

Hypergeometric2F2

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Notations

Traditional name

Generalized hypergeometric function ${}_2F_2$

Traditional notation

 ${}_2F_2(a_1, a_2; b_1, b_2; z)$

Mathematica StandardForm notation

HypergeometricPFQ[$\{a_1, a_2\}, \{b_1, b_2\}, z]$

Primary definition

07.25.02.0001.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = \sum_{k=0}^{\infty} \frac{(a_1)_k (a_2)_k z^k}{(b_1)_k (b_2)_k k!}$$

For $a_i = -n$, $b_j = -m$; $m \geq n$ being nonpositive integers and $\nexists_{a_k} (a_k > -n \wedge a_k \in \mathbb{N}) \wedge \nexists_{b_k} (b_k > -m \wedge b_k \in \mathbb{N})$ the function ${}_2F_2(a_1, a_2; b_1, b_2; z)$ cannot be uniquely defined by a limiting procedure based on the above definition because the two variables a_i, b_j can approach nonpositive integers $-n, -m$; $m \geq n$ at different speeds. For the above conditions we define:

07.25.02.0002.01

$${}_2F_2(a_1, \dots, a_i, \dots, a_2; b_1, \dots, b_j, \dots, b_2; z) = \sum_{k=0}^n \frac{(a_1)_k (a_2)_k z^k}{(b_1)_k (b_2)_k k!}; a_i = -n \wedge b_j = -m \wedge m \in \mathbb{N} \wedge n \in \mathbb{N} \wedge m \geq n$$

Specific values

Values at $z = 0$

07.25.03.0001.01

$${}_2F_2(a_1, a_2; b_1, b_2; 0) = 1$$

Specialized values

For fixed a_1, a_2, b_1, z

07.25.03.0002.01

$${}_2F_2(a, b; c, b; z) = {}_1F_1(a; c; z)$$

For fixed a_1, a_2, b_2, z

07.25.03.0003.01

$${}_2F_2(a, b; a-1, d; z) = \frac{bz}{(a-1)d} {}_1F_1(b+1; d+1; z) + {}_1F_1(b; d; z)$$

For fixed a_1, a_2, z

07.25.03.0004.01

$${}_2F_2(a, b; a+n, b+1; z) = \frac{(a)_n}{(a-b)_n} \left({}_1F_1(b; b+1; z) - b \sum_{k=1}^n \frac{(a-b)_{k-1}}{(a)_k} {}_1F_1(a; a+k; z) \right)$$

07.25.03.0005.01

$${}_2F_2(a, b; a+1, b+1; z) = \frac{1}{b-a} (b {}_1F_1(a; a+1; z) - a {}_1F_1(b; b+1; z))$$

For fixed a_2, b_2, z

07.25.03.0006.01

$${}_2F_2(1, b; 2, d; z) = \frac{d-1}{(b-1)z} ({}_1F_1(b-1; d-1; z) - 1)$$

07.25.03.0007.01

$${}_2F_2(1, b; b+1, d; z) + \frac{d-1}{b-d+1} {}_2F_2(1, b; b+1, b-d+2; -z) = \frac{b}{b-d+1} {}_1F_1(b-d+1; b-d+2; z) {}_1F_1(d-1; d; -z)$$

For fixed a_1, z

07.25.03.0008.01

$${}_2F_2(a, a; a-1, a-1; z) = \frac{e^z}{(a-1)^2} (a^2 + 2za - 2a + z^2 - z + 1)$$

For fixed a_2, z

07.25.03.0009.01

$${}_2F_2\left(\frac{1}{2}, b; \frac{3}{2}, b+1; z\right) = \frac{b}{2b-1} \left(\sqrt{\frac{\pi}{z}} \operatorname{erfi}(\sqrt{z}) - (-z)^{-b} (\Gamma(b) - \Gamma(b, -z)) \right)$$

For integer and half-integer parameters and fixed z

For fixed z and $a_1 = -\frac{11}{2}, a_2 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}, a_2 = -\frac{11}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}, a_2 = -\frac{11}{2}, b_1 = -\frac{11}{2}$

07.25.03.0177.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = e^z$$

07.25.03.0178.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{945} e^z (32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0179.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{945} e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.0180.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{105} e^z (-16 z^5 + 80 z^4 + 32 z^3 + 36 z^2 + 60 z + 105) + \frac{8}{105} \sqrt{\pi} (2 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0181.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{105} e^{-z} (16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105) + \frac{8}{105} \sqrt{\pi} (2 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0182.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} + 44 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0183.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} - 44 z^{9/2} - 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0184.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{18} e^z (-4 z^5 + 64 z^4 - 267 z^3 + 240 z^2 + 48 z + 18) + \frac{1}{36} \sqrt{\pi} (8 z^{11/2} - 132 z^{9/2} + 594 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0185.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{18} e^{-z} (4 z^5 + 64 z^4 + 267 z^3 + 240 z^2 - 48 z + 18) + \frac{1}{36} \sqrt{\pi} (8 z^{11/2} + 132 z^{9/2} + 594 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0186.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{96} e^z (8 z^5 - 172 z^4 + 1106 z^3 - 2295 z^2 + 960 z + 96) + \frac{1}{192} \sqrt{\pi} (-16 z^{11/2} + 352 z^{9/2} - 2376 z^{7/2} + 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0187.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{96} e^{-z} (-8 z^5 - 172 z^4 - 1106 z^3 - 2295 z^2 - 960 z + 96) + \frac{1}{192} \sqrt{\pi} (-16 z^{11/2} - 352 z^{9/2} - 2376 z^{7/2} - 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0188.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (-16 z^5 + 432 z^4 - 3752 z^3 + 12180 z^2 - 12645 z + 1920)}{1920} + \frac{\sqrt{\pi} (32 z^{11/2} - 880 z^{9/2} + 7920 z^{7/2} - 27720 z^{5/2} + 34650 z^{3/2} - 10395 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.0189.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z}(16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \frac{\sqrt{\pi}(32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z})\operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.0190.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2}(32z^6 - 992z^5 + 10512z^4 - 46944z^3 + 88674z^2 - 62370z + 10395)I_0\left(\frac{z}{2}\right) - 2e^{z/2}(16z^6 - 480z^5 + 4784z^4 - 18912z^3 + 27387z^2 - 9762z)I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.0191.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z(-32z^5 + 1040z^4 - 11376z^3 + 50232z^2 - 83370z + 35685)}{46080} + \frac{\sqrt{\pi}(64z^6 - 2112z^5 + 23760z^4 - 110880z^3 + 207900z^2 - 124740z + 10395)\operatorname{erfi}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.0192.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}(32z^5 + 1040z^4 + 11376z^3 + 50232z^2 + 83370z + 35685)}{46080} + \frac{\sqrt{\pi}(64z^6 + 2112z^5 + 23760z^4 + 110880z^3 + 207900z^2 + 124740z + 10395)\operatorname{erf}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.0193.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2}(64z^6 - 2336z^5 + 30000z^4 - 168864z^3 + 425112z^2 - 436590z + 135135)I_0\left(\frac{z}{2}\right) + e^{z/2}(-64z^6 + 2272z^5 - 27760z^4 + 142176z^3 - 294744z^2 + 191442z - 10395)I_1\left(\frac{z}{2}\right)}{135135}$$

07.25.03.0194.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z(-64z^6 + 2432z^5 - 32080z^4 + 179136z^3 - 408828z^2 + 291480z - 10395)}{430080z} + \frac{1}{860160z^{3/2}}\sqrt{\pi}(128z^7 - 4928z^6 + 66528z^5 - 388080z^4 + 970200z^3 - 873180z^2 + 145530z + 10395)\operatorname{erfi}(\sqrt{z})$$

07.25.03.0195.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(64z^6 + 2432z^5 + 32080z^4 + 179136z^3 + 408828z^2 + 291480z + 10395)}{430080z} + \frac{1}{860160z^{3/2}}\sqrt{\pi}(128z^7 + 4928z^6 + 66528z^5 + 388080z^4 + 970200z^3 + 873180z^2 + 145530z - 10395)\operatorname{erf}(\sqrt{z})$$

07.25.03.0196.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 - 2688 z^5 + 40560 z^4 - 275520 z^3 + 866520 z^2 - 1164240 z + 509355) I_0\left(\frac{z}{2}\right) - \frac{1}{2027025} 4 e^{z/2} (64 z^7 - 2624 z^6 + 37968 z^5 - 238800 z^4 + 644280 z^3 - 608760 z^2 + 72765 z + 10395) I_1\left(\frac{z}{2}\right)}{2027025}$$

07.25.03.0197.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (-128 z^7 + 5568 z^6 - 85984 z^5 + 580560 z^4 - 1686744 z^3 + 1690836 z^2 - 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} \left(\sqrt{\pi} (256 z^8 - 11264 z^7 + 177408 z^6 - 1241856 z^5 + 3880800 z^4 - 4656960 z^3 + 1164240 z^2 + 166320 z + 31185) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.0198.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 5568 z^6 + 85984 z^5 + 580560 z^4 + 1686744 z^3 + 1690836 z^2 + 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} \left(\sqrt{\pi} (256 z^8 + 11264 z^7 + 177408 z^6 + 1241856 z^5 + 3880800 z^4 + 4656960 z^3 + 1164240 z^2 - 166320 z + 31185) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.0199.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{11486475 z} 4 e^{z/2} (128 z^7 - 6080 z^6 + 105408 z^5 - 838800 z^4 + 3163920 z^3 - 5239080 z^2 + 2910600 z + 10395) I_0\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} 4 e^{z/2} (128 z^8 - 5952 z^7 + 99520 z^6 - 742128 z^5 + 2466000 z^4 - 3061560 z^3 + 582120 z^2 + 155925 z + 41580) I_1\left(\frac{z}{2}\right)$$

07.25.03.0200.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{14155776 z^3} e^z (-256 z^8 + 12544 z^7 - 221952 z^6 + 1757760 z^5 - 6203040 z^4 + 8030448 z^3 - 1164240 z^2 - 457380 z - 155925) + \frac{1}{28311552 z^{7/2}} \left(\sqrt{\pi} (512 z^9 - 25344 z^8 + 456192 z^7 - 3725568 z^6 + 13970880 z^5 - 20956320 z^4 + 6985440 z^3 + 1496880 z^2 + 561330 z + 155925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.0201.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{14\,155\,776\,z^3} e^{-z} (256\,z^8 + 12\,544\,z^7 + 221\,952\,z^6 + 1\,757\,760\,z^5 + 6\,203\,040\,z^4 + 8\,030\,448\,z^3 + 1\,164\,240\,z^2 - 457\,380\,z + 155\,925) + \frac{1}{28\,311\,552\,z^{7/2}} \left(\sqrt{\pi} (512\,z^9 + 25\,344\,z^8 + 456\,192\,z^7 + 3\,725\,568\,z^6 + 13\,970\,880\,z^5 + 20\,956\,320\,z^4 + 6\,985\,440\,z^3 - 1\,496\,880\,z^2 + 561\,330\,z - 155\,925) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.0202.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{218\,243\,025\,z^2} \left(32\,e^{z/2} (128\,z^8 - 6784\,z^7 + 132\,864\,z^6 - 1\,212\,096\,z^5 + 5\,331\,360\,z^4 - 10\,478\,160\,z^3 + 6\,985\,440\,z^2 + 83\,160\,z + 31\,185) I_0\left(\frac{z}{2}\right) - \frac{1}{218\,243\,025\,z^3} \left(128\,e^{z/2} (32\,z^9 - 1664\,z^8 + 31\,568\,z^7 - 272\,256\,z^6 + 1\,074\,804\,z^5 - 1\,654\,080\,z^4 + 436\,590\,z^3 + 166\,320\,z^2 + 83\,160\,z + 31\,185) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.0203.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{62\,914\,560\,z^4} \left(e^z (-512\,z^9 + 27\,904\,z^8 - 556\,544\,z^7 + 5\,057\,280\,z^6 - 21\,001\,920\,z^5 + 33\,362\,400\,z^4 - 6\,985\,440\,z^3 - 3\,825\,360\,z^2 - 2\,390\,850\,z - 1\,091\,475)\right) + \frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024\,z^{10} - 56\,320\,z^9 + 1\,140\,480\,z^8 - 10\,644\,480\,z^7 + 46\,569\,600\,z^6 - 83\,825\,280\,z^5 + 34\,927\,200\,z^4 + 9\,979\,200\,z^3 + 5\,613\,300\,z^2 + 3\,118\,500\,z + 1\,091\,475) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.0204.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{62\,914\,560\,z^4} \left(e^{-z} (512\,z^9 + 27\,904\,z^8 + 556\,544\,z^7 + 5\,057\,280\,z^6 + 21\,001\,920\,z^5 + 33\,362\,400\,z^4 + 6\,985\,440\,z^3 - 3\,825\,360\,z^2 + 2\,390\,850\,z - 1\,091\,475)\right) + \frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024\,z^{10} + 56\,320\,z^9 + 1\,140\,480\,z^8 + 10\,644\,480\,z^7 + 46\,569\,600\,z^6 + 83\,825\,280\,z^5 + 34\,927\,200\,z^4 - 9\,979\,200\,z^3 + 5\,613\,300\,z^2 - 3\,118\,500\,z + 1\,091\,475) \operatorname{erf}(\sqrt{z})\right)$$

$$\begin{aligned}
 & \text{07.25.03.0205.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{11}{2}; -\frac{11}{2}, 6; z\right) = \\
 & \frac{1}{916620705z^3} \left(32e^{z/2} (256z^9 - 14976z^8 + 326976z^7 - 3364032z^6 + 16903152z^5 - 38419920z^4 + \right. \\
 & \quad \left. 29688120z^3 + 748440z^2 + 530145z + 249480) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{916620705z^4} \left(32e^{z/2} (256z^{10} - 14720z^9 + 312384z^8 - 3058752z^7 + 13986672z^6 - 25692912z^5 + \right. \\
 & \quad \left. 8731800z^4 + 4241160z^3 + 3024945z^2 + 2120580z + 997920) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{9}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{9}{2}$, $b_1 = -\frac{11}{2}$

$$\text{07.25.03.0206.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{1}{11} e^z (2z - 11)$$

$$\text{07.25.03.0207.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = e^z$$

$$\text{07.25.03.0208.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{105} e^z (16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.0209.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

$$\text{07.25.03.0210.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15} \sqrt{\pi} (2z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.0211.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15} \sqrt{\pi} (2z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.0212.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6} \sqrt{\pi} (-4z^{9/2} + 36z^{7/2} - 63z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.0213.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6} \sqrt{\pi} (4z^{9/2} + 36z^{7/2} + 63z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0214.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{12} e^z (-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24} \sqrt{\pi} (8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0215.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{12} e^{-z} (-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24} \sqrt{\pi} (-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0216.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{192} e^z (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0217.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{192} e^{-z} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0218.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-16z^5 + 336z^4 - 2220z^3 + 5484z^2 - 4725z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^5 - 320z^4 + 1908z^3 - 3720z^2 + 1689z) I_1\left(\frac{z}{2}\right)$$

07.25.03.0219.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (16z^4 - 352z^3 + 2352z^2 - 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945) \operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.0220.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.0221.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (-32z^5 + 816z^4 - 6816z^3 + 22524z^2 - 28350z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2} (32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.0222.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (32 z^5 - 848 z^4 + 7152 z^3 - 22008 z^2 + 20010 z - 945)}{30720 z} + \frac{\sqrt{\pi} (-64 z^6 + 1728 z^5 - 15120 z^4 + 50400 z^3 - 56700 z^2 + 11340 z + 945) \operatorname{erfi}(\sqrt{z})}{61440 z^{3/2}}$$

07.25.03.0223.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 848 z^4 + 7152 z^3 + 22008 z^2 + 20010 z + 945)}{30720 z} + \frac{\sqrt{\pi} (64 z^6 + 1728 z^5 + 15120 z^4 + 50400 z^3 + 56700 z^2 + 11340 z - 945) \operatorname{erf}(\sqrt{z})}{61440 z^{3/2}}$$

07.25.03.0224.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (32 z^6 - 928 z^5 + 8784 z^4 - 31776 z^3 + 37938 z^2 - 5670 z - 945) I_1\left(\frac{z}{2}\right)}{135135 z} - \frac{8 e^{z/2} (16 z^5 - 480 z^4 + 4848 z^3 - 20064 z^2 + 33075 z - 17010) I_0\left(\frac{z}{2}\right)}{135135}$$

07.25.03.0225.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (64 z^6 - 1984 z^5 + 20208 z^4 - 79008 z^3 + 100716 z^2 - 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (-128 z^7 + 4032 z^6 - 42336 z^5 + 176400 z^4 - 264600 z^3 + 79380 z^2 + 13230 z + 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0226.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1984 z^5 + 20208 z^4 + 79008 z^3 + 100716 z^2 + 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835) \operatorname{erf}(\sqrt{z})$$

07.25.03.0227.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^7 - 2144 z^6 + 24048 z^5 - 107040 z^4 + 167640 z^3 - 39690 z^2 - 12285 z - 3780) I_1\left(\frac{z}{2}\right)}{675675 z^2} - \frac{4 e^{z/2} (64 z^6 - 2208 z^5 + 26160 z^4 - 130080 z^3 + 264600 z^2 - 171990 z - 945) I_0\left(\frac{z}{2}\right)}{675675 z}$$

07.25.03.0228.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 4544 z^6 + 54240 z^5 - 257232 z^4 + 422616 z^3 - 79380 z^2 - 35910 z - 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} \sqrt{\pi} (-256 z^8 + 9216 z^7 - 112896 z^6 + 564480 z^5 - 1058400 z^4 + 423360 z^3 + 105840 z^2 + 45360 z + 14175) \operatorname{erfi}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.0229.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{e^{-z} (128 z^7 + 4544 z^6 + 54240 z^5 + 257232 z^4 + 422616 z^3 + 79380 z^2 - 35910 z + 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} \\
 & \sqrt{\pi} (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0230.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{11486475 z^3} \\
 & \frac{32 e^{z/2} (64 z^8 - 2432 z^7 + 31536 z^6 - 166656 z^5 + 323160 z^4 - 105840 z^3 - 46305 z^2 - 26460 z - 11340) I_1\left(\frac{z}{2}\right) -}{11486475 z^2} \\
 & 32 e^{z/2} (64 z^7 - 2496 z^6 + 33936 z^5 - 197040 z^4 + 476280 z^3 - 370440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0231.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{3145728 z^4} e^z (256 z^8 - 10240 z^7 + 140160 z^6 - 781440 z^5 + 1572864 z^4 - 423360 z^3 - 264600 z^2 - 189000 z - 99225) + \\
 & \frac{1}{6291456 z^{9/2}} \left(\sqrt{\pi} (-512 z^9 + 20736 z^8 - 290304 z^7 + 1693440 z^6 - \right. \\
 & \left. 3810240 z^5 + 1905120 z^4 + 635040 z^3 + 408240 z^2 + 255150 z + 99225) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0232.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{3145728 z^4} e^{-z} (256 z^8 + 10240 z^7 + 140160 z^6 + 781440 z^5 + 1572864 z^4 + 423360 z^3 - 264600 z^2 + 189000 z - 99225) + \\
 & \frac{1}{6291456 z^{9/2}} \left(\sqrt{\pi} (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + \right. \\
 & \left. 3810240 z^5 + 1905120 z^4 - 635040 z^3 + 408240 z^2 - 255150 z + 99225) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0233.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{11}{2}, 6; z\right) = \\
 & \frac{1}{43648605 z^4} \left(32 e^{z/2} (128 z^9 - 5440 z^8 + 80064 z^7 - 489840 z^6 + 1132752 z^5 - 476280 z^4 - 264600 z^3 - \right. \\
 & \left. 214515 z^2 - 170100 z - 90720) I_1\left(\frac{z}{2}\right) - \frac{1}{43648605 z^3} \right. \\
 & \left. 32 e^{z/2} (128 z^8 - 5568 z^7 + 85440 z^6 - 567312 z^5 + 1587600 z^4 - 1428840 z^3 - 52920 z^2 - 42525 z - 22680) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{9}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.0234.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0235.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{945} e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.0236.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{105} e^z (-16 z^5 + 80 z^4 + 32 z^3 + 36 z^2 + 60 z + 105) + \frac{8}{105} \sqrt{\pi} (2 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0237.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{105} e^{-z} (16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105) + \frac{8}{105} \sqrt{\pi} (2 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0238.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} + 44 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0239.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} - 44 z^{9/2} - 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0240.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{18} e^z (-4 z^5 + 64 z^4 - 267 z^3 + 240 z^2 + 48 z + 18) + \frac{1}{36} \sqrt{\pi} (8 z^{11/2} - 132 z^{9/2} + 594 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0241.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{18} e^{-z} (4 z^5 + 64 z^4 + 267 z^3 + 240 z^2 - 48 z + 18) + \frac{1}{36} \sqrt{\pi} (8 z^{11/2} + 132 z^{9/2} + 594 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0242.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{96} e^z (8 z^5 - 172 z^4 + 1106 z^3 - 2295 z^2 + 960 z + 96) + \frac{1}{192} \sqrt{\pi} (-16 z^{11/2} + 352 z^{9/2} - 2376 z^{7/2} + 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0243.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{96} e^{-z} (-8 z^5 - 172 z^4 - 1106 z^3 - 2295 z^2 - 960 z + 96) + \frac{1}{192} \sqrt{\pi} (-16 z^{11/2} - 352 z^{9/2} - 2376 z^{7/2} - 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0244.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{e^z (-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920)}{1920} + \frac{\sqrt{\pi} (32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.0245.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \frac{\sqrt{\pi} (32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z}) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.0246.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (32z^6 - 992z^5 + 10512z^4 - 46944z^3 + 88674z^2 - 62370z + 10395) I_0\left(\frac{z}{2}\right)}{10395} - \frac{2e^{z/2} (16z^6 - 480z^5 + 4784z^4 - 18912z^3 + 27387z^2 - 9762z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.0247.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z (-32z^5 + 1040z^4 - 11376z^3 + 50232z^2 - 83370z + 35685)}{46080} + \frac{\sqrt{\pi} (64z^6 - 2112z^5 + 23760z^4 - 110880z^3 + 207900z^2 - 124740z + 10395) \operatorname{erfi}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.0248.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (32z^5 + 1040z^4 + 11376z^3 + 50232z^2 + 83370z + 35685)}{46080} + \frac{\sqrt{\pi} (64z^6 + 2112z^5 + 23760z^4 + 110880z^3 + 207900z^2 + 124740z + 10395) \operatorname{erf}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.0249.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (64z^6 - 2336z^5 + 30000z^4 - 168864z^3 + 425112z^2 - 436590z + 135135) I_0\left(\frac{z}{2}\right)}{135135} + \frac{e^{z/2} (-64z^6 + 2272z^5 - 27760z^4 + 142176z^3 - 294744z^2 + 191442z - 10395) I_1\left(\frac{z}{2}\right)}{135135}$$

07.25.03.0250.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (-64z^6 + 2432z^5 - 32080z^4 + 179136z^3 - 408828z^2 + 291480z - 10395)}{430080z} + \frac{1}{860160z^{3/2}} \sqrt{\pi} (128z^7 - 4928z^6 + 66528z^5 - 388080z^4 + 970200z^3 - 873180z^2 + 145530z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0251.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 2432 z^5 + 32080 z^4 + 179136 z^3 + 408828 z^2 + 291480 z + 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 + 4928 z^6 + 66528 z^5 + 388080 z^4 + 970200 z^3 + 873180 z^2 + 145530 z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.0252.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 - 2688 z^5 + 40560 z^4 - 275520 z^3 + 866520 z^2 - 1164240 z + 509355) I_0\left(\frac{z}{2}\right)}{2027025} - \frac{1}{2027025 z} 4 e^{z/2} (64 z^7 - 2624 z^6 + 37968 z^5 - 238800 z^4 + 644280 z^3 - 608760 z^2 + 72765 z + 10395) I_1\left(\frac{z}{2}\right)$$

07.25.03.0253.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (-128 z^7 + 5568 z^6 - 85984 z^5 + 580560 z^4 - 1686744 z^3 + 1690836 z^2 - 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} \left(\sqrt{\pi} (256 z^8 - 11264 z^7 + 177408 z^6 - 1241856 z^5 + 3880800 z^4 - 4656960 z^3 + 1164240 z^2 + 166320 z + 31185) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.0254.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 5568 z^6 + 85984 z^5 + 580560 z^4 + 1686744 z^3 + 1690836 z^2 + 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} \left(\sqrt{\pi} (256 z^8 + 11264 z^7 + 177408 z^6 + 1241856 z^5 + 3880800 z^4 + 4656960 z^3 + 1164240 z^2 - 166320 z + 31185) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.0255.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, 4; z\right) = \frac{1}{11486475 z} 4 e^{z/2} (128 z^7 - 6080 z^6 + 105408 z^5 - 838800 z^4 + 3163920 z^3 - 5239080 z^2 + 2910600 z + 10395) I_0\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} 4 e^{z/2} (128 z^8 - 5952 z^7 + 99520 z^6 - 742128 z^5 + 2466000 z^4 - 3061560 z^3 + 582120 z^2 + 155925 z + 41580) I_1\left(\frac{z}{2}\right)$$

07.25.03.0256.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{14\,155\,776\,z^3}$$

$$e^z (-256\,z^8 + 12\,544\,z^7 - 221\,952\,z^6 + 1\,757\,760\,z^5 - 6\,203\,040\,z^4 + 8\,030\,448\,z^3 - 1\,164\,240\,z^2 - 457\,380\,z - 155\,925) +$$

$$\frac{1}{28\,311\,552\,z^{7/2}} \left(\sqrt{\pi} (512\,z^9 - 25\,344\,z^8 + 456\,192\,z^7 - 3\,725\,568\,z^6 + 13\,970\,880\,z^5 -$$

$$20\,956\,320\,z^4 + 6\,985\,440\,z^3 + 1\,496\,880\,z^2 + 561\,330\,z + 155\,925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.0257.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{14\,155\,776\,z^3}$$

$$e^{-z} (256\,z^8 + 12\,544\,z^7 + 221\,952\,z^6 + 1\,757\,760\,z^5 + 6\,203\,040\,z^4 + 8\,030\,448\,z^3 + 1\,164\,240\,z^2 - 457\,380\,z + 155\,925) +$$

$$\frac{1}{28\,311\,552\,z^{7/2}} \left(\sqrt{\pi} (512\,z^9 + 25\,344\,z^8 + 456\,192\,z^7 + 3\,725\,568\,z^6 + 13\,970\,880\,z^5 +$$

$$20\,956\,320\,z^4 + 6\,985\,440\,z^3 - 1\,496\,880\,z^2 + 561\,330\,z - 155\,925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.0258.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, 5; z\right) = \frac{1}{218\,243\,025\,z^2}$$

$$\left(32\,e^{z/2} (128\,z^8 - 6784\,z^7 + 132\,864\,z^6 - 1\,212\,096\,z^5 + 5\,331\,360\,z^4 - 10\,478\,160\,z^3 + 6\,985\,440\,z^2 + 83\,160\,z + 31\,185) \right.$$

$$I_0\left(\frac{z}{2}\right) - \frac{1}{218\,243\,025\,z^3} \left(128\,e^{z/2} (32\,z^9 - 1664\,z^8 + 31\,568\,z^7 - 272\,256\,z^6 +$$

$$1\,074\,804\,z^5 - 1\,654\,080\,z^4 + 436\,590\,z^3 + 166\,320\,z^2 + 83\,160\,z + 31\,185) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.0259.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{62\,914\,560\,z^4} \left(e^z (-512\,z^9 + 27\,904\,z^8 - 556\,544\,z^7 + 5\,057\,280\,z^6 - 21\,001\,920\,z^5 + 33\,362\,400\,z^4 -$$

$$6\,985\,440\,z^3 - 3\,825\,360\,z^2 - 2\,390\,850\,z - 1\,091\,475) \right) +$$

$$\frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024\,z^{10} - 56\,320\,z^9 + 1\,140\,480\,z^8 - 10\,644\,480\,z^7 + 46\,569\,600\,z^6 - 83\,825\,280\,z^5 +$$

$$34\,927\,200\,z^4 + 9\,979\,200\,z^3 + 5\,613\,300\,z^2 + 3\,118\,500\,z + 1\,091\,475) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.0260.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{62\,914\,560\,z^4} \left(e^{-z} (512\,z^9 + 27\,904\,z^8 + 556\,544\,z^7 + 5\,057\,280\,z^6 + 21\,001\,920\,z^5 + 33\,362\,400\,z^4 +$$

$$6\,985\,440\,z^3 - 3\,825\,360\,z^2 + 2\,390\,850\,z - 1\,091\,475) \right) +$$

$$\frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024\,z^{10} + 56\,320\,z^9 + 1\,140\,480\,z^8 + 10\,644\,480\,z^7 + 46\,569\,600\,z^6 + 83\,825\,280\,z^5 +$$

$$34\,927\,200\,z^4 - 9\,979\,200\,z^3 + 5\,613\,300\,z^2 - 3\,118\,500\,z + 1\,091\,475) \operatorname{erf}(\sqrt{z}) \right)$$

$$\begin{aligned}
 & \text{07.25.03.0261.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{9}{2}; -\frac{9}{2}, 6; z\right) = \\
 & \frac{1}{916620705 z^3} \left(32 e^{z/2} (256 z^9 - 14976 z^8 + 326976 z^7 - 3364032 z^6 + 16903152 z^5 - 38419920 z^4 + \right. \\
 & \quad \left. 29688120 z^3 + 748440 z^2 + 530145 z + 249480) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{916620705 z^4} \left(32 e^{z/2} (256 z^{10} - 14720 z^9 + 312384 z^8 - 3058752 z^7 + 13986672 z^6 - 25692912 z^5 + \right. \\
 & \quad \left. 8731800 z^4 + 4241160 z^3 + 3024945 z^2 + 2120580 z + 997920) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{7}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{7}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.0262.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{99} e^z (4z^2 - 36z + 99)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0263.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{9} e^z (2z - 9)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0264.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = e^z
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0265.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (8z^3 + 4z^2 + 6z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0266.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0267.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3} \sqrt{\pi} (2z^{7/2} - 7z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0268.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (4z^3 + 12z^2 - 4z + 3) + \frac{2}{3} \sqrt{\pi} (2z^{7/2} + 7z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0269.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{2} e^z (2z^3 - 13z^2 + 12z + 2) + \frac{1}{4} \sqrt{\pi} (-4z^{7/2} + 28z^{5/2} - 35z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0270.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2} e^{-z} (-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4} \sqrt{\pi} (-4z^{7/2} - 28z^{5/2} - 35z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.0271.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{24} e^{-z} (-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48} \sqrt{\pi} (8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0272.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{24} e^{-z} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} \sqrt{\pi} (8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0273.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8z^4 - 104z^3 + 376z^2 - 420z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} (2z^4 - 24z^3 + 71z^2 - 44z) I_1\left(\frac{z}{2}\right)$$

07.25.03.0274.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{384} e^{-z} (-8z^3 + 108z^2 - 370z + 279) + \frac{\sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.0275.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} e^{-z} (8z^3 + 108z^2 + 370z + 279) + \frac{\sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.0276.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (16z^4 - 264z^3 + 1284z^2 - 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16z^4 + 248z^3 - 1044z^2 + 1164z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.0277.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^{-z} (-16z^4 + 272z^3 - 1272z^2 + 1580z - 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.0278.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (16z^4 + 272z^3 + 1272z^2 + 1580z + 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.0279.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (16z^4 - 320z^3 + 1956z^2 - 4200z + 2625) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16z^5 - 304z^4 + 1660z^3 - 2676z^2 + 525z + 105) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.0280.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^{-z} (-32z^5 + 656z^4 - 3888z^3 + 6744z^2 - 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi} (64z^6 - 1344z^5 + 8400z^4 - 16800z^3 + 6300z^2 + 1260z + 315) \operatorname{erfi}(\sqrt{z})}{24576z^{5/2}}$$

07.25.03.0281.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 656 z^4 + 3888 z^3 + 6744 z^2 + 1050 z - 315)}{12288 z^2} + \frac{\sqrt{\pi} (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315) \operatorname{erf}(\sqrt{z})}{24576 z^{5/2}}$$

07.25.03.0282.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 - 752 z^4 + 5536 z^3 - 14700 z^2 + 11550 z + 105) I_0\left(\frac{z}{2}\right)}{45045 z} - \frac{4 e^{z/2} (32 z^6 - 720 z^5 + 4832 z^4 - 10196 z^3 + 3150 z^2 + 1155 z + 420) I_1\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.0283.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (-64 z^6 + 1536 z^5 - 11024 z^4 + 24576 z^3 - 6300 z^2 - 3360 z - 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 - 3136 z^6 + 23520 z^5 - 58800 z^4 + 29400 z^3 + 8820 z^2 + 4410 z + 1575) \operatorname{erfi}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.0284.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1536 z^5 + 11024 z^4 + 24576 z^3 + 6300 z^2 - 3360 z + 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.0285.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23520 z^3 + 22050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right)}{675675 z^2} - \frac{64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675675 z^3}$$

07.25.03.0286.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{1048576 z^{9/2}} - \frac{3 \sqrt{\pi} (256 z^8 - 7168 z^7 + 62720 z^6 - 188160 z^5 + 117600 z^4 + 47040 z^3 + 35280 z^2 + 25200 z + 11025) \operatorname{erfi}(\sqrt{z}) - 3 e^z (128 z^7 - 3520 z^6 + 29664 z^5 - 80848 z^4 + 29400 z^3 + 21420 z^2 + 17850 z + 11025)}{524288 z^4}$$

07.25.03.0287.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29664 z^5 + 80848 z^4 + 29400 z^3 - 21420 z^2 + 17850 z - 11025)}{524288 z^4} + \frac{1}{1048576 z^{9/2}} - \frac{3 \sqrt{\pi} (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025) \operatorname{erf}(\sqrt{z})}{524288 z^4}$$

07.25.03.0288.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right)}{2297295 z^3} - \frac{1}{2297295 z^4} 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{7}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.0289.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{64 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{8505} + \frac{e^{-z} (-64 z^5 - 32 z^4 - 48 z^3 - 120 z^2 - 420 z + 8505)}{8505}$$

07.25.03.0290.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{64 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{8505} + \frac{e^{-z} (64 z^5 - 32 z^4 + 48 z^3 - 120 z^2 + 420 z + 8505)}{8505}$$

07.25.03.0291.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0292.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{945} e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.0293.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{135} e^z (-8 z^5 - 4 z^4 + 192 z^3 + 84 z^2 + 96 z + 135) + \frac{2}{135} \sqrt{\pi} (4 z^{11/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0294.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{135} e^{-z} (8 z^5 - 4 z^4 - 192 z^3 + 84 z^2 - 96 z + 135) + \frac{2}{135} \sqrt{\pi} (4 z^{11/2} - 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0295.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{81} e^z (4 z^5 + 2 z^4 - 294 z^3 + 552 z^2 + 150 z + 81) + \frac{1}{81} \sqrt{\pi} (-4 z^{11/2} + 297 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0296.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{81} e^{-z} (-4 z^5 + 2 z^4 + 294 z^3 + 552 z^2 - 150 z + 81) + \frac{1}{81} \sqrt{\pi} (-4 z^{11/2} + 297 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0297.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{432} e^z (-8 z^5 - 4 z^4 + 1182 z^3 - 4965 z^2 + 3264 z + 432) + \frac{1}{864} \sqrt{\pi} (16 z^{11/2} - 2376 z^{7/2} + 11088 z^{5/2} - 10395 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0298.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{432} e^{-z} (8z^5 - 4z^4 - 1182z^3 - 4965z^2 - 3264z + 432) + \frac{1}{864} \sqrt{\pi} (16z^{11/2} - 2376z^{7/2} - 11088z^{5/2} - 10395z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0299.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{e^z (8z^5 + 4z^4 - 1974z^3 + 12885z^2 - 20490z + 4320)}{4320} + \frac{\sqrt{\pi} (-16z^{11/2} + 3960z^{7/2} - 27720z^{5/2} + 51975z^{3/2} - 20790\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{8640}$$

07.25.03.0300.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (-8z^5 + 4z^4 + 1974z^3 + 12885z^2 + 20490z + 4320)}{4320} + \frac{\sqrt{\pi} (-16z^{11/2} + 3960z^{7/2} + 27720z^{5/2} + 51975z^{3/2} + 20790\sqrt{z}) \operatorname{erf}(\sqrt{z})}{8640}$$

07.25.03.0301.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (-64z^6 + 48z^5 + 19632z^4 - 174732z^3 + 486216z^2 - 446985z + 93555) I_0\left(\frac{z}{2}\right)}{93555} + \frac{e^{z/2} (64z^6 + 16z^5 - 19584z^4 + 155220z^3 - 340572z^2 + 165321z) I_1\left(\frac{z}{2}\right)}{93555}$$

07.25.03.0302.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z (32z^5 + 16z^4 - 11856z^3 + 105000z^2 - 265110z + 155385)}{207360} + \frac{\sqrt{\pi} (-64z^6 + 23760z^4 - 221760z^3 + 623700z^2 - 498960z + 51975) \operatorname{erfi}(\sqrt{z})}{414720\sqrt{z}}$$

07.25.03.0303.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-32z^5 + 16z^4 + 11856z^3 + 105000z^2 + 265110z + 155385)}{207360} + \frac{\sqrt{\pi} (-64z^6 + 23760z^4 + 221760z^3 + 623700z^2 + 498960z + 51975) \operatorname{erf}(\sqrt{z})}{414720\sqrt{z}}$$

07.25.03.0304.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (-128z^6 + 96z^5 + 56688z^4 - 636960z^3 + 2370708z^2 - 3180870z + 1216215) I_0\left(\frac{z}{2}\right)}{1216215} + \frac{e^{z/2} (128z^6 + 32z^5 - 56592z^4 + 580512z^3 - 1818060z^2 + 1598238z - 114345) I_1\left(\frac{z}{2}\right)}{1216215}$$

07.25.03.0305.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (32 z^6 + 16 z^5 - 16 608 z^4 + 185 784 z^3 - 642 894 z^2 + 624 645 z - 31 185)}{967 680 z} + \frac{\sqrt{\pi} (-64 z^7 + 33 264 z^5 - 388 080 z^4 + 1 455 300 z^3 - 1 746 360 z^2 + 363 825 z + 31 185) \operatorname{erfi}(\sqrt{z})}{1 935 360 z^{3/2}}$$

07.25.03.0306.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-32 z^6 + 16 z^5 + 16 608 z^4 + 185 784 z^3 + 642 894 z^2 + 624 645 z + 31 185)}{967 680 z} + \frac{\sqrt{\pi} (-64 z^7 + 33 264 z^5 + 388 080 z^4 + 1 455 300 z^3 + 1 746 360 z^2 + 363 825 z - 31 185) \operatorname{erf}(\sqrt{z})}{1 935 360 z^{3/2}}$$

07.25.03.0307.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, 3; z\right) = \frac{1}{18 243 225 z} 4 e^{z/2} (128 z^7 + 32 z^6 - 77 184 z^5 + 971 760 z^4 - 3 954 480 z^3 + 5 042 250 z^2 - 790 020 z - 135 135) I_1\left(\frac{z}{2}\right) - \frac{8 e^{z/2} (64 z^6 - 48 z^5 - 38 640 z^4 + 524 400 z^3 - 2 444 040 z^2 + 4 293 135 z - 2 297 295) I_0\left(\frac{z}{2}\right)}{18 243 225}$$

07.25.03.0308.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (128 z^7 + 64 z^6 - 88 608 z^5 + 1 197 744 z^4 - 5 265 960 z^3 + 7 172 172 z^2 - 852 390 z - 218 295)}{12 386 304 z^2} + \frac{1}{24 772 608 z^{5/2}} (\sqrt{\pi} (-256 z^8 + 177 408 z^6 - 2 483 712 z^5 + 11 642 400 z^4 - 18 627 840 z^3 + 5 821 200 z^2 + 997 920 z + 218 295) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.0309.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-128 z^7 + 64 z^6 + 88 608 z^5 + 1 197 744 z^4 + 5 265 960 z^3 + 7 172 172 z^2 + 852 390 z - 218 295)}{12 386 304 z^2} + \frac{1}{24 772 608 z^{5/2}} (\sqrt{\pi} (-256 z^8 + 177 408 z^6 + 2 483 712 z^5 + 11 642 400 z^4 + 18 627 840 z^3 + 5 821 200 z^2 - 997 920 z + 218 295) \operatorname{erf}(\sqrt{z}))$$

07.25.03.0310.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, 4; z\right) = \frac{1}{103 378 275 z^2} (4 e^{z/2} (256 z^8 + 64 z^7 - 201 888 z^6 + 3 012 720 z^5 - 15 084 480 z^4 + 25 225 560 z^3 - 6 257 790 z^2 - 1 985 445 z - 623 700) I_1\left(\frac{z}{2}\right) - \frac{1}{103 378 275 z} 4 e^{z/2} (256 z^7 - 192 z^6 - 202 080 z^5 + 3 214 320 z^4 - 17 997 120 z^3 + 39 002 040 z^2 - 26 340 930 z - 155 925) I_0\left(\frac{z}{2}\right))$$

$$\begin{aligned}
 & \text{07.25.03.0311.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{31\,850\,496\,z^3} \\
 & e^z (128\,z^8 + 64\,z^7 - 113\,952\,z^6 + 1\,806\,000\,z^5 - 9\,631\,464\,z^4 + 16\,904\,268\,z^3 - 3\,347\,190\,z^2 - 1\,548\,855\,z - 623\,700) + \\
 & \frac{1}{63\,700\,992\,z^{7/2}} \left(\sqrt{\pi} (-256\,z^9 + 228\,096\,z^7 - 3\,725\,568\,z^6 + 20\,956\,320\,z^5 - \right. \\
 & \left. 41\,912\,640\,z^4 + 17\,463\,600\,z^3 + 4\,490\,640\,z^2 + 1\,964\,655\,z + 623\,700) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0312.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{31\,850\,496\,z^3} \\
 & e^{-z} (-128\,z^8 + 64\,z^7 + 113\,952\,z^6 + 1\,806\,000\,z^5 + 9\,631\,464\,z^4 + 16\,904\,268\,z^3 + 3\,347\,190\,z^2 - 1\,548\,855\,z + 623\,700) + \\
 & \frac{1}{63\,700\,992\,z^{7/2}} \left(\sqrt{\pi} (-256\,z^9 + 228\,096\,z^7 + 3\,725\,568\,z^6 + 20\,956\,320\,z^5 + \right. \\
 & \left. 41\,912\,640\,z^4 + 17\,463\,600\,z^3 - 4\,490\,640\,z^2 + 1\,964\,655\,z - 623\,700) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0313.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, 5; z\right) = \\
 & \frac{1}{1\,964\,187\,225\,z^3} \left(32\,e^{z/2} (256\,z^9 + 64\,z^8 - 255\,744\,z^7 + 4\,412\,976\,z^6 - 26\,232\,672\,z^5 + 54\,307\,800\,z^4 - \right. \\
 & \left. 18\,627\,840\,z^3 - 8\,347\,185\,z^2 - 4\,864\,860\,z - 2\,120\,580) I_1\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{1\,964\,187\,225\,z^2} \left(32\,e^{z/2} (256\,z^8 - 192\,z^7 - 255\,936\,z^6 + 4\,668\,432\,z^5 - 30\,518\,640\,z^4 + \right. \right. \\
 & \left. \left. 78\,586\,200\,z^3 - 63\,451\,080\,z^2 - 1\,216\,215\,z - 530\,145) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0314.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{283\,115\,520\,z^4} \left(e^z (512\,z^9 + 256\,z^8 - 569\,856\,z^7 + 10\,360\,320\,z^6 - 64\,956\,480\,z^5 + 139\,652\,640\,z^4 - \right. \\
 & \left. 39\,584\,160\,z^3 - 25\,280\,640\,z^2 - 18\,399\,150\,z - 9\,823\,275) \right) + \\
 & \frac{1}{566\,231\,040\,z^{9/2}} \left(\sqrt{\pi} (-1024\,z^{10} + 1\,140\,480\,z^8 - 21\,288\,960\,z^7 + 139\,708\,800\,z^6 - 335\,301\,120\,z^5 + \right. \\
 & \left. 174\,636\,000\,z^4 + 59\,875\,200\,z^3 + 39\,293\,100\,z^2 + 24\,948\,000\,z + 9\,823\,275) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0315.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{283\,115\,520\,z^4} \left(e^{-z} (-512\,z^9 + 256\,z^8 + 569\,856\,z^7 + 10\,360\,320\,z^6 + 64\,956\,480\,z^5 + 139\,652\,640\,z^4 + \right. \\
 & \quad \left. 39\,584\,160\,z^3 - 25\,280\,640\,z^2 + 18\,399\,150\,z - 9\,823\,275) \right) + \\
 & \frac{1}{566\,231\,040\,z^{9/2}} \left(\sqrt{\pi} (-1024\,z^{10} + 1\,140\,480\,z^8 + 21\,288\,960\,z^7 + 139\,708\,800\,z^6 + 335\,301\,120\,z^5 + \right. \\
 & \quad \left. 174\,636\,000\,z^4 - 59\,875\,200\,z^3 + 39\,293\,100\,z^2 - 24\,948\,000\,z + 9\,823\,275) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0316.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{9}{2}, 6; z\right) = \\
 & \frac{1}{8\,249\,586\,345\,z^4} \left(32\,e^{z/2} (512\,z^{10} + 128\,z^9 - 631\,872\,z^8 + 12\,377\,280\,z^7 - 85\,179\,696\,z^6 + 210\,279\,888\,z^5 - \right. \\
 & \quad \left. 92\,557\,080\,z^4 - 52\,640\,280\,z^3 - 43\,503\,075\,z^2 - 35\,051\,940\,z - 18\,960\,480) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{8\,249\,586\,345\,z^3} \left(32\,e^{z/2} (512\,z^9 - 384\,z^8 - 632\,256\,z^7 + 13\,008\,576\,z^6 - 97\,242\,768\,z^5 + 289\,895\,760\,z^4 - \right. \\
 & \quad \left. 270\,685\,800\,z^3 - 10\,727\,640\,z^2 - 8\,762\,985\,z - 4\,740\,120) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{7}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.0317.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{105} e^z (-16\,z^5 + 80\,z^4 + 32\,z^3 + 36\,z^2 + 60\,z + 105) + \frac{8}{105} \sqrt{\pi} (2\,z^{11/2} - 11\,z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0318.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{105} e^{-z} (16\,z^5 + 80\,z^4 - 32\,z^3 + 36\,z^2 - 60\,z + 105) + \frac{8}{105} \sqrt{\pi} (2\,z^{11/2} + 11\,z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0319.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (4\,z^5 - 42\,z^4 + 80\,z^3 + 24\,z^2 + 18\,z + 15) + \frac{1}{15} \sqrt{\pi} (-4\,z^{11/2} + 44\,z^{9/2} - 99\,z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0320.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \\
 & \frac{1}{15} e^{-z} (-4\,z^5 - 42\,z^4 - 80\,z^3 + 24\,z^2 - 18\,z + 15) + \frac{1}{15} \sqrt{\pi} (-4\,z^{11/2} - 44\,z^{9/2} - 99\,z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0321.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \\
 & \frac{1}{18} e^z (-4\,z^5 + 64\,z^4 - 267\,z^3 + 240\,z^2 + 48\,z + 18) + \frac{1}{36} \sqrt{\pi} (8\,z^{11/2} - 132\,z^{9/2} + 594\,z^{7/2} - 693\,z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0322.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) &= \\
 & \frac{1}{18} e^{-z} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36} \sqrt{\pi} (8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0323.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) &= \frac{1}{96} e^z (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) + \\
 & \frac{1}{192} \sqrt{\pi} (-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0324.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) &= \frac{1}{96} e^{-z} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) + \\
 & \frac{1}{192} \sqrt{\pi} (-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0325.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) &= \frac{e^z (-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920)}{1920} + \\
 & \frac{\sqrt{\pi} (32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0326.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) &= \frac{e^{-z} (16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \\
 & \frac{\sqrt{\pi} (32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z}) \operatorname{erf}(\sqrt{z})}{3840}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0327.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, 1; z\right) &= \frac{e^{z/2} (32z^6 - 992z^5 + 10512z^4 - 46944z^3 + 88674z^2 - 62370z + 10395) I_0\left(\frac{z}{2}\right)}{10395} - \\
 & \frac{2e^{z/2} (16z^6 - 480z^5 + 4784z^4 - 18912z^3 + 27387z^2 - 9762z) I_1\left(\frac{z}{2}\right)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0328.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) &= \frac{e^z (-32z^5 + 1040z^4 - 11376z^3 + 50232z^2 - 83370z + 35685)}{46080} + \\
 & \frac{\sqrt{\pi} (64z^6 - 2112z^5 + 23760z^4 - 110880z^3 + 207900z^2 - 124740z + 10395) \operatorname{erfi}(\sqrt{z})}{92160\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0329.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) &= \frac{e^{-z} (32z^5 + 1040z^4 + 11376z^3 + 50232z^2 + 83370z + 35685)}{46080} + \\
 & \frac{\sqrt{\pi} (64z^6 + 2112z^5 + 23760z^4 + 110880z^3 + 207900z^2 + 124740z + 10395) \operatorname{erf}(\sqrt{z})}{92160\sqrt{z}}
 \end{aligned}$$

07.25.03.0330.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 - 2336 z^5 + 30000 z^4 - 168864 z^3 + 425112 z^2 - 436590 z + 135135) I_0\left(\frac{z}{2}\right) + e^{z/2} (-64 z^6 + 2272 z^5 - 27760 z^4 + 142176 z^3 - 294744 z^2 + 191442 z - 10395) I_1\left(\frac{z}{2}\right)}{135135}$$

07.25.03.0331.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (-64 z^6 + 2432 z^5 - 32080 z^4 + 179136 z^3 - 408828 z^2 + 291480 z - 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 - 4928 z^6 + 66528 z^5 - 388080 z^4 + 970200 z^3 - 873180 z^2 + 145530 z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0332.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 2432 z^5 + 32080 z^4 + 179136 z^3 + 408828 z^2 + 291480 z + 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 + 4928 z^6 + 66528 z^5 + 388080 z^4 + 970200 z^3 + 873180 z^2 + 145530 z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.0333.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 - 2688 z^5 + 40560 z^4 - 275520 z^3 + 866520 z^2 - 1164240 z + 509355) I_0\left(\frac{z}{2}\right) - \frac{1}{2027025 z} 4 e^{z/2} (64 z^7 - 2624 z^6 + 37968 z^5 - 238800 z^4 + 644280 z^3 - 608760 z^2 + 72765 z + 10395) I_1\left(\frac{z}{2}\right)}{2027025}$$

07.25.03.0334.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (-128 z^7 + 5568 z^6 - 85984 z^5 + 580560 z^4 - 1686744 z^3 + 1690836 z^2 - 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} \left(\sqrt{\pi} (256 z^8 - 11264 z^7 + 177408 z^6 - 1241856 z^5 + 3880800 z^4 - 4656960 z^3 + 1164240 z^2 + 166320 z + 31185) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.0335.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 5568 z^6 + 85984 z^5 + 580560 z^4 + 1686744 z^3 + 1690836 z^2 + 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} \left(\sqrt{\pi} (256 z^8 + 11264 z^7 + 177408 z^6 + 1241856 z^5 + 3880800 z^4 + 4656960 z^3 + 1164240 z^2 - 166320 z + 31185) \operatorname{erf}(\sqrt{z}) \right)$$

$$\begin{aligned}
 & \text{07.25.03.0336.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, 4; z\right) = \\
 & \frac{1}{11486475z} 4e^{z/2} (128z^7 - 6080z^6 + 105408z^5 - 838800z^4 + 3163920z^3 - 5239080z^2 + 2910600z + 10395) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{11486475z^2} \\
 & 4e^{z/2} (128z^8 - 5952z^7 + 99520z^6 - 742128z^5 + 2466000z^4 - 3061560z^3 + 582120z^2 + 155925z + 41580) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0337.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{14155776z^3} \\
 & e^z (-256z^8 + 12544z^7 - 221952z^6 + 1757760z^5 - 6203040z^4 + 8030448z^3 - 1164240z^2 - 457380z - 155925) + \\
 & \frac{1}{28311552z^{7/2}} \left(\sqrt{\pi} (512z^9 - 25344z^8 + 456192z^7 - 3725568z^6 + 13970880z^5 - \right. \\
 & \left. 20956320z^4 + 6985440z^3 + 1496880z^2 + 561330z + 155925) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0338.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{14155776z^3} \\
 & e^{-z} (256z^8 + 12544z^7 + 221952z^6 + 1757760z^5 + 6203040z^4 + 8030448z^3 + 1164240z^2 - 457380z + 155925) + \\
 & \frac{1}{28311552z^{7/2}} \left(\sqrt{\pi} (512z^9 + 25344z^8 + 456192z^7 + 3725568z^6 + 13970880z^5 + \right. \\
 & \left. 20956320z^4 + 6985440z^3 - 1496880z^2 + 561330z - 155925) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0339.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{218243025z^2} \\
 & \left(32e^{z/2} (128z^8 - 6784z^7 + 132864z^6 - 1212096z^5 + 5331360z^4 - 10478160z^3 + 6985440z^2 + 83160z + 31185) \right. \\
 & \left. I_0\left(\frac{z}{2}\right) - \frac{1}{218243025z^3} \left(128e^{z/2} (32z^9 - 1664z^8 + 31568z^7 - 272256z^6 + \right. \right. \\
 & \left. \left. 1074804z^5 - 1654080z^4 + 436590z^3 + 166320z^2 + 83160z + 31185) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0340.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{62914560z^4} \left(e^z (-512z^9 + 27904z^8 - 556544z^7 + 5057280z^6 - 21001920z^5 + 33362400z^4 - \right. \\
 & \left. 6985440z^3 - 3825360z^2 - 2390850z - 1091475) \right) + \\
 & \frac{1}{125829120z^{9/2}} \left(\sqrt{\pi} (1024z^{10} - 56320z^9 + 1140480z^8 - 10644480z^7 + 46569600z^6 - 83825280z^5 + \right. \\
 & \left. 34927200z^4 + 9979200z^3 + 5613300z^2 + 3118500z + 1091475) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0341.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{62914560z^4} \left(e^{-z} (512z^9 + 27904z^8 + 556544z^7 + 5057280z^6 + 21001920z^5 + 33362400z^4 + \right. \\
 & \quad \left. 6985440z^3 - 3825360z^2 + 2390850z - 1091475) \right) + \\
 & \frac{1}{125829120z^{9/2}} \left(\sqrt{\pi} (1024z^{10} + 56320z^9 + 1140480z^8 + 10644480z^7 + 46569600z^6 + 83825280z^5 + \right. \\
 & \quad \left. 34927200z^4 - 9979200z^3 + 5613300z^2 - 3118500z + 1091475) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0342.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{7}{2}; -\frac{7}{2}, 6; z\right) = \\
 & \frac{1}{916620705z^3} \left(32e^{z/2} (256z^9 - 14976z^8 + 326976z^7 - 3364032z^6 + 16903152z^5 - 38419920z^4 + \right. \\
 & \quad \left. 29688120z^3 + 748440z^2 + 530145z + 249480) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{916620705z^4} \left(32e^{z/2} (256z^{10} - 14720z^9 + 312384z^8 - 3058752z^7 + 13986672z^6 - 25692912z^5 + \right. \\
 & \quad \left. 8731800z^4 + 4241160z^3 + 3024945z^2 + 2120580z + 997920) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{5}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{5}{2}$, $b_1 = -\frac{11}{2}$

$$\text{07.25.03.0343.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{1}{693} e^z (8z^3 - 84z^2 + 378z - 693)$$

$$\text{07.25.03.0344.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{63} e^z (4z^2 - 28z + 63)$$

$$\text{07.25.03.0345.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{1}{7} e^z (2z - 7)$$

$$\text{07.25.03.0346.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = e^z$$

$$\text{07.25.03.0347.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (4z^2 + 2z + 3) - \frac{4}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0348.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{4}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4z^2 - 2z + 3)$$

07.25.03.0349.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = e^z (-2z^2 + 4z + 1) + \sqrt{\pi} (2z^{5/2} - 5z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0350.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = e^{-z} (-2z^2 - 4z + 1) + \sqrt{\pi} (-2z^{5/2} - 5z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0351.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{4} e^z (2z^2 - 9z + 4) + \frac{1}{8} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0352.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{4} e^{-z} (2z^2 + 9z + 4) + \frac{1}{8} \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0353.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-4z^3 + 28z^2 - 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^3 - 24z^2 + 23z) I_1\left(\frac{z}{2}\right)$$

07.25.03.0354.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{48} e^z (4z^2 - 28z + 33) + \frac{\sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.0355.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{48} e^{-z} (4z^2 + 28z + 33) + \frac{\sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.0356.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-8z^3 + 76z^2 - 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 - 68z^2 + 116z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.0357.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^3 - 76z^2 + 146z - 15)}{256z} + \frac{\sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.0358.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^3 + 76z^2 + 146z + 15)}{256z} + \frac{\sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.0359.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, 3; z\right) = \frac{4e^{z/2} (8z^4 - 88z^3 + 216z^2 - 60z - 15) I_1\left(\frac{z}{2}\right)}{945z} - \frac{16}{945} e^{z/2} (2z^3 - 24z^2 + 75z - 60) I_0\left(\frac{z}{2}\right)$$

$$\begin{aligned}
 & 07.25.03.0360.01 \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \\
 & \frac{e^z (16z^4 - 192z^3 + 512z^2 - 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.0361.01 \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \\
 & \frac{e^{-z} (16z^4 + 192z^3 + 512z^2 + 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.0362.01 \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, 4; z\right) = \\
 & \frac{4e^{z/2} (16z^5 - 216z^4 + 692z^3 - 300z^2 - 135z - 60) I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4e^{z/2} (16z^4 - 232z^3 + 900z^2 - 900z - 15) I_0\left(\frac{z}{2}\right)}{3465z}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.0363.01 \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{7e^z (32z^5 - 464z^4 + 1584z^3 - 600z^2 - 390z - 225)}{24576z^3} - \\
 & \frac{7\sqrt{\pi} (64z^6 - 960z^5 + 3600z^4 - 2400z^3 - 900z^2 - 540z - 225) \operatorname{erfi}(\sqrt{z})}{49152z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.0364.01 \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} (32z^5 + 464z^4 + 1584z^3 + 600z^2 - 390z + 225)}{24576z^3} + \\
 & \frac{7\sqrt{\pi} (64z^6 + 960z^5 + 3600z^4 + 2400z^3 - 900z^2 + 540z - 225) \operatorname{erf}(\sqrt{z})}{49152z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.0365.01 \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2} (16z^6 - 256z^5 + 1012z^4 - 600z^3 - 375z^2 - 300z - 180) I_1\left(\frac{z}{2}\right)}{45045z^3} - \\
 & \frac{32e^{z/2} (16z^5 - 272z^4 + 1260z^3 - 1500z^2 - 75z - 45) I_0\left(\frac{z}{2}\right)}{45045z^2}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.0366.01 \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{3e^z (64z^6 - 1088z^5 + 4528z^4 - 2400z^3 - 2100z^2 - 2100z - 1575)}{32768z^4} - \\
 & \frac{3\sqrt{\pi} (128z^7 - 2240z^6 + 10080z^5 - 8400z^4 - 4200z^3 - 3780z^2 - 3150z - 1575) \operatorname{erfi}(\sqrt{z})}{65536z^{9/2}}
 \end{aligned}$$

07.25.03.0367.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 + 1088 z^5 + 4528 z^4 + 2400 z^3 - 2100 z^2 + 2100 z - 1575)}{32 768 z^4} + \frac{3 \sqrt{\pi} (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575) \operatorname{erf}(\sqrt{z})}{65 536 z^{9/2}}$$

07.25.03.0368.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right)}{135 135 z^4} - \frac{32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135 135 z^3}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{5}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.0369.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{e^z (256 z^5 + 128 z^4 + 192 z^3 + 480 z^2 - 19 110 z + 59 535)}{59 535} - \frac{256 \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})}{59 535}$$

07.25.03.0370.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{e^{-z} (-256 z^5 + 128 z^4 - 192 z^3 + 480 z^2 + 19 110 z + 59 535)}{59 535} - \frac{256 \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})}{59 535}$$

07.25.03.0371.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{128 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{6615} + \frac{e^z (-128 z^5 - 64 z^4 - 96 z^3 - 240 z^2 - 840 z + 6615)}{6615}$$

07.25.03.0372.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{128 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{6615} + \frac{e^{-z} (128 z^5 - 64 z^4 + 96 z^3 - 240 z^2 + 840 z + 6615)}{6615}$$

07.25.03.0373.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0374.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{945} e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.0375.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{567} e^z (-16 z^5 - 8 z^4 - 12 z^3 + 1356 z^2 + 588 z + 567) + \frac{2}{567} \sqrt{\pi} (8 z^{11/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0376.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{567} e^{-z} (16 z^5 - 8 z^4 + 12 z^3 + 1356 z^2 - 588 z + 567) + \frac{2}{567} \sqrt{\pi} (8 z^{11/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0377.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{756} e^z (8z^5 + 4z^4 + 6z^3 - 2757z^2 + 3864z + 756) + \frac{\sqrt{\pi} (-16z^{11/2} + 5544z^{5/2} - 10395z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1512}$$

07.25.03.0378.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{756} e^{-z} (-8z^5 + 4z^4 - 6z^3 - 2757z^2 - 3864z + 756) + \frac{\sqrt{\pi} (-16z^{11/2} - 5544z^{5/2} - 10395z^{3/2}) \operatorname{erf}(\sqrt{z})}{1512}$$

07.25.03.0379.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{e^z (-8z^5 - 4z^4 - 6z^3 + 6915z^2 - 22575z + 7560)}{7560} + \frac{\sqrt{\pi} (16z^{11/2} - 13860z^{5/2} + 51975z^{3/2} - 31185\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{15120}$$

07.25.03.0380.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (8z^5 - 4z^4 + 6z^3 + 6915z^2 + 22575z + 7560)}{7560} + \frac{\sqrt{\pi} (16z^{11/2} + 13860z^{5/2} + 51975z^{3/2} + 31185\sqrt{z}) \operatorname{erf}(\sqrt{z})}{15120}$$

07.25.03.0381.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (256z^6 - 192z^5 - 120z^4 - 320376z^3 + 1740312z^2 - 2328480z + 654885) I_0\left(\frac{z}{2}\right)}{654885} - \frac{4e^{z/2} (64z^6 + 16z^5 + 18z^4 - 80004z^3 + 355299z^2 - 265923z) I_1\left(\frac{z}{2}\right)}{654885}$$

07.25.03.0382.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z (-16z^5 - 8z^4 - 12z^3 + 27690z^2 - 142170z + 129465)}{181440} + \frac{\sqrt{\pi} (32z^6 - 55440z^3 + 311850z^2 - 374220z + 51975) \operatorname{erfi}(\sqrt{z})}{362880\sqrt{z}}$$

07.25.03.0383.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (16z^5 - 8z^4 + 12z^3 + 27690z^2 + 142170z + 129465)}{181440} + \frac{\sqrt{\pi} (32z^6 + 55440z^3 + 311850z^2 + 374220z + 51975) \operatorname{erf}(\sqrt{z})}{362880\sqrt{z}}$$

07.25.03.0384.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (512 z^6 - 384 z^5 - 240 z^4 - 1 189 608 z^3 + 8 694 756 z^2 - 17 006 220 z + 8 513 505) I_0\left(\frac{z}{2}\right) + e^{z/2} (-512 z^6 - 128 z^5 - 144 z^4 + 1 188 888 z^3 - 7 507 668 z^2 + 10 085 796 z - 1 029 105) I_1\left(\frac{z}{2}\right)}{8 513 505}$$

07.25.03.0385.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (-64 z^6 - 32 z^5 - 48 z^4 + 193 920 z^3 - 1 358 700 z^2 + 2 035 530 z - 155 925)}{3 386 880 z} + \frac{\sqrt{\pi} (128 z^7 - 388 080 z^4 + 2 910 600 z^3 - 5 239 080 z^2 + 1 455 300 z + 155 925) \operatorname{erfi}(\sqrt{z})}{6 773 760 z^{3/2}}$$

07.25.03.0386.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (64 z^6 - 32 z^5 + 48 z^4 + 193 920 z^3 + 1 358 700 z^2 + 2 035 530 z + 155 925)}{3 386 880 z} + \frac{\sqrt{\pi} (128 z^7 + 388 080 z^4 + 2 910 600 z^3 + 5 239 080 z^2 + 1 455 300 z - 155 925) \operatorname{erf}(\sqrt{z})}{6 773 760 z^{3/2}}$$

07.25.03.0387.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, 3; z\right) = \frac{4 e^{z/2} (512 z^6 - 384 z^5 - 240 z^4 - 1 982 400 z^3 + 18 208 260 z^2 - 46 735 920 z + 32 297 265) I_0\left(\frac{z}{2}\right) - \frac{1}{127 702 575 z} 4 e^{z/2} (512 z^7 + 128 z^6 + 144 z^5 - 1 981 680 z^4 + 16 228 380 z^3 - 31 491 180 z^2 + 6 975 045 z + 1 486 485) I_1\left(\frac{z}{2}\right)}{127 702 575}$$

07.25.03.0388.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (-128 z^7 - 64 z^6 - 96 z^5 + 620 688 z^4 - 5 511 576 z^3 + 11 522 196 z^2 - 2 058 210 z - 654 885)}{21 676 032 z^2} + \frac{1}{43 352 064 z^{5/2}} \sqrt{\pi} (256 z^8 - 1 241 856 z^5 + 11 642 400 z^4 - 27 941 760 z^3 + 11 642 400 z^2 + 2 494 800 z + 654 885) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0389.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (128 z^7 - 64 z^6 + 96 z^5 + 620 688 z^4 + 5 511 576 z^3 + 11 522 196 z^2 + 2 058 210 z - 654 885)}{21 676 032 z^2} + \frac{1}{43 352 064 z^{5/2}} \sqrt{\pi} (256 z^8 + 1 241 856 z^5 + 11 642 400 z^4 + 27 941 760 z^3 + 11 642 400 z^2 - 2 494 800 z + 654 885) \operatorname{erf}(\sqrt{z})$$

07.25.03.0390.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, 4; z\right) = \frac{1}{723 647 925 z} + \frac{4 e^{z/2} (1024 z^7 - 768 z^6 - 480 z^5 - 6 126 960 z^4 + 67 767 840 z^3 - 215 093 340 z^2 + 186 216 030 z + 2 027 025) I_0\left(\frac{z}{2}\right) - \frac{1}{723 647 925 z^2} (4 e^{z/2} (1024 z^8 + 256 z^7 + 288 z^6 - 6 125 520 z^5 + 61 645 920 z^4 - 156 495 780 z^3 + 54 490 590 z^2 + 21 216 195 z + 8 108 100) I_1\left(\frac{z}{2}\right))}{723 647 925 z^2}$$

07.25.03.0391.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{55\,738\,368\,z^3}$$

$$e^z (-128z^8 - 64z^7 - 96z^6 + 931\,152z^5 - 10013\,304z^4 + 26\,890\,164z^3 - 7\,879\,410z^2 - 4\,438\,665z - 2\,182\,950) +$$

$$\frac{1}{111\,476\,736\,z^{7/2}} \left(\sqrt{\pi} (256z^9 - 1\,862\,784z^6 + 20\,956\,320z^5 - 62\,868\,960z^4 +$$

$$34\,927\,200z^3 + 11\,226\,600z^2 + 5\,893\,965z + 2\,182\,950) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.0392.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{55\,738\,368\,z^3}$$

$$e^{-z} (128z^8 - 64z^7 + 96z^6 + 931\,152z^5 + 10013\,304z^4 + 26\,890\,164z^3 + 7\,879\,410z^2 - 4\,438\,665z + 2\,182\,950) +$$

$$\frac{1}{111\,476\,736\,z^{7/2}} \left(\sqrt{\pi} (256z^9 + 1\,862\,784z^6 + 20\,956\,320z^5 + 62\,868\,960z^4 +$$

$$34\,927\,200z^3 - 11\,226\,600z^2 + 5\,893\,965z - 2\,182\,950) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.0393.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, 5; z\right) =$$

$$\frac{1}{13\,749\,310\,575\,z^2} \left(32 e^{z/2} (1024z^8 - 768z^7 - 480z^6 - 8\,954\,400z^5 + 115\,834\,320z^4 - 437\,754\,240z^3 +$$

$$451\,288\,530z^2 + 15\,280\,650z + 7\,952\,175) I_0\left(\frac{z}{2}\right) -$$

$$\frac{1}{13\,749\,310\,575\,z^3} \left(64 e^{z/2} (512z^9 + 128z^8 + 144z^7 - 4\,476\,480z^6 + 53\,442\,480z^5 - 167\,665\,680z^4 +$$

$$80\,259\,795z^3 + 43\,742\,160z^2 + 30\,561\,300z + 15\,904\,350) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.0394.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{123\,863\,040\,z^4} \left(e^z (-128z^9 - 64z^8 - 96z^7 + 1\,330\,320z^6 - 16\,799\,160z^5 + 55\,131\,300z^4 - 22\,848\,210z^3 -$$

$$17\,536\,365z^2 - 15\,280\,650z - 9\,823\,275) \right) +$$

$$\frac{1}{247\,726\,080\,z^{9/2}} \left(\sqrt{\pi} (256z^{10} - 2\,661\,120z^7 + 34\,927\,200z^6 - 125\,737\,920z^5 + 87\,318\,000z^4 +$$

$$37\,422\,000z^3 + 29\,469\,825z^2 + 21\,829\,500z + 9\,823\,275) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.0395.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{123\,863\,040\,z^4} \left(e^{-z} (128\,z^9 - 64\,z^8 + 96\,z^7 + 1\,330\,320\,z^6 + 16\,799\,160\,z^5 + 55\,131\,300\,z^4 + 22\,848\,210\,z^3 - 17\,536\,365\,z^2 + 15\,280\,650\,z - 9\,823\,275) \right) +$$

$$\frac{1}{247\,726\,080\,z^{9/2}} \left(\sqrt{\pi} (256\,z^{10} + 2\,661\,120\,z^7 + 34\,927\,200\,z^6 + 125\,737\,920\,z^5 + 87\,318\,000\,z^4 - 37\,422\,000\,z^3 + 29\,469\,825\,z^2 - 21\,829\,500\,z + 9\,823\,275) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.0396.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{9}{2}, 6; z\right) =$$

$$\frac{1}{57\,747\,104\,415\,z^3} \left(32\,e^{z/2} (2048\,z^9 - 1536\,z^8 - 960\,z^7 - 25\,071\,648\,z^6 + 371\,344\,176\,z^5 - 1\,627\,607\,520\,z^4 + 1\,936\,713\,240\,z^3 + 131\,288\,850\,z^2 + 126\,704\,655\,z + 80\,582\,040) I_0\left(\frac{z}{2}\right) - \right.$$

$$\left. \frac{1}{57\,747\,104\,415\,z^4} \left(32\,e^{z/2} (2048\,z^{10} + 512\,z^9 + 576\,z^8 - 25\,068\,768\,z^7 + 346\,282\,608\,z^6 - 1\,293\,830\,496\,z^5 + 791\,101\,080\,z^4 + 544\,302\,990\,z^3 + 535\,228\,155\,z^2 + 506\,818\,620\,z + 322\,328\,160) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{5}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.0397.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{735} e^z (64\,z^5 - 144\,z^4 - 40\,z^3 - 12\,z^2 + 90\,z + 735) - \frac{16}{735} \sqrt{\pi} (4\,z^{11/2} - 11\,z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0398.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{735} e^{-z} (-64\,z^5 - 144\,z^4 + 40\,z^3 - 12\,z^2 - 90\,z + 735) - \frac{16}{735} \sqrt{\pi} (4\,z^{11/2} + 11\,z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0399.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{105} e^z (-16\,z^5 + 80\,z^4 + 32\,z^3 + 36\,z^2 + 60\,z + 105) + \frac{8}{105} \sqrt{\pi} (2\,z^{11/2} - 11\,z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0400.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{1}{105} e^{-z} (16\,z^5 + 80\,z^4 - 32\,z^3 + 36\,z^2 - 60\,z + 105) + \frac{8}{105} \sqrt{\pi} (2\,z^{11/2} + 11\,z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0401.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) =$$

$$\frac{1}{63} e^z (8\,z^5 - 62\,z^4 - 27\,z^3 + 312\,z^2 + 102\,z + 63) + \frac{1}{126} \sqrt{\pi} (-16\,z^{11/2} + 132\,z^{9/2} - 693\,z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0402.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{63} e^{-z} (-8z^5 - 62z^4 + 27z^3 + 312z^2 - 102z + 63) + \frac{1}{126} \sqrt{\pi} (-16z^{11/2} - 132z^{9/2} + 693z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0403.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{168} e^z (-8z^5 + 84z^4 + 38z^3 - 1335z^2 + 1152z + 168) + \frac{1}{336} \sqrt{\pi} (16z^{11/2} - 176z^{9/2} + 2772z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0404.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{168} e^{-z} (8z^5 + 84z^4 - 38z^3 - 1335z^2 - 1152z + 168) + \frac{1}{336} \sqrt{\pi} (16z^{11/2} + 176z^{9/2} - 2772z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0405.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{e^z (32z^5 - 424z^4 - 196z^3 + 13590z^2 - 28335z + 6720)}{6720} + \frac{\sqrt{\pi} (-64z^{11/2} + 880z^{9/2} - 27720z^{5/2} + 69300z^{3/2} - 31185\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{13440}$$

07.25.03.0406.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (-32z^5 - 424z^4 + 196z^3 + 13590z^2 + 28335z + 6720)}{6720} + \frac{\sqrt{\pi} (-64z^{11/2} - 880z^{9/2} + 27720z^{5/2} + 69300z^{3/2} + 31185\sqrt{z}) \operatorname{erf}(\sqrt{z})}{13440}$$

07.25.03.0407.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (-128z^6 + 2032z^5 - 1392z^4 - 80844z^3 + 308868z^2 - 322245z + 72765) I_0\left(\frac{z}{2}\right)}{72765} + \frac{e^{z/2} (128z^6 - 1904z^5 - 448z^4 + 79572z^3 - 231024z^2 + 126273z) I_1\left(\frac{z}{2}\right)}{72765}$$

07.25.03.0408.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z (16z^5 - 256z^4 - 120z^3 + 13692z^2 - 45435z + 29925)}{40320} + \frac{\sqrt{\pi} (-32z^6 + 528z^5 - 27720z^3 + 103950z^2 - 93555z + 10395) \operatorname{erfi}(\sqrt{z})}{80640\sqrt{z}}$$

07.25.03.0409.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}(-16z^5 - 256z^4 + 120z^3 + 13692z^2 + 45435z + 29925)}{40320} + \frac{\sqrt{\pi}(-32z^6 - 528z^5 + 27720z^3 + 103950z^2 + 93555z + 10395)\operatorname{erf}(\sqrt{z})}{80640\sqrt{z}}$$

07.25.03.0410.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2}(-256z^6 + 4768z^5 - 3312z^4 - 299232z^3 + 1520484z^2 - 2307690z + 945945)I_0\left(\frac{z}{2}\right) + e^{z/2}(256z^6 - 4512z^5 - 1072z^4 + 296160z^3 - 1228572z^2 + 1215354z - 93555)I_1\left(\frac{z}{2}\right)}{945945}$$

07.25.03.0411.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z(128z^6 - 2400z^5 - 1136z^4 + 192432z^3 - 876960z^2 + 957810z - 51975)}{1505280z} + \frac{\sqrt{\pi}(-256z^7 + 4928z^6 - 388080z^4 + 1940400z^3 - 2619540z^2 + 582120z + 51975)\operatorname{erfi}(\sqrt{z})}{3010560z^{3/2}}$$

07.25.03.0412.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(-128z^6 - 2400z^5 + 1136z^4 + 192432z^3 + 876960z^2 + 957810z + 51975)}{1505280z} + \frac{\sqrt{\pi}(-256z^7 - 4928z^6 + 388080z^4 + 1940400z^3 + 2619540z^2 + 582120z - 51975)\operatorname{erf}(\sqrt{z})}{3010560z^{3/2}}$$

07.25.03.0413.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{14189175z} 4e^{z/2}(256z^7 - 5216z^6 - 1248z^5 + 494160z^4 - 2665920z^3 + 3824730z^2 - 644490z - 114345)I_1\left(\frac{z}{2}\right) - \frac{8e^{z/2}(128z^6 - 2736z^5 + 1920z^4 + 248880z^3 - 1577520z^2 + 3128895z - 1787940)I_0\left(\frac{z}{2}\right)}{14189175}$$

07.25.03.0414.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z(128z^7 - 2752z^6 - 1312z^5 + 308592z^4 - 1789608z^3 + 2740668z^2 - 353430z - 93555)}{4816896z^2} + \frac{1}{9633792z^{5/2}} + \frac{\sqrt{\pi}(-256z^8 + 5632z^7 - 620928z^5 + 3880800z^4 - 6985440z^3 + 2328480z^2 + 415800z + 93555)\operatorname{erfi}(\sqrt{z})}{9633792z^{5/2}}$$

$$\begin{aligned}
 & \text{07.25.03.0415.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \\
 & \frac{e^{-z}(-128z^7 - 2752z^6 + 1312z^5 + 308592z^4 + 1789608z^3 + 2740668z^2 + 353430z - 93555)}{4816896z^2} + \frac{1}{9633792z^{5/2}} \\
 & \sqrt{\pi}(-256z^8 - 5632z^7 + 620928z^5 + 3880800z^4 + 6985440z^3 + 2328480z^2 - 415800z + 93555)\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0416.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, 4; z\right) = \\
 & \frac{1}{80405325z^2} \left(4e^{z/2}(512z^8 - 11840z^7 - 2848z^6 + 1528464z^5 - 10152480z^4 + 19102440z^3 - 5093550z^2 - \right. \\
 & \quad \left.1673595z - 540540)I_1\left(\frac{z}{2}\right) - \frac{1}{80405325z}\right. \\
 & \quad \left.4e^{z/2}(512z^7 - 12352z^6 + 8736z^5 + 1536720z^4 - 11669280z^3 + 28523880z^2 - 20519730z - 135135)I_0\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0417.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{49545216z^3} \\
 & e^z(512z^8 - 12416z^7 - 5952z^6 + 1854240z^5 - 13059888z^4 + 25778088z^3 - 5530140z^2 - 2640330z - 1091475) + \\
 & \frac{1}{99090432z^{7/2}} \left(\sqrt{\pi}(-1024z^9 + 25344z^8 - 3725568z^6 + 27941760z^5 - \right. \\
 & \quad \left.62868960z^4 + 27941760z^3 + 7484400z^2 + 3367980z + 1091475)\operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0418.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{49545216z^3} e^{-z} \\
 & (-512z^8 - 12416z^7 + 5952z^6 + 1854240z^5 + 13059888z^4 + 25778088z^3 + 5530140z^2 - 2640330z + 1091475) + \\
 & \frac{1}{99090432z^{7/2}} \left(\sqrt{\pi}(-1024z^9 - 25344z^8 + 3725568z^6 + 27941760z^5 + 62868960z^4 + \right. \\
 & \quad \left.27941760z^3 - 7484400z^2 + 3367980z - 1091475)\operatorname{erf}(\sqrt{-z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0419.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, 5; z\right) = \\
 & \frac{1}{1527701175z^3} \left(32e^{z/2}(512z^9 - 13248z^8 - 3200z^7 + 2234928z^6 - 17634240z^5 + 41075160z^4 - \right. \\
 & \quad \left.15135120z^3 - 7016625z^2 - 4199580z - 1871100)I_1\left(\frac{z}{2}\right) - \right. \\
 & \quad \left.\frac{1}{1527701175z^2} \left(32e^{z/2}(512z^8 - 13760z^7 + 9792z^6 + 2244240z^5 - 19855920z^4 + \right. \right. \\
 & \quad \left. \left.57629880z^3 - 49480200z^2 - 1049895z - 467775)I_0\left(\frac{z}{2}\right)\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0420.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{55\,050\,240 z^4} \left(e^z (256 z^9 - 6912 z^8 - 3328 z^7 + 1\,325\,760 z^6 - 10\,988\,640 z^5 + 26\,572\,560 z^4 - 8\,149\,680 z^3 - \right. \\
 & \quad \left. 5\,363\,820 z^2 - 4\,002\,075 z - 2\,182\,950) \right) + \\
 & \frac{1}{110\,100\,480 z^{9/2}} \left(\sqrt{\pi} (-512 z^{10} + 14\,080 z^9 - 2\,661\,120 z^7 + 23\,284\,800 z^6 - 62\,868\,960 z^5 + \right. \\
 & \quad \left. 34\,927\,200 z^4 + 12\,474\,000 z^3 + 8\,419\,950 z^2 + 5\,457\,375 z + 2\,182\,950) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0421.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{55\,050\,240 z^4} \left(e^{-z} (-256 z^9 - 6912 z^8 + 3328 z^7 + 1\,325\,760 z^6 + 10\,988\,640 z^5 + 26\,572\,560 z^4 + 8\,149\,680 z^3 - \right. \\
 & \quad \left. 5\,363\,820 z^2 + 4\,002\,075 z - 2\,182\,950) \right) + \\
 & \frac{1}{110\,100\,480 z^{9/2}} \left(\sqrt{\pi} (-512 z^{10} - 14\,080 z^9 + 2\,661\,120 z^7 + 23\,284\,800 z^6 + 62\,868\,960 z^5 + \right. \\
 & \quad \left. 34\,927\,200 z^4 - 12\,474\,000 z^3 + 8\,419\,950 z^2 - 5\,457\,375 z + 2\,182\,950) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0422.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{7}{2}, 6; z\right) = \\
 & \frac{1}{6416\,344\,935 z^4} \left(32 e^{z/2} (1024 z^{10} - 29\,312 z^9 - 7104 z^8 + 6\,259\,776 z^7 - 57\,206\,352 z^6 + 158\,894\,064 z^5 - \right. \\
 & \quad \left. 75\,093\,480 z^4 - 44\,157\,960 z^3 - 37\,453\,185 z^2 - 30\,810\,780 z - 16\,964\,640) I_1\left(\frac{z}{2}\right) \right) - \\
 & \frac{1}{6416\,344\,935 z^3} \left(32 e^{z/2} (1024 z^9 - 30\,336 z^8 + 21\,696 z^7 + 6\,280\,512 z^6 - 63\,436\,464 z^5 + \right. \\
 & \quad \left. 213\,055\,920 z^4 - 211\,309\,560 z^3 - 9\,230\,760 z^2 - 7\,702\,695 z - 4\,241\,160) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{5}{2}$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.0423.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} + 44 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0424.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \\
 & \frac{1}{15} e^{-z} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} - 44 z^{9/2} - 99 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.0425.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{18} e^z (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36} \sqrt{\pi} (8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0426.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{18} e^{-z} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36} \sqrt{\pi} (8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0427.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{96} e^z (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) + \frac{1}{192} \sqrt{\pi} (-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0428.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{96} e^{-z} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) + \frac{1}{192} \sqrt{\pi} (-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0429.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{e^z (-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920)}{1920} + \frac{\sqrt{\pi} (32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.0430.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \frac{\sqrt{\pi} (32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z}) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.0431.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (32z^6 - 992z^5 + 10512z^4 - 46944z^3 + 88674z^2 - 62370z + 10395) I_0\left(\frac{z}{2}\right)}{10395} - \frac{2e^{z/2} (16z^6 - 480z^5 + 4784z^4 - 18912z^3 + 27387z^2 - 9762z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.0432.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{e^z (-32z^5 + 1040z^4 - 11376z^3 + 50232z^2 - 83370z + 35685)}{46080} + \frac{\sqrt{\pi} (64z^6 - 2112z^5 + 23760z^4 - 110880z^3 + 207900z^2 - 124740z + 10395) \operatorname{erfi}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.0433.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}(32z^5 + 1040z^4 + 11376z^3 + 50232z^2 + 83370z + 35685)}{46080} + \frac{\sqrt{\pi}(64z^6 + 2112z^5 + 23760z^4 + 110880z^3 + 207900z^2 + 124740z + 10395)\operatorname{erf}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.0434.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2}(64z^6 - 2336z^5 + 30000z^4 - 168864z^3 + 425112z^2 - 436590z + 135135)I_0\left(\frac{z}{2}\right)}{135135} + \frac{e^{z/2}(-64z^6 + 2272z^5 - 27760z^4 + 142176z^3 - 294744z^2 + 191442z - 10395)I_1\left(\frac{z}{2}\right)}{135135}$$

07.25.03.0435.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z(-64z^6 + 2432z^5 - 32080z^4 + 179136z^3 - 408828z^2 + 291480z - 10395)}{430080z} + \frac{1}{860160z^{3/2}}\sqrt{\pi}(128z^7 - 4928z^6 + 66528z^5 - 388080z^4 + 970200z^3 - 873180z^2 + 145530z + 10395)\operatorname{erfi}(\sqrt{z})$$

07.25.03.0436.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(64z^6 + 2432z^5 + 32080z^4 + 179136z^3 + 408828z^2 + 291480z + 10395)}{430080z} + \frac{1}{860160z^{3/2}}\sqrt{\pi}(128z^7 + 4928z^6 + 66528z^5 + 388080z^4 + 970200z^3 + 873180z^2 + 145530z - 10395)\operatorname{erf}(\sqrt{z})$$

07.25.03.0437.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, 3; z\right) = \frac{4e^{z/2}(64z^6 - 2688z^5 + 40560z^4 - 275520z^3 + 866520z^2 - 1164240z + 509355)I_0\left(\frac{z}{2}\right)}{2027025} - \frac{1}{2027025z}4e^{z/2}(64z^7 - 2624z^6 + 37968z^5 - 238800z^4 + 644280z^3 - 608760z^2 + 72765z + 10395)I_1\left(\frac{z}{2}\right)$$

07.25.03.0438.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z(-128z^7 + 5568z^6 - 85984z^5 + 580560z^4 - 1686744z^3 + 1690836z^2 - 145530z - 31185)}{2752512z^2} + \frac{1}{5505024z^{5/2}}\left(\sqrt{\pi}(256z^8 - 11264z^7 + 177408z^6 - 1241856z^5 + 3880800z^4 - 4656960z^3 + 1164240z^2 + 166320z + 31185)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.0439.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 5568 z^6 + 85984 z^5 + 580560 z^4 + 1686744 z^3 + 1690836 z^2 + 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} \left(\sqrt{\pi} (256 z^8 + 11264 z^7 + 177408 z^6 + 1241856 z^5 + 3880800 z^4 + 4656960 z^3 + 1164240 z^2 - 166320 z + 31185) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.0440.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, 4; z\right) = \frac{1}{11486475 z} 4 e^{z/2} (128 z^7 - 6080 z^6 + 105408 z^5 - 838800 z^4 + 3163920 z^3 - 5239080 z^2 + 2910600 z + 10395) I_0\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} 4 e^{z/2} (128 z^8 - 5952 z^7 + 99520 z^6 - 742128 z^5 + 2466000 z^4 - 3061560 z^3 + 582120 z^2 + 155925 z + 41580) I_1\left(\frac{z}{2}\right)$$

07.25.03.0441.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{14155776 z^3} e^z (-256 z^8 + 12544 z^7 - 221952 z^6 + 1757760 z^5 - 6203040 z^4 + 8030448 z^3 - 1164240 z^2 - 457380 z - 155925) + \frac{1}{28311552 z^{7/2}} \left(\sqrt{\pi} (512 z^9 - 25344 z^8 + 456192 z^7 - 3725568 z^6 + 13970880 z^5 - 20956320 z^4 + 6985440 z^3 + 1496880 z^2 + 561330 z + 155925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.0442.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{14155776 z^3} e^{-z} (256 z^8 + 12544 z^7 + 221952 z^6 + 1757760 z^5 + 6203040 z^4 + 8030448 z^3 + 1164240 z^2 - 457380 z + 155925) + \frac{1}{28311552 z^{7/2}} \left(\sqrt{\pi} (512 z^9 + 25344 z^8 + 456192 z^7 + 3725568 z^6 + 13970880 z^5 + 20956320 z^4 + 6985440 z^3 - 1496880 z^2 + 561330 z - 155925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.0443.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, 5; z\right) = \frac{1}{218243025 z^2} \left(32 e^{z/2} (128 z^8 - 6784 z^7 + 132864 z^6 - 1212096 z^5 + 5331360 z^4 - 10478160 z^3 + 6985440 z^2 + 83160 z + 31185) I_0\left(\frac{z}{2}\right) - \frac{1}{218243025 z^3} \left(128 e^{z/2} (32 z^9 - 1664 z^8 + 31568 z^7 - 272256 z^6 + 1074804 z^5 - 1654080 z^4 + 436590 z^3 + 166320 z^2 + 83160 z + 31185) I_1\left(\frac{z}{2}\right) \right) \right)$$

$$\begin{aligned}
 & \text{07.25.03.0444.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{62914560 z^4} \left(e^z (-512 z^9 + 27904 z^8 - 556544 z^7 + 5057280 z^6 - 21001920 z^5 + 33362400 z^4 - \right. \\
 & \quad \left. 6985440 z^3 - 3825360 z^2 - 2390850 z - 1091475) \right) + \\
 & \frac{1}{125829120 z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} - 56320 z^9 + 1140480 z^8 - 10644480 z^7 + 46569600 z^6 - 83825280 z^5 + \right. \\
 & \quad \left. 34927200 z^4 + 9979200 z^3 + 5613300 z^2 + 3118500 z + 1091475) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0445.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{62914560 z^4} \left(e^{-z} (512 z^9 + 27904 z^8 + 556544 z^7 + 5057280 z^6 + 21001920 z^5 + 33362400 z^4 + \right. \\
 & \quad \left. 6985440 z^3 - 3825360 z^2 + 2390850 z - 1091475) \right) + \\
 & \frac{1}{125829120 z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} + 56320 z^9 + 1140480 z^8 + 10644480 z^7 + 46569600 z^6 + 83825280 z^5 + \right. \\
 & \quad \left. 34927200 z^4 - 9979200 z^3 + 5613300 z^2 - 3118500 z + 1091475) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0446.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{5}{2}; -\frac{5}{2}, 6; z\right) = \\
 & \frac{1}{916620705 z^3} \left(32 e^{z/2} (256 z^9 - 14976 z^8 + 326976 z^7 - 3364032 z^6 + 16903152 z^5 - 38419920 z^4 + \right. \\
 & \quad \left. 29688120 z^3 + 748440 z^2 + 530145 z + 249480) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{916620705 z^4} \left(32 e^{z/2} (256 z^{10} - 14720 z^9 + 312384 z^8 - 3058752 z^7 + 13986672 z^6 - 25692912 z^5 + \right. \\
 & \quad \left. 8731800 z^4 + 4241160 z^3 + 3024945 z^2 + 2120580 z + 997920) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{3}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{11}{2}$

$$\text{07.25.03.0447.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{e^z (16 z^4 - 160 z^3 + 840 z^2 - 2520 z + 3465)}{3465}$$

$$\text{07.25.03.0448.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{315} e^z (8 z^3 - 60 z^2 + 210 z - 315)$$

07.25.03.0449.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{35} e^z (4z^2 - 20z + 35)$$

07.25.03.0450.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{5} e^z (2z - 5)$$

07.25.03.0451.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = e^z$$

07.25.03.0452.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = e^z (2z + 1) - 2\sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0453.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = e^{-z} (1 - 2z) - 2\sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.0454.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = e^z (1 - z) + \frac{1}{2} \sqrt{\pi} (2z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0455.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = e^{-z} (z + 1) + \frac{1}{2} \sqrt{\pi} (2z^{3/2} + 3\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0456.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (2z^2 - 6z + 3) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z - 2) z I_1\left(\frac{z}{2}\right)$$

07.25.03.0457.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{8} e^z (5 - 2z) + \frac{\sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.0458.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{8} e^{-z} (2z + 5) + \frac{\sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.0459.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4z^2 - 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4z^2 + 14z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.0460.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (-4z^2 + 16z - 3)}{32z} + \frac{\sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.0461.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (4z^2 + 16z + 3)}{32z} + \frac{\sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.0462.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 - 24z + 27) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4z^3 - 20z^2 + 9z + 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.0463.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}} - \frac{5 e^z (8z^3 - 44z^2 + 18z + 9)}{512 z^2}$$

07.25.03.0464.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (8z^3 + 44z^2 + 18z - 9)}{512 z^2} + \frac{5\sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.0465.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 - 60z^2 + 84z + 3) I_0\left(\frac{z}{2}\right)}{315z} - \frac{4 e^{z/2} (8z^4 - 52z^3 + 36z^2 + 21z + 12) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.0466.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096 z^{7/2}} - \frac{7 e^z (16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048 z^3}$$

07.25.03.0467.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048 z^3} + \frac{7\sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096 z^{7/2}}$$

07.25.03.0468.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (8z^4 - 72z^3 + 120z^2 + 12z + 9) I_0\left(\frac{z}{2}\right)}{3465 z^2} - \frac{128 e^{z/2} (2z^5 - 16z^4 + 15z^3 + 12z^2 + 12z + 9) I_1\left(\frac{z}{2}\right)}{3465 z^3}$$

07.25.03.0469.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi} (64z^6 - 576z^5 + 720z^4 + 480z^3 + 540z^2 + 540z + 315) \operatorname{erfi}(\sqrt{z})}{32768 z^{9/2}} - \frac{21 e^z (32z^5 - 272z^4 + 240z^3 + 264z^2 + 330z + 315)}{16384 z^4}$$

07.25.03.0470.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (32z^5 + 272z^4 + 240z^3 - 264z^2 + 330z - 315)}{16384 z^4} + \frac{21\sqrt{\pi} (64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315) \operatorname{erf}(\sqrt{z})}{32768 z^{9/2}}$$

07.25.03.0471.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 168 z^4 + 324 z^3 + 60 z^2 + 81 z + 72) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (16 z^6 - 152 z^5 + 180 z^4 + 180 z^3 + 249 z^2 + 324 z + 288) I_1\left(\frac{z}{2}\right)}{9009 z^3}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.0472.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{512 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{99225} + \frac{e^z (-512 z^5 - 256 z^4 - 384 z^3 + 12900 z^2 - 58800 z + 99225)}{99225}$$

07.25.03.0473.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{512 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{99225} + \frac{e^{-z} (512 z^5 - 256 z^4 + 384 z^3 + 12900 z^2 + 58800 z + 99225)}{99225}$$

07.25.03.0474.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (256 z^5 + 128 z^4 + 192 z^3 + 480 z^2 - 5250 z + 11025)}{11025} - \frac{256 \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})}{11025}$$

07.25.03.0475.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-256 z^5 + 128 z^4 - 192 z^3 + 480 z^2 + 5250 z + 11025)}{11025} - \frac{256 \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})}{11025}$$

07.25.03.0476.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{64 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{1575} + \frac{e^z (-64 z^5 - 32 z^4 - 48 z^3 - 120 z^2 - 420 z + 1575)}{1575}$$

07.25.03.0477.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{64 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{1575} + \frac{e^{-z} (64 z^5 - 32 z^4 + 48 z^3 - 120 z^2 + 420 z + 1575)}{1575}$$

07.25.03.0478.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0479.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.0480.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{630} e^z (-8 z^5 - 4 z^4 - 6 z^3 - 15 z^2 + 1680 z + 630) + \frac{\sqrt{\pi} (16 z^{11/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1260}$$

07.25.03.0481.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{630} e^{-z} (8 z^5 - 4 z^4 + 6 z^3 - 15 z^2 - 1680 z + 630) + \frac{\sqrt{\pi} (16 z^{11/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})}{1260}$$

07.25.03.0482.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{e^z (8z^5 + 4z^4 + 6z^3 + 15z^2 - 8610z + 6300)}{6300} + \frac{\sqrt{\pi} (-16z^{11/2} + 17325z^{3/2} - 20790\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{12600}$$

07.25.03.0483.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (-8z^5 + 4z^4 - 6z^3 + 15z^2 + 8610z + 6300)}{6300} + \frac{\sqrt{\pi} (-16z^{11/2} + 17325z^{3/2} + 20790\sqrt{z}) \operatorname{erf}(\sqrt{z})}{12600}$$

07.25.03.0484.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (-512z^6 + 384z^5 + 240z^4 + 420z^3 + 1001700z^2 - 2546775z + 1091475) I_0\left(\frac{z}{2}\right)}{1091475} + \frac{e^{z/2} (512z^6 + 128z^5 + 144z^4 + 300z^3 - 999600z^2 + 1554525z) I_1\left(\frac{z}{2}\right)}{1091475}$$

07.25.03.0485.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z (16z^5 + 8z^4 + 12z^3 + 30z^2 - 51870z + 99225)}{151200} + \frac{\sqrt{\pi} (-32z^6 + 103950z^2 - 249480z + 51975) \operatorname{erfi}(\sqrt{z})}{302400\sqrt{z}}$$

07.25.03.0486.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-16z^5 + 8z^4 - 12z^3 + 30z^2 + 51870z + 99225)}{151200} + \frac{\sqrt{\pi} (-32z^6 + 103950z^2 + 249480z + 51975) \operatorname{erf}(\sqrt{z})}{302400\sqrt{z}}$$

07.25.03.0487.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (-1024z^6 + 768z^5 + 480z^4 + 840z^3 + 5205060z^2 - 19501020z + 14189175) I_0\left(\frac{z}{2}\right)}{14189175} + \frac{e^{z/2} (1024z^6 + 256z^5 + 288z^4 + 600z^3 - 5200860z^2 + 14314860z - 2401245) I_1\left(\frac{z}{2}\right)}{14189175}$$

07.25.03.0488.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (16z^6 + 8z^5 + 12z^4 + 30z^3 - 121170z^2 + 376425z - 51975)}{705600z} + \frac{\sqrt{\pi} (-32z^7 + 242550z^3 - 873180z^2 + 363825z + 51975) \operatorname{erfi}(\sqrt{z})}{1411200z^{3/2}}$$

07.25.03.0489.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(-16z^6 + 8z^5 - 12z^4 + 30z^3 + 121170z^2 + 376425z + 51975)}{705600z} + \frac{\sqrt{\pi}(-32z^7 + 242550z^3 + 873180z^2 + 363825z - 51975)\operatorname{erf}(\sqrt{z})}{1411200z^{3/2}}$$

07.25.03.0490.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, 3; z\right) = \frac{1}{212837625z} 4e^{z/2}(1024z^7 + 256z^6 + 288z^5 + 600z^4 - 11146800z^3 + 44044560z^2 - 15779610z - 4459455)I_1\left(\frac{z}{2}\right) - \frac{8e^{z/2}(512z^6 - 384z^5 - 240z^4 - 420z^3 - 5575500z^2 + 27588330z - 27162135)I_0\left(\frac{z}{2}\right)}{212837625}$$

07.25.03.0491.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z(128z^7 + 64z^6 + 96z^5 + 240z^4 - 1939560z^3 + 8347500z^2 - 2598750z - 1091475)}{18063360z^2} + \frac{\sqrt{\pi}(-256z^8 + 3880800z^4 - 18627840z^3 + 11642400z^2 + 3326400z + 1091475)\operatorname{erfi}(\sqrt{z})}{36126720z^{5/2}}$$

07.25.03.0492.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(-128z^7 + 64z^6 - 96z^5 + 240z^4 + 1939560z^3 + 8347500z^2 + 2598750z - 1091475)}{18063360z^2} + \frac{\sqrt{\pi}(-256z^8 + 3880800z^4 + 18627840z^3 + 11642400z^2 - 3326400z + 1091475)\operatorname{erf}(\sqrt{z})}{36126720z^{5/2}}$$

07.25.03.0493.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, 4; z\right) = \frac{1}{1206079875z^2} \left(4e^{z/2}(2048z^8 + 512z^7 + 576z^6 + 1200z^5 - 42113400z^4 + 216917820z^3 - 120748320z^2 - 60945885z - 29729700)I_1\left(\frac{z}{2}\right) - \frac{1}{1206079875z} 4e^{z/2}(2048z^7 - 1536z^6 - 960z^5 - 1680z^4 - 42121800z^3 + 259001820z^2 - 316756440z - 7432425)I_0\left(\frac{z}{2}\right)\right)$$

07.25.03.0494.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{46448640z^3} e^z(128z^8 + 64z^7 + 96z^6 + 240z^5 - 3491880z^4 + 19213740z^3 - 9584190z^2 - 6912675z - 4365900) + \frac{1}{92897280z^{7/2}} \sqrt{\pi}(-256z^9 + 6985440z^5 - 41912640z^4 + 34927200z^3 + 14968800z^2 + 9823275z + 4365900)\operatorname{erfi}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.0495.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \\
 & \frac{1}{46\,448\,640\,z^3} e^{-z} (-128z^8 + 64z^7 - 96z^6 + 240z^5 + 3\,491\,880z^4 + 19\,213\,740z^3 + 9\,584\,190z^2 - 6\,912\,675z + 4\,365\,900) + \\
 & \frac{1}{92\,897\,280\,z^{7/2}} \\
 & \sqrt{\pi} (-256z^9 + 6\,985\,440z^5 + 41\,912\,640z^4 + 34\,927\,200z^3 - 14\,968\,800z^2 + 9\,823\,275z - 4\,365\,900) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0496.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, 5; z\right) = \\
 & \frac{1}{22\,915\,517\,625\,z^3} \left(32 e^{z/2} (2048z^9 + 512z^8 + 576z^7 + 1200z^6 - 72\,744\,000z^5 + 461\,962\,620z^4 - 350\,477\,820z^3 - \right. \\
 & \quad \left. 244\,729\,485z^2 - 213\,513\,300z - 137\,837\,700) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{22\,915\,517\,625\,z^2} \left(32 e^{z/2} (2048z^8 - 1536z^7 - 960z^6 - 1680z^5 - 72\,752\,400z^4 + 534\,677\,220z^3 - \right. \\
 & \quad \left. 776\,215\,440z^2 - 53\,378\,325z - 34\,459\,425) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0497.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{103\,219\,200\,z^4} \left(e^z (128z^9 + 64z^8 + 96z^7 + 240z^6 - 5\,820\,360z^5 + 39\,005\,820z^4 - 27\,047\,790z^3 - 26\,122\,635z^2 - \right. \\
 & \quad \left. 28\,378\,350z - 22\,920\,975) + \frac{1}{206\,438\,400\,z^{9/2}} \left(\sqrt{\pi} (-256z^{10} + 11\,642\,400z^6 - 83\,825\,280z^5 + \right. \right. \\
 & \quad \left. \left. 87\,318\,000z^4 + 49\,896\,000z^3 + 49\,116\,375z^2 + 43\,659\,000z + 22\,920\,975) \operatorname{erfi}(\sqrt{z})\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0498.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{103\,219\,200\,z^4} \left(e^{-z} (-128z^9 + 64z^8 - 96z^7 + 240z^6 + 5\,820\,360z^5 + 39\,005\,820z^4 + 27\,047\,790z^3 - \right. \\
 & \quad \left. 26\,122\,635z^2 + 28\,378\,350z - 22\,920\,975) + \right. \\
 & \frac{1}{206\,438\,400\,z^{9/2}} \left(\sqrt{\pi} (-256z^{10} + 11\,642\,400z^6 + 83\,825\,280z^5 + 87\,318\,000z^4 - 49\,896\,000z^3 + \right. \\
 & \quad \left. 49\,116\,375z^2 - 43\,659\,000z + 22\,920\,975) \operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0499.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{9}{2}, 6; z\right) = \\
 & \frac{1}{96\,245\,174\,025\,z^4} \left(32 e^{z/2} (4096 z^{10} + 1024 z^9 + 1152 z^8 + 2400 z^7 - 235\,023\,600 z^6 + 1\,774\,513\,440 z^5 - \right. \\
 & \quad \left. 1\,708\,231\,140 z^4 - 1\,496\,734\,470 z^3 - 1\,820\,424\,375 z^2 - 2\,088\,771\,300 z - 1\,611\,640\,800) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{96\,245\,174\,025\,z^3} \left(32 e^{z/2} (4096 z^9 - 3072 z^8 - 1920 z^7 - 3360 z^6 - 235\,040\,400 z^5 + 2\,009\,478\,240 z^4 - \right. \\
 & \quad \left. 3\,365\,526\,780 z^3 - 442\,515\,150 z^2 - 522\,192\,825 z - 402\,910\,200) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.0500.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{e^z (-384 z^5 + 512 z^4 + 64 z^3 - 192 z^2 - 1200 z + 3675)}{3675} + \frac{64 \sqrt{\pi} (6 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{3675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0501.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{e^{-z} (384 z^5 + 512 z^4 - 64 z^3 - 192 z^2 + 1200 z + 3675)}{3675} + \frac{64 \sqrt{\pi} (6 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})}{3675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0502.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{525} e^z (96 z^5 - 304 z^4 - 104 z^3 - 84 z^2 - 30 z + 525) - \frac{32}{525} \sqrt{\pi} (3 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0503.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{525} e^{-z} (-96 z^5 - 304 z^4 + 104 z^3 - 84 z^2 + 30 z + 525) - \frac{32}{525} \sqrt{\pi} (3 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0504.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{105} e^z (-16 z^5 + 80 z^4 + 32 z^3 + 36 z^2 + 60 z + 105) + \frac{8}{105} \sqrt{\pi} (2 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0505.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{105} e^{-z} (16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105) + \frac{8}{105} \sqrt{\pi} (2 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0506.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{420} e^z (24 z^5 - 164 z^4 - 70 z^3 - 87 z^2 + 1560 z + 420) + \frac{1}{840} \sqrt{\pi} (-48 z^{11/2} + 352 z^{9/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0507.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \\
 & \frac{1}{420} e^{-z} (-24 z^5 - 164 z^4 + 70 z^3 - 87 z^2 - 1560 z + 420) + \frac{1}{840} \sqrt{\pi} (-48 z^{11/2} - 352 z^{9/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.0508.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{e^z(-48z^5 + 416z^4 + 184z^3 + 240z^2 - 16815z + 8400)}{8400} + \frac{\sqrt{\pi}(96z^{11/2} - 880z^{9/2} + 34650z^{3/2} - 31185\sqrt{z})\operatorname{erfi}(\sqrt{z})}{16800}$$

07.25.03.0509.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{e^{-z}(48z^5 + 416z^4 - 184z^3 + 240z^2 + 16815z + 8400)}{8400} + \frac{\sqrt{\pi}(96z^{11/2} + 880z^{9/2} + 34650z^{3/2} + 31185\sqrt{z})\operatorname{erf}(\sqrt{z})}{16800}$$

07.25.03.0510.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2}(768z^6 - 8320z^5 + 5448z^4 + 3000z^3 + 504840z^2 - 1039500z + 363825)I_0\left(\frac{z}{2}\right) - 4e^{z/2}(192z^6 - 1888z^5 - 430z^4 - 432z^3 + 124275z^2 - 139650z)I_1\left(\frac{z}{2}\right)}{363825}$$

07.25.03.0511.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z(-16z^5 + 168z^4 + 76z^3 + 102z^2 - 17100z + 23205)}{33600} + \frac{\sqrt{\pi}(32z^6 - 352z^5 + 34650z^2 - 62370z + 10395)\operatorname{erfi}(\sqrt{z})}{67200\sqrt{z}}$$

07.25.03.0512.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}(16z^5 + 168z^4 - 76z^3 + 102z^2 + 17100z + 23205)}{33600} + \frac{\sqrt{\pi}(32z^6 + 352z^5 + 34650z^2 + 62370z + 10395)\operatorname{erf}(\sqrt{z})}{67200\sqrt{z}}$$

07.25.03.0513.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2}(1536z^6 - 19456z^5 + 13008z^4 + 7320z^3 + 2612820z^2 - 7775460z + 4729725)I_0\left(\frac{z}{2}\right) + e^{z/2}(-1536z^6 + 17920z^5 + 4144z^4 + 4248z^3 - 2593380z^2 + 5224380z - 654885)I_1\left(\frac{z}{2}\right)}{4729725}$$

07.25.03.0514.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z(-96z^6 + 1184z^5 + 544z^4 + 744z^3 - 240870z^2 + 538860z - 51975)}{940800z} + \frac{\sqrt{\pi}(192z^7 - 2464z^6 + 485100z^3 - 1309770z^2 + 436590z + 51975)\operatorname{erfi}(\sqrt{z})}{1881600z^{3/2}}$$

07.25.03.0515.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{e^{-z} (96 z^6 + 1184 z^5 - 544 z^4 + 744 z^3 + 240 870 z^2 + 538 860 z + 51 975)}{940 800 z} + \frac{\sqrt{\pi} (192 z^7 + 2464 z^6 + 485 100 z^3 + 1 309 770 z^2 + 436 590 z - 51 975) \operatorname{erf}(\sqrt{z})}{1 881 600 z^{3/2}}$$

07.25.03.0516.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (512 z^6 - 7424 z^5 + 5040 z^4 + 2880 z^3 + 1 862 700 z^2 - 7 234 920 z + 5 997 915) I_0\left(\frac{z}{2}\right) - \frac{1}{23 648 625 z} 4 e^{z/2} (512 z^7 - 6912 z^6 - 1616 z^5 - 1680 z^4 + 1 854 900 z^3 - 5 397 420 z^2 + 1 465 695 z + 343 035) I_1\left(\frac{z}{2}\right)}$$

07.25.03.0517.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^{-z} (-384 z^7 + 5440 z^6 + 2528 z^5 + 3504 z^4 - 1 932 360 z^3 + 6 040 860 z^2 - 1 351 350 z - 467 775)}{12 042 240 z^2} + \frac{1}{24 084 480 z^{5/2}} \sqrt{\pi} (768 z^8 - 11 264 z^7 + 3 880 800 z^4 - 13 970 880 z^3 + 6 985 440 z^2 + 1 663 200 z + 467 775) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0518.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (384 z^7 + 5440 z^6 - 2528 z^5 + 3504 z^4 + 1 932 360 z^3 + 6 040 860 z^2 + 1 351 350 z - 467 775)}{12 042 240 z^2} + \frac{1}{24 084 480 z^{5/2}} \sqrt{\pi} (768 z^8 + 11 264 z^7 + 3 880 800 z^4 + 13 970 880 z^3 + 6 985 440 z^2 - 1 663 200 z + 467 775) \operatorname{erf}(\sqrt{z})$$

07.25.03.0519.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{402 026 625 z} 4 e^{z/2} (3072 z^7 - 50 176 z^6 + 34 464 z^5 + 19 920 z^4 + 21 090 720 z^3 - 100 997 820 z^2 + 104 137 110 z + 1 486 485) I_0\left(\frac{z}{2}\right) - \frac{1}{402 026 625 z^2} \left(4 e^{z/2} (3072 z^8 - 47 104 z^7 - 11 104 z^6 - 11 664 z^5 + 21 036 000 z^4 - 80 086 020 z^3 + 34 116 390 z^2 + 14 521 815 z + 5 945 940) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.0520.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{20 643 840 z^3} e^z (-256 z^8 + 4096 z^7 + 1920 z^6 + 2688 z^5 - 2 322 240 z^4 + 9 334 080 z^3 - 3 409 560 z^2 - 2 079 000 z - 1 091 475) + \frac{1}{41 287 680 z^{7/2}} \sqrt{\pi} (512 z^9 - 8448 z^8 + 4 656 960 z^5 - 20 956 320 z^4 + 13 970 880 z^3 + 4 989 600 z^2 + 2 806 650 z + 1 091 475) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0521.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{20\,643\,840 z^3} e^{-z} (256 z^8 + 4096 z^7 - 1920 z^6 + 2688 z^5 + 2\,322\,240 z^4 + 9\,334\,080 z^3 + 3\,409\,560 z^2 -$$

$$2\,079\,000 z + 1\,091\,475) + \frac{1}{41\,287\,680 z^{7/2}}$$

$$\sqrt{\pi} (512 z^9 + 8448 z^8 + 4\,656\,960 z^5 + 20\,956\,320 z^4 + 13\,970\,880 z^3 - 4\,989\,600 z^2 + 2\,806\,650 z - 1\,091\,475) \operatorname{erf}(\sqrt{z})$$

07.25.03.0522.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, 5; z\right) =$$

$$\frac{1}{7\,638\,505\,875 z^2} \left(32 e^{z/2} (3072 z^8 - 55\,808 z^7 + 38\,688 z^6 + 22\,560 z^5 + 36\,410\,640 z^4 - 207\,234\,720 z^3 +$$

$$253\,367\,730 z^2 + 11\,081\,070 z + 6\,081\,075) I_0\left(\frac{z}{2}\right) -$$

$$\frac{1}{7\,638\,505\,875 z^3} \left(64 e^{z/2} (1536 z^9 - 26\,368 z^8 - 62\,560 z^7 - 6624 z^6 + 18\,174\,000 z^5 - 85\,515\,360 z^4 +$$

$$49\,989\,555 z^3 + 29\,708\,910 z^2 + 22\,162\,140 z + 12\,162\,150) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.0523.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{68\,812\,800 z^4} \left(e^z (-384 z^9 + 6848 z^8 + 3232 z^7 + 4560 z^6 - 5\,810\,520 z^5 + 28\,558\,740 z^4 - 14\,698\,530 z^3 -$$

$$12\,172\,545 z^2 - 11\,278\,575 z - 7\,640\,325)\right) +$$

$$\frac{1}{137\,625\,600 z^{9/2}} \left(\sqrt{\pi} (768 z^{10} - 14\,080 z^9 + 11\,642\,400 z^6 - 62\,868\,960 z^5 + 52\,390\,800 z^4 +$$

$$24\,948\,000 z^3 + 21\,049\,875 z^2 + 16\,372\,125 z + 7\,640\,325) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.0524.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{68\,812\,800 z^4} \left(e^{-z} (384 z^9 + 6848 z^8 - 3232 z^7 + 4560 z^6 + 5\,810\,520 z^5 + 28\,558\,740 z^4 + 14\,698\,530 z^3 -$$

$$12\,172\,545 z^2 + 11\,278\,575 z - 7\,640\,325)\right) +$$

$$\frac{1}{137\,625\,600 z^{9/2}} \left(\sqrt{\pi} (768 z^{10} + 14\,080 z^9 + 11\,642\,400 z^6 + 62\,868\,960 z^5 + 52\,390\,800 z^4 -$$

$$24\,948\,000 z^3 + 21\,049\,875 z^2 - 16\,372\,125 z + 7\,640\,325) \operatorname{erf}(\sqrt{z})\right)$$

$$\begin{aligned}
 & \text{07.25.03.0525.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{7}{2}, 6; z\right) = \\
 & \frac{1}{10\,693\,908\,225\,z^3} \left(32 e^{z/2} (2048 z^9 - 40\,960 z^8 + 28\,608 z^7 + 16\,800 z^6 + 39\,199\,440 z^5 - 258\,461\,280 z^4 + \right. \\
 & \quad \left. 363\,825\,000 z^3 + 31\,455\,270 z^2 + 31\,964\,625 z + 21\,205\,800) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{10\,693\,908\,225\,z^4} \left(32 e^{z/2} (2048 z^{10} - 38\,912 z^9 - 9\,280 z^8 - 9\,888 z^7 + 39\,152\,400 z^6 - 219\,418\,080 z^5 + \right. \\
 & \quad \left. 163\,575\,720 z^4 + 122\,557\,050 z^3 + 128\,471\,805 z^2 + 127\,858\,500 z + 84\,823\,200) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.0526.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{75} e^z (-24 z^5 + 164 z^4 - 128 z^3 - 12 z^2 + 24 z + 75) + \frac{2}{75} \sqrt{\pi} (12 z^{11/2} - 88 z^{9/2} + 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0527.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \\
 & \frac{1}{75} e^{-z} (24 z^5 + 164 z^4 + 128 z^3 - 12 z^2 - 24 z + 75) + \frac{2}{75} \sqrt{\pi} (12 z^{11/2} + 88 z^{9/2} + 99 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0528.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{15} e^z (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} + 44 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0529.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \\
 & \frac{1}{15} e^{-z} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} - 44 z^{9/2} - 99 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0530.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{240} e^z (-24 z^5 + 340 z^4 - 1030 z^3 - 375 z^2 + 1344 z + 240) + \frac{1}{480} \sqrt{\pi} (48 z^{11/2} - 704 z^{9/2} + 2376 z^{7/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0531.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \\
 & \frac{1}{240} e^{-z} (24 z^5 + 340 z^4 + 1030 z^3 - 375 z^2 - 1344 z + 240) + \frac{1}{480} \sqrt{\pi} (48 z^{11/2} + 704 z^{9/2} + 2376 z^{7/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.0532.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{e^z (24 z^5 - 428 z^4 + 1778 z^3 + 705 z^2 - 7845 z + 2400)}{2400} + \frac{\sqrt{\pi} (-48 z^{11/2} + 880 z^{9/2} - 3960 z^{7/2} + 17325 z^{3/2} - 10395 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{4800}$$

07.25.03.0533.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{e^{-z} (-24 z^5 - 428 z^4 - 1778 z^3 + 705 z^2 + 7845 z + 2400)}{2400} + \frac{\sqrt{\pi} (-48 z^{11/2} - 880 z^{9/2} - 3960 z^{7/2} + 17325 z^{3/2} + 10395 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{4800}$$

07.25.03.0534.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (-192 z^6 + 4016 z^5 - 22416 z^4 + 13044 z^3 + 131520 z^2 - 197505 z + 51975) I_0\left(\frac{z}{2}\right)}{51975} + \frac{e^{z/2} (192 z^6 - 3824 z^5 + 18688 z^4 + 3924 z^3 - 121476 z^2 + 87225 z) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.0535.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{e^z (32 z^5 - 688 z^4 + 3632 z^3 + 1512 z^2 - 32790 z + 28005)}{38400} + \frac{\sqrt{\pi} (-64 z^6 + 1408 z^5 - 7920 z^4 + 69300 z^2 - 83160 z + 10395) \operatorname{erfi}(\sqrt{z})}{76800 \sqrt{z}}$$

07.25.03.0536.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-32 z^5 - 688 z^4 - 3632 z^3 + 1512 z^2 + 32790 z + 28005)}{38400} + \frac{\sqrt{\pi} (-64 z^6 - 1408 z^5 - 7920 z^4 + 69300 z^2 + 83160 z + 10395) \operatorname{erf}(\sqrt{z})}{76800 \sqrt{z}}$$

07.25.03.0537.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (-384 z^6 + 9440 z^5 - 63312 z^4 + 38496 z^3 + 670260 z^2 - 1434510 z + 675675) I_0\left(\frac{z}{2}\right)}{675675} + \frac{e^{z/2} (384 z^6 - 9056 z^5 + 54448 z^4 + 11808 z^3 - 639084 z^2 + 832470 z - 72765) I_1\left(\frac{z}{2}\right)}{675675}$$

07.25.03.0538.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (96 z^6 - 2416 z^5 + 15472 z^4 + 6648 z^3 - 234066 z^2 + 333165 z - 20790)}{537600 z} + \frac{\sqrt{\pi} (-192 z^7 + 4928 z^6 - 33264 z^5 + 485100 z^3 - 873180 z^2 + 218295 z + 20790) \operatorname{erfi}(\sqrt{z})}{1075200 z^{3/2}}$$

07.25.03.0539.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{e^{-z}(-96z^6 - 2416z^5 - 15472z^4 + 6648z^3 + 234066z^2 + 333165z + 20790)}{537600z} + \frac{\sqrt{\pi}(-192z^7 - 4928z^6 - 33264z^5 + 485100z^3 + 873180z^2 + 218295z - 20790)\operatorname{erf}(\sqrt{z})}{1075200z^{3/2}}$$

07.25.03.0540.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, 3; z\right) = \frac{4e^{z/2}(128z^7 - 3488z^6 + 24896z^5 + 5520z^4 - 459120z^3 + 869070z^2 - 166320z - 31185)I_1\left(\frac{z}{2}\right) + 8e^{z/2}(64z^6 - 1808z^5 + 14160z^4 - 8880z^3 - 237000z^2 + 654885z - 426195)I_0\left(\frac{z}{2}\right)}{3378375z}$$

07.25.03.0541.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z(384z^7 - 11072z^6 + 83360z^5 + 36624z^4 - 1892472z^3 + 3790500z^2 - 561330z - 155925)}{6881280z^2} + \frac{1}{13762560z^{5/2}} + \frac{\sqrt{\pi}(-768z^8 + 22528z^7 - 177408z^6 + 3880800z^4 - 9313920z^3 + 3492720z^2 + 665280z + 155925)\operatorname{erfi}(\sqrt{z})}{13762560z^{5/2}}$$

07.25.03.0542.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(-384z^7 - 11072z^6 - 83360z^5 + 36624z^4 + 1892472z^3 + 3790500z^2 + 561330z - 155925)}{6881280z^2} + \frac{1}{13762560z^{5/2}} + \frac{\sqrt{\pi}(-768z^8 - 22528z^7 - 177408z^6 + 3880800z^4 + 9313920z^3 + 3492720z^2 - 665280z + 155925)\operatorname{erf}(\sqrt{z})}{13762560z^{5/2}}$$

07.25.03.0543.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, 4; z\right) = \frac{1}{57432375z^2} \left(4e^{z/2}(768z^8 - 23744z^7 + 196192z^6 + 44208z^5 - 5220480z^4 + 12979320z^3 - 3929310z^2 - 1361745z - 457380)I_1\left(\frac{z}{2}\right) - \frac{1}{57432375z} + 4e^{z/2}(768z^7 - 24512z^6 + 219552z^5 - 140880z^4 - 5341440z^3 + 18045720z^2 - 14698530z - 114345)I_0\left(\frac{z}{2}\right) \right)$$

07.25.03.0544.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) =$$

$$\frac{1}{5898240 z^3} e^z (128 z^8 - 4160 z^7 + 36000 z^6 + 16080 z^5 - 1142808 z^4 + 2957940 z^3 - 727650 z^2 - 363825 z - 155925) +$$

$$\frac{1}{11796480 z^{7/2}} \left(\sqrt{\pi} (-256 z^9 + 8448 z^8 - 76032 z^7 + 2328480 z^5 - 6985440 z^4 + 3492720 z^3 + 997920 z^2 + 467775 z + 155925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.0545.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) =$$

$$\frac{1}{5898240 z^3} e^{-z} (-128 z^8 - 4160 z^7 - 36000 z^6 + 16080 z^5 + 1142808 z^4 + 2957940 z^3 + 727650 z^2 - 363825 z + 155925) +$$

$$\frac{1}{11796480 z^{7/2}} \left(\sqrt{\pi} (-256 z^9 - 8448 z^8 - 76032 z^7 + 2328480 z^5 + 6985440 z^4 + 3492720 z^3 - 997920 z^2 + 467775 z - 155925) \operatorname{erf}(\sqrt{-z}) \right)$$

07.25.03.0546.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, 5; z\right) =$$

$$\frac{1}{1091215125 z^3} \left(32 e^{z/2} (768 z^9 - 26560 z^8 + 249344 z^7 + 56880 z^6 - 9035808 z^5 + 27842520 z^4 - 11642400 z^3 - 5686065 z^2 - 3534300 z - 1621620) I_1\left(\frac{z}{2}\right) - \right.$$

$$\left. \frac{1}{1091215125 z^2} \left(32 e^{z/2} (768 z^8 - 27328 z^7 + 275520 z^6 - 179952 z^5 - 9193200 z^4 + 36673560 z^3 - 35509320 z^2 - 883575 z - 405405) I_0\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.0547.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{157286400 z^4} \left(e^z (1536 z^9 - 55552 z^8 + 543232 z^7 + 245760 z^6 - 22952640 z^5 + 72927840 z^4 - 25613280 z^3 - 17629920 z^2 - 13617450 z - 7640325) + \right.$$

$$\left. \frac{1}{314572800 z^{9/2}} \left(\sqrt{\pi} (-3072 z^{10} + 112640 z^9 - 1140480 z^8 + 46569600 z^6 - 167650560 z^5 + 104781600 z^4 + 39916800 z^3 + 28066500 z^2 + 18711000 z + 7640325) \operatorname{erfi}(\sqrt{z}) \right) \right)$$

07.25.03.0548.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{157286400z^4} \left(e^{-z} (-1536z^9 - 55552z^8 - 543232z^7 + 245760z^6 + 22952640z^5 + 72927840z^4 + 25613280z^3 - 17629920z^2 + 13617450z - 7640325) \right) +$$

$$\frac{1}{314572800z^{9/2}} \left(\sqrt{\pi} (-3072z^{10} - 112640z^9 - 1140480z^8 + 46569600z^6 + 167650560z^5 + 104781600z^4 - 39916800z^3 + 28066500z^2 - 18711000z + 7640325) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.0549.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{5}{2}, 6; z\right) =$$

$$\frac{1}{1527701175z^4} \left(32e^{z/2} (512z^{10} - 19584z^9 + 205888z^8 + 47424z^7 - 9744336z^6 + 35836080z^5 - 19209960z^4 - 11891880z^3 - 10467765z^2 - 8856540z - 4989600) I_1\left(\frac{z}{2}\right) - \right.$$

$$\left. \frac{1}{1527701175z^3} \left(32e^{z/2} (512z^9 - 20096z^8 + 225216z^7 - 149184z^6 - 9876720z^5 + 45405360z^4 - 50644440z^3 - 2577960z^2 - 2214135z - 1247400) I_0\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.0550.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{18} e^z (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36} \sqrt{\pi} (8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0551.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{18} e^{-z} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36} \sqrt{\pi} (8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0552.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{96} e^z (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) +$$

$$\frac{1}{192} \sqrt{\pi} (-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0553.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{96} e^{-z} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) +$$

$$\frac{1}{192} \sqrt{\pi} (-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0554.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{e^z (-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920)}{1920} + \frac{\sqrt{\pi} (32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.0555.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \frac{\sqrt{\pi} (32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z}) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.0556.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, 1; z\right) = \frac{e^{z/2} (32z^6 - 992z^5 + 10512z^4 - 46944z^3 + 88674z^2 - 62370z + 10395) I_0\left(\frac{z}{2}\right)}{10395} - \frac{2e^{z/2} (16z^6 - 480z^5 + 4784z^4 - 18912z^3 + 27387z^2 - 9762z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.0557.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (-32z^5 + 1040z^4 - 11376z^3 + 50232z^2 - 83370z + 35685)}{46080} + \frac{\sqrt{\pi} (64z^6 - 2112z^5 + 23760z^4 - 110880z^3 + 207900z^2 - 124740z + 10395) \operatorname{erfi}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.0558.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (32z^5 + 1040z^4 + 11376z^3 + 50232z^2 + 83370z + 35685)}{46080} + \frac{\sqrt{\pi} (64z^6 + 2112z^5 + 23760z^4 + 110880z^3 + 207900z^2 + 124740z + 10395) \operatorname{erf}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.0559.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2} (64z^6 - 2336z^5 + 30000z^4 - 168864z^3 + 425112z^2 - 436590z + 135135) I_0\left(\frac{z}{2}\right)}{135135} + \frac{e^{z/2} (-64z^6 + 2272z^5 - 27760z^4 + 142176z^3 - 294744z^2 + 191442z - 10395) I_1\left(\frac{z}{2}\right)}{135135}$$

07.25.03.0560.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (-64z^6 + 2432z^5 - 32080z^4 + 179136z^3 - 408828z^2 + 291480z - 10395)}{430080z} + \frac{1}{860160z^{3/2}} \sqrt{\pi} (128z^7 - 4928z^6 + 66528z^5 - 388080z^4 + 970200z^3 - 873180z^2 + 145530z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0561.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 2432 z^5 + 32080 z^4 + 179136 z^3 + 408828 z^2 + 291480 z + 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 + 4928 z^6 + 66528 z^5 + 388080 z^4 + 970200 z^3 + 873180 z^2 + 145530 z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.0562.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 - 2688 z^5 + 40560 z^4 - 275520 z^3 + 866520 z^2 - 1164240 z + 509355) I_0\left(\frac{z}{2}\right)}{2027025} - \frac{1}{2027025 z} 4 e^{z/2} (64 z^7 - 2624 z^6 + 37968 z^5 - 238800 z^4 + 644280 z^3 - 608760 z^2 + 72765 z + 10395) I_1\left(\frac{z}{2}\right)$$

07.25.03.0563.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (-128 z^7 + 5568 z^6 - 85984 z^5 + 580560 z^4 - 1686744 z^3 + 1690836 z^2 - 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} \left(\sqrt{\pi} (256 z^8 - 11264 z^7 + 177408 z^6 - 1241856 z^5 + 3880800 z^4 - 4656960 z^3 + 1164240 z^2 + 166320 z + 31185) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.0564.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 5568 z^6 + 85984 z^5 + 580560 z^4 + 1686744 z^3 + 1690836 z^2 + 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} \left(\sqrt{\pi} (256 z^8 + 11264 z^7 + 177408 z^6 + 1241856 z^5 + 3880800 z^4 + 4656960 z^3 + 1164240 z^2 - 166320 z + 31185) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.0565.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{11486475 z} 4 e^{z/2} (128 z^7 - 6080 z^6 + 105408 z^5 - 838800 z^4 + 3163920 z^3 - 5239080 z^2 + 2910600 z + 10395) I_0\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} 4 e^{z/2} (128 z^8 - 5952 z^7 + 99520 z^6 - 742128 z^5 + 2466000 z^4 - 3061560 z^3 + 582120 z^2 + 155925 z + 41580) I_1\left(\frac{z}{2}\right)$$

07.25.03.0566.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{14\,155\,776\,z^3}$$

$$e^z (-256 z^8 + 12\,544 z^7 - 221\,952 z^6 + 1\,757\,760 z^5 - 6\,203\,040 z^4 + 8\,030\,448 z^3 - 1\,164\,240 z^2 - 457\,380 z - 155\,925) +$$

$$\frac{1}{28\,311\,552\,z^{7/2}} \left(\sqrt{\pi} (512 z^9 - 25\,344 z^8 + 456\,192 z^7 - 3\,725\,568 z^6 + 13\,970\,880 z^5 -$$

$$20\,956\,320 z^4 + 6\,985\,440 z^3 + 1\,496\,880 z^2 + 561\,330 z + 155\,925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.0567.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{14\,155\,776\,z^3}$$

$$e^{-z} (256 z^8 + 12\,544 z^7 + 221\,952 z^6 + 1\,757\,760 z^5 + 6\,203\,040 z^4 + 8\,030\,448 z^3 + 1\,164\,240 z^2 - 457\,380 z + 155\,925) +$$

$$\frac{1}{28\,311\,552\,z^{7/2}} \left(\sqrt{\pi} (512 z^9 + 25\,344 z^8 + 456\,192 z^7 + 3\,725\,568 z^6 + 13\,970\,880 z^5 +$$

$$20\,956\,320 z^4 + 6\,985\,440 z^3 - 1\,496\,880 z^2 + 561\,330 z - 155\,925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.0568.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, 5; z\right) = \frac{1}{218\,243\,025\,z^2}$$

$$\left(32 e^{z/2} (128 z^8 - 6784 z^7 + 132\,864 z^6 - 1\,212\,096 z^5 + 5\,331\,360 z^4 - 10\,478\,160 z^3 + 6\,985\,440 z^2 + 83\,160 z + 31\,185) \right.$$

$$I_0\left(\frac{z}{2}\right) - \frac{1}{218\,243\,025\,z^3} \left(128 e^{z/2} (32 z^9 - 1664 z^8 + 31\,568 z^7 - 272\,256 z^6 +$$

$$1\,074\,804 z^5 - 1\,654\,080 z^4 + 436\,590 z^3 + 166\,320 z^2 + 83\,160 z + 31\,185) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.0569.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{62\,914\,560\,z^4} \left(e^z (-512 z^9 + 27\,904 z^8 - 556\,544 z^7 + 5\,057\,280 z^6 - 21\,001\,920 z^5 + 33\,362\,400 z^4 -$$

$$6\,985\,440 z^3 - 3\,825\,360 z^2 - 2\,390\,850 z - 1\,091\,475) \right) +$$

$$\frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} - 56\,320 z^9 + 1\,140\,480 z^8 - 10\,644\,480 z^7 + 46\,569\,600 z^6 - 83\,825\,280 z^5 +$$

$$34\,927\,200 z^4 + 9\,979\,200 z^3 + 5\,613\,300 z^2 + 3\,118\,500 z + 1\,091\,475) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.0570.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{62\,914\,560\,z^4} \left(e^{-z} (512 z^9 + 27\,904 z^8 + 556\,544 z^7 + 5\,057\,280 z^6 + 21\,001\,920 z^5 + 33\,362\,400 z^4 +$$

$$6\,985\,440 z^3 - 3\,825\,360 z^2 + 2\,390\,850 z - 1\,091\,475) \right) +$$

$$\frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} + 56\,320 z^9 + 1\,140\,480 z^8 + 10\,644\,480 z^7 + 46\,569\,600 z^6 + 83\,825\,280 z^5 +$$

$$34\,927\,200 z^4 - 9\,979\,200 z^3 + 5\,613\,300 z^2 - 3\,118\,500 z + 1\,091\,475) \operatorname{erf}(\sqrt{z}) \right)$$

$$\begin{aligned}
 & \text{07.25.03.0571.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{3}{2}; -\frac{3}{2}, 6; z\right) = \\
 & \frac{1}{916620705z^3} \left(32e^{z/2} (256z^9 - 14976z^8 + 326976z^7 - 3364032z^6 + 16903152z^5 - 38419920z^4 + \right. \\
 & \quad \left. 29688120z^3 + 748440z^2 + 530145z + 249480) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{916620705z^4} \left(32e^{z/2} (256z^{10} - 14720z^9 + 312384z^8 - 3058752z^7 + 13986672z^6 - 25692912z^5 + \right. \right. \\
 & \quad \left. \left. 8731800z^4 + 4241160z^3 + 3024945z^2 + 2120580z + 997920) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{1}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.0572.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{e^z (32z^5 - 240z^4 + 1200z^3 - 4200z^2 + 9450z - 10395)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0573.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{945} e^z (16z^4 - 96z^3 + 360z^2 - 840z + 945)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0574.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{1}{105} e^z (8z^3 - 36z^2 + 90z - 105)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0575.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (4z^2 - 12z + 15)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0576.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = -\frac{1}{3} e^z (2z - 3)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0577.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = e^z
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0578.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0579.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0580.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, 1; z\right) = e^{z/2} (1-z) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

07.25.03.0581.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{e^z}{2}$$

07.25.03.0582.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.0583.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, 2; z\right) = e^{z/2} \left(1 - \frac{2z}{3}\right) I_0\left(\frac{z}{2}\right) + e^{z/2} \left(\frac{2z}{3} - \frac{1}{3}\right) I_1\left(\frac{z}{2}\right)$$

07.25.03.0584.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{3e^z(2z-1)}{16z} - \frac{3\sqrt{\pi}(4z^2-4z-1)\operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.0585.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{3e^{-z}(2z+1)}{16z} + \frac{3\sqrt{\pi}(4z^2+4z-1)\operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.0586.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, 3; z\right) = \frac{4e^{z/2}(2z^2-2z-1)I_1\left(\frac{z}{2}\right)}{15z} - \frac{8}{15}e^{z/2}(z-2)I_0\left(\frac{z}{2}\right)$$

07.25.03.0587.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5e^z(4z^2-4z-3)}{64z^2} - \frac{5\sqrt{\pi}(8z^3-12z^2-6z-3)\operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.0588.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}(4z^2+4z-3)}{64z^2} + \frac{5\sqrt{\pi}(8z^3+12z^2-6z+3)\operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.0589.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2}(4z^3-6z^2-5z-4)I_1\left(\frac{z}{2}\right)}{35z^2} - \frac{4e^{z/2}(4z^2-10z-1)I_0\left(\frac{z}{2}\right)}{35z}$$

07.25.03.0590.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{35e^z(8z^3-12z^2-14z-15)}{1024z^3} - \frac{35\sqrt{\pi}(16z^4-32z^3-24z^2-24z-15)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.0591.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}(8z^3+12z^2-14z+15)}{1024z^3} + \frac{35\sqrt{\pi}(16z^4+32z^3-24z^2+24z-15)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.0592.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2}(4z^4-8z^3-9z^2-12z-12)I_1\left(\frac{z}{2}\right)}{315z^3} - \frac{32e^{z/2}(4z^3-12z^2-3z-3)I_0\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.0593.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (16 z^4 - 32 z^3 - 48 z^2 - 80 z - 105)}{4096 z^4} - \frac{63 \sqrt{\pi} (32 z^5 - 80 z^4 - 80 z^3 - 120 z^2 - 150 z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.0594.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16 z^4 + 32 z^3 - 48 z^2 + 80 z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.0595.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^5 - 20 z^4 - 28 z^3 - 51 z^2 - 84 z - 96) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (8 z^4 - 28 z^3 - 12 z^2 - 21 z - 24) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.0596.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{e^z (4096 z^5 + 2048 z^4 - 24\,648 z^3 + 104\,700 z^2 - 257\,250 z + 297\,675)}{297\,675} - \frac{4096 \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})}{297\,675}$$

07.25.03.0597.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{e^{-z} (-4096 z^5 + 2048 z^4 + 24\,648 z^3 + 104\,700 z^2 + 257\,250 z + 297\,675)}{297\,675} - \frac{4096 \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})}{297\,675}$$

07.25.03.0598.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{2048 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{33\,075} + \frac{e^z (-2048 z^5 - 1024 z^4 - 1536 z^3 + 10\,020 z^2 - 27\,300 z + 33\,075)}{33\,075}$$

07.25.03.0599.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{2048 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{33\,075} + \frac{e^{-z} (2048 z^5 - 1024 z^4 + 1536 z^3 + 10\,020 z^2 + 27\,300 z + 33\,075)}{33\,075}$$

07.25.03.0600.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (512 z^5 + 256 z^4 + 384 z^3 + 960 z^2 - 3570 z + 4725)}{4725} - \frac{512 \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.0601.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-512 z^5 + 256 z^4 - 384 z^3 + 960 z^2 + 3570 z + 4725)}{4725} - \frac{512 \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.0602.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{256 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{2835} + \frac{e^z (-256 z^5 - 128 z^4 - 192 z^3 - 480 z^2 - 1680 z + 2835)}{2835}$$

07.25.03.0603.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{256 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{2835} + \frac{e^{-z} (256 z^5 - 128 z^4 + 192 z^3 - 480 z^2 + 1680 z + 2835)}{2835}$$

07.25.03.0604.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0605.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945} e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.0606.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{e^z (-16 z^5 - 8 z^4 - 12 z^3 - 30 z^2 - 105 z + 4725)}{4725} + \frac{\sqrt{\pi} (32 z^{11/2} - 10395 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{9450}$$

07.25.03.0607.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (16 z^5 - 8 z^4 + 12 z^3 - 30 z^2 + 105 z + 4725)}{4725} + \frac{\sqrt{\pi} (32 z^{11/2} + 10395 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{9450}$$

07.25.03.0608.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (4096 z^6 - 3072 z^5 - 1920 z^4 - 3360 z^3 - 9450 z^2 - 3638250 z + 3274425) I_0\left(\frac{z}{2}\right)}{3274425} - \frac{2 e^{z/2} (2048 z^6 + 512 z^5 + 576 z^4 + 1200 z^3 + 3675 z^2 - 1786050 z) I_1\left(\frac{z}{2}\right)}{3274425}$$

07.25.03.0609.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z (-32 z^5 - 16 z^4 - 24 z^3 - 60 z^2 - 210 z + 61425)}{113400} + \frac{\sqrt{\pi} (64 z^6 - 124740 z + 51975) \operatorname{erfi}(\sqrt{z})}{226800 \sqrt{z}}$$

07.25.03.0610.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (32 z^5 - 16 z^4 + 24 z^3 - 60 z^2 + 210 z + 61425)}{113400} + \frac{\sqrt{\pi} (64 z^6 + 124740 z + 51975) \operatorname{erf}(\sqrt{z})}{226800 \sqrt{z}}$$

07.25.03.0611.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (8192 z^6 - 6144 z^5 - 3840 z^4 - 6720 z^3 - 18900 z^2 - 31288950 z + 42567525) I_0\left(\frac{z}{2}\right)}{42567525} + \frac{e^{z/2} (-8192 z^6 - 2048 z^5 - 2304 z^4 - 4800 z^3 - 14700 z^2 + 31156650 z - 12006225) I_1\left(\frac{z}{2}\right)}{42567525}$$

07.25.03.0612.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z(-64z^6 - 32z^5 - 48z^4 - 120z^3 - 420z^2 + 434700z - 155925)}{1058400z} + \frac{\sqrt{\pi}(128z^7 - 873180z^2 + 727650z + 155925)\operatorname{erfi}(\sqrt{z})}{2116800z^{3/2}}$$

07.25.03.0613.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(64z^6 - 32z^5 + 48z^4 - 120z^3 + 420z^2 + 434700z + 155925)}{1058400z} + \frac{\sqrt{\pi}(128z^7 + 873180z^2 + 727650z - 155925)\operatorname{erf}(\sqrt{z})}{2116800z^{3/2}}$$

07.25.03.0614.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, 3; z\right) = \frac{4e^{z/2}(8192z^6 - 6144z^5 - 3840z^4 - 6720z^3 - 18900z^2 - 93721320z + 167432265)I_0\left(\frac{z}{2}\right)}{638512875} - \frac{1}{638512875z} 4e^{z/2}(8192z^7 + 2048z^6 + 2304z^5 + 4800z^4 + 14700z^3 - 93589020z^2 + 74438595z + 31216185)I_1\left(\frac{z}{2}\right)$$

07.25.03.0615.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z(-128z^7 - 64z^6 - 96z^5 - 240z^4 - 840z^3 + 2324700z^2 - 1767150z - 1091475)}{6773760z^2} + \frac{\sqrt{\pi}(256z^8 - 4656960z^3 + 5821200z^2 + 2494800z + 1091475)\operatorname{erfi}(\sqrt{z})}{13547520z^{5/2}}$$

07.25.03.0616.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(128z^7 - 64z^6 + 96z^5 - 240z^4 + 840z^3 + 2324700z^2 + 1767150z - 1091475)}{6773760z^2} + \frac{\sqrt{\pi}(256z^8 + 4656960z^3 + 5821200z^2 - 2494800z + 1091475)\operatorname{erf}(\sqrt{z})}{13547520z^{5/2}}$$

07.25.03.0617.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, 4; z\right) = \frac{1}{3618239625z} - \frac{4e^{z/2}(16384z^7 - 12288z^6 - 7680z^5 - 13440z^4 - 37800z^3 - 455009940z^2 + 1003782780z + 66891825)I_0\left(\frac{z}{2}\right)}{3618239625z^2} - \frac{1}{3618239625z^2} \left(4e^{z/2}(16384z^8 + 4096z^7 + 4608z^6 + 9600z^5 + 29400z^4 - 454745340z^3 + 550228140z^2 + 396891495z + 267567300)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.0618.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (-128 z^8 - 64 z^7 - 96 z^6 - 240 z^5 - 840 z^4 + 5 235 300 z^3 - 6 133 050 z^2 - 6 185 025 z - 5 457 375)}{17 418 240 z^3} + \frac{\sqrt{\pi} (256 z^9 - 10 478 160 z^4 + 17 463 600 z^3 + 11 226 600 z^2 + 9 823 275 z + 5 457 375) \operatorname{erfi}(\sqrt{z})}{34 836 480 z^{7/2}}$$

07.25.03.0619.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^8 - 64 z^7 + 96 z^6 - 240 z^5 + 840 z^4 + 5 235 300 z^3 + 6 133 050 z^2 - 6 185 025 z + 5 457 375)}{17 418 240 z^3} + \frac{\sqrt{\pi} (256 z^9 + 10 478 160 z^4 + 17 463 600 z^3 - 11 226 600 z^2 + 9 823 275 z - 5 457 375) \operatorname{erf}(\sqrt{z})}{34 836 480 z^{7/2}}$$

07.25.03.0620.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, 5; z\right) = \frac{1}{68 746 552 875 z^2} \left(32 e^{z/2} (16 384 z^8 - 12 288 z^7 - 7 680 z^6 - 13 440 z^5 - 37 800 z^4 - 960 414 840 z^3 + 2 519 997 480 z^2 + 445 945 500 z + 379 053 675) I_0\left(\frac{z}{2}\right) - \frac{1}{68 746 552 875 z^3} \left(128 e^{z/2} (4096 z^9 + 1024 z^8 + 1152 z^7 + 2400 z^6 + 7350 z^5 - 240 037 560 z^4 + 390 259 485 z^3 + 383 513 130 z^2 + 445 945 500 z + 379 053 675) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.0621.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{77 414 400 z^4} \left(e^z (-256 z^9 - 128 z^8 - 192 z^7 - 480 z^6 - 1680 z^5 + 20 948 760 z^4 - 33 222 420 z^3 - 43 804 530 z^2 - 63 305 550 z - 68 762 925)\right) + \frac{1}{154 828 800 z^{9/2}} \sqrt{\pi} (512 z^{10} - 41 912 640 z^5 + 87 318 000 z^4 + 74 844 000 z^3 + 98 232 750 z^2 + 109 147 500 z + 68 762 925) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0622.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{77 414 400 z^4} \left(e^{-z} (256 z^9 - 128 z^8 + 192 z^7 - 480 z^6 + 1680 z^5 + 20 948 760 z^4 + 33 222 420 z^3 - 43 804 530 z^2 + 63 305 550 z - 68 762 925)\right) + \frac{1}{154 828 800 z^{9/2}} \sqrt{\pi} (512 z^{10} + 41 912 640 z^5 + 87 318 000 z^4 - 74 844 000 z^3 + 98 232 750 z^2 - 109 147 500 z + 68 762 925) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.0623.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{9}{2}, 6; z\right) = \\
 & \frac{1}{288\,735\,522\,075\,z^3} \left(32 e^{z/2} (32\,768 z^9 - 24\,576 z^8 - 15\,360 z^7 - 26\,880 z^6 - 75\,600 z^5 - 3\,666\,773\,880 z^4 + \right. \\
 & \quad \left. 11\,150\,799\,660 z^3 + 3\,510\,807\,300 z^2 + 5\,341\,210\,875 z + 5\,237\,832\,600) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{288\,735\,522\,075\,z^4} \left(32 e^{z/2} (32\,768 z^{10} + 8192 z^9 + 9216 z^8 + 19\,200 z^7 + 58\,800 z^6 - 3\,666\,244\,680 z^5 + \right. \\
 & \quad \left. 7\,486\,936\,380 z^4 + 9\,178\,909\,740 z^3 + 14\,697\,958\,275 z^2 + 21\,364\,843\,500 z + 20\,951\,330\,400) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.0624.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{e^z (1024 z^5 - 896 z^4 + 64 z^3 + 864 z^2 - 2850 z + 3675)}{3675} - \frac{128 \sqrt{\pi} (8 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{3675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0625.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{e^{-z} (-1024 z^5 - 896 z^4 - 64 z^3 + 864 z^2 + 2850 z + 3675)}{3675} - \frac{128 \sqrt{\pi} (8 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})}{3675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0626.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{525} e^z (-256 z^5 + 576 z^4 + 160 z^3 + 48 z^2 - 360 z + 525) + \frac{64}{525} \sqrt{\pi} (4 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0627.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{525} e^{-z} (256 z^5 + 576 z^4 - 160 z^3 + 48 z^2 + 360 z + 525) + \frac{64}{525} \sqrt{\pi} (4 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0628.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} e^z (128 z^5 - 464 z^4 - 168 z^3 - 156 z^2 - 150 z + 315) - \frac{16}{315} \sqrt{\pi} (8 z^{11/2} - 33 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0629.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \\
 & \frac{1}{315} e^{-z} (-128 z^5 - 464 z^4 + 168 z^3 - 156 z^2 + 150 z + 315) - \frac{16}{315} \sqrt{\pi} (8 z^{11/2} + 33 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0630.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} e^z (-16 z^5 + 80 z^4 + 32 z^3 + 36 z^2 + 60 z + 105) + \frac{8}{105} \sqrt{\pi} (2 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0631.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} e^{-z} (16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105) + \frac{8}{105} \sqrt{\pi} (2 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.0632.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{e^z (64 z^5 - 408 z^4 - 172 z^3 - 210 z^2 - 405 z + 4200)}{4200} + \frac{\sqrt{\pi} (-128 z^{11/2} + 880 z^{9/2} - 10395 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{8400}$$

07.25.03.0633.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (-64 z^5 - 408 z^4 + 172 z^3 - 210 z^2 + 405 z + 4200)}{4200} + \frac{\sqrt{\pi} (-128 z^{11/2} - 880 z^{9/2} + 10395 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{8400}$$

07.25.03.0634.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (-2048 z^6 + 17024 z^5 - 10656 z^4 - 5580 z^3 - 7980 z^2 - 467775 z + 363825) I_0\left(\frac{z}{2}\right)}{363825} + \frac{e^{z/2} (2048 z^6 - 14976 z^5 - 3296 z^4 - 3156 z^3 - 5400 z^2 + 437325 z) I_1\left(\frac{z}{2}\right)}{363825}$$

07.25.03.0635.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z (32 z^5 - 248 z^4 - 108 z^3 - 138 z^2 - 285 z + 14805)}{25200} + \frac{\sqrt{\pi} (-64 z^6 + 528 z^5 - 31185 z + 10395) \operatorname{erfi}(\sqrt{z})}{50400 \sqrt{z}}$$

07.25.03.0636.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-32 z^5 - 248 z^4 + 108 z^3 - 138 z^2 + 285 z + 14805)}{25200} + \frac{\sqrt{\pi} (-64 z^6 - 528 z^5 + 31185 z + 10395) \operatorname{erf}(\sqrt{z})}{50400 \sqrt{z}}$$

07.25.03.0637.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (-4096 z^6 + 39680 z^5 - 25536 z^4 - 13800 z^3 - 20580 z^2 - 3950100 z + 4729725) I_0\left(\frac{z}{2}\right)}{4729725} + \frac{e^{z/2} (4096 z^6 - 35584 z^5 - 8000 z^4 - 7896 z^3 - 14100 z^2 + 3866100 z - 1091475) I_1\left(\frac{z}{2}\right)}{4729725}$$

07.25.03.0638.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (128 z^6 - 1168 z^5 - 520 z^4 - 684 z^3 - 1470 z^2 + 213990 z - 51975)}{470400 z} + \frac{\sqrt{\pi} (-256 z^7 + 2464 z^6 - 436590 z^2 + 291060 z + 51975) \operatorname{erfi}(\sqrt{z})}{940800 z^{3/2}}$$

07.25.03.0639.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(-128z^6 - 1168z^5 + 520z^4 - 684z^3 + 1470z^2 + 213990z + 51975)}{470400z} + \frac{\sqrt{\pi}(-256z^7 - 2464z^6 + 436590z^2 + 291060z - 51975)\operatorname{erf}(\sqrt{z})}{940800z^{3/2}}$$

07.25.03.0640.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{70945875z} 4e^{z/2}(4096z^7 - 41216z^6 - 9408z^5 - 9480z^4 - 17400z^3 + 11660040z^2 - 6985440z - 2401245)I_1\left(\frac{z}{2}\right) - \frac{16e^{z/2}(1024z^6 - 11328z^5 + 7440z^4 + 4110z^3 + 6300z^2 + 2941785z - 4584195)I_0\left(\frac{z}{2}\right)}{70945875}$$

07.25.03.0641.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z(128z^7 - 1344z^6 - 608z^5 - 816z^4 - 1800z^3 + 576660z^2 - 311850z - 155925)}{1505280z^2} + \frac{\sqrt{\pi}(-256z^8 + 2816z^7 - 1164240z^3 + 1164240z^2 + 415800z + 155925)\operatorname{erfi}(\sqrt{z})}{3010560z^{5/2}}$$

07.25.03.0642.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(-128z^7 - 1344z^6 + 608z^5 - 816z^4 + 1800z^3 + 576660z^2 + 311850z - 155925)}{1505280z^2} + \frac{\sqrt{\pi}(-256z^8 - 2816z^7 + 1164240z^3 + 1164240z^2 - 415800z + 155925)\operatorname{erf}(\sqrt{z})}{3010560z^{5/2}}$$

07.25.03.0643.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{402026625z^2} \left(4e^{z/2}(8192z^8 - 93696z^7 - 21632z^6 - 22128z^5 - 41400z^4 + 56745780z^3 - 52515540z^2 - 31902255z - 17837820)I_1\left(\frac{z}{2}\right) - \frac{1}{402026625z}\right) - \frac{4e^{z/2}(8192z^7 - 101888z^6 + 67968z^5 + 38160z^4 + 59640z^3 + 57006180z^2 - 108482220z - 4459455)I_0\left(\frac{z}{2}\right)}{402026625z^2}$$

07.25.03.0644.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{30965760z^3} e^z(1024z^8 - 12160z^7 - 5568z^6 - 7584z^5 - 17040z^4 + 10425240z^3 - 8939700z^2 - 7588350z - 5457375) + \frac{1}{61931520z^{7/2}} \sqrt{\pi}(-2048z^9 + 25344z^8 - 20956320z^4 + 27941760z^3 + 14968800z^2 + 11226600z + 5457375)\operatorname{erfi}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.0645.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) &= \frac{1}{30965760z^3} \\
 & e^{-z}(-1024z^8 - 12160z^7 + 5568z^6 - 7584z^5 + 17040z^4 + 10425240z^3 + 8939700z^2 - 7588350z + 5457375) + \\
 & \frac{1}{61931520z^{7/2}} \sqrt{\pi}(-2048z^9 - 25344z^8 + 20956320z^4 + 27941760z^3 - 14968800z^2 + 11226600z - 5457375) \\
 & \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0646.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, 5; z\right) &= \\
 & \frac{1}{7638505875z^3} \left(32e^{z/2}(8192z^9 - 104960z^8 - 24448z^7 - 25296z^6 - 48000z^5 + 119901180z^4 - \right. \\
 & \quad \left. 150519600z^3 - 125893845z^2 - 124864740z - 89189100)I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{7638505875z^2} \left(32e^{z/2}(8192z^8 - 113152z^7 + 76416z^6 + 43440z^5 + 68880z^4 + 120207780z^3 - \right. \\
 & \quad \left. 269479980z^2 - 31216185z - 22297275)I_0\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0647.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) &= \\
 & \frac{1}{34406400z^4} \left(e^z(512z^9 - 6784z^8 - 3136z^7 - 4320z^6 - 9840z^5 + 10447080z^4 - 12349260z^3 - \right. \\
 & \quad \left. 13950090z^2 - 17099775z - 15280650)\right) + \\
 & \frac{1}{68812800z^{9/2}} \left(\sqrt{\pi}(-1024z^{10} + 14080z^9 - 20956320z^5 + 34927200z^4 + 24948000z^3 + \right. \\
 & \quad \left. 28066500z^2 + 27286875z + 15280650) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0648.01} \\
 {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) &= \\
 & \frac{1}{34406400z^4} \left(e^{-z}(-512z^9 - 6784z^8 + 3136z^7 - 4320z^6 + 9840z^5 + 10447080z^4 + 12349260z^3 - \right. \\
 & \quad \left. 13950090z^2 + 17099775z - 15280650)\right) + \\
 & \frac{1}{68812800z^{9/2}} \left(\sqrt{\pi}(-1024z^{10} - 14080z^9 + 20956320z^5 + 34927200z^4 - 24948000z^3 + \right. \\
 & \quad \left. 28066500z^2 - 27286875z + 15280650) \operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0649.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{7}{2}, 6; z\right) = \\
 & \frac{1}{32081724675z^4} \left(32e^{z/2} (16384z^{10} - 232448z^9 - 54528z^8 - 56928z^7 - 109200z^6 + 458004960z^5 - \right. \\
 & \quad \left. 726776820z^4 - 761392170z^3 - 1049593545z^2 - 1321620300z - 1102701600) I_1\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{32081724675z^3} \left(32e^{z/2} (16384z^9 - 248832z^8 + 169728z^7 + 97440z^6 + 156240z^5 + 458710560z^4 - \right. \right. \\
 & \quad \left. \left. 1182576780z^3 - 253783530z^2 - 330405075z - 275675400) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.0650.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{75} e^z (64z^5 - 320z^4 + 136z^3 - 12z^2 - 42z + 75) - \frac{8}{75} \sqrt{\pi} (8z^{11/2} - 44z^{9/2} + 33z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0651.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \\
 & \frac{1}{75} e^{-z} (-64z^5 - 320z^4 - 136z^3 - 12z^2 + 42z + 75) - \frac{8}{75} \sqrt{\pi} (8z^{11/2} + 44z^{9/2} + 33z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0652.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{45} e^z (-32z^5 + 248z^4 - 288z^3 - 60z^2 - 12z + 45) + \frac{4}{45} \sqrt{\pi} (8z^{11/2} - 66z^{9/2} + 99z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0653.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \\
 & \frac{1}{45} e^{-z} (32z^5 + 248z^4 + 288z^3 - 60z^2 + 12z + 45) + \frac{4}{45} \sqrt{\pi} (8z^{11/2} + 66z^{9/2} + 99z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0654.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) + \frac{1}{15} \sqrt{\pi} (-4z^{11/2} + 44z^{9/2} - 99z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0655.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \\
 & \frac{1}{15} e^{-z} (-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) + \frac{1}{15} \sqrt{\pi} (-4z^{11/2} - 44z^{9/2} - 99z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.0656.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{e^z (-32 z^5 + 424 z^4 - 1124 z^3 - 390 z^2 - 375 z + 1200)}{1200} + \frac{\sqrt{\pi} (64 z^{11/2} - 880 z^{9/2} + 2640 z^{7/2} - 3465 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{2400}$$

07.25.03.0657.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 424 z^4 + 1124 z^3 - 390 z^2 + 375 z + 1200)}{1200} + \frac{\sqrt{\pi} (64 z^{11/2} + 880 z^{9/2} + 2640 z^{7/2} + 3465 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{2400}$$

07.25.03.0658.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (512 z^6 - 8128 z^5 + 31704 z^4 - 16392 z^3 - 7080 z^2 - 83160 z + 51975) I_0\left(\frac{z}{2}\right)}{51975} - \frac{4 e^{z/2} (128 z^6 - 1904 z^5 + 6086 z^4 + 1164 z^3 + 933 z^2 - 17475 z) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.0659.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{e^z (-64 z^5 + 1024 z^4 - 3480 z^3 - 1308 z^2 - 1410 z + 18405)}{28800} + \frac{\sqrt{\pi} (128 z^6 - 2112 z^5 + 7920 z^4 - 41580 z + 10395) \operatorname{erfi}(\sqrt{z})}{57600 \sqrt{z}}$$

07.25.03.0660.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (64 z^5 + 1024 z^4 + 3480 z^3 - 1308 z^2 + 1410 z + 18405)}{28800} + \frac{\sqrt{\pi} (128 z^6 + 2112 z^5 + 7920 z^4 + 41580 z + 10395) \operatorname{erf}(\sqrt{z})}{57600 \sqrt{z}}$$

07.25.03.0661.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (1024 z^6 - 19072 z^5 + 88752 z^4 - 48888 z^3 - 22740 z^2 - 679140 z + 675675) I_0\left(\frac{z}{2}\right)}{675675} + \frac{e^{z/2} (-1024 z^6 + 18048 z^5 - 71216 z^4 - 14328 z^3 - 12348 z^2 + 631500 z - 121275) I_1\left(\frac{z}{2}\right)}{675675}$$

07.25.03.0662.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-64 z^6 + 1200 z^5 - 4976 z^4 - 1968 z^3 - 2268 z^2 + 68565 z - 10395)}{134400 z} + \frac{\sqrt{\pi} (128 z^7 - 2464 z^6 + 11088 z^5 - 145530 z^4 + 72765 z + 10395) \operatorname{erfi}(\sqrt{z})}{268800 z^{3/2}}$$

07.25.03.0663.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(64z^6 + 1200z^5 + 4976z^4 - 1968z^3 + 2268z^2 + 68565z + 10395)}{134400z} + \frac{\sqrt{\pi}(128z^7 + 2464z^6 + 11088z^5 + 145530z^2 + 72765z - 10395)\operatorname{erf}(\sqrt{z})}{268800z^{3/2}}$$

07.25.03.0664.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, 3; z\right) = \frac{4e^{z/2}(1024z^6 - 21888z^5 + 118320z^4 - 68160z^3 - 33300z^2 - 1995840z + 2588355)I_0\left(\frac{z}{2}\right)}{10135125} - \frac{1}{10135125z} 4e^{z/2}(1024z^7 - 20864z^6 + 97968z^5 + 20400z^4 + 18420z^3 - 1921140z^2 + 800415z + 218295)I_1\left(\frac{z}{2}\right)$$

07.25.03.0665.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z(-128z^7 + 2752z^6 - 13472z^5 - 5520z^4 - 6648z^3 + 375060z^2 - 131670z - 51975)}{860160z^2} + \frac{\sqrt{\pi}(256z^8 - 5632z^7 + 29568z^6 - 776160z^3 + 582120z^2 + 166320z + 51975)\operatorname{erfi}(\sqrt{z})}{1720320z^{5/2}}$$

07.25.03.0666.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(128z^7 + 2752z^6 + 13472z^5 - 5520z^4 + 6648z^3 + 375060z^2 + 131670z - 51975)}{860160z^2} + \frac{\sqrt{\pi}(256z^8 + 5632z^7 + 29568z^6 + 776160z^3 + 582120z^2 - 166320z + 51975)\operatorname{erf}(\sqrt{z})}{1720320z^{5/2}}$$

07.25.03.0667.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, 4; z\right) = \frac{1}{57432375z} 4e^{z/2}(2048z^7 - 49408z^6 + 304224z^5 - 181200z^4 - 91680z^3 - 9604980z^2 + 15114330z + 343035)I_0\left(\frac{z}{2}\right) - \frac{1}{57432375z^2} \left(4e^{z/2}(2048z^8 - 47360z^7 + 257888z^6 + 55056z^5 + 51360z^4 - 9389580z^3 + 6133050z^2 + 3024945z + 1372140)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.0668.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{8847360z^3} e^z(-512z^8 + 12416z^7 - 70080z^6 - 29472z^5 - 36624z^4 + 3418200z^3 - 1954260z^2 - 1351350z - 779625) + \frac{1}{17694720z^{7/2}} \sqrt{\pi}(1024z^9 - 25344z^8 + 152064z^7 - 6985440z^4 + 6985440z^3 + 2993760z^2 + 1871100z + 779625)\operatorname{erfi}(\sqrt{z})$$

07.25.03.0669.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{8847360z^3} e^{-z} (512z^8 + 12416z^7 + 70080z^6 - 29472z^5 + 36624z^4 + 3418200z^3 + 1954260z^2 - 1351350z + 779625) + \frac{1}{17694720z^{7/2}} \sqrt{\pi} (1024z^9 + 25344z^8 + 152064z^7 + 6985440z^4 + 6985440z^3 - 2993760z^2 + 1871100z - 779625) \operatorname{erf}(\sqrt{z})$$

07.25.03.0670.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, 5; z\right) = \frac{1}{1091215125z^2} \left(32e^{z/2} (2048z^8 - 55040z^7 + 380256z^6 - 232416z^5 - 120720z^4 - 20180160z^3 + 37110150z^2 + 2515590z + 1486485) I_0\left(\frac{z}{2}\right) - \frac{1}{1091215125z^3} \left(64e^{z/2} (1024z^9 - 26496z^8 + 164144z^7 + 35712z^6 + 34128z^5 - 9943440z^4 + 8901585z^3 + 6112260z^2 + 5031180z + 2972970) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.0671.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{39321600z^4} \left(e^z (-1024z^9 + 27648z^8 - 176768z^7 - 75840z^6 - 96480z^5 + 13769040z^4 - 11060280z^3 - 10353420z^2 - 10498950z - 7640325)\right) + \frac{1}{78643200z^{9/2}} \left(\sqrt{\pi} (2048z^{10} - 56320z^9 + 380160z^8 - 27941760z^5 + 34927200z^4 + 19958400z^3 + 18711000z^2 + 15592500z + 7640325) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.0672.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{39321600z^4} \left(e^{-z} (1024z^9 + 27648z^8 + 176768z^7 - 75840z^6 + 96480z^5 + 13769040z^4 + 11060280z^3 - 10353420z^2 + 10498950z - 7640325)\right) + \frac{1}{78643200z^{9/2}} \left(\sqrt{\pi} (2048z^{10} + 56320z^9 + 380160z^8 + 27941760z^5 + 34927200z^4 - 19958400z^3 + 18711000z^2 - 15592500z + 7640325) \operatorname{erf}(\sqrt{z})\right)$$

$$\begin{aligned}
 & \text{07.25.03.0673.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{5}{2}, 6; z\right) = \\
 & \frac{1}{4583103525z^3} \left(32e^{z/2} (4096z^9 - 121344z^8 + 929472z^7 - 579936z^6 - 307440z^5 - 76839840z^4 + \right. \\
 & \quad \left. 161247240z^3 + 21143430z^2 + 23108085z + 16216200) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{4583103525z^4} \left(32e^{z/2} (4096z^{10} - 117248z^9 + 814272z^8 + 179808z^7 + 175056z^6 - 76073760z^5 + \right. \right. \\
 & \quad \left. \left. 86735880z^4 + 74989530z^3 + 86600745z^2 + 92432340z + 64864800) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.0674.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{27} e^z (16z^5 - 190z^4 + 507z^3 - 168z^2 + 6z + 27) + \frac{1}{54} \sqrt{\pi} (-32z^{11/2} + 396z^{9/2} - 1188z^{7/2} + 693z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0675.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \\
 & \frac{1}{27} e^{-z} (-16z^5 - 190z^4 - 507z^3 - 168z^2 - 6z + 27) + \frac{1}{54} \sqrt{\pi} (-32z^{11/2} - 396z^{9/2} - 1188z^{7/2} - 693z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0676.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{18} e^z (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36} \sqrt{\pi} (8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0677.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \\
 & \frac{1}{18} e^{-z} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36} \sqrt{\pi} (8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0678.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{e^z (64z^5 - 1288z^4 + 7308z^3 - 10770z^2 - 3045z + 2880)}{2880} + \\
 & \frac{\sqrt{\pi} (-128z^{11/2} + 2640z^{9/2} - 15840z^{7/2} + 27720z^{5/2} - 10395\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{5760}
 \end{aligned}$$

07.25.03.0679.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z}(-64z^5 - 1288z^4 - 7308z^3 - 10770z^2 + 3045z + 2880)}{2880} + \frac{\sqrt{\pi}(-128z^{11/2} - 2640z^{9/2} - 15840z^{7/2} - 27720z^{5/2} + 10395\sqrt{z})\operatorname{erf}(\sqrt{z})}{5760}$$

07.25.03.0680.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, 1; z\right) = \frac{e^{z/2}(-256z^6 + 6000z^5 - 43440z^4 + 106932z^3 - 45828z^2 - 72765z + 31185)I_0\left(\frac{z}{2}\right)}{31185} + \frac{e^{z/2}(256z^6 - 5744z^5 + 37824z^4 - 71724z^3 - 11928z^2 + 48177z)I_1\left(\frac{z}{2}\right)}{31185}$$

07.25.03.0681.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z(64z^5 - 1552z^4 + 11136z^3 - 22848z^2 - 7500z + 24165)}{34560} + \frac{\sqrt{\pi}(-128z^6 + 3168z^5 - 23760z^4 + 55440z^3 - 62370z + 10395)\operatorname{erfi}(\sqrt{z})}{69120\sqrt{z}}$$

07.25.03.0682.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}(-64z^5 - 1552z^4 - 11136z^3 - 22848z^2 + 7500z + 24165)}{34560} + \frac{\sqrt{\pi}(-128z^6 - 3168z^5 - 23760z^4 - 55440z^3 + 62370z + 10395)\operatorname{erf}(\sqrt{z})}{69120\sqrt{z}}$$

07.25.03.0683.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2}(-512z^6 + 14112z^5 - 123312z^4 + 376224z^3 - 179964z^2 - 561330z + 405405)I_0\left(\frac{z}{2}\right)}{405405} + \frac{e^{z/2}(512z^6 - 13600z^5 + 109968z^4 - 272544z^3 - 49596z^2 + 449586z - 51975)I_1\left(\frac{z}{2}\right)}{405405}$$

07.25.03.0684.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z(256z^6 - 7264z^5 + 63024z^4 - 165840z^3 - 59304z^2 + 374850z - 31185)}{645120z} + \frac{\sqrt{\pi}(-512z^7 + 14784z^6 - 133056z^5 + 388080z^4 - 873180z^2 + 291060z + 31185)\operatorname{erfi}(\sqrt{z})}{1290240z^{3/2}}$$

07.25.03.0685.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(-256z^6 - 7264z^5 - 63024z^4 - 165840z^3 + 59304z^2 + 374850z + 31185)}{645120z} + \frac{\sqrt{\pi}(-512z^7 - 14784z^6 - 133056z^5 - 388080z^4 + 873180z^2 + 291060z - 31185)\operatorname{erf}(\sqrt{z})}{1290240z^{3/2}}$$

07.25.03.06886.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, 3; z\right) = \frac{1}{6081075 z} 4 e^{z/2} (512 z^7 - 15712 z^6 + 150624 z^5 - 461040 z^4 - 88800 z^3 + 1389690 z^2 - 353430 z - 72765) I_1\left(\frac{z}{2}\right) - \frac{8 e^{z/2} (256 z^6 - 8112 z^5 + 83040 z^4 - 302160 z^3 + 155520 z^2 + 800415 z - 769230) I_0\left(\frac{z}{2}\right)}{6081075}$$

07.25.03.0687.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (128 z^7 - 4160 z^6 + 42336 z^5 - 135984 z^4 - 51432 z^3 + 524916 z^2 - 103950 z - 31185)}{1032192 z^2} + \frac{1}{2064384 z^{5/2}} \sqrt{\pi} (-256 z^8 + 8448 z^7 - 88704 z^6 + 310464 z^5 - 1164240 z^3 + 582120 z^2 + 124740 z + 31185) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0688.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-128 z^7 - 4160 z^6 - 42336 z^5 - 135984 z^4 + 51432 z^3 + 524916 z^2 + 103950 z - 31185)}{1032192 z^2} + \frac{1}{2064384 z^{5/2}} \sqrt{\pi} (-256 z^8 - 8448 z^7 - 88704 z^6 - 310464 z^5 + 1164240 z^3 + 582120 z^2 - 124740 z + 31185) \operatorname{erf}(\sqrt{-z})$$

07.25.03.0689.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{34459425 z^2} \left(4 e^{z/2} (1024 z^8 - 35648 z^7 + 395232 z^6 - 1440048 z^5 - 288480 z^4 + 6856200 z^3 - 2765070 z^2 - 1049895 z - 374220) I_1\left(\frac{z}{2}\right) - \frac{1}{34459425 z} 4 e^{z/2} (1024 z^7 - 36672 z^6 + 430368 z^5 - 1818480 z^4 + 986400 z^3 + 7567560 z^2 - 8877330 z - 93555) I_0\left(\frac{z}{2}\right)\right)$$

07.25.03.0690.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{21233664 z^3} e^z (1024 z^8 - 37504 z^7 + 437952 z^6 - 1661280 z^5 - 653808 z^4 + 9717192 z^3 - 3201660 z^2 - 1725570 z - 779625) + \frac{1}{42467328 z^{7/2}} \left(\sqrt{\pi} (-2048 z^9 + 76032 z^8 - 912384 z^7 + 3725568 z^6 - 20956320 z^4 + 13970880 z^3 + 4490640 z^2 + 2245320 z + 779625) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.0691.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{21233664 z^3} e^{-z} (-1024 z^8 - 37504 z^7 - 437952 z^6 - 1661280 z^5 + 653808 z^4 + 9717192 z^3 + 3201660 z^2 - 1725570 z + 779625) + \frac{1}{42467328 z^{7/2}} \left(\sqrt{\pi} (-2048 z^9 - 76032 z^8 - 912384 z^7 - 3725568 z^6 + 20956320 z^4 + 13970880 z^3 - 4490640 z^2 + 2245320 z - 779625) \operatorname{erf}(\sqrt{-z})\right)$$

$$\begin{aligned}
 & \text{07.25.03.0692.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, 5; z\right) = \\
 & \frac{1}{654729075 z^3} \left(32 e^{z/2} (1024 z^9 - 39872 z^8 + 501888 z^7 - 2121168 z^6 - 437376 z^5 + 14609880 z^4 - \right. \\
 & \quad \left. 8149680 z^3 - 4355505 z^2 - 2869020 z - 1372140) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{654729075 z^2} \left(32 e^{z/2} (1024 z^8 - 40896 z^7 + 541248 z^6 - 2604144 z^5 + 1469520 z^4 + \right. \\
 & \quad \left. 15717240 z^3 - 21538440 z^2 - 717255 z - 343035) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0693.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{47185920 z^4} \left(e^z (1024 z^9 - 41728 z^8 + 549888 z^7 - 2405760 z^6 - 975360 z^5 + 19782720 z^4 - 9313920 z^3 - \right. \\
 & \quad \left. 6902280 z^2 - 5613300 z - 3274425) + \right. \\
 & \frac{1}{94371840 z^{9/2}} \left(\sqrt{\pi} (-2048 z^{10} + 84480 z^9 - 1140480 z^8 + 5322240 z^7 - 41912640 z^5 + \right. \\
 & \quad \left. 34927200 z^4 + 14968800 z^3 + 11226600 z^2 + 7796250 z + 3274425) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0694.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{47185920 z^4} \left(e^{-z} (-1024 z^9 - 41728 z^8 - 549888 z^7 - 2405760 z^6 + 975360 z^5 + 19782720 z^4 + \right. \\
 & \quad \left. 9313920 z^3 - 6902280 z^2 + 5613300 z - 3274425) + \right. \\
 & \frac{1}{94371840 z^{9/2}} \left(\sqrt{\pi} (-2048 z^{10} - 84480 z^9 - 1140480 z^8 - 5322240 z^7 + 41912640 z^5 + \right. \\
 & \quad \left. 34927200 z^4 - 14968800 z^3 + 11226600 z^2 - 7796250 z + 3274425) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0695.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{3}{2}, 6; z\right) = \\
 & \frac{1}{2749862115 z^4} \left(32 e^{z/2} (2048 z^{10} - 88192 z^9 + 1242432 z^8 - 5975232 z^7 - 1259664 z^6 + 56122416 z^5 - \right. \\
 & \quad \left. 40166280 z^4 - 27193320 z^3 - 25353405 z^2 - 22328460 z - 12972960) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{2749862115 z^3} \left(32 e^{z/2} (2048 z^9 - 90240 z^8 + 1329600 z^7 - 7175616 z^6 + 4176144 z^5 + \right. \\
 & \quad \left. 59376240 z^4 - 92557080 z^3 - 6237000 z^2 - 5582115 z - 3243240) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.0696.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{96} e^z (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) + \frac{1}{192} \sqrt{\pi} (-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0697.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{96} e^{-z} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) + \frac{1}{192} \sqrt{\pi} (-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0698.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{e^z (-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920)}{1920} + \frac{\sqrt{\pi} (32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.0699.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \frac{\sqrt{\pi} (32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z}) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.0700.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, 1; z\right) = \frac{e^{z/2} (32z^6 - 992z^5 + 10512z^4 - 46944z^3 + 88674z^2 - 62370z + 10395) I_0\left(\frac{z}{2}\right)}{10395} - \frac{2e^{z/2} (16z^6 - 480z^5 + 4784z^4 - 18912z^3 + 27387z^2 - 9762z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.0701.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z (-32z^5 + 1040z^4 - 11376z^3 + 50232z^2 - 83370z + 35685)}{46080} + \frac{\sqrt{\pi} (64z^6 - 2112z^5 + 23760z^4 - 110880z^3 + 207900z^2 - 124740z + 10395) \operatorname{erfi}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.0702.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (32z^5 + 1040z^4 + 11376z^3 + 50232z^2 + 83370z + 35685)}{46080} + \frac{\sqrt{\pi} (64z^6 + 2112z^5 + 23760z^4 + 110880z^3 + 207900z^2 + 124740z + 10395) \operatorname{erf}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.0703.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 - 2336 z^5 + 30000 z^4 - 168864 z^3 + 425112 z^2 - 436590 z + 135135) I_0\left(\frac{z}{2}\right) + e^{z/2} (-64 z^6 + 2272 z^5 - 27760 z^4 + 142176 z^3 - 294744 z^2 + 191442 z - 10395) I_1\left(\frac{z}{2}\right)}{135135}$$

07.25.03.0704.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (-64 z^6 + 2432 z^5 - 32080 z^4 + 179136 z^3 - 408828 z^2 + 291480 z - 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 - 4928 z^6 + 66528 z^5 - 388080 z^4 + 970200 z^3 - 873180 z^2 + 145530 z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0705.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 2432 z^5 + 32080 z^4 + 179136 z^3 + 408828 z^2 + 291480 z + 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 + 4928 z^6 + 66528 z^5 + 388080 z^4 + 970200 z^3 + 873180 z^2 + 145530 z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.0706.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 - 2688 z^5 + 40560 z^4 - 275520 z^3 + 866520 z^2 - 1164240 z + 509355) I_0\left(\frac{z}{2}\right) - \frac{1}{2027025 z} 4 e^{z/2} (64 z^7 - 2624 z^6 + 37968 z^5 - 238800 z^4 + 644280 z^3 - 608760 z^2 + 72765 z + 10395) I_1\left(\frac{z}{2}\right)}{2027025}$$

07.25.03.0707.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (-128 z^7 + 5568 z^6 - 85984 z^5 + 580560 z^4 - 1686744 z^3 + 1690836 z^2 - 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} \left(\sqrt{\pi} (256 z^8 - 11264 z^7 + 177408 z^6 - 1241856 z^5 + 3880800 z^4 - 4656960 z^3 + 1164240 z^2 + 166320 z + 31185) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.0708.01

$${}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 5568 z^6 + 85984 z^5 + 580560 z^4 + 1686744 z^3 + 1690836 z^2 + 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} \left(\sqrt{\pi} (256 z^8 + 11264 z^7 + 177408 z^6 + 1241856 z^5 + 3880800 z^4 + 4656960 z^3 + 1164240 z^2 - 166320 z + 31185) \operatorname{erf}(\sqrt{z}) \right)$$

$$\begin{aligned}
 & \text{07.25.03.0709.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, 4; z\right) = \\
 & \frac{1}{11486475z} 4e^{z/2} (128z^7 - 6080z^6 + 105408z^5 - 838800z^4 + 3163920z^3 - 5239080z^2 + 2910600z + 10395) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{11486475z^2} \\
 & 4e^{z/2} (128z^8 - 5952z^7 + 99520z^6 - 742128z^5 + 2466000z^4 - 3061560z^3 + 582120z^2 + 155925z + 41580) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0710.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{14155776z^3} \\
 & e^z (-256z^8 + 12544z^7 - 221952z^6 + 1757760z^5 - 6203040z^4 + 8030448z^3 - 1164240z^2 - 457380z - 155925) + \\
 & \frac{1}{28311552z^{7/2}} \left(\sqrt{\pi} (512z^9 - 25344z^8 + 456192z^7 - 3725568z^6 + 13970880z^5 - \right. \\
 & \left. 20956320z^4 + 6985440z^3 + 1496880z^2 + 561330z + 155925) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0711.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{14155776z^3} \\
 & e^{-z} (256z^8 + 12544z^7 + 221952z^6 + 1757760z^5 + 6203040z^4 + 8030448z^3 + 1164240z^2 - 457380z + 155925) + \\
 & \frac{1}{28311552z^{7/2}} \left(\sqrt{\pi} (512z^9 + 25344z^8 + 456192z^7 + 3725568z^6 + 13970880z^5 + \right. \\
 & \left. 20956320z^4 + 6985440z^3 - 1496880z^2 + 561330z - 155925) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0712.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, 5; z\right) = \frac{1}{218243025z^2} \\
 & \left(32e^{z/2} (128z^8 - 6784z^7 + 132864z^6 - 1212096z^5 + 5331360z^4 - 10478160z^3 + 6985440z^2 + 83160z + 31185) \right. \\
 & \left. I_0\left(\frac{z}{2}\right) - \frac{1}{218243025z^3} \left(128e^{z/2} (32z^9 - 1664z^8 + 31568z^7 - 272256z^6 + \right. \right. \\
 & \left. \left. 1074804z^5 - 1654080z^4 + 436590z^3 + 166320z^2 + 83160z + 31185) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0713.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{62914560z^4} \left(e^z (-512z^9 + 27904z^8 - 556544z^7 + 5057280z^6 - 21001920z^5 + 33362400z^4 - \right. \\
 & \left. 6985440z^3 - 3825360z^2 - 2390850z - 1091475) \right) + \\
 & \frac{1}{125829120z^{9/2}} \left(\sqrt{\pi} (1024z^{10} - 56320z^9 + 1140480z^8 - 10644480z^7 + 46569600z^6 - 83825280z^5 + \right. \\
 & \left. 34927200z^4 + 9979200z^3 + 5613300z^2 + 3118500z + 1091475) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0714.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{62914560z^4} \left(e^{-z} (512z^9 + 27904z^8 + 556544z^7 + 5057280z^6 + 21001920z^5 + 33362400z^4 + \right. \\
 & \quad \left. 6985440z^3 - 3825360z^2 + 2390850z - 1091475) \right) + \\
 & \frac{1}{125829120z^{9/2}} \left(\sqrt{\pi} (1024z^{10} + 56320z^9 + 1140480z^8 + 10644480z^7 + 46569600z^6 + 83825280z^5 + \right. \\
 & \quad \left. 34927200z^4 - 9979200z^3 + 5613300z^2 - 3118500z + 1091475) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0715.01} \\
 & {}_2F_2\left(-\frac{11}{2}, -\frac{1}{2}; -\frac{1}{2}, 6; z\right) = \\
 & \frac{1}{916620705z^3} \left(32e^{z/2} (256z^9 - 14976z^8 + 326976z^7 - 3364032z^6 + 16903152z^5 - 38419920z^4 + \right. \\
 & \quad \left. 29688120z^3 + 748440z^2 + 530145z + 249480) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{916620705z^4} \left(32e^{z/2} (256z^{10} - 14720z^9 + 312384z^8 - 3058752z^7 + 13986672z^6 - 25692912z^5 + \right. \\
 & \quad \left. 8731800z^4 + 4241160z^3 + 3024945z^2 + 2120580z + 997920) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{1}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{11}{2}$

$$\text{07.25.03.0716.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{e^z (64z^6 - 192z^5 + 720z^4 - 2400z^3 + 6300z^2 - 11340z + 10395)}{10395}$$

$$\text{07.25.03.0717.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{945} e^z (32z^5 - 80z^4 + 240z^3 - 600z^2 + 1050z - 945)$$

$$\text{07.25.03.0718.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{105} e^z (16z^4 - 32z^3 + 72z^2 - 120z + 105)$$

$$\text{07.25.03.0719.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{15} e^z (8z^3 - 12z^2 + 18z - 15)$$

$$\text{07.25.03.0720.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (4z^2 - 4z + 3)$$

$$\text{07.25.03.0721.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -e^z (2z - 1)$$

07.25.03.0722.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = e^z$$

07.25.03.0723.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, 1; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

07.25.03.0724.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.0725.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.0726.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.0727.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi} (2z+1) \operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3e^z}{4z}$$

07.25.03.0728.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi} (2z-1) \operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.0729.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2} (z+1) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.0730.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi} (4z^2+4z+3) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15e^z (2z+3)}{32z^2}$$

07.25.03.0731.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} (2z-3)}{32z^2} + \frac{15\sqrt{\pi} (4z^2-4z+3) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.0732.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2} (2z+1) I_0\left(\frac{z}{2}\right)}{5z} - \frac{4e^{z/2} (2z^2+3z+4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.0733.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi} (8z^3+12z^2+18z+15) \operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35e^z (4z^2+8z+15)}{128z^3}$$

07.25.03.0734.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z^2 - 8z + 15)}{128 z^3} + \frac{35 \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.0735.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 + 2z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} - \frac{64 e^{z/2} (z^3 + 2z^2 + 4z + 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.0736.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (16z^4 + 32z^3 + 72z^2 + 120z + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315 e^z (8z^3 + 20z^2 + 50z + 105)}{2048 z^4}$$

07.25.03.0737.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (8z^3 - 20z^2 + 50z - 105)}{2048 z^4} + \frac{315 \sqrt{\pi} (16z^4 - 32z^3 + 72z^2 - 120z + 105) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.0738.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 + 6z^2 + 15z + 24) I_0\left(\frac{z}{2}\right)}{63 z^3} - \frac{32 e^{z/2} (4z^4 + 10z^3 + 27z^2 + 60z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.0739.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{8192 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{59535} + \frac{e^z (-8192 z^5 + 6992 z^4 - 17232 z^3 + 40080 z^2 - 67620 z + 59535)}{59535}$$

07.25.03.0740.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{8192 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{59535} + \frac{e^{-z} (8192 z^5 + 6992 z^4 + 17232 z^3 + 40080 z^2 + 67620 z + 59535)}{59535}$$

07.25.03.0741.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (4096 z^5 + 2048 z^4 - 2472 z^3 + 4908 z^2 - 7770 z + 6615)}{6615} - \frac{4096 \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})}{6615}$$

07.25.03.0742.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-4096 z^5 + 2048 z^4 + 2472 z^3 + 4908 z^2 + 7770 z + 6615)}{6615} - \frac{4096 \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})}{6615}$$

07.25.03.0743.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1024}{945} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2} + \frac{1}{945} e^z (-1024 z^5 - 512 z^4 - 768 z^3 + 852 z^2 - 1176 z + 945)$$

07.25.03.0744.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{1024}{945} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2} + \frac{1}{945} e^{-z} (1024 z^5 - 512 z^4 + 768 z^3 + 852 z^2 + 1176 z + 945)$$

07.25.03.0745.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{567} e^z (512 z^5 + 256 z^4 + 384 z^3 + 960 z^2 - 798 z + 567) - \frac{512}{567} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0746.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{567} e^{-z} (-512 z^5 + 256 z^4 - 384 z^3 + 960 z^2 + 798 z + 567) - \frac{512}{567} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.0747.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{64}{189} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2} + \frac{1}{189} e^z (-64 z^5 - 32 z^4 - 48 z^3 - 120 z^2 - 420 z + 189)$$

07.25.03.0748.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{64}{189} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2} + \frac{1}{189} e^{-z} (64 z^5 - 32 z^4 + 48 z^3 - 120 z^2 + 420 z + 189)$$

07.25.03.0749.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0750.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.0751.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (-8192 z^6 + 6144 z^5 + 3840 z^4 + 6720 z^3 + 18900 z^2 + 72765 z + 654885) I_0\left(\frac{z}{2}\right)}{654885} + \frac{e^{z/2} (8192 z^6 + 2048 z^5 + 2304 z^4 + 4800 z^3 + 14700 z^2 + 59535 z) I_1\left(\frac{z}{2}\right)}{654885}$$

07.25.03.0752.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945)}{11340} + \frac{\sqrt{\pi} (10395 - 64 z^6) \operatorname{erfi}(\sqrt{z})}{22680 \sqrt{z}}$$

07.25.03.0753.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945)}{11340} + \frac{\sqrt{\pi} (10395 - 64 z^6) \operatorname{erf}(\sqrt{z})}{22680 \sqrt{z}}$$

07.25.03.0754.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (-16384 z^6 + 12288 z^5 + 7680 z^4 + 13440 z^3 + 37800 z^2 + 145530 z + 8513505) I_0\left(\frac{z}{2}\right)}{8513505} + \frac{e^{z/2} (16384 z^6 + 4096 z^5 + 4608 z^4 + 9600 z^3 + 29400 z^2 + 119070 z - 7203735) I_1\left(\frac{z}{2}\right)}{8513505}$$

07.25.03.0755.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (32 z^6 + 16 z^5 + 24 z^4 + 60 z^3 + 210 z^2 + 945 z - 31185)}{52920 z} + \frac{\sqrt{\pi} (-64 z^7 + 72765 z + 31185) \operatorname{erfi}(\sqrt{z})}{105840 z^{3/2}}$$

$$\begin{aligned}
 & \text{07.25.03.0756.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = & \\
 & \frac{e^{-z}(-32z^6 + 16z^5 - 24z^4 + 60z^3 - 210z^2 + 945z + 31185)}{52920z} + \frac{\sqrt{\pi}(-64z^7 + 72765z - 31185)\operatorname{erf}(\sqrt{z})}{105840z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0757.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, 3; z\right) = & \\
 & \frac{1}{127702575z} 4e^{z/2}(16384z^7 + 4096z^6 + 4608z^5 + 9600z^4 + 29400z^3 + 119070z^2 - 38419920z - 31216185)I_1\left(\frac{z}{2}\right) - \\
 & \frac{8e^{z/2}(8192z^6 - 6144z^5 - 3840z^4 - 6720z^3 - 18900z^2 - 72765z - 19864845)I_0\left(\frac{z}{2}\right)}{127702575}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0758.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = & \frac{e^z(128z^7 + 64z^6 + 96z^5 + 240z^4 + 840z^3 + 3780z^2 - 561330z - 654885)}{677376z^2} + \\
 & \frac{\sqrt{\pi}(-256z^8 + 1164240z^2 + 997920z + 654885)\operatorname{erfi}(\sqrt{z})}{1354752z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0759.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = & \frac{e^{-z}(-128z^7 + 64z^6 - 96z^5 + 240z^4 - 840z^3 + 3780z^2 + 561330z - 654885)}{677376z^2} + \\
 & \frac{\sqrt{\pi}(-256z^8 + 1164240z^2 - 997920z + 654885)\operatorname{erf}(\sqrt{z})}{1354752z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0760.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, 4; z\right) = & \\
 & \frac{1}{723647925z^2} \left(4e^{z/2}(32768z^8 + 8192z^7 + 9216z^6 + 19200z^5 + 58800z^4 + 238140z^3 - 264136950z^2 - \right. \\
 & \left. 343378035z - 374594220)I_1\left(\frac{z}{2}\right) - \frac{1}{723647925z} \right. \\
 & \left. 4e^{z/2}(32768z^7 - 24576z^6 - 15360z^5 - 26880z^4 - 75600z^3 - 291060z^2 - 266756490z - 93648555)I_0\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0761.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = & \frac{e^z(128z^8 + 64z^7 + 96z^6 + 240z^5 + 840z^4 + 3780z^3 - 1725570z^2 - 2983365z - 4365900)}{1741824z^3} + \\
 & \frac{\sqrt{\pi}(-256z^9 + 3492720z^3 + 4490640z^2 + 5893965z + 4365900)\operatorname{erfi}(\sqrt{z})}{3483648z^{7/2}}
 \end{aligned}$$

07.25.03.0762.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(-128z^8 + 64z^7 - 96z^6 + 240z^5 - 840z^4 + 3780z^3 + 1725570z^2 - 2983365z + 4365900)}{1741824z^3} + \frac{\sqrt{\pi}(-256z^9 + 3492720z^3 - 4490640z^2 + 5893965z - 4365900)\operatorname{erf}(\sqrt{z})}{3483648z^{7/2}}$$

07.25.03.0763.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, 5; z\right) = \frac{1}{13749310575z^3} \left(32e^{z/2}(32768z^9 + 8192z^8 + 9216z^7 + 19200z^6 + 58800z^5 + 238140z^4 - 719001360z^3 - 1253106855z^2 - 2194051860z - 2729186460)I_1\left(\frac{z}{2}\right) - \frac{1}{13749310575z^2} \left(32e^{z/2}(32768z^8 - 24576z^7 - 15360z^6 - 26880z^5 - 75600z^4 - 291060z^3 - 721620900z^2 - 548512965z - 682296615)I_0\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.0764.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{7741440z^4} e^z(256z^9 + 128z^8 + 192z^7 + 480z^6 + 1680z^5 + 7560z^4 - 8690220z^3 - 19064430z^2 - 41476050z - 68762925) + \frac{1}{15482880z^{9/2}} \sqrt{\pi}(-512z^{10} + 17463600z^4 + 29937600z^3 + 58939650z^2 + 87318000z + 68762925)\operatorname{erfi}(\sqrt{z})$$

07.25.03.0765.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{7741440z^4} e^{-z}(-256z^9 + 128z^8 - 192z^7 + 480z^6 - 1680z^5 + 7560z^4 + 8690220z^3 - 19064430z^2 + 41476050z - 68762925) + \frac{1}{15482880z^{9/2}} \sqrt{\pi}(-512z^{10} + 17463600z^4 - 29937600z^3 + 58939650z^2 - 87318000z + 68762925)\operatorname{erf}(\sqrt{z})$$

07.25.03.0766.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{9}{2}, 6; z\right) = \frac{1}{57747104415z^4} \left(32e^{z/2}(65536z^{10} + 16384z^9 + 18432z^8 + 38400z^7 + 117600z^6 + 476280z^5 - 3358541340z^4 - 7307560260z^3 - 17351739405z^2 - 34266452220z - 46092926880)I_1\left(\frac{z}{2}\right) - \frac{1}{57747104415z^3} \left(32e^{z/2}(65536z^9 - 49152z^8 - 30720z^7 - 53760z^6 - 151200z^5 - 582120z^4 - 3363780420z^3 - 3977833860z^2 - 8566613055z - 11523231720)I_0\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.0767.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{e^z (-10240 z^5 + 6144 z^4 - 2048 z^3 + 3108 z^2 - 4500 z + 3675)}{3675} + \frac{1024 \sqrt{\pi} (10 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{3675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0768.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \\
 & \frac{e^{-z} (10240 z^5 + 6144 z^4 + 2048 z^3 + 3108 z^2 + 4500 z + 3675)}{3675} + \frac{1024 \sqrt{\pi} (10 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})}{3675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0769.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{525} e^z (2560 z^5 - 4352 z^4 - 896 z^3 + 576 z^2 - 690 z + 525) - \frac{512}{525} \sqrt{\pi} (5 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0770.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \\
 & \frac{1}{525} e^{-z} (-2560 z^5 - 4352 z^4 + 896 z^3 + 576 z^2 + 690 z + 525) - \frac{512}{525} \sqrt{\pi} (5 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0771.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{315} e^z (-1280 z^5 + 3584 z^4 + 1152 z^3 + 768 z^2 - 480 z + 315) + \frac{128}{315} \sqrt{\pi} (10 z^{11/2} - 33 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0772.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \\
 & \frac{1}{315} e^{-z} (1280 z^5 + 3584 z^4 - 1152 z^3 + 768 z^2 + 480 z + 315) + \frac{128}{315} \sqrt{\pi} (10 z^{11/2} + 33 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0773.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} e^z (160 z^5 - 624 z^4 - 232 z^3 - 228 z^2 - 270 z + 105) - \frac{32}{105} \sqrt{\pi} (5 z^{11/2} - 22 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0774.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} e^{-z} (-160 z^5 - 624 z^4 + 232 z^3 - 228 z^2 + 270 z + 105) - \frac{32}{105} \sqrt{\pi} (5 z^{11/2} + 22 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0775.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (-16 z^5 + 80 z^4 + 32 z^3 + 36 z^2 + 60 z + 105) + \frac{8}{105} \sqrt{\pi} (2 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0776.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} e^{-z} (16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105) + \frac{8}{105} \sqrt{\pi} (2 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.0777.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (20480 z^6 - 139264 z^5 + 83328 z^4 + 41280 z^3 + 54390 z^2 + 103950 z + 363825) I_0\left(\frac{z}{2}\right) - 2 e^{z/2} (10240 z^6 - 59392 z^5 - 12608 z^4 - 11424 z^3 - 17925 z^2 - 36750 z) I_1\left(\frac{z}{2}\right)}{363825}$$

07.25.03.0778.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z (-160 z^5 + 976 z^4 + 408 z^3 + 492 z^2 + 930 z + 2205)}{12600} + \frac{\sqrt{\pi} (320 z^6 - 2112 z^5 + 10395) \operatorname{erfi}(\sqrt{z})}{25200 \sqrt{z}}$$

07.25.03.0779.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (160 z^5 + 976 z^4 - 408 z^3 + 492 z^2 - 930 z + 2205)}{12600} + \frac{\sqrt{\pi} (320 z^6 + 2112 z^5 + 10395) \operatorname{erf}(\sqrt{z})}{25200 \sqrt{z}}$$

07.25.03.0780.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (40960 z^6 - 323584 z^5 + 200448 z^4 + 103680 z^3 + 145740 z^2 + 311850 z + 4729725) I_0\left(\frac{z}{2}\right) + e^{z/2} (-40960 z^6 + 282624 z^5 + 61696 z^4 + 58368 z^3 + 98100 z^2 + 227850 z - 3274425) I_1\left(\frac{z}{2}\right)}{4729725}$$

07.25.03.0781.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (-320 z^6 + 2304 z^5 + 992 z^4 + 1248 z^3 + 2520 z^2 + 6720 z - 51975)}{117600 z} + \frac{\sqrt{\pi} (640 z^7 - 4928 z^6 + 145530 z + 51975) \operatorname{erfi}(\sqrt{z})}{235200 z^{3/2}}$$

07.25.03.0782.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (320 z^6 + 2304 z^5 - 992 z^4 + 1248 z^3 - 2520 z^2 + 6720 z + 51975)}{117600 z} + \frac{\sqrt{\pi} (640 z^7 + 4928 z^6 + 145530 z - 51975) \operatorname{erf}(\sqrt{z})}{235200 z^{3/2}}$$

07.25.03.0783.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (8192 z^6 - 73728 z^5 + 46848 z^4 + 24960 z^3 + 36540 z^2 + 83160 z + 4147605) I_0\left(\frac{z}{2}\right) - \frac{1}{14189175 z} 4 e^{z/2} (8192 z^7 - 65536 z^6 - 14592 z^5 - 14208 z^4 - 24900 z^3 - 61740 z^2 + 3711015 z + 2401245) I_1\left(\frac{z}{2}\right)}{14189175}$$

07.25.03.0784.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (-640 z^7 + 5312 z^6 + 2336 z^5 + 3024 z^4 + 6360 z^3 + 18060 z^2 - 519750 z - 467775)}{752640 z^2} + \frac{\sqrt{\pi} (1280 z^8 - 11264 z^7 + 1164240 z^2 + 831600 z + 467775) \operatorname{erfi}(\sqrt{z})}{1505280 z^{5/2}}$$

07.25.03.0785.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(640z^7 + 5312z^6 - 2336z^5 + 3024z^4 - 6360z^3 + 18060z^2 + 519750z - 467775)}{752640z^2} + \frac{\sqrt{\pi}(1280z^8 + 11264z^7 + 1164240z^2 - 831600z + 467775)\operatorname{erf}(\sqrt{z})}{1505280z^{5/2}}$$

07.25.03.0786.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{402026625z} - \frac{4e^{z/2}(81920z^7 - 827392z^6 + 536064z^5 + 291840z^4 + 439320z^3 + 1039500z^2 + 135925020z + 31216185)I_0\left(\frac{z}{2}\right) - \frac{1}{402026625z^2}\left(4e^{z/2}(81920z^8 - 745472z^7 - 168448z^6 - 167424z^5 - 301800z^4 - 779100z^3 + 130103820z^2 + 141673455z + 124864740)I_1\left(\frac{z}{2}\right)\right)}{402026625z^2}$$

07.25.03.0787.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{3870720z^3} e^z(-1280z^8 + 12032z^7 + 5376z^6 + 7104z^5 + 15360z^4 + 45360z^3 - 3326400z^2 - 4781700z - 5457375) + \frac{\sqrt{\pi}(2560z^9 - 25344z^8 + 6985440z^3 + 7484400z^2 + 8419950z + 5457375)\operatorname{erfi}(\sqrt{z})}{7741440z^{7/2}}$$

07.25.03.0788.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{3870720z^3} e^{-z}(1280z^8 + 12032z^7 - 5376z^6 + 7104z^5 - 15360z^4 + 45360z^3 + 3326400z^2 - 4781700z + 5457375) + \frac{\sqrt{\pi}(2560z^9 + 25344z^8 + 6985440z^3 - 7484400z^2 + 8419950z - 5457375)\operatorname{erf}(\sqrt{z})}{7741440z^{7/2}}$$

07.25.03.0789.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{7638505875z^2}\left(32e^{z/2}(81920z^8 - 917504z^7 + 603648z^6 + 334080z^5 + 513240z^4 + 1247400z^3 + 364157640z^2 + 196216020z + 200675475)I_0\left(\frac{z}{2}\right) - \frac{1}{7638505875z^3}\left(128e^{z/2}(20480z^9 - 208896z^8 - 47744z^7 - 48192z^6 - 88650z^5 - 235200z^4 + 89220285z^3 + 131725440z^2 + 196216020z + 200675475)I_1\left(\frac{z}{2}\right)\right)\right)$$

$$\begin{aligned}
 & \text{07.25.03.0790.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{1720320z^4} \\
 & e^z (-256z^9 + 2688z^8 + 1216z^7 + 1632z^6 + 3600z^5 + 10920z^4 - 1704780z^3 - 3180870z^2 - 5821200z - 7640325) + \\
 & \frac{1}{3440640z^{9/2}} \sqrt{\pi} (512z^{10} - 5632z^9 + 3492720z^4 + 4989600z^3 + 8419950z^2 + 10914750z + 7640325) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0791.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{1720320z^4} \\
 & e^{-z} (256z^9 + 2688z^8 - 1216z^7 + 1632z^6 - 3600z^5 + 10920z^4 + 1704780z^3 - 3180870z^2 + 5821200z - 7640325) + \\
 & \frac{1}{3440640z^{9/2}} \sqrt{\pi} (512z^{10} + 5632z^9 + 3492720z^4 - 4989600z^3 + 8419950z^2 - 10914750z + 7640325) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0792.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{7}{2}, 6; z\right) = \\
 & \frac{1}{32081724675z^3} \left(32e^{z/2} (163840z^9 - 2015232z^8 + 1342464z^7 + 752640z^6 + 1174320z^5 + 2910600z^4 + \right. \\
 & \quad \left. 1690185420z^3 + 1480539060z^2 + 2697970275z + 3032429400) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{32081724675z^4} \left(32e^{z/2} (163840z^{10} - 1851392z^9 - 427008z^8 - 436224z^7 - 814800z^6 - 2205000z^5 + \right. \\
 & \quad \left. 1672721820z^4 + 3087772380z^3 + 6301209915z^2 + 10791881100z + 12129717600) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.0793.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \\
 & \frac{1}{75} e^z (-640z^5 + 2496z^4 - 656z^3 + 120z^2 - 108z + 75) + \frac{16}{75} \sqrt{\pi} (40z^{11/2} - 176z^{9/2} + 99z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0794.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \\
 & \frac{1}{75} e^{-z} (640z^5 + 2496z^4 + 656z^3 + 120z^2 + 108z + 75) + \frac{16}{75} \sqrt{\pi} (40z^{11/2} + 176z^{9/2} + 99z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0795.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{45} e^z (320z^5 - 1952z^4 + 1560z^3 + 204z^2 - 78z + 45) - \frac{8}{45} \sqrt{\pi} (40z^{11/2} - 264z^{9/2} + 297z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.0796.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{45} e^{-z} (-320 z^5 - 1952 z^4 - 1560 z^3 + 204 z^2 + 78 z + 45) - \frac{8}{45} \sqrt{\pi} (40 z^{11/2} + 264 z^{9/2} + 297 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0797.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (-40 z^5 + 332 z^4 - 448 z^3 - 108 z^2 - 48 z + 15) + \frac{2}{15} \sqrt{\pi} (20 z^{11/2} - 176 z^{9/2} + 297 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0798.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (40 z^5 + 332 z^4 + 448 z^3 - 108 z^2 + 48 z + 15) + \frac{2}{15} \sqrt{\pi} (20 z^{11/2} + 176 z^{9/2} + 297 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0799.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} + 44 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0800.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} - 44 z^{9/2} - 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0801.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (-5120 z^6 + 65792 z^5 - 200880 z^4 + 92772 z^3 + 34500 z^2 + 31185 z + 51975) I_0\left(\frac{z}{2}\right) + e^{z/2} (5120 z^6 - 60672 z^5 + 142768 z^4 + 24780 z^3 + 16992 z^2 + 17925 z) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.0802.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{e^z (320 z^5 - 4064 z^4 + 10008 z^3 + 3372 z^2 + 3090 z + 4005)}{14400} + \frac{\sqrt{\pi} (-640 z^6 + 8448 z^5 - 23760 z^4 + 10395) \operatorname{erfi}(\sqrt{z})}{28800 \sqrt{z}}$$

07.25.03.0803.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-320 z^5 - 4064 z^4 - 10008 z^3 + 3372 z^2 - 3090 z + 4005)}{14400} + \frac{\sqrt{\pi} (-640 z^6 - 8448 z^5 - 23760 z^4 + 10395) \operatorname{erf}(\sqrt{z})}{28800 \sqrt{z}}$$

07.25.03.0804.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2}(-10240z^6 + 154112z^5 - 558048z^4 + 279528z^3 + 115860z^2 + 124740z + 675675)I_0\left(\frac{z}{2}\right) + e^{z/2}(10240z^6 - 143872z^5 + 419296z^4 + 78072z^3 + 59988z^2 + 77100z - 363825)I_1\left(\frac{z}{2}\right)}{675675}$$

07.25.03.0805.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z(320z^6 - 4768z^5 + 14408z^4 + 5220z^3 + 5334z^2 + 8295z - 20790)}{67200z} + \frac{\sqrt{\pi}(-640z^7 + 9856z^6 - 33264z^5 + 72765z + 20790)\operatorname{erfi}(\sqrt{z})}{134400z^{3/2}}$$

07.25.03.0806.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(-320z^6 - 4768z^5 - 14408z^4 + 5220z^3 - 5334z^2 + 8295z + 20790)}{67200z} + \frac{\sqrt{\pi}(-640z^7 - 9856z^6 - 33264z^5 + 72765z - 20790)\operatorname{erf}(\sqrt{z})}{134400z^{3/2}}$$

07.25.03.0807.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, 3; z\right) = \frac{1}{2027025z} 4e^{z/2}(2048z^7 - 33280z^6 + 115680z^5 + 22584z^4 + 18624z^3 + 26640z^2 - 436590z - 218295)I_1\left(\frac{z}{2}\right) - \frac{8e^{z/2}(1024z^6 - 17664z^5 + 73968z^4 - 39252z^3 - 17460z^2 - 20790z - 280665)I_0\left(\frac{z}{2}\right)}{2027025}$$

07.25.03.0808.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z(640z^7 - 10944z^6 + 39200z^5 + 14928z^4 + 16344z^3 + 28140z^2 - 228690z - 155925)}{430080z^2} + \frac{\sqrt{\pi}(-1280z^8 + 22528z^7 - 88704z^6 + 582120z^2 + 332640z + 155925)\operatorname{erfi}(\sqrt{z})}{860160z^{5/2}}$$

07.25.03.0809.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(-640z^7 - 10944z^6 - 39200z^5 + 14928z^4 - 16344z^3 + 28140z^2 + 228690z - 155925)}{430080z^2} + \frac{\sqrt{\pi}(-1280z^8 - 22528z^7 - 88704z^6 + 582120z^2 - 332640z + 155925)\operatorname{erf}(\sqrt{z})}{860160z^{5/2}}$$

07.25.03.0810.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, 4; z\right) =$$

$$\frac{1}{57432375z^2} \left(4e^{z/2} (20480z^8 - 377856z^7 + 1525696z^6 + 308208z^5 + 266760z^4 + 408300z^3 - 15717240z^2 - 13752585z - 9604980) I_1\left(\frac{z}{2}\right) - \frac{1}{57432375z} \right.$$

$$\left. 4e^{z/2} (20480z^7 - 398336z^6 + 1893312z^5 - 1049040z^4 - 490440z^3 - 623700z^2 - 17796240z - 2401245) I_0\left(\frac{z}{2}\right) \right)$$

07.25.03.0811.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) =$$

$$\frac{1}{1105920z^3} e^z (640z^8 - 12352z^7 + 51168z^6 + 20208z^5 + 23208z^4 + 42660z^3 - 769230z^2 - 883575z - 779625) +$$

$$\frac{1}{2211840z^{7/2}} \sqrt{\pi} (-1280z^9 + 25344z^8 - 114048z^7 + 1746360z^3 + 1496880z^2 + 1403325z + 779625) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0812.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) =$$

$$\frac{1}{1105920z^3} e^{-z} (-640z^8 - 12352z^7 - 51168z^6 + 20208z^5 - 23208z^4 + 42660z^3 + 769230z^2 - 883575z + 779625) +$$

$$\frac{1}{2211840z^{7/2}} \sqrt{\pi} (-1280z^9 - 25344z^8 - 114048z^7 + 1746360z^3 - 1496880z^2 + 1403325z - 779625) \operatorname{erf}(\sqrt{z})$$

07.25.03.0813.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, 5; z\right) =$$

$$\frac{1}{1091215125z^3} \left(32e^{z/2} (20480z^9 - 422912z^8 + 1945280z^7 + 403248z^6 + 361536z^5 + 579900z^4 - 43700580z^3 - 52546725z^2 - 64490580z - 53513460) I_1\left(\frac{z}{2}\right) - \right.$$

$$\left. \frac{1}{1091215125z^2} \left(32e^{z/2} (20480z^8 - 443392z^7 + 2357952z^6 - 1351056z^5 - 655440z^4 - 873180z^3 - 46819080z^2 - 16122645z - 13378365) I_0\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.0814.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{3932160z^4} \left(e^z (1024z^9 - 22016z^8 + 103552z^7 + 42048z^6 + 50016z^5 + 96240z^4 - 3243240z^3 - 4948020z^2 - 7380450z - 7640325) \right. + \frac{1}{7864320z^{9/2}} \left(\sqrt{\pi} \right.$$

$$\left. \left. (-2048z^{10} + 45056z^9 - 228096z^8 + 6985440z^4 + 7983360z^3 + 11226600z^2 + 12474000z + 7640325) \operatorname{erfi}(\sqrt{z}) \right) \right)$$

$$\begin{aligned}
 & \text{07.25.03.0815.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{3932160z^4} \left(e^{-z} (-1024z^9 - 22016z^8 - 103552z^7 + 42048z^6 - 50016z^5 + 96240z^4 + 3243240z^3 - \right. \\
 & \quad \left. 4948020z^2 + 7380450z - 7640325) \right) + \frac{1}{7864320z^{9/2}} \left(\sqrt{\pi} \right. \\
 & \quad \left. (-2048z^{10} - 45056z^9 - 228096z^8 + 6985440z^4 - 7983360z^3 + 11226600z^2 - 12474000z + 7640325) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0816.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{5}{2}, 6; z\right) = \\
 & \frac{1}{4583103525z^4} \left(32e^{z/2} (40960z^{10} - 935936z^9 + 4831104z^8 + 1021920z^7 + 941136z^6 + 1562400z^5 - \right. \\
 & \quad \left. 206361540z^4 - 311454990z^3 - 529989075z^2 - 767026260z - 713512800) I_1\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{4583103525z^3} \left(32e^{z/2} (40960z^9 - 976896z^8 + 5746560z^7 - 3382176z^6 - 1688400z^5 - \right. \right. \\
 & \quad \left. \left. 2328480z^4 - 215093340z^3 - 126922950z^2 - 191756565z - 178378200) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.0817.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{27} e^z (-160z^5 + 1504z^4 - 2892z^3 + 492z^2 - 60z + 27) + \frac{2}{27} \sqrt{\pi} (80z^{11/2} - 792z^{9/2} + 1782z^{7/2} - 693z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0818.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \\
 & \frac{1}{27} e^{-z} (160z^5 + 1504z^4 + 2892z^3 + 492z^2 + 60z + 27) + \frac{2}{27} \sqrt{\pi} (80z^{11/2} + 792z^{9/2} + 1782z^{7/2} + 693z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0819.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \\
 & \frac{1}{9} e^z (20z^5 - 254z^4 + 774z^3 - 408z^2 - 42z + 9) + \frac{1}{9} \sqrt{\pi} (-20z^{11/2} + 264z^{9/2} - 891z^{7/2} + 693z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0820.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \\
 & \frac{1}{9} e^{-z} (-20z^5 - 254z^4 - 774z^3 - 408z^2 + 42z + 9) + \frac{1}{9} \sqrt{\pi} (-20z^{11/2} - 264z^{9/2} - 891z^{7/2} - 693z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.0821.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{18} e^z (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36} \sqrt{\pi} (8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0822.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{18} e^{-z} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36} \sqrt{\pi} (8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0823.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{3}{2}, 1; z\right) = \frac{e^{z/2} (2560z^6 - 48384z^5 + 268872z^4 - 476904z^3 + 162072z^2 + 41580z + 31185) I_0\left(\frac{z}{2}\right) + 4e^{z/2} (640z^6 - 11456z^5 + 56082z^4 - 68232z^3 - 9129z^2 - 4248z) I_1\left(\frac{z}{2}\right)}{31185}$$

07.25.03.0824.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (-320z^5 + 6176z^4 - 32712z^3 + 41772z^2 + 10770z + 6885) + \sqrt{\pi} (640z^6 - 12672z^5 + 71280z^4 - 110880z^3 + 10395) \operatorname{erfi}(\sqrt{z})}{34560\sqrt{z}}$$

07.25.03.0825.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (320z^5 + 6176z^4 + 32712z^3 + 41772z^2 - 10770z + 6885) + \sqrt{\pi} (640z^6 + 12672z^5 + 71280z^4 + 110880z^3 + 10395) \operatorname{erf}(\sqrt{z})}{34560\sqrt{z}}$$

07.25.03.0826.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2} (5120z^6 - 113664z^5 + 759504z^4 - 1651560z^3 + 651636z^2 + 207900z + 405405) I_0\left(\frac{z}{2}\right) + e^{z/2} (-5120z^6 + 108544z^5 - 653520z^4 + 1047192z^3 + 161340z^2 + 96156z - 155925) I_1\left(\frac{z}{2}\right)}{405405}$$

07.25.03.0827.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (-640z^6 + 14464z^5 - 92880z^4 + 154032z^3 + 45696z^2 + 36540z - 31185) + \sqrt{\pi} (1280z^7 - 29568z^6 + 199584z^5 - 388080z^4 + 145530z + 31185) \operatorname{erfi}(\sqrt{z})}{322560z^{3/2}}$$

07.25.03.0828.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(640z^6 + 14464z^5 + 92880z^4 + 154032z^3 - 45696z^2 + 36540z + 31185)}{161280z} + \frac{\sqrt{\pi}(1280z^7 + 29568z^6 + 199584z^5 + 388080z^4 + 145530z - 31185)\operatorname{erf}(\sqrt{z})}{322560z^{3/2}}$$

07.25.03.0829.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, 3; z\right) = \frac{4e^{z/2}(1024z^6 - 26112z^5 + 203856z^4 - 524352z^3 + 228852z^2 + 83160z + 322245)I_0\left(\frac{z}{2}\right)}{1216215} - \frac{1}{1216215z} 4e^{z/2}(1024z^7 - 25088z^6 + 179280z^5 - 356592z^4 - 59988z^3 - 40932z^2 + 197505z + 72765)I_1\left(\frac{z}{2}\right)$$

07.25.03.0830.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z(-640z^7 + 16576z^6 - 125088z^5 + 255408z^4 + 82920z^3 + 75348z^2 - 187110z - 93555)}{516096z^2} + \frac{\sqrt{\pi}(1280z^8 - 33792z^7 + 266112z^6 - 620928z^5 + 582120z^2 + 249480z + 93555)\operatorname{erfi}(\sqrt{z})}{1032192z^{5/2}}$$

07.25.03.0831.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(640z^7 + 16576z^6 + 125088z^5 + 255408z^4 - 82920z^3 + 75348z^2 + 187110z - 93555)}{516096z^2} + \frac{\sqrt{\pi}(1280z^8 + 33792z^7 + 266112z^6 + 620928z^5 + 582120z^2 - 249480z + 93555)\operatorname{erf}(\sqrt{z})}{1032192z^{5/2}}$$

07.25.03.0832.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{34459425z} + \frac{4e^{z/2}(10240z^7 - 294912z^6 + 2634144z^5 - 7817520z^4 + 3670560z^3 + 1455300z^2 + 9833670z + 654885)I_0\left(\frac{z}{2}\right)}{34459425z^2} - \frac{1}{34459425z^2} \left(4e^{z/2}(10240z^8 - 284672z^7 + 2354592z^6 - 5595024z^5 - 999840z^4 - 743940z^3 + 7338870z^2 + 4875255z + 2619540)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.0833.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{2654208z^3} + \frac{e^z(-1280z^8 + 37376z^7 - 324096z^6 + 786432z^5 + 271968z^4 + 268704z^3 - 1330560z^2 - 1164240z - 779625)}{5308416z^{7/2}} + \frac{\sqrt{\pi}(2560z^9 - 76032z^8 + 684288z^7 - 1862784z^6 + 3492720z^3 + 2245320z^2 + 1683990z + 779625)\operatorname{erfi}(\sqrt{z})}{5308416z^{7/2}}$$

$$\begin{aligned}
 & \text{07.25.03.0834.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{2\,654\,208\,z^3} \\
 & \quad e^{-z} (1280\,z^8 + 37\,376\,z^7 + 324\,096\,z^6 + 786\,432\,z^5 - 271\,968\,z^4 + 268\,704\,z^3 + 1\,330\,560\,z^2 - 1\,164\,240\,z + 779\,625) + \\
 & \quad \frac{1}{5\,308\,416\,z^{7/2}} \sqrt{\pi} (2560\,z^9 + 76\,032\,z^8 + 684\,288\,z^7 + 1\,862\,784\,z^6 + 3\,492\,720\,z^5 - 2\,245\,320\,z^4 + 1\,683\,990\,z - 779\,625) \\
 & \quad \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0835.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, 5; z\right) = \\
 & \quad \frac{1}{654\,729\,075\,z^2} \left(32\,e^{z/2} (10\,240\,z^8 - 328\,704\,z^7 + 3\,305\,760\,z^6 - 11\,113\,824\,z^5 + 5\,515\,920\,z^4 + 2\,328\,480\,z^3 + \right. \\
 & \quad \left. 25\,176\,690\,z^2 + 4\,677\,750\,z + 3\,087\,315) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{654\,729\,075\,z^3} \left(64\,e^{z/2} (5120\,z^9 - 159\,232\,z^8 + 1\,496\,208\,z^7 - 4\,135\,200\,z^6 - 772\,368\,z^5 - 610\,560\,z^4 + \right. \right. \\
 & \quad \left. \left. 10\,405\,395\,z^3 + 9\,625\,770\,z^2 + 9\,355\,500\,z + 6\,174\,630) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0836.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \\
 & \quad \frac{1}{4\,718\,592\,z^4} (e^z (-1024\,z^9 + 33\,280\,z^8 - 326\,016\,z^7 + 916\,800\,z^6 + 332\,256\,z^5 + 348\,336\,z^4 - 2\,910\,600\,z^3 - \\
 & \quad 3\,451\,140\,z^2 - 4\,054\,050\,z - 3\,274\,425)) + \\
 & \quad \frac{1}{9\,437\,184\,z^{9/2}} (\sqrt{\pi} (2048\,z^{10} - 67\,584\,z^9 + 684\,288\,z^8 - 2\,128\,896\,z^7 + 6\,985\,440\,z^4 + 5\,987\,520\,z^3 + \\
 & \quad 6\,735\,960\,z^2 + 6\,237\,000\,z + 3\,274\,425) \operatorname{erfi}(\sqrt{z}))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0837.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \\
 & \quad \frac{1}{4\,718\,592\,z^4} (e^{-z} (1024\,z^9 + 33\,280\,z^8 + 326\,016\,z^7 + 916\,800\,z^6 - 332\,256\,z^5 + 348\,336\,z^4 + 2\,910\,600\,z^3 - \\
 & \quad 3\,451\,140\,z^2 + 4\,054\,050\,z - 3\,274\,425)) + \\
 & \quad \frac{1}{9\,437\,184\,z^{9/2}} (\sqrt{\pi} (2048\,z^{10} + 67\,584\,z^9 + 684\,288\,z^8 + 2\,128\,896\,z^7 + 6\,985\,440\,z^4 - 5\,987\,520\,z^3 + \\
 & \quad 6\,735\,960\,z^2 - 6\,237\,000\,z + 3\,274\,425) \operatorname{erf}(\sqrt{z}))
 \end{aligned}$$

07.25.03.0838.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{2749862115z^3} \left(32 e^{z/2} (20480 z^9 - 724992 z^8 + 8106816 z^7 - 30442272 z^6 + 15782256 z^5 + 6985440 z^4 + 113513400 z^3 + 38482290 z^2 + 46995795 z + 35675640) I_0\left(\frac{z}{2}\right) - \frac{1}{2749862115z^4} \left(32 e^{z/2} (20480 z^{10} - 704512 z^9 + 7412544 z^8 - 23361504 z^7 - 4513488 z^6 - 3731616 z^5 + 99542520 z^4 + 116195310 z^3 + 158388615 z^2 + 187983180 z + 142702560) I_1\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.0839.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{48} e^z (-40 z^5 + 684 z^4 - 3242 z^3 + 4215 z^2 - 576 z + 48) + \frac{1}{96} \sqrt{\pi} (80 z^{11/2} - 1408 z^{9/2} + 7128 z^{7/2} - 11088 z^{5/2} + 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0840.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{48} e^{-z} (40 z^5 + 684 z^4 + 3242 z^3 + 4215 z^2 + 576 z + 48) + \frac{1}{96} \sqrt{\pi} (80 z^{11/2} + 1408 z^{9/2} + 7128 z^{7/2} + 11088 z^{5/2} + 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0841.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{96} e^z (8 z^5 - 172 z^4 + 1106 z^3 - 2295 z^2 + 960 z + 96) + \frac{1}{192} \sqrt{\pi} (-16 z^{11/2} + 352 z^{9/2} - 2376 z^{7/2} + 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0842.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{96} e^{-z} (-8 z^5 - 172 z^4 - 1106 z^3 - 2295 z^2 - 960 z + 96) + \frac{1}{192} \sqrt{\pi} (-16 z^{11/2} - 352 z^{9/2} - 2376 z^{7/2} - 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0843.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, 1; z\right) = \frac{e^{z/2} (-320 z^6 + 7984 z^5 - 64464 z^4 + 200820 z^3 - 223176 z^2 + 51975 z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (320 z^6 - 7664 z^5 + 56960 z^4 - 147372 z^3 + 97620 z^2 + 9129 z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.0844.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z (160 z^5 - 4144 z^4 + 33\,648 z^3 - 95\,928 z^2 + 68\,370 z + 12\,645)}{23\,040} + \frac{\sqrt{\pi} (-320 z^6 + 8448 z^5 - 71\,280 z^4 + 221\,760 z^3 - 207\,900 z^2 + 10\,395) \operatorname{erfi}(\sqrt{z})}{46\,080 \sqrt{z}}$$

07.25.03.0845.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-160 z^5 - 4144 z^4 - 33\,648 z^3 - 95\,928 z^2 - 68\,370 z + 12\,645)}{23\,040} + \frac{\sqrt{\pi} (-320 z^6 - 8448 z^5 - 71\,280 z^4 - 221\,760 z^3 - 207\,900 z^2 + 10\,395) \operatorname{erf}(\sqrt{z})}{46\,080 \sqrt{z}}$$

07.25.03.0846.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^{z/2} (-640 z^6 + 18\,784 z^5 - 183\,312 z^4 + 713\,952 z^3 - 1\,030\,188 z^2 + 311\,850 z + 135\,135) I_0\left(\frac{z}{2}\right)}{135\,135} + \frac{e^{z/2} (640 z^6 - 18\,144 z^5 + 165\,488 z^4 - 556\,896 z^3 + 539\,892 z^2 + 66\,702 z - 31\,185) I_1\left(\frac{z}{2}\right)}{135\,135}$$

07.25.03.0847.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (160 z^6 - 4848 z^5 + 47\,552 z^4 - 172\,488 z^3 + 174\,762 z^2 + 41\,685 z - 10\,395)}{107\,520 z} + \frac{\sqrt{\pi} (-320 z^7 + 9856 z^6 - 99\,792 z^5 + 388\,080 z^4 - 485\,100 z^3 + 72\,765 z + 10\,395) \operatorname{erfi}(\sqrt{z})}{215\,040 z^{3/2}}$$

07.25.03.0848.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-160 z^6 - 4848 z^5 - 47\,552 z^4 - 172\,488 z^3 - 174\,762 z^2 + 41\,685 z + 10\,395)}{107\,520 z} + \frac{\sqrt{\pi} (-320 z^7 - 9856 z^6 - 99\,792 z^5 - 388\,080 z^4 - 485\,100 z^3 + 72\,765 z - 10\,395) \operatorname{erf}(\sqrt{z})}{215\,040 z^{3/2}}$$

07.25.03.0849.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (128 z^7 - 4192 z^6 + 45\,312 z^5 - 187\,728 z^4 + 239\,952 z^3 + 34\,434 z^2 - 41\,580 z - 10\,395) I_1\left(\frac{z}{2}\right)}{405\,405 z} + \frac{8 e^{z/2} (64 z^6 - 2160 z^5 + 24\,720 z^4 - 115\,536 z^3 + 204\,408 z^2 - 72\,765 z - 51\,975) I_0\left(\frac{z}{2}\right)}{405\,405}$$

07.25.03.0850.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (640 z^7 - 22\,208 z^6 + 255\,328 z^5 - 1\,124\,496 z^4 + 1\,481\,016 z^3 + 408\,828 z^2 - 270\,270 z - 93\,555)}{1\,376\,256 z^2} + \frac{1}{2\,752\,512 z^{5/2}} + \frac{\sqrt{\pi} (-1280 z^8 + 45\,056 z^7 - 532\,224 z^6 + 2\,483\,712 z^5 - 3\,880\,800 z^4 + 1\,164\,240 z^2 + 332\,640 z + 93\,555) \operatorname{erfi}(\sqrt{z})}{2\,752\,512 z^{5/2}}$$

07.25.03.0851.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{1376256z^2}$$

$$e^{-z}(-640z^7 - 22208z^6 - 255328z^5 - 1124496z^4 - 1481016z^3 + 408828z^2 + 270270z - 93555) + \frac{1}{2752512z^{5/2}}$$

$$\sqrt{\pi}(-1280z^8 - 45056z^7 - 532224z^6 - 2483712z^5 - 3880800z^4 + 1164240z^2 - 332640z + 93555)\operatorname{erf}(\sqrt{z})$$

07.25.03.0852.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, 4; z\right) =$$

$$\frac{1}{11486475z^2}\left(4e^{z/2}(1280z^8 - 47552z^7 + 594272z^6 - 2924304z^5 + 4643520z^4 + 733080z^3 - 1600830z^2 - 738045z - 291060)I_1\left(\frac{z}{2}\right) - \frac{1}{11486475z}\right.$$

$$\left.4e^{z/2}(1280z^7 - 48832z^6 + 641184z^5 - 3496080z^4 + 7314240z^3 - 2910600z^2 - 3056130z - 72765)I_0\left(\frac{z}{2}\right)\right)$$

07.25.03.0853.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{3538944z^3}$$

$$e^z(640z^8 - 25024z^7 + 329952z^6 - 1709520z^5 + 2774616z^4 + 843372z^3 - 1018710z^2 - 634095z - 311850) +$$

$$\frac{1}{7077888z^{7/2}}\left(\sqrt{\pi}(-1280z^9 + 50688z^8 - 684288z^7 + 3725568z^6 - 6985440z^5 + 3492720z^3 + 1496880z^2 + 841995z + 311850)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.0854.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{3538944z^3}$$

$$e^{-z}(-640z^8 - 25024z^7 - 329952z^6 - 1709520z^5 - 2774616z^4 + 843372z^3 + 1018710z^2 - 634095z + 311850) +$$

$$\frac{1}{7077888z^{7/2}}\left(\sqrt{\pi}(-1280z^9 - 50688z^8 - 684288z^7 - 3725568z^6 - 6985440z^5 + 3492720z^3 - 1496880z^2 + 841995z - 311850)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.0855.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, 5; z\right) =$$

$$\frac{1}{218243025z^3}\left(32e^{z/2}(1280z^9 - 53184z^8 + 754432z^7 - 4299216z^6 + 8161056z^5 + 1377240z^4 - 4656960z^3 - 3024945z^2 - 2203740z - 1122660)I_1\left(\frac{z}{2}\right) - \frac{1}{218243025z^2}\right.$$

$$\left.32e^{z/2}(1280z^8 - 54464z^7 + 806976z^6 - 5028336z^5 + 12132240z^4 - 5239080z^3 - 7567560z^2 - 550935z - 280665)I_0\left(\frac{z}{2}\right)\right)$$

$$\begin{aligned}
 & \text{07.25.03.0856.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{6291456z^4} \left(e^z (512z^9 - 22272z^8 + 331264z^7 - 1973760z^6 + 3810240z^5 + 1240608z^4 - 2328480z^3 - \right. \\
 & \quad \left. 1995840z^2 - 1767150z - 1091475) \right) + \\
 & \frac{1}{12582912z^{9/2}} \left(\sqrt{\pi} (-1024z^{10} + 45056z^9 - 684288z^8 + 4257792z^7 - 9313920z^6 + 6985440z^4 + \right. \\
 & \quad \left. 3991680z^3 + 3367980z^2 + 2494800z + 1091475) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0857.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{6291456z^4} \left(e^{-z} (-512z^9 - 22272z^8 - 331264z^7 - 1973760z^6 - 3810240z^5 + 1240608z^4 + 2328480z^3 - \right. \\
 & \quad \left. 1995840z^2 + 1767150z - 1091475) \right) + \\
 & \frac{1}{12582912z^{9/2}} \left(\sqrt{\pi} (-1024z^{10} - 45056z^9 - 684288z^8 - 4257792z^7 - 9313920z^6 + 6985440z^4 - \right. \\
 & \quad \left. 3991680z^3 + 3367980z^2 - 2494800z + 1091475) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0858.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; -\frac{1}{2}, 6; z\right) = \\
 & \frac{1}{916620705z^4} \left(32e^{z/2} (2560z^{10} - 117632z^9 + 1867200z^8 - 12092736z^7 + 26713680z^6 + 4736592z^5 - \right. \\
 & \quad \left. 22702680z^4 - 18711000z^3 - 19303515z^2 - 18087300z - 10977120) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{916620705z^3} \left(32e^{z/2} (2560z^9 - 120192z^8 + 1983552z^7 - 13903680z^6 + 37982448z^5 - \right. \\
 & \quad \left. 17463600z^4 - 33180840z^3 - 4740120z^2 - 4521825z - 2744280) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{1}{2}$, $b_1 = \frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.0859.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{e^z (-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920)}{1920} + \\
 & \frac{\sqrt{\pi} (32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0860.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \\
 & \frac{\sqrt{\pi} (32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z}) \operatorname{erf}(\sqrt{z})}{3840}
 \end{aligned}$$

07.25.03.0861.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, 1; z\right) = \frac{e^{z/2} (32 z^6 - 992 z^5 + 10512 z^4 - 46944 z^3 + 88674 z^2 - 62370 z + 10395) I_0\left(\frac{z}{2}\right) - 2 e^{z/2} (16 z^6 - 480 z^5 + 4784 z^4 - 18912 z^3 + 27387 z^2 - 9762 z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.0862.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z (-32 z^5 + 1040 z^4 - 11376 z^3 + 50232 z^2 - 83370 z + 35685)}{46080} + \frac{\sqrt{\pi} (64 z^6 - 2112 z^5 + 23760 z^4 - 110880 z^3 + 207900 z^2 - 124740 z + 10395) \operatorname{erfi}(\sqrt{z})}{92160 \sqrt{z}}$$

07.25.03.0863.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 1040 z^4 + 11376 z^3 + 50232 z^2 + 83370 z + 35685)}{46080} + \frac{\sqrt{\pi} (64 z^6 + 2112 z^5 + 23760 z^4 + 110880 z^3 + 207900 z^2 + 124740 z + 10395) \operatorname{erf}(\sqrt{z})}{92160 \sqrt{z}}$$

07.25.03.0864.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 - 2336 z^5 + 30000 z^4 - 168864 z^3 + 425112 z^2 - 436590 z + 135135) I_0\left(\frac{z}{2}\right) + e^{z/2} (-64 z^6 + 2272 z^5 - 27760 z^4 + 142176 z^3 - 294744 z^2 + 191442 z - 10395) I_1\left(\frac{z}{2}\right)}{135135}$$

07.25.03.0865.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (-64 z^6 + 2432 z^5 - 32080 z^4 + 179136 z^3 - 408828 z^2 + 291480 z - 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 - 4928 z^6 + 66528 z^5 - 388080 z^4 + 970200 z^3 - 873180 z^2 + 145530 z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0866.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 2432 z^5 + 32080 z^4 + 179136 z^3 + 408828 z^2 + 291480 z + 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 + 4928 z^6 + 66528 z^5 + 388080 z^4 + 970200 z^3 + 873180 z^2 + 145530 z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.0867.01

$${}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 - 2688 z^5 + 40560 z^4 - 275520 z^3 + 866520 z^2 - 1164240 z + 509355) I_0\left(\frac{z}{2}\right) - 1}{2027025 z} + \frac{4 e^{z/2} (64 z^7 - 2624 z^6 + 37968 z^5 - 238800 z^4 + 644280 z^3 - 608760 z^2 + 72765 z + 10395) I_1\left(\frac{z}{2}\right)}{2027025 z}$$

$$\begin{aligned}
 & \text{07.25.03.0868.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \\
 & \frac{e^z (-128 z^7 + 5568 z^6 - 85984 z^5 + 580560 z^4 - 1686744 z^3 + 1690836 z^2 - 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} \\
 & \left(\sqrt{\pi} (256 z^8 - 11264 z^7 + 177408 z^6 - 1241856 z^5 + 3880800 z^4 - 4656960 z^3 + 1164240 z^2 + 166320 z + 31185)\right. \\
 & \left.\operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0869.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \\
 & \frac{e^{-z} (128 z^7 + 5568 z^6 + 85984 z^5 + 580560 z^4 + 1686744 z^3 + 1690836 z^2 + 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} \\
 & \left(\sqrt{\pi} (256 z^8 + 11264 z^7 + 177408 z^6 + 1241856 z^5 + 3880800 z^4 + 4656960 z^3 + 1164240 z^2 - 166320 z + 31185)\right. \\
 & \left.\operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0870.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, 4; z\right) = \\
 & \frac{1}{11486475 z} 4 e^{z/2} (128 z^7 - 6080 z^6 + 105408 z^5 - 838800 z^4 + 3163920 z^3 - 5239080 z^2 + 2910600 z + 10395) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{11486475 z^2} \\
 & \left(4 e^{z/2} (128 z^8 - 5952 z^7 + 99520 z^6 - 742128 z^5 + 2466000 z^4 - 3061560 z^3 + 582120 z^2 + 155925 z + 41580) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0871.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{14155776 z^3} \\
 & \left(e^z (-256 z^8 + 12544 z^7 - 221952 z^6 + 1757760 z^5 - 6203040 z^4 + 8030448 z^3 - 1164240 z^2 - 457380 z - 155925)\right) + \\
 & \frac{1}{28311552 z^{7/2}} \left(\sqrt{\pi} (512 z^9 - 25344 z^8 + 456192 z^7 - 3725568 z^6 + 13970880 z^5 - \right. \\
 & \left. 20956320 z^4 + 6985440 z^3 + 1496880 z^2 + 561330 z + 155925) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0872.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{14155776 z^3} \\
 & \left(e^{-z} (256 z^8 + 12544 z^7 + 221952 z^6 + 1757760 z^5 + 6203040 z^4 + 8030448 z^3 + 1164240 z^2 - 457380 z + 155925)\right) + \\
 & \frac{1}{28311552 z^{7/2}} \left(\sqrt{\pi} (512 z^9 + 25344 z^8 + 456192 z^7 + 3725568 z^6 + 13970880 z^5 + \right. \\
 & \left. 20956320 z^4 + 6985440 z^3 - 1496880 z^2 + 561330 z - 155925) \operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0873.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, 5; z\right) &= \frac{1}{218\,243\,025 z^2} \\
 & \left(32 e^{z/2} (128 z^8 - 6784 z^7 + 132\,864 z^6 - 1\,212\,096 z^5 + 5\,331\,360 z^4 - 10\,478\,160 z^3 + 6\,985\,440 z^2 + 83\,160 z + 31\,185) \right. \\
 & \left. I_0\left(\frac{z}{2}\right) - \frac{1}{218\,243\,025 z^3} \left(128 e^{z/2} (32 z^9 - 1664 z^8 + 31\,568 z^7 - 272\,256 z^6 + \right. \right. \\
 & \left. \left. 1\,074\,804 z^5 - 1\,654\,080 z^4 + 436\,590 z^3 + 166\,320 z^2 + 83\,160 z + 31\,185) I_1\left(\frac{z}{2}\right)\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0874.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, \frac{11}{2}; z\right) &= \\
 & \frac{1}{62\,914\,560 z^4} \left(e^z (-512 z^9 + 27\,904 z^8 - 556\,544 z^7 + 5\,057\,280 z^6 - 21\,001\,920 z^5 + 33\,362\,400 z^4 - 6\,985\,440 z^3 - \right. \\
 & \left. 3\,825\,360 z^2 - 2\,390\,850 z - 1\,091\,475)\right) + \\
 & \frac{1}{125\,829\,120 z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} - 56\,320 z^9 + 1\,140\,480 z^8 - 10\,644\,480 z^7 + 46\,569\,600 z^6 - 83\,825\,280 z^5 + \right. \\
 & \left. 34\,927\,200 z^4 + 9\,979\,200 z^3 + 5\,613\,300 z^2 + 3\,118\,500 z + 1\,091\,475) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0875.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) &= \\
 & \frac{1}{62\,914\,560 z^4} \left(e^{-z} (512 z^9 + 27\,904 z^8 + 556\,544 z^7 + 5\,057\,280 z^6 + 21\,001\,920 z^5 + 33\,362\,400 z^4 + 6\,985\,440 z^3 - \right. \\
 & \left. 3\,825\,360 z^2 + 2\,390\,850 z - 1\,091\,475)\right) + \\
 & \frac{1}{125\,829\,120 z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} + 56\,320 z^9 + 1\,140\,480 z^8 + 10\,644\,480 z^7 + 46\,569\,600 z^6 + 83\,825\,280 z^5 + \right. \\
 & \left. 34\,927\,200 z^4 - 9\,979\,200 z^3 + 5\,613\,300 z^2 - 3\,118\,500 z + 1\,091\,475) \operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0876.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{1}{2}; \frac{1}{2}, 6; z\right) &= \\
 & \frac{1}{916\,620\,705 z^3} \left(32 e^{z/2} (256 z^9 - 14\,976 z^8 + 326\,976 z^7 - 3\,364\,032 z^6 + 16\,903\,152 z^5 - 38\,419\,920 z^4 + 29\,688\,120 z^3 + \right. \\
 & \left. 748\,440 z^2 + 530\,145 z + 249\,480) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{916\,620\,705 z^4} \left(32 e^{z/2} (256 z^{10} - 14\,720 z^9 + 312\,384 z^8 - 3\,058\,752 z^7 + 13\,986\,672 z^6 - 25\,692\,912 z^5 + \right. \right. \\
 & \left. \left. 8\,731\,800 z^4 + 4\,241\,160 z^3 + 3\,024\,945 z^2 + 2\,120\,580 z + 997\,920) I_1\left(\frac{z}{2}\right)\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = -\frac{11}{2}$

07.25.03.0877.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{64 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{64 z^6 - 32 z^5 + 48 z^4 - 120 z^3 + 420 z^2 - 1890 z + 10395}{10395}$$

07.25.03.0878.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 + 1890 z + 10395}{10395} - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.0879.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{945} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.0880.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{945} (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0881.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{16}{105} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)$$

07.25.03.0882.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{105} (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0883.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} (-8 z^3 + 4 z^2 - 6 z + 15) - \frac{8}{15} e^z \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.0884.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15} (8 z^3 + 4 z^2 + 6 z + 15) - \frac{8}{15} e^{-z} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0885.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{4}{3} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (4 z^2 - 2 z + 3)$$

07.25.03.0886.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} (4 z^2 + 2 z + 3) - \frac{4}{3} e^{-z} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0887.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, -\frac{1}{2}; z\right) = -2 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} - 2 z + 1$$

07.25.03.0888.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, -\frac{1}{2}; -z\right) = -2 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + 2 z + 1$$

07.25.03.0889.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, \frac{1}{2}; z\right) = e^z \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.0890.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, \frac{1}{2}; -z\right) = 1 - e^{-z} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0891.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, 1; z\right) = e^z$$

07.25.03.0892.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.0893.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.0894.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, 2; z\right) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.0895.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3}{2z}$$

07.25.03.0896.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{3}{2z} - \frac{3 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.0897.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, 3; z\right) = \frac{2 e^z}{z^2} - \frac{2(z+1)}{z^2}$$

07.25.03.0898.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5(2z+3)}{4 z^2}$$

07.25.03.0899.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5(2z-3)}{4 z^2} + \frac{15 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.0900.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, 4; z\right) = \frac{6 e^z}{z^3} - \frac{3(z^2 + 2z + 2)}{z^3}$$

07.25.03.0901.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{105 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7(4z^2 + 10z + 15)}{8 z^3}$$

07.25.03.0902.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{7(4z^2 - 10z + 15)}{8 z^3} - \frac{105 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.0903.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, 5; z\right) = \frac{24 e^z}{z^4} - \frac{4(z^3 + 3z^2 + 6z + 6)}{z^4}$$

07.25.03.0904.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9(8z^3 + 28z^2 + 70z + 105)}{16 z^4}$$

07.25.03.0905.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{9(8z^3 - 28z^2 + 70z - 105)}{16 z^4} + \frac{945 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.0906.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{11}{2}, 6; z\right) = \frac{120 e^z}{z^5} - \frac{5(z^4 + 4z^3 + 12z^2 + 24z + 24)}{z^5}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = -\frac{9}{2}$

07.25.03.0907.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{9}{2}, 1; z\right) = \frac{1}{945} e^z (32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0908.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{9}{2}, 1; -z\right) = \frac{1}{945} e^{-z} (-32z^5 + 16z^4 - 24z^3 + 60z^2 - 210z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.0909.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{9}{2}, 2; z\right) = -\frac{64 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{12285} + \frac{e^z (64z^6 + 32z^5 + 48z^4 + 120z^3 + 420z^2 + 1890z + 10395)}{12285 z} - \frac{11}{13 z}$$

07.25.03.0910.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{9}{2}, 2; -z\right) = -\frac{64 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{12285} + \frac{e^{-z} (-64z^6 + 32z^5 - 48z^4 + 120z^3 - 420z^2 + 1890z - 10395)}{12285 z} + \frac{11}{13 z}$$

07.25.03.0911.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{9}{2}, 3; z\right) = -\frac{256 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{184275} - \frac{22(15z + 13)}{195 z^2} + \frac{2 e^z (128z^7 + 64z^6 + 96z^5 + 240z^4 + 840z^3 + 3780z^2 + 20790z + 135135)}{184275 z^2}$$

07.25.03.0912.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{9}{2}, 3; -z\right) = -\frac{256 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{184275} + \frac{22(15z - 13)}{195 z^2} - \frac{2 e^{-z} (128z^7 - 64z^6 + 96z^5 - 240z^4 + 840z^3 - 3780z^2 + 20790z - 135135)}{184275 z^2}$$

07.25.03.0913.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{9}{2}, 4; z\right) = -\frac{512\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{11/2}}{1044225} - \frac{11(255z^2 + 442z + 390)}{1105z^3} + \frac{2e^z(256z^8 + 128z^7 + 192z^6 + 480z^5 + 1680z^4 + 7560z^3 + 41580z^2 + 270270z + 2027025)}{1044225z^3}$$

07.25.03.0914.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{9}{2}, 4; -z\right) = -\frac{512\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{11/2}}{1044225} + \frac{11(255z^2 - 442z + 390)}{1105z^3} - \frac{2e^{-z}(256z^8 - 128z^7 + 192z^6 - 480z^5 + 1680z^4 - 7560z^3 + 41580z^2 - 270270z + 2027025)}{1044225z^3}$$

07.25.03.0915.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{9}{2}, 5; z\right) = -\frac{4096\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{11/2}}{19840275} - \frac{44(1615z^3 + 4199z^2 + 7410z + 6630)}{20995z^4} + \frac{1}{19840275z^4} + \frac{8e^z(512z^9 + 256z^8 + 384z^7 + 960z^6 + 3360z^5 + 15120z^4 + 83160z^3 + 540540z^2 + 4054050z + 34459425)}{19840275z^4}$$

07.25.03.0916.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{9}{2}, 5; -z\right) = -\frac{4096\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{11/2}}{19840275} + \frac{44(1615z^3 - 4199z^2 + 7410z - 6630)}{20995z^4} - \frac{1}{19840275z^4} + \frac{8e^{-z}(512z^9 - 256z^8 + 384z^7 - 960z^6 + 3360z^5 - 15120z^4 + 83160z^3 - 540540z^2 + 4054050z - 34459425)}{19840275z^4}$$

07.25.03.0917.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{9}{2}, 6; z\right) = -\frac{8192\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{11/2}}{83329155} - \frac{11(33915z^4 + 117572z^3 + 311220z^2 + 556920z + 503880)}{88179z^5} + \frac{1}{83329155z^5} (8e^z(1024z^{10} + 512z^9 + 768z^8 + 1920z^7 + 6720z^6 + 30240z^5 + 166320z^4 + 1081080z^3 + 8108100z^2 + 68918850z + 654729075))$$

07.25.03.0918.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{9}{2}, 6; -z\right) = -\frac{8192\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{11/2}}{83329155} + \frac{11(33915z^4 - 117572z^3 + 311220z^2 - 556920z + 503880)}{88179z^5} - \frac{1}{83329155z^5} (8e^{-z}(1024z^{10} - 512z^9 + 768z^8 - 1920z^7 + 6720z^6 - 30240z^5 + 166320z^4 - 1081080z^3 + 8108100z^2 - 68918850z + 654729075))$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = -\frac{7}{2}$

07.25.03.0919.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^z(-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105) + \frac{8}{105} \sqrt{\pi} (2z^{11/2} - 11z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0920.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{7}{2}, 1; -z\right) = \frac{1}{105} e^{-z} (16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105) + \frac{8}{105} \sqrt{\pi} (2z^{11/2} + 11z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.0921.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{7}{2}, 2; z\right) = \frac{e^z (-32z^6 + 192z^5 + 80z^4 + 96z^3 + 180z^2 + 420z + 945)}{1365z} + \frac{16\sqrt{\pi} (2z^{11/2} - 13z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1365} - \frac{9}{13z}$$

07.25.03.0922.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{7}{2}, 2; -z\right) = \frac{e^{-z} (32z^6 + 192z^5 - 80z^4 + 96z^3 - 180z^2 + 420z - 945)}{1365z} + \frac{16\sqrt{\pi} (2z^{11/2} + 13z^{9/2}) \operatorname{erf}(\sqrt{z})}{1365} + \frac{9}{13z}$$

07.25.03.0923.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{7}{2}, 3; z\right) = -\frac{6(15z + 11)}{65z^2} - \frac{2e^z (64z^7 - 448z^6 - 192z^5 - 240z^4 - 480z^3 - 1260z^2 - 3780z - 10395)}{20475z^2} + \frac{64\sqrt{\pi} (2z^{11/2} - 15z^{9/2}) \operatorname{erfi}(\sqrt{z})}{20475}$$

07.25.03.0924.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{7}{2}, 3; -z\right) = \frac{6(15z - 11)}{65z^2} + \frac{2e^{-z} (64z^7 + 448z^6 - 192z^5 + 240z^4 - 480z^3 + 1260z^2 - 3780z + 10395)}{20475z^2} + \frac{64\sqrt{\pi} (2z^{11/2} + 15z^{9/2}) \operatorname{erf}(\sqrt{z})}{20475}$$

07.25.03.0925.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{7}{2}, 4; z\right) = \frac{9(255z^2 + 374z + 286)}{1105z^3} - \frac{2e^z (128z^8 - 1024z^7 - 448z^6 - 576z^5 - 1200z^4 - 3360z^3 - 11340z^2 - 41580z - 135135)}{116025z^3} + \frac{128\sqrt{\pi} (2z^{11/2} - 17z^{9/2}) \operatorname{erfi}(\sqrt{z})}{116025}$$

07.25.03.0926.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{7}{2}, 4; -z\right) = \frac{9(255z^2 - 374z + 286)}{1105z^3} + \frac{2e^{-z} (128z^8 + 1024z^7 - 448z^6 + 576z^5 - 1200z^4 + 3360z^3 - 11340z^2 + 41580z - 135135)}{116025z^3} + \frac{128\sqrt{\pi} (2z^{11/2} + 17z^{9/2}) \operatorname{erf}(\sqrt{z})}{116025}$$

07.25.03.0927.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{7}{2}, 5; z\right) = -\frac{36(1615z^3 + 3553z^2 + 5434z + 4290)}{20995z^4} - \frac{1}{2204475z^4} \\ + \frac{8e^z(256z^9 - 2304z^8 - 1024z^7 - 1344z^6 - 2880z^5 - 8400z^4 - 30240z^3 - 124740z^2 - 540540z - 2027025) + 1024\sqrt{\pi}(2z^{11/2} - 19z^{9/2})\operatorname{erfi}(\sqrt{z})}{2204475}$$

07.25.03.0928.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{7}{2}, 5; -z\right) = \frac{36(1615z^3 - 3553z^2 + 5434z - 4290)}{20995z^4} + \frac{1}{2204475z^4} \\ + \frac{8e^{-z}(256z^9 + 2304z^8 - 1024z^7 + 1344z^6 - 2880z^5 + 8400z^4 - 30240z^3 + 124740z^2 - 540540z + 2027025) + 1024\sqrt{\pi}(2z^{11/2} + 19z^{9/2})\operatorname{erf}(\sqrt{z})}{2204475}$$

07.25.03.0929.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{7}{2}, 6; z\right) = -\frac{3(33915z^4 + 99484z^3 + 228228z^2 + 360360z + 291720)}{29393z^5} - \\ - \frac{1}{9258795z^5} (8e^z(512z^{10} - 5120z^9 - 2304z^8 - 3072z^7 - 6720z^6 - 20160z^5 - 75600z^4 - \\ - 332640z^3 - 1621620z^2 - 8108100z - 34459425)) + \frac{2048\sqrt{\pi}(2z^{11/2} - 21z^{9/2})\operatorname{erfi}(\sqrt{z})}{9258795}$$

07.25.03.0930.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{7}{2}, 6; -z\right) = \frac{3(33915z^4 - 99484z^3 + 228228z^2 - 360360z + 291720)}{29393z^5} + \\ + \frac{1}{9258795z^5} (8e^{-z}(512z^{10} + 5120z^9 - 2304z^8 + 3072z^7 - 6720z^6 + 20160z^5 - 75600z^4 + \\ + 332640z^3 - 1621620z^2 + 8108100z - 34459425)) + \frac{2048\sqrt{\pi}(2z^{11/2} + 21z^{9/2})\operatorname{erf}(\sqrt{z})}{9258795}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = -\frac{5}{2}$

07.25.03.0931.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{5}{2}, 1; z\right) = \frac{1}{15}e^z(4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) + \frac{1}{15}\sqrt{\pi}(-4z^{11/2} + 44z^{9/2} - 99z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.0932.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{5}{2}, 1; -z\right) = \frac{1}{15}e^{-z}(-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) + \frac{1}{15}\sqrt{\pi}(-4z^{11/2} - 44z^{9/2} - 99z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.0933.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{5}{2}, 2; z\right) = \\ = \frac{e^z(8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105)}{195z} - \frac{2}{195}\sqrt{\pi}(4z^{11/2} - 52z^{9/2} + 143z^{7/2})\operatorname{erfi}(\sqrt{z}) - \frac{7}{13z}$$

07.25.03.0934.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{5}{2}, 2; -z\right) = \frac{e^{-z}(-8z^6 - 100z^5 - 240z^4 + 80z^3 - 72z^2 + 90z - 105)}{195z} - \frac{2}{195}\sqrt{\pi}(4z^{11/2} + 52z^{9/2} + 143z^{7/2})\operatorname{erf}(\sqrt{z}) + \frac{7}{13z}$$

07.25.03.0935.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{5}{2}, 3; z\right) = -\frac{14(5z+3)}{65z^2} + \frac{2e^z(16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945)}{2925z^2} - \frac{8\sqrt{\pi}(4z^{11/2} - 60z^{9/2} + 195z^{7/2})\operatorname{erfi}(\sqrt{z})}{2925}$$

07.25.03.0936.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{5}{2}, 3; -z\right) = \frac{14(5z-3)}{65z^2} - \frac{2e^{-z}(16z^7 + 232z^6 + 672z^5 - 240z^4 + 240z^3 - 360z^2 + 630z - 945)}{2925z^2} - \frac{8\sqrt{\pi}(4z^{11/2} + 60z^{9/2} + 195z^{7/2})\operatorname{erf}(\sqrt{z})}{2925}$$

07.25.03.0937.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{5}{2}, 4; z\right) = -\frac{21(85z^2 + 102z + 66)}{1105z^3} + \frac{2e^z(32z^8 - 528z^7 + 1792z^6 + 672z^5 + 720z^4 + 1200z^3 + 2520z^2 + 5670z + 10395)}{16575z^3} - \frac{16\sqrt{\pi}(4z^{11/2} - 68z^{9/2} + 255z^{7/2})\operatorname{erfi}(\sqrt{z})}{16575}$$

07.25.03.0938.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{5}{2}, 4; -z\right) = \frac{21(85z^2 - 102z + 66)}{1105z^3} - \frac{2e^{-z}(32z^8 + 528z^7 + 1792z^6 - 672z^5 + 720z^4 - 1200z^3 + 2520z^2 - 5670z + 10395)}{16575z^3} - \frac{16\sqrt{\pi}(4z^{11/2} + 68z^{9/2} + 255z^{7/2})\operatorname{erf}(\sqrt{z})}{16575}$$

07.25.03.0939.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{5}{2}, 5; z\right) = -\frac{28(1615z^3 + 2907z^2 + 3762z + 2574)}{20995z^4} + \frac{1}{314925z^4} 8e^z(64z^9 - 1184z^8 + 4608z^7 + 1792z^6 + 2016z^5 + 3600z^4 + 8400z^3 + 22680z^2 + 62370z + 135135) - \frac{128\sqrt{\pi}(4z^{11/2} - 76z^{9/2} + 323z^{7/2})\operatorname{erfi}(\sqrt{z})}{314925}$$

$$\begin{aligned}
 & \text{07.25.03.0940.01} \\
 {}_2F_2\left(-\frac{11}{2}, 1; -\frac{5}{2}, 5; -z\right) &= \frac{28(1615z^3 - 2907z^2 + 3762z - 2574)}{20995z^4} - \\
 & \frac{1}{314925z^4} 8e^{-z}(64z^9 + 1184z^8 + 4608z^7 - 1792z^6 + 2016z^5 - 3600z^4 + 8400z^3 - 22680z^2 + 62370z - 135135) - \\
 & \frac{128\sqrt{\pi}(4z^{11/2} + 76z^{9/2} + 323z^{7/2})\operatorname{erf}(\sqrt{z})}{314925}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0941.01} \\
 {}_2F_2\left(-\frac{11}{2}, 1; -\frac{5}{2}, 6; z\right) &= \frac{-11305z^4 - 27132z^3 - 52668z^2 - 72072z - 51480}{4199z^5} + \\
 & \frac{1}{1322685z^5} (8e^z(128z^{10} - 2624z^9 + 11520z^8 + 4608z^7 + 5376z^6 + 10080z^5 + 25200z^4 + \\
 & 75600z^3 + 249480z^2 + 810810z + 2027025)) - \frac{256\sqrt{\pi}(4z^{11/2} - 84z^{9/2} + 399z^{7/2})\operatorname{erfi}(\sqrt{z})}{1322685}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0942.01} \\
 {}_2F_2\left(-\frac{11}{2}, 1; -\frac{5}{2}, 6; -z\right) &= \frac{11305z^4 - 27132z^3 + 52668z^2 - 72072z + 51480}{4199z^5} - \\
 & \frac{1}{1322685z^5} (8e^{-z}(128z^{10} + 2624z^9 + 11520z^8 - 4608z^7 + 5376z^6 - 10080z^5 + 25200z^4 - \\
 & 75600z^3 + 249480z^2 - 810810z + 2027025)) - \frac{256\sqrt{\pi}(4z^{11/2} + 84z^{9/2} + 399z^{7/2})\operatorname{erf}(\sqrt{z})}{1322685}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.0943.01} \\
 {}_2F_2\left(-\frac{11}{2}, 1; -\frac{3}{2}, 1; z\right) &= \\
 & \frac{1}{18} e^z(-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36} \sqrt{\pi}(8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0944.01} \\
 {}_2F_2\left(-\frac{11}{2}, 1; -\frac{3}{2}, 1; -z\right) &= \\
 & \frac{1}{18} e^{-z}(4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36} \sqrt{\pi}(8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0945.01} \\
 {}_2F_2\left(-\frac{11}{2}, 1; -\frac{3}{2}, 2; z\right) &= \\
 & \frac{e^z(-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45)}{117z} + \frac{1}{234} \sqrt{\pi}(8z^{11/2} - 156z^{9/2} + 858z^{7/2} - 1287z^{5/2})\operatorname{erfi}(\sqrt{z}) - \frac{5}{13z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0946.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 1; -\frac{3}{2}, 2; -z\right) = \\
 & \frac{e^{-z} (4z^6 + 76z^5 + 393z^4 + 480z^3 - 120z^2 + 72z - 45)}{117z} + \frac{1}{234} \sqrt{\pi} (8z^{11/2} + 156z^{9/2} + 858z^{7/2} + 1287z^{5/2}) \operatorname{erf}(\sqrt{z}) + \frac{5}{13z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0947.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 1; -\frac{3}{2}, 3; z\right) = -\frac{2(15z+7)}{39z^2} - \frac{2e^z (8z^7 - 176z^6 + 1086z^5 - 1680z^4 - 480z^3 - 360z^2 - 360z - 315)}{1755z^2} + \\
 & \frac{2\sqrt{\pi} (8z^{11/2} - 180z^{9/2} + 1170z^{7/2} - 2145z^{5/2}) \operatorname{erfi}(\sqrt{z})}{1755}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0948.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 1; -\frac{3}{2}, 3; -z\right) = \frac{2(15z-7)}{39z^2} + \frac{2e^{-z} (8z^7 + 176z^6 + 1086z^5 + 1680z^4 - 480z^3 + 360z^2 - 360z + 315)}{1755z^2} + \\
 & \frac{2\sqrt{\pi} (8z^{11/2} + 180z^{9/2} + 1170z^{7/2} + 2145z^{5/2}) \operatorname{erf}(\sqrt{z})}{1755}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0949.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 1; -\frac{3}{2}, 4; z\right) = \\
 & \frac{-255z^2 - 238z - 126}{221z^3} - \frac{2e^z (16z^8 - 400z^7 + 2868z^6 - 5376z^5 - 1680z^4 - 1440z^3 - 1800z^2 - 2520z - 2835)}{9945z^3} + \\
 & \frac{4\sqrt{\pi} (8z^{11/2} - 204z^{9/2} + 1530z^{7/2} - 3315z^{5/2}) \operatorname{erfi}(\sqrt{z})}{9945}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0950.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 1; -\frac{3}{2}, 4; -z\right) = \\
 & \frac{255z^2 - 238z + 126}{221z^3} + \frac{2e^{-z} (16z^8 + 400z^7 + 2868z^6 + 5376z^5 - 1680z^4 + 1440z^3 - 1800z^2 + 2520z - 2835)}{9945z^3} + \\
 & \frac{4\sqrt{\pi} (8z^{11/2} + 204z^{9/2} + 1530z^{7/2} + 3315z^{5/2}) \operatorname{erf}(\sqrt{z})}{9945}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0951.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 1; -\frac{3}{2}, 5; z\right) = -\frac{4(1615z^3 + 2261z^2 + 2394z + 1386)}{4199z^4} - \\
 & \frac{1}{188955z^4} 8e^z (32z^9 - 896z^8 + 7320z^7 - 16128z^6 - 5376z^5 - 5040z^4 - 7200z^3 - 12600z^2 - 22680z - 31185) + \\
 & \frac{32\sqrt{\pi} (8z^{11/2} - 228z^{9/2} + 1938z^{7/2} - 4845z^{5/2}) \operatorname{erfi}(\sqrt{z})}{188955}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0952.01} \\
 {}_2F_2\left(-\frac{11}{2}, 1; -\frac{3}{2}, 5; -z\right) &= \frac{4(1615z^3 - 2261z^2 + 2394z - 1386)}{4199z^4} + \\
 & \frac{1}{188955z^4} 8e^{-z}(32z^9 + 896z^8 + 7320z^7 + 16128z^6 - 5376z^5 + 5040z^4 - 7200z^3 + 12600z^2 - 22680z + 31185) + \\
 & \frac{32\sqrt{\pi}(8z^{11/2} + 228z^{9/2} + 1938z^{7/2} + 4845z^{5/2})\operatorname{erf}(\sqrt{z})}{188955}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0953.01} \\
 {}_2F_2\left(-\frac{11}{2}, 1; -\frac{3}{2}, 6; z\right) &= -\frac{5(4845z^4 + 9044z^3 + 14364z^2 + 16632z + 10296)}{12597z^5} - \\
 & \frac{1}{793611z^5} (8e^z(64z^{10} - 1984z^9 + 18192z^8 - 46080z^7 - 16128z^6 - 16128z^5 - 25200z^4 - 50400z^3 - \\
 & 113400z^2 - 249480z - 405405)) + \frac{64\sqrt{\pi}(8z^{11/2} - 252z^{9/2} + 2394z^{7/2} - 6783z^{5/2})\operatorname{erfi}(\sqrt{z})}{793611}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0954.01} \\
 {}_2F_2\left(-\frac{11}{2}, 1; -\frac{3}{2}, 6; -z\right) &= \frac{5(4845z^4 - 9044z^3 + 14364z^2 - 16632z + 10296)}{12597z^5} + \\
 & \frac{1}{793611z^5} (8e^{-z}(64z^{10} + 1984z^9 + 18192z^8 + 46080z^7 - 16128z^6 + 16128z^5 - 25200z^4 + 50400z^3 - \\
 & 113400z^2 + 249480z - 405405)) + \frac{64\sqrt{\pi}(8z^{11/2} + 252z^{9/2} + 2394z^{7/2} + 6783z^{5/2})\operatorname{erfi}(\sqrt{z})}{793611}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.0955.01} \\
 {}_2F_2\left(-\frac{11}{2}, 1; -\frac{1}{2}, 1; z\right) &= \frac{1}{96} e^z(8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) + \\
 & \frac{1}{192} \sqrt{\pi}(-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0956.01} \\
 {}_2F_2\left(-\frac{11}{2}, 1; -\frac{1}{2}, 1; -z\right) &= \frac{1}{96} e^{-z}(-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) + \\
 & \frac{1}{192} \sqrt{\pi}(-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.0957.01} \\
 {}_2F_2\left(-\frac{11}{2}, 1; -\frac{1}{2}, 2; z\right) &= \frac{e^z(8z^6 - 204z^5 + 1618z^4 - 4431z^3 + 2880z^2 + 480z + 144)}{624z} + \\
 & \frac{\sqrt{\pi}(-16z^{11/2} + 416z^{9/2} - 3432z^{7/2} + 10296z^{5/2} - 9009z^{3/2})\operatorname{erfi}(\sqrt{z})}{1248} - \frac{3}{13z}
 \end{aligned}$$

07.25.03.0958.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{1}{2}, 2; -z\right) = \frac{e^{-z}(-8z^6 - 204z^5 - 1618z^4 - 4431z^3 - 2880z^2 + 480z - 144)}{624z} + \frac{\sqrt{\pi}(-16z^{11/2} - 416z^{9/2} - 3432z^{7/2} - 10296z^{5/2} - 9009z^{3/2})\operatorname{erf}(\sqrt{z})}{1248} + \frac{3}{13z}$$

07.25.03.0959.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{1}{2}, 3; z\right) = -\frac{2(3z+1)}{13z^2} + \frac{e^z(8z^7 - 236z^6 + 2226z^5 - 7575z^4 + 6720z^3 + 1440z^2 + 720z + 360)}{2340z^2} + \frac{\sqrt{\pi}(-16z^{11/2} + 480z^{9/2} - 4680z^{7/2} + 17160z^{5/2} - 19305z^{3/2})\operatorname{erfi}(\sqrt{z})}{4680}$$

07.25.03.0960.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{1}{2}, 3; -z\right) = \frac{2(3z-1)}{13z^2} + \frac{e^{-z}(-8z^7 - 236z^6 - 2226z^5 - 7575z^4 - 6720z^3 + 1440z^2 - 720z + 360)}{2340z^2} + \frac{\sqrt{\pi}(-16z^{11/2} - 480z^{9/2} - 4680z^{7/2} - 17160z^{5/2} - 19305z^{3/2})\operatorname{erf}(\sqrt{z})}{4680}$$

07.25.03.0961.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{1}{2}, 4; z\right) = -\frac{3(51z^2 + 34z + 14)}{221z^3} + \frac{e^z(8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260)}{6630z^3} + \frac{\sqrt{\pi}(-16z^{11/2} + 544z^{9/2} - 6120z^{7/2} + 26520z^{5/2} - 36465z^{3/2})\operatorname{erfi}(\sqrt{z})}{13260}$$

07.25.03.0962.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{1}{2}, 4; -z\right) = \frac{3(51z^2 - 34z + 14)}{221z^3} + \frac{e^{-z}(-8z^8 - 268z^7 - 2930z^6 - 11919z^5 - 13440z^4 + 3360z^3 - 2160z^2 + 1800z - 1260)}{6630z^3} + \frac{\sqrt{\pi}(-16z^{11/2} - 544z^{9/2} - 6120z^{7/2} - 26520z^{5/2} - 36465z^{3/2})\operatorname{erf}(\sqrt{z})}{13260}$$

07.25.03.0963.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{1}{2}, 5; z\right) = -\frac{12(323z^3 + 323z^2 + 266z + 126)}{4199z^4} + \frac{1}{62985z^4} 4e^z(8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670) - \frac{2\sqrt{\pi}(16z^{11/2} - 608z^{9/2} + 7752z^{7/2} - 38760z^{5/2} + 62985z^{3/2})\operatorname{erfi}(\sqrt{z})}{62985}$$

07.25.03.0964.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{1}{2}, 5; -z\right) = \frac{12(323z^3 - 323z^2 + 266z - 126)}{4199z^4} - \frac{1}{62985z^4} 4e^{-z}(8z^9 + 300z^8 + 3730z^7 + 17655z^6 + 24192z^5 - 6720z^4 + 5040z^3 - 5400z^2 + 6300z - 5670) - \frac{2\sqrt{\pi}(16z^{11/2} + 608z^{9/2} + 7752z^{7/2} + 38760z^{5/2} + 62985z^{3/2})\operatorname{erf}(\sqrt{z})}{62985}$$

07.25.03.0965.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{1}{2}, 6; z\right) = -\frac{5(969z^4 + 1292z^3 + 1596z^2 + 1512z + 792)}{4199z^5} + \frac{1}{264537z^5} (8e^z(8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185)) - \frac{4\sqrt{\pi}(16z^{11/2} - 672z^{9/2} + 9576z^{7/2} - 54264z^{5/2} + 101745z^{3/2})\operatorname{erfi}(\sqrt{z})}{264537}$$

07.25.03.0966.01

$${}_2F_2\left(-\frac{11}{2}, 1; -\frac{1}{2}, 6; -z\right) = \frac{5(969z^4 - 1292z^3 + 1596z^2 - 1512z + 792)}{4199z^5} - \frac{1}{264537z^5} (8e^{-z}(8z^{10} + 332z^9 + 4626z^8 + 24975z^7 + 40320z^6 - 12096z^5 + 10080z^4 - 12600z^3 + 18900z^2 - 28350z + 31185)) - \frac{4\sqrt{\pi}(16z^{11/2} + 672z^{9/2} + 9576z^{7/2} + 54264z^{5/2} + 101745z^{3/2})\operatorname{erf}(\sqrt{z})}{264537}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = \frac{1}{2}$

07.25.03.0967.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{1}{2}, 1; z\right) = \frac{e^z(-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920)}{1920} + \frac{\sqrt{\pi}(32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.0968.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{1}{2}, 1; -z\right) = \frac{e^{-z}(16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \frac{\sqrt{\pi}(32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z})\operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.0969.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{1}{2}, 2; z\right) = \frac{e^z(-16z^6 + 512z^5 - 5472z^4 + 23240z^3 - 35595z^2 + 11520z + 960)}{12480z} + \frac{\sqrt{\pi}(32z^{11/2} - 1040z^{9/2} + 11440z^{7/2} - 51480z^{5/2} + 90090z^{3/2} - 45045\sqrt{z})\operatorname{erfi}(\sqrt{z})}{24960} - \frac{1}{13z}$$

07.25.03.0970.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{1}{2}, 2; -z\right) = \frac{e^{-z}(16z^6 + 512z^5 + 5472z^4 + 23240z^3 + 35595z^2 + 11520z - 960)}{12480z} + \frac{\sqrt{\pi}(32z^{11/2} + 1040z^{9/2} + 11440z^{7/2} + 51480z^{5/2} + 90090z^{3/2} + 45045\sqrt{z})\operatorname{erf}(\sqrt{z})}{24960} + \frac{1}{13z}$$

07.25.03.0971.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{1}{2}, 3; z\right) = -\frac{2(5z+1)}{65z^2} + \frac{e^z(-16z^7 + 592z^6 - 7512z^5 + 39420z^4 - 79905z^3 + 40320z^2 + 5760z + 1440)}{46800z^2} + \frac{\sqrt{\pi}(32z^{11/2} - 1200z^{9/2} + 15600z^{7/2} - 85800z^{5/2} + 193050z^{3/2} - 135135\sqrt{z})\operatorname{erfi}(\sqrt{z})}{93600}$$

07.25.03.0972.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{1}{2}, 3; -z\right) = \frac{2(5z-1)}{65z^2} + \frac{e^{-z}(16z^7 + 592z^6 + 7512z^5 + 39420z^4 + 79905z^3 + 40320z^2 - 5760z + 1440)}{46800z^2} + \frac{\sqrt{\pi}(32z^{11/2} + 1200z^{9/2} + 15600z^{7/2} + 85800z^{5/2} + 193050z^{3/2} + 135135\sqrt{z})\operatorname{erf}(\sqrt{z})}{93600}$$

07.25.03.0973.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{1}{2}, 4; z\right) = -\frac{3(85z^2 + 34z + 10)}{1105z^3} + \frac{e^z(-16z^8 + 672z^7 - 9872z^6 + 61680z^5 - 155655z^4 + 107520z^3 + 20160z^2 + 8640z + 3600)}{132600z^3} + \frac{\sqrt{\pi}(32z^{11/2} - 1360z^{9/2} + 20400z^{7/2} - 132600z^{5/2} + 364650z^{3/2} - 328185\sqrt{z})\operatorname{erfi}(\sqrt{z})}{265200}$$

07.25.03.0974.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{1}{2}, 4; -z\right) = \frac{3(85z^2 - 34z + 10)}{1105z^3} + \frac{e^{-z}(16z^8 + 672z^7 + 9872z^6 + 61680z^5 + 155655z^4 + 107520z^3 - 20160z^2 + 8640z - 3600)}{132600z^3} + \frac{\sqrt{\pi}(32z^{11/2} + 1360z^{9/2} + 20400z^{7/2} + 132600z^{5/2} + 364650z^{3/2} + 328185\sqrt{z})\operatorname{erf}(\sqrt{z})}{265200}$$

07.25.03.0975.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{1}{2}, 5; z\right) = -\frac{4(1615z^3 + 969z^2 + 570z + 210)}{20995z^4} + \frac{1}{314925z^4} + \frac{e^z(-16z^9 + 752z^8 - 12552z^7 + 90980z^6 - 274845z^5 + 241920z^4 + 53760z^3 + 30240z^2 + 21600z + 12600)}{629850} + \frac{\sqrt{\pi}(32z^{11/2} - 1520z^{9/2} + 25840z^{7/2} - 193800z^{5/2} + 629850z^{3/2} - 692835\sqrt{z})\operatorname{erfi}(\sqrt{z})}{629850}$$

07.25.03.0976.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{1}{2}, 5; -z\right) = \frac{4(1615z^3 - 969z^2 + 570z - 210)}{20995z^4} + \frac{1}{314925z^4} \\ e^{-z}(16z^9 + 752z^8 + 12552z^7 + 90980z^6 + 274845z^5 + 241920z^4 - 53760z^3 + 30240z^2 - 21600z + 12600) + \\ \frac{\sqrt{\pi}(32z^{11/2} + 1520z^{9/2} + 25840z^{7/2} + 193800z^{5/2} + 629850z^{3/2} + 692835\sqrt{z})\operatorname{erf}(\sqrt{z})}{629850}$$

07.25.03.0977.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{1}{2}, 6; z\right) = \\ \frac{-1615z^4 - 1292z^3 - 1140z^2 - 840z - 360}{4199z^5} - \frac{1}{1322685z^5} (2e^z(16z^{10} - 832z^9 + 15552z^8 - 128280z^7 + \\ 451395z^6 - 483840z^5 - 120960z^4 - 80640z^3 - 75600z^2 - 75600z - 56700)) + \\ \frac{\sqrt{\pi}(32z^{11/2} - 1680z^{9/2} + 31920z^{7/2} - 271320z^{5/2} + 1017450z^{3/2} - 1322685\sqrt{z})\operatorname{erfi}(\sqrt{z})}{1322685}$$

07.25.03.0978.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{1}{2}, 6; -z\right) = \\ \frac{1615z^4 - 1292z^3 + 1140z^2 - 840z + 360}{4199z^5} + \frac{1}{1322685z^5} (2e^{-z}(16z^{10} + 832z^9 + 15552z^8 + 128280z^7 + \\ 451395z^6 + 483840z^5 - 120960z^4 + 80640z^3 - 75600z^2 + 75600z - 56700)) + \\ \frac{\sqrt{\pi}(32z^{11/2} + 1680z^{9/2} + 31920z^{7/2} + 271320z^{5/2} + 1017450z^{3/2} + 1322685\sqrt{z})\operatorname{erf}(\sqrt{z})}{1322685}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = 1$

07.25.03.0979.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, 1; z\right) = \frac{e^{z/2}(32z^6 - 992z^5 + 10512z^4 - 46944z^3 + 88674z^2 - 62370z + 10395)I_0\left(\frac{z}{2}\right) - \\ 2e^{z/2}(16z^6 - 480z^5 + 4784z^4 - 18912z^3 + 27387z^2 - 9762z)I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.0980.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, \frac{3}{2}; z\right) = \frac{e^z(-32z^5 + 1040z^4 - 11376z^3 + 50232z^2 - 83370z + 35685)}{46080} + \\ \frac{\sqrt{\pi}(64z^6 - 2112z^5 + 23760z^4 - 110880z^3 + 207900z^2 - 124740z + 10395)\operatorname{erfi}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.0981.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, \frac{3}{2}; -z\right) = \frac{e^{-z}(32z^5 + 1040z^4 + 11376z^3 + 50232z^2 + 83370z + 35685)}{46080} + \frac{\sqrt{\pi}(64z^6 + 2112z^5 + 23760z^4 + 110880z^3 + 207900z^2 + 124740z + 10395)\operatorname{erf}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.0982.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, 2; z\right) = \frac{e^{z/2}(64z^6 - 2336z^5 + 30000z^4 - 168864z^3 + 425112z^2 - 436590z + 135135)I_0\left(\frac{z}{2}\right)}{135135} + \frac{e^{z/2}(-64z^6 + 2272z^5 - 27760z^4 + 142176z^3 - 294744z^2 + 191442z - 10395)I_1\left(\frac{z}{2}\right)}{135135}$$

07.25.03.0983.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, \frac{5}{2}; z\right) = \frac{e^z(-64z^6 + 2432z^5 - 32080z^4 + 179136z^3 - 408828z^2 + 291480z - 10395)}{430080z} + \frac{1}{860160z^{3/2}}\sqrt{\pi}(128z^7 - 4928z^6 + 66528z^5 - 388080z^4 + 970200z^3 - 873180z^2 + 145530z + 10395)\operatorname{erfi}(\sqrt{z})$$

07.25.03.0984.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, \frac{5}{2}; -z\right) = \frac{e^{-z}(64z^6 + 2432z^5 + 32080z^4 + 179136z^3 + 408828z^2 + 291480z + 10395)}{430080z} + \frac{1}{860160z^{3/2}}\sqrt{\pi}(128z^7 + 4928z^6 + 66528z^5 + 388080z^4 + 970200z^3 + 873180z^2 + 145530z - 10395)\operatorname{erf}(\sqrt{z})$$

07.25.03.0985.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, 3; z\right) = \frac{4e^{z/2}(64z^6 - 2688z^5 + 40560z^4 - 275520z^3 + 866520z^2 - 1164240z + 509355)I_0\left(\frac{z}{2}\right)}{2027025} - \frac{1}{2027025z}4e^{z/2}(64z^7 - 2624z^6 + 37968z^5 - 238800z^4 + 644280z^3 - 608760z^2 + 72765z + 10395)I_1\left(\frac{z}{2}\right)$$

07.25.03.0986.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, \frac{7}{2}; z\right) = \frac{e^z(-128z^7 + 5568z^6 - 85984z^5 + 580560z^4 - 1686744z^3 + 1690836z^2 - 145530z - 31185)}{2752512z^2} + \frac{1}{5505024z^{5/2}}(\sqrt{\pi}(256z^8 - 11264z^7 + 177408z^6 - 1241856z^5 + 3880800z^4 - 4656960z^3 + 1164240z^2 + 166320z + 31185)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.0987.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, \frac{7}{2}; -z\right) = \frac{e^{-z}(128z^7 + 5568z^6 + 85984z^5 + 580560z^4 + 1686744z^3 + 1690836z^2 + 145530z - 31185)}{2752512z^2} + \frac{1}{5505024z^{5/2}}(\sqrt{\pi}(256z^8 + 11264z^7 + 177408z^6 + 1241856z^5 + 3880800z^4 + 4656960z^3 + 1164240z^2 - 166320z + 31185)\operatorname{erf}(\sqrt{z}))$$

07.25.03.0988.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, 4; z\right) = \frac{1}{11486475z} 4e^{z/2} (128z^7 - 6080z^6 + 105408z^5 - 838800z^4 + 3163920z^3 - 5239080z^2 + 2910600z + 10395) I_0\left(\frac{z}{2}\right) - \frac{1}{11486475z^2} 4e^{z/2} (128z^8 - 5952z^7 + 99520z^6 - 742128z^5 + 2466000z^4 - 3061560z^3 + 582120z^2 + 155925z + 41580) I_1\left(\frac{z}{2}\right)$$

07.25.03.0989.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, \frac{9}{2}; z\right) = \frac{1}{14155776z^3} e^z (-256z^8 + 12544z^7 - 221952z^6 + 1757760z^5 - 6203040z^4 + 8030448z^3 - 1164240z^2 - 457380z - 155925) + \frac{1}{28311552z^{7/2}} \left(\sqrt{\pi} (512z^9 - 25344z^8 + 456192z^7 - 3725568z^6 + 13970880z^5 - 20956320z^4 + 6985440z^3 + 1496880z^2 + 561330z + 155925) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.0990.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, \frac{9}{2}; -z\right) = \frac{1}{14155776z^3} e^{-z} (256z^8 + 12544z^7 + 221952z^6 + 1757760z^5 + 6203040z^4 + 8030448z^3 + 1164240z^2 - 457380z + 155925) + \frac{1}{28311552z^{7/2}} \left(\sqrt{\pi} (512z^9 + 25344z^8 + 456192z^7 + 3725568z^6 + 13970880z^5 + 20956320z^4 + 6985440z^3 - 1496880z^2 + 561330z - 155925) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.0991.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, 5; z\right) = \frac{1}{218243025z^2} \left(32e^{z/2} (128z^8 - 6784z^7 + 132864z^6 - 1212096z^5 + 5331360z^4 - 10478160z^3 + 6985440z^2 + 83160z + 31185) I_0\left(\frac{z}{2}\right) - \frac{1}{218243025z^3} \left(128e^{z/2} (32z^9 - 1664z^8 + 31568z^7 - 272256z^6 + 1074804z^5 - 1654080z^4 + 436590z^3 + 166320z^2 + 83160z + 31185) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.0992.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, \frac{11}{2}; z\right) = \frac{1}{62914560z^4} \left(e^z (-512z^9 + 27904z^8 - 556544z^7 + 5057280z^6 - 21001920z^5 + 33362400z^4 - 6985440z^3 - 3825360z^2 - 2390850z - 1091475)\right) + \frac{1}{125829120z^{9/2}} \left(\sqrt{\pi} (1024z^{10} - 56320z^9 + 1140480z^8 - 10644480z^7 + 46569600z^6 - 83825280z^5 + 34927200z^4 + 9979200z^3 + 5613300z^2 + 3118500z + 1091475) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.0993.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, \frac{11}{2}; -z\right) = \frac{1}{62914560z^4} (e^{-z} (512z^9 + 27904z^8 + 556544z^7 + 5057280z^6 + 21001920z^5 + 33362400z^4 + 6985440z^3 - 3825360z^2 + 2390850z - 1091475)) + \frac{1}{125829120z^{9/2}} (\sqrt{\pi} (1024z^{10} + 56320z^9 + 1140480z^8 + 10644480z^7 + 46569600z^6 + 83825280z^5 + 34927200z^4 - 9979200z^3 + 5613300z^2 - 3118500z + 1091475) \operatorname{erf}(\sqrt{z}))$$

07.25.03.0994.01

$${}_2F_2\left(-\frac{11}{2}, 1; 1, 6; z\right) = \frac{1}{916620705z^3} (32e^{z/2} (256z^9 - 14976z^8 + 326976z^7 - 3364032z^6 + 16903152z^5 - 38419920z^4 + 29688120z^3 + 748440z^2 + 530145z + 249480) I_0\left(\frac{z}{2}\right)) - \frac{1}{916620705z^4} (32e^{z/2} (256z^{10} - 14720z^9 + 312384z^8 - 3058752z^7 + 13986672z^6 - 25692912z^5 + 8731800z^4 + 4241160z^3 + 3024945z^2 + 2120580z + 997920) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{11}{2}, a_2 = 1, b_1 = \frac{3}{2}$

07.25.03.0995.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{3}{2}, 2; z\right) = \frac{e^z (-32z^6 + 1232z^5 - 16560z^4 + 95256z^3 - 229530z^2 + 187425z - 23040)}{299520z} + \frac{\sqrt{\pi} (64z^6 - 2496z^5 + 34320z^4 - 205920z^3 + 540540z^2 - 540540z + 135135) \operatorname{erfi}(\sqrt{z})}{599040\sqrt{z}} + \frac{1}{13z}$$

07.25.03.0996.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (32z^6 + 1232z^5 + 16560z^4 + 95256z^3 + 229530z^2 + 187425z + 23040)}{299520z} + \frac{\sqrt{\pi} (64z^6 + 2496z^5 + 34320z^4 + 205920z^3 + 540540z^2 + 540540z + 135135) \operatorname{erf}(\sqrt{z})}{599040\sqrt{z}} - \frac{1}{13z}$$

07.25.03.0997.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{3}{2}, 3; z\right) = \frac{2(15z + 1)}{195z^2} + \frac{e^z (-32z^7 + 1424z^6 - 22704z^5 + 160920z^4 - 508410z^3 + 614565z^2 - 161280z - 11520)}{1123200z^2} + \frac{\sqrt{\pi} (64z^6 - 2880z^5 + 46800z^4 - 343200z^3 + 1158300z^2 - 1621620z + 675675) \operatorname{erfi}(\sqrt{z})}{2246400\sqrt{z}}$$

07.25.03.0998.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{3}{2}, 3; -z\right) = -\frac{2(15z-1)}{195z^2} + \frac{e^{-z}(32z^7 + 1424z^6 + 22704z^5 + 160920z^4 + 508410z^3 + 614565z^2 + 161280z - 11520)}{1123200z^2} + \frac{\sqrt{\pi}(64z^6 + 2880z^5 + 46800z^4 + 343200z^3 + 1158300z^2 + 1621620z + 675675)\operatorname{erf}(\sqrt{z})}{2246400\sqrt{z}}$$

07.25.03.0999.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{3}{2}, 4; z\right) = \frac{255z^2 + 34z + 6}{1105z^3} + \frac{1}{3182400z^3} e^z(-32z^8 + 1616z^7 - 29808z^6 + 251064z^5 - 981450z^4 + 1573425z^3 - 645120z^2 - 80640z - 17280) + \frac{\sqrt{\pi}(64z^6 - 3264z^5 + 61200z^4 - 530400z^3 + 2187900z^2 - 3938220z + 2297295)\operatorname{erfi}(\sqrt{z})}{6364800\sqrt{z}}$$

07.25.03.1000.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{3}{2}, 4; -z\right) = \frac{-255z^2 + 34z - 6}{1105z^3} + \frac{1}{3182400z^3} e^{-z}(32z^8 + 1616z^7 + 29808z^6 + 251064z^5 + 981450z^4 + 1573425z^3 + 645120z^2 - 80640z + 17280) + \frac{\sqrt{\pi}(64z^6 + 3264z^5 + 61200z^4 + 530400z^3 + 2187900z^2 + 3938220z + 2297295)\operatorname{erf}(\sqrt{z})}{6364800\sqrt{z}}$$

07.25.03.1001.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{3}{2}, 5; z\right) = \frac{4(1615z^3 + 323z^2 + 114z + 30)}{20995z^4} + \frac{1}{7558200z^4} (e^z(-32z^9 + 1808z^8 - 37872z^7 + 369528z^6 - 1721610z^5 + 3441285z^4 - 1935360z^3 - 322560z^2 - 120960z - 43200)) + \frac{\sqrt{\pi}(64z^6 - 3648z^5 + 77520z^4 - 775200z^3 + 3779100z^2 - 8314020z + 6235515)\operatorname{erfi}(\sqrt{z})}{15116400\sqrt{z}}$$

07.25.03.1002.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{3}{2}, 5; -z\right) = -\frac{4(1615z^3 - 323z^2 + 114z - 30)}{20995z^4} + \frac{1}{7558200z^4} (e^{-z}(32z^9 + 1808z^8 + 37872z^7 + 369528z^6 + 1721610z^5 + 3441285z^4 + 1935360z^3 - 322560z^2 + 120960z - 43200)) + \frac{\sqrt{\pi}(64z^6 + 3648z^5 + 77520z^4 + 775200z^3 + 3779100z^2 + 8314020z + 6235515)\operatorname{erf}(\sqrt{z})}{15116400\sqrt{z}}$$

07.25.03.1003.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{3}{2}, 6; z\right) = \frac{4845 z^4 + 1292 z^3 + 684 z^2 + 360 z + 120}{12597 z^5} + \frac{1}{15872220 z^5} (e^z (-32 z^{10} + 2000 z^9 - 46896 z^8 + 520152 z^7 - 2813370 z^6 + 6739425 z^5 - 4838400 z^4 - 967680 z^3 - 483840 z^2 - 302400 z - 151200)) + \frac{1}{31744440 \sqrt{z}} \sqrt{\pi} (64 z^6 - 4032 z^5 + 95760 z^4 - 1085280 z^3 + 6104700 z^2 - 15872220 z + 14549535) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1004.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{3}{2}, 6; -z\right) = \frac{-4845 z^4 + 1292 z^3 - 684 z^2 + 360 z - 120}{12597 z^5} + \frac{1}{15872220 z^5} (e^{-z} (32 z^{10} + 2000 z^9 + 46896 z^8 + 520152 z^7 + 2813370 z^6 + 6739425 z^5 + 4838400 z^4 - 967680 z^3 + 483840 z^2 - 302400 z + 151200)) + \frac{1}{31744440 \sqrt{z}} \sqrt{\pi} (64 z^6 + 4032 z^5 + 95760 z^4 + 1085280 z^3 + 6104700 z^2 + 15872220 z + 14549535) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = 2$

07.25.03.1005.01

$${}_2F_2\left(-\frac{11}{2}, 1; 2, 2; z\right) = \frac{1}{1756755 z} 2 e^{z/2} (64 z^7 - 2752 z^6 + 42896 z^5 - 305520 z^4 + 1035384 z^3 - 1589352 z^2 + 945945 z - 135135) I_0\left(\frac{z}{2}\right) - \frac{2 e^{z/2} (64 z^6 - 2688 z^5 + 40240 z^4 - 266560 z^3 + 786456 z^2 - 903504 z + 264207) I_1\left(\frac{z}{2}\right)}{1756755} + \frac{2}{13 z}$$

07.25.03.1006.01

$${}_2F_2\left(-\frac{11}{2}, 1; 2, \frac{5}{2}; z\right) = \frac{e^z (-64 z^6 + 2880 z^5 - 46640 z^4 + 338400 z^3 - 1112076 z^2 + 1458660 z - 509985)}{2795520 z} + \frac{1}{5591040 z^{3/2}} \sqrt{\pi} (128 z^7 - 5824 z^6 + 96096 z^5 - 720720 z^4 + 2522520 z^3 - 3783780 z^2 + 1891890 z - 135135) \operatorname{erfi}(\sqrt{z}) + \frac{3}{13 z}$$

07.25.03.1007.01

$${}_2F_2\left(-\frac{11}{2}, 1; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 2880 z^5 + 46640 z^4 + 338400 z^3 + 1112076 z^2 + 1458660 z + 509985)}{2795520 z} + \frac{1}{5591040 z^{3/2}} \sqrt{\pi} (128 z^7 + 5824 z^6 + 96096 z^5 + 720720 z^4 + 2522520 z^3 + 3783780 z^2 + 1891890 z + 135135) \operatorname{erf}(\sqrt{z}) - \frac{3}{13 z}$$

07.25.03.1008.01

$${}_2F_2\left(-\frac{11}{2}, 1; 2, 3; z\right) = \frac{1}{26351325z}$$

$$4e^{z/2}(128z^7 - 6336z^6 + 116160z^5 - 1001040z^4 + 4266000z^3 - 8705160z^2 + 7567560z - 2027025)I_0\left(\frac{z}{2}\right) -$$

$$\frac{1}{26351325z} 4e^{z/2}(128z^7 - 6208z^6 + 110016z^5 - 894000z^4 + 3421200z^3 - 5638680z^2 + 3017160z - 135135)I_1\left(\frac{z}{2}\right) +$$

$$\frac{4}{13z}$$

07.25.03.1009.01

$${}_2F_2\left(-\frac{11}{2}, 1; 2, \frac{7}{2}; z\right) =$$

$$\frac{1}{17891328z^2} e^z(-128z^7 + 6592z^6 - 124896z^5 + 1093840z^4 - 4552920z^3 + 8232084z^2 - 4809210z + 135135) +$$

$$\frac{1}{35782656z^{5/2}} \left(\sqrt{\pi}(256z^8 - 13312z^7 + 256256z^6 - 2306304z^5 +$$

$$10090080z^4 - 20180160z^3 + 15135120z^2 - 2162160z - 135135)\operatorname{erfi}(\sqrt{z})\right) + \frac{5}{13z}$$

07.25.03.1010.01

$${}_2F_2\left(-\frac{11}{2}, 1; 2, \frac{7}{2}; -z\right) =$$

$$\frac{1}{17891328z^2} e^{-z}(128z^7 + 6592z^6 + 124896z^5 + 1093840z^4 + 4552920z^3 + 8232084z^2 + 4809210z + 135135) +$$

$$\frac{1}{35782656z^{5/2}} \left(\sqrt{\pi}(256z^8 + 13312z^7 + 256256z^6 + 2306304z^5 +$$

$$10090080z^4 + 20180160z^3 + 15135120z^2 + 2162160z - 135135)\operatorname{erf}(\sqrt{-z})\right) - \frac{5}{13z}$$

07.25.03.1011.01

$${}_2F_2\left(-\frac{11}{2}, 1; 2, 4; z\right) =$$

$$\frac{1}{149324175z} 64e^{z/2}(16z^7 - 896z^6 + 18888z^5 - 191040z^4 + 980970z^3 - 2496240z^2 + 2837835z - 1081080)I_0\left(\frac{z}{2}\right) -$$

$$\frac{1}{149324175z^2} \left(8e^{z/2}(128z^8 - 7040z^7 + 144128z^6 - 1387584z^5 +$$

$$6525600z^4 - 14014320z^3 + 10931040z^2 - 1081080z - 135135)I_1\left(\frac{z}{2}\right) + \frac{6}{13z}$$

07.25.03.1012.01

$${}_2F_2\left(-\frac{11}{2}, 1; 2, \frac{9}{2}; z\right) = \frac{1}{92012544 z^3} (e^z (-256 z^8 + 14848 z^7 - 322176 z^6 + 3305472 z^5 - 16653120 z^4 + 38391840 z^3 - 31599288 z^2 + 2162160 z + 405405)) + \frac{1}{184025088 z^{7/2}} (\sqrt{\pi} (512 z^9 - 29952 z^8 + 658944 z^7 - 6918912 z^6 + 36324288 z^5 - 90810720 z^4 + 90810720 z^3 - 19459440 z^2 - 2432430 z - 405405) \operatorname{erfi}(\sqrt{z})) + \frac{7}{13 z}$$

07.25.03.1013.01

$${}_2F_2\left(-\frac{11}{2}, 1; 2, \frac{9}{2}; -z\right) = \frac{1}{92012544 z^3} (e^{-z} (256 z^8 + 14848 z^7 + 322176 z^6 + 3305472 z^5 + 16653120 z^4 + 38391840 z^3 + 31599288 z^2 + 2162160 z - 405405)) + \frac{1}{184025088 z^{7/2}} (\sqrt{\pi} (512 z^9 + 29952 z^8 + 658944 z^7 + 6918912 z^6 + 36324288 z^5 + 90810720 z^4 + 90810720 z^3 + 19459440 z^2 - 2432430 z + 405405) \operatorname{erf}(\sqrt{-z})) - \frac{7}{13 z}$$

07.25.03.1014.01

$${}_2F_2\left(-\frac{11}{2}, 1; 2, 5; z\right) = \frac{1}{2837159325 z^2} \left(32 e^{z/2} (256 z^8 - 16000 z^7 + 381248 z^6 - 4426944 z^5 + 26599920 z^4 - 81070800 z^3 + 113513400 z^2 - 55135080 z - 135135) I_0\left(\frac{z}{2}\right)\right) - \frac{1}{2837159325 z^3} \left(32 e^{z/2} (256 z^9 - 15744 z^8 + 365632 z^7 - 4068928 z^6 + 22698864 z^5 - 60086640 z^4 + 61662360 z^3 - 9729720 z^2 - 2297295 z - 540540) I_1\left(\frac{z}{2}\right)\right) + \frac{8}{13 z}$$

07.25.03.1015.01

$${}_2F_2\left(-\frac{11}{2}, 1; 2, \frac{11}{2}; z\right) = \frac{1}{408944640 z^4} (e^z (-512 z^9 + 33024 z^8 - 807424 z^7 + 9496320 z^6 - 56157120 z^5 + 157423200 z^4 - 167594400 z^3 + 19459440 z^2 + 6756750 z + 2027025)) + \frac{1}{817889280 z^{9/2}} (\sqrt{\pi} (1024 z^{10} - 66560 z^9 + 1647360 z^8 - 19768320 z^7 + 121080960 z^6 - 363242880 z^5 + 454053600 z^4 - 129729600 z^3 - 24324300 z^2 - 8108100 z - 2027025) \operatorname{erfi}(\sqrt{z})) + \frac{9}{13 z}$$

07.25.03.1016.01

$${}_2F_2\left(-\frac{11}{2}, 1; 2, \frac{11}{2}; -z\right) = \frac{1}{408944640z^4} \left(e^{-z} (512z^9 + 33024z^8 + 807424z^7 + 9496320z^6 + 56157120z^5 + 157423200z^4 + 167594400z^3 + 19459440z^2 - 6756750z + 2027025) \right) + \frac{1}{817889280z^{9/2}} \left(\sqrt{\pi} (1024z^{10} + 66560z^9 + 1647360z^8 + 19768320z^7 + 121080960z^6 + 363242880z^5 + 454053600z^4 + 129729600z^3 - 24324300z^2 + 8108100z - 2027025) \operatorname{erf}(\sqrt{z}) \right) - \frac{9}{13z}$$

07.25.03.1017.01

$${}_2F_2\left(-\frac{11}{2}, 1; 2, 6; z\right) = \frac{1}{11916069165z^3} \left(64e^{z/2} (256z^9 - 17664z^8 + 469440z^7 - 6154176z^6 + 42357168z^5 - 150378480z^4 + 249729480z^3 - 145945800z^2 - 1216215z - 405405) I_0\left(\frac{z}{2}\right) \right) - \frac{1}{11916069165z^4} \left(64e^{z/2} (256z^{10} - 17408z^9 + 452160z^8 - 5710464z^7 + 36856176z^6 - 115976448z^5 + 147674520z^4 - 32432400z^3 - 10945935z^2 - 4864860z - 1621620) I_1\left(\frac{z}{2}\right) \right) + \frac{10}{13z}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = \frac{5}{2}$

07.25.03.1018.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{5}{2}, 3; z\right) = \frac{2(15z-1)}{65z^2} + \frac{1}{10483200z^2} e^z (-64z^7 + 3328z^6 - 63888z^5 + 570240z^4 - 2445660z^3 + 4672080z^2 - 3133935z + 322560) + \frac{1}{20966400z^{3/2}} \sqrt{\pi} (128z^7 - 6720z^6 + 131040z^5 - 1201200z^4 + 5405400z^3 - 11351340z^2 + 9459450z - 2027025) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1019.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{5}{2}, 3; -z\right) = -\frac{2(15z+1)}{65z^2} + \frac{1}{10483200z^2} e^{-z} (64z^7 + 3328z^6 + 63888z^5 + 570240z^4 + 2445660z^3 + 4672080z^2 + 3133935z + 322560) + \frac{1}{20966400z^{3/2}} \sqrt{\pi} (128z^7 + 6720z^6 + 131040z^5 + 1201200z^4 + 5405400z^3 + 11351340z^2 + 9459450z + 2027025) \operatorname{erf}(\sqrt{z})$$

07.25.03.1020.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{5}{2}, 4; z\right) = \frac{3(255z^2 - 34z - 2)}{1105z^3} + \frac{1}{29702400z^3} e^z (-64z^8 + 3776z^7 - 83824z^6 + 888096z^5 - 4698540z^4 + 11789820z^3 - 11737845z^2 + 2580480z + 161280) + \frac{1}{59404800z^{3/2}} \sqrt{\pi} (128z^7 - 7616z^6 + 171360z^5 - 1856400z^4 + 10210200z^3 - 27567540z^2 + 32162130z - 11486475) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1021.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{5}{2}, 4; -z\right) = -\frac{3(255z^2 + 34z - 2)}{1105z^3} + \frac{1}{29702400z^3} e^{-z} (64z^8 + 3776z^7 + 83824z^6 + 888096z^5 + 4698540z^4 + 11789820z^3 + 11737845z^2 + 2580480z - 161280) + \frac{1}{59404800z^{3/2}} \sqrt{\pi} (128z^7 + 7616z^6 + 171360z^5 + 1856400z^4 + 10210200z^3 + 27567540z^2 + 32162130z + 11486475) \operatorname{erf}(\sqrt{z})$$

07.25.03.1022.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{5}{2}, 5; z\right) = \frac{12(1615z^3 - 323z^2 - 38z - 6)}{20995z^4} + \frac{1}{70543200z^4} (e^z (-64z^9 + 4224z^8 - 106448z^7 + 1305408z^6 - 8213436z^5 + 25530120z^4 - 33765795z^3 + 11612160z^2 + 1290240z + 241920)) + \frac{1}{141086400z^{3/2}} \sqrt{\pi} (128z^7 - 8512z^6 + 217056z^5 - 2713200z^4 + 17635800z^3 - 58198140z^2 + 87297210z - 43648605) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1023.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{5}{2}, 5; -z\right) = -\frac{12(1615z^3 + 323z^2 - 38z + 6)}{20995z^4} + \frac{1}{70543200z^4} (e^{-z} (64z^9 + 4224z^8 + 106448z^7 + 1305408z^6 + 8213436z^5 + 25530120z^4 + 33765795z^3 + 11612160z^2 - 1290240z + 241920)) + \frac{1}{141086400z^{3/2}} \sqrt{\pi} (128z^7 + 8512z^6 + 217056z^5 + 2713200z^4 + 17635800z^3 + 58198140z^2 + 87297210z + 43648605) \operatorname{erf}(\sqrt{z})$$

07.25.03.1024.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{5}{2}, 6; z\right) = \frac{33915z^4 - 9044z^3 - 1596z^2 - 504z - 120}{29393z^5} + \frac{1}{148140720z^5} \left(e^z (-64z^{10} + 4672z^9 - 131760z^8 + 1835616z^7 - 13386828z^6 + 49632660z^5 - 81943785z^4 + 38707200z^3 + 5806080z^2 + 1935360z + 604800) \right) + \frac{1}{296281440z^{3/2}} \left(\sqrt{\pi} (128z^7 - 9408z^6 + 268128z^5 - 3798480z^4 + 28488600z^3 - 111105540z^2 + 203693490z - 130945815) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1025.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{5}{2}, 6; -z\right) = \frac{-33915z^4 - 9044z^3 + 1596z^2 - 504z + 120}{29393z^5} + \frac{1}{148140720z^5} \left(e^{-z} (64z^{10} + 4672z^9 + 131760z^8 + 1835616z^7 + 13386828z^6 + 49632660z^5 + 81943785z^4 + 38707200z^3 - 5806080z^2 + 1935360z - 604800) \right) + \frac{1}{296281440z^{3/2}} \left(\sqrt{\pi} (128z^7 + 9408z^6 + 268128z^5 + 3798480z^4 + 28488600z^3 + 111105540z^2 + 203693490z + 130945815) \operatorname{erf}(\sqrt{z}) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = 3$

07.25.03.1026.01

$${}_2F_2\left(-\frac{11}{2}, 1; 3, 3; z\right) = \frac{8(15z - 2)}{195z^2} + \frac{1}{395269875z^2} \left(16e^{z/2} (128z^8 - 7296z^7 + 157440z^6 - 1644480z^5 + 8848800z^4 - 24235920z^3 + 31407840z^2 - 16216200z + 2027025) I_0\left(\frac{z}{2}\right) - \frac{1}{395269875z} 128e^{z/2} (16z^7 - 896z^6 + 18792z^5 - 187200z^4 + 927450z^3 - 2179440z^2 + 2071215z - 512280) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.1027.01

$${}_2F_2\left(-\frac{11}{2}, 1; 3, \frac{7}{2}; z\right) = \frac{2(5z - 1)}{13z^2} + \frac{1}{67092480z^2} e^z (-128z^7 + 7616z^6 - 170976z^5 + 1840080z^4 - 9967320z^3 + 26025300z^2 - 28147770z + 8294895) + \frac{1}{134184960z^{5/2}} \left(\sqrt{\pi} (256z^8 - 15360z^7 + 349440z^6 - 3843840z^5 + 21621600z^4 - 60540480z^3 + 75675600z^2 - 32432400z + 2027025) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1028.01

$${}_2F_2\left(-\frac{11}{2}, 1; 3, \frac{7}{2}; -z\right) = -\frac{2(5z+1)}{13z^2} + \frac{1}{67092480z^2} e^{-z} (128z^7 + 7616z^6 + 170976z^5 + 1840080z^4 + 9967320z^3 + 26025300z^2 + 28147770z + 8294895) + \frac{1}{134184960z^{5/2}} \left(\sqrt{\pi} (256z^8 + 15360z^7 + 349440z^6 + 3843840z^5 + 21621600z^4 + 60540480z^3 + 75675600z^2 + 32432400z + 2027025) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.1029.01

$${}_2F_2\left(-\frac{11}{2}, 1; 3, 4; z\right) = \frac{4(15z-4)}{65z^2} + \frac{1}{2239862625z^2} \left(16e^{z/2} (256z^8 - 16512z^7 + 409920z^6 - 5031360z^5 + 32713200z^4 - 112461840z^3 + 193393080z^2 - 145945800z + 34459425) I_0\left(\frac{z}{2}\right) - \frac{1}{2239862625z^2} \left(16e^{z/2} (256z^8 - 16256z^7 + 393792z^6 - 4645440z^5 + 28249200z^4 - 86189040z^3 + 117719640z^2 - 53453880z + 2027025) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.1030.01

$${}_2F_2\left(-\frac{11}{2}, 1; 3, \frac{9}{2}; z\right) = \frac{14(3z-1)}{39z^2} + \frac{1}{345047040z^3} \left(e^z (-256z^8 + 17152z^7 - 440832z^6 + 5553600z^5 - 36342240z^4 + 120344400z^3 - 179776800z^2 + 88727940z - 2027025)\right) + \frac{1}{690094080z^{7/2}} \left(\sqrt{\pi} (512z^9 - 34560z^8 + 898560z^7 - 11531520z^6 + 77837760z^5 - 272432160z^4 + 454053600z^3 - 291891600z^2 + 36486450z + 2027025) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.1031.01

$${}_2F_2\left(-\frac{11}{2}, 1; 3, \frac{9}{2}; -z\right) = -\frac{14(3z+1)}{39z^2} + \frac{1}{345047040z^3} \left(e^{-z} (256z^8 + 17152z^7 + 440832z^6 + 5553600z^5 + 36342240z^4 + 120344400z^3 + 179776800z^2 + 88727940z + 2027025)\right) + \frac{1}{690094080z^{7/2}} \left(\sqrt{\pi} (512z^9 + 34560z^8 + 898560z^7 + 11531520z^6 + 77837760z^5 + 272432160z^4 + 454053600z^3 + 291891600z^2 + 36486450z - 2027025) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.1032.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; 3, 5; z\right) = & \frac{16(5z-2)}{65z^2} + \frac{1}{42557389875z^2} \left(128e^{z/2}(256z^8 - 18432z^7 + 517440z^6 - 7297920z^5 + 55638000z^4 - \right. \\
 & \left. 230178240z^3 + 492941880z^2 - 486486000z + 164189025)I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{42557389875z^3} \left(128e^{z/2}(256z^9 - 18176z^8 + 499392z^7 - 6807360z^6 + 49062960z^5 - \right. \right. \\
 & \left. \left. 184073040z^4 + 327934440z^3 - 217419480z^2 + 18243225z + 2027025)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

07.25.03.1033.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; 3, \frac{11}{2}; z\right) = & \frac{6(15z-7)}{65z^2} + \frac{1}{1533542400z^4} \left(e^z(-512z^9 + 38144z^8 - 1104384z^7 + 15939840z^6 - 122266560z^5 + \right. \\
 & \left. 490485600z^4 - 935431200z^3 + 651445200z^2 - 36486450z - 6081075)\right) + \\
 & \frac{1}{3067084800z^{9/2}} \left(\sqrt{\pi}(1024z^{10} - 76800z^9 + 2246400z^8 - 32947200z^7 + 259459200z^6 - 1089728640z^5 + \right. \\
 & \left. 2270268000z^4 - 1945944000z^3 + 364864500z^2 + 40540500z + 6081075)\operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

07.25.03.1034.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; 3, \frac{11}{2}; -z\right) = & -\frac{6(15z+7)}{65z^2} + \frac{1}{1533542400z^4} \left(e^{-z}(512z^9 + 38144z^8 + 1104384z^7 + 15939840z^6 + 122266560z^5 + \right. \\
 & \left. 490485600z^4 + 935431200z^3 + 651445200z^2 + 36486450z - 6081075)\right) + \\
 & \frac{1}{3067084800z^{9/2}} \left(\sqrt{\pi}(1024z^{10} + 76800z^9 + 2246400z^8 + 32947200z^7 + 259459200z^6 + 1089728640z^5 + \right. \\
 & \left. 2270268000z^4 + 1945944000z^3 + 364864500z^2 - 40540500z + 6081075)\operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

07.25.03.1035.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; 3, 6; z\right) = & \frac{4(15z-8)}{39z^2} + \frac{1}{178741037475z^3} \left(128e^{z/2}(512z^9 - 40704z^8 + 1274880z^7 - 20314560z^6 + 177680160z^5 - \right. \\
 & \left. 859355280z^4 + 2201945760z^3 - 2675673000z^2 + 1155404250z + 2027025)I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{178741037475z^4} \left(128e^{z/2}(512z^{10} - 40192z^9 + 1234944z^8 - 19099200z^7 + 159159840z^6 - \right. \right. \\
 & \left. \left. 708629040z^5 + 1557168480z^4 - 1359774360z^3 + 182432250z^2 + 38513475z + 8108100)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = \frac{7}{2}$

07.25.03.1036.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{7}{2}, 4; z\right) = \frac{3(85z^2 - 34z + 2)}{221z^3} + \frac{1}{190095360z^3} \left(e^z (-128z^8 + 8640z^7 - 224224z^6 + 2862288z^5 - 19091160z^4 + 65155860z^3 - 102901050z^2 + 58437855z - 5160960) \right) + \frac{1}{380190720z^{5/2}} \left(\sqrt{\pi} (256z^8 - 17408z^7 + 456960z^6 - 5940480z^5 + 40840800z^4 - 147026880z^3 + 257297040z^2 - 183783600z + 34459425) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1037.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{7}{2}, 4; -z\right) = -\frac{3(85z^2 + 34z + 2)}{221z^3} + \frac{1}{190095360z^3} \left(e^{-z} (128z^8 + 8640z^7 + 224224z^6 + 2862288z^5 + 19091160z^4 + 65155860z^3 + 102901050z^2 + 58437855z + 5160960) \right) + \frac{1}{380190720z^{5/2}} \left(\sqrt{\pi} (256z^8 + 17408z^7 + 456960z^6 + 5940480z^5 + 40840800z^4 + 147026880z^3 + 257297040z^2 + 183783600z + 34459425) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1038.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{7}{2}, 5; z\right) = \frac{4(1615z^3 - 969z^2 + 114z + 6)}{4199z^4} + \frac{1}{451476480z^4} \left(e^z (-128z^9 + 9664z^8 - 284640z^7 + 4203472z^6 - 33300696z^5 + 140332500z^4 - 291538170z^3 + 246243375z^2 - 46448640z - 2580480) \right) + \frac{1}{902952960z^{5/2}} \left(\sqrt{\pi} (256z^8 - 19456z^7 + 578816z^6 - 8682240z^5 + 70543200z^4 - 310390080z^3 + 698377680z^2 - 698377680z + 218243025) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1039.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{7}{2}, 5; -z\right) = -\frac{4(1615z^3 + 969z^2 + 114z - 6)}{4199z^4} + \frac{1}{451476480z^4} \left(e^{-z} (128z^9 + 9664z^8 + 284640z^7 + 4203472z^6 + 33300696z^5 + 140332500z^4 + 291538170z^3 + 246243375z^2 + 46448640z - 2580480) \right) + \frac{1}{902952960z^{5/2}} \left(\sqrt{\pi} (256z^8 + 19456z^7 + 578816z^6 + 8682240z^5 + 70543200z^4 + 310390080z^3 + 698377680z^2 + 698377680z + 218243025) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1040.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{7}{2}, 6; z\right) = \frac{5(11305z^4 - 9044z^3 + 1596z^2 + 168z + 24)}{29393z^5} + \frac{1}{948100608z^5} \left(e^z (-128z^{10} + 10688z^9 - 352224z^8 + 5906640z^7 - 54187224z^6 + 271747476z^5 - 700020090z^4 + 786496095z^3 - 232243200z^2 - 23224320z - 3870720) \right) + \frac{1}{1896201216z^{5/2}} \left(\sqrt{\pi} (256z^8 - 21504z^7 + 715008z^6 - 12155136z^5 + 113954400z^4 - 592562880z^3 + 1629547920z^2 - 2095133040z + 916620705) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1041.01

$${}_2F_2\left(-\frac{11}{2}, 1; \frac{7}{2}, 6; -z\right) = -\frac{5(11305z^4 + 9044z^3 + 1596z^2 - 168z + 24)}{29393z^5} + \frac{1}{948100608z^5} \left(e^{-z} (128z^{10} + 10688z^9 + 352224z^8 + 5906640z^7 + 54187224z^6 + 271747476z^5 + 700020090z^4 + 786496095z^3 + 232243200z^2 - 23224320z + 3870720) \right) + \frac{1}{1896201216z^{5/2}} \left(\sqrt{\pi} (256z^8 + 21504z^7 + 715008z^6 + 12155136z^5 + 113954400z^4 + 592562880z^3 + 1629547920z^2 + 2095133040z + 916620705) \operatorname{erf}(\sqrt{z}) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = 4$

07.25.03.1042.01

$${}_2F_2\left(-\frac{11}{2}, 1; 4, 4; z\right) = \frac{6(255z^2 - 136z + 16)}{1105z^3} + \frac{1}{12692554875z^3} \left(32e^{z/2} (256z^9 - 18688z^8 + 533952z^7 - 7707840z^6 + 60669360z^5 - 262891440z^4 + 605403720z^3 - 679879080z^2 + 310134825z - 34459425) I_0\left(\frac{z}{2}\right) - \frac{1}{12692554875z^2} \left(32e^{z/2} (256z^8 - 18432z^7 + 515648z^6 - 7201152z^5 + 53708400z^4 - 212322240z^3 + 414123480z^2 - 335139120z + 71697105) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.1043.01

$${}_2F_2\left(-\frac{11}{2}, 1; 4, \frac{9}{2}; z\right) = \frac{7(51z^2 - 34z + 6)}{221z^3} + \frac{1}{977633280z^3} \left(e^z (-256z^8 + 19456z^7 - 577920z^6 + 8631168z^5 - 69463680z^4 + 299756160z^3 - 648232200z^2 + 595387800z - 151335135) \right) + \frac{1}{1955266560z^{7/2}} \left(\sqrt{\pi} (512z^9 - 39168z^8 + 1175040z^7 - 17821440z^6 + 147026880z^5 - 661620960z^4 + 1543782240z^3 - 1654052400z^2 + 620269650z - 34459425) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1044.01

$${}_2F_2\left(-\frac{11}{2}, 1; 4, \frac{9}{2}; -z\right) =$$

$$-\frac{7(51z^2 + 34z + 6)}{221z^3} + \frac{1}{977633280z^3} \left(e^{-z} (256z^8 + 19456z^7 + 577920z^6 + 8631168z^5 + 69463680z^4 + 299756160z^3 + 648232200z^2 + 595387800z + 151335135) + \frac{1}{1955266560z^{7/2}} \left(\sqrt{\pi} (512z^9 + 39168z^8 + 1175040z^7 + 17821440z^6 + 147026880z^5 + 661620960z^4 + 1543782240z^3 + 1654052400z^2 + 620269650z + 34459425) \operatorname{erf}(\sqrt{z}) \right) \right)$$

07.25.03.1045.01

$${}_2F_2\left(-\frac{11}{2}, 1; 4, 5; z\right) =$$

$$\frac{24(85z^2 - 68z + 16)}{1105z^3} + \frac{1}{241158542625z^3} \left(128e^{z/2} (512z^9 - 41728z^8 + 1348608z^7 - 22384320z^6 + 206871840z^5 - 1081907280z^4 + 3122658720z^3 - 4647440520z^2 + 3101348250z - 654729075) I_0\left(\frac{z}{2}\right) - \frac{1}{241158542625z^3} \left(128e^{z/2} (512z^9 - 41216z^8 + 1307648z^7 - 21096768z^6 + 186389280z^5 - 904880880z^4 + 2293460640z^3 - 2671512120z^2 + 1052110170z - 34459425) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.1046.01

$${}_2F_2\left(-\frac{11}{2}, 1; 4, \frac{11}{2}; z\right) =$$

$$\frac{9(255z^2 - 238z + 70)}{1105z^3} + \frac{1}{4345036800z^4} \left(e^z (-512z^9 + 43264z^8 - 1447424z^7 + 24756480z^6 - 233338560z^5 + 1217330400z^4 - 3342319200z^3 + 4246981200z^2 - 1811045250z + 34459425) + \frac{1}{8690073600z^{9/2}} \left(\sqrt{\pi} (1024z^{10} - 87040z^9 + 2937600z^8 - 50918400z^7 + 490089600z^6 - 2646483840z^5 + 7718911200z^4 - 11027016000z^3 + 6202696500z^2 - 689188500z - 34459425) \operatorname{erfi}(\sqrt{z}) \right) \right)$$

07.25.03.1047.01

$${}_2F_2\left(-\frac{11}{2}, 1; 4, \frac{11}{2}; -z\right) =$$

$$-\frac{9(255z^2 + 238z + 70)}{1105z^3} + \frac{1}{4345036800z^4} \left(e^{-z} (512z^9 + 43264z^8 + 1447424z^7 + 24756480z^6 + 233338560z^5 + 1217330400z^4 + 3342319200z^3 + 4246981200z^2 + 1811045250z + 34459425) + \frac{1}{8690073600z^{9/2}} \left(\sqrt{\pi} (1024z^{10} + 87040z^9 + 2937600z^8 + 50918400z^7 + 490089600z^6 + 2646483840z^5 + 7718911200z^4 + 11027016000z^3 + 6202696500z^2 + 689188500z - 34459425) \operatorname{erf}(\sqrt{z}) \right) \right)$$

07.25.03.1048.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; 4, 6; z\right) = & \frac{2(255z^2 - 272z + 96)}{221z^3} + \frac{1}{1012865879025z^3} \left(512e^{z/2}(256z^9 - 23040z^8 + 830976z^7 - 15590400z^6 + 165468240z^5 - \right. \\
 & \left. 1013876640z^4 + 3517844400z^3 - 6513726240z^2 + 5685805125z - 1722971250)I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{1012865879025z^4} \left(256e^{z/2}(512z^{10} - 45568z^9 + 1616640z^8 - 29586432z^7 + 302114400z^6 - \right. \right. \\
 & \left. \left. 1738951200z^5 + 5422702320z^4 - 8246397600z^3 + 4748241330z^2 - 344594250z - 34459425)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = \frac{9}{2}$

07.25.03.1049.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; \frac{9}{2}, 5; z\right) = & \frac{28(323z^3 - 323z^2 + 114z - 6)}{4199z^4} + \frac{1}{2321879040z^4} \left(e^z(-256z^9 + 21760z^8 - 733440z^7 + 12667200z^6 - \right. \\
 & \left. 120984864z^5 + 643397040z^4 - 1821037680z^3 + 2447606700z^2 - 1203216525z + 92897280)\right) + \\
 & \frac{1}{4643758080z^{7/2}} \left(\sqrt{\pi}(512z^9 - 43776z^8 + 1488384z^7 - 26046720z^6 + 25395520z^5 - 139675360z^4 + \right. \\
 & \left. 4190266080z^3 - 6285399120z^2 + 3928374450z - 654729075)\operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

07.25.03.1050.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; \frac{9}{2}, 5; -z\right) = & -\frac{28(323z^3 + 323z^2 + 114z + 6)}{4199z^4} + \frac{1}{2321879040z^4} \left(e^{-z}(256z^9 + 21760z^8 + 733440z^7 + 12667200z^6 + \right. \\
 & \left. 120984864z^5 + 643397040z^4 + 1821037680z^3 + 2447606700z^2 + 1203216525z + 92897280)\right) + \\
 & \frac{1}{4643758080z^{7/2}} \left(\sqrt{\pi}(512z^9 + 43776z^8 + 1488384z^7 + 26046720z^6 + 25395520z^5 + 139675360z^4 + \right. \\
 & \left. 4190266080z^3 + 6285399120z^2 + 3928374450z + 654729075)\operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

07.25.03.1051.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; \frac{9}{2}, 6; z\right) = & \frac{5(6783z^4 - 9044z^3 + 4788z^2 - 504z - 24)}{12597z^5} + \\
 & \frac{1}{4875945984z^5} \left(e^z(-256z^{10} + 24064z^9 - 907392z^8 + 17790720z^7 - 196647360z^6 + 1242809568z^5 - \right. \\
 & \left. 4347022680z^4 + 7695293760z^3 - 5635597275z^2 + 928972800z + 46448640)\right) + \\
 & \frac{1}{9751891968z^{7/2}} \left(\sqrt{\pi}(512z^9 - 48384z^8 + 1838592z^7 - 36465408z^6 + 410235840z^5 - 2666532960z^4 + \right. \\
 & \left. 9777287520z^3 - 18856197360z^2 + 16499172690z - 4583103525)\operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

07.25.03.1052.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; \frac{9}{2}, 6; -z\right) &= -\frac{5(6783z^4 + 9044z^3 + 4788z^2 + 504z - 24)}{12597z^5} + \\
 &\frac{1}{4875945984z^5} (e^{-z}(256z^{10} + 24064z^9 + 907392z^8 + 17790720z^7 + 196647360z^6 + 1242809568z^5 + \\
 &4347022680z^4 + 7695293760z^3 + 5635597275z^2 + 928972800z - 46448640)) + \\
 &\frac{1}{9751891968z^{7/2}} (\sqrt{\pi}(512z^9 + 48384z^8 + 1838592z^7 + 36465408z^6 + 410235840z^5 + 2666532960z^4 + \\
 &9777287520z^3 + 18856197360z^2 + 16499172690z + 4583103525) \operatorname{erf}(\sqrt{z}))
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = 5$

07.25.03.1053.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; 5, 5; z\right) &= \frac{32(1615z^3 - 1938z^2 + 912z - 96)}{20995z^4} + \\
 &\frac{1}{4582012309875z^4} (1024e^{z/2}(512z^{10} - 46592z^9 + 1703680z^8 - 32529408z^7 + 353320800z^6 - 2234625120z^5 + \\
 &8117596080z^4 - 16150111200z^3 + 16019050770z^2 - 6547290750z + 654729075) I_0\left(\frac{z}{2}\right) - \\
 &\frac{1}{4582012309875z^3} (2048e^{z/2}(256z^9 - 23040z^8 + 828928z^7 - 15447040z^6 + 161605584z^5 - \\
 &962670240z^4 + 3163791600z^3 - 5269929120z^2 + 3709876725z - 698352210) I_1\left(\frac{z}{2}\right))
 \end{aligned}$$

07.25.03.1054.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; 5, \frac{11}{2}; z\right) &= \\
 &\frac{36(1615z^3 - 2261z^2 + 1330z - 210)}{20995z^4} + \frac{1}{10319462400z^4} (e^z(-512z^9 + 48384z^8 - 1836544z^7 + 36314880z^6 - \\
 &405961920z^5 + 2606604000z^4 - 9337442400z^3 + 17211625200z^2 - 13718801250z + 3061162125)) + \\
 &\frac{1}{20638924800z^{9/2}} (\sqrt{\pi}(1024z^{10} - 97280z^9 + 3720960z^8 - 74419200z^7 + 846518400z^6 - 5587021440z^5 + \\
 &20951330400z^4 - 41902660800z^3 + 39283744500z^2 - 13094581500z + 654729075) \operatorname{erfi}(\sqrt{z}))
 \end{aligned}$$

07.25.03.1055.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; 5, \frac{11}{2}; -z\right) &= \\
 &-\frac{36(1615z^3 + 2261z^2 + 1330z + 210)}{20995z^4} + \frac{1}{10319462400z^4} (e^{-z}(512z^9 + 48384z^8 + 1836544z^7 + 36314880z^6 + \\
 &405961920z^5 + 2606604000z^4 + 9337442400z^3 + 17211625200z^2 + 13718801250z + 3061162125)) + \\
 &\frac{1}{20638924800z^{9/2}} (\sqrt{\pi}(1024z^{10} + 97280z^9 + 3720960z^8 + 74419200z^7 + 846518400z^6 + 5587021440z^5 + \\
 &20951330400z^4 + 41902660800z^3 + 39283744500z^2 + 13094581500z + 654729075) \operatorname{erf}(\sqrt{z}))
 \end{aligned}$$

07.25.03.1056.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; 5, 6; z\right) &= \frac{8(1615z^3 - 2584z^2 + 1824z - 384)}{4199z^4} + \\
 &\frac{1}{19244451701475z^4} \left(1024e^{z/2}(1024z^{10} - 102912z^9 + 4200192z^8 - 90682368z^7 + 1131943680z^6 - 8399815200z^5 + \right. \\
 &\quad \left. 36791430480z^4 - 91630738080z^3 + 120339471420z^2 - 72020198250z + 13749310575) I_0\left(\frac{z}{2}\right) - \right. \\
 &\frac{1}{19244451701475z^4} \left(1024e^{z/2}(1024z^{10} - 101888z^9 + 4098816z^8 - 86633472z^7 + 1047260928z^6 - 7392077280z^5 + \right. \\
 &\quad \left. 29847903120z^4 - 64655468640z^3 + 65598237180z^2 - 22783502070z + 654729075) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = \frac{11}{2}$

07.25.03.1057.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; \frac{11}{2}, 6; z\right) &= \frac{3(4845z^4 - 9044z^3 + 7980z^2 - 2520z + 120)}{4199z^5} + \\
 &\frac{1}{21670871040z^5} \left(e^z(-512z^{10} + 53504z^9 - 2271744z^8 + 50983680z^7 - 659305920z^6 + 5026301280z^5 - \right. \\
 &\quad \left. 22205383200z^4 + 53632378800z^3 - 62670935250z^2 + 27125492625z - 1857945600) + \right. \\
 &\frac{1}{43341742080z^{9/2}} \left(\sqrt{\pi}(1024z^{10} - 107520z^9 + 4596480z^8 - 104186880z^7 + 1367452800z^6 - 10666131840z^5 + \right. \\
 &\quad \left. 48886437600z^4 - 125707982400z^3 + 164991726900z^2 - 91662070500z + 13749310575) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.1058.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; \frac{11}{2}, 6; -z\right) &= -\frac{3(4845z^4 + 9044z^3 + 7980z^2 + 2520z + 120)}{4199z^5} + \\
 &\frac{1}{21670871040z^5} \left(e^{-z}(512z^{10} + 53504z^9 + 2271744z^8 + 50983680z^7 + 659305920z^6 + 5026301280z^5 + \right. \\
 &\quad \left. 22205383200z^4 + 53632378800z^3 + 62670935250z^2 + 27125492625z + 1857945600) + \right. \\
 &\frac{1}{43341742080z^{9/2}} \left(\sqrt{\pi}(1024z^{10} + 107520z^9 + 4596480z^8 + 104186880z^7 + 1367452800z^6 + 10666131840z^5 + \right. \\
 &\quad \left. 48886437600z^4 + 125707982400z^3 + 164991726900z^2 + 91662070500z + 13749310575) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 1$, $b_1 = 6$

07.25.03.1059.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 1; 6, 6; z\right) &= \frac{10(33\,915 z^4 - 72\,352 z^3 + 76\,608 z^2 - 32\,256 z + 3072)}{88\,179 z^5} + \\
 &\frac{1}{80\,826\,697\,146\,195 z^5} \left(2048 e^{z/2} (1024 z^{11} - 113\,664 z^{10} + 5\,178\,624 z^9 - 126\,459\,648 z^8 + \right. \\
 &1\,815\,061\,248 z^7 - 15\,819\,552\,000 z^6 + 83\,718\,558\,000 z^5 - 262\,100\,255\,760 z^4 + 459\,491\,806\,620 z^3 - \\
 &408\,420\,264\,420 z^2 + 151\,242\,416\,325 z - 13\,749\,310\,575) I_0\left(\frac{z}{2}\right) - \frac{1}{80\,826\,697\,146\,195 z^4} \\
 &\left. (2048 e^{z/2} (1024 z^{10} - 112\,640 z^9 + 5\,066\,496 z^8 - 121\,448\,448 z^7 + 1\,696\,036\,608 z^6 - 14\,179\,511\,808 z^5 + \right. \\
 &70\,280\,053\,200 z^4 - 197\,534\,715\,840 z^3 + 286\,935\,260\,220 z^2 - 178\,598\,324\,520 z + 29\,985\,521\,895) I_1\left(\frac{z}{2}\right) \Big)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{3}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.1060.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13\,230 z + 10\,395)}{10\,395}$$

07.25.03.1061.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)$$

07.25.03.1062.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{105} e^z (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105)$$

07.25.03.1063.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{15} e^z (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15)$$

07.25.03.1064.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (8 z^3 + 12 z^2 - 6 z + 3)$$

07.25.03.1065.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -e^z (4 z^2 + 4 z - 1)$$

07.25.03.1066.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = e^z (2 z + 1)$$

07.25.03.1067.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, 1; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.1068.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = e^z$$

07.25.03.1069.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.1070.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{3 e^z}{2z} - \frac{3\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.1071.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3 e^{-z}}{2z}$$

07.25.03.1072.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.1073.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{45 e^z}{8z^2} - \frac{15\sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.1074.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{15\sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45 e^{-z}}{8z^2}$$

07.25.03.1075.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (z+4) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.1076.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{105 e^z (2z+15)}{64z^3} - \frac{105\sqrt{\pi} (4z^2+12z+15) \operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.1077.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (2z-15)}{64z^3} + \frac{105\sqrt{\pi} (4z^2-12z+15) \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.1078.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (z^2+4z+12) I_1\left(\frac{z}{2}\right)}{5z^3} - \frac{32 e^{z/2} (z+3) I_0\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.1079.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{315 e^z (4z^2+20z+105)}{256z^4} - \frac{315\sqrt{\pi} (8z^3+36z^2+90z+105) \operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.1080.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2 - 20z + 105)}{256 z^4} + \frac{315 \sqrt{\pi} (8z^3 - 36z^2 + 90z - 105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.1081.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^3 + 11z^2 + 36z + 96) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{32 e^{z/2} (2z^2 + 9z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.1082.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{32768 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{19845} + \frac{e^z (-25376 z^5 + 9488 z^4 - 13488 z^3 + 21720 z^2 - 27930 z + 19845)}{19845}$$

07.25.03.1083.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{32768 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{19845} + \frac{e^{-z} (25376 z^5 + 9488 z^4 + 13488 z^3 + 21720 z^2 + 27930 z + 19845)}{19845}$$

07.25.03.1084.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{e^z (16384 z^5 + 4496 z^4 - 2496 z^3 + 3000 z^2 - 3360 z + 2205)}{2205} - \frac{16384 \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})}{2205}$$

07.25.03.1085.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{e^{-z} (-16384 z^5 + 4496 z^4 + 2496 z^3 + 3000 z^2 + 3360 z + 2205)}{2205} - \frac{16384 \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})}{2205}$$

07.25.03.1086.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{4096}{315} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2} + \frac{1}{315} e^z (-4096 z^5 - 2048 z^4 - 1224 z^3 + 636 z^2 - 546 z + 315)$$

07.25.03.1087.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{4096}{315} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2} + \frac{1}{315} e^{-z} (4096 z^5 - 2048 z^4 + 1224 z^3 + 636 z^2 + 546 z + 315)$$

07.25.03.1088.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{189} e^z (2048 z^5 + 1024 z^4 + 1536 z^3 + 1068 z^2 - 420 z + 189) - \frac{2048}{189} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1089.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{189} e^{-z} (-2048 z^5 + 1024 z^4 - 1536 z^3 + 1068 z^2 + 420 z + 189) - \frac{2048}{189} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1090.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{256}{63} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2} + \frac{1}{63} e^z (-256 z^5 - 128 z^4 - 192 z^3 - 480 z^2 - 294 z + 63)$$

07.25.03.1091.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{256}{63} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2} + \frac{1}{63} e^{-z} (256 z^5 - 128 z^4 + 192 z^3 - 480 z^2 + 294 z + 63)$$

07.25.03.1092.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{315} e^z (128 z^5 + 64 z^4 + 96 z^3 + 240 z^2 + 840 z + 315) - \frac{128}{315} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1093.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} e^{-z} (-128 z^5 + 64 z^4 - 96 z^3 + 240 z^2 - 840 z + 315) - \frac{128}{315} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1094.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (-32768 z^6 + 24576 z^5 + 15360 z^4 + 26880 z^3 + 75600 z^2 + 291060 z + 218295) I_0\left(\frac{z}{2}\right)}{218295} + \frac{4 e^{z/2} (8192 z^6 + 2048 z^5 + 2304 z^4 + 4800 z^3 + 14700 z^2 + 59535 z) I_1\left(\frac{z}{2}\right)}{218295}$$

07.25.03.1095.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1096.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1097.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (-65536 z^6 + 49152 z^5 + 30720 z^4 + 53760 z^3 + 151200 z^2 + 582120 z + 2837835) I_0\left(\frac{z}{2}\right)}{2837835} + \frac{e^{z/2} (65536 z^6 + 16384 z^5 + 18432 z^4 + 38400 z^3 + 117600 z^2 + 476280 z + 2401245) I_1\left(\frac{z}{2}\right)}{2837835}$$

07.25.03.1098.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 + 1890 z + 10395)}{8820 z} + \frac{\sqrt{\pi} (-128 z^7 - 10395) \operatorname{erfi}(\sqrt{z})}{17640 z^{3/2}}$$

07.25.03.1099.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-64 z^6 + 32 z^5 - 48 z^4 + 120 z^3 - 420 z^2 + 1890 z - 10395)}{8820 z} + \frac{\sqrt{\pi} (10395 - 128 z^7) \operatorname{erf}(\sqrt{z})}{17640 z^{3/2}}$$

07.25.03.1100.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, 3; z\right) = \frac{1}{42567525 z} 4 e^{z/2} (65536 z^7 + 16384 z^6 + 18432 z^5 + 38400 z^4 + 117600 z^3 + 476280 z^2 + 2401245 z + 31216185) I_1\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (65536 z^6 - 49152 z^5 - 30720 z^4 - 53760 z^3 - 151200 z^2 - 582120 z - 2837835) I_0\left(\frac{z}{2}\right)}{42567525}$$

07.25.03.1101.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (128 z^7 + 64 z^6 + 96 z^5 + 240 z^4 + 840 z^3 + 3780 z^2 + 20790 z + 218295)}{56448 z^2} + \frac{\sqrt{\pi} (-256 z^8 - 166320 z - 218295) \operatorname{erfi}(\sqrt{z})}{112896 z^{5/2}}$$

$$\begin{aligned}
 & \text{07.25.03.1102.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) &= \frac{e^{-z}(-128z^7 + 64z^6 - 96z^5 + 240z^4 - 840z^3 + 3780z^2 - 20790z + 218295)}{56448z^2} + \\
 & \frac{\sqrt{\pi}(-256z^8 + 166320z - 218295)\operatorname{erf}(\sqrt{z})}{112896z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1103.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, 4; z\right) &= \\
 & \frac{1}{241215975z^2} \left(4e^{z/2}(131072z^8 + 32768z^7 + 36864z^6 + 76800z^5 + 235200z^4 + 952560z^3 + 4802490z^2 + \right. \\
 & \left. 218513295z + 624323700)I_1\left(\frac{z}{2}\right) - \frac{1}{241215975z} \right. \\
 & \left. 4e^{z/2}(131072z^7 - 98304z^6 - 61440z^5 - 107520z^4 - 302400z^3 - 1164240z^2 - 5675670z + 156080925)I_0\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1104.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) &= \frac{e^z(128z^8 + 64z^7 + 96z^6 + 240z^5 + 840z^4 + 3780z^3 + 20790z^2 + 509355z + 2182950)}{145152z^3} + \\
 & \frac{\sqrt{\pi}(-256z^9 - 748440z^2 - 1964655z - 2182950)\operatorname{erfi}(\sqrt{z})}{290304z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1105.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) &= \frac{e^{-z}(-128z^8 + 64z^7 - 96z^6 + 240z^5 - 840z^4 + 3780z^3 - 20790z^2 + 509355z - 2182950)}{145152z^3} + \\
 & \frac{\sqrt{\pi}(-256z^9 + 748440z^2 - 1964655z + 2182950)\operatorname{erf}(\sqrt{z})}{290304z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1106.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, 5; z\right) &= \\
 & \frac{1}{4583103525z^3} \left(64e^{z/2}(65536z^9 + 16384z^8 + 18432z^7 + 38400z^6 + 117600z^5 + 476280z^4 + 2401245z^3 + \right. \\
 & \left. 374594220z^2 + 1373512140z + 3184050870)I_1\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{4583103525z^2} \left(32e^{z/2}(131072z^8 - 98304z^7 - 61440z^6 - 107520z^5 - 302400z^4 - \right. \right. \\
 & \left. \left. 1164240z^3 - 5675670z^2 + 686756070z + 1592025435)I_0\left(\frac{z}{2}\right)\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1107.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{322560 z^4} e^z (128 z^9 + 64 z^8 + 96 z^7 + 240 z^6 + 840 z^5 + 3780 z^4 + 20790 z^3 + 1382535 z^2 + 6548850 z + 22920975) + \\
 & \frac{\sqrt{\pi} (-256 z^{10} - 2494800 z^3 - 9823275 z^2 - 21829500 z - 22920975) \operatorname{erfi}(\sqrt{z})}{645120 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1108.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{322560 z^4} e^{-z} (-128 z^9 + 64 z^8 - 96 z^7 + 240 z^6 - 840 z^5 + 3780 z^4 - 20790 z^3 + 1382535 z^2 - 6548850 z + 22920975) + \\
 & \frac{\sqrt{\pi} (-256 z^{10} + 2494800 z^3 - 9823275 z^2 + 21829500 z - 22920975) \operatorname{erf}(\sqrt{z})}{645120 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1109.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{9}{2}, 6; z\right) = \\
 & \frac{1}{19249034805 z^4} \left(32 e^{z/2} (262144 z^{10} + 65536 z^9 + 73728 z^8 + 153600 z^7 + 470400 z^6 + 1905120 z^5 + \right. \\
 & \quad \left. 9604980 z^4 + 4379184810 z^3 + 21338492175 z^2 + 64590746220 z + 138278780640) I_1\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{19249034805 z^3} \left(32 e^{z/2} (262144 z^9 - 196608 z^8 - 122880 z^7 - 215040 z^6 - 604800 z^5 - 2328480 z^4 - \right. \right. \\
 & \quad \left. \left. 11351340 z^3 + 425432070 z^2 + 16147686555 z + 34569695160) I_0\left(\frac{z}{2}\right)\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.1110.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{735} e^z (-24576 z^5 + 10240 z^4 - 1624 z^3 + 1308 z^2 - 1230 z + 735) + \frac{2048}{735} \sqrt{\pi} (12 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1111.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \\
 & \frac{1}{735} e^{-z} (24576 z^5 + 10240 z^4 + 1624 z^3 + 1308 z^2 + 1230 z + 735) + \frac{2048}{735} \sqrt{\pi} (12 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1112.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{105} e^z (6144 z^5 - 8192 z^4 - 1024 z^3 + 300 z^2 - 204 z + 105) - \frac{1024}{105} \sqrt{\pi} (6 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.1113.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{105} e^{-z} (-6144 z^5 - 8192 z^4 + 1024 z^3 + 300 z^2 + 204 z + 105) - \frac{1024}{105} \sqrt{\pi} (6 z^{11/2} + 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1114.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{21} e^z (-1024 z^5 + 2304 z^4 + 640 z^3 + 192 z^2 - 54 z + 21) + \frac{256}{21} \sqrt{\pi} (4 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1115.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{21} e^{-z} (1024 z^5 + 2304 z^4 - 640 z^3 + 192 z^2 + 54 z + 21) + \frac{256}{21} \sqrt{\pi} (4 z^{11/2} + 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1116.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{21} e^z (384 z^5 - 1216 z^4 - 416 z^3 - 336 z^2 - 120 z + 21) - \frac{128}{21} \sqrt{\pi} (3 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1117.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{21} e^{-z} (-384 z^5 - 1216 z^4 + 416 z^3 - 336 z^2 + 120 z + 21) - \frac{128}{21} \sqrt{\pi} (3 z^{11/2} + 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1118.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (-192 z^5 + 784 z^4 + 296 z^3 + 300 z^2 + 390 z + 105) + \frac{16}{105} \sqrt{\pi} (12 z^{11/2} - 55 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1119.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} e^{-z} (192 z^5 + 784 z^4 - 296 z^3 + 300 z^2 - 390 z + 105) + \frac{16}{105} \sqrt{\pi} (12 z^{11/2} + 55 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1120.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (49 152 z^6 - 284 672 z^5 + 162 816 z^4 + 75 840 z^3 + 89 880 z^2 + 135 135 z + 72 765) I_0\left(\frac{z}{2}\right) + e^{z/2} (-49 152 z^6 + 235 520 z^5 + 48 128 z^4 + 40 896 z^3 + 57 000 z^2 + 87 465 z) I_1\left(\frac{z}{2}\right)}{72 765}$$

07.25.03.1121.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{8}{105} \sqrt{\pi} (2z - 11) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^z (-16 z^5 + 80 z^4 + 32 z^3 + 36 z^2 + 60 z + 105)$$

07.25.03.1122.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{8}{105} \sqrt{\pi} (2z + 11) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105)$$

07.25.03.1123.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (98 304 z^6 - 659 456 z^5 + 393 216 z^4 + 193 920 z^3 + 253 680 z^2 + 478 170 z + 945 945) I_0\left(\frac{z}{2}\right) + e^{z/2} (-98 304 z^6 + 561 152 z^5 + 118 784 z^4 + 107 136 z^3 + 166 800 z^2 + 336 630 z + 654 885) I_1\left(\frac{z}{2}\right)}{945 945}$$

07.25.03.1124.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (-384 z^6 + 2272 z^5 + 944 z^4 + 1128 z^3 + 2100 z^2 + 4830 z + 10395)}{11760 z} + \frac{\sqrt{\pi} (768 z^7 - 4928 z^6 - 10395) \operatorname{erfi}(\sqrt{z})}{23520 z^{3/2}}$$

07.25.03.1125.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (384 z^6 + 2272 z^5 - 944 z^4 + 1128 z^3 - 2100 z^2 + 4830 z - 10395)}{11760 z} + \frac{\sqrt{\pi} (768 z^7 + 4928 z^6 + 10395) \operatorname{erf}(\sqrt{z})}{23520 z^{3/2}}$$

07.25.03.1126.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, 3; z\right) = \frac{8 e^{z/2} (16384 z^6 - 124928 z^5 + 76800 z^4 + 39360 z^3 + 54600 z^2 + 114345 z + 291060) I_0\left(\frac{z}{2}\right)}{4729725} - \frac{1}{4729725 z} 4 e^{z/2} (32768 z^7 - 217088 z^6 - 47104 z^5 - 44160 z^4 - 73200 z^3 - 166110 z^2 - 436590 z - 2401245) I_1\left(\frac{z}{2}\right)$$

07.25.03.1127.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (-384 z^7 + 2624 z^6 + 1120 z^5 + 1392 z^4 + 2760 z^3 + 7140 z^2 + 20790 z + 93555)}{37632 z^2} + \frac{\sqrt{\pi} (768 z^8 - 5632 z^7 - 83160 z - 93555) \operatorname{erfi}(\sqrt{z})}{75264 z^{5/2}}$$

07.25.03.1128.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (384 z^7 + 2624 z^6 - 1120 z^5 + 1392 z^4 - 2760 z^3 + 7140 z^2 - 20790 z + 93555)}{37632 z^2} + \frac{\sqrt{\pi} (768 z^8 + 5632 z^7 + 83160 z - 93555) \operatorname{erf}(\sqrt{z})}{75264 z^{5/2}}$$

07.25.03.1129.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{80405325 z} 4 e^{z/2} (196608 z^7 - 1679360 z^6 + 1056768 z^5 + 556800 z^4 + 803040 z^3 + 1787940 z^2 + 5093550 z - 31216185) I_0\left(\frac{z}{2}\right) - \frac{1}{80405325 z^2} \left(4 e^{z/2} (196608 z^8 - 1482752 z^7 - 327680 z^6 - 315648 z^5 - 544800 z^4 - 1320060 z^3 - 3929310 z^2 - 60031125 z - 124864740) I_1\left(\frac{z}{2}\right)\right)$$

$$\begin{aligned}
 & \text{07.25.03.1130.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \\
 & \frac{e^z (-512 z^8 + 3968 z^7 + 1728 z^6 + 2208 z^5 + 4560 z^4 + 12600 z^3 + 41580 z^2 + 395010 z + 1091475)}{129024 z^3} + \\
 & \frac{\sqrt{\pi} (1024 z^9 - 8448 z^8 - 498960 z^2 - 1122660 z - 1091475) \operatorname{erfi}(\sqrt{z})}{258048 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1131.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{e^{-z} (512 z^8 + 3968 z^7 - 1728 z^6 + 2208 z^5 - 4560 z^4 + 12600 z^3 - 41580 z^2 + 395010 z - 1091475)}{129024 z^3} + \\
 & \frac{\sqrt{\pi} (1024 z^9 + 8448 z^8 + 498960 z^2 - 1122660 z + 1091475) \operatorname{erf}(\sqrt{z})}{258048 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1132.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, 5; z\right) = \\
 & \frac{1}{1527701175 z^2} \left(32 e^{z/2} (196608 z^8 - 1859584 z^7 + 1191936 z^6 + 641280 z^5 + 950880 z^4 + 2203740 z^3 + \right. \\
 & \quad \left. 6694380 z^2 - 156080925 z - 280945665) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{1527701175 z^3} \left(32 e^{z/2} (196608 z^9 - 1662976 z^8 - 372736 z^7 - 366336 z^6 - 650400 z^5 - \right. \\
 & \quad \left. 1643460 z^4 - 5239080 z^3 - 199303335 z^2 - 624323700 z - 1123782660) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1133.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{430080 z^4} \\
 & \frac{e^z (-768 z^9 + 6656 z^8 + 2944 z^7 + 3840 z^6 + 8160 z^5 + 23520 z^4 + 83160 z^3 + 1580040 z^2 + 6185025 z + 15280650) +}{860160 z^{9/2}} \\
 & \frac{\sqrt{\pi} (1536 z^{10} - 14080 z^9 - 2494800 z^3 - 8419950 z^2 - 16372125 z - 15280650) \operatorname{erfi}(\sqrt{z})}{860160 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1134.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{430080 z^4} \\
 & \frac{e^{-z} (768 z^9 + 6656 z^8 - 2944 z^7 + 3840 z^6 - 8160 z^5 + 23520 z^4 - 83160 z^3 + 1580040 z^2 - 6185025 z + 15280650) +}{860160 z^{9/2}} \\
 & \frac{\sqrt{\pi} (1536 z^{10} + 14080 z^9 + 2494800 z^3 - 8419950 z^2 + 16372125 z - 15280650) \operatorname{erf}(\sqrt{z})}{860160 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1135.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{7}{2}, 6; z\right) = \\
 & \frac{1}{2\,138\,781\,645\,z^3} \left(32 e^{z/2} (131\,072 z^9 - 1\,359\,872 z^8 + 884\,736 z^7 + 483\,840 z^6 + 732\,480 z^5 + 1\,746\,360 z^4 + \right. \\
 & \quad \left. 5\,530\,140 z^3 - 338\,918\,580 z^2 - 1\,056\,890\,835 z - 1\,819\,457\,640) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{2\,138\,781\,645\,z^4} \left(32 e^{z/2} (131\,072 z^{10} - 1\,228\,800 z^9 - 278\,528 z^8 - 278\,016 z^7 - 504\,000 z^6 - 1\,311\,240 z^5 - \right. \right. \\
 & \quad \left. \left. 4\,365\,900 z^4 - 377\,338\,500 z^3 - 1\,583\,106\,525 z^2 - 4\,227\,563\,340 z - 7\,277\,830\,560) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.1136.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{75} e^z (-7680 z^5 + 24\,320 z^4 - 4352 z^3 + 384 z^2 - 174 z + 75) + \frac{128}{75} \sqrt{\pi} (60 z^{11/2} - 220 z^{9/2} + 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1137.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \\
 & \frac{1}{75} e^{-z} (7680 z^5 + 24\,320 z^4 + 4352 z^3 + 384 z^2 + 174 z + 75) + \frac{128}{75} \sqrt{\pi} (60 z^{11/2} + 220 z^{9/2} + 99 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1138.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{15} e^z (1280 z^5 - 6400 z^4 + 3776 z^3 + 288 z^2 - 48 z + 15) - \frac{64}{15} \sqrt{\pi} (20 z^{11/2} - 110 z^{9/2} + 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1139.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \\
 & \frac{1}{15} e^{-z} (-1280 z^5 - 6400 z^4 - 3776 z^3 + 288 z^2 + 48 z + 15) - \frac{64}{15} \sqrt{\pi} (20 z^{11/2} + 110 z^{9/2} + 99 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1140.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{15} e^z (-480 z^5 + 3280 z^4 - 3352 z^3 - 636 z^2 - 114 z + 15) + \frac{16}{15} \sqrt{\pi} (30 z^{11/2} - 220 z^{9/2} + 297 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1141.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \\
 & \frac{1}{15} e^{-z} (480 z^5 + 3280 z^4 + 3352 z^3 - 636 z^2 + 114 z + 15) + \frac{16}{15} \sqrt{\pi} (30 z^{11/2} + 220 z^{9/2} + 297 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.1142.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (48 z^5 - 416 z^4 + 608 z^3 + 156 z^2 + 84 z + 15) - \frac{8}{15} \sqrt{\pi} (6 z^{11/2} - 55 z^{9/2} + 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1143.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-48 z^5 - 416 z^4 - 608 z^3 + 156 z^2 - 84 z + 15) - \frac{8}{15} \sqrt{\pi} (6 z^{11/2} + 55 z^{9/2} + 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1144.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (-61\,440 z^6 + 665\,600 z^5 - 1\,690\,368 z^4 + 700\,896 z^3 + 221\,610 z^2 + 145\,530 z + 51\,975) I_0\left(\frac{z}{2}\right) + 2 e^{z/2} (30\,720 z^6 - 302\,080 z^5 + 558\,464 z^4 + 87\,696 z^3 + 50\,043 z^2 + 34\,950 z) I_1\left(\frac{z}{2}\right)}{51\,975}$$

07.25.03.1145.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} + 44 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1146.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} - 44 z^{9/2} - 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1147.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{675\,675} e^{z/2} (-122\,880 z^6 + 1\,556\,480 z^5 - 4\,664\,832 z^4 + 2\,132\,544 z^3 + 781\,140 z^2 + 686\,070 z + 675\,675) I_0\left(\frac{z}{2}\right) + \frac{1}{675\,675} e^{z/2} (122\,880 z^6 - 1\,433\,600 z^5 + 3\,292\,672 z^4 + 566\,208 z^3 + 381\,804 z^2 + 388\,950 z + 363\,825) I_1\left(\frac{z}{2}\right)$$

07.25.03.1148.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (960 z^6 - 11\,840 z^5 + 27\,824 z^4 + 9192 z^3 + 8148 z^2 + 9870 z + 10\,395)}{16\,800 z} + \frac{\sqrt{\pi} (-1920 z^7 + 24\,640 z^6 - 66\,528 z^5 - 10\,395) \operatorname{erfi}(\sqrt{z})}{33\,600 z^{3/2}}$$

07.25.03.1149.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-960 z^6 - 11\,840 z^5 - 27\,824 z^4 + 9192 z^3 - 8148 z^2 + 9870 z - 10\,395)}{16\,800 z} + \frac{\sqrt{\pi} (-1920 z^7 - 24\,640 z^6 - 66\,528 z^5 + 10\,395) \operatorname{erf}(\sqrt{z})}{33\,600 z^{3/2}}$$

07.25.03.1150.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, 3; z\right) = \frac{1}{675675z} 4 e^{z/2} (8192 z^7 - 110592 z^6 + 303616 z^5 + 55488 z^4 + 41364 z^3 + 50460 z^2 + 72765 z + 218295) I_1\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8192 z^6 - 118784 z^5 + 410112 z^4 - 201024 z^3 - 80940 z^2 - 83160 z - 114345) I_0\left(\frac{z}{2}\right)}{675675}$$

07.25.03.1151.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (1920 z^7 - 27200 z^6 + 76064 z^5 + 26832 z^4 + 26328 z^3 + 38220 z^2 + 62370 z + 155925)}{107520 z^2} + \frac{\sqrt{\pi} (-3840 z^8 + 56320 z^7 - 177408 z^6 - 166320 z - 155925) \operatorname{erfi}(\sqrt{z})}{215040 z^{5/2}}$$

07.25.03.1152.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-1920 z^7 - 27200 z^6 - 76064 z^5 + 26832 z^4 - 26328 z^3 + 38220 z^2 - 62370 z + 155925)}{107520 z^2} + \frac{\sqrt{\pi} (-3840 z^8 - 56320 z^7 - 177408 z^6 + 166320 z - 155925) \operatorname{erf}(\sqrt{z})}{215040 z^{5/2}}$$

07.25.03.1153.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, 4; z\right) = \frac{1}{11486475 z^2} \left(4 e^{z/2} (49152 z^8 - 753664 z^7 + 2407424 z^6 + 459648 z^5 + 366456 z^4 + 497460 z^3 + 873180 z^2 + 6330555 z + 9604980) I_1\left(\frac{z}{2}\right) - \frac{1}{11486475 z} 4 e^{z/2} (49152 z^7 - 802816 z^6 + 3136512 z^5 - 1620096 z^4 - 696840 z^3 - 790020 z^2 - 1288980 z + 2401245) I_0\left(\frac{z}{2}\right) \right)$$

07.25.03.1154.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{184320 z^3} e^z (1280 z^8 - 20480 z^7 + 66432 z^6 + 24576 z^5 + 25824 z^4 + 41760 z^3 + 83160 z^2 + 415800 z + 779625) + \frac{\sqrt{\pi} (-2560 z^9 + 42240 z^8 - 152064 z^7 - 498960 z^2 - 935550 z - 779625) \operatorname{erfi}(\sqrt{z})}{368640 z^{7/2}}$$

07.25.03.1155.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{184320 z^3} e^{-z} (-1280 z^8 - 20480 z^7 - 66432 z^6 + 24576 z^5 - 25824 z^4 + 41760 z^3 - 83160 z^2 + 415800 z - 779625) + \frac{\sqrt{\pi} (-2560 z^9 - 42240 z^8 - 152064 z^7 + 498960 z^2 - 935550 z + 779625) \operatorname{erf}(\sqrt{z})}{368640 z^{7/2}}$$

$$\begin{aligned}
 & \text{07.25.03.1156.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, 5; z\right) = \\
 & \frac{1}{1091215125z^3} \left(128 e^{z/2} (61440z^9 - 1054720z^8 + 3842816z^7 + 758304z^6 + 634422z^5 + 924600z^4 + \right. \\
 & \quad \left. 1819125z^3 + 26631990z^2 + 67234860z + 93648555) I_1\left(\frac{z}{2}\right)\right) - \\
 & \frac{1}{1091215125z^2} \left(32 e^{z/2} (245760z^8 - 4464640z^7 + 19467264z^6 - 10474368z^5 - 4730280z^4 - \right. \\
 & \quad \left. 5738040z^3 - 10395000z^2 + 67234860z + 93648555) I_0\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1157.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{491520z^4} (e^z (1536z^9 - 27392z^8 + 101120z^7 + 38784z^6 + 42816z^5 + 74400z^4 + 166320z^3 + 1413720z^2 + \\
 & \quad 4261950z + 7640325)) + \\
 & \frac{1}{983040z^{9/2}} \sqrt{\pi} (-3072z^{10} + 56320z^9 - 228096z^8 - 1995840z^3 - 5613300z^2 - 9355500z - 7640325) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1158.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{491520z^4} (e^{-z} (-1536z^9 - 27392z^8 - 101120z^7 + 38784z^6 - 42816z^5 + 74400z^4 - 166320z^3 + \\
 & \quad 1413720z^2 - 4261950z + 7640325)) + \\
 & \frac{1}{983040z^{9/2}} \sqrt{\pi} (-3072z^{10} - 56320z^9 - 228096z^8 + 1995840z^3 - 5613300z^2 + 9355500z - 7640325) \operatorname{erf}(\sqrt{-z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1159.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{5}{2}, 6; z\right) = \\
 & \frac{1}{1527701175z^4} \left(32 e^{z/2} (163840z^{10} - 3112960z^9 + 12740608z^8 + 2579712z^7 + 2238096z^6 + 3431400z^5 + \right. \\
 & \quad \left. 7276500z^4 + 198710820z^3 + 687099105z^2 + 1551890340z + 2140538400) I_1\left(\frac{z}{2}\right)\right) - \\
 & \frac{1}{1527701175z^3} \left(32 e^{z/2} (163840z^9 - 3276800z^8 + 15771648z^7 - 8768256z^6 - 4110960z^5 - \right. \\
 & \quad \left. 5239080z^4 - 10187100z^3 + 155051820z^2 + 387972585z + 535134600) I_0\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.1160.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} e^z (-640 z^5 + 4960 z^4 - 7344 z^3 + 780 z^2 - 42 z + 9) + \frac{4}{9} \sqrt{\pi} (160 z^{11/2} - 1320 z^{9/2} + 2376 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1161.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9} e^{-z} (640 z^5 + 4960 z^4 + 7344 z^3 + 780 z^2 + 42 z + 9) + \frac{4}{9} \sqrt{\pi} (160 z^{11/2} + 1320 z^{9/2} + 2376 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1162.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (80 z^5 - 840 z^4 + 1996 z^3 - 708 z^2 - 36 z + 3) - \frac{2}{3} \sqrt{\pi} (40 z^{11/2} - 440 z^{9/2} + 1188 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1163.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-80 z^5 - 840 z^4 - 1996 z^3 - 708 z^2 + 36 z + 3) - \frac{2}{3} \sqrt{\pi} (40 z^{11/2} + 440 z^{9/2} + 1188 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1164.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (-8 z^5 + 106 z^4 - 347 z^3 + 216 z^2 + 30 z + 3) + \frac{1}{6} \sqrt{\pi} (16 z^{11/2} - 220 z^{9/2} + 792 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1165.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (8 z^5 + 106 z^4 + 347 z^3 + 216 z^2 - 30 z + 3) + \frac{1}{6} \sqrt{\pi} (16 z^{11/2} + 220 z^{9/2} + 792 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1166.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, 1; z\right) = \frac{e^{z/2} (10240 z^6 - 162560 z^5 + 738624 z^4 - 1046580 z^3 + 289644 z^2 + 51975 z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2} (-10240 z^6 + 152320 z^5 - 591424 z^4 + 521076 z^3 + 56040 z^2 + 16059 z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.1167.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{18} e^z (-4 z^5 + 64 z^4 - 267 z^3 + 240 z^2 + 48 z + 18) + \frac{1}{36} \sqrt{\pi} (8 z^{11/2} - 132 z^{9/2} + 594 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1168.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{18} e^{-z} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36} \sqrt{\pi} (8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1169.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2} (20480z^6 - 381440z^5 + 2077056z^4 - 3582648z^3 + 1187412z^2 + 291060z + 135135) I_0\left(\frac{z}{2}\right)}{135135} + \frac{1}{135135} e^{z/2} (-20480z^6 + 360960z^5 - 1726336z^4 + 2016312z^3 + 262692z^2 + 115212z + 51975) I_1\left(\frac{z}{2}\right)$$

07.25.03.1170.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (-1280z^6 + 24000z^5 - 121696z^4 + 143592z^3 + 35028z^2 + 19950z + 10395)}{26880z} + \frac{\sqrt{\pi} (2560z^7 - 49280z^6 + 266112z^5 - 388080z^4 - 10395) \operatorname{erfi}(\sqrt{z})}{53760z^{3/2}}$$

07.25.03.1171.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (1280z^6 + 24000z^5 + 121696z^4 + 143592z^3 - 35028z^2 + 19950z - 10395)}{26880z} + \frac{\sqrt{\pi} (2560z^7 + 49280z^6 + 266112z^5 + 388080z^4 + 10395) \operatorname{erf}(\sqrt{z})}{53760z^{3/2}}$$

07.25.03.1172.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, 3; z\right) = \frac{16 e^{z/2} (1024z^6 - 21888z^5 + 138912z^4 - 281802z^3 + 105696z^2 + 31185z + 20790) I_0\left(\frac{z}{2}\right)}{405405} - \frac{1}{405405z} 4 e^{z/2} (4096z^7 - 83456z^6 + 474240z^5 - 690600z^4 - 101352z^3 - 55224z^2 - 41580z - 72765) I_1\left(\frac{z}{2}\right)$$

07.25.03.1173.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (-640z^7 + 13760z^6 - 82144z^5 + 120240z^4 + 33288z^3 + 23604z^2 + 20790z + 31185)}{43008z^2} + \frac{\sqrt{\pi} (1280z^8 - 28160z^7 + 177408z^6 - 310464z^5 - 41580z - 31185) \operatorname{erfi}(\sqrt{z})}{86016z^{5/2}}$$

07.25.03.1174.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (640z^7 + 13760z^6 + 82144z^5 + 120240z^4 - 33288z^3 + 23604z^2 - 20790z + 31185)}{43008z^2} + \frac{\sqrt{\pi} (1280z^8 + 28160z^7 + 177408z^6 + 310464z^5 + 41580z - 31185) \operatorname{erf}(\sqrt{z})}{86016z^{5/2}}$$

07.25.03.1175.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{2297295z}$$

$$4e^{z/2} (8192z^7 - 197632z^6 + 1432320z^5 - 3336816z^4 + 1370136z^3 + 457380z^2 + 374220z - 218295) I_0\left(\frac{z}{2}\right) -$$

$$\frac{1}{2297295z^2} \left(4e^{z/2} (8192z^8 - 189440z^7 + 1246976z^6 - 2176368z^5 -$$

$$346584z^4 - 215916z^3 - 207900z^2 - 800415z - 873180) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.1176.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) =$$

$$\frac{1}{442368z^3} e^z (-2560z^8 + 62080z^7 - 426432z^6 + 746016z^5 + 225552z^4 + 183384z^3 + 207900z^2 + 602910z + 779625) +$$

$$\frac{1}{884736z^{7/2}} \sqrt{\pi} (5120z^9 - 126720z^8 + 912384z^7 - 1862784z^6 - 748440z^2 - 1122660z - 779625) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1177.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) =$$

$$\frac{1}{442368z^3} e^{-z} (2560z^8 + 62080z^7 + 426432z^6 + 746016z^5 - 225552z^4 + 183384z^3 - 207900z^2 + 602910z - 779625) +$$

$$\frac{1}{884736z^{7/2}} \sqrt{\pi} (5120z^9 + 126720z^8 + 912384z^7 + 1862784z^6 + 748440z^2 - 1122660z + 779625) \operatorname{erf}(\sqrt{z})$$

07.25.03.1178.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, 5; z\right) =$$

$$\frac{1}{218243025z^2} \left(32e^{z/2} (40960z^8 - 1100800z^7 + 8969472z^6 - 23578704z^5 + 10376400z^4 + 3783780z^3 +$$

$$3534300z^2 - 6767145z - 7203735) I_0\left(\frac{z}{2}\right)\right) -$$

$$\frac{1}{218243025z^3} \left(32e^{z/2} (40960z^9 - 1059840z^8 + 7930112z^7 - 16137552z^6 - 2727936z^5 -$$

$$1862340z^4 - 2079000z^3 - 14043645z^2 - 27068580z - 28814940) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.1179.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{196608z^4} \left(e^z (-512z^9 + 13824z^8 - 107392z^7 + 218688z^6 + 70560z^5 + 63024z^4 + 83160z^3 + 374220z^2 +$$

$$831600z + 1091475)\right) + \frac{1}{393216z^{9/2}}$$

$$\sqrt{\pi} (1024z^{10} - 28160z^9 + 228096z^8 - 532224z^7 - 498960z^3 - 1122660z^2 - 1559250z - 1091475) \operatorname{erfi}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.1180.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{196\,608 z^4} \left(e^{-z} (512 z^9 + 13\,824 z^8 + 107\,392 z^7 + 218\,688 z^6 - 70\,560 z^5 + 63\,024 z^4 - 83\,160 z^3 + 374\,220 z^2 - \right. \\
 & \quad \left. 831\,600 z + 1\,091\,475) \right) + \frac{1}{393\,216 z^{9/2}} \\
 & \sqrt{\pi} (1024 z^{10} + 28\,160 z^9 + 228\,096 z^8 + 532\,224 z^7 + 498\,960 z^6 - 1\,122\,660 z^5 + 1\,559\,250 z - 1\,091\,475) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1181.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{3}{2}, 6; z\right) = \\
 & \frac{1}{916\,620\,705 z^3} \left(32 e^{z/2} (81\,920 z^9 - 2\,426\,880 z^8 + 21\,960\,192 z^7 - 64\,266\,720 z^6 + 29\,876\,112 z^5 + 11\,642\,400 z^4 + \right. \\
 & \quad \left. 11\,933\,460 z^3 - 49\,958\,370 z^2 - 97\,764\,975 z - 107\,026\,920) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{916\,620\,705 z^4} \left(32 e^{z/2} (81\,920 z^{10} - 2\,344\,960 z^9 + 19\,656\,192 z^8 - 45\,701\,088 z^7 - 8\,085\,840 z^6 - \right. \right. \\
 & \quad \left. \left. 5\,900\,832 z^5 - 7\,276\,500 z^4 - 79\,064\,370 z^3 - 213\,211\,845 z^2 - 391\,059\,900 z - 428\,107\,680) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.1182.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{12} e^z (-120 z^5 + 1700 z^4 - 6338 z^3 + 5847 z^2 - 408 z + 12) + \\
 & \frac{1}{24} \sqrt{\pi} (240 z^{11/2} - 3520 z^{9/2} + 14\,256 z^{7/2} - 16\,632 z^{5/2} + 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1183.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{12} e^{-z} (120 z^5 + 1700 z^4 + 6338 z^3 + 5847 z^2 + 408 z + 12) + \\
 & \frac{1}{24} \sqrt{\pi} (240 z^{11/2} + 3520 z^{9/2} + 14\,256 z^{7/2} + 16\,632 z^{5/2} + 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1184.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{24} e^z (24 z^5 - 428 z^4 + 2174 z^3 - 3255 z^2 + 768 z + 24) + \\
 & \frac{1}{48} \sqrt{\pi} (-48 z^{11/2} + 880 z^{9/2} - 4752 z^{7/2} + 8316 z^{5/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1185.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{24} e^{-z} (-24 z^5 - 428 z^4 - 2174 z^3 - 3255 z^2 - 768 z + 24) + \\
 & \frac{1}{48} \sqrt{\pi} (-48 z^{11/2} - 880 z^{9/2} - 4752 z^{7/2} - 8316 z^{5/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.1186.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, 1; z\right) = \frac{e^{z/2}(-3840z^6 + 80320z^5 - 526728z^4 + 1280184z^3 - 1054776z^2 + 166320z + 10395)I_0\left(\frac{z}{2}\right) + 4e^{z/2}(960z^6 - 19120z^5 + 113042z^4 - 215604z^3 + 88491z^2 + 4881z)I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.1187.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{96}e^z(8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) - \frac{1}{192}\sqrt{\pi}z^{3/2}(16z^4 - 352z^3 + 2376z^2 - 5544z + 3465)\operatorname{erfi}(\sqrt{z})$$

07.25.03.1188.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{96}e^{-z}(-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) - \frac{1}{192}\sqrt{\pi}z^{3/2}(16z^4 + 352z^3 + 2376z^2 + 5544z + 3465)\operatorname{erf}(\sqrt{z})$$

07.25.03.1189.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{135135}e^{z/2}(-7680z^6 + 188800z^5 - 1492752z^4 + 4507368z^3 - 4772388z^2 + 1039500z + 135135)I_0\left(\frac{z}{2}\right) + \frac{e^{z/2}(7680z^6 - 181120z^5 + 1315472z^4 - 3274776z^3 + 1998228z^2 + 170652z + 31185)I_1\left(\frac{z}{2}\right)}{135135}$$

07.25.03.1190.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z(960z^6 - 24160z^5 + 187984z^4 - 499008z^3 + 303828z^2 + 46830z + 10395)}{53760z} + \frac{\sqrt{\pi}(-1920z^7 + 49280z^6 - 399168z^5 + 1164240z^4 - 970200z^3 - 10395)\operatorname{erfi}(\sqrt{z})}{107520z^{3/2}}$$

07.25.03.1191.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(-960z^6 - 24160z^5 - 187984z^4 - 499008z^3 - 303828z^2 + 46830z - 10395)}{53760z} + \frac{\sqrt{\pi}(-1920z^7 - 49280z^6 - 399168z^5 - 1164240z^4 - 970200z^3 + 10395)\operatorname{erf}(\sqrt{z})}{107520z^{3/2}}$$

07.25.03.1192.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, 3; z\right) = \frac{1}{135135z}4e^{z/2}(512z^7 - 13952z^6 + 120176z^5 - 369168z^4 + 299940z^3 + 32268z^2 + 10395z + 10395)I_1\left(\frac{z}{2}\right) - \frac{4e^{z/2}(512z^6 - 14464z^5 + 133872z^4 - 482880z^3 + 621372z^2 - 166320z - 31185)I_0\left(\frac{z}{2}\right)}{135135}$$

$$\begin{aligned}
 & \text{07.25.03.1193.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \\
 & \frac{e^z (1920 z^7 - 55360 z^6 + 505504 z^5 - 1635312 z^4 + 1315176 z^3 + 258132 z^2 + 103950 z + 93555)}{344064 z^2} + \\
 & \frac{1}{688128 z^{5/2}} \sqrt{\pi} (-3840 z^8 + 112640 z^7 - 1064448 z^6 + 3725568 z^5 - 3880800 z^4 - 166320 z - 93555) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1194.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \\
 & \frac{1}{344064 z^2} e^{-z} (-1920 z^7 - 55360 z^6 - 505504 z^5 - 1635312 z^4 - 1315176 z^3 + 258132 z^2 - 103950 z + 93555) + \\
 & \frac{1}{688128 z^{5/2}} \sqrt{\pi} (-3840 z^8 - 112640 z^7 - 1064448 z^6 - 3725568 z^5 - 3880800 z^4 + 166320 z - 93555) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1195.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, 4; z\right) = \\
 & \frac{1}{2297295 z^2} \left(4 e^{z/2} (3072 z^8 - 94976 z^7 + 946336 z^6 - 3458448 z^5 + 3514848 z^4 + 437676 z^3 + 187110 z^2 + \right. \\
 & \quad \left. 384615 z + 291060) I_1\left(\frac{z}{2}\right) - \frac{1}{2297295 z} \right. \\
 & \quad \left. 4 e^{z/2} (3072 z^7 - 98048 z^6 + 1039776 z^5 - 4360368 z^4 + 6585504 z^3 - 2037420 z^2 - 478170 z + 72765) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1196.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \\
 & \frac{1}{294912 z^3} e^z (640 z^8 - 20800 z^7 + 218016 z^6 - 831984 z^5 + 834216 z^4 + 191556 z^3 + 103950 z^2 + 176715 z + 155925) + \\
 & \frac{1}{589824 z^{7/2}} \sqrt{\pi} (-1280 z^9 + 42240 z^8 - 456192 z^7 + 1862784 z^6 - 2328480 z^5 - 249480 z^2 - 280665 z - 155925) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1197.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{1}{294912 z^3} e^{-z} (-640 z^8 - 20800 z^7 - 218016 z^6 - 831984 z^5 - 834216 z^4 + 191556 z^3 - 103950 z^2 + 176715 z - 155925) + \\
 & \frac{1}{589824 z^{7/2}} \sqrt{\pi} (-1280 z^9 - 42240 z^8 - 456192 z^7 - 1862784 z^6 - 2328480 z^5 + 249480 z^2 - 280665 z + 155925) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1198.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, 5; z\right) = \\
 & \frac{1}{218\,243\,025\,z^3} \left(64 e^{z/2} (7680 z^9 - 265\,600 z^8 + 3\,005\,072 z^7 - 12\,733\,632 z^6 + 15\,549\,744 z^5 + 2\,143\,920 z^4 + \right. \\
 & \quad \left. 1\,091\,475 z^3 + 3\,575\,880 z^2 + 4\,948\,020 z + 3\,929\,310) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{218\,243\,025\,z^2} \left(32 e^{z/2} (15\,360 z^8 - 546\,560 z^7 + 6\,533\,664 z^6 - 31\,227\,168 z^5 + 54\,044\,880 z^4 - \right. \\
 & \quad \left. 18\,627\,840 z^3 - 5\,093\,550 z^2 + 2\,474\,010 z + 1\,964\,655) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1199.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{786\,432\,z^4} \left(e^z (768 z^9 - 27\,776 z^8 + 328\,640 z^7 - 1\,445\,280 z^6 + 1\,738\,992 z^5 + 446\,136 z^4 + 291\,060 z^3 + \right. \\
 & \quad \left. 727\,650 z^2 + 1\,143\,450 z + 1\,091\,475) \right) + \\
 & \frac{1}{1\,572\,864\,z^{9/2}} \left(\sqrt{\pi} (-1536 z^{10} + 56\,320 z^9 - 684\,288 z^8 + 3\,193\,344 z^7 - 4\,656\,960 z^6 - 997\,920 z^3 - \right. \\
 & \quad \left. 1\,683\,990 z^2 - 1\,871\,100 z - 1\,091\,475) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1200.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{786\,432\,z^4} \left(e^{-z} (-768 z^9 - 27\,776 z^8 - 328\,640 z^7 - 1\,445\,280 z^6 - 1\,738\,992 z^5 + 446\,136 z^4 - 291\,060 z^3 + \right. \\
 & \quad \left. 727\,650 z^2 - 1\,143\,450 z + 1\,091\,475) \right) + \\
 & \frac{1}{1\,572\,864\,z^{9/2}} \left(\sqrt{\pi} (-1536 z^{10} - 56\,320 z^9 - 684\,288 z^8 - 3\,193\,344 z^7 - 4\,656\,960 z^6 + 997\,920 z^3 - \right. \\
 & \quad \left. 1\,683\,990 z^2 + 1\,871\,100 z - 1\,091\,475) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1201.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; -\frac{1}{2}, 6; z\right) = \\
 & \frac{1}{305\,540\,235\,z^4} \left(32 e^{z/2} (10\,240 z^{10} - 391\,680 z^9 + 4\,960\,448 z^8 - 23\,910\,816 z^7 + 34\,113\,744 z^6 + 5\,071\,584 z^5 + \right. \\
 & \quad \left. 2\,910\,600 z^4 + 13\,783\,770 z^3 + 27\,058\,185 z^2 + 38\,544\,660 z + 32\,931\,360) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{305\,540\,235\,z^3} \left(32 e^{z/2} (10\,240 z^9 - 401\,920 z^8 + 5\,347\,008 z^7 - 28\,685\,664 z^6 + 55\,904\,016 z^5 - \right. \\
 & \quad \left. 20\,956\,320 z^4 - 6\,403\,320 z^3 + 6\,507\,270 z^2 + 9\,636\,165 z + 8\,232\,840) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{1}{2}$

07.25.03.1202.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{960} e^z (-96 z^5 + 2152 z^4 - 14812 z^3 + 35130 z^2 - 22245 z + 960) + \frac{\sqrt{\pi} (192 z^{11/2} - 4400 z^{9/2} + 31680 z^{7/2} - 83160 z^{5/2} + 69300 z^{3/2} - 10395 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.1203.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{960} e^{-z} (96 z^5 + 2152 z^4 + 14812 z^3 + 35130 z^2 + 22245 z + 960) + \frac{\sqrt{\pi} (192 z^{11/2} + 4400 z^{9/2} + 31680 z^{7/2} + 83160 z^{5/2} + 69300 z^{3/2} + 10395 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.1204.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{1}{2}, 1; z\right) = \frac{e^{z/2} (384 z^6 - 9968 z^5 + 85488 z^4 - 294708 z^3 + 400524 z^2 - 176715 z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2} (-384 z^6 + 9584 z^5 - 76096 z^4 + 223020 z^3 - 207168 z^2 + 29919 z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.1205.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (-16 z^5 + 432 z^4 - 3752 z^3 + 12180 z^2 - 12645 z + 1920)}{1920} + \frac{\sqrt{\pi} \sqrt{z} (32 z^5 - 880 z^4 + 7920 z^3 - 27720 z^2 + 34650 z - 10395) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.1206.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (16 z^5 + 432 z^4 + 3752 z^3 + 12180 z^2 + 12645 z + 1920)}{1920} + \frac{\sqrt{\pi} \sqrt{z} (32 z^5 + 880 z^4 + 7920 z^3 + 27720 z^2 + 34650 z + 10395) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.1207.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{1}{2}, 2; z\right) = \frac{e^{z/2} (768 z^6 - 23456 z^5 + 243312 z^4 - 1051680 z^3 + 1880412 z^2 - 1185030 z + 135135) I_0\left(\frac{z}{2}\right)}{135135} + \frac{e^{z/2} (-768 z^6 + 22688 z^5 - 221008 z^4 + 841248 z^3 - 1129380 z^2 + 316182 z + 10395) I_1\left(\frac{z}{2}\right)}{135135}$$

07.25.03.1208.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-384 z^6 + 12128 z^5 - 127184 z^4 + 524112 z^3 - 758352 z^2 + 208110 z + 10395)}{215040 z} + \frac{\sqrt{\pi} (768 z^7 - 24640 z^6 + 266112 z^5 - 1164240 z^4 + 1940400 z^3 - 873180 z^2 - 10395) \operatorname{erfi}(\sqrt{z})}{430080 z^{3/2}}$$

07.25.03.1209.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(384z^6 + 12128z^5 + 127184z^4 + 524112z^3 + 758352z^2 + 208110z - 10395)}{215040z} + \frac{\sqrt{\pi}(768z^7 + 24640z^6 + 266112z^5 + 1164240z^4 + 1940400z^3 + 873180z^2 + 10395)\operatorname{erf}(\sqrt{z})}{430080z^{3/2}}$$

07.25.03.1210.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{1}{2}, 3; z\right) = \frac{8e^{z/2}(128z^6 - 4496z^5 + 54720z^4 - 284400z^3 + 629520z^2 - 509355z + 83160)I_0\left(\frac{z}{2}\right) - \frac{1}{675675z}4e^{z/2}(256z^7 - 8736z^6 + 100832z^5 - 472080z^4 + 829440z^3 - 348450z^2 - 20790z - 10395)I_1\left(\frac{z}{2}\right)}{675675}$$

07.25.03.1211.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z(-384z^7 + 13888z^6 - 170656z^5 + 852528z^4 - 1583880z^3 + 641004z^2 + 62370z + 31185)}{688128z^2} + \frac{1}{1376256z^{5/2}} + \frac{\sqrt{\pi}(768z^8 - 28160z^7 + 354816z^6 - 1862784z^5 + 3880800z^4 - 2328480z^3 - 83160z - 31185)\operatorname{erfi}(\sqrt{z})}{1376256z^{5/2}}$$

07.25.03.1212.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(384z^7 + 13888z^6 + 170656z^5 + 852528z^4 + 1583880z^3 + 641004z^2 - 62370z + 31185)}{688128z^2} + \frac{1}{1376256z^{5/2}} + \frac{\sqrt{\pi}(768z^8 + 28160z^7 + 354816z^6 + 1862784z^5 + 3880800z^4 + 2328480z^3 + 83160z - 31185)\operatorname{erf}(\sqrt{-z})}{1376256z^{5/2}}$$

07.25.03.1213.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{1}{2}, 4; z\right) = \frac{1}{11486475z} + \frac{4e^{z/2}(1536z^7 - 60992z^6 + 852000z^5 - 5173680z^4 + 13642080z^3 - 13388760z^2 + 2765070z - 51975)I_0\left(\frac{z}{2}\right) - \frac{1}{11486475z^2}\left(4e^{z/2}(1536z^8 - 59456z^7 + 793312z^6 - 4408560z^5 + 9575520z^4 - 5390040z^3 - 436590z^2 - 426195z - 207900)I_1\left(\frac{z}{2}\right)\right)}{11486475z^2}$$

07.25.03.1214.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{2359296z^3} + \frac{e^z(-512z^8 + 20864z^7 - 293952z^6 + 1725600z^5 - 3917424z^4 + 2114568z^3 + 291060z^2 + 270270z + 155925) + \frac{1}{4718592z^{7/2}}\left(\sqrt{\pi}(1024z^9 - 42240z^8 + 608256z^7 - 3725568z^6 + 9313920z^5 - 6985440z^4 - 498960z^2 - 374220z - 155925)\operatorname{erfi}(\sqrt{z})\right)}{4718592z^{7/2}}$$

07.25.03.1215.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{2359296z^3} e^{-z} (512z^8 + 20864z^7 + 293952z^6 + 1725600z^5 + 3917424z^4 + 2114568z^3 - 291060z^2 + 270270z - 155925) + \frac{1}{4718592z^{7/2}} \left(\sqrt{\pi} (1024z^9 + 42240z^8 + 608256z^7 + 3725568z^6 + 9313920z^5 + 6985440z^4 + 498960z^2 - 374220z + 155925) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.1216.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{1}{2}, 5; z\right) = \frac{1}{218243025z^2} \left(32e^{z/2} (1536z^8 - 68032z^7 + 1072704z^6 - 7452528z^5 + 22794960z^4 - 26195400z^3 + 6403320z^2 - 384615z - 218295) I_0\left(\frac{z}{2}\right) - \frac{1}{218243025z^3} \left(32e^{z/2} (1536z^9 - 66496z^8 + 1006976z^7 - 6477264z^6 + 16759488z^5 - 11855400z^4 - 1164240z^3 - 1694385z^2 - 1538460z - 873180) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.1217.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{7864320z^4} \left(e^z (-768z^9 + 34816z^8 - 553216z^7 + 3731520z^6 - 10013280z^5 + 6789840z^4 + 1164240z^3 + 1538460z^2 + 1611225z + 1091475)\right) + \frac{1}{15728640z^{9/2}} \left(\sqrt{\pi} (1536z^{10} - 70400z^9 + 1140480z^8 - 7983360z^7 + 23284800z^6 - 20956320z^5 - 2494800z^3 - 2806650z^2 - 2338875z - 1091475) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.1218.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{7864320z^4} \left(e^{-z} (768z^9 + 34816z^8 + 553216z^7 + 3731520z^6 + 10013280z^5 + 6789840z^4 - 1164240z^3 + 1538460z^2 - 1611225z + 1091475)\right) + \frac{1}{15728640z^{9/2}} \left(\sqrt{\pi} (1536z^{10} + 70400z^9 + 1140480z^8 + 7983360z^7 + 23284800z^6 + 20956320z^5 + 2494800z^3 - 2806650z^2 + 2338875z - 1091475) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.1219.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{1}{2}, 6; z\right) = \frac{1}{305\,540\,235\,z^3} \left(32 e^{z/2} (1024 z^9 - 50\,048 z^8 + 879\,168 z^7 - 6\,877\,248 z^6 + 23\,929\,584 z^5 - 31\,434\,480 z^4 + 87\,318\,000 z^3 - 1\,081\,080 z^2 - 1\,153\,845 z - 748\,440) I_0\left(\frac{z}{2}\right) - \frac{1}{305\,540\,235\,z^4} \left(32 e^{z/2} (1024 z^{10} - 49\,024 z^9 + 830\,656 z^8 - 6\,070\,080 z^7 + 18\,229\,008 z^6 - 15\,549\,744 z^5 - 174\,636\,000 z^4 - 3\,409\,560 z^3 - 4\,417\,875 z^2 - 4\,615\,380 z - 2\,993\,760) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{3}{2}$, $b_1 = 1$

07.25.03.1220.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; 1, \frac{3}{2}; z\right) = \frac{e^{z/2} (32 z^6 - 992 z^5 + 10\,512 z^4 - 46\,944 z^3 + 88\,674 z^2 - 62\,370 z + 10\,395) I_0\left(\frac{z}{2}\right) - 2 e^{z/2} (16 z^6 - 480 z^5 + 4\,784 z^4 - 18\,912 z^3 + 27\,387 z^2 - 9\,762 z) I_1\left(\frac{z}{2}\right)}{10\,395}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{3}{2}$

07.25.03.1221.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (-32 z^5 + 1\,040 z^4 - 11\,376 z^3 + 50\,232 z^2 - 83\,370 z + 35\,685)}{46\,080} + \frac{\sqrt{\pi} (64 z^6 - 2112 z^5 + 23\,760 z^4 - 110\,880 z^3 + 207\,900 z^2 - 124\,740 z + 10\,395) \operatorname{erfi}(\sqrt{z})}{92\,160 \sqrt{z}}$$

07.25.03.1222.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 1\,040 z^4 + 11\,376 z^3 + 50\,232 z^2 + 83\,370 z + 35\,685)}{46\,080} + \frac{\sqrt{\pi} (64 z^6 + 2112 z^5 + 23\,760 z^4 + 110\,880 z^3 + 207\,900 z^2 + 124\,740 z + 10\,395) \operatorname{erf}(\sqrt{z})}{92\,160 \sqrt{z}}$$

07.25.03.1223.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 - 2336 z^5 + 30\,000 z^4 - 168\,864 z^3 + 425\,112 z^2 - 436\,590 z + 135\,135) I_0\left(\frac{z}{2}\right) + e^{z/2} (-64 z^6 + 2272 z^5 - 27\,760 z^4 + 142\,176 z^3 - 294\,744 z^2 + 191\,442 z - 10\,395) I_1\left(\frac{z}{2}\right)}{135\,135}$$

07.25.03.1224.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (-64 z^6 + 2432 z^5 - 32080 z^4 + 179136 z^3 - 408828 z^2 + 291480 z - 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 - 4928 z^6 + 66528 z^5 - 388080 z^4 + 970200 z^3 - 873180 z^2 + 145530 z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1225.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 2432 z^5 + 32080 z^4 + 179136 z^3 + 408828 z^2 + 291480 z + 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 + 4928 z^6 + 66528 z^5 + 388080 z^4 + 970200 z^3 + 873180 z^2 + 145530 z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.1226.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 - 2688 z^5 + 40560 z^4 - 275520 z^3 + 866520 z^2 - 1164240 z + 509355) I_0\left(\frac{z}{2}\right)}{2027025} - \frac{1}{2027025 z} 4 e^{z/2} (64 z^7 - 2624 z^6 + 37968 z^5 - 238800 z^4 + 644280 z^3 - 608760 z^2 + 72765 z + 10395) I_1\left(\frac{z}{2}\right)$$

07.25.03.1227.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (-128 z^7 + 5568 z^6 - 85984 z^5 + 580560 z^4 - 1686744 z^3 + 1690836 z^2 - 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} (\sqrt{\pi} (256 z^8 - 11264 z^7 + 177408 z^6 - 1241856 z^5 + 3880800 z^4 - 4656960 z^3 + 1164240 z^2 + 166320 z + 31185) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1228.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 5568 z^6 + 85984 z^5 + 580560 z^4 + 1686744 z^3 + 1690836 z^2 + 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} (\sqrt{\pi} (256 z^8 + 11264 z^7 + 177408 z^6 + 1241856 z^5 + 3880800 z^4 + 4656960 z^3 + 1164240 z^2 - 166320 z + 31185) \operatorname{erf}(\sqrt{z}))$$

07.25.03.1229.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, 4; z\right) = \frac{1}{11486475 z} 4 e^{z/2} (128 z^7 - 6080 z^6 + 105408 z^5 - 838800 z^4 + 3163920 z^3 - 5239080 z^2 + 2910600 z + 10395) I_0\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} 4 e^{z/2} (128 z^8 - 5952 z^7 + 99520 z^6 - 742128 z^5 + 2466000 z^4 - 3061560 z^3 + 582120 z^2 + 155925 z + 41580) I_1\left(\frac{z}{2}\right)$$

07.25.03.1230.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{14\,155\,776\,z^3}$$

$$e^z (-256 z^8 + 12\,544 z^7 - 221\,952 z^6 + 1\,757\,760 z^5 - 6\,203\,040 z^4 + 8\,030\,448 z^3 - 1\,164\,240 z^2 - 457\,380 z - 155\,925) +$$

$$\frac{1}{28\,311\,552 z^{7/2}} \left(\sqrt{\pi} (512 z^9 - 25\,344 z^8 + 456\,192 z^7 - 3\,725\,568 z^6 + 13\,970\,880 z^5 - 20\,956\,320 z^4 + 6\,985\,440 z^3 + 1\,496\,880 z^2 + 561\,330 z + 155\,925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1231.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{14\,155\,776\,z^3}$$

$$e^{-z} (256 z^8 + 12\,544 z^7 + 221\,952 z^6 + 1\,757\,760 z^5 + 6\,203\,040 z^4 + 8\,030\,448 z^3 + 1\,164\,240 z^2 - 457\,380 z + 155\,925) +$$

$$\frac{1}{28\,311\,552 z^{7/2}} \left(\sqrt{\pi} (512 z^9 + 25\,344 z^8 + 456\,192 z^7 + 3\,725\,568 z^6 + 13\,970\,880 z^5 + 20\,956\,320 z^4 + 6\,985\,440 z^3 - 1\,496\,880 z^2 + 561\,330 z - 155\,925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1232.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, 5; z\right) = \frac{1}{218\,243\,025\,z^2}$$

$$\left(32 e^{z/2} (128 z^8 - 6784 z^7 + 132\,864 z^6 - 1\,212\,096 z^5 + 5\,331\,360 z^4 - 10\,478\,160 z^3 + 6\,985\,440 z^2 + 83\,160 z + 31\,185) \right.$$

$$I_0\left(\frac{z}{2}\right) - \frac{1}{218\,243\,025\,z^3} \left(128 e^{z/2} (32 z^9 - 1664 z^8 + 31\,568 z^7 - 272\,256 z^6 + 1\,074\,804 z^5 - 1\,654\,080 z^4 + 436\,590 z^3 + 166\,320 z^2 + 83\,160 z + 31\,185) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.1233.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{62\,914\,560\,z^4} (e^z (-512 z^9 + 27\,904 z^8 - 556\,544 z^7 + 5\,057\,280 z^6 - 21\,001\,920 z^5 + 33\,362\,400 z^4 - 6\,985\,440 z^3 - 3\,825\,360 z^2 - 2\,390\,850 z - 1\,091\,475)) +$$

$$\frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} - 56\,320 z^9 + 1\,140\,480 z^8 - 10\,644\,480 z^7 + 46\,569\,600 z^6 - 83\,825\,280 z^5 + 34\,927\,200 z^4 + 9\,979\,200 z^3 + 5\,613\,300 z^2 + 3\,118\,500 z + 1\,091\,475) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1234.01

$${}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{62\,914\,560\,z^4} (e^{-z} (512 z^9 + 27\,904 z^8 + 556\,544 z^7 + 5\,057\,280 z^6 + 21\,001\,920 z^5 + 33\,362\,400 z^4 + 6\,985\,440 z^3 - 3\,825\,360 z^2 + 2\,390\,850 z - 1\,091\,475)) +$$

$$\frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} + 56\,320 z^9 + 1\,140\,480 z^8 + 10\,644\,480 z^7 + 46\,569\,600 z^6 + 83\,825\,280 z^5 + 34\,927\,200 z^4 - 9\,979\,200 z^3 + 5\,613\,300 z^2 - 3\,118\,500 z + 1\,091\,475) \operatorname{erf}(\sqrt{z}) \right)$$

$$\begin{aligned}
 & \text{07.25.03.1235.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{3}{2}; \frac{3}{2}, 6; z\right) = \\
 & \frac{1}{916620705 z^3} \left(32 e^{z/2} (256 z^9 - 14976 z^8 + 326976 z^7 - 3364032 z^6 + 16903152 z^5 - 38419920 z^4 + 29688120 z^3 + \right. \\
 & \quad \left. 748440 z^2 + 530145 z + 249480) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{916620705 z^4} \left(32 e^{z/2} (256 z^{10} - 14720 z^9 + 312384 z^8 - 3058752 z^7 + 13986672 z^6 - 25692912 z^5 + \right. \\
 & \quad \left. 8731800 z^4 + 4241160 z^3 + 3024945 z^2 + 2120580 z + 997920) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.1236.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \frac{64 z^7 + 448 z^6 - 192 z^5 + 240 z^4 - 480 z^3 + 1260 z^2 - 3780 z + 10395}{10395} + \frac{32 e^z \sqrt{\pi} (2 z^{15/2} + 15 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1237.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \\
 & \frac{-64 z^7 + 448 z^6 + 192 z^5 + 240 z^4 + 480 z^3 + 1260 z^2 + 3780 z + 10395}{10395} + \frac{32 e^{-z} \sqrt{\pi} (2 z^{15/2} - 15 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1238.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & \frac{1}{945} (-32 z^6 - 192 z^5 + 80 z^4 - 96 z^3 + 180 z^2 - 420 z + 945) - \frac{16}{945} e^z \sqrt{\pi} (2 z^{13/2} + 13 z^{11/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1239.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \\
 & \frac{1}{945} (-32 z^6 + 192 z^5 + 80 z^4 + 96 z^3 + 180 z^2 + 420 z + 945) + \frac{16}{945} e^{-z} \sqrt{\pi} (2 z^{13/2} - 13 z^{11/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1240.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{105} (16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105) + \frac{8}{105} e^z \sqrt{\pi} (2 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1241.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{105} (-16 z^5 + 80 z^4 + 32 z^3 + 36 z^2 + 60 z + 105) + \frac{8}{105} e^{-z} \sqrt{\pi} (2 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.1242.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{15}(-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15}e^z \sqrt{\pi} (2z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1243.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15}(-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15}e^{-z} \sqrt{\pi} (2z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1244.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{3}(4z^3 + 12z^2 - 4z + 3) + \frac{2}{3}e^z \sqrt{\pi} (2z^{7/2} + 7z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1245.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3}(-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3}e^{-z} \sqrt{\pi} (2z^{7/2} - 7z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1246.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; z\right) = -2z^2 - 4z + e^z \sqrt{\pi} (-2z^{5/2} - 5z^{3/2}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.1247.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; -z\right) = -2z^2 + 4z + e^{-z} \sqrt{\pi} (2z^{5/2} - 5z^{3/2}) \operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.1248.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, \frac{1}{2}; z\right) = z + \frac{1}{2}e^z \sqrt{\pi} (2z^{3/2} + 3\sqrt{z}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.1249.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, \frac{1}{2}; -z\right) = -z + \frac{1}{2}e^{-z} \sqrt{\pi} (2z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.1250.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, 1; z\right) = e^z(z + 1)$$

07.25.03.1251.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.1252.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.1253.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, 2; z\right) = e^z$$

07.25.03.1254.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{3e^z \sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3}{4z}$$

07.25.03.1255.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z+1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3}{4z}$$

07.25.03.1256.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, 3; z\right) = \frac{2 e^z (z-1)}{z^2} + \frac{2}{z^2}$$

07.25.03.1257.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45}{8 z^2}$$

07.25.03.1258.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{45}{8 z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.1259.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, 4; z\right) = \frac{6 e^z (z-2)}{z^3} + \frac{6(z+2)}{z^3}$$

07.25.03.1260.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{35(4z+15)}{16 z^3} + \frac{105 e^z \sqrt{\pi} (2z-5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.1261.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35(4z-15)}{16 z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z+5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.1262.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, 5; z\right) = \frac{24 e^z (z-3)}{z^4} + \frac{12(z^2+4z+6)}{z^4}$$

07.25.03.1263.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{63(8z^2+40z+105)}{32 z^4} + \frac{945 e^z \sqrt{\pi} (2z-7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.1264.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{63(8z^2-40z+105)}{32 z^4} - \frac{945 e^{-z} \sqrt{\pi} (2z+7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.1265.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{11}{2}, 6; z\right) = \frac{120 e^z (z-4)}{z^5} + \frac{20(z^3+6z^2+18z+24)}{z^5}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = -\frac{9}{2}$

07.25.03.1266.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{9}{2}, 1; z\right) = \frac{1}{945} e^z (208 z^5 + 104 z^4 + 156 z^3 + 390 z^2 + 1365 z + 945) - \frac{208}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1267.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{9}{2}, 1; -z\right) = \frac{1}{945} e^{-z} (-208 z^5 + 104 z^4 - 156 z^3 + 390 z^2 - 1365 z + 945) - \frac{208}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1268.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{9}{2}, 2; z\right) = \frac{1}{945} e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1269.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{9}{2}, 2; -z\right) = \frac{1}{945} e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1270.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{9}{2}, 3; z\right) = -\frac{128 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{14175} + \frac{2 e^z (64 z^7 + 32 z^6 + 48 z^5 + 120 z^4 + 420 z^3 + 1890 z^2 + 10395 z - 10395)}{14175 z^2} + \frac{22}{15 z^2}$$

07.25.03.1271.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{9}{2}, 3; -z\right) = -\frac{128 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{14175} - \frac{2 e^{-z} (64 z^7 - 32 z^6 + 48 z^5 - 120 z^4 + 420 z^3 - 1890 z^2 + 10395 z + 10395)}{14175 z^2} + \frac{22}{15 z^2}$$

07.25.03.1272.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{9}{2}, 4; z\right) = -\frac{256 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{80325} + \frac{22(17z+30)}{85z^3} + \frac{2 e^z (128 z^8 + 64 z^7 + 96 z^6 + 240 z^5 + 840 z^4 + 3780 z^3 + 20790 z^2 + 135135 z - 311850)}{80325 z^3}$$

07.25.03.1273.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{9}{2}, 4; -z\right) = -\frac{256 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{80325} + \frac{22(17z-30)}{85z^3} - \frac{2 e^{-z} (128 z^8 - 64 z^7 + 96 z^6 - 240 z^5 + 840 z^4 - 3780 z^3 + 20790 z^2 - 135135 z - 311850)}{80325 z^3}$$

07.25.03.1274.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{9}{2}, 5; z\right) = -\frac{2048 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{1526175} + \frac{44(323z^2 + 1140z + 1530)}{1615z^4} + \frac{1}{1526175 z^4} 8 e^z (256 z^9 + 128 z^8 + 192 z^7 + 480 z^6 + 1680 z^5 + 7560 z^4 + 41580 z^3 + 270270 z^2 + 2027025 z - 7952175)$$

07.25.03.1275.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{9}{2}, 5; -z\right) = -\frac{2048 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{1526175} + \frac{44(323z^2 - 1140z + 1530)}{1615z^4} - \frac{1}{1526175 z^4} 8 e^{-z} (256 z^9 - 128 z^8 + 192 z^7 - 480 z^6 + 1680 z^5 - 7560 z^4 + 41580 z^3 - 270270 z^2 + 2027025 z + 7952175)$$

$$\begin{aligned}
 & \text{07.25.03.1276.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; -\frac{9}{2}, 6; z\right) = & \\
 & -\frac{4096\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{11/2}}{6409935} + \frac{44(2261z^3 + 11970z^2 + 32130z + 38760)}{6783z^5} + \frac{1}{6409935z^5} (8e^z(512z^{10} + 256z^9 + 384z^8 + \\
 & 960z^7 + 3360z^6 + 15120z^5 + 83160z^4 + 540540z^3 + 4054050z^2 + 34459425z - 201455100))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1277.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; -\frac{9}{2}, 6; -z\right) = & \\
 & -\frac{4096\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{11/2}}{6409935} + \frac{44(2261z^3 - 11970z^2 + 32130z - 38760)}{6783z^5} - \frac{1}{6409935z^5} (8e^{-z}(512z^{10} - 256z^9 + 384z^8 - \\
 & 960z^7 + 3360z^6 - 15120z^5 + 83160z^4 - 540540z^3 + 4054050z^2 - 34459425z - 201455100))
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.1278.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; -\frac{7}{2}, 1; z\right) = & \frac{1}{105} e^z(-104z^5 + 432z^4 + 164z^3 + 168z^2 + 225z + 105) + \frac{4}{105} \sqrt{\pi} (26z^{11/2} - 121z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1279.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; -\frac{7}{2}, 1; -z\right) = & \frac{1}{105} e^{-z}(104z^5 + 432z^4 - 164z^3 + 168z^2 - 225z + 105) + \frac{4}{105} \sqrt{\pi} (26z^{11/2} + 121z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1280.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; -\frac{7}{2}, 2; z\right) = & \frac{1}{105} e^z(-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105) + \frac{8}{105} \sqrt{\pi} (2z^{11/2} - 11z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1281.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; -\frac{7}{2}, 2; -z\right) = & \frac{1}{105} e^{-z}(16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105) + \frac{8}{105} \sqrt{\pi} (2z^{11/2} + 11z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1282.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; -\frac{7}{2}, 3; z\right) = & -\frac{2e^z(416z^7 - 2432z^6 - 1008z^5 - 1200z^4 - 2220z^3 - 5040z^2 - 10395z + 10395)}{20475z^2} + \\
 & \frac{32\sqrt{\pi}(26z^{11/2} - 165z^{9/2})\operatorname{erfi}(\sqrt{z})}{20475} + \frac{66}{65z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1283.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; -\frac{7}{2}, 3; -z\right) = & \frac{2e^{-z}(416z^7 + 2432z^6 - 1008z^5 + 1200z^4 - 2220z^3 + 5040z^2 - 10395z - 10395)}{20475z^2} + \\
 & \frac{32\sqrt{\pi}(26z^{11/2} + 165z^{9/2})\operatorname{erf}(\sqrt{z})}{20475} + \frac{66}{65z^2}
 \end{aligned}$$

07.25.03.1284.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{7}{2}, 4; z\right) = \frac{198(17z+26)}{1105z^3} - \frac{2e^z(832z^8 - 5568z^7 - 2368z^6 - 2928z^5 - 5760z^4 - 14700z^3 - 41580z^2 - 93555z + 270270)}{116025z^3} +$$

$$\frac{64\sqrt{\pi}(26z^{11/2} - 187z^{9/2})\operatorname{erfi}(\sqrt{z})}{116025}$$

07.25.03.1285.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{7}{2}, 4; -z\right) = \frac{198(17z-26)}{1105z^3} +$$

$$\frac{1}{116025z^3} 2e^{-z}(832z^8 + 5568z^7 - 2368z^6 + 2928z^5 - 5760z^4 + 14700z^3 - 41580z^2 + 93555z + 270270) +$$

$$\frac{64\sqrt{\pi}(26z^{11/2} + 187z^{9/2})\operatorname{erf}(\sqrt{z})}{116025}$$

07.25.03.1286.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{7}{2}, 5; z\right) = \frac{396(323z^2 + 988z + 1170)}{20995z^4} - \frac{1}{2204475z^4}$$

$$(8e^z(1664z^9 - 12544z^8 - 5440z^7 - 6912z^6 - 14160z^5 - 38640z^4 - 124740z^3 - 415800z^2 - 945945z + 6081075)) +$$

$$\frac{512\sqrt{\pi}(26z^{11/2} - 209z^{9/2})\operatorname{erfi}(\sqrt{z})}{2204475}$$

07.25.03.1287.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{7}{2}, 5; -z\right) = \frac{396(323z^2 - 988z + 1170)}{20995z^4} + \frac{1}{2204475z^4}$$

$$(8e^{-z}(1664z^9 + 12544z^8 - 5440z^7 + 6912z^6 - 14160z^5 + 38640z^4 - 124740z^3 + 415800z^2 - 945945z - 6081075)) +$$

$$\frac{512\sqrt{\pi}(26z^{11/2} + 209z^{9/2})\operatorname{erf}(\sqrt{z})}{2204475}$$

07.25.03.1288.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{7}{2}, 6; z\right) = \frac{132(2261z^3 + 10374z^2 + 24570z + 26520)}{29393z^5} -$$

$$\frac{1}{9258795z^5} (8e^z(3328z^{10} - 27904z^9 - 12288z^8 - 15936z^7 - 33600z^6 - 95760z^5 - 332640z^4 -$$

$$1288980z^3 - 4864860z^2 - 10135125z + 137837700)) + \frac{1024\sqrt{\pi}(26z^{11/2} - 231z^{9/2})\operatorname{erfi}(\sqrt{z})}{9258795}$$

07.25.03.1289.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{7}{2}, 6; -z\right) = \frac{132(2261z^3 - 10374z^2 + 24570z - 26520)}{29393z^5} + \frac{1}{9258795z^5} (8e^{-z}(3328z^{10} + 27904z^9 - 12288z^8 + 15936z^7 - 33600z^6 + 95760z^5 - 332640z^4 + 1288980z^3 - 4864860z^2 + 10135125z + 137837700)) + \frac{1024\sqrt{\pi}(26z^{11/2} + 231z^{9/2})\operatorname{erf}(\sqrt{z})}{9258795}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = -\frac{5}{2}$

07.25.03.1290.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{5}{2}, 1; z\right) = \frac{1}{15} e^z (26z^5 - 229z^4 + 344z^3 + 90z^2 + 51z + 15) + \frac{1}{30} \sqrt{\pi} (-52z^{11/2} + 484z^{9/2} - 891z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.1291.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{5}{2}, 1; -z\right) = \frac{1}{15} e^{-z} (-26z^5 - 229z^4 - 344z^3 + 90z^2 - 51z + 15) + \frac{1}{30} \sqrt{\pi} (-52z^{11/2} - 484z^{9/2} - 891z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.1292.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{5}{2}, 2; z\right) = \frac{1}{15} e^z (4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) + \frac{1}{15} \sqrt{\pi} (-4z^{11/2} + 44z^{9/2} - 99z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.1293.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{5}{2}, 2; -z\right) = \frac{1}{15} e^{-z} (-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) + \frac{1}{15} \sqrt{\pi} (-4z^{11/2} - 44z^{9/2} - 99z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.1294.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{5}{2}, 3; z\right) = \frac{2e^z(104z^7 - 1268z^6 + 2928z^5 + 960z^4 + 840z^3 + 990z^2 + 945z - 945)}{2925z^2} - \frac{4\sqrt{\pi}(52z^{11/2} - 660z^{9/2} + 1755z^{7/2})\operatorname{erfi}(\sqrt{z})}{2925} + \frac{42}{65z^2}$$

07.25.03.1295.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{5}{2}, 3; -z\right) = -\frac{2e^{-z}(104z^7 + 1268z^6 + 2928z^5 - 960z^4 + 840z^3 - 990z^2 + 945z + 945)}{2925z^2} - \frac{4\sqrt{\pi}(52z^{11/2} + 660z^{9/2} + 1755z^{7/2})\operatorname{erf}(\sqrt{z})}{2925} + \frac{42}{65z^2}$$

07.25.03.1296.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{5}{2}, 4; z\right) = \frac{126(17z+22)}{1105z^3} + \frac{2e^z(208z^8 - 2888z^7 + 7840z^6 + 2736z^5 + 2640z^4 + 3720z^3 + 5670z^2 + 4725z - 20790)}{16575z^3} - \frac{8\sqrt{\pi}(52z^{11/2} - 748z^{9/2} + 2295z^{7/2})\operatorname{erfi}(\sqrt{z})}{16575}$$

07.25.03.1297.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{5}{2}, 4; -z\right) = \frac{126(17z-22)}{1105z^3} - \frac{2e^{-z}(208z^8 + 2888z^7 + 7840z^6 - 2736z^5 + 2640z^4 - 3720z^3 + 5670z^2 - 4725z - 20790)}{16575z^3} - \frac{8\sqrt{\pi}(52z^{11/2} + 748z^{9/2} + 2295z^{7/2})\operatorname{erf}(\sqrt{z})}{16575}$$

07.25.03.1298.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{5}{2}, 5; z\right) = \frac{252(323z^2 + 836z + 858)}{20995z^4} + \frac{1}{314925z^4} 8e^z(416z^9 - 6480z^8 + 20224z^7 + 7392z^6 + 7632z^5 + 12000z^4 + 22680z^3 + 39690z^2 + 10395z - 405405) - \frac{64\sqrt{\pi}(52z^{11/2} - 836z^{9/2} + 2907z^{7/2})\operatorname{erfi}(\sqrt{z})}{314925}$$

07.25.03.1299.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{5}{2}, 5; -z\right) = \frac{252(323z^2 - 836z + 858)}{20995z^4} - \frac{1}{314925z^4} 8e^{-z}(416z^9 + 6480z^8 + 20224z^7 - 7392z^6 + 7632z^5 - 12000z^4 + 22680z^3 - 39690z^2 + 10395z + 405405) - \frac{64\sqrt{\pi}(52z^{11/2} + 836z^{9/2} + 2907z^{7/2})\operatorname{erf}(\sqrt{z})}{314925}$$

07.25.03.1300.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{5}{2}, 6; z\right) = \frac{12(2261z^3 + 8778z^2 + 18018z + 17160)}{4199z^5} + \frac{1}{1322685z^5} (8e^z(832z^{10} - 14368z^9 + 50688z^8 + 19200z^7 + 20832z^6 + 35280z^5 + 75600z^4 + 173880z^3 + 311850z^2 - 405405z - 8108100)) - \frac{128\sqrt{\pi}(52z^{11/2} - 924z^{9/2} + 3591z^{7/2})\operatorname{erfi}(\sqrt{z})}{1322685}$$

$$\begin{aligned}
 & \text{07.25.03.1301.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; -\frac{5}{2}, 6; -z\right) &= \frac{12(2261z^3 - 8778z^2 + 18018z - 17160)}{4199z^5} - \\
 & \frac{1}{1322685z^5} (8e^{-z}(832z^{10} + 14368z^9 + 50688z^8 - 19200z^7 + 20832z^6 - 35280z^5 + 75600z^4 - \\
 & 173880z^3 + 311850z^2 + 405405z - 8108100)) - \frac{128\sqrt{\pi}(52z^{11/2} + 924z^{9/2} + 3591z^{7/2})\operatorname{erf}(\sqrt{z})}{1322685}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.1302.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; -\frac{3}{2}, 1; z\right) &= \\
 & \frac{1}{36}e^z(-52z^5 + 700z^4 - 2349z^3 + 1536z^2 + 228z + 36) + \frac{1}{72}\sqrt{\pi}(104z^{11/2} - 1452z^{9/2} + 5346z^{7/2} - 4851z^{5/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1303.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; -\frac{3}{2}, 1; -z\right) &= \\
 & \frac{1}{36}e^{-z}(52z^5 + 700z^4 + 2349z^3 + 1536z^2 - 228z + 36) + \frac{1}{72}\sqrt{\pi}(104z^{11/2} + 1452z^{9/2} + 5346z^{7/2} + 4851z^{5/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1304.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; -\frac{3}{2}, 2; z\right) &= \\
 & \frac{1}{18}e^z(-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36}\sqrt{\pi}(8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1305.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; -\frac{3}{2}, 2; -z\right) &= \\
 & \frac{1}{18}e^{-z}(4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36}\sqrt{\pi}(8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1306.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; -\frac{3}{2}, 3; z\right) &= -\frac{2e^z(52z^7 - 964z^6 + 4809z^5 - 5520z^4 - 1320z^3 - 720z^2 - 315z + 315)}{1755z^2} + \\
 & \frac{\sqrt{\pi}(104z^{11/2} - 1980z^{9/2} + 10530z^{7/2} - 15015z^{5/2})\operatorname{erfi}(\sqrt{z})}{1755} + \frac{14}{39z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1307.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; -\frac{3}{2}, 3; -z\right) &= \frac{2e^{-z}(52z^7 + 964z^6 + 4809z^5 + 5520z^4 - 1320z^3 + 720z^2 - 315z - 315)}{1755z^2} + \\
 & \frac{\sqrt{\pi}(104z^{11/2} + 1980z^{9/2} + 10530z^{7/2} + 15015z^{5/2})\operatorname{erf}(\sqrt{z})}{1755} + \frac{14}{39z^2}
 \end{aligned}$$

07.25.03.1308.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{3}{2}, 4; z\right) = \frac{14(17z+18)}{221z^3} - \frac{2e^z(104z^8 - 2192z^7 + 12726z^6 - 17808z^5 - 4800z^4 - 3240z^3 - 2520z^2 - 315z + 5670)}{9945z^3} + \frac{2\sqrt{\pi}(104z^{11/2} - 2244z^{9/2} + 13770z^{7/2} - 23205z^{5/2})\operatorname{erfi}(\sqrt{z})}{9945}$$

07.25.03.1309.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{3}{2}, 4; -z\right) = \frac{14(17z-18)}{221z^3} + \frac{2e^{-z}(104z^8 + 2192z^7 + 12726z^6 + 17808z^5 - 4800z^4 + 3240z^3 - 2520z^2 + 315z + 5670)}{9945z^3} + \frac{2\sqrt{\pi}(104z^{11/2} + 2244z^{9/2} + 13770z^{7/2} + 23205z^{5/2})\operatorname{erf}(\sqrt{z})}{9945}$$

07.25.03.1310.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{3}{2}, 5; z\right) = \frac{28(323z^2 + 684z + 594)}{4199z^4} - \frac{1}{188955z^4} + \frac{8e^z(208z^9 - 4912z^8 + 32532z^7 - 53760z^6 - 15792z^5 - 12240z^4 - 12600z^3 - 10080z^2 + 14175z + 93555) + 16\sqrt{\pi}(104z^{11/2} - 2508z^{9/2} + 17442z^{7/2} - 33915z^{5/2})\operatorname{erfi}(\sqrt{z})}{188955}$$

07.25.03.1311.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{3}{2}, 5; -z\right) = \frac{28(323z^2 - 684z + 594)}{4199z^4} + \frac{1}{188955z^4} + \frac{8e^{-z}(208z^9 + 4912z^8 + 32532z^7 + 53760z^6 - 15792z^5 + 12240z^4 - 12600z^3 + 10080z^2 + 14175z - 93555) + 16\sqrt{\pi}(104z^{11/2} + 2508z^{9/2} + 17442z^{7/2} + 33915z^{5/2})\operatorname{erf}(\sqrt{z})}{188955}$$

07.25.03.1312.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{3}{2}, 6; z\right) = \frac{20(2261z^3 + 7182z^2 + 12474z + 10296)}{12597z^5} - \frac{1}{793611z^5} (8e^z(416z^{10} - 10880z^9 + 80952z^8 - 154368z^7 - 48384z^6 - 41328z^5 - 50400z^4 - 63000z^3 - 22680z^2 + 343035z + 1621620)) + \frac{32\sqrt{\pi}(104z^{11/2} - 2772z^{9/2} + 21546z^{7/2} - 47481z^{5/2})\operatorname{erfi}(\sqrt{z})}{793611}$$

07.25.03.1313.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{3}{2}, 6; -z\right) = \frac{20(2261z^3 - 7182z^2 + 12474z - 10296)}{12597z^5} +$$

$$\frac{1}{793611z^5} (8e^{-z}(416z^{10} + 10880z^9 + 80952z^8 + 154368z^7 - 48384z^6 + 41328z^5 - 50400z^4 + 63000z^3 -$$

$$22680z^2 - 343035z + 1621620)) + \frac{32\sqrt{\pi}(104z^{11/2} + 2772z^{9/2} + 21546z^{7/2} + 47481z^{5/2})\operatorname{erf}(\sqrt{z})}{793611}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = -\frac{1}{2}$

07.25.03.1314.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{1}{2}, 1; z\right) = \frac{1}{192} e^z (104z^5 - 1884z^4 + 9802z^3 - 15315z^2 + 4032z + 192) +$$

$$\frac{1}{384} \sqrt{\pi} (-208z^{11/2} + 3872z^{9/2} - 21384z^{7/2} + 38808z^{5/2} - 17325z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1315.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{1}{2}, 1; -z\right) = \frac{1}{192} e^{-z} (-104z^5 - 1884z^4 - 9802z^3 - 15315z^2 - 4032z + 192) +$$

$$\frac{1}{384} \sqrt{\pi} (-208z^{11/2} - 3872z^{9/2} - 21384z^{7/2} - 38808z^{5/2} - 17325z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1316.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{1}{2}, 2; z\right) = \frac{1}{96} e^z (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) +$$

$$\frac{1}{192} \sqrt{\pi} (-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1317.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{1}{2}, 2; -z\right) = \frac{1}{96} e^{-z} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) +$$

$$\frac{1}{192} \sqrt{\pi} (-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1318.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{1}{2}, 3; z\right) = \frac{e^z(104z^7 - 2588z^6 + 19818z^5 - 51315z^4 + 29760z^3 + 4320z^2 + 720z - 720)}{4680z^2} +$$

$$\frac{\sqrt{\pi}(-208z^{11/2} + 5280z^{9/2} - 42120z^{7/2} + 120120z^{5/2} - 96525z^{3/2})\operatorname{erfi}(\sqrt{z})}{9360} + \frac{2}{13z^2}$$

07.25.03.1319.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{1}{2}, 3; -z\right) = \frac{e^{-z}(-104z^7 - 2588z^6 - 19818z^5 - 51315z^4 - 29760z^3 + 4320z^2 - 720z - 720)}{4680z^2} +$$

$$\frac{\sqrt{\pi}(-208z^{11/2} - 5280z^{9/2} - 42120z^{7/2} - 120120z^{5/2} - 96525z^{3/2})\operatorname{erf}(\sqrt{z})}{9360} + \frac{2}{13z^2}$$

07.25.03.1320.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{1}{2}, 4; z\right) = \frac{6(17z+14)}{221z^3} + \frac{e^z(104z^8 - 2940z^7 + 26122z^6 - 81099z^5 + 60480z^4 + 11040z^3 + 3600z^2 - 1080z - 5040)}{13260z^3} + \frac{\sqrt{\pi}(-208z^{11/2} + 5984z^{9/2} - 55080z^{7/2} + 185640z^{5/2} - 182325z^{3/2})\operatorname{erfi}(\sqrt{z})}{26520}$$

07.25.03.1321.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{1}{2}, 4; -z\right) = \frac{6(17z-14)}{221z^3} + \frac{e^{-z}(-104z^8 - 2940z^7 - 26122z^6 - 81099z^5 - 60480z^4 + 11040z^3 - 3600z^2 - 1080z + 5040)}{13260z^3} + \frac{\sqrt{\pi}(-208z^{11/2} - 5984z^{9/2} - 55080z^{7/2} - 185640z^{5/2} - 182325z^{3/2})\operatorname{erf}(\sqrt{z})}{26520}$$

07.25.03.1322.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{1}{2}, 5; z\right) = \frac{12(323z^2 + 532z + 378)}{4199z^4} + \frac{1}{62985z^4} + \frac{2e^z(104z^9 - 3292z^8 + 33290z^7 - 120531z^6 + 110208z^5 + 23520z^4 + 10800z^3 + 1800z^2 - 13860z - 34020) + \sqrt{\pi}(-208z^{11/2} + 6688z^{9/2} - 69768z^{7/2} + 271320z^{5/2} - 314925z^{3/2})\operatorname{erfi}(\sqrt{z})}{62985}$$

07.25.03.1323.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{1}{2}, 5; -z\right) = \frac{12(323z^2 - 532z + 378)}{4199z^4} - \frac{1}{62985z^4} + \frac{2e^{-z}(104z^9 + 3292z^8 + 33290z^7 + 120531z^6 + 110208z^5 - 23520z^4 + 10800z^3 - 1800z^2 - 13860z + 34020) + \sqrt{\pi}(-208z^{11/2} - 6688z^{9/2} - 69768z^{7/2} - 271320z^{5/2} - 314925z^{3/2})\operatorname{erf}(\sqrt{z})}{62985}$$

07.25.03.1324.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{1}{2}, 6; z\right) = \frac{20(323z^3 + 798z^2 + 1134z + 792)}{4199z^5} + \frac{1}{264537z^5} (4e^z(104z^{10} - 3644z^9 + 41322z^8 - 170955z^7 + 185472z^6 + 44352z^5 + 25200z^4 + 12600z^3 - 18900z^2 - 107730z - 249480)) - \frac{2\sqrt{\pi}(208z^{11/2} - 7392z^{9/2} + 86184z^{7/2} - 379848z^{5/2} + 508725z^{3/2})\operatorname{erfi}(\sqrt{z})}{264537}$$

07.25.03.1325.01

$${}_2F_2\left(-\frac{11}{2}, 2; -\frac{1}{2}, 6; -z\right) = \frac{20(323z^3 - 798z^2 + 1134z - 792)}{4199z^5} - \frac{1}{264537z^5} (4e^{-z}(104z^{10} + 3644z^9 + 41322z^8 + 170955z^7 + 185472z^6 - 44352z^5 + 25200z^4 - 12600z^3 - 18900z^2 + 107730z - 249480)) - \frac{2\sqrt{\pi}(208z^{11/2} + 7392z^{9/2} + 86184z^{7/2} + 379848z^{5/2} + 508725z^{3/2})\operatorname{erf}(\sqrt{z})}{264537}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = \frac{1}{2}$

07.25.03.1326.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{1}{2}, 1; z\right) = \frac{e^z(-208z^5 + 4736z^4 - 33376z^3 + 82440z^2 - 57135z + 3840)}{3840} + \frac{\sqrt{\pi}(416z^{11/2} - 9680z^{9/2} + 71280z^{7/2} - 194040z^{5/2} + 173250z^{3/2} - 31185\sqrt{z})\operatorname{erfi}(\sqrt{z})}{7680}$$

07.25.03.1327.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{1}{2}, 1; -z\right) = \frac{e^{-z}(208z^5 + 4736z^4 + 33376z^3 + 82440z^2 + 57135z + 3840)}{3840} + \frac{\sqrt{\pi}(416z^{11/2} + 9680z^{9/2} + 71280z^{7/2} + 194040z^{5/2} + 173250z^{3/2} + 31185\sqrt{z})\operatorname{erf}(\sqrt{z})}{7680}$$

07.25.03.1328.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{1}{2}, 2; z\right) = \frac{e^z(-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920)}{1920} + \frac{\sqrt{\pi}(32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.1329.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{1}{2}, 2; -z\right) = \frac{e^{-z}(16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \frac{\sqrt{\pi}(32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z})\operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.1330.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{1}{2}, 3; z\right) = \frac{e^z(-208z^7 + 6496z^6 - 67056z^5 + 269760z^4 - 374115z^3 + 92160z^2 + 2880z - 2880)}{93600z^2} + \frac{\sqrt{\pi}(416z^{11/2} - 13200z^{9/2} + 140400z^{7/2} - 600600z^{5/2} + 965250z^{3/2} - 405405\sqrt{z})\operatorname{erfi}(\sqrt{z})}{187200} + \frac{2}{65z^2}$$

07.25.03.1331.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{1}{2}, 3; -z\right) = \frac{e^{-z}(208z^7 + 6496z^6 + 67056z^5 + 269760z^4 + 374115z^3 + 92160z^2 - 2880z - 2880)}{93600z^2} + \frac{\sqrt{\pi}(416z^{11/2} + 13200z^{9/2} + 140400z^{7/2} + 600600z^{5/2} + 965250z^{3/2} + 405405\sqrt{z})\operatorname{erf}(\sqrt{z})}{187200} + \frac{2}{65z^2}$$

07.25.03.1332.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{1}{2}, 4; z\right) = \frac{6(17z + 10)}{1105z^3} + \frac{1}{265200z^3} e^{-z}(-208z^8 + 7376z^7 - 88216z^6 + 423420z^5 - 735765z^4 + 255360z^3 + 17280z^2 - 10080z - 14400) + \frac{\sqrt{\pi}(416z^{11/2} - 14960z^{9/2} + 183600z^{7/2} - 928200z^{5/2} + 1823250z^{3/2} - 984555\sqrt{z})\operatorname{erfi}(\sqrt{z})}{530400}$$

07.25.03.1333.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{1}{2}, 4; -z\right) = \frac{6(17z - 10)}{1105z^3} + \frac{1}{265200z^3} e^{-z}(208z^8 + 7376z^7 + 88216z^6 + 423420z^5 + 735765z^4 + 255360z^3 - 17280z^2 - 10080z + 14400) + \frac{\sqrt{\pi}(416z^{11/2} + 14960z^{9/2} + 183600z^{7/2} + 928200z^{5/2} + 1823250z^{3/2} + 984555\sqrt{z})\operatorname{erfi}(\sqrt{z})}{530400}$$

07.25.03.1334.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{1}{2}, 5; z\right) = \frac{12(323z^2 + 380z + 210)}{20995z^4} + \frac{1}{629850z^4} (e^z(-208z^9 + 8256z^8 - 112256z^7 + 626040z^6 - 1308375z^5 + 591360z^4 + 60480z^3 - 17280z^2 - 61200z - 75600)) + \frac{1}{1259700} \sqrt{\pi}(416z^{11/2} - 16720z^{9/2} + 232560z^{7/2} - 1356600z^{5/2} + 3149250z^{3/2} - 2078505\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.1335.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{1}{2}, 5; -z\right) = \frac{12(323z^2 - 380z + 210)}{20995z^4} + \frac{1}{629850z^4} (e^{-z}(208z^9 + 8256z^8 + 112256z^7 + 626040z^6 + 1308375z^5 + 591360z^4 - 60480z^3 - 17280z^2 + 61200z - 75600)) + \frac{1}{1259700} \sqrt{\pi}(416z^{11/2} + 16720z^{9/2} + 232560z^{7/2} + 1356600z^{5/2} + 3149250z^{3/2} + 2078505\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.1336.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{1}{2}, 6; z\right) = \frac{4(323z^3 + 570z^2 + 630z + 360)}{4199z^5} + \frac{1}{1322685z^5} (e^z(-208z^{10} + 9136z^9 - 139176z^8 + 884340z^7 - 2160585z^6 + 1209600z^5 + 161280z^4 - 10080z^3 - 151200z^2 - 340200z - 453600)) + \frac{1}{2645370} \sqrt{\pi}(416z^{11/2} - 18480z^{9/2} + 287280z^{7/2} - 1899240z^{5/2} + 5087250z^{3/2} - 3968055\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.1337.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; \frac{1}{2}, 6; -z\right) = & \frac{4(323z^3 - 570z^2 + 630z - 360)}{4199z^5} + \frac{1}{1322685z^5} (e^{-z}(208z^{10} + 9136z^9 + 139176z^8 + 884340z^7 + 2160585z^6 + \\
 & 1209600z^5 - 161280z^4 - 10080z^3 + 151200z^2 - 340200z + 453600)) + \\
 & \frac{1}{2645370} \sqrt{\pi} (416z^{11/2} + 18480z^{9/2} + 287280z^{7/2} + 1899240z^{5/2} + 5087250z^{3/2} + 3968055\sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = 1$

$$\begin{aligned}
 & \text{07.25.03.1338.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; 1, 1; z\right) = & \frac{e^{z/2}(416z^6 - 10960z^5 + 96000z^4 - 341652z^3 + 489198z^2 - 239085z + 20790)I_0\left(\frac{z}{2}\right)}{20790} + \\
 & \frac{e^{z/2}(-416z^6 + 10544z^5 - 85664z^4 + 260844z^3 - 261942z^2 + 49443z)I_1\left(\frac{z}{2}\right)}{20790}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1339.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; 1, \frac{3}{2}; z\right) = & \frac{e^z(-416z^5 + 11408z^4 - 101424z^3 + 342552z^2 - 386850z + 81765)}{92160} + \\
 & \frac{\sqrt{\pi}(832z^6 - 23232z^5 + 213840z^4 - 776160z^3 + 1039500z^2 - 374220z + 10395) \operatorname{erfi}(\sqrt{z})}{184320\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1340.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; 1, \frac{3}{2}; -z\right) = & \frac{e^{-z}(416z^5 + 11408z^4 + 101424z^3 + 342552z^2 + 386850z + 81765)}{92160} + \\
 & \frac{\sqrt{\pi}(832z^6 + 23232z^5 + 213840z^4 + 776160z^3 + 1039500z^2 + 374220z + 10395) \operatorname{erf}(\sqrt{z})}{184320\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1341.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; 1, 2; z\right) = & \frac{e^{z/2}(32z^6 - 992z^5 + 10512z^4 - 46944z^3 + 88674z^2 - 62370z + 10395)I_0\left(\frac{z}{2}\right)}{10395} - \\
 & \frac{2e^{z/2}(16z^6 - 480z^5 + 4784z^4 - 18912z^3 + 27387z^2 - 9762z)I_1\left(\frac{z}{2}\right)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1342.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; 1, \frac{5}{2}; z\right) = & \frac{e^z(-832z^6 + 26688z^5 - 286448z^4 + 1227360z^3 - 1925532z^2 + 707700z + 10395)}{860160z} + \frac{1}{1720320z^{3/2}} \\
 & \sqrt{\pi}(1664z^7 - 54208z^6 + 598752z^5 - 2716560z^4 + 4851000z^3 - 2619540z^2 + 145530z - 10395) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.1343.01

$${}_2F_2\left(-\frac{11}{2}, 2; 1, \frac{5}{2}; -z\right) = \frac{e^{-z} (832 z^6 + 26688 z^5 + 286448 z^4 + 1227360 z^3 + 1925532 z^2 + 707700 z - 10395)}{860160 z} + \frac{1}{1720320 z^{3/2}} \sqrt{\pi} (1664 z^7 + 54208 z^6 + 598752 z^5 + 2716560 z^4 + 4851000 z^3 + 2619540 z^2 + 145530 z + 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.1344.01

$${}_2F_2\left(-\frac{11}{2}, 2; 1, 3; z\right) = \frac{2 e^{z/2} (832 z^6 - 29664 z^5 + 368880 z^4 - 1981920 z^3 + 4643640 z^2 - 4220370 z + 1008315) I_0\left(\frac{z}{2}\right) - \frac{1}{2027025} 2 e^{z/2} (832 z^7 - 28832 z^6 + 340464 z^5 - 1655040 z^4 + 3132600 z^3 - 1654110 z^2 + 10395 z - 20790) I_1\left(\frac{z}{2}\right)}{2027025}$$

07.25.03.1345.01

$${}_2F_2\left(-\frac{11}{2}, 2; 1, \frac{7}{2}; z\right) = \frac{1}{5505024 z^2} e^z (-1664 z^7 + 61120 z^6 - 768608 z^5 + 3990672 z^4 - 8022264 z^3 + 4254852 z^2 + 103950 z + 93555) + \frac{1}{11010048 z^{5/2}} (\sqrt{\pi} (3328 z^8 - 123904 z^7 + 1596672 z^6 - 8692992 z^5 + 19404000 z^4 - 13970880 z^3 + 1164240 z^2 - 166320 z - 93555) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1346.01

$${}_2F_2\left(-\frac{11}{2}, 2; 1, \frac{7}{2}; -z\right) = \frac{1}{5505024 z^2} e^{-z} (1664 z^7 + 61120 z^6 + 768608 z^5 + 3990672 z^4 + 8022264 z^3 + 4254852 z^2 - 103950 z + 93555) + \frac{1}{11010048 z^{5/2}} (\sqrt{\pi} (3328 z^8 + 123904 z^7 + 1596672 z^6 + 8692992 z^5 + 19404000 z^4 + 13970880 z^3 + 1164240 z^2 + 166320 z - 93555) \operatorname{erf}(\sqrt{-z}))$$

07.25.03.1347.01

$${}_2F_2\left(-\frac{11}{2}, 2; 1, 4; z\right) = \frac{1}{11486475 z} 4 e^{z/2} (832 z^7 - 33536 z^6 + 478704 z^5 - 3006240 z^4 + 8403000 z^3 - 9313920 z^2 + 2837835 z - 20790) I_0\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} (4 e^{z/2} (832 z^8 - 32704 z^7 + 446416 z^6 - 2575344 z^5 + 6020760 z^4 - 4225800 z^3 + 72765 z^2 - 135135 z - 83160) I_1\left(\frac{z}{2}\right))$$

07.25.03.1348.01

$${}_2F_2\left(-\frac{11}{2}, 2; 1, \frac{9}{2}; z\right) = \frac{1}{28311552z^3} \left(e^z (-3328z^8 + 137728z^7 - 1985664z^6 + 12111360z^5 - 29707584z^4 + 20717856z^3 + 582120z^2 + 1164240z + 779625) \right) + \frac{1}{56623104z^{7/2}} \left(\sqrt{\pi} (6656z^9 - 278784z^8 + 4105728z^7 - 26078976z^6 + 69854400z^5 - 62868960z^4 + 6985440z^3 - 1496880z^2 - 1683990z - 779625) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1349.01

$${}_2F_2\left(-\frac{11}{2}, 2; 1, \frac{9}{2}; -z\right) = \frac{1}{28311552z^3} \left(e^{-z} (3328z^8 + 137728z^7 + 1985664z^6 + 12111360z^5 + 29707584z^4 + 20717856z^3 - 582120z^2 + 1164240z - 779625) \right) + \frac{1}{56623104z^{7/2}} \left(\sqrt{\pi} (6656z^9 + 278784z^8 + 4105728z^7 + 26078976z^6 + 69854400z^5 + 62868960z^4 + 6985440z^3 + 1496880z^2 - 1683990z + 779625) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1350.01

$${}_2F_2\left(-\frac{11}{2}, 2; 1, 5; z\right) = \frac{1}{218243025z^2} \left(16e^{z/2} (1664z^8 - 74816z^7 + 1205568z^6 - 8664624z^5 + 28126320z^4 - 36673560z^3 + 13388760z^2 - 301455z - 187110) I_0\left(\frac{z}{2}\right) \right) - \frac{1}{218243025z^3} \left(16e^{z/2} (1664z^9 - 73152z^8 + 1133248z^7 - 7566288z^6 + 21058704z^5 - 18471720z^4 + 582120z^3 - 1029105z^2 - 1205820z - 748440) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.1351.01

$${}_2F_2\left(-\frac{11}{2}, 2; 1, \frac{11}{2}; z\right) = \frac{1}{125829120z^4} \left(e^z (-6656z^9 + 306432z^8 - 4982272z^7 + 34909440z^6 - 101108160z^5 + 87681120z^4 + 2328480z^3 + 8482320z^2 + 10498950z + 7640325) \right) + \frac{1}{251658240z^{9/2}} \left(\sqrt{\pi} (13312z^{10} - 619520z^9 + 10264320z^8 - 74511360z^7 + 232848000z^6 - 251475840z^5 + 34927200z^4 - 9979200z^3 - 16839900z^2 - 15592500z - 7640325) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1352.01

$${}_2F_2\left(-\frac{11}{2}, 2; 1, \frac{11}{2}; -z\right) = \frac{1}{125\,829\,120\,z^4} \left(e^{-z} (6656 z^9 + 306\,432 z^8 + 4\,982\,272 z^7 + 34\,909\,440 z^6 + 101\,108\,160 z^5 + 87\,681\,120 z^4 - 2\,328\,480 z^3 + 8\,482\,320 z^2 - 10\,498\,950 z + 7\,640\,325) \right) + \frac{1}{251\,658\,240\,z^{9/2}} \left(\sqrt{\pi} (13\,312 z^{10} + 619\,520 z^9 + 10\,264\,320 z^8 + 74\,511\,360 z^7 + 232\,848\,000 z^6 + 251\,475\,840 z^5 + 34\,927\,200 z^4 + 9\,979\,200 z^3 - 16\,839\,900 z^2 + 15\,592\,500 z - 7\,640\,325) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1353.01

$${}_2F_2\left(-\frac{11}{2}, 2; 1, 6; z\right) = \frac{1}{916\,620\,705\,z^3} \left(32 e^{z/2} (1664 z^9 - 82\,560 z^8 + 1\,482\,240 z^7 - 11\,997\,888 z^6 + 44\,345\,952 z^5 - 66\,361\,680 z^4 + 27\,941\,760 z^3 - 1\,247\,400 z^2 - 1\,465\,695 z - 997\,920) I_0\left(\frac{z}{2}\right) - \frac{1}{916\,620\,705\,z^4} \left(128 e^{z/2} (416 z^{10} - 20\,224 z^9 + 350\,544 z^8 - 2\,658\,624 z^7 + 8\,584\,212 z^6 - 9\,042\,768 z^5 + 436\,590 z^4 - 748\,440 z^3 - 1\,278\,585 z^2 - 1\,465\,695 z - 997\,920) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = \frac{3}{2}$

07.25.03.1354.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{3}{2}, 2; z\right) = \frac{e^z (-32 z^5 + 1040 z^4 - 11\,376 z^3 + 50\,232 z^2 - 83\,370 z + 35\,685)}{46\,080} + \frac{\sqrt{\pi} (64 z^6 - 2112 z^5 + 23\,760 z^4 - 110\,880 z^3 + 207\,900 z^2 - 124\,740 z + 10\,395) \operatorname{erfi}(\sqrt{z})}{92\,160 \sqrt{z}}$$

07.25.03.1355.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (32 z^5 + 1040 z^4 + 11\,376 z^3 + 50\,232 z^2 + 83\,370 z + 35\,685)}{46\,080} + \frac{\sqrt{\pi} (64 z^6 + 2112 z^5 + 23\,760 z^4 + 110\,880 z^3 + 207\,900 z^2 + 124\,740 z + 10\,395) \operatorname{erf}(\sqrt{z})}{92\,160 \sqrt{z}}$$

07.25.03.1356.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{3}{2}, 3; z\right) = \frac{1}{2\,246\,400\,z^2} e^z (-416 z^7 + 15\,632 z^6 - 202\,992 z^5 + 1\,107\,000 z^4 - 2\,426\,130 z^3 + 1\,582\,245 z^2 - 23\,040 z + 23\,040) + \frac{1}{4\,492\,800 \sqrt{z}} \sqrt{\pi} (832 z^6 - 31\,680 z^5 + 421\,200 z^4 - 2\,402\,400 z^3 + 5\,791\,500 z^2 - 4\,864\,860 z + 675\,675) \operatorname{erfi}(\sqrt{z}) - \frac{2}{195 z^2}$$

07.25.03.1357.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{3}{2}, 3; -z\right) = \frac{e^{-z} (416 z^7 + 15 632 z^6 + 202 992 z^5 + 1 107 000 z^4 + 2 426 130 z^3 + 1 582 245 z^2 + 23 040 z + 23 040)}{2 246 400 z^2} + \frac{1}{4 492 800 \sqrt{z}} \sqrt{\pi} (832 z^6 + 31 680 z^5 + 421 200 z^4 + 2 402 400 z^3 + 5 791 500 z^2 + 4 864 860 z + 675 675) \operatorname{erf}(\sqrt{z}) - \frac{2}{195 z^2}$$

07.25.03.1358.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{3}{2}, 4; z\right) = -\frac{2(17z+6)}{1105 z^3} + \frac{1}{6 364 800 z^3} e^z (-416 z^8 + 17 744 z^7 - 266 736 z^6 + 1 731 384 z^5 - 4 717 170 z^4 + 4 153 905 z^3 - 161 280 z^2 + 126 720 z + 69 120) + \frac{1}{12 729 600 \sqrt{z}} \sqrt{\pi} (832 z^6 - 35 904 z^5 + 550 800 z^4 - 3 712 800 z^3 + 10 939 500 z^2 - 11 814 660 z + 2 297 295) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1359.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{3}{2}, 4; -z\right) = -\frac{2(17z-6)}{1105 z^3} + \frac{1}{6 364 800 z^3} e^{-z} (416 z^8 + 17 744 z^7 + 266 736 z^6 + 1 731 384 z^5 + 4 717 170 z^4 + 4 153 905 z^3 + 161 280 z^2 + 126 720 z - 69 120) + \frac{1}{12 729 600 \sqrt{z}} \sqrt{\pi} (832 z^6 + 35 904 z^5 + 550 800 z^4 + 3 712 800 z^3 + 10 939 500 z^2 + 11 814 660 z + 2 297 295) \operatorname{erf}(\sqrt{z})$$

07.25.03.1360.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{3}{2}, 5; z\right) = -\frac{4(323 z^2 + 228 z + 90)}{20 995 z^4} + \frac{1}{15 116 400 z^4} (e^z (-416 z^9 + 19 856 z^8 - 339 120 z^7 + 2 553 048 z^6 - 8 317 890 z^5 + 9 247 365 z^4 - 645 120 z^3 + 403 200 z^2 + 397 440 z + 259 200)) + \frac{1}{30 232 800 \sqrt{z}} \sqrt{\pi} (832 z^6 - 40 128 z^5 + 697 680 z^4 - 5 426 400 z^3 + 18 895 500 z^2 - 24 942 060 z + 6 235 515) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1361.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{3}{2}, 5; -z\right) = -\frac{4(323 z^2 - 228 z + 90)}{20 995 z^4} + \frac{1}{15 116 400 z^4} (e^{-z} (416 z^9 + 19 856 z^8 + 339 120 z^7 + 2 553 048 z^6 + 8 317 890 z^5 + 9 247 365 z^4 + 645 120 z^3 + 403 200 z^2 - 397 440 z + 259 200)) + \frac{1}{30 232 800 \sqrt{z}} \sqrt{\pi} (832 z^6 + 40 128 z^5 + 697 680 z^4 + 5 426 400 z^3 + 18 895 500 z^2 + 24 942 060 z + 6 235 515) \operatorname{erf}(\sqrt{z})$$

07.25.03.1362.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{3}{2}, 6; z\right) = -\frac{4(323 z^3 + 342 z^2 + 270 z + 120)}{12 597 z^5} + \frac{1}{31 744 440 z^5} (e^z (-416 z^{10} + 21 968 z^9 - 420 144 z^8 + 3 598 872 z^7 - 13 646 850 z^6 + 18 351 585 z^5 - 1 935 360 z^4 + 967 680 z^3 + 1 330 560 z^2 + 1 512 000 z + 1 209 600)) + \frac{1}{63 488 880 \sqrt{z}} \sqrt{\pi} (832 z^6 - 44 352 z^5 + 861 840 z^4 - 7 596 960 z^3 + 30 523 500 z^2 - 47 616 660 z + 14 549 535) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1363.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{3}{2}, 6; -z\right) = -\frac{4(323z^3 - 342z^2 + 270z - 120)}{12597z^5} + \frac{1}{31744440z^5} (e^{-z}(416z^{10} + 21968z^9 + 420144z^8 + 3598872z^7 + 13646850z^6 + 18351585z^5 + 1935360z^4 + 967680z^3 - 1330560z^2 + 1512000z - 1209600)) + \frac{1}{63488880\sqrt{z}} \sqrt{\pi} (832z^6 + 44352z^5 + 861840z^4 + 7596960z^3 + 30523500z^2 + 47616660z + 14549535) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = 2$

07.25.03.1364.01

$${}_2F_2\left(-\frac{11}{2}, 2; 2, 2; z\right) = \frac{e^{z/2}(64z^6 - 2336z^5 + 30000z^4 - 168864z^3 + 425112z^2 - 436590z + 135135)I_0\left(\frac{z}{2}\right)}{135135} + \frac{e^{z/2}(-64z^6 + 2272z^5 - 27760z^4 + 142176z^3 - 294744z^2 + 191442z - 10395)I_1\left(\frac{z}{2}\right)}{135135}$$

07.25.03.1365.01

$${}_2F_2\left(-\frac{11}{2}, 2; 2, \frac{5}{2}; z\right) = \frac{e^z(-64z^6 + 2432z^5 - 32080z^4 + 179136z^3 - 408828z^2 + 291480z - 10395)}{430080z} + \frac{1}{860160z^{3/2}} \sqrt{\pi} (128z^7 - 4928z^6 + 66528z^5 - 388080z^4 + 970200z^3 - 873180z^2 + 145530z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1366.01

$${}_2F_2\left(-\frac{11}{2}, 2; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(64z^6 + 2432z^5 + 32080z^4 + 179136z^3 + 408828z^2 + 291480z + 10395)}{430080z} + \frac{1}{860160z^{3/2}} \sqrt{\pi} (128z^7 + 4928z^6 + 66528z^5 + 388080z^4 + 970200z^3 + 873180z^2 + 145530z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.1367.01

$${}_2F_2\left(-\frac{11}{2}, 2; 2, 3; z\right) = \frac{4e^{z/2}(64z^6 - 2688z^5 + 40560z^4 - 275520z^3 + 866520z^2 - 1164240z + 509355)I_0\left(\frac{z}{2}\right)}{2027025} - \frac{1}{2027025z} 4e^{z/2}(64z^7 - 2624z^6 + 37968z^5 - 238800z^4 + 644280z^3 - 608760z^2 + 72765z + 10395)I_1\left(\frac{z}{2}\right)$$

07.25.03.1368.01

$${}_2F_2\left(-\frac{11}{2}, 2; 2, \frac{7}{2}; z\right) = \frac{e^z(-128z^7 + 5568z^6 - 85984z^5 + 580560z^4 - 1686744z^3 + 1690836z^2 - 145530z - 31185)}{2752512z^2} + \frac{1}{5505024z^{5/2}} (\sqrt{\pi} (256z^8 - 11264z^7 + 177408z^6 - 1241856z^5 + 3880800z^4 - 4656960z^3 + 1164240z^2 + 166320z + 31185) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1369.01

$${}_2F_2\left(-\frac{11}{2}, 2; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 5568 z^6 + 85984 z^5 + 580560 z^4 + 1686744 z^3 + 1690836 z^2 + 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}}$$

$$\left(\sqrt{\pi} (256 z^8 + 11264 z^7 + 177408 z^6 + 1241856 z^5 + 3880800 z^4 + 4656960 z^3 + 1164240 z^2 - 166320 z + 31185)\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.1370.01

$${}_2F_2\left(-\frac{11}{2}, 2; 2, 4; z\right) = \frac{1}{11486475 z} 4 e^{z/2} (128 z^7 - 6080 z^6 + 105408 z^5 - 838800 z^4 + 3163920 z^3 - 5239080 z^2 + 2910600 z + 10395) I_0\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} 4 e^{z/2} (128 z^8 - 5952 z^7 + 99520 z^6 - 742128 z^5 + 2466000 z^4 - 3061560 z^3 + 582120 z^2 + 155925 z + 41580) I_1\left(\frac{z}{2}\right)$$

07.25.03.1371.01

$${}_2F_2\left(-\frac{11}{2}, 2; 2, \frac{9}{2}; z\right) = \frac{1}{14155776 z^3} e^z (-256 z^8 + 12544 z^7 - 221952 z^6 + 1757760 z^5 - 6203040 z^4 + 8030448 z^3 - 1164240 z^2 - 457380 z - 155925) + \frac{1}{28311552 z^{7/2}} \left(\sqrt{\pi} (512 z^9 - 25344 z^8 + 456192 z^7 - 3725568 z^6 + 13970880 z^5 - 20956320 z^4 + 6985440 z^3 + 1496880 z^2 + 561330 z + 155925)\right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1372.01

$${}_2F_2\left(-\frac{11}{2}, 2; 2, \frac{9}{2}; -z\right) = \frac{1}{14155776 z^3} e^{-z} (256 z^8 + 12544 z^7 + 221952 z^6 + 1757760 z^5 + 6203040 z^4 + 8030448 z^3 + 1164240 z^2 - 457380 z + 155925) + \frac{1}{28311552 z^{7/2}} \left(\sqrt{\pi} (512 z^9 + 25344 z^8 + 456192 z^7 + 3725568 z^6 + 13970880 z^5 + 20956320 z^4 + 6985440 z^3 - 1496880 z^2 + 561330 z - 155925)\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.1373.01

$${}_2F_2\left(-\frac{11}{2}, 2; 2, 5; z\right) = \frac{1}{218243025 z^2} \left(32 e^{z/2} (128 z^8 - 6784 z^7 + 132864 z^6 - 1212096 z^5 + 5331360 z^4 - 10478160 z^3 + 6985440 z^2 + 83160 z + 31185)\right) I_0\left(\frac{z}{2}\right) - \frac{1}{218243025 z^3} \left(128 e^{z/2} (32 z^9 - 1664 z^8 + 31568 z^7 - 272256 z^6 + 1074804 z^5 - 1654080 z^4 + 436590 z^3 + 166320 z^2 + 83160 z + 31185)\right) I_1\left(\frac{z}{2}\right)$$

$$\begin{aligned}
 & \text{07.25.03.1374.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 2; 2, \frac{11}{2}; z\right) = \\
 & \frac{1}{62\,914\,560 z^4} \left(e^z (-512 z^9 + 27\,904 z^8 - 556\,544 z^7 + 5\,057\,280 z^6 - 21\,001\,920 z^5 + 33\,362\,400 z^4 - 6\,985\,440 z^3 - \right. \\
 & \quad \left. 3\,825\,360 z^2 - 2\,390\,850 z - 1\,091\,475) \right) + \\
 & \frac{1}{125\,829\,120 z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} - 56\,320 z^9 + 1\,140\,480 z^8 - 10\,644\,480 z^7 + 46\,569\,600 z^6 - 83\,825\,280 z^5 + \right. \\
 & \quad \left. 34\,927\,200 z^4 + 9\,979\,200 z^3 + 5\,613\,300 z^2 + 3\,118\,500 z + 1\,091\,475) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1375.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 2; 2, \frac{11}{2}; -z\right) = \\
 & \frac{1}{62\,914\,560 z^4} \left(e^{-z} (512 z^9 + 27\,904 z^8 + 556\,544 z^7 + 5\,057\,280 z^6 + 21\,001\,920 z^5 + 33\,362\,400 z^4 + 6\,985\,440 z^3 - \right. \\
 & \quad \left. 3\,825\,360 z^2 + 2\,390\,850 z - 1\,091\,475) \right) + \\
 & \frac{1}{125\,829\,120 z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} + 56\,320 z^9 + 1\,140\,480 z^8 + 10\,644\,480 z^7 + 46\,569\,600 z^6 + 83\,825\,280 z^5 + \right. \\
 & \quad \left. 34\,927\,200 z^4 - 9\,979\,200 z^3 + 5\,613\,300 z^2 - 3\,118\,500 z + 1\,091\,475) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1376.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 2; 2, 6; z\right) = \\
 & \frac{1}{916\,620\,705 z^3} \left(32 e^{z/2} (256 z^9 - 14\,976 z^8 + 326\,976 z^7 - 3\,364\,032 z^6 + 16\,903\,152 z^5 - 38\,419\,920 z^4 + 29\,688\,120 z^3 + \right. \\
 & \quad \left. 748\,440 z^2 + 530\,145 z + 249\,480) I_0\left(\frac{z}{2}\right) \right) - \\
 & \frac{1}{916\,620\,705 z^4} \left(32 e^{z/2} (256 z^{10} - 14\,720 z^9 + 312\,384 z^8 - 3\,058\,752 z^7 + 13\,986\,672 z^6 - 25\,692\,912 z^5 + \right. \\
 & \quad \left. 8\,731\,800 z^4 + 4\,241\,160 z^3 + 3\,024\,945 z^2 + 2\,120\,580 z + 997\,920) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = \frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.1377.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 2; \frac{5}{2}, 3; z\right) = \\
 & \frac{1}{20\,966\,400 z^2} e^z (-832 z^7 + 36\,544 z^6 - 571\,824 z^5 + 3\,935\,520 z^4 - 11\,789\,820 z^3 + 12\,535\,740 z^2 - 1\,381\,905 z - 645\,120) + \\
 & \frac{1}{41\,932\,800 z^{3/2}} \left(\sqrt{\pi} (1664 z^7 - 73\,920 z^6 + 1\,179\,360 z^5 - 8\,408\,400 z^4 + \right. \\
 & \quad \left. 27\,027\,000 z^3 - 34\,054\,020 z^2 + 9\,459\,450 z + 2\,027\,025) \operatorname{erfi}(\sqrt{z}) \right) + \frac{2}{65 z^2}
 \end{aligned}$$

07.25.03.1378.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{5}{2}, 3; -z\right) = \frac{1}{20966400z^2} e^{-z} (832z^7 + 36544z^6 + 571824z^5 + 3935520z^4 + 11789820z^3 + 12535740z^2 + 1381905z - 645120) + \frac{1}{41932800z^{3/2}} \left(\sqrt{\pi} (1664z^7 + 73920z^6 + 1179360z^5 + 8408400z^4 + 27027000z^3 + 34054020z^2 + 9459450z - 2027025) \operatorname{erf}(\sqrt{z}) \right) + \frac{2}{65z^2}$$

07.25.03.1379.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{5}{2}, 4; z\right) = \frac{6(17z+2)}{1105z^3} + \frac{1}{59404800z^3} (e^z (-832z^8 + 41472z^7 - 750800z^6 + 6141696z^5 - 22782060z^4 + 32266080z^3 - 6325515z^2 - 4838400z - 645120)) + \frac{1}{118809600z^{3/2}} \left(\sqrt{\pi} (1664z^7 - 83776z^6 + 1542240z^5 - 12994800z^4 + 51051000z^3 - 82702620z^2 + 32162130z + 11486475) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1380.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{5}{2}, 4; -z\right) = \frac{6(17z-2)}{1105z^3} + \frac{1}{59404800z^3} (e^{-z} (832z^8 + 41472z^7 + 750800z^6 + 6141696z^5 + 22782060z^4 + 32266080z^3 + 6325515z^2 - 4838400z + 645120)) + \frac{1}{118809600z^{3/2}} \left(\sqrt{\pi} (1664z^7 + 83776z^6 + 1542240z^5 + 12994800z^4 + 51051000z^3 + 82702620z^2 + 32162130z - 11486475) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1381.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{5}{2}, 5; z\right) = \frac{12(323z^2 + 76z + 18)}{20995z^4} + \frac{1}{141086400z^4} (e^z (-832z^9 + 46400z^8 - 953968z^7 + 9041376z^6 - 39991644z^5 + 70825860z^4 - 20424285z^3 - 20643840z^2 - 4677120z - 1451520)) + \frac{1}{282172800z^{3/2}} \left(\sqrt{\pi} (1664z^7 - 93632z^6 + 1953504z^5 - 18992400z^4 + 88179000z^3 - 174594420z^2 + 87297210z + 43648605) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1382.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{5}{2}, 5; -z\right) = \frac{12(323z^2 - 76z + 18)}{20995z^4} + \frac{1}{141086400z^4} (e^{-z}(832z^9 + 46400z^8 + 953968z^7 + 9041376z^6 + 39991644z^5 + 70825860z^4 + 20424285z^3 - 20643840z^2 + 4677120z - 1451520)) + \frac{1}{282172800z^{3/2}} (\sqrt{\pi}(1664z^7 + 93632z^6 + 1953504z^5 + 18992400z^4 + 88179000z^3 + 174594420z^2 + 87297210z - 43648605) \operatorname{erf}(\sqrt{z}))$$

07.25.03.1383.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{5}{2}, 6; z\right) = \frac{4(2261z^3 + 798z^2 + 378z + 120)}{29393z^5} + \frac{1}{296281440z^5} (e^z(-832z^{10} + 51328z^9 - 1181328z^8 + 12728640z^7 - 65387532z^6 + 139071240z^5 - 53531415z^4 - 65802240z^3 - 19353600z^2 - 10402560z - 4838400)) + \frac{1}{592562880z^{3/2}} (\sqrt{\pi}(1664z^7 - 103488z^6 + 2413152z^5 - 26589360z^4 + 142443000z^3 - 333316620z^2 + 203693490z + 130945815) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1384.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{5}{2}, 6; -z\right) = \frac{4(2261z^3 - 798z^2 + 378z - 120)}{29393z^5} + \frac{1}{296281440z^5} (e^{-z}(832z^{10} + 51328z^9 + 1181328z^8 + 12728640z^7 + 65387532z^6 + 139071240z^5 + 53531415z^4 - 65802240z^3 + 19353600z^2 - 10402560z + 4838400)) + \frac{1}{592562880z^{3/2}} (\sqrt{\pi}(1664z^7 + 103488z^6 + 2413152z^5 + 26589360z^4 + 142443000z^3 + 333316620z^2 + 203693490z - 130945815) \operatorname{erf}(\sqrt{-z}))$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = 3$

07.25.03.1385.01

$${}_2F_2\left(-\frac{11}{2}, 2; 3, 3; z\right) = \frac{1}{395269875z^2} (8e^{z/2}(1664z^8 - 80448z^7 + 1427520z^6 - 11726640z^5 + 46292400z^4 - 82105560z^3 + 50697720z^2 + 2027025z - 4054050) I_0\left(\frac{z}{2}\right) - \frac{1}{395269875z} (8e^{z/2}(1664z^7 - 78784z^6 + 1349568z^5 - 10414800z^4 + 36478800z^3 - 49709160z^2 + 12117960z + 6169455) I_1\left(\frac{z}{2}\right) + \frac{16}{195z^2})$$

07.25.03.1386.01

$${}_2F_2\left(-\frac{11}{2}, 2; 3, \frac{7}{2}; z\right) = \frac{1}{134\,184\,960 z^2} e^z (-1664 z^7 + 83\,648 z^6 - 1\,531\,488 z^5 + 12\,727\,440 z^4 - 48\,359\,160 z^3 + 71\,430\,660 z^2 - 15\,842\,610 z - 14\,562\,765) + \frac{1}{268\,369\,920 z^{5/2}} \left(\sqrt{\pi} (3328 z^8 - 168\,960 z^7 + 3\,144\,960 z^6 - 26\,906\,880 z^5 + 108\,108\,000 z^4 - 181\,621\,440 z^3 + 75\,675\,600 z^2 + 32\,432\,400 z - 6\,081\,075) \operatorname{erfi}(\sqrt{z})\right) + \frac{2}{13 z^2}$$

07.25.03.1387.01

$${}_2F_2\left(-\frac{11}{2}, 2; 3, \frac{7}{2}; -z\right) = \frac{1}{134\,184\,960 z^2} e^{-z} (1664 z^7 + 83\,648 z^6 + 1\,531\,488 z^5 + 12\,727\,440 z^4 + 48\,359\,160 z^3 + 71\,430\,660 z^2 + 15\,842\,610 z - 14\,562\,765) + \frac{1}{268\,369\,920 z^{5/2}} \left(\sqrt{\pi} (3328 z^8 + 168\,960 z^7 + 3\,144\,960 z^6 + 26\,906\,880 z^5 + 108\,108\,000 z^4 + 181\,621\,440 z^3 + 75\,675\,600 z^2 - 32\,432\,400 z - 6\,081\,075) \operatorname{erf}(\sqrt{z})\right) + \frac{2}{13 z^2}$$

07.25.03.1388.01

$${}_2F_2\left(-\frac{11}{2}, 2; 3, 4; z\right) = \frac{1}{2\,239\,862\,625 z^2} \left(16 e^{z/2} (1664 z^8 - 91\,008 z^7 + 1\,856\,640 z^6 - 17\,893\,440 z^5 + 85\,003\,200 z^4 - 187\,086\,960 z^3 + 147\,147\,120 z^2 + 16\,216\,200 z - 34\,459\,425) I_0\left(\frac{z}{2}\right) - \frac{1}{2\,239\,862\,625 z^2} \left(32 e^{z/2} (832 z^8 - 44\,672 z^7 + 884\,064 z^6 - 8\,084\,160 z^5 + 34\,817\,400 z^4 - 62\,012\,880 z^3 + 23\,122\,980 z^2 + 18\,618\,840 z - 2\,027\,025) I_1\left(\frac{z}{2}\right) + \frac{16}{65 z^2}\right)\right)$$

07.25.03.1389.01

$${}_2F_2\left(-\frac{11}{2}, 2; 3, \frac{9}{2}; z\right) = \frac{1}{690\,094\,080 z^3} \left(e^z (-3328 z^8 + 188\,416 z^7 - 3\,950\,976 z^6 + 38\,474\,880 z^5 - 177\,112\,320 z^4 + 335\,188\,800 z^3 - 114\,435\,720 z^2 - 145\,023\,480 z + 10\,135\,125)\right) + \frac{1}{1\,380\,188\,160 z^{7/2}} \left(\sqrt{\pi} (6656 z^9 - 380\,160 z^8 + 8\,087\,040 z^7 - 80\,720\,640 z^6 + 389\,188\,800 z^5 - 817\,296\,480 z^4 + 454\,053\,600 z^3 + 291\,891\,600 z^2 - 109\,459\,350 z - 10\,135\,125) \operatorname{erfi}(\sqrt{z})\right) + \frac{14}{39 z^2}$$

07.25.03.1390.01

$${}_2F_2\left(-\frac{11}{2}, 2; 3, \frac{9}{2}; -z\right) = \frac{1}{690094080z^3} \left(e^{-z} (3328z^8 + 188416z^7 + 3950976z^6 + 38474880z^5 + 177112320z^4 + 335188800z^3 + 114435720z^2 - 145023480z - 10135125) \right) + \frac{1}{1380188160z^{7/2}} \left(\sqrt{\pi} (6656z^9 + 380160z^8 + 8087040z^7 + 80720640z^6 + 389188800z^5 + 817296480z^4 + 454053600z^3 - 291891600z^2 - 109459350z + 10135125) \operatorname{erf}(\sqrt{z}) \right) + \frac{14}{39z^2}$$

07.25.03.1391.01

$${}_2F_2\left(-\frac{11}{2}, 2; 3, 5; z\right) = \frac{1}{42557389875z^2} \left(64e^{z/2} (3328z^8 - 203136z^7 + 4683840z^6 - 51808320z^5 + 287722800z^4 - 755705520z^3 + 716817240z^2 + 145945800z - 330405075) I_0\left(\frac{z}{2}\right) - \frac{1}{42557389875z^3} \left(64e^{z/2} (3328z^9 - 199808z^8 + 4485696z^7 - 47419200z^6 + 242357040z^5 - 533153520z^4 + 269066520z^3 + 288893160z^2 - 70945875z - 12162150) I_1\left(\frac{z}{2}\right) + \frac{32}{65z^2} \right) \right)$$

07.25.03.1392.01

$${}_2F_2\left(-\frac{11}{2}, 2; 3, \frac{11}{2}; z\right) = \frac{1}{3067084800z^4} \left(e^z (-6656z^9 + 419072z^8 - 9902592z^7 + 110565120z^6 - 597823680z^5 + 1380376800z^4 - 643053600z^3 - 1010998800z^2 + 174324150z + 42567525) \right) + \frac{1}{6134169600z^{9/2}} \left(\sqrt{\pi} (13312z^{10} - 844800z^9 + 20217600z^8 - 230630400z^7 + 1297296000z^6 - 3269185920z^5 + 2270268000z^4 + 1945944000z^3 - 1094593500z^2 - 202702500z - 42567525) \operatorname{erfi}(\sqrt{z}) \right) + \frac{42}{65z^2}$$

07.25.03.1393.01

$${}_2F_2\left(-\frac{11}{2}, 2; 3, \frac{11}{2}; -z\right) = \frac{1}{3067084800z^4} \left(e^{-z} (6656z^9 + 419072z^8 + 9902592z^7 + 110565120z^6 + 597823680z^5 + 1380376800z^4 + 643053600z^3 - 1010998800z^2 - 174324150z + 42567525) \right) + \frac{1}{6134169600z^{9/2}} \left(\sqrt{\pi} (13312z^{10} + 844800z^9 + 20217600z^8 + 230630400z^7 + 1297296000z^6 + 3269185920z^5 + 2270268000z^4 - 1945944000z^3 - 1094593500z^2 + 202702500z - 42567525) \operatorname{erf}(\sqrt{z}) \right) + \frac{42}{65z^2}$$

07.25.03.1394.01

$${}_2F_2\left(-\frac{11}{2}, 2; 3, 6; z\right) = \frac{1}{178\,741\,037\,475\,z^3} \left(128 e^{z/2} (3328 z^9 - 224\,256 z^8 + 5\,766\,720 z^7 - 71\,998\,080 z^6 + 457\,677\,360 z^5 - 1\,396\,321\,920 z^4 + 1\,543\,996\,440 z^3 + 486\,486\,000 z^2 - 1\,173\,647\,475 z - 8\,108\,100) I_0\left(\frac{z}{2}\right) - \frac{1}{178\,741\,037\,475\,z^4} \left(128 e^{z/2} (3328 z^{10} - 220\,928 z^9 + 5\,547\,456 z^8 - 66\,557\,760 z^7 + 393\,682\,800 z^6 - 1\,031\,017\,680 z^5 + 657\,949\,320 z^4 + 873\,288\,360 z^3 - 346\,621\,275 z^2 - 111\,486\,375 z - 32\,432\,400) I_1\left(\frac{z}{2}\right) + \frac{32}{39 z^2} \right.$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = \frac{7}{2}$

07.25.03.1395.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{7}{2}, 4; z\right) = \frac{6(17z-2)}{221z^3} + \frac{1}{380\,190\,720z^3} \left(e^z (-1664 z^8 + 94\,912 z^7 - 2\,009\,696 z^6 + 19\,832\,208 z^5 - 93\,079\,800 z^4 + 181\,806\,660 z^3 - 66\,907\,890 z^2 - 92\,738\,205 z + 20\,643\,840) \right) + \frac{1}{760\,381\,440z^{5/2}} \left(\sqrt{\pi} (3328 z^8 - 191\,488 z^7 + 4\,112\,640 z^6 - 41\,583\,360 z^5 + 204\,204\,000 z^4 - 441\,080\,640 z^3 + 257\,297\,040 z^2 + 183\,783\,600 z - 103\,378\,275) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1396.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{7}{2}, 4; -z\right) = \frac{6(17z+2)}{221z^3} + \frac{1}{380\,190\,720z^3} \left(e^{-z} (1664 z^8 + 94\,912 z^7 + 2\,009\,696 z^6 + 19\,832\,208 z^5 + 93\,079\,800 z^4 + 181\,806\,660 z^3 + 66\,907\,890 z^2 - 92\,738\,205 z - 20\,643\,840) \right) + \frac{1}{760\,381\,440z^{5/2}} \left(\sqrt{\pi} (3328 z^8 + 191\,488 z^7 + 4\,112\,640 z^6 + 41\,583\,360 z^5 + 204\,204\,000 z^4 + 441\,080\,640 z^3 + 257\,297\,040 z^2 - 183\,783\,600 z - 103\,378\,275) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1397.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{7}{2}, 5; z\right) = \frac{12(323z^2 - 76z - 6)}{4199z^4} + \frac{1}{902\,952\,960z^4} \left(e^z (-1664 z^9 + 106\,176 z^8 - 2\,552\,416 z^7 + 29\,162\,640 z^6 - 162\,927\,864 z^5 + 395\,966\,340 z^4 - 205\,890\,930 z^3 - 367\,141\,005 z^2 + 180\,633\,600 z + 15\,482\,880) \right) + \frac{1}{1\,805\,905\,920z^{5/2}} \left(\sqrt{\pi} (3328 z^8 - 214\,016 z^7 + 5\,209\,344 z^6 - 60\,775\,680 z^5 + 352\,716\,000 z^4 - 931\,170\,240 z^3 + 698\,377\,680 z^2 + 698\,377\,680 z - 654\,729\,075) \operatorname{erfi}(\sqrt{z}) \right)$$

$$\begin{aligned}
 & \text{07.25.03.1398.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; \frac{7}{2}, 5; -z\right) = & \\
 & \frac{12(323z^2 + 76z - 6)}{4199z^4} + \frac{1}{902952960z^4} \left(e^{-z} (1664z^9 + 106176z^8 + 2552416z^7 + 29162640z^6 + 162927864z^5 + \right. \\
 & \left. 395966340z^4 + 205890930z^3 - 367141005z^2 - 180633600z + 15482880) \right) + \\
 & \frac{1}{1805905920z^{5/2}} \left(\sqrt{\pi} (3328z^8 + 214016z^7 + 5209344z^6 + 60775680z^5 + 352716000z^4 + \right. \\
 & \left. 931170240z^3 + 698377680z^2 - 698377680z - 654729075) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1399.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; \frac{7}{2}, 6; z\right) = & \frac{20(2261z^3 - 798z^2 - 126z - 24)}{29393z^5} + \\
 & \frac{1}{1896201216z^5} \left(e^z (-1664z^{10} + 117440z^9 - 3159648z^8 + 41019792z^7 - 265816824z^6 + \right. \\
 & \left. 773002692z^5 - 522140850z^4 - 1120857885z^3 + 882524160z^2 + 131604480z + 30965760) \right) + \\
 & \frac{1}{3792402432z^{5/2}} \left(\sqrt{\pi} (3328z^8 - 236544z^7 + 6435072z^6 - 85085952z^5 + 569772000z^4 - \right. \\
 & \left. 1777688640z^3 + 1629547920z^2 + 2095133040z - 2749862115) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1400.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; \frac{7}{2}, 6; -z\right) = & \frac{20(2261z^3 + 798z^2 - 126z + 24)}{29393z^5} + \\
 & \frac{1}{1896201216z^5} \left(e^{-z} (1664z^{10} + 117440z^9 + 3159648z^8 + 41019792z^7 + 265816824z^6 + \right. \\
 & \left. 773002692z^5 + 522140850z^4 - 1120857885z^3 - 882524160z^2 + 131604480z - 30965760) \right) + \\
 & \frac{1}{3792402432z^{5/2}} \left(\sqrt{\pi} (3328z^8 + 236544z^7 + 6435072z^6 + 85085952z^5 + 569772000z^4 + \right. \\
 & \left. 1777688640z^3 + 1629547920z^2 - 2095133040z - 2749862115) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = 4$

$$\begin{aligned}
 & \text{07.25.03.1401.01} \\
 {}_2F_2\left(-\frac{11}{2}, 2; 4, 4; z\right) = & \\
 & \frac{48(17z - 4)}{1105z^3} + \frac{1}{12692554875z^3} \left(16e^{z/2} (3328z^9 - 205952z^8 + 4832832z^7 - 54701760z^6 + 313446960z^5 - \right. \\
 & \left. 860285520z^4 + 866067480z^3 + 238437720z^2 - 654729075z + 137837700) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{12692554875z^2} \left(16e^{z/2} (3328z^8 - 202624z^7 + 4631872z^6 - 50167872z^5 + 265402800z^4 - \right. \right. \\
 & \left. \left. 615924720z^3 + 344739960z^2 + 431840520z - 252328995) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

07.25.03.1402.01

$${}_2F_2\left(-\frac{11}{2}, 2; 4, \frac{9}{2}; z\right) = \frac{14(17z-6)}{221z^3} + \frac{1}{1955266560z^3} \left(e^z (-3328z^8 + 213760z^7 - 5182464z^6 + 59886528z^5 - 339963360z^4 + 846830160z^3 - 463276800z^2 - 873176220z + 570881115) \right) + \frac{1}{3910533120z^{7/2}} \left(\sqrt{\pi} (6656z^9 - 430848z^8 + 10575360z^7 - 124750080z^6 + 735134400z^5 - 1984862880z^4 + 1543782240z^3 + 1654052400z^2 - 1860808950z + 172297125) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1403.01

$${}_2F_2\left(-\frac{11}{2}, 2; 4, \frac{9}{2}; -z\right) = \frac{14(17z+6)}{221z^3} + \frac{1}{1955266560z^3} \left(e^{-z} (3328z^8 + 213760z^7 + 5182464z^6 + 59886528z^5 + 339963360z^4 + 846830160z^3 + 463276800z^2 - 873176220z - 570881115) \right) + \frac{1}{3910533120z^{7/2}} \left(\sqrt{\pi} (6656z^9 + 430848z^8 + 10575360z^7 + 124750080z^6 + 735134400z^5 + 1984862880z^4 + 1543782240z^3 - 1654052400z^2 - 1860808950z - 172297125) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1404.01

$${}_2F_2\left(-\frac{11}{2}, 2; 4, 5; z\right) = \frac{96(17z-8)}{1105z^3} + \frac{1}{241158542625z^3} \left(128 e^{z/2} (3328z^9 - 229888z^8 + 6099264z^7 - 79296000z^6 + 532102320z^5 - 1749215520z^4 + 2134694520z^3 + 1024619040z^2 - 3411483075z + 1309458150) I_0\left(\frac{z}{2}\right) - \frac{1}{241158542625z^3} \left(128 e^{z/2} (3328z^9 - 226560z^8 + 5874368z^7 - 73531584z^6 + 461291760z^5 - 1319479920z^4 + 987964200z^3 + 1646893080z^2 - 1794085515z + 103378275) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.1405.01

$${}_2F_2\left(-\frac{11}{2}, 2; 4, \frac{11}{2}; z\right) = \frac{126(17z-10)}{1105z^3} + \frac{1}{8690073600z^4} \left(e^z (-6656z^9 + 475392z^8 - 12984832z^7 + 171951360z^6 - 1145177280z^5 + 3468933600z^4 - 2533053600z^3 - 5913356400z^2 + 6623911350z - 241215975) \right) + \frac{1}{17380147200z^{9/2}} \left(\sqrt{\pi} (13312z^{10} - 957440z^9 + 26438400z^8 - 356428800z^7 + 2450448000z^6 - 7939451520z^5 + 7718911200z^4 + 11027016000z^3 - 18608089500z^2 + 3445942500z + 241215975) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1406.01

$${}_2F_2\left(-\frac{11}{2}, 2; 4, \frac{11}{2}; -z\right) = \frac{126(17z+10)}{1105z^3} + \frac{1}{8690073600z^4} (e^{-z}(6656z^9 + 475392z^8 + 12984832z^7 + 171951360z^6 + 1145177280z^5 + 3468933600z^4 + 2533053600z^3 - 5913356400z^2 - 6623911350z - 241215975)) + \frac{1}{17380147200z^{9/2}} (\sqrt{\pi}(13312z^{10} + 957440z^9 + 26438400z^8 + 356428800z^7 + 2450448000z^6 + 7939451520z^5 + 7718911200z^4 - 11027016000z^3 - 18608089500z^2 - 3445942500z + 241215975) \operatorname{erf}(\sqrt{z}))$$

07.25.03.1407.01

$${}_2F_2\left(-\frac{11}{2}, 2; 4, 6; z\right) = \frac{32(17z-12)}{221z^3} + \frac{1}{1012865879025z^3} (128e^{z/2}(6656z^9 - 507648z^8 + 15025152z^7 - 220624320z^6 + 1696816800z^5 - 6498026640z^4 + 9290322720z^3 + 6623368920z^2 - 25844568750z + 13818229425) I_0\left(\frac{z}{2}\right)) - \frac{1}{1012865879025z^4} (128e^{z/2}(6656z^{10} - 500992z^9 + 14527488z^8 - 206340672z^7 + 1497259680z^6 - 5090888880z^5 + 4781054880z^4 + 9869426280z^3 - 15891617070z^2 + 2033106075z + 275675400) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = \frac{9}{2}$

07.25.03.1408.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{9}{2}, 5; z\right) = \frac{28(323z^2 - 228z + 18)}{4199z^4} + \frac{1}{4643758080z^4} (e^z(-3328z^9 + 239104z^8 - 6579840z^7 + 87988992z^6 - 593900736z^5 + 1834984800z^4 - 1390185720z^3 - 3373272000z^2 + 4343931585z - 557383680)) + \frac{1}{9287516160z^{7/2}} (\sqrt{\pi}(6656z^9 - 481536z^8 + 13395456z^7 - 182327040z^6 + 1269777600z^5 - 4190266080z^4 + 4190266080z^3 + 6285399120z^2 - 11785123350z + 3273645375) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1409.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{9}{2}, 5; -z\right) = \frac{28(323z^2 + 228z + 18)}{4199z^4} + \frac{1}{4643758080z^4} (e^{-z}(3328z^9 + 239104z^8 + 6579840z^7 + 87988992z^6 + 593900736z^5 + 1834984800z^4 + 1390185720z^3 - 3373272000z^2 - 4343931585z - 557383680)) + \frac{1}{9287516160z^{7/2}} (\sqrt{\pi}(6656z^9 + 481536z^8 + 13395456z^7 + 182327040z^6 + 1269777600z^5 + 4190266080z^4 + 4190266080z^3 - 6285399120z^2 - 11785123350z - 3273645375) \operatorname{erf}(\sqrt{z}))$$

07.25.03.1410.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{9}{2}, 6; z\right) = \frac{20(2261z^3 - 2394z^2 + 378z + 24)}{12597z^5} + \frac{1}{9751891968z^5} (e^z(-3328z^{10} + 264448z^9 - 8143104z^8 + 123685440z^7 - 967503264z^6 + 3568861296z^5 - 3465609840z^4 - 10162609380z^3 + 19817231175z^2 - 5480939520z - 371589120)) + \frac{1}{19503783936z^{7/2}} (\sqrt{\pi}(6656z^9 - 532224z^8 + 16547328z^7 - 255257856z^6 + 2051179200z^5 - 7999598880z^4 + 9777287520z^3 + 18856197360z^2 - 49497518070z + 22915517625) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1411.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{9}{2}, 6; -z\right) = \frac{20(2261z^3 + 2394z^2 + 378z - 24)}{12597z^5} + \frac{1}{9751891968z^5} (e^{-z}(3328z^{10} + 264448z^9 + 8143104z^8 + 123685440z^7 + 967503264z^6 + 3568861296z^5 + 3465609840z^4 - 10162609380z^3 - 19817231175z^2 - 5480939520z + 371589120)) + \frac{1}{19503783936z^{7/2}} (\sqrt{\pi}(6656z^9 + 532224z^8 + 16547328z^7 + 255257856z^6 + 2051179200z^5 + 7999598880z^4 + 9777287520z^3 - 18856197360z^2 - 49497518070z - 22915517625) \operatorname{erf}(\sqrt{z}))$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = 5$

07.25.03.1412.01

$${}_2F_2\left(-\frac{11}{2}, 2; 5, 5; z\right) = \frac{192(323z^2 - 304z + 48)}{20995z^4} + \frac{1}{4582012309875z^4} (512e^{z/2}(6656z^{10} - 513280z^9 + 15401472z^8 - 230125632z^7 + 1810640160z^6 - 7148487600z^5 + 10624939200z^4 + 8599297320z^3 - 37188687870z^2 + 26843892075z - 3928374450) I_0\left(\frac{z}{2}\right)) - \frac{1}{4582012309875z^3} (512e^{z/2}(6656z^9 - 506624z^8 + 14898176z^7 - 215474112z^6 + 1602129312z^5 - 5640693840z^4 + 5610252960z^3 + 12480419160z^2 - 24528427470z + 7725497445) I_1\left(\frac{z}{2}\right))$$

07.25.03.1413.01

$${}_2F_2\left(-\frac{11}{2}, 2; 5, \frac{11}{2}; z\right) = \frac{252(323z^2 - 380z + 90)}{20995z^4} + \frac{1}{20638924800z^4} (e^z(-6656z^9 + 531712z^8 - 16481792z^7 + 252483840z^6 - 1997661120z^5 + 7489653600z^4 - 7479410400z^3 - 22577108400z^2 + 47902947750z - 17712243675)) + \frac{1}{41277849600z^{9/2}} (\sqrt{\pi}(13312z^{10} - 1070080z^9 + 33488640z^8 - 520934400z^7 + 4232592000z^6 - 16761064320z^5 + 20951330400z^4 + 41902660800z^3 - 117851233500z^2 + 65472907500z - 4583103525) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1414.01

$${}_2F_2\left(-\frac{11}{2}, 2; 5, \frac{11}{2}; -z\right) = \frac{252(323z^2 + 380z + 90)}{20995z^4} + \frac{1}{20638924800z^4} (e^{-z}(6656z^9 + 531712z^8 + 16481792z^7 + 252483840z^6 + 1997661120z^5 + 7489653600z^4 + 7479410400z^3 - 22577108400z^2 - 47902947750z - 17712243675)) + \frac{1}{41277849600z^{9/2}} (\sqrt{\pi}(13312z^{10} + 1070080z^9 + 33488640z^8 + 520934400z^7 + 4232592000z^6 + 16761064320z^5 + 20951330400z^4 - 41902660800z^3 - 117851233500z^2 - 65472907500z - 4583103525) \operatorname{erf}(\sqrt{z}))$$

07.25.03.1415.01

$${}_2F_2\left(-\frac{11}{2}, 2; 5, 6; z\right) = \frac{64(323z^2 - 456z + 144)}{4199z^4} + \frac{1}{19244451701475z^4} (1024e^{z/2}(6656z^{10} - 566784z^9 + 18976512z^8 - 320388096z^7 + 2891962080z^6 - 13327866720z^5 + 23303795760z^4 + 27370617120z^3 - 144957819510z^2 + 150587687250z - 41247931725) I_0\left(\frac{z}{2}\right) - \frac{1}{19244451701475z^4} (2048e^{z/2}(3328z^{10} - 280064z^9 + 9209856z^8 - 151120896z^7 + 1299195408z^6 - 5431920480z^5 + 6743817360z^4 + 18642425760z^3 - 53289063135z^2 + 30901607730z - 1309458150) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = \frac{11}{2}$

07.25.03.1416.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{11}{2}, 6; z\right) = \frac{12(2261z^3 - 3990z^2 + 1890z - 120)}{4199z^5} + \frac{1}{43341742080z^5} (e^z(-6656z^{10} + 588032z^9 - 20393472z^8 + 354743040z^7 - 3250752960z^6 + 14528273760z^5 - 18443224800z^4 - 67614901200z^3 + 213272655750z^2 - 152719536375z + 14863564800)) + \frac{1}{86683484160z^{9/2}} (\sqrt{\pi}(13312z^{10} - 1182720z^9 + 41368320z^8 - 729308160z^7 + 6837264000z^6 - 31998395520z^5 + 48886437600z^4 + 125707982400z^3 - 494975180700z^2 + 458310352500z - 96245174025) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1417.01

$${}_2F_2\left(-\frac{11}{2}, 2; \frac{11}{2}, 6; -z\right) = \frac{12(2261z^3 + 3990z^2 + 1890z + 120)}{4199z^5} + \frac{1}{43341742080z^5} (e^{-z}(6656z^{10} + 588032z^9 + 20393472z^8 + 354743040z^7 + 3250752960z^6 + 14528273760z^5 + 18443224800z^4 - 67614901200z^3 - 213272655750z^2 - 152719536375z - 14863564800)) + \frac{1}{86683484160z^{9/2}} (\sqrt{\pi}(13312z^{10} + 1182720z^9 + 41368320z^8 + 729308160z^7 + 6837264000z^6 + 31998395520z^5 + 48886437600z^4 - 125707982400z^3 - 494975180700z^2 - 458310352500z - 96245174025) \operatorname{erf}(\sqrt{z}))$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 2$, $b_1 = 6$

$$\begin{aligned}
 & \text{07.25.03.1418.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 2; 6, 6; z\right) = \\
 & \frac{320(2261z^3 - 4788z^2 + 3024z - 384)}{88179z^5} + \frac{1}{80826697146195z^5} \left(1024e^{z/2}(13312z^{11} - 1251840z^{10} + 46775040z^9 - \right. \\
 & \quad \left. 892652544z^8 + 9250327296z^7 - 49839703200z^6 + 102871576080z^5 + 172556546400z^4 - \right. \\
 & \quad \left. 1148805553140z^3 + 1754937952110z^2 - 921203808525z + 109994484600\right) I_0\left(\frac{z}{2}\right) - \frac{1}{80826697146195z^4} \\
 & \quad \left(1024e^{z/2}(13312z^{10} - 1238528z^9 + 45543168z^8 - 847715328z^7 + 8424186624z^6 - 41797528416z^5 + \right. \\
 & \quad \left. 64565539920z^4 + 222512885280z^3 - 917919100980z^2 + 950333052690z - 226134864585\right) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{5}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.1419.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{e^z(256z^8 + 3072z^7 + 5376z^6 - 5376z^5 + 10080z^4 - 20160z^3 + 35280z^2 - 45360z + 31185)}{31185}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1420.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{e^z(128z^7 + 1344z^6 + 2016z^5 - 1680z^4 + 2520z^3 - 3780z^2 + 4410z - 2835)}{2835}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1421.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{315} e^z(64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1422.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{45} e^z(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1423.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} e^z(16z^4 + 96z^3 + 72z^2 - 24z + 9)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1424.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{3} e^z(8z^3 + 36z^2 + 18z - 3)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1425.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z(4z^2 + 12z + 3)
 \end{aligned}$$

07.25.03.1426.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (2z^2 + 6z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} (z^2 + 2z) I_1\left(\frac{z}{2}\right)$$

07.25.03.1427.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (2z + 3)$$

07.25.03.1428.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{3} e^{z/2} (2z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z + 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.1429.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = e^z$$

07.25.03.1430.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (z - 1) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.1431.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2z - 3)}{4z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.1432.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5 e^{-z} (2z + 3)}{4z^2}$$

07.25.03.1433.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z - 4) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.1434.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (4z - 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.1435.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z + 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.1436.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.1437.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1575 e^z (2z - 21)}{128 z^4} + \frac{945 \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.1438.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 e^{-z} (2z + 21)}{128 z^4}$$

07.25.03.1439.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (z+8) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (z^2+4z+32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.1440.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{65536 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{8505} + \frac{e^z (2112 z^6 - 44416 z^5 + 11056 z^4 - 11136 z^3 + 13740 z^2 - 14280 z + 8505)}{8505}$$

07.25.03.1441.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{65536 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{8505} + \frac{e^{-z} (2112 z^6 + 44416 z^5 + 11056 z^4 + 11136 z^3 + 13740 z^2 + 14280 z + 8505)}{8505}$$

07.25.03.1442.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{945} e^z (31712 z^5 + 6352 z^4 - 2352 z^3 + 2040 z^2 - 1770 z + 945) - \frac{32768}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1443.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{945} e^{-z} (-31712 z^5 + 6352 z^4 + 2352 z^3 + 2040 z^2 + 1770 z + 945) - \frac{32768}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1444.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{8192}{135} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2} + \frac{1}{135} e^z (-8192 z^5 - 3568 z^4 - 1392 z^3 + 480 z^2 - 300 z + 135)$$

07.25.03.1445.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{8192}{135} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2} + \frac{1}{135} e^{-z} (8192 z^5 - 3568 z^4 + 1392 z^3 + 480 z^2 + 300 z + 135)$$

07.25.03.1446.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{81} e^z (4096 z^5 + 2048 z^4 + 2280 z^3 + 948 z^2 - 246 z + 81) - \frac{4096}{81} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1447.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{81} e^{-z} (-4096 z^5 + 2048 z^4 - 2280 z^3 + 948 z^2 + 246 z + 81) - \frac{4096}{81} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1448.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{512}{27} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2} + \frac{1}{27} e^z (-512 z^5 - 256 z^4 - 384 z^3 - 564 z^2 - 192 z + 27)$$

07.25.03.1449.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{512}{27} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2} + \frac{1}{27} e^{-z} (512 z^5 - 256 z^4 + 384 z^3 - 564 z^2 + 192 z + 27)$$

07.25.03.1450.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{135} e^z (256 z^5 + 128 z^4 + 192 z^3 + 480 z^2 + 690 z + 135) - \frac{256}{135} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1451.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{135} e^{-z} (-256 z^5 + 128 z^4 - 192 z^3 + 480 z^2 - 690 z + 135) - \frac{256}{135} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1452.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (-65\,536 z^6 + 49\,152 z^5 + 30\,720 z^4 + 53\,760 z^3 + 151\,200 z^2 + 239\,085 z + 93\,555) I_0\left(\frac{z}{2}\right) + e^{z/2} (65\,536 z^6 + 16\,384 z^5 + 18\,432 z^4 + 38\,400 z^3 + 117\,600 z^2 + 133\,245 z) I_1\left(\frac{z}{2}\right)}{93\,555}$$

07.25.03.1453.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{405} e^z (64 z^5 + 32 z^4 + 48 z^3 + 120 z^2 + 420 z + 405) - \frac{64}{405} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1454.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{405} e^{-z} (-64 z^5 + 32 z^4 - 48 z^3 + 120 z^2 - 420 z + 405) - \frac{64}{405} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1455.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (-131\,072 z^6 + 98\,304 z^5 + 61\,440 z^4 + 107\,520 z^3 + 302\,400 z^2 + 1\,164\,240 z + 1\,216\,215) I_0\left(\frac{z}{2}\right) + e^{z/2} (131\,072 z^6 + 32\,768 z^5 + 36\,864 z^4 + 76\,800 z^3 + 235\,200 z^2 + 952\,560 z + 343\,035) I_1\left(\frac{z}{2}\right)}{1\,216\,215}$$

07.25.03.1456.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1457.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{1}{945} e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1458.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, 3; z\right) = \frac{1}{18\,243\,225 z} 4 e^{z/2} (131\,072 z^7 + 32\,768 z^6 + 36\,864 z^5 + 76\,800 z^4 + 235\,200 z^3 + 952\,560 z^2 + 4\,802\,490 z - 4\,459\,455) I_1\left(\frac{z}{2}\right) - \frac{8 e^{z/2} (65\,536 z^6 - 49\,152 z^5 - 30\,720 z^4 - 53\,760 z^3 - 151\,200 z^2 - 582\,120 z - 2\,837\,835) I_0\left(\frac{z}{2}\right)}{18\,243\,225}$$

07.25.03.1459.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (128 z^7 + 64 z^6 + 96 z^5 + 240 z^4 + 840 z^3 + 3780 z^2 + 20\,790 z - 31\,185)}{12\,096 z^2} + \frac{\sqrt{\pi} (31\,185 - 256 z^8) \operatorname{erfi}(\sqrt{z})}{24\,192 z^{5/2}}$$

$$\begin{aligned}
 & \text{07.25.03.1460.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = & \\
 & \frac{e^{-z}(-128z^7 + 64z^6 - 96z^5 + 240z^4 - 840z^3 + 3780z^2 - 20790z - 31185)}{12096z^2} + \frac{\sqrt{\pi}(31185 - 256z^8)\operatorname{erf}(\sqrt{z})}{24192z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1461.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, 4; z\right) = & \\
 & \frac{1}{103378275z^2} \left(4e^{z/2}(262144z^8 + 65536z^7 + 73728z^6 + 153600z^5 + 470400z^4 + 1905120z^3 + 9604980z^2 + \right. \\
 & \left. 57972915z - 267567300)I_1\left(\frac{z}{2}\right) - \frac{1}{103378275z} \right. \\
 & \left. 4e^{z/2}(262144z^7 - 196608z^6 - 122880z^5 - 215040z^4 - 604800z^3 - 2328480z^2 - 11351340z - 66891825)I_0\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1462.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = & \frac{e^z(128z^8 + 64z^7 + 96z^6 + 240z^5 + 840z^4 + 3780z^3 + 20790z^2 + 135135z - 623700)}{31104z^3} + \\
 & \frac{\sqrt{\pi}(-256z^9 + 280665z + 623700)\operatorname{erfi}(\sqrt{z})}{62208z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1463.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = & \frac{e^{-z}(-128z^8 + 64z^7 - 96z^6 + 240z^5 - 840z^4 + 3780z^3 - 20790z^2 + 135135z + 623700)}{31104z^3} + \\
 & \frac{\sqrt{\pi}(-256z^9 + 280665z - 623700)\operatorname{erf}(\sqrt{z})}{62208z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1464.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, 5; z\right) = & \\
 & \frac{1}{1964187225z^3} \left(32e^{z/2}(262144z^9 + 65536z^8 + 73728z^7 + 153600z^6 + 470400z^5 + 1905120z^4 + \right. \\
 & \left. 9604980z^3 + 57972915z^2 - 267567300z - 4548644100)I_1\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{1964187225z^2} \left(32e^{z/2}(262144z^8 - 196608z^7 - 122880z^6 - 215040z^5 - 604800z^4 - \right. \right. \\
 & \left. \left. 2328480z^3 - 11351340z^2 - 66891825z - 1137161025)I_0\left(\frac{z}{2}\right)\right)\right)
 \end{aligned}$$

07.25.03.1465.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{69120 z^4} e^z (128 z^9 + 64 z^8 + 96 z^7 + 240 z^6 + 840 z^5 + 3780 z^4 + 20790 z^3 + 135135 z^2 + 311850 z - 9823275) + \frac{\sqrt{\pi} (-256 z^{10} + 1403325 z^2 + 6237000 z + 9823275) \operatorname{erfi}(\sqrt{z})}{138240 z^{9/2}}$$

07.25.03.1466.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{69120 z^4} e^{-z} (-128 z^9 + 64 z^8 - 96 z^7 + 240 z^6 - 840 z^5 + 3780 z^4 - 20790 z^3 + 135135 z^2 - 311850 z - 9823275) + \frac{\sqrt{\pi} (-256 z^{10} + 1403325 z^2 - 6237000 z + 9823275) \operatorname{erf}(\sqrt{z})}{138240 z^{9/2}}$$

07.25.03.1467.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{9}{2}, 6; z\right) = \frac{1}{8249586345 z^4} \left(32 e^{z/2} (524288 z^{10} + 131072 z^9 + 147456 z^8 + 307200 z^7 + 940800 z^6 + 3810240 z^5 + 19209960 z^4 + 115945830 z^3 - 4856346495 z^2 - 26382135780 z - 138278780640) I_1\left(\frac{z}{2}\right) - \frac{1}{8249586345 z^3} \left(32 e^{z/2} (524288 z^9 - 393216 z^8 - 245760 z^7 - 430080 z^6 - 1209600 z^5 - 4656960 z^4 - 8249586345 z^3 - 133783650 z^2 - 6595533945 z - 34569695160) I_0\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.1468.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{735} e^z (-114688 z^5 + 36464 z^4 - 4000 z^3 + 2232 z^2 - 1560 z + 735) + \frac{8192}{735} \sqrt{\pi} (14 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1469.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{735} e^{-z} (114688 z^5 + 36464 z^4 + 4000 z^3 + 2232 z^2 + 1560 z + 735) + \frac{8192}{735} \sqrt{\pi} (14 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1470.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{105} e^z (28\,672 z^5 - 30\,720 z^4 - 2872 z^3 + 564 z^2 - 270 z + 105) - \frac{4096}{105} \sqrt{\pi} (7 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1471.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{105} e^{-z} (-28\,672 z^5 - 30\,720 z^4 + 2872 z^3 + 564 z^2 + 270 z + 105) - \frac{4096}{105} \sqrt{\pi} (7 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1472.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{63} e^z (-14\,336 z^5 + 26\,624 z^4 + 6144 z^3 + 1236 z^2 - 228 z + 63) + \frac{1024}{63} \sqrt{\pi} (14 z^{11/2} - 33 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1473.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{63} e^{-z} (14\,336 z^5 + 26\,624 z^4 - 6144 z^3 + 1236 z^2 + 228 z + 63) + \frac{1024}{63} \sqrt{\pi} (14 z^{11/2} + 33 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1474.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{21} e^z (1792 z^5 - 4736 z^4 - 1472 z^3 - 864 z^2 - 186 z + 21) - \frac{256}{21} \sqrt{\pi} (7 z^{11/2} - 22 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1475.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{21} e^{-z} (-1792 z^5 - 4736 z^4 + 1472 z^3 - 864 z^2 + 186 z + 21) - \frac{256}{21} \sqrt{\pi} (7 z^{11/2} + 22 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1476.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (-896 z^5 + 3072 z^4 + 1088 z^3 + 960 z^2 + 720 z + 105) + \frac{64}{105} \sqrt{\pi} (14 z^{11/2} - 55 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1477.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} e^{-z} (896 z^5 + 3072 z^4 - 1088 z^3 + 960 z^2 - 720 z + 105) + \frac{64}{105} \sqrt{\pi} (14 z^{11/2} + 55 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1478.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (229\,376 z^6 - 1\,163\,264 z^5 + 635\,904 z^4 + 276\,480 z^3 + 283\,920 z^2 + 249\,480 z + 72\,765) I_0\left(\frac{z}{2}\right) + 8 e^{z/2} (28\,672 z^6 - 116\,736 z^5 - 22\,912 z^4 - 18\,048 z^3 - 21\,150 z^2 - 13\,965 z) I_1\left(\frac{z}{2}\right)}{72\,765}$$

07.25.03.1479.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{32}{315} \sqrt{\pi} (7 z - 33) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{315} e^z (-224 z^5 + 944 z^4 + 360 z^3 + 372 z^2 + 510 z + 315)$$

07.25.03.1480.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{32}{315} \sqrt{\pi} (7z + 33) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{315} e^{-z} (224z^5 + 944z^4 - 360z^3 + 372z^2 - 510z + 315)$$

07.25.03.1481.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{945945} e^{z/2} (458752z^6 - 2686976z^5 + 1542144z^4 + 721920z^3 + 863520z^2 + 1330560z + 945945) I_0\left(\frac{z}{2}\right) + \frac{1}{945945} e^{z/2} (-458752z^6 + 2228224z^5 + 456704z^4 + 390144z^3 + 549600z^2 + 870240z + 218295) I_1\left(\frac{z}{2}\right)$$

07.25.03.1482.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{8}{105} \sqrt{\pi} (2z - 11) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^z (-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105)$$

07.25.03.1483.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{8}{105} \sqrt{\pi} (2z + 11) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105)$$

07.25.03.1484.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{14189175} 4 e^{z/2} (458752z^6 - 3047424z^5 + 1812480z^4 + 890880z^3 + 1159200z^2 + 2162160z + 4147605) I_0\left(\frac{z}{2}\right) - \frac{1}{14189175z} 4 e^{z/2} (458752z^7 - 2588672z^6 - 546816z^5 - 491520z^4 - 760800z^3 - 1517040z^2 - 2837835z + 2401245) I_1\left(\frac{z}{2}\right)$$

07.25.03.1485.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (-896z^7 + 5184z^6 + 2144z^5 + 2544z^4 + 4680z^3 + 10500z^2 + 20790z - 31185)}{18816z^2} + \frac{\sqrt{\pi} (1792z^8 - 11264z^7 + 31185) \operatorname{erfi}(\sqrt{z})}{37632z^{5/2}}$$

07.25.03.1486.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (896z^7 + 5184z^6 - 2144z^5 + 2544z^4 - 4680z^3 + 10500z^2 - 20790z - 31185)}{18816z^2} + \frac{\sqrt{\pi} (1792z^8 + 11264z^7 + 31185) \operatorname{erf}(\sqrt{z})}{37632z^{5/2}}$$

07.25.03.1487.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{80405325z} \left(4 e^{z/2} (917504z^7 - 6815744z^6 + 4165632z^5 + 2119680z^4 + 2909760z^3 + 5987520z^2 + 14698530z + 31216185) I_0\left(\frac{z}{2}\right) - \frac{1}{80405325z^2} \left(4 e^{z/2} (917504z^8 - 5898240z^7 - 1273856z^6 - 1185792z^5 - 1944000z^4 - 4327680z^3 - 10914750z^2 - 21611205z + 124864740) I_1\left(\frac{z}{2}\right)\right)\right)$$

$$\begin{aligned}
 & \text{07.25.03.1488.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \\
 & \frac{1}{96768 z^3} e^z (-1792 z^8 + 11776 z^7 + 4992 z^6 + 6144 z^5 + 12000 z^4 + 30240 z^3 + 83160 z^2 + 166320 z - 1091475) + \\
 & \frac{\sqrt{\pi} (3584 z^9 - 25344 z^8 + 561330 z + 1091475) \operatorname{erfi}(\sqrt{z})}{193536 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1489.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{1}{96768 z^3} e^{-z} (1792 z^8 + 11776 z^7 - 4992 z^6 + 6144 z^5 - 12000 z^4 + 30240 z^3 - 83160 z^2 + 166320 z + 1091475) + \\
 & \frac{\sqrt{\pi} (3584 z^9 + 25344 z^8 + 561330 z - 1091475) \operatorname{erf}(\sqrt{z})}{193536 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1490.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, 5; z\right) = \\
 & \frac{1}{1527701175 z^2} \left(32 e^{z/2} (917504 z^8 - 7536640 z^7 + 4706304 z^6 + 2457600 z^5 + 3501120 z^4 + 7650720 z^3 + \right. \\
 & \quad \left. 21101850 z^2 + 62432370 z + 468242775) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{1527701175 z^3} \left(64 e^{z/2} (458752 z^9 - 3309568 z^8 - 727040 z^7 - 694272 z^6 - 1183200 z^5 - \right. \\
 & \quad \left. 2810640 z^4 - 8076915 z^3 - 24012450 z^2 + 124864740 z + 936485550) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1491.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{107520 z^4} e^z (-896 z^9 + 6592 z^8 + 2848 z^7 + 3600 z^6 + 7320 z^5 + 19740 z^4 + 62370 z^3 + 197505 z^2 - 363825 z - 7640325) + \\
 & \frac{\sqrt{\pi} (1792 z^{10} - 14080 z^9 + 1403325 z^2 + 5457375 z + 7640325) \operatorname{erfi}(\sqrt{z})}{215040 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1492.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{107520 z^4} e^{-z} (896 z^9 + 6592 z^8 - 2848 z^7 + 3600 z^6 - 7320 z^5 + 19740 z^4 - 62370 z^3 + 197505 z^2 + 363825 z - 7640325) + \\
 & \frac{\sqrt{\pi} (1792 z^{10} + 14080 z^9 + 1403325 z^2 - 5457375 z + 7640325) \operatorname{erf}(\sqrt{z})}{215040 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1493.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{7}{2}, 6; z\right) = \\
 & \frac{1}{916620705 z^3} \left(32 e^{z/2} (262144 z^9 - 2359296 z^8 + 1499136 z^7 + 798720 z^6 + 1169280 z^5 + 2661120 z^4 + \right. \\
 & \quad \left. 7858620 z^3 + 26756730 z^2 + 494999505 z + 1819457640) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{916620705 z^4} \left(32 e^{z/2} (262144 z^{10} - 2097152 z^9 - 466944 z^8 - 454656 z^7 - 796800 z^6 - 1975680 z^5 - \right. \right. \\
 & \quad \left. \left. 6112260 z^4 - 21268170 z^3 + 334459125 z^2 + 1979998020 z + 7277830560) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.1494.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{15} e^z (-7168 z^5 + 18944 z^4 - 2560 z^3 + 156 z^2 - 48 z + 15) + \frac{256}{15} \sqrt{\pi} (28 z^{11/2} - 88 z^{9/2} + 33 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1495.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \\
 & \frac{1}{15} e^{-z} (7168 z^5 + 18944 z^4 + 2560 z^3 + 156 z^2 + 48 z + 15) + \frac{256}{15} \sqrt{\pi} (28 z^{11/2} + 88 z^{9/2} + 33 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1496.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{9} e^z (3584 z^5 - 15104 z^4 + 6912 z^3 + 384 z^2 - 42 z + 9) - \frac{128}{9} \sqrt{\pi} (28 z^{11/2} - 132 z^{9/2} + 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1497.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \\
 & \frac{1}{9} e^{-z} (-3584 z^5 - 15104 z^4 - 6912 z^3 + 384 z^2 + 42 z + 9) - \frac{128}{9} \sqrt{\pi} (28 z^{11/2} + 132 z^{9/2} + 99 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1498.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{3} e^z (-448 z^5 + 2592 z^4 - 2096 z^3 - 312 z^2 - 36 z + 3) + \frac{32}{3} \sqrt{\pi} (14 z^{11/2} - 88 z^{9/2} + 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.1499.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (448 z^5 + 2592 z^4 + 2096 z^3 - 312 z^2 + 36 z + 3) + \frac{32}{3} \sqrt{\pi} (14 z^{11/2} + 88 z^{9/2} + 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1500.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (224 z^5 - 1648 z^4 + 1928 z^3 + 420 z^2 + 150 z + 15) - \frac{16}{15} \sqrt{\pi} (14 z^{11/2} - 110 z^{9/2} + 165 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1501.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-224 z^5 - 1648 z^4 - 1928 z^3 + 420 z^2 - 150 z + 15) - \frac{16}{15} \sqrt{\pi} (14 z^{11/2} + 110 z^{9/2} + 165 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1502.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (-57344 z^6 + 538624 z^5 - 1181184 z^4 + 441984 z^3 + 117780 z^2 + 51975 z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (57344 z^6 - 481280 z^5 + 728576 z^4 + 103296 z^3 + 47724 z^2 + 17445 z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.1503.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{45} e^z (56 z^5 - 500 z^4 + 768 z^3 + 204 z^2 + 120 z + 45) - \frac{2}{45} \sqrt{\pi} z^{7/2} (28 z^2 - 264 z + 495) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1504.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{45} e^{-z} (-56 z^5 - 500 z^4 - 768 z^3 + 204 z^2 - 120 z + 45) - \frac{2}{45} \sqrt{\pi} z^{7/2} (28 z^2 + 264 z + 495) \operatorname{erf}(\sqrt{z})$$

07.25.03.1505.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{135135} e^{z/2} (-114688 z^6 + 1257472 z^5 - 3240960 z^4 + 1357056 z^3 + 436200 z^2 + 297990 z + 135135) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (114688 z^6 - 1142784 z^5 + 2155520 z^4 + 341760 z^3 + 198936 z^2 + 147090 z + 24255) I_1\left(\frac{z}{2}\right)}{135135}$$

07.25.03.1506.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{15} e^z (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) - \frac{1}{15} \sqrt{\pi} z^{7/2} (4 z^2 - 44 z + 99) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1507.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) - \frac{1}{15} \sqrt{\pi} z^{7/2} (4 z^2 + 44 z + 99) \operatorname{erf}(\sqrt{z})$$

07.25.03.1508.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, 3; z\right) = \frac{1}{2027025z}$$

$$\frac{4e^{z/2}(114688z^7 - 1323008z^6 + 2989056z^5 + 510720z^4 + 340440z^3 + 338490z^2 + 291060z - 218295)I_1\left(\frac{z}{2}\right) - 8e^{z/2}(57344z^6 - 718848z^5 + 2127360z^4 - 965760z^3 - 350100z^2 - 301455z - 280665)I_0\left(\frac{z}{2}\right)}{2027025}$$

07.25.03.1509.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z(896z^7 - 10816z^6 + 24608z^5 + 8016z^4 + 6936z^3 + 7980z^2 + 6930z - 10395)}{10752z^2} + \frac{\sqrt{\pi}(-1792z^8 + 22528z^7 - 59136z^6 + 10395)\operatorname{erfi}(\sqrt{z})}{21504z^{5/2}}$$

07.25.03.1510.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(-896z^7 - 10816z^6 - 24608z^5 + 8016z^4 - 6936z^3 + 7980z^2 - 6930z - 10395)}{10752z^2} + \frac{\sqrt{\pi}(-1792z^8 - 22528z^7 - 59136z^6 + 10395)\operatorname{erf}(\sqrt{z})}{21504z^{5/2}}$$

07.25.03.1511.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, 4; z\right) = \frac{1}{11486475z^2} \left(4e^{z/2}(229376z^8 - 3006464z^7 + 7915520z^6 + 1426944z^5 + 1039920z^4 + 1218180z^3 + 1600830z^2 + 1091475z - 9604980)I_1\left(\frac{z}{2}\right) - \frac{1}{11486475z} \left(4e^{z/2}(229376z^7 - 3235840z^6 + 10807296z^5 - 5214720z^4 - 2055120z^3 - 2037420z^2 - 2598750z - 2401245)I_0\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.1512.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{27648z^3} e^z(896z^8 - 12224z^7 + 32352z^6 + 11184z^5 + 10632z^4 + 14580z^3 + 20790z^2 + 10395z - 155925) + \frac{\sqrt{\pi}(-1792z^9 + 25344z^8 - 76032z^7 + 93555z + 155925)\operatorname{erfi}(\sqrt{z})}{55296z^{7/2}}$$

07.25.03.1513.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{27648z^3} e^{-z}(-896z^8 - 12224z^7 - 32352z^6 + 11184z^5 - 10632z^4 + 14580z^3 - 20790z^2 + 10395z + 155925) + \frac{\sqrt{\pi}(-1792z^9 - 25344z^8 - 76032z^7 + 93555z - 155925)\operatorname{erf}(\sqrt{z})}{55296z^{7/2}}$$

$$\begin{aligned}
 & \text{07.25.03.1514.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, 5; z\right) = \\
 & \frac{1}{218\,243\,025\,z^3} \left(32 e^{z/2} (229\,376\,z^9 - 3\,366\,912\,z^8 + 10\,123\,264\,z^7 + 1\,900\,032\,z^6 + 1\,474\,992\,z^5 + 1\,917\,780\,z^4 + \right. \\
 & \quad \left. 3\,104\,640\,z^3 + 4\,584\,195\,z^2 - 28\,814\,940\,z - 124\,864\,740) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{218\,243\,025\,z^2} \left(32 e^{z/2} (229\,376\,z^8 - 3\,596\,288\,z^7 + 13\,375\,488\,z^6 - 6\,769\,152\,z^5 - 2\,836\,560\,z^4 - \right. \\
 & \quad \left. 3\,090\,780\,z^3 - 4\,698\,540\,z^2 - 7\,203\,735\,z - 31\,216\,185) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1515.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{245\,760\,z^4} \left(e^z (3584\,z^9 - 54\,528\,z^8 + 164\,608\,z^7 + 59\,520\,z^6 + 60\,480\,z^5 + 92\,640\,z^4 + 166\,320\,z^3 + 249\,480\,z^2 - 1\,143\,450\,z - \right. \\
 & \quad \left. 7\,640\,325) + \frac{\sqrt{\pi} (-7168\,z^{10} + 112\,640\,z^9 - 380\,160\,z^8 + 1\,871\,100\,z^7 + 6\,237\,000\,z^6 + 7\,640\,325) \operatorname{erfi}(\sqrt{z})}{491\,520\,z^{9/2}} \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1516.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{245\,760\,z^4} \left(e^{-z} (-3584\,z^9 - 54\,528\,z^8 - 164\,608\,z^7 + 59\,520\,z^6 - 60\,480\,z^5 + 92\,640\,z^4 - 166\,320\,z^3 + \right. \\
 & \quad \left. 249\,480\,z^2 + 1\,143\,450\,z - 7\,640\,325) + \right. \\
 & \quad \left. \frac{\sqrt{\pi} (-7168\,z^{10} - 112\,640\,z^9 - 380\,160\,z^8 + 1\,871\,100\,z^7 - 6\,237\,000\,z^6 + 7\,640\,325) \operatorname{erf}(\sqrt{z})}{491\,520\,z^{9/2}} \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1517.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{5}{2}, 6; z\right) = \\
 & \frac{1}{130\,945\,815\,z^4} \left(32 e^{z/2} (65\,536\,z^{10} - 1\,064\,960\,z^9 + 3\,600\,384\,z^8 + 697\,344\,z^7 + 567\,456\,z^6 + 793\,080\,z^5 + \right. \\
 & \quad \left. 1\,455\,300\,z^4 + 2\,869\,020\,z^3 - 29\,844\,045\,z^2 - 160\,540\,380\,z - 428\,107\,680) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{130\,945\,815\,z^3} \left(32 e^{z/2} (65\,536\,z^9 - 1\,130\,496\,z^8 + 4\,632\,576\,z^7 - 2\,436\,096\,z^6 - 1\,069\,920\,z^5 - \right. \\
 & \quad \left. 1\,247\,400\,z^4 - 2\,120\,580\,z^3 - 4\,116\,420\,z^2 - 40\,135\,095\,z - 107\,026\,920) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.1518.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{27} e^z (-8960 z^5 + 58880 z^4 - 70080 z^3 + 5376 z^2 - 192 z + 27) + \frac{32}{27} \sqrt{\pi} (280 z^{11/2} - 1980 z^{9/2} + 2970 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1519.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{27} e^{-z} (8960 z^5 + 58880 z^4 + 70080 z^3 + 5376 z^2 + 192 z + 27) + \frac{32}{27} \sqrt{\pi} (280 z^{11/2} + 1980 z^{9/2} + 2970 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1520.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{9} e^z (1120 z^5 - 10000 z^4 + 19320 z^3 - 5028 z^2 - 174 z + 9) - \frac{16}{9} \sqrt{\pi} (70 z^{11/2} - 660 z^{9/2} + 1485 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1521.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{9} e^{-z} (-1120 z^5 - 10000 z^4 - 19320 z^3 - 5028 z^2 + 174 z + 9) - \frac{16}{9} \sqrt{\pi} (70 z^{11/2} + 660 z^{9/2} + 1485 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1522.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{9} e^z (-112 z^5 + 1264 z^4 - 3384 z^3 + 1572 z^2 + 156 z + 9) + \frac{4}{9} \sqrt{\pi} (28 z^{11/2} - 330 z^{9/2} + 990 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1523.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{9} e^{-z} (112 z^5 + 1264 z^4 + 3384 z^3 + 1572 z^2 - 156 z + 9) + \frac{4}{9} \sqrt{\pi} (28 z^{11/2} + 330 z^{9/2} + 990 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1524.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{31185} e^{z/2} (143360 z^6 - 1966080 z^5 + 7599360 z^4 - 9073536 z^3 + 2095542 z^2 + 270270 z + 31185) I_0\left(\frac{z}{2}\right) - \frac{2 e^{z/2} (71680 z^6 - 911360 z^5 + 2924160 z^4 - 1996608 z^3 - 174117 z^2 - 29286 z) I_1\left(\frac{z}{2}\right)}{31185}$$

31185

07.25.03.1525.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{27} \sqrt{\pi} (28 z^3 - 396 z^2 + 1485 z - 1386) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{27} e^z (-28 z^5 + 382 z^4 - 1308 z^3 + 888 z^2 + 138 z + 27)$$

07.25.03.1526.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{27} \sqrt{\pi} (28z^3 + 396z^2 + 1485z + 1386) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{27} e^{-z} (28z^5 + 382z^4 + 1308z^3 + 888z^2 - 138z + 27)$$

07.25.03.1527.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{405405} e^{z/2} (286720z^6 - 4608000z^5 + 21281280z^4 - 30793728z^3 + 8718156z^2 + 1642410z + 405405) I_0\left(\frac{z}{2}\right) + \frac{1}{405405} e^{z/2} (-286720z^6 + 4321280z^5 - 17103360z^4 + 15564288z^3 + 1719732z^2 + 532746z + 51975) I_1\left(\frac{z}{2}\right)$$

07.25.03.1528.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{36} \sqrt{\pi} (8z^3 - 132z^2 + 594z - 693) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{18} e^z (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18)$$

07.25.03.1529.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{36} \sqrt{\pi} (8z^3 + 132z^2 + 594z + 693) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{18} e^{-z} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18)$$

07.25.03.1530.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, 3; z\right) = \frac{1}{1216215} 4 e^{z/2} (57344z^6 - 1056768z^5 + 5675520z^4 - 9620736z^3 + 3139452z^2 + 748440z + 322245) I_0\left(\frac{z}{2}\right) - \frac{1}{1216215z} 4 e^{z/2} (57344z^7 - 999424z^6 + 4704768z^5 - 5358336z^4 - 686724z^3 - 290412z^2 - 114345z + 72765) I_1\left(\frac{z}{2}\right)$$

07.25.03.1531.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (-4480z^7 + 82240z^6 - 404640z^5 + 454128z^4 + 106824z^3 + 56196z^2 + 20790z - 31185)}{64512z^2} + \frac{\sqrt{\pi} (8960z^8 - 168960z^7 + 887040z^6 - 1241856z^5 + 31185) \operatorname{erfi}(\sqrt{z})}{129024z^{5/2}}$$

07.25.03.1532.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (4480z^7 + 82240z^6 + 404640z^5 + 454128z^4 - 106824z^3 + 56196z^2 - 20790z - 31185)}{64512z^2} + \frac{\sqrt{\pi} (8960z^8 + 168960z^7 + 887040z^6 + 1241856z^5 + 31185) \operatorname{erf}(\sqrt{z})}{129024z^{5/2}}$$

07.25.03.1533.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{6891885z}$$

$$\left(4e^{z/2}(114688z^7 - 2383872z^6 + 14595072z^5 - 28314624z^4 + 10264248z^3 + 2869020z^2 + 1704780z + 654885)\right. \\ \left.I_0\left(\frac{z}{2}\right) - \frac{1}{6891885z^2}\left(4e^{z/2}(114688z^8 - 2269184z^7 + 12383232z^6 - \right. \right. \\ \left. \left. 16951296z^5 - 2406216z^4 - 1229868z^3 - 790020z^2 - 72765z + 2619540)\right)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.1534.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{331776z^3}$$

$$\frac{e^z(-8960z^8 + 185600z^7 - 1052160z^6 + 1418304z^5 + 373632z^4 + 241488z^3 + 166320z^2 - 41580z - 779625) + \sqrt{\pi}(17920z^9 - 380160z^8 + 2280960z^7 - 3725568z^6 + 561330z + 779625)\operatorname{erfi}(\sqrt{z})}{663552z^{7/2}}$$

07.25.03.1535.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{331776z^3}$$

$$\frac{e^{-z}(8960z^8 + 185600z^7 + 1052160z^6 + 1418304z^5 - 373632z^4 + 241488z^3 - 166320z^2 - 41580z + 779625) + \sqrt{\pi}(17920z^9 + 380160z^8 + 2280960z^7 + 3725568z^6 + 561330z - 779625)\operatorname{erf}(\sqrt{z})}{663552z^{7/2}}$$

07.25.03.1536.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, 5; z\right) =$$

$$\frac{1}{130945815z^2}\left(32e^{z/2}(114688z^8 - 2654208z^7 + 18244608z^6 - 39820800z^5 + 15656184z^4 + 4906440z^3 + \right. \\ \left. 3575880z^2 + 2619540z + 7203735)\right)I_0\left(\frac{z}{2}\right) -$$

$$\frac{1}{130945815z^3}\left(128e^{z/2}(28672z^9 - 634880z^8 + 3940608z^7 - 6303360z^6 - 964290z^5 - \right. \\ \left. 560016z^4 - 467775z^3 - 291060z^2 + 2619540z + 7203735)\right)I_1\left(\frac{z}{2}\right)$$

07.25.03.1537.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{294912z^4}\left(e^z(-3584z^9 + 82688z^8 - 530688z^7 + 835968z^6 + 239424z^5 + 177696z^4 + 166320z^3 + \right. \\ \left. 83160z^2 - 935550z - 3274425)\right) +$$

$$\frac{1}{589824z^{9/2}}\sqrt{\pi}(7168z^{10} - 168960z^9 + 1140480z^8 - 2128896z^7 + 1122660z^2 + 3118500z + 3274425)\operatorname{erfi}(\sqrt{z})$$

07.25.03.1538.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{294912z^4} (e^{-z} (3584z^9 + 82688z^8 + 530688z^7 + 835968z^6 - 239424z^5 + 177696z^4 - 166320z^3 + 83160z^2 + 935550z - 3274425)) + \frac{1}{589824z^{9/2}} \sqrt{\pi} (7168z^{10} + 168960z^9 + 1140480z^8 + 2128896z^7 + 1122660z^2 - 3118500z + 3274425) \operatorname{erf}(\sqrt{z})$$

07.25.03.1539.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{392837445z^3} (32e^{z/2} (163840z^9 - 4177920z^8 + 31856640z^7 - 77205504z^6 + 32382288z^5 + 11060280z^4 + 9272340z^3 + 9355500z^2 + 54542565z + 107026920) I_0\left(\frac{z}{2}\right)) - \frac{1}{392837445z^4} (32e^{z/2} (163840z^{10} - 4014080z^9 + 27924480z^8 - 51124224z^7 - 8281776z^6 - 5273208z^5 - 5197500z^4 - 5197500z^3 + 50800365z^2 + 218170260z + 428107680) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.1540.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{6} e^z (-280z^5 + 3380z^4 - 10330z^3 + 7263z^2 - 336z + 6) + \frac{1}{12} \sqrt{\pi} (560z^{11/2} - 7040z^{9/2} + 23760z^{7/2} - 22176z^{5/2} + 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1541.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{6} e^{-z} (280z^5 + 3380z^4 + 10330z^3 + 7263z^2 + 336z + 6) + \frac{1}{12} \sqrt{\pi} (560z^{11/2} + 7040z^{9/2} + 23760z^{7/2} + 22176z^{5/2} + 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1542.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{12} e^z (56z^5 - 852z^4 + 3562z^3 - 4119z^2 + 648z + 12) + \frac{1}{24} \sqrt{\pi} (-112z^{11/2} + 1760z^{9/2} - 7920z^{7/2} + 11088z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1543.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{12} e^{-z} (-56z^5 - 852z^4 - 3562z^3 - 4119z^2 - 648z + 12) + \frac{1}{24} \sqrt{\pi} (-112z^{11/2} - 1760z^{9/2} - 7920z^{7/2} - 11088z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1544.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, 1; z\right) = \frac{e^{z/2} (-17920 z^6 + 323200 z^5 - 1792080 z^4 + 3606948 z^3 - 2399196 z^2 + 280665 z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (17920 z^6 - 305280 z^5 + 1495760 z^4 - 2245908 z^3 + 651888 z^2 + 22989 z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.1545.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{144} e^z (56 z^5 - 1028 z^4 + 5454 z^3 - 8805 z^2 + 2496 z + 144) + \frac{1}{288} \sqrt{\pi} (-112 z^{11/2} + 2112 z^{9/2} - 11880 z^{7/2} + 22176 z^{5/2} - 10395 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1546.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{144} e^{-z} (-56 z^5 - 1028 z^4 - 5454 z^3 - 8805 z^2 - 2496 z + 144) + \frac{1}{288} \sqrt{\pi} (-112 z^{11/2} - 2112 z^{9/2} - 11880 z^{7/2} - 22176 z^{5/2} - 10395 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1547.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{135135} e^{z/2} (-35840 z^6 + 759040 z^5 - 5062560 z^4 + 12597384 z^3 - 10732188 z^2 + 1787940 z + 135135) I_0\left(\frac{z}{2}\right) + \frac{1}{135135} e^{z/2} (35840 z^6 - 723200 z^5 + 4357280 z^4 - 8565864 z^3 + 3733764 z^2 + 226092 z + 10395) I_1\left(\frac{z}{2}\right)$$

07.25.03.1548.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{96} e^z (8 z^5 - 172 z^4 + 1106 z^3 - 2295 z^2 + 960 z + 96) - \frac{1}{192} \sqrt{\pi} z^{3/2} (16 z^4 - 352 z^3 + 2376 z^2 - 5544 z + 3465) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1549.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{96} e^{-z} (-8 z^5 - 172 z^4 - 1106 z^3 - 2295 z^2 - 960 z + 96) - \frac{1}{192} \sqrt{\pi} z^{3/2} (16 z^4 + 352 z^3 + 2376 z^2 + 5544 z + 3465) \operatorname{erf}(\sqrt{z})$$

07.25.03.1550.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, 3; z\right) = \frac{1}{405405 z} 4 e^{z/2} (7168 z^7 - 167168 z^6 + 1195296 z^5 - 2905608 z^4 + 1698288 z^3 + 138384 z^2 + 20790 z - 10395) I_1\left(\frac{z}{2}\right) - \frac{8 e^{z/2} (3584 z^6 - 87168 z^5 + 679440 z^4 - 2012244 z^3 + 2075508 z^2 - 436590 z - 51975) I_0\left(\frac{z}{2}\right)}{405405}$$

07.25.03.1551.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (4480 z^7 - 110400 z^6 + 834080 z^5 - 2116272 z^4 + 1182024 z^3 + 163716 z^2 + 20790 z - 31185)}{172032 z^2} + \frac{\sqrt{\pi} (-8960 z^8 + 225280 z^7 - 1774080 z^6 + 4967424 z^5 - 3880800 z^4 + 31185) \operatorname{erfi}(\sqrt{z})}{344064 z^{5/2}}$$

07.25.03.1552.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{172032 z^2} e^{-z} (-4480 z^7 - 110400 z^6 - 834080 z^5 - 2116272 z^4 - 1182024 z^3 + 163716 z^2 - 20790 z - 31185) + \frac{\sqrt{\pi} (-8960 z^8 - 225280 z^7 - 1774080 z^6 - 4967424 z^5 - 3880800 z^4 + 31185) \operatorname{erf}(\sqrt{z})}{344064 z^{5/2}}$$

07.25.03.1553.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, 4; z\right) = \frac{1}{2297295 z^2} \left(4 e^{z/2} (14336 z^8 - 379392 z^7 + 3139648 z^6 - 9093264 z^5 + 6683112 z^4 + 659436 z^3 + 166320 z^2 - 31185 z - 291060) I_1\left(\frac{z}{2}\right) - \frac{1}{2297295 z} 4 e^{z/2} (14336 z^7 - 393728 z^6 + 3511872 z^5 - 12057552 z^4 + 14541144 z^3 - 3617460 z^2 - 582120 z - 72765) I_0\left(\frac{z}{2}\right)\right)$$

07.25.03.1554.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{442368 z^3} e^z (4480 z^8 - 124480 z^7 + 1080480 z^6 - 3241968 z^5 + 2277096 z^4 + 391284 z^3 + 103950 z^2 - 72765 z - 311850) + \frac{1}{884736 z^{7/2}} \sqrt{\pi} (-8960 z^9 + 253440 z^8 - 2280960 z^7 + 7451136 z^6 - 6985440 z^5 + 280665 z + 311850) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1555.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{442368 z^3} e^{-z} (-4480 z^8 - 124480 z^7 - 1080480 z^6 - 3241968 z^5 - 2277096 z^4 + 391284 z^3 - 103950 z^2 - 72765 z + 311850) + \frac{1}{884736 z^{7/2}} \sqrt{\pi} (-8960 z^9 - 253440 z^8 - 2280960 z^7 - 7451136 z^6 - 6985440 z^5 + 280665 z - 311850) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.1556.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, 5; z\right) = \\
 & \frac{1}{43\,648\,605\,z^3} \left(32 e^{z/2} (14\,336\,z^9 - 424\,448\,z^8 + 3\,990\,080\,z^7 - 13\,414\,416\,z^6 + 11\,894\,208\,z^5 + 1\,342\,668\,z^4 + \right. \\
 & \quad \left. 457\,380\,z^3 + 51\,975\,z^2 - 1\,455\,300\,z - 2\,619\,540) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{43\,648\,605\,z^2} \left(32 e^{z/2} (14\,336\,z^8 - 438\,784\,z^7 + 4\,407\,360\,z^6 - 17\,206\,608\,z^5 + 23\,693\,232\,z^4 - \right. \\
 & \quad \left. 6\,694\,380\,z^3 - 1\,330\,560\,z^2 - 363\,825\,z - 654\,885) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1557.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{393\,216\,z^4} \left(e^z (1792\,z^9 - 55\,424\,z^8 + 543\,424\,z^7 - 1\,882\,656\,z^6 + 1\,597\,872\,z^5 + 320\,088\,z^4 + 124\,740\,z^3 - \right. \\
 & \quad \left. 20\,790\,z^2 - 519\,750\,z - 1\,091\,475) \right) + \frac{1}{786\,432\,z^{9/2}} \\
 & \left(\sqrt{\pi} (-3584\,z^{10} + 112\,640\,z^9 - 1\,140\,480\,z^8 + 4\,257\,792\,z^7 - 4\,656\,960\,z^6 + 561\,330\,z^5 + 1\,247\,400\,z + 1\,091\,475) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1558.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{393\,216\,z^4} \left(e^{-z} (-1792\,z^9 - 55\,424\,z^8 - 543\,424\,z^7 - 1\,882\,656\,z^6 - 1\,597\,872\,z^5 + 320\,088\,z^4 - 124\,740\,z^3 - \right. \\
 & \quad \left. 20\,790\,z^2 + 519\,750\,z - 1\,091\,475) \right) + \frac{1}{786\,432\,z^{9/2}} \\
 & \left(\sqrt{\pi} (-3584\,z^{10} - 112\,640\,z^9 - 1\,140\,480\,z^8 - 4\,257\,792\,z^7 - 4\,656\,960\,z^6 + 561\,330\,z^5 - 1\,247\,400\,z + 1\,091\,475) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1559.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; -\frac{1}{2}, 6; z\right) = \\
 & \frac{1}{130\,945\,815\,z^4} \left(32 e^{z/2} (20\,480\,z^{10} - 670\,720\,z^9 + 7\,059\,840\,z^8 - 27\,023\,712\,z^7 + 28\,085\,232\,z^6 + 3\,504\,096\,z^5 + \right. \\
 & \quad \left. 1\,455\,300\,z^4 + 519\,750\,z^3 - 7\,266\,105\,z^2 - 22\,827\,420\,z - 32\,931\,360) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{130\,945\,815\,z^3} \left(32 e^{z/2} (20\,480\,z^9 - 691\,200\,z^8 + 7\,720\,320\,z^7 - 33\,768\,672\,z^6 + 52\,185\,744\,z^5 - \right. \\
 & \quad \left. 16\,299\,360\,z^4 - 3\,783\,780\,z^3 - 1\,559\,250\,z^2 - 5\,706\,855\,z - 8\,232\,840) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{1}{2}$

07.25.03.1560.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{240} e^z (-112 z^5 + 2144 z^4 - 12184 z^3 + 22560 z^2 - 9975 z + 240) + \frac{1}{480} \sqrt{\pi} (224 z^{11/2} - 4400 z^{9/2} + 26400 z^{7/2} - 55440 z^{5/2} + 34650 z^{3/2} - 3465 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1561.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{240} e^{-z} (112 z^5 + 2144 z^4 + 12184 z^3 + 22560 z^2 + 9975 z + 240) + \frac{1}{480} \sqrt{\pi} (224 z^{11/2} + 4400 z^{9/2} + 26400 z^{7/2} + 55440 z^{5/2} + 34650 z^{3/2} + 3465 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1562.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, 1; z\right) = \frac{e^{z/2} (1792 z^6 - 40064 z^5 + 289560 z^4 - 819672 z^3 + 885624 z^2 - 291060 z + 10395) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (448 z^6 - 9568 z^5 + 63046 z^4 - 146208 z^3 + 98553 z^2 - 8346 z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.1563.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z (-56 z^5 + 1292 z^4 - 9282 z^3 + 23655 z^2 - 17445 z + 1440)}{1440} + \frac{\sqrt{\pi} \sqrt{z} (112 z^5 - 2640 z^4 + 19800 z^3 - 55440 z^2 + 51975 z - 10395) \operatorname{erfi}(\sqrt{z})}{2880}$$

07.25.03.1564.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (56 z^5 + 1292 z^4 + 9282 z^3 + 23655 z^2 + 17445 z + 1440)}{1440} + \frac{\sqrt{\pi} \sqrt{z} (112 z^5 + 2640 z^4 + 19800 z^3 + 55440 z^2 + 51975 z + 10395) \operatorname{erf}(\sqrt{z})}{2880}$$

07.25.03.1565.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, 2; z\right) = \frac{e^{z/2} (3584 z^6 - 94208 z^5 + 822000 z^4 - 2904696 z^3 + 4098012 z^2 - 1926540 z + 135135) I_0\left(\frac{z}{2}\right) + e^{z/2} (-3584 z^6 + 90624 z^5 - 733168 z^4 + 2213256 z^3 - 2171916 z^2 + 364692 z + 3465) I_1\left(\frac{z}{2}\right)}{135135}$$

07.25.03.1566.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16 z^5 + 432 z^4 - 3752 z^3 + 12180 z^2 - 12645 z + 1920)}{1920} + \frac{\sqrt{\pi} \sqrt{z} (32 z^5 - 880 z^4 + 7920 z^3 - 27720 z^2 + 34650 z - 10395) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.1567.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \frac{\sqrt{\pi} \sqrt{z} (32z^5 + 880z^4 + 7920z^3 + 27720z^2 + 34650z + 10395) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.1568.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, 3; z\right) = \frac{1}{2027025} 4 e^{z/2} (3584z^6 - 108288z^5 + 1107120z^4 - 4689600z^3 + 8143020z^2 - 4906440z + 509355) I_0\left(\frac{z}{2}\right) - \frac{1}{2027025z} 4 e^{z/2} (3584z^7 - 104704z^6 + 1004208z^5 - 3734160z^4 + 4817460z^3 - 1232460z^2 - 31185z + 10395) I_1\left(\frac{z}{2}\right)$$

07.25.03.1569.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z(-896z^7 + 27712z^6 - 282272z^5 + 1113456z^4 - 1494312z^3 + 341292z^2 + 6930z - 10395)}{344064z^2} + \frac{1}{688128z^{5/2}} \sqrt{\pi} (1792z^8 - 56320z^7 + 591360z^6 - 2483712z^5 + 3880800z^4 - 1552320z^3 + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1570.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(896z^7 + 27712z^6 + 282272z^5 + 1113456z^4 + 1494312z^3 + 341292z^2 - 6930z - 10395)}{344064z^2} + \frac{1}{688128z^{5/2}} \sqrt{\pi} (1792z^8 + 56320z^7 + 591360z^6 + 2483712z^5 + 3880800z^4 + 1552320z^3 + 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.1571.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, 4; z\right) = \frac{1}{11486475z} 4 e^{z/2} (7168z^7 - 244736z^6 + 2868960z^5 - 14165520z^4 + 29165280z^3 - 21247380z^2 + 2889810z + 51975) I_0\left(\frac{z}{2}\right) - \frac{1}{11486475z^2} \left(4 e^{z/2} (7168z^8 - 237568z^7 + 2634976z^6 - 11642160z^5 + 18625440z^4 - 6457260z^3 - 270270z^2 + 72765z + 207900) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.1572.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{1769472z^3} e^z(-1792z^8 + 62464z^7 - 729984z^6 + 3389568z^5 - 5585856z^4 + 1731456z^3 + 83160z^2 - 83160z - 155925) + \frac{1}{3538944z^{7/2}} \sqrt{\pi} (3584z^9 - 126720z^8 + 1520640z^7 - 7451136z^6 + 13970880z^5 - 6985440z^4 + 187110z + 155925) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1573.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{1769472z^3} e^{-z} (1792z^8 + 62464z^7 + 729984z^6 + 3389568z^5 + 5585856z^4 + 1731456z^3 - 83160z^2 - 83160z + 155925) + \frac{1}{3538944z^{7/2}} \sqrt{\pi} (3584z^9 + 126720z^8 + 1520640z^7 + 7451136z^6 + 13970880z^5 + 6985440z^4 + 187110z - 155925) \operatorname{erf}(\sqrt{z})$$

07.25.03.1574.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, 5; z\right) = \frac{1}{218243025z^2} (32e^{z/2} (7168z^8 - 272896z^7 + 3608160z^6 - 20345760z^5 + 48408240z^4 - 41136480z^3 + 6839910z^2 + 311850z + 363825) I_0\left(\frac{z}{2}\right) - \frac{1}{218243025z^3} (64e^{z/2} (3584z^9 - 132864z^8 + 1673008z^7 - 8562720z^6 + 16356240z^5 - 7188960z^4 - 412335z^3 + 62370z^2 + 623700z + 727650) I_1\left(\frac{z}{2}\right))$$

07.25.03.1575.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{3932160z^4} (e^z (-1792z^9 + 69504z^8 - 916544z^7 + 4896480z^6 - 9573840z^5 + 3783000z^4 + 291060z^3 - 187110z^2 - 831600z - 1091475)) + \frac{1}{7864320z^{9/2}} (\sqrt{\pi} (3584z^{10} - 140800z^9 + 1900800z^8 - 10644480z^7 + 23284800z^6 - 13970880z^5 + 935550z^2 + 1559250z + 1091475) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1576.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{3932160z^4} (e^{-z} (1792z^9 + 69504z^8 + 916544z^7 + 4896480z^6 + 9573840z^5 + 3783000z^4 - 291060z^3 - 187110z^2 + 831600z - 1091475)) + \frac{1}{7864320z^{9/2}} (\sqrt{\pi} (3584z^{10} + 140800z^9 + 1900800z^8 + 10644480z^7 + 23284800z^6 + 13970880z^5 + 935550z^2 - 1559250z + 1091475) \operatorname{erf}(\sqrt{z}))$$

$$\begin{aligned}
 & \text{07.25.03.1577.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{1}{2}, 6; z\right) = \\
 & \frac{1}{130945815z^3} \left(32 e^{z/2} (2048 z^9 - 86016 z^8 + 1266240 z^7 - 8027808 z^6 + 21660336 z^5 - 20956320 z^4 + \right. \\
 & \quad \left. 4074840 z^3 + 311850 z^2 + 717255 z + 748440) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{130945815z^4} \left(32 e^{z/2} (2048 z^{10} - 83968 z^9 + 1183296 z^8 - 6884448 z^7 + 15289968 z^6 - 8161056 z^5 - \right. \\
 & \quad \left. 582120 z^4 + 20790 z^3 + 1340955 z^2 + 2869020 z + 2993760) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 1$

$$\begin{aligned}
 & \text{07.25.03.1578.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; 1, \frac{3}{2}; z\right) = \frac{e^{z/2} (448 z^6 - 11952 z^5 + 106512 z^4 - 388596 z^3 + 577872 z^2 - 301455 z + 31185) I_0\left(\frac{z}{2}\right)}{31185} + \\
 & \frac{e^{z/2} (-448 z^6 + 11504 z^5 - 95232 z^4 + 298668 z^3 - 316716 z^2 + 68967 z) I_1\left(\frac{z}{2}\right)}{31185}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1579.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; 1, \frac{5}{2}; z\right) = \frac{e^{z/2} (32 z^6 - 992 z^5 + 10512 z^4 - 46944 z^3 + 88674 z^2 - 62370 z + 10395) I_0\left(\frac{z}{2}\right)}{10395} - \\
 & \frac{2 e^{z/2} (16 z^6 - 480 z^5 + 4784 z^4 - 18912 z^3 + 27387 z^2 - 9762 z) I_1\left(\frac{z}{2}\right)}{10395}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.1580.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (-224 z^5 + 6224 z^4 - 56400 z^3 + 196392 z^2 - 235110 z + 58725)}{69120} + \\
 & \frac{\sqrt{\pi} (448 z^6 - 12672 z^5 + 118800 z^4 - 443520 z^3 + 623700 z^2 - 249480 z + 10395) \operatorname{erfi}(\sqrt{z})}{138240 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1581.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (224 z^5 + 6224 z^4 + 56400 z^3 + 196392 z^2 + 235110 z + 58725)}{69120} + \\
 & \frac{\sqrt{\pi} (448 z^6 + 12672 z^5 + 118800 z^4 + 443520 z^3 + 623700 z^2 + 249480 z + 10395) \operatorname{erf}(\sqrt{z})}{138240 \sqrt{z}}
 \end{aligned}$$

07.25.03.1582.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{3}{2}, 2; z\right) = \frac{e^{z/2} (896 z^6 - 28 128 z^5 + 303 312 z^4 - 1 389 408 z^3 + 2 730 636 z^2 - 2 058 210 z + 405 405) I_0\left(\frac{z}{2}\right) + e^{z/2} (-896 z^6 + 27 232 z^5 - 276 528 z^4 + 1 125 600 z^3 - 1 718 868 z^2 + 699 066 z - 10 395) I_1\left(\frac{z}{2}\right)}{405 405}$$

07.25.03.1583.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^{-z} (-32 z^5 + 1040 z^4 - 11 376 z^3 + 50 232 z^2 - 83 370 z + 35 685)}{46 080} + \frac{\sqrt{\pi} (64 z^6 - 2112 z^5 + 23 760 z^4 - 110 880 z^3 + 207 900 z^2 - 124 740 z + 10 395) \operatorname{erfi}(\sqrt{z})}{92 160 \sqrt{z}}$$

07.25.03.1584.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 1040 z^4 + 11 376 z^3 + 50 232 z^2 + 83 370 z + 35 685)}{46 080} + \frac{\sqrt{\pi} (64 z^6 + 2112 z^5 + 23 760 z^4 + 110 880 z^3 + 207 900 z^2 + 124 740 z + 10 395) \operatorname{erf}(\sqrt{z})}{92 160 \sqrt{z}}$$

07.25.03.1585.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{3}{2}, 3; z\right) = \frac{8 e^{z/2} (448 z^6 - 16 176 z^5 + 204 720 z^4 - 1 128 720 z^3 + 2 755 080 z^2 - 2 692 305 z + 758 835) I_0\left(\frac{z}{2}\right) - \frac{1}{6 081 075 z} 4 e^{z/2} (896 z^7 - 31 456 z^6 + 378 432 z^5 - 1 893 840 z^4 + 3 776 880 z^3 - 2 262 870 z^2 + 83 160 z - 10 395) I_1\left(\frac{z}{2}\right)}{6 081 075}$$

07.25.03.1586.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{4 128 768 z^2} + \frac{e^{-z} (-896 z^7 + 33 344 z^6 - 427 296 z^5 + 2 285 616 z^4 - 4 854 504 z^3 + 2 972 844 z^2 - 20 790 z + 31 185) + \frac{1}{8 257 536 z^{5/2}} \sqrt{\pi} (1792 z^8 - 67 584 z^7 + 887 040 z^6 - 4 967 424 z^5 + 11 642 400 z^4 - 9 313 920 z^3 + 1 164 240 z^2 - 31 185) \operatorname{erfi}(\sqrt{z})}{8 257 536 z^{5/2}}$$

07.25.03.1587.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (896 z^7 + 33 344 z^6 + 427 296 z^5 + 2 285 616 z^4 + 4 854 504 z^3 + 2 972 844 z^2 + 20 790 z + 31 185)}{4 128 768 z^2} + \frac{1}{8 257 536 z^{5/2}} \sqrt{\pi} (1792 z^8 + 67 584 z^7 + 887 040 z^6 + 4 967 424 z^5 + 11 642 400 z^4 + 9 313 920 z^3 + 1 164 240 z^2 - 31 185) \operatorname{erf}(\sqrt{z})$$

07.25.03.1588.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{3}{2}, 4; z\right) = \frac{1}{34459425z}$$

$$4e^{z/2} (1792z^7 - 73152z^6 + 1062816z^5 - 6851280z^4 + 19969920z^3 - 23866920z^2 + 8586270z - 31185) I_0\left(\frac{z}{2}\right) -$$

$$\frac{1}{34459425z^2} \left(4e^{z/2} (1792z^8 - 71360z^7 + 992352z^6 - 5892816z^5 +$$

$$14507520z^4 - 11513160z^3 + 727650z^2 - 114345z - 124740) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.1589.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{10616832z^3}$$

$$e^z (-896z^8 + 37568z^7 - 551904z^6 + 3467280z^5 - 8977656z^4 + 7187076z^3 - 145530z^2 + 176715z + 155925) +$$

$$\frac{1}{21233664z^{7/2}} \left(\sqrt{\pi} (1792z^9 - 76032z^8 + 1140480z^7 - 7451136z^6 +$$

$$20956320z^5 - 20956320z^4 + 3492720z^3 - 280665z - 155925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1590.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{10616832z^3}$$

$$e^{-z} (896z^8 + 37568z^7 + 551904z^6 + 3467280z^5 + 8977656z^4 + 7187076z^3 + 145530z^2 + 176715z - 155925) +$$

$$\frac{1}{21233664z^{7/2}} \left(\sqrt{\pi} (1792z^9 + 76032z^8 + 1140480z^7 + 7451136z^6 +$$

$$20956320z^5 + 20956320z^4 + 3492720z^3 - 280665z + 155925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1591.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{3}{2}, 5; z\right) =$$

$$\frac{1}{654729075z^2} \left(32e^{z/2} (1792z^8 - 81600z^7 + 1338432z^6 - 9876720z^5 + 33457680z^4 - 47151720z^3 +$$

$$20374200z^2 - 218295z - 155925) I_0\left(\frac{z}{2}\right) \right) -$$

$$\frac{1}{654729075z^3} \left(32e^{z/2} (1792z^9 - 79808z^8 + 1259520z^7 - 8655312z^6 + 25357920z^5 -$$

$$25088040z^4 + 2328480z^3 - 363825z^2 - 873180z - 623700) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.1592.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{94\,371\,840 z^4} \left(e^z (-3584 z^9 + 167\,168 z^8 - 2\,769\,408 z^7 + 19\,983\,360 z^6 - 61\,055\,040 z^5 + 60\,521\,760 z^4 - 2\,328\,480 z^3 + 2\,328\,480 z^2 + 4\,054\,050 z + 3\,274\,425) \right) +$$

$$\frac{1}{188\,743\,680 z^{9/2}} \left(\sqrt{\pi} (7168 z^{10} - 337\,920 z^9 + 5\,702\,400 z^8 - 42\,577\,920 z^7 + 139\,708\,800 z^6 - 167\,650\,560 z^5 + 34\,927\,200 z^4 - 5\,613\,300 z^2 - 6\,237\,000 z - 3\,274\,425) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1593.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{94\,371\,840 z^4} \left(e^{-z} (3584 z^9 + 167\,168 z^8 + 2\,769\,408 z^7 + 19\,983\,360 z^6 + 61\,055\,040 z^5 + 60\,521\,760 z^4 + 2\,328\,480 z^3 + 2\,328\,480 z^2 - 4\,054\,050 z + 3\,274\,425) \right) +$$

$$\frac{1}{188\,743\,680 z^{9/2}} \left(\sqrt{\pi} (7168 z^{10} + 337\,920 z^9 + 5\,702\,400 z^8 + 42\,577\,920 z^7 + 139\,708\,800 z^6 + 167\,650\,560 z^5 + 34\,927\,200 z^4 - 5\,613\,300 z^2 + 6\,237\,000 z - 3\,274\,425) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1594.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{3}{2}, 6; z\right) =$$

$$\frac{1}{392\,837\,445 z^3} \left(32 e^{z/2} (512 z^9 - 25\,728 z^8 + 470\,208 z^7 - 3\,908\,544 z^6 + 15\,085\,008 z^5 - 24\,449\,040 z^4 + 12\,224\,520 z^3 - 249\,480 z^2 - 343\,035 z - 249\,480) I_0\left(\frac{z}{2}\right) - \right.$$

$$\left. \frac{1}{392\,837\,445 z^4} \left(32 e^{z/2} (512 z^{10} - 25\,216 z^9 + 445\,248 z^8 - 3\,475\,392 z^7 + 11\,808\,624 z^6 - 14\,005\,008 z^5 + 1\,746\,360 z^4 - 249\,480 z^3 - 1\,029\,105 z^2 - 1\,372\,140 z - 997\,920) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 2$

07.25.03.1595.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; 2, \frac{5}{2}; z\right) = \frac{e^{z/2} (64 z^6 - 2336 z^5 + 30\,000 z^4 - 168\,864 z^3 + 425\,112 z^2 - 436\,590 z + 135\,135) I_0\left(\frac{z}{2}\right)}{135\,135} +$$

$$\frac{e^{z/2} (-64 z^6 + 2272 z^5 - 27\,760 z^4 + 142\,176 z^3 - 294\,744 z^2 + 191\,442 z - 10\,395) I_1\left(\frac{z}{2}\right)}{135\,135}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{5}{2}$

07.25.03.1596.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-64 z^6 + 2432 z^5 - 32080 z^4 + 179136 z^3 - 408828 z^2 + 291480 z - 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 - 4928 z^6 + 66528 z^5 - 388080 z^4 + 970200 z^3 - 873180 z^2 + 145530 z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1597.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 2432 z^5 + 32080 z^4 + 179136 z^3 + 408828 z^2 + 291480 z + 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 + 4928 z^6 + 66528 z^5 + 388080 z^4 + 970200 z^3 + 873180 z^2 + 145530 z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.1598.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 - 2688 z^5 + 40560 z^4 - 275520 z^3 + 866520 z^2 - 1164240 z + 509355) I_0\left(\frac{z}{2}\right)}{2027025} - \frac{1}{2027025 z} 4 e^{z/2} (64 z^7 - 2624 z^6 + 37968 z^5 - 238800 z^4 + 644280 z^3 - 608760 z^2 + 72765 z + 10395) I_1\left(\frac{z}{2}\right)$$

07.25.03.1599.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-128 z^7 + 5568 z^6 - 85984 z^5 + 580560 z^4 - 1686744 z^3 + 1690836 z^2 - 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} (\sqrt{\pi} (256 z^8 - 11264 z^7 + 177408 z^6 - 1241856 z^5 + 3880800 z^4 - 4656960 z^3 + 1164240 z^2 + 166320 z + 31185) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1600.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 5568 z^6 + 85984 z^5 + 580560 z^4 + 1686744 z^3 + 1690836 z^2 + 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} (\sqrt{\pi} (256 z^8 + 11264 z^7 + 177408 z^6 + 1241856 z^5 + 3880800 z^4 + 4656960 z^3 + 1164240 z^2 - 166320 z + 31185) \operatorname{erf}(\sqrt{z}))$$

07.25.03.1601.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{5}{2}, 4; z\right) = \frac{1}{11486475 z} 4 e^{z/2} (128 z^7 - 6080 z^6 + 105408 z^5 - 838800 z^4 + 3163920 z^3 - 5239080 z^2 + 2910600 z + 10395) I_0\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} 4 e^{z/2} (128 z^8 - 5952 z^7 + 99520 z^6 - 742128 z^5 + 2466000 z^4 - 3061560 z^3 + 582120 z^2 + 155925 z + 41580) I_1\left(\frac{z}{2}\right)$$

07.25.03.1602.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{14\,155\,776\,z^3}$$

$$e^z (-256 z^8 + 12\,544 z^7 - 221\,952 z^6 + 1\,757\,760 z^5 - 6\,203\,040 z^4 + 8\,030\,448 z^3 - 1\,164\,240 z^2 - 457\,380 z - 155\,925) +$$

$$\frac{1}{28\,311\,552\,z^{7/2}} \left(\sqrt{\pi} (512 z^9 - 25\,344 z^8 + 456\,192 z^7 - 3\,725\,568 z^6 + 13\,970\,880 z^5 -$$

$$20\,956\,320 z^4 + 6\,985\,440 z^3 + 1\,496\,880 z^2 + 561\,330 z + 155\,925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1603.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{14\,155\,776\,z^3}$$

$$e^{-z} (256 z^8 + 12\,544 z^7 + 221\,952 z^6 + 1\,757\,760 z^5 + 6\,203\,040 z^4 + 8\,030\,448 z^3 + 1\,164\,240 z^2 - 457\,380 z + 155\,925) +$$

$$\frac{1}{28\,311\,552\,z^{7/2}} \left(\sqrt{\pi} (512 z^9 + 25\,344 z^8 + 456\,192 z^7 + 3\,725\,568 z^6 + 13\,970\,880 z^5 +$$

$$20\,956\,320 z^4 + 6\,985\,440 z^3 - 1\,496\,880 z^2 + 561\,330 z - 155\,925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1604.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{5}{2}, 5; z\right) = \frac{1}{218\,243\,025\,z^2}$$

$$\left(32 e^{z/2} (128 z^8 - 6784 z^7 + 132\,864 z^6 - 1\,212\,096 z^5 + 5\,331\,360 z^4 - 10\,478\,160 z^3 + 6\,985\,440 z^2 + 83\,160 z + 31\,185) \right.$$

$$I_0\left(\frac{z}{2}\right) - \frac{1}{218\,243\,025\,z^3} \left(128 e^{z/2} (32 z^9 - 1664 z^8 + 31\,568 z^7 - 272\,256 z^6 +$$

$$1\,074\,804 z^5 - 1\,654\,080 z^4 + 436\,590 z^3 + 166\,320 z^2 + 83\,160 z + 31\,185) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.1605.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{62\,914\,560\,z^4} \left(e^z (-512 z^9 + 27\,904 z^8 - 556\,544 z^7 + 5\,057\,280 z^6 - 21\,001\,920 z^5 + 33\,362\,400 z^4 - 6\,985\,440 z^3 -$$

$$3\,825\,360 z^2 - 2\,390\,850 z - 1\,091\,475) \right) +$$

$$\frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} - 56\,320 z^9 + 1\,140\,480 z^8 - 10\,644\,480 z^7 + 46\,569\,600 z^6 - 83\,825\,280 z^5 +$$

$$34\,927\,200 z^4 + 9\,979\,200 z^3 + 5\,613\,300 z^2 + 3\,118\,500 z + 1\,091\,475) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1606.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{62\,914\,560\,z^4} \left(e^{-z} (512 z^9 + 27\,904 z^8 + 556\,544 z^7 + 5\,057\,280 z^6 + 21\,001\,920 z^5 + 33\,362\,400 z^4 + 6\,985\,440 z^3 -$$

$$3\,825\,360 z^2 + 2\,390\,850 z - 1\,091\,475) \right) +$$

$$\frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} + 56\,320 z^9 + 1\,140\,480 z^8 + 10\,644\,480 z^7 + 46\,569\,600 z^6 + 83\,825\,280 z^5 +$$

$$34\,927\,200 z^4 - 9\,979\,200 z^3 + 5\,613\,300 z^2 - 3\,118\,500 z + 1\,091\,475) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1607.01

$${}_2F_2\left(-\frac{11}{2}, \frac{5}{2}; \frac{5}{2}, 6; z\right) = \frac{1}{916620705z^3} \left(32e^{z/2} (256z^9 - 14976z^8 + 326976z^7 - 3364032z^6 + 16903152z^5 - 38419920z^4 + 29688120z^3 + 748440z^2 + 530145z + 249480) I_0\left(\frac{z}{2}\right) - \frac{1}{916620705z^4} \left(32e^{z/2} (256z^{10} - 14720z^9 + 312384z^8 - 3058752z^7 + 13986672z^6 - 25692912z^5 + 8731800z^4 + 4241160z^3 + 3024945z^2 + 2120580z + 997920) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = -\frac{11}{2}$

07.25.03.1608.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{32z^8 + 528z^7 + 1792z^6 - 672z^5 + 720z^4 - 1200z^3 + 2520z^2 - 5670z + 10395}{10395} + \frac{8e^z \sqrt{\pi} (4z^{17/2} + 68z^{15/2} + 255z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.1609.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{32z^8 - 528z^7 + 1792z^6 + 672z^5 + 720z^4 + 1200z^3 + 2520z^2 + 5670z + 10395}{10395} - \frac{8e^{-z} \sqrt{\pi} (4z^{17/2} - 68z^{15/2} + 255z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.1610.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{945} (-16z^7 - 232z^6 - 672z^5 + 240z^4 - 240z^3 + 360z^2 - 630z + 945) - \frac{4}{945} e^z \sqrt{\pi} (4z^{15/2} + 60z^{13/2} + 195z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1611.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{945} (16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945) - \frac{4}{945} e^{-z} \sqrt{\pi} (4z^{15/2} - 60z^{13/2} + 195z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1612.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{105} (8z^6 + 100z^5 + 240z^4 - 80z^3 + 72z^2 - 90z + 105) + \frac{2}{105} e^z \sqrt{\pi} (4z^{13/2} + 52z^{11/2} + 143z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1613.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{105} (8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} (4z^{13/2} - 52z^{11/2} + 143z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1614.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} (-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) + \frac{1}{15} e^z \sqrt{\pi} (-4z^{11/2} - 44z^{9/2} - 99z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1615.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15} (4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) + \frac{1}{15} e^{-z} \sqrt{\pi} (-4z^{11/2} + 44z^{9/2} - 99z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1616.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} (2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6} e^z \sqrt{\pi} (4z^{9/2} + 36z^{7/2} + 63z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1617.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} (2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6} e^{-z} \sqrt{\pi} (-4z^{9/2} + 36z^{7/2} - 63z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1618.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{2} (-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4} e^z \sqrt{\pi} (-4z^{7/2} - 28z^{5/2} - 35z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1619.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2} (2z^3 - 13z^2 + 12z + 2) + \frac{1}{4} e^{-z} \sqrt{\pi} (-4z^{7/2} + 28z^{5/2} - 35z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1620.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{4} (2z^2 + 9z + 4) + \frac{1}{8} e^z \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1621.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{4} (2z^2 - 9z + 4) + \frac{1}{8} e^{-z} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1622.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, 1; z\right) = \frac{1}{2} e^z (z^2 + 4z + 2)$$

07.25.03.1623.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{8} (2z + 5) + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.1624.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{8} (5 - 2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.1625.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, 2; z\right) = \frac{1}{2} e^z (z + 2)$$

07.25.03.1626.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{3(2z+1)}{16z} + \frac{3e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.1627.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{3(2z-1)}{16z} - \frac{3e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.1628.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, 3; z\right) = e^z$$

07.25.03.1629.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{15(2z-3)}{32z^2} + \frac{15e^z \sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.1630.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} \sqrt{\pi} (4z^2 + 4z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15(2z+3)}{32z^2}$$

07.25.03.1631.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, 4; z\right) = \frac{3e^z(z^2 - 2z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.1632.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{105(2z-15)}{64z^3} + \frac{105e^z \sqrt{\pi} (4z^2 - 12z + 15) \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.1633.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{105(2z+15)}{64z^3} - \frac{105e^{-z} \sqrt{\pi} (4z^2 + 12z + 15) \operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.1634.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, 5; z\right) = \frac{12e^z(z^2 - 4z + 6)}{z^4} - \frac{24(z+3)}{z^4}$$

07.25.03.1635.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{945e^z \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256z^{9/2}} - \frac{1575(2z+21)}{128z^4}$$

07.25.03.1636.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1575(2z-21)}{128z^4} + \frac{945e^{-z} \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.1637.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{11}{2}, 6; z\right) = \frac{60e^z(z^2 - 6z + 12)}{z^5} - \frac{60(z^2 + 6z + 12)}{z^5}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = -\frac{9}{2}$

07.25.03.1638.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{9}{2}, 1; z\right) = \frac{1}{126} e^z (104 z^5 + 52 z^4 + 78 z^3 + 195 z^2 + 336 z + 126) - \frac{52}{63} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1639.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{9}{2}, 1; -z\right) = \frac{1}{126} e^{-z} (-104 z^5 + 52 z^4 - 78 z^3 + 195 z^2 - 336 z + 126) - \frac{52}{63} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1640.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{9}{2}, 2; z\right) = \frac{1}{126} e^z (16 z^5 + 8 z^4 + 12 z^3 + 30 z^2 + 105 z + 126) - \frac{8}{63} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1641.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{9}{2}, 2; -z\right) = \frac{1}{126} e^{-z} (-16 z^5 + 8 z^4 - 12 z^3 + 30 z^2 - 105 z + 126) - \frac{8}{63} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1642.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{9}{2}, 3; z\right) = \frac{1}{945} e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1643.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{9}{2}, 3; -z\right) = \frac{1}{945} e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1644.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{9}{2}, 4; z\right) = -\frac{64 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{5355} + \frac{e^z (64 z^8 + 32 z^7 + 48 z^6 + 120 z^5 + 420 z^4 + 1890 z^3 + 10395 z^2 - 20790 z + 20790)}{5355 z^3} - \frac{66}{17 z^3}$$

07.25.03.1645.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{9}{2}, 4; -z\right) = -\frac{64 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{5355} + \frac{e^{-z} (-64 z^8 + 32 z^7 - 48 z^6 + 120 z^5 - 420 z^4 + 1890 z^3 - 10395 z^2 - 20790 z - 20790)}{5355 z^3} + \frac{66}{17 z^3}$$

07.25.03.1646.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{9}{2}, 5; z\right) = -\frac{512 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{101745} - \frac{264 (19 z + 51)}{323 z^4} + \frac{1}{101745 z^4} 4 e^z (128 z^9 + 64 z^8 + 96 z^7 + 240 z^6 + 840 z^5 + 3780 z^4 + 20790 z^3 + 135135 z^2 - 665280 z + 1060290)$$

07.25.03.1647.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{9}{2}, 5; -z\right) = -\frac{512 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{101745} + \frac{264 (19 z - 51)}{323 z^4} - \frac{1}{101745 z^4} 4 e^{-z} (128 z^9 - 64 z^8 + 96 z^7 - 240 z^6 + 840 z^5 - 3780 z^4 + 20790 z^3 - 135135 z^2 - 665280 z - 1060290)$$

$$\begin{aligned}
 & \text{07.25.03.1648.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 3; -\frac{9}{2}, 6; z\right) = \\
 & -\frac{1024\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{11/2}}{427329} - \frac{660(133z^2 + 714z + 1292)}{2261z^5} + \frac{1}{427329z^5} (4e^z(256z^{10} + 128z^9 + 192z^8 + \\
 & 480z^7 + 1680z^6 + 7560z^5 + 41580z^4 + 270270z^3 + 2027025z^2 - 18024930z + 40291020))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1649.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 3; -\frac{9}{2}, 6; -z\right) = \\
 & -\frac{1024\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{11/2}}{427329} + \frac{660(133z^2 - 714z + 1292)}{2261z^5} - \frac{1}{427329z^5} (4e^{-z}(256z^{10} - 128z^9 + 192z^8 - \\
 & 480z^7 + 1680z^6 - 7560z^5 + 41580z^4 - 270270z^3 + 2027025z^2 + 18024930z + 40291020))
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.1650.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 3; -\frac{7}{2}, 1; z\right) = \frac{1}{210} e^z(-780z^5 + 2756z^4 + 988z^3 + 897z^2 + 780z + 210) + \frac{13}{105}\sqrt{\pi}(30z^{11/2} - 121z^{9/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1651.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 3; -\frac{7}{2}, 1; -z\right) = \frac{1}{210} e^{-z}(780z^5 + 2756z^4 - 988z^3 + 897z^2 - 780z + 210) + \frac{13}{105}\sqrt{\pi}(30z^{11/2} + 121z^{9/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1652.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 3; -\frac{7}{2}, 2; z\right) = \frac{1}{210} e^z(-120z^5 + 512z^4 + 196z^3 + 204z^2 + 285z + 210) + \frac{2}{105}\sqrt{\pi}(30z^{11/2} - 143z^{9/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1653.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 3; -\frac{7}{2}, 2; -z\right) = \frac{1}{210} e^{-z}(120z^5 + 512z^4 - 196z^3 + 204z^2 - 285z + 210) + \frac{2}{105}\sqrt{\pi}(30z^{11/2} + 143z^{9/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1654.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 3; -\frac{7}{2}, 3; z\right) = \frac{1}{105} e^z(-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105) + \frac{8}{105}\sqrt{\pi}(2z^{11/2} - 11z^{9/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1655.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 3; -\frac{7}{2}, 3; -z\right) = \frac{1}{105} e^{-z}(16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105) + \frac{8}{105}\sqrt{\pi}(2z^{11/2} + 11z^{9/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1656.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 3; -\frac{7}{2}, 4; z\right) = \frac{e^z(-480z^8 + 2752z^7 + 1136z^6 + 1344z^5 + 2460z^4 + 5460z^3 + 10395z^2 - 20790z + 20790)}{8925z^3} + \\
 & \frac{16\sqrt{\pi}(30z^{11/2} - 187z^{9/2})\operatorname{erfi}(\sqrt{z})}{8925} - \frac{198}{85z^3}
 \end{aligned}$$

07.25.03.1657.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{7}{2}, 4; -z\right) = \frac{e^{-z}(480z^8 + 2752z^7 - 1136z^6 + 1344z^5 - 2460z^4 + 5460z^3 - 10395z^2 - 20790z - 20790)}{8925z^3} + \frac{16\sqrt{\pi}(30z^{11/2} + 187z^{9/2})\operatorname{erf}(\sqrt{z})}{8925} + \frac{198}{85z^3}$$

07.25.03.1658.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{7}{2}, 5; z\right) = -\frac{792(19z + 45)}{1615z^4} - \frac{1}{169575z^4} 4e^z(960z^9 - 6208z^8 - 2624z^7 - 3216z^6 - 6240z^5 - 15540z^4 - 41580z^3 - 72765z^2 + 540540z - 935550) + \frac{128\sqrt{\pi}(30z^{11/2} - 209z^{9/2})\operatorname{erfi}(\sqrt{z})}{169575}$$

07.25.03.1659.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{7}{2}, 5; -z\right) = \frac{792(19z - 45)}{1615z^4} + \frac{1}{169575z^4} 4e^{-z}(960z^9 + 6208z^8 - 2624z^7 + 3216z^6 - 6240z^5 + 15540z^4 - 41580z^3 + 72765z^2 + 540540z + 935550) + \frac{128\sqrt{\pi}(30z^{11/2} + 209z^{9/2})\operatorname{erf}(\sqrt{-z})}{169575}$$

07.25.03.1660.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{7}{2}, 6; z\right) = -\frac{396(133z^2 + 630z + 1020)}{2261z^5} - \frac{1}{237405z^5} (4e^z(640z^{10} - 4608z^9 - 1984z^8 - 2496z^7 - 5040z^6 - 13440z^5 - 41580z^4 - 124740z^3 - 135135z^2 + 4054050z - 10602900)) + \frac{256\sqrt{\pi}(10z^{11/2} - 77z^{9/2})\operatorname{erfi}(\sqrt{z})}{237405}$$

07.25.03.1661.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{7}{2}, 6; -z\right) = \frac{396(133z^2 - 630z + 1020)}{2261z^5} + \frac{1}{237405z^5} (4e^{-z}(640z^{10} + 4608z^9 - 1984z^8 + 2496z^7 - 5040z^6 + 13440z^5 - 41580z^4 + 124740z^3 - 135135z^2 - 4054050z - 10602900)) + \frac{256\sqrt{\pi}(10z^{11/2} + 77z^{9/2})\operatorname{erf}(\sqrt{-z})}{237405}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = -\frac{5}{2}$

07.25.03.1662.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{5}{2}, 1; z\right) = \frac{1}{60} e^z (390 z^5 - 2951 z^4 + 3620 z^3 + 822 z^2 + 336 z + 60) + \frac{1}{120} \sqrt{\pi} (-780 z^{11/2} + 6292 z^{9/2} - 9801 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1663.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{5}{2}, 1; -z\right) = \frac{1}{60} e^{-z} (-390 z^5 - 2951 z^4 - 3620 z^3 + 822 z^2 - 336 z + 60) + \frac{1}{120} \sqrt{\pi} (-780 z^{11/2} - 6292 z^{9/2} - 9801 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1664.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{5}{2}, 2; z\right) = \frac{1}{30} e^z (30 z^5 - 271 z^4 + 424 z^3 + 114 z^2 + 69 z + 30) + \frac{1}{60} \sqrt{\pi} (-60 z^{11/2} + 572 z^{9/2} - 1089 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1665.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{5}{2}, 2; -z\right) = \frac{1}{30} e^{-z} (-30 z^5 - 271 z^4 - 424 z^3 + 114 z^2 - 69 z + 30) + \frac{1}{60} \sqrt{\pi} (-60 z^{11/2} - 572 z^{9/2} - 1089 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1666.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{5}{2}, 3; z\right) = \frac{1}{15} e^z (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} + 44 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1667.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{5}{2}, 3; -z\right) = \frac{1}{15} e^{-z} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} - 44 z^{9/2} - 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1668.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{5}{2}, 4; z\right) = \frac{1}{16575 z^3} e^z (1560 z^8 - 18668 z^7 + 41936 z^6 + 13584 z^5 + 11640 z^4 + 13110 z^3 + 10395 z^2 - 20790 z + 20790) - \frac{2 \sqrt{\pi} (780 z^{11/2} - 9724 z^{9/2} + 25245 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{16575} - \frac{1386}{1105 z^3}$$

07.25.03.1669.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{5}{2}, 4; -z\right) = \frac{1}{16575 z^3} e^{-z} (-1560 z^8 - 18668 z^7 - 41936 z^6 + 13584 z^5 - 11640 z^4 + 13110 z^3 - 10395 z^2 - 20790 z - 20790) - \frac{2 \sqrt{\pi} (780 z^{11/2} + 9724 z^{9/2} + 25245 z^{7/2}) \operatorname{erf}(\sqrt{z})}{16575} + \frac{1386}{1105 z^3}$$

07.25.03.1670.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{5}{2}, 5; z\right) = -\frac{5544(19z + 39)}{20995z^4} + \frac{1}{314925z^4} \\ (4e^z(3120z^9 - 41912z^8 + 108512z^7 + 37200z^6 + 34896z^5 + 46680z^4 + 62370z^3 + 10395z^2 - 415800z + 810810)) - \\ \frac{16\sqrt{\pi}(780z^{11/2} - 10868z^{9/2} + 31977z^{7/2})\operatorname{erfi}(\sqrt{z})}{314925}$$

07.25.03.1671.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{5}{2}, 5; -z\right) = \\ \frac{5544(19z - 39)}{20995z^4} - \frac{1}{314925z^4} (4e^{-z}(3120z^9 + 41912z^8 + 108512z^7 - 37200z^6 + 34896z^5 - 46680z^4 + \\ 62370z^3 - 10395z^2 - 415800z - 810810)) - \frac{16\sqrt{\pi}(780z^{11/2} + 10868z^{9/2} + 31977z^{7/2})\operatorname{erf}(\sqrt{z})}{314925}$$

07.25.03.1672.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{5}{2}, 6; z\right) = -\frac{396(133z^2 + 546z + 780)}{4199z^5} + \\ \frac{1}{440895z^5} (4e^z(2080z^{10} - 30992z^9 + 90880z^8 + 32544z^7 + 32592z^6 + 48720z^5 + 83160z^4 + 103950z^3 - \\ 239085z^2 - 2432430z + 8108100)) - \frac{32\sqrt{\pi}(260z^{11/2} - 4004z^{9/2} + 13167z^{7/2})\operatorname{erfi}(\sqrt{z})}{440895}$$

07.25.03.1673.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{5}{2}, 6; -z\right) = \frac{396(133z^2 - 546z + 780)}{4199z^5} - \\ \frac{1}{440895z^5} (4e^{-z}(2080z^{10} + 30992z^9 + 90880z^8 - 32544z^7 + 32592z^6 - 48720z^5 + 83160z^4 - 103950z^3 - \\ 239085z^2 + 2432430z + 8108100)) - \frac{32\sqrt{\pi}(260z^{11/2} + 4004z^{9/2} + 13167z^{7/2})\operatorname{erf}(\sqrt{z})}{440895}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = -\frac{3}{2}$

07.25.03.1674.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{3}{2}, 1; z\right) = \frac{1}{48} e^z (-260z^5 + 3016z^4 - 8423z^3 + 4248z^2 + 480z + 48) + \\ \frac{1}{96} \sqrt{\pi} (520z^{11/2} - 6292z^{9/2} + 19602z^{7/2} - 14553z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.1675.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{3}{2}, 1; -z\right) = \\ \frac{1}{48} e^{-z} (260z^5 + 3016z^4 + 8423z^3 + 4248z^2 - 480z + 48) + \frac{1}{96} \sqrt{\pi} (520z^{11/2} + 6292z^{9/2} + 19602z^{7/2} + 14553z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.1676.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{3}{2}, 2; z\right) = \frac{1}{24} e^z (-20 z^5 + 276 z^4 - 961 z^3 + 672 z^2 + 108 z + 24) + \frac{1}{48} \sqrt{\pi} (40 z^{11/2} - 572 z^{9/2} + 2178 z^{7/2} - 2079 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1677.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{3}{2}, 2; -z\right) = \frac{1}{24} e^{-z} (20 z^5 + 276 z^4 + 961 z^3 + 672 z^2 - 108 z + 24) + \frac{1}{48} \sqrt{\pi} (40 z^{11/2} + 572 z^{9/2} + 2178 z^{7/2} + 2079 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1678.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{3}{2}, 3; z\right) = \frac{1}{18} e^z (-4 z^5 + 64 z^4 - 267 z^3 + 240 z^2 + 48 z + 18) + \frac{1}{36} \sqrt{\pi} (8 z^{11/2} - 132 z^{9/2} + 594 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1679.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{3}{2}, 3; -z\right) = \frac{1}{18} e^{-z} (4 z^5 + 64 z^4 + 267 z^3 + 240 z^2 - 48 z + 18) + \frac{1}{36} \sqrt{\pi} (8 z^{11/2} + 132 z^{9/2} + 594 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1680.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{3}{2}, 4; z\right) = \frac{e^z (-260 z^8 + 4732 z^7 - 23\,009 z^6 + 25\,344 z^5 + 5880 z^4 + 3000 z^3 + 945 z^2 - 1890 z + 1890)}{3315 z^3} + \frac{\sqrt{\pi} (520 z^{11/2} - 9724 z^{9/2} + 50\,490 z^{7/2} - 69\,615 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{6630} - \frac{126}{221 z^3}$$

07.25.03.1681.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{3}{2}, 4; -z\right) = \frac{e^{-z} (260 z^8 + 4732 z^7 + 23\,009 z^6 + 25\,344 z^5 - 5880 z^4 + 3000 z^3 - 945 z^2 - 1890 z - 1890)}{3315 z^3} + \frac{\sqrt{\pi} (520 z^{11/2} + 9724 z^{9/2} + 50\,490 z^{7/2} + 69\,615 z^{5/2}) \operatorname{erf}(\sqrt{z})}{6630} + \frac{126}{221 z^3}$$

07.25.03.1682.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{3}{2}, 5; z\right) = -\frac{504(19z + 33)}{4199 z^4} - \frac{1}{62\,985 z^4} 4 e^z (520 z^9 - 10\,608 z^8 + 58\,910 z^7 - 76\,944 z^6 - 19\,872 z^5 - 12\,360 z^4 - 7560 z^3 + 4725 z^2 + 26\,460 z - 62\,370) + \frac{4 \sqrt{\pi} (520 z^{11/2} - 10\,868 z^{9/2} + 63\,954 z^{7/2} - 101\,745 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{62\,985}$$

$$\begin{aligned}
 & \text{07.25.03.1683.01} \\
 {}_2F_2\left(-\frac{11}{2}, 3; -\frac{3}{2}, 5; -z\right) &= \frac{504(19z - 33)}{4199z^4} + \\
 & \frac{1}{62985z^4} 4e^{-z}(520z^9 + 10608z^8 + 58910z^7 + 76944z^6 - 19872z^5 + 12360z^4 - 7560z^3 - 4725z^2 + 26460z + 62370) + \\
 & \frac{4\sqrt{\pi}(520z^{11/2} + 10868z^{9/2} + 63954z^{7/2} + 101745z^{5/2})\operatorname{erfi}(\sqrt{z})}{62985}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1684.01} \\
 {}_2F_2\left(-\frac{11}{2}, 3; -\frac{3}{2}, 6; z\right) &= -\frac{180(133z^2 + 462z + 572)}{4199z^5} - \\
 & \frac{1}{264537z^5} (4e^z(1040z^{10} - 23504z^9 + 146772z^8 - 221952z^7 - 62160z^6 - 44352z^5 - 37800z^4 - 7560z^3 + \\
 & 121905z^2 + 311850z - 1621620)) + \frac{8\sqrt{\pi}(520z^{11/2} - 12012z^{9/2} + 79002z^{7/2} - 142443z^{5/2})\operatorname{erfi}(\sqrt{z})}{264537}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1685.01} \\
 {}_2F_2\left(-\frac{11}{2}, 3; -\frac{3}{2}, 6; -z\right) &= \frac{180(133z^2 - 462z + 572)}{4199z^5} + \\
 & \frac{1}{264537z^5} (4e^{-z}(1040z^{10} + 23504z^9 + 146772z^8 + 221952z^7 - 62160z^6 + 44352z^5 - 37800z^4 + 7560z^3 + \\
 & 121905z^2 - 311850z - 1621620)) + \frac{8\sqrt{\pi}(520z^{11/2} + 12012z^{9/2} + 79002z^{7/2} + 142443z^{5/2})\operatorname{erfi}(\sqrt{z})}{264537}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.1686.01} \\
 {}_2F_2\left(-\frac{11}{2}, 3; -\frac{1}{2}, 1; z\right) &= \frac{1}{768} e^z(1560z^5 - 24388z^4 + 106198z^3 - 131781z^2 + 24576z + 768) + \\
 & \frac{\sqrt{\pi}(-3120z^{11/2} + 50336z^{9/2} - 235224z^{7/2} + 349272z^{5/2} - 121275z^{3/2})\operatorname{erfi}(\sqrt{z})}{1536}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1687.01} \\
 {}_2F_2\left(-\frac{11}{2}, 3; -\frac{1}{2}, 1; -z\right) &= \frac{1}{768} e^{-z}(-1560z^5 - 24388z^4 - 106198z^3 - 131781z^2 - 24576z + 768) + \\
 & \frac{\sqrt{\pi}(-3120z^{11/2} - 50336z^{9/2} - 235224z^{7/2} - 349272z^{5/2} - 121275z^{3/2})\operatorname{erfi}(\sqrt{z})}{1536}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1688.01} \\
 {}_2F_2\left(-\frac{11}{2}, 3; -\frac{1}{2}, 2; z\right) &= \frac{1}{384} e^z(120z^5 - 2228z^4 + 12014z^3 - 19905z^2 + 5952z + 384) + \\
 & \frac{1}{768} \sqrt{\pi}(-240z^{11/2} + 4576z^{9/2} - 26136z^{7/2} + 49896z^{5/2} - 24255z^{3/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.1689.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{1}{2}, 2; -z\right) = \frac{1}{384} e^{-z} (-120 z^5 - 2228 z^4 - 12014 z^3 - 19905 z^2 - 5952 z + 384) + \frac{1}{768} \sqrt{\pi} (-240 z^{11/2} - 4576 z^{9/2} - 26136 z^{7/2} - 49896 z^{5/2} - 24255 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1690.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{1}{2}, 3; z\right) = \frac{1}{96} e^z (8 z^5 - 172 z^4 + 1106 z^3 - 2295 z^2 + 960 z + 96) + \frac{1}{192} \sqrt{\pi} (-16 z^{11/2} + 352 z^{9/2} - 2376 z^{7/2} + 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1691.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{1}{2}, 3; -z\right) = \frac{1}{96} e^{-z} (-8 z^5 - 172 z^4 - 1106 z^3 - 2295 z^2 - 960 z + 96) + \frac{1}{192} \sqrt{\pi} (-16 z^{11/2} - 352 z^{9/2} - 2376 z^{7/2} - 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1692.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{1}{2}, 4; z\right) = \frac{1}{53040 z^3} e^z (1560 z^8 - 38116 z^7 + 284662 z^6 - 710157 z^5 + 384960 z^4 + 51360 z^3 + 5040 z^2 - 10080 z + 10080) + \frac{\sqrt{\pi} (-3120 z^{11/2} + 77792 z^{9/2} - 605880 z^{7/2} + 1670760 z^{5/2} - 1276275 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{106080} - \frac{42}{221 z^3}$$

07.25.03.1693.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{1}{2}, 4; -z\right) = \frac{1}{53040 z^3} e^{-z} (-1560 z^8 - 38116 z^7 - 284662 z^6 - 710157 z^5 - 384960 z^4 + 51360 z^3 - 5040 z^2 - 10080 z - 10080) + \frac{\sqrt{\pi} (-3120 z^{11/2} - 77792 z^{9/2} - 605880 z^{7/2} - 1670760 z^{5/2} - 1276275 z^{3/2}) \operatorname{erf}(\sqrt{z})}{106080} + \frac{42}{221 z^3}$$

07.25.03.1694.01

$${}_2F_2\left(-\frac{11}{2}, 3; -\frac{1}{2}, 5; z\right) = -\frac{168(19z+27)}{4199 z^4} + \frac{1}{125970 z^4} (e^z (1560 z^9 - 42692 z^8 + 363158 z^7 - 1058757 z^6 + 708288 z^5 + 115680 z^4 + 25200 z^3 - 27720 z^2 - 40320 z + 136080)) + \frac{\sqrt{\pi} (-3120 z^{11/2} + 86944 z^{9/2} - 767448 z^{7/2} + 2441880 z^{5/2} - 2204475 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{251940}$$

$$\begin{aligned}
 & \text{07.25.03.1695.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 3; -\frac{1}{2}, 5; -z\right) = \\
 & \frac{168(19z - 27)}{4199z^4} + \frac{1}{125970z^4} \left(e^{-z} (-1560z^9 - 42692z^8 - 363158z^7 - 1058757z^6 - 708288z^5 + 115680z^4 - \right. \\
 & \quad \left. 25200z^3 - 27720z^2 + 40320z + 136080) \right) + \\
 & \frac{\sqrt{\pi} (-3120z^{11/2} - 86944z^{9/2} - 767448z^{7/2} - 2441880z^{5/2} - 2204475z^{3/2}) \operatorname{erf}(\sqrt{z})}{251940}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1696.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 3; -\frac{1}{2}, 6; z\right) = \\
 & -\frac{60(133z^2 + 378z + 396)}{4199z^5} + \frac{1}{88179z^5} \left(e^z (520z^{10} - 15756z^9 + 150386z^8 - 501807z^7 + 400512z^6 + \right. \\
 & \quad \left. 75936z^5 + 25200z^4 - 12600z^3 - 59220z^2 - 22680z + 498960) \right) + \\
 & \frac{\sqrt{\pi} (-1040z^{11/2} + 32032z^{9/2} - 316008z^{7/2} + 1139544z^{5/2} - 1187025z^{3/2}) \operatorname{erfi}(\sqrt{z})}{176358}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1697.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 3; -\frac{1}{2}, 6; -z\right) = \\
 & \frac{60(133z^2 - 378z + 396)}{4199z^5} + \frac{1}{88179z^5} \left(e^{-z} (-520z^{10} - 15756z^9 - 150386z^8 - 501807z^7 - 400512z^6 + \right. \\
 & \quad \left. 75936z^5 - 25200z^4 - 12600z^3 + 59220z^2 - 22680z - 498960) \right) + \\
 & \frac{\sqrt{\pi} (-1040z^{11/2} - 32032z^{9/2} - 316008z^{7/2} - 1139544z^{5/2} - 1187025z^{3/2}) \operatorname{erf}(\sqrt{z})}{176358}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = \frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.1698.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 3; \frac{1}{2}, 1; z\right) = \frac{e^z (-624z^5 + 12272z^4 - 72584z^3 + 143700z^2 - 73263z + 3072)}{3072} + \\
 & \frac{\sqrt{\pi} (1248z^{11/2} - 25168z^{9/2} + 156816z^{7/2} - 349272z^{5/2} + 242550z^{3/2} - 31185\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{6144}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1699.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 3; \frac{1}{2}, 1; -z\right) = \frac{e^{-z} (624z^5 + 12272z^4 + 72584z^3 + 143700z^2 + 73263z + 3072)}{3072} + \\
 & \frac{\sqrt{\pi} (1248z^{11/2} + 25168z^{9/2} + 156816z^{7/2} + 349272z^{5/2} + 242550z^{3/2} + 31185\sqrt{z}) \operatorname{erf}(\sqrt{z})}{6144}
 \end{aligned}$$

07.25.03.1700.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{1}{2}, 2; z\right) = \frac{e^z(-48z^5 + 1120z^4 - 8176z^3 + 21360z^2 - 16485z + 1536)}{1536} + \frac{\sqrt{\pi}(96z^{11/2} - 2288z^{9/2} + 17424z^{7/2} - 49896z^{5/2} + 48510z^{3/2} - 10395\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3072}$$

07.25.03.1701.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{1}{2}, 2; -z\right) = \frac{e^{-z}(48z^5 + 1120z^4 + 8176z^3 + 21360z^2 + 16485z + 1536)}{1536} + \frac{\sqrt{\pi}(96z^{11/2} + 2288z^{9/2} + 17424z^{7/2} + 49896z^{5/2} + 48510z^{3/2} + 10395\sqrt{z})\operatorname{erf}(\sqrt{z})}{3072}$$

07.25.03.1702.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{1}{2}, 3; z\right) = \frac{e^z(-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920)}{1920} + \frac{\sqrt{\pi}(32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.1703.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{1}{2}, 3; -z\right) = \frac{e^{-z}(16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \frac{\sqrt{\pi}(32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z})\operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.1704.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{1}{2}, 4; z\right) = \frac{1}{212160z^3} e^z(-624z^8 + 19136z^7 - 192704z^6 + 747816z^5 - 977685z^4 + 211200z^3 + 2880z^2 - 5760z + 5760) + \frac{1}{424320} \sqrt{\pi}(1248z^{11/2} - 38896z^{9/2} + 403920z^{7/2} - 1670760z^{5/2} + 2552550z^{3/2} - 984555\sqrt{z})\operatorname{erfi}(\sqrt{z}) - \frac{6}{221z^3}$$

07.25.03.1705.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{1}{2}, 4; -z\right) = \frac{1}{212160z^3} e^{-z}(624z^8 + 19136z^7 + 192704z^6 + 747816z^5 + 977685z^4 + 211200z^3 - 2880z^2 - 5760z - 5760) + \frac{1}{424320} \sqrt{\pi}(1248z^{11/2} + 38896z^{9/2} + 403920z^{7/2} + 1670760z^{5/2} + 2552550z^{3/2} + 984555\sqrt{z})\operatorname{erf}(\sqrt{z}) + \frac{6}{221z^3}$$

07.25.03.1706.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{1}{2}, 5; z\right) = -\frac{24(19z+21)}{4199z^4} + \frac{1}{503880z^4} (e^z(-624z^9 + 21424z^8 - 245416z^7 + 1108164z^6 - 1749207z^5 + 497280z^4 + 17280z^3 - 24480z^2 - 5760z + 60480)) + \frac{1}{1007760} \sqrt{\pi} (1248z^{11/2} - 43472z^{9/2} + 511632z^{7/2} - 2441880z^{5/2} + 4408950z^{3/2} - 2078505\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1707.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{1}{2}, 5; -z\right) = \frac{24(19z-21)}{4199z^4} + \frac{1}{503880z^4} (e^{-z}(624z^9 + 21424z^8 + 245416z^7 + 1108164z^6 + 1749207z^5 + 497280z^4 - 17280z^3 - 24480z^2 + 5760z + 60480)) + \frac{1}{1007760} \sqrt{\pi} (1248z^{11/2} + 43472z^{9/2} + 511632z^{7/2} + 2441880z^{5/2} + 4408950z^{3/2} + 2078505\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1708.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{1}{2}, 6; z\right) = -\frac{60(19z^2+42z+36)}{4199z^5} + \frac{1}{352716z^5} (e^z(-208z^{10} + 7904z^9 - 101488z^8 + 522720z^7 - 967491z^6 + 344064z^5 + 20160z^4 - 20160z^3 - 25200z^2 + 30240z + 181440)) + \frac{1}{705432} \sqrt{\pi} (416z^{11/2} - 16016z^{9/2} + 210672z^{7/2} - 1139544z^{5/2} + 2374050z^{3/2} - 1322685\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1709.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{1}{2}, 6; -z\right) = \frac{60(19z^2-42z+36)}{4199z^5} + \frac{1}{352716z^5} (e^{-z}(208z^{10} + 7904z^9 + 101488z^8 + 522720z^7 + 967491z^6 + 344064z^5 - 20160z^4 - 20160z^3 + 25200z^2 + 30240z - 181440)) + \frac{1}{705432} \sqrt{\pi} (416z^{11/2} + 16016z^{9/2} + 210672z^{7/2} + 1139544z^{5/2} + 2374050z^{3/2} + 1322685\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = 1$

07.25.03.1710.01

$${}_2F_2\left(-\frac{11}{2}, 3; 1, 1; z\right) = \frac{e^{z/2} (3120z^6 - 71552z^5 + 535596z^4 - 1594632z^3 + 1861971z^2 - 706860z + 41580) I_0\left(\frac{z}{2}\right) + e^{z/2} (-3120z^6 + 68432z^5 - 468724z^4 + 1157004z^3 - 880647z^2 + 109281z) I_1\left(\frac{z}{2}\right)}{41580}$$

07.25.03.1711.01

$${}_2F_2\left(-\frac{11}{2}, 3; 1, \frac{3}{2}; z\right) = \frac{e^z(-2080z^5 + 49296z^4 - 368432z^3 + 1002072z^2 - 843930z + 112485)}{122880} + \frac{1}{245760\sqrt{z}} \sqrt{\pi} (4160z^6 - 100672z^5 + 784080z^4 - 2328480z^3 + 2425500z^2 - 623700z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1712.01

$${}_2F_2\left(-\frac{11}{2}, 3; 1, \frac{3}{2}; -z\right) = \frac{e^{-z}(2080z^5 + 49296z^4 + 368432z^3 + 1002072z^2 + 843930z + 112485)}{122880} + \frac{1}{245760\sqrt{z}} \sqrt{\pi} (4160z^6 + 100672z^5 + 784080z^4 + 2328480z^3 + 2425500z^2 + 623700z + 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.1713.01

$${}_2F_2\left(-\frac{11}{2}, 3; 1, 2; z\right) = \frac{e^{z/2}(480z^6 - 12944z^5 + 117024z^4 - 435540z^3 + 666546z^2 - 363825z + 41580)I_0\left(\frac{z}{2}\right)}{41580} + \frac{e^{z/2}(-480z^6 + 12464z^5 - 104800z^4 + 336492z^3 - 371490z^2 + 88491z)I_1\left(\frac{z}{2}\right)}{41580}$$

07.25.03.1714.01

$${}_2F_2\left(-\frac{11}{2}, 3; 1, \frac{5}{2}; z\right) = \frac{e^z(-12480z^6 + 346112z^5 - 3126320z^4 + 10818816z^3 - 12757332z^2 + 2997120z + 10395)}{3440640z} + \frac{1}{6881280z^{3/2}} \left(\sqrt{\pi} (24960z^7 - 704704z^6 + 6586272z^5 - 24449040z^4 + 33957000z^3 - 13097700z^2 + 436590z - 10395) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.1715.01

$${}_2F_2\left(-\frac{11}{2}, 3; 1, \frac{5}{2}; -z\right) = \frac{e^{-z}(12480z^6 + 346112z^5 + 3126320z^4 + 10818816z^3 + 12757332z^2 + 2997120z - 10395)}{3440640z} + \frac{1}{6881280z^{3/2}} \left(\sqrt{\pi} (24960z^7 + 704704z^6 + 6586272z^5 + 24449040z^4 + 33957000z^3 + 13097700z^2 + 436590z + 10395) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.1716.01

$${}_2F_2\left(-\frac{11}{2}, 3; 1, 3; z\right) = \frac{e^{z/2}(32z^6 - 992z^5 + 10512z^4 - 46944z^3 + 88674z^2 - 62370z + 10395)I_0\left(\frac{z}{2}\right)}{10395} - \frac{2e^{z/2}z(16z^5 - 480z^4 + 4784z^3 - 18912z^2 + 27387z - 9762)I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.1717.01

$${}_2F_2\left(-\frac{11}{2}, 3; 1, \frac{7}{2}; z\right) = \frac{1}{22020096z^2} e^z(-24960z^7 + 792896z^6 - 8397728z^5 + 35284848z^4 - 53594760z^3 + 18391548z^2 + 228690z - 93555) + \frac{1}{44040192z^{5/2}} \left(\sqrt{\pi} (49920z^8 - 1610752z^7 + 17563392z^6 - 78236928z^5 + 135828000z^4 - 69854400z^3 + 3492720z^2 - 166320z + 93555) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.1718.01

$${}_2F_2\left(-\frac{11}{2}, 3; 1, \frac{7}{2}; -z\right) = \frac{1}{22020096z^2} e^{-z} (24960z^7 + 792896z^6 + 8397728z^5 + 35284848z^4 + 53594760z^3 + 18391548z^2 - 228690z - 93555) + \frac{1}{44040192z^{5/2}} \left(\sqrt{\pi} (49920z^8 + 1610752z^7 + 17563392z^6 + 78236928z^5 + 135828000z^4 + 69854400z^3 + 3492720z^2 + 166320z + 93555) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1719.01

$${}_2F_2\left(-\frac{11}{2}, 3; 1, 4; z\right) = \frac{1}{11486475z} e^{z/2} (12480z^7 - 437216z^6 + 5313552z^5 - 27680160z^4 + 62135880z^3 - 53118450z^2 + 11465685z + 41580) I_0\left(\frac{z}{2}\right) + \frac{1}{11486475z^2} \left(e^{z/2} (-12480z^8 + 424736z^7 - 4895056z^6 + 22984992z^5 - 41212680z^4 + 19668270z^3 - 31185z^2 + 83160z - 166320) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.1720.01

$${}_2F_2\left(-\frac{11}{2}, 3; 1, \frac{9}{2}; z\right) = \frac{1}{37748736z^3} \left(e^z (-16640z^8 + 595712z^7 - 7237632z^6 + 35776704z^5 - 66559584z^4 + 30340368z^3 + 665280z^2 - 41580z - 779625) \right) + \frac{1}{75497472z^{7/2}} \left(\sqrt{\pi} (33280z^9 - 1208064z^8 + 15054336z^7 - 78236928z^6 + 162993600z^5 - 104781600z^4 + 6985440z^3 - 498960z^2 + 561330z + 779625) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1721.01

$${}_2F_2\left(-\frac{11}{2}, 3; 1, \frac{9}{2}; -z\right) = \frac{1}{37748736z^3} \left(e^{-z} (16640z^8 + 595712z^7 + 7237632z^6 + 35776704z^5 + 66559584z^4 + 30340368z^3 - 665280z^2 - 41580z + 779625) \right) + \frac{1}{75497472z^{7/2}} \left(\sqrt{\pi} (33280z^9 + 1208064z^8 + 15054336z^7 + 78236928z^6 + 162993600z^5 + 104781600z^4 + 6985440z^3 + 498960z^2 + 561330z - 779625) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1722.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 3; 1, 5; z\right) = & \\
 & \frac{1}{218243025z^2} \left(8e^{z/2} (12480z^8 - 487552z^7 + 6684240z^6 - 39789312z^5 + 103404360z^4 - 103617360z^3 + \right. \\
 & \quad \left. 27141345z^2 + 207900z + 374220) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{218243025z^3} \left(8e^{z/2} (12480z^9 - 475072z^8 + 6215408z^7 - 33798960z^6 + 72277032z^5 - \right. \\
 & \quad \left. 43346760z^4 + 218295z^3 - 509355z^2 + 831600z + 1496880) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

07.25.03.1723.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 3; 1, \frac{11}{2}; z\right) = & \\
 & \frac{1}{100663296z^4} \left(e^z (-19968z^9 + 795392z^8 - 10903040z^7 + 61981440z^6 - 136552512z^5 + 78061728z^4 + \right. \\
 & \quad \left. 2328480z^3 + 831600z^2 - 4261950z - 7640325) \right) + \\
 & \frac{1}{201326592z^{9/2}} \left(\sqrt{\pi} (39936z^{10} - 1610752z^9 + 22581504z^8 - 134120448z^7 + 325987200z^6 - \right. \\
 & \quad \left. 251475840z^5 + 20956320z^4 - 1995840z^3 + 3367980z^2 + 9355500z + 7640325) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.1724.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 3; 1, \frac{11}{2}; -z\right) = & \\
 & \frac{1}{100663296z^4} \left(e^{-z} (19968z^9 + 795392z^8 + 10903040z^7 + 61981440z^6 + 136552512z^5 + 78061728z^4 - \right. \\
 & \quad \left. 2328480z^3 + 831600z^2 + 4261950z - 7640325) \right) + \\
 & \frac{1}{201326592z^{9/2}} \left(\sqrt{\pi} (39936z^{10} + 1610752z^9 + 22581504z^8 + 134120448z^7 + 325987200z^6 + \right. \\
 & \quad \left. 251475840z^5 + 20956320z^4 + 1995840z^3 + 3367980z^2 - 9355500z + 7640325) \operatorname{erf}(\sqrt{-z}) \right)
 \end{aligned}$$

07.25.03.1725.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 3; 1, 6; z\right) = & \\
 & \frac{1}{305540235z^3} \left(8e^{z/2} (8320z^9 - 358592z^8 + 5474496z^7 - 36656592z^6 + 108192336z^5 - 123991560z^4 + \right. \\
 & \quad \left. 37837800z^3 + 384615z^2 + 1621620z + 1995840) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{305540235z^4} \left(8e^{z/2} (8320z^{10} - 350272z^9 + 5128384z^8 - 31695024z^7 + 78737232z^6 - \right. \\
 & \quad \left. 56959896z^5 + 582120z^4 - 1216215z^3 + 1787940z^2 + 6486480z + 7983360) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = \frac{3}{2}$

07.25.03.1726.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{3}{2}, 2; z\right) = \frac{e^z(-160z^5 + 4496z^4 - 41392z^3 + 147672z^2 - 184530z + 51045)}{61440} + \frac{\sqrt{\pi}(320z^6 - 9152z^5 + 87120z^4 - 332640z^3 + 485100z^2 - 207900z + 10395)\operatorname{erfi}(\sqrt{z})}{122880\sqrt{z}}$$

07.25.03.1727.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{3}{2}, 2; -z\right) = \frac{e^{-z}(160z^5 + 4496z^4 + 41392z^3 + 147672z^2 + 184530z + 51045)}{61440} + \frac{\sqrt{\pi}(320z^6 + 9152z^5 + 87120z^4 + 332640z^3 + 485100z^2 + 207900z + 10395)\operatorname{erf}(\sqrt{z})}{122880\sqrt{z}}$$

07.25.03.1728.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{3}{2}, 3; z\right) = \frac{e^z(-32z^5 + 1040z^4 - 11376z^3 + 50232z^2 - 83370z + 35685)}{46080} + \frac{\sqrt{\pi}(64z^6 - 2112z^5 + 23760z^4 - 110880z^3 + 207900z^2 - 124740z + 10395)\operatorname{erfi}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.1729.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{3}{2}, 3; -z\right) = \frac{e^{-z}(32z^5 + 1040z^4 + 11376z^3 + 50232z^2 + 83370z + 35685)}{46080} + \frac{\sqrt{\pi}(64z^6 + 2112z^5 + 23760z^4 + 110880z^3 + 207900z^2 + 124740z + 10395)\operatorname{erf}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.1730.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{3}{2}, 4; z\right) = \frac{1}{8486400z^3} + \frac{e^z(-2080z^8 + 76752z^7 - 972464z^6 + 5118744z^5 - 10603290z^4 + 6196785z^3 - 23040z^2 + 46080z - 46080)}{16972800\sqrt{z}} + \frac{\sqrt{\pi}(4160z^6 - 155584z^5 + 2019600z^4 - 11138400z^3 + 25525500z^2 - 19691100z + 2297295)}{16972800\sqrt{z}} + \frac{\operatorname{erfi}(\sqrt{z})}{1105z^3} + \frac{6}{1105z^3}$$

07.25.03.1731.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{3}{2}, 4; -z\right) = \frac{1}{8486400z^3} + \frac{e^{-z}(2080z^8 + 76752z^7 + 972464z^6 + 5118744z^5 + 10603290z^4 + 6196785z^3 + 23040z^2 + 46080z + 46080)}{16972800\sqrt{z}} + \frac{\sqrt{\pi}(4160z^6 + 155584z^5 + 2019600z^4 + 11138400z^3 + 25525500z^2 + 19691100z + 2297295)}{16972800\sqrt{z}} + \frac{\operatorname{erf}(\sqrt{z})}{1105z^3} - \frac{6}{1105z^3}$$

07.25.03.1732.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{3}{2}, 5; z\right) = \frac{24(19z+15)}{20995z^4} + \frac{1}{20155200z^4} (e^z(-2080z^9 + 85904z^8 - 1237168z^7 + 7561368z^6 - 18784890z^5 + 13978245z^4 - 161280z^3 + 264960z^2 - 92160z - 345600)) + \frac{1}{40310400\sqrt{z}} \sqrt{\pi} (4160z^6 - 173888z^5 + 2558160z^4 - 16279200z^3 + 44089500z^2 - 41570100z + 6235515) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1733.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{3}{2}, 5; -z\right) = -\frac{24(19z-15)}{20995z^4} + \frac{1}{20155200z^4} (e^{-z}(2080z^9 + 85904z^8 + 1237168z^7 + 7561368z^6 + 18784890z^5 + 13978245z^4 + 161280z^3 + 264960z^2 + 92160z - 345600)) + \frac{1}{40310400\sqrt{z}} \sqrt{\pi} (4160z^6 + 173888z^5 + 2558160z^4 + 16279200z^3 + 44089500z^2 + 41570100z + 6235515) \operatorname{erf}(\sqrt{z})$$

07.25.03.1734.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{3}{2}, 6; z\right) = \frac{12(19z^2+30z+20)}{4199z^5} + \frac{1}{42325920z^5} (e^z(-2080z^{10} + 95056z^9 - 1533552z^8 + 10673592z^7 - 30931530z^6 + 28028385z^5 - 645120z^4 + 887040z^3 + 120960z^2 - 1209600z - 2419200)) + \frac{1}{84651840\sqrt{z}} \sqrt{\pi} (4160z^6 - 192192z^5 + 3160080z^4 - 22790880z^3 + 71221500z^2 - 79361100z + 14549535) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1735.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{3}{2}, 6; -z\right) = -\frac{12(19z^2-30z+20)}{4199z^5} + \frac{1}{42325920z^5} (e^{-z}(2080z^{10} + 95056z^9 + 1533552z^8 + 10673592z^7 + 30931530z^6 + 28028385z^5 + 645120z^4 + 887040z^3 - 120960z^2 - 1209600z + 2419200)) + \frac{1}{84651840\sqrt{z}} \sqrt{\pi} (4160z^6 + 192192z^5 + 3160080z^4 + 22790880z^3 + 71221500z^2 + 79361100z + 14549535) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = 2$

07.25.03.1736.01

$${}_2F_2\left(-\frac{11}{2}, 3; 2, 2; z\right) = \frac{e^{z/2}(240z^6 - 7616z^5 + 83328z^4 - 389568z^3 + 788937z^2 - 623700z + 135135) I_0\left(\frac{z}{2}\right)}{135135} + \frac{e^{z/2}(-480z^6 + 14752z^5 - 152144z^4 + 633888z^3 - 1006806z^2 + 445254z - 10395) I_1\left(\frac{z}{2}\right)}{270270}$$

07.25.03.1737.01

$${}_2F_2\left(-\frac{11}{2}, 3; 2, \frac{5}{2}; z\right) = \frac{e^z (-960 z^6 + 31\,552 z^5 - 350\,608 z^4 + 1\,585\,632 z^3 - 2\,743\,188 z^2 + 1\,290\,660 z - 10\,395)}{1\,720\,320 z} + \frac{1}{3\,440\,640 z^{3/2}} \sqrt{\pi} (1920 z^7 - 64\,064 z^6 + 731\,808 z^5 - 3\,492\,720 z^4 + 6\,791\,400 z^3 - 4\,365\,900 z^2 + 436\,590 z + 10\,395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1738.01

$${}_2F_2\left(-\frac{11}{2}, 3; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (960 z^6 + 31\,552 z^5 + 350\,608 z^4 + 1\,585\,632 z^3 + 2\,743\,188 z^2 + 1\,290\,660 z + 10\,395)}{1\,720\,320 z} + \frac{1}{3\,440\,640 z^{3/2}} \sqrt{\pi} (1920 z^7 + 64\,064 z^6 + 731\,808 z^5 + 3\,492\,720 z^4 + 6\,791\,400 z^3 + 4\,365\,900 z^2 + 436\,590 z - 10\,395) \operatorname{erf}(\sqrt{z})$$

07.25.03.1739.01

$${}_2F_2\left(-\frac{11}{2}, 3; 2, 3; z\right) = \frac{e^{z/2} (64 z^6 - 2336 z^5 + 30\,000 z^4 - 168\,864 z^3 + 425\,112 z^2 - 436\,590 z + 135\,135) I_0\left(\frac{z}{2}\right)}{135\,135} + \frac{e^{z/2} (-64 z^6 + 2272 z^5 - 27\,760 z^4 + 142\,176 z^3 - 294\,744 z^2 + 191\,442 z - 10\,395) I_1\left(\frac{z}{2}\right)}{135\,135}$$

07.25.03.1740.01

$${}_2F_2\left(-\frac{11}{2}, 3; 2, \frac{7}{2}; z\right) = \frac{1}{11\,010\,048 z^2} e^z (-1920 z^7 + 72\,256 z^6 - 940\,576 z^5 + 5\,151\,792 z^4 - 11\,395\,752 z^3 + 7\,636\,524 z^2 - 187\,110 z + 31\,185) + \frac{1}{22\,020\,096 z^{5/2}} \left(\sqrt{\pi} (3840 z^8 - 146\,432 z^7 + 1\,951\,488 z^6 - 11\,176\,704 z^5 + 27\,165\,600 z^4 - 23\,284\,800 z^3 + 3\,492\,720 z^2 + 166\,320 z - 31\,185) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1741.01

$${}_2F_2\left(-\frac{11}{2}, 3; 2, \frac{7}{2}; -z\right) = \frac{1}{11\,010\,048 z^2} e^{-z} (1920 z^7 + 72\,256 z^6 + 940\,576 z^5 + 5\,151\,792 z^4 + 11\,395\,752 z^3 + 7\,636\,524 z^2 + 187\,110 z + 31\,185) + \frac{1}{22\,020\,096 z^{5/2}} \left(\sqrt{\pi} (3840 z^8 + 146\,432 z^7 + 1\,951\,488 z^6 + 11\,176\,704 z^5 + 27\,165\,600 z^4 + 23\,284\,800 z^3 + 3\,492\,720 z^2 - 166\,320 z - 31\,185) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1742.01

$${}_2F_2\left(-\frac{11}{2}, 3; 2, 4; z\right) = \frac{1}{11486475z} 2e^{z/2} (960z^7 - 39616z^6 + 584112z^5 - 3845040z^4 + 11566920z^3 - 14553000z^2 + 5748435z - 10395) - I_0\left(\frac{z}{2}\right) - \frac{1}{11486475z^2} \left(2e^{z/2} (960z^8 - 38656z^7 + 545936z^6 - 3317472z^5 + 8486760z^4 - 7287360z^3 + 654885z^2 + 20790z - 41580) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.1743.01

$${}_2F_2\left(-\frac{11}{2}, 3; 2, \frac{9}{2}; z\right) = \frac{1}{18874368z^3} e^z (-1280z^8 + 54272z^7 - 809856z^6 + 5208960z^5 - 14037888z^4 + 12259584z^3 - 582120z^2 + 83160z + 155925) + \frac{1}{37748736z^{7/2}} \left(\sqrt{\pi} (2560z^9 - 109824z^8 + 1672704z^7 - 11176704z^6 + 32598720z^5 - 34927200z^4 + 6985440z^3 + 498960z^2 - 187110z - 155925) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.1744.01

$${}_2F_2\left(-\frac{11}{2}, 3; 2, \frac{9}{2}; -z\right) = \frac{1}{18874368z^3} e^{-z} (1280z^8 + 54272z^7 + 809856z^6 + 5208960z^5 + 14037888z^4 + 12259584z^3 + 582120z^2 + 83160z - 155925) + \frac{1}{37748736z^{7/2}} \left(\sqrt{\pi} (2560z^9 + 109824z^8 + 1672704z^7 + 11176704z^6 + 32598720z^5 + 34927200z^4 + 6985440z^3 - 498960z^2 - 187110z + 155925) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.1745.01

$${}_2F_2\left(-\frac{11}{2}, 3; 2, 5; z\right) = \frac{1}{218243025z^2} \left(8e^{z/2} (1920z^8 - 88384z^7 + 1471296z^6 - 11088816z^5 + 38789040z^4 - 57629880z^3 + 27359640z^2 - 135135z - 124740) I_0\left(\frac{z}{2}\right)\right) - \frac{1}{218243025z^3} \left(8e^{z/2} (1920z^9 - 86464z^8 + 1385792z^7 - 9744336z^6 + 29657136z^5 - 31704360z^4 + 4074840z^3 + 301455z^2 - 540540z - 498960) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.1746.01

$${}_2F_2\left(-\frac{11}{2}, 3; 2, \frac{11}{2}; z\right) = \frac{1}{50331648z^4} \left(e^z (-1536z^9 + 72448z^8 - 1219072z^7 + 9004800z^6 - 28622400z^5 + 30881184z^4 - 2328480z^3 + 166320z^2 + 1143450z + 1091475)\right) + \frac{1}{100663296z^{9/2}} \left(\sqrt{\pi} (3072z^{10} - 146432z^9 + 2509056z^8 - 19160064z^7 + 65197440z^6 - 83825280z^5 + 20956320z^4 + 1995840z^3 - 1122660z^2 - 1871100z - 1091475) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.1747.01

$${}_2F_2\left(-\frac{11}{2}, 3; 2, \frac{11}{2}; -z\right) = \frac{1}{50331648z^4} (e^{-z} (1536z^9 + 72448z^8 + 1219072z^7 + 9004800z^6 + 28622400z^5 + 30881184z^4 + 2328480z^3 + 166320z^2 - 1143450z + 1091475)) + \frac{1}{100663296z^{9/2}} (\sqrt{\pi} (3072z^{10} + 146432z^9 + 2509056z^8 + 19160064z^7 + 65197440z^6 + 83825280z^5 + 20956320z^4 - 1995840z^3 - 1122660z^2 + 1871100z - 1091475) \operatorname{erf}(\sqrt{z}))$$

07.25.03.1748.01

$${}_2F_2\left(-\frac{11}{2}, 3; 2, 6; z\right) = \frac{1}{305540235z^3} (32e^{z/2} (320z^9 - 16256z^8 + 301536z^7 - 2560320z^6 + 10208184z^5 - 17463600z^4 + 9604980z^3 - 83160z^2 - 155925z - 124740) I_0\left(\frac{z}{2}\right)) - \frac{1}{305540235z^4} (16e^{z/2} (640z^{10} - 31872z^9 + 571520z^8 - 4564416z^7 + 16107840z^6 - 20621328z^5 + 3492720z^4 + 415800z^3 - 696465z^2 - 1247400z - 997920) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = \frac{5}{2}$

07.25.03.1749.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{5}{2}, 3; z\right) = \frac{e^{-z} (-64z^6 + 2432z^5 - 32080z^4 + 179136z^3 - 408828z^2 + 291480z - 10395)}{430080z} + \frac{1}{860160z^{3/2}} \sqrt{\pi} (128z^7 - 4928z^6 + 66528z^5 - 388080z^4 + 970200z^3 - 873180z^2 + 145530z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1750.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (64z^6 + 2432z^5 + 32080z^4 + 179136z^3 + 408828z^2 + 291480z + 10395)}{430080z} + \frac{1}{860160z^{3/2}} \sqrt{\pi} (128z^7 + 4928z^6 + 66528z^5 + 388080z^4 + 970200z^3 + 873180z^2 + 145530z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.1751.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{5}{2}, 4; z\right) = \frac{1}{237619200z^3} (e^z (-12480z^8 + 538304z^7 - 8219408z^6 + 54620448z^5 - 154862820z^4 + 148575420z^3 - 10841355z^2 - 1290240z + 1290240)) + \frac{1}{475238400z^{3/2}} (\sqrt{\pi} (24960z^7 - 1089088z^6 + 16964640z^5 - 116953200z^4 + 357357000z^3 - 413513100z^2 + 96486390z + 11486475) \operatorname{erfi}(\sqrt{z})) - \frac{6}{1105z^3}$$

07.25.03.1752.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{5}{2}, 4; -z\right) = \frac{1}{237\,619\,200 z^3} \left(e^{-z} (12\,480 z^8 + 538\,304 z^7 + 8\,219\,408 z^6 + 54\,620\,448 z^5 + 154\,862\,820 z^4 + 148\,575\,420 z^3 + 10\,841\,355 z^2 - 1\,290\,240 z - 1\,290\,240) \right) + \frac{1}{475\,238\,400 z^{3/2}} \left(\sqrt{\pi} (24\,960 z^7 + 1\,089\,088 z^6 + 16\,964\,640 z^5 + 116\,953\,200 z^4 + 357\,357\,000 z^3 + 413\,513\,100 z^2 + 96\,486\,390 z - 11\,486\,475) \operatorname{erf}(\sqrt{z}) \right) + \frac{6}{1105 z^3}$$

07.25.03.1753.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{5}{2}, 5; z\right) = -\frac{24(19z+9)}{20\,995 z^4} + \frac{1}{564\,345\,600 z^4} \left(e^z (-12\,480 z^9 + 602\,368 z^8 - 10\,449\,328 z^7 + 80\,526\,720 z^6 - 272\,892\,564 z^5 + 329\,752\,080 z^4 - 38\,487\,645 z^3 - 9\,354\,240 z^2 + 6\,451\,200 z + 5\,806\,080) \right) + \frac{1}{1\,128\,691\,200 z^{3/2}} \left(\sqrt{\pi} (24\,960 z^7 - 1\,217\,216 z^6 + 21\,488\,544 z^5 - 170\,931\,600 z^4 + 617\,253\,000 z^3 - 872\,972\,100 z^2 + 261\,891\,630 z + 43\,648\,605) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1754.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{5}{2}, 5; -z\right) = \frac{24(19z-9)}{20\,995 z^4} + \frac{1}{564\,345\,600 z^4} \left(e^{-z} (12\,480 z^9 + 602\,368 z^8 + 10\,449\,328 z^7 + 80\,526\,720 z^6 + 272\,892\,564 z^5 + 329\,752\,080 z^4 + 38\,487\,645 z^3 - 9\,354\,240 z^2 - 6\,451\,200 z + 5\,806\,080) \right) + \frac{1}{1\,128\,691\,200 z^{3/2}} \left(\sqrt{\pi} (24\,960 z^7 + 1\,217\,216 z^6 + 21\,488\,544 z^5 + 170\,931\,600 z^4 + 617\,253\,000 z^3 + 872\,972\,100 z^2 + 261\,891\,630 z - 43\,648\,605) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1755.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{5}{2}, 6; z\right) = -\frac{12(133 z^2 + 126 z + 60)}{29\,393 z^5} + \frac{1}{395\,041\,920 z^5} \left(e^z (-41\,600 z^{10} + 222\,144 z^9 - 4\,315\,120 z^8 + 37\,832\,352 z^7 - 149\,166\,444 z^6 + 217\,638\,540 z^5 - 35\,907\,165 z^4 - 12\,902\,400 z^3 + 5\,967\,360 z^2 + 10\,644\,480 z + 9\,676\,800) \right) + \frac{1}{790\,083\,840 z^{3/2}} \left(\sqrt{\pi} (8\,320 z^7 - 448\,448 z^6 + 8\,848\,224 z^5 - 79\,768\,080 z^4 + 332\,367\,000 z^3 - 555\,527\,700 z^2 + 203\,693\,490 z + 43\,648\,605) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1756.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{5}{2}, 6; -z\right) = \frac{12(133z^2 - 126z + 60)}{29393z^5} + \frac{1}{395041920z^5} (e^{-z}(4160z^{10} + 222144z^9 + 4315120z^8 + 37832352z^7 + 149166444z^6 + 217638540z^5 + 35907165z^4 - 12902400z^3 - 5967360z^2 + 10644480z - 9676800)) + \frac{1}{790083840z^{3/2}} (\sqrt{\pi}(8320z^7 + 448448z^6 + 8848224z^5 + 79768080z^4 + 332367000z^3 + 555527700z^2 + 203693490z - 43648605)\operatorname{erf}(\sqrt{z}))$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = 3$

07.25.03.1757.01

$${}_2F_2\left(-\frac{11}{2}, 3; 3, 3; z\right) = \frac{4e^{z/2}(64z^6 - 2688z^5 + 40560z^4 - 275520z^3 + 866520z^2 - 1164240z + 509355)I_0\left(\frac{z}{2}\right) - \frac{1}{2027025z} 4e^{z/2}(64z^7 - 2624z^6 + 37968z^5 - 238800z^4 + 644280z^3 - 608760z^2 + 72765z + 10395)I_1\left(\frac{z}{2}\right)}{2027025}$$

07.25.03.1758.01

$${}_2F_2\left(-\frac{11}{2}, 3; 3, \frac{7}{2}; z\right) = \frac{e^z(-128z^7 + 5568z^6 - 85984z^5 + 580560z^4 - 1686744z^3 + 1690836z^2 - 145530z - 31185)}{2752512z^2} + \frac{1}{5505024z^{5/2}} (\sqrt{\pi}(256z^8 - 11264z^7 + 177408z^6 - 1241856z^5 + 3880800z^4 - 4656960z^3 + 1164240z^2 + 166320z + 31185)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.1759.01

$${}_2F_2\left(-\frac{11}{2}, 3; 3, \frac{7}{2}; -z\right) = \frac{e^{-z}(128z^7 + 5568z^6 + 85984z^5 + 580560z^4 + 1686744z^3 + 1690836z^2 + 145530z - 31185)}{2752512z^2} + \frac{1}{5505024z^{5/2}} (\sqrt{\pi}(256z^8 + 11264z^7 + 177408z^6 + 1241856z^5 + 3880800z^4 + 4656960z^3 + 1164240z^2 - 166320z + 31185)\operatorname{erf}(\sqrt{z}))$$

07.25.03.1760.01

$${}_2F_2\left(-\frac{11}{2}, 3; 3, 4; z\right) = \frac{1}{11486475z} 4e^{z/2}(128z^7 - 6080z^6 + 105408z^5 - 838800z^4 + 3163920z^3 - 5239080z^2 + 2910600z + 10395)I_0\left(\frac{z}{2}\right) - \frac{1}{11486475z^2} 4e^{z/2}(128z^8 - 5952z^7 + 99520z^6 - 742128z^5 + 2466000z^4 - 3061560z^3 + 582120z^2 + 155925z + 41580)I_1\left(\frac{z}{2}\right)$$

07.25.03.1761.01

$${}_2F_2\left(-\frac{11}{2}, 3; 3, \frac{9}{2}; z\right) = \frac{1}{14\,155\,776\,z^3} e^z (-256\,z^8 + 12\,544\,z^7 - 221\,952\,z^6 + 1\,757\,760\,z^5 - 6\,203\,040\,z^4 + 8\,030\,448\,z^3 - 1\,164\,240\,z^2 - 457\,380\,z - 155\,925) + \frac{1}{28\,311\,552\,z^{7/2}} \left(\sqrt{\pi} (512\,z^9 - 25\,344\,z^8 + 456\,192\,z^7 - 3\,725\,568\,z^6 + 13\,970\,880\,z^5 - 20\,956\,320\,z^4 + 6\,985\,440\,z^3 + 1\,496\,880\,z^2 + 561\,330\,z + 155\,925) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.1762.01

$${}_2F_2\left(-\frac{11}{2}, 3; 3, \frac{9}{2}; -z\right) = \frac{1}{14\,155\,776\,z^3} e^{-z} (256\,z^8 + 12\,544\,z^7 + 221\,952\,z^6 + 1\,757\,760\,z^5 + 6\,203\,040\,z^4 + 8\,030\,448\,z^3 + 1\,164\,240\,z^2 - 457\,380\,z + 155\,925) + \frac{1}{28\,311\,552\,z^{7/2}} \left(\sqrt{\pi} (512\,z^9 + 25\,344\,z^8 + 456\,192\,z^7 + 3\,725\,568\,z^6 + 13\,970\,880\,z^5 + 20\,956\,320\,z^4 + 6\,985\,440\,z^3 - 1\,496\,880\,z^2 + 561\,330\,z - 155\,925) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.1763.01

$${}_2F_2\left(-\frac{11}{2}, 3; 3, 5; z\right) = \frac{1}{218\,243\,025\,z^2} \left(32\,e^{z/2} (128\,z^8 - 6784\,z^7 + 132\,864\,z^6 - 1\,212\,096\,z^5 + 5\,331\,360\,z^4 - 10\,478\,160\,z^3 + 6\,985\,440\,z^2 + 83\,160\,z + 31\,185) I_0\left(\frac{z}{2}\right) - \frac{1}{218\,243\,025\,z^3} (128\,e^{z/2} (32\,z^9 - 1664\,z^8 + 31\,568\,z^7 - 272\,256\,z^6 + 1\,074\,804\,z^5 - 1\,654\,080\,z^4 + 436\,590\,z^3 + 166\,320\,z^2 + 83\,160\,z + 31\,185) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.1764.01

$${}_2F_2\left(-\frac{11}{2}, 3; 3, \frac{11}{2}; z\right) = \frac{1}{62\,914\,560\,z^4} (e^z (-512\,z^9 + 27\,904\,z^8 - 556\,544\,z^7 + 5\,057\,280\,z^6 - 21\,001\,920\,z^5 + 33\,362\,400\,z^4 - 6\,985\,440\,z^3 - 3\,825\,360\,z^2 - 2\,390\,850\,z - 1\,091\,475)) + \frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024\,z^{10} - 56\,320\,z^9 + 1\,140\,480\,z^8 - 10\,644\,480\,z^7 + 46\,569\,600\,z^6 - 83\,825\,280\,z^5 + 34\,927\,200\,z^4 + 9\,979\,200\,z^3 + 5\,613\,300\,z^2 + 3\,118\,500\,z + 1\,091\,475) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.1765.01

$${}_2F_2\left(-\frac{11}{2}, 3; 3, \frac{11}{2}; -z\right) = \frac{1}{62\,914\,560\,z^4} (e^{-z} (512\,z^9 + 27\,904\,z^8 + 556\,544\,z^7 + 5\,057\,280\,z^6 + 21\,001\,920\,z^5 + 33\,362\,400\,z^4 + 6\,985\,440\,z^3 - 3\,825\,360\,z^2 + 2\,390\,850\,z - 1\,091\,475)) + \frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024\,z^{10} + 56\,320\,z^9 + 1\,140\,480\,z^8 + 10\,644\,480\,z^7 + 46\,569\,600\,z^6 + 83\,825\,280\,z^5 + 34\,927\,200\,z^4 - 9\,979\,200\,z^3 + 5\,613\,300\,z^2 - 3\,118\,500\,z + 1\,091\,475) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.1766.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 3; 3, 6; z\right) = & \\
 & \frac{1}{916620705z^3} \left(32e^{z/2} (256z^9 - 14976z^8 + 326976z^7 - 3364032z^6 + 16903152z^5 - 38419920z^4 + 29688120z^3 + \right. \\
 & \quad \left. 748440z^2 + 530145z + 249480) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{916620705z^4} \left(32e^{z/2} (256z^{10} - 14720z^9 + 312384z^8 - 3058752z^7 + 13986672z^6 - 25692912z^5 + \right. \\
 & \quad \left. 8731800z^4 + 4241160z^3 + 3024945z^2 + 2120580z + 997920) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = \frac{7}{2}$

07.25.03.1767.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 3; \frac{7}{2}, 4; z\right) = & \\
 & \frac{1}{1520762880z^3} \left(e^z (-24960z^8 + 1232192z^7 - 22015904z^6 + 176702064z^5 - 635946120z^4 + 850707900z^3 - \right. \\
 & \quad \left. 135508590z^2 - 62090595z - 41287680) \right) + \\
 & \frac{1}{3041525760z^{5/2}} \left(\sqrt{\pi} (49920z^8 - 2489344z^7 + 45239040z^6 - 374250240z^5 + 1429428000z^4 - \right. \\
 & \quad \left. 2205403200z^3 + 771891120z^2 + 183783600z + 103378275) \operatorname{erfi}(\sqrt{z}) \right) + \frac{6}{221z^3}
 \end{aligned}$$

07.25.03.1768.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 3; \frac{7}{2}, 4; -z\right) = & \\
 & \frac{1}{1520762880z^3} \left(e^{-z} (24960z^8 + 1232192z^7 + 22015904z^6 + 176702064z^5 + 635946120z^4 + 850707900z^3 + \right. \\
 & \quad \left. 135508590z^2 - 62090595z + 41287680) \right) + \\
 & \frac{1}{3041525760z^{5/2}} \left(\sqrt{\pi} (49920z^8 + 2489344z^7 + 45239040z^6 + 374250240z^5 + 1429428000z^4 + \right. \\
 & \quad \left. 2205403200z^3 + 771891120z^2 - 183783600z + 103378275) \operatorname{erf}(\sqrt{z}) \right) - \frac{6}{221z^3}
 \end{aligned}$$

07.25.03.1769.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 3; \frac{7}{2}, 5; z\right) = & \\
 & \frac{24(19z+3)}{4199z^4} + \frac{1}{3611811840z^4} \left(e^z (-24960z^9 + 1378624z^8 - 27974560z^7 + 260161392z^6 - 1116804744z^5 + \right. \\
 & \quad \left. 1870461180z^4 - 447686190z^3 - 293461875z^2 - 330301440z - 61931520) \right) + \\
 & \frac{1}{7223623680z^{5/2}} \left(\sqrt{\pi} (49920z^8 - 2782208z^7 + 57302784z^6 - 546981120z^5 + 2469012000z^4 - \right. \\
 & \quad \left. 4655851200z^3 + 2095133040z^2 + 698377680z + 654729075) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1770.01} \\
 {}_2F_2\left(-\frac{11}{2}, 3; \frac{7}{2}, 5; -z\right) = & \\
 & -\frac{24(19z-3)}{4199z^4} + \frac{1}{3611811840z^4} \left(e^{-z} (24960z^9 + 1378624z^8 + 27974560z^7 + 260161392z^6 + 1116804744z^5 + \right. \\
 & \left. 1870461180z^4 + 447686190z^3 - 293461875z^2 + 330301440z - 61931520) \right) + \\
 & \frac{1}{7223623680z^{5/2}} \left(\sqrt{\pi} (49920z^8 + 2782208z^7 + 57302784z^6 + 546981120z^5 + 2469012000z^4 + \right. \\
 & \left. 4655851200z^3 + 2095133040z^2 - 698377680z + 654729075) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1771.01} \\
 {}_2F_2\left(-\frac{11}{2}, 3; \frac{7}{2}, 6; z\right) = & \\
 & \frac{60(133z^2 + 42z + 12)}{29393z^5} + \frac{1}{2528268288z^5} \left(e^z (-8320z^{10} + 508352z^9 - 11547616z^8 + 122098896z^7 - 608861400z^6 + \right. \\
 & \left. 1225758996z^5 - 396954810z^4 - 328271265z^3 - 500613120z^2 - 154828800z - 61931520) \right) + \\
 & \frac{1}{5056536576z^{5/2}} \left(\sqrt{\pi} (16640z^8 - 1025024z^7 + 23595264z^6 - 255257856z^5 + 1329468000z^4 - \right. \\
 & \left. 2962814400z^3 + 1629547920z^2 + 698377680z + 916620705) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1772.01} \\
 {}_2F_2\left(-\frac{11}{2}, 3; \frac{7}{2}, 6; -z\right) = & \\
 & -\frac{60(133z^2 - 42z + 12)}{29393z^5} + \frac{1}{2528268288z^5} \left(e^{-z} (8320z^{10} + 508352z^9 + 11547616z^8 + 122098896z^7 + 608861400z^6 + \right. \\
 & \left. 1225758996z^5 + 396954810z^4 - 328271265z^3 + 500613120z^2 - 154828800z + 61931520) \right) + \\
 & \frac{1}{5056536576z^{5/2}} \left(\sqrt{\pi} (16640z^8 + 1025024z^7 + 23595264z^6 + 255257856z^5 + 1329468000z^4 + \right. \\
 & \left. 2962814400z^3 + 1629547920z^2 - 698377680z + 916620705) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = 4$

$$\begin{aligned}
 & \text{07.25.03.1773.01} \\
 {}_2F_2\left(-\frac{11}{2}, 3; 4, 4; z\right) = & \\
 & \frac{1}{12692554875z^3} \left(16e^{z/2} (12480z^9 - 670592z^8 + 13365024z^7 - 124743360z^6 + 565803720z^5 - 1160096400z^4 + \right. \\
 & \left. 817716780z^3 + 18618840z^2 + 34459425z - 68918850) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{12692554875z^2} \left(8e^{z/2} (24960z^8 - 1316224z^7 + 25426304z^6 - 224693568z^5 + 918388800z^4 - \right. \right. \\
 & \left. \left. 1492513200z^3 + 441441360z^2 + 201200040z + 183410145) I_1\left(\frac{z}{2}\right) + \frac{96}{1105z^3} \right) \right)
 \end{aligned}$$

07.25.03.1774.01

$${}_2F_2\left(-\frac{11}{2}, 3; 4, \frac{9}{2}; z\right) = \frac{1}{2\,607\,022\,080\,z^3} \left(e^z (-16\,640\,z^8 + 925\,184\,z^7 - 18\,933\,888\,z^6 + 178\,099\,968\,z^5 - 776\,994\,240\,z^4 + 1\,334\,849\,760\,z^3 - 339\,617\,880\,z^2 - 239\,682\,240\,z - 323\,155\,035) \right) + \frac{1}{5\,214\,044\,160\,z^{7/2}} \left(\sqrt{\pi} (33\,280\,z^9 - 1\,867\,008\,z^8 + 38\,776\,320\,z^7 - 374\,250\,240\,z^6 + 1\,715\,313\,600\,z^5 - 3\,308\,104\,800\,z^4 + 1\,543\,782\,240\,z^3 + 551\,350\,800\,z^2 + 620\,269\,650\,z - 172\,297\,125) \operatorname{erfi}(\sqrt{z}) \right) + \frac{42}{221\,z^3}$$

07.25.03.1775.01

$${}_2F_2\left(-\frac{11}{2}, 3; 4, \frac{9}{2}; -z\right) = \frac{1}{2\,607\,022\,080\,z^3} \left(e^{-z} (16\,640\,z^8 + 925\,184\,z^7 + 18\,933\,888\,z^6 + 178\,099\,968\,z^5 + 776\,994\,240\,z^4 + 1\,334\,849\,760\,z^3 + 339\,617\,880\,z^2 - 239\,682\,240\,z + 323\,155\,035) \right) + \frac{1}{5\,214\,044\,160\,z^{7/2}} \left(\sqrt{\pi} (33\,280\,z^9 + 1\,867\,008\,z^8 + 38\,776\,320\,z^7 + 374\,250\,240\,z^6 + 1\,715\,313\,600\,z^5 + 3\,308\,104\,800\,z^4 + 1\,543\,782\,240\,z^3 - 551\,350\,800\,z^2 + 620\,269\,650\,z + 172\,297\,125) \operatorname{erf}(\sqrt{z}) \right) - \frac{42}{221\,z^3}$$

07.25.03.1776.01

$${}_2F_2\left(-\frac{11}{2}, 3; 4, 5; z\right) = \frac{1}{241\,158\,542\,625\,z^3} \left(32\,e^{z/2} (49\,920\,z^9 - 2\,993\,536\,z^8 + 67\,426\,752\,z^7 - 722\,149\,440\,z^6 + 3\,827\,082\,960\,z^5 - 9\,348\,562\,800\,z^4 + 7\,916\,504\,040\,z^3 + 431\,840\,520\,z^2 + 1\,206\,079\,875\,z - 2\,618\,916\,300) I_0\left(\frac{z}{2}\right) \right) - \frac{1}{241\,158\,542\,625\,z^3} \left(32\,e^{z/2} (49\,920\,z^9 - 2\,943\,616\,z^8 + 64\,508\,096\,z^7 - 659\,063\,232\,z^6 + 3\,197\,486\,160\,z^5 - 6\,424\,650\,000\,z^4 + 2\,598\,202\,440\,z^3 + 1\,617\,397\,560\,z^2 + 2\,382\,091\,155\,z - 413\,513\,100) I_1\left(\frac{z}{2}\right) \right) + \frac{384}{1105\,z^3}$$

07.25.03.1777.01

$${}_2F_2\left(-\frac{11}{2}, 3; 4, \frac{11}{2}; z\right) = \frac{1}{6\,952\,058\,880\,z^4} \left(e^z (-19\,968\,z^9 + 1\,234\,688\,z^8 - 28\,474\,880\,z^7 + 307\,140\,864\,z^6 - 1\,574\,529\,600\,z^5 + 3\,305\,707\,680\,z^4 - 1\,173\,160\,800\,z^3 - 1\,072\,053\,360\,z^2 - 2\,056\,862\,430\,z + 241\,215\,975) \right) + \frac{1}{13\,904\,117\,760\,z^{9/2}} \left(\sqrt{\pi} (39\,936\,z^{10} - 2\,489\,344\,z^9 + 58\,164\,480\,z^8 - 641\,571\,840\,z^7 + 3\,430\,627\,200\,z^6 - 7\,939\,451\,520\,z^5 + 4\,631\,346\,720\,z^4 + 2\,205\,403\,200\,z^3 + 3\,721\,617\,900\,z^2 - 2\,067\,565\,500\,z - 241\,215\,975) \operatorname{erfi}(\sqrt{z}) \right) + \frac{126}{221\,z^3}$$

07.25.03.1778.01

$${}_2F_2\left(-\frac{11}{2}, 3; 4, \frac{11}{2}; -z\right) = \frac{1}{6952058880z^4} \left(e^{-z} (19968z^9 + 1234688z^8 + 28474880z^7 + 307140864z^6 + 1574529600z^5 + 3305707680z^4 + 1173160800z^3 - 1072053360z^2 + 2056862430z + 241215975) \right) + \frac{1}{13904117760z^{9/2}} \left(\sqrt{\pi} (39936z^{10} + 2489344z^9 + 58164480z^8 + 641571840z^7 + 3430627200z^6 + 7939451520z^5 + 4631346720z^4 - 2205403200z^3 + 3721617900z^2 + 2067565500z - 241215975) \operatorname{erf}(\sqrt{z}) \right) - \frac{126}{221z^3}$$

07.25.03.1779.01

$${}_2F_2\left(-\frac{11}{2}, 3; 4, 6; z\right) = \frac{1}{337621959675z^3} \left(64e^{z/2} (16640z^9 - 1101568z^8 + 27669696z^7 - 334447680z^6 + 2027899440z^5 - 5746482000z^4 + 5652538920z^3 + 548964360z^2 + 1964187225z - 4652022375) I_0\left(\frac{z}{2}\right) - \frac{1}{337621959675z^4} \left(64e^{z/2} (16640z^{10} - 1084928z^9 + 26593088z^8 - 308380416z^7 + 1731782640z^6 - 4145470560z^5 + 2134694520z^4 + 1658825280z^3 + 3333018465z^2 - 1309458150z - 275675400) I_1\left(\frac{z}{2}\right) + \frac{192}{221z^3} \right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = \frac{9}{2}$

07.25.03.1780.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{9}{2}, 5; z\right) = \frac{168(19z-3)}{4199z^4} + \frac{1}{6191677440z^4} \left(e^z (-16640z^9 + 1035008z^8 - 24049152z^7 + 261962688z^6 - 1361233632z^5 + 2916611280z^4 - 1080505440z^3 - 1032420060z^2 - 2176328385z + 743178240) \right) + \frac{1}{12383354880z^{7/2}} \left(\sqrt{\pi} (33280z^9 - 2086656z^8 + 49116672z^7 - 546981120z^6 + 2962814400z^5 - 6983776800z^4 + 4190266080z^3 + 2095133040z^2 + 3928374450z - 3273645375) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1781.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{9}{2}, 5; -z\right) = -\frac{168(19z+3)}{4199z^4} + \frac{1}{6191677440z^4} \left(e^{-z} (16640z^9 + 1035008z^8 + 24049152z^7 + 261962688z^6 + 1361233632z^5 + 2916611280z^4 + 1080505440z^3 - 1032420060z^2 + 2176328385z + 743178240) \right) + \frac{1}{12383354880z^{7/2}} \left(\sqrt{\pi} (33280z^9 + 2086656z^8 + 49116672z^7 + 546981120z^6 + 2962814400z^5 + 6983776800z^4 + 4190266080z^3 - 2095133040z^2 + 3928374450z + 3273645375) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1782.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{9}{2}, 6; z\right) = \frac{60(133z^2 - 42z - 4)}{4199z^5} + \frac{1}{13002522624z^5} (e^z(-16640z^{10} + 1144832z^9 - 29772672z^8 + 368552064z^7 - 2222298624z^6 + 5707171008z^5 - 280080360z^4 - 3287685240z^3 - 9226941255z^2 + 7060193280z + 743178240)) + \frac{1}{26005045248z^{7/2}} (\sqrt{\pi}(33280z^9 - 2306304z^8 + 60673536z^7 - 765773568z^6 + 4786084800z^5 - 13332664800z^4 + 9777287520z^3 + 6285399120z^2 + 16499172690z - 22915517625) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1783.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{9}{2}, 6; -z\right) = -\frac{60(133z^2 + 42z - 4)}{4199z^5} + \frac{1}{13002522624z^5} (e^{-z}(16640z^{10} + 1144832z^9 + 29772672z^8 + 368552064z^7 + 2222298624z^6 + 5707171008z^5 + 280080360z^4 - 3287685240z^3 + 9226941255z^2 + 7060193280z - 743178240)) + \frac{1}{26005045248z^{7/2}} (\sqrt{\pi}(33280z^9 + 2306304z^8 + 60673536z^7 + 765773568z^6 + 4786084800z^5 + 13332664800z^4 + 9777287520z^3 - 6285399120z^2 + 16499172690z + 22915517625) \operatorname{erf}(\sqrt{z}))$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = 5$

07.25.03.1784.01

$${}_2F_2\left(-\frac{11}{2}, 3; 5, 5; z\right) = \frac{1536(19z - 6)}{20995z^4} + \frac{1}{4582012309875z^4} (256e^{z/2}(49920z^{10} - 3341312z^9 + 85083072z^8 - 1046372736z^7 + 6488663760z^6 - 18938119680z^5 + 19309317480z^4 + 2269167120z^3 + 9559197315z^2 - 28808079300z + 7856748900) I_0\left(\frac{z}{2}\right) - \frac{1}{4582012309875z^3} (256e^{z/2}(49920z^9 - 3291392z^8 + 81816640z^7 - 966151872z^6 + 5560284816z^5 - 13788730800z^4 + 7550813880z^3 + 6330130200z^2 + 14969230155z - 13486807665) I_1\left(\frac{z}{2}\right))$$

07.25.03.1785.01

$${}_2F_2\left(-\frac{11}{2}, 3; 5, \frac{11}{2}; z\right) = \frac{504(19z - 9)}{4199z^4} + \frac{1}{16511139840z^4} (e^z(-19968z^9 + 1381120z^8 - 36156928z^7 + 451428096z^6 - 2753544768z^5 + 7190224800z^4 - 3642075360z^3 - 4409067600z^2 - 13151495070z + 13253174235)) + \frac{1}{33022279680z^{9/2}} (\sqrt{\pi}(39936z^{10} - 2782208z^9 + 73675008z^8 - 937681920z^7 + 5925628800z^6 - 16761064320z^5 + 12570798240z^4 + 8380532160z^3 + 23570246700z^2 - 39283744500z + 4583103525) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1786.01

$${}_2F_2\left(-\frac{11}{2}, 3; 5, \frac{11}{2}; -z\right) = -\frac{504(19z+9)}{4199z^4} + \frac{1}{16511139840z^4} \left(e^{-z} (19968z^9 + 1381120z^8 + 36156928z^7 + 451428096z^6 + 2753544768z^5 + 7190224800z^4 + 3642075360z^3 - 4409067600z^2 + 13151495070z + 13253174235) \right) + \frac{1}{33022279680z^{9/2}} \left(\sqrt{\pi} (39936z^{10} + 2782208z^9 + 73675008z^8 + 937681920z^7 + 5925628800z^6 + 16761064320z^5 + 12570798240z^4 - 8380532160z^3 + 23570246700z^2 + 39283744500z + 4583103525) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1787.01

$${}_2F_2\left(-\frac{11}{2}, 3; 5, 6; z\right) = \frac{768(19z-12)}{4199z^4} + \frac{1}{6414817233825z^4} \left(256e^{z/2} (33280z^{10} - 2459392z^9 + 69857280z^8 - 970103232z^7 + 6890556960z^6 - 23383679760z^5 + 27766982880z^4 + 5453847000z^3 + 29594823930z^2 - 113268129975z + 54997242300) I_0\left(\frac{z}{2}\right) - \frac{1}{6414817233825z^4} \left(256e^{z/2} (33280z^{10} - 2426112z^9 + 67447808z^8 - 903835200z^7 + 6018123552z^6 - 17757174960z^5 + 12296501280z^4 + 12793231080z^3 + 41457260250z^2 - 69527948805z + 5237832600) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = \frac{11}{2}$

07.25.03.1788.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{11}{2}, 6; z\right) = \frac{180(133z^2 - 126z + 12)}{4199z^5} + \frac{1}{11557797888z^5} \left(e^z (-6656z^{10} + 509184z^9 - 14917120z^8 + 211580160z^7 - 1496424384z^6 + 4674205536z^5 - 3093884640z^4 - 4561991280z^3 - 18244935450z^2 + 36290673405z - 5945425920) \right) + \frac{1}{23115595776z^{9/2}} \left(\sqrt{\pi} (13312z^{10} - 1025024z^9 + 30336768z^8 - 437584896z^7 + 3190723200z^6 - 10666131840z^5 + 9777287520z^4 + 8380532160z^3 + 32998345380z^2 - 91662070500z + 32081724675) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1789.01

$${}_2F_2\left(-\frac{11}{2}, 3; \frac{11}{2}, 6; -z\right) = -\frac{180(133z^2 + 126z + 12)}{4199z^5} + \frac{1}{11557797888z^5} \left(e^{-z} (6656z^{10} + 509184z^9 + 14917120z^8 + 211580160z^7 + 1496424384z^6 + 4674205536z^5 + 3093884640z^4 - 4561991280z^3 + 18244935450z^2 + 36290673405z + 5945425920) \right) + \frac{1}{23115595776z^{9/2}} \left(\sqrt{\pi} (13312z^{10} + 1025024z^9 + 30336768z^8 + 437584896z^7 + 3190723200z^6 + 10666131840z^5 + 9777287520z^4 - 8380532160z^3 + 32998345380z^2 + 91662070500z + 32081724675) \operatorname{erf}(\sqrt{z}) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 3$, $b_1 = 6$

07.25.03.1790.01

$${}_2F_2\left(-\frac{11}{2}, 3; 6, 6; z\right) = \frac{1920(133z^2 - 168z + 32)}{29393z^5} + \frac{1}{26942232382065z^5} \left(1024e^{z/2}(16640z^{11} - 1357824z^{10} + 43030272z^9 - 675032064z^8 + 5496703632z^7 - 21727681920z^6 + 30127497120z^5 + 9518886720z^4 + 67050408285z^3 - 350412070680z^2 + 316234143225z - 54997242300)I_0\left(\frac{z}{2}\right) - \frac{1}{26942232382065z^4} \left(512e^{z/2}(33280z^{10} - 2682368z^9 + 83394816z^8 - 1267977216z^7 + 9764549088z^6 - 34249358304z^5 + 29847903120z^4 + 38481075360z^3 + 171872217090z^2 - 517710544470z + 207802450485)I_1\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{7}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.1791.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{155925} e^z (512z^9 + 11520z^8 + 69120z^7 + 80640z^6 - 60480z^5 + 90720z^4 - 151200z^3 + 226800z^2 - 255150z + 155925)$$

07.25.03.1792.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{14175} e^z (256z^8 + 5120z^7 + 26880z^6 + 26880z^5 - 16800z^4 + 20160z^3 - 25200z^2 + 25200z - 14175)$$

07.25.03.1793.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{e^z (128z^7 + 2240z^6 + 10080z^5 + 8400z^4 - 4200z^3 + 3780z^2 - 3150z + 1575)}{1575}$$

07.25.03.1794.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{225} e^z (64z^6 + 960z^5 + 3600z^4 + 2400z^3 - 900z^2 + 540z - 225)$$

07.25.03.1795.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} e^z (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45)$$

07.25.03.1796.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{15} e^z (16z^4 + 160z^3 + 360z^2 + 120z - 15)$$

07.25.03.1797.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (8z^3 + 60z^2 + 90z + 15)$$

07.25.03.1798.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (4z^3 + 28z^2 + 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^3 + 24z^2 + 23z) I_1\left(\frac{z}{2}\right)$$

07.25.03.1799.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (4z^2 + 20z + 15)$$

07.25.03.1800.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4z^2 + 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^2 + 14z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.1801.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{5} e^z (2z + 5)$$

07.25.03.1802.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, 3; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2z^2 + 2z - 1) I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.1803.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = e^z$$

07.25.03.1804.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (2z - 1) I_0\left(\frac{z}{2}\right)}{5z} + \frac{4 e^{z/2} (2z^2 - 3z + 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.1805.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4z^2 - 10z + 15)}{8z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.1806.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{7 e^{-z} (4z^2 + 10z + 15)}{8z^3}$$

07.25.03.1807.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (z - 3) I_0\left(\frac{z}{2}\right)}{5z^2} + \frac{32 e^{z/2} (z^2 - 4z + 12) I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.1808.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (8z^2 - 40z + 105)}{32z^4} - \frac{945 \sqrt{\pi} (2z + 7) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.1809.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8z^2 + 40z + 105)}{32z^4} + \frac{945 \sqrt{\pi} (2z - 7) \operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.1810.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (z-8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.1811.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1048576 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{42525} + \frac{e^z (4224 z^7 + 78144 z^6 - 644128 z^5 + 121456 z^4 - 95016 z^3 + 95100 z^2 - 82950 z + 42525)}{42525}$$

07.25.03.1812.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1048576 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{42525} + \frac{e^{-z} (-4224 z^7 + 78144 z^6 + 644128 z^5 + 121456 z^4 + 95016 z^3 + 95100 z^2 + 82950 z + 42525)}{42525}$$

07.25.03.1813.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{e^z (-2112 z^6 + 488384 z^5 + 77872 z^4 - 21792 z^3 + 14820 z^2 - 10500 z + 4725)}{4725} - \frac{524288 \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.1814.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{e^{-z} (-2112 z^6 - 488384 z^5 + 77872 z^4 + 21792 z^3 + 14820 z^2 + 10500 z + 4725)}{4725} - \frac{524288 \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.1815.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{131072}{675} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2} + \frac{1}{675} e^z (-130016 z^5 - 49168 z^4 - 14352 z^3 + 3720 z^2 - 1830 z + 675)$$

07.25.03.1816.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{131072}{675} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2} + \frac{1}{675} e^{-z} (130016 z^5 - 49168 z^4 + 14352 z^3 + 3720 z^2 + 1830 z + 675)$$

07.25.03.1817.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{405} e^z (65536 z^5 + 31184 z^4 + 26976 z^3 + 8040 z^2 - 1560 z + 405) - \frac{65536}{405} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1818.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{405} e^{-z} (-65\,536 z^5 + 31\,184 z^4 - 26\,976 z^3 + 8040 z^2 + 1560 z + 405) - \frac{65\,536}{405} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1819.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{8192}{135} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2} + \frac{1}{135} e^z (-8192 z^5 - 4096 z^4 - 5352 z^3 - 5460 z^2 - 1290 z + 135)$$

07.25.03.1820.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{8192}{135} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2} + \frac{1}{135} e^{-z} (8192 z^5 - 4096 z^4 + 5352 z^3 - 5460 z^2 + 1290 z + 135)$$

07.25.03.1821.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{675} e^z (4096 z^5 + 2048 z^4 + 3072 z^3 + 5700 z^2 + 5100 z + 675) - \frac{4096}{675} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1822.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{675} e^{-z} (-4096 z^5 + 2048 z^4 - 3072 z^3 + 5700 z^2 - 5100 z + 675) - \frac{4096}{675} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1823.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{467\,775} e^{z/2} (-1\,048\,576 z^6 + 786\,432 z^5 + 491\,520 z^4 + 860\,160 z^3 + 1\,733\,130 z^2 + 1\,767\,150 z + 467\,775) I_0\left(\frac{z}{2}\right) + \frac{2 e^{z/2} (524\,288 z^6 + 131\,072 z^5 + 147\,456 z^4 + 307\,200 z^3 + 597\,765 z^2 + 379\,890 z) I_1\left(\frac{z}{2}\right)}{467\,775}$$

07.25.03.1824.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z (1024 z^5 + 512 z^4 + 768 z^3 + 1920 z^2 + 3750 z + 2025)}{2025} - \frac{1024 \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})}{2025}$$

07.25.03.1825.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-1024 z^5 + 512 z^4 - 768 z^3 + 1920 z^2 - 3750 z + 2025)}{2025} - \frac{1024 \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})}{2025}$$

07.25.03.1826.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{6081\,075} e^{z/2} (-2\,097\,152 z^6 + 1\,572\,864 z^5 + 983\,040 z^4 + 1\,720\,320 z^3 + 4\,838\,400 z^2 + 9\,708\,930 z + 6081\,075) I_0\left(\frac{z}{2}\right) + \frac{1}{6081\,075} e^{z/2} (2\,097\,152 z^6 + 524\,288 z^5 + 589\,824 z^4 + 1\,228\,800 z^3 + 3\,763\,200 z^2 + 6\,322\,050 z + 1\,029\,105) I_1\left(\frac{z}{2}\right)$$

07.25.03.1827.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (512 z^5 + 256 z^4 + 384 z^3 + 960 z^2 + 3360 z + 4725)}{4725} - \frac{512 \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.1828.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(-512z^5 + 256z^4 - 384z^3 + 960z^2 - 3360z + 4725)}{4725} - \frac{512\sqrt{\pi}z^{11/2}\operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.1829.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, 3; z\right) = \frac{1}{91216125z} 4e^{z/2} (2097152z^7 + 524288z^6 + 589824z^5 + 1228800z^4 + 3763200z^3 + 15240960z^2 + 9948015z - 4459455) I_1\left(\frac{z}{2}\right) - \frac{1}{91216125} 4e^{z/2} (2097152z^6 - 1572864z^5 - 983040z^4 - 1720320z^3 - 4838400z^2 - 18627840z - 23918895) I_0\left(\frac{z}{2}\right)$$

07.25.03.1830.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{945} e^z (32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.1831.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{1}{945} e^{-z} (-32z^5 + 16z^4 - 24z^3 + 60z^2 - 210z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.1832.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, 4; z\right) = \frac{1}{516891375z^2} \left(4e^{z/2} (4194304z^8 + 1048576z^7 + 1179648z^6 + 2457600z^5 + 7526400z^4 + 30481920z^3 + 153679680z^2 - 209594385z + 267567300) I_1\left(\frac{z}{2}\right) - \frac{1}{516891375z} \left(4e^{z/2} (4194304z^7 - 3145728z^6 - 1966080z^5 - 3440640z^4 - 9676800z^3 - 37255680z^2 - 181621440z + 66891825) I_0\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.1833.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (256z^8 + 128z^7 + 192z^6 + 480z^5 + 1680z^4 + 7560z^3 + 41580z^2 - 103950z + 155925)}{19440z^3} + \frac{\sqrt{\pi} (-512z^9 - 155925) \operatorname{erfi}(\sqrt{z})}{38880z^{7/2}}$$

07.25.03.1834.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-256z^8 + 128z^7 - 192z^6 + 480z^5 - 1680z^4 + 7560z^3 - 41580z^2 - 103950z - 155925)}{19440z^3} + \frac{\sqrt{\pi} (155925 - 512z^9) \operatorname{erf}(\sqrt{z})}{38880z^{7/2}}$$

$$\begin{aligned}
 & \text{07.25.03.1835.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, 5; z\right) = \\
 & \frac{1}{9\,820\,936\,125\,z^3} \left(128 e^{z/2} (1\,048\,576 z^9 + 262\,144 z^8 + 294\,912 z^7 + 614\,400 z^6 + 1\,881\,600 z^5 + 7\,620\,480 z^4 + \right. \\
 & \quad \left. 38\,419\,920 z^3 + 231\,891\,660 z^2 - 1\,070\,269\,200 z + 3\,411\,483\,075) I_1\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{9\,820\,936\,125\,z^2} \left(32 e^{z/2} (4\,194\,304 z^8 - 3\,145\,728 z^7 - 1\,966\,080 z^6 - 3\,440\,640 z^5 - 9\,676\,800 z^4 - \right. \right. \\
 & \quad \left. \left. 37\,255\,680 z^3 - 181\,621\,440 z^2 - 1\,070\,269\,200 z + 3\,411\,483\,075) I_0\left(\frac{z}{2}\right)\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1836.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{86\,400\,z^4} e^z (512 z^9 + 256 z^8 + 384 z^7 + 960 z^6 + 3360 z^5 + 15\,120 z^4 + 83\,160 z^3 + 540\,540 z^2 - 3\,430\,350 z + 9\,823\,275) + \\
 & \frac{\sqrt{\pi} (-1024 z^{10} - 3\,118\,500 z - 9\,823\,275) \operatorname{erfi}(\sqrt{z})}{172\,800 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1837.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{86\,400\,z^4} e^{-z} (-512 z^9 + 256 z^8 - 384 z^7 + 960 z^6 - 3360 z^5 + 15\,120 z^4 - 83\,160 z^3 + 540\,540 z^2 + 3\,430\,350 z + 9\,823\,275) + \\
 & \frac{\sqrt{\pi} (-1024 z^{10} + 3\,118\,500 z - 9\,823\,275) \operatorname{erf}(\sqrt{z})}{172\,800 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1838.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{9}{2}, 6; z\right) = \\
 & \frac{1}{41\,247\,931\,725\,z^4} \left(32 e^{z/2} (8\,388\,608 z^{10} + 2\,097\,152 z^9 + 2\,359\,296 z^8 + 4\,915\,200 z^7 + 15\,052\,800 z^6 + 60\,963\,840 z^5 + \right. \\
 & \quad \left. 307\,359\,360 z^4 + 1\,855\,133\,280 z^3 + 13\,043\,905\,875 z^2 - 59\,132\,373\,300 z + 691\,393\,903\,200) I_1\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{41\,247\,931\,725\,z^3} \left(32 e^{z/2} (8\,388\,608 z^9 - 6\,291\,456 z^8 - 3\,932\,160 z^7 - 6\,881\,280 z^6 - 19\,353\,600 z^5 - \right. \right. \\
 & \quad \left. \left. 74\,511\,360 z^4 - 363\,242\,880 z^3 - 2\,140\,538\,400 z^2 - 14\,783\,093\,325 z + 172\,848\,475\,800) I_0\left(\frac{z}{2}\right)\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.1839.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{525} e^z (-261\,088 z^5 + 66\,576 z^4 - 5648 z^3 + 2424 z^2 - 1350 z + 525) + \frac{16\,384}{525} \sqrt{\pi} (16 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1840.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \\
 & \frac{1}{525} e^{-z} (261088 z^5 + 66576 z^4 + 5648 z^3 + 2424 z^2 + 1350 z + 525) + \frac{16384}{525} \sqrt{\pi} (16 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1841.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{75} e^z (65536 z^5 - 57872 z^4 - 4352 z^3 + 648 z^2 - 240 z + 75) - \frac{8192}{75} \sqrt{\pi} (8 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1842.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \\
 & \frac{1}{75} e^{-z} (-65536 z^5 - 57872 z^4 + 4352 z^3 + 648 z^2 + 240 z + 75) - \frac{8192}{75} \sqrt{\pi} (8 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1843.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{45} e^z (-32768 z^5 + 51200 z^4 + 10008 z^3 + 1524 z^2 - 210 z + 45) + \frac{2048}{45} \sqrt{\pi} (16 z^{11/2} - 33 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1844.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \\
 & \frac{1}{45} e^{-z} (32768 z^5 + 51200 z^4 - 10008 z^3 + 1524 z^2 + 210 z + 45) + \frac{2048}{45} \sqrt{\pi} (16 z^{11/2} + 33 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1845.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (4096 z^5 - 9216 z^4 - 2560 z^3 - 1164 z^2 - 180 z + 15) - \frac{1024}{15} \sqrt{\pi} (4 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1846.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \\
 & \frac{1}{15} e^{-z} (-4096 z^5 - 9216 z^4 + 2560 z^3 - 1164 z^2 + 180 z + 15) - \frac{1024}{15} \sqrt{\pi} (4 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1847.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{75} e^z (-2048 z^5 + 6016 z^4 + 1984 z^3 + 1440 z^2 + 750 z + 75) + \frac{128}{75} \sqrt{\pi} (16 z^{11/2} - 55 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1848.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{75} e^{-z} (2048 z^5 + 6016 z^4 - 1984 z^3 + 1440 z^2 - 750 z + 75) + \frac{128}{75} \sqrt{\pi} (16 z^{11/2} + 55 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.1849.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (524\,288 z^6 - 2\,375\,680 z^5 + 1\,241\,088 z^4 + 499\,200 z^3 + 416\,640 z^2 + 259\,875 z + 51\,975) I_0\left(\frac{z}{2}\right) + e^{z/2} (-524\,288 z^6 + 1\,851\,392 z^5 + 348\,160 z^4 + 250\,368 z^3 + 220\,800 z^2 + 90\,195 z) I_1\left(\frac{z}{2}\right)}{51\,975}$$

07.25.03.1850.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{64}{225} \sqrt{\pi} (8z - 33) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{225} e^z (-512 z^5 + 1856 z^4 + 672 z^3 + 624 z^2 + 600 z + 225)$$

07.25.03.1851.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{64}{225} \sqrt{\pi} (8z + 33) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{225} e^{-z} (512 z^5 + 1856 z^4 - 672 z^3 + 624 z^2 - 600 z + 225)$$

07.25.03.1852.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{675\,675} e^{z/2} (1\,048\,576 z^6 - 5\,472\,256 z^5 + 3\,022\,848 z^4 + 1\,336\,320 z^3 + 1\,424\,640 z^2 + 1\,496\,880 z + 675\,675) I_0\left(\frac{z}{2}\right) + \frac{1}{675\,675} e^{z/2} (-1\,048\,576 z^6 + 4\,423\,680 z^5 + 876\,544 z^4 + 703\,488 z^3 + 864\,000 z^2 + 787\,920 z + 93\,555) I_1\left(\frac{z}{2}\right)$$

07.25.03.1853.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{16}{525} \sqrt{\pi} (16z - 77) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{525} e^z (-256 z^5 + 1104 z^4 + 424 z^3 + 444 z^2 + 630 z + 525)$$

07.25.03.1854.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{16}{525} \sqrt{\pi} (16z + 77) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{525} e^{-z} (256 z^5 + 1104 z^4 - 424 z^3 + 444 z^2 - 630 z + 525)$$

07.25.03.1855.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{10\,135\,125} 16 e^{z/2} (262\,144 z^6 - 1\,548\,288 z^5 + 890\,880 z^4 + 418\,560 z^3 + 504\,000 z^2 + 790\,020 z + 654\,885) I_0\left(\frac{z}{2}\right) - \frac{1}{10\,135\,125 z} 4 e^{z/2} (1\,048\,576 z^7 - 5\,144\,576 z^6 - 1\,056\,768 z^5 - 906\,240 z^4 - 1\,286\,400 z^3 - 2\,081\,520 z^2 - 873\,180 z + 343\,035) I_1\left(\frac{z}{2}\right)$$

07.25.03.1856.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{8}{105} \sqrt{\pi} (2z - 11) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^z (-16 z^5 + 80 z^4 + 32 z^3 + 36 z^2 + 60 z + 105)$$

07.25.03.1857.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{8}{105} \sqrt{\pi} (2z + 11) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105)$$

07.25.03.1858.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{57432375z} \left(4e^{z/2}(2097152z^7 - 13828096z^6 + 8208384z^5 + 4024320z^4 + 5214720z^3 + 9646560z^2 + 18045720z - 4459455)\right. \\ \left. I_0\left(\frac{z}{2}\right) - \frac{1}{57432375z^2} \left(4e^{z/2}(2097152z^8 - 11730944z^7 - 2473984z^6 - 2217984z^5 - 3417600z^4 - 6750240z^3 - 12224520z^2 + 14750505z - 17837820)\right) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.1859.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{34560z^3} e^z (-2048z^8 + 11648z^7 + 4800z^6 + 5664z^5 + 10320z^4 + 22680z^3 + 41580z^2 - 103950z + 155925) + \frac{\sqrt{\pi}(4096z^9 - 25344z^8 - 155925)\operatorname{erfi}(\sqrt{z})}{69120z^{7/2}}$$

07.25.03.1860.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{34560z^3} e^{-z} (2048z^8 + 11648z^7 - 4800z^6 + 5664z^5 - 10320z^4 + 22680z^3 - 41580z^2 - 103950z - 155925) + \frac{\sqrt{\pi}(4096z^9 + 25344z^8 + 155925)\operatorname{erf}(\sqrt{z})}{69120z^{7/2}}$$

07.25.03.1861.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{1091215125z^2} \left(32e^{z/2}(2097152z^8 - 15269888z^7 + 9289728z^6 + 4700160z^5 + 6397440z^4 + 12972960z^3 + 30852360z^2 + 57972915z - 200675475) I_0\left(\frac{z}{2}\right) - \frac{1}{1091215125z^3} \left(32e^{z/2}(2097152z^9 - 13172736z^8 - 2834432z^7 - 2623488z^6 - 4262400z^5 - 9337440z^4 - 22702680z^3 - 38076885z^2 + 231891660z - 802701900) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.1862.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{38400z^4} e^z (-1024z^9 + 6528z^8 + 2752z^7 + 3360z^6 + 6480z^5 + 15960z^4 + 41580z^3 + 62370z^2 - 675675z + 2182950) + \frac{\sqrt{\pi}(2048z^{10} - 14080z^9 - 779625z - 2182950)\operatorname{erfi}(\sqrt{z})}{76800z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.1863.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{38\,400 z^4} e^{-z} (1024 z^9 + 6528 z^8 - 2752 z^7 + 3360 z^6 - 6480 z^5 + 15\,960 z^4 - 41\,580 z^3 + 62\,370 z^2 + 675\,675 z + 2\,182\,950) + \\
 & \frac{\sqrt{\pi} (2048 z^{10} + 14\,080 z^9 + 779\,625 z - 2\,182\,950) \operatorname{erf}(\sqrt{z})}{76\,800 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1864.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{7}{2}, 6; z\right) = \\
 & \frac{1}{4\,583\,103\,525 z^3} \left(32 e^{z/2} (4\,194\,304 z^9 - 33\,423\,360 z^8 + 20\,742\,144 z^7 + 10\,752\,000 z^6 + 15\,160\,320 z^5 + \right. \\
 & \quad \left. 32\,598\,720 z^4 + 87\,318\,000 z^3 + 240\,810\,570 z^2 + 334\,459\,125 z - 9\,097\,288\,200) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{4\,583\,103\,525 z^4} \left(32 e^{z/2} (4\,194\,304 z^{10} - 29\,229\,056 z^9 - 6\,389\,760 z^8 - 6\,057\,984 z^7 - 10\,214\,400 z^6 - \right. \right. \\
 & \quad \left. \left. 23\,849\,280 z^5 - 66\,361\,680 z^4 - 181\,808\,550 z^3 - 173\,918\,745 z^2 + 1\,337\,836\,500 z - 36\,389\,152\,800) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.1865.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{75} e^z (-114\,688 z^5 + 258\,048 z^4 - 27\,848 z^3 + 1308 z^2 - 306 z + 75) + \frac{1024}{75} \sqrt{\pi} (112 z^{11/2} - 308 z^{9/2} + 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1866.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \\
 & \frac{1}{75} e^{-z} (114\,688 z^5 + 258\,048 z^4 + 27\,848 z^3 + 1308 z^2 + 306 z + 75) + \frac{1024}{75} \sqrt{\pi} (112 z^{11/2} + 308 z^{9/2} + 99 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1867.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \\
 & \frac{1}{45} e^z (57\,344 z^5 - 207\,872 z^4 + 76\,800 z^3 + 3372 z^2 - 276 z + 45) - \frac{512}{45} \sqrt{\pi} (112 z^{11/2} - 462 z^{9/2} + 297 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1868.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \\
 & \frac{1}{45} e^{-z} (-57\,344 z^5 - 207\,872 z^4 - 76\,800 z^3 + 3372 z^2 + 276 z + 45) - \frac{512}{45} \sqrt{\pi} (112 z^{11/2} + 462 z^{9/2} + 297 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.1869.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (-7168 z^5 + 35840 z^4 - 23680 z^3 - 2880 z^2 - 246 z + 15) + \frac{128}{15} \sqrt{\pi} (56 z^{11/2} - 308 z^{9/2} + 297 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1870.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (7168 z^5 + 35840 z^4 + 23680 z^3 - 2880 z^2 + 246 z + 15) + \frac{128}{15} \sqrt{\pi} (56 z^{11/2} + 308 z^{9/2} + 297 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1871.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{75} e^z (3584 z^5 - 22848 z^4 + 22048 z^3 + 4080 z^2 + 1080 z + 75) - \frac{64}{75} \sqrt{\pi} (56 z^{11/2} - 385 z^{9/2} + 495 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1872.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{75} e^{-z} (-3584 z^5 - 22848 z^4 - 22048 z^3 + 4080 z^2 - 1080 z + 75) - \frac{64}{75} \sqrt{\pi} (56 z^{11/2} + 385 z^{9/2} + 495 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1873.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{51975} e^{z/2} (-917504 z^6 + 7626752 z^5 - 14810112 z^4 + 5027328 z^3 + 1129440 z^2 + 374220 z + 51975) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (229376 z^6 - 1677312 z^5 + 2139904 z^4 + 273792 z^3 + 100872 z^2 + 24405 z) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.1874.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{225} e^z (896 z^5 - 6944 z^4 + 8856 z^3 + 2076 z^2 + 930 z + 225) - \frac{8}{225} \sqrt{\pi} z^{7/2} (112 z^2 - 924 z + 1485) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1875.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{225} e^{-z} (-896 z^5 - 6944 z^4 - 8856 z^3 + 2076 z^2 - 930 z + 225) - \frac{8}{225} \sqrt{\pi} z^{7/2} (112 z^2 + 924 z + 1485) \operatorname{erf}(\sqrt{z})$$

07.25.03.1876.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{675\,675} e^{z/2} (-1\,835\,008 z^6 + 17\,776\,640 z^5 - 40\,433\,664 z^4 + 15\,562\,752 z^3 + 4\,370\,880 z^2 + 2\,245\,320 z + 675\,675) I_0\left(\frac{z}{2}\right) + \frac{1}{675\,675} e^{z/2} (1\,835\,008 z^6 - 15\,941\,632 z^5 + 25\,409\,536 z^4 + 3\,710\,976 z^3 + 1\,837\,632 z^2 + 894\,840 z + 72\,765) I_1\left(\frac{z}{2}\right)$$

07.25.03.1877.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{75} e^z (64 z^5 - 584 z^4 + 928 z^3 + 252 z^2 + 156 z + 75) - \frac{4}{75} \sqrt{\pi} z^{7/2} (16 z^2 - 154 z + 297) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1878.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{75} e^{-z} (-64 z^5 - 584 z^4 - 928 z^3 + 252 z^2 - 156 z + 75) - \frac{4}{75} \sqrt{\pi} z^{7/2} (16 z^2 + 154 z + 297) \operatorname{erf}(\sqrt{z})$$

07.25.03.1879.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, 3; z\right) = \frac{1}{10\,135\,125 z} \left(4 e^{z/2} (1\,835\,008 z^7 - 18\,464\,768 z^6 + 35\,321\,856 z^5 + 5\,637\,120 z^4 + 3\,324\,480 z^3 + 2\,544\,840 z^2 + 654\,885 z - 218\,295) I_1\left(\frac{z}{2}\right) - \frac{1}{10\,135\,125} 4 e^{z/2} (1\,835\,008 z^6 - 20\,299\,776 z^5 + 52\,869\,120 z^4 - 22\,287\,360 z^3 - 7\,243\,200 z^2 - 5\,072\,760 z - 2\,588\,355) I_0\left(\frac{z}{2}\right)\right)$$

07.25.03.1880.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{15} e^z (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) - \frac{1}{15} \sqrt{\pi} z^{7/2} (4 z^2 - 44 z + 99) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1881.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{15} e^{-z} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) - \frac{1}{15} \sqrt{\pi} z^{7/2} (4 z^2 + 44 z + 99) \operatorname{erf}(\sqrt{z})$$

07.25.03.1882.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, 4; z\right) = \frac{1}{57\,432\,375 z^2} \left(4 e^{z/2} (3\,670\,016 z^8 - 41\,975\,808 z^7 + 93\,712\,384 z^6 + 15\,937\,536 z^5 + 10\,535\,040 z^4 + 10\,290\,480 z^3 + 8\,295\,210 z^2 - 8\,513\,505 z + 9\,604\,980) I_1\left(\frac{z}{2}\right) - \frac{1}{57\,432\,375 z} \left(4 e^{z/2} (3\,670\,016 z^7 - 45\,645\,824 z^6 + 133\,853\,184 z^5 - 60\,456\,960 z^4 - 21\,751\,680 z^3 - 18\,461\,520 z^2 - 16\,486\,470 z + 2\,401\,245) I_0\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.1883.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{69120 z^3} e^z (7168 z^8 - 85120 z^7 + 189120 z^6 + 60960 z^5 + 51792 z^4 + 57240 z^3 + 41580 z^2 - 103950 z + 155925) + \frac{\sqrt{\pi} (-14336 z^9 + 177408 z^8 - 456192 z^7 - 155925) \operatorname{erfi}(\sqrt{z})}{138240 z^{7/2}}$$

07.25.03.1884.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{69120 z^3} e^{-z} (-7168 z^8 - 85120 z^7 - 189120 z^6 + 60960 z^5 - 51792 z^4 + 57240 z^3 - 41580 z^2 - 103950 z - 155925) + \frac{\sqrt{\pi} (-14336 z^9 - 177408 z^8 - 456192 z^7 + 155925) \operatorname{erf}(\sqrt{z})}{138240 z^{7/2}}$$

07.25.03.1885.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, 5; z\right) = \frac{1}{1091215125 z^3} \left(64 e^{z/2} (1835008 z^9 - 23511040 z^8 + 60012544 z^7 + 10705920 z^6 + 7666752 z^5 + 8696040 z^4 + 10550925 z^3 + 3492720 z^2 - 48024900 z + 187297110) I_1\left(\frac{z}{2}\right) - \frac{1}{1091215125 z^2} \left(32 e^{z/2} (3670016 z^8 - 50692096 z^7 + 165212160 z^6 - 78772224 z^5 - 30537600 z^4 - 29438640 z^3 - 35280630 z^2 - 24012450 z + 93648555) I_0\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.1886.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{307200 z^4} \left(e^z (14336 z^9 - 189952 z^8 + 482432 z^7 + 164160 z^6 + 152160 z^5 + 198960 z^4 + 249480 z^3 - 41580 z^2 - 1975050 z + 7640325) + \frac{\sqrt{\pi} (-28672 z^{10} + 394240 z^9 - 1140480 z^8 - 3118500 z - 7640325) \operatorname{erfi}(\sqrt{z})}{614400 z^{9/2}}\right)$$

07.25.03.1887.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{307200 z^4} \left(e^{-z} (-14336 z^9 - 189952 z^8 - 482432 z^7 + 164160 z^6 - 152160 z^5 + 198960 z^4 - 249480 z^3 - 41580 z^2 - 1975050 z + 7640325) + \frac{\sqrt{\pi} (-28672 z^{10} - 394240 z^9 - 1140480 z^8 + 3118500 z - 7640325) \operatorname{erf}(\sqrt{z})}{614400 z^{9/2}}\right)$$

$$\begin{aligned}
 & \text{07.25.03.1888.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{5}{2}, 6; z\right) = \\
 & \frac{1}{654\,729\,075\,z^4} \left(32 e^{z/2} (1\,048\,576 z^{10} - 14\,876\,672 z^9 + 42\,737\,664 z^8 + 79\,134\,472 z^7 + 60\,126\,720 z^6 + 7\,541\,280 z^5 + \right. \\
 & \quad \left. 11\,351\,340 z^4 + 13\,160\,070 z^3 - 23\,669\,415 z^2 + 53\,513\,460 z + 2\,140\,538\,400) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{654\,729\,075\,z^3} \left(32 e^{z/2} (1\,048\,576 z^9 - 15\,925\,248 z^8 + 57\,090\,048 z^7 - 28\,434\,432 z^6 - 11\,669\,760 z^5 - \right. \\
 & \quad \left. 12\,307\,680 z^4 - 17\,588\,340 z^3 - 22\,640\,310 z^2 + 13\,378\,365 z + 535\,134\,600) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.1889.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{27} e^z (-28\,672 z^5 + 163\,072 z^4 - 160\,896 z^3 + 9\,600 z^2 - 258 z + 27) + \\
 & \frac{64}{27} \sqrt{\pi} (448 z^{11/2} - 2\,772 z^{9/2} + 3\,564 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1890.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{27} e^{-z} (28\,672 z^5 + 163\,072 z^4 + 160\,896 z^3 + 9\,600 z^2 + 258 z + 27) + \\
 & \frac{64}{27} \sqrt{\pi} (448 z^{11/2} + 2\,772 z^{9/2} + 3\,564 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1891.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{9} e^z (3584 z^5 - 27\,776 z^4 + 44\,928 z^3 - 9\,120 z^2 - 240 z + 9) - \frac{32}{9} \sqrt{\pi} (112 z^{11/2} - 924 z^{9/2} + 1\,782 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1892.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \\
 & \frac{1}{9} e^{-z} (-3584 z^5 - 27\,776 z^4 - 44\,928 z^3 - 9\,120 z^2 + 240 z + 9) - \frac{32}{9} \sqrt{\pi} (112 z^{11/2} + 924 z^{9/2} + 1\,782 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1893.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{45} e^z (-1\,792 z^5 + 17\,584 z^4 - 39\,624 z^3 + 14\,460 z^2 + 1\,110 z + 45) + \\
 & \frac{8}{45} \sqrt{\pi} (224 z^{11/2} - 2\,310 z^{9/2} + 5\,940 z^{7/2} - 3\,465 z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1894.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{45} e^{-z} (1\,792 z^5 + 17\,584 z^4 + 39\,624 z^3 + 14\,460 z^2 - 1\,110 z + 45) + \\
 & \frac{8}{45} \sqrt{\pi} (224 z^{11/2} + 2\,310 z^{9/2} + 5\,940 z^{7/2} + 3\,465 z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.1895.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{31185} e^{z/2} (458752 z^6 - 5548032 z^5 + 18742272 z^4 - 19473024 z^3 + 3837744 z^2 + 384615 z + 31185) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (-458752 z^6 + 5089280 z^5 - 13882368 z^4 + 7676544 z^3 + 553296 z^2 + 64809 z) I_1\left(\frac{z}{2}\right)}{31185}$$

07.25.03.1896.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{4}{135} \sqrt{\pi} (112 z^3 - 1386 z^2 + 4455 z - 3465) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{135} e^{-z} (-448 z^5 + 5320 z^4 - 15384 z^3 + 8268 z^2 + 1020 z + 135)$$

07.25.03.1897.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{4}{135} \sqrt{\pi} (112 z^3 + 1386 z^2 + 4455 z + 3465) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{135} e^{-z} (448 z^5 + 5320 z^4 + 15384 z^3 + 8268 z^2 - 1020 z + 135)$$

07.25.03.1898.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{405405} e^{z/2} (917504 z^6 - 12988416 z^5 + 52285440 z^4 - 65658624 z^3 + 16127712 z^2 + 2390850 z + 405405) I_0\left(\frac{z}{2}\right) + \frac{1}{405405} e^{z/2} (-917504 z^6 + 12070912 z^5 - 40673280 z^4 + 30103296 z^3 + 2842656 z^2 + 624222 z + 31185) I_1\left(\frac{z}{2}\right)$$

07.25.03.1899.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{90} \sqrt{\pi} (64 z^3 - 924 z^2 + 3564 z - 3465) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{45} e^{-z} (-32 z^5 + 446 z^4 - 1575 z^3 + 1128 z^2 + 186 z + 45)$$

07.25.03.1900.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{90} \sqrt{\pi} (64 z^3 + 924 z^2 + 3564 z + 3465) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{45} e^{-z} (32 z^5 + 446 z^4 + 1575 z^3 + 1128 z^2 - 186 z + 45)$$

07.25.03.1901.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, 3; z\right) = \frac{1}{6081075} 8 e^{z/2} (458752 z^6 - 7440384 z^5 + 34759680 z^4 - 51000960 z^3 + 14646960 z^2 + 2837835 z + 769230) I_0\left(\frac{z}{2}\right) - \frac{1}{6081075 z} \left(4 e^{z/2} (917504 z^7 - 13963264 z^6 + 56014848 z^5 - 52051200 z^4 - 5845920 z^3 - 1888650 z^2 - 270270 z + 72765) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.1902.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{36} \sqrt{\pi} (8z^3 - 132z^2 + 594z - 693) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{18} e^z (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18)$$

07.25.03.1903.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{36} \sqrt{\pi} (8z^3 + 132z^2 + 594z + 693) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{18} e^{-z} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18)$$

07.25.03.1904.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{34459425z} \left(4e^{z/2} (1835008z^7 - 33546240z^6 + 178372608z^5 - 298790400z^4 + 96477120z^3 + 22577940z^2 + 9251550z - 654885) I_0\left(\frac{z}{2}\right) - \frac{1}{34459425z^2} \left(4e^{z/2} (1835008z^8 - 31711232z^7 + 147578880z^6 - 165232128z^5 - 20942400z^4 - 8644140z^3 - 3097710z^2 + 2546775z - 2619540) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.1905.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{165888z^3} \frac{e^z (-14336z^8 + 258944z^7 - 1246272z^6 + 1351200z^5 + 309840z^4 + 154008z^3 + 41580z^2 - 103950z + 155925) + \sqrt{\pi} (28672z^9 - 532224z^8 + 2737152z^7 - 3725568z^6 - 155925) \operatorname{erfi}(\sqrt{z})}{331776z^{7/2}}$$

07.25.03.1906.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{165888z^3} \frac{e^{-z} (14336z^8 + 258944z^7 + 1246272z^6 + 1351200z^5 - 309840z^4 + 154008z^3 - 41580z^2 - 103950z - 155925) + \sqrt{\pi} (28672z^9 + 532224z^8 + 2737152z^7 + 3725568z^6 + 155925) \operatorname{erf}(\sqrt{z})}{331776z^{7/2}}$$

$$\begin{aligned}
 & \text{07.25.03.1907.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, 5; z\right) = \\
 & \frac{1}{654729075 z^2} \left(32 e^{z/2} (1835008 z^8 - 37330944 z^7 + 222572544 z^6 - 418515456 z^5 + 148052160 z^4 + \right. \\
 & \quad \left. 39792060 z^3 + 21663180 z^2 + 4584195 z - 21611205) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{654729075 z^3} \left(32 e^{z/2} (1835008 z^9 - 35495936 z^8 + 187994112 z^7 - 246434304 z^6 - 34146624 z^5 - \right. \right. \\
 & \quad \left. \left. 16647300 z^4 - 9397080 z^3 + 2110185 z^2 + 18336780 z - 86444820) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1908.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{368640 z^4} \left(e^z (-14336 z^9 + 288512 z^8 - 1573632 z^7 + 2000640 z^6 + 507840 z^5 + 305280 z^4 + 166320 z^3 - \right. \\
 & \quad \left. 166320 z^2 - 623700 z + 3274425) \right) + \\
 & \frac{\sqrt{\pi} (28672 z^{10} - 591360 z^9 + 3421440 z^8 - 5322240 z^7 - 1559250 z - 3274425) \operatorname{erfi}(\sqrt{z})}{737280 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1909.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{368640 z^4} \left(e^{-z} (14336 z^9 + 288512 z^8 + 1573632 z^7 + 2000640 z^6 - 507840 z^5 + 305280 z^4 - 166320 z^3 - \right. \\
 & \quad \left. 166320 z^2 + 623700 z + 3274425) \right) + \\
 & \frac{\sqrt{\pi} (28672 z^{10} + 591360 z^9 + 3421440 z^8 + 5322240 z^7 + 1559250 z - 3274425) \operatorname{erf}(\sqrt{z})}{737280 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1910.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{3}{2}, 6; z\right) = \\
 & \frac{1}{392837445 z^3} \left(32 e^{z/2} (524288 z^9 - 11747328 z^8 + 77611008 z^7 - 161719296 z^6 + 61554816 z^5 + 18378360 z^4 + \right. \\
 & \quad \left. 12182940 z^3 + 6361740 z^2 - 11320155 z - 107026920) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{392837445 z^4} \left(32 e^{z/2} (524288 z^{10} - 11223040 z^9 + 66650112 z^8 - 100156416 z^7 - 14861184 z^6 - \right. \right. \\
 & \quad \left. \left. 8167176 z^5 - 6029100 z^4 - 1787940 z^3 + 12068595 z^2 - 45280620 z - 428107680) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.1911.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (-448 z^5 + 4704 z^4 - 12128 z^3 + 6816 z^2 - 234 z + 3) + \frac{2}{3} \sqrt{\pi} (224 z^{11/2} - 2464 z^{9/2} + 7128 z^{7/2} - 5544 z^{5/2} + 693 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1912.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (448 z^5 + 4704 z^4 + 12128 z^3 + 6816 z^2 + 234 z + 3) + \frac{2}{3} \sqrt{\pi} (224 z^{11/2} + 2464 z^{9/2} + 7128 z^{7/2} + 5544 z^{5/2} + 693 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1913.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (224 z^5 - 2968 z^4 + 10508 z^3 - 9810 z^2 + 1140 z + 15) + \frac{1}{15} \sqrt{\pi} (-224 z^{11/2} + 3080 z^{9/2} - 11880 z^{7/2} + 13860 z^{5/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1914.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-224 z^5 - 2968 z^4 - 10508 z^3 - 9810 z^2 - 1140 z + 15) + \frac{1}{15} \sqrt{\pi} (-224 z^{11/2} - 3080 z^{9/2} - 11880 z^{7/2} - 13860 z^{5/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1915.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, 1; z\right) = \frac{e^{z/2} (-57344 z^6 + 910336 z^5 - 4387200 z^4 + 7585824 z^3 - 4257822 z^2 + 395010 z + 10395) I_0\left(\frac{z}{2}\right) + 2 e^{z/2} (28672 z^6 - 426496 z^5 + 1781440 z^4 - 2196048 z^3 + 486687 z^2 + 12534 z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.1916.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{90} e^z (112 z^5 - 1792 z^4 + 8070 z^3 - 10581 z^2 + 2220 z + 90) + \frac{1}{180} \sqrt{\pi} (-224 z^{11/2} + 3696 z^{9/2} - 17820 z^{7/2} + 27720 z^{5/2} - 10395 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1917.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{90} e^{-z} (-112 z^5 - 1792 z^4 - 8070 z^3 - 10581 z^2 - 2220 z + 90) + \frac{1}{180} \sqrt{\pi} (-224 z^{11/2} - 3696 z^{9/2} - 17820 z^{7/2} - 27720 z^{5/2} - 10395 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1918.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{135135} e^{z/2} (-114688 z^6 + 2136064 z^5 - 12356352 z^4 + 26314560 z^3 - 18915132 z^2 + 2532222 z + 135135) I_0\left(\frac{z}{2}\right) + \frac{1}{135135} e^{z/2} (114688 z^6 - 2021376 z^5 + 10392320 z^4 - 16818240 z^3 + 5630076 z^2 + 255198 z + 6237) I_1\left(\frac{z}{2}\right)$$

07.25.03.1919.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{60} e^z (16 z^5 - 300 z^4 + 1640 z^3 - 2775 z^2 + 864 z + 60) - \frac{1}{120} \sqrt{\pi} z^{3/2} (32 z^4 - 616 z^3 + 3564 z^2 - 6930 z + 3465) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1920.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{60} e^{-z} (-16 z^5 - 300 z^4 - 1640 z^3 - 2775 z^2 - 864 z + 60) - \frac{1}{120} \sqrt{\pi} z^{3/2} (32 z^4 + 616 z^3 + 3564 z^2 + 6930 z + 3465) \operatorname{erf}(\sqrt{z})$$

07.25.03.1921.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, 3; z\right) = \frac{1}{2027025 z} 4 e^{z/2} (114688 z^7 - 2336768 z^6 + 14267136 z^5 - 28603200 z^4 + 12899580 z^3 + 816660 z^2 + 51975 z - 10395) I_1\left(\frac{z}{2}\right) - \frac{1}{2027025} 4 e^{z/2} (114688 z^6 - 2451456 z^5 + 16546560 z^4 - 41816640 z^3 + 36347580 z^2 - 6237000 z - 509355) I_0\left(\frac{z}{2}\right)$$

07.25.03.1922.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{96} e^z (8 z^5 - 172 z^4 + 1106 z^3 - 2295 z^2 + 960 z + 96) - \frac{1}{192} \sqrt{\pi} z^{3/2} (16 z^4 - 352 z^3 + 2376 z^2 - 5544 z + 3465) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1923.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{96} e^{-z} (-8 z^5 - 172 z^4 - 1106 z^3 - 2295 z^2 - 960 z + 96) - \frac{1}{192} \sqrt{\pi} z^{3/2} (16 z^4 + 352 z^3 + 2376 z^2 + 5544 z + 3465) \operatorname{erf}(\sqrt{z})$$

07.25.03.1924.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, 4; z\right) = \frac{1}{11486475 z^2} \left(4 e^{z/2} (229376 z^8 - 5304320 z^7 + 37500416 z^6 - 89697408 z^5 + 51058680 z^4 + 4045620 z^3 + 540540 z^2 - 322245 z + 291060) I_1\left(\frac{z}{2}\right) - \frac{1}{11486475 z} \left(4 e^{z/2} (229376 z^7 - 5533696 z^6 + 42690048 z^5 - 124775040 z^4 + 126593400 z^3 - 26070660 z^2 - 2952180 z + 72765) I_0\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.1925.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{110592 z^3} e^z (3584 z^8 - 86912 z^7 + 642624 z^6 - 1580448 z^5 + 836112 z^4 + 108216 z^3 + 8316 z^2 - 20790 z + 31185) + \frac{\sqrt{\pi} (-7168 z^9 + 177408 z^8 - 1368576 z^7 + 3725568 z^6 - 2794176 z^5 - 31185) \operatorname{erfi}(\sqrt{z})}{221184 z^{7/2}}$$

07.25.03.1926.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{110592 z^3} e^{-z} (-3584 z^8 - 86912 z^7 - 642624 z^6 - 1580448 z^5 - 836112 z^4 + 108216 z^3 - 8316 z^2 - 20790 z - 31185) + \frac{\sqrt{\pi} (-7168 z^9 - 177408 z^8 - 1368576 z^7 - 3725568 z^6 - 2794176 z^5 + 31185) \operatorname{erf}(\sqrt{z})}{221184 z^{7/2}}$$

07.25.03.1927.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, 5; z\right) = \frac{1}{218243025 z^3} \left(128 e^{z/2} (57344 z^9 - 1483776 z^8 + 11920768 z^7 - 33132192 z^6 + 22824126 z^5 + 2125320 z^4 + 446985 z^3 - 187110 z^2 - 291060 z + 1964655) I_1\left(\frac{z}{2}\right) - \frac{1}{218243025 z^2} \left(32 e^{z/2} (229376 z^8 - 6164480 z^7 + 53503488 z^6 - 177473664 z^5 + 205202040 z^4 - 48648600 z^3 - 7068600 z^2 - 291060 z + 1964655) I_0\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.1928.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{491520 z^4} (e^z (7168 z^9 - 193536 z^8 + 1617536 z^7 - 4601280 z^6 + 2956320 z^5 + 462480 z^4 + 83160 z^3 - 124740 z^2 - 103950 z + 1091475)) + \frac{1}{983040 z^{9/2}} \sqrt{\pi} (-14336 z^{10} + 394240 z^9 - 3421440 z^8 + 10644480 z^7 - 9313920 z^6 - 623700 z - 1091475) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1929.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{491520 z^4} (e^{-z} (-7168 z^9 - 193536 z^8 - 1617536 z^7 - 4601280 z^6 - 2956320 z^5 + 462480 z^4 - 83160 z^3 - 124740 z^2 + 103950 z + 1091475)) + \frac{1}{983040 z^{9/2}} \sqrt{\pi} (-14336 z^{10} - 394240 z^9 - 3421440 z^8 - 10644480 z^7 - 9313920 z^6 + 623700 z - 1091475) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.1930.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; -\frac{1}{2}, 6; z\right) = \\
 & \frac{1}{130945815z^4} \left(32e^{z/2} (65536z^{10} - 1875968z^9 + 16880640z^8 - 53462784z^7 + 43280016z^6 + 4551912z^5 + \right. \\
 & \quad \left. 1288980z^4 - 207900z^3 - 1465695z^2 + 7110180z + 32931360) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{130945815z^3} \left(32e^{z/2} (65536z^9 - 1941504z^8 + 18723840z^7 - 69470976z^6 + 89973648z^5 - \right. \\
 & \quad \left. 23866920z^4 - 4199580z^3 - 623700z^2 + 1777545z + 8232840) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.1931.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{600} e^z (-896z^5 + 14952z^4 - 72172z^3 + 108870z^2 - 36405z + 600) + \\
 & \frac{\sqrt{\pi} (1792z^{11/2} - 30800z^{9/2} + 158400z^{7/2} - 277200z^{5/2} + 138600z^{3/2} - 10395\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1200}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1932.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{600} e^{-z} (896z^5 + 14952z^4 + 72172z^3 + 108870z^2 + 36405z + 600) + \\
 & \frac{\sqrt{\pi} (1792z^{11/2} + 30800z^{9/2} + 158400z^{7/2} + 277200z^{5/2} + 138600z^{3/2} + 10395\sqrt{z}) \operatorname{erf}(\sqrt{z})}{1200}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1933.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, 1; z\right) = \frac{e^{z/2} (28672z^6 - 563584z^5 + 3529440z^4 - 8524980z^3 + 7712940z^2 - 2027025z + 51975) I_0\left(\frac{z}{2}\right) +}{51975} \\
 & \frac{e^{z/2} (-28672z^6 + 534912z^5 - 3008864z^4 + 5754900z^3 - 3017160z^2 + 177315z) I_1\left(\frac{z}{2}\right)}{51975}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1934.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z (-448z^5 + 9016z^4 - 55116z^3 + 114990z^2 - 64815z + 3600)}{3600} + \\
 & \frac{\sqrt{\pi} \sqrt{z} (896z^5 - 18480z^4 + 118800z^3 - 277200z^2 + 207900z - 31185) \operatorname{erfi}(\sqrt{z})}{7200}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1935.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (448z^5 + 9016z^4 + 55116z^3 + 114990z^2 + 64815z + 3600)}{3600} + \\
 & \frac{\sqrt{\pi} \sqrt{z} (896z^5 + 18480z^4 + 118800z^3 + 277200z^2 + 207900z + 31185) \operatorname{erf}(\sqrt{z})}{7200}
 \end{aligned}$$

07.25.03.1936.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{675\,675} e^{z/2} (57\,344 z^6 - 1\,324\,288 z^5 + 9\,994\,560 z^4 - 30\,025\,560 z^3 + 35\,320\,260 z^2 - 13\,347\,180 z + 675\,675) I_0\left(\frac{z}{2}\right) + \frac{1}{675\,675} e^{z/2} (-57\,344 z^6 + 1\,266\,944 z^5 - 8\,756\,288 z^4 + 21\,845\,400 z^3 - 16\,765\,260 z^2 + 1\,962\,060 z + 10\,395) I_1\left(\frac{z}{2}\right)$$

07.25.03.1937.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (-128 z^5 + 3016 z^4 - 22\,316 z^3 + 59\,490 z^2 - 47\,535 z + 4800)}{4800} + \frac{\sqrt{\pi} \sqrt{z} (256 z^5 - 6160 z^4 + 47\,520 z^3 - 138\,600 z^2 + 138\,600 z - 31\,185) \operatorname{erfi}(\sqrt{z})}{9600}$$

07.25.03.1938.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (128 z^5 + 3016 z^4 + 22\,316 z^3 + 59\,490 z^2 + 47\,535 z + 4800)}{4800} + \frac{\sqrt{\pi} \sqrt{z} (256 z^5 + 6160 z^4 + 47\,520 z^3 + 138\,600 z^2 + 138\,600 z + 31\,185) \operatorname{erf}(\sqrt{z})}{9600}$$

07.25.03.1939.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, 3; z\right) = \frac{1}{10\,135\,125} + \frac{16 e^{z/2} (14\,336 z^6 - 380\,352 z^5 + 3\,359\,280 z^4 - 12\,065\,010 z^3 + 17\,403\,300 z^2 - 8\,451\,135 z + 634\,095) I_0\left(\frac{z}{2}\right) - \frac{1}{10\,135\,125 z} + 4 e^{z/2} (57\,344 z^7 - 1\,464\,064 z^6 + 12\,001\,728 z^5 - 36\,933\,000 z^4 + 37\,396\,200 z^3 - 6\,702\,840 z^2 - 83\,160 z + 10\,395) I_1\left(\frac{z}{2}\right)}{10\,135\,125}$$

07.25.03.1940.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (-16 z^5 + 432 z^4 - 3752 z^3 + 12\,180 z^2 - 12\,645 z + 1920)}{1920} + \frac{\sqrt{\pi} \sqrt{z} (32 z^5 - 880 z^4 + 7920 z^3 - 27\,720 z^2 + 34\,650 z - 10\,395) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.1941.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16 z^5 + 432 z^4 + 3752 z^3 + 12\,180 z^2 + 12\,645 z + 1920)}{1920} + \frac{\sqrt{\pi} \sqrt{z} (32 z^5 + 880 z^4 + 7920 z^3 + 27\,720 z^2 + 34\,650 z + 10\,395) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.1942.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, 4; z\right) = \frac{1}{57432375z} \left(4e^{z/2} (114688z^7 - 3437056z^6 + 34773120z^5 - 145280880z^4 + 247697400z^3 - 145571580z^2 + 14428260z - 51975) I_0\left(\frac{z}{2}\right) - \frac{1}{57432375z^2} \left(4e^{z/2} (114688z^8 - 3322368z^7 + 31508096z^6 - 115319280z^5 + 145168200z^4 - 35446380z^3 - 790020z^2 + 280665z - 207900) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.1943.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{4423680z^3} \left(e^z (-14336z^8 + 436352z^7 - 4350912z^6 + 16652640z^5 - 21311760z^4 + 4411800z^3 + 41580z^2 - 103950z + 155925)\right) + \frac{1}{8847360z^{7/2}} \left(\sqrt{\pi} (28672z^9 - 887040z^8 + 9123840z^7 - 37255680z^6 + 55883520z^5 - 20956320z^4 - 155925) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.1944.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{4423680z^3} \left(e^{-z} (14336z^8 + 436352z^7 + 4350912z^6 + 16652640z^5 + 21311760z^4 + 4411800z^3 - 41580z^2 - 103950z - 155925)\right) + \frac{1}{8847360z^{7/2}} \left(\sqrt{\pi} (28672z^9 + 887040z^8 + 9123840z^7 + 37255680z^6 + 55883520z^5 + 20956320z^4 + 155925) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.1945.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, 5; z\right) = \frac{1}{1091215125z^2} \left(32e^{z/2} (114688z^8 - 3831296z^7 + 43685760z^6 - 208107600z^5 + 408915600z^4 - 280290780z^3 + 34386660z^2 + 51975z - 1091475) I_0\left(\frac{z}{2}\right) - \frac{1}{1091215125z^3} \left(32e^{z/2} (114688z^9 - 3716608z^8 + 40026496z^7 - 169824720z^6 + 255745920z^5 - 79554180z^4 - 2661120z^3 + 1008315z^2 + 207900z - 4365900) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.1946.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{4915200z^4} (e^z (-7168z^9 + 242816z^8 - 2733376z^7 + 12051360z^6 - 18355440z^5 + 4874280z^4 + 124740z^3 - 228690z^2 + 51975z + 1091475)) + \frac{1}{9830400z^{9/2}} (\sqrt{\pi} (14336z^{10} - 492800z^9 + 5702400z^8 - 26611200z^7 + 46569600z^6 - 20956320z^5 - 779625z - 1091475) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1947.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{4915200z^4} (e^{-z} (7168z^9 + 242816z^8 + 2733376z^7 + 12051360z^6 + 18355440z^5 + 4874280z^4 - 124740z^3 - 228690z^2 - 51975z + 1091475)) + \frac{1}{9830400z^{9/2}} (\sqrt{\pi} (14336z^{10} + 492800z^9 + 5702400z^8 + 26611200z^7 + 46569600z^6 + 20956320z^5 + 779625z - 1091475) \operatorname{erf}(\sqrt{-z}))$$

07.25.03.1948.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{1}{2}, 6; z\right) = \frac{1}{654729075z^3} (32e^{z/2} (32768z^9 - 1207296z^8 + 15317760z^7 - 81935520z^6 + 182147760z^5 - 142037280z^4 + 20665260z^3 + 311850z^2 - 1403325z - 3742200) I_0\left(\frac{z}{2}\right) - \frac{1}{654729075z^4} (32e^{z/2} (32768z^{10} - 1174528z^9 + 14159616z^8 - 68330400z^7 + 119825040z^6 - 45462240z^5 - 2037420z^4 + 644490z^3 + 779625z^2 - 5613300z - 14968800) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 1$

07.25.03.1949.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; 1, \frac{3}{2}; z\right) = \frac{e^{z/2} (7168z^6 - 168000z^5 + 1294728z^4 - 4013400z^3 + 4968360z^2 - 2079000z + 155925) I_0\left(\frac{z}{2}\right)}{155925} + \frac{4e^{z/2} (1792z^6 - 40208z^5 + 284370z^4 - 737292z^3 + 612375z^2 - 94005z) I_1\left(\frac{z}{2}\right)}{155925}$$

07.25.03.1950.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; 1, \frac{5}{2}; z\right) = \frac{e^{z/2} (512z^6 - 13936z^5 + 127536z^4 - 482484z^3 + 755220z^2 - 426195z + 51975) I_0\left(\frac{z}{2}\right)}{51975} + \frac{e^{z/2} (-512z^6 + 13424z^5 - 114368z^4 + 374316z^3 - 426264z^2 + 108015z) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.1951.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; 1, \frac{7}{2}; z\right) = \frac{e^{z/2} (32 z^6 - 992 z^5 + 10512 z^4 - 46944 z^3 + 88674 z^2 - 62370 z + 10395) I_0\left(\frac{z}{2}\right) - 2 e^{z/2} (16 z^6 - 480 z^5 + 4784 z^4 - 18912 z^3 + 27387 z^2 - 9762 z) I_1\left(\frac{z}{2}\right)}{10395}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{3}{2}$

07.25.03.1952.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (-896 z^5 + 21728 z^4 - 167784 z^3 + 480252 z^2 - 444450 z + 76005)}{86400} + \frac{\sqrt{\pi} (1792 z^6 - 44352 z^5 + 356400 z^4 - 1108800 z^3 + 1247400 z^2 - 374220 z + 10395) \operatorname{erfi}(\sqrt{z})}{172800 \sqrt{z}}$$

07.25.03.1953.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (896 z^5 + 21728 z^4 + 167784 z^3 + 480252 z^2 + 444450 z + 76005)}{86400} + \frac{\sqrt{\pi} (1792 z^6 + 44352 z^5 + 356400 z^4 + 1108800 z^3 + 1247400 z^2 + 374220 z + 10395) \operatorname{erf}(\sqrt{z})}{172800 \sqrt{z}}$$

07.25.03.1954.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{2027025} e^{z/2} (14336 z^6 - 395136 z^5 + 3679248 z^4 - 14271720 z^3 + 23216580 z^2 - 14012460 z + 2027025) I_0\left(\frac{z}{2}\right) + \frac{1}{2027025} e^{z/2} (-14336 z^6 + 380800 z^5 - 3305616 z^4 + 11142168 z^3 - 13391220 z^2 + 3890340 z - 31185) I_1\left(\frac{z}{2}\right)$$

07.25.03.1955.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-128 z^5 + 3632 z^4 - 33888 z^3 + 123312 z^2 - 159240 z + 47205)}{57600} + \frac{\sqrt{\pi} (256 z^6 - 7392 z^5 + 71280 z^4 - 277200 z^3 + 415800 z^2 - 187110 z + 10395) \operatorname{erfi}(\sqrt{z})}{115200 \sqrt{z}}$$

07.25.03.1956.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (128 z^5 + 3632 z^4 + 33888 z^3 + 123312 z^2 + 159240 z + 47205)}{57600} + \frac{\sqrt{\pi} (256 z^6 + 7392 z^5 + 71280 z^4 + 277200 z^3 + 415800 z^2 + 187110 z + 10395) \operatorname{erf}(\sqrt{z})}{115200 \sqrt{z}}$$

07.25.03.1957.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{3}{2}, 3; z\right) = \frac{1}{30405375} 4 e^{z/2} (14336 z^6 - 454272 z^5 + 4959120 z^4 - 23098560 z^3 + 46469700 z^2 - 36257760 z + 7598745) I_0\left(\frac{z}{2}\right) - \frac{1}{30405375 z} 4 e^{z/2} (14336 z^7 - 439936 z^6 + 4526352 z^5 - 18777840 z^4 + 29559900 z^3 - 12748860 z^2 + 239085 z - 10395) I_1\left(\frac{z}{2}\right)$$

07.25.03.1958.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (-32 z^5 + 1040 z^4 - 11376 z^3 + 50232 z^2 - 83370 z + 35685)}{46080} + \frac{\sqrt{\pi} (64 z^6 - 2112 z^5 + 23760 z^4 - 110880 z^3 + 207900 z^2 - 124740 z + 10395) \operatorname{erfi}(\sqrt{z})}{92160 \sqrt{z}}$$

07.25.03.1959.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 1040 z^4 + 11376 z^3 + 50232 z^2 + 83370 z + 35685)}{46080} + \frac{\sqrt{\pi} (64 z^6 + 2112 z^5 + 23760 z^4 + 110880 z^3 + 207900 z^2 + 124740 z + 10395) \operatorname{erf}(\sqrt{z})}{92160 \sqrt{z}}$$

07.25.03.1960.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{3}{2}, 4; z\right) = \frac{1}{172297125 z} (4 e^{z/2} (28672 z^7 - 1026816 z^6 + 12858144 z^5 - 69901680 z^4 + 167375520 z^3 - 159209820 z^2 + 43014510 z + 31185) I_0\left(\frac{z}{2}\right) - \frac{1}{172297125 z^2} (4 e^{z/2} (28672 z^8 - 998144 z^7 + 11874336 z^6 - 58497744 z^5 + 113906400 z^4 - 65424420 z^3 + 2099790 z^2 - 239085 z + 124740) I_1\left(\frac{z}{2}\right))$$

07.25.03.1961.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{26542080 z^3} (e^z (-7168 z^8 + 262528 z^7 - 3293760 z^6 + 17103264 z^5 - 34712880 z^4 + 19568520 z^3 - 41580 z^2 + 103950 z - 155925)) + \frac{1}{53084160 z^{7/2}} (\sqrt{\pi} (14336 z^9 - 532224 z^8 + 6842880 z^7 - 37255680 z^6 + 83825280 z^5 - 62868960 z^4 + 6985440 z^3 + 155925) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1962.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) =$$

$$\frac{1}{26542080z^3} \left(e^{-z} (7168z^8 + 262528z^7 + 3293760z^6 + 17103264z^5 + 34712880z^4 + 19568520z^3 + 41580z^2 + 103950z + 155925) \right) +$$

$$\frac{1}{53084160z^{7/2}} \left(\sqrt{\pi} (14336z^9 + 532224z^8 + 6842880z^7 + 37255680z^6 + 83825280z^5 + 62868960z^4 + 6985440z^3 - 155925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.1963.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{3}{2}, 5; z\right) =$$

$$\frac{1}{3273645375z^2} \left(32e^{z/2} (28672z^8 - 1145088z^7 + 16178208z^6 - 100544160z^5 + 279055440z^4 - 312016320z^3 + 102016530z^2 + 62370z + 467775) I_0\left(\frac{z}{2}\right) \right) -$$

$$\frac{1}{3273645375z^3} \left(64e^{z/2} (14336z^9 - 558208z^8 + 7538064z^7 - 42998784z^6 + 99784560z^5 - 71742960z^4 + 3419955z^3 - 540540z^2 + 124740z + 935550) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.1964.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{117964800z^4} \left(e^z (-14336z^9 + 584192z^8 - 8268672z^7 + 49362240z^6 - 118498080z^5 + 83219760z^4 - 582120z^3 + 1205820z^2 - 935550z - 3274425) \right) +$$

$$\frac{1}{235929600z^{9/2}} \left(\sqrt{\pi} (28672z^{10} - 1182720z^9 + 17107200z^8 - 106444800z^7 + 279417600z^6 - 251475840z^5 + 34927200z^4 + 3118500z + 3274425) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.1965.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{117964800z^4} \left(e^{-z} (14336z^9 + 584192z^8 + 8268672z^7 + 49362240z^6 + 118498080z^5 + 83219760z^4 + 582120z^3 + 1205820z^2 + 935550z - 3274425) \right) +$$

$$\frac{1}{235929600z^{9/2}} \left(\sqrt{\pi} (28672z^{10} + 1182720z^9 + 17107200z^8 + 106444800z^7 + 279417600z^6 + 251475840z^5 + 34927200z^4 - 3118500z + 3274425) \operatorname{erf}(\sqrt{z}) \right)$$

$$\begin{aligned}
 & \text{07.25.03.1966.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{3}{2}, 6; z\right) = \\
 & \frac{1}{1964187225z^3} \left(32e^{z/2}(8192z^9 - 360960z^8 + 5679552z^7 - 39717600z^6 + 125321040z^5 - 160665120z^4 + \right. \\
 & \quad \left. 61122600z^3 - 62370z^2 + 779625z + 1247400) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{1964187225z^4} \left(32e^{z/2}(8192z^{10} - 352768z^9 + 5330880z^8 - 34554912z^7 + 93104400z^6 - \right. \\
 & \quad \left. 80503200z^5 + 5239080z^4 - 935550z^3 - 93555z^2 + 3118500z + 4989600) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 2$

$$\begin{aligned}
 & \text{07.25.03.1967.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; 2, \frac{5}{2}; z\right) = \frac{e^{z/2}(1024z^6 - 32800z^5 + 363312z^4 - 1727136z^3 + 3580860z^2 - 2931390z + 675675) I_0\left(\frac{z}{2}\right) +}{675675} \\
 & \frac{e^{z/2}(-1024z^6 + 31776z^5 - 332048z^4 + 1409952z^3 - 2308356z^2 + 1081950z - 31185) I_1\left(\frac{z}{2}\right)}{675675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1968.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; 2, \frac{7}{2}; z\right) = \frac{e^{z/2}(64z^6 - 2336z^5 + 30000z^4 - 168864z^3 + 425112z^2 - 436590z + 135135) I_0\left(\frac{z}{2}\right) +}{135135} \\
 & \frac{e^{z/2}(-64z^6 + 2272z^5 - 27760z^4 + 142176z^3 - 294744z^2 + 191442z - 10395) I_1\left(\frac{z}{2}\right)}{135135}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.1969.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \\
 & \frac{e^z(-512z^6 + 16992z^5 - 191344z^4 + 882384z^3 - 1576008z^2 + 791070z - 10395)}{1075200z} + \frac{1}{2150400z^{3/2}} \\
 & \sqrt{\pi} (1024z^7 - 34496z^6 + 399168z^5 - 1940400z^4 + 3880800z^3 - 2619540z^2 + 291060z + 10395) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1970.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \\
 & \frac{e^{-z}(512z^6 + 16992z^5 + 191344z^4 + 882384z^3 + 1576008z^2 + 791070z + 10395)}{1075200z} + \frac{1}{2150400z^{3/2}} \\
 & \sqrt{\pi} (1024z^7 + 34496z^6 + 399168z^5 + 1940400z^4 + 3880800z^3 + 2619540z^2 + 291060z - 10395) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.1971.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{5}{2}, 3; z\right) = \frac{8 e^{z/2} (512 z^6 - 18864 z^5 + 245280 z^4 - 1404240 z^3 + 3621600 z^2 - 3856545 z + 1268190) I_0\left(\frac{z}{2}\right) - \frac{1}{10135125 z} 4 e^{z/2} (1024 z^7 - 36704 z^6 + 454368 z^5 - 2371440 z^4 + 5065440 z^3 - 3480390 z^2 + 228690 z + 10395) I_1\left(\frac{z}{2}\right)}{10135125}$$

07.25.03.1972.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-64 z^6 + 2432 z^5 - 32080 z^4 + 179136 z^3 - 408828 z^2 + 291480 z - 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 - 4928 z^6 + 66528 z^5 - 388080 z^4 + 970200 z^3 - 873180 z^2 + 145530 z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1973.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 2432 z^5 + 32080 z^4 + 179136 z^3 + 408828 z^2 + 291480 z + 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 + 4928 z^6 + 66528 z^5 + 388080 z^4 + 970200 z^3 + 873180 z^2 + 145530 z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.1974.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{5}{2}, 4; z\right) = \frac{1}{57432375 z} - \frac{4 e^{z/2} (2048 z^7 - 85312 z^6 + 1273632 z^5 - 8528880 z^4 + 26297760 z^3 - 34345080 z^2 + 14407470 z - 10395) I_0\left(\frac{z}{2}\right) - \frac{1}{57432375 z^2} (4 e^{z/2} (2048 z^8 - 83264 z^7 + 1191392 z^6 - 7377072 z^5 + 19439520 z^4 - 17636280 z^3 + 1891890 z^2 + 197505 z - 41580) I_1\left(\frac{z}{2}\right))}{57432375 z^2}$$

07.25.03.1975.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{35389440 z^3} (e^z (-2048 z^8 + 87680 z^7 - 1325760 z^6 + 8692320 z^5 - 24158352 z^4 + 22404600 z^3 - 1455300 z^2 - 103950 z + 155925)) + \frac{1}{70778880 z^{7/2}} (\sqrt{\pi} (4096 z^9 - 177408 z^8 + 2737152 z^7 - 18627840 z^6 + 55883520 z^5 - 62868960 z^4 + 13970880 z^3 + 1496880 z^2 - 155925) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1976.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{35389440 z^3} (e^{-z} (2048 z^8 + 87680 z^7 + 1325760 z^6 + 8692320 z^5 + 24158352 z^4 + 22404600 z^3 + 1455300 z^2 - 103950 z - 155925)) + \frac{1}{70778880 z^{7/2}} (\sqrt{\pi} (4096 z^9 + 177408 z^8 + 2737152 z^7 + 18627840 z^6 + 55883520 z^5 + 62868960 z^4 + 13970880 z^3 - 1496880 z^2 + 155925) \operatorname{erf}(\sqrt{z}))$$

07.25.03.1977.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{5}{2}, 5; z\right) = \frac{1}{1091215125z^2} \left(32e^{z/2} (2048z^8 - 95168z^7 + 1604160z^6 - 12300912z^5 + 44120400z^4 - 68108040z^3 + 34345080z^2 - 51975z - 93555) I_0\left(\frac{z}{2}\right) - \frac{1}{1091215125z^3} \left(32e^{z/2} (2048z^9 - 93120z^8 + 1512064z^7 - 10833360z^6 + 33956352z^5 - 38320680z^4 + 5821200z^3 + 966735z^2 - 207900z - 374220) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.1978.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{78643200z^4} \left(e^z (-2048z^9 + 97536z^8 - 1662976z^7 + 12520320z^6 - 41028480z^5 + 46942080z^4 - 4656960z^3 - 748440z^2 + 831600z + 1091475) + \frac{1}{157286400z^{9/2}} \left(\sqrt{\pi} (4096z^{10} - 197120z^9 + 3421440z^8 - 26611200z^7 + 93139200z^6 - 125737920z^5 + 34927200z^4 + 4989600z^3 - 1559250z - 1091475) \operatorname{erfi}(\sqrt{z}) \right) \right)$$

07.25.03.1979.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{78643200z^4} \left(e^{-z} (2048z^9 + 97536z^8 + 1662976z^7 + 12520320z^6 + 41028480z^5 + 46942080z^4 + 4656960z^3 - 748440z^2 - 831600z + 1091475) + \frac{1}{157286400z^{9/2}} \left(\sqrt{\pi} (4096z^{10} + 197120z^9 + 3421440z^8 + 26611200z^7 + 93139200z^6 - 125737920z^5 + 34927200z^4 - 4989600z^3 + 1559250z - 1091475) \operatorname{erf}(\sqrt{z}) \right) \right)$$

07.25.03.1980.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{5}{2}, 6; z\right) = \frac{1}{4583103525z^3} \left(32e^{z/2} (4096z^9 - 210048z^8 + 3945408z^7 - 34087872z^6 + 139401360z^5 - 247983120z^4 + 144947880z^3 - 249480z^2 - 1340955z - 1247400) I_0\left(\frac{z}{2}\right) - \frac{1}{4583103525z^4} \left(32e^{z/2} (4096z^{10} - 205952z^9 + 3741504z^8 - 30445248z^7 + 110633712z^6 - 149420880z^5 + 29688120z^4 + 6735960z^3 - 1153845z^2 - 5363820z - 4989600) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 3$

07.25.03.1981.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; 3, \frac{7}{2}; z\right) = \frac{4 e^{z/2} (64 z^6 - 2688 z^5 + 40560 z^4 - 275520 z^3 + 866520 z^2 - 1164240 z + 509355) I_0\left(\frac{z}{2}\right) - \frac{1}{2027025} 4 e^{z/2} (64 z^7 - 2624 z^6 + 37968 z^5 - 238800 z^4 + 644280 z^3 - 608760 z^2 + 72765 z + 10395) I_1\left(\frac{z}{2}\right)}{2027025}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{7}{2}$

07.25.03.1982.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (-128 z^7 + 5568 z^6 - 85984 z^5 + 580560 z^4 - 1686744 z^3 + 1690836 z^2 - 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} (\sqrt{\pi} (256 z^8 - 11264 z^7 + 177408 z^6 - 1241856 z^5 + 3880800 z^4 - 4656960 z^3 + 1164240 z^2 + 166320 z + 31185) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1983.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 5568 z^6 + 85984 z^5 + 580560 z^4 + 1686744 z^3 + 1690836 z^2 + 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} (\sqrt{\pi} (256 z^8 + 11264 z^7 + 177408 z^6 + 1241856 z^5 + 3880800 z^4 + 4656960 z^3 + 1164240 z^2 - 166320 z + 31185) \operatorname{erf}(\sqrt{-z}))$$

07.25.03.1984.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{7}{2}, 4; z\right) = \frac{1}{11486475 z} 4 e^{z/2} (128 z^7 - 6080 z^6 + 105408 z^5 - 838800 z^4 + 3163920 z^3 - 5239080 z^2 + 2910600 z + 10395) I_0\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} 4 e^{z/2} (128 z^8 - 5952 z^7 + 99520 z^6 - 742128 z^5 + 2466000 z^4 - 3061560 z^3 + 582120 z^2 + 155925 z + 41580) I_1\left(\frac{z}{2}\right)$$

07.25.03.1985.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{14155776 z^3} e^z (-256 z^8 + 12544 z^7 - 221952 z^6 + 1757760 z^5 - 6203040 z^4 + 8030448 z^3 - 1164240 z^2 - 457380 z - 155925) + \frac{1}{28311552 z^{7/2}} (\sqrt{\pi} (512 z^9 - 25344 z^8 + 456192 z^7 - 3725568 z^6 + 13970880 z^5 - 20956320 z^4 + 6985440 z^3 + 1496880 z^2 + 561330 z + 155925) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.1986.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{14\,155\,776\,z^3} e^{-z} (256\,z^8 + 12\,544\,z^7 + 221\,952\,z^6 + 1\,757\,760\,z^5 + 6\,203\,040\,z^4 + 8\,030\,448\,z^3 + 1\,164\,240\,z^2 - 457\,380\,z + 155\,925) + \frac{1}{28\,311\,552\,z^{7/2}} \left(\sqrt{\pi} (512\,z^9 + 25\,344\,z^8 + 456\,192\,z^7 + 3\,725\,568\,z^6 + 13\,970\,880\,z^5 + 20\,956\,320\,z^4 + 6\,985\,440\,z^3 - 1\,496\,880\,z^2 + 561\,330\,z - 155\,925) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.1987.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{7}{2}, 5; z\right) = \frac{1}{218\,243\,025\,z^2} \left(32\,e^{z/2} (128\,z^8 - 6784\,z^7 + 132\,864\,z^6 - 1\,212\,096\,z^5 + 5\,331\,360\,z^4 - 10\,478\,160\,z^3 + 6\,985\,440\,z^2 + 83\,160\,z + 31\,185) I_0\left(\frac{z}{2}\right) - \frac{1}{218\,243\,025\,z^3} \left(128\,e^{z/2} (32\,z^9 - 1664\,z^8 + 31\,568\,z^7 - 272\,256\,z^6 + 1\,074\,804\,z^5 - 1\,654\,080\,z^4 + 436\,590\,z^3 + 166\,320\,z^2 + 83\,160\,z + 31\,185) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.1988.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{62\,914\,560\,z^4} \left(e^z (-512\,z^9 + 27\,904\,z^8 - 556\,544\,z^7 + 5\,057\,280\,z^6 - 21\,001\,920\,z^5 + 33\,362\,400\,z^4 - 6\,985\,440\,z^3 - 3\,825\,360\,z^2 - 2\,390\,850\,z - 1\,091\,475)\right) + \frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024\,z^{10} - 56\,320\,z^9 + 1\,140\,480\,z^8 - 10\,644\,480\,z^7 + 46\,569\,600\,z^6 - 83\,825\,280\,z^5 + 34\,927\,200\,z^4 + 9\,979\,200\,z^3 + 5\,613\,300\,z^2 + 3\,118\,500\,z + 1\,091\,475) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.1989.01

$${}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{62\,914\,560\,z^4} \left(e^{-z} (512\,z^9 + 27\,904\,z^8 + 556\,544\,z^7 + 5\,057\,280\,z^6 + 21\,001\,920\,z^5 + 33\,362\,400\,z^4 + 6\,985\,440\,z^3 - 3\,825\,360\,z^2 + 2\,390\,850\,z - 1\,091\,475)\right) + \frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024\,z^{10} + 56\,320\,z^9 + 1\,140\,480\,z^8 + 10\,644\,480\,z^7 + 46\,569\,600\,z^6 + 83\,825\,280\,z^5 + 34\,927\,200\,z^4 - 9\,979\,200\,z^3 + 5\,613\,300\,z^2 - 3\,118\,500\,z + 1\,091\,475) \operatorname{erf}(\sqrt{z})\right)$$

$$\begin{aligned}
 & \text{07.25.03.1990.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{7}{2}; \frac{7}{2}, 6; z\right) = \\
 & \frac{1}{916620705 z^3} \left(32 e^{z/2} (256 z^9 - 14976 z^8 + 326976 z^7 - 3364032 z^6 + 16903152 z^5 - 38419920 z^4 + 29688120 z^3 + \right. \\
 & \quad \left. 748440 z^2 + 530145 z + 249480) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{916620705 z^4} \left(32 e^{z/2} (256 z^{10} - 14720 z^9 + 312384 z^8 - 3058752 z^7 + 13986672 z^6 - 25692912 z^5 + \right. \\
 & \quad \left. 8731800 z^4 + 4241160 z^3 + 3024945 z^2 + 2120580 z + 997920) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.1991.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \frac{32 z^9 + 896 z^8 + 7320 z^7 + 16128 z^6 - 5376 z^5 + 5040 z^4 - 7200 z^3 + 12600 z^2 - 22680 z + 31185}{31185} + \\
 & \frac{4 e^z \sqrt{\pi} (8 z^{19/2} + 228 z^{17/2} + 1938 z^{15/2} + 4845 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1992.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \\
 & \frac{-32 z^9 + 896 z^8 - 7320 z^7 + 16128 z^6 + 5376 z^5 + 5040 z^4 + 7200 z^3 + 12600 z^2 + 22680 z + 31185}{31185} + \\
 & \frac{4 e^{-z} \sqrt{\pi} (8 z^{19/2} - 228 z^{17/2} + 1938 z^{15/2} - 4845 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1993.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{-16 z^8 - 400 z^7 - 2868 z^6 - 5376 z^5 + 1680 z^4 - 1440 z^3 + 1800 z^2 - 2520 z + 2835}{2835} - \\
 & \frac{2 e^z \sqrt{\pi} (8 z^{17/2} + 204 z^{15/2} + 1530 z^{13/2} + 3315 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.1994.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{-16 z^8 + 400 z^7 - 2868 z^6 + 5376 z^5 + 1680 z^4 + 1440 z^3 + 1800 z^2 + 2520 z + 2835}{2835} + \\
 & \frac{2 e^{-z} \sqrt{\pi} (8 z^{17/2} - 204 z^{15/2} + 1530 z^{13/2} - 3315 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}
 \end{aligned}$$

07.25.03.1995.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{315} (8z^7 + 176z^6 + 1086z^5 + 1680z^4 - 480z^3 + 360z^2 - 360z + 315) + \frac{1}{315} e^z \sqrt{\pi} (8z^{15/2} + 180z^{13/2} + 1170z^{11/2} + 2145z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1996.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{315} (-8z^7 + 176z^6 - 1086z^5 + 1680z^4 + 480z^3 + 360z^2 + 360z + 315) + \frac{1}{315} e^{-z} \sqrt{\pi} (8z^{15/2} - 180z^{13/2} + 1170z^{11/2} - 2145z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1997.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{45} (-4z^6 - 76z^5 - 393z^4 - 480z^3 + 120z^2 - 72z + 45) + \frac{1}{90} e^z \sqrt{\pi} (-8z^{13/2} - 156z^{11/2} - 858z^{9/2} - 1287z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.1998.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{45} (-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45) + \frac{1}{90} e^{-z} \sqrt{\pi} (8z^{13/2} - 156z^{11/2} + 858z^{9/2} - 1287z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.1999.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{18} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36} e^z \sqrt{\pi} (8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2000.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{18} (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36} e^{-z} \sqrt{\pi} (8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2001.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{12} (-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24} e^z \sqrt{\pi} (-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2002.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{12} (-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24} e^{-z} \sqrt{\pi} (8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2003.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{24} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} e^z \sqrt{\pi} (8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2004.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{24}(-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48}e^{-z}\sqrt{\pi}(8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.2005.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, 1; z\right) = \frac{1}{6}e^z(z^3 + 9z^2 + 18z + 6)$$

07.25.03.2006.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{48}(4z^2 + 28z + 33) + \frac{e^z\sqrt{\pi}(8z^3 + 60z^2 + 90z + 15)\operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.2007.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{48}(4z^2 - 28z + 33) + \frac{e^{-z}\sqrt{\pi}(-8z^3 + 60z^2 - 90z + 15)\operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.2008.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, 2; z\right) = \frac{1}{6}e^z(z^2 + 6z + 6)$$

07.25.03.2009.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{4z^2 + 16z + 3}{32z} + \frac{e^z\sqrt{\pi}(8z^3 + 36z^2 + 18z - 3)\operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.2010.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-4z^2 + 16z - 3}{32z} + \frac{e^{-z}\sqrt{\pi}(8z^3 - 36z^2 + 18z + 3)\operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.2011.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, 3; z\right) = \frac{1}{3}e^z(z + 3)$$

07.25.03.2012.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5(4z^2 + 4z - 3)}{64z^2} + \frac{5e^z\sqrt{\pi}(8z^3 + 12z^2 - 6z + 3)\operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.2013.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^2 - 4z - 3)}{64z^2} - \frac{5e^{-z}\sqrt{\pi}(8z^3 - 12z^2 - 6z - 3)\operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.2014.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, 4; z\right) = e^z$$

07.25.03.2015.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{35(4z^2 - 8z + 15)}{128z^3} + \frac{35e^z\sqrt{\pi}(8z^3 - 12z^2 + 18z - 15)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.2016.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(8z^3 + 12z^2 + 18z + 15)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35(4z^2 + 8z + 15)}{128z^3}$$

07.25.03.2017.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, 5; z\right) = \frac{4 e^z (z^3 - 3 z^2 + 6 z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.2018.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{315 (4 z^2 - 20 z + 105)}{256 z^4} + \frac{315 e^z \sqrt{\pi} (8 z^3 - 36 z^2 + 90 z - 105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.2019.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{315 (4 z^2 + 20 z + 105)}{256 z^4} - \frac{315 e^{-z} \sqrt{\pi} (8 z^3 + 36 z^2 + 90 z + 105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.2020.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{11}{2}, 6; z\right) = \frac{120 (z + 4)}{z^5} + \frac{20 e^z (z^3 - 6 z^2 + 18 z - 24)}{z^5}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = -\frac{9}{2}$

07.25.03.2021.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{9}{2}, 1; z\right) = \frac{1}{378} e^z (884 z^5 + 442 z^4 + 663 z^3 + 1311 z^2 + 1470 z + 378) - \frac{442}{189} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.2022.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{9}{2}, 1; -z\right) = \frac{1}{378} e^{-z} (-884 z^5 + 442 z^4 - 663 z^3 + 1311 z^2 - 1470 z + 378) - \frac{442}{189} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.2023.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{9}{2}, 2; z\right) = \frac{1}{378} e^z (136 z^5 + 68 z^4 + 102 z^3 + 255 z^2 + 546 z + 378) - \frac{68}{189} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.2024.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{9}{2}, 2; -z\right) = \frac{1}{378} e^{-z} (-136 z^5 + 68 z^4 - 102 z^3 + 255 z^2 - 546 z + 378) - \frac{68}{189} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.2025.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{9}{2}, 3; z\right) = \frac{e^z (272 z^5 + 136 z^4 + 204 z^3 + 510 z^2 + 1785 z + 2835)}{2835} - \frac{272 \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.2026.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{9}{2}, 3; -z\right) = \frac{e^{-z} (-272 z^5 + 136 z^4 - 204 z^3 + 510 z^2 - 1785 z + 2835)}{2835} - \frac{272 \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.2027.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{9}{2}, 4; z\right) = \frac{1}{945} e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.2028.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{9}{2}, 4; -z\right) = \frac{1}{945} e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.2029.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{9}{2}, 5; z\right) = -\frac{256 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{17955} + \frac{4 e^z (64 z^9 + 32 z^8 + 48 z^7 + 120 z^6 + 420 z^5 + 1890 z^4 + 10395 z^3 - 31185 z^2 + 62370 z - 62370)}{17955 z^4} + \frac{264}{19 z^4}$$

07.25.03.2030.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{9}{2}, 5; -z\right) = -\frac{256 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{17955} - \frac{1}{17955 z^4} 4 e^{-z} (64 z^9 - 32 z^8 + 48 z^7 - 120 z^6 + 420 z^5 - 1890 z^4 + 10395 z^3 + 31185 z^2 + 62370 z + 62370) + \frac{264}{19 z^4}$$

07.25.03.2031.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{9}{2}, 6; z\right) = -\frac{512 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{75411} + \frac{440(21z+76)}{133z^5} + \frac{1}{75411z^5} (4 e^z (128 z^{10} + 64 z^9 + 96 z^8 + 240 z^7 + 840 z^6 + 3780 z^5 + 20790 z^4 + 135135 z^3 - 1060290 z^2 + 3430350 z - 4740120))$$

07.25.03.2032.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{9}{2}, 6; -z\right) = -\frac{512 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{75411} + \frac{440(21z-76)}{133z^5} - \frac{1}{75411z^5} (4 e^{-z} (128 z^{10} - 64 z^9 + 96 z^8 - 240 z^7 + 840 z^6 - 3780 z^5 + 20790 z^4 - 135135 z^3 - 1060290 z^2 - 3430350 z - 4740120))$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = -\frac{7}{2}$

07.25.03.2033.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{7}{2}, 1; z\right) = \frac{1}{42} e^z (-442 z^5 + 1352 z^4 + 455 z^3 + 351 z^2 + 222 z + 42) + \frac{13}{42} \sqrt{\pi} (34 z^{11/2} - 121 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2034.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{7}{2}, 1; -z\right) = \frac{1}{42} e^{-z} (442 z^5 + 1352 z^4 - 455 z^3 + 351 z^2 - 222 z + 42) + \frac{13}{42} \sqrt{\pi} (34 z^{11/2} + 121 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2035.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{7}{2}, 2; z\right) = \frac{1}{42} e^z (-68 z^5 + 252 z^4 + 92 z^3 + 87 z^2 + 90 z + 42) + \frac{1}{21} \sqrt{\pi} (34 z^{11/2} - 143 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2036.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{7}{2}, 2; -z\right) = \frac{1}{42} e^{-z} (68 z^5 + 252 z^4 - 92 z^3 + 87 z^2 - 90 z + 42) + \frac{1}{21} \sqrt{\pi} (34 z^{11/2} + 143 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2037.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{7}{2}, 3; z\right) = \frac{1}{315} e^z (-136 z^5 + 592 z^4 + 228 z^3 + 240 z^2 + 345 z + 315) + \frac{4}{315} \sqrt{\pi} (34 z^{11/2} - 165 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2038.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{7}{2}, 3; -z\right) = \frac{1}{315} e^{-z} (136 z^5 + 592 z^4 - 228 z^3 + 240 z^2 - 345 z + 315) + \frac{4}{315} \sqrt{\pi} (34 z^{11/2} + 165 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2039.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{7}{2}, 4; z\right) = \frac{1}{105} e^z (-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105) + \frac{8}{105} \sqrt{\pi} (2z^{11/2} - 11z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2040.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{7}{2}, 4; -z\right) = \frac{1}{105} e^{-z} (16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105) + \frac{8}{105} \sqrt{\pi} (2z^{11/2} + 11z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2041.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{7}{2}, 5; z\right) = \frac{1}{33915z^4} 4e^z (544z^9 - 3072z^8 - 1264z^7 - 1488z^6 - 2700z^5 - 5880z^4 - 10395z^3 + 31185z^2 - 62370z + 62370) + \frac{64\sqrt{\pi} (34z^{11/2} - 209z^{9/2}) \operatorname{erfi}(\sqrt{z})}{33915} + \frac{2376}{323z^4}$$

07.25.03.2042.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{7}{2}, 5; -z\right) = \frac{1}{33915z^4} 4e^{-z} (544z^9 + 3072z^8 - 1264z^7 + 1488z^6 - 2700z^5 + 5880z^4 - 10395z^3 - 31185z^2 - 62370z - 62370) + \frac{64\sqrt{\pi} (34z^{11/2} + 209z^{9/2}) \operatorname{erf}(\sqrt{z})}{33915} + \frac{2376}{323z^4}$$

07.25.03.2043.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{7}{2}, 6; z\right) = \frac{3960(21z + 68)}{2261z^5} - \frac{1}{142443z^5} (4e^z (1088z^{10} - 6848z^9 - 2880z^8 - 3504z^7 - 6720z^6 - 16380z^5 - 41580z^4 - 51975z^3 + 810810z^2 - 2931390z + 4241160)) + \frac{128\sqrt{\pi} (34z^{11/2} - 231z^{9/2}) \operatorname{erfi}(\sqrt{z})}{142443}$$

07.25.03.2044.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{7}{2}, 6; -z\right) = \frac{3960(21z - 68)}{2261z^5} + \frac{1}{142443z^5} (4e^{-z} (1088z^{10} + 6848z^9 - 2880z^8 + 3504z^7 - 6720z^6 + 16380z^5 - 41580z^4 + 51975z^3 + 810810z^2 + 2931390z + 4241160)) + \frac{128\sqrt{\pi} (34z^{11/2} + 231z^{9/2}) \operatorname{erf}(\sqrt{z})}{142443}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = -\frac{5}{2}$

07.25.03.2045.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{5}{2}, 1; z\right) = \frac{1}{120} e^z (2210z^5 - 14625z^4 + 15028z^3 + 2964z^2 + 936z + 120) - \frac{13}{240} \sqrt{\pi} (340z^{11/2} - 2420z^{9/2} + 3267z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2046.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{5}{2}, 1; -z\right) = \frac{1}{120} e^{-z} (-2210 z^5 - 14\,625 z^4 - 15\,028 z^3 + 2964 z^2 - 936 z + 120) - \frac{13}{240} \sqrt{\pi} (340 z^{11/2} + 2420 z^{9/2} + 3267 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2047.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{5}{2}, 2; z\right) = \frac{1}{60} e^z (170 z^5 - 1345 z^4 + 1772 z^3 + 426 z^2 + 204 z + 60) + \frac{1}{120} \sqrt{\pi} (-340 z^{11/2} + 2860 z^{9/2} - 4719 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2048.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{5}{2}, 2; -z\right) = \frac{1}{60} e^{-z} (-170 z^5 - 1345 z^4 - 1772 z^3 + 426 z^2 - 204 z + 60) + \frac{1}{120} \sqrt{\pi} (-340 z^{11/2} - 2860 z^{9/2} - 4719 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2049.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{5}{2}, 3; z\right) = \frac{1}{45} e^z (34 z^5 - 313 z^4 + 504 z^3 + 138 z^2 + 87 z + 45) + \frac{1}{90} \sqrt{\pi} (-68 z^{11/2} + 660 z^{9/2} - 1287 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2050.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{5}{2}, 3; -z\right) = \frac{1}{45} e^{-z} (-34 z^5 - 313 z^4 - 504 z^3 + 138 z^2 - 87 z + 45) + \frac{1}{90} \sqrt{\pi} (-68 z^{11/2} - 660 z^{9/2} - 1287 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2051.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{5}{2}, 4; z\right) = \frac{1}{15} e^z (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} + 44 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2052.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{5}{2}, 4; -z\right) = \frac{1}{15} e^{-z} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} - 44 z^{9/2} - 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2053.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{5}{2}, 5; z\right) = \frac{1}{24\,225 z^4} 4 e^z (680 z^9 - 8020 z^8 + 17\,648 z^7 + 5664 z^6 + 4776 z^5 + 5190 z^4 + 3465 z^3 - 10\,395 z^2 + 20\,790 z - 20\,790) - \frac{8 \sqrt{\pi} (340 z^{11/2} - 4180 z^{9/2} + 10\,659 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{24\,225} + \frac{5544}{1615 z^4}$$

$$\begin{aligned}
 & \text{07.25.03.2054.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{5}{2}, 5; -z\right) = \\
 & -\frac{1}{24\,225\,z^4} 4 e^{-z} (680 z^9 + 8020 z^8 + 17\,648 z^7 - 5664 z^6 + 4776 z^5 - 5190 z^4 + 3465 z^3 + 10\,395 z^2 + 20\,790 z + 20\,790) - \\
 & \frac{8 \sqrt{\pi} (340 z^{11/2} + 4180 z^{9/2} + 10\,659 z^{7/2}) \operatorname{erf}(\sqrt{z})}{24\,225} + \frac{5544}{1615 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2055.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{5}{2}, 6; z\right) = \\
 & \frac{792 (7 z + 20)}{323 z^5} + \frac{1}{101\,745 z^5} (4 e^z (1360 z^{10} - 17\,800 z^9 + 44\,448 z^8 + 15\,024 z^7 + 13\,776 z^6 + 17\,640 z^5 + 20\,790 z^4 - \\
 & 10\,395 z^3 - 187\,110 z^2 + 810\,810 z - 1\,247\,400)) - \frac{16 \sqrt{\pi} (340 z^{11/2} - 4620 z^{9/2} + 13\,167 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{101\,745}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2056.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{5}{2}, 6; -z\right) = \\
 & \frac{792 (7 z - 20)}{323 z^5} - \frac{1}{101\,745 z^5} (4 e^{-z} (1360 z^{10} + 17\,800 z^9 + 44\,448 z^8 - 15\,024 z^7 + 13\,776 z^6 - 17\,640 z^5 + 20\,790 z^4 + \\
 & 10\,395 z^3 - 187\,110 z^2 - 810\,810 z - 1\,247\,400)) - \frac{16 \sqrt{\pi} (340 z^{11/2} + 4620 z^{9/2} + 13\,167 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{101\,745}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.2057.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{3}{2}, 1; z\right) = \frac{1}{288} e^z (-4420 z^5 + 44\,980 z^4 - 107\,133 z^3 + 43\,440 z^2 + 3936 z + 288) + \\
 & \frac{1}{576} \sqrt{\pi} (8840 z^{11/2} - 94\,380 z^{9/2} + 254\,826 z^{7/2} - 160\,083 z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2058.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{3}{2}, 1; -z\right) = \frac{1}{288} e^{-z} (4420 z^5 + 44\,980 z^4 + 107\,133 z^3 + 43\,440 z^2 - 3936 z + 288) + \\
 & \frac{1}{576} \sqrt{\pi} (8840 z^{11/2} + 94\,380 z^{9/2} + 254\,826 z^{7/2} + 160\,083 z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2059.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{3}{2}, 2; z\right) = \frac{1}{144} e^z (-340 z^5 + 4120 z^4 - 12\,267 z^3 + 6936 z^2 + 912 z + 144) + \\
 & \frac{1}{288} \sqrt{\pi} (680 z^{11/2} - 8580 z^{9/2} + 28\,314 z^{7/2} - 22\,869 z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.2060.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{3}{2}, 2; -z\right) = \frac{1}{144} e^{-z} (340 z^5 + 4120 z^4 + 12267 z^3 + 6936 z^2 - 912 z + 144) + \frac{1}{288} \sqrt{\pi} (680 z^{11/2} + 8580 z^{9/2} + 28314 z^{7/2} + 22869 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2061.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{3}{2}, 3; z\right) = \frac{1}{108} e^z (-68 z^5 + 956 z^4 - 3417 z^3 + 2496 z^2 + 420 z + 108) + \frac{1}{216} \sqrt{\pi} (136 z^{11/2} - 1980 z^{9/2} + 7722 z^{7/2} - 7623 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2062.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{3}{2}, 3; -z\right) = \frac{1}{108} e^{-z} (68 z^5 + 956 z^4 + 3417 z^3 + 2496 z^2 - 420 z + 108) + \frac{1}{216} \sqrt{\pi} (136 z^{11/2} + 1980 z^{9/2} + 7722 z^{7/2} + 7623 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2063.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{3}{2}, 4; z\right) = \frac{1}{18} e^z (-4 z^5 + 64 z^4 - 267 z^3 + 240 z^2 + 48 z + 18) + \frac{1}{36} \sqrt{\pi} (8 z^{11/2} - 132 z^{9/2} + 594 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2064.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{3}{2}, 4; -z\right) = \frac{1}{18} e^{-z} (4 z^5 + 64 z^4 + 267 z^3 + 240 z^2 - 48 z + 18) + \frac{1}{36} \sqrt{\pi} (8 z^{11/2} + 132 z^{9/2} + 594 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2065.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{3}{2}, 5; z\right) = -\frac{1}{188955 z^4} (4 e^z (4420 z^9 - 79300 z^8 + 378261 z^7 - 404592 z^6 - 91848 z^5 - 44640 z^4 - 10395 z^3 + 31185 z^2 - 62370 z + 62370)) + \frac{2 \sqrt{\pi} (8840 z^{11/2} - 163020 z^{9/2} + 831402 z^{7/2} - 1119195 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{188955} + \frac{5544}{4199 z^4}$$

07.25.03.2066.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{3}{2}, 5; -z\right) = \frac{1}{188955 z^4} (4 e^{-z} (4420 z^9 + 79300 z^8 + 378261 z^7 + 404592 z^6 - 91848 z^5 + 44640 z^4 - 10395 z^3 - 31185 z^2 - 62370 z - 62370)) + \frac{2 \sqrt{\pi} (8840 z^{11/2} + 163020 z^{9/2} + 831402 z^{7/2} + 1119195 z^{5/2}) \operatorname{erf}(\sqrt{z})}{188955} + \frac{5544}{4199 z^4}$$

$$\begin{aligned}
 & \text{07.25.03.2067.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{3}{2}, 6; z\right) = \\
 & \frac{1320(21z+52)}{4199z^5} - \frac{1}{793611z^5} (4e^z(8840z^{10} - 175760z^9 + 943566z^8 - 1171920z^7 - 292992z^6 - 170856z^5 - \\
 & \quad 83160z^4 + 114345z^3 + 311850z^2 - 1933470z + 3243240)) + \\
 & \frac{4\sqrt{\pi}(8840z^{11/2} - 180180z^{9/2} + 1027026z^{7/2} - 1566873z^{5/2})\operatorname{erfi}(\sqrt{z})}{793611}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2068.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{3}{2}, 6; -z\right) = \\
 & \frac{1320(21z-52)}{4199z^5} + \frac{1}{793611z^5} (4e^{-z}(8840z^{10} + 175760z^9 + 943566z^8 + 1171920z^7 - 292992z^6 + \\
 & \quad 170856z^5 - 83160z^4 - 114345z^3 + 311850z^2 + 1933470z + 3243240)) + \\
 & \frac{4\sqrt{\pi}(8840z^{11/2} + 180180z^{9/2} + 1027026z^{7/2} + 1566873z^{5/2})\operatorname{erf}(\sqrt{-z})}{793611}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.2069.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{1}{2}, 1; z\right) = \frac{e^z(8840z^5 - 121420z^4 + 453362z^3 - 463311z^2 + 66048z + 1536)}{1536} + \\
 & \frac{\sqrt{\pi}(-17680z^{11/2} + 251680z^{9/2} - 1019304z^{7/2} + 1280664z^{5/2} - 363825z^{3/2})\operatorname{erfi}(\sqrt{z})}{3072}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2070.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{1}{2}, 1; -z\right) = \frac{e^{-z}(-8840z^5 - 121420z^4 - 453362z^3 - 463311z^2 - 66048z + 1536)}{1536} + \\
 & \frac{\sqrt{\pi}(-17680z^{11/2} - 251680z^{9/2} - 1019304z^{7/2} - 1280664z^{5/2} - 363825z^{3/2})\operatorname{erf}(\sqrt{-z})}{3072}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2071.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{1}{2}, 2; z\right) = \frac{1}{768} e^z(680z^5 - 11100z^4 + 51418z^3 - 70467z^2 + 16128z + 768) + \\
 & \frac{\sqrt{\pi}(-1360z^{11/2} + 22880z^{9/2} - 113256z^{7/2} + 182952z^{5/2} - 72765z^{3/2})\operatorname{erfi}(\sqrt{z})}{1536}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2072.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; -\frac{1}{2}, 2; -z\right) = \frac{1}{768} e^{-z}(-680z^5 - 11100z^4 - 51418z^3 - 70467z^2 - 16128z + 768) + \\
 & \frac{\sqrt{\pi}(-1360z^{11/2} - 22880z^{9/2} - 113256z^{7/2} - 182952z^{5/2} - 72765z^{3/2})\operatorname{erf}(\sqrt{-z})}{1536}
 \end{aligned}$$

07.25.03.2073.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{1}{2}, 3; z\right) = \frac{1}{576} e^z (136 z^5 - 2572 z^4 + 14226 z^3 - 24495 z^2 + 7872 z + 576) + \frac{\sqrt{\pi} (-272 z^{11/2} + 5280 z^{9/2} - 30888 z^{7/2} + 60984 z^{5/2} - 31185 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1152}$$

07.25.03.2074.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{1}{2}, 3; -z\right) = \frac{1}{576} e^{-z} (-136 z^5 - 2572 z^4 - 14226 z^3 - 24495 z^2 - 7872 z + 576) + \frac{\sqrt{\pi} (-272 z^{11/2} - 5280 z^{9/2} - 30888 z^{7/2} - 60984 z^{5/2} - 31185 z^{3/2}) \operatorname{erf}(\sqrt{z})}{1152}$$

07.25.03.2075.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{1}{2}, 4; z\right) = \frac{1}{96} e^z (8 z^5 - 172 z^4 + 1106 z^3 - 2295 z^2 + 960 z + 96) + \frac{1}{192} \sqrt{\pi} (-16 z^{11/2} + 352 z^{9/2} - 2376 z^{7/2} + 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2076.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{1}{2}, 4; -z\right) = \frac{1}{96} e^{-z} (-8 z^5 - 172 z^4 - 1106 z^3 - 2295 z^2 - 960 z + 96) + \frac{1}{192} \sqrt{\pi} (-16 z^{11/2} - 352 z^{9/2} - 2376 z^{7/2} - 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2077.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{1}{2}, 5; z\right) = \frac{1}{251940 z^4} (e^z (8840 z^9 - 212940 z^8 + 1560754 z^7 - 3791823 z^6 + 1965888 z^5 + 248160 z^4 + 15120 z^3 - 45360 z^2 + 90720 z - 90720)) + \frac{\sqrt{\pi} (-17680 z^{11/2} + 434720 z^{9/2} - 3325608 z^{7/2} + 8953560 z^{5/2} - 6613425 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{503880} + \frac{1512}{4199 z^4}$$

07.25.03.2078.01

$${}_2F_2\left(-\frac{11}{2}, 4; -\frac{1}{2}, 5; -z\right) = \frac{1}{251940 z^4} (e^{-z} (-8840 z^9 - 212940 z^8 - 1560754 z^7 - 3791823 z^6 - 1965888 z^5 + 248160 z^4 - 15120 z^3 - 45360 z^2 - 90720 z - 90720)) + \frac{\sqrt{\pi} (-17680 z^{11/2} - 434720 z^{9/2} - 3325608 z^{7/2} - 8953560 z^{5/2} - 6613425 z^{3/2}) \operatorname{erf}(\sqrt{z})}{503880} + \frac{1512}{4199 z^4}$$

07.25.03.2079.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 4; -\frac{1}{2}, 6; z\right) = & \frac{360(21z+44)}{4199z^5} + \frac{1}{529074z^5} \left(e^z (8840z^{10} - 235820z^9 + 1940562z^8 - 5404071z^7 + 3355968z^6 + 506016z^5 + \right. \\
 & \left. 75600z^4 - 143640z^3 - 45360z^2 + 1043280z - 1995840) \right) + \\
 & \frac{\sqrt{\pi} (-17680z^{11/2} + 480480z^{9/2} - 4108104z^{7/2} + 12534984z^{5/2} - 10683225z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1058148}
 \end{aligned}$$

07.25.03.2080.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 4; -\frac{1}{2}, 6; -z\right) = & \frac{360(21z-44)}{4199z^5} + \frac{1}{529074z^5} \left(e^{-z} (-8840z^{10} - 235820z^9 - 1940562z^8 - 5404071z^7 - 3355968z^6 + \right. \\
 & \left. 506016z^5 - 75600z^4 - 143640z^3 + 45360z^2 + 1043280z + 1995840) \right) + \\
 & \frac{\sqrt{\pi} (-17680z^{11/2} - 480480z^{9/2} - 4108104z^{7/2} - 12534984z^{5/2} - 10683225z^{3/2}) \operatorname{erf}(\sqrt{z})}{1058148}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = \frac{1}{2}$

07.25.03.2081.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 4; \frac{1}{2}, 1; z\right) = & \frac{e^z (-3536z^5 + 61152z^4 - 310960z^3 + 511008z^2 - 203715z + 6144)}{6144} + \\
 & \frac{1}{12288} \sqrt{\pi} (7072z^{11/2} - 125840z^{9/2} + 679536z^{7/2} - 1280664z^{5/2} + 727650z^{3/2} - 72765\sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.2082.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 4; \frac{1}{2}, 1; -z\right) = & \frac{e^{-z} (3536z^5 + 61152z^4 + 310960z^3 + 511008z^2 + 203715z + 6144)}{6144} + \\
 & \frac{1}{12288} \sqrt{\pi} (7072z^{11/2} + 125840z^{9/2} + 679536z^{7/2} + 1280664z^{5/2} + 727650z^{3/2} + 72765\sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.2083.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 4; \frac{1}{2}, 2; z\right) = & \frac{e^z (-272z^5 + 5584z^4 - 35096z^3 + 76380z^2 - 46401z + 3072)}{3072} + \\
 & \frac{\sqrt{\pi} (544z^{11/2} - 11440z^{9/2} + 75504z^{7/2} - 182952z^{5/2} + 145530z^{3/2} - 24255\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{6144}
 \end{aligned}$$

07.25.03.2084.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 4; \frac{1}{2}, 2; -z\right) = & \frac{e^{-z} (272z^5 + 5584z^4 + 35096z^3 + 76380z^2 + 46401z + 3072)}{3072} + \\
 & \frac{\sqrt{\pi} (544z^{11/2} + 11440z^{9/2} + 75504z^{7/2} + 182952z^{5/2} + 145530z^{3/2} + 24255\sqrt{z}) \operatorname{erf}(\sqrt{z})}{6144}
 \end{aligned}$$

07.25.03.2085.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{1}{2}, 3; z\right) = \frac{e^z(-272z^5 + 6464z^4 - 48384z^3 + 131160z^2 - 107715z + 11520)}{11520} + \frac{\sqrt{\pi}(544z^{11/2} - 13200z^{9/2} + 102960z^{7/2} - 304920z^{5/2} + 311850z^{3/2} - 72765\sqrt{z})\operatorname{erfi}(\sqrt{z})}{23040}$$

07.25.03.2086.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{1}{2}, 3; -z\right) = \frac{e^{-z}(272z^5 + 6464z^4 + 48384z^3 + 131160z^2 + 107715z + 11520)}{11520} + \frac{\sqrt{\pi}(544z^{11/2} + 13200z^{9/2} + 102960z^{7/2} + 304920z^{5/2} + 311850z^{3/2} + 72765\sqrt{z})\operatorname{erf}(\sqrt{z})}{23040}$$

07.25.03.2087.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{1}{2}, 4; z\right) = \frac{e^z(-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920)}{1920} + \frac{\sqrt{\pi}(32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.2088.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{1}{2}, 4; -z\right) = \frac{e^{-z}(16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \frac{\sqrt{\pi}(32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z})\operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.2089.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{1}{2}, 5; z\right) = \frac{1}{1007760z^4} (e^z(-3536z^9 + 106912z^8 - 1056848z^7 + 3997392z^6 - 5025867z^5 + 1006080z^4 + 6720z^3 - 20160z^2 + 40320z - 40320)) + \frac{1}{2015520} \sqrt{\pi}(7072z^{11/2} - 217360z^{9/2} + 2217072z^{7/2} - 8953560z^{5/2} + 13226850z^{3/2} - 4849845\sqrt{z})\operatorname{erfi}(\sqrt{z}) + \frac{168}{4199z^4}$$

07.25.03.2090.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{1}{2}, 5; -z\right) = \frac{1}{1007760z^4} (e^{-z}(3536z^9 + 106912z^8 + 1056848z^7 + 3997392z^6 + 5025867z^5 + 1006080z^4 - 6720z^3 - 20160z^2 - 40320z - 40320)) + \frac{1}{2015520} \sqrt{\pi}(7072z^{11/2} + 217360z^{9/2} + 2217072z^{7/2} + 8953560z^{5/2} + 13226850z^{3/2} + 4849845\sqrt{z})\operatorname{erf}(\sqrt{z}) + \frac{168}{4199z^4}$$

07.25.03.2091.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{1}{2}, 6; z\right) = \frac{120(7z+12)}{4199z^5} + \frac{1}{2116296z^5} (e^z(-3536z^{10} + 118352z^9 - 1311960z^8 + 5666268z^7 - 8374485z^6 + 2104704z^5 + 40320z^4 - 90720z^3 + 60480z^2 + 302400z - 725760)) + \frac{1}{4232592} \sqrt{\pi} (7072z^{11/2} - 240240z^{9/2} + 2738736z^{7/2} - 12534984z^{5/2} + 21366450z^{3/2} - 9258795\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2092.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{1}{2}, 6; -z\right) = \frac{120(7z-12)}{4199z^5} + \frac{1}{2116296z^5} (e^{-z}(3536z^{10} + 118352z^9 + 1311960z^8 + 5666268z^7 + 8374485z^6 + 2104704z^5 - 40320z^4 - 90720z^3 - 60480z^2 + 302400z + 725760)) + \frac{1}{4232592} \sqrt{\pi} (7072z^{11/2} + 240240z^{9/2} + 2738736z^{7/2} + 12534984z^{5/2} + 21366450z^{3/2} + 9258795\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = 1$

07.25.03.2093.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, 1; z\right) = \frac{e^{z/2} (17680z^6 - 359320z^5 + 2353572z^4 - 6051420z^3 + 6007377z^2 - 1871100z + 83160) I_0\left(\frac{z}{2}\right) + e^{z/2} (-17680z^6 + 341640z^5 - 2020772z^4 + 4183788z^3 - 2547585z^2 + 232422z) I_1\left(\frac{z}{2}\right)}{83160}$$

07.25.03.2094.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, \frac{3}{2}; z\right) = \frac{e^z (-7072z^5 + 147472z^4 - 949104z^3 + 2151672z^2 - 1430034z + 137061)}{147456} + \frac{1}{294912\sqrt{z}} \sqrt{\pi} (14144z^6 - 302016z^5 + 2038608z^4 - 5122656z^3 + 4365900z^2 - 873180z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2095.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, \frac{3}{2}; -z\right) = \frac{e^{-z} (7072z^5 + 147472z^4 + 949104z^3 + 2151672z^2 + 1430034z + 137061)}{147456} + \frac{1}{294912\sqrt{z}} \sqrt{\pi} (14144z^6 + 302016z^5 + 2038608z^4 + 5122656z^3 + 4365900z^2 + 873180z + 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.2096.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, 2; z\right) = \frac{e^{z/2} (1360z^6 - 32480z^5 + 256548z^4 - 821904z^3 + 1065021z^2 - 478170z + 41580) I_0\left(\frac{z}{2}\right) + e^{z/2} (-1360z^6 + 31120z^5 - 226108z^4 + 609996z^3 - 541209z^2 + 95421z) I_1\left(\frac{z}{2}\right)}{41580}$$

07.25.03.2097.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, \frac{5}{2}; z\right) = \frac{e^z (-70720 z^6 + 1726400 z^5 - 13442416 z^4 + 38876832 z^3 - 36387372 z^2 + 6146700 z + 10395)}{6881280 z} + \frac{1}{13762560 z^{3/2}} (\sqrt{\pi} (141440 z^7 - 3523520 z^6 + 28540512 z^5 - 89646480 z^4 + 101871000 z^3 - 30561300 z^2 + 727650 z - 10395) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.2098.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, \frac{5}{2}; -z\right) = \frac{e^{-z} (70720 z^6 + 1726400 z^5 + 13442416 z^4 + 38876832 z^3 + 36387372 z^2 + 6146700 z - 10395)}{6881280 z} + \frac{1}{13762560 z^{3/2}} (\sqrt{\pi} (141440 z^7 + 3523520 z^6 + 28540512 z^5 + 89646480 z^4 + 101871000 z^3 + 30561300 z^2 + 727650 z + 10395) \operatorname{erf}(\sqrt{z}))$$

07.25.03.2099.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, 3; z\right) = \frac{e^{z/2} (544 z^6 - 14928 z^5 + 138048 z^4 - 529428 z^3 + 843894 z^2 - 488565 z + 62370) I_0\left(\frac{z}{2}\right)}{62370} - \frac{e^{z/2} z (544 z^5 - 14384 z^4 + 123936 z^3 - 412140 z^2 + 481038 z - 127539) I_1\left(\frac{z}{2}\right)}{62370}$$

07.25.03.2100.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, \frac{7}{2}; z\right) = \frac{1}{44040192 z^2} e^z (-141440 z^7 + 3956160 z^6 - 36146656 z^5 + 127162320 z^4 - 153943128 z^3 + 38099796 z^2 + 187110 z - 31185) + \frac{1}{88080384 z^{5/2}} (\sqrt{\pi} (282880 z^8 - 8053760 z^7 + 76108032 z^6 - 286868736 z^5 + 407484000 z^4 - 162993600 z^3 + 5821200 z^2 - 166320 z + 31185) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.2101.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, \frac{7}{2}; -z\right) = \frac{1}{44040192 z^2} e^{-z} (141440 z^7 + 3956160 z^6 + 36146656 z^5 + 127162320 z^4 + 153943128 z^3 + 38099796 z^2 - 187110 z - 31185) + \frac{1}{88080384 z^{5/2}} (\sqrt{\pi} (282880 z^8 + 8053760 z^7 + 76108032 z^6 + 286868736 z^5 + 407484000 z^4 + 162993600 z^3 + 5821200 z^2 + 166320 z + 31185) \operatorname{erf}(\sqrt{z}))$$

07.25.03.2102.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, 4; z\right) = \frac{e^{z/2} (32 z^6 - 992 z^5 + 10512 z^4 - 46944 z^3 + 88674 z^2 - 62370 z + 10395) I_0\left(\frac{z}{2}\right)}{10395} - \frac{2 e^{z/2} z (16 z^5 - 480 z^4 + 4784 z^3 - 18912 z^2 + 27387 z - 9762) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.2103.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, \frac{9}{2}; z\right) = \frac{1}{226492416z^3} \left(e^z (-282880z^8 + 8919040z^7 - 93535104z^6 + 387641472z^5 - 576577536z^4 + 190358208z^3 + 2079000z^2 - 1081080z + 779625) \right) + \frac{1}{452984832z^{7/2}} \left(\sqrt{\pi} (565760z^9 - 18120960z^8 + 195706368z^7 - 860606208z^6 + 1466942400z^5 - 733471200z^4 + 34927200z^3 - 1496880z^2 + 561330z - 779625) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2104.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, \frac{9}{2}; -z\right) = \frac{1}{226492416z^3} \left(e^{-z} (282880z^8 + 8919040z^7 + 93535104z^6 + 387641472z^5 + 576577536z^4 + 190358208z^3 - 2079000z^2 - 1081080z - 779625) \right) + \frac{1}{452984832z^{7/2}} \left(\sqrt{\pi} (565760z^9 + 18120960z^8 + 195706368z^7 + 860606208z^6 + 1466942400z^5 + 733471200z^4 + 34927200z^3 + 1496880z^2 + 561330z + 779625) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2105.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, 5; z\right) = \frac{1}{218243025z^2} \left(4e^{z/2} (70720z^8 - 2444000z^7 + 29196336z^6 - 148781472z^5 + 324591000z^4 - 267338610z^3 + 54521775z^2 + 124740z - 249480) I_0\left(\frac{z}{2}\right) \right) - \frac{1}{218243025z^3} \left(4e^{z/2} (70720z^9 - 2373280z^8 + 26858416z^7 - 123038976z^6 + 212828952z^5 - 95667870z^4 + 51975z^3 - 187110z^2 + 498960z - 997920) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.2106.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, \frac{11}{2}; z\right) = \frac{1}{201326592z^4} \left(e^z (-113152z^9 + 3970304z^8 - 46998016z^7 + 224232192z^6 - 395924160z^5 + 164661216z^4 + 2993760z^3 - 1164240z^2 - 1975050z + 7640325) \right) + \frac{1}{402653184z^{9/2}} \left(\sqrt{\pi} (226304z^{10} - 8053760z^9 + 97853184z^8 - 491774976z^7 + 977961600z^6 - 586776960z^5 + 34927200z^4 - 1995840z^3 + 1122660z^2 - 3118500z - 7640325) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2107.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, \frac{11}{2}; -z\right) = \frac{1}{201\,326\,592\,z^4} \left(e^{-z} (113\,152\,z^9 + 3\,970\,304\,z^8 + 46\,998\,016\,z^7 + 224\,232\,192\,z^6 + 395\,924\,160\,z^5 + 164\,661\,216\,z^4 - 2\,993\,760\,z^3 - 1\,164\,240\,z^2 + 1\,975\,050\,z + 7\,640\,325) \right) + \frac{1}{402\,653\,184\,z^{9/2}} \left(\sqrt{\pi} (226\,304\,z^{10} + 8\,053\,760\,z^9 + 97\,853\,184\,z^8 + 491\,774\,976\,z^7 + 977\,961\,600\,z^6 + 586\,776\,960\,z^5 + 34\,927\,200\,z^4 + 1\,995\,840\,z^3 + 1\,122\,660\,z^2 + 3\,118\,500\,z - 7\,640\,325) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2108.01

$${}_2F_2\left(-\frac{11}{2}, 4; 1, 6; z\right) = \frac{1}{916\,620\,705\,z^3} \left(8 e^{z/2} (70\,720\,z^9 - 2\,695\,680\,z^8 + 35\,840\,688\,z^7 - 205\,212\,000\,z^6 + 507\,445\,848\,z^5 - 477\,338\,400\,z^4 + 114\,313\,815\,z^3 + 686\,070\,z^2 - 623\,700\,z - 3\,991\,680) I_0\left(\frac{z}{2}\right) \right) - \frac{1}{916\,620\,705\,z^4} \left(8 e^{z/2} (70\,720\,z^{10} - 2\,624\,960\,z^9 + 33\,251\,088\,z^8 - 173\,202\,672\,z^7 + 348\,464\,760\,z^6 - 189\,507\,528\,z^5 + 363\,825\,z^4 - 1\,133\,055\,z^3 + 2\,245\,320\,z^2 - 2\,494\,800\,z - 15\,966\,720) I_1\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = \frac{3}{2}$

07.25.03.2109.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{3}{2}, 2; z\right) = \frac{e^z (-544\,z^5 + 13\,456\,z^4 - 106\,800\,z^3 + 318\,552\,z^2 - 316\,410\,z + 63\,333)}{73\,728} + \frac{\sqrt{\pi} (1088\,z^6 - 27\,456\,z^5 + 226\,512\,z^4 - 731\,808\,z^3 + 873\,180\,z^2 - 291\,060\,z + 10\,395) \operatorname{erfi}(\sqrt{z})}{147\,456\,\sqrt{z}}$$

07.25.03.2110.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (544\,z^5 + 13\,456\,z^4 + 106\,800\,z^3 + 318\,552\,z^2 + 316\,410\,z + 63\,333)}{73\,728} + \frac{\sqrt{\pi} (1088\,z^6 + 27\,456\,z^5 + 226\,512\,z^4 + 731\,808\,z^3 + 873\,180\,z^2 + 291\,060\,z + 10\,395) \operatorname{erf}(\sqrt{z})}{147\,456\,\sqrt{z}}$$

07.25.03.2111.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{3}{2}, 3; z\right) = \frac{e^z (-544\,z^5 + 15\,568\,z^4 - 146\,928\,z^3 + 543\,480\,z^2 - 720\,330\,z + 224\,505)}{276\,480} + \frac{\sqrt{\pi} (1088\,z^6 - 31\,680\,z^5 + 308\,880\,z^4 - 1\,219\,680\,z^3 + 1\,871\,100\,z^2 - 873\,180\,z + 51\,975) \operatorname{erfi}(\sqrt{z})}{552\,960\,\sqrt{z}}$$

07.25.03.2112.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{3}{2}, 3; -z\right) = \frac{e^{-z}(544z^5 + 15568z^4 + 146928z^3 + 543480z^2 + 720330z + 224505)}{276480} + \frac{\sqrt{\pi}(1088z^6 + 31680z^5 + 308880z^4 + 1219680z^3 + 1871100z^2 + 873180z + 51975)\operatorname{erf}(\sqrt{z})}{552960\sqrt{z}}$$

07.25.03.2113.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{3}{2}, 4; z\right) = \frac{e^z(-32z^5 + 1040z^4 - 11376z^3 + 50232z^2 - 83370z + 35685)}{46080} + \frac{\sqrt{\pi}(64z^6 - 2112z^5 + 23760z^4 - 110880z^3 + 207900z^2 - 124740z + 10395)\operatorname{erfi}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.2114.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{3}{2}, 4; -z\right) = \frac{e^{-z}(32z^5 + 1040z^4 + 11376z^3 + 50232z^2 + 83370z + 35685)}{46080} + \frac{\sqrt{\pi}(64z^6 + 2112z^5 + 23760z^4 + 110880z^3 + 207900z^2 + 124740z + 10395)\operatorname{erf}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.2115.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{3}{2}, 5; z\right) = \frac{1}{24186240z^4} \left(e^z(-7072z^9 + 257296z^8 - 3200496z^7 + 16426680z^6 - 32778546z^5 + 17956485z^4 - 23040z^3 + 69120z^2 - 138240z + 138240) \right) + \frac{1}{48372480\sqrt{z}} \sqrt{\pi} (14144z^6 - 521664z^5 + 6651216z^4 - 35814240z^3 + 79361100z^2 - 58198140z + 6235515)\operatorname{erfi}(\sqrt{z}) - \frac{24}{4199z^4}$$

07.25.03.2116.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{3}{2}, 5; -z\right) = \frac{1}{24186240z^4} \left(e^{-z}(7072z^9 + 257296z^8 + 3200496z^7 + 16426680z^6 + 32778546z^5 + 17956485z^4 + 23040z^3 + 69120z^2 + 138240z + 138240) \right) + \frac{1}{48372480\sqrt{z}} \sqrt{\pi} (14144z^6 + 521664z^5 + 6651216z^4 + 35814240z^3 + 79361100z^2 + 58198140z + 6235515)\operatorname{erf}(\sqrt{z}) - \frac{24}{4199z^4}$$

07.25.03.2117.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{3}{2}, 6; z\right) = -\frac{40(3z+4)}{4199z^5} + \frac{1}{50791104z^5} (e^z (-7072z^{10} + 284752z^9 - 3969264z^8 + 23218872z^7 - 54151314z^6 + 36285921z^5 - 161280z^4 + 403200z^3 - 483840z^2 - 483840z + 1935360)) + \frac{1}{101582208\sqrt{z}} \sqrt{\pi} (14144z^6 - 576576z^5 + 8216208z^4 - 50139936z^3 + 128198700z^2 - 111105540z + 14549535) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2118.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{3}{2}, 6; -z\right) = -\frac{40(3z-4)}{4199z^5} + \frac{1}{50791104z^5} (e^{-z} (7072z^{10} + 284752z^9 + 3969264z^8 + 23218872z^7 + 54151314z^6 + 36285921z^5 + 161280z^4 + 403200z^3 + 483840z^2 - 483840z - 1935360)) + \frac{1}{101582208\sqrt{z}} \sqrt{\pi} (14144z^6 + 576576z^5 + 8216208z^4 + 50139936z^3 + 128198700z^2 + 111105540z + 14549535) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = 2$

07.25.03.2119.01

$${}_2F_2\left(-\frac{11}{2}, 4; 2, 2; z\right) = \frac{e^{z/2} (2720z^6 - 76400z^5 + 729312z^4 - 2926188z^3 + 4992198z^2 - 3239775z + 540540) I_0\left(\frac{z}{2}\right) + e^{z/2} (-2720z^6 + 73680z^5 - 656992z^4 + 2303316z^3 - 2952198z^2 + 977133z - 13860) I_1\left(\frac{z}{2}\right)}{540540}$$

07.25.03.2120.01

$${}_2F_2\left(-\frac{11}{2}, 4; 2, \frac{5}{2}; z\right) = \frac{e^z (-5440z^6 + 157440z^5 - 1509584z^4 + 5720448z^3 - 7910028z^2 + 2719920z - 10395)}{3440640z} + \frac{1}{6881280z^{3/2}} (\sqrt{\pi} (10880z^7 - 320320z^6 + 3171168z^5 - 12806640z^4 + 20374200z^3 - 10187100z^2 + 727650z + 10395) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.2121.01

$${}_2F_2\left(-\frac{11}{2}, 4; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (5440z^6 + 157440z^5 + 1509584z^4 + 5720448z^3 + 7910028z^2 + 2719920z + 10395)}{3440640z} + \frac{1}{6881280z^{3/2}} (\sqrt{\pi} (10880z^7 + 320320z^6 + 3171168z^5 + 12806640z^4 + 20374200z^3 + 10187100z^2 + 727650z - 10395) \operatorname{erf}(\sqrt{z}))$$

07.25.03.2122.01

$${}_2F_2\left(-\frac{11}{2}, 4; 2, 3; z\right) = \frac{e^{z/2} (544 z^6 - 17 568 z^5 + 196 656 z^4 - 948 000 z^3 + 2 002 986 z^2 - 1 683 990 z + 405 405) I_0\left(\frac{z}{2}\right) - 2 e^{z/2} (272 z^6 - 8512 z^5 + 89 952 z^4 - 388 032 z^3 + 650 775 z^2 - 318 348 z + 10 395) I_1\left(\frac{z}{2}\right)}{405 405}$$

07.25.03.2123.01

$${}_2F_2\left(-\frac{11}{2}, 4; 2, \frac{7}{2}; z\right) = \frac{1}{22 020 096 z^2} e^z (-10 880 z^7 + 360 640 z^6 - 4 053 344 z^5 + 18 630 672 z^4 - 33 059 256 z^3 + 16 312 548 z^2 - 173 250 z + 10 395) + \frac{1}{44 040 192 z^{5/2}} (\sqrt{\pi} (21 760 z^8 - 732 160 z^7 + 8 456 448 z^6 - 40 981 248 z^5 + 81 496 800 z^4 - 54 331 200 z^3 + 5 821 200 z^2 + 166 320 z - 10 395) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.2124.01

$${}_2F_2\left(-\frac{11}{2}, 4; 2, \frac{7}{2}; -z\right) = \frac{1}{22 020 096 z^2} e^{-z} (10 880 z^7 + 360 640 z^6 + 4 053 344 z^5 + 18 630 672 z^4 + 33 059 256 z^3 + 16 312 548 z^2 + 173 250 z + 10 395) + \frac{1}{44 040 192 z^{5/2}} (\sqrt{\pi} (21 760 z^8 + 732 160 z^7 + 8 456 448 z^6 + 40 981 248 z^5 + 81 496 800 z^4 + 54 331 200 z^3 + 5 821 200 z^2 - 166 320 z - 10 395) \operatorname{erf}(\sqrt{-z}))$$

07.25.03.2125.01

$${}_2F_2\left(-\frac{11}{2}, 4; 2, 4; z\right) = \frac{e^{z/2} (64 z^6 - 2336 z^5 + 30 000 z^4 - 168 864 z^3 + 425 112 z^2 - 436 590 z + 135 135) I_0\left(\frac{z}{2}\right) + e^{z/2} (-64 z^6 + 2272 z^5 - 27 760 z^4 + 142 176 z^3 - 294 744 z^2 + 191 442 z - 10 395) I_1\left(\frac{z}{2}\right)}{135 135}$$

07.25.03.2126.01

$${}_2F_2\left(-\frac{11}{2}, 4; 2, \frac{9}{2}; z\right) = \frac{1}{113 246 208 z^3} (e^z (-21 760 z^8 + 812 800 z^7 - 10 477 056 z^6 + 56 612 544 z^5 - 122 711 136 z^4 + 79 378 704 z^3 - 1 663 200 z^2 + 291 060 z - 155 925)) + \frac{1}{226 492 416 z^{7/2}} (\sqrt{\pi} (43 520 z^9 - 1 647 360 z^8 + 21 745 152 z^7 - 122 943 744 z^6 + 293 388 480 z^5 - 244 490 400 z^4 + 34 927 200 z^3 + 1 496 880 z^2 - 187 110 z + 155 925) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.2127.01

$${}_2F_2\left(-\frac{11}{2}, 4; 2, \frac{9}{2}; -z\right) =$$

$$\frac{1}{113\,246\,208\,z^3} \left(e^{-z} (21\,760\,z^8 + 812\,800\,z^7 + 10\,477\,056\,z^6 + 56\,612\,544\,z^5 + 122\,711\,136\,z^4 + 79\,378\,704\,z^3 + 1\,663\,200\,z^2 + 291\,060\,z + 155\,925) \right) +$$

$$\frac{1}{226\,492\,416\,z^{7/2}} \left(\sqrt{\pi} (43\,520\,z^9 + 1\,647\,360\,z^8 + 21\,745\,152\,z^7 + 122\,943\,744\,z^6 + 293\,388\,480\,z^5 + 244\,490\,400\,z^4 + 34\,927\,200\,z^3 - 1\,496\,880\,z^2 - 187\,110\,z - 155\,925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2128.01

$${}_2F_2\left(-\frac{11}{2}, 4; 2, 5; z\right) =$$

$$\frac{1}{218\,243\,025\,z^2} \left(8 e^{z/2} (5440\,z^8 - 221\,440\,z^7 + 3\,208\,944\,z^6 - 20\,655\,648\,z^5 + 60\,327\,480\,z^4 - 72\,959\,040\,z^3 + 27\,286\,875\,z^2 - 20\,790\,z + 41\,580) I_0\left(\frac{z}{2}\right) - \right.$$

$$\left. \frac{1}{218\,243\,025\,z^3} \left(8 e^{z/2} (5440\,z^9 - 216\,000\,z^8 + 2\,995\,664\,z^7 - 17\,762\,544\,z^6 + 43\,863\,768\,z^5 - 35\,585\,160\,z^4 + 2\,789\,325\,z^3 + 31\,185\,z^2 - 83\,160\,z + 166\,320) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.2129.01

$${}_2F_2\left(-\frac{11}{2}, 4; 2, \frac{11}{2}; z\right) =$$

$$\frac{1}{100\,663\,296\,z^4} \left(e^z (-8704\,z^9 + 361\,728\,z^8 - 5\,259\,776\,z^7 + 32\,666\,880\,z^6 - 83\,680\,704\,z^5 + 67\,195\,488\,z^4 - 2\,328\,480\,z^3 + 498\,960\,z^2 + 103\,950\,z - 1\,091\,475) \right) +$$

$$\frac{1}{201\,326\,592\,z^{9/2}} \left(\sqrt{\pi} (17\,408\,z^{10} - 732\,160\,z^9 + 10\,872\,576\,z^8 - 70\,253\,568\,z^7 + 195\,592\,320\,z^6 - 195\,592\,320\,z^5 + 34\,927\,200\,z^4 + 1\,995\,840\,z^3 - 374\,220\,z^2 + 623\,700\,z + 1\,091\,475) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2130.01

$${}_2F_2\left(-\frac{11}{2}, 4; 2, \frac{11}{2}; -z\right) =$$

$$\frac{1}{100\,663\,296\,z^4} \left(e^{-z} (8704\,z^9 + 361\,728\,z^8 + 5\,259\,776\,z^7 + 32\,666\,880\,z^6 + 83\,680\,704\,z^5 + 67\,195\,488\,z^4 + 2\,328\,480\,z^3 + 498\,960\,z^2 - 103\,950\,z - 1\,091\,475) \right) +$$

$$\frac{1}{201\,326\,592\,z^{9/2}} \left(\sqrt{\pi} (17\,408\,z^{10} + 732\,160\,z^9 + 10\,872\,576\,z^8 + 70\,253\,568\,z^7 + 195\,592\,320\,z^6 + 195\,592\,320\,z^5 + 34\,927\,200\,z^4 - 1\,995\,840\,z^3 - 374\,220\,z^2 - 623\,700\,z + 1\,091\,475) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2131.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 4; 2, 6; z\right) = & \frac{1}{916620705 z^3} \left(8 e^{z/2} (10880 z^9 - 488640 z^8 + 7886784 z^7 - 57139152 z^6 + 189857808 z^5 - 263700360 z^4 + \right. \\
 & \left. 114677640 z^3 - 280665 z^2 + 374220 z + 997920) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{916620705 z^4} \left(8 e^{z/2} (10880 z^{10} - 477760 z^9 + 7414464 z^8 - 49952688 z^7 + 143168592 z^6 - \right. \right. \\
 & \left. \left. 139445208 z^5 + 14553000 z^4 + 446985 z^3 - 997920 z^2 + 1496880 z + 3991680) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = \frac{5}{2}$

07.25.03.2132.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 4; \frac{5}{2}, 3; z\right) = & \frac{e^z (-1088 z^6 + 36416 z^5 - 414768 z^4 + 1943904 z^3 - 3560844 z^2 + 1873620 z - 31185)}{2580480 z} + \frac{1}{5160960 z^{3/2}} \\
 & \sqrt{\pi} (2176 z^7 - 73920 z^6 + 864864 z^5 - 4268880 z^4 + 8731800 z^3 - 6112260 z^2 + 727650 z + 31185) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.2133.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 4; \frac{5}{2}, 3; -z\right) = & \frac{e^{-z} (1088 z^6 + 36416 z^5 + 414768 z^4 + 1943904 z^3 + 3560844 z^2 + 1873620 z + 31185)}{2580480 z} + \frac{1}{5160960 z^{3/2}} \\
 & \sqrt{\pi} (2176 z^7 + 73920 z^6 + 864864 z^5 + 4268880 z^4 + 8731800 z^3 + 6112260 z^2 + 727650 z - 31185) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.2134.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 4; \frac{5}{2}, 4; z\right) = & \frac{e^z (-64 z^6 + 2432 z^5 - 32080 z^4 + 179136 z^3 - 408828 z^2 + 291480 z - 10395)}{430080 z} + \\
 & \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 - 4928 z^6 + 66528 z^5 - 388080 z^4 + 970200 z^3 - 873180 z^2 + 145530 z + 10395) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.2135.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 4; \frac{5}{2}, 4; -z\right) = & \frac{e^{-z} (64 z^6 + 2432 z^5 + 32080 z^4 + 179136 z^3 + 408828 z^2 + 291480 z + 10395)}{430080 z} + \\
 & \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 + 4928 z^6 + 66528 z^5 + 388080 z^4 + 970200 z^3 + 873180 z^2 + 145530 z - 10395) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.2136.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{5}{2}, 5; z\right) = \frac{1}{1128691200z^4} \left(e^z (-70720z^9 + 3007680z^8 - 45090032z^7 + 292245024z^6 - 798869484z^5 + 721142940z^4 - 43003485z^3 - 1935360z^2 + 3870720z - 3870720) \right) + \frac{1}{2257382400z^{3/2}} \left(\sqrt{\pi} (141440z^7 - 6086080z^6 + 93117024z^5 - 626749200z^4 + 1851759000z^3 - 2036934900z^2 + 436486050z + 43648605) \operatorname{erfi}(\sqrt{z}) \right) + \frac{72}{20995z^4}$$

07.25.03.2137.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{5}{2}, 5; -z\right) = \frac{1}{1128691200z^4} \left(e^{-z} (70720z^9 + 3007680z^8 + 45090032z^7 + 292245024z^6 + 798869484z^5 + 721142940z^4 + 43003485z^3 - 1935360z^2 - 3870720z - 3870720) \right) + \frac{1}{2257382400z^{3/2}} \left(\sqrt{\pi} (141440z^7 + 6086080z^6 + 93117024z^5 + 626749200z^4 + 1851759000z^3 + 2036934900z^2 + 436486050z - 43648605) \operatorname{erf}(\sqrt{-z}) \right) + \frac{72}{20995z^4}$$

07.25.03.2138.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{5}{2}, 6; z\right) = \frac{24(21z+20)}{29393z^5} + \frac{1}{2370251520z^5} \left(e^z (-70720z^{10} + 3328000z^9 - 55884816z^8 + 412357632z^7 - 1313582172z^6 + 1437710400z^5 - 125784855z^4 - 13870080z^3 + 21288960z^2 - 1935360z - 38707200) \right) + \frac{1}{4740503040z^{3/2}} \left(\sqrt{\pi} (141440z^7 - 6726720z^6 + 115026912z^5 - 877448880z^4 + 2991303000z^3 - 3888693900z^2 + 1018467450z + 130945815) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2139.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{5}{2}, 6; -z\right) = \frac{24(21z-20)}{29393z^5} + \frac{1}{2370251520z^5} \left(e^{-z} (70720z^{10} + 3328000z^9 + 55884816z^8 + 412357632z^7 + 1313582172z^6 + 1437710400z^5 + 125784855z^4 - 13870080z^3 - 21288960z^2 - 1935360z + 38707200) \right) + \frac{1}{4740503040z^{3/2}} \left(\sqrt{\pi} (141440z^7 + 6726720z^6 + 115026912z^5 + 877448880z^4 + 2991303000z^3 + 3888693900z^2 + 1018467450z - 130945815) \operatorname{erf}(\sqrt{-z}) \right)$$

For fixed z and $a_1 = -\frac{11}{2}, a_2 = 4, b_1 = 3$

07.25.03.2140.01

$${}_2F_2\left(-\frac{11}{2}, 4; 3, 3; z\right) = \frac{2 e^{z/2} (1088 z^6 - 40416 z^5 + 531120 z^4 - 3084000 z^3 + 8109720 z^2 - 8877330 z + 3045735) I_0\left(\frac{z}{2}\right) - \frac{1}{6081075 z} 2 e^{z/2} (1088 z^7 - 39328 z^6 + 492336 z^5 - 2610240 z^4 + 5709720 z^3 - 4089150 z^2 + 301455 z + 20790) I_1\left(\frac{z}{2}\right)}{6081075}$$

07.25.03.2141.01

$${}_2F_2\left(-\frac{11}{2}, 4; 3, \frac{7}{2}; z\right) = \frac{1}{16515072 z^2} e^z (-2176 z^7 + 83392 z^6 - 1112544 z^5 + 6312912 z^4 - 14769240 z^3 + 11018196 z^2 - 478170 z - 31185) + \frac{1}{33030144 z^{5/2}} \left(\sqrt{\pi} (4352 z^8 - 168960 z^7 + 2306304 z^6 - 13660416 z^5 + 34927200 z^4 - 32598720 z^3 + 5821200 z^2 + 498960 z + 31185) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2142.01

$${}_2F_2\left(-\frac{11}{2}, 4; 3, \frac{7}{2}; -z\right) = \frac{1}{16515072 z^2} e^{-z} (2176 z^7 + 83392 z^6 + 1112544 z^5 + 6312912 z^4 + 14769240 z^3 + 11018196 z^2 + 478170 z - 31185) + \frac{1}{33030144 z^{5/2}} \left(\sqrt{\pi} (4352 z^8 + 168960 z^7 + 2306304 z^6 + 13660416 z^5 + 34927200 z^4 + 32598720 z^3 + 5821200 z^2 - 498960 z + 31185) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2143.01

$${}_2F_2\left(-\frac{11}{2}, 4; 3, 4; z\right) = \frac{4 e^{z/2} (64 z^6 - 2688 z^5 + 40560 z^4 - 275520 z^3 + 866520 z^2 - 1164240 z + 509355) I_0\left(\frac{z}{2}\right) - \frac{1}{2027025 z} 4 e^{z/2} (64 z^7 - 2624 z^6 + 37968 z^5 - 238800 z^4 + 644280 z^3 - 608760 z^2 + 72765 z + 10395) I_1\left(\frac{z}{2}\right)}{2027025}$$

07.25.03.2144.01

$${}_2F_2\left(-\frac{11}{2}, 4; 3, \frac{9}{2}; z\right) = \frac{1}{84934656 z^3} \left(e^z (-4352 z^8 + 187904 z^7 - 2873472 z^6 + 19142400 z^5 - 54519744 z^4 + 52839648 z^3 - 4074840 z^2 - 665280 z + 155925) \right) + \frac{1}{169869312 z^{7/2}} \left(\sqrt{\pi} (8704 z^9 - 380160 z^8 + 5930496 z^7 - 40981248 z^6 + 125737920 z^5 - 146694240 z^4 + 34927200 z^3 + 4490640 z^2 + 561330 z - 155925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2145.01

$${}_2F_2\left(-\frac{11}{2}, 4; 3, \frac{9}{2}; -z\right) =$$

$$\frac{1}{84934656z^3} \left(e^{-z} (4352z^8 + 187904z^7 + 2873472z^6 + 19142400z^5 + 54519744z^4 + 52839648z^3 + 4074840z^2 - 665280z - 155925) \right) +$$

$$\frac{1}{169869312z^{7/2}} \left(\sqrt{\pi} (8704z^9 + 380160z^8 + 5930496z^7 + 40981248z^6 + 125737920z^5 + 146694240z^4 + 34927200z^3 - 4490640z^2 + 561330z + 155925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2146.01

$${}_2F_2\left(-\frac{11}{2}, 4; 3, 5; z\right) =$$

$$\frac{1}{654729075z^2} \left(16e^{z/2} (2176z^8 - 101952z^7 + 1737024z^6 - 13513008z^5 + 49451760z^4 - 78586200z^3 + 41330520z^2 + 31185z - 62370) I_0\left(\frac{z}{2}\right) - \right.$$

$$\left. \frac{1}{654729075z^3} \left(16e^{z/2} (2176z^9 - 99776z^8 + 1638336z^7 - 11922384z^6 + 38255568z^5 - 44937000z^4 + 7567560z^3 + 1632015z^2 + 124740z - 249480) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.2147.01

$${}_2F_2\left(-\frac{11}{2}, 4; 3, \frac{11}{2}; z\right) =$$

$$\frac{1}{377487360z^4} \left(e^z (-8704z^9 + 418048z^8 - 7208448z^7 + 55138560z^6 - 185115840z^5 + 221130720z^4 - 25613280z^3 - 6819120z^2 + 935550z + 3274425) \right) +$$

$$\frac{1}{754974720z^{9/2}} \left(\sqrt{\pi} (17408z^{10} - 844800z^9 + 14826240z^8 - 117089280z^7 + 419126400z^6 - 586776960z^5 + 174636000z^4 + 29937600z^3 + 5613300z^2 - 3118500z - 3274425) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2148.01

$${}_2F_2\left(-\frac{11}{2}, 4; 3, \frac{11}{2}; -z\right) =$$

$$\frac{1}{377487360z^4} \left(e^{-z} (8704z^9 + 418048z^8 + 7208448z^7 + 55138560z^6 + 185115840z^5 + 221130720z^4 + 25613280z^3 - 6819120z^2 - 935550z + 3274425) \right) +$$

$$\frac{1}{754974720z^{9/2}} \left(\sqrt{\pi} (17408z^{10} + 844800z^9 + 14826240z^8 + 117089280z^7 + 419126400z^6 + 586776960z^5 + 174636000z^4 - 29937600z^3 + 5613300z^2 + 3118500z - 3274425) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2149.01

$${}_2F_2\left(-\frac{11}{2}, 4; 3, 6; z\right) = \frac{1}{2749862115z^3} \left(32e^{z/2} (2176z^9 - 112512z^8 + 2136192z^7 - 18725952z^6 + 78152256z^5 - 143201520z^4 + 87318000z^3 + 249480z^2 - 405405z - 498960) I_0\left(\frac{z}{2}\right) - \frac{1}{2749862115z^4} \left(64e^{z/2} (1088z^{10} - 55168z^9 + 1013472z^8 - 8376000z^7 + 31155096z^6 - 43778448z^5 + 9604980z^4 + 2744280z^3 + 467775z^2 - 810810z - 997920) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = \frac{7}{2}$

07.25.03.2150.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{7}{2}, 4; z\right) = \frac{e^z (-128z^7 + 5568z^6 - 85984z^5 + 580560z^4 - 1686744z^3 + 1690836z^2 - 145530z - 31185)}{2752512z^2} + \frac{1}{5505024z^{5/2}} \left(\sqrt{\pi} (256z^8 - 11264z^7 + 177408z^6 - 1241856z^5 + 3880800z^4 - 4656960z^3 + 1164240z^2 + 166320z + 31185) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2151.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{7}{2}, 4; -z\right) = \frac{e^{-z} (128z^7 + 5568z^6 + 85984z^5 + 580560z^4 + 1686744z^3 + 1690836z^2 + 145530z - 31185)}{2752512z^2} + \frac{1}{5505024z^{5/2}} \left(\sqrt{\pi} (256z^8 + 11264z^7 + 177408z^6 + 1241856z^5 + 3880800z^4 + 4656960z^3 + 1164240z^2 - 166320z + 31185) \operatorname{erf}(\sqrt{-z}) \right)$$

07.25.03.2152.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{7}{2}, 5; z\right) = \frac{1}{7223623680z^4} \left(e^z (-141440z^9 + 6884800z^8 - 120784352z^7 + 945672144z^6 - 3283122264z^5 + 4140842580z^4 - 559763610z^3 - 197599185z^2 - 41287680z + 41287680) \right) + \frac{1}{14447247360z^{5/2}} \left(\sqrt{\pi} (282880z^8 - 13911040z^7 + 248312064z^6 - 2005597440z^5 + 7407036000z^4 - 10863652800z^3 + 3491888400z^2 + 698377680z + 218243025) \operatorname{erfi}(\sqrt{z}) \right) - \frac{24}{4199z^4}$$

$$\begin{aligned}
 & \text{07.25.03.2153.01} \\
 {}_2F_2\left(-\frac{11}{2}, 4; \frac{7}{2}, 5; -z\right) = & \\
 & \frac{1}{7\,223\,623\,680\,z^4} \left(e^{-z} (141\,440\,z^9 + 6\,884\,800\,z^8 + 120\,784\,352\,z^7 + 945\,672\,144\,z^6 + 3\,283\,122\,264\,z^5 + 4\,140\,842\,580\,z^4 + \right. \\
 & \left. 559\,763\,610\,z^3 - 197\,599\,185\,z^2 + 41\,287\,680\,z + 41\,287\,680) \right) + \\
 & \frac{1}{14\,447\,247\,360\,z^{5/2}} \left(\sqrt{\pi} (282\,880\,z^8 + 13\,911\,040\,z^7 + 248\,312\,064\,z^6 + 2\,005\,597\,440\,z^5 + 7\,407\,036\,000\,z^4 + \right. \\
 & \left. 10\,863\,652\,800\,z^3 + 3\,491\,888\,400\,z^2 - 698\,377\,680\,z + 218\,243\,025) \operatorname{erf}(\sqrt{z}) \right) - \frac{24}{4199\,z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2154.01} \\
 {}_2F_2\left(-\frac{11}{2}, 4; \frac{7}{2}, 6; z\right) = & \\
 & -\frac{120(7z+4)}{29\,393\,z^5} + \frac{1}{15\,169\,609\,728\,z^5} \left(e^z (-141\,440\,z^{10} + 7\,616\,960\,z^9 - 149\,631\,456\,z^8 + 1\,332\,734\,160\,z^7 - 5\,382\,187\,608\,z^6 + \right. \\
 & \left. 8\,190\,192\,276\,z^5 - 1\,545\,984\,090\,z^4 - 741\,148\,065\,z^3 - 309\,657\,600\,z^2 + 185\,794\,560\,z + 247\,726\,080) \right) + \\
 & \frac{1}{30\,339\,219\,456\,z^{5/2}} \left(\sqrt{\pi} (282\,880\,z^8 - 15\,375\,360\,z^7 + 306\,738\,432\,z^6 - 2\,807\,836\,416\,z^5 + 11\,965\,212\,000\,z^4 - \right. \\
 & \left. 20\,739\,700\,800\,z^3 + 8\,147\,739\,600\,z^2 + 2\,095\,133\,040\,z + 916\,620\,705) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2155.01} \\
 {}_2F_2\left(-\frac{11}{2}, 4; \frac{7}{2}, 6; -z\right) = & \\
 & -\frac{120(7z-4)}{29\,393\,z^5} + \frac{1}{15\,169\,609\,728\,z^5} \left(e^{-z} (141\,440\,z^{10} + 7\,616\,960\,z^9 + 149\,631\,456\,z^8 + 1\,332\,734\,160\,z^7 + 5\,382\,187\,608\,z^6 + \right. \\
 & \left. 8\,190\,192\,276\,z^5 + 1\,545\,984\,090\,z^4 - 741\,148\,065\,z^3 + 309\,657\,600\,z^2 + 185\,794\,560\,z - 247\,726\,080) \right) + \\
 & \frac{1}{30\,339\,219\,456\,z^{5/2}} \left(\sqrt{\pi} (282\,880\,z^8 + 15\,375\,360\,z^7 + 306\,738\,432\,z^6 + 2\,807\,836\,416\,z^5 + 11\,965\,212\,000\,z^4 + \right. \\
 & \left. 20\,739\,700\,800\,z^3 + 8\,147\,739\,600\,z^2 - 2\,095\,133\,040\,z + 916\,620\,705) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = 4$

$$\begin{aligned}
 & \text{07.25.03.2156.01} \\
 {}_2F_2\left(-\frac{11}{2}, 4; 4, 4; z\right) = & \\
 & \frac{1}{11\,486\,475\,z} 4 e^{z/2} (128\,z^7 - 6080\,z^6 + 105\,408\,z^5 - 838\,800\,z^4 + 3\,163\,920\,z^3 - 5\,239\,080\,z^2 + 2\,910\,600\,z + 10\,395) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{11\,486\,475\,z^2} \\
 & 4 e^{z/2} (128\,z^8 - 5952\,z^7 + 99\,520\,z^6 - 742\,128\,z^5 + 2\,466\,000\,z^4 - 3\,061\,560\,z^3 + 582\,120\,z^2 + 155\,925\,z + 41\,580) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

07.25.03.2157.01

$${}_2F_2\left(-\frac{11}{2}, 4; 4, \frac{9}{2}; z\right) = \frac{1}{14\,155\,776\,z^3} e^z (-256z^8 + 12\,544z^7 - 221\,952z^6 + 1\,757\,760z^5 - 6\,203\,040z^4 + 8\,030\,448z^3 - 1\,164\,240z^2 - 457\,380z - 155\,925) + \frac{1}{28\,311\,552\,z^{7/2}} \left(\sqrt{\pi} (512z^9 - 25\,344z^8 + 456\,192z^7 - 3\,725\,568z^6 + 13\,970\,880z^5 - 20\,956\,320z^4 + 6\,985\,440z^3 + 1\,496\,880z^2 + 561\,330z + 155\,925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2158.01

$${}_2F_2\left(-\frac{11}{2}, 4; 4, \frac{9}{2}; -z\right) = \frac{1}{14\,155\,776\,z^3} e^{-z} (256z^8 + 12\,544z^7 + 221\,952z^6 + 1\,757\,760z^5 + 6\,203\,040z^4 + 8\,030\,448z^3 + 1\,164\,240z^2 - 457\,380z + 155\,925) + \frac{1}{28\,311\,552\,z^{7/2}} \left(\sqrt{\pi} (512z^9 + 25\,344z^8 + 456\,192z^7 + 3\,725\,568z^6 + 13\,970\,880z^5 + 20\,956\,320z^4 + 6\,985\,440z^3 - 1\,496\,880z^2 + 561\,330z - 155\,925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2159.01

$${}_2F_2\left(-\frac{11}{2}, 4; 4, 5; z\right) = \frac{1}{218\,243\,025\,z^2} \left(32e^{z/2} (128z^8 - 6784z^7 + 132\,864z^6 - 1\,212\,096z^5 + 5\,331\,360z^4 - 10\,478\,160z^3 + 6\,985\,440z^2 + 83\,160z + 31\,185) \right. \\ \left. I_0\left(\frac{z}{2}\right) - \frac{1}{218\,243\,025\,z^3} \left(128e^{z/2} (32z^9 - 1664z^8 + 31\,568z^7 - 272\,256z^6 + 1\,074\,804z^5 - 1\,654\,080z^4 + 436\,590z^3 + 166\,320z^2 + 83\,160z + 31\,185) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.2160.01

$${}_2F_2\left(-\frac{11}{2}, 4; 4, \frac{11}{2}; z\right) = \frac{1}{62\,914\,560\,z^4} \left(e^z (-512z^9 + 27\,904z^8 - 556\,544z^7 + 5\,057\,280z^6 - 21\,001\,920z^5 + 33\,362\,400z^4 - 6\,985\,440z^3 - 3\,825\,360z^2 - 2\,390\,850z - 1\,091\,475) \right) + \frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024z^{10} - 56\,320z^9 + 1\,140\,480z^8 - 10\,644\,480z^7 + 46\,569\,600z^6 - 83\,825\,280z^5 + 34\,927\,200z^4 + 9\,979\,200z^3 + 5\,613\,300z^2 + 3\,118\,500z + 1\,091\,475) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2161.01

$${}_2F_2\left(-\frac{11}{2}, 4; 4, \frac{11}{2}; -z\right) = \frac{1}{62\,914\,560\,z^4} \left(e^{-z} (512z^9 + 27\,904z^8 + 556\,544z^7 + 5\,057\,280z^6 + 21\,001\,920z^5 + 33\,362\,400z^4 + 6\,985\,440z^3 - 3\,825\,360z^2 + 2\,390\,850z - 1\,091\,475) \right) + \frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024z^{10} + 56\,320z^9 + 1\,140\,480z^8 + 10\,644\,480z^7 + 46\,569\,600z^6 + 83\,825\,280z^5 + 34\,927\,200z^4 - 9\,979\,200z^3 + 5\,613\,300z^2 - 3\,118\,500z + 1\,091\,475) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2162.01

$${}_2F_2\left(-\frac{11}{2}, 4; 4, 6; z\right) = \frac{1}{916620705 z^3} \left(32 e^{z/2} (256 z^9 - 14976 z^8 + 326976 z^7 - 3364032 z^6 + 16903152 z^5 - 38419920 z^4 + 29688120 z^3 + 748440 z^2 + 530145 z + 249480) I_0\left(\frac{z}{2}\right) - \frac{1}{916620705 z^4} \left(32 e^{z/2} (256 z^{10} - 14720 z^9 + 312384 z^8 - 3058752 z^7 + 13986672 z^6 - 25692912 z^5 + 8731800 z^4 + 4241160 z^3 + 3024945 z^2 + 2120580 z + 997920) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = \frac{9}{2}$

07.25.03.2163.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{9}{2}, 5; z\right) = \frac{1}{37150064640 z^4} \left(e^z (-282880 z^9 + 15508480 z^8 - 311645568 z^7 + 2859974016 z^6 - 12040423296 z^5 + 19528922880 z^4 - 4291728840 z^3 - 2489122440 z^2 - 1787288895 z - 1486356480) \right) + \frac{1}{74300129280 z^{7/2}} \left(\sqrt{\pi} (565760 z^9 - 31299840 z^8 + 638516736 z^7 - 6016792320 z^6 + 26665329600 z^5 - 48886437600 z^4 + 20951330400 z^3 + 6285399120 z^2 + 3928374450 z + 3273645375) \operatorname{erfi}(\sqrt{z}) \right) + \frac{168}{4199 z^4}$$

07.25.03.2164.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{9}{2}, 5; -z\right) = \frac{1}{37150064640 z^4} \left(e^{-z} (282880 z^9 + 15508480 z^8 + 311645568 z^7 + 2859974016 z^6 + 12040423296 z^5 + 19528922880 z^4 + 4291728840 z^3 - 2489122440 z^2 + 1787288895 z - 1486356480) \right) + \frac{1}{74300129280 z^{7/2}} \left(\sqrt{\pi} (565760 z^9 + 31299840 z^8 + 638516736 z^7 + 6016792320 z^6 + 26665329600 z^5 + 48886437600 z^4 + 20951330400 z^3 - 6285399120 z^2 + 3928374450 z - 3273645375) \operatorname{erf}(\sqrt{z}) \right) + \frac{168}{4199 z^4}$$

07.25.03.2165.01

$${}_2F_2\left(-\frac{11}{2}, 4; \frac{9}{2}, 6; z\right) = \frac{40(21z+4)}{4199 z^5} + \frac{1}{78015135744 z^5} \left(e^z (-282880 z^{10} + 17155840 z^9 - 385941504 z^8 + 4027008192 z^7 - 19696711776 z^6 + 38420152848 z^5 - 11490292800 z^4 - 8530080300 z^3 - 8795131065 z^2 - 12634030080 z - 2972712960) \right) + \frac{1}{156030271488 z^{7/2}} \left(\sqrt{\pi} (565760 z^9 - 34594560 z^8 + 788755968 z^7 - 8423509248 z^6 + 43074763200 z^5 - 93328653600 z^4 + 48886437600 z^3 + 18856197360 z^2 + 16499172690 z + 22915517625) \operatorname{erfi}(\sqrt{z}) \right)$$

$$\begin{aligned}
 & \text{07.25.03.2166.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; \frac{9}{2}, 6; -z\right) = \\
 & \frac{40(21z-4)}{4199z^5} + \frac{1}{78015135744z^5} \left(e^{-z} (282880z^{10} + 17155840z^9 + 385941504z^8 + 4027008192z^7 + 19696711776z^6 + \right. \\
 & \quad \left. 38420152848z^5 + 11490292800z^4 - 8530080300z^3 + 8795131065z^2 - 12634030080z + 2972712960) \right) + \\
 & \frac{1}{156030271488z^{7/2}} \left(\sqrt{\pi} (565760z^9 + 34594560z^8 + 788755968z^7 + 8423509248z^6 + 43074763200z^5 + \right. \\
 & \quad \left. 93328653600z^4 + 48886437600z^3 - 18856197360z^2 + 16499172690z - 22915517625) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = 5$

$$\begin{aligned}
 & \text{07.25.03.2167.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; 5, 5; z\right) = \frac{1}{4582012309875z^4} \\
 & \left(128e^{z/2} (282880z^{10} - 16731520z^9 + 370314048z^8 - 3876031296z^7 + 19912416240z^6 - 46582151280z^5 + \right. \\
 & \quad \left. 37264980600z^4 + 1222211880z^3 + 1265707665z^2 + 2618916300z - 5237832600) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{4582012309875z^3} \left(128e^{z/2} (282880z^9 - 16448640z^8 + 354006848z^7 - 3529965888z^6 + 16543889136z^5 - \right. \\
 & \quad \left. 31496962800z^4 + 11421406200z^3 + 6023431080z^2 + 5107090545z + 6372288810) I_1\left(\frac{z}{2}\right) + \frac{3072}{20995z^4} \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2168.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; 5, \frac{11}{2}; z\right) = \\
 & \frac{1}{33022279680z^4} \left(e^z (-113152z^9 + 6898944z^8 - 156236288z^7 + 1644273408z^6 - 8136324288z^5 + 16142665440z^4 - \right. \\
 & \quad \left. 5001968160z^3 - 3850292880z^2 - 4259132010z - 7307748315) \right) + \frac{1}{66044559360z^{9/2}} \\
 & \left(\sqrt{\pi} (226304z^{10} - 13911040z^9 + 319258368z^8 - 3438167040z^7 + 17776886400z^6 - 39109150080z^5 + \right. \\
 & \quad \left. 20951330400z^4 + 8380532160z^3 + 7856748900z^2 + 13094581500z - 4583103525) \operatorname{erfi}(\sqrt{z}) \right) + \frac{1512}{4199z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2169.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 4; 5, \frac{11}{2}; -z\right) = \\
 & \frac{1}{33022279680z^4} \left(e^{-z} (113152z^9 + 6898944z^8 + 156236288z^7 + 1644273408z^6 + 8136324288z^5 + 16142665440z^4 + \right. \\
 & \quad \left. 5001968160z^3 - 3850292880z^2 + 4259132010z - 7307748315) \right) + \frac{1}{66044559360z^{9/2}} \\
 & \left(\sqrt{\pi} (226304z^{10} + 13911040z^9 + 319258368z^8 + 3438167040z^7 + 17776886400z^6 + 39109150080z^5 + \right. \\
 & \quad \left. 20951330400z^4 - 8380532160z^3 + 7856748900z^2 - 13094581500z - 4583103525) \operatorname{erf}(\sqrt{z}) \right) + \frac{1512}{4199z^4}
 \end{aligned}$$

07.25.03.2170.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 4; 5, 6; z\right) = & \\
 & \frac{1}{19\,244\,451\,701\,475\,z^4} \left(256 e^{z/2} (282\,880 z^{10} - 18\,470\,400 z^9 + 455\,866\,944 z^8 - 5\,384\,402\,688 z^7 + 31\,639\,532\,400 z^6 - \right. \\
 & \quad 85\,799\,478\,240 z^5 + 79\,631\,256\,600 z^4 + 4\,976\,475\,840 z^3 + 7\,724\,733\,345 z^2 + \\
 & \quad \left. 24\,879\,704\,850 z - 54\,997\,242\,300) I_0\left(\frac{z}{2}\right) - \frac{1}{19\,244\,451\,701\,475\,z^4} \right. \\
 & \quad \left(256 e^{z/2} (282\,880 z^{10} - 18\,187\,520 z^9 + 437\,820\,864 z^8 - 4\,955\,392\,704 z^7 + 26\,885\,746\,608 z^6 - 61\,006\,765\,680 z^5 + \right. \\
 & \quad \left. 28\,262\,694\,600 z^4 + 18\,724\,449\,240 z^3 + 21\,870\,090\,585 z^2 + 44\,648\,243\,955 z - 10\,475\,665\,200) I_1\left(\frac{z}{2}\right) + \frac{3072}{4199 z^4} \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = \frac{11}{2}$

07.25.03.2171.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 4; \frac{11}{2}, 6; z\right) = & \\
 & \frac{360(21z-4)}{4199z^5} + \frac{1}{69\,346\,787\,328z^5} \left(e^z (-113\,152 z^{10} + 7\,631\,104 z^9 - 193\,430\,016 z^8 + 2\,313\,676\,032 z^7 - \right. \\
 & \quad 13\,289\,115\,840 z^6 + 31\,634\,751\,456 z^5 - 13\,118\,988\,960 z^4 - 12\,615\,508\,080 z^3 - \\
 & \quad \left. 19\,080\,723\,690 z^2 - 52\,390\,473\,975 z + 23\,781\,703\,680) \right) + \frac{1}{138\,693\,574\,656 z^{9/2}} \\
 & \quad \left(\sqrt{\pi} (226\,304 z^{10} - 15\,375\,360 z^9 + 394\,377\,984 z^8 - 4\,813\,433\,856 z^7 + 28\,716\,508\,800 z^6 - 74\,662\,922\,880 z^5 + \right. \\
 & \quad \left. 48\,886\,437\,600 z^4 + 25\,141\,596\,480 z^3 + 32\,998\,345\,380 z^2 + 91\,662\,070\,500 z - 96\,245\,174\,025) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.2172.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 4; \frac{11}{2}, 6; -z\right) = & \\
 & \frac{360(21z+4)}{4199z^5} + \frac{1}{69\,346\,787\,328z^5} \left(e^{-z} (113\,152 z^{10} + 7\,631\,104 z^9 + 193\,430\,016 z^8 + 2\,313\,676\,032 z^7 + \right. \\
 & \quad 13\,289\,115\,840 z^6 + 31\,634\,751\,456 z^5 + 13\,118\,988\,960 z^4 - 12\,615\,508\,080 z^3 + \\
 & \quad \left. 19\,080\,723\,690 z^2 - 52\,390\,473\,975 z - 23\,781\,703\,680) \right) + \frac{1}{138\,693\,574\,656 z^{9/2}} \\
 & \quad \left(\sqrt{\pi} (226\,304 z^{10} + 15\,375\,360 z^9 + 394\,377\,984 z^8 + 4\,813\,433\,856 z^7 + 28\,716\,508\,800 z^6 + 74\,662\,922\,880 z^5 + \right. \\
 & \quad \left. 48\,886\,437\,600 z^4 - 25\,141\,596\,480 z^3 + 32\,998\,345\,380 z^2 - 91\,662\,070\,500 z - 96\,245\,174\,025) \operatorname{erf}(\sqrt{-z}) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 4$, $b_1 = 6$

$$\begin{aligned}
 & 07.25.03.2173.01 \\
 & {}_2F_2\left(-\frac{11}{2}, 4; 6, 6; z\right) = \\
 & \frac{5120(21z-8)}{29393z^5} + \frac{1}{80826697146195z^5} \left(256e^{z/2}(565760z^{11} - 40784640z^{10} + 1122760704z^9 - 14971911360z^8 + \right. \\
 & \quad 100728067104z^7 - 317235819600z^6 + 342086663520z^5 + 38379693240z^4 + 85088036250z^3 + \\
 & \quad \left. 424665835965z^2 - 1374931057500z + 439977938400\right) I_0\left(\frac{z}{2}\right) - \frac{1}{80826697146195z^4} \\
 & \left(256e^{z/2}(565760z^{10} - 40218880z^9 + 1082824704z^8 - 13908630336z^7 + 87322398240z^6 - 235903240944z^5 + \right. \\
 & \quad \left. 138834914400z^4 + 114733551240z^3 + 183113596890z^2 + 610755252975z - 721215317340\right) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & 07.25.03.2174.01 \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \frac{1}{1091475} \left(e^z(1024z^{10} + 35840z^9 + 403200z^8 + 1612800z^7 + 1411200z^6 - 846720z^5 + 1058400z^4 - \right. \\
 & \quad \left. 1512000z^3 + 1984500z^2 - 1984500z + 1091475)\right)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.2175.01 \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{99225} \\
 & \left(e^z(512z^9 + 16128z^8 + 161280z^7 + 564480z^6 + 423360z^5 - 211680z^4 + 211680z^3 - 226800z^2 + 198450z - 99225)\right)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.2176.01 \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{11025} e^z(256z^8 + 7168z^7 + 62720z^6 + 188160z^5 + 117600z^4 - 47040z^3 + 35280z^2 - 25200z + 11025)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.2177.01 \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{e^z(128z^7 + 3136z^6 + 23520z^5 + 58800z^4 + 29400z^3 - 8820z^2 + 4410z - 1575)}{1575}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.2178.01 \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} e^z(64z^6 + 1344z^5 + 8400z^4 + 16800z^3 + 6300z^2 - 1260z + 315)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.2179.01 \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{105} e^z(32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105)
 \end{aligned}$$

07.25.03.2180.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (16z^4 + 224z^3 + 840z^2 + 840z + 105)$$

07.25.03.2181.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8z^4 + 104z^3 + 376z^2 + 420z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} (2z^4 + 24z^3 + 71z^2 + 44z) I_1\left(\frac{z}{2}\right)$$

07.25.03.2182.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (8z^3 + 84z^2 + 210z + 105)$$

07.25.03.2183.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (8z^3 + 76z^2 + 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 + 68z^2 + 116z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.2184.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{35} e^z (4z^2 + 28z + 35)$$

07.25.03.2185.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 + 24z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4z^3 + 20z^2 + 9z - 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.2186.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (2z + 7)$$

07.25.03.2187.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (4z^2 + 10z - 1) I_0\left(\frac{z}{2}\right)}{35z} + \frac{4 e^{z/2} (4z^3 + 6z^2 - 5z + 4) I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.2188.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = e^z$$

07.25.03.2189.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 - 2z + 3) I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{64 e^{z/2} (z^3 - 2z^2 + 4z - 6) I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.2190.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (8z^3 - 28z^2 + 70z - 105)}{16z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.2191.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32z^{9/2}} - \frac{9 e^{-z} (8z^3 + 28z^2 + 70z + 105)}{16z^4}$$

07.25.03.2192.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^2 - 9z + 24) I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{32 e^{z/2} (2z^3 - 11z^2 + 36z - 96) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.2193.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{2097152\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{11/2}}{33075} + \frac{1}{99225}e^z(2816z^8 + 81664z^7 + 764544z^6 - 3569088z^5 + 543936z^4 - 348336z^3 + 293400z^2 - 220500z + 99225)$$

07.25.03.2194.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{2097152\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{11/2}}{33075} + \frac{1}{99225}e^{-z}(2816z^8 - 81664z^7 + 764544z^6 + 3569088z^5 + 543936z^4 + 348336z^3 + 293400z^2 + 220500z + 99225)$$

07.25.03.2195.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{e^z(-1408z^7 - 37312z^6 + 2819424z^5 + 374832z^4 - 84552z^3 + 47340z^2 - 28350z + 11025)}{11025} - \frac{1048576\sqrt{\pi}z^{11/2}\operatorname{erfi}(\sqrt{z})}{3675}$$

07.25.03.2196.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{e^{-z}(1408z^7 - 37312z^6 - 2819424z^5 + 374832z^4 + 84552z^3 + 47340z^2 + 28350z + 11025)}{11025} - \frac{1048576\sqrt{\pi}z^{11/2}\operatorname{erf}(\sqrt{z})}{3675}$$

07.25.03.2197.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{262144}{525}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{11/2} + \frac{e^z(704z^6 - 769536z^5 - 255408z^4 - 59712z^3 + 12420z^2 - 5040z + 1575)}{1575}$$

07.25.03.2198.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{262144}{525}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{11/2} + \frac{e^{-z}(704z^6 + 769536z^5 - 255408z^4 + 59712z^3 + 12420z^2 + 5040z + 1575)}{1575}$$

07.25.03.2199.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{315}e^z(130720z^5 + 57968z^4 + 40752z^3 + 9480z^2 - 1470z + 315) - \frac{131072}{315}\sqrt{\pi}z^{11/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.2200.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{315} e^{-z} (-130720 z^5 + 57968 z^4 - 40752 z^3 + 9480 z^2 + 1470 z + 315) - \frac{131072}{315} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.2201.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{16384}{105} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2} + \frac{1}{105} e^z (-16384 z^5 - 8016 z^4 - 8944 z^3 - 6960 z^2 - 1260 z + 105)$$

07.25.03.2202.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{16384}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2} + \frac{1}{105} e^{-z} (16384 z^5 - 8016 z^4 + 8944 z^3 - 6960 z^2 + 1260 z + 105)$$

07.25.03.2203.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{525} e^z (8192 z^5 + 4096 z^4 + 5704 z^3 + 8100 z^2 + 5250 z + 525) - \frac{8192}{525} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.2204.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{525} e^{-z} (-8192 z^5 + 4096 z^4 - 5704 z^3 + 8100 z^2 - 5250 z + 525) - \frac{8192}{525} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.2205.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{363825} e^{z/2} (-2097152 z^6 + 1572864 z^5 + 983040 z^4 + 1567860 z^3 + 2399040 z^2 + 1819125 z + 363825) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (2097152 z^6 + 524288 z^5 + 589824 z^4 + 1076340 z^3 + 1476300 z^2 + 642915 z) I_1\left(\frac{z}{2}\right)}{363825}$$

07.25.03.2206.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z (2048 z^5 + 1024 z^4 + 1536 z^3 + 3180 z^2 + 4200 z + 1575)}{1575} - \frac{2048 \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.2207.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-2048 z^5 + 1024 z^4 - 1536 z^3 + 3180 z^2 - 4200 z + 1575)}{1575} - \frac{2048 \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.2208.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{4729725} e^{z/2} (-4194304 z^6 + 3145728 z^5 + 1966080 z^4 + 3440640 z^3 + 7694820 z^2 + 10498950 z + 4729725) I_0\left(\frac{z}{2}\right) + \frac{1}{4729725} e^{z/2} (4194304 z^6 + 1048576 z^5 + 1179648 z^4 + 2457600 z^3 + 5544420 z^2 + 5707170 z + 571725) I_1\left(\frac{z}{2}\right)$$

07.25.03.2209.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (1024 z^5 + 512 z^4 + 768 z^3 + 1920 z^2 + 4410 z + 3675)}{3675} - \frac{1024 \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})}{3675}$$

07.25.03.2210.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(-1024z^5 + 512z^4 - 768z^3 + 1920z^2 - 4410z + 3675)}{3675} - \frac{1024\sqrt{\pi}z^{11/2}\operatorname{erf}(\sqrt{z})}{3675}$$

07.25.03.2211.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, 3; z\right) = \frac{1}{70945875z} \left(4e^{z/2}(4194304z^7 + 1048576z^6 + 1179648z^5 + 2457600z^4 + 7526400z^3 + 15617070z^2 + 5031180z - 1486485)I_1\left(\frac{z}{2}\right) - \frac{1}{70945875} 8e^{z/2}(2097152z^6 - 1572864z^5 - 983040z^4 - 1720320z^3 - 4838400z^2 - 11195415z - 9054045)I_0\left(\frac{z}{2}\right) \right)$$

07.25.03.2212.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{735} e^z(64z^5 + 32z^4 + 48z^3 + 120z^2 + 420z + 735) - \frac{64}{735} \sqrt{\pi}z^{11/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.2213.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{1}{735} e^{-z}(-64z^5 + 32z^4 - 48z^3 + 120z^2 - 420z + 735) - \frac{64}{735} \sqrt{\pi}z^{11/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.2214.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, 4; z\right) = \frac{1}{402026625z^2} \left(4e^{z/2}(8388608z^8 + 2097152z^7 + 2359296z^6 + 4915200z^5 + 15052800z^4 + 60963840z^3 + 54656910z^2 - 40135095z + 29729700)I_1\left(\frac{z}{2}\right) - \frac{1}{402026625z} \left(4e^{z/2}(8388608z^7 - 6291456z^6 - 3932160z^5 - 6881280z^4 - 19353600z^3 - 74511360z^2 - 110540430z + 7432425)I_0\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.2215.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{945} e^z(32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945) - \frac{32}{945} \sqrt{\pi}z^{11/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.2216.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{945} e^{-z}(-32z^5 + 16z^4 - 24z^3 + 60z^2 - 210z + 945) - \frac{32}{945} \sqrt{\pi}z^{11/2}\operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.2217.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, 5; z\right) = \\
 & \frac{1}{7\,638\,505\,875\,z^3} \left(32 e^{z/2} (8\,388\,608 z^9 + 2\,097\,152 z^8 + 2\,359\,296 z^7 + 4\,915\,200 z^6 + 15\,052\,800 z^5 + 60\,963\,840 z^4 + \right. \\
 & \quad \left. 307\,359\,360 z^3 - 545\,539\,995 z^2 + 1\,040\,539\,500 z - 1\,516\,214\,700) I_1\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{7\,638\,505\,875\,z^2} \left(32 e^{z/2} (8\,388\,608 z^8 - 6\,291\,456 z^7 - 3\,932\,160 z^6 - 6\,881\,280 z^5 - 19\,353\,600 z^4 - \right. \right. \\
 & \quad \left. \left. 74\,511\,360 z^3 - 363\,242\,880 z^2 + 260\,134\,875 z - 379\,053\,675) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2218.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{33\,600\,z^4} e^z (512 z^9 + 256 z^8 + 384 z^7 + 960 z^6 + 3360 z^5 + 15\,120 z^4 + 83\,160 z^3 - 291\,060 z^2 + 727\,650 z - 1\,091\,475) + \\
 & \frac{\sqrt{\pi} (1\,091\,475 - 1024 z^{10}) \operatorname{erfi}(\sqrt{z})}{67\,200 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2219.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{33\,600\,z^4} e^{-z} (-512 z^9 + 256 z^8 - 384 z^7 + 960 z^6 - 3360 z^5 + 15\,120 z^4 - 83\,160 z^3 - 291\,060 z^2 - 727\,650 z - 1\,091\,475) + \\
 & \frac{\sqrt{\pi} (1\,091\,475 - 1024 z^{10}) \operatorname{erf}(\sqrt{z})}{67\,200 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2220.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{9}{2}, 6; z\right) = \\
 & \frac{1}{32\,081\,724\,675\,z^4} \left(32 e^{z/2} (16\,777\,216 z^{10} + 4\,194\,304 z^9 + 4\,718\,592 z^8 + 9\,830\,400 z^7 + 30\,105\,600 z^6 + 121\,927\,680 z^5 + \right. \\
 & \quad \left. 614\,718\,720 z^4 + 3\,710\,266\,560 z^3 - 24\,326\,327\,025 z^2 + 83\,391\,808\,500 z - 230\,464\,634\,400) I_1\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{32\,081\,724\,675\,z^3} \left(32 e^{z/2} (16\,777\,216 z^9 - 12\,582\,912 z^8 - 7\,864\,320 z^7 - 13\,762\,560 z^6 - 38\,707\,200 z^5 - \right. \right. \\
 & \quad \left. \left. 149\,022\,720 z^4 - 726\,485\,760 z^3 - 4\,281\,076\,800 z^2 + 20\,847\,952\,125 z - 57\,616\,158\,600) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.2221.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{e^z (2112 z^6 - 4 665 792 z^5 + 987 344 z^4 - 68 576 z^3 + 23 964 z^2 - 11 100 z + 3675)}{3675} + \frac{262 144 \sqrt{\pi} (18 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{3675}$$

07.25.03.2222.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{e^{-z} (2112 z^6 + 4 665 792 z^5 + 987 344 z^4 + 68 576 z^3 + 23 964 z^2 + 11 100 z + 3675)}{3675} + \frac{262 144 \sqrt{\pi} (18 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})}{3675}$$

07.25.03.2223.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{525} e^z (1 178 592 z^5 - 876 784 z^4 - 55 280 z^3 + 6648 z^2 - 2010 z + 525) - \frac{131 072}{525} \sqrt{\pi} (9 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2224.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{525} e^{-z} (-1 178 592 z^5 - 876 784 z^4 + 55 280 z^3 + 6648 z^2 + 2010 z + 525) - \frac{131 072}{525} \sqrt{\pi} (9 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2225.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{105} e^z (-196 608 z^5 + 262 672 z^4 + 44 384 z^3 + 5448 z^2 - 600 z + 105) + \frac{32 768}{105} \sqrt{\pi} (6 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2226.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{105} e^{-z} (196 608 z^5 + 262 672 z^4 - 44 384 z^3 + 5448 z^2 + 600 z + 105) + \frac{32 768}{105} \sqrt{\pi} (6 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2227.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} e^z (73 728 z^5 - 143 360 z^4 - 35 608 z^3 - 13 164 z^2 - 1590 z + 105) - \frac{8192}{105} \sqrt{\pi} (9 z^{11/2} - 22 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2228.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} e^{-z} (-73 728 z^5 - 143 360 z^4 + 35 608 z^3 - 13 164 z^2 + 1590 z + 105) - \frac{8192}{105} \sqrt{\pi} (9 z^{11/2} + 22 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2229.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{525} e^z (-36864 z^5 + 94208 z^4 + 28672 z^3 + 17340 z^2 + 6900 z + 525) + \frac{2048}{525} \sqrt{\pi} (18 z^{11/2} - 55 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2230.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{525} e^{-z} (36864 z^5 + 94208 z^4 - 28672 z^3 + 17340 z^2 - 6900 z + 525) + \frac{2048}{525} \sqrt{\pi} (18 z^{11/2} + 55 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2231.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{363825} e^{z/2} (9437184 z^6 - 38797312 z^5 + 19365888 z^4 + 7127040 z^3 + 4933110 z^2 + 2390850 z + 363825) I_0\left(\frac{z}{2}\right) - \frac{2 e^{z/2} (4718592 z^6 - 14680064 z^5 - 2637824 z^4 - 1695744 z^3 - 1168635 z^2 - 341670 z) I_1\left(\frac{z}{2}\right)}{363825}$$

07.25.03.2232.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1024}{525} \sqrt{\pi} (3z - 11) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{525} e^z (-3072 z^5 + 9728 z^4 + 3328 z^3 + 2688 z^2 + 1950 z + 525)$$

07.25.03.2233.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1024}{525} \sqrt{\pi} (3z + 11) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{525} e^{-z} (3072 z^5 + 9728 z^4 - 3328 z^3 + 2688 z^2 - 1950 z + 525)$$

07.25.03.2234.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{4729725} e^{z/2} (18874368 z^6 - 89128960 z^5 + 47382528 z^4 + 19660800 z^3 + 17955840 z^2 + 14241150 z + 4729725) I_0\left(\frac{z}{2}\right) + \frac{1}{4729725} e^{z/2} (-18874368 z^6 + 70254592 z^5 + 13434880 z^4 + 10027008 z^3 + 10060800 z^2 + 6284670 z + 467775) I_1\left(\frac{z}{2}\right)$$

07.25.03.2235.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{256 \sqrt{\pi} (18z - 77) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{3675} + \frac{e^z (-4608 z^5 + 17408 z^4 + 6400 z^3 + 6144 z^2 + 6720 z + 3675)}{3675}$$

07.25.03.2236.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{256 \sqrt{\pi} (18z + 77) \operatorname{erf}(\sqrt{z}) z^{9/2}}{3675} + \frac{e^{-z} (4608 z^5 + 17408 z^4 - 6400 z^3 + 6144 z^2 - 6720 z + 3675)}{3675}$$

07.25.03.2237.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{23\,648\,625} 4 e^{z/2} (6\,291\,456 z^6 - 33\,554\,432 z^5 + 18\,677\,760 z^4 + 8\,355\,840 z^3 + 9\,139\,200 z^2 + 10\,644\,480 z + 5\,997\,915) I_0\left(\frac{z}{2}\right) - \frac{1}{23\,648\,625 z} \left(4 e^{z/2} (6\,291\,456 z^7 - 27\,262\,976 z^6 - 5\,439\,488 z^5 - 4\,423\,680 z^4 - 5\,606\,400 z^3 - 6\,021\,120 z^2 - 1\,340\,955 z + 343\,035) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.2238.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{32}{735} \sqrt{\pi} (9z - 44) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{735} e^z (-288 z^5 + 1264 z^4 + 488 z^3 + 516 z^2 + 750 z + 735)$$

07.25.03.2239.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{32}{735} \sqrt{\pi} (9z + 44) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{735} e^{-z} (288 z^5 + 1264 z^4 - 488 z^3 + 516 z^2 - 750 z + 735)$$

07.25.03.2240.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{402\,026\,625 z} \left(4 e^{z/2} (37\,748\,736 z^7 - 224\,395\,264 z^6 + 129\,368\,064 z^5 + 60\,948\,480 z^4 + 73\,758\,720 z^3 + 117\,089\,280 z^2 + 107\,110\,080 z - 4\,459\,455) I_0\left(\frac{z}{2}\right)\right) - \frac{1}{402\,026\,625 z^2} \left(4 e^{z/2} (37\,748\,736 z^8 - 186\,646\,528 z^7 - 38\,404\,096 z^6 - 33\,030\,144 z^5 - 47\,155\,200 z^4 - 77\,521\,920 z^3 - 41\,912\,640 z^2 + 26\,413\,695 z - 17\,837\,820) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.2241.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{8}{105} \sqrt{\pi} (2z - 11) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^z (-16 z^5 + 80 z^4 + 32 z^3 + 36 z^2 + 60 z + 105)$$

07.25.03.2242.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{8}{105} \sqrt{\pi} (2z + 11) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105)$$

07.25.03.2243.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{7\,638\,505\,875 z^2} \left(32 e^{z/2} (37\,748\,736 z^8 - 247\,463\,936 z^7 + 146\,669\,568 z^6 + 71\,761\,920 z^5 + 92\,682\,240 z^4 + 170\,311\,680 z^3 + 312\,016\,320 z^2 - 142\,702\,560 z + 200\,675\,475) I_0\left(\frac{z}{2}\right)\right) - \frac{1}{7\,638\,505\,875 z^3} \left(128 e^{z/2} (9\,437\,184 z^9 - 52\,428\,800 z^8 - 11\,042\,816 z^7 - 9\,879\,552 z^6 - 15\,168\,000 z^5 - 29\,729\,280 z^4 - 52\,390\,800 z^3 + 79\,584\,120 z^2 - 142\,702\,560 z + 200\,675\,475) I_1\left(\frac{z}{2}\right)\right)$$

$$\begin{aligned}
 & \text{07.25.03.2244.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{67200z^4} \left(e^z (-4608z^9 + 25856z^8 + 10624z^7 + 12480z^6 + 22560z^5 + 48720z^4 + 83160z^3 - 291060z^2 + \right. \\
 & \left. 727650z - 1091475) \right) + \frac{\sqrt{\pi} (9216z^{10} - 56320z^9 + 1091475) \operatorname{erfi}(\sqrt{z})}{134400z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2245.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{67200z^4} \\
 & e^{-z} (4608z^9 + 25856z^8 - 10624z^7 + 12480z^6 - 22560z^5 + 48720z^4 - 83160z^3 - 291060z^2 - 727650z - 1091475) + \\
 & \frac{\sqrt{\pi} (9216z^{10} + 56320z^9 + 1091475) \operatorname{erf}(\sqrt{z})}{134400z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2246.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{7}{2}, 6; z\right) = \\
 & \frac{1}{10693908225z^3} \left(32e^{z/2} (25165824z^9 - 180355072z^8 + 109314048z^7 + 55050240z^6 + 74403840z^5 + \right. \\
 & \left. 149022720z^4 + 344615040z^3 + 570810240z^2 - 3143915775z + 9097288200) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{10693908225z^4} \left(32e^{z/2} (25165824z^{10} - 155189248z^9 - 33292288z^8 - 30670848z^7 - 49459200z^6 - \right. \right. \\
 & \left. \left. 106874880z^5 - 251475840z^4 - 351267840z^3 + 3420401985z^2 - 12575663100z + 36389152800) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.2247.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{75} e^z (-294912z^5 + 573968z^4 - 51344z^3 + 1968z^2 - 372z + 75) + \frac{2048}{75} \sqrt{\pi} (144z^{11/2} - 352z^{9/2} + 99z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2248.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \\
 & \frac{1}{75} e^{-z} (294912z^5 + 573968z^4 + 51344z^3 + 1968z^2 + 372z + 75) + \frac{2048}{75} \sqrt{\pi} (144z^{11/2} + 352z^{9/2} + 99z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2249.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \\
 & \frac{1}{15} e^z (49152z^5 - 155648z^4 + 47864z^3 + 1740z^2 - 114z + 15) - \frac{1024}{15} \sqrt{\pi} (48z^{11/2} - 176z^{9/2} + 99z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.2250.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-49\,152 z^5 - 155\,648 z^4 - 47\,864 z^3 + 1740 z^2 + 114 z + 15) - \frac{1024}{15} \sqrt{\pi} (48 z^{11/2} + 176 z^{9/2} + 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2251.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (-18\,432 z^5 + 80\,896 z^4 - 44\,800 z^3 - 4596 z^2 - 312 z + 15) + \frac{256}{15} \sqrt{\pi} (72 z^{11/2} - 352 z^{9/2} + 297 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2252.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (18\,432 z^5 + 80\,896 z^4 + 44\,800 z^3 - 4596 z^2 + 312 z + 15) + \frac{256}{15} \sqrt{\pi} (72 z^{11/2} + 352 z^{9/2} + 297 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2253.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{75} e^z (9216 z^5 - 51\,712 z^4 + 42\,112 z^3 + 6720 z^2 + 1410 z + 75) - \frac{128}{75} \sqrt{\pi} (72 z^{11/2} - 440 z^{9/2} + 495 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2254.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{75} e^{-z} (-9216 z^5 - 51\,712 z^4 - 42\,112 z^3 + 6720 z^2 - 1410 z + 75) - \frac{128}{75} \sqrt{\pi} (72 z^{11/2} + 440 z^{9/2} + 495 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2255.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{51\,975} e^{z/2} (-2\,359\,296 z^6 + 17\,629\,184 z^5 - 30\,861\,312 z^4 + 9\,555\,456 z^3 + 1\,842\,240 z^2 + 488\,565 z + 51\,975) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (2\,359\,296 z^6 - 15\,269\,888 z^5 + 16\,771\,072 z^4 + 1\,939\,968 z^3 + 586\,176 z^2 + 105\,045 z) I_1\left(\frac{z}{2}\right)}{51\,975}$$

07.25.03.2256.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{75} e^z (768 z^5 - 5248 z^4 + 5680 z^3 + 1176 z^2 + 420 z + 75) - \frac{16}{75} \sqrt{\pi} z^{7/2} (48 z^2 - 352 z + 495) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2257.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{75} e^{-z} (-768 z^5 - 5248 z^4 - 5680 z^3 + 1176 z^2 - 420 z + 75) - \frac{16}{75} \sqrt{\pi} z^{7/2} (48 z^2 + 352 z + 495) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2258.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{675675} e^{z/2} (-4718592z^6 + 41025536z^5 - 83890176z^4 + 29789184z^3 + 7317120z^2 + 2993760z + 675675) I_0\left(\frac{z}{2}\right) + \frac{1}{675675} e^{z/2} (4718592z^6 - 36306944z^5 + 49942528z^4 + 6718464z^3 + 2811264z^2 + 1001760z + 51975) I_1\left(\frac{z}{2}\right)$$

07.25.03.2259.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{525} e^z (1152z^5 - 9280z^4 + 12568z^3 + 3084z^2 + 1554z + 525) - \frac{8}{525} \sqrt{\pi} z^{7/2} (144z^2 - 1232z + 2079) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2260.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{525} e^{-z} (-1152z^5 - 9280z^4 - 12568z^3 + 3084z^2 - 1554z + 525) - \frac{8}{525} \sqrt{\pi} z^{7/2} (144z^2 + 1232z + 2079) \operatorname{erf}(\sqrt{z})$$

07.25.03.2261.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, 3; z\right) = \frac{1}{3378375z} 4e^{z/2} (1572864z^7 - 14024704z^6 + 23195648z^5 + 3456000z^4 + 1787520z^3 + 1002720z^2 + 145530z - 31185) I_1\left(\frac{z}{2}\right) - \frac{1}{3378375} 8e^{z/2} (786432z^6 - 7798784z^5 + 18216960z^4 - 7150080z^3 - 2078400z^2 - 1164240z - 426195) I_0\left(\frac{z}{2}\right)$$

07.25.03.2262.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{105} e^z (72z^5 - 668z^4 + 1088z^3 + 300z^2 + 192z + 105) - \frac{2}{105} \sqrt{\pi} z^{7/2} (36z^2 - 352z + 693) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2263.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{105} e^{-z} (-72z^5 - 668z^4 - 1088z^3 + 300z^2 - 192z + 105) - \frac{2}{105} \sqrt{\pi} z^{7/2} (36z^2 + 352z + 693) \operatorname{erf}(\sqrt{z})$$

07.25.03.2264.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, 4; z\right) = \frac{1}{57432375z^2} \left(4e^{z/2} (9437184z^8 - 95682560z^7 + 184950784z^6 + 29657088z^5 + 17652480z^4 + 13830720z^3 + 4365900z^2 - 2276505z + 1372140) I_1\left(\frac{z}{2}\right) - \frac{1}{57432375z} \left(4e^{z/2} (9437184z^7 - 105119744z^6 + 275914752z^5 - 116889600z^4 - 38288640z^3 - 27276480z^2 - 14927220z + 343035) I_0\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.2265.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{15} e^z (4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) - \frac{1}{15} \sqrt{\pi} z^{7/2} (4z^2 - 44z + 99) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2266.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{15} e^{-z} (-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) - \frac{1}{15} \sqrt{\pi} z^{7/2} (4z^2 + 44z + 99) \operatorname{erf}(\sqrt{z})$$

07.25.03.2267.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, 5; z\right) = \frac{1}{1091215125z^3} \left(32e^{z/2} (9437184z^9 - 107216896z^8 + 237215744z^7 + 40200192z^6 + 26404608z^5 + 25446720z^4 + 19501020z^3 - 24106005z^2 + 39792060z - 53513460) I_1\left(\frac{z}{2}\right) - \frac{1}{1091215125z^2} \left(32e^{z/2} (9437184z^8 - 116654080z^7 + 339714048z^6 - 152844288z^5 - 54677760z^4 - 45904320z^3 - 39708900z^2 + 9948015z - 13378365) I_0\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.2268.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{153600z^4} \left(e^z (18432z^9 - 216064z^8 + 471424z^7 + 150720z^6 + 126240z^5 + 135120z^4 + 83160z^3 - 291060z^2 + 153600z - 1091475) + \frac{\sqrt{\pi} (-36864z^{10} + 450560z^9 - 1140480z^8 + 1091475) \operatorname{erfi}(\sqrt{z})}{307200z^{9/2}} \right)$$

07.25.03.2269.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{153600z^4} \left(e^{-z} (-18432z^9 - 216064z^8 - 471424z^7 + 150720z^6 - 126240z^5 + 135120z^4 - 83160z^3 - 291060z^2 - 153600z + 1091475) + \frac{\sqrt{\pi} (-36864z^{10} - 450560z^9 - 1140480z^8 + 1091475) \operatorname{erf}(\sqrt{z})}{307200z^{9/2}} \right)$$

$$\begin{aligned}
 & \text{07.25.03.2270.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{5}{2}, 6; z\right) = \\
 & \frac{1}{1527701175z^4} \left(32e^{z/2} (6291456z^{10} - 79167488z^9 + 197312512z^8 + 34910208z^7 + 24654336z^6 + \right. \\
 & \quad \left. 27242880z^5 + 30852360z^4 + 810810z^3 - 168430185z^2 + 695674980z - 2140538400) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{1527701175z^3} \left(32e^{z/2} (6291456z^9 - 85458944z^8 + 273334272z^7 - 129110016z^6 - 49405440z^5 - \right. \\
 & \quad \left. 46569600z^4 - 52972920z^3 - 25384590z^2 + 173918745z - 535134600) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.2271.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \\
 & \frac{1}{3} e^z (-8192z^5 + 40960z^4 - 34304z^3 + 1668z^2 - 36z + 3) + \frac{256}{3} \sqrt{\pi} (32z^{11/2} - 176z^{9/2} + 198z^{7/2} - 33z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2272.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \\
 & \frac{1}{3} e^{-z} (8192z^5 + 40960z^4 + 34304z^3 + 1668z^2 + 36z + 3) + \frac{256}{3} \sqrt{\pi} (32z^{11/2} + 176z^{9/2} + 198z^{7/2} + 33z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2273.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{3} e^z (3072z^5 - 20992z^4 + 29056z^3 - 4800z^2 - 102z + 3) - \frac{128}{3} \sqrt{\pi} (24z^{11/2} - 176z^{9/2} + 297z^{7/2} - 99z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2274.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \\
 & \frac{1}{3} e^{-z} (-3072z^5 - 20992z^4 - 29056z^3 - 4800z^2 + 102z + 3) - \frac{128}{3} \sqrt{\pi} (24z^{11/2} + 176z^{9/2} + 297z^{7/2} + 99z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2275.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \\
 & \frac{1}{15} e^z (-1536z^5 + 13312z^4 - 25792z^3 + 7680z^2 + 480z + 15) + \frac{32}{15} \sqrt{\pi} (48z^{11/2} - 440z^{9/2} + 990z^{7/2} - 495z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2276.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \\
 & \frac{1}{15} e^{-z} (1536z^5 + 13312z^4 + 25792z^3 + 7680z^2 - 480z + 15) + \frac{32}{15} \sqrt{\pi} (48z^{11/2} + 440z^{9/2} + 990z^{7/2} + 495z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.2277.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; 1; z\right) = \frac{1}{10395} e^{z/2} (393\,216 z^6 - 4\,259\,840 z^5 + 12\,825\,600 z^4 - 11\,845\,632 z^3 + 2\,031\,648 z^2 + 166\,320 z + 10\,395) I_0\left(\frac{z}{2}\right) - \frac{16 e^{z/2} (24\,576 z^6 - 241\,664 z^5 + 572\,224 z^4 - 264\,384 z^3 - 16\,158 z^2 - 1443 z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.2278.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{8}{15} \sqrt{\pi} (16 z^3 - 176 z^2 + 495 z - 330) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{15} e^z (-128 z^5 + 1344 z^4 - 3352 z^3 + 1476 z^2 + 150 z + 15)$$

07.25.03.2279.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{8}{15} \sqrt{\pi} (16 z^3 + 176 z^2 + 495 z + 330) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{15} e^{-z} (128 z^5 + 1344 z^4 + 3352 z^3 + 1476 z^2 - 150 z + 15)$$

07.25.03.2280.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{135\,135} e^{z/2} (786\,432 z^6 - 9\,961\,472 z^5 + 35\,653\,632 z^4 - 39\,742\,464 z^3 + 8\,591\,424 z^2 + 1\,045\,440 z + 135\,135) I_0\left(\frac{z}{2}\right) + \frac{1}{135\,135} e^{z/2} (-786\,432 z^6 + 9\,175\,040 z^5 - 26\,871\,808 z^4 + 16\,671\,744 z^3 + 1\,361\,856 z^2 + 228\,864 z + 7425) I_1\left(\frac{z}{2}\right)$$

07.25.03.2281.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{2}{105} \sqrt{\pi} (96 z^3 - 1232 z^2 + 4158 z - 3465) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{105} e^z (-192 z^5 + 2368 z^4 - 7228 z^3 + 4260 z^2 + 588 z + 105)$$

07.25.03.2282.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{2}{105} \sqrt{\pi} (96 z^3 + 1232 z^2 + 4158 z + 3465) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{105} e^{-z} (192 z^5 + 2368 z^4 + 7228 z^3 + 4260 z^2 - 588 z + 105)$$

07.25.03.2283.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, 3; z\right) = \frac{1}{675\,675} 4 e^{z/2} (262\,144 z^6 - 3\,801\,088 z^5 + 15\,759\,360 z^4 - 20\,490\,240 z^3 + 5\,234\,880 z^2 + 839\,520 z + 169\,785) I_0\left(\frac{z}{2}\right) - \frac{1}{675\,675} 4 e^{z/2} (262\,144 z^7 - 3\,538\,944 z^6 + 12\,351\,488 z^5 - 9\,646\,080 z^4 - 955\,200 z^3 - 238\,560 z^2 - 20\,295 z + 3465) I_1\left(\frac{z}{2}\right)$$

07.25.03.2284.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{21} \sqrt{\pi} (12z^3 - 176z^2 + 693z - 693) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{21} e^z (-12z^5 + 170z^4 - 614z^3 + 456z^2 + 78z + 21)$$

07.25.03.2285.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{21} \sqrt{\pi} (12z^3 + 176z^2 + 693z + 693) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{21} e^{-z} (12z^5 + 170z^4 + 614z^3 + 456z^2 - 78z + 21)$$

07.25.03.2286.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{11486475z} \left(4 e^{z/2} (1572864z^7 - 25690112z^6 + 121049088z^5 - 179374080z^4 + 52022400z^3 + 10264320z^2 + 2931390z - 31185) I_0\left(\frac{z}{2}\right) - \frac{1}{11486475z^2} \left(4 e^{z/2} (1572864z^8 - 24117248z^7 + 97718272z^6 - 92141568z^5 - 10462080z^4 - 3469440z^3 - 585090z^2 + 239085z - 124740) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.2287.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{36} \sqrt{\pi} (8z^3 - 132z^2 + 594z - 693) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{18} e^z (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18)$$

07.25.03.2288.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{36} \sqrt{\pi} (8z^3 + 132z^2 + 594z + 693) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{18} e^{-z} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18)$$

07.25.03.2289.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, 5; z\right) = \frac{1}{218243025z^2} \left(32 e^{z/2} (1572864z^8 - 28573696z^7 + 150786048z^6 - 250404864z^5 + 80238720z^4 + 18532800z^3 + 7338870z^2 - 810810z + 1029105) I_0\left(\frac{z}{2}\right) - \frac{1}{218243025z^3} \left(64 e^{z/2} (786432z^9 - 13500416z^8 + 62285824z^7 - 68880384z^6 - 8660928z^5 - 3514080z^4 - 1177605z^3 + 1101870z^2 - 1621620z + 2058210) I_1\left(\frac{z}{2}\right)\right)\right)$$

$$\begin{aligned}
 & \text{07.25.03.2290.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{61\,440 z^4} \left(e^z (-6144 z^9 + 109\,568 z^8 - 518\,528 z^7 + 548\,160 z^6 + 123\,360 z^5 + 58\,800 z^4 + 11\,880 z^3 - 41\,580 z^2 + \right. \\
 & \left. 103\,950 z - 155\,925) \right) + \frac{\sqrt{\pi} (12\,288 z^{10} - 225\,280 z^9 + 1\,140\,480 z^8 - 1\,520\,640 z^7 + 155\,925) \operatorname{erfi}(\sqrt{z})}{122\,880 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2291.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{61\,440 z^4} \left(e^{-z} (6144 z^9 + 109\,568 z^8 + 518\,528 z^7 + 548\,160 z^6 - 123\,360 z^5 + 58\,800 z^4 - 11\,880 z^3 - 41\,580 z^2 - \right. \\
 & \left. 103\,950 z - 155\,925) \right) + \frac{\sqrt{\pi} (12\,288 z^{10} + 225\,280 z^9 + 1\,140\,480 z^8 + 1\,520\,640 z^7 + 155\,925) \operatorname{erf}(\sqrt{z})}{122\,880 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2292.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{3}{2}, 6; z\right) = \\
 & \frac{1}{305\,540\,235 z^3} \left(32 e^{z/2} (1\,048\,576 z^9 - 20\,971\,520 z^8 + 122\,511\,360 z^7 - 225\,103\,872 z^6 + 78\,183\,168 z^5 + \right. \\
 & \left. 20\,401\,920 z^4 + 10\,381\,140 z^3 + 935\,550 z^2 - 10\,634\,085 z + 35\,675\,640) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{305\,540\,235 z^4} \left(32 e^{z/2} (1\,048\,576 z^{10} - 19\,922\,944 z^9 + 103\,112\,704 z^8 - 130\,904\,064 z^7 - 17\,810\,688 z^6 - \right. \right. \\
 & \left. \left. 8\,375\,808 z^5 - 4\,255\,020 z^4 + 2\,002\,770 z^3 + 8\,201\,655 z^2 - 42\,536\,340 z + 142\,702\,560) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.2293.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (-1152 z^5 + 10\,688 z^4 - 23\,744 z^3 + 11\,040 z^2 - 300 z + 3) + \\
 & \frac{4}{3} \sqrt{\pi} (288 z^{11/2} - 2816 z^{9/2} + 7128 z^{7/2} - 4752 z^{5/2} + 495 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2294.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (1152 z^5 + 10\,688 z^4 + 23\,744 z^3 + 11\,040 z^2 + 300 z + 3) + \\
 & \frac{4}{3} \sqrt{\pi} (288 z^{11/2} + 2816 z^{9/2} + 7128 z^{7/2} + 4752 z^{5/2} + 495 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2295.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (576 z^5 - 6752 z^4 + 20\,672 z^3 - 16\,080 z^2 + 1470 z + 15) - \\
 & \frac{2}{15} \sqrt{\pi} (288 z^{11/2} - 3520 z^{9/2} + 11\,880 z^{7/2} - 11\,880 z^{5/2} + 2475 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.2296.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-576 z^5 - 6752 z^4 - 20672 z^3 - 16080 z^2 - 1470 z + 15) - \frac{2}{15} \sqrt{\pi} (288 z^{11/2} + 3520 z^{9/2} + 11880 z^{7/2} + 11880 z^{5/2} + 2475 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2297.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{10395} e^{z/2} (-147456 z^6 + 2093056 z^5 - 8944896 z^4 + 13618752 z^3 - 6630852 z^2 + 509355 z + 10395) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (147456 z^6 - 1945600 z^5 + 7073024 z^4 - 7371072 z^3 + 1311492 z^2 + 26553 z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.2298.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (48 z^5 - 680 z^4 + 2654 z^3 - 2913 z^2 + 480 z + 15) - \frac{1}{30} \sqrt{\pi} z^{3/2} (96 z^4 - 1408 z^3 + 5940 z^2 - 7920 z + 2475) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2299.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-48 z^5 - 680 z^4 - 2654 z^3 - 2913 z^2 - 480 z + 15) - \frac{1}{30} \sqrt{\pi} z^{3/2} (96 z^4 + 1408 z^3 + 5940 z^2 + 7920 z + 2475) \operatorname{erf}(\sqrt{z})$$

07.25.03.2300.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{135135} e^{z/2} (-294912 z^6 + 4907008 z^5 - 25121280 z^4 + 46972032 z^3 - 29325576 z^2 + 3275910 z + 135135) I_0\left(\frac{z}{2}\right) + \frac{1}{135135} e^{z/2} (294912 z^6 - 4612096 z^5 + 20656640 z^4 - 28326528 z^3 + 7636872 z^2 + 275394 z + 4455) I_1\left(\frac{z}{2}\right)$$

07.25.03.2301.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{210} e^z (144 z^5 - 2392 z^4 + 11350 z^3 - 16131 z^2 + 3948 z + 210) - \frac{1}{420} \sqrt{\pi} z^{3/2} (288 z^4 - 4928 z^3 + 24948 z^2 - 41580 z + 17325) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2302.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{210} e^{-z} (-144 z^5 - 2392 z^4 - 11350 z^3 - 16131 z^2 - 3948 z + 210) - \frac{1}{420} \sqrt{\pi} z^{3/2} (288 z^4 + 4928 z^3 + 24948 z^2 + 41580 z + 17325) \operatorname{erf}(\sqrt{z})$$

07.25.03.2303.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, 3; z\right) = \frac{1}{675675z} 4 e^{z/2} (98304 z^7 - 1777664 z^6 + 9461248 z^5 - 16099200 z^4 + 5864280 z^3 + 298950 z^2 + 11880 z - 1485) I_1\left(\frac{z}{2}\right) - \frac{1}{675675} 8 e^{z/2} (49152 z^6 - 937984 z^5 + 5594880 z^4 - 12384960 z^3 + 9351660 z^2 - 1349865 z - 84645) I_0\left(\frac{z}{2}\right)$$

07.25.03.2304.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{336} e^z (72 z^5 - 1372 z^4 + 7666 z^3 - 13395 z^2 + 4416 z + 336) - \frac{1}{672} \sqrt{\pi} z^{3/2} (144 z^4 - 2816 z^3 + 16632 z^2 - 33264 z + 17325) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2305.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{336} e^{-z} (-72 z^5 - 1372 z^4 - 7666 z^3 - 13395 z^2 - 4416 z + 336) - \frac{1}{672} \sqrt{\pi} z^{3/2} (144 z^4 + 2816 z^3 + 16632 z^2 + 33264 z + 17325) \operatorname{erf}(\sqrt{z})$$

07.25.03.2306.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, 4; z\right) = \frac{1}{11486475 z^2} \left(4 e^{z/2} (589824 z^8 - 12107776 z^7 + 74654720 z^6 - 151743744 z^5 + 69949200 z^4 + 4544580 z^3 + 329670 z^2 - 96525 z + 41580) I_1\left(\frac{z}{2}\right) - \frac{1}{11486475 z} \left(4 e^{z/2} (589824 z^7 - 12697600 z^6 + 86467584 z^5 - 220934400 z^4 + 194630160 z^3 - 34018380 z^2 - 2895750 z + 10395) I_0\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.2307.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{96} e^z (8 z^5 - 172 z^4 + 1106 z^3 - 2295 z^2 + 960 z + 96) - \frac{1}{192} \sqrt{\pi} z^{3/2} (16 z^4 - 352 z^3 + 2376 z^2 - 5544 z + 3465) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2308.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{96} e^{-z} (-8 z^5 - 172 z^4 - 1106 z^3 - 2295 z^2 - 960 z + 96) - \frac{1}{192} \sqrt{\pi} z^{3/2} (16 z^4 + 352 z^3 + 2376 z^2 + 5544 z + 3465) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.2309.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, 5; z\right) = \\
 & \frac{1}{218243025 z^3} \left(32 e^{z/2} (589824 z^9 - 13549568 z^8 + 94974976 z^7 - 224531712 z^6 + 125545488 z^5 + \right. \\
 & \quad \left. 9766500 z^4 + 1211760 z^3 - 767745 z^2 + 956340 z - 1122660) I_1\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{218243025 z^2} \left(32 e^{z/2} (589824 z^8 - 14139392 z^7 + 108229632 z^6 - 313321728 z^5 + 314296080 z^4 - \right. \right. \\
 & \quad \left. \left. 63813420 z^3 - 7003260 z^2 + 239085 z - 280665) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2310.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{245760 z^4} \left(e^z (9216 z^9 - 220672 z^8 + 1604992 z^7 - 3858240 z^6 + 1966560 z^5 + 243120 z^4 + 11880 z^3 - \right. \\
 & \quad \left. 41580 z^2 + 103950 z - 155925) \right) + \\
 & \frac{\sqrt{\pi} (-18432 z^{10} + 450560 z^9 - 3421440 z^8 + 9123840 z^7 - 6652800 z^6 + 155925) \operatorname{erfi}(\sqrt{z})}{491520 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2311.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{245760 z^4} \left(e^{-z} (-9216 z^9 - 220672 z^8 - 1604992 z^7 - 3858240 z^6 - 1966560 z^5 + 243120 z^4 - 11880 z^3 - \right. \\
 & \quad \left. 41580 z^2 - 103950 z - 155925) \right) + \\
 & \frac{\sqrt{\pi} (-18432 z^{10} - 450560 z^9 - 3421440 z^8 - 9123840 z^7 - 6652800 z^6 + 155925) \operatorname{erf}(\sqrt{z})}{491520 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2312.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; -\frac{1}{2}, 6; z\right) = \\
 & \frac{1}{305540235 z^4} \left(32 e^{z/2} (393216 z^{10} - 9994240 z^9 + 78485504 z^8 - 211594752 z^7 + 139312992 z^6 + \right. \\
 & \quad \left. 12450648 z^5 + 2286900 z^4 - 1288980 z^3 - 862785 z^2 + 8607060 z - 32931360) I_1\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{305540235 z^3} \left(32 e^{z/2} (393216 z^9 - 10387456 z^8 + 88283136 z^7 - 285476352 z^6 + 320430432 z^5 - \right. \right. \\
 & \quad \left. \left. 73430280 z^4 - 9937620 z^3 + 41580 z^2 + 2151765 z - 8232840) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{1}{2}$

07.25.03.2313.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{75} e^z (-288 z^5 + 4256 z^4 - 17816 z^3 + 22560 z^2 - 6015 z + 75) + \frac{1}{150} \sqrt{\pi} (576 z^{11/2} - 8800 z^{9/2} + 39600 z^{7/2} - 59400 z^{5/2} + 24750 z^{3/2} - 1485 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2314.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{75} e^{-z} (288 z^5 + 4256 z^4 + 17816 z^3 + 22560 z^2 + 6015 z + 75) + \frac{1}{150} \sqrt{\pi} (576 z^{11/2} + 8800 z^{9/2} + 39600 z^{7/2} + 59400 z^{5/2} + 24750 z^{3/2} + 1485 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2315.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{51975} e^{z/2} (73728 z^6 - 1294336 z^5 + 7167360 z^4 - 15161280 z^3 + 11856090 z^2 - 2598750 z + 51975) I_0\left(\frac{z}{2}\right) - \frac{2 e^{z/2} (36864 z^6 - 610304 z^5 + 2991808 z^4 - 4857120 z^3 + 2071725 z^2 - 92370 z) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.2316.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{150} e^z (-48 z^5 + 856 z^4 - 4546 z^3 + 7995 z^2 - 3615 z + 150) + \frac{1}{300} \sqrt{\pi} \sqrt{z} (96 z^5 - 1760 z^4 + 9900 z^3 - 19800 z^2 + 12375 z - 1485) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2317.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{150} e^{-z} (48 z^5 + 856 z^4 + 4546 z^3 + 7995 z^2 + 3615 z + 150) + \frac{1}{300} \sqrt{\pi} \sqrt{z} (96 z^5 + 1760 z^4 + 9900 z^3 + 19800 z^2 + 12375 z + 1485) \operatorname{erf}(\sqrt{z})$$

07.25.03.2318.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{675675} e^{z/2} (147456 z^6 - 3039232 z^5 + 20248320 z^4 - 53111040 z^3 + 53876820 z^2 - 17062650 z + 675675) I_0\left(\frac{z}{2}\right) + \frac{1}{675675} e^{z/2} (-147456 z^6 + 2891776 z^5 - 17430272 z^4 + 36979200 z^3 - 23181780 z^2 + 2060070 z + 7425) I_1\left(\frac{z}{2}\right)$$

07.25.03.2319.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (-288 z^5 + 6016 z^4 - 38716 z^3 + 87240 z^2 - 56175 z + 4200)}{4200} + \frac{\sqrt{\pi} \sqrt{z} (576 z^5 - 12320 z^4 + 83160 z^3 - 207900 z^2 + 173250 z - 31185) \operatorname{erfi}(\sqrt{z})}{8400}$$

07.25.03.2320.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(288z^5 + 6016z^4 + 38716z^3 + 87240z^2 + 56175z + 4200)}{4200} + \frac{\sqrt{\pi} \sqrt{z} (576z^5 + 12320z^4 + 83160z^3 + 207900z^2 + 173250z + 31185) \operatorname{erf}(\sqrt{z})}{8400}$$

07.25.03.2321.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, 3; z\right) = \frac{1}{3378375} 4 e^{z/2} (49152z^6 - 1163264z^5 + 9058560z^4 - 28341120z^3 + 35173500z^2 - 14362920z + 844965) I_0\left(\frac{z}{2}\right) - \frac{1}{3378375z} 4 e^{z/2} (49152z^7 - 1114112z^6 + 7969024z^5 - 20880000z^4 + 17317500z^3 - 2359020z^2 - 19305z + 1485) I_1\left(\frac{z}{2}\right)$$

07.25.03.2322.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z(-72z^5 + 1724z^4 - 13034z^3 + 35835z^2 - 30090z + 3360)}{3360} + \frac{\sqrt{\pi} \sqrt{z} (144z^5 - 3520z^4 + 27720z^3 - 83160z^2 + 86625z - 20790) \operatorname{erfi}(\sqrt{z})}{6720}$$

07.25.03.2323.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(72z^5 + 1724z^4 + 13034z^3 + 35835z^2 + 30090z + 3360)}{3360} + \frac{\sqrt{\pi} \sqrt{z} (144z^5 + 3520z^4 + 27720z^3 + 83160z^2 + 86625z + 20790) \operatorname{erf}(\sqrt{z})}{6720}$$

07.25.03.2324.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, 4; z\right) = \frac{1}{57432375z} (4 e^{z/2} (294912z^7 - 7880704z^6 + 70233600z^5 - 255160320z^4 + 373506600z^3 - 184989420z^2 + 14380740z - 7425) I_0\left(\frac{z}{2}\right) - \frac{1}{57432375z^2} (4 e^{z/2} (294912z^8 - 7585792z^7 + 62795264z^6 - 195863040z^5 + 202377000z^4 - 37620420z^3 - 516780z^2 + 90585z - 29700) I_1\left(\frac{z}{2}\right))$$

07.25.03.2325.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z(-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920)}{1920} + \frac{\sqrt{\pi} \sqrt{z} (32z^5 - 880z^4 + 7920z^3 - 27720z^2 + 34650z - 10395) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.2326.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \frac{\sqrt{\pi} \sqrt{z} (32z^5 + 880z^4 + 7920z^3 + 27720z^2 + 34650z + 10395) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.2327.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, 5; z\right) = \frac{1}{1091215125z^2} \left(32e^{z/2}(294912z^8 - 8781824z^7 + 88143360z^6 - 364604160z^5 + 613905000z^4 - 355081320z^3 + 34250040z^2 - 148500z + 155925)I_0\left(\frac{z}{2}\right) - \frac{1}{1091215125z^3} \left(128e^{z/2}(73728z^9 - 2121728z^8 + 19950976z^7 - 72187200z^6 + 89373210z^5 - 21211680z^4 - 441045z^3 + 154440z^2 - 148500z + 155925)I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.2328.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{2457600z^4} \left(e^z(-9216z^9 + 276992z^8 - 2717312z^7 + 10173120z^6 - 12600480z^5 + 2454960z^4 + 11880z^3 - 41580z^2 + 103950z - 155925)\right) + \frac{1}{4915200z^{9/2}} \sqrt{\pi} (18432z^{10} - 563200z^9 + 5702400z^8 - 22809600z^7 + 33264000z^6 - 11975040z^5 + 155925) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2329.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{2457600z^4} \left(e^{-z}(9216z^9 + 276992z^8 + 2717312z^7 + 10173120z^6 + 12600480z^5 + 2454960z^4 - 11880z^3 - 41580z^2 - 103950z - 155925)\right) + \frac{1}{4915200z^{9/2}} \sqrt{\pi} (18432z^{10} + 563200z^9 + 5702400z^8 + 22809600z^7 + 33264000z^6 + 11975040z^5 + 155925) \operatorname{erf}(\sqrt{z})$$

07.25.03.2330.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{1}{2}, 6; z\right) = \frac{1}{1527701175z^3} \left(32e^{z/2}(196608z^9 - 6455296z^8 + 72053760z^7 - 334279680z^6 + 635683440z^5 - 418544280z^4 + 48108060z^3 - 207900z^2 - 779625z + 3742200)I_0\left(\frac{z}{2}\right) - \frac{1}{1527701175z^4} \left(32e^{z/2}(196608z^{10} - 6258688z^9 + 65893376z^8 - 271319040z^7 + 391666800z^6 - 113646120z^5 - 3284820z^4 + 1372140z^3 - 363825z^2 - 3118500z + 14968800)I_1\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 1$

07.25.03.2331.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; 1, \frac{3}{2}; z\right) = \frac{e^{z/2} (6144 z^6 - 128512 z^5 + 874128 z^4 - 2364540 z^3 + 2521380 z^2 - 883575 z + 51975) I_0\left(\frac{z}{2}\right) + e^{z/2} (-6144 z^6 + 122368 z^5 - 754832 z^4 + 1664748 z^3 - 1130880 z^2 + 132765 z) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.2332.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; 1, \frac{5}{2}; z\right) = \frac{e^{z/2} (9216 z^6 - 223744 z^5 + 1804872 z^4 - 5943336 z^3 + 7989240 z^2 - 3783780 z + 363825) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (2304 z^6 - 53632 z^5 + 398738 z^4 - 1111608 z^3 + 1038639 z^2 - 202020 z) I_1\left(\frac{z}{2}\right)}{363825}$$

07.25.03.2333.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; 1, \frac{7}{2}; z\right) = \frac{e^{z/2} (576 z^6 - 15920 z^5 + 148560 z^4 - 576372 z^3 + 932568 z^2 - 550935 z + 72765) I_0\left(\frac{z}{2}\right) + e^{z/2} (-576 z^6 + 15344 z^5 - 133504 z^4 + 449964 z^3 - 535812 z^2 + 147063 z) I_1\left(\frac{z}{2}\right)}{72765}$$

07.25.03.2334.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; 1, \frac{9}{2}; z\right) = \frac{e^{z/2} (32 z^6 - 992 z^5 + 10512 z^4 - 46944 z^3 + 88674 z^2 - 62370 z + 10395) I_0\left(\frac{z}{2}\right) - 2 e^{z/2} (16 z^6 - 480 z^5 + 4784 z^4 - 18912 z^3 + 27387 z^2 - 9762 z) I_1\left(\frac{z}{2}\right)}{10395}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{3}{2}$

07.25.03.2335.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (-128 z^5 + 2752 z^4 - 18488 z^3 + 44772 z^2 - 33510 z + 4305)}{4800} + \frac{\sqrt{\pi} (256 z^6 - 5632 z^5 + 39600 z^4 - 105600 z^3 + 99000 z^2 - 23760 z + 495) \operatorname{erfi}(\sqrt{z})}{9600 \sqrt{z}}$$

07.25.03.2336.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (128 z^5 + 2752 z^4 + 18488 z^3 + 44772 z^2 + 33510 z + 4305)}{4800} + \frac{\sqrt{\pi} (256 z^6 + 5632 z^5 + 39600 z^4 + 105600 z^3 + 99000 z^2 + 23760 z + 495) \operatorname{erf}(\sqrt{z})}{9600 \sqrt{z}}$$

07.25.03.2337.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{675\,675} e^{z/2} (12\,288 z^6 - 302\,080 z^5 + 2\,479\,008 z^4 - 8\,367\,000 z^3 + 11\,679\,060 z^2 - 5\,910\,300 z + 675\,675) I_0\left(\frac{z}{2}\right) + \frac{1}{675\,675} e^{z/2} (-12\,288 z^6 + 289\,792 z^5 - 2\,195\,360 z^4 + 6\,304\,248 z^3 - 6\,221\,100 z^2 + 1\,391\,820 z - 7425) I_1\left(\frac{z}{2}\right)$$

07.25.03.2338.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (-384 z^5 + 9664 z^4 - 78\,520 z^3 + 242\,292 z^2 - 254\,310 z + 56\,805)}{67\,200} + \frac{\sqrt{\pi} (768 z^6 - 19\,712 z^5 + 166\,320 z^4 - 554\,400 z^3 + 693\,000 z^2 - 249\,480 z + 10\,395) \operatorname{erfi}(\sqrt{z})}{134\,400 \sqrt{z}}$$

07.25.03.2339.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (384 z^5 + 9664 z^4 + 78\,520 z^3 + 242\,292 z^2 + 254\,310 z + 56\,805)}{67\,200} + \frac{\sqrt{\pi} (768 z^6 + 19\,712 z^5 + 166\,320 z^4 + 554\,400 z^3 + 693\,000 z^2 + 249\,480 z + 10\,395) \operatorname{erf}(\sqrt{z})}{134\,400 \sqrt{z}}$$

07.25.03.2340.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{3}{2}, 3; z\right) = \frac{8 e^{z/2} (2048 z^6 - 57\,856 z^5 + 556\,080 z^4 - 2\,248\,980 z^3 + 3\,870\,300 z^2 - 2\,531\,430 z + 422\,235) I_0\left(\frac{z}{2}\right)}{3\,378\,375} - \frac{1}{3\,378\,375 z} 4 e^{z/2} (4096 z^7 - 111\,616 z^6 + 1\,002\,592 z^5 - 3\,547\,080 z^4 + 4\,596\,000 z^3 - 1\,533\,360 z^2 + 18\,810 z - 495) I_1\left(\frac{z}{2}\right)$$

07.25.03.2341.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (-96 z^5 + 2768 z^4 - 26\,384 z^3 + 98\,952 z^2 - 133\,950 z + 43\,365)}{53\,760} + \frac{\sqrt{\pi} (192 z^6 - 5632 z^5 + 55\,440 z^4 - 221\,760 z^3 + 346\,500 z^2 - 166\,320 z + 10\,395) \operatorname{erfi}(\sqrt{z})}{107\,520 \sqrt{z}}$$

07.25.03.2342.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (96 z^5 + 2768 z^4 + 26\,384 z^3 + 98\,952 z^2 + 133\,950 z + 43\,365)}{53\,760} + \frac{\sqrt{\pi} (192 z^6 + 5632 z^5 + 55\,440 z^4 + 221\,760 z^3 + 346\,500 z^2 + 166\,320 z + 10\,395) \operatorname{erf}(\sqrt{z})}{107\,520 \sqrt{z}}$$

07.25.03.2343.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{3}{2}, 4; z\right) = \frac{1}{57432375z}$$

$$4e^{z/2} (24576z^7 - 784384z^6 + 8641344z^5 - 40726320z^4 + 83206920z^3 - 66284460z^2 + 14351040z + 1485) I_0\left(\frac{z}{2}\right) -$$

$$\frac{1}{57432375z^2} \left(4e^{z/2} (24576z^8 - 759808z^7 + 7893824z^6 - 33187824z^5 +$$

$$53283000z^4 - 23756460z^3 + 487080z^2 - 28215z + 5940) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.2344.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (-32z^5 + 1040z^4 - 11376z^3 + 50232z^2 - 83370z + 35685)}{46080} +$$

$$\frac{\sqrt{\pi} (64z^6 - 2112z^5 + 23760z^4 - 110880z^3 + 207900z^2 - 124740z + 10395) \operatorname{erfi}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.2345.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (32z^5 + 1040z^4 + 11376z^3 + 50232z^2 + 83370z + 35685)}{46080} +$$

$$\frac{\sqrt{\pi} (64z^6 + 2112z^5 + 23760z^4 + 110880z^3 + 207900z^2 + 124740z + 10395) \operatorname{erf}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.2346.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{3}{2}, 5; z\right) =$$

$$\frac{1}{1091215125z^2} \left(32e^{z/2} (24576z^8 - 874496z^7 + 10863168z^6 - 58456560z^5 + 138146640z^4 - 129189060z^3 +$$

$$34059960z^2 + 25245z - 22275) I_0\left(\frac{z}{2}\right) -$$

$$\frac{1}{1091215125z^3} \left(32e^{z/2} (24576z^9 - 849920z^8 + 10025536z^7 - 48831408z^6 + 93554880z^5 -$$

$$52360860z^4 + 1574100z^3 - 164835z^2 + 100980z - 89100) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.2347.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{19660800z^4} \left(e^z (-6144z^9 + 222208z^8 - 2743168z^7 + 13938240z^6 - 27417120z^5 + 14673840z^4 -$$

$$11880z^3 + 41580z^2 - 103950z + 155925)\right) +$$

$$\frac{1}{39321600z^{9/2}} \left(\sqrt{\pi} (12288z^{10} - 450560z^9 + 5702400z^8 - 30412800z^7 + 66528000z^6 -$$

$$47900160z^5 + 4989600z^4 - 155925) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.2348.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{19\,660\,800 z^4} (e^{-z} (6144 z^9 + 222\,208 z^8 + 2\,743\,168 z^7 + 13\,938\,240 z^6 + 27\,417\,120 z^5 + 14\,673\,840 z^4 + 11\,880 z^3 + 41\,580 z^2 + 103\,950 z + 155\,925)) + \frac{1}{39\,321\,600 z^{9/2}} (\sqrt{\pi} (12\,288 z^{10} + 450\,560 z^9 + 5\,702\,400 z^8 + 30\,412\,800 z^7 + 66\,528\,000 z^6 + 47\,900\,160 z^5 + 4\,989\,600 z^4 - 155\,925) \operatorname{erf}(\sqrt{z}))$$

07.25.03.2349.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{3}{2}, 6; z\right) = \frac{1}{1\,527\,701\,175 z^3} (32 e^{z/2} (16\,384 z^9 - 643\,072 z^8 + 8\,892\,288 z^7 - 53\,790\,240 z^6 + 144\,263\,280 z^5 - 154\,455\,840 z^4 + 47\,636\,820 z^3 + 62\,370 z^2 + 51\,975 z - 415\,800) I_0\left(\frac{z}{2}\right)) - \frac{1}{1\,527\,701\,175 z^4} (32 e^{z/2} (16\,384 z^{10} - 626\,688 z^9 + 8\,273\,792 z^8 - 45\,813\,408 z^7 + 102\,011\,280 z^6 - 68\,822\,880 z^5 + 2\,813\,580 z^4 - 408\,870 z^3 + 197\,505 z^2 + 207\,900 z - 1\,663\,200) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 2$

07.25.03.2350.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{4\,729\,725} e^{z/2} (18\,432 z^6 - 526\,336 z^5 + 5\,132\,496 z^4 - 21\,180\,264 z^3 + 37\,540\,020 z^2 - 25\,738\,020 z + 4\,729\,725) I_0\left(\frac{z}{2}\right) + \frac{1}{4\,729\,725} e^{z/2} (-18\,432 z^6 + 507\,904 z^5 - 4\,633\,808 z^4 + 16\,781\,976 z^3 - 22\,624\,644 z^2 + 8\,218\,140 z - 155\,925) I_1\left(\frac{z}{2}\right)$$

07.25.03.2351.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; 2, \frac{7}{2}; z\right) = \frac{e^{z/2} (1152 z^6 - 37\,472 z^5 + 423\,312 z^4 - 2\,064\,864 z^3 + 4\,431\,084 z^2 - 3\,804\,570 z + 945\,945) I_0\left(\frac{z}{2}\right) + e^{z/2} (-1152 z^6 + 36\,320 z^5 - 387\,568 z^4 + 1\,694\,304 z^3 - 2\,897\,844 z^2 + 1\,464\,834 z - 51\,975) I_1\left(\frac{z}{2}\right)}{945\,945}$$

07.25.03.2352.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; 2, \frac{9}{2}; z\right) = \frac{e^{z/2} (64 z^6 - 2336 z^5 + 30\,000 z^4 - 168\,864 z^3 + 425\,112 z^2 - 436\,590 z + 135\,135) I_0\left(\frac{z}{2}\right) + e^{z/2} (-64 z^6 + 2272 z^5 - 27\,760 z^4 + 142\,176 z^3 - 294\,744 z^2 + 191\,442 z - 10\,395) I_1\left(\frac{z}{2}\right)}{135\,135}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{5}{2}$

07.25.03.2353.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-2304 z^6 + 67840 z^5 - 665776 z^4 + 2608752 z^3 - 3805368 z^2 + 1451940 z - 10395)}{1881600 z} + \frac{1}{3763200 z^{3/2}} \sqrt{\pi} (4608 z^7 - 137984 z^6 + 1397088 z^5 - 5821200 z^4 + 9702000 z^3 - 5239080 z^2 + 436590 z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2354.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (2304 z^6 + 67840 z^5 + 665776 z^4 + 2608752 z^3 + 3805368 z^2 + 1451940 z + 10395)}{1881600 z} + \frac{1}{3763200 z^{3/2}} \sqrt{\pi} (4608 z^7 + 137984 z^6 + 1397088 z^5 + 5821200 z^4 + 9702000 z^3 + 5239080 z^2 + 436590 z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.2355.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{5}{2}, 3; z\right) = \frac{1}{23648625} \\ 4 e^{z/2} (6144 z^6 - 201728 z^5 + 2307120 z^4 - 11444160 z^3 + 25147500 z^2 - 22370040 z + 5914755) I_0\left(\frac{z}{2}\right) - \frac{1}{23648625 z} \\ 4 e^{z/2} (6144 z^7 - 195584 z^6 + 2114608 z^5 - 9421200 z^4 + 16607220 z^3 - 8890140 z^2 + 384615 z + 10395) I_1\left(\frac{z}{2}\right)$$

07.25.03.2356.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-288 z^6 + 9712 z^5 - 111712 z^4 + 530760 z^3 - 992418 z^2 + 541275 z - 10395)}{752640 z} + \frac{1}{1505280 z^{3/2}} \sqrt{\pi} (576 z^7 - 19712 z^6 + 232848 z^5 - 1164240 z^4 + 2425500 z^3 - 1746360 z^2 + 218295 z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2357.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (288 z^6 + 9712 z^5 + 111712 z^4 + 530760 z^3 + 992418 z^2 + 541275 z + 10395)}{752640 z} + \frac{1}{1505280 z^{3/2}} \sqrt{\pi} (576 z^7 + 19712 z^6 + 232848 z^5 + 1164240 z^4 + 2425500 z^3 + 1746360 z^2 + 218295 z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.2358.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{5}{2}, 4; z\right) = \frac{1}{402026625 z} \left(4 e^{z/2} (36864 z^7 - 1368064 z^6 + 17952672 z^5 - 104017200 z^4 + 272566560 z^3 - 296590140 z^2 + 100644390 z - 10395) I_0\left(\frac{z}{2}\right) - \frac{1}{402026625 z^2} \left(4 e^{z/2} (36864 z^8 - 1331200 z^7 + 16639904 z^6 - 88006032 z^5 + 191664480 z^4 - 135969540 z^3 + 9667350 z^2 + 550935 z - 41580) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.2359.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (-64 z^6 + 2432 z^5 - 32080 z^4 + 179136 z^3 - 408828 z^2 + 291480 z - 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 - 4928 z^6 + 66528 z^5 - 388080 z^4 + 970200 z^3 - 873180 z^2 + 145530 z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2360.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 2432 z^5 + 32080 z^4 + 179136 z^3 + 408828 z^2 + 291480 z + 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 + 4928 z^6 + 66528 z^5 + 388080 z^4 + 970200 z^3 + 873180 z^2 + 145530 z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.2361.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{5}{2}, 5; z\right) = \frac{1}{7638505875 z^2} \left(32 e^{z/2} (36864 z^8 - 1525760 z^7 + 22594848 z^6 - 149747808 z^5 + 455537040 z^4 - 584448480 z^3 + 239396850 z^2 - 145530 z + 93555) I_0\left(\frac{z}{2}\right) - \frac{1}{7638505875 z^3} \left(64 e^{z/2} (18432 z^9 - 744448 z^8 + 10562192 z^7 - 64665504 z^6 + 167697264 z^5 - 148384320 z^4 + 15062355 z^3 + 1392930 z^2 - 291060 z + 187110) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.2362.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{275251200 z^4} \left(e^z (-18432 z^9 + 779264 z^8 - 11594624 z^7 + 74402880 z^6 - 200555040 z^5 + 177103920 z^4 - 9896040 z^3 - 291060 z^2 + 727650 z - 1091475)\right) + \frac{1}{550502400 z^{9/2}} \left(\sqrt{\pi} (36864 z^{10} - 1576960 z^9 + 23950080 z^8 - 159667200 z^7 + 465696000 z^6 - 502951680 z^5 + 104781600 z^4 + 9979200 z^3 + 1091475) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.2363.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{275251200 z^4} \left(e^{-z} (18432 z^9 + 779264 z^8 + 11594624 z^7 + 74402880 z^6 + 200555040 z^5 + 177103920 z^4 + 9896040 z^3 - 291060 z^2 - 727650 z - 1091475)\right) + \frac{1}{550502400 z^{9/2}} \left(\sqrt{\pi} (36864 z^{10} + 1576960 z^9 + 23950080 z^8 + 159667200 z^7 + 465696000 z^6 + 502951680 z^5 + 104781600 z^4 - 9979200 z^3 + 1091475) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.2364.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{5}{2}, 6; z\right) = \frac{1}{10\,693\,908\,225\,z^3} \left(32 e^{z/2} (24\,576 z^9 - 1\,122\,304 z^8 + 18\,512\,832 z^7 - 138\,124\,896 z^6 + 478\,284\,240 z^5 - 705\,529\,440 z^4 + 335\,883\,240 z^3 - 478\,170 z^2 + 31\,185 z + 1\,247\,400) I_0\left(\frac{z}{2}\right) - \frac{1}{10\,693\,908\,225\,z^4} \left(32 e^{z/2} (24\,576 z^{10} - 1\,097\,728 z^9 + 17\,427\,392 z^8 - 121\,221\,792 z^7 + 364\,755\,216 z^6 - 387\,068\,640 z^5 + 51\,808\,680 z^4 + 6\,798\,330 z^3 - 1\,756\,755 z^2 + 124\,740 z + 4\,989\,600) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 3$

07.25.03.2365.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; 3, \frac{7}{2}; z\right) = \frac{8 e^{z/2} (192 z^6 - 7184 z^5 + 95\,280 z^4 - 559\,920 z^3 + 1\,496\,040 z^2 - 1\,673\,595 z + 592\,515) I_0\left(\frac{z}{2}\right) - \frac{1}{4\,729\,725 z} 4 e^{z/2} (384 z^7 - 13\,984 z^6 + 176\,768 z^5 - 949\,680 z^4 + 2\,118\,000 z^3 - 1\,565\,970 z^2 + 124\,740 z + 10\,395) I_1\left(\frac{z}{2}\right)}{4\,729\,725}$$

07.25.03.2366.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; 3, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (64 z^6 - 2688 z^5 + 40\,560 z^4 - 275\,520 z^3 + 866\,520 z^2 - 1\,164\,240 z + 509\,355) I_0\left(\frac{z}{2}\right) - \frac{1}{2\,027\,025 z} 4 e^{z/2} (64 z^7 - 2624 z^6 + 37\,968 z^5 - 238\,800 z^4 + 644\,280 z^3 - 608\,760 z^2 + 72\,765 z + 10\,395) I_1\left(\frac{z}{2}\right)}{2\,027\,025}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{7}{2}$

07.25.03.2367.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{9\,633\,792 z^2} e^z (-1152 z^7 + 44\,480 z^6 - 599\,264 z^5 + 3\,446\,736 z^4 - 8\,227\,992 z^3 + 6\,354\,516 z^2 - 311\,850 z - 31\,185) + \frac{1}{19\,267\,584 z^{5/2}} \left(\sqrt{\pi} (2304 z^8 - 90\,112 z^7 + 1\,241\,856 z^6 - 7\,451\,136 z^5 + 19\,404\,000 z^4 - 18\,627\,840 z^3 + 3\,492\,720 z^2 + 332\,640 z + 31\,185) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2368.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{1}{9\,633\,792 z^2} e^{-z} (1152 z^7 + 44\,480 z^6 + 599\,264 z^5 + 3\,446\,736 z^4 + 8\,227\,992 z^3 + 6\,354\,516 z^2 + 311\,850 z - 31\,185) + \frac{1}{19\,267\,584 z^{5/2}} \left(\sqrt{\pi} (2304 z^8 + 90\,112 z^7 + 1\,241\,856 z^6 + 7\,451\,136 z^5 + 19\,404\,000 z^4 + 18\,627\,840 z^3 + 3\,492\,720 z^2 - 332\,640 z + 31\,185) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2369.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{7}{2}, 4; z\right) = \frac{1}{80405325z}$$

$$4 e^{z/2} (2304 z^7 - 97472 z^6 + 1484448 z^5 - 10206480 z^4 + 32625600 z^3 - 44823240 z^2 + 20228670 z + 10395) I_0\left(\frac{z}{2}\right) -$$

$$\frac{1}{80405325 z^2} \left(4 e^{z/2} (2304 z^8 - 95168 z^7 + 1390432 z^6 - 8861328 z^5 + 24371520 z^4 - 23759400 z^3 + 3056130 z^2 + 509355 z + 41580) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.2370.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; z\right) =$$

$$\frac{e^z (-128 z^7 + 5568 z^6 - 85984 z^5 + 580560 z^4 - 1686744 z^3 + 1690836 z^2 - 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}}$$

$$\left(\sqrt{\pi} (256 z^8 - 11264 z^7 + 177408 z^6 - 1241856 z^5 + 3880800 z^4 - 4656960 z^3 + 1164240 z^2 + 166320 z + 31185) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.2371.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) =$$

$$\frac{e^{-z} (128 z^7 + 5568 z^6 + 85984 z^5 + 580560 z^4 + 1686744 z^3 + 1690836 z^2 + 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}}$$

$$\left(\sqrt{\pi} (256 z^8 + 11264 z^7 + 177408 z^6 + 1241856 z^5 + 3880800 z^4 + 4656960 z^3 + 1164240 z^2 - 166320 z + 31185) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.2372.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{7}{2}, 5; z\right) =$$

$$\frac{1}{1527701175 z^2} \left(32 e^{z/2} (2304 z^8 - 108736 z^7 + 1869888 z^6 - 14725104 z^5 + 54783120 z^4 - 89064360 z^3 + 48315960 z^2 + 114345 z - 31185) I_0\left(\frac{z}{2}\right) -$$

$$\frac{1}{1527701175 z^3} \left(32 e^{z/2} (2304 z^9 - 106432 z^8 + 1764608 z^7 - 13011408 z^6 + 42554784 z^5 - 51553320 z^4 + 9313920 z^3 + 2297295 z^2 + 457380 z - 124740) I_1\left(\frac{z}{2}\right)\right)$$

$$\begin{aligned}
 & \text{07.25.03.2373.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{220200960z^4} \left(e^z (-4608z^9 + 222976z^8 - 3882496z^7 + 30097920z^6 - 103058880z^5 + 127246560z^4 - \right. \\
 & \quad \left. 16299360z^3 - 5322240z^2 - 727650z + 1091475) \right) + \\
 & \frac{1}{440401920z^{9/2}} \left(\sqrt{\pi} (9216z^{10} - 450560z^9 + 7983360z^8 - 63866880z^7 + 232848000z^6 - \right. \\
 & \quad \left. 335301120z^5 + 104781600z^4 + 19958400z^3 + 5613300z^2 - 1091475) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2374.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{220200960z^4} \left(e^{-z} (4608z^9 + 222976z^8 + 3882496z^7 + 30097920z^6 + 103058880z^5 + 127246560z^4 + \right. \\
 & \quad \left. 16299360z^3 - 5322240z^2 + 727650z + 1091475) \right) + \\
 & \frac{1}{440401920z^{9/2}} \left(\sqrt{\pi} (9216z^{10} + 450560z^9 + 7983360z^8 + 63866880z^7 + 232848000z^6 + \right. \\
 & \quad \left. 335301120z^5 + 104781600z^4 - 19958400z^3 + 5613300z^2 - 1091475) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2375.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{7}{2}, 6; z\right) = \\
 & \frac{1}{2138781645z^3} \left(32e^{z/2} (1536z^9 - 80000z^8 + 1533120z^7 - 13605312z^6 + 57735888z^5 - 108274320z^4 + \right. \\
 & \quad \left. 68108040z^3 + 415800z^2 - 93555z - 249480) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{2138781645z^4} \left(32e^{z/2} (1536z^{10} - 78464z^9 + 1455424z^8 - 12187584z^7 + 46202352z^6 - \right. \\
 & \quad \left. 66935568z^5 + 15717240z^4 + 5072760z^3 + 1632015z^2 - 374220z - 997920) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 4$

$$\begin{aligned}
 & \text{07.25.03.2376.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; 4, \frac{9}{2}; z\right) = \\
 & \frac{1}{11486475z} 4e^{z/2} (128z^7 - 6080z^6 + 105408z^5 - 838800z^4 + 3163920z^3 - 5239080z^2 + 2910600z + 10395) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{11486475z^2} \\
 & 4e^{z/2} (128z^8 - 5952z^7 + 99520z^6 - 742128z^5 + 2466000z^4 - 3061560z^3 + 582120z^2 + 155925z + 41580) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{9}{2}$

07.25.03.2377.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{14\,155\,776\,z^3}$$

$$e^z (-256 z^8 + 12\,544 z^7 - 221\,952 z^6 + 1\,757\,760 z^5 - 6\,203\,040 z^4 + 8\,030\,448 z^3 - 1\,164\,240 z^2 - 457\,380 z - 155\,925) +$$

$$\frac{1}{28\,311\,552 z^{7/2}} \left(\sqrt{\pi} (512 z^9 - 25\,344 z^8 + 456\,192 z^7 - 3\,725\,568 z^6 + 13\,970\,880 z^5 - 20\,956\,320 z^4 + 6\,985\,440 z^3 + 1\,496\,880 z^2 + 561\,330 z + 155\,925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2378.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{14\,155\,776\,z^3}$$

$$e^{-z} (256 z^8 + 12\,544 z^7 + 221\,952 z^6 + 1\,757\,760 z^5 + 6\,203\,040 z^4 + 8\,030\,448 z^3 + 1\,164\,240 z^2 - 457\,380 z + 155\,925) +$$

$$\frac{1}{28\,311\,552 z^{7/2}} \left(\sqrt{\pi} (512 z^9 + 25\,344 z^8 + 456\,192 z^7 + 3\,725\,568 z^6 + 13\,970\,880 z^5 + 20\,956\,320 z^4 + 6\,985\,440 z^3 - 1\,496\,880 z^2 + 561\,330 z - 155\,925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2379.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{9}{2}, 5; z\right) = \frac{1}{218\,243\,025\,z^2}$$

$$\left(32 e^{z/2} (128 z^8 - 6784 z^7 + 132\,864 z^6 - 1\,212\,096 z^5 + 5\,331\,360 z^4 - 10\,478\,160 z^3 + 6\,985\,440 z^2 + 83\,160 z + 31\,185) \right.$$

$$I_0\left(\frac{z}{2}\right) - \frac{1}{218\,243\,025\,z^3} \left(128 e^{z/2} (32 z^9 - 1664 z^8 + 31\,568 z^7 - 272\,256 z^6 + 1\,074\,804 z^5 - 1\,654\,080 z^4 + 436\,590 z^3 + 166\,320 z^2 + 83\,160 z + 31\,185) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.2380.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{62\,914\,560\,z^4} (e^z (-512 z^9 + 27\,904 z^8 - 556\,544 z^7 + 5\,057\,280 z^6 - 21\,001\,920 z^5 + 33\,362\,400 z^4 - 6\,985\,440 z^3 - 3\,825\,360 z^2 - 2\,390\,850 z - 1\,091\,475)) +$$

$$\frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} - 56\,320 z^9 + 1\,140\,480 z^8 - 10\,644\,480 z^7 + 46\,569\,600 z^6 - 83\,825\,280 z^5 + 34\,927\,200 z^4 + 9\,979\,200 z^3 + 5\,613\,300 z^2 + 3\,118\,500 z + 1\,091\,475) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2381.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{62\,914\,560\,z^4} (e^{-z} (512 z^9 + 27\,904 z^8 + 556\,544 z^7 + 5\,057\,280 z^6 + 21\,001\,920 z^5 + 33\,362\,400 z^4 + 6\,985\,440 z^3 - 3\,825\,360 z^2 + 2\,390\,850 z - 1\,091\,475)) +$$

$$\frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} + 56\,320 z^9 + 1\,140\,480 z^8 + 10\,644\,480 z^7 + 46\,569\,600 z^6 + 83\,825\,280 z^5 + 34\,927\,200 z^4 - 9\,979\,200 z^3 + 5\,613\,300 z^2 - 3\,118\,500 z + 1\,091\,475) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2382.01

$${}_2F_2\left(-\frac{11}{2}, \frac{9}{2}; \frac{9}{2}, 6; z\right) = \frac{1}{916620705 z^3} \left(32 e^{z/2} (256 z^9 - 14976 z^8 + 326976 z^7 - 3364032 z^6 + 16903152 z^5 - 38419920 z^4 + 29688120 z^3 + 748440 z^2 + 530145 z + 249480) I_0\left(\frac{z}{2}\right) - \frac{1}{916620705 z^4} \left(32 e^{z/2} (256 z^{10} - 14720 z^9 + 312384 z^8 - 3058752 z^7 + 13986672 z^6 - 25692912 z^5 + 8731800 z^4 + 4241160 z^3 + 3024945 z^2 + 2120580 z + 997920) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = -\frac{11}{2}$

07.25.03.2383.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{31185} (8 z^{10} + 332 z^9 + 4626 z^8 + 24975 z^7 + 40320 z^6 - 12096 z^5 + 10080 z^4 - 12600 z^3 + 18900 z^2 - 28350 z + 31185) + \frac{e^z \sqrt{\pi} (16 z^{21/2} + 672 z^{19/2} + 9576 z^{17/2} + 54264 z^{15/2} + 101745 z^{13/2}) \operatorname{erf}(\sqrt{z})}{62370}$$

07.25.03.2384.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{31185} (8 z^{10} - 332 z^9 + 4626 z^8 - 24975 z^7 + 40320 z^6 + 12096 z^5 + 10080 z^4 + 12600 z^3 + 18900 z^2 + 28350 z + 31185) + \frac{e^{-z} \sqrt{\pi} (-16 z^{21/2} + 672 z^{19/2} - 9576 z^{17/2} + 54264 z^{15/2} - 101745 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{62370}$$

07.25.03.2385.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{-8 z^9 - 300 z^8 - 3730 z^7 - 17655 z^6 - 24192 z^5 + 6720 z^4 - 5040 z^3 + 5400 z^2 - 6300 z + 5670}{5670} + \frac{e^z \sqrt{\pi} (-16 z^{19/2} - 608 z^{17/2} - 7752 z^{15/2} - 38760 z^{13/2} - 62985 z^{11/2}) \operatorname{erf}(\sqrt{z})}{11340}$$

07.25.03.2386.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{8 z^9 - 300 z^8 + 3730 z^7 - 17655 z^6 + 24192 z^5 + 6720 z^4 + 5040 z^3 + 5400 z^2 + 6300 z + 5670}{5670} + \frac{e^{-z} \sqrt{\pi} (-16 z^{19/2} + 608 z^{17/2} - 7752 z^{15/2} + 38760 z^{13/2} - 62985 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{11340}$$

07.25.03.2387.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{8z^8 + 268z^7 + 2930z^6 + 11919z^5 + 13440z^4 - 3360z^3 + 2160z^2 - 1800z + 1260}{1260} + \frac{e^z \sqrt{\pi} (16z^{17/2} + 544z^{15/2} + 6120z^{13/2} + 26520z^{11/2} + 36465z^{9/2}) \operatorname{erf}(\sqrt{z})}{2520}$$

07.25.03.2388.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260}{1260} + \frac{e^{-z} \sqrt{\pi} (-16z^{17/2} + 544z^{15/2} - 6120z^{13/2} + 26520z^{11/2} - 36465z^{9/2}) \operatorname{erfi}(\sqrt{z})}{2520}$$

07.25.03.2389.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{360} (-8z^7 - 236z^6 - 2226z^5 - 7575z^4 - 6720z^3 + 1440z^2 - 720z + 360) + \frac{1}{720} e^z \sqrt{\pi} (-16z^{15/2} - 480z^{13/2} - 4680z^{11/2} - 17160z^{9/2} - 19305z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2390.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{360} (8z^7 - 236z^6 + 2226z^5 - 7575z^4 + 6720z^3 + 1440z^2 + 720z + 360) + \frac{1}{720} e^{-z} \sqrt{\pi} (-16z^{15/2} + 480z^{13/2} - 4680z^{11/2} + 17160z^{9/2} - 19305z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2391.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{144} (8z^6 + 204z^5 + 1618z^4 + 4431z^3 + 2880z^2 - 480z + 144) + \frac{1}{288} e^z \sqrt{\pi} (16z^{13/2} + 416z^{11/2} + 3432z^{9/2} + 10296z^{7/2} + 9009z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2392.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{144} (8z^6 - 204z^5 + 1618z^4 - 4431z^3 + 2880z^2 + 480z + 144) + \frac{1}{288} e^{-z} \sqrt{\pi} (-16z^{13/2} + 416z^{11/2} - 3432z^{9/2} + 10296z^{7/2} - 9009z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2393.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{96} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) + \frac{1}{192} e^z \sqrt{\pi} (-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2394.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{96} (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) + \frac{1}{192} e^{-z} \sqrt{\pi} (-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2395.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{192} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2396.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{192} (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2397.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, 1; z\right) = \frac{1}{24} e^z (z^4 + 16z^3 + 72z^2 + 96z + 24)$$

07.25.03.2398.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{384} (8z^3 + 108z^2 + 370z + 279) + \frac{e^z \sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.2399.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} (-8z^3 + 108z^2 - 370z + 279) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.2400.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, 2; z\right) = \frac{1}{24} e^z (z^3 + 12z^2 + 36z + 24)$$

07.25.03.2401.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.2402.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.2403.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, 3; z\right) = \frac{1}{12} e^z (z^2 + 8z + 12)$$

07.25.03.2404.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5e^z \sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.2405.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.2406.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, 4; z\right) = \frac{1}{4} e^z (z + 4)$$

07.25.03.2407.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{35(8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35e^z\sqrt{\pi}(16z^4 + 32z^3 - 24z^2 + 24z - 15)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.2408.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35e^{-z}\sqrt{\pi}(16z^4 - 32z^3 - 24z^2 - 24z - 15)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.2409.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, 5; z\right) = e^z$$

07.25.03.2410.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{315(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315e^z\sqrt{\pi}(16z^4 - 32z^3 + 72z^2 - 120z + 105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.2411.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(16z^4 + 32z^3 + 72z^2 + 120z + 105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315(8z^3 + 20z^2 + 50z + 105)}{2048z^4}$$

07.25.03.2412.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{11}{2}, 6; z\right) = \frac{5e^z(z^4 - 4z^3 + 12z^2 - 24z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = -\frac{9}{2}$

07.25.03.2413.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{9}{2}, 1; z\right) = \frac{e^z(8398z^5 + 4199z^4 + 5952z^3 + 9336z^2 + 7728z + 1512)}{1512} - \frac{4199}{756}\sqrt{\pi}z^{11/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.2414.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{9}{2}, 1; -z\right) = \frac{e^{-z}(-8398z^5 + 4199z^4 - 5952z^3 + 9336z^2 - 7728z + 1512)}{1512} - \frac{4199}{756}\sqrt{\pi}z^{11/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.2415.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{9}{2}, 2; z\right) = \frac{e^z(1292z^5 + 646z^4 + 969z^3 + 2076z^2 + 3108z + 1512)}{1512} - \frac{323}{378}\sqrt{\pi}z^{11/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.2416.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{9}{2}, 2; -z\right) = \frac{e^{-z}(-1292z^5 + 646z^4 - 969z^3 + 2076z^2 - 3108z + 1512)}{1512} - \frac{323}{378}\sqrt{\pi}z^{11/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.2417.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{9}{2}, 3; z\right) = \frac{e^z(2584z^5 + 1292z^4 + 1938z^3 + 4845z^2 + 11760z + 11340)}{11340} - \frac{646\sqrt{\pi}z^{11/2}\operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.2418.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{9}{2}, 3; -z\right) = \frac{e^{-z}(-2584z^5 + 1292z^4 - 1938z^3 + 4845z^2 - 11760z + 11340)}{11340} - \frac{646\sqrt{\pi}z^{11/2}\operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.2419.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{9}{2}, 4; z\right) = \frac{e^z (304 z^5 + 152 z^4 + 228 z^3 + 570 z^2 + 1995 z + 3780)}{3780} - \frac{76}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.2420.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{9}{2}, 4; -z\right) = \frac{e^{-z} (-304 z^5 + 152 z^4 - 228 z^3 + 570 z^2 - 1995 z + 3780)}{3780} - \frac{76}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.2421.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{9}{2}, 5; z\right) = \frac{1}{945} e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.2422.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{9}{2}, 5; -z\right) = \frac{1}{945} e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.2423.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{9}{2}, 6; z\right) = -\frac{64 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{3969} + \frac{1}{3969 z^5} \\ e^z (64 z^{10} + 32 z^9 + 48 z^8 + 120 z^7 + 420 z^6 + 1890 z^5 + 10395 z^4 - 41580 z^3 + 124740 z^2 - 249480 z + 249480) - \frac{440}{7 z^5}$$

07.25.03.2424.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{9}{2}, 6; -z\right) = -\frac{64 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{3969} + \frac{1}{3969 z^5} \\ e^{-z} (-64 z^{10} + 32 z^9 - 48 z^8 + 120 z^7 - 420 z^6 + 1890 z^5 - 10395 z^4 - 41580 z^3 - 124740 z^2 - 249480 z - 249480) + \frac{440}{7 z^5}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = -\frac{7}{2}$

07.25.03.2425.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{7}{2}, 1; z\right) = \frac{1}{168} e^z (-4199 z^5 + 11271 z^4 + 3536 z^3 + 2328 z^2 + 1152 z + 168) + \frac{221}{336} \sqrt{\pi} (38 z^{11/2} - 121 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2426.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{7}{2}, 1; -z\right) = \frac{1}{168} e^{-z} (4199 z^5 + 11271 z^4 - 3536 z^3 + 2328 z^2 - 1152 z + 168) + \frac{221}{336} \sqrt{\pi} (38 z^{11/2} + 121 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2427.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{7}{2}, 2; z\right) = \frac{1}{168} e^z (-646 z^5 + 2108 z^4 + 731 z^3 + 612 z^2 + 492 z + 168) + \frac{17}{168} \sqrt{\pi} (38 z^{11/2} - 143 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2428.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{7}{2}, 2; -z\right) = \frac{1}{168} e^{-z} (646 z^5 + 2108 z^4 - 731 z^3 + 612 z^2 - 492 z + 168) + \frac{17}{168} \sqrt{\pi} (38 z^{11/2} + 143 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2429.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{7}{2}, 3; z\right) = \frac{e^z(-1292z^5 + 4964z^4 + 1836z^3 + 1785z^2 + 2040z + 1260)}{1260} + \frac{17}{630}\sqrt{\pi}(38z^{11/2} - 165z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.2430.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{7}{2}, 3; -z\right) = \frac{e^{-z}(1292z^5 + 4964z^4 - 1836z^3 + 1785z^2 - 2040z + 1260)}{1260} + \frac{17}{630}\sqrt{\pi}(38z^{11/2} + 165z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.2431.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{7}{2}, 4; z\right) = \frac{1}{420}e^z(-152z^5 + 672z^4 + 260z^3 + 276z^2 + 405z + 420) + \frac{1}{105}\sqrt{\pi}(38z^{11/2} - 187z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.2432.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{7}{2}, 4; -z\right) = \frac{1}{420}e^{-z}(152z^5 + 672z^4 - 260z^3 + 276z^2 - 405z + 420) + \frac{1}{105}\sqrt{\pi}(38z^{11/2} + 187z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.2433.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{7}{2}, 5; z\right) = \frac{1}{105}e^z(-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105) + \frac{8}{105}\sqrt{\pi}(2z^{11/2} - 11z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.2434.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{7}{2}, 5; -z\right) = \frac{1}{105}e^{-z}(16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105) + \frac{8}{105}\sqrt{\pi}(2z^{11/2} + 11z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.2435.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{7}{2}, 6; z\right) = \frac{1}{8379z^5}(e^z(-608z^{10} + 3392z^9 + 1392z^8 + 1632z^7 + 2940z^6 + 6300z^5 + 10395z^4 - 41580z^3 + 124740z^2 - 249480z + 249480)) + \frac{16\sqrt{\pi}(38z^{11/2} - 231z^{9/2})\operatorname{erfi}(\sqrt{z})}{8379} - \frac{3960}{133z^5}$$

07.25.03.2436.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{7}{2}, 6; -z\right) = \frac{1}{8379z^5}(e^{-z}(608z^{10} + 3392z^9 - 1392z^8 + 1632z^7 - 2940z^6 + 6300z^5 - 10395z^4 - 41580z^3 - 124740z^2 - 249480z + 249480)) + \frac{16\sqrt{\pi}(38z^{11/2} + 231z^{9/2})\operatorname{erf}(\sqrt{z})}{8379} + \frac{3960}{133z^5}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = -\frac{5}{2}$

07.25.03.2437.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{5}{2}, 1; z\right) = \frac{1}{192}e^z(8398z^5 - 49283z^4 + 43264z^3 + 7488z^2 + 1920z + 192) - \frac{13}{384}\sqrt{\pi}(1292z^{11/2} - 8228z^{9/2} + 9801z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.2438.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{5}{2}, 1; -z\right) = \frac{1}{192} e^{-z} (-8398 z^5 - 49283 z^4 - 43264 z^3 + 7488 z^2 - 1920 z + 192) - \frac{13}{384} \sqrt{\pi} (1292 z^{11/2} + 8228 z^{9/2} + 9801 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2439.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{5}{2}, 2; z\right) = \frac{1}{96} e^z (646 z^5 - 4539 z^4 + 5132 z^3 + 1104 z^2 + 432 z + 96) + \frac{1}{192} \sqrt{\pi} (-1292 z^{11/2} + 9724 z^{9/2} - 14157 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2440.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{5}{2}, 2; -z\right) = \frac{1}{96} e^{-z} (-646 z^5 - 4539 z^4 - 5132 z^3 + 1104 z^2 - 432 z + 96) + \frac{1}{192} \sqrt{\pi} (-1292 z^{11/2} - 9724 z^{9/2} - 14157 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2441.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{5}{2}, 3; z\right) = \frac{1}{360} e^z (646 z^5 - 5287 z^4 + 7332 z^3 + 1830 z^2 + 960 z + 360) + \frac{1}{720} \sqrt{\pi} (-1292 z^{11/2} + 11220 z^{9/2} - 19305 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2442.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{5}{2}, 3; -z\right) = \frac{1}{360} e^{-z} (-646 z^5 - 5287 z^4 - 7332 z^3 + 1830 z^2 - 960 z + 360) + \frac{1}{720} \sqrt{\pi} (-1292 z^{11/2} - 11220 z^{9/2} - 19305 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2443.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{5}{2}, 4; z\right) = \frac{1}{60} e^z (38 z^5 - 355 z^4 + 584 z^3 + 162 z^2 + 105 z + 60) + \frac{1}{120} \sqrt{\pi} (-76 z^{11/2} + 748 z^{9/2} - 1485 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2444.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{5}{2}, 4; -z\right) = \frac{1}{60} e^{-z} (-38 z^5 - 355 z^4 - 584 z^3 + 162 z^2 - 105 z + 60) + \frac{1}{120} \sqrt{\pi} (-76 z^{11/2} - 748 z^{9/2} - 1485 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2445.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{5}{2}, 5; z\right) = \frac{1}{15} e^z (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} + 44 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2446.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{5}{2}, 5; -z\right) = \frac{1}{15} e^{-z} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} - 44 z^{9/2} - 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2447.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{5}{2}, 6; z\right) = \frac{1}{20349 z^5} (e^z (2584 z^{10} - 30124 z^9 + 65232 z^8 + 20784 z^7 + 17304 z^6 + 18270 z^5 + 10395 z^4 - 41580 z^3 + 124740 z^2 - 249480 z + 249480)) - \frac{2\sqrt{\pi} (1292 z^{11/2} - 15708 z^{9/2} + 39501 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{20349} - \frac{3960}{323 z^5}$$

07.25.03.2448.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{5}{2}, 6; -z\right) = \frac{1}{20349 z^5} (e^{-z} (-2584 z^{10} - 30124 z^9 - 65232 z^8 + 20784 z^7 - 17304 z^6 + 18270 z^5 - 10395 z^4 - 41580 z^3 - 124740 z^2 - 249480 z - 249480)) - \frac{2\sqrt{\pi} (1292 z^{11/2} + 15708 z^{9/2} + 39501 z^{7/2}) \operatorname{erf}(\sqrt{z})}{20349} + \frac{3960}{323 z^5}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = -\frac{3}{2}$

07.25.03.2449.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{3}{2}, 1; z\right) = \frac{e^z (-83980 z^5 + 760240 z^4 - 1573065 z^3 + 529152 z^2 + 39936 z + 2304)}{2304} + \frac{13\sqrt{\pi} (12920 z^{11/2} - 123420 z^{9/2} + 294030 z^{7/2} - 160083 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{4608}$$

07.25.03.2450.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{3}{2}, 1; -z\right) = \frac{e^{-z} (83980 z^5 + 760240 z^4 + 1573065 z^3 + 529152 z^2 - 39936 z + 2304)}{2304} + \frac{13\sqrt{\pi} (12920 z^{11/2} + 123420 z^{9/2} + 294030 z^{7/2} + 160083 z^{5/2}) \operatorname{erf}(\sqrt{z})}{4608}$$

07.25.03.2451.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{3}{2}, 2; z\right) = \frac{e^z (-6460 z^5 + 69700 z^4 - 180735 z^3 + 85056 z^2 + 9408 z + 1152)}{1152} + \frac{\sqrt{\pi} (12920 z^{11/2} - 145860 z^{9/2} + 424710 z^{7/2} - 297297 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{2304}$$

07.25.03.2452.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{3}{2}, 2; -z\right) = \frac{e^{-z} (6460 z^5 + 69700 z^4 + 180735 z^3 + 85056 z^2 - 9408 z + 1152)}{1152} + \frac{\sqrt{\pi} (12920 z^{11/2} + 145860 z^{9/2} + 424710 z^{7/2} + 297297 z^{5/2}) \operatorname{erf}(\sqrt{z})}{2304}$$

07.25.03.2453.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{3}{2}, 3; z\right) = \frac{1}{864} e^z (-1292 z^5 + 16184 z^4 - 50469 z^3 + 30792 z^2 + 4416 z + 864) + \frac{\sqrt{\pi} (2584 z^{11/2} - 33660 z^{9/2} + 115830 z^{7/2} - 99099 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{1728}$$

07.25.03.2454.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{3}{2}, 3; -z\right) = \frac{1}{864} e^{-z} (1292 z^5 + 16184 z^4 + 50469 z^3 + 30792 z^2 - 4416 z + 864) + \frac{\sqrt{\pi} (2584 z^{11/2} + 33660 z^{9/2} + 115830 z^{7/2} + 99099 z^{5/2}) \operatorname{erf}(\sqrt{z})}{1728}$$

07.25.03.2455.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{3}{2}, 4; z\right) = \frac{1}{144} e^z (-76 z^5 + 1084 z^4 - 3951 z^3 + 2976 z^2 + 516 z + 144) + \frac{1}{288} \sqrt{\pi} (152 z^{11/2} - 2244 z^{9/2} + 8910 z^{7/2} - 9009 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2456.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{3}{2}, 4; -z\right) = \frac{1}{144} e^{-z} (76 z^5 + 1084 z^4 + 3951 z^3 + 2976 z^2 - 516 z + 144) + \frac{1}{288} \sqrt{\pi} (152 z^{11/2} + 2244 z^{9/2} + 8910 z^{7/2} + 9009 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2457.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{3}{2}, 5; z\right) = \frac{1}{18} e^z (-4 z^5 + 64 z^4 - 267 z^3 + 240 z^2 + 48 z + 18) + \frac{1}{36} \sqrt{\pi} (8 z^{11/2} - 132 z^{9/2} + 594 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2458.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{3}{2}, 5; -z\right) = \frac{1}{18} e^{-z} (4 z^5 + 64 z^4 + 267 z^3 + 240 z^2 - 48 z + 18) + \frac{1}{36} \sqrt{\pi} (8 z^{11/2} + 132 z^{9/2} + 594 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2459.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{3}{2}, 6; z\right) = \frac{1}{61047 z^5} (e^z (-6460 z^{10} + 114580 z^9 - 538455 z^8 + 563424 z^7 + 125832 z^6 + 58968 z^5 + 10395 z^4 - 41580 z^3 + 124740 z^2 - 249480 z + 249480)) + \frac{\sqrt{\pi} (12920 z^{11/2} - 235620 z^{9/2} + 1185030 z^{7/2} - 1566873 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{122094} - \frac{1320}{323 z^5}$$

07.25.03.2460.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{3}{2}, 6; -z\right) = \frac{1}{61\,047 z^5} (e^{-z} (6460 z^{10} + 114\,580 z^9 + 538\,455 z^8 + 563\,424 z^7 - 125\,832 z^6 + 58\,968 z^5 - 10\,395 z^4 - 41\,580 z^3 - 124\,740 z^2 - 249\,480 z - 249\,480)) + \frac{\sqrt{\pi} (12\,920 z^{11/2} + 235\,620 z^{9/2} + 1\,185\,030 z^{7/2} + 1\,566\,873 z^{5/2}) \operatorname{erf}(\sqrt{z})}{122\,094} + \frac{1320}{323 z^5}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = -\frac{1}{2}$

07.25.03.2461.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{1}{2}, 1; z\right) = \frac{e^z (167\,960 z^5 - 2\,055\,300 z^4 + 6\,701\,110 z^3 - 5\,791\,461 z^2 + 663\,552 z + 12\,288)}{12\,288} + \frac{\sqrt{\pi} (-335\,920 z^{11/2} + 4\,278\,560 z^{9/2} - 15\,289\,560 z^{7/2} + 16\,648\,632 z^{5/2} - 4\,002\,075 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{24\,576}$$

07.25.03.2462.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{1}{2}, 1; -z\right) = \frac{e^{-z} (-167\,960 z^5 - 2\,055\,300 z^4 - 6\,701\,110 z^3 - 5\,791\,461 z^2 - 663\,552 z + 12\,288)}{12\,288} + \frac{\sqrt{\pi} (-335\,920 z^{11/2} - 4\,278\,560 z^{9/2} - 15\,289\,560 z^{7/2} - 16\,648\,632 z^{5/2} - 4\,002\,075 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{24\,576}$$

07.25.03.2463.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{1}{2}, 2; z\right) = \frac{e^z (12\,920 z^5 - 188\,020 z^4 + 761\,870 z^3 - 886\,113 z^2 + 162\,816 z + 6144)}{6144} + \frac{\sqrt{\pi} (-25\,840 z^{11/2} + 388\,960 z^{9/2} - 1\,698\,840 z^{7/2} + 2\,378\,376 z^{5/2} - 800\,415 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{12\,288}$$

07.25.03.2464.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{1}{2}, 2; -z\right) = \frac{e^{-z} (-12\,920 z^5 - 188\,020 z^4 - 761\,870 z^3 - 886\,113 z^2 - 162\,816 z + 6144)}{6144} + \frac{\sqrt{\pi} (-25\,840 z^{11/2} - 388\,960 z^{9/2} - 1\,698\,840 z^{7/2} - 2\,378\,376 z^{5/2} - 800\,415 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{12\,288}$$

07.25.03.2465.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{1}{2}, 3; z\right) = \frac{e^z (2584 z^5 - 43\,588 z^4 + 211\,158 z^3 - 309\,381 z^2 + 79\,872 z + 4608)}{4608} + \frac{\sqrt{\pi} (-5168 z^{11/2} + 89\,760 z^{9/2} - 463\,320 z^{7/2} + 792\,792 z^{5/2} - 343\,035 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{9216}$$

07.25.03.2466.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{1}{2}, 3; -z\right) = \frac{e^{-z}(-2584 z^5 - 43 588 z^4 - 211 158 z^3 - 309 381 z^2 - 79 872 z + 4608)}{4608} + \frac{\sqrt{\pi}(-5168 z^{11/2} - 89 760 z^{9/2} - 463 320 z^{7/2} - 792 792 z^{5/2} - 343 035 z^{3/2}) \operatorname{erf}(\sqrt{z})}{9216}$$

07.25.03.2467.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{1}{2}, 4; z\right) = \frac{1}{768} e^z (152 z^5 - 2916 z^4 + 16 438 z^3 - 29 085 z^2 + 9792 z + 768) + \frac{\sqrt{\pi}(-304 z^{11/2} + 5984 z^{9/2} - 35 640 z^{7/2} + 72 072 z^{5/2} - 38 115 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1536}$$

07.25.03.2468.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{1}{2}, 4; -z\right) = \frac{1}{768} e^{-z} (-152 z^5 - 2916 z^4 - 16 438 z^3 - 29 085 z^2 - 9792 z + 768) + \frac{\sqrt{\pi}(-304 z^{11/2} - 5984 z^{9/2} - 35 640 z^{7/2} - 72 072 z^{5/2} - 38 115 z^{3/2}) \operatorname{erf}(\sqrt{z})}{1536}$$

07.25.03.2469.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{1}{2}, 5; z\right) = \frac{1}{96} e^z (8 z^5 - 172 z^4 + 1106 z^3 - 2295 z^2 + 960 z + 96) + \frac{1}{192} \sqrt{\pi} (-16 z^{11/2} + 352 z^{9/2} - 2376 z^{7/2} + 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2470.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{1}{2}, 5; -z\right) = \frac{1}{96} e^{-z} (-8 z^5 - 172 z^4 - 1106 z^3 - 2295 z^2 - 960 z + 96) + \frac{1}{192} \sqrt{\pi} (-16 z^{11/2} - 352 z^{9/2} - 2376 z^{7/2} - 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2471.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{1}{2}, 6; z\right) = \frac{1}{4 232 592 z^5} (e^z (167 960 z^{10} - 4 000 100 z^9 + 28 894 710 z^8 - 68 820 141 z^7 + 34 571 712 z^6 + 4 199 328 z^5 + 166 320 z^4 - 665 280 z^3 + 1 995 840 z^2 - 3 991 680 z + 3 991 680)) + \frac{1}{8 465 184} \sqrt{\pi} (-335 920 z^{11/2} + 8 168 160 z^{9/2} - 61 621 560 z^{7/2} + 162 954 792 z^{5/2} - 117 515 475 z^{3/2}) \operatorname{erfi}(\sqrt{z}) - \frac{3960}{4199 z^5}$$

07.25.03.2472.01

$${}_2F_2\left(-\frac{11}{2}, 5; -\frac{1}{2}, 6; -z\right) = \frac{1}{4 232 592 z^5} (e^{-z} (-167 960 z^{10} - 4 000 100 z^9 - 28 894 710 z^8 - 68 820 141 z^7 - 34 571 712 z^6 + 4 199 328 z^5 - 166 320 z^4 - 665 280 z^3 - 1 995 840 z^2 - 3 991 680 z - 3 991 680)) + \frac{1}{8 465 184} \sqrt{\pi} (-335 920 z^{11/2} - 8 168 160 z^{9/2} - 61 621 560 z^{7/2} - 162 954 792 z^{5/2} - 117 515 475 z^{3/2}) \operatorname{erf}(\sqrt{z}) + \frac{3960}{4199 z^5}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = \frac{1}{2}$

07.25.03.2473.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{1}{2}, 1; z\right) = \frac{e^z(-67184z^5 + 1036048z^4 - 4612088z^3 + 6452316z^2 - 2097627z + 49152)}{49152} + \frac{1}{98304} \sqrt{\pi} (134368z^{11/2} - 2139280z^{9/2} + 10193040z^{7/2} - 16648632z^{5/2} + 8004150z^{3/2} - 654885\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2474.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{1}{2}, 1; -z\right) = \frac{e^{-z}(67184z^5 + 1036048z^4 + 4612088z^3 + 6452316z^2 + 2097627z + 49152)}{49152} + \frac{1}{98304} \sqrt{\pi} (134368z^{11/2} + 2139280z^{9/2} + 10193040z^{7/2} + 16648632z^{5/2} + 8004150z^{3/2} + 654885\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2475.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{1}{2}, 2; z\right) = \frac{e^z(-5168z^5 + 94656z^4 - 521536z^3 + 969288z^2 - 482121z + 24576)}{24576} + \frac{1}{49152} \sqrt{\pi} (10336z^{11/2} - 194480z^{9/2} + 1132560z^{7/2} - 2378376z^{5/2} + 1600830z^{3/2} - 218295\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2476.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{1}{2}, 2; -z\right) = \frac{e^{-z}(5168z^5 + 94656z^4 + 521536z^3 + 969288z^2 + 482121z + 24576)}{24576} + \frac{1}{49152} \sqrt{\pi} (10336z^{11/2} + 194480z^{9/2} + 1132560z^{7/2} + 2378376z^{5/2} + 1600830z^{3/2} + 218295\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2477.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{1}{2}, 3; z\right) = \frac{e^z(-5168z^5 + 109616z^4 - 719976z^3 + 1670340z^2 - 1126875z + 92160)}{92160} + \frac{1}{184320} \sqrt{\pi} (10336z^{11/2} - 224400z^{9/2} + 1544400z^{7/2} - 3963960z^{5/2} + 3430350z^{3/2} - 654885\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2478.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{1}{2}, 3; -z\right) = \frac{e^{-z}(5168z^5 + 109616z^4 + 719976z^3 + 1670340z^2 + 1126875z + 92160)}{92160} + \frac{1}{184320} \sqrt{\pi} (10336z^{11/2} + 224400z^{9/2} + 1544400z^{7/2} + 3963960z^{5/2} + 3430350z^{3/2} + 654885\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2479.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{1}{2}, 4; z\right) = \frac{e^z(-304z^5 + 7328z^4 - 55888z^3 + 155520z^2 - 133005z + 15360)}{15360} + \frac{\sqrt{\pi} (608z^{11/2} - 14960z^{9/2} + 118800z^{7/2} - 360360z^{5/2} + 381150z^{3/2} - 93555\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{30720}$$

07.25.03.2480.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{1}{2}, 4; -z\right) = \frac{e^{-z}(304z^5 + 7328z^4 + 55888z^3 + 155520z^2 + 133005z + 15360)}{15360} + \frac{\sqrt{\pi}(608z^{11/2} + 14960z^{9/2} + 118800z^{7/2} + 360360z^{5/2} + 381150z^{3/2} + 93555\sqrt{z})\operatorname{erf}(\sqrt{z})}{30720}$$

07.25.03.2481.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{1}{2}, 5; z\right) = \frac{e^z(-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920)}{1920} + \frac{\sqrt{\pi}(32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.2482.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{1}{2}, 5; -z\right) = \frac{e^{-z}(16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \frac{\sqrt{\pi}(32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z})\operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.2483.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{1}{2}, 6; z\right) = \frac{1}{16930368z^5} (e^z(-67184z^{10} + 2008448z^9 - 19569888z^8 + 72612696z^7 - 88794237z^6 + 16918272z^5 + 60480z^4 - 241920z^3 + 725760z^2 - 1451520z + 1451520)) + \frac{1}{33860736} \sqrt{\pi} (134368z^{11/2} - 4084080z^{9/2} + 41081040z^{7/2} - 162954792z^{5/2} + 235030950z^{3/2} - 83329155\sqrt{z}) \operatorname{erfi}(\sqrt{z}) - \frac{360}{4199z^5}$$

07.25.03.2484.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{1}{2}, 6; -z\right) = \frac{1}{16930368z^5} (e^{-z}(67184z^{10} + 2008448z^9 + 19569888z^8 + 72612696z^7 + 88794237z^6 + 16918272z^5 - 60480z^4 - 241920z^3 - 725760z^2 - 1451520z - 1451520)) + \frac{1}{33860736} \sqrt{\pi} (134368z^{11/2} + 4084080z^{9/2} + 41081040z^{7/2} + 162954792z^{5/2} + 235030950z^{3/2} + 83329155\sqrt{z}) \operatorname{erf}(\sqrt{z}) + \frac{360}{4199z^5}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = 1$

07.25.03.2485.01

$${}_2F_2\left(-\frac{11}{2}, 5; 1, 1; z\right) = \frac{1}{332\,640} e^{z/2} (167\,960 z^6 - 3\,067\,480 z^5 + 17\,894\,760 z^4 - 40\,630\,044 z^3 + 35\,224\,923 z^2 - 9\,313\,920 z + 332\,640) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (-41\,990 z^6 + 724\,880 z^5 - 3\,769\,805 z^4 + 6\,708\,156 z^3 - 3\,389\,316 z^2 + 242\,817 z) I_1\left(\frac{z}{2}\right)}{83\,160}$$

07.25.03.2486.01

$${}_2F_2\left(-\frac{11}{2}, 5; 1, \frac{3}{2}; z\right) = \frac{e^z (-134\,368 z^5 + 2\,499\,952 z^4 - 14\,106\,768 z^3 + 27\,325\,896 z^2 - 14\,899\,398 z + 1\,106\,883)}{1\,179\,648} + \frac{1}{2\,359\,296 \sqrt{z}} \sqrt{\pi} (268\,736 z^6 - 5\,134\,272 z^5 + 30\,579\,120 z^4 - 66\,594\,528 z^3 + 48\,024\,900 z^2 - 7\,858\,620 z + 72\,765) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2487.01

$${}_2F_2\left(-\frac{11}{2}, 5; 1, \frac{3}{2}; -z\right) = \frac{e^{-z} (134\,368 z^5 + 2\,499\,952 z^4 + 14\,106\,768 z^3 + 27\,325\,896 z^2 + 14\,899\,398 z + 1\,106\,883)}{1\,179\,648} + \frac{1}{2\,359\,296 \sqrt{z}} \sqrt{\pi} (268\,736 z^6 + 5\,134\,272 z^5 + 30\,579\,120 z^4 + 66\,594\,528 z^3 + 48\,024\,900 z^2 + 7\,858\,620 z + 72\,765) \operatorname{erf}(\sqrt{z})$$

07.25.03.2488.01

$${}_2F_2\left(-\frac{11}{2}, 5; 1, 2; z\right) = \frac{1}{332\,640} e^{z/2} (25\,840 z^6 - 554\,200 z^5 + 3\,892\,860 z^4 - 10\,982\,844 z^3 + 12\,397\,503 z^2 - 4\,740\,120 z + 332\,640) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (-25\,840 z^6 + 528\,360 z^5 - 3\,377\,420 z^4 + 7\,843\,764 z^3 - 5\,794\,839 z^2 + 804\,948 z) I_1\left(\frac{z}{2}\right)}{332\,640}$$

07.25.03.2489.01

$${}_2F_2\left(-\frac{11}{2}, 5; 1, \frac{5}{2}; z\right) = \frac{1}{11\,010\,048 z} e^z (-268\,736 z^6 + 5\,855\,616 z^5 - 40\,017\,328 z^4 + 99\,123\,648 z^3 - 76\,428\,324 z^2 + 9\,984\,408 z + 10\,395) + \frac{1}{22\,020\,096 z^{3/2}} \left(\sqrt{\pi} (537\,472 z^7 - 11\,979\,968 z^6 + 85\,621\,536 z^5 - 233\,080\,848 z^4 + 224\,116\,200 z^3 - 55\,010\,340 z^2 + 1\,018\,710 z - 10\,395) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2490.01

$${}_2F_2\left(-\frac{11}{2}, 5; 1, \frac{5}{2}; -z\right) = \frac{1}{11010048z} e^{-z} (268736z^6 + 5855616z^5 + 40017328z^4 + 99123648z^3 + 76428324z^2 + 9984408z - 10395) + \frac{1}{22020096z^{3/2}} \left(\sqrt{\pi} (537472z^7 + 11979968z^6 + 85621536z^5 + 233080848z^4 + 224116200z^3 + 55010340z^2 + 1018710z + 10395) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2491.01

$${}_2F_2\left(-\frac{11}{2}, 5; 1, 3; z\right) = \frac{e^{z/2} (5168z^6 - 127296z^5 + 1045740z^4 - 3524568z^3 + 4882851z^2 - 2411640z + 249480) I_0\left(\frac{z}{2}\right)}{249480} - \frac{e^{z/2} z (5168z^5 - 122128z^4 + 926196z^3 - 2654268z^2 + 2585703z - 541341) I_1\left(\frac{z}{2}\right)}{249480}$$

07.25.03.2492.01

$${}_2F_2\left(-\frac{11}{2}, 5; 1, \frac{7}{2}; z\right) = \frac{1}{352321536z^2} \left(e^z (-2687360z^7 + 67113280z^6 - 538597280z^5 + 1625545584z^4 - 1626225288z^3 + 310993788z^2 + 893970z - 93555) \right) + \frac{1}{704643072z^{5/2}} \left(\sqrt{\pi} (5374720z^8 - 136913920z^7 + 1141620480z^6 - 3729293568z^5 + 4482324000z^4 - 1466942400z^3 + 40748400z^2 - 831600z + 93555) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2493.01

$${}_2F_2\left(-\frac{11}{2}, 5; 1, \frac{7}{2}; -z\right) = \frac{1}{352321536z^2} \left(e^{-z} (2687360z^7 + 67113280z^6 + 538597280z^5 + 1625545584z^4 + 1626225288z^3 + 310993788z^2 - 893970z - 93555) \right) + \frac{1}{704643072z^{5/2}} \left(\sqrt{\pi} (5374720z^8 + 136913920z^7 + 1141620480z^6 + 3729293568z^5 + 4482324000z^4 + 1466942400z^3 + 40748400z^2 + 831600z + 93555) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2494.01

$${}_2F_2\left(-\frac{11}{2}, 5; 1, 4; z\right) = \frac{e^{z/2} (608z^6 - 16912z^5 + 159072z^4 - 623316z^3 + 1021242z^2 - 613305z + 83160) I_0\left(\frac{z}{2}\right)}{83160} - \frac{e^{z/2} z (608z^5 - 16304z^4 + 143072z^3 - 487788z^2 + 590586z - 166587) I_1\left(\frac{z}{2}\right)}{83160}$$

07.25.03.2495.01

$${}_2F_2\left(-\frac{11}{2}, 5; 1, \frac{9}{2}; z\right) = \frac{1}{1811939328z^3} \left(e^z (-5374720z^8 + 151340800z^7 - 1394814720z^6 + 4965484992z^5 - 6118530144z^4 + 1561950864z^3 + 8814960z^2 - 2203740z + 779625) \right) + \frac{1}{3623878656z^{7/2}} \left(\sqrt{\pi} (10749440z^9 - 308056320z^8 + 2935595520z^7 - 11187880704z^6 + 16136366400z^5 - 6601240800z^4 + 244490400z^3 - 7484400z^2 + 1683990z - 779625) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2496.01

$${}_2F_2\left(-\frac{11}{2}, 5; 1, \frac{9}{2}; -z\right) = \frac{1}{1811939328z^3} \left(e^{-z} (5374720z^8 + 151340800z^7 + 1394814720z^6 + 4965484992z^5 + 6118530144z^4 + 1561950864z^3 - 8814960z^2 - 2203740z - 779625) \right) + \frac{1}{3623878656z^{7/2}} \left(\sqrt{\pi} (10749440z^9 + 308056320z^8 + 2935595520z^7 + 11187880704z^6 + 16136366400z^5 + 6601240800z^4 + 244490400z^3 + 7484400z^2 + 1683990z + 779625) \operatorname{erf}(\sqrt{-z}) \right)$$

07.25.03.2497.01

$${}_2F_2\left(-\frac{11}{2}, 5; 1, 5; z\right) = \frac{e^{z/2} (32z^6 - 992z^5 + 10512z^4 - 46944z^3 + 88674z^2 - 62370z + 10395) I_0\left(\frac{z}{2}\right) + 2e^{z/2} z (16z^5 - 480z^4 + 4784z^3 - 18912z^2 + 27387z - 9762) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.2498.01

$${}_2F_2\left(-\frac{11}{2}, 5; 1, \frac{11}{2}; z\right) = \frac{1}{1610612736z^4} \left(e^z (-2149888z^9 + 67382016z^8 - 701282816z^7 + 2876899584z^6 - 4216696128z^5 + 1358204448z^4 + 13638240z^3 - 7484400z^2 + 8212050z - 7640325) \right) + \frac{1}{3221225472z^{9/2}} \left(\sqrt{\pi} (4299776z^{10} - 136913920z^9 + 1467797760z^8 - 6393074688z^7 + 10757577600z^6 - 5280992640z^5 + 244490400z^4 - 9979200z^3 + 3367980z^2 - 3118500z + 7640325) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2499.01

$${}_2F_2\left(-\frac{11}{2}, 5; 1, \frac{11}{2}; -z\right) = \frac{1}{1610612736z^4} \left(e^{-z} (2149888z^9 + 67382016z^8 + 701282816z^7 + 2876899584z^6 + 4216696128z^5 + 1358204448z^4 - 13638240z^3 - 7484400z^2 - 8212050z - 7640325) \right) + \frac{1}{3221225472z^{9/2}} \left(\sqrt{\pi} (4299776z^{10} + 136913920z^9 + 1467797760z^8 + 6393074688z^7 + 10757577600z^6 + 5280992640z^5 + 244490400z^4 + 9979200z^3 + 3367980z^2 + 3118500z + 7640325) \operatorname{erf}(\sqrt{-z}) \right)$$

07.25.03.2500.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 5; 1, 6; z\right) = & \frac{1}{916620705 z^3} \left(e^{z/2} (1343680 z^9 - 45932640 z^8 + 541441680 z^7 - 2713986912 z^6 + 5801519304 z^5 - \right. \\
 & \left. 4659434010 z^4 + 916329645 z^3 + 1247400 z^2 - 3991680 z + 7983360) I_0\left(\frac{z}{2}\right) + \right. \\
 & \left. \frac{1}{916620705 z^4} \left(e^{z/2} (-1343680 z^{10} + 44588960 z^9 - 497524560 z^8 + 2237413152 z^7 - 3772478472 z^6 + \right. \right. \\
 & \left. \left. 1630010214 z^5 - 363825 z^4 + 1663200 z^3 - 5987520 z^2 + 15966720 z - 31933440) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = \frac{3}{2}$

07.25.03.2501.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 5; \frac{3}{2}, 2; z\right) = & \frac{e^z (-10336 z^5 + 228208 z^4 - 1589904 z^3 + 4062984 z^2 - 3328494 z + 517059)}{589824} + \\
 & \frac{1}{1179648 \sqrt{z}} \sqrt{\pi} (20672 z^6 - 466752 z^5 + 3397680 z^4 - 9513504 z^3 + 9604980 z^2 - 2619540 z + 72765) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.2502.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 5; \frac{3}{2}, 2; -z\right) = & \frac{e^{-z} (10336 z^5 + 228208 z^4 + 1589904 z^3 + 4062984 z^2 + 3328494 z + 517059)}{589824} + \\
 & \frac{1}{1179648 \sqrt{z}} \sqrt{\pi} (20672 z^6 + 466752 z^5 + 3397680 z^4 + 9513504 z^3 + 9604980 z^2 + 2619540 z + 72765) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.2503.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 5; \frac{3}{2}, 3; z\right) = & \frac{e^z (-10336 z^5 + 264112 z^4 - 2189712 z^3 + 6952200 z^2 - 7627470 z + 1848015)}{2211840} + \\
 & \frac{1}{4423680 \sqrt{z}} \sqrt{\pi} (20672 z^6 - 538560 z^5 + 4633200 z^4 - 15855840 z^3 + 20582100 z^2 - 7858620 z + 363825) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.2504.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 5; \frac{3}{2}, 3; -z\right) = & \frac{e^{-z} (10336 z^5 + 264112 z^4 + 2189712 z^3 + 6952200 z^2 + 7627470 z + 1848015)}{2211840} + \\
 & \frac{1}{4423680 \sqrt{z}} \sqrt{\pi} (20672 z^6 + 538560 z^5 + 4633200 z^4 + 15855840 z^3 + 20582100 z^2 + 7858620 z + 363825) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.2505.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 5; \frac{3}{2}, 4; z\right) = & \frac{e^z (-608 z^5 + 17648 z^4 - 169680 z^3 + 643944 z^2 - 887070 z + 295875)}{368640} + \\
 & \frac{1}{737280 \sqrt{z}} \sqrt{\pi} (1216 z^6 - 35904 z^5 + 356400 z^4 - 1441440 z^3 + 2286900 z^2 - 1122660 z + 72765) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.2506.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{3}{2}, 4; -z\right) = \frac{e^{-z}(608z^5 + 17648z^4 + 169680z^3 + 643944z^2 + 887070z + 295875)}{368640} + \frac{1}{737280\sqrt{z}} \sqrt{\pi} (1216z^6 + 35904z^5 + 356400z^4 + 1441440z^3 + 2286900z^2 + 1122660z + 72765) \operatorname{erf}(\sqrt{z})$$

07.25.03.2507.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{3}{2}, 5; z\right) = \frac{e^z(-32z^5 + 1040z^4 - 11376z^3 + 50232z^2 - 83370z + 35685)}{46080} + \frac{\sqrt{\pi} (64z^6 - 2112z^5 + 23760z^4 - 110880z^3 + 207900z^2 - 124740z + 10395) \operatorname{erfi}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.2508.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{3}{2}, 5; -z\right) = \frac{e^{-z}(32z^5 + 1040z^4 + 11376z^3 + 50232z^2 + 83370z + 35685)}{46080} + \frac{\sqrt{\pi} (64z^6 + 2112z^5 + 23760z^4 + 110880z^3 + 207900z^2 + 124740z + 10395) \operatorname{erf}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.2509.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{3}{2}, 6; z\right) = \frac{1}{406328832z^5} (e^z(-134368z^{10} + 4833712z^9 - 59271888z^8 + 298522536z^7 - 580046838z^6 + 304514343z^5 - 161280z^4 + 645120z^3 - 1935360z^2 + 3870720z - 3870720)) + \frac{1}{812657664\sqrt{z}} (\sqrt{\pi} (268736z^6 - 9801792z^5 + 123243120z^4 - 651819168z^3 + 1410185700z^2 - 999949860z + 101846745) \operatorname{erfi}(\sqrt{z})) + \frac{40}{4199z^5}$$

07.25.03.2510.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{3}{2}, 6; -z\right) = \frac{1}{406328832z^5} (e^{-z}(134368z^{10} + 4833712z^9 + 59271888z^8 + 298522536z^7 + 580046838z^6 + 304514343z^5 + 161280z^4 + 645120z^3 + 1935360z^2 + 3870720z + 3870720)) + \frac{1}{812657664\sqrt{z}} (\sqrt{\pi} (268736z^6 + 9801792z^5 + 123243120z^4 + 651819168z^3 + 1410185700z^2 + 999949860z + 101846745) \operatorname{erf}(\sqrt{z})) - \frac{40}{4199z^5}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = 2$

07.25.03.2511.01

$${}_2F_2\left(-\frac{11}{2}, 5; 2, 2; z\right) = \frac{1}{2\,162\,160} e^{z/2} (25\,840 z^6 - 651\,440 z^5 + 5\,523\,060 z^4 - 19\,463\,316 z^3 + 28\,821\,867 z^2 - 15\,935\,535 z + 2\,162\,160) I_0\left(\frac{z}{2}\right) + \frac{1}{2\,162\,160} e^{z/2} (-25\,840 z^6 + 625\,600 z^5 - 4\,910\,380 z^4 + 14\,839\,896 z^3 - 15\,892\,311 z^2 + 4\,171\,872 z - 41\,580) I_1\left(\frac{z}{2}\right)$$

07.25.03.2512.01

$${}_2F_2\left(-\frac{11}{2}, 5; 2, \frac{5}{2}; z\right) = \frac{e^z (-20\,672 z^6 + 534\,208 z^5 - 4\,499\,984 z^4 + 14\,639\,904 z^3 - 16\,769\,508 z^2 + 4\,493\,244 z - 10\,395)}{5\,505\,024 z} + \frac{1}{11\,010\,048 z^{3/2}} (\sqrt{\pi} (41\,344 z^7 - 1\,089\,088 z^6 + 9\,513\,504 z^5 - 33\,297\,264 z^4 + 44\,823\,240 z^3 - 18\,336\,780 z^2 + 1\,018\,710 z + 10\,395) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.2513.01

$${}_2F_2\left(-\frac{11}{2}, 5; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (20\,672 z^6 + 534\,208 z^5 + 4\,499\,984 z^4 + 14\,639\,904 z^3 + 16\,769\,508 z^2 + 4\,493\,244 z + 10\,395)}{5\,505\,024 z} + \frac{1}{11\,010\,048 z^{3/2}} (\sqrt{\pi} (41\,344 z^7 + 1\,089\,088 z^6 + 9\,513\,504 z^5 + 33\,297\,264 z^4 + 44\,823\,240 z^3 + 18\,336\,780 z^2 + 1\,018\,710 z - 10\,395) \operatorname{erf}(\sqrt{-z}))$$

07.25.03.2514.01

$${}_2F_2\left(-\frac{11}{2}, 5; 2, 3; z\right) = \frac{1}{3\,243\,240} e^{z/2} (10\,336 z^6 - 299\,472 z^5 + 2\,974\,560 z^4 - 12\,570\,564 z^3 + 22\,988\,538 z^2 - 16\,455\,285 z + 3\,243\,240) I_0\left(\frac{z}{2}\right) + \frac{1}{3\,243\,240} e^{z/2} (-10\,336 z^6 + 289\,136 z^5 - 2\,690\,592 z^4 + 10\,014\,204 z^3 - 14\,062\,794 z^2 + 5\,478\,183 z - 124\,740) I_1\left(\frac{z}{2}\right)$$

07.25.03.2515.01

$${}_2F_2\left(-\frac{11}{2}, 5; 2, \frac{7}{2}; z\right) = \frac{1}{176\,160\,768 z^2} e^z (-206\,720 z^7 + 6\,120\,000 z^6 - 60\,466\,720 z^5 + 238\,946\,352 z^4 - 352\,298\,664 z^3 + 135\,975\,084 z^2 - 852\,390 z + 31\,185) + \frac{1}{352\,321\,536 z^{5/2}} (\sqrt{\pi} (413\,440 z^8 - 12\,446\,720 z^7 + 126\,846\,720 z^6 - 532\,756\,224 z^5 + 896\,464\,800 z^4 - 488\,980\,800 z^3 + 40\,748\,400 z^2 + 831\,600 z - 31\,185) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.2516.01

$${}_2F_2\left(-\frac{11}{2}, 5; 2, \frac{7}{2}; -z\right) = \frac{1}{176\,160\,768\,z^2} e^{-z} (206\,720\,z^7 + 6\,120\,000\,z^6 + 60\,466\,720\,z^5 + 238\,946\,352\,z^4 + 352\,298\,664\,z^3 + 135\,975\,084\,z^2 + 852\,390\,z + 31\,185) + \frac{1}{352\,321\,536\,z^{5/2}} \left(\sqrt{\pi} (413\,440\,z^8 + 12\,446\,720\,z^7 + 126\,846\,720\,z^6 + 532\,756\,224\,z^5 + 896\,464\,800\,z^4 + 488\,980\,800\,z^3 + 40\,748\,400\,z^2 - 831\,600\,z - 31\,185) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.2517.01

$${}_2F_2\left(-\frac{11}{2}, 5; 2, 4; z\right) = \frac{e^{z/2} (304\,z^6 - 9952\,z^5 + 113\,328\,z^4 - 558\,432\,z^3 + 1\,214\,049\,z^2 - 1\,060\,290\,z + 270\,270) I_0\left(\frac{z}{2}\right) + e^{z/2} (-608\,z^6 + 19\,296\,z^5 - 207\,664\,z^4 + 918\,240\,z^3 - 1\,596\,294\,z^2 + 828\,138\,z - 31\,185) I_1\left(\frac{z}{2}\right)}{270\,270 + 540\,540}$$

07.25.03.2518.01

$${}_2F_2\left(-\frac{11}{2}, 5; 2, \frac{9}{2}; z\right) = \frac{1}{905\,969\,664\,z^3} (e^z (-413\,440\,z^8 + 13\,795\,840\,z^7 - 156\,397\,440\,z^6 + 727\,316\,736\,z^5 - 1\,312\,844\,352\,z^4 + 666\,630\,432\,z^3 - 7900\,200\,z^2 + 665\,280\,z - 155\,925)) + \frac{1}{1\,811\,939\,328\,z^{7/2}} \left(\sqrt{\pi} (826\,880\,z^9 - 28\,005\,120\,z^8 + 326\,177\,280\,z^7 - 1\,598\,268\,672\,z^6 + 3\,227\,273\,280\,z^5 - 2\,200\,413\,600\,z^4 + 244\,490\,400\,z^3 + 7\,484\,400\,z^2 - 561\,330\,z + 155\,925) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.2519.01

$${}_2F_2\left(-\frac{11}{2}, 5; 2, \frac{9}{2}; -z\right) = \frac{1}{905\,969\,664\,z^3} (e^{-z} (413\,440\,z^8 + 13\,795\,840\,z^7 + 156\,397\,440\,z^6 + 727\,316\,736\,z^5 + 1\,312\,844\,352\,z^4 + 666\,630\,432\,z^3 + 7900\,200\,z^2 + 665\,280\,z + 155\,925)) + \frac{1}{1\,811\,939\,328\,z^{7/2}} \left(\sqrt{\pi} (826\,880\,z^9 + 28\,005\,120\,z^8 + 326\,177\,280\,z^7 + 1\,598\,268\,672\,z^6 + 3\,227\,273\,280\,z^5 + 2\,200\,413\,600\,z^4 + 244\,490\,400\,z^3 - 7\,484\,400\,z^2 - 561\,330\,z - 155\,925) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.2520.01

$${}_2F_2\left(-\frac{11}{2}, 5; 2, 5; z\right) = \frac{e^{z/2} (64\,z^6 - 2336\,z^5 + 30\,000\,z^4 - 168\,864\,z^3 + 425\,112\,z^2 - 436\,590\,z + 135\,135) I_0\left(\frac{z}{2}\right) + e^{z/2} (-64\,z^6 + 2272\,z^5 - 27\,760\,z^4 + 142\,176\,z^3 - 294\,744\,z^2 + 191\,442\,z - 10\,395) I_1\left(\frac{z}{2}\right)}{135\,135 + 135\,135}$$

$$\begin{aligned}
 & \text{07.25.03.2521.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 5; 2, \frac{11}{2}; z\right) = \\
 & \frac{1}{805\,306\,368\,z^4} \left(e^z (-165\,376\,z^9 + 6\,140\,672\,z^8 - 78\,556\,672\,z^7 + 420\,233\,472\,z^6 - 898\,008\,384\,z^5 + 567\,834\,144\,z^4 - \right. \\
 & \quad \left. 10\,977\,120\,z^3 + 1\,829\,520\,z^2 - 1\,351\,350\,z + 1\,091\,475) \right) + \\
 & \frac{1}{1\,610\,612\,736\,z^{9/2}} \left(\sqrt{\pi} (330\,752\,z^{10} - 12\,446\,720\,z^9 + 163\,088\,640\,z^8 - 913\,296\,384\,z^7 + 2\,151\,515\,520\,z^6 - \right. \\
 & \quad \left. 1\,760\,330\,880\,z^5 + 244\,490\,400\,z^4 + 9\,979\,200\,z^3 - 1\,122\,660\,z^2 + 623\,700\,z - 1\,091\,475) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2522.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 5; 2, \frac{11}{2}; -z\right) = \\
 & \frac{1}{805\,306\,368\,z^4} \left(e^{-z} (165\,376\,z^9 + 6\,140\,672\,z^8 + 78\,556\,672\,z^7 + 420\,233\,472\,z^6 + 898\,008\,384\,z^5 + 567\,834\,144\,z^4 + \right. \\
 & \quad \left. 10\,977\,120\,z^3 + 1\,829\,520\,z^2 + 1\,351\,350\,z + 1\,091\,475) \right) + \\
 & \frac{1}{1\,610\,612\,736\,z^{9/2}} \left(\sqrt{\pi} (330\,752\,z^{10} + 12\,446\,720\,z^9 + 163\,088\,640\,z^8 + 913\,296\,384\,z^7 + 2\,151\,515\,520\,z^6 + \right. \\
 & \quad \left. 1\,760\,330\,880\,z^5 + 244\,490\,400\,z^4 - 9\,979\,200\,z^3 - 1\,122\,660\,z^2 - 623\,700\,z - 1\,091\,475) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2523.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 5; 2, 6; z\right) = \\
 & \frac{1}{916\,620\,705\,z^3} \left(2 e^{z/2} (103\,360\,z^9 - 4\,161\,600\,z^8 + 59\,501\,040\,z^7 - 376\,629\,456\,z^6 + 1\,077\,019\,272\,z^5 - 1\,268\,439\,480\,z^4 + \right. \\
 & \quad \left. 458\,346\,735\,z^3 - 155\,925\,z^2 + 498\,960\,z - 997\,920) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{916\,620\,705\,z^4} \left(2 e^{z/2} (103\,360\,z^{10} - 4\,058\,240\,z^9 + 55\,494\,480\,z^8 - 323\,060\,736\,z^7 + 777\,970\,536\,z^6 - \right. \\
 & \quad \left. 607\,843\,152\,z^5 + 44\,022\,825\,z^4 + 207\,900\,z^3 - 748\,440\,z^2 + 1\,995\,840\,z - 3\,991\,680) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = \frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.2524.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 5; \frac{5}{2}, 3; z\right) = \\
 & \frac{e^z (-20\,672\,z^6 + 617\,984\,z^5 - 6\,187\,824\,z^4 + 24\,936\,960\,z^3 - 37\,973\,460\,z^2 + 15\,654\,240\,z - 155\,925)}{20\,643\,840\,z} + \frac{1}{41\,287\,680\,z^{3/2}} \\
 & \left(\sqrt{\pi} (41\,344\,z^7 - 1\,256\,640\,z^6 + 12\,972\,960\,z^5 - 55\,495\,440\,z^4 + 96\,049\,800\,z^3 - 55\,010\,340\,z^2 + 5\,093\,550\,z + 155\,925) \right. \\
 & \quad \left. \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.2525.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (20672 z^6 + 617984 z^5 + 6187824 z^4 + 24936960 z^3 + 37973460 z^2 + 15654240 z + 155925)}{20643840 z} + \frac{1}{41287680 z^{3/2}} \left(\sqrt{\pi} (41344 z^7 + 1256640 z^6 + 12972960 z^5 + 55495440 z^4 + 96049800 z^3 + 55010340 z^2 + 5093550 z - 155925)\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.2526.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{5}{2}, 4; z\right) = \frac{e^z (-1216 z^6 + 41280 z^5 - 478928 z^4 + 2302176 z^3 - 4378500 z^2 + 2456580 z - 51975)}{3440640 z} + \frac{1}{6881280 z^{3/2}} \sqrt{\pi} (2432 z^7 - 83776 z^6 + 997920 z^5 - 5045040 z^4 + 10672200 z^3 - 7858620 z^2 + 1018710 z + 51975) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2527.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{5}{2}, 4; -z\right) = \frac{e^{-z} (1216 z^6 + 41280 z^5 + 478928 z^4 + 2302176 z^3 + 4378500 z^2 + 2456580 z + 51975)}{3440640 z} + \frac{1}{6881280 z^{3/2}} \sqrt{\pi} (2432 z^7 + 83776 z^6 + 997920 z^5 + 5045040 z^4 + 10672200 z^3 + 7858620 z^2 + 1018710 z - 51975) \operatorname{erf}(\sqrt{z})$$

07.25.03.2528.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{5}{2}, 5; z\right) = \frac{e^z (-64 z^6 + 2432 z^5 - 32080 z^4 + 179136 z^3 - 408828 z^2 + 291480 z - 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 - 4928 z^6 + 66528 z^5 - 388080 z^4 + 970200 z^3 - 873180 z^2 + 145530 z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2529.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{5}{2}, 5; -z\right) = \frac{e^{-z} (64 z^6 + 2432 z^5 + 32080 z^4 + 179136 z^3 + 408828 z^2 + 291480 z + 10395)}{430080 z} + \frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 + 4928 z^6 + 66528 z^5 + 388080 z^4 + 970200 z^3 + 873180 z^2 + 145530 z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.2530.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{5}{2}, 6; z\right) = \frac{1}{3792402432 z^5} \left(e^z (-268736 z^{10} + 11301056 z^9 - 167024208 z^8 + 1062486048 z^7 - 2829818964 z^6 + 2453716188 z^5 - 130300695 z^4 - 2580480 z^3 + 7741440 z^2 - 15482880 z + 15482880) \right) + \frac{1}{7584804864 z^{3/2}} \left(\sqrt{\pi} (537472 z^7 - 22870848 z^6 + 345080736 z^5 - 2281367088 z^4 + 6580866600 z^3 - 6999649020 z^2 + 1425854430 z + 130945815) \operatorname{erfi}(\sqrt{z}) \right) - \frac{120}{29393 z^5}$$

$$\begin{aligned}
 & \text{07.25.03.2531.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 5; \frac{5}{2}, 6; -z\right) = \\
 & \frac{1}{3792402432z^5} \left(e^{-z} (268736z^{10} + 11301056z^9 + 167024208z^8 + 1062486048z^7 + 2829818964z^6 + \right. \\
 & \quad \left. 2453716188z^5 + 130300695z^4 - 2580480z^3 - 7741440z^2 - 15482880z - 15482880) \right) + \\
 & \frac{1}{7584804864z^{3/2}} \left(\sqrt{\pi} (537472z^7 + 22870848z^6 + 345080736z^5 + 2281367088z^4 + 6580866600z^3 + \right. \\
 & \quad \left. 6999649020z^2 + 1425854430z - 130945815) \operatorname{erf}(\sqrt{z}) \right) + \frac{120}{29393z^5}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = 3$

$$\begin{aligned}
 & \text{07.25.03.2532.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 5; 3, 3; z\right) = \frac{1}{12162150} \\
 & e^{z/2} (10336z^6 - 344352z^5 + 4012080z^4 - 20388000z^3 + 46264230z^2 - 43014510z + 12172545) I_0\left(\frac{z}{2}\right) + \frac{1}{6081075z} \\
 & e^{z/2} (-5168z^7 + 167008z^6 - 1841616z^5 + 8430720z^4 - 15471345z^3 + 8864370z^2 - 457380z - 20790) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2533.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 5; 3, \frac{7}{2}; z\right) = \frac{1}{132120576z^2} \\
 & e^z (-41344z^7 + 1415488z^6 - 16610208z^5 + 81143664z^4 - 158254728z^3 + 93010428z^2 - 2432430z - 93555) + \\
 & \frac{1}{264241152z^{5/2}} \left(\sqrt{\pi} (82688z^8 - 2872320z^7 + 34594560z^6 - 177585408z^5 + \right. \\
 & \quad \left. 384199200z^4 - 293388480z^3 + 40748400z^2 + 2494800z + 93555) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2534.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 5; 3, \frac{7}{2}; -z\right) = \frac{1}{132120576z^2} \\
 & e^{-z} (41344z^7 + 1415488z^6 + 16610208z^5 + 81143664z^4 + 158254728z^3 + 93010428z^2 + 2432430z - 93555) + \\
 & \frac{1}{264241152z^{5/2}} \left(\sqrt{\pi} (82688z^8 + 2872320z^7 + 34594560z^6 + 177585408z^5 + \right. \\
 & \quad \left. 384199200z^4 + 293388480z^3 + 40748400z^2 - 2494800z + 93555) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2535.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 5; 3, 4; z\right) = \frac{e^{z/2} (1216z^6 - 45792z^5 + 612240z^4 - 3635040z^3 + 9842760z^2 - 11205810z + 4064445) I_0\left(\frac{z}{2}\right)}{4054050} + \\
 & \frac{1}{4054050z} e^{z/2} (-1216z^7 + 44576z^6 - 568272z^5 + 3087840z^4 - 6998280z^3 + 5306670z^2 - 446985z - 41580) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

07.25.03.2536.01

$${}_2F_2\left(-\frac{11}{2}, 5; 3, \frac{9}{2}; z\right) = \frac{1}{679477248z^3} \left(e^z (-82688z^8 + 3190016z^7 - 42925056z^6 + 246407232z^5 - 586212384z^4 + 449494704z^3 - 21288960z^2 - 1787940z + 155925) \right) + \frac{1}{1358954496z^{7/2}} \left(\sqrt{\pi} (165376z^9 - 6462720z^8 + 88957440z^7 - 532756224z^6 + 1383117120z^5 - 1320248160z^4 + 244490400z^3 + 22453200z^2 + 1683990z - 155925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2537.01

$${}_2F_2\left(-\frac{11}{2}, 5; 3, \frac{9}{2}; -z\right) = \frac{1}{679477248z^3} \left(e^{-z} (82688z^8 + 3190016z^7 + 42925056z^6 + 246407232z^5 + 586212384z^4 + 449494704z^3 + 21288960z^2 - 1787940z - 155925) \right) + \frac{1}{1358954496z^{7/2}} \left(\sqrt{\pi} (165376z^9 + 6462720z^8 + 88957440z^7 + 532756224z^6 + 1383117120z^5 + 1320248160z^4 + 244490400z^3 - 22453200z^2 + 1683990z + 155925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2538.01

$${}_2F_2\left(-\frac{11}{2}, 5; 3, 5; z\right) = \frac{4e^{z/2} (64z^6 - 2688z^5 + 40560z^4 - 275520z^3 + 866520z^2 - 1164240z + 509355) I_0\left(\frac{z}{2}\right) - \frac{1}{2027025z} 4e^{z/2} (64z^7 - 2624z^6 + 37968z^5 - 238800z^4 + 644280z^3 - 608760z^2 + 72765z + 10395) I_1\left(\frac{z}{2}\right)}{2027025}$$

07.25.03.2539.01

$${}_2F_2\left(-\frac{11}{2}, 5; 3, \frac{11}{2}; z\right) = \frac{1}{3019898880z^4} \left(e^z (-165376z^9 + 7098112z^8 - 107730432z^7 + 710557440z^6 - 1995673920z^5 + 1892455200z^4 - 137380320z^3 - 19792080z^2 + 5301450z - 3274425) \right) + \frac{1}{6039797760z^{9/2}} \left(\sqrt{\pi} (330752z^{10} - 14361600z^9 + 222393600z^8 - 1522160640z^7 + 4610390400z^6 - 5280992640z^5 + 1222452000z^4 + 149688000z^3 + 16839900z^2 - 3118500z + 3274425) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2540.01

$${}_2F_2\left(-\frac{11}{2}, 5; 3, \frac{11}{2}; -z\right) = \frac{1}{3019898880z^4} \left(e^{-z} (165376z^9 + 7098112z^8 + 107730432z^7 + 710557440z^6 + 1995673920z^5 + 1892455200z^4 + 137380320z^3 - 19792080z^2 - 5301450z - 3274425) \right) + \frac{1}{6039797760z^{9/2}} \left(\sqrt{\pi} (330752z^{10} + 14361600z^9 + 222393600z^8 + 1522160640z^7 + 4610390400z^6 + 5280992640z^5 + 1222452000z^4 - 149688000z^3 + 16839900z^2 + 3118500z + 3274425) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2541.01

$${}_2F_2\left(-\frac{11}{2}, 5; 3, 6; z\right) = \frac{1}{2749862115z^3} \left(4e^{z/2} (41344z^9 - 1915968z^8 + 32205120z^7 - 246321264z^6 + 882182448z^5 - 1363907160z^4 + 693304920z^3 + 155925z^2 - 498960z + 997920) I_0\left(\frac{z}{2}\right) - \frac{1}{2749862115z^4} \left(4e^{z/2} (41344z^{10} - 1874624z^9 + 30351168z^8 - 216866064z^7 + 678746544z^6 - 768563208z^5 + 120498840z^4 + 23295195z^3 + 748440z^2 - 1995840z + 3991680) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = \frac{7}{2}$

07.25.03.2542.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{7}{2}, 4; z\right) = \frac{1}{22020096z^2} e^z (-2432z^7 + 94528z^6 - 1284512z^5 + 7474032z^4 - 18142728z^3 + 14399868z^2 - 769230z - 93555) + \frac{1}{44040192z^{5/2}} \left(\sqrt{\pi} (4864z^8 - 191488z^7 + 2661120z^6 - 16144128z^5 + 42688800z^4 - 41912640z^3 + 8149680z^2 + 831600z + 93555) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2543.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{7}{2}, 4; -z\right) = \frac{1}{22020096z^2} e^{-z} (2432z^7 + 94528z^6 + 1284512z^5 + 7474032z^4 + 18142728z^3 + 14399868z^2 + 769230z - 93555) + \frac{1}{44040192z^{5/2}} \left(\sqrt{\pi} (4864z^8 + 191488z^7 + 2661120z^6 + 16144128z^5 + 42688800z^4 + 41912640z^3 + 8149680z^2 - 831600z + 93555) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2544.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{7}{2}, 5; z\right) = \frac{e^z (-128z^7 + 5568z^6 - 85984z^5 + 580560z^4 - 1686744z^3 + 1690836z^2 - 145530z - 31185)}{2752512z^2} + \frac{1}{5505024z^{5/2}} \left(\sqrt{\pi} (256z^8 - 11264z^7 + 177408z^6 - 1241856z^5 + 3880800z^4 - 4656960z^3 + 1164240z^2 + 166320z + 31185) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2545.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{7}{2}, 5; -z\right) = \frac{e^{-z} (128 z^7 + 5568 z^6 + 85984 z^5 + 580560 z^4 + 1686744 z^3 + 1690836 z^2 + 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}} \left(\sqrt{\pi} (256 z^8 + 11264 z^7 + 177408 z^6 + 1241856 z^5 + 3880800 z^4 + 4656960 z^3 + 1164240 z^2 - 166320 z + 31185)\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.2546.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{7}{2}, 6; z\right) = \frac{1}{121356877824 z^5} (e^z (-2687360 z^{10} + 129346880 z^9 - 2237208480 z^8 + 17193646704 z^7 - 58181192328 z^6 + 70577309628 z^5 - 8663067630 z^4 - 2667286755 z^3 - 247726080 z^2 + 495452160 z - 495452160)) + \frac{1}{242713755648 z^{5/2}} (\sqrt{\pi} (5374720 z^8 - 261381120 z^7 + 4601076480 z^6 - 36501873408 z^5 + 131617332000 z^4 - 186657307200 z^3 + 57034177200 z^2 + 10475665200 z + 2749862115) \operatorname{erfi}(\sqrt{z})) + \frac{120}{29393 z^5}$$

07.25.03.2547.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{7}{2}, 6; -z\right) = \frac{1}{121356877824 z^5} (e^{-z} (2687360 z^{10} + 129346880 z^9 + 2237208480 z^8 + 17193646704 z^7 + 58181192328 z^6 + 70577309628 z^5 + 8663067630 z^4 - 2667286755 z^3 + 247726080 z^2 + 495452160 z + 495452160)) + \frac{1}{242713755648 z^{5/2}} (\sqrt{\pi} (5374720 z^8 + 261381120 z^7 + 4601076480 z^6 + 36501873408 z^5 + 131617332000 z^4 + 186657307200 z^3 + 57034177200 z^2 - 10475665200 z + 2749862115) \operatorname{erf}(\sqrt{z})) - \frac{120}{29393 z^5}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = 4$

07.25.03.2548.01

$${}_2F_2\left(-\frac{11}{2}, 5; 4, 4; z\right) = \frac{1}{11486475 z} e^{z/2} (1216 z^7 - 51776 z^6 + 794928 z^5 - 5522640 z^4 + 17894760 z^3 - 25031160 z^2 + 11569635 z + 10395) I_0\left(\frac{z}{2}\right) + \frac{1}{11486475 z^2} (e^{z/2} (-1216 z^8 + 50560 z^7 - 744976 z^6 + 4801728 z^5 - 13418760 z^4 + 13410480 z^3 - 1819125 z^2 - 332640 z - 41580) I_1\left(\frac{z}{2}\right))$$

07.25.03.2549.01

$${}_2F_2\left(-\frac{11}{2}, 5; 4, \frac{9}{2}; z\right) =$$

$$\frac{1}{113\,246\,208\,z^3} \left(e^z (-4864\,z^8 + 212\,992\,z^7 - 3\,317\,376\,z^6 + 22\,657\,920\,z^5 - 66\,925\,824\,z^4 + 68\,900\,544\,z^3 - 6403\,320\,z^2 - 1\,580\,040\,z - 155\,925) \right) +$$

$$\frac{1}{226\,492\,416\,z^{7/2}} \left(\sqrt{\pi} (9728\,z^9 - 430\,848\,z^8 + 6\,842\,880\,z^7 - 48\,432\,384\,z^6 + 153\,679\,680\,z^5 - 188\,606\,880\,z^4 + 48\,898\,080\,z^3 + 7\,484\,400\,z^2 + 1\,683\,990\,z + 155\,925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2550.01

$${}_2F_2\left(-\frac{11}{2}, 5; 4, \frac{9}{2}; -z\right) =$$

$$\frac{1}{113\,246\,208\,z^3} \left(e^{-z} (4864\,z^8 + 212\,992\,z^7 + 3\,317\,376\,z^6 + 22\,657\,920\,z^5 + 66\,925\,824\,z^4 + 68\,900\,544\,z^3 + 6403\,320\,z^2 - 1\,580\,040\,z + 155\,925) \right) +$$

$$\frac{1}{226\,492\,416\,z^{7/2}} \left(\sqrt{\pi} (9728\,z^9 + 430\,848\,z^8 + 6\,842\,880\,z^7 + 48\,432\,384\,z^6 + 153\,679\,680\,z^5 + 188\,606\,880\,z^4 + 48\,898\,080\,z^3 - 7\,484\,400\,z^2 + 1\,683\,990\,z - 155\,925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2551.01

$${}_2F_2\left(-\frac{11}{2}, 5; 4, 5; z\right) =$$

$$\frac{1}{11\,486\,475\,z} 4 e^{z/2} (128\,z^7 - 6080\,z^6 + 105\,408\,z^5 - 838\,800\,z^4 + 3\,163\,920\,z^3 - 5\,239\,080\,z^2 + 2\,910\,600\,z + 10\,395) I_0\left(\frac{z}{2}\right) -$$

$$\frac{1}{11\,486\,475\,z^2} 4 e^{z/2} (128\,z^8 - 5952\,z^7 + 99\,520\,z^6 - 742\,128\,z^5 + 2\,466\,000\,z^4 - 3\,061\,560\,z^3 + 582\,120\,z^2 + 155\,925\,z + 41\,580) I_1\left(\frac{z}{2}\right)$$

07.25.03.2552.01

$${}_2F_2\left(-\frac{11}{2}, 5; 4, \frac{11}{2}; z\right) =$$

$$\frac{1}{503\,316\,480\,z^4} \left(e^z (-9728\,z^9 + 473\,856\,z^8 - 8\,321\,536\,z^7 + 65\,253\,120\,z^6 - 227\,119\,680\,z^5 + 287\,855\,520\,z^4 - 39\,584\,160\,z^3 - 14\,469\,840\,z^2 - 3\,846\,150\,z + 1\,091\,475) \right) +$$

$$\frac{1}{1\,006\,632\,960\,z^{9/2}} \left(\sqrt{\pi} (19\,456\,z^{10} - 957\,440\,z^9 + 17\,107\,200\,z^8 - 138\,378\,240\,z^7 + 512\,265\,600\,z^6 - 754\,427\,520\,z^5 + 244\,490\,400\,z^4 + 49\,896\,000\,z^3 + 16\,839\,900\,z^2 + 3\,118\,500\,z - 1\,091\,475) \operatorname{erfi}(\sqrt{z}) \right)$$

$$\begin{aligned}
 & \text{07.25.03.2553.01} \\
 {}_2F_2\left(-\frac{11}{2}, 5; 4, \frac{11}{2}; -z\right) = & \\
 & \frac{1}{503\,316\,480\,z^4} \left(e^{-z} (9728\,z^9 + 473\,856\,z^8 + 8\,321\,536\,z^7 + 65\,253\,120\,z^6 + 227\,119\,680\,z^5 + 287\,855\,520\,z^4 + \right. \\
 & \quad \left. 39\,584\,160\,z^3 - 14\,469\,840\,z^2 + 3\,846\,150\,z + 1\,091\,475) \right) + \\
 & \frac{1}{1\,006\,632\,960\,z^{9/2}} \left(\sqrt{\pi} (19\,456\,z^{10} + 957\,440\,z^9 + 17\,107\,200\,z^8 + 138\,378\,240\,z^7 + 512\,265\,600\,z^6 + \right. \\
 & \quad \left. 754\,427\,520\,z^5 + 244\,490\,400\,z^4 - 49\,896\,000\,z^3 + 16\,839\,900\,z^2 - 3\,118\,500\,z - 1\,091\,475) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2554.01} \\
 {}_2F_2\left(-\frac{11}{2}, 5; 4, 6; z\right) = & \\
 & \frac{1}{916\,620\,705\,z^3} \left(32\,e^{z/2} (608\,z^9 - 31\,872\,z^8 + 615\,792\,z^7 - 5\,522\,496\,z^6 + 23\,763\,852\,z^5 - 45\,405\,360\,z^4 + 29\,251\,530\,z^3 + \right. \\
 & \quad \left. 249\,480\,z^2 + 31\,185\,z - 62\,370) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{916\,620\,705\,z^4} \left(8\,e^{z/2} (2432\,z^{10} - 125\,056\,z^9 + 2\,339\,328\,z^8 - 19\,810\,752\,z^7 + 76\,296\,864\,z^6 - \right. \\
 & \quad \left. 113\,249\,808\,z^5 + 27\,941\,760\,z^4 + 9\,729\,720\,z^3 + 3\,960\,495\,z^2 + 498\,960\,z - 997\,920) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = \frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.2555.01} \\
 {}_2F_2\left(-\frac{11}{2}, 5; \frac{9}{2}, 5; z\right) = & \frac{1}{14\,155\,776\,z^3} \\
 & e^z (-256\,z^8 + 12\,544\,z^7 - 221\,952\,z^6 + 1\,757\,760\,z^5 - 6\,203\,040\,z^4 + 8\,030\,448\,z^3 - 1\,164\,240\,z^2 - 457\,380\,z - 155\,925) + \\
 & \frac{1}{28\,311\,552\,z^{7/2}} \left(\sqrt{\pi} (512\,z^9 - 25\,344\,z^8 + 456\,192\,z^7 - 3\,725\,568\,z^6 + 13\,970\,880\,z^5 - \right. \\
 & \quad \left. 20\,956\,320\,z^4 + 6\,985\,440\,z^3 + 1\,496\,880\,z^2 + 561\,330\,z + 155\,925) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2556.01} \\
 {}_2F_2\left(-\frac{11}{2}, 5; \frac{9}{2}, 5; -z\right) = & \frac{1}{14\,155\,776\,z^3} \\
 & e^{-z} (256\,z^8 + 12\,544\,z^7 + 221\,952\,z^6 + 1\,757\,760\,z^5 + 6\,203\,040\,z^4 + 8\,030\,448\,z^3 + 1\,164\,240\,z^2 - 457\,380\,z + 155\,925) + \\
 & \frac{1}{28\,311\,552\,z^{7/2}} \left(\sqrt{\pi} (512\,z^9 + 25\,344\,z^8 + 456\,192\,z^7 + 3\,725\,568\,z^6 + 13\,970\,880\,z^5 + \right. \\
 & \quad \left. 20\,956\,320\,z^4 + 6\,985\,440\,z^3 - 1\,496\,880\,z^2 + 561\,330\,z - 155\,925) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.2557.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{9}{2}, 6; z\right) = \frac{1}{624\,121\,085\,952\,z^5} \left(e^z (-5\,374\,720\,z^{10} + 291\,366\,400\,z^9 - 5\,772\,673\,920\,z^8 + 52\,005\,437\,952\,z^7 - 213\,455\,465\,664\,z^6 + 333\,267\,074\,784\,z^5 - 67\,145\,720\,040\,z^4 - 35\,211\,410\,640\,z^3 - 19\,942\,804\,665\,z^2 - 5\,945\,425\,920\,z + 5\,945\,425\,920) \right) + \frac{1}{1\,248\,242\,171\,904\,z^{7/2}} \left(\sqrt{\pi} (10\,749\,440\,z^9 - 588\,107\,520\,z^8 + 11\,831\,339\,520\,z^7 - 109\,505\,620\,224\,z^6 + 473\,822\,395\,200\,z^5 - 839\,957\,882\,400\,z^4 + 342\,205\,063\,200\,z^3 + 94\,280\,986\,800\,z^2 + 49\,497\,518\,070\,z + 22\,915\,517\,625) \operatorname{erfi}(\sqrt{z}) \right) - \frac{40}{4199\,z^5}$$

07.25.03.2558.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{9}{2}, 6; -z\right) = \frac{1}{624\,121\,085\,952\,z^5} \left(e^{-z} (5\,374\,720\,z^{10} + 291\,366\,400\,z^9 + 5\,772\,673\,920\,z^8 + 52\,005\,437\,952\,z^7 + 213\,455\,465\,664\,z^6 + 333\,267\,074\,784\,z^5 + 67\,145\,720\,040\,z^4 - 35\,211\,410\,640\,z^3 + 19\,942\,804\,665\,z^2 - 5\,945\,425\,920\,z - 5\,945\,425\,920) \right) + \frac{1}{1\,248\,242\,171\,904\,z^{7/2}} \left(\sqrt{\pi} (10\,749\,440\,z^9 + 588\,107\,520\,z^8 + 11\,831\,339\,520\,z^7 + 109\,505\,620\,224\,z^6 + 473\,822\,395\,200\,z^5 + 839\,957\,882\,400\,z^4 + 342\,205\,063\,200\,z^3 - 94\,280\,986\,800\,z^2 + 49\,497\,518\,070\,z - 22\,915\,517\,625) \operatorname{erf}(\sqrt{z}) \right) + \frac{40}{4199\,z^5}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = 5$

07.25.03.2559.01

$${}_2F_2\left(-\frac{11}{2}, 5; 5, 5; z\right) = \frac{1}{218\,243\,025\,z^2} \left(32\,e^{z/2} (128\,z^8 - 6784\,z^7 + 132\,864\,z^6 - 1\,212\,096\,z^5 + 5\,331\,360\,z^4 - 10\,478\,160\,z^3 + 6\,985\,440\,z^2 + 83\,160\,z + 31\,185) \right) - \frac{1}{218\,243\,025\,z^3} \left(128\,e^{z/2} (32\,z^9 - 1664\,z^8 + 31\,568\,z^7 - 272\,256\,z^6 + 1\,074\,804\,z^5 - 1\,654\,080\,z^4 + 436\,590\,z^3 + 166\,320\,z^2 + 83\,160\,z + 31\,185) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.2560.01

$${}_2F_2\left(-\frac{11}{2}, 5; 5, \frac{11}{2}; z\right) = \frac{1}{62\,914\,560\,z^4} \left(e^z (-512\,z^9 + 27\,904\,z^8 - 556\,544\,z^7 + 5\,057\,280\,z^6 - 21\,001\,920\,z^5 + 33\,362\,400\,z^4 - 6985\,440\,z^3 - 3\,825\,360\,z^2 - 2\,390\,850\,z - 1\,091\,475) \right) + \frac{1}{125\,829\,120\,z^{9/2}} \left(\sqrt{\pi} (1024\,z^{10} - 56\,320\,z^9 + 1\,140\,480\,z^8 - 10\,644\,480\,z^7 + 46\,569\,600\,z^6 - 83\,825\,280\,z^5 + 34\,927\,200\,z^4 + 9\,979\,200\,z^3 + 5\,613\,300\,z^2 + 3\,118\,500\,z + 1\,091\,475) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2561.01

$${}_2F_2\left(-\frac{11}{2}, 5; 5, \frac{11}{2}; -z\right) = \frac{1}{62914560z^4} (e^{-z} (512z^9 + 27904z^8 + 556544z^7 + 5057280z^6 + 21001920z^5 + 33362400z^4 + 6985440z^3 - 3825360z^2 + 2390850z - 1091475)) + \frac{1}{125829120z^{9/2}} (\sqrt{\pi} (1024z^{10} + 56320z^9 + 1140480z^8 + 10644480z^7 + 46569600z^6 + 83825280z^5 + 34927200z^4 - 9979200z^3 + 5613300z^2 - 3118500z + 1091475) \operatorname{erf}(\sqrt{z}))$$

07.25.03.2562.01

$${}_2F_2\left(-\frac{11}{2}, 5; 5, 6; z\right) = \frac{1}{916620705z^3} (32e^{z/2} (256z^9 - 14976z^8 + 326976z^7 - 3364032z^6 + 16903152z^5 - 38419920z^4 + 29688120z^3 + 748440z^2 + 530145z + 249480) I_0\left(\frac{z}{2}\right)) - \frac{1}{916620705z^4} (32e^{z/2} (256z^{10} - 14720z^9 + 312384z^8 - 3058752z^7 + 13986672z^6 - 25692912z^5 + 8731800z^4 + 4241160z^3 + 3024945z^2 + 2120580z + 997920) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{11}{2}, a_2 = 5, b_1 = \frac{11}{2}$

07.25.03.2563.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{11}{2}, 6; z\right) = \frac{1}{554774298624z^5} (e^z (-2149888z^{10} + 129615616z^9 - 2894102016z^8 + 29902389504z^7 - 144284578368z^6 + 275726471328z^5 - 78803353440z^4 - 55625134320z^3 - 51280324830z^2 - 48681766665z - 47563407360)) + \frac{1}{1109548597248z^{9/2}} (\sqrt{\pi} (4299776z^{10} - 261381120z^9 + 5915669760z^8 - 62574640128z^7 + 315881596800z^6 - 671966305920z^5 + 342205063200z^4 + 125707982400z^3 + 98995036140z^2 + 91662070500z + 96245174025) \operatorname{erfi}(\sqrt{z})) + \frac{360}{4199z^5}$$

07.25.03.2564.01

$${}_2F_2\left(-\frac{11}{2}, 5; \frac{11}{2}, 6; -z\right) = \frac{1}{554774298624z^5} (e^{-z} (2149888z^{10} + 129615616z^9 + 2894102016z^8 + 29902389504z^7 + 144284578368z^6 + 275726471328z^5 + 78803353440z^4 - 55625134320z^3 + 51280324830z^2 - 48681766665z + 47563407360)) + \frac{1}{1109548597248z^{9/2}} (\sqrt{\pi} (4299776z^{10} + 261381120z^9 + 5915669760z^8 + 62574640128z^7 + 315881596800z^6 + 671966305920z^5 + 342205063200z^4 - 125707982400z^3 + 98995036140z^2 - 91662070500z + 96245174025) \operatorname{erf}(\sqrt{z})) - \frac{360}{4199z^5}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 5$, $b_1 = 6$

$$\begin{aligned}
 & \text{07.25.03.2565.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 5; 6, 6; z\right) = \\
 & \frac{1}{80\,826\,697\,146\,195\,z^5} \left(64 e^{z/2} (5\,374\,720 z^{11} - 347\,093\,760 z^{10} + 8\,450\,445\,120 z^9 - 98\,100\,545\,088 z^8 + 563\,702\,113\,296 z^7 - \right. \\
 & \quad \left. 1\,484\,553\,223\,440 z^6 + 1\,330\,169\,725\,080 z^5 + 66\,126\,299\,400 z^4 + 77\,131\,363\,995 z^3 + \right. \\
 & \quad \left. 97\,807\,965\,885 z^2 + 219\,988\,969\,200 z - 439\,977\,938\,400\right) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{80\,826\,697\,146\,195\,z^4} \left(64 e^{z/2} (5\,374\,720 z^{10} - 341\,719\,040 z^9 + 8\,111\,413\,440 z^8 - 90\,154\,616\,448 z^7 + \right. \\
 & \quad \left. 477\,278\,280\,528 z^6 - 1\,045\,238\,838\,336 z^5 + 454\,681\,672\,200 z^4 + 278\,479\,882\,800 z^3 + \right. \\
 & \quad \left. 276\,158\,305\,395 z^2 + 326\,857\,870\,080 z + 501\,226\,348\,140\right) I_1\left(\frac{z}{2}\right) + \frac{10\,240}{29\,393\,z^5}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.2566.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \frac{1}{9\,823\,275} \left(e^z (2048 z^{11} + 101\,376 z^{10} + 1\,774\,080 z^9 + 13\,305\,600 z^8 + 39\,916\,800 z^7 + 27\,941\,760 z^6 - \right. \\
 & \quad \left. 13\,970\,880 z^5 + 14\,968\,800 z^4 - 18\,711\,000 z^3 + 21\,829\,500 z^2 - 19\,646\,550 z + 9\,823\,275\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2567.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & -\frac{1}{893\,025} \left(e^z (1024 z^{10} + 46\,080 z^9 + 725\,760 z^8 + 4\,838\,400 z^7 + 12\,700\,800 z^6 + 7\,620\,480 z^5 - 3\,175\,200 z^4 + \right. \\
 & \quad \left. 2\,721\,600 z^3 - 2\,551\,500 z^2 + 1\,984\,500 z - 893\,025\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2568.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{99\,225} \left(e^z (512 z^9 + 20\,736 z^8 + 290\,304 z^7 + 1\,693\,440 z^6 + 3\,810\,240 z^5 + 1\,905\,120 z^4 - 635\,040 z^3 + \right. \\
 & \quad \left. 408\,240 z^2 - 255\,150 z + 99\,225\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2569.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \\
 & -\frac{1}{14\,175} e^z (256 z^8 + 9216 z^7 + 112\,896 z^6 + 564\,480 z^5 + 1\,058\,400 z^4 + 423\,360 z^3 - 105\,840 z^2 + 45\,360 z - 14\,175)
 \end{aligned}$$

07.25.03.2570.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835)}{2835}$$

07.25.03.2571.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 1728 z^5 + 15120 z^4 + 50400 z^3 + 56700 z^2 + 11340 z - 945)$$

07.25.03.2572.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945)$$

07.25.03.2573.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (16 z^5 + 336 z^4 + 2220 z^3 + 5484 z^2 + 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^5 + 320 z^4 + 1908 z^3 + 3720 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.2574.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (16 z^4 + 288 z^3 + 1512 z^2 + 2520 z + 945)$$

07.25.03.2575.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (16 z^4 + 264 z^3 + 1284 z^2 + 2100 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^4 + 248 z^3 + 1044 z^2 + 1164 z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.2576.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (8 z^3 + 108 z^2 + 378 z + 315)$$

07.25.03.2577.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, 3; z\right) = \frac{16}{945} e^{z/2} (2 z^3 + 24 z^2 + 75 z + 60) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8 z^4 + 88 z^3 + 216 z^2 + 60 z - 15) I_1\left(\frac{z}{2}\right)}{945 z}$$

07.25.03.2578.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (4 z^2 + 36 z + 63)$$

07.25.03.2579.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (8 z^3 + 60 z^2 + 84 z - 3) I_0\left(\frac{z}{2}\right)}{315 z} + \frac{4 e^{z/2} (8 z^4 + 52 z^3 + 36 z^2 - 21 z + 12) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.2580.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2 z + 9)$$

07.25.03.2581.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (4 z^3 + 12 z^2 - 3 z + 3) I_0\left(\frac{z}{2}\right)}{315 z^2} + \frac{32 e^{z/2} (4 z^4 + 8 z^3 - 9 z^2 + 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3}$$

$${}_{2}F_{2}\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = e^z$$

$${}_{2}F_{2}\left(-\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 - 6z^2 + 15z - 24) I_0\left(\frac{z}{2}\right)}{63 z^3} + \frac{32 e^{z/2} (4z^4 - 10z^3 + 27z^2 - 60z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{9}{2}$

$${}_{2}F_{2}\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{8388608 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2}}{59535} + \frac{1}{893025} (e^z (5632 z^9 + 233728 z^8 + 3407360 z^7 + 21500160 z^6 - 66724800 z^5 + 8550240 z^4 - 4638240 z^3 + 3373200 z^2 - 2227050 z + 893025))$$

$${}_{2}F_{2}\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{8388608 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2}}{59535} + \frac{1}{893025} (e^{-z} (-5632 z^9 + 233728 z^8 - 3407360 z^7 + 21500160 z^6 + 66724800 z^5 + 8550240 z^4 + 4638240 z^3 + 3373200 z^2 + 2227050 z + 893025))$$

$${}_{2}F_{2}\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{99225} \frac{e^z (-2816 z^8 - 107008 z^7 - 1436160 z^6 + 54318720 z^5 + 6203040 z^4 - 1173600 z^3 + 558720 z^2 - 289800 z + 99225) - 4194304 \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})}{6615}$$

$${}_{2}F_{2}\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{99225} \frac{e^{-z} (-2816 z^8 + 107008 z^7 - 1436160 z^6 - 54318720 z^5 + 6203040 z^4 + 1173600 z^3 + 558720 z^2 + 289800 z + 99225) - 4194304 \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})}{6615}$$

$${}_{2}F_{2}\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1048576}{945} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2} + \frac{1}{14175} e^z (1408 z^7 + 48576 z^6 - 15132000 z^5 - 4461360 z^4 - 870840 z^3 + 151380 z^2 - 52290 z + 14175)$$

$$\begin{aligned}
 & \text{07.25.03.2589.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) &= \frac{1048576}{945} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2} + \\
 & \frac{1}{14175} e^{-z} (-1408 z^7 + 48576 z^6 + 15132000 z^5 - 4461360 z^4 + 870840 z^3 + 151380 z^2 + 52290 z + 14175)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2590.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) &= \\
 & \frac{e^z (-704 z^6 + 2599616 z^5 + 1066960 z^4 + 630240 z^3 + 120300 z^2 - 15540 z + 2835)}{2835} - \frac{524288}{567} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2591.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) &= \\
 & \frac{e^{-z} (-704 z^6 - 2599616 z^5 + 1066960 z^4 - 630240 z^3 + 120300 z^2 + 15540 z + 2835)}{2835} - \frac{524288}{567} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2592.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) &= \\
 & \frac{65536}{189} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{11/2} + \frac{1}{945} e^z (-327328 z^5 - 154160 z^4 - 148080 z^3 - 93000 z^2 - 13650 z + 945)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2593.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) &= \\
 & \frac{65536}{189} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{11/2} + \frac{1}{945} e^{-z} (327328 z^5 - 154160 z^4 + 148080 z^3 - 93000 z^2 + 13650 z + 945)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2594.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) &= \frac{1}{945} e^z (32768 z^5 + 16208 z^4 + 20352 z^3 + 23160 z^2 + 11760 z + 945) - \frac{32768}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2595.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) &= \\
 & \frac{1}{945} e^{-z} (-32768 z^5 + 16208 z^4 - 20352 z^3 + 23160 z^2 - 11760 z + 945) - \frac{32768}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2596.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, 1; z\right) &= \\
 & \frac{1}{654885} e^{z/2} (-8388608 z^6 + 6291456 z^5 + 3871176 z^4 + 5478648 z^3 + 6729912 z^2 + 4074840 z + 654885) I_0\left(\frac{z}{2}\right) + \\
 & \frac{4 e^{z/2} (2097152 z^6 + 524288 z^5 + 574578 z^4 + 893388 z^3 + 935067 z^2 + 307503 z)}{654885} I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2597.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) &= \frac{e^z (8192 z^5 + 4096 z^4 + 5880 z^3 + 9948 z^2 + 9870 z + 2835)}{2835} - \frac{8192 \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})}{2835}
 \end{aligned}$$

07.25.03.2598.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}(-8192z^5 + 4096z^4 - 5880z^3 + 9948z^2 - 9870z + 2835)}{2835} - \frac{8192\sqrt{\pi}z^{11/2}\operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.2599.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{8513505}$$

$$e^{z/2}(-16777216z^6 + 12582912z^5 + 7864320z^4 + 12969768z^3 + 23247756z^2 + 24157980z + 8513505)I_0\left(\frac{z}{2}\right) + \frac{1}{8513505}e^{z/2}(16777216z^6 + 4194304z^5 + 4718592z^4 + 9037608z^3 + 15438948z^2 + 11333196z + 800415)I_1\left(\frac{z}{2}\right)$$

07.25.03.2600.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z(4096z^5 + 2048z^4 + 3072z^3 + 6756z^2 + 11172z + 6615)}{6615} - \frac{4096\sqrt{\pi}z^{11/2}\operatorname{erfi}(\sqrt{z})}{6615}$$

07.25.03.2601.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(-4096z^5 + 2048z^4 - 3072z^3 + 6756z^2 - 11172z + 6615)}{6615} - \frac{4096\sqrt{\pi}z^{11/2}\operatorname{erf}(\sqrt{z})}{6615}$$

07.25.03.2602.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, 3; z\right) = \frac{1}{127702575z} \left(4e^{z/2}(16777216z^7 + 4194304z^6 + 4718592z^5 + 9830400z^4 + 24159660z^3 + 32738580z^2 + 6746355z - 1486485)I_1\left(\frac{z}{2}\right) - \frac{1}{127702575} \right. \\ \left. 4e^{z/2}(16777216z^6 - 12582912z^5 - 7864320z^4 - 13762560z^3 - 32761260z^2 - 53887680z - 32297265)I_0\left(\frac{z}{2}\right) \right)$$

07.25.03.2603.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z(256z^5 + 128z^4 + 192z^3 + 480z^2 + 1218z + 1323)}{1323} - \frac{256\sqrt{\pi}z^{11/2}\operatorname{erfi}(\sqrt{z})}{1323}$$

07.25.03.2604.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(-256z^5 + 128z^4 - 192z^3 + 480z^2 - 1218z + 1323)}{1323} - \frac{256\sqrt{\pi}z^{11/2}\operatorname{erf}(\sqrt{z})}{1323}$$

07.25.03.2605.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = \frac{1}{723647925z^2} \left(4e^{z/2}(33554432z^8 + 8388608z^7 + 9437184z^6 + 19660800z^5 + 60211200z^4 + 142774380z^3 + 67006170z^2 - 34189155z + 17837820)I_1\left(\frac{z}{2}\right) - \frac{1}{723647925z} \right. \\ \left. 4e^{z/2}(33554432z^7 - 25165824z^6 - 15728640z^5 - 27525120z^4 - 77414400z^3 - 196964460z^2 - 189459270z + 4459455)I_0\left(\frac{z}{2}\right) \right)$$

07.25.03.2606.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^5 + 64 z^4 + 96 z^3 + 240 z^2 + 840 z + 1701)}{1701} - \frac{128 \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})}{1701}$$

07.25.03.2607.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-128 z^5 + 64 z^4 - 96 z^3 + 240 z^2 - 840 z + 1701)}{1701} - \frac{128 \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})}{1701}$$

07.25.03.2608.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, 5; z\right) = \frac{1}{13749310575 z^3} \left(64 e^{z/2} (16777216 z^9 + 4194304 z^8 + 4718592 z^7 + 9830400 z^6 + 30105600 z^5 + 121927680 z^4 + 134584065 z^3 - 130810680 z^2 + 160540380 z - 151621470) I_1\left(\frac{z}{2}\right) - \frac{1}{13749310575 z^2} \left(32 e^{z/2} (33554432 z^8 - 25165824 z^7 - 15728640 z^6 - 27525120 z^5 - 77414400 z^4 - 298045440 z^3 - 492702210 z^2 + 80270190 z - 75810735) I_0\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.2609.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.2610.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{945} e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.2611.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = \frac{1}{57747104415 z^4} \left(32 e^{z/2} (67108864 z^{10} + 16777216 z^9 + 18874368 z^8 + 39321600 z^7 + 120422400 z^6 + 487710720 z^5 + 2458874880 z^4 - 5324589270 z^3 + 13605797205 z^2 - 29414565180 z + 46092926880) I_1\left(\frac{z}{2}\right) - \frac{1}{57747104415 z^3} \left(32 e^{z/2} (67108864 z^9 - 50331648 z^8 - 31457280 z^7 - 55050240 z^6 - 154828800 z^5 - 596090880 z^4 - 2905943040 z^3 + 3041348310 z^2 - 7353641295 z + 11523231720) I_0\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.2612.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{e^z (1408 z^7 + 49984 z^6 - 30814 176 z^5 + 5 549 232 z^4 - 326904 z^3 + 96444 z^2 - 38250 z + 11 025)}{11 025} + \\
 & \frac{524 288 \sqrt{\pi} (20 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{3675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2613.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \\
 & \frac{1}{11 025} e^{-z} (-1408 z^7 + 49984 z^6 + 30814 176 z^5 + 5 549 232 z^4 + 326904 z^3 + 96444 z^2 + 38250 z + 11 025) + \\
 & \frac{524 288 \sqrt{\pi} (20 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})}{3675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2614.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{e^z (-704 z^6 + 7 841 088 z^5 - 5 005 296 z^4 - 271 968 z^3 + 27 468 z^2 - 7020 z + 1575)}{1575} - \\
 & \frac{262 144 \sqrt{\pi} (10 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{525}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2615.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{e^{-z} (-704 z^6 - 7 841 088 z^5 - 5 005 296 z^4 + 271 968 z^3 + 27 468 z^2 + 7020 z + 1575)}{1575} - \\
 & \frac{262 144 \sqrt{\pi} (10 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})}{525}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2616.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{315} e^z (-1 310 368 z^5 + 1 518 064 z^4 + 225 552 z^3 + 23 208 z^2 - 2130 z + 315) + \frac{65 536}{315} \sqrt{\pi} (20 z^{11/2} - 33 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2617.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \\
 & \frac{1}{315} e^{-z} (1 310 368 z^5 + 1 518 064 z^4 - 225 552 z^3 + 23 208 z^2 + 2130 z + 315) + \frac{65 536}{315} \sqrt{\pi} (20 z^{11/2} + 33 z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2618.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{105} e^z (163 840 z^5 - 278 704 z^4 - 62 272 z^3 - 19 368 z^2 - 1920 z + 105) - \frac{32 768}{105} \sqrt{\pi} (5 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.2619.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} e^{-z} (-163840 z^5 - 278704 z^4 + 62272 z^3 - 19368 z^2 + 1920 z + 105) - \frac{32768}{105} \sqrt{\pi} (5 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2620.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (-16384 z^5 + 36864 z^4 + 10328 z^3 + 5316 z^2 + 1710 z + 105) + \frac{4096}{105} \sqrt{\pi} (4 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2621.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} e^{-z} (16384 z^5 + 36864 z^4 - 10328 z^3 + 5316 z^2 - 1710 z + 105) + \frac{4096}{105} \sqrt{\pi} (4 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2622.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{363825} e^{z/2} (20971520 z^6 - 79167488 z^5 + 37748736 z^4 + 12686220 z^3 + 7467180 z^2 + 2962575 z + 363825) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (-20971520 z^6 + 58195968 z^5 + 9961472 z^4 + 5706636 z^3 + 3198240 z^2 + 723765 z) I_1\left(\frac{z}{2}\right)}{363825}$$

07.25.03.2623.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{2048 \sqrt{\pi} (10z - 33) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{1575} + \frac{e^z (-20480 z^5 + 57344 z^4 + 18432 z^3 + 12948 z^2 + 7500 z + 1575)}{1575}$$

07.25.03.2624.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{2048 \sqrt{\pi} (10z + 33) \operatorname{erf}(\sqrt{z}) z^{9/2}}{1575} + \frac{e^{-z} (20480 z^5 + 57344 z^4 - 18432 z^3 + 12948 z^2 - 7500 z + 1575)}{1575}$$

07.25.03.2625.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{4729725} e^{z/2} (41943040 z^6 - 181403648 z^5 + 92798976 z^4 + 35880960 z^3 + 28216860 z^2 + 17983350 z + 4729725) I_0\left(\frac{z}{2}\right) + \frac{1}{4729725} e^{z/2} (-41943040 z^6 + 139460608 z^5 + 25690112 z^4 + 17596416 z^3 + 14577180 z^2 + 6862170 z + 363825) I_1\left(\frac{z}{2}\right)$$

07.25.03.2626.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{512 \sqrt{\pi} (20z - 77) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{3675} + \frac{e^z (-10240 z^5 + 34304 z^4 + 12032 z^3 + 10368 z^2 + 9030 z + 3675)}{3675}$$

07.25.03.2627.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{512 \sqrt{\pi} (20z + 77) \operatorname{erf}(\sqrt{z}) z^{9/2}}{3675} + \frac{e^{-z} (10240 z^5 + 34304 z^4 - 12032 z^3 + 10368 z^2 - 9030 z + 3675)}{3675}$$

07.25.03.2628.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{14189175} 8 e^{z/2} (4194304 z^6 - 20447232 z^5 + 11010048 z^4 + 4669440 z^3 + 4515840 z^2 + 4147605 z + 1787940) I_0\left(\frac{z}{2}\right) - \frac{1}{14189175 z} \left(4 e^{z/2} (8388608 z^7 - 32505856 z^6 - 6291456 z^5 - 4816896 z^4 - 5222400 z^3 - 4101930 z^2 - 602910 z + 114345) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.2629.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{128}{735} \sqrt{\pi} (5z - 22) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{735} e^z (-640 z^5 + 2496 z^4 + 928 z^3 + 912 z^2 + 1080 z + 735)$$

07.25.03.2630.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{128}{735} \sqrt{\pi} (5z + 22) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{735} e^{-z} (640 z^5 + 2496 z^4 - 928 z^3 + 912 z^2 - 1080 z + 735)$$

07.25.03.2631.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{402026625 z} \left(4 e^{z/2} (83886080 z^7 - 455081984 z^6 + 254803968 z^5 + 115015680 z^4 + 128163840 z^3 + 159667200 z^2 + 103679730 z - 1486485) I_0\left(\frac{z}{2}\right)\right) - \frac{1}{402026625 z^2} \left(4 e^{z/2} (83886080 z^8 - 371195904 z^7 - 74448896 z^6 - 61145088 z^5 - 79257600 z^4 - 94080000 z^3 - 29168370 z^2 + 12692295 z - 5945940) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.2632.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{16}{945} \sqrt{\pi} (20z - 99) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{945} e^z (-320 z^5 + 1424 z^4 + 552 z^3 + 588 z^2 + 870 z + 945)$$

07.25.03.2633.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{16}{945} \sqrt{\pi} (20z + 99) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{945} e^{-z} (320 z^5 + 1424 z^4 - 552 z^3 + 588 z^2 - 870 z + 945)$$

$$\begin{aligned}
 & \text{07.25.03.2634.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = & \\
 & \frac{1}{7\,638\,505\,875\,z^2} \left(32 e^{z/2} (83\,886\,080 z^8 - 501\,219\,328 z^7 + 289\,406\,976 z^6 + 136\,642\,560 z^5 + 166\,010\,880 z^4 + \right. \\
 & \left. 266\,112\,000 z^3 + 260\,789\,760 z^2 - 25\,270\,245 z + 22\,297\,275) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{7\,638\,505\,875\,z^3} \left(32 e^{z/2} (83\,886\,080 z^9 - 417\,333\,248 z^8 - 85\,983\,232 z^7 - 74\,121\,216 z^6 - 106\,291\,200 z^5 - \right. \right. \\
 & \left. \left. 176\,870\,400 z^4 - 111\,767\,040 z^3 + 91\,132\,965 z^2 - 101\,080\,980 z + 89\,189\,100) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2635.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = & \frac{8}{105} \sqrt{\pi} (2z - 11) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^z (-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2636.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = & \frac{8}{105} \sqrt{\pi} (2z + 11) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2637.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, 6; z\right) = & \\
 & \frac{1}{32\,081\,724\,675\,z^3} \left(32 e^{z/2} (167\,772\,160 z^9 - 1\,094\,713\,344 z^8 + 648\,019\,968 z^7 + 316\,538\,880 z^6 + 407\,715\,840 z^5 + \right. \\
 & \left. 745\,113\,600 z^4 + 1\,341\,204\,480 z^3 - 856\,215\,360 z^2 + 1\,984\,457\,475 z - 3\,032\,429\,400) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{32\,081\,724\,675\,z^4} \left(32 e^{z/2} (167\,772\,160 z^{10} - 926\,941\,184 z^9 - 195\,035\,136 z^8 - 174\,194\,688 z^7 - 266\,649\,600 z^6 - \right. \right. \\
 & \left. \left. 519\,321\,600 z^5 - 894\,136\,320 z^4 + 1\,602\,659\,520 z^3 - 3\,803\,915\,115 z^2 + 7\,937\,829\,900 z - 12\,129\,717\,600) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.2638.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = & \frac{1}{225} e^z (-1\,965\,728 z^5 + 3\,353\,424 z^4 - 255\,408 z^3 + 8280 z^2 - 1314 z + 225) + \\
 & \frac{32\,768}{75} \sqrt{\pi} (20 z^{11/2} - 44 z^{9/2} + 11 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2639.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = & \\
 & \frac{1}{225} e^{-z} (1\,965\,728 z^5 + 3\,353\,424 z^4 + 255\,408 z^3 + 8280 z^2 + 1314 z + 225) + \frac{32\,768}{75} \sqrt{\pi} (20 z^{11/2} + 44 z^{9/2} + 11 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.2640.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} e^z (327\,680 z^5 - 917\,680 z^4 + 240\,480 z^3 + 7464 z^2 - 408 z + 45) - \frac{16\,384}{45} \sqrt{\pi} (20 z^{11/2} - 66 z^{9/2} + 33 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2641.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{45} e^{-z} (-327\,680 z^5 - 917\,680 z^4 - 240\,480 z^3 + 7464 z^2 + 408 z + 45) - \frac{16\,384}{45} \sqrt{\pi} (20 z^{11/2} + 66 z^{9/2} + 33 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2642.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (-40\,960 z^5 + 159\,744 z^4 - 75\,688 z^3 - 6\,708 z^2 - 378 z + 15) + \frac{4\,096}{15} \sqrt{\pi} (10 z^{11/2} - 44 z^{9/2} + 33 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2643.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (40\,960 z^5 + 159\,744 z^4 + 75\,688 z^3 - 6\,708 z^2 + 378 z + 15) + \frac{4\,096}{15} \sqrt{\pi} (10 z^{11/2} + 44 z^{9/2} + 33 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2644.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (40\,96 z^5 - 20\,480 z^4 + 14\,336 z^3 + 2\,004 z^2 + 348 z + 15) - \frac{2\,048}{15} \sqrt{\pi} (2 z^{11/2} - 11 z^{9/2} + 11 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2645.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-40\,96 z^5 - 20\,480 z^4 - 14\,336 z^3 + 2\,004 z^2 - 348 z + 15) - \frac{2\,048}{15} \sqrt{\pi} (2 z^{11/2} + 11 z^{9/2} + 11 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2646.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{51\,975} e^{z/2} (-5\,242\,880 z^6 + 35\,651\,584 z^5 - 57\,016\,320 z^4 + 16\,195\,584 z^3 + 2\,726\,970 z^2 + 602\,910 z + 51\,975) I_0\left(\frac{z}{2}\right) + \frac{2 e^{z/2} (2\,621\,440 z^6 - 15\,204\,352 z^5 + 14\,614\,528 z^4 + 1\,536\,000 z^3 + 391\,197 z^2 + 55\,410 z) I_1\left(\frac{z}{2}\right)}{51\,975}$$

07.25.03.2647.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{225} e^z (5120 z^5 - 31\,232 z^4 + 29\,184 z^3 + 5376 z^2 + 1590 z + 225) - \frac{256}{225} \sqrt{\pi} z^{7/2} (20 z^2 - 132 z + 165) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2648.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{225} e^{-z} (-5120 z^5 - 31232 z^4 - 29184 z^3 + 5376 z^2 - 1590 z + 225) - \frac{256}{225} \sqrt{\pi} z^{7/2} (20 z^2 + 132 z + 165) \operatorname{erf}(\sqrt{z})$$

07.25.03.2649.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{675675} e^{z/2} (-10485760 z^6 + 82837504 z^5 - 154402816 z^4 + 50774016 z^3 + 11013120 z^2 + 3739890 z + 675675) I_0\left(\frac{z}{2}\right) + \frac{1}{675675} e^{z/2} (10485760 z^6 - 72351744 z^5 + 87293952 z^4 + 10829824 z^3 + 3879936 z^2 + 1082610 z + 40425) I_1\left(\frac{z}{2}\right)$$

07.25.03.2650.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{525} e^z (2560 z^5 - 18432 z^4 + 21632 z^3 + 4800 z^2 + 2016 z + 525) - \frac{128}{525} \sqrt{\pi} z^{7/2} (20 z^2 - 154 z + 231) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2651.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{525} e^{-z} (-2560 z^5 - 18432 z^4 - 21632 z^3 + 4800 z^2 - 2016 z + 525) - \frac{128}{525} \sqrt{\pi} z^{7/2} (20 z^2 + 154 z + 231) \operatorname{erf}(\sqrt{z})$$

07.25.03.2652.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = \frac{1}{2027025 z} 4 e^{z/2} (2097152 z^7 - 16777216 z^6 + 24379392 z^5 + 3391488 z^4 + 1532928 z^3 + 668160 z^2 + 65835 z - 10395) I_1\left(\frac{z}{2}\right) - \frac{1}{2027025} 4 e^{z/2} (2097152 z^6 - 18874368 z^5 + 40108032 z^4 - 14696448 z^3 - 3824640 z^2 - 1774080 z - 509355) I_0\left(\frac{z}{2}\right)$$

07.25.03.2653.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{105} e^z (160 z^5 - 1328 z^4 + 1880 z^3 + 476 z^2 + 258 z + 105) - \frac{32}{105} \sqrt{\pi} z^{7/2} (5 z^2 - 44 z + 77) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2654.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{105} e^{-z} (-160 z^5 - 1328 z^4 - 1880 z^3 + 476 z^2 - 258 z + 105) - \frac{32}{105} \sqrt{\pi} z^{7/2} (5 z^2 + 44 z + 77) \operatorname{erf}(\sqrt{z})$$

07.25.03.2655.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = \frac{1}{57432375 z^2} \left(4 e^{z/2} (20971520 z^8 - 190840832 z^7 + 324534272 z^6 + 49053696 z^5 + 26142720 z^4 + 15974400 z^3 + 3104640 z^2 - 1112265 z + 457380) I_1\left(\frac{z}{2}\right) - \frac{1}{57432375 z} \left(4 e^{z/2} (20971520 z^7 - 211812352 z^6 + 504889344 z^5 - 201031680 z^4 - 59873280 z^3 - 35481600 z^2 - 14636160 z + 114345) I_0\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.2656.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{135} e^z (80 z^5 - 752 z^4 + 1248 z^3 + 348 z^2 + 228 z + 135) - \frac{8}{135} \sqrt{\pi} z^{7/2} (10 z^2 - 99 z + 198) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2657.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{135} e^{-z} (-80 z^5 - 752 z^4 - 1248 z^3 + 348 z^2 - 228 z + 135) - \frac{8}{135} \sqrt{\pi} z^{7/2} (10 z^2 + 99 z + 198) \operatorname{erf}(\sqrt{z})$$

07.25.03.2658.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, 5; z\right) = \frac{1}{1091215125 z^3} \left(128 e^{z/2} (5242880 z^9 - 53477376 z^8 + 104202240 z^7 + 16769024 z^6 + 10050048 z^5 + 8006400 z^4 + 2845920 z^3 - 1871100 z^2 + 1829520 z - 1486485) I_1\left(\frac{z}{2}\right) - \frac{1}{1091215125 z^2} \left(32 e^{z/2} (20971520 z^8 - 234881024 z^7 + 620232704 z^6 - 263749632 z^5 - 86906880 z^4 - 62684160 z^3 - 35925120 z^2 + 1829520 z - 1486485) I_0\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.2659.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{15} e^z (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) - \frac{1}{15} \sqrt{\pi} z^{7/2} (4 z^2 - 44 z + 99) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2660.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{15} e^{-z} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) - \frac{1}{15} \sqrt{\pi} z^{7/2} (4 z^2 + 44 z + 99) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.2661.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, 6; z\right) = \\
 & \frac{1}{4583103525z^4} \left(32e^{z/2} (41943040z^{10} - 473956352z^9 + 1041235968z^8 + 175964160z^7 + 115003392z^6 + \right. \\
 & \quad \left. 109670400z^5 + 80720640z^4 - 112764960z^3 + 241839675z^2 - 481621140z + 713512800) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{4583103525z^3} \left(32e^{z/2} (41943040z^9 - 515899392z^8 + 1494220800z^7 - 670236672z^6 - 238694400z^5 - \right. \\
 & \quad \left. 198696960z^4 - 167650560z^3 + 54885600z^2 - 120405285z + 178378200) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.2662.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{27} e^z (-163840z^5 + 729088z^4 - 528120z^3 + 21612z^2 - 390z + 27) + \\
 & \frac{512}{27} \sqrt{\pi} (320z^{11/2} - 1584z^{9/2} + 1584z^{7/2} - 231z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2663.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{27} e^{-z} (163840z^5 + 729088z^4 + 528120z^3 + 21612z^2 + 390z + 27) + \\
 & \frac{512}{27} \sqrt{\pi} (320z^{11/2} + 1584z^{9/2} + 1584z^{7/2} + 231z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2664.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{9} e^z (20480z^5 - 124928z^4 + 150528z^3 - 20868z^2 - 372z + 9) - \frac{256}{9} \sqrt{\pi} (80z^{11/2} - 528z^{9/2} + 792z^{7/2} - 231z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2665.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{9} e^{-z} (-20480z^5 - 124928z^4 - 150528z^3 - 20868z^2 + 372z + 9) - \\
 & \frac{256}{9} \sqrt{\pi} (80z^{11/2} + 528z^{9/2} + 792z^{7/2} + 231z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2666.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \\
 & \frac{1}{9} e^z (-2048z^5 + 15872z^4 - 26880z^3 + 6720z^2 + 354z + 9) + \frac{64}{9} \sqrt{\pi} (32z^{11/2} - 264z^{9/2} + 528z^{7/2} - 231z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2667.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \\
 & \frac{1}{9} e^{-z} (2048z^5 + 15872z^4 + 26880z^3 + 6720z^2 - 354z + 9) + \frac{64}{9} \sqrt{\pi} (32z^{11/2} + 264z^{9/2} + 528z^{7/2} + 231z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.2668.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{31185} e^{z/2} (2621440 z^6 - 25755648 z^5 + 70139904 z^4 - 58464768 z^3 + 8866944 z^2 + 613305 z + 31185) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (-2621440 z^6 + 23134208 z^5 - 48316416 z^4 + 19094016 z^3 + 1011072 z^2 + 72729 z) I_1\left(\frac{z}{2}\right)}{31185}$$

07.25.03.2669.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{32}{135} \sqrt{\pi} (80 z^3 - 792 z^2 + 1980 z - 1155) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{135} e^z (-2560 z^5 + 24064 z^4 - 52608 z^3 + 19488 z^2 + 1680 z + 135)$$

07.25.03.2670.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{32}{135} \sqrt{\pi} (80 z^3 + 792 z^2 + 1980 z + 1155) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{135} e^{-z} (2560 z^5 + 24064 z^4 + 52608 z^3 + 19488 z^2 - 1680 z + 135)$$

07.25.03.2671.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{405405} e^{z/2} (5242880 z^6 - 60162048 z^5 + 194347008 z^4 - 195394560 z^3 + 37654272 z^2 + 3880800 z + 405405) I_0\left(\frac{z}{2}\right) + \frac{1}{405405} e^{z/2} (-5242880 z^6 + 54919168 z^5 - 142049280 z^4 + 75561984 z^3 + 5418240 z^2 + 734112 z + 17325) I_1\left(\frac{z}{2}\right)$$

07.25.03.2672.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{4}{315} \sqrt{\pi} (320 z^3 - 3696 z^2 + 11088 z - 8085) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{315} e^z (-1280 z^5 + 14144 z^4 - 37920 z^3 + 18852 z^2 + 2226 z + 315)$$

07.25.03.2673.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{4}{315} \sqrt{\pi} (320 z^3 + 3696 z^2 + 11088 z + 8085) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{315} e^{-z} (1280 z^5 + 14144 z^4 + 37920 z^3 + 18852 z^2 - 2226 z + 315)$$

07.25.03.2674.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{1}{1216215} \left(32 e^{z/2} (131072 z^6 - 1720320 z^5 + 6426624 z^4 - 7529088 z^3 + 1728288 z^2 + 235620 z + 38115) I_0\left(\frac{z}{2}\right) - \frac{1}{1216215 z} + 4 e^{z/2} (1048576 z^7 - 12713984 z^6 + 39223296 z^5 - 26317824 z^4 - 2317056 z^3 - 467424 z^2 - 27720 z + 3465) I_1\left(\frac{z}{2}\right) \right)$$

$$\begin{aligned}
 & \text{07.25.03.2675.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \\
 & \frac{2}{63} \sqrt{\pi} (40 z^3 - 528 z^2 + 1848 z - 1617) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{63} e^z (-80 z^5 + 1016 z^4 - 3228 z^3 + 2028 z^2 + 300 z + 63)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2676.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \\
 & \frac{2}{63} \sqrt{\pi} (40 z^3 + 528 z^2 + 1848 z + 1617) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{63} e^{-z} (80 z^5 + 1016 z^4 + 3228 z^3 + 2028 z^2 - 300 z + 63)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2677.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \\
 & \frac{1}{34459425 z} \left(4 e^{z/2} (10485760 z^7 - 154927104 z^6 + 656867328 z^5 - 876042240 z^4 + 230008320 z^3 + \right. \\
 & \quad \left. 38808000 z^2 + 8704080 z - 31185) I_0\left(\frac{z}{2}\right)\right) - \\
 & \frac{1}{34459425 z^2} \left(4 e^{z/2} (10485760 z^8 - 144441344 z^7 + 517668864 z^6 - 420108288 z^5 - \right. \\
 & \quad \left. 42938880 z^4 - 11580480 z^3 - 1275120 z^2 + 356895 z - 124740) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2678.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \\
 & \frac{1}{162} \sqrt{\pi} (80 z^3 - 1188 z^2 + 4752 z - 4851) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{81} e^z (-40 z^5 + 574 z^4 - 2109 z^3 + 1608 z^2 + 282 z + 81)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2679.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{1}{162} \sqrt{\pi} (80 z^3 + 1188 z^2 + 4752 z + 4851) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{81} e^{-z} (40 z^5 + 574 z^4 + 2109 z^3 + 1608 z^2 - 282 z + 81)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2680.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = \\
 & \frac{1}{654729075 z^2} \left(32 e^{z/2} (10485760 z^8 - 172228608 z^7 + 816906240 z^6 - 1219504128 z^5 + 356221440 z^4 + \right. \\
 & \quad \left. 71184960 z^3 + 21011760 z^2 - 467775 z + 343035) I_0\left(\frac{z}{2}\right)\right) - \\
 & \frac{1}{654729075 z^3} \left(32 e^{z/2} (10485760 z^9 - 161742848 z^8 + 660406272 z^7 - 629483520 z^6 - 72033792 z^5 - \right. \\
 & \quad \left. 24315840 z^4 - 4490640 z^3 + 2248785 z^2 - 1871100 z + 1372140) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2681.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{36} \sqrt{\pi} (8z^3 - 132z^2 + 594z - 693) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{18} e^z (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2682.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{36} \sqrt{\pi} (8z^3 + 132z^2 + 594z + 693) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{18} e^{-z} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2683.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, 6; z\right) = \\
 & \frac{1}{2749862115z^3} \left(32 e^{z/2} (20971520z^9 - 379060224z^8 + 1988493312z^7 - 3280564224z^6 + 1045158912z^5 + \right. \\
 & \quad \left. 239057280z^4 + 92363040z^3 - 12286890z^2 + 25041555z - 35675640) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{2749862115z^4} \left(32 e^{z/2} (20971520z^{10} - 358088704z^9 + 1640890368z^8 - 1797746688z^7 - 224695296z^6 - \right. \right. \\
 & \quad \left. \left. 90018432z^5 - 28717920z^4 + 28849590z^3 - 53607015z^2 + 100166220z - 142702560) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.2684.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (-2560z^5 + 21248z^4 - 41344z^3 + 16320z^2 - 366z + 3) + \\
 & \frac{16}{3} \sqrt{\pi} (160z^{11/2} - 1408z^{9/2} + 3168z^{7/2} - 1848z^{5/2} + 165z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2685.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (2560z^5 + 21248z^4 + 41344z^3 + 16320z^2 + 366z + 3) + \\
 & \frac{16}{3} \sqrt{\pi} (160z^{11/2} + 1408z^{9/2} + 3168z^{7/2} + 1848z^{5/2} + 165z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2686.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \\
 & \frac{1}{3} e^z (256z^5 - 2688z^4 + 7232z^3 - 4800z^2 + 360z + 3) - \frac{8}{3} \sqrt{\pi} (32z^{11/2} - 352z^{9/2} + 1056z^{7/2} - 924z^{5/2} + 165z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2687.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-256z^5 - 2688z^4 - 7232z^3 - 4800z^2 - 360z + 3) - \\
 & \frac{8}{3} \sqrt{\pi} (32z^{11/2} + 352z^{9/2} + 1056z^{7/2} + 924z^{5/2} + 165z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.2688.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{10395} e^{z/2} (-327680 z^6 + 4210688 z^5 - 16201728 z^4 + 22106880 z^3 - 9518352 z^2 + 623700 z + 10395) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (81920 z^6 - 970752 z^5 + 3120640 z^4 - 2809536 z^3 + 415620 z^2 + 6927 z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.2689.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{45} e^z (320 z^5 - 4064 z^4 + 13968 z^3 - 13128 z^2 + 1770 z + 45) - \frac{2}{45} \sqrt{\pi} z^{3/2} (160 z^4 - 2112 z^3 + 7920 z^2 - 9240 z + 2475) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2690.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{45} e^{-z} (-320 z^5 - 4064 z^4 - 13968 z^3 - 13128 z^2 - 1770 z + 45) - \frac{2}{45} \sqrt{\pi} z^{3/2} (160 z^4 + 2112 z^3 + 7920 z^2 + 9240 z + 2475) \operatorname{erf}(\sqrt{z})$$

07.25.03.2691.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{135135} e^{z/2} (-655360 z^6 + 9863168 z^5 - 45379584 z^4 + 75876864 z^3 - 41964576 z^2 + 4019400 z + 135135) I_0\left(\frac{z}{2}\right) + \frac{1}{135135} e^{z/2} (655360 z^6 - 9207808 z^5 + 36499456 z^4 - 43325952 z^3 + 9728544 z^2 + 290904 z + 3465) I_1\left(\frac{z}{2}\right)$$

07.25.03.2692.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{105} e^z (160 z^5 - 2384 z^4 + 9976 z^3 - 12174 z^2 + 2436 z + 105) - \frac{1}{105} \sqrt{\pi} z^{3/2} (160 z^4 - 2464 z^3 + 11088 z^2 - 16170 z + 5775) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2693.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{105} e^{-z} (-160 z^5 - 2384 z^4 - 9976 z^3 - 12174 z^2 - 2436 z + 105) - \frac{1}{105} \sqrt{\pi} z^{3/2} (160 z^4 + 2464 z^3 + 11088 z^2 + 16170 z + 5775) \operatorname{erf}(\sqrt{z})$$

07.25.03.2694.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = \frac{1}{405405 z} 4 e^{z/2} (131072 z^7 - 2129920 z^6 + 10039296 z^5 - 14808576 z^4 + 4500384 z^3 + 191448 z^2 + 5445 z - 495) I_1\left(\frac{z}{2}\right) - \frac{1}{405405} 4 e^{z/2} (131072 z^6 - 2260992 z^5 + 12103680 z^4 - 23913984 z^3 + 16009632 z^2 - 1991880 z - 101475) I_0\left(\frac{z}{2}\right)$$

07.25.03.2695.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{84} e^z (40 z^5 - 684 z^4 + 3374 z^3 - 5073 z^2 + 1368 z + 84) - \frac{1}{168} \sqrt{\pi} z^{3/2} (80 z^4 - 1408 z^3 + 7392 z^2 - 12936 z + 5775) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2696.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{84} e^{-z} (-40 z^5 - 684 z^4 - 3374 z^3 - 5073 z^2 - 1368 z + 84) - \frac{1}{168} \sqrt{\pi} z^{3/2} (80 z^4 + 1408 z^3 + 7392 z^2 + 12936 z + 5775) \operatorname{erf}(\sqrt{z})$$

07.25.03.2697.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = \frac{1}{11486475 z^2} \left(4 e^{z/2} (1310720 z^8 - 24182784 z^7 + 132112384 z^6 - 233038848 z^5 + 89778240 z^4 + 4902960 z^3 + 244530 z^2 - 49005 z + 13860) I_1\left(\frac{z}{2}\right) - \frac{1}{11486475 z} \left(4 e^{z/2} (1310720 z^7 - 25493504 z^6 + 155639808 z^5 - 354370560 z^4 + 276847680 z^3 - 41936400 z^2 - 2883870 z + 3465) I_0\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.2698.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{216} e^z (40 z^5 - 772 z^4 + 4386 z^3 - 7845 z^2 + 2688 z + 216) - \frac{1}{432} \sqrt{\pi} z^{3/2} (80 z^4 - 1584 z^3 + 9504 z^2 - 19404 z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2699.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{216} e^{-z} (-40 z^5 - 772 z^4 - 4386 z^3 - 7845 z^2 - 2688 z + 216) - \frac{1}{432} \sqrt{\pi} z^{3/2} (80 z^4 + 1584 z^3 + 9504 z^2 + 19404 z + 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.2700.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = \frac{1}{218243025 z^3} \left(64 e^{z/2} (655360 z^9 - 13533184 z^8 + 84078592 z^7 - 172647936 z^6 + 80810016 z^5 + 5339640 z^4 + 415305 z^3 - 144540 z^2 + 97020 z - 62370) I_1\left(\frac{z}{2}\right) - \frac{1}{218243025 z^2} \left(32 e^{z/2} (1310720 z^8 - 28377088 z^7 + 194568192 z^6 - 501230592 z^5 + 445807680 z^4 - 78906960 z^3 - 6891390 z^2 + 48510 z - 31185) I_0\left(\frac{z}{2}\right)\right)\right)$$

$$\begin{aligned}
 & \text{07.25.03.2701.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = & \\
 & \frac{1}{96} e^z (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) - \frac{1}{192} \sqrt{\pi} z^{3/2} (16z^4 - 352z^3 + 2376z^2 - 5544z + 3465) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2702.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = & \\
 & \frac{1}{96} e^{-z} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) - \frac{1}{192} \sqrt{\pi} z^{3/2} (16z^4 + 352z^3 + 2376z^2 + 5544z + 3465) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2703.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = & \\
 & \frac{1}{916620705 z^4} \left(32 e^{z/2} (2621440 z^{10} - 59899904 z^9 + 417054720 z^8 - 977283072 z^7 + 539441280 z^6 + \right. \\
 & \quad \left. 41426784 z^5 + 4892580 z^4 - 3153150 z^3 + 4750515 z^2 - 8108100 z + 10977120) I_1\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{916620705 z^3} \left(32 e^{z/2} (2621440 z^9 - 62521344 z^8 + 475643904 z^7 - 1367009280 z^6 + 1359904896 z^5 - \right. \right. \\
 & \quad \left. \left. 273319200 z^4 - 29369340 z^3 + 1101870 z^2 - 2027025 z + 2744280) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.2704.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = & \frac{1}{15} e^z (-128z^5 + 1696z^4 - 6256z^3 + 6800z^2 - 1500z + 15) + \\
 & \frac{1}{15} \sqrt{\pi} (128z^{11/2} - 1760z^{9/2} + 7040z^{7/2} - 9240z^{5/2} + 3300z^{3/2} - 165\sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2705.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = & \frac{1}{15} e^{-z} (128z^5 + 1696z^4 + 6256z^3 + 6800z^2 + 1500z + 15) + \\
 & \frac{1}{15} \sqrt{\pi} (128z^{11/2} + 1760z^{9/2} + 7040z^{7/2} + 9240z^{5/2} + 3300z^{3/2} + 165\sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2706.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, 1; z\right) = & \frac{e^{z/2} (32768z^6 - 520192z^5 + 2586624z^4 - 4882368z^3 + 3371448z^2 - 634095z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \\
 & \frac{e^{z/2} (-32768z^6 + 487424z^5 - 2115584z^4 + 2977728z^3 - 1066488z^2 + 38103z) I_1\left(\frac{z}{2}\right)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2707.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = & \frac{1}{45} e^z (-32z^5 + 512z^4 - 2400z^3 + 3636z^2 - 1365z + 45) + \\
 & \frac{1}{90} \sqrt{\pi} \sqrt{z} (64z^5 - 1056z^4 + 5280z^3 - 9240z^2 + 4950z - 495) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.2708.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{45} e^{-z} (32 z^5 + 512 z^4 + 2400 z^3 + 3636 z^2 + 1365 z + 45) + \frac{1}{90} \sqrt{\pi} \sqrt{z} (64 z^5 + 1056 z^4 + 5280 z^3 + 9240 z^2 + 4950 z + 495) \operatorname{erf}(\sqrt{z})$$

07.25.03.2709.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{135 \cdot 135} e^{z/2} (65 \cdot 536 z^6 - 1 \cdot 220 \cdot 608 z^5 + 7 \cdot 290 \cdot 880 z^4 - 17 \cdot 021 \cdot 568 z^3 + 15 \cdot 231 \cdot 024 z^2 - 4 \cdot 155 \cdot 690 z + 135 \cdot 135) I_0\left(\frac{z}{2}\right) + \frac{1}{135 \cdot 135} e^{z/2} (-65 \cdot 536 z^6 + 1 \cdot 155 \cdot 072 z^5 - 6 \cdot 168 \cdot 576 z^4 + 11 \cdot 364 \cdot 992 z^3 - 6 \cdot 000 \cdot 048 z^2 + 427 \cdot 194 z + 1155) I_1\left(\frac{z}{2}\right)$$

07.25.03.2710.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{420} e^z (-64 z^5 + 1200 z^4 - 6824 z^3 + 13 \cdot 278 z^2 - 7119 z + 420) + \frac{1}{840} \sqrt{\pi} \sqrt{z} (128 z^5 - 2464 z^4 + 14 \cdot 784 z^3 - 32 \cdot 340 z^2 + 23 \cdot 100 z - 3465) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2711.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{420} e^{-z} (64 z^5 + 1200 z^4 + 6824 z^3 + 13 \cdot 278 z^2 + 7119 z + 420) + \frac{1}{840} \sqrt{\pi} \sqrt{z} (128 z^5 + 2464 z^4 + 14 \cdot 784 z^3 + 32 \cdot 340 z^2 + 23 \cdot 100 z + 3465) \operatorname{erf}(\sqrt{z})$$

07.25.03.2712.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, 3; z\right) = \frac{1}{2027025} 8 e^{z/2} (32 \cdot 768 z^6 - 700 \cdot 416 z^5 + 4 \cdot 884 \cdot 480 z^4 - 13 \cdot 575 \cdot 360 z^3 + 14 \cdot 841 \cdot 720 z^2 - 5 \cdot 237 \cdot 595 z + 253 \cdot 440) I_0\left(\frac{z}{2}\right) - \frac{1}{2027025 z} 4 e^{z/2} (65 \cdot 536 z^7 - 1 \cdot 335 \cdot 296 z^6 + 8 \cdot 466 \cdot 432 z^5 - 19 \cdot 286 \cdot 400 z^4 + 13 \cdot 499 \cdot 760 z^3 - 1 \cdot 473 \cdot 030 z^2 - 8910 z + 495) I_1\left(\frac{z}{2}\right)$$

07.25.03.2713.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{168} e^z (-8 z^5 + 172 z^4 - 1150 z^3 + 2735 z^2 - 1917 z + 168) + \frac{1}{336} \sqrt{\pi} \sqrt{z} (16 z^5 - 352 z^4 + 2464 z^3 - 6468 z^2 + 5775 z - 1155) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2714.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{168} e^{-z} (8 z^5 + 172 z^4 + 1150 z^3 + 2735 z^2 + 1917 z + 168) + \frac{1}{336} \sqrt{\pi} \sqrt{z} (16 z^5 + 352 z^4 + 2464 z^3 + 6468 z^2 + 5775 z + 1155) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.2715.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, 4; z\right) &= \frac{1}{11486475z} \\
 & \left(4e^{z/2}(131072z^7 - 3162112z^6 + 25214976z^5 - 81250560z^4 + 104627040z^3 - 44888580z^2 + 2873970z - 495)\right. \\
 & \left.I_0\left(\frac{z}{2}\right) - \frac{1}{11486475z^2}\left(4e^{z/2}(131072z^8 - 3031040z^7 + 22249472z^6 - \right.\right. \\
 & \left.60385536z^5 + 52744800z^4 - 7855140z^3 - 78210z^2 + 9405z - 1980)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2716.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) &= \frac{e^z(-32z^5 + 776z^4 - 5964z^3 + 16770z^2 - 14565z + 1728)}{1728} + \\
 & \frac{\sqrt{\pi}\sqrt{z}(64z^5 - 1584z^4 + 12672z^3 - 38808z^2 + 41580z - 10395)\operatorname{erfi}(\sqrt{z})}{3456}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2717.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) &= \frac{e^{-z}(32z^5 + 776z^4 + 5964z^3 + 16770z^2 + 14565z + 1728)}{1728} + \\
 & \frac{\sqrt{\pi}\sqrt{z}(64z^5 + 1584z^4 + 12672z^3 + 38808z^2 + 41580z + 10395)\operatorname{erf}(\sqrt{z})}{3456}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2718.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, 5; z\right) &= \\
 & \frac{1}{218243025z^2}\left(32e^{z/2}(131072z^8 - 3522560z^7 + 31612928z^6 - 115836672z^5 + 171345120z^4 - 85997340z^3 + \right. \\
 & \left.6832980z^2 - 6435z + 3465)I_0\left(\frac{z}{2}\right) - \right. \\
 & \left.\frac{1}{218243025z^3}\left(32e^{z/2}(131072z^9 - 3391488z^8 + 28286976z^7 - 89114368z^6 + 93392352z^5 - \right.\right. \\
 & \left.17769660z^4 - 257400z^3 + 51975z^2 - 25740z + 13860)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2719.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) &= \frac{e^z(-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920)}{1920} + \\
 & \frac{\sqrt{\pi}\sqrt{z}(32z^5 - 880z^4 + 7920z^3 - 27720z^2 + 34650z - 10395)\operatorname{erfi}(\sqrt{z})}{3840}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2720.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) &= \frac{e^{-z}(16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \\
 & \frac{\sqrt{\pi}\sqrt{z}(32z^5 + 880z^4 + 7920z^3 + 27720z^2 + 34650z + 10395)\operatorname{erf}(\sqrt{z})}{3840}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2721.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \\
 & \frac{1}{916620705 z^3} \left(32 e^{z/2} (262144 z^9 - 7766016 z^8 + 77463552 z^7 - 318011904 z^6 + 530599104 z^5 - 303506280 z^4 + \right. \\
 & \quad \left. 28759500 z^3 - 124740 z^2 + 197505 z - 249480) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{916620705 z^4} \left(32 e^{z/2} (262144 z^{10} - 7503872 z^9 + 70090752 z^8 - 251410944 z^7 + 307548864 z^6 - \right. \\
 & \quad \left. 71613864 z^5 - 1427580 z^4 + 485100 z^3 - 530145 z^2 + 790020 z - 997920) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 1$

$$\begin{aligned}
 & \text{07.25.03.2722.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \\
 & \frac{1}{155925} e^{z/2} (40960 z^6 - 774144 z^5 + 4720128 z^4 - 11359200 z^3 + 10675710 z^2 - 3222450 z + 155925) I_0\left(\frac{z}{2}\right) - \\
 & \frac{2 e^{z/2} (20480 z^6 - 366592 z^5 + 2003712 z^4 - 3838704 z^3 + 2198415 z^2 - 207810 z) I_1\left(\frac{z}{2}\right)}{155925}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2723.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \\
 & \frac{1}{363825} e^{z/2} (20480 z^6 - 449024 z^5 + 3242880 z^4 - 9479484 z^3 + 11209380 z^2 - 4584195 z + 363825) I_0\left(\frac{z}{2}\right) + \\
 & \frac{e^{z/2} (-20480 z^6 + 428544 z^5 - 2824576 z^4 + 6848700 z^3 - 5408424 z^2 + 848505 z) I_1\left(\frac{z}{2}\right)}{363825}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2724.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{e^{z/2} (1280 z^6 - 31936 z^5 + 266568 z^4 - 916536 z^3 + 1302168 z^2 - 665280 z + 72765) I_0\left(\frac{z}{2}\right)}{72765} - \\
 & \frac{4 e^{z/2} (320 z^6 - 7664 z^5 + 59138 z^4 - 173508 z^3 + 174939 z^2 - 38787 z) I_1\left(\frac{z}{2}\right)}{72765}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2725.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{e^{z/2} (640 z^6 - 17904 z^5 + 169584 z^4 - 670260 z^3 + 1109916 z^2 - 675675 z + 93555) I_0\left(\frac{z}{2}\right)}{93555} + \\
 & \frac{e^{z/2} (-640 z^6 + 17264 z^5 - 152640 z^4 + 525612 z^3 - 645360 z^2 + 186111 z) I_1\left(\frac{z}{2}\right)}{93555}
 \end{aligned}$$

07.25.03.2726.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; 1, \frac{11}{2}; z\right) = \frac{e^{z/2} (32 z^6 - 992 z^5 + 10512 z^4 - 46944 z^3 + 88674 z^2 - 62370 z + 10395) I_0\left(\frac{z}{2}\right) - 2 e^{z/2} (16 z^6 - 480 z^5 + 4784 z^4 - 18912 z^3 + 27387 z^2 - 9762 z) I_1\left(\frac{z}{2}\right)}{10395}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{3}{2}$

07.25.03.2727.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (-320 z^5 + 6176 z^4 - 36672 z^3 + 76752 z^2 - 47970 z + 4905)}{5400} + \frac{\sqrt{\pi} (640 z^6 - 12672 z^5 + 79200 z^4 - 184800 z^3 + 148500 z^2 - 29700 z + 495) \operatorname{erfi}(\sqrt{z})}{10800 \sqrt{z}}$$

07.25.03.2728.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (320 z^5 + 6176 z^4 + 36672 z^3 + 76752 z^2 + 47970 z + 4905)}{5400} + \frac{\sqrt{\pi} (640 z^6 + 12672 z^5 + 79200 z^4 + 184800 z^3 + 148500 z^2 + 29700 z + 495) \operatorname{erf}(\sqrt{z})}{10800 \sqrt{z}}$$

07.25.03.2729.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{2027025} e^{z/2} (81920 z^6 - 1818624 z^5 + 13360128 z^4 - 40015680 z^3 + 49103100 z^2 - 21448350 z + 2027025) I_0\left(\frac{z}{2}\right) + \frac{1}{2027025} e^{z/2} (-81920 z^6 + 1736704 z^5 - 11664384 z^4 + 29137728 z^3 - 24316860 z^2 + 4398210 z - 17325) I_1\left(\frac{z}{2}\right)$$

07.25.03.2730.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (-320 z^5 + 7232 z^4 - 51984 z^3 + 138924 z^2 - 122220 z + 21735)}{25200} + \frac{\sqrt{\pi} (640 z^6 - 14784 z^5 + 110880 z^4 - 323400 z^3 + 346500 z^2 - 103950 z + 3465) \operatorname{erfi}(\sqrt{z})}{50400 \sqrt{z}}$$

07.25.03.2731.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (320 z^5 + 7232 z^4 + 51984 z^3 + 138924 z^2 + 122220 z + 21735)}{25200} + \frac{\sqrt{\pi} (640 z^6 + 14784 z^5 + 110880 z^4 + 323400 z^3 + 346500 z^2 + 103950 z + 3465) \operatorname{erf}(\sqrt{z})}{50400 \sqrt{z}}$$

$$\begin{aligned}
 & \text{07.25.03.2732.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, 3; z\right) &= \\
 & \frac{1}{6081075} 4 e^{z/2} (16384 z^6 - 417792 z^5 + 3591168 z^4 - 12864960 z^3 + 19419660 z^2 - 10973160 z + 1520145) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{6081075 z} 4 e^{z/2} (16384 z^7 - 401408 z^6 + 3197952 z^5 - 9851328 z^4 + 10817100 z^3 - 2925180 z^2 + 26235 z - 495) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2733.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) &= \frac{e^z (-80 z^5 + 2072 z^4 - 17484 z^3 + 56874 z^2 - 64710 z + 16695)}{20160} + \\
 & \frac{\sqrt{\pi} (160 z^6 - 4224 z^5 + 36960 z^4 - 129360 z^3 + 173250 z^2 - 69300 z + 3465) \operatorname{erfi}(\sqrt{z})}{40320 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2734.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) &= \frac{e^{-z} (80 z^5 + 2072 z^4 + 17484 z^3 + 56874 z^2 + 64710 z + 16695)}{20160} + \\
 & \frac{\sqrt{\pi} (160 z^6 + 4224 z^5 + 36960 z^4 + 129360 z^3 + 173250 z^2 + 69300 z + 3465) \operatorname{erf}(\sqrt{z})}{40320 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2735.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, 4; z\right) &= \frac{1}{172297125 z} \\
 & \left(4 e^{z/2} (163840 z^7 - 4718592 z^6 + 46454784 z^5 - 193656960 z^4 + 346387320 z^3 - 238421700 z^2 + 43063020 z + 1485)\right. \\
 & \left. I_0\left(\frac{z}{2}\right) - \frac{1}{172297125 z^2} \left(4 e^{z/2} (163840 z^8 - 4554752 z^7 + 41981952 z^6 - \right.\right. \\
 & \left. \left. 153788544 z^5 + 209547000 z^4 - 75890700 z^3 + 1126620 z^2 - 45045 z + 5940)\right) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2736.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) &= \frac{e^z (-80 z^5 + 2336 z^4 - 22632 z^3 + 86772 z^2 - 121305 z + 41445)}{51840} + \\
 & \frac{\sqrt{\pi} (160 z^6 - 4752 z^5 + 47520 z^4 - 194040 z^3 + 311850 z^2 - 155925 z + 10395) \operatorname{erfi}(\sqrt{z})}{103680 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2737.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) &= \frac{e^{-z} (80 z^5 + 2336 z^4 + 22632 z^3 + 86772 z^2 + 121305 z + 41445)}{51840} + \\
 & \frac{\sqrt{\pi} (160 z^6 + 4752 z^5 + 47520 z^4 + 194040 z^3 + 311850 z^2 + 155925 z + 10395) \operatorname{erf}(\sqrt{z})}{103680 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2738.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \\
 & \frac{1}{3\,273\,645\,375\,z^2} \left(32 e^{z/2} (163\,840 z^8 - 5\,259\,264 z^7 + 58\,349\,568 z^6 - 277\,418\,880 z^5 + 573\,026\,040 z^4 - \right. \\
 & \quad \left. 462\,864\,600 z^3 + 102\,243\,240 z^2 + 17\,820 z - 7425) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{3\,273\,645\,375\,z^3} \left(128 e^{z/2} (40\,960 z^9 - 1\,273\,856 z^8 + 13\,334\,016 z^7 - 56\,616\,672 z^6 + 92\,160\,990 z^5 - \right. \right. \\
 & \quad \left. \left. 41\,977\,800 z^4 + 902\,385 z^3 - 58\,410 z^2 + 17\,820 z - 7425) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2739.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z (-32 z^5 + 1040 z^4 - 11\,376 z^3 + 50\,232 z^2 - 83\,370 z + 35\,685)}{46\,080} + \\
 & \frac{\sqrt{\pi} (64 z^6 - 2112 z^5 + 23\,760 z^4 - 110\,880 z^3 + 207\,900 z^2 - 124\,740 z + 10\,395) \operatorname{erfi}(\sqrt{z})}{92\,160 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2740.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 1040 z^4 + 11\,376 z^3 + 50\,232 z^2 + 83\,370 z + 35\,685)}{46\,080} + \\
 & \frac{\sqrt{\pi} (64 z^6 + 2112 z^5 + 23\,760 z^4 + 110\,880 z^3 + 207\,900 z^2 + 124\,740 z + 10\,395) \operatorname{erf}(\sqrt{z})}{92\,160 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2741.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \\
 & \frac{1}{13\,749\,310\,575\,z^3} \left(32 e^{z/2} (327\,680 z^9 - 11\,599\,872 z^8 + 143\,192\,064 z^7 - 764\,601\,600 z^6 + 1\,789\,789\,680 z^5 - \right. \\
 & \quad \left. 1\,654\,191\,000 z^4 + 429\,202\,620 z^3 + 291\,060 z^2 - 363\,825 z + 415\,800) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{13\,749\,310\,575\,z^4} \left(32 e^{z/2} (327\,680 z^{10} - 11\,272\,192 z^9 + 132\,083\,712 z^8 - 637\,826\,304 z^7 + 1\,207\,757\,040 z^6 - \right. \right. \\
 & \quad \left. \left. 664\,229\,160 z^5 + 19\,223\,820 z^4 - 1\,898\,820 z^3 + 1\,216\,215 z^2 - 1\,455\,300 z + 1\,663\,200) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 2$

$$\begin{aligned}
 & \text{07.25.03.2742.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \\
 & \frac{1}{4\,729\,725} e^{z/2} (40\,960 z^6 - 1\,055\,744 z^5 + 9\,206\,016 z^4 - 33\,643\,176 z^3 + 52\,277\,820 z^2 - 30\,949\,380 z + 4\,729\,725) I_0\left(\frac{z}{2}\right) + \\
 & \frac{1}{4\,729\,725} e^{z/2} (-40\,960 z^6 + 1\,014\,784 z^5 - 8\,211\,712 z^4 + 25\,897\,896 z^3 - 29\,598\,996 z^2 + 8\,726\,340 z - 121\,275) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

07.25.03.2743.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{e^{z/2} (2560 z^6 - 75 136 z^5 + 758 416 z^4 - 3 271 080 z^3 + 6 140 484 z^2 - 4 550 700 z + 945 945) I_0\left(\frac{z}{2}\right)}{945 945} + \frac{e^{z/2} (-2560 z^6 + 72 576 z^5 - 687 120 z^4 + 2 617 688 z^3 - 3 801 780 z^2 + 1 564 164 z - 40 425) I_1\left(\frac{z}{2}\right)}{945 945}$$

07.25.03.2744.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{e^{z/2} (1280 z^6 - 42 144 z^5 + 483 312 z^4 - 2 402 592 z^3 + 5 281 308 z^2 - 4 677 750 z + 1 216 215) I_0\left(\frac{z}{2}\right)}{1 216 215} + \frac{e^{z/2} (-1280 z^6 + 40 864 z^5 - 443 088 z^4 + 1 978 656 z^3 - 3 487 332 z^2 + 1 847 718 z - 72 765) I_1\left(\frac{z}{2}\right)}{1 216 215}$$

07.25.03.2745.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; 2, \frac{11}{2}; z\right) = \frac{e^{z/2} (64 z^6 - 2336 z^5 + 30 000 z^4 - 168 864 z^3 + 425 112 z^2 - 436 590 z + 135 135) I_0\left(\frac{z}{2}\right)}{135 135} + \frac{e^{z/2} (-64 z^6 + 2272 z^5 - 27 760 z^4 + 142 176 z^3 - 294 744 z^2 + 191 442 z - 10 395) I_1\left(\frac{z}{2}\right)}{135 135}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{5}{2}$

07.25.03.2746.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-2560 z^6 + 67 712 z^5 - 588 352 z^4 + 2 000 280 z^3 - 2 455 236 z^2 + 749 070 z - 3465)}{940 800 z} + \frac{1}{1 881 600 z^{3/2}} + \frac{\sqrt{\pi} (5120 z^7 - 137 984 z^6 + 1 241 856 z^5 - 4 527 600 z^4 + 6 468 000 z^3 - 2 910 600 z^2 + 194 040 z + 3465) \operatorname{erfi}(\sqrt{z})}{1 881 600 z^{3/2}}$$

07.25.03.2747.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (2560 z^6 + 67 712 z^5 + 588 352 z^4 + 2 000 280 z^3 + 2 455 236 z^2 + 749 070 z + 3465)}{940 800 z} + \frac{1}{1 881 600 z^{3/2}} + \frac{\sqrt{\pi} (5120 z^7 + 137 984 z^6 + 1 241 856 z^5 + 4 527 600 z^4 + 6 468 000 z^3 + 2 910 600 z^2 + 194 040 z - 3465) \operatorname{erf}(\sqrt{z})}{1 881 600 z^{3/2}}$$

07.25.03.2748.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{16 e^{z/2} (2048 z^6 - 60 672 z^5 + 619 968 z^4 - 2 718 702 z^3 + 5 223 960 z^2 - 4 009 005 z + 887 040) I_0\left(\frac{z}{2}\right)}{14 189 175} - \frac{1}{14 189 175 z} + \frac{4 e^{z/2} (8192 z^7 - 234 496 z^6 + 2 249 472 z^5 - 8 734 392 z^4 + 13 077 288 z^3 - 5 702 760 z^2 + 180 180 z + 3465) I_1\left(\frac{z}{2}\right)}{14 189 175 z}$$

07.25.03.2749.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-320 z^6 + 9696 z^5 - 98800 z^4 + 407808 z^3 - 643356 z^2 + 281610 z - 3465)}{376320 z} + \frac{1}{752640 z^{3/2}} \sqrt{\pi} (640 z^7 - 19712 z^6 + 206976 z^5 - 905520 z^4 + 1617000 z^3 - 970200 z^2 + 97020 z + 3465) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2750.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (320 z^6 + 9696 z^5 + 98800 z^4 + 407808 z^3 + 643356 z^2 + 281610 z + 3465)}{376320 z} + \frac{1}{752640 z^{3/2}} \sqrt{\pi} (640 z^7 + 19712 z^6 + 206976 z^5 + 905520 z^4 + 1617000 z^3 + 970200 z^2 + 97020 z - 3465) \operatorname{erf}(\sqrt{z})$$

07.25.03.2751.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{1}{402026625 z} \left(4 e^{z/2} (81920 z^7 - 2742272 z^6 + 32131584 z^5 - 164372880 z^4 + 375860520 z^3 - 352390500 z^2 + 100582020 z - 3465)\right) - \frac{1}{402026625 z^2} \left(4 e^{z/2} (81920 z^8 - 2660352 z^7 + 29512192 z^6 - 136108944 z^5 + 252103320 z^4 - 146078100 z^3 + 7581420 z^2 + 301455 z - 13860)\right) I_1\left(\frac{z}{2}\right)$$

07.25.03.2752.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (-640 z^6 + 21856 z^5 - 255504 z^4 + 1240656 z^3 - 2393664 z^2 + 1374030 z - 31185)}{1935360 z} + \frac{1}{3870720 z^{3/2}} \sqrt{\pi} (1280 z^7 - 44352 z^6 + 532224 z^5 - 2716560 z^4 + 5821200 z^3 - 4365900 z^2 + 582120 z + 31185) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2753.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (640 z^6 + 21856 z^5 + 255504 z^4 + 1240656 z^3 + 2393664 z^2 + 1374030 z + 31185)}{1935360 z} + \frac{1}{3870720 z^{3/2}} \sqrt{\pi} (1280 z^7 + 44352 z^6 + 532224 z^5 + 2716560 z^4 + 5821200 z^3 + 4365900 z^2 + 582120 z - 31185) \operatorname{erf}(\sqrt{z})$$

07.25.03.2754.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{1}{7638505875 z^2} \left(32 e^{z/2} (81920 z^8 - 3057664 z^7 + 40410624 z^6 - 236230512 z^5 + 626033520 z^4 - 691073460 z^3 + 239071140 z^2 - 38115 z + 10395)\right) I_0\left(\frac{z}{2}\right) - \frac{1}{7638505875 z^3} \left(32 e^{z/2} (81920 z^9 - 2975744 z^8 + 37475840 z^7 - 200160624 z^6 + 441891072 z^5 - 320021100 z^4 + 23756040 z^3 + 1472625 z^2 - 152460 z + 41580)\right) I_1\left(\frac{z}{2}\right)$$

07.25.03.2755.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{e^z(-64z^6 + 2432z^5 - 32080z^4 + 179136z^3 - 408828z^2 + 291480z - 10395)}{430080z} + \frac{1}{860160z^{3/2}}\sqrt{\pi}(128z^7 - 4928z^6 + 66528z^5 - 388080z^4 + 970200z^3 - 873180z^2 + 145530z + 10395)\operatorname{erfi}(\sqrt{z})$$

07.25.03.2756.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z}(64z^6 + 2432z^5 + 32080z^4 + 179136z^3 + 408828z^2 + 291480z + 10395)}{430080z} + \frac{1}{860160z^{3/2}}\sqrt{\pi}(128z^7 + 4928z^6 + 66528z^5 + 388080z^4 + 970200z^3 + 873180z^2 + 145530z - 10395)\operatorname{erf}(\sqrt{z})$$

07.25.03.2757.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{1}{32081724675z^3}\left(32e^{z/2}(163840z^9 - 6746112z^8 + 99271680z^7 - 652781472z^6 + 1966411440z^5 - 2492249760z^4 + 1005224220z^3 - 519750z^2 + 426195z - 415800)I_0\left(\frac{z}{2}\right) - \frac{1}{32081724675z^4}\left(32e^{z/2}(163840z^{10} - 6582272z^9 + 92771328z^8 - 563137440z^7 + 1443589392z^6 - 1255897440z^5 + 123312420z^4 + 10734570z^3 - 2130975z^2 + 1704780z - 1663200)I_1\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 3$

07.25.03.2758.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{4e^{z/2}(512z^6 - 17280z^5 + 204624z^4 - 1061568z^3 + 2474388z^2 - 2383920z + 710325)I_0\left(\frac{z}{2}\right)}{2837835} - \frac{1}{2837835z}4e^{z/2}(512z^7 - 16768z^6 + 188112z^5 - 881328z^4 + 1671948z^3 - 1010268z^2 + 58905z + 3465)I_1\left(\frac{z}{2}\right)$$

07.25.03.2759.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{8e^{z/2}(128z^6 - 4848z^5 + 65280z^4 - 391056z^3 + 1070928z^2 - 1237005z + 457380)I_0\left(\frac{z}{2}\right)}{3648645} - \frac{1}{3648645z}4e^{z/2}(256z^7 - 9440z^6 + 121248z^5 - 665328z^4 + 1528512z^3 - 1183086z^2 + 103950z + 10395)I_1\left(\frac{z}{2}\right)$$

07.25.03.2760.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; 3, \frac{11}{2}; z\right) = \frac{4e^{z/2}(64z^6 - 2688z^5 + 40560z^4 - 275520z^3 + 866520z^2 - 1164240z + 509355)I_0\left(\frac{z}{2}\right)}{2027025} - \frac{1}{2027025z}4e^{z/2}(64z^7 - 2624z^6 + 37968z^5 - 238800z^4 + 644280z^3 - 608760z^2 + 72765z + 10395)I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{7}{2}$

07.25.03.2761.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (-640 z^7 + 22\,208 z^6 - 265\,184 z^5 + 1\,326\,544 z^4 - 2\,678\,520 z^3 + 1\,668\,324 z^2 - 53\,130 z - 3465)}{2\,408\,448 z^2} + \frac{1}{4\,816\,896 z^{5/2}} \left(\sqrt{\pi} (1280 z^8 - 45\,056 z^7 + 551\,936 z^6 - 2\,897\,664 z^5 + 6\,468\,000 z^4 - 5\,174\,400 z^3 + 776\,160 z^2 + 55\,440 z + 3465) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.2762.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (640 z^7 + 22\,208 z^6 + 265\,184 z^5 + 1\,326\,544 z^4 + 2\,678\,520 z^3 + 1\,668\,324 z^2 + 53\,130 z - 3465)}{2\,408\,448 z^2} + \frac{1}{4\,816\,896 z^{5/2}} \left(\sqrt{\pi} (1280 z^8 + 45\,056 z^7 + 551\,936 z^6 + 2\,897\,664 z^5 + 6\,468\,000 z^4 + 5\,174\,400 z^3 + 776\,160 z^2 - 55\,440 z + 3465) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.2763.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{1}{80\,405\,325 z} \left(4 e^{z/2} (5120 z^7 - 195\,328 z^6 + 2\,654\,496 z^5 - 16\,093\,680 z^4 + 44\,785\,440 z^3 - 52\,875\,900 z^2 + 20\,173\,230 z + 3465) I_0\left(\frac{z}{2}\right) - \frac{1}{80\,405\,325 z^2} \left(4 e^{z/2} (5120 z^8 - 190\,208 z^7 + 2\,466\,848 z^6 - 13\,716\,816 z^5 + 32\,127\,840 z^4 - 25\,667\,460 z^3 + 2\,432\,430 z^2 + 287\,595 z + 13\,860) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.2764.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{6\,193\,152 z^2} e^z (-640 z^7 + 25\,024 z^6 - 342\,624 z^5 + 2\,013\,648 z^4 - 4\,957\,368 z^3 + 4\,022\,676 z^2 - 228\,690 z - 31\,185) + \frac{1}{12\,386\,304 z^{5/2}} \left(\sqrt{\pi} (1280 z^8 - 50\,688 z^7 + 709\,632 z^6 - 4\,346\,496 z^5 + 11\,642\,400 z^4 - 11\,642\,400 z^3 + 2\,328\,480 z^2 + 249\,480 z + 31\,185) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.2765.01

$${}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{6\,193\,152 z^2} e^{-z} (640 z^7 + 25\,024 z^6 + 342\,624 z^5 + 2\,013\,648 z^4 + 4\,957\,368 z^3 + 4\,022\,676 z^2 + 228\,690 z - 31\,185) + \frac{1}{12\,386\,304 z^{5/2}} \left(\sqrt{\pi} (1280 z^8 + 50\,688 z^7 + 709\,632 z^6 + 4\,346\,496 z^5 + 11\,642\,400 z^4 + 11\,642\,400 z^3 + 2\,328\,480 z^2 - 249\,480 z + 31\,185) \operatorname{erf}(\sqrt{z})\right)$$

$$\begin{aligned}
 & \text{07.25.03.2766.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \\
 & \frac{1}{1527701175z^2} \left(32 e^{z/2} (5120z^8 - 217856z^7 + 3341600z^6 - 23183136z^5 + 74963280z^4 - 104522880z^3 + \right. \\
 & \quad \left. 48073410z^2 + 34650z - 3465) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{1527701175z^3} \left(64 e^{z/2} (2560z^9 - 106368z^8 + 1565712z^7 - 10076480z^6 + 28089648z^5 - \right. \right. \\
 & \quad \left. \left. 27943440z^4 + 3743355z^3 + 665280z^2 + 69300z - 6930) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2767.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \\
 & \frac{e^z (-128z^7 + 5568z^6 - 85984z^5 + 580560z^4 - 1686744z^3 + 1690836z^2 - 145530z - 31185)}{2752512z^2} + \frac{1}{5505024z^{5/2}} \\
 & \quad \left(\sqrt{\pi} (256z^8 - 11264z^7 + 177408z^6 - 1241856z^5 + 3880800z^4 - 4656960z^3 + 1164240z^2 + 166320z + 31185) \right. \\
 & \quad \left. \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2768.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{e^{-z} (128z^7 + 5568z^6 + 85984z^5 + 580560z^4 + 1686744z^3 + 1690836z^2 + 145530z - 31185)}{2752512z^2} + \\
 & \quad \frac{1}{5505024z^{5/2}} \left(\sqrt{\pi} (256z^8 + 11264z^7 + 177408z^6 + 1241856z^5 + \right. \\
 & \quad \left. 3880800z^4 + 4656960z^3 + 1164240z^2 - 166320z + 31185) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2769.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \\
 & \frac{1}{6416344935z^3} \left(32 e^{z/2} (10240z^9 - 480768z^8 + 8215104z^7 - 64182048z^6 + 236409264z^5 - 379542240z^4 + \right. \\
 & \quad \left. 202771800z^3 + 395010z^2 - 114345z + 83160) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{6416344935z^4} \left(32 e^{z/2} (10240z^{10} - 470528z^9 + 7749696z^8 - 56657376z^7 + 183188208z^6 - \right. \right. \\
 & \quad \left. \left. 218270304z^5 + 38225880z^4 + 9029790z^3 + 1590435z^2 - 457380z + 332640) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 4$

$$\begin{aligned}
 & \text{07.25.03.2770.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; 4, \frac{9}{2}; z\right) &= \frac{1}{103\,378\,275\,z} \\
 & 4 e^{z/2} (2560 z^7 - 109\,632 z^6 + 1\,695\,264 z^5 - 11\,884\,080 z^4 + 38\,953\,440 z^3 - 55\,301\,400 z^2 + 26\,049\,870 z + 31\,185) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{103\,378\,275\,z^2} \left(4 e^{z/2} (2560 z^8 - 107\,072 z^7 + 1\,589\,472 z^6 - 10\,345\,584 z^5 + \right. \\
 & \left. 29\,303\,520 z^4 - 29\,882\,520 z^3 + 4\,220\,370 z^2 + 821\,205 z + 124\,740) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2771.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; 4, \frac{11}{2}; z\right) &= \\
 & \frac{1}{11\,486\,475\,z} 4 e^{z/2} (128 z^7 - 6080 z^6 + 105\,408 z^5 - 838\,800 z^4 + 3\,163\,920 z^3 - 5\,239\,080 z^2 + 2\,910\,600 z + 10\,395) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{11\,486\,475\,z^2} \\
 & 4 e^{z/2} (128 z^8 - 5952 z^7 + 99\,520 z^6 - 742\,128 z^5 + 2\,466\,000 z^4 - 3\,061\,560 z^3 + 582\,120 z^2 + 155\,925 z + 41\,580) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.2772.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) &= \\
 & \frac{1}{63\,700\,992\,z^3} (e^z (-2560 z^8 + 112\,768 z^7 - 1\,769\,664 z^6 + 12\,207\,840 z^5 - 36\,564\,432 z^4 + 38\,465\,496 z^3 - \\
 & 3\,783\,780 z^2 - 1\,018\,710 z - 155\,925)) + \\
 & \frac{1}{127\,401\,984\,z^{7/2}} (\sqrt{\pi} (5120 z^9 - 228\,096 z^8 + 3\,649\,536 z^7 - 26\,078\,976 z^6 + 83\,825\,280 z^5 - \\
 & 104\,781\,600 z^4 + 27\,941\,760 z^3 + 4\,490\,640 z^2 + 1\,122\,660 z + 155\,925) \operatorname{erfi}(\sqrt{z}))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2773.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) &= \\
 & \frac{1}{63\,700\,992\,z^3} (e^{-z} (2560 z^8 + 112\,768 z^7 + 1\,769\,664 z^6 + 12\,207\,840 z^5 + 36\,564\,432 z^4 + 38\,465\,496 z^3 + \\
 & 3\,783\,780 z^2 - 1\,018\,710 z + 155\,925)) + \\
 & \frac{1}{127\,401\,984\,z^{7/2}} (\sqrt{\pi} (5120 z^9 + 228\,096 z^8 + 3\,649\,536 z^7 + 26\,078\,976 z^6 + 83\,825\,280 z^5 + \\
 & 104\,781\,600 z^4 + 27\,941\,760 z^3 - 4\,490\,640 z^2 + 1\,122\,660 z - 155\,925) \operatorname{erf}(\sqrt{z}))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2774.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \\
 & \frac{1}{1964187225z^2} \left(32e^{z/2}(2560z^8 - 122304z^7 + 2135616z^6 - 17149296z^5 + 65445840z^4 - 110020680z^3 + \right. \\
 & \quad \left. 62286840z^2 + 280665z + 31185) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{1964187225z^3} \left(32e^{z/2}(2560z^9 - 119744z^8 + 2017152z^7 - 15189456z^6 + 51153216z^5 - \right. \\
 & \quad \left. 64785960z^4 + 12806640z^3 + 3627855z^2 + 1122660z + 124740) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2775.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{14155776z^3} \\
 & \quad e^z(-256z^8 + 12544z^7 - 221952z^6 + 1757760z^5 - 6203040z^4 + 8030448z^3 - 1164240z^2 - 457380z - 155925) + \\
 & \frac{1}{28311552z^{7/2}} \left(\sqrt{\pi}(512z^9 - 25344z^8 + 456192z^7 - 3725568z^6 + 13970880z^5 - \right. \\
 & \quad \left. 20956320z^4 + 6985440z^3 + 1496880z^2 + 561330z + 155925) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2776.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{14155776z^3} \\
 & \quad e^{-z}(256z^8 + 12544z^7 + 221952z^6 + 1757760z^5 + 6203040z^4 + 8030448z^3 + 1164240z^2 - 457380z + 155925) + \\
 & \frac{1}{28311552z^{7/2}} \left(\sqrt{\pi}(512z^9 + 25344z^8 + 456192z^7 + 3725568z^6 + 13970880z^5 + \right. \\
 & \quad \left. 20956320z^4 + 6985440z^3 - 1496880z^2 + 561330z - 155925) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2777.01} \\
 & {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \\
 & \frac{1}{8249586345z^3} \left(32e^{z/2}(5120z^9 - 269952z^8 + 5253312z^7 - 47544000z^6 + 207013968z^5 - 401662800z^4 + \right. \\
 & \quad \left. 263700360z^3 + 2744280z^2 + 779625z - 249480) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{8249586345z^4} \left(32e^{z/2}(5120z^{10} - 264832z^9 + 4991040z^8 - 42680256z^7 + 166580400z^6 - \right. \\
 & \quad \left. 252192528z^5 + 64615320z^4 + 23700600z^3 + 10945935z^2 + 3118500z - 997920) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 5$

$$\begin{aligned}
 & \text{07.25.03.2778.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; 5, \frac{11}{2}; z\right) &= \frac{1}{218\,243\,025 z^2} \\
 & \left(32 e^{z/2} (128 z^8 - 6784 z^7 + 132\,864 z^6 - 1\,212\,096 z^5 + 5\,331\,360 z^4 - 10\,478\,160 z^3 + 6\,985\,440 z^2 + 83\,160 z + 31\,185) \right. \\
 & \left. I_0\left(\frac{z}{2}\right) - \frac{1}{218\,243\,025 z^3} \left(128 e^{z/2} (32 z^9 - 1664 z^8 + 31\,568 z^7 - 272\,256 z^6 + \right. \right. \\
 & \left. \left. 1\,074\,804 z^5 - 1\,654\,080 z^4 + 436\,590 z^3 + 166\,320 z^2 + 83\,160 z + 31\,185) I_1\left(\frac{z}{2}\right)\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.2779.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) &= \\
 & \frac{1}{62\,914\,560 z^4} \left(e^z (-512 z^9 + 27\,904 z^8 - 556\,544 z^7 + 5\,057\,280 z^6 - 21\,001\,920 z^5 + 33\,362\,400 z^4 - \right. \\
 & \left. 6\,985\,440 z^3 - 3\,825\,360 z^2 - 2\,390\,850 z - 1\,091\,475)\right) + \\
 & \frac{1}{125\,829\,120 z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} - 56\,320 z^9 + 1\,140\,480 z^8 - 10\,644\,480 z^7 + 46\,569\,600 z^6 - 83\,825\,280 z^5 + \right. \\
 & \left. 34\,927\,200 z^4 + 9\,979\,200 z^3 + 5\,613\,300 z^2 + 3\,118\,500 z + 1\,091\,475) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2780.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) &= \\
 & \frac{1}{62\,914\,560 z^4} \left(e^{-z} (512 z^9 + 27\,904 z^8 + 556\,544 z^7 + 5\,057\,280 z^6 + 21\,001\,920 z^5 + 33\,362\,400 z^4 + \right. \\
 & \left. 6\,985\,440 z^3 - 3\,825\,360 z^2 + 2\,390\,850 z - 1\,091\,475)\right) + \\
 & \frac{1}{125\,829\,120 z^{9/2}} \left(\sqrt{\pi} (1024 z^{10} + 56\,320 z^9 + 1\,140\,480 z^8 + 10\,644\,480 z^7 + 46\,569\,600 z^6 + 83\,825\,280 z^5 + \right. \\
 & \left. 34\,927\,200 z^4 - 9\,979\,200 z^3 + 5\,613\,300 z^2 - 3\,118\,500 z + 1\,091\,475) \operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2781.01} \\
 {}_2F_2\left(-\frac{11}{2}, \frac{11}{2}; \frac{11}{2}, 6; z\right) &= \\
 & \frac{1}{916\,620\,705 z^3} \left(32 e^{z/2} (256 z^9 - 14\,976 z^8 + 326\,976 z^7 - 3\,364\,032 z^6 + 16\,903\,152 z^5 - 38\,419\,920 z^4 + \right. \\
 & \left. 29\,688\,120 z^3 + 748\,440 z^2 + 530\,145 z + 249\,480) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{916\,620\,705 z^4} \left(32 e^{z/2} (256 z^{10} - 14\,720 z^9 + 312\,384 z^8 - 3\,058\,752 z^7 + 13\,986\,672 z^6 - 25\,692\,912 z^5 + \right. \right. \\
 & \left. \left. 8\,731\,800 z^4 + 4\,241\,160 z^3 + 3\,024\,945 z^2 + 2\,120\,580 z + 997\,920) I_1\left(\frac{z}{2}\right)\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.2782.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \frac{1}{311850} (16z^{11} + 912z^{10} + 18872z^9 + 174540z^8 + 701145z^7 + 887040z^6 - 241920z^5 + 181440z^4 - \\
 & \quad 201600z^3 + 264600z^2 - 340200z + 311850) + \\
 & \frac{1}{623700} e^z \sqrt{\pi} (32z^{23/2} + 1840z^{21/2} + 38640z^{19/2} + 367080z^{17/2} + 1560090z^{15/2} + 2340135z^{13/2}) \operatorname{erf}(\sqrt{z}) \\
 & \text{07.25.03.2783.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \\
 & \frac{1}{311850} (-16z^{11} + 912z^{10} - 18872z^9 + 174540z^8 - 701145z^7 + 887040z^6 + 241920z^5 + 181440z^4 + \\
 & \quad 201600z^3 + 264600z^2 + 340200z + 311850) + \\
 & \frac{1}{623700} e^{-z} \sqrt{\pi} (32z^{23/2} - 1840z^{21/2} + 38640z^{19/2} - 367080z^{17/2} + 1560090z^{15/2} - 2340135z^{13/2}) \operatorname{erfi}(\sqrt{z}) \\
 & \text{07.25.03.2784.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{56700} (-16z^{10} - 832z^9 - 15552z^8 - \\
 & \quad 128280z^7 - 451395z^6 - 483840z^5 + 120960z^4 - 80640z^3 + 75600z^2 - 75600z + 56700) + \\
 & \frac{1}{113400} e^z \sqrt{\pi} (-32z^{21/2} - 1680z^{19/2} - 31920z^{17/2} - 271320z^{15/2} - 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erf}(\sqrt{z}) \\
 & \text{07.25.03.2785.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{56700} (-16z^{10} + 832z^9 - 15552z^8 + \\
 & \quad 128280z^7 - 451395z^6 + 483840z^5 + 120960z^4 + 80640z^3 + 75600z^2 + 75600z + 56700) + \\
 & \frac{1}{113400} e^{-z} \sqrt{\pi} (32z^{21/2} - 1680z^{19/2} + 31920z^{17/2} - 271320z^{15/2} + 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erfi}(\sqrt{z}) \\
 & \text{07.25.03.2786.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{12600} (16z^9 + 752z^8 + 12552z^7 + 90980z^6 + 274845z^5 + 241920z^4 - 53760z^3 + 30240z^2 - 21600z + 12600) + \\
 & \frac{e^z \sqrt{\pi} (32z^{19/2} + 1520z^{17/2} + 25840z^{15/2} + 193800z^{13/2} + 629850z^{11/2} + 692835z^{9/2}) \operatorname{erf}(\sqrt{z})}{25200}
 \end{aligned}$$

07.25.03.2787.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{12\,600} (-16z^9 + 752z^8 - 12\,552z^7 + 90\,980z^6 - 274\,845z^5 + 241\,920z^4 + 53\,760z^3 + 30\,240z^2 + 21\,600z + 12\,600) + \frac{1}{25\,200} e^{-z} \sqrt{\pi} (32z^{19/2} - 1520z^{17/2} + 25\,840z^{15/2} - 193\,800z^{13/2} + 629\,850z^{11/2} - 692\,835z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2788.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{-16z^8 - 672z^7 - 9872z^6 - 61\,680z^5 - 155\,655z^4 - 107\,520z^3 + 20\,160z^2 - 8640z + 3600}{3600} + \frac{e^z \sqrt{\pi} (-32z^{17/2} - 1360z^{15/2} - 20\,400z^{13/2} - 132\,600z^{11/2} - 364\,650z^{9/2} - 328\,185z^{7/2}) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.2789.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{-16z^8 + 672z^7 - 9872z^6 + 61\,680z^5 - 155\,655z^4 + 107\,520z^3 + 20\,160z^2 + 8640z + 3600}{3600} + \frac{e^{-z} \sqrt{\pi} (32z^{17/2} - 1360z^{15/2} + 20\,400z^{13/2} - 132\,600z^{11/2} + 364\,650z^{9/2} - 328\,185z^{7/2}) \operatorname{erfi}(\sqrt{z})}{7200}$$

07.25.03.2790.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{16z^7 + 592z^6 + 7512z^5 + 39\,420z^4 + 79\,905z^3 + 40\,320z^2 - 5760z + 1440}{1440} + \frac{e^z \sqrt{\pi} (32z^{15/2} + 1200z^{13/2} + 15\,600z^{11/2} + 85\,800z^{9/2} + 193\,050z^{7/2} + 135\,135z^{5/2}) \operatorname{erf}(\sqrt{z})}{2880}$$

07.25.03.2791.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{-16z^7 + 592z^6 - 7512z^5 + 39\,420z^4 - 79\,905z^3 + 40\,320z^2 + 5760z + 1440}{1440} + \frac{e^{-z} \sqrt{\pi} (32z^{15/2} - 1200z^{13/2} + 15\,600z^{11/2} - 85\,800z^{9/2} + 193\,050z^{7/2} - 135\,135z^{5/2}) \operatorname{erfi}(\sqrt{z})}{2880}$$

07.25.03.2792.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{960} (-16z^6 - 512z^5 - 5472z^4 - 23\,240z^3 - 35\,595z^2 - 11\,520z + 960) + \frac{e^z \sqrt{\pi} (-32z^{13/2} - 1040z^{11/2} - 11\,440z^{9/2} - 51\,480z^{7/2} - 90\,090z^{5/2} - 45\,045z^{3/2}) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.2793.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{960} (-16z^6 + 512z^5 - 5472z^4 + 23\,240z^3 - 35\,595z^2 + 11\,520z + 960) + \frac{e^{-z} \sqrt{\pi} (32z^{13/2} - 1040z^{11/2} + 11\,440z^{9/2} - 51\,480z^{7/2} + 90\,090z^{5/2} - 45\,045z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.2794.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920}{1920} + \frac{e^z \sqrt{\pi} (32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z}) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.2795.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920}{1920} + \frac{e^{-z} \sqrt{\pi} (32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.2796.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, 1; z\right) = \frac{1}{120} e^z (z^5 + 25z^4 + 200z^3 + 600z^2 + 600z + 120)$$

07.25.03.2797.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{16z^4 + 352z^3 + 2352z^2 + 5280z + 2895}{3840} + \frac{e^z \sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.2798.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{16z^4 - 352z^3 + 2352z^2 - 5280z + 2895}{3840} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945) \operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.2799.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, 2; z\right) = \frac{1}{120} e^z (z^4 + 20z^3 + 120z^2 + 240z + 120)$$

07.25.03.2800.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z \sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.2801.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z} \sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.2802.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, 3; z\right) = \frac{1}{60} e^z (z^3 + 15z^2 + 60z + 60)$$

$$\begin{aligned}
 & 07.25.03.2803.01 \\
 & {}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, \frac{7}{2}; z\right) = \\
 & \frac{16z^4 + 192z^3 + 512z^2 + 120z - 45}{1024z^2} + \frac{e^z \sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.2804.01 \\
 & {}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, \frac{7}{2}; -z\right) = \\
 & \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.2805.01 \\
 & {}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, 4; z\right) = \frac{1}{20} e^z (z^2 + 10z + 20)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.2806.01 \\
 & {}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, \frac{9}{2}; z\right) = \\
 & \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z \sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.2807.01 \\
 & {}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{7e^{-z} \sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.2808.01 \\
 & {}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, 5; z\right) = \frac{1}{5} e^z (z + 5)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.2809.01 \\
 & {}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, \frac{11}{2}; z\right) = \\
 & \frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z \sqrt{\pi} (32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105) \operatorname{erf}(\sqrt{z})}{8192z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.2810.01 \\
 & {}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z} \sqrt{\pi} (32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105) \operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.2811.01 \\
 & {}_2F_2\left(-\frac{11}{2}, 6; -\frac{11}{2}, 6; z\right) = e^z
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = -\frac{9}{2}$

07.25.03.2812.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{9}{2}, 1; z\right) = \frac{1}{360} e^z (4199 z^5 + 2083 z^4 + 2712 z^3 + 3480 z^2 + 2280 z + 360) - \frac{4199}{360} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.2813.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{9}{2}, 1; -z\right) = \frac{1}{360} e^{-z} (-4199 z^5 + 2083 z^4 - 2712 z^3 + 3480 z^2 - 2280 z + 360) - \frac{4199}{360} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.2814.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{9}{2}, 2; z\right) = \frac{1}{360} e^z (646 z^5 + 323 z^4 + 468 z^3 + 840 z^2 + 960 z + 360) - \frac{323}{180} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.2815.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{9}{2}, 2; -z\right) = \frac{1}{360} e^{-z} (-646 z^5 + 323 z^4 - 468 z^3 + 840 z^2 - 960 z + 360) - \frac{323}{180} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.2816.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{9}{2}, 3; z\right) = \frac{e^z (1292 z^5 + 646 z^4 + 969 z^3 + 2175 z^2 + 3900 z + 2700)}{2700} - \frac{323}{675} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.2817.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{9}{2}, 3; -z\right) = \frac{e^{-z} (-1292 z^5 + 646 z^4 - 969 z^3 + 2175 z^2 - 3900 z + 2700)}{2700} - \frac{323}{675} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.2818.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{9}{2}, 4; z\right) = \frac{1}{900} e^z (152 z^5 + 76 z^4 + 114 z^3 + 285 z^2 + 750 z + 900) - \frac{38}{225} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.2819.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{9}{2}, 4; -z\right) = \frac{1}{900} e^{-z} (-152 z^5 + 76 z^4 - 114 z^3 + 285 z^2 - 750 z + 900) - \frac{38}{225} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.2820.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{9}{2}, 5; z\right) = \frac{1}{225} e^z (16 z^5 + 8 z^4 + 12 z^3 + 30 z^2 + 105 z + 225) - \frac{16}{225} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.2821.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{9}{2}, 5; -z\right) = \frac{1}{225} e^{-z} (-16 z^5 + 8 z^4 - 12 z^3 + 30 z^2 - 105 z + 225) - \frac{16}{225} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.2822.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{9}{2}, 6; z\right) = \frac{1}{945} e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.2823.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{9}{2}, 6; -z\right) = \frac{1}{945} e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = -\frac{7}{2}$

07.25.03.2824.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{7}{2}, 1; z\right) = \frac{e^z (-88\,179 z^5 + 209\,950 z^4 + 61\,232 z^3 + 34\,896 z^2 + 14\,160 z + 1680)}{1680} + \frac{4199 \sqrt{\pi} (42 z^{11/2} - 121 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{3360}$$

07.25.03.2825.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{7}{2}, 1; -z\right) = \frac{e^{-z} (88\,179 z^5 + 209\,950 z^4 - 61\,232 z^3 + 34\,896 z^2 - 14\,160 z + 1680)}{1680} + \frac{4199 \sqrt{\pi} (42 z^{11/2} + 121 z^{9/2}) \operatorname{erf}(\sqrt{z})}{3360}$$

07.25.03.2826.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{7}{2}, 2; z\right) = \frac{1}{840} e^z (-6783 z^5 + 19\,703 z^4 + 6460 z^3 + 4776 z^2 + 3120 z + 840) + \frac{323 \sqrt{\pi} (42 z^{11/2} - 143 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1680}$$

07.25.03.2827.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{7}{2}, 2; -z\right) = \frac{1}{840} e^{-z} (6783 z^5 + 19\,703 z^4 - 6460 z^3 + 4776 z^2 - 3120 z + 840) + \frac{323 \sqrt{\pi} (42 z^{11/2} + 143 z^{9/2}) \operatorname{erf}(\sqrt{z})}{1680}$$

07.25.03.2828.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{7}{2}, 3; z\right) = \frac{e^z (-4522 z^5 + 15\,504 z^4 + 5491 z^3 + 4845 z^2 + 4500 z + 2100)}{2100} + \frac{323 \sqrt{\pi} (14 z^{11/2} - 55 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{2100}$$

07.25.03.2829.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{7}{2}, 3; -z\right) = \frac{e^{-z} (4522 z^5 + 15\,504 z^4 - 5491 z^3 + 4845 z^2 - 4500 z + 2100)}{2100} + \frac{323 \sqrt{\pi} (14 z^{11/2} + 55 z^{9/2}) \operatorname{erf}(\sqrt{z})}{2100}$$

07.25.03.2830.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{7}{2}, 4; z\right) = \frac{e^z (-1596 z^5 + 6308 z^4 + 2356 z^3 + 2337 z^2 + 2850 z + 2100)}{2100} + \frac{19 \sqrt{\pi} (42 z^{11/2} - 187 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1050}$$

07.25.03.2831.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{7}{2}, 4; -z\right) = \frac{e^{-z} (1596 z^5 + 6308 z^4 - 2356 z^3 + 2337 z^2 - 2850 z + 2100)}{2100} + \frac{19 \sqrt{\pi} (42 z^{11/2} + 187 z^{9/2}) \operatorname{erf}(\sqrt{z})}{1050}$$

07.25.03.2832.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{7}{2}, 5; z\right) = \frac{1}{525} e^z (-168 z^5 + 752 z^4 + 292 z^3 + 312 z^2 + 465 z + 525) + \frac{4}{525} \sqrt{\pi} (42 z^{11/2} - 209 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2833.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{7}{2}, 5; -z\right) = \frac{1}{525} e^{-z} (168 z^5 + 752 z^4 - 292 z^3 + 312 z^2 - 465 z + 525) + \frac{4}{525} \sqrt{\pi} (42 z^{11/2} + 209 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

$$07.25.03.2834.01$$

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{7}{2}, 6; z\right) = \frac{1}{105} e^z (-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105) + \frac{8}{105} \sqrt{\pi} (2z^{11/2} - 11z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.2835.01$$

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{7}{2}, 6; -z\right) = \frac{1}{105} e^{-z} (16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105) + \frac{8}{105} \sqrt{\pi} (2z^{11/2} + 11z^{9/2}) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = -\frac{5}{2}$

$$07.25.03.2836.01$$

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{5}{2}, 1; z\right) = \frac{e^z (176358z^5 - 927979z^4 + 707200z^3 + 108672z^2 + 23424z + 1920)}{1920} - \frac{221\sqrt{\pi} (1596z^{11/2} - 9196z^{9/2} + 9801z^{7/2}) \operatorname{erfi}(\sqrt{z})}{3840}$$

$$07.25.03.2837.01$$

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{5}{2}, 1; -z\right) = \frac{e^{-z} (-176358z^5 - 927979z^4 - 707200z^3 + 108672z^2 - 23424z + 1920)}{1920} - \frac{221\sqrt{\pi} (1596z^{11/2} + 9196z^{9/2} + 9801z^{7/2}) \operatorname{erf}(\sqrt{z})}{3840}$$

$$07.25.03.2838.01$$

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{5}{2}, 2; z\right) = \frac{1}{960} e^z (13566z^5 - 85595z^4 + 84320z^3 + 16320z^2 + 5376z + 960) - \frac{17\sqrt{\pi} (1596z^{11/2} - 10868z^{9/2} + 14157z^{7/2}) \operatorname{erfi}(\sqrt{z})}{1920}$$

$$07.25.03.2839.01$$

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{5}{2}, 2; -z\right) = \frac{1}{960} e^{-z} (-13566z^5 - 85595z^4 - 84320z^3 + 16320z^2 - 5376z + 960) - \frac{17\sqrt{\pi} (1596z^{11/2} + 10868z^{9/2} + 14157z^{7/2}) \operatorname{erf}(\sqrt{z})}{1920}$$

$$07.25.03.2840.01$$

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{5}{2}, 3; z\right) = \frac{e^z (4522z^5 - 33269z^4 + 40324z^3 + 9180z^2 + 4080z + 1200)}{1200} - \frac{17\sqrt{\pi} (532z^{11/2} - 4180z^{9/2} + 6435z^{7/2}) \operatorname{erfi}(\sqrt{z})}{2400}$$

$$07.25.03.2841.01$$

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{5}{2}, 3; -z\right) = \frac{e^{-z} (-4522z^5 - 33269z^4 - 40324z^3 + 9180z^2 - 4080z + 1200)}{1200} - \frac{17\sqrt{\pi} (532z^{11/2} + 4180z^{9/2} + 6435z^{7/2}) \operatorname{erf}(\sqrt{z})}{2400}$$

07.25.03.2842.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{5}{2}, 4; z\right) = \frac{1}{600} e^z (798 z^5 - 6707 z^4 + 9668 z^3 + 2478 z^2 + 1380 z + 600) + \frac{\sqrt{\pi} (-1596 z^{11/2} + 14212 z^{9/2} - 25245 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{1200}$$

07.25.03.2843.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{5}{2}, 4; -z\right) = \frac{1}{600} e^{-z} (-798 z^5 - 6707 z^4 - 9668 z^3 + 2478 z^2 - 1380 z + 600) + \frac{\sqrt{\pi} (-1596 z^{11/2} - 14212 z^{9/2} - 25245 z^{7/2}) \operatorname{erf}(\sqrt{z})}{1200}$$

07.25.03.2844.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{5}{2}, 5; z\right) = \frac{1}{75} e^z (42 z^5 - 397 z^4 + 664 z^3 + 186 z^2 + 123 z + 75) + \frac{1}{150} \sqrt{\pi} (-84 z^{11/2} + 836 z^{9/2} - 1683 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2845.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{5}{2}, 5; -z\right) = \frac{1}{75} e^{-z} (-42 z^5 - 397 z^4 - 664 z^3 + 186 z^2 - 123 z + 75) + \frac{1}{150} \sqrt{\pi} (-84 z^{11/2} - 836 z^{9/2} - 1683 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2846.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{5}{2}, 6; z\right) = \frac{1}{15} e^z (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} + 44 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2847.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{5}{2}, 6; -z\right) = \frac{1}{15} e^{-z} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) + \frac{1}{15} \sqrt{\pi} (-4 z^{11/2} - 44 z^{9/2} - 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = -\frac{3}{2}$

07.25.03.2848.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{3}{2}, 1; z\right) = \frac{e^z (-117572 z^5 + 957372 z^4 - 1746121 z^3 + 499200 z^2 + 32256 z + 1536)}{1536} + \frac{13 \sqrt{\pi} (18088 z^{11/2} - 156332 z^{9/2} + 333234 z^{7/2} - 160083 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{3072}$$

07.25.03.2849.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{3}{2}, 1; -z\right) = \frac{e^{-z} (117572 z^5 + 957372 z^4 + 1746121 z^3 + 499200 z^2 - 32256 z + 1536)}{1536} + \frac{13 \sqrt{\pi} (18088 z^{11/2} + 156332 z^{9/2} + 333234 z^{7/2} + 160083 z^{5/2}) \operatorname{erf}(\sqrt{z})}{3072}$$

07.25.03.2850.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{3}{2}, 2; z\right) = \frac{1}{768} e^z (-9044 z^5 + 87856 z^4 - 201263 z^3 + 80640 z^2 + 7680 z + 768) + \frac{\sqrt{\pi} (18088 z^{11/2} - 184756 z^{9/2} + 481338 z^{7/2} - 297297 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{1536}$$

07.25.03.2851.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{3}{2}, 2; -z\right) = \frac{1}{768} e^{-z} (9044 z^5 + 87856 z^4 + 201263 z^3 + 80640 z^2 - 7680 z + 768) + \frac{\sqrt{\pi} (18088 z^{11/2} + 184756 z^{9/2} + 481338 z^{7/2} + 297297 z^{5/2}) \operatorname{erf}(\sqrt{z})}{1536}$$

07.25.03.2852.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{3}{2}, 3; z\right) = \frac{e^z (-9044 z^5 + 102068 z^4 - 281673 z^3 + 146640 z^2 + 18240 z + 2880)}{2880} + \frac{\sqrt{\pi} (18088 z^{11/2} - 213180 z^{9/2} + 656370 z^{7/2} - 495495 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{5760}$$

07.25.03.2853.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{3}{2}, 3; -z\right) = \frac{e^{-z} (9044 z^5 + 102068 z^4 + 281673 z^3 + 146640 z^2 - 18240 z + 2880)}{2880} + \frac{\sqrt{\pi} (18088 z^{11/2} + 213180 z^{9/2} + 656370 z^{7/2} + 495495 z^{5/2}) \operatorname{erf}(\sqrt{z})}{5760}$$

07.25.03.2854.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{3}{2}, 4; z\right) = \frac{1}{480} e^z (-532 z^5 + 6840 z^4 - 22091 z^3 + 14232 z^2 + 2160 z + 480) + \frac{1}{960} \sqrt{\pi} (1064 z^{11/2} - 14212 z^{9/2} + 50490 z^{7/2} - 45045 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2855.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{3}{2}, 4; -z\right) = \frac{1}{480} e^{-z} (532 z^5 + 6840 z^4 + 22091 z^3 + 14232 z^2 - 2160 z + 480) + \frac{1}{960} \sqrt{\pi} (1064 z^{11/2} + 14212 z^{9/2} + 50490 z^{7/2} + 45045 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2856.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{3}{2}, 5; z\right) = \frac{1}{60} e^z (-28 z^5 + 404 z^4 - 1495 z^3 + 1152 z^2 + 204 z + 60) + \frac{1}{120} \sqrt{\pi} (56 z^{11/2} - 836 z^{9/2} + 3366 z^{7/2} - 3465 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2857.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{3}{2}, 5; -z\right) = \frac{1}{60} e^{-z} (28 z^5 + 404 z^4 + 1495 z^3 + 1152 z^2 - 204 z + 60) + \frac{1}{120} \sqrt{\pi} (56 z^{11/2} + 836 z^{9/2} + 3366 z^{7/2} + 3465 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2858.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{3}{2}, 6; z\right) = \frac{1}{18} e^z (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36} \sqrt{\pi} (8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2859.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{3}{2}, 6; -z\right) = \frac{1}{18} e^{-z} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36} \sqrt{\pi} (8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2}) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = -\frac{1}{2}$

07.25.03.2860.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{1}{2}, 1; z\right) = \frac{e^z (705432z^5 - 7776548z^4 + 22456694z^3 - 16751085z^2 + 1597440z + 24576)}{24576} - \frac{13\sqrt{\pi} (108528z^{11/2} - 1250656z^{9/2} + 3998808z^{7/2} - 3841992z^{5/2} + 800415z^{3/2}) \operatorname{erfi}(\sqrt{z})}{49152}$$

07.25.03.2861.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{1}{2}, 1; -z\right) = \frac{e^{-z} (-705432z^5 - 7776548z^4 - 22456694z^3 - 16751085z^2 - 1597440z + 24576)}{24576} - \frac{13\sqrt{\pi} (108528z^{11/2} + 1250656z^{9/2} + 3998808z^{7/2} + 3841992z^{5/2} + 800415z^{3/2}) \operatorname{erf}(\sqrt{z})}{49152}$$

07.25.03.2862.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{1}{2}, 2; z\right) = \frac{e^z (54264z^5 - 711892z^4 + 2559214z^3 - 2576073z^2 + 393216z + 12288)}{12288} + \frac{\sqrt{\pi} (-108528z^{11/2} + 1478048z^{9/2} - 5776056z^{7/2} + 7135128z^{5/2} - 2081079z^{3/2}) \operatorname{erfi}(\sqrt{z})}{24576}$$

07.25.03.2863.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{1}{2}, 2; -z\right) = \frac{e^{-z} (-54264z^5 - 711892z^4 - 2559214z^3 - 2576073z^2 - 393216z + 12288)}{12288} + \frac{\sqrt{\pi} (-108528z^{11/2} - 1478048z^{9/2} - 5776056z^{7/2} - 7135128z^{5/2} - 2081079z^{3/2}) \operatorname{erf}(\sqrt{z})}{24576}$$

07.25.03.2864.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{1}{2}, 3; z\right) = \frac{e^z (18088z^5 - 275196z^4 + 1184186z^3 - 1504875z^2 + 322560z + 15360)}{15360} + \frac{\sqrt{\pi} (-36176z^{11/2} + 568480z^{9/2} - 2625480z^{7/2} + 3963960z^{5/2} - 1486485z^{3/2}) \operatorname{erfi}(\sqrt{z})}{30720}$$

07.25.03.2865.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{1}{2}, 3; -z\right) = \frac{e^{-z}(-18088z^5 - 275196z^4 - 1184186z^3 - 1504875z^2 - 322560z + 15360)}{15360} + \frac{\sqrt{\pi}(-36176z^{11/2} - 568480z^{9/2} - 2625480z^{7/2} - 3963960z^{5/2} - 1486485z^{3/2})\operatorname{erf}(\sqrt{z})}{30720}$$

07.25.03.2866.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{1}{2}, 4; z\right) = \frac{e^z(3192z^5 - 55252z^4 + 276910z^3 - 425721z^2 + 119040z + 7680)}{7680} + \frac{\sqrt{\pi}(-6384z^{11/2} + 113696z^{9/2} - 605880z^{7/2} + 1081080z^{5/2} - 495495z^{3/2})\operatorname{erfi}(\sqrt{z})}{15360}$$

07.25.03.2867.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{1}{2}, 4; -z\right) = \frac{e^{-z}(-3192z^5 - 55252z^4 - 276910z^3 - 425721z^2 - 119040z + 7680)}{7680} + \frac{\sqrt{\pi}(-6384z^{11/2} - 113696z^{9/2} - 605880z^{7/2} - 1081080z^{5/2} - 495495z^{3/2})\operatorname{erf}(\sqrt{z})}{15360}$$

07.25.03.2868.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{1}{2}, 5; z\right) = \frac{1}{960}e^z(168z^5 - 3260z^4 + 18650z^3 - 33675z^2 + 11712z + 960) + \frac{\sqrt{\pi}(-336z^{11/2} + 6688z^{9/2} - 40392z^{7/2} + 83160z^{5/2} - 45045z^{3/2})\operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.2869.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{1}{2}, 5; -z\right) = \frac{1}{960}e^{-z}(-168z^5 - 3260z^4 - 18650z^3 - 33675z^2 - 11712z + 960) + \frac{\sqrt{\pi}(-336z^{11/2} - 6688z^{9/2} - 40392z^{7/2} - 83160z^{5/2} - 45045z^{3/2})\operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.2870.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{1}{2}, 6; z\right) = \frac{1}{96}e^z(8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) + \frac{1}{192}\sqrt{\pi}(-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.2871.01

$${}_2F_2\left(-\frac{11}{2}, 6; -\frac{1}{2}, 6; -z\right) = \frac{1}{96}e^{-z}(-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) + \frac{1}{192}\sqrt{\pi}(-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2})\operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = \frac{1}{2}$

07.25.03.2872.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{1}{2}, 1; z\right) = \frac{e^z(-1410864z^5 + 19617728z^4 - 77537408z^3 + 94141320z^2 - 25728105z + 491520)}{491520} + \frac{1}{983040} \sqrt{\pi} (2821728z^{11/2} - 40646320z^{9/2} + 173281680z^{7/2} - 249729480z^{5/2} + 104053950z^{3/2} - 7203735\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2873.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{1}{2}, 1; -z\right) = \frac{e^{-z}(1410864z^5 + 19617728z^4 + 77537408z^3 + 94141320z^2 + 25728105z + 491520)}{491520} + \frac{1}{983040} \sqrt{\pi} (2821728z^{11/2} + 40646320z^{9/2} + 173281680z^{7/2} + 249729480z^{5/2} + 104053950z^{3/2} + 7203735\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2874.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{1}{2}, 2; z\right) = \frac{e^z(-108528z^5 + 1793296z^4 - 8784376z^3 + 14206620z^2 - 5954595z + 245760)}{245760} + \frac{1}{491520} \sqrt{\pi} (217056z^{11/2} - 3695120z^{9/2} + 19253520z^{7/2} - 35675640z^{5/2} + 20810790z^{3/2} - 2401245\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2875.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{1}{2}, 2; -z\right) = \frac{e^{-z}(108528z^5 + 1793296z^4 + 8784376z^3 + 14206620z^2 + 5954595z + 245760)}{245760} + \frac{1}{491520} \sqrt{\pi} (217056z^{11/2} + 3695120z^{9/2} + 19253520z^{7/2} + 35675640z^{5/2} + 20810790z^{3/2} + 2401245\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2876.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{1}{2}, 3; z\right) = \frac{e^z(-36176z^5 + 692512z^4 - 4047632z^3 + 8187120z^2 - 4664355z + 307200)}{307200} + \frac{1}{614400} \sqrt{\pi} (72352z^{11/2} - 1421200z^{9/2} + 8751600z^{7/2} - 19819800z^{5/2} + 14864850z^{3/2} - 2401245\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2877.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{1}{2}, 3; -z\right) = \frac{e^{-z}(36176z^5 + 692512z^4 + 4047632z^3 + 8187120z^2 + 4664355z + 307200)}{307200} + \frac{1}{614400} \sqrt{\pi} (72352z^{11/2} + 1421200z^{9/2} + 8751600z^{7/2} + 19819800z^{5/2} + 14864850z^{3/2} + 2401245\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2878.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{1}{2}, 4; z\right) = \frac{e^z(-6384z^5 + 138928z^4 - 943528z^3 + 2292420z^2 - 1658895z + 153600)}{153600} + \frac{1}{307200} \sqrt{\pi} (12768z^{11/2} - 284240z^{9/2} + 2019600z^{7/2} - 5405400z^{5/2} + 4954950z^{3/2} - 1029105\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2879.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{1}{2}, 4; -z\right) = \frac{e^{-z}(6384z^5 + 138928z^4 + 943528z^3 + 2292420z^2 + 1658895z + 153600)}{153600} + \frac{1}{307200} \sqrt{\pi} (12768z^{11/2} + 284240z^{9/2} + 2019600z^{7/2} + 5405400z^{5/2} + 4954950z^{3/2} + 1029105\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2880.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{1}{2}, 5; z\right) = \frac{e^z(-336z^5 + 8192z^4 - 63392z^3 + 179880z^2 - 158295z + 19200)}{19200} + \frac{\sqrt{\pi}(672z^{11/2} - 16720z^{9/2} + 134640z^{7/2} - 415800z^{5/2} + 450450z^{3/2} - 114345\sqrt{z})\operatorname{erfi}(\sqrt{z})}{38400}$$

07.25.03.2881.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{1}{2}, 5; -z\right) = \frac{e^{-z}(336z^5 + 8192z^4 + 63392z^3 + 179880z^2 + 158295z + 19200)}{19200} + \frac{\sqrt{\pi}(672z^{11/2} + 16720z^{9/2} + 134640z^{7/2} + 415800z^{5/2} + 450450z^{3/2} + 114345\sqrt{z})\operatorname{erf}(\sqrt{z})}{38400}$$

07.25.03.2882.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{1}{2}, 6; z\right) = \frac{e^z(-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920)}{1920} + \frac{\sqrt{\pi}(32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.2883.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{1}{2}, 6; -z\right) = \frac{e^{-z}(16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{1920} + \frac{\sqrt{\pi}(32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z})\operatorname{erf}(\sqrt{z})}{3840}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = 1$

07.25.03.2884.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, 1; z\right) = \frac{1}{665280} e^{z/2}(705432z^6 - 11706812z^5 + 61661652z^4 - 125682609z^3 + 96961254z^2 - 22286880z + 665280) I_0\left(\frac{z}{2}\right) + \frac{1}{665280} e^{z/2}(-705432z^6 + 11001380z^5 - 51012988z^4 + 79464879z^3 - 34205964z^2 + 2009064z) I_1\left(\frac{z}{2}\right)$$

07.25.03.2885.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, \frac{3}{2}; z\right) = \frac{e^z(-940576z^5 + 15788240z^4 - 79217008z^3 + 133596216z^2 - 61479210z + 3713865)}{3932160} + \frac{1}{7864320\sqrt{z}} \sqrt{\pi}(1881152z^6 - 32517056z^5 + 173281680z^4 - 332972640z^3 + 208107900z^2 - 28814940z + 218295)\operatorname{erfi}(\sqrt{z})$$

07.25.03.2886.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, \frac{3}{2}; -z\right) = \frac{e^{-z} (940576 z^5 + 15788240 z^4 + 79217008 z^3 + 133596216 z^2 + 61479210 z + 3713865)}{3932160} + \frac{1}{7864320 \sqrt{z}} \sqrt{\pi} (1881152 z^6 + 32517056 z^5 + 173281680 z^4 + 332972640 z^3 + 208107900 z^2 + 28814940 z + 218295) \operatorname{erf}(\sqrt{z})$$

07.25.03.2887.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, 2; z\right) = \frac{1}{332640} e^{z/2} (54264 z^6 - 1056856 z^5 + 6693240 z^4 - 16912284 z^3 + 16962987 z^2 - 5654880 z + 332640) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (-13566 z^6 + 250648 z^5 - 1429445 z^4 + 2910384 z^3 - 1836831 z^2 + 209553 z)}{83160} I_1\left(\frac{z}{2}\right)$$

07.25.03.2888.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, \frac{5}{2}; z\right) = \frac{1}{15728640 z} e^z (-806208 z^6 + 15855424 z^5 - 96444400 z^4 + 208427232 z^3 - 136025916 z^2 + 14411940 z + 10395) + \frac{1}{31457280 z^{3/2}} \left(\sqrt{\pi} (1612416 z^7 - 32517056 z^6 + 207938016 z^5 - 499458960 z^4 + 416215800 z^3 - 86444820 z^2 + 1309770 z - 10395) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2889.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, \frac{5}{2}; -z\right) = \frac{1}{15728640 z} e^{-z} (806208 z^6 + 15855424 z^5 + 96444400 z^4 + 208427232 z^3 + 136025916 z^2 + 14411940 z - 10395) + \frac{1}{31457280 z^{3/2}} \left(\sqrt{\pi} (1612416 z^7 + 32517056 z^6 + 207938016 z^5 + 499458960 z^4 + 416215800 z^3 + 86444820 z^2 + 1309770 z + 10395) \operatorname{erf}(\sqrt{-z}) \right)$$

07.25.03.2890.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, 3; z\right) = \frac{1}{831600} e^{z/2} (36176 z^6 - 808792 z^5 + 5984340 z^4 - 18031980 z^3 + 22163205 z^2 - 9563400 z + 831600) I_0\left(\frac{z}{2}\right) - \frac{e^{z/2} z (36176 z^5 - 772616 z^4 + 5229812 z^3 - 13152300 z^2 + 10966245 z - 1887630)}{831600} I_1\left(\frac{z}{2}\right)$$

07.25.03.2891.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, \frac{7}{2}; z\right) = \frac{1}{704\,643\,072\,z^2} \left(e^z (-11\,286\,912\,z^7 + 254\,492\,992\,z^6 - 1\,819\,151\,776\,z^5 + 4\,797\,502\,320\,z^4 - 4\,071\,931\,656\,z^3 + 630\,494\,844\,z^2 + 1\,226\,610\,z - 93\,555) \right) + \frac{1}{1\,409\,286\,144\,z^{5/2}} \left(\sqrt{\pi} (22\,573\,824\,z^8 - 520\,272\,896\,z^7 + 3\,881\,509\,632\,z^6 - 11\,187\,880\,704\,z^5 + 11\,654\,042\,400\,z^4 - 3\,227\,273\,280\,z^3 + 73\,347\,120\,z^2 - 1\,164\,240\,z + 93\,555) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2892.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, \frac{7}{2}; -z\right) = \frac{1}{704\,643\,072\,z^2} \left(e^{-z} (11\,286\,912\,z^7 + 254\,492\,992\,z^6 + 1\,819\,151\,776\,z^5 + 4\,797\,502\,320\,z^4 + 4\,071\,931\,656\,z^3 + 630\,494\,844\,z^2 - 1\,226\,610\,z - 93\,555) \right) + \frac{1}{1\,409\,286\,144\,z^{5/2}} \left(\sqrt{\pi} (22\,573\,824\,z^8 + 520\,272\,896\,z^7 + 3\,881\,509\,632\,z^6 + 11\,187\,880\,704\,z^5 + 11\,654\,042\,400\,z^4 + 3\,227\,273\,280\,z^3 + 73\,347\,120\,z^2 + 1\,164\,240\,z + 93\,555) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2893.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, 4; z\right) = \frac{e^{z/2} (6384\,z^6 - 161\,120\,z^5 + 1\,363\,884\,z^4 - 4\,771\,200\,z^3 + 6\,925\,335\,z^2 - 3\,638\,250\,z + 415\,800) I_0\left(\frac{z}{2}\right)}{415\,800} - \frac{e^{z/2} z (6384\,z^5 - 154\,736\,z^4 + 1\,212\,340\,z^3 - 3\,629\,844\,z^2 + 3\,766\,875\,z - 874\,515) I_1\left(\frac{z}{2}\right)}{415\,800}$$

07.25.03.2894.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, \frac{9}{2}; z\right) = \frac{1}{1\,207\,959\,552\,z^3} \left(e^z (-7\,524\,608\,z^8 + 191\,340\,032\,z^7 - 1\,571\,596\,416\,z^6 + 4\,894\,406\,400\,z^5 - 5\,126\,646\,720\,z^4 + 1\,058\,775\,264\,z^3 + 3\,908\,520\,z^2 - 665\,280\,z + 155\,925) \right) + \frac{1}{2\,415\,919\,104\,z^{7/2}} \left(\sqrt{\pi} (15\,049\,216\,z^9 - 390\,204\,672\,z^8 + 3\,327\,008\,256\,z^7 - 11\,187\,880\,704\,z^6 + 13\,984\,850\,880\,z^5 - 4\,840\,909\,920\,z^4 + 146\,694\,240\,z^3 - 3\,492\,720\,z^2 + 561\,330\,z - 155\,925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2895.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, \frac{9}{2}; -z\right) = \frac{1}{1\,207\,959\,552\,z^3} \left(e^{-z} (7\,524\,608\,z^8 + 191\,340\,032\,z^7 + 1\,571\,596\,416\,z^6 + 4\,894\,406\,400\,z^5 + 5\,126\,646\,720\,z^4 + 1\,058\,775\,264\,z^3 - 3\,908\,520\,z^2 - 665\,280\,z - 155\,925) \right) + \frac{1}{2\,415\,919\,104\,z^{7/2}} \left(\sqrt{\pi} (15\,049\,216\,z^9 + 390\,204\,672\,z^8 + 3\,327\,008\,256\,z^7 + 11\,187\,880\,704\,z^6 + 13\,984\,850\,880\,z^5 + 4\,840\,909\,920\,z^4 + 146\,694\,240\,z^3 + 3\,492\,720\,z^2 + 561\,330\,z + 155\,925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2896.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, 5; z\right) = \frac{e^{z/2} (672 z^6 - 18 896 z^5 + 180 096 z^4 - 717 204 z^3 + 1 198 590 z^2 - 738 045 z + 103 950) I_0\left(\frac{z}{2}\right) - e^{z/2} z (672 z^5 - 18 224 z^4 + 162 208 z^3 - 563 436 z^2 + 700 134 z - 205 635) I_1\left(\frac{z}{2}\right)}{103 950}$$

07.25.03.2897.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, \frac{11}{2}; z\right) = \frac{1}{16 106 127 360 z^4} (e^z (-45 147 648 z^9 + 1 278 108 416 z^8 - 11 859 800 576 z^7 + 42 600 779 520 z^6 - 53 164 937 280 z^5 + 13 853 811 360 z^4 + 84 157 920 z^3 - 25 114 320 z^2 + 14 449 050 z - 7 640 325)) + \frac{1}{32 212 254 720 z^{9/2}} (\sqrt{\pi} (90 295 296 z^{10} - 2 601 364 480 z^9 + 24 952 561 920 z^8 - 95 896 120 320 z^7 + 139 848 508 800 z^6 - 58 090 919 040 z^5 + 2 200 413 600 z^4 - 69 854 400 z^3 + 16 839 900 z^2 - 9 355 500 z + 7 640 325) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.2898.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, \frac{11}{2}; -z\right) = \frac{1}{16 106 127 360 z^4} (e^{-z} (45 147 648 z^9 + 1 278 108 416 z^8 + 11 859 800 576 z^7 + 42 600 779 520 z^6 + 53 164 937 280 z^5 + 13 853 811 360 z^4 - 84 157 920 z^3 - 25 114 320 z^2 - 14 449 050 z - 7 640 325)) + \frac{1}{32 212 254 720 z^{9/2}} (\sqrt{\pi} (90 295 296 z^{10} + 2 601 364 480 z^9 + 24 952 561 920 z^8 + 95 896 120 320 z^7 + 139 848 508 800 z^6 + 58 090 919 040 z^5 + 2 200 413 600 z^4 + 69 854 400 z^3 + 16 839 900 z^2 + 9 355 500 z + 7 640 325) \operatorname{erf}(\sqrt{-z}))$$

07.25.03.2899.01

$${}_2F_2\left(-\frac{11}{2}, 6; 1, 6; z\right) = \frac{e^{z/2} (32 z^6 - 992 z^5 + 10 512 z^4 - 46 944 z^3 + 88 674 z^2 - 62 370 z + 10 395) I_0\left(\frac{z}{2}\right) - 2 e^{z/2} z (16 z^5 - 480 z^4 + 4784 z^3 - 18 912 z^2 + 27 387 z - 9762) I_1\left(\frac{z}{2}\right)}{10 395}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = \frac{3}{2}$

07.25.03.2900.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{3}{2}, 2; z\right) = \frac{e^z (-72 352 z^5 + 1 441 872 z^4 - 8 942 000 z^3 + 19 943 256 z^2 - 13 842 450 z + 1 747 785)}{1 966 080} + \frac{1}{3 932 160 \sqrt{z}} \sqrt{\pi} (144 704 z^6 - 2 956 096 z^5 + 19 253 520 z^4 - 47 567 520 z^3 + 41 621 580 z^2 - 9 604 980 z + 218 295) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2901.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (72\,352 z^5 + 1\,441\,872 z^4 + 8\,942\,000 z^3 + 19\,943\,256 z^2 + 13\,842\,450 z + 1\,747\,785)}{1\,966\,080} + \frac{1}{3\,932\,160 \sqrt{z}}$$

$$\frac{\sqrt{\pi} (144\,704 z^6 + 2\,956\,096 z^5 + 19\,253\,520 z^4 + 47\,567\,520 z^3 + 41\,621\,580 z^2 + 9\,604\,980 z + 218\,295) \operatorname{erfi}(\sqrt{z})}{3\,932\,160 \sqrt{z}}$$

07.25.03.2902.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{3}{2}, 3; z\right) = \frac{e^z (-72\,352 z^5 + 1\,669\,264 z^4 - 12\,328\,944 z^3 + 34\,219\,320 z^2 - 31\,897\,410 z + 6\,281\,325)}{7\,372\,800} + \frac{1}{14\,745\,600 \sqrt{z}}$$

$$\frac{\sqrt{\pi} (144\,704 z^6 - 3\,410\,880 z^5 + 26\,254\,800 z^4 - 79\,279\,200 z^3 + 89\,189\,100 z^2 - 28\,814\,940 z + 1\,091\,475) \operatorname{erfi}(\sqrt{z})}{14\,745\,600 \sqrt{z}}$$

07.25.03.2903.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{3}{2}, 3; -z\right) = \frac{e^{-z} (72\,352 z^5 + 1\,669\,264 z^4 + 12\,328\,944 z^3 + 34\,219\,320 z^2 + 31\,897\,410 z + 6\,281\,325)}{7\,372\,800} + \frac{1}{14\,745\,600 \sqrt{z}}$$

$$\frac{\sqrt{\pi} (144\,704 z^6 + 3\,410\,880 z^5 + 26\,254\,800 z^4 + 79\,279\,200 z^3 + 89\,189\,100 z^2 + 28\,814\,940 z + 1\,091\,475) \operatorname{erfi}(\sqrt{z})}{14\,745\,600 \sqrt{z}}$$

07.25.03.2904.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{3}{2}, 4; z\right) = \frac{e^z (-4256 z^5 + 111\,568 z^4 - 956\,144 z^3 + 3\,175\,992 z^2 - 3\,725\,250 z + 1\,010\,505)}{1\,228\,800} + \frac{1}{2\,457\,600 \sqrt{z}}$$

$$\frac{\sqrt{\pi} (8512 z^6 - 227\,392 z^5 + 2\,019\,600 z^4 - 7\,207\,200 z^3 + 9\,909\,900 z^2 - 4\,116\,420 z + 218\,295) \operatorname{erfi}(\sqrt{z})}{2\,457\,600 \sqrt{z}}$$

07.25.03.2905.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{3}{2}, 4; -z\right) = \frac{e^{-z} (4256 z^5 + 111\,568 z^4 + 956\,144 z^3 + 3\,175\,992 z^2 + 3\,725\,250 z + 1\,010\,505)}{1\,228\,800} + \frac{1}{2\,457\,600 \sqrt{z}}$$

$$\frac{\sqrt{\pi} (8512 z^6 + 227\,392 z^5 + 2\,019\,600 z^4 + 7\,207\,200 z^3 + 9\,909\,900 z^2 + 4\,116\,420 z + 218\,295) \operatorname{erfi}(\sqrt{z})}{2\,457\,600 \sqrt{z}}$$

07.25.03.2906.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{3}{2}, 5; z\right) = \frac{e^z (-224 z^5 + 6576 z^4 - 64\,144 z^3 + 248\,136 z^2 - 351\,270 z + 122\,415)}{153\,600} + \frac{1}{307\,200 \sqrt{z}}$$

$$\frac{\sqrt{\pi} (448 z^6 - 13\,376 z^5 + 134\,640 z^4 - 554\,400 z^3 + 900\,900 z^2 - 457\,380 z + 31\,185) \operatorname{erfi}(\sqrt{z})}{307\,200 \sqrt{z}}$$

07.25.03.2907.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{3}{2}, 5; -z\right) = \frac{e^{-z} (224 z^5 + 6576 z^4 + 64\,144 z^3 + 248\,136 z^2 + 351\,270 z + 122\,415)}{153\,600} + \frac{1}{307\,200 \sqrt{z}}$$

$$\frac{\sqrt{\pi} (448 z^6 + 13\,376 z^5 + 134\,640 z^4 + 554\,400 z^3 + 900\,900 z^2 + 457\,380 z + 31\,185) \operatorname{erfi}(\sqrt{z})}{307\,200 \sqrt{z}}$$

07.25.03.2908.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{3}{2}, 6; z\right) = \frac{e^z(-32z^5 + 1040z^4 - 11376z^3 + 50232z^2 - 83370z + 35685)}{46080} + \frac{\sqrt{\pi}(64z^6 - 2112z^5 + 23760z^4 - 110880z^3 + 207900z^2 - 124740z + 10395)\operatorname{erfi}(\sqrt{z})}{92160\sqrt{z}}$$

07.25.03.2909.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{3}{2}, 6; -z\right) = \frac{e^{-z}(32z^5 + 1040z^4 + 11376z^3 + 50232z^2 + 83370z + 35685)}{46080} + \frac{\sqrt{\pi}(64z^6 + 2112z^5 + 23760z^4 + 110880z^3 + 207900z^2 + 124740z + 10395)\operatorname{erf}(\sqrt{z})}{92160\sqrt{z}}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = 2$

07.25.03.2910.01

$${}_2F_2\left(-\frac{11}{2}, 6; 2, 2; z\right) = \frac{1}{4324320} e^{z/2}(108528z^6 - 2483224z^5 + 18958332z^4 - 59696700z^3 + 78348495z^2 - 37821168z + 4324320)I_0\left(\frac{z}{2}\right) + \frac{1}{4324320} e^{z/2}(-108528z^6 + 2374696z^5 - 16637900z^4 + 44137620z^3 - 40494279z^2 + 8767860z - 66528)I_1\left(\frac{z}{2}\right)$$

07.25.03.2911.01

$${}_2F_2\left(-\frac{11}{2}, 6; 2, \frac{5}{2}; z\right) = \frac{e^z(-62016z^6 + 1447040z^5 - 10859600z^4 + 30891840z^3 - 30083484z^2 + 6561480z - 10395)}{7864320z} + \frac{1}{15728640z^{3/2}} (\sqrt{\pi}(124032z^7 - 2956096z^6 + 23104224z^5 - 71351280z^4 + 83243160z^3 - 28814940z^2 + 1309770z + 10395)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.2912.01

$${}_2F_2\left(-\frac{11}{2}, 6; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(62016z^6 + 1447040z^5 + 10859600z^4 + 30891840z^3 + 30083484z^2 + 6561480z + 10395)}{7864320z} + \frac{1}{15728640z^{3/2}} (\sqrt{\pi}(124032z^7 + 2956096z^6 + 23104224z^5 + 71351280z^4 + 83243160z^3 + 28814940z^2 + 1309770z - 10395)\operatorname{erf}(\sqrt{z}))$$

07.25.03.2913.01

$${}_2F_2\left(-\frac{11}{2}, 6; 2, 3; z\right) = \frac{1}{5405400} e^{z/2} (36176 z^6 - 950912 z^5 + 8497620 z^4 - 32033880 z^3 + 51810405 z^2 - 32390820 z + 5405400) I_0\left(\frac{z}{2}\right) + \frac{1}{5405400} e^{z/2} (-36176 z^6 + 914736 z^5 - 7600972 z^4 + 24854100 z^3 - 29955105 z^2 + 9650055 z - 166320) I_1\left(\frac{z}{2}\right)$$

07.25.03.2914.01

$${}_2F_2\left(-\frac{11}{2}, 6; 2, \frac{7}{2}; z\right) = \frac{1}{352321536 z^2} (e^z (-868224 z^7 + 23214656 z^6 - 204466208 z^5 + 707423280 z^4 - 888922920 z^3 + 279758892 z^2 - 1185030 z + 31185)) + \frac{1}{704643072 z^{5/2}} (\sqrt{\pi} (1736448 z^8 - 47297536 z^7 + 431278848 z^6 - 1598268672 z^5 + 2330808480 z^4 - 1075757760 z^3 + 73347120 z^2 + 1164240 z - 31185) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.2915.01

$${}_2F_2\left(-\frac{11}{2}, 6; 2, \frac{7}{2}; -z\right) = \frac{1}{352321536 z^2} (e^{-z} (868224 z^7 + 23214656 z^6 + 204466208 z^5 + 707423280 z^4 + 888922920 z^3 + 279758892 z^2 + 1185030 z + 31185)) + \frac{1}{704643072 z^{5/2}} (\sqrt{\pi} (1736448 z^8 + 47297536 z^7 + 431278848 z^6 + 1598268672 z^5 + 2330808480 z^4 + 1075757760 z^3 + 73347120 z^2 - 1164240 z - 31185) \operatorname{erf}(\sqrt{z}))$$

07.25.03.2916.01

$${}_2F_2\left(-\frac{11}{2}, 6; 2, 4; z\right) = \frac{1}{5405400} e^{z/2} (12768 z^6 - 379088 z^5 + 3881184 z^4 - 17038020 z^3 + 32700930 z^2 - 24937605 z + 5405400) I_0\left(\frac{z}{2}\right) + \frac{1}{5405400} e^{z/2} (-12768 z^6 + 366320 z^5 - 3521248 z^4 + 13687164 z^3 - 20447970 z^2 + 8790735 z - 249480) I_1\left(\frac{z}{2}\right)$$

07.25.03.2917.01

$${}_2F_2\left(-\frac{11}{2}, 6; 2, \frac{9}{2}; z\right) = \frac{1}{603979776 z^3} (e^z (-578816 z^8 + 17447168 z^7 - 176399616 z^6 + 718934592 z^5 - 1108085664 z^4 + 459666288 z^3 - 3625776 z^2 + 207900 z - 31185)) + \frac{1}{1207959552 z^{7/2}} (\sqrt{\pi} (1157632 z^9 - 35473152 z^8 + 369667584 z^7 - 1598268672 z^6 + 2796970176 z^5 - 1613636640 z^4 + 146694240 z^3 + 3492720 z^2 - 187110 z + 31185) \operatorname{erfi}(\sqrt{z}))$$

$$\begin{aligned}
 & \text{07.25.03.2918.01} \\
 {}_2F_2\left(-\frac{11}{2}, 6; 2, \frac{9}{2}; -z\right) = & \\
 & \frac{1}{603\,979\,776\,z^3} \left(e^{-z} (578\,816\,z^8 + 17\,447\,168\,z^7 + 176\,399\,616\,z^6 + 718\,934\,592\,z^5 + 1\,108\,085\,664\,z^4 + 459\,666\,288\,z^3 + \right. \\
 & \left. 3\,625\,776\,z^2 + 207\,900\,z + 31\,185) \right) + \\
 & \frac{1}{1\,207\,959\,552\,z^{7/2}} \left(\sqrt{\pi} (1\,157\,632\,z^9 + 35\,473\,152\,z^8 + 369\,667\,584\,z^7 + 1\,598\,268\,672\,z^6 + 2\,796\,970\,176\,z^5 + \right. \\
 & \left. 1\,613\,636\,640\,z^4 + 146\,694\,240\,z^3 - 3\,492\,720\,z^2 - 187\,110\,z - 31\,185) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2919.01} \\
 {}_2F_2\left(-\frac{11}{2}, 6; 2, 5; z\right) = & \frac{e^{z/2} (672\,z^6 - 22\,240\,z^5 + 256\,656\,z^4 - 1\,285\,728\,z^3 + 2\,853\,210\,z^2 - 2\,557\,170\,z + 675\,675) I_0\left(\frac{z}{2}\right)}{675\,675} - \\
 & \frac{2\,e^{z/2} (336\,z^6 - 10\,784\,z^5 + 117\,712\,z^4 - 530\,208\,z^3 + 945\,519\,z^2 - 509\,790\,z + 20\,790) I_1\left(\frac{z}{2}\right)}{675\,675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2920.01} \\
 {}_2F_2\left(-\frac{11}{2}, 6; 2, \frac{11}{2}; z\right) = & \\
 & \frac{1}{8\,053\,063\,680\,z^4} \left(e^z (-3\,472\,896\,z^9 + 116\,507\,392\,z^8 - 1\,329\,736\,192\,z^7 + 6\,238\,767\,360\,z^6 - 11\,400\,763\,200\,z^5 + \right. \\
 & \left. 5\,900\,877\,600\,z^4 - 74\,178\,720\,z^3 + 7\,151\,760\,z^2 - 2\,598\,750\,z + 1\,091\,475) \right) + \\
 & \frac{1}{16\,106\,127\,360\,z^{9/2}} \left(\sqrt{\pi} (6\,945\,792\,z^{10} - 236\,487\,680\,z^9 + 2\,772\,506\,880\,z^8 - 13\,699\,445\,760\,z^7 + 27\,969\,701\,760\,z^6 - \right. \\
 & \left. 19\,363\,639\,680\,z^5 + 2\,200\,413\,600\,z^4 + 69\,854\,400\,z^3 - 5\,613\,300\,z^2 + 1\,871\,100\,z - 1\,091\,475) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2921.01} \\
 {}_2F_2\left(-\frac{11}{2}, 6; 2, \frac{11}{2}; -z\right) = & \\
 & \frac{1}{8\,053\,063\,680\,z^4} \left(e^{-z} (3\,472\,896\,z^9 + 116\,507\,392\,z^8 + 1\,329\,736\,192\,z^7 + 6\,238\,767\,360\,z^6 + 11\,400\,763\,200\,z^5 + \right. \\
 & \left. 5\,900\,877\,600\,z^4 + 74\,178\,720\,z^3 + 7\,151\,760\,z^2 + 2\,598\,750\,z + 1\,091\,475) \right) + \\
 & \frac{1}{16\,106\,127\,360\,z^{9/2}} \left(\sqrt{\pi} (6\,945\,792\,z^{10} + 236\,487\,680\,z^9 + 2\,772\,506\,880\,z^8 + 13\,699\,445\,760\,z^7 + 27\,969\,701\,760\,z^6 + \right. \\
 & \left. 19\,363\,639\,680\,z^5 + 2\,200\,413\,600\,z^4 - 69\,854\,400\,z^3 - 5\,613\,300\,z^2 - 1\,871\,100\,z - 1\,091\,475) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2922.01} \\
 {}_2F_2\left(-\frac{11}{2}, 6; 2, 6; z\right) = & \frac{e^{z/2} (64\,z^6 - 2336\,z^5 + 30\,000\,z^4 - 168\,864\,z^3 + 425\,112\,z^2 - 436\,590\,z + 135\,135) I_0\left(\frac{z}{2}\right)}{135\,135} + \\
 & \frac{e^{z/2} (-64\,z^6 + 2272\,z^5 - 27\,760\,z^4 + 142\,176\,z^3 - 294\,744\,z^2 + 191\,442\,z - 10\,395) I_1\left(\frac{z}{2}\right)}{135\,135}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = \frac{5}{2}$

07.25.03.2923.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{5}{2}, 3; z\right) = \frac{e^z (-20672 z^6 + 558144 z^5 - 4982224 z^4 + 17581920 z^3 - 22827780 z^2 + 7682100 z - 51975)}{9830400 z} + \frac{1}{19660800 z^{3/2}}$$

$$\left(\sqrt{\pi} (41344 z^7 - 1136960 z^6 + 10501920 z^5 - 39639600 z^4 + 59459400 z^3 - 28814940 z^2 + 2182950 z + 51975)\right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2924.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (20672 z^6 + 558144 z^5 + 4982224 z^4 + 17581920 z^3 + 22827780 z^2 + 7682100 z + 51975)}{9830400 z} + \frac{1}{19660800 z^{3/2}}$$

$$\left(\sqrt{\pi} (41344 z^7 + 1136960 z^6 + 10501920 z^5 + 39639600 z^4 + 59459400 z^3 + 28814940 z^2 + 2182950 z - 51975)\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.2925.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{5}{2}, 4; z\right) = \frac{e^z (-3648 z^6 + 111872 z^5 - 1157648 z^4 + 4877952 z^3 - 7926780 z^2 + 3640080 z - 51975)}{4915200 z} + \frac{1}{9830400 z^{3/2}}$$

$$\left(\sqrt{\pi} (7296 z^7 - 227392 z^6 + 2423520 z^5 - 10810800 z^4 + 19819800 z^3 - 12349260 z^2 + 1309770 z + 51975)\right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2926.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{5}{2}, 4; -z\right) = \frac{e^{-z} (3648 z^6 + 111872 z^5 + 1157648 z^4 + 4877952 z^3 + 7926780 z^2 + 3640080 z + 51975)}{4915200 z} + \frac{1}{9830400 z^{3/2}}$$

$$\left(\sqrt{\pi} (7296 z^7 + 227392 z^6 + 2423520 z^5 + 10810800 z^4 + 19819800 z^3 + 12349260 z^2 + 1309770 z - 51975)\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.2927.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{5}{2}, 5; z\right) = \frac{e^z (-192 z^6 + 6592 z^5 - 77584 z^4 + 380064 z^3 - 742308 z^2 + 434220 z - 10395)}{614400 z} + \frac{1}{1228800 z^{3/2}}$$

$$\sqrt{\pi} (384 z^7 - 13376 z^6 + 161568 z^5 - 831600 z^4 + 1801800 z^3 - 1372140 z^2 + 187110 z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2928.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{5}{2}, 5; -z\right) = \frac{e^{-z} (192 z^6 + 6592 z^5 + 77584 z^4 + 380064 z^3 + 742308 z^2 + 434220 z + 10395)}{614400 z} + \frac{1}{1228800 z^{3/2}}$$

$$\sqrt{\pi} (384 z^7 + 13376 z^6 + 161568 z^5 + 831600 z^4 + 1801800 z^3 + 1372140 z^2 + 187110 z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.2929.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{5}{2}, 6; z\right) = \frac{e^z (-64 z^6 + 2432 z^5 - 32080 z^4 + 179136 z^3 - 408828 z^2 + 291480 z - 10395)}{430080 z} +$$

$$\frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 - 4928 z^6 + 66528 z^5 - 388080 z^4 + 970200 z^3 - 873180 z^2 + 145530 z + 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2930.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{5}{2}, 6; -z\right) = \frac{e^{-z} (64 z^6 + 2432 z^5 + 32080 z^4 + 179136 z^3 + 408828 z^2 + 291480 z + 10395)}{430080 z} +$$

$$\frac{1}{860160 z^{3/2}} \sqrt{\pi} (128 z^7 + 4928 z^6 + 66528 z^5 + 388080 z^4 + 970200 z^3 + 873180 z^2 + 145530 z - 10395) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = 3$

07.25.03.2931.01

$${}_2F_2\left(-\frac{11}{2}, 6; 3, 3; z\right) = \frac{1}{40540500}$$

$$e^{z/2} (72352 z^6 - 2186064 z^5 + 22896960 z^4 - 103628820 z^3 + 207471150 z^2 - 168305445 z + 40561290) I_0\left(\frac{z}{2}\right) +$$

$$\frac{1}{40540500 z} \left(e^{z/2} (-72352 z^7 + 2113712 z^6 - 20819424 z^5 + 83793900 z^4 -$$

$$132199350 z^3 + 62848395 z^2 - 2453220 z - 83160) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.2932.01

$${}_2F_2\left(-\frac{11}{2}, 6; 3, \frac{7}{2}; z\right) = \frac{1}{440401920 z^2} e^z$$

$$(-289408 z^7 + 8950976 z^6 - 93687136 z^5 + 401233680 z^4 - 668808120 z^3 + 321995940 z^2 - 5717250 z - 155925) +$$

$$\frac{1}{880803840 z^{5/2}} \left(\sqrt{\pi} (578816 z^8 - 18191360 z^7 + 196035840 z^6 - 887927040 z^5 +$$

$$1664863200 z^4 - 1075757760 z^3 + 122245200 z^2 + 5821200 z + 155925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2933.01

$${}_2F_2\left(-\frac{11}{2}, 6; 3, \frac{7}{2}; -z\right) = \frac{1}{440401920 z^2} e^{-z}$$

$$(289408 z^7 + 8950976 z^6 + 93687136 z^5 + 401233680 z^4 + 668808120 z^3 + 321995940 z^2 + 5717250 z - 155925) +$$

$$\frac{1}{880803840 z^{5/2}} \left(\sqrt{\pi} (578816 z^8 + 18191360 z^7 + 196035840 z^6 + 887927040 z^5 +$$

$$1664863200 z^4 + 1075757760 z^3 + 122245200 z^2 - 5821200 z + 155925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2934.01

$${}_2F_2\left(-\frac{11}{2}, 6; 3, 4; z\right) =$$

$$\frac{1}{6756750} e^{z/2} (4256 z^6 - 145312 z^5 + 1745520 z^4 - 9219360 z^3 + 21983250 z^2 - 21808710 z + 6767145) I_0\left(\frac{z}{2}\right) +$$

$$\frac{1}{3378375 z} e^{z/2} (-2128 z^7 + 70528 z^6 - 803296 z^5 + 3839520 z^4 - 7489875 z^3 + 4723680 z^2 - 301455 z - 20790) I_1\left(\frac{z}{2}\right)$$

07.25.03.2935.01

$${}_2F_2\left(-\frac{11}{2}, 6; 3, \frac{9}{2}; z\right) = \frac{1}{2264924160z^3} \left(e^z (-578816z^8 + 20175872z^7 - 242247552z^6 + 1220131200z^5 - 2485269120z^4 + 1565619840z^3 - 50478120z^2 - 2910600z + 155925) \right) + \frac{1}{4529848320z^{7/2}} \left(\sqrt{\pi} (1157632z^9 - 40930560z^8 + 504092160z^7 - 2663781120z^6 + 5993507520z^5 - 4840909920z^4 + 733471200z^3 + 52390800z^2 + 2806650z - 155925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2936.01

$${}_2F_2\left(-\frac{11}{2}, 6; 3, \frac{9}{2}; -z\right) = \frac{1}{2264924160z^3} \left(e^{-z} (578816z^8 + 20175872z^7 + 242247552z^6 + 1220131200z^5 + 2485269120z^4 + 1565619840z^3 + 50478120z^2 - 2910600z - 155925) \right) + \frac{1}{4529848320z^{7/2}} \left(\sqrt{\pi} (1157632z^9 + 40930560z^8 + 504092160z^7 + 2663781120z^6 + 5993507520z^5 + 4840909920z^4 + 733471200z^3 - 52390800z^2 + 2806650z + 155925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2937.01

$${}_2F_2\left(-\frac{11}{2}, 6; 3, 5; z\right) = \frac{2e^{z/2} (448z^6 - 17056z^5 + 231120z^4 - 1395360z^3 + 3858600z^2 - 4511430z + 1694385) I_0\left(\frac{z}{2}\right)}{3378375} - \frac{1}{3378375z} 2e^{z/2} (448z^7 - 16608z^6 + 214736z^5 - 1188480z^4 + 2762280z^3 - 2174730z^2 + 197505z + 20790) I_1\left(\frac{z}{2}\right)$$

07.25.03.2938.01

$${}_2F_2\left(-\frac{11}{2}, 6; 3, \frac{11}{2}; z\right) = \frac{1}{10066329600z^4} \left(e^z (-1157632z^9 + 44899584z^8 - 608244224z^7 + 3522282240z^6 - 8481389760z^5 + 6624081120z^4 - 329646240z^3 - 30436560z^2 + 3846150z - 1091475) \right) + \frac{1}{20132659200z^{9/2}} \left(\sqrt{\pi} (2315264z^{10} - 90956800z^9 + 1260230400z^8 - 7610803200z^7 + 19978358400z^6 - 19363639680z^5 + 3667356000z^4 + 349272000z^3 + 28066500z^2 - 3118500z + 1091475) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2939.01

$${}_2F_2\left(-\frac{11}{2}, 6; 3, \frac{11}{2}; -z\right) = \frac{1}{10066329600z^4} \left(e^{-z} (1157632z^9 + 44899584z^8 + 608244224z^7 + 3522282240z^6 + 8481389760z^5 + 6624081120z^4 + 329646240z^3 - 30436560z^2 - 3846150z - 1091475) \right) + \frac{1}{20132659200z^{9/2}} \left(\sqrt{\pi} (2315264z^{10} + 90956800z^9 + 1260230400z^8 + 7610803200z^7 + 19978358400z^6 + 19363639680z^5 + 3667356000z^4 - 349272000z^3 + 28066500z^2 + 3118500z + 1091475) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2940.01

$${}_2F_2\left(-\frac{11}{2}, 6; 3, 6; z\right) = \frac{4 e^{z/2} (64 z^6 - 2688 z^5 + 40560 z^4 - 275520 z^3 + 866520 z^2 - 1164240 z + 509355) I_0\left(\frac{z}{2}\right) - \frac{1}{2027025 z} 4 e^{z/2} (64 z^7 - 2624 z^6 + 37968 z^5 - 238800 z^4 + 644280 z^3 - 608760 z^2 + 72765 z + 10395) I_1\left(\frac{z}{2}\right)}{2027025}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = \frac{7}{2}$

07.25.03.2941.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{7}{2}, 4; z\right) = \frac{1}{220200960 z^2} e^z (-51072 z^7 + 1793600 z^6 - 21748256 z^5 + 111039792 z^4 - 230825640 z^3 + 150609900 z^2 - 5509350 z - 467775) + \frac{1}{440401920 z^{5/2}} \left(\sqrt{\pi} (102144 z^8 - 3638272 z^7 + 45239040 z^6 - 242161920 z^5 + 554954400 z^4 - 461039040 z^3 + 73347120 z^2 + 5821200 z + 467775) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2942.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{7}{2}, 4; -z\right) = \frac{1}{220200960 z^2} e^{-z} (51072 z^7 + 1793600 z^6 + 21748256 z^5 + 111039792 z^4 + 230825640 z^3 + 150609900 z^2 + 5509350 z - 467775) + \frac{1}{440401920 z^{5/2}} \left(\sqrt{\pi} (102144 z^8 + 3638272 z^7 + 45239040 z^6 + 242161920 z^5 + 554954400 z^4 + 461039040 z^3 + 73347120 z^2 - 5821200 z + 467775) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2943.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{7}{2}, 5; z\right) = \frac{1}{27525120 z^2} e^z (-2688 z^7 + 105664 z^6 - 1456480 z^5 + 8635152 z^4 - 21516216 z^3 + 17781540 z^2 - 1060290 z - 155925) + \frac{1}{55050240 z^{5/2}} \left(\sqrt{\pi} (5376 z^8 - 214016 z^7 + 3015936 z^6 - 18627840 z^5 + 50450400 z^4 - 51226560 z^3 + 10478160 z^2 + 1164240 z + 155925) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2944.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{7}{2}, 5; -z\right) = \frac{1}{27525120 z^2} e^{-z} (2688 z^7 + 105664 z^6 + 1456480 z^5 + 8635152 z^4 + 21516216 z^3 + 17781540 z^2 + 1060290 z - 155925) + \frac{1}{55050240 z^{5/2}} \left(\sqrt{\pi} (5376 z^8 + 214016 z^7 + 3015936 z^6 + 18627840 z^5 + 50450400 z^4 + 51226560 z^3 + 10478160 z^2 - 1164240 z + 155925) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2945.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{7}{2}, 6; z\right) = \frac{e^z (-128 z^7 + 5568 z^6 - 85984 z^5 + 580560 z^4 - 1686744 z^3 + 1690836 z^2 - 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}}$$

$$\left(\sqrt{\pi} (256 z^8 - 11264 z^7 + 177408 z^6 - 1241856 z^5 + 3880800 z^4 - 4656960 z^3 + 1164240 z^2 + 166320 z + 31185)\right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2946.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{7}{2}, 6; -z\right) = \frac{e^{-z} (128 z^7 + 5568 z^6 + 85984 z^5 + 580560 z^4 + 1686744 z^3 + 1690836 z^2 + 145530 z - 31185)}{2752512 z^2} + \frac{1}{5505024 z^{5/2}}$$

$$\left(\sqrt{\pi} (256 z^8 + 11264 z^7 + 177408 z^6 + 1241856 z^5 + 3880800 z^4 + 4656960 z^3 + 1164240 z^2 - 166320 z + 31185)\right) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = 4$

07.25.03.2947.01

$${}_2F_2\left(-\frac{11}{2}, 6; 4, 4; z\right) = \frac{1}{114864750 z}$$

$$\left(e^{z/2} (25536 z^7 - 985568 z^6 + 13587792 z^5 - 83886240 z^4 + 238905960 z^3 - 290623410 z^2 + 115374105 z + 41580)\right)$$

$$I_0\left(\frac{z}{2}\right) + \frac{1}{114864750 z^2} \left(e^{z/2} (-25536 z^8 + 960032 z^7 - 12640528 z^6 + 71700192 z^5 - 172645800 z^4 + 143855310 z^3 - 14875245 z^2 - 2037420 z - 166320)\right) I_1\left(\frac{z}{2}\right)$$

07.25.03.2948.01

$${}_2F_2\left(-\frac{11}{2}, 6; 4, \frac{9}{2}; z\right) = \frac{1}{377487360 z^3} \left(e^z (-34048 z^8 + 1347328 z^7 - 18731520 z^6 + 112346304 z^5 - 284638560 z^4 + 241698960 z^3 - 15634080 z^2 - 2702700 z - 155925)\right) +$$

$$\frac{1}{754974720 z^{7/2}} \left(\sqrt{\pi} (68096 z^9 - 2728704 z^8 + 38776320 z^7 - 242161920 z^6 + 665945280 z^5 - 691558560 z^4 + 146694240 z^3 + 17463600 z^2 + 2806650 z + 155925)\right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2949.01

$${}_2F_2\left(-\frac{11}{2}, 6; 4, \frac{9}{2}; -z\right) = \frac{1}{377487360z^3} (e^{-z} (34048z^8 + 1347328z^7 + 18731520z^6 + 112346304z^5 + 284638560z^4 + 241698960z^3 + 15634080z^2 - 2702700z + 155925)) + \frac{1}{754974720z^{7/2}} (\sqrt{\pi} (68096z^9 + 2728704z^8 + 38776320z^7 + 242161920z^6 + 665945280z^5 + 691558560z^4 + 146694240z^3 - 17463600z^2 + 2806650z - 155925) \operatorname{erf}(\sqrt{z}))$$

07.25.03.2950.01

$${}_2F_2\left(-\frac{11}{2}, 6; 4, 5; z\right) = \frac{1}{57432375z} 4e^{z/2} (1344z^7 - 57856z^6 + 900336z^5 - 6361440z^4 + 21058680z^3 - 30270240z^2 + 14480235z + 20790) I_0\left(\frac{z}{2}\right) - \frac{1}{57432375z^2} (4e^{z/2} (1344z^8 - 56512z^7 + 844496z^6 - 5543856z^5 + 15884760z^4 - 16472040z^3 + 2401245z^2 + 488565z + 83160) I_1\left(\frac{z}{2}\right))$$

07.25.03.2951.01

$${}_2F_2\left(-\frac{11}{2}, 6; 4, \frac{11}{2}; z\right) = \frac{1}{5033164800z^4} (e^{-z} (-204288z^9 + 8993536z^8 - 141016576z^7 + 971569920z^6 - 2904152640z^5 + 3043877280z^4 - 295716960z^3 - 77671440z^2 - 10083150z + 1091475)) + \frac{1}{10066329600z^{9/2}} (\sqrt{\pi} (408576z^{10} - 18191360z^9 + 290822400z^8 - 2075673600z^7 + 6659452800z^6 - 8298702720z^5 + 2200413600z^4 + 349272000z^3 + 84199500z^2 + 9355500z - 1091475) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.2952.01

$${}_2F_2\left(-\frac{11}{2}, 6; 4, \frac{11}{2}; -z\right) = \frac{1}{5033164800z^4} (e^{-z} (204288z^9 + 8993536z^8 + 141016576z^7 + 971569920z^6 + 2904152640z^5 + 3043877280z^4 + 295716960z^3 - 77671440z^2 + 10083150z + 1091475)) + \frac{1}{10066329600z^{9/2}} (\sqrt{\pi} (408576z^{10} + 18191360z^9 + 290822400z^8 + 2075673600z^7 + 6659452800z^6 + 8298702720z^5 + 2200413600z^4 - 349272000z^3 + 84199500z^2 - 9355500z - 1091475) \operatorname{erf}(\sqrt{z}))$$

$$\begin{aligned}
 & \text{07.25.03.2953.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 6; 4, 6; z\right) = \\
 & \frac{1}{11486475z} 4e^{z/2} (128z^7 - 6080z^6 + 105408z^5 - 838800z^4 + 3163920z^3 - 5239080z^2 + 2910600z + 10395) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{11486475z^2} \\
 & 4e^{z/2} (128z^8 - 5952z^7 + 99520z^6 - 742128z^5 + 2466000z^4 - 3061560z^3 + 582120z^2 + 155925z + 41580) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = \frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.2954.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 6; \frac{9}{2}, 5; z\right) = \\
 & \frac{1}{47185920z^3} (e^z (-1792z^8 + 79360z^7 - 1253760z^6 + 8724480z^5 - 26443968z^4 + 28320480z^3 - 2910600z^2 - \\
 & 831600z - 155925)) + \frac{1}{94371840z^{7/2}} (\sqrt{\pi} (3584z^9 - 160512z^8 + 2585088z^7 - 18627840z^6 + \\
 & 60540480z^5 - 76839840z^4 + 20956320z^3 + 3492720z^2 + 935550z + 155925) \operatorname{erfi}(\sqrt{z}))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2955.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 6; \frac{9}{2}, 5; -z\right) = \\
 & \frac{1}{47185920z^3} (e^{-z} (1792z^8 + 79360z^7 + 1253760z^6 + 8724480z^5 + 26443968z^4 + 28320480z^3 + 2910600z^2 - \\
 & 831600z + 155925)) + \frac{1}{94371840z^{7/2}} (\sqrt{\pi} (3584z^9 + 160512z^8 + 2585088z^7 + 18627840z^6 + \\
 & 60540480z^5 + 76839840z^4 + 20956320z^3 - 3492720z^2 + 935550z - 155925) \operatorname{erf}(\sqrt{-z}))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2956.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 6; \frac{9}{2}, 6; z\right) = \frac{1}{14155776z^3} \\
 & (e^z (-256z^8 + 12544z^7 - 221952z^6 + 1757760z^5 - 6203040z^4 + 8030448z^3 - 1164240z^2 - 457380z - 155925)) + \\
 & \frac{1}{28311552z^{7/2}} (\sqrt{\pi} (512z^9 - 25344z^8 + 456192z^7 - 3725568z^6 + 13970880z^5 - \\
 & 20956320z^4 + 6985440z^3 + 1496880z^2 + 561330z + 155925) \operatorname{erfi}(\sqrt{z}))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.2957.01} \\
 & {}_2F_2\left(-\frac{11}{2}, 6; \frac{9}{2}, 6; -z\right) = \frac{1}{14155776z^3} \\
 & (e^{-z} (256z^8 + 12544z^7 + 221952z^6 + 1757760z^5 + 6203040z^4 + 8030448z^3 + 1164240z^2 - 457380z + 155925)) + \\
 & \frac{1}{28311552z^{7/2}} (\sqrt{\pi} (512z^9 + 25344z^8 + 456192z^7 + 3725568z^6 + 13970880z^5 + \\
 & 20956320z^4 + 6985440z^3 - 1496880z^2 + 561330z - 155925) \operatorname{erf}(\sqrt{-z}))
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = 5$

07.25.03.2958.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 6; 5, 5; z\right) = & \frac{1}{1091215125z^2} \left(16e^{z/2}(2688z^8 - 129088z^7 + 2268480z^6 - 18361392z^5 + 70777200z^4 - 120498840z^3 + \right. \\
 & \left. 69272280z^2 + 363825z + 62370)I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{1091215125z^3} \left(16e^{z/2}(2688z^9 - 126400z^8 + 2143424z^7 - 16278480z^6 + 55452432z^5 - \right. \right. \\
 & \left. \left. 71402280z^4 + 14553000z^3 + 4293135z^2 + 1455300z + 249480)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

07.25.03.2959.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 6; 5, \frac{11}{2}; z\right) = & \frac{1}{629145600z^4} \left(e^z(-10752z^9 + 529664z^8 - 9434624z^7 + 75367680z^6 - 269123520z^5 + 354580320z^4 - \right. \\
 & \left. 53555040z^3 - 22120560z^2 - 8627850z - 1091475)\right) + \\
 & \frac{1}{1258291200z^{9/2}} \left(\sqrt{\pi}(21504z^{10} - 1070080z^9 + 19388160z^8 - 159667200z^7 + 605404800z^6 - \right. \\
 & \left. 922078080z^5 + 314344800z^4 + 69854400z^3 + 28066500z^2 + 9355500z + 1091475)\operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

07.25.03.2960.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 6; 5, \frac{11}{2}; -z\right) = & \frac{1}{629145600z^4} \left(e^{-z}(10752z^9 + 529664z^8 + 9434624z^7 + 75367680z^6 + 269123520z^5 + 354580320z^4 + \right. \\
 & \left. 53555040z^3 - 22120560z^2 + 8627850z - 1091475)\right) + \\
 & \frac{1}{1258291200z^{9/2}} \left(\sqrt{\pi}(21504z^{10} + 1070080z^9 + 19388160z^8 + 159667200z^7 + 605404800z^6 + \right. \\
 & \left. 922078080z^5 + 314344800z^4 - 69854400z^3 + 28066500z^2 - 9355500z + 1091475)\operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

07.25.03.2961.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{11}{2}, 6; 5, 6; z\right) = & \frac{1}{218243025z^2} \\
 & \left(32e^{z/2}(128z^8 - 6784z^7 + 132864z^6 - 1212096z^5 + 5331360z^4 - 10478160z^3 + 6985440z^2 + 83160z + 31185) \right. \\
 & \left. I_0\left(\frac{z}{2}\right) - \frac{1}{218243025z^3} \left(128e^{z/2}(32z^9 - 1664z^8 + 31568z^7 - 272256z^6 + \right. \right. \\
 & \left. \left. 1074804z^5 - 1654080z^4 + 436590z^3 + 166320z^2 + 83160z + 31185)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = \frac{11}{2}$

07.25.03.2962.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{11}{2}, 6; z\right) = \frac{1}{62914560z^4} (e^z (-512z^9 + 27904z^8 - 556544z^7 + 5057280z^6 - 21001920z^5 + 33362400z^4 - 6985440z^3 - 3825360z^2 - 2390850z - 1091475)) + \frac{1}{125829120z^{9/2}} (\sqrt{\pi} (1024z^{10} - 56320z^9 + 1140480z^8 - 10644480z^7 + 46569600z^6 - 83825280z^5 + 34927200z^4 + 9979200z^3 + 5613300z^2 + 3118500z + 1091475) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.2963.01

$${}_2F_2\left(-\frac{11}{2}, 6; \frac{11}{2}, 6; -z\right) = \frac{1}{62914560z^4} (e^{-z} (512z^9 + 27904z^8 + 556544z^7 + 5057280z^6 + 21001920z^5 + 33362400z^4 + 6985440z^3 - 3825360z^2 + 2390850z - 1091475)) + \frac{1}{125829120z^{9/2}} (\sqrt{\pi} (1024z^{10} + 56320z^9 + 1140480z^8 + 10644480z^7 + 46569600z^6 + 83825280z^5 + 34927200z^4 - 9979200z^3 + 5613300z^2 - 3118500z + 1091475) \operatorname{erf}(\sqrt{z}))$$

For fixed z and $a_1 = -\frac{11}{2}$, $a_2 = 6$, $b_1 = 6$

07.25.03.2964.01

$${}_2F_2\left(-\frac{11}{2}, 6; 6, 6; z\right) = \frac{1}{916620705z^3} (32e^{z/2} (256z^9 - 14976z^8 + 326976z^7 - 3364032z^6 + 16903152z^5 - 38419920z^4 + 29688120z^3 + 748440z^2 + 530145z + 249480) I_0\left(\frac{z}{2}\right)) - \frac{1}{916620705z^4} (32e^{z/2} (256z^{10} - 14720z^9 + 312384z^8 - 3058752z^7 + 13986672z^6 - 25692912z^5 + 8731800z^4 + 4241160z^3 + 3024945z^2 + 2120580z + 997920) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 \geq -\frac{9}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{9}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{9}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.2965.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{121} e^z (4z^2 - 40z + 121)$$

07.25.03.2966.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{11} e^z (2z - 11)$$

07.25.03.2967.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{e^z (32z^4 + 16z^3 + 24z^2 + 60z + 1155)}{1155} - \frac{32\sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})}{1155}$$

07.25.03.2968.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{32\sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2}}{1155} + \frac{e^{-z} (32z^4 - 16z^3 + 24z^2 - 60z + 1155)}{1155}$$

07.25.03.2969.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{165} e^z (-16z^4 + 136z^3 + 60z^2 + 78z + 165) + \frac{16}{165} \sqrt{\pi} (z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2970.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{165} e^{-z} (-16z^4 - 136z^3 + 60z^2 - 78z + 165) - \frac{16}{165} \sqrt{\pi} (z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2971.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{33} e^z (4z^4 - 70z^3 + 156z^2 + 48z + 33) + \frac{1}{33} \sqrt{\pi} (-4z^{9/2} + 72z^{7/2} - 189z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2972.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{33} e^{-z} (4z^4 + 70z^3 + 156z^2 - 48z + 33) + \frac{1}{33} \sqrt{\pi} (4z^{9/2} + 72z^{7/2} + 189z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2973.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{33} e^z (-2z^4 + 53z^3 - 258z^2 + 210z + 33) + \frac{1}{66} \sqrt{\pi} (4z^{9/2} - 108z^{7/2} + 567z^{5/2} - 630z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2974.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{33} e^{-z} (-2z^4 - 53z^3 - 258z^2 - 210z + 33) + \frac{1}{66} \sqrt{\pi} (-4z^{9/2} - 108z^{7/2} - 567z^{5/2} - 630z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2975.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (8z^4 - 284z^3 + 2130z^2 - 4107z + 1056)}{1056} + \frac{\sqrt{\pi} (-16z^{9/2} + 576z^{7/2} - 4536z^{5/2} + 10080z^{3/2} - 4725\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{2112}$$

07.25.03.2976.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (8z^4 + 284z^3 + 2130z^2 + 4107z + 1056)}{1056} + \frac{\sqrt{\pi} (16z^{9/2} + 576z^{7/2} + 4536z^{5/2} + 10080z^{3/2} + 4725\sqrt{z}) \operatorname{erf}(\sqrt{z})}{2112}$$

07.25.03.2977.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2}(-32z^5 + 1320z^4 - 12864z^3 + 41424z^2 - 43470z + 10395)I_0\left(\frac{z}{2}\right)}{10395} + \frac{2e^{z/2}(16z^5 - 644z^4 + 5796z^3 - 15222z^2 + 8817z)I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.2978.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z(8z^4 - 356z^3 + 3606z^2 - 10965z + 7725)}{10560} + \frac{\sqrt{\pi}(-16z^5 + 720z^4 - 7560z^3 + 25200z^2 - 23625z + 2835)\operatorname{erfi}(\sqrt{z})}{21120\sqrt{z}}$$

07.25.03.2979.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}(8z^4 + 356z^3 + 3606z^2 + 10965z + 7725)}{10560} + \frac{\sqrt{\pi}(16z^5 + 720z^4 + 7560z^3 + 25200z^2 + 23625z + 2835)\operatorname{erf}(\sqrt{z})}{21120\sqrt{z}}$$

07.25.03.2980.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2}(-64z^5 + 3216z^4 - 39768z^3 + 172164z^2 - 264600z + 114345)I_0\left(\frac{z}{2}\right)}{114345} + \frac{e^{z/2}(64z^5 - 3152z^4 + 36648z^3 - 137028z^2 + 142944z - 12285)I_1\left(\frac{z}{2}\right)}{114345}$$

07.25.03.2981.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z(32z^5 - 1712z^4 + 21840z^3 - 90696z^2 + 105330z - 6615)}{168960z} + \frac{\sqrt{\pi}(-64z^6 + 3456z^5 - 45360z^4 + 201600z^3 - 283500z^2 + 68040z + 6615)\operatorname{erfi}(\sqrt{z})}{337920z^{3/2}}$$

07.25.03.2982.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(32z^5 + 1712z^4 + 21840z^3 + 90696z^2 + 105330z + 6615)}{168960z} + \frac{\sqrt{\pi}(64z^6 + 3456z^5 + 45360z^4 + 201600z^3 + 283500z^2 + 68040z - 6615)\operatorname{erf}(\sqrt{z})}{337920z^{3/2}}$$

07.25.03.2983.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, 3; z\right) = \frac{4e^{z/2}(64z^6 - 3728z^5 + 53136z^4 - 257772z^3 + 388968z^2 - 72765z - 14175)I_1\left(\frac{z}{2}\right)}{1486485z} - \frac{4e^{z/2}(64z^5 - 3792z^4 + 56832z^3 - 309108z^2 + 623700z - 375165)I_0\left(\frac{z}{2}\right)}{1486485}$$

07.25.03.2984.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (32 z^6 - 2000 z^5 + 30768 z^4 - 161976 z^3 + 262794 z^2 - 38745 z - 11340)}{473088 z^2} + \frac{1}{946176 z^{5/2}} \sqrt{\pi} (-64 z^7 + 4032 z^6 - 63504 z^5 + 352800 z^4 - 661500 z^3 + 238140 z^2 + 46305 z + 11340) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2985.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32 z^6 + 2000 z^5 + 30768 z^4 + 161976 z^3 + 262794 z^2 + 38745 z - 11340)}{473088 z^2} + \frac{1}{946176 z^{5/2}} \sqrt{\pi} (64 z^7 + 4032 z^6 + 63504 z^5 + 352800 z^4 + 661500 z^3 + 238140 z^2 - 46305 z + 11340) \operatorname{erf}(\sqrt{z})$$

07.25.03.2986.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{7432425 z^2} 4 e^{z/2} (128 z^7 - 8608 z^6 + 145296 z^5 - 866400 z^4 + 1711740 z^3 - 504630 z^2 - 180495 z - 64260) I_1\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (128 z^6 - 8736 z^5 + 153840 z^4 - 1007520 z^3 + 2513700 z^2 - 1903230 z - 16065) I_0\left(\frac{z}{2}\right)}{7432425 z}$$

07.25.03.2987.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 9152 z^6 + 164832 z^5 - 1050960 z^4 + 2192088 z^3 - 532980 z^2 - 277830 z - 127575)}{4325376 z^3} + \frac{1}{8650752 z^{7/2}} \left(\sqrt{\pi} (-256 z^8 + 18432 z^7 - 338688 z^6 + 2257920 z^5 - 5292000 z^4 + 2540160 z^3 + 740880 z^2 + 362880 z + 127575) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2988.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 9152 z^6 + 164832 z^5 + 1050960 z^4 + 2192088 z^3 + 532980 z^2 - 277830 z + 127575)}{4325376 z^3} + \frac{1}{8650752 z^{7/2}} \left(\sqrt{\pi} (256 z^8 + 18432 z^7 + 338688 z^6 + 2257920 z^5 - 5292000 z^4 + 2540160 z^3 - 740880 z^2 + 362880 z - 127575) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2989.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{126351225 z^3} 64 e^{z/2} (64 z^8 - 4880 z^7 + 95184 z^6 - 673392 z^5 + 1645080 z^4 - 668115 z^3 - 335475 z^2 - 219240 z - 107730) I_1\left(\frac{z}{2}\right) - \frac{1}{126351225 z^2} 32 e^{z/2} (128 z^7 - 9888 z^6 + 200064 z^5 - 1532400 z^4 + 4551120 z^3 - 4114530 z^2 - 109620 z - 53865) I_0\left(\frac{z}{2}\right)$$

07.25.03.2990.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{8650752z^4}$$

$$e^z (128z^8 - 10304z^7 + 212640z^6 - 1592112z^5 + 4060776z^4 - 1402380z^3 - 999810z^2 - 817425z - 496125) +$$

$$\frac{1}{17301504z^{9/2}} \left(\sqrt{\pi} (-256z^9 + 20736z^8 - 435456z^7 + 3386880z^6 - 9525600z^5 +$$

$$5715360z^4 + 2222640z^3 + 1632960z^2 + 1148175z + 496125) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.2991.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{8650752z^4}$$

$$e^{-z} (128z^8 + 10304z^7 + 212640z^6 + 1592112z^5 + 4060776z^4 + 1402380z^3 - 999810z^2 + 817425z - 496125) +$$

$$\frac{1}{17301504z^{9/2}} \left(\sqrt{\pi} (256z^9 + 20736z^8 + 435456z^7 + 3386880z^6 + 9525600z^5 +$$

$$5715360z^4 - 2222640z^3 + 1632960z^2 - 1148175z + 496125) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.2992.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{11}{2}, 6; z\right) =$$

$$\frac{1}{480134655z^4} \left(32e^{z/2} (256z^9 - 21824z^8 + 482976z^7 - 3953712z^6 + 11507712z^5 - 5979960z^4 -$$

$$3797010z^3 - 3499335z^2 - 3141180z - 1905120) I_1\left(\frac{z}{2}\right) -$$

$$\frac{1}{480134655z^3} \left(32e^{z/2} (256z^8 - 22080z^7 + 504672z^6 - 4426032z^5 + 15240960z^4 -$$

$$15928920z^3 - 859950z^2 - 785295z - 476280) I_0\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{9}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.2993.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = e^z$$

07.25.03.2994.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{105} e^z (16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.2995.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

07.25.03.2996.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15} \sqrt{\pi} (2z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2997.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15} \sqrt{\pi} (2z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.2998.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6} \sqrt{\pi} (-4z^{9/2} + 36z^{7/2} - 63z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.2999.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6} \sqrt{\pi} (4z^{9/2} + 36z^{7/2} + 63z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3000.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{12} e^z (-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24} \sqrt{\pi} (8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3001.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{12} e^{-z} (-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24} \sqrt{\pi} (-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3002.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{192} e^z (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3003.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{192} e^{-z} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3004.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-16z^5 + 336z^4 - 2220z^3 + 5484z^2 - 4725z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^5 - 320z^4 + 1908z^3 - 3720z^2 + 1689z) I_1\left(\frac{z}{2}\right)$$

07.25.03.3005.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z (16z^4 - 352z^3 + 2352z^2 - 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945) \operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.3006.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.3007.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2}(-32z^5 + 816z^4 - 6816z^3 + 22524z^2 - 28350z + 10395)I_0\left(\frac{z}{2}\right) + e^{z/2}(32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945)I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.3008.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z(32z^5 - 848z^4 + 7152z^3 - 22008z^2 + 20010z - 945)}{30720z} + \frac{\sqrt{\pi}(-64z^6 + 1728z^5 - 15120z^4 + 50400z^3 - 56700z^2 + 11340z + 945)\operatorname{erfi}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.3009.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(32z^5 + 848z^4 + 7152z^3 + 22008z^2 + 20010z + 945)}{30720z} + \frac{\sqrt{\pi}(64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945)\operatorname{erf}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.3010.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, 3; z\right) = \frac{4e^{z/2}(32z^6 - 928z^5 + 8784z^4 - 31776z^3 + 37938z^2 - 5670z - 945)I_1\left(\frac{z}{2}\right) - 8e^{z/2}(16z^5 - 480z^4 + 4848z^3 - 20064z^2 + 33075z - 17010)I_0\left(\frac{z}{2}\right)}{135135z}$$

07.25.03.3011.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z(64z^6 - 1984z^5 + 20208z^4 - 79008z^3 + 100716z^2 - 11340z - 2835)}{172032z^2} + \frac{1}{344064z^{5/2}}\sqrt{\pi}(-128z^7 + 4032z^6 - 42336z^5 + 176400z^4 - 264600z^3 + 79380z^2 + 13230z + 2835)\operatorname{erfi}(\sqrt{z})$$

07.25.03.3012.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(64z^6 + 1984z^5 + 20208z^4 + 79008z^3 + 100716z^2 + 11340z - 2835)}{172032z^2} + \frac{1}{344064z^{5/2}}\sqrt{\pi}(128z^7 + 4032z^6 + 42336z^5 + 176400z^4 + 264600z^3 + 79380z^2 - 13230z + 2835)\operatorname{erf}(\sqrt{z})$$

07.25.03.3013.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, 4; z\right) = \frac{4e^{z/2}(64z^7 - 2144z^6 + 24048z^5 - 107040z^4 + 167640z^3 - 39690z^2 - 12285z - 3780)I_1\left(\frac{z}{2}\right) - 4e^{z/2}(64z^6 - 2208z^5 + 26160z^4 - 130080z^3 + 264600z^2 - 171990z - 945)I_0\left(\frac{z}{2}\right)}{675675z^2}$$

07.25.03.3014.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 4544 z^6 + 54\,240 z^5 - 257\,232 z^4 + 422\,616 z^3 - 79\,380 z^2 - 35\,910 z - 14\,175)}{786\,432 z^3} + \frac{1}{1\,572\,864 z^{7/2}} (\sqrt{\pi} (-256 z^8 + 9216 z^7 - 112\,896 z^6 + 564\,480 z^5 - 1\,058\,400 z^4 + 423\,360 z^3 + 105\,840 z^2 + 45\,360 z + 14\,175) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.3015.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 4544 z^6 + 54\,240 z^5 + 257\,232 z^4 + 422\,616 z^3 + 79\,380 z^2 - 35\,910 z + 14\,175)}{786\,432 z^3} + \frac{1}{1\,572\,864 z^{7/2}} (\sqrt{\pi} (256 z^8 + 9216 z^7 + 112\,896 z^6 + 564\,480 z^5 + 1\,058\,400 z^4 + 423\,360 z^3 - 105\,840 z^2 + 45\,360 z - 14\,175) \operatorname{erf}(\sqrt{z}))$$

07.25.03.3016.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, 5; z\right) = \frac{1}{11\,486\,475 z^3} \frac{32 e^{z/2} (64 z^8 - 2432 z^7 + 31\,536 z^6 - 166\,656 z^5 + 323\,160 z^4 - 105\,840 z^3 - 46\,305 z^2 - 26\,460 z - 11\,340) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^7 - 2496 z^6 + 33\,936 z^5 - 197\,040 z^4 + 476\,280 z^3 - 370\,440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right)}{11\,486\,475 z^2}$$

07.25.03.3017.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{3\,145\,728 z^4} e^z (256 z^8 - 10\,240 z^7 + 140\,160 z^6 - 781\,440 z^5 + 1\,572\,864 z^4 - 423\,360 z^3 - 264\,600 z^2 - 189\,000 z - 99\,225) + \frac{1}{6\,291\,456 z^{9/2}} (\sqrt{\pi} (-512 z^9 + 20\,736 z^8 - 290\,304 z^7 + 1\,693\,440 z^6 - 3\,810\,240 z^5 + 1\,905\,120 z^4 + 635\,040 z^3 + 408\,240 z^2 + 255\,150 z + 99\,225) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.3018.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{3\,145\,728 z^4} e^{-z} (256 z^8 + 10\,240 z^7 + 140\,160 z^6 + 781\,440 z^5 + 1\,572\,864 z^4 + 423\,360 z^3 - 264\,600 z^2 + 189\,000 z - 99\,225) + \frac{1}{6\,291\,456 z^{9/2}} (\sqrt{\pi} (512 z^9 + 20\,736 z^8 + 290\,304 z^7 + 1\,693\,440 z^6 - 3\,810\,240 z^5 + 1\,905\,120 z^4 - 635\,040 z^3 + 408\,240 z^2 - 255\,150 z + 99\,225) \operatorname{erf}(\sqrt{z}))$$

$$\begin{aligned}
 & \text{07.25.03.3019.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{9}{2}; -\frac{9}{2}, 6; z\right) = \\
 & \frac{1}{43\,648\,605\,z^4} \left(32 e^{z/2} (128 z^9 - 5440 z^8 + 80\,064 z^7 - 489\,840 z^6 + 1\,132\,752 z^5 - 476\,280 z^4 - 264\,600 z^3 - \right. \\
 & \quad \left. 214\,515 z^2 - 170\,100 z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605 z^3} \right. \\
 & \quad \left. 32 e^{z/2} (128 z^8 - 5568 z^7 + 85\,440 z^6 - 567\,312 z^5 + 1\,587\,600 z^4 - 1\,428\,840 z^3 - 52\,920 z^2 - 42\,525 z - 22\,680) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{7}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{7}{2}$, $b_1 = -\frac{11}{2}$

$$\text{07.25.03.3020.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{e^z (8 z^3 - 100 z^2 + 522 z - 1089)}{1089}$$

$$\text{07.25.03.3021.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{99} e^z (4 z^2 - 36 z + 99)$$

$$\text{07.25.03.3022.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{1}{11} e^z (2 z - 11)$$

$$\text{07.25.03.3023.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{165} e^z (32 z^3 + 16 z^2 + 24 z + 165) - \frac{32}{165} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3024.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{165} e^{-z} (-32 z^3 + 16 z^2 - 24 z + 165) - \frac{32}{165} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.3025.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{33} e^z (-16 z^3 + 76 z^2 + 30 z + 33) + \frac{4}{33} \sqrt{\pi} (4 z^{7/2} - 21 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3026.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{33} e^{-z} (16 z^3 + 76 z^2 - 30 z + 33) + \frac{4}{33} \sqrt{\pi} (4 z^{7/2} + 21 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.3027.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{11} e^z (4 z^3 - 40 z^2 + 52 z + 11) - \frac{2}{11} \sqrt{\pi} (2 z^{7/2} - 21 z^{5/2} + 35 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3028.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{11} e^{-z} (-4 z^3 - 40 z^2 - 52 z + 11) - \frac{2}{11} \sqrt{\pi} (2 z^{7/2} + 21 z^{5/2} + 35 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3029.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{132} e^{-z} (-8z^3 + 122z^2 - 363z + 132) + \frac{1}{264} \sqrt{\pi} (16z^{7/2} - 252z^{5/2} + 840z^{3/2} - 525\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3030.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{132} e^{-z} (8z^3 + 122z^2 + 363z + 132) + \frac{1}{264} \sqrt{\pi} (16z^{7/2} + 252z^{5/2} + 840z^{3/2} + 525\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3031.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (32z^4 - 612z^3 + 2876z^2 - 3885z + 1155) I_0\left(\frac{z}{2}\right) - e^{z/2} (-32z^4 + 580z^3 - 2312z^2 + 1831z) I_1\left(\frac{z}{2}\right)}{1155}$$

07.25.03.3032.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^{-z} (-8z^3 + 164z^2 - 762z + 741)}{1056} + \frac{\sqrt{\pi} (16z^4 - 336z^3 + 1680z^2 - 2100z + 315) \operatorname{erfi}(\sqrt{z})}{2112\sqrt{z}}$$

07.25.03.3033.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (8z^3 + 164z^2 + 762z + 741)}{1056} + \frac{\sqrt{\pi} (16z^4 + 336z^3 + 1680z^2 + 2100z + 315) \operatorname{erf}(\sqrt{z})}{2112\sqrt{z}}$$

07.25.03.3034.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (64z^4 - 1560z^3 + 9924z^2 - 19740z + 10395) I_0\left(\frac{z}{2}\right) - e^{z/2} (-64z^4 + 1496z^3 - 8460z^2 + 11964z - 1365) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.3035.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (-32z^4 + 824z^3 - 5204z^2 + 8270z - 735)}{14080z} + \frac{\sqrt{\pi} (64z^5 - 1680z^4 + 11200z^3 - 21000z^2 + 6300z + 735) \operatorname{erfi}(\sqrt{z})}{28160z^{3/2}}$$

07.25.03.3036.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (32z^4 + 824z^3 + 5204z^2 + 8270z + 735)}{14080z} + \frac{\sqrt{\pi} (64z^5 + 1680z^4 + 11200z^3 + 21000z^2 + 6300z - 735) \operatorname{erf}(\sqrt{z})}{28160z^{3/2}}$$

07.25.03.3037.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, 3; z\right) = \frac{16 e^{z/2} (16z^4 - 474z^3 + 3804z^2 - 9975z + 7245) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (64z^5 - 1832z^4 + 13416z^3 - 27336z^2 + 6720z + 1575) I_1\left(\frac{z}{2}\right)}{114345z}$$

07.25.03.3038.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z(-16z^5 + 496z^4 - 3960z^3 + 8748z^2 - 1785z - 630)}{16896z^2} + \frac{\sqrt{\pi}(32z^6 - 1008z^5 + 8400z^4 - 21000z^3 + 9450z^2 + 2205z + 630)\operatorname{erfi}(\sqrt{z})}{33792z^{5/2}}$$

07.25.03.3039.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(16z^5 + 496z^4 + 3960z^3 + 8748z^2 + 1785z - 630)}{16896z^2} + \frac{\sqrt{\pi}(32z^6 + 1008z^5 + 8400z^4 + 21000z^3 + 9450z^2 - 2205z + 630)\operatorname{erf}(\sqrt{z})}{33792z^{5/2}}$$

07.25.03.3040.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2}(128z^5 - 4464z^4 + 43256z^3 - 140700z^2 + 128100z + 1785)I_0\left(\frac{z}{2}\right) - 4e^{z/2}(128z^6 - 4336z^5 + 38984z^4 - 103756z^3 + 39900z^2 + 16905z + 7140)I_1\left(\frac{z}{2}\right)}{495495z^2}$$

07.25.03.3041.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z(-128z^6 + 4640z^5 - 44784z^4 + 126768z^3 - 42000z^2 - 25830z - 14175)}{270336z^3} + \frac{1}{540672z^{7/2}}\sqrt{\pi}(256z^7 - 9408z^6 + 94080z^5 - 294000z^4 + 176400z^3 + 61740z^2 + 35280z + 14175)\operatorname{erfi}(\sqrt{z})$$

07.25.03.3042.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(128z^6 + 4640z^5 + 44784z^4 + 126768z^3 + 42000z^2 - 25830z + 14175)}{270336z^3} + \frac{1}{540672z^{7/2}}\sqrt{\pi}(256z^7 + 9408z^6 + 94080z^5 + 294000z^4 + 176400z^3 - 61740z^2 + 35280z - 14175)\operatorname{erf}(\sqrt{z})$$

07.25.03.3043.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2}(128z^6 - 5136z^5 + 58320z^4 - 226380z^3 + 245700z^2 + 10395z + 5985)I_0\left(\frac{z}{2}\right) - 32e^{z/2}(128z^7 - 5008z^6 + 53376z^5 - 175380z^4 + 92400z^3 + 54495z^2 + 41580z + 23940)I_1\left(\frac{z}{2}\right)}{7432425z^3}$$

07.25.03.3044.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{2883584z^{9/2}}\left(3\sqrt{\pi}(256z^8 - 10752z^7 + 125440z^6 - 470400z^5 + 352800z^4 + 164640z^3 + 141120z^2 + 113400z + 55125)\operatorname{erfi}(\sqrt{z})\right) - \frac{3e^z(128z^7 - 5312z^6 + 60128z^5 - 207632z^4 + 96600z^3 + 80220z^2 + 76650z + 55125)}{1441792z^4}$$

$$\begin{aligned}
 & \text{07.25.03.3045.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{3 e^{-z} (128 z^7 + 5312 z^6 + 60128 z^5 + 207632 z^4 + 96600 z^3 - 80220 z^2 + 76650 z - 55125)}{1441792 z^4} + \frac{1}{2883584 z^{9/2}} \\
 & \left(3 \sqrt{\pi} (256 z^8 + 10752 z^7 + 125440 z^6 + 470400 z^5 + 352800 z^4 - 164640 z^3 + 141120 z^2 - 113400 z + 55125) \operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3046.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{25270245 z^3} \\
 & 32 e^{z/2} (256 z^7 - 11616 z^6 + 151248 z^5 - 682080 z^4 + 855540 z^3 + 71190 z^2 + 75285 z + 52920) I_0\left(\frac{z}{2}\right) - \frac{1}{25270245 z^4} \\
 & \left(32 e^{z/2} (256 z^8 - 11360 z^7 + 140016 z^6 - 547488 z^5 + 367500 z^4 + 272790 z^3 + 291375 z^2 + 301140 z + 211680) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{7}{2}$, $b_1 = -\frac{9}{2}$

$$\text{07.25.03.3047.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{1}{9} e^z (2z - 9)$$

$$\text{07.25.03.3048.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = e^z$$

$$\text{07.25.03.3049.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (8z^3 + 4z^2 + 6z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3050.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.3051.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3} \sqrt{\pi} (2z^{7/2} - 7z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3052.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (4z^3 + 12z^2 - 4z + 3) + \frac{2}{3} \sqrt{\pi} (2z^{7/2} + 7z^{5/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.3053.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{2} e^z (2z^3 - 13z^2 + 12z + 2) + \frac{1}{4} \sqrt{\pi} (-4z^{7/2} + 28z^{5/2} - 35z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3054.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2} e^{-z} (-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4} \sqrt{\pi} (-4z^{7/2} - 28z^{5/2} - 35z^{3/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.3055.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{24} e^z (-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48} \sqrt{\pi} (8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3056.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{24} e^{-z} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} \sqrt{\pi} (8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3057.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8z^4 - 104z^3 + 376z^2 - 420z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} (2z^4 - 24z^3 + 71z^2 - 44z) I_1\left(\frac{z}{2}\right)$$

07.25.03.3058.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{384} e^z (-8z^3 + 108z^2 - 370z + 279) + \frac{\sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.3059.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} e^{-z} (8z^3 + 108z^2 + 370z + 279) + \frac{\sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.3060.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (16z^4 - 264z^3 + 1284z^2 - 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16z^4 + 248z^3 - 1044z^2 + 1164z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.3061.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16z^4 + 272z^3 - 1272z^2 + 1580z - 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.3062.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (16z^4 + 272z^3 + 1272z^2 + 1580z + 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.3063.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, 3; z\right) = \frac{4 e^{z/2} (16z^4 - 320z^3 + 1956z^2 - 4200z + 2625) I_0\left(\frac{z}{2}\right)}{10395} - \frac{4 e^{z/2} (16z^5 - 304z^4 + 1660z^3 - 2676z^2 + 525z + 105) I_1\left(\frac{z}{2}\right)}{10395z}$$

07.25.03.3064.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (-32z^5 + 656z^4 - 3888z^3 + 6744z^2 - 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi} (64z^6 - 1344z^5 + 8400z^4 - 16800z^3 + 6300z^2 + 1260z + 315) \operatorname{erfi}(\sqrt{z})}{24576z^{5/2}}$$

$$\begin{aligned}
 & \text{07.25.03.3065.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) &= \frac{e^{-z} (32 z^5 + 656 z^4 + 3888 z^3 + 6744 z^2 + 1050 z - 315)}{12\,288 z^2} + \\
 & \frac{\sqrt{\pi} (64 z^6 + 1344 z^5 + 8400 z^4 + 16\,800 z^3 + 6300 z^2 - 1260 z + 315) \operatorname{erf}(\sqrt{z})}{24\,576 z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3066.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, 4; z\right) &= \frac{4 e^{z/2} (32 z^5 - 752 z^4 + 5536 z^3 - 14\,700 z^2 + 11\,550 z + 105) I_0\left(\frac{z}{2}\right)}{45\,045 z} - \\
 & \frac{4 e^{z/2} (32 z^6 - 720 z^5 + 4832 z^4 - 10\,196 z^3 + 3150 z^2 + 1155 z + 420) I_1\left(\frac{z}{2}\right)}{45\,045 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3067.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) &= \frac{e^z (-64 z^6 + 1536 z^5 - 11\,024 z^4 + 24\,576 z^3 - 6300 z^2 - 3360 z - 1575)}{49\,152 z^3} + \\
 & \frac{\sqrt{\pi} (128 z^7 - 3136 z^6 + 23\,520 z^5 - 58\,800 z^4 + 29\,400 z^3 + 8820 z^2 + 4410 z + 1575) \operatorname{erfi}(\sqrt{z})}{98\,304 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3068.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) &= \frac{e^{-z} (64 z^6 + 1536 z^5 + 11\,024 z^4 + 24\,576 z^3 + 6300 z^2 - 3360 z + 1575)}{49\,152 z^3} + \\
 & \frac{\sqrt{\pi} (128 z^7 + 3136 z^6 + 23\,520 z^5 + 58\,800 z^4 + 29\,400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{98\,304 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3069.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, 5; z\right) &= \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23\,520 z^3 + 22\,050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right)}{675\,675 z^2} - \\
 & \frac{64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675\,675 z^3}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3070.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) &= \frac{1}{1\,048\,576 z^{9/2}} \\
 & \frac{3 \sqrt{\pi} (256 z^8 - 7168 z^7 + 62\,720 z^6 - 188\,160 z^5 + 117\,600 z^4 + 47\,040 z^3 + 35\,280 z^2 + 25\,200 z + 11\,025) \operatorname{erfi}(\sqrt{z})}{524\,288 z^4} - \\
 & \frac{3 e^z (128 z^7 - 3520 z^6 + 29\,664 z^5 - 80\,848 z^4 + 29\,400 z^3 + 21\,420 z^2 + 17\,850 z + 11\,025)}{524\,288 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3071.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) &= \\
 & \frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29\,664 z^5 + 80\,848 z^4 + 29\,400 z^3 - 21\,420 z^2 + 17\,850 z - 11\,025)}{524\,288 z^4} + \frac{1}{1\,048\,576 z^{9/2}} \\
 & \frac{3 \sqrt{\pi} (256 z^8 + 7168 z^7 + 62\,720 z^6 + 188\,160 z^5 + 117\,600 z^4 - 47\,040 z^3 + 35\,280 z^2 - 25\,200 z + 11\,025) \operatorname{erf}(\sqrt{z})}{524\,288 z^4}
 \end{aligned}$$

07.25.03.3072.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right) - \frac{1}{2297295 z^4} 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)}{2297295 z^3}$$

For fixed z and $a_1 = -\frac{9}{2}, a_2 = -\frac{7}{2}, b_1 = -\frac{7}{2}$

07.25.03.3073.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{105} e^z (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.3074.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)$$

07.25.03.3075.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (-8 z^4 + 32 z^3 + 12 z^2 + 12 z + 15) + \frac{4}{15} \sqrt{\pi} (2 z^{9/2} - 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3076.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-8 z^4 - 32 z^3 + 12 z^2 - 12 z + 15) - \frac{4}{15} \sqrt{\pi} (2 z^{9/2} + 9 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3077.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (2 z^4 - 17 z^3 + 24 z^2 + 6 z + 3) + \frac{1}{6} \sqrt{\pi} (-4 z^{9/2} + 36 z^{7/2} - 63 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3078.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (2 z^4 + 17 z^3 + 24 z^2 - 6 z + 3) + \frac{1}{6} \sqrt{\pi} (4 z^{9/2} + 36 z^{7/2} + 63 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3079.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{12} e^z (-4 z^4 + 52 z^3 - 165 z^2 + 96 z + 12) + \frac{1}{24} \sqrt{\pi} (8 z^{9/2} - 108 z^{7/2} + 378 z^{5/2} - 315 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3080.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{12} e^{-z} (-4 z^4 - 52 z^3 - 165 z^2 - 96 z + 12) + \frac{1}{24} \sqrt{\pi} (-8 z^{9/2} - 108 z^{7/2} - 378 z^{5/2} - 315 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3081.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{192} e^z (8 z^4 - 140 z^3 + 690 z^2 - 975 z + 192) + \frac{1}{384} \sqrt{\pi} (-16 z^{9/2} + 288 z^{7/2} - 1512 z^{5/2} + 2520 z^{3/2} - 945 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3082.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{192} e^{-z} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3083.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-16z^5 + 336z^4 - 2220z^3 + 5484z^2 - 4725z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^5 - 320z^4 + 1908z^3 - 3720z^2 + 1689z) I_1\left(\frac{z}{2}\right)$$

07.25.03.3084.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z (16z^4 - 352z^3 + 2352z^2 - 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945) \operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.3085.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.3086.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (-32z^5 + 816z^4 - 6816z^3 + 22524z^2 - 28350z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2} (32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.3087.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (32z^5 - 848z^4 + 7152z^3 - 22008z^2 + 20010z - 945)}{30720z} + \frac{\sqrt{\pi} (-64z^6 + 1728z^5 - 15120z^4 + 50400z^3 - 56700z^2 + 11340z + 945) \operatorname{erfi}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.3088.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (32z^5 + 848z^4 + 7152z^3 + 22008z^2 + 20010z + 945)}{30720z} + \frac{\sqrt{\pi} (64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945) \operatorname{erf}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.3089.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (32 z^6 - 928 z^5 + 8784 z^4 - 31776 z^3 + 37938 z^2 - 5670 z - 945) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (16 z^5 - 480 z^4 + 4848 z^3 - 20064 z^2 + 33075 z - 17010) I_0\left(\frac{z}{2}\right)}{135135 z}$$

07.25.03.3090.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (64 z^6 - 1984 z^5 + 20208 z^4 - 79008 z^3 + 100716 z^2 - 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (-128 z^7 + 4032 z^6 - 42336 z^5 + 176400 z^4 - 264600 z^3 + 79380 z^2 + 13230 z + 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3091.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1984 z^5 + 20208 z^4 + 79008 z^3 + 100716 z^2 + 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835) \operatorname{erf}(\sqrt{z})$$

07.25.03.3092.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^7 - 2144 z^6 + 24048 z^5 - 107040 z^4 + 167640 z^3 - 39690 z^2 - 12285 z - 3780) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (64 z^6 - 2208 z^5 + 26160 z^4 - 130080 z^3 + 264600 z^2 - 171990 z - 945) I_0\left(\frac{z}{2}\right)}{675675 z^2}$$

07.25.03.3093.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 4544 z^6 + 54240 z^5 - 257232 z^4 + 422616 z^3 - 79380 z^2 - 35910 z - 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} \left(\sqrt{\pi} (-256 z^8 + 9216 z^7 - 112896 z^6 + 564480 z^5 - 1058400 z^4 + 423360 z^3 + 105840 z^2 + 45360 z + 14175) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.3094.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 4544 z^6 + 54240 z^5 + 257232 z^4 + 422616 z^3 + 79380 z^2 - 35910 z + 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} \sqrt{\pi} (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175) \operatorname{erf}(\sqrt{z})$$

07.25.03.3095.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{11486475 z^3} - \frac{32 e^{z/2} (64 z^8 - 2432 z^7 + 31536 z^6 - 166656 z^5 + 323160 z^4 - 105840 z^3 - 46305 z^2 - 26460 z - 11340) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^7 - 2496 z^6 + 33936 z^5 - 197040 z^4 + 476280 z^3 - 370440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right)}{11486475 z^2}$$

$$\begin{aligned}
 & \text{07.25.03.3096.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{3\,145\,728\,z^4} e^z (256\,z^8 - 10\,240\,z^7 + 140\,160\,z^6 - 781\,440\,z^5 + 1\,572\,864\,z^4 - 423\,360\,z^3 - 264\,600\,z^2 - 189\,000\,z - 99\,225) + \\
 & \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (-512\,z^9 + 20\,736\,z^8 - 290\,304\,z^7 + 1\,693\,440\,z^6 - \right. \\
 & \left. 3\,810\,240\,z^5 + 1\,905\,120\,z^4 + 635\,040\,z^3 + 408\,240\,z^2 + 255\,150\,z + 99\,225) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3097.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{3\,145\,728\,z^4} e^{-z} (256\,z^8 + 10\,240\,z^7 + 140\,160\,z^6 + 781\,440\,z^5 + 1\,572\,864\,z^4 + 423\,360\,z^3 - 264\,600\,z^2 + 189\,000\,z - 99\,225) + \\
 & \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (512\,z^9 + 20\,736\,z^8 + 290\,304\,z^7 + 1\,693\,440\,z^6 + \right. \\
 & \left. 3\,810\,240\,z^5 + 1\,905\,120\,z^4 - 635\,040\,z^3 + 408\,240\,z^2 - 255\,150\,z + 99\,225) \operatorname{erf}(\sqrt{-z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3098.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{7}{2}; -\frac{7}{2}, 6; z\right) = \\
 & \frac{1}{43\,648\,605\,z^4} \left(32\,e^{z/2} (128\,z^9 - 5440\,z^8 + 80\,064\,z^7 - 489\,840\,z^6 + 1\,132\,752\,z^5 - 476\,280\,z^4 - 264\,600\,z^3 - \right. \\
 & \left. 214\,515\,z^2 - 170\,100\,z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \right. \\
 & \left. 32\,e^{z/2} (128\,z^8 - 5568\,z^7 + 85\,440\,z^6 - 567\,312\,z^5 + 1\,587\,600\,z^4 - 1\,428\,840\,z^3 - 52\,920\,z^2 - 42\,525\,z - 22\,680) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{5}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{5}{2}$, $b_1 = -\frac{11}{2}$

$$\text{07.25.03.3099.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{e^z (16\,z^4 - 208\,z^3 + 1344\,z^2 - 4788\,z + 7623)}{7623}$$

$$\text{07.25.03.3100.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{693} e^z (8\,z^3 - 84\,z^2 + 378\,z - 693)$$

$$\text{07.25.03.3101.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{77} e^z (4\,z^2 - 32\,z + 77)$$

$$\text{07.25.03.3102.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{11} e^z (2\,z - 11)$$

07.25.03.3103.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{11} e^z (8z^2 + 4z + 11) - \frac{8}{11} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.3104.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{8}{11} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{11} e^{-z} (8z^2 - 4z + 11)$$

07.25.03.3105.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{11} e^z (-12z^2 + 34z + 11) + \frac{4}{11} \sqrt{\pi} (3z^{5/2} - 10z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3106.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{11} e^{-z} (-12z^2 - 34z + 11) - \frac{4}{11} \sqrt{\pi} (3z^{5/2} + 10z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3107.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{22} e^z (6z^2 - 37z + 22) + \frac{1}{44} \sqrt{\pi} (-12z^{5/2} + 80z^{3/2} - 75\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3108.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{22} e^{-z} (6z^2 + 37z + 22) + \frac{1}{44} \sqrt{\pi} (12z^{5/2} + 80z^{3/2} + 75\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3109.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{165} e^{z/2} (-24z^3 + 218z^2 - 420z + 165) I_0\left(\frac{z}{2}\right) + \frac{2}{165} e^{z/2} (12z^3 - 97z^2 + 119z) I_1\left(\frac{z}{2}\right)$$

07.25.03.3110.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{44} e^z (2z^2 - 19z + 29) + \frac{\sqrt{\pi} (-4z^3 + 40z^2 - 75z + 15) \operatorname{erfi}(\sqrt{z})}{88\sqrt{z}}$$

07.25.03.3111.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{44} e^{-z} (2z^2 + 19z + 29) + \frac{\sqrt{\pi} (4z^3 + 40z^2 + 75z + 15) \operatorname{erf}(\sqrt{z})}{88\sqrt{z}}$$

07.25.03.3112.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (-48z^3 + 596z^2 - 1710z + 1155) I_0\left(\frac{z}{2}\right)}{1155} + \frac{e^{z/2} (48z^3 - 548z^2 + 1186z - 195) I_1\left(\frac{z}{2}\right)}{1155}$$

07.25.03.3113.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (24z^3 - 308z^2 + 758z - 105)}{1408z} + \frac{\sqrt{\pi} (-48z^4 + 640z^3 - 1800z^2 + 720z + 105) \operatorname{erfi}(\sqrt{z})}{2816z^{3/2}}$$

07.25.03.3114.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (24z^3 + 308z^2 + 758z + 105)}{1408z} + \frac{\sqrt{\pi} (48z^4 + 640z^3 + 1800z^2 + 720z - 105) \operatorname{erf}(\sqrt{z})}{2816z^{3/2}}$$

07.25.03.3115.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, 3; z\right) = \frac{4e^{z/2} (16z^4 - 236z^3 + 732z^2 - 255z - 75) I_1\left(\frac{z}{2}\right)}{3465z} - \frac{4e^{z/2} (16z^3 - 252z^2 + 960z - 885) I_0\left(\frac{z}{2}\right)}{3465}$$

07.25.03.3116.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (24z^4 - 388z^3 + 1318z^2 - 405z - 180)}{2816z^2} + \frac{\sqrt{\pi} (-48z^5 + 800z^4 - 3000z^3 + 1800z^2 + 525z + 180) \operatorname{erfi}(\sqrt{z})}{5632z^{5/2}}$$

07.25.03.3117.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (24z^4 + 388z^3 + 1318z^2 + 405z - 180)}{2816z^2} + \frac{\sqrt{\pi} (48z^5 + 800z^4 + 3000z^3 + 1800z^2 - 525z + 180) \operatorname{erf}(\sqrt{z})}{5632z^{5/2}}$$

07.25.03.3118.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2} (96z^5 - 1736z^4 + 7012z^3 - 3780z^2 - 1965z - 1020) I_1\left(\frac{z}{2}\right) - 4e^{z/2} (96z^4 - 1832z^3 + 8700z^2 - 10020z - 255) I_0\left(\frac{z}{2}\right)}{38115z^2}$$

07.25.03.3119.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{7e^z (32z^5 - 624z^4 + 2704z^3 - 1320z^2 - 990z - 675)}{45056z^3} - \frac{7\sqrt{\pi} (64z^6 - 1280z^5 + 6000z^4 - 4800z^3 - 2100z^2 - 1440z - 675) \operatorname{erfi}(\sqrt{z})}{90112z^{7/2}}$$

07.25.03.3120.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} (32z^5 + 624z^4 + 2704z^3 + 1320z^2 - 990z + 675)}{45056z^3} + \frac{7\sqrt{\pi} (64z^6 + 1280z^5 + 6000z^4 + 4800z^3 - 2100z^2 + 1440z - 675) \operatorname{erf}(\sqrt{z})}{90112z^{7/2}}$$

07.25.03.3121.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, 5; z\right) = \frac{64e^{z/2} (48z^6 - 1028z^5 + 5116z^4 - 3750z^3 - 2685z^2 - 2460z - 1710) I_1\left(\frac{z}{2}\right) - 32e^{z/2} (96z^5 - 2152z^4 + 12240z^3 - 16800z^2 - 1230z - 855) I_0\left(\frac{z}{2}\right)}{495495z^2}$$

07.25.03.3122.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{3e^z (96z^6 - 2192z^5 + 11552z^4 - 7800z^3 - 7770z^2 - 8925z - 7875)}{90112z^4} - \frac{1}{180224z^{9/2}} 3\sqrt{\pi} (192z^7 - 4480z^6 + 25200z^5 - 25200z^4 - 14700z^3 - 15120z^2 - 14175z - 7875) \operatorname{erfi}(\sqrt{z})$$

$$\begin{aligned}
 &07.25.03.3123.01 \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) &= \frac{3 e^{-z} (96 z^6 + 2192 z^5 + 11552 z^4 + 7800 z^3 - 7770 z^2 + 8925 z - 7875)}{90112 z^4} + \\
 &\frac{1}{180224 z^{9/2}} 3 \sqrt{\pi} (192 z^7 + 4480 z^6 + 25200 z^5 + 25200 z^4 - 14700 z^3 + 15120 z^2 - 14175 z + 7875) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.3124.01 \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{11}{2}, 6; z\right) &= \frac{32 e^{z/2} (64 z^7 - 1584 z^6 + 9368 z^5 - 8700 z^4 - 7800 z^3 - 9915 z^2 - 12060 z - 10080) I_1\left(\frac{z}{2}\right)}{495495 z^4} - \\
 &\frac{32 e^{z/2} (64 z^6 - 1648 z^5 + 10920 z^4 - 17340 z^3 - 2400 z^2 - 3015 z - 2520) I_0\left(\frac{z}{2}\right)}{495495 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{5}{2}$, $b_1 = -\frac{9}{2}$

$$\begin{aligned}
 &07.25.03.3125.01 \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) &= \frac{1}{63} e^z (4 z^2 - 28 z + 63)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.3126.01 \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) &= -\frac{1}{7} e^z (2 z - 7)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.3127.01 \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) &= e^z
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.3128.01 \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) &= \frac{1}{3} e^z (4 z^2 + 2 z + 3) - \frac{4}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.3129.01 \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) &= \frac{4}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4 z^2 - 2 z + 3)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.3130.01 \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) &= e^z (-2 z^2 + 4 z + 1) + \sqrt{\pi} (2 z^{5/2} - 5 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.3131.01 \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) &= e^{-z} (-2 z^2 - 4 z + 1) + \sqrt{\pi} (-2 z^{5/2} - 5 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.3132.01 \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) &= \frac{1}{4} e^z (2 z^2 - 9 z + 4) + \frac{1}{8} \sqrt{\pi} (-4 z^{5/2} + 20 z^{3/2} - 15 \sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.3133.01 \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) &= \frac{1}{4} e^{-z} (2 z^2 + 9 z + 4) + \frac{1}{8} \sqrt{\pi} (4 z^{5/2} + 20 z^{3/2} + 15 \sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.3134.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-4z^3 + 28z^2 - 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^3 - 24z^2 + 23z) I_1\left(\frac{z}{2}\right)$$

07.25.03.3135.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{48} e^z (4z^2 - 28z + 33) + \frac{\sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.3136.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{48} e^{-z} (4z^2 + 28z + 33) + \frac{\sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.3137.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-8z^3 + 76z^2 - 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 - 68z^2 + 116z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.3138.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^3 - 76z^2 + 146z - 15)}{256z} + \frac{\sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.3139.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^3 + 76z^2 + 146z + 15)}{256z} + \frac{\sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.3140.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, 3; z\right) = \frac{4 e^{z/2} (8z^4 - 88z^3 + 216z^2 - 60z - 15) I_1\left(\frac{z}{2}\right)}{945z} - \frac{16}{945} e^{z/2} (2z^3 - 24z^2 + 75z - 60) I_0\left(\frac{z}{2}\right)$$

07.25.03.3141.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (16z^4 - 192z^3 + 512z^2 - 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.3142.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16z^4 + 192z^3 + 512z^2 + 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.3143.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (16z^5 - 216z^4 + 692z^3 - 300z^2 - 135z - 60) I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4 e^{z/2} (16z^4 - 232z^3 + 900z^2 - 900z - 15) I_0\left(\frac{z}{2}\right)}{3465z}$$

$$\begin{aligned}
 & \text{07.25.03.3144.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) &= \frac{7 e^z (32 z^5 - 464 z^4 + 1584 z^3 - 600 z^2 - 390 z - 225)}{24\,576 z^3} - \\
 & \frac{7 \sqrt{\pi} (64 z^6 - 960 z^5 + 3600 z^4 - 2400 z^3 - 900 z^2 - 540 z - 225) \operatorname{erfi}(\sqrt{z})}{49\,152 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3145.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) &= \frac{7 e^{-z} (32 z^5 + 464 z^4 + 1584 z^3 + 600 z^2 - 390 z + 225)}{24\,576 z^3} + \\
 & \frac{7 \sqrt{\pi} (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225) \operatorname{erf}(\sqrt{z})}{49\,152 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3146.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, 5; z\right) &= \frac{32 e^{z/2} (16 z^6 - 256 z^5 + 1012 z^4 - 600 z^3 - 375 z^2 - 300 z - 180) I_1\left(\frac{z}{2}\right)}{45\,045 z^3} - \\
 & \frac{32 e^{z/2} (16 z^5 - 272 z^4 + 1260 z^3 - 1500 z^2 - 75 z - 45) I_0\left(\frac{z}{2}\right)}{45\,045 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3147.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) &= \frac{3 e^z (64 z^6 - 1088 z^5 + 4528 z^4 - 2400 z^3 - 2100 z^2 - 2100 z - 1575)}{32\,768 z^4} - \\
 & \frac{3 \sqrt{\pi} (128 z^7 - 2240 z^6 + 10\,080 z^5 - 8400 z^4 - 4200 z^3 - 3780 z^2 - 3150 z - 1575) \operatorname{erfi}(\sqrt{z})}{65\,536 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3148.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) &= \frac{3 e^{-z} (64 z^6 + 1088 z^5 + 4528 z^4 + 2400 z^3 - 2100 z^2 + 2100 z - 1575)}{32\,768 z^4} + \\
 & \frac{3 \sqrt{\pi} (128 z^7 + 2240 z^6 + 10\,080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575) \operatorname{erf}(\sqrt{z})}{65\,536 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3149.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{9}{2}, 6; z\right) &= \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right)}{135\,135 z^4} - \\
 & \frac{32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135\,135 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{5}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.3150.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) &= \frac{32}{735} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{735} e^z (-32 z^4 - 16 z^3 - 24 z^2 - 60 z + 735)
 \end{aligned}$$

07.25.03.3151.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{735} e^{-z} (-32z^4 + 16z^3 - 24z^2 + 60z + 735) - \frac{32}{735} \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.3152.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{105} e^z (16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.3153.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

07.25.03.3154.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{21} e^z (-4z^4 - 2z^3 + 60z^2 + 24z + 21) + \frac{1}{21} \sqrt{\pi} (4z^{9/2} - 63z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3155.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{21} e^{-z} (-4z^4 + 2z^3 + 60z^2 - 24z + 21) + \frac{1}{21} \sqrt{\pi} (63z^{5/2} - 4z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3156.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{21} e^z (2z^4 + z^3 - 93z^2 + 114z + 21) + \frac{1}{42} \sqrt{\pi} (-4z^{9/2} + 189z^{5/2} - 315z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3157.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{21} e^{-z} (2z^4 - z^3 - 93z^2 - 114z + 21) + \frac{1}{42} \sqrt{\pi} (4z^{9/2} - 189z^{5/2} - 315z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3158.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{672} e^z (-8z^4 - 4z^3 + 750z^2 - 2157z + 672) + \frac{\sqrt{\pi} (16z^{9/2} - 1512z^{5/2} + 5040z^{3/2} - 2835\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1344}$$

07.25.03.3159.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{672} e^{-z} (-8z^4 + 4z^3 + 750z^2 + 2157z + 672) + \frac{\sqrt{\pi} (-16z^{9/2} + 1512z^{5/2} + 5040z^{3/2} + 2835\sqrt{z}) \operatorname{erf}(\sqrt{z})}{1344}$$

07.25.03.3160.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (32z^5 - 24z^4 - 3984z^3 + 19488z^2 - 24570z + 6615) I_0\left(\frac{z}{2}\right) - 2e^{z/2} (16z^5 + 4z^4 - 1980z^3 + 7782z^2 - 5439z) I_1\left(\frac{z}{2}\right)}{6615}$$

$$\begin{aligned}
 & \text{07.25.03.3161.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \\
 & \frac{e^z (-8z^4 - 4z^3 + 1254z^2 - 5685z + 4830)}{6720} + \frac{\sqrt{\pi} (16z^5 - 2520z^3 + 12600z^2 - 14175z + 1890) \operatorname{erfi}(\sqrt{z})}{13440\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3162.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \\
 & \frac{e^{-z} (-8z^4 + 4z^3 + 1254z^2 + 5685z + 4830)}{6720} + \frac{\sqrt{\pi} (-16z^5 + 2520z^3 + 12600z^2 + 14175z + 1890) \operatorname{erf}(\sqrt{z})}{13440\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3163.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (64z^5 - 48z^4 - 12504z^3 + 82068z^2 - 151200z + 72765) I_0\left(\frac{z}{2}\right)}{72765} + \\
 & \frac{e^{z/2} (-64z^5 - 16z^4 + 12456z^3 - 69684z^2 + 87528z - 8505) I_1\left(\frac{z}{2}\right)}{72765}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3164.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (-32z^5 - 16z^4 + 7536z^3 - 46680z^2 + 65310z - 4725)}{107520z} + \\
 & \frac{\sqrt{\pi} (64z^6 - 15120z^4 + 100800z^3 - 170100z^2 + 45360z + 4725) \operatorname{erfi}(\sqrt{z})}{215040z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3165.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-32z^5 + 16z^4 + 7536z^3 + 46680z^2 + 65310z + 4725)}{107520z} + \\
 & \frac{\sqrt{\pi} (-64z^6 + 15120z^4 + 100800z^3 + 170100z^2 + 45360z - 4725) \operatorname{erf}(\sqrt{z})}{215040z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3166.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, 3; z\right) = \frac{4e^{z/2} (64z^5 - 48z^4 - 18048z^3 + 148596z^2 - 359100z + 239085) I_0\left(\frac{z}{2}\right)}{945945} - \\
 & \frac{4e^{z/2} (64z^6 + 16z^5 - 18000z^4 + 130668z^3 - 237216z^2 + 50085z + 10395) I_1\left(\frac{z}{2}\right)}{945945z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3167.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (-32z^6 - 16z^5 + 10560z^4 - 82968z^3 + 162078z^2 - 27405z - 8505)}{301056z^2} + \\
 & \frac{\sqrt{\pi} (64z^7 - 21168z^5 + 176400z^4 - 396900z^3 + 158760z^2 + 33075z + 8505) \operatorname{erfi}(\sqrt{z})}{602112z^{5/2}}
 \end{aligned}$$

07.25.03.3168.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(-32z^6 + 16z^5 + 10560z^4 + 82968z^3 + 162078z^2 + 27405z - 8505)}{301056z^2} + \frac{\sqrt{\pi}(-64z^7 + 21168z^5 + 176400z^4 + 396900z^3 + 158760z^2 - 33075z + 8505)\operatorname{erf}(\sqrt{z})}{602112z^{5/2}}$$

07.25.03.3169.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, 4; z\right) = \frac{4e^{z/2}(128z^6 - 96z^5 - 49200z^4 + 487200z^3 - 1455300z^2 + 1215270z + 12285)I_0\left(\frac{z}{2}\right) - \frac{1}{4729725z^2}4e^{z/2}(128z^7 + 32z^6 - 49104z^5 + 438240z^4 - 1041180z^3 + 345870z^2 + 131355z + 49140)I_1\left(\frac{z}{2}\right)}{4729725z}$$

07.25.03.3170.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z(-128z^7 - 64z^6 + 56352z^5 - 536496z^4 + 1346856z^3 - 374220z^2 - 206010z - 99225)}{2752512z^3} + \frac{1}{5505024z^{7/2}} + \frac{\sqrt{\pi}(256z^8 - 112896z^6 + 1128960z^5 - 3175200z^4 + 1693440z^3 + 529200z^2 + 272160z + 99225)\operatorname{erfi}(\sqrt{z})}{5505024z^{7/2}}$$

07.25.03.3171.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(-128z^7 + 64z^6 + 56352z^5 + 536496z^4 + 1346856z^3 + 374220z^2 - 206010z + 99225)}{2752512z^3} + \frac{1}{5505024z^{7/2}} + \frac{\sqrt{\pi}(-256z^8 + 112896z^6 + 1128960z^5 + 3175200z^4 + 1693440z^3 - 529200z^2 + 272160z - 99225)\operatorname{erf}(\sqrt{z})}{5505024z^{7/2}}$$

07.25.03.3172.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{80405325z^2} + \frac{32e^{z/2}(128z^7 - 96z^6 - 64320z^5 + 744240z^4 - 2646000z^3 + 2632770z^2 + 83160z + 42525)I_0\left(\frac{z}{2}\right) - \frac{1}{80405325z^3}}{80405325z^2} + \frac{64e^{z/2}(64z^8 + 16z^7 - 32112z^6 + 340080z^5 - 998760z^4 + 456435z^3 + 242865z^2 + 166320z + 85050)I_1\left(\frac{z}{2}\right)}{80405325z^2}$$

07.25.03.3173.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{5505024z^4} e^z(-128z^8 - 64z^7 + 72480z^6 - 810672z^5 + 2487912z^4 - 979020z^3 - 735210z^2 - 628425z - 396900) + \frac{1}{11010048z^{9/2}} \left(\sqrt{\pi}(256z^9 - 145152z^7 + 1693440z^6 - 5715360z^5 + 3810240z^4 + 1587600z^3 + 1224720z^2 + 893025z + 396900)\operatorname{erfi}(\sqrt{z}) \right)$$

$$\begin{aligned}
 & \text{07.25.03.3174.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{5\,505\,024\,z^4} e^{-z} (-128\,z^8 + 64\,z^7 + 72\,480\,z^6 + 810\,672\,z^5 + 2\,487\,912\,z^4 + 979\,020\,z^3 - 735\,210\,z^2 + 628\,425\,z - 396\,900) + \\
 & \frac{1}{11\,010\,048\,z^{9/2}} \left(\sqrt{\pi} (-256\,z^9 + 145\,152\,z^7 + 1\,693\,440\,z^6 + 5\,715\,360\,z^5 + \right. \\
 & \left. 3\,810\,240\,z^4 - 1\,587\,600\,z^3 + 1\,224\,720\,z^2 - 893\,025\,z + 396\,900) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3175.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{305\,540\,235\,z^3} \left(32\,e^{z/2} \right. \\
 & \left. (256\,z^8 - 192\,z^7 - 162\,912\,z^6 + 2\,156\,784\,z^5 - 8\,890\,560\,z^4 + 10\,213\,560\,z^3 + 648\,270\,z^2 + 615\,195\,z + 385\,560) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{305\,540\,235\,z^4} \left(32\,e^{z/2} (256\,z^9 + 64\,z^8 - 162\,720\,z^7 + 1\,994\,352\,z^6 - 6\,976\,704\,z^5 + 4\,074\,840\,z^4 + \right. \right. \\
 & \left. \left. 2\,738\,610\,z^3 + 2\,641\,275\,z^2 + 2\,460\,780\,z + 1\,542\,240) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{5}{2}$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.3176.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (-8\,z^4 + 32\,z^3 + 12\,z^2 + 12\,z + 15) + \frac{4}{15} \sqrt{\pi} (2\,z^{9/2} - 9\,z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3177.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-8\,z^4 - 32\,z^3 + 12\,z^2 - 12\,z + 15) - \frac{4}{15} \sqrt{\pi} (2\,z^{9/2} + 9\,z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3178.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (2\,z^4 - 17\,z^3 + 24\,z^2 + 6\,z + 3) + \frac{1}{6} \sqrt{\pi} (-4\,z^{9/2} + 36\,z^{7/2} - 63\,z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3179.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (2\,z^4 + 17\,z^3 + 24\,z^2 - 6\,z + 3) + \frac{1}{6} \sqrt{\pi} (4\,z^{9/2} + 36\,z^{7/2} + 63\,z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3180.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{12} e^z (-4\,z^4 + 52\,z^3 - 165\,z^2 + 96\,z + 12) + \frac{1}{24} \sqrt{\pi} (8\,z^{9/2} - 108\,z^{7/2} + 378\,z^{5/2} - 315\,z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3181.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \\
 & \frac{1}{12} e^{-z} (-4\,z^4 - 52\,z^3 - 165\,z^2 - 96\,z + 12) + \frac{1}{24} \sqrt{\pi} (-8\,z^{9/2} - 108\,z^{7/2} - 378\,z^{5/2} - 315\,z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.3182.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{192} e^z (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3183.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{192} e^{-z} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3184.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-16z^5 + 336z^4 - 2220z^3 + 5484z^2 - 4725z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^5 - 320z^4 + 1908z^3 - 3720z^2 + 1689z) I_1\left(\frac{z}{2}\right)$$

07.25.03.3185.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{e^z (16z^4 - 352z^3 + 2352z^2 - 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945) \operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.3186.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.3187.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (-32z^5 + 816z^4 - 6816z^3 + 22524z^2 - 28350z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2} (32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.3188.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (32z^5 - 848z^4 + 7152z^3 - 22008z^2 + 20010z - 945)}{30720z} + \frac{\sqrt{\pi} (-64z^6 + 1728z^5 - 15120z^4 + 50400z^3 - 56700z^2 + 11340z + 945) \operatorname{erfi}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.3189.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 848 z^4 + 7152 z^3 + 22008 z^2 + 20010 z + 945)}{30720 z} + \frac{\sqrt{\pi} (64 z^6 + 1728 z^5 + 15120 z^4 + 50400 z^3 + 56700 z^2 + 11340 z - 945) \operatorname{erf}(\sqrt{z})}{61440 z^{3/2}}$$

07.25.03.3190.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (32 z^6 - 928 z^5 + 8784 z^4 - 31776 z^3 + 37938 z^2 - 5670 z - 945) I_1\left(\frac{z}{2}\right)}{135135 z} - \frac{8 e^{z/2} (16 z^5 - 480 z^4 + 4848 z^3 - 20064 z^2 + 33075 z - 17010) I_0\left(\frac{z}{2}\right)}{135135}$$

07.25.03.3191.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (64 z^6 - 1984 z^5 + 20208 z^4 - 79008 z^3 + 100716 z^2 - 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (-128 z^7 + 4032 z^6 - 42336 z^5 + 176400 z^4 - 264600 z^3 + 79380 z^2 + 13230 z + 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3192.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1984 z^5 + 20208 z^4 + 79008 z^3 + 100716 z^2 + 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835) \operatorname{erf}(\sqrt{z})$$

07.25.03.3193.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^7 - 2144 z^6 + 24048 z^5 - 107040 z^4 + 167640 z^3 - 39690 z^2 - 12285 z - 3780) I_1\left(\frac{z}{2}\right)}{675675 z^2} - \frac{4 e^{z/2} (64 z^6 - 2208 z^5 + 26160 z^4 - 130080 z^3 + 264600 z^2 - 171990 z - 945) I_0\left(\frac{z}{2}\right)}{675675 z}$$

07.25.03.3194.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 4544 z^6 + 54240 z^5 - 257232 z^4 + 422616 z^3 - 79380 z^2 - 35910 z - 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} \left(\sqrt{\pi} (-256 z^8 + 9216 z^7 - 112896 z^6 + 564480 z^5 - 1058400 z^4 + 423360 z^3 + 105840 z^2 + 45360 z + 14175) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.3195.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 4544 z^6 + 54240 z^5 + 257232 z^4 + 422616 z^3 + 79380 z^2 - 35910 z + 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} \sqrt{\pi} (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175) \operatorname{erf}(\sqrt{z})$$

07.25.03.3196.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, 5; z\right) = \frac{1}{11486475 z^3}$$

$$\frac{32 e^{z/2} (64 z^8 - 2432 z^7 + 31536 z^6 - 166656 z^5 + 323160 z^4 - 105840 z^3 - 46305 z^2 - 26460 z - 11340) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^7 - 2496 z^6 + 33936 z^5 - 197040 z^4 + 476280 z^3 - 370440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right)}{11486475 z^2}$$

07.25.03.3197.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{3145728 z^4} e^z (256 z^8 - 10240 z^7 + 140160 z^6 - 781440 z^5 + 1572864 z^4 - 423360 z^3 - 264600 z^2 - 189000 z - 99225) +$$

$$\frac{1}{6291456 z^{9/2}} \left(\sqrt{\pi} (-512 z^9 + 20736 z^8 - 290304 z^7 + 1693440 z^6 - 3810240 z^5 + 1905120 z^4 + 635040 z^3 + 408240 z^2 + 255150 z + 99225) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.3198.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{3145728 z^4} e^{-z} (256 z^8 + 10240 z^7 + 140160 z^6 + 781440 z^5 + 1572864 z^4 + 423360 z^3 - 264600 z^2 + 189000 z - 99225) +$$

$$\frac{1}{6291456 z^{9/2}} \left(\sqrt{\pi} (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + 408240 z^2 - 255150 z + 99225) \operatorname{erf}(\sqrt{-z}) \right)$$

07.25.03.3199.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{5}{2}; -\frac{5}{2}, 6; z\right) =$$

$$\frac{1}{43648605 z^4} \left(32 e^{z/2} (128 z^9 - 5440 z^8 + 80064 z^7 - 489840 z^6 + 1132752 z^5 - 476280 z^4 - 264600 z^3 - 214515 z^2 - 170100 z - 90720) I_1\left(\frac{z}{2}\right) - \frac{1}{43648605 z^3} \right)$$

$$32 e^{z/2} (128 z^8 - 5568 z^7 + 85440 z^6 - 567312 z^5 + 1587600 z^4 - 1428840 z^3 - 52920 z^2 - 42525 z - 22680) I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{3}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.3200.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{e^z (32 z^5 - 368 z^4 + 2480 z^3 - 10920 z^2 + 29610 z - 38115)}{38115}$$

07.25.03.3201.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{e^z (16z^4 - 160z^3 + 840z^2 - 2520z + 3465)}{3465}$$

07.25.03.3202.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{1}{385} e^z (8z^3 - 68z^2 + 250z - 385)$$

07.25.03.3203.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{55} e^z (4z^2 - 28z + 55)$$

07.25.03.3204.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = -\frac{1}{11} e^z (2z - 11)$$

07.25.03.3205.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{11} e^z (16z + 11) - \frac{16}{11} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.3206.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{11} e^{-z} (11 - 16z) - \frac{16}{11} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.3207.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{11} e^z (11 - 8z) + \frac{1}{11} \sqrt{\pi} (8z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3208.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{11} e^{-z} (8z + 11) + \frac{1}{11} \sqrt{\pi} (8z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3209.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{33} e^{z/2} (16z^2 - 57z + 33) I_0\left(\frac{z}{2}\right) + \frac{1}{33} e^{z/2} (41z - 16z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.3210.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{22} e^z (13 - 4z) + \frac{\sqrt{\pi} (8z^2 - 30z + 9) \operatorname{erfi}(\sqrt{z})}{44 \sqrt{z}}$$

07.25.03.3211.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{22} e^{-z} (4z + 13) + \frac{\sqrt{\pi} (8z^2 + 30z + 9) \operatorname{erf}(\sqrt{z})}{44 \sqrt{z}}$$

07.25.03.3212.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{165} e^{z/2} (32z^2 - 174z + 165) I_0\left(\frac{z}{2}\right) + \frac{1}{165} e^{z/2} (-32z^2 + 142z - 39) I_1\left(\frac{z}{2}\right)$$

07.25.03.3213.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16z^2 + 82z - 21)}{176z} + \frac{\sqrt{\pi} (32z^3 - 180z^2 + 108z + 21) \operatorname{erfi}(\sqrt{z})}{352 z^{3/2}}$$

07.25.03.3214.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(16z^2 + 82z + 21)}{176z} + \frac{\sqrt{\pi}(32z^3 + 180z^2 + 108z - 21)\operatorname{erf}(\sqrt{z})}{352z^{3/2}}$$

07.25.03.3215.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, 3; z\right) = \frac{8e^{z/2}(16z^2 - 117z + 150)I_0\left(\frac{z}{2}\right)}{1155} - \frac{4e^{z/2}(32z^3 - 202z^2 + 114z + 45)I_1\left(\frac{z}{2}\right)}{1155z}$$

07.25.03.3216.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi}(8z^4 - 60z^3 + 54z^2 + 21z + 9)\operatorname{erfi}(\sqrt{z})}{704z^{5/2}} - \frac{5e^z(4z^3 - 28z^2 + 15z + 9)}{352z^2}$$

07.25.03.3217.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}(4z^3 + 28z^2 + 15z - 9)}{352z^2} + \frac{5\sqrt{\pi}(8z^4 + 60z^3 + 54z^2 - 21z + 9)\operatorname{erf}(\sqrt{z})}{704z^{5/2}}$$

07.25.03.3218.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2}(64z^3 - 588z^2 + 942z + 51)I_0\left(\frac{z}{2}\right)}{3465z} - \frac{4e^{z/2}(64z^4 - 524z^3 + 450z^2 + 303z + 204)I_1\left(\frac{z}{2}\right)}{3465z^2}$$

07.25.03.3219.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(128z^5 - 1200z^4 + 1440z^3 + 840z^2 + 720z + 405)\operatorname{erfi}(\sqrt{z})}{22528z^{7/2}} - \frac{7e^z(64z^4 - 568z^3 + 468z^2 + 450z + 405)}{11264z^3}$$

07.25.03.3220.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}(64z^4 + 568z^3 + 468z^2 - 450z + 405)}{11264z^3} + \frac{7\sqrt{\pi}(128z^5 + 1200z^4 + 1440z^3 - 840z^2 + 720z - 405)\operatorname{erf}(\sqrt{z})}{22528z^{7/2}}$$

07.25.03.3221.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2}(64z^4 - 708z^3 + 1356z^2 + 195z + 171)I_0\left(\frac{z}{2}\right)}{38115z^2} - \frac{32e^{z/2}(64z^5 - 644z^4 + 744z^3 + 681z^2 + 780z + 684)I_1\left(\frac{z}{2}\right)}{38115z^3}$$

07.25.03.3222.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi}(128z^6 - 1440z^5 + 2160z^4 + 1680z^3 + 2160z^2 + 2430z + 1575)\operatorname{erfi}(\sqrt{z})}{90112z^{9/2}} - \frac{21e^z(64z^5 - 688z^4 + 768z^3 + 960z^2 + 1380z + 1575)}{45056z^4}$$

$$\begin{aligned}
 & \text{07.25.03.3223.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) &= \frac{21 e^{-z} (64 z^5 + 688 z^4 + 768 z^3 - 960 z^2 + 1380 z - 1575)}{45\,056 z^4} + \\
 & \frac{21 \sqrt{\pi} (128 z^6 + 1440 z^5 + 2160 z^4 - 1680 z^3 + 2160 z^2 - 2430 z + 1575) \operatorname{erf}(\sqrt{z})}{90\,112 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3224.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{11}{2}, 6; z\right) &= \frac{32 e^{z/2} (128 z^5 - 1656 z^4 + 3684 z^3 + 948 z^2 + 1467 z + 1512) I_0\left(\frac{z}{2}\right)}{99\,099 z^3} - \\
 & \frac{32 e^{z/2} (128 z^6 - 1528 z^5 + 2220 z^4 + 2532 z^3 + 3981 z^2 + 5868 z + 6048) I_1\left(\frac{z}{2}\right)}{99\,099 z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.3225.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) &= -\frac{1}{315} e^z (8 z^3 - 60 z^2 + 210 z - 315)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3226.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) &= \frac{1}{35} e^z (4 z^2 - 20 z + 35)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3227.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) &= -\frac{1}{5} e^z (2 z - 5)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3228.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) &= e^z
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3229.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) &= e^z (2 z + 1) - 2 \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3230.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) &= e^{-z} (1 - 2 z) - 2 \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3231.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) &= e^z (1 - z) + \frac{1}{2} \sqrt{\pi} (2 z^{3/2} - 3 \sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3232.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) &= e^{-z} (z + 1) + \frac{1}{2} \sqrt{\pi} (2 z^{3/2} + 3 \sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3233.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, 1; z\right) &= \frac{1}{3} e^{z/2} (2 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z - 2) z I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

07.25.03.3234.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{8} e^z (5 - 2z) + \frac{\sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.3235.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{8} e^{-z} (2z + 5) + \frac{\sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.3236.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4z^2 - 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4z^2 + 14z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.3237.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (-4z^2 + 16z - 3)}{32z} + \frac{\sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.3238.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (4z^2 + 16z + 3)}{32z} + \frac{\sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.3239.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 - 24z + 27) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4z^3 - 20z^2 + 9z + 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.3240.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5 e^z (8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.3241.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5\sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.3242.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 - 60z^2 + 84z + 3) I_0\left(\frac{z}{2}\right)}{315z} - \frac{4 e^{z/2} (8z^4 - 52z^3 + 36z^2 + 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.3243.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7 e^z (16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.3244.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7\sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

$$07.25.03.3245.01$$

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 - 72 z^3 + 120 z^2 + 12 z + 9) I_0\left(\frac{z}{2}\right)}{3465 z^2} - \frac{128 e^{z/2} (2 z^5 - 16 z^4 + 15 z^3 + 12 z^2 + 12 z + 9) I_1\left(\frac{z}{2}\right)}{3465 z^3}$$

$$07.25.03.3246.01$$

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{21 \sqrt{\pi} (64 z^6 - 576 z^5 + 720 z^4 + 480 z^3 + 540 z^2 + 540 z + 315) \operatorname{erfi}(\sqrt{z})}{32 768 z^{9/2}} - \frac{21 e^z (32 z^5 - 272 z^4 + 240 z^3 + 264 z^2 + 330 z + 315)}{16384 z^4}$$

$$07.25.03.3247.01$$

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (32 z^5 + 272 z^4 + 240 z^3 - 264 z^2 + 330 z - 315)}{16384 z^4} + \frac{21 \sqrt{\pi} (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315) \operatorname{erf}(\sqrt{z})}{32 768 z^{9/2}}$$

$$07.25.03.3248.01$$

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 168 z^4 + 324 z^3 + 60 z^2 + 81 z + 72) I_0\left(\frac{z}{2}\right)}{9009 z^3} - \frac{32 e^{z/2} (16 z^6 - 152 z^5 + 180 z^4 + 180 z^3 + 249 z^2 + 324 z + 288) I_1\left(\frac{z}{2}\right)}{9009 z^4}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{7}{2}$

$$07.25.03.3249.01$$

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{e^z (128 z^4 + 64 z^3 + 96 z^2 - 1650 z + 3675)}{3675} - \frac{128 \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})}{3675}$$

$$07.25.03.3250.01$$

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{128 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2}}{3675} + \frac{e^{-z} (128 z^4 - 64 z^3 + 96 z^2 + 1650 z + 3675)}{3675}$$

$$07.25.03.3251.01$$

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{64}{525} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{525} e^z (-64 z^4 - 32 z^3 - 48 z^2 - 120 z + 525)$$

$$07.25.03.3252.01$$

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{525} e^{-z} (-64 z^4 + 32 z^3 - 48 z^2 + 120 z + 525) - \frac{64}{525} \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})$$

$$07.25.03.3253.01$$

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{105} e^z (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.3254.01$$

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)$$

07.25.03.3255.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} e^z (-8z^4 - 4z^3 - 6z^2 + 300z + 105) + \frac{1}{105} \sqrt{\pi} (8z^{9/2} - 315z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3256.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} e^{-z} (-8z^4 + 4z^3 - 6z^2 - 300z + 105) + \frac{1}{105} \sqrt{\pi} (-8z^{9/2} - 315z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3257.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{840} e^z (8z^4 + 4z^3 + 6z^2 - 1245z + 840) + \frac{\sqrt{\pi} (-16z^{9/2} + 2520z^{3/2} - 2835\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1680}$$

07.25.03.3258.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{840} e^{-z} (8z^4 - 4z^3 + 6z^2 + 1245z + 840) + \frac{\sqrt{\pi} (16z^{9/2} + 2520z^{3/2} + 2835\sqrt{z}) \operatorname{erf}(\sqrt{z})}{1680}$$

07.25.03.3259.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (-128z^5 + 96z^4 + 60z^3 + 33180z^2 - 80325z + 33075) I_0\left(\frac{z}{2}\right)}{33075} + \frac{e^{z/2} (128z^5 + 32z^4 + 36z^3 - 33000z^2 + 47775z) I_1\left(\frac{z}{2}\right)}{33075}$$

07.25.03.3260.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z (8z^4 + 4z^3 + 6z^2 - 3135z + 5565)}{8400} + \frac{\sqrt{\pi} (-16z^5 + 6300z^2 - 14175z + 2835) \operatorname{erfi}(\sqrt{z})}{16800\sqrt{z}}$$

07.25.03.3261.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (8z^4 - 4z^3 + 6z^2 + 3135z + 5565)}{8400} + \frac{\sqrt{\pi} (16z^5 + 6300z^2 + 14175z + 2835) \operatorname{erf}(\sqrt{z})}{16800\sqrt{z}}$$

07.25.03.3262.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (-256z^5 + 192z^4 + 120z^3 + 145740z^2 - 517860z + 363825) I_0\left(\frac{z}{2}\right)}{363825} + \frac{e^{z/2} (256z^5 + 64z^4 + 72z^3 - 145380z^2 + 373380z - 59535) I_1\left(\frac{z}{2}\right)}{363825}$$

07.25.03.3263.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (16z^5 + 8z^4 + 12z^3 - 12570z^2 + 36330z - 4725)}{67200z} + \frac{\sqrt{\pi} (-32z^6 + 25200z^3 - 85050z^2 + 34020z + 4725) \operatorname{erfi}(\sqrt{z})}{134400z^{3/2}}$$

07.25.03.3264.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (16z^5 - 8z^4 + 12z^3 + 12570z^2 + 36330z + 4725)}{67200z} + \frac{\sqrt{\pi} (32z^6 + 25200z^3 + 85050z^2 + 34020z - 4725) \operatorname{erf}(\sqrt{z})}{134400z^{3/2}}$$

07.25.03.3265.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (256 z^6 + 64 z^5 + 72 z^4 - 270 120 z^3 + 997 080 z^2 - 340 200 z - 93 555) I_1\left(\frac{z}{2}\right) - 16 e^{z/2} (64 z^5 - 48 z^4 - 30 z^3 - 67 620 z^2 + 316 575 z - 301 455) I_0\left(\frac{z}{2}\right)}{4 729 725 z}$$

07.25.03.3266.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (64 z^6 + 32 z^5 + 48 z^4 - 88 080 z^3 + 353 220 z^2 - 103 950 z - 42 525)}{752 640 z^2} + \frac{\sqrt{\pi} (-128 z^7 + 176 400 z^4 - 793 800 z^3 + 476 280 z^2 + 132 300 z + 42 525) \operatorname{erfi}(\sqrt{z})}{1 505 280 z^{5/2}}$$

07.25.03.3267.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (64 z^6 - 32 z^5 + 48 z^4 + 88 080 z^3 + 353 220 z^2 + 103 950 z - 42 525)}{752 640 z^2} + \frac{\sqrt{\pi} (128 z^7 + 176 400 z^4 + 793 800 z^3 + 476 280 z^2 - 132 300 z + 42 525) \operatorname{erf}(\sqrt{z})}{1 505 280 z^{5/2}}$$

07.25.03.3268.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{23 648 625 z^2} 4 e^{z/2} (512 z^7 + 128 z^6 + 144 z^5 - 900 600 z^4 + 4 336 500 z^3 - 2 302 020 z^2 - 1 133 055 z - 540 540) I_1\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (512 z^6 - 384 z^5 - 240 z^4 - 901 320 z^3 + 5 235 300 z^2 - 6 195 420 z - 135 135) I_0\left(\frac{z}{2}\right)}{23 648 625 z}$$

07.25.03.3269.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 + 64 z^6 + 96 z^5 - 282 000 z^4 + 1 447 320 z^3 - 684 180 z^2 - 481 950 z - 297 675)}{3 440 640 z^3} + \frac{1}{6 881 280 z^{7/2}} \sqrt{\pi} (-256 z^8 + 564 480 z^5 - 3 175 200 z^4 + 2 540 160 z^3 + 1 058 400 z^2 + 680 400 z + 297 675) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3270.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 - 64 z^6 + 96 z^5 + 282 000 z^4 + 1 447 320 z^3 + 684 180 z^2 - 481 950 z + 297 675)}{3 440 640 z^3} + \frac{1}{6 881 280 z^{7/2}} \sqrt{\pi} (256 z^8 + 564 480 z^5 + 3 175 200 z^4 + 2 540 160 z^3 - 1 058 400 z^2 + 680 400 z - 297 675) \operatorname{erf}(\sqrt{z})$$

07.25.03.3271.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{402 026 625 z^3} \left(32 e^{z/2} (512 z^8 + 128 z^7 + 144 z^6 - 1 392 000 z^5 + 8 267 700 z^4 - 5 987 520 z^3 - 4 081 455 z^2 - 3 488 940 z - 2 211 300) I_1\left(\frac{z}{2}\right) - \frac{1}{402 026 625 z^2} 32 e^{z/2} (512 z^7 - 384 z^6 - 240 z^5 - 1 392 720 z^4 + 9 657 900 z^3 - 13 566 420 z^2 - 872 235 z - 552 825) I_0\left(\frac{z}{2}\right) \right)$$

$$\begin{aligned}
 & \text{07.25.03.3272.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{6881280z^4} e^z (128z^8 + 64z^7 + 96z^6 - 423120z^5 + 2646840z^4 - 1742580z^3 - 1646190z^2 - 1752975z - 1389150) + \\
 & \frac{1}{13762560z^{9/2}} (\sqrt{\pi} (-256z^9 + 846720z^6 - 5715360z^5 + 5715360z^4 + 3175200z^3 + 3061800z^2 + 2679075z + 1389150) \operatorname{erfi}(\sqrt{z}))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3273.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{6881280z^4} e^{-z} (128z^8 - 64z^7 + 96z^6 + 423120z^5 + 2646840z^4 + 1742580z^3 - 1646190z^2 + 1752975z - 1389150) + \\
 & \frac{1}{13762560z^{9/2}} \sqrt{\pi} (256z^9 + 846720z^6 + 5715360z^5 + 5715360z^4 - 3175200z^3 + 3061800z^2 - 2679075z + 1389150) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3274.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{7}{2}, 6; z\right) = \\
 & \frac{1}{1527701175z^4} \left(32e^{z/2} (1024z^9 + 256z^8 + 288z^7 - 4069200z^6 + 28744800z^5 - 26433540z^4 - 22621410z^3 - \right. \\
 & \quad \left. 26978805z^2 - 30447900z - 23133600) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{1527701175z^3} \left(32e^{z/2} (1024z^8 - 768z^7 - 480z^6 - 4070640z^5 + 32810400z^4 - \right. \\
 & \quad \left. 53158140z^3 - 6563970z^2 - 7611975z - 5783400) I_0\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{5}{2}$

$$\text{07.25.03.3275.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{75} e^z (32z^4 - 56z^3 - 12z^2 + 6z + 75) - \frac{8}{75} \sqrt{\pi} (4z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3276.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{75} e^{-z} (32z^4 + 56z^3 - 12z^2 - 6z + 75) + \frac{8}{75} \sqrt{\pi} (4z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.3277.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{15} e^z (-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15} \sqrt{\pi} (2z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3278.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15} \sqrt{\pi} (2z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3279.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{30} e^z (8z^4 - 50z^3 - 21z^2 + 132z + 30) + \frac{1}{60} \sqrt{\pi} (-16z^{9/2} + 108z^{7/2} - 315z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3280.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{30} e^{-z} (8z^4 + 50z^3 - 21z^2 - 132z + 30) + \frac{1}{60} \sqrt{\pi} (16z^{9/2} + 108z^{7/2} - 315z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3281.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{240} e^z (-8z^4 + 68z^3 + 30z^2 - 591z + 240) + \frac{1}{480} \sqrt{\pi} (16z^{9/2} - 144z^{7/2} + 1260z^{5/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3282.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{240} e^{-z} (-8z^4 - 68z^3 + 30z^2 + 591z + 240) + \frac{1}{480} \sqrt{\pi} (-16z^{9/2} - 144z^{7/2} + 1260z^{5/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3283.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (64z^5 - 696z^4 + 456z^3 + 8520z^2 - 15120z + 4725) I_0\left(\frac{z}{2}\right) - 4e^{z/2} (16z^5 - 158z^4 - 36z^3 + 2031z^2 - 1875z) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.3284.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{e^z (-32z^4 + 344z^3 + 156z^2 - 6090z + 6765)}{9600} + \frac{\sqrt{\pi} (64z^5 - 720z^4 + 12600z^3 - 18900z + 2835) \operatorname{erfi}(\sqrt{z})}{19200\sqrt{z}}$$

07.25.03.3285.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-32z^4 - 344z^3 + 156z^2 + 6090z + 6765)}{9600} + \frac{\sqrt{\pi} (-64z^5 - 720z^4 + 12600z^3 + 18900z + 2835) \operatorname{erf}(\sqrt{z})}{19200\sqrt{z}}$$

07.25.03.3286.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (128z^5 - 1680z^4 + 1128z^3 + 37020z^2 - 94500z + 51975) I_0\left(\frac{z}{2}\right) + e^{z/2} (-128z^5 + 1552z^4 + 360z^3 - 36012z^2 + 59820z - 6615) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.3287.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16z^5 + 208z^4 + 96z^3 - 6168z^2 + 11325z - 945)}{19200z} + \frac{\sqrt{\pi} (32z^6 - 432z^5 + 12600z^3 - 28350z^2 + 8505z + 945) \operatorname{erfi}(\sqrt{z})}{38400z^{3/2}}$$

07.25.03.3288.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-16z^5 - 208z^4 + 96z^3 + 6168z^2 + 11325z + 945)}{19200z} + \frac{\sqrt{\pi} (-32z^6 - 432z^5 + 12600z^3 + 28350z^2 + 8505z - 945) \operatorname{erf}(\sqrt{z})}{38400z^{3/2}}$$

07.25.03.3289.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, 3; z\right) = \frac{4e^{z/2} (128z^5 - 1968z^4 + 1344z^3 + 68340z^2 - 226800z + 171045) I_0\left(\frac{z}{2}\right)}{675675} - \frac{4e^{z/2} (128z^6 - 1840z^5 - 432z^4 + 67116z^3 - 161340z^2 + 38745z + 8505) I_1\left(\frac{z}{2}\right)}{675675z}$$

07.25.03.3290.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-128z^6 + 1952z^5 + 912z^4 - 86928z^3 + 223440z^2 - 43470z - 14175)}{430080z^2} + \frac{\sqrt{\pi} (256z^7 - 4032z^6 + 176400z^4 - 529200z^3 + 238140z^2 + 52920z + 14175) \operatorname{erfi}(\sqrt{z})}{860160z^{5/2}}$$

07.25.03.3291.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-128z^6 - 1952z^5 + 912z^4 + 86928z^3 + 223440z^2 + 43470z - 14175)}{430080z^2} + \frac{\sqrt{\pi} (-256z^7 - 4032z^6 + 176400z^4 + 529200z^3 + 238140z^2 - 52920z + 14175) \operatorname{erf}(\sqrt{z})}{860160z^{5/2}}$$

07.25.03.3292.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, 4; z\right) = \frac{4e^{z/2} (256z^6 - 4512z^5 + 3120z^4 + 227040z^3 - 926100z^2 + 871290z + 10395) I_0\left(\frac{z}{2}\right)}{3378375z} - \frac{1}{3378375z^2} 4e^{z/2} (256z^7 - 4256z^6 - 1008z^5 + 224160z^4 - 705900z^3 + 266490z^2 + 106785z + 41580) I_1\left(\frac{z}{2}\right)$$

07.25.03.3293.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (-128z^7 + 2240z^6 + 1056z^5 - 139632z^4 + 462120z^3 - 147420z^2 - 85050z - 42525)}{983040z^3} + \frac{1}{1966080z^{7/2}} \sqrt{\pi} (256z^8 - 4608z^7 + 282240z^5 - 1058400z^4 + 635040z^3 + 211680z^2 + 113400z + 42525) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3294.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(-128z^7 - 2240z^6 + 1056z^5 + 139632z^4 + 462120z^3 + 147420z^2 - 85050z + 42525)}{983040z^3} + \frac{1}{1966080z^{7/2}}\sqrt{\pi}(-256z^8 - 4608z^7 + 282240z^5 + 1058400z^4 + 635040z^3 - 211680z^2 + 113400z - 42525)\operatorname{erf}(\sqrt{z})$$

07.25.03.3295.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, 5; z\right) = \frac{1}{57432375z^2}$$

$$32e^{z/2}(256z^7 - 5088z^6 + 3552z^5 + 350160z^4 - 1693440z^3 + 1891890z^2 + 69930z + 36855)I_0\left(\frac{z}{2}\right) - \frac{1}{57432375z^3}$$

$$64e^{z/2}(128z^8 - 2416z^7 - 576z^6 + 173424z^5 - 675600z^4 + 350595z^3 + 196560z^2 + 139860z + 73710)I_1\left(\frac{z}{2}\right)$$

07.25.03.3296.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{7864320z^4}$$

$$e^z(-512z^8 + 10112z^7 + 4800z^6 - 839904z^5 + 3402960z^4 - 1534680z^3 - 1205820z^2 - 1067850z - 694575) + \frac{1}{15728640z^{9/2}}\left(\sqrt{\pi}(1024z^9 - 20736z^8 + 1693440z^6 - 7620480z^5 + 5715360z^4 + 2540160z^3 + 2041200z^2 + 1530900z + 694575)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.3297.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{7864320z^4}$$

$$e^{-z}(-512z^8 - 10112z^7 + 4800z^6 + 839904z^5 + 3402960z^4 + 1534680z^3 - 1205820z^2 + 1067850z - 694575) + \frac{1}{15728640z^{9/2}}\left(\sqrt{\pi}(-1024z^9 - 20736z^8 + 1693440z^6 + 7620480z^5 + 5715360z^4 - 2540160z^3 + 2041200z^2 - 1530900z + 694575)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.3298.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{5}{2}, 6; z\right) = \frac{1}{218243025z^3}\left(32e^{z/2}\right.$$

$$\left.(512z^8 - 11328z^7 + 7968z^6 + 1022160z^5 - 5715360z^4 + 7355880z^3 + 542430z^2 + 530145z + 340200)I_0\left(\frac{z}{2}\right) - \frac{1}{218243025z^4}\left(32e^{z/2}(512z^9 - 10816z^8 - 2592z^7 + 1014672z^6 - 4711200z^5 + 3122280z^4 + 2209410z^3 + 2212245z^2 + 2120580z + 1360800)I_1\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.3299.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{3}e^z(2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6}\sqrt{\pi}(-4z^{9/2} + 36z^{7/2} - 63z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.3300.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6} \sqrt{\pi} (4z^{9/2} + 36z^{7/2} + 63z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3301.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{12} e^z (-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24} \sqrt{\pi} (8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3302.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{12} e^{-z} (-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24} \sqrt{\pi} (-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3303.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{192} e^z (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3304.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{192} e^{-z} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3305.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-16z^5 + 336z^4 - 2220z^3 + 5484z^2 - 4725z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^5 - 320z^4 + 1908z^3 - 3720z^2 + 1689z) I_1\left(\frac{z}{2}\right)$$

07.25.03.3306.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (16z^4 - 352z^3 + 2352z^2 - 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945) \operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.3307.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.3308.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2}(-32z^5 + 816z^4 - 6816z^3 + 22524z^2 - 28350z + 10395)I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2}(32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945)I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.3309.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z(32z^5 - 848z^4 + 7152z^3 - 22008z^2 + 20010z - 945)}{30720z} + \frac{\sqrt{\pi}(-64z^6 + 1728z^5 - 15120z^4 + 50400z^3 - 56700z^2 + 11340z + 945)\operatorname{erfi}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.3310.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(32z^5 + 848z^4 + 7152z^3 + 22008z^2 + 20010z + 945)}{30720z} + \frac{\sqrt{\pi}(64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945)\operatorname{erf}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.3311.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, 3; z\right) = \frac{4e^{z/2}(32z^6 - 928z^5 + 8784z^4 - 31776z^3 + 37938z^2 - 5670z - 945)I_1\left(\frac{z}{2}\right)}{135135z} - \frac{8e^{z/2}(16z^5 - 480z^4 + 4848z^3 - 20064z^2 + 33075z - 17010)I_0\left(\frac{z}{2}\right)}{135135}$$

07.25.03.3312.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z(64z^6 - 1984z^5 + 20208z^4 - 79008z^3 + 100716z^2 - 11340z - 2835)}{172032z^2} + \frac{1}{344064z^{5/2}}\sqrt{\pi}(-128z^7 + 4032z^6 - 42336z^5 + 176400z^4 - 264600z^3 + 79380z^2 + 13230z + 2835)\operatorname{erfi}(\sqrt{z})$$

07.25.03.3313.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(64z^6 + 1984z^5 + 20208z^4 + 79008z^3 + 100716z^2 + 11340z - 2835)}{172032z^2} + \frac{1}{344064z^{5/2}}\sqrt{\pi}(128z^7 + 4032z^6 + 42336z^5 + 176400z^4 + 264600z^3 + 79380z^2 - 13230z + 2835)\operatorname{erf}(\sqrt{z})$$

07.25.03.3314.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, 4; z\right) = \frac{4e^{z/2}(64z^7 - 2144z^6 + 24048z^5 - 107040z^4 + 167640z^3 - 39690z^2 - 12285z - 3780)I_1\left(\frac{z}{2}\right)}{675675z^2} - \frac{4e^{z/2}(64z^6 - 2208z^5 + 26160z^4 - 130080z^3 + 264600z^2 - 171990z - 945)I_0\left(\frac{z}{2}\right)}{675675z}$$

07.25.03.3315.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 4544 z^6 + 54\,240 z^5 - 257\,232 z^4 + 422\,616 z^3 - 79\,380 z^2 - 35\,910 z - 14\,175)}{786\,432 z^3} + \frac{1}{1\,572\,864 z^{7/2}} (\sqrt{\pi} (-256 z^8 + 9216 z^7 - 112\,896 z^6 + 564\,480 z^5 - 1\,058\,400 z^4 + 423\,360 z^3 + 105\,840 z^2 + 45\,360 z + 14\,175) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.3316.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 4544 z^6 + 54\,240 z^5 + 257\,232 z^4 + 422\,616 z^3 + 79\,380 z^2 - 35\,910 z + 14\,175)}{786\,432 z^3} + \frac{1}{1\,572\,864 z^{7/2}} (\sqrt{\pi} (256 z^8 + 9216 z^7 + 112\,896 z^6 + 564\,480 z^5 + 1\,058\,400 z^4 + 423\,360 z^3 - 105\,840 z^2 + 45\,360 z - 14\,175) \operatorname{erf}(\sqrt{z}))$$

07.25.03.3317.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, 5; z\right) = \frac{1}{11\,486\,475 z^3} \frac{32 e^{z/2} (64 z^8 - 2432 z^7 + 31\,536 z^6 - 166\,656 z^5 + 323\,160 z^4 - 105\,840 z^3 - 46\,305 z^2 - 26\,460 z - 11\,340) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^7 - 2496 z^6 + 33\,936 z^5 - 197\,040 z^4 + 476\,280 z^3 - 370\,440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right)}{11\,486\,475 z^2}$$

07.25.03.3318.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{3\,145\,728 z^4} e^z (256 z^8 - 10\,240 z^7 + 140\,160 z^6 - 781\,440 z^5 + 1\,572\,864 z^4 - 423\,360 z^3 - 264\,600 z^2 - 189\,000 z - 99\,225) + \frac{1}{6\,291\,456 z^{9/2}} (\sqrt{\pi} (-512 z^9 + 20\,736 z^8 - 290\,304 z^7 + 1\,693\,440 z^6 - 3\,810\,240 z^5 + 1\,905\,120 z^4 + 635\,040 z^3 + 408\,240 z^2 + 255\,150 z + 99\,225) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.3319.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{3\,145\,728 z^4} e^{-z} (256 z^8 + 10\,240 z^7 + 140\,160 z^6 + 781\,440 z^5 + 1\,572\,864 z^4 + 423\,360 z^3 - 264\,600 z^2 + 189\,000 z - 99\,225) + \frac{1}{6\,291\,456 z^{9/2}} (\sqrt{\pi} (512 z^9 + 20\,736 z^8 + 290\,304 z^7 + 1\,693\,440 z^6 + 3\,810\,240 z^5 + 1\,905\,120 z^4 - 635\,040 z^3 + 408\,240 z^2 - 255\,150 z + 99\,225) \operatorname{erf}(\sqrt{z}))$$

$$\begin{aligned}
 & \text{07.25.03.3320.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{3}{2}; -\frac{3}{2}, 6; z\right) = \\
 & \frac{1}{43\,648\,605\,z^4} \left(32 e^{z/2} (128 z^9 - 5440 z^8 + 80\,064 z^7 - 489\,840 z^6 + 1\,132\,752 z^5 - 476\,280 z^4 - 264\,600 z^3 - \right. \\
 & \quad \left. 214\,515 z^2 - 170\,100 z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \right. \\
 & \quad \left. 32 e^{z/2} (128 z^8 - 5568 z^7 + 85\,440 z^6 - 567\,312 z^5 + 1\,587\,600 z^4 - 1\,428\,840 z^3 - 52\,920 z^2 - 42\,525 z - 22\,680) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{1}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{11}{2}$

$$\text{07.25.03.3321.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{e^z (64 z^6 - 512 z^5 + 3120 z^4 - 14\,400 z^3 + 48\,300 z^2 - 105\,840 z + 114\,345)}{114\,345}$$

$$\text{07.25.03.3322.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{e^z (32 z^5 - 240 z^4 + 1200 z^3 - 4200 z^2 + 9450 z - 10\,395)}{10\,395}$$

$$\text{07.25.03.3323.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{e^z (16 z^4 - 112 z^3 + 432 z^2 - 1020 z + 1155)}{1155}$$

$$\text{07.25.03.3324.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{165} e^z (8 z^3 - 52 z^2 + 138 z - 165)$$

$$\text{07.25.03.3325.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{33} e^z (4 z^2 - 24 z + 33)$$

$$\text{07.25.03.3326.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{11} e^z (2 z - 11)$$

$$\text{07.25.03.3327.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = e^z - \frac{10}{11} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3328.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{10}{11} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

$$\text{07.25.03.3329.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{11} e^{z/2} (11 - 10 z) I_0\left(\frac{z}{2}\right) + \frac{10}{11} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.3330.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (3 - 5z) \operatorname{erfi}(\sqrt{z})}{11 \sqrt{z}} + \frac{5 e^z}{11}$$

07.25.03.3331.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} (5z + 3) \operatorname{erf}(\sqrt{z})}{11 \sqrt{z}} + \frac{5 e^{-z}}{11}$$

07.25.03.3332.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{33} e^{z/2} (33 - 20z) I_0\left(\frac{z}{2}\right) + \frac{1}{33} e^{z/2} (20z - 13) I_1\left(\frac{z}{2}\right)$$

07.25.03.3333.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{3 e^z (10z - 7)}{88 z} - \frac{3 \sqrt{\pi} (20z^2 - 24z - 7) \operatorname{erfi}(\sqrt{z})}{176 z^{3/2}}$$

07.25.03.3334.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (10z + 7)}{88 z} + \frac{3 \sqrt{\pi} (20z^2 + 24z - 7) \operatorname{erf}(\sqrt{z})}{176 z^{3/2}}$$

07.25.03.3335.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (4z^2 - 5z - 3) I_1\left(\frac{z}{2}\right)}{33 z} - \frac{4}{33} e^{z/2} (4z - 9) I_0\left(\frac{z}{2}\right)$$

07.25.03.3336.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (10z^2 - 13z - 12)}{176 z^2} - \frac{5 \sqrt{\pi} (20z^3 - 36z^2 - 21z - 12) \operatorname{erfi}(\sqrt{z})}{352 z^{5/2}}$$

07.25.03.3337.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (10z^2 + 13z - 12)}{176 z^2} + \frac{5 \sqrt{\pi} (20z^3 + 36z^2 - 21z + 12) \operatorname{erf}(\sqrt{z})}{352 z^{5/2}}$$

07.25.03.3338.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (40z^3 - 74z^2 - 71z - 68) I_1\left(\frac{z}{2}\right)}{385 z^2} - \frac{4 e^{z/2} (40z^2 - 114z - 17) I_0\left(\frac{z}{2}\right)}{385 z}$$

07.25.03.3339.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (40z^3 - 76z^2 - 102z - 135)}{5632 z^3} - \frac{35 \sqrt{\pi} (80z^4 - 192z^3 - 168z^2 - 192z - 135) \operatorname{erfi}(\sqrt{z})}{11264 z^{7/2}}$$

07.25.03.3340.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (40z^3 + 76z^2 - 102z + 135)}{5632 z^3} + \frac{35 \sqrt{\pi} (80z^4 + 192z^3 - 168z^2 + 192z - 135) \operatorname{erf}(\sqrt{z})}{11264 z^{7/2}}$$

07.25.03.3341.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, 5; z\right) = \frac{64 e^{z/2} (20z^4 - 49z^3 - 63z^2 - 96z - 114) I_1\left(\frac{z}{2}\right)}{3465 z^3} - \frac{32 e^{z/2} (40z^3 - 138z^2 - 48z - 57) I_0\left(\frac{z}{2}\right)}{3465 z^2}$$

$$\begin{aligned}
 & \text{07.25.03.3342.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \\
 & \frac{315 e^z (8z^4 - 20z^3 - 34z^2 - 65z - 105)}{11264 z^4} - \frac{315 \sqrt{\pi} (16z^5 - 48z^4 - 56z^3 - 96z^2 - 135z - 105) \operatorname{erfi}(\sqrt{z})}{22528 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3343.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{315 e^{-z} (8z^4 + 20z^3 - 34z^2 + 65z - 105)}{11264 z^4} + \frac{315 \sqrt{\pi} (16z^5 + 48z^4 - 56z^3 + 96z^2 - 135z + 105) \operatorname{erf}(\sqrt{-z})}{22528 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3344.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{11}{2}, 6; z\right) = \\
 & \frac{32 e^{z/2} (80z^5 - 244z^4 - 390z^3 - 807z^2 - 1500z - 2016) I_1\left(\frac{z}{2}\right)}{7623 z^4} - \frac{32 e^{z/2} (80z^4 - 324z^3 - 186z^2 - 375z - 504) I_0\left(\frac{z}{2}\right)}{7623 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.3345.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{945} e^z (16z^4 - 96z^3 + 360z^2 - 840z + 945)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3346.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{105} e^z (8z^3 - 36z^2 + 90z - 105)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3347.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (4z^2 - 12z + 15)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3348.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{3} e^z (2z - 3)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3349.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = e^z
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3350.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3351.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \sqrt{\pi} \sqrt{-z} \operatorname{erf}(\sqrt{-z}) + e^{-z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3352.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, 1; z\right) = e^{z/2} (1-z) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

07.25.03.3353.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{e^z}{2}$$

07.25.03.3354.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.3355.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, 2; z\right) = e^{z/2} \left(1 - \frac{2z}{3}\right) I_0\left(\frac{z}{2}\right) + e^{z/2} \left(\frac{2z}{3} - \frac{1}{3}\right) I_1\left(\frac{z}{2}\right)$$

07.25.03.3356.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{3e^z(2z-1)}{16z} - \frac{3\sqrt{\pi}(4z^2-4z-1)\operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.3357.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{3e^{-z}(2z+1)}{16z} + \frac{3\sqrt{\pi}(4z^2+4z-1)\operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.3358.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, 3; z\right) = \frac{4e^{z/2}(2z^2-2z-1)I_1\left(\frac{z}{2}\right)}{15z} - \frac{8}{15}e^{z/2}(z-2)I_0\left(\frac{z}{2}\right)$$

07.25.03.3359.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5e^z(4z^2-4z-3)}{64z^2} - \frac{5\sqrt{\pi}(8z^3-12z^2-6z-3)\operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.3360.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}(4z^2+4z-3)}{64z^2} + \frac{5\sqrt{\pi}(8z^3+12z^2-6z+3)\operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.3361.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, 4; z\right) = \frac{4e^{z/2}(4z^3-6z^2-5z-4)I_1\left(\frac{z}{2}\right)}{35z^2} - \frac{4e^{z/2}(4z^2-10z-1)I_0\left(\frac{z}{2}\right)}{35z}$$

07.25.03.3362.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{35e^z(8z^3-12z^2-14z-15)}{1024z^3} - \frac{35\sqrt{\pi}(16z^4-32z^3-24z^2-24z-15)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.3363.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}(8z^3+12z^2-14z+15)}{1024z^3} + \frac{35\sqrt{\pi}(16z^4+32z^3-24z^2+24z-15)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.3364.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, 5; z\right) = \frac{32e^{z/2}(4z^4-8z^3-9z^2-12z-12)I_1\left(\frac{z}{2}\right)}{315z^3} - \frac{32e^{z/2}(4z^3-12z^2-3z-3)I_0\left(\frac{z}{2}\right)}{315z^2}$$

$$\begin{aligned}
 & \text{07.25.03.3365.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \\
 & \frac{63 e^z (16 z^4 - 32 z^3 - 48 z^2 - 80 z - 105)}{4096 z^4} - \frac{63 \sqrt{\pi} (32 z^5 - 80 z^4 - 80 z^3 - 120 z^2 - 150 z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3366.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{63 e^{-z} (16 z^4 + 32 z^3 - 48 z^2 + 80 z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3367.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^5 - 20 z^4 - 28 z^3 - 51 z^2 - 84 z - 96) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (8 z^4 - 28 z^3 - 12 z^2 - 21 z - 24) I_0\left(\frac{z}{2}\right)}{693 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.3368.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{256 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2}}{3675} + \frac{e^z (-256 z^4 - 128 z^3 + 1068 z^2 - 3000 z + 3675)}{3675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3369.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{e^{-z} (-256 z^4 + 128 z^3 + 1068 z^2 + 3000 z + 3675)}{3675} - \frac{256 \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})}{3675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3370.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{525} e^z (128 z^4 + 64 z^3 + 96 z^2 - 390 z + 525) - \frac{128}{525} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3371.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{128}{525} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{525} e^{-z} (128 z^4 - 64 z^3 + 96 z^2 + 390 z + 525)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3372.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{32}{105} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^z (-32 z^4 - 16 z^3 - 24 z^2 - 60 z + 105)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3373.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{105} e^{-z} (-32 z^4 + 16 z^3 - 24 z^2 + 60 z + 105) - \frac{32}{105} \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3374.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} e^z (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3375.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)
 \end{aligned}$$

07.25.03.3376.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{420} e^z (-8z^4 - 4z^3 - 6z^2 - 15z + 420) + \frac{1}{840} \sqrt{\pi} (16z^{9/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3377.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{420} e^{-z} (-8z^4 + 4z^3 - 6z^2 + 15z + 420) + \frac{1}{840} \sqrt{\pi} (945\sqrt{z} - 16z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3378.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (256z^5 - 192z^4 - 120z^3 - 210z^2 - 37800z + 33075) I_0\left(\frac{z}{2}\right) - 2e^{z/2} (128z^5 + 32z^4 + 36z^3 + 75z^2 - 18375z) I_1\left(\frac{z}{2}\right)}{33075}$$

07.25.03.3379.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z (-8z^4 - 4z^3 - 6z^2 - 15z + 2310)}{4200} + \frac{\sqrt{\pi} (16z^5 - 4725z + 1890) \operatorname{erfi}(\sqrt{z})}{8400\sqrt{z}}$$

07.25.03.3380.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-8z^4 + 4z^3 - 6z^2 + 15z + 2310)}{4200} + \frac{\sqrt{\pi} (-16z^5 + 4725z + 1890) \operatorname{erf}(\sqrt{z})}{8400\sqrt{z}}$$

07.25.03.3381.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (512z^5 - 384z^4 - 240z^3 - 420z^2 - 274050z + 363825) I_0\left(\frac{z}{2}\right) + e^{z/2} (-512z^5 - 128z^4 - 144z^3 - 300z^2 + 271950z - 99225) I_1\left(\frac{z}{2}\right)}{363825}$$

07.25.03.3382.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16z^5 - 8z^4 - 12z^3 - 30z^2 + 14070z - 4725)}{33600z} + \frac{\sqrt{\pi} (32z^6 - 28350z^2 + 22680z + 4725) \operatorname{erfi}(\sqrt{z})}{67200z^{3/2}}$$

07.25.03.3383.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-16z^5 + 8z^4 - 12z^3 + 30z^2 + 14070z + 4725)}{33600z} + \frac{\sqrt{\pi} (-32z^6 + 28350z^2 + 22680z - 4725) \operatorname{erf}(\sqrt{z})}{67200z^{3/2}}$$

07.25.03.3384.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, 3; z\right) = \frac{4e^{z/2} (512z^5 - 384z^4 - 240z^3 - 420z^2 - 710640z + 1237005) I_0\left(\frac{z}{2}\right) - 4e^{z/2} (512z^6 + 128z^5 + 144z^4 + 300z^3 - 708540z^2 + 535815z + 218295) I_1\left(\frac{z}{2}\right)}{4729725z}$$

07.25.03.3385.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (-16z^6 - 8z^5 - 12z^4 - 30z^3 + 32970z^2 - 23625z - 14175)}{94080z^2} + \frac{\sqrt{\pi} (32z^7 - 66150z^3 + 79380z^2 + 33075z + 14175) \operatorname{erfi}(\sqrt{z})}{188160z^{5/2}}$$

07.25.03.3386.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-16z^6 + 8z^5 - 12z^4 + 30z^3 + 32970z^2 + 23625z - 14175)}{94080z^2} + \frac{\sqrt{\pi} (-32z^7 + 66150z^3 + 79380z^2 - 33075z + 14175) \operatorname{erf}(\sqrt{z})}{188160z^{5/2}}$$

07.25.03.3387.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, 4; z\right) = \frac{4e^{z/2} (1024z^6 - 768z^5 - 480z^4 - 840z^3 - 3042900z^2 + 6528060z + 405405) I_0\left(\frac{z}{2}\right) - \frac{1}{23648625z^2} 4e^{z/2} (1024z^7 + 256z^6 + 288z^5 + 600z^4 - 3038700z^3 + 3504060z^2 + 2463615z + 1621620) I_1\left(\frac{z}{2}\right)}{23648625z}$$

07.25.03.3388.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (-128z^7 - 64z^6 - 96z^5 - 240z^4 + 528360z^3 - 585900z^2 - 576450z - 496125)}{1720320z^3} + \frac{\sqrt{\pi} (256z^8 - 1058400z^4 + 1693440z^3 + 1058400z^2 + 907200z + 496125) \operatorname{erfi}(\sqrt{z})}{3440640z^{7/2}}$$

07.25.03.3389.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-128z^7 + 64z^6 - 96z^5 + 240z^4 + 528360z^3 + 585900z^2 - 576450z + 496125)}{1720320z^3} + \frac{\sqrt{\pi} (-256z^8 + 1058400z^4 + 1693440z^3 - 1058400z^2 + 907200z - 496125) \operatorname{erf}(\sqrt{z})}{3440640z^{7/2}}$$

07.25.03.3390.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{402026625z^2} + \frac{32e^{z/2} (1024z^7 - 768z^6 - 480z^5 - 840z^4 - 5745600z^3 + 14636160z^2 + 2432430z + 2027025) I_0\left(\frac{z}{2}\right) - \frac{1}{402026625z^3}}{402026625z^2} + \frac{64e^{z/2} (512z^8 + 128z^7 + 144z^6 + 300z^5 - 2870700z^4 + 4454730z^3 + 4272345z^2 + 4864860z + 4054050) I_1\left(\frac{z}{2}\right)}{402026625z^2}$$

07.25.03.3391.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{3440640z^4} e^z (-128z^8 - 64z^7 - 96z^6 - 240z^5 + 951720z^4 - 1432620z^3 - 1846530z^2 - 2612925z - 2778300) + \frac{1}{6881280z^{9/2}} \sqrt{\pi} (256z^9 - 1905120z^5 + 3810240z^4 + 3175200z^3 + 4082400z^2 + 4465125z + 2778300) \operatorname{erfi}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.3392.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{3440640z^4} e^{-z} (-128z^8 + 64z^7 - 96z^6 + 240z^5 + 951720z^4 + 1432620z^3 - 1846530z^2 + 2612925z - 2778300) + \\
 & \frac{1}{6881280z^{9/2}} \sqrt{\pi} (-256z^9 + 1905120z^5 + 3810240z^4 - 3175200z^3 + 4082400z^2 - 4465125z + 2778300) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3393.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{1527701175z^3} \\
 & \left(32e^{z/2}(2048z^8 - 1536z^7 - 960z^6 - 1680z^5 - 19845000z^4 + 58510620z^3 + 17395560z^2 + 25982775z + 25061400)\right. \\
 & \left. I_0\left(\frac{z}{2}\right) - \frac{1}{1527701175z^4} \left(32e^{z/2}(2048z^9 + 512z^8 + 576z^7 + 1200z^6 - 19836600z^5 + \right.\right. \\
 & \left. \left. 38703420z^4 + 46327680z^3 + 72714915z^2 + 103931100z + 100245600\right) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.3394.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{75} e^z (-64z^4 + 64z^3 - 48z + 75) + \frac{32}{75} \sqrt{\pi} (2z^{9/2} - 3z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3395.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{75} e^{-z} (-64z^4 - 64z^3 + 48z + 75) - \frac{32}{75} \sqrt{\pi} (2z^{9/2} + 3z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3396.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{15} e^z (16z^4 - 40z^3 - 12z^2 - 6z + 15) - \frac{16}{15} \sqrt{\pi} (z^{9/2} - 3z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3397.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (16z^4 + 40z^3 - 12z^2 + 6z + 15) + \frac{16}{15} \sqrt{\pi} (z^{9/2} + 3z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3398.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15} \sqrt{\pi} (2z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3399.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15} \sqrt{\pi} (2z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3400.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{120} e^z (8z^4 - 44z^3 - 18z^2 - 21z + 120) + \frac{1}{240} \sqrt{\pi} (-16z^{9/2} + 96z^{7/2} - 315\sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3401.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{120} e^{-z} (8z^4 + 44z^3 - 18z^2 + 21z + 120) + \frac{1}{240} \sqrt{\pi} (16z^{9/2} + 96z^{7/2} + 315\sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.3402.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2}(-128z^5 + 960z^4 - 588z^3 - 300z^2 - 6615z + 4725)I_0\left(\frac{z}{2}\right) + e^{z/2}(128z^5 - 832z^4 - 180z^3 - 168z^2 + 5925z)I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.3403.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{e^z(16z^4 - 112z^3 - 48z^2 - 60z + 1455)}{2400} + \frac{\sqrt{\pi}(-32z^5 + 240z^4 - 3150z + 945)\operatorname{erfi}(\sqrt{z})}{4800\sqrt{z}}$$

07.25.03.3404.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}(16z^4 + 112z^3 - 48z^2 + 60z + 1455)}{2400} + \frac{\sqrt{\pi}(32z^5 + 240z^4 + 3150z + 945)\operatorname{erf}(\sqrt{z})}{4800\sqrt{z}}$$

07.25.03.3405.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2}(-256z^5 + 2304z^4 - 1464z^3 - 780z^2 - 46620z + 51975)I_0\left(\frac{z}{2}\right) + e^{z/2}(256z^5 - 2048z^4 - 456z^3 - 444z^2 + 44700z - 11025)I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.3406.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z(16z^5 - 136z^4 - 60z^3 - 78z^2 + 4560z - 945)}{9600z} + \frac{\sqrt{\pi}(-32z^6 + 288z^5 - 9450z^2 + 5670z + 945)\operatorname{erfi}(\sqrt{z})}{19200z^{3/2}}$$

07.25.03.3407.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(16z^5 + 136z^4 - 60z^3 + 78z^2 + 4560z + 945)}{9600z} + \frac{\sqrt{\pi}(32z^6 + 288z^5 + 9450z^2 + 5670z - 945)\operatorname{erf}(\sqrt{z})}{19200z^{3/2}}$$

07.25.03.3408.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, 3; z\right) = \frac{4e^{z/2}(256z^6 - 2432z^5 - 552z^4 - 552z^3 + 117240z^2 - 61740z - 19845)I_1\left(\frac{z}{2}\right) + 16e^{z/2}(64z^5 - 672z^4 + 438z^3 + 240z^2 + 29925z - 43470)I_0\left(\frac{z}{2}\right)}{675675z}$$

07.25.03.3409.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z(32z^6 - 320z^5 - 144z^4 - 192z^3 + 21630z^2 - 10080z - 4725)}{53760z^2} + \frac{\sqrt{\pi}(-64z^7 + 672z^6 - 44100z^3 + 39690z^2 + 13230z + 4725)\operatorname{erfi}(\sqrt{z})}{107520z^{5/2}}$$

$$\begin{aligned}
 & \text{07.25.03.3410.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) &= \frac{e^{-z} (32 z^6 + 320 z^5 - 144 z^4 + 192 z^3 + 21\,630 z^2 + 10\,080 z - 4725)}{53\,760 z^2} + \\
 & \frac{\sqrt{\pi} (64 z^7 + 672 z^6 + 44\,100 z^5 + 39\,690 z^4 - 13\,230 z + 4725) \operatorname{erf}(\sqrt{z})}{107\,520 z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3411.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, 4; z\right) &= \frac{4 e^{z/2} (512 z^7 - 5632 z^6 - 1296 z^5 - 1320 z^4 + 504\,300 z^3 - 412\,020 z^2 - 235\,305 z - 124\,740) I_1\left(\frac{z}{2}\right)}{3\,378\,375 z^2} - \\
 & \frac{4 e^{z/2} (512 z^6 - 6144 z^5 + 4080 z^4 + 2280 z^3 + 510\,300 z^2 - 903\,420 z - 31\,185) I_0\left(\frac{z}{2}\right)}{3\,378\,375 z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3412.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) &= \frac{e^z (128 z^7 - 1472 z^6 - 672 z^5 - 912 z^4 + 174\,360 z^3 - 129\,780 z^2 - 103\,950 z - 70\,875)}{491\,520 z^3} + \\
 & \frac{\sqrt{\pi} (-256 z^8 + 3072 z^7 - 352\,800 z^6 + 423\,360 z^5 + 211\,680 z^4 + 151\,200 z + 70\,875) \operatorname{erfi}(\sqrt{z})}{983\,040 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3413.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) &= \frac{e^{-z} (128 z^7 + 1472 z^6 - 672 z^5 + 912 z^4 + 174\,360 z^3 + 129\,780 z^2 - 103\,950 z + 70\,875)}{491\,520 z^3} + \\
 & \frac{\sqrt{\pi} (256 z^8 + 3072 z^7 + 352\,800 z^6 + 423\,360 z^5 - 211\,680 z^4 + 151\,200 z - 70\,875) \operatorname{erf}(\sqrt{z})}{983\,040 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3414.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, 5; z\right) &= \frac{1}{57\,432\,375 z^3} \\
 & \frac{32 e^{z/2} (512 z^8 - 6400 z^7 - 1488 z^6 - 1536 z^5 + 954\,300 z^4 - 1\,060\,920 z^3 - 836\,325 z^2 - 790\,020 z - 540\,540) I_1\left(\frac{z}{2}\right)}{57\,432\,375 z^2} - \\
 & \frac{1}{57\,432\,375 z^2} 32 e^{z/2} (512 z^7 - 6912 z^6 + 4656 z^5 + 2640 z^4 + 961\,380 z^3 - 1\,999\,620 z^2 - 197\,505 z - 135\,135) I_0\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3415.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) &= \frac{1}{1966\,080 z^4} \\
 & e^z (256 z^8 - 3328 z^7 - 1536 z^6 - 2112 z^5 + 630\,240 z^4 - 650\,160 z^3 - 695\,520 z^2 - 812\,700 z - 694\,575) + \frac{1}{3932\,160 z^{9/2}} \\
 & \sqrt{\pi} (-512 z^9 + 6912 z^8 - 1\,270\,080 z^7 + 1\,905\,120 z^6 + 1\,270\,080 z^5 + 1\,360\,800 z^4 + 1\,275\,750 z + 694\,575) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3416.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) &= \frac{1}{1966\,080 z^4} \\
 & e^{-z} (256 z^8 + 3328 z^7 - 1536 z^6 + 2112 z^5 + 630\,240 z^4 + 650\,160 z^3 - 695\,520 z^2 + 812\,700 z - 694\,575) + \frac{1}{3932\,160 z^{9/2}} \\
 & \sqrt{\pi} (512 z^9 + 6912 z^8 + 1\,270\,080 z^7 + 1\,905\,120 z^6 - 1\,270\,080 z^5 + 1\,360\,800 z^4 - 1\,275\,750 z + 694\,575) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3417.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{5}{2}, 6; z\right) = \\
 & \frac{1}{218243025z^4} \left(32e^{z/2} (1024z^9 - 14336z^8 - 3360z^7 - 3504z^6 + 330000z^5 - 4648140z^4 - 4594590z^3 - \right. \\
 & \quad \left. 6043275z^2 - 7321860z - 5896800) I_1\left(\frac{z}{2}\right) - \frac{1}{218243025z^3} \left(32e^{z/2} \right. \right. \\
 & \quad \left. \left. (1024z^8 - 15360z^7 + 10464z^6 + 6000z^5 + 3316320z^4 - 7911540z^3 - 1464750z^2 - 1830465z - 1474200) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{3}{2}$

$$\text{07.25.03.3418.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (-4z^4 + 22z^3 - 12z^2 + 3) + \frac{1}{3} \sqrt{\pi} (4z^{9/2} - 24z^{7/2} + 21z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3419.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (-4z^4 - 22z^3 - 12z^2 + 3) + \frac{1}{3} \sqrt{\pi} (-4z^{9/2} - 24z^{7/2} - 21z^{5/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.3420.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6} \sqrt{\pi} (-4z^{9/2} + 36z^{7/2} - 63z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3421.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6} \sqrt{\pi} (4z^{9/2} + 36z^{7/2} + 63z^{5/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.3422.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \\
 \frac{1}{96} e^z (-8z^4 + 92z^3 - 210z^2 - 69z + 96) + \frac{1}{192} \sqrt{\pi} (16z^{9/2} - 192z^{7/2} + 504z^{5/2} - 315\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3423.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \\
 \frac{1}{96} e^{-z} (-8z^4 - 92z^3 - 210z^2 + 69z + 96) + \frac{1}{192} \sqrt{\pi} (-16z^{9/2} - 192z^{7/2} - 504z^{5/2} + 315\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.3424.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, 1; z\right) = \\
 \frac{1}{945} e^{z/2} (32z^5 - 456z^4 + 1632z^3 - 816z^2 - 1890z + 945) I_0\left(\frac{z}{2}\right) - \frac{2}{945} e^{z/2} (16z^5 - 212z^4 + 612z^3 + 114z^2 - 687z) I_1\left(\frac{z}{2}\right)$$

$$\text{07.25.03.3425.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \\
 \frac{1}{960} e^z (-8z^4 + 116z^3 - 366z^2 - 135z + 645) + \frac{\sqrt{\pi} (16z^5 - 240z^4 + 840z^3 - 1575z + 315) \operatorname{erfi}(\sqrt{z})}{1920\sqrt{z}}$$

$$\begin{aligned}
 & \text{07.25.03.3426.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = & \\
 & \frac{1}{960} e^{-z} (-8z^4 - 116z^3 - 366z^2 + 135z + 645) + \frac{\sqrt{\pi} (-16z^5 - 240z^4 - 840z^3 + 1575z + 315) \operatorname{erf}(\sqrt{z})}{1920\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3427.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, 2; z\right) = & \frac{e^{z/2} (64z^5 - 1104z^4 + 4920z^3 - 2676z^2 - 12600z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \\
 & \frac{e^{z/2} (-64z^5 + 1040z^4 - 3912z^3 - 780z^2 + 10704z - 1575) I_1\left(\frac{z}{2}\right)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3428.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = & \\
 & \frac{e^z (-32z^5 + 560z^4 - 2256z^3 - 888z^2 + 8430z - 945)}{15360z} + \frac{\sqrt{\pi} (64z^6 - 1152z^5 + 5040z^4 - 18900z^2 + 7560z + 945) \operatorname{erfi}(\sqrt{z})}{30720z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3429.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = & \frac{e^{-z} (-32z^5 - 560z^4 - 2256z^3 + 888z^2 + 8430z + 945)}{15360z} + \\
 & \frac{\sqrt{\pi} (-64z^6 - 1152z^5 - 5040z^4 + 18900z^2 + 7560z - 945) \operatorname{erf}(\sqrt{z})}{30720z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3430.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, 3; z\right) = & \frac{4 e^{z/2} (64z^5 - 1296z^4 + 6912z^3 - 3972z^2 - 31500z + 34335) I_0\left(\frac{z}{2}\right)}{135135} - \\
 & \frac{4 e^{z/2} (64z^6 - 1232z^5 + 5712z^4 + 1188z^3 - 28488z^2 + 9135z + 2205) I_1\left(\frac{z}{2}\right)}{135135z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3431.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = & \frac{e^z (-32z^6 + 656z^5 - 3216z^4 - 1320z^3 + 20454z^2 - 5355z - 1890)}{43008z^2} + \\
 & \frac{\sqrt{\pi} (64z^7 - 1344z^6 + 7056z^5 - 44100z^3 + 26460z^2 + 6615z + 1890) \operatorname{erfi}(\sqrt{z})}{86016z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3432.01} \\
 {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = & \frac{e^{-z} (-32z^6 - 656z^5 - 3216z^4 + 1320z^3 + 20454z^2 + 5355z - 1890)}{43008z^2} + \\
 & \frac{\sqrt{\pi} (-64z^7 - 1344z^6 - 7056z^5 + 44100z^3 + 26460z^2 - 6615z + 1890) \operatorname{erf}(\sqrt{z})}{86016z^{5/2}}
 \end{aligned}$$

07.25.03.3433.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (128 z^6 - 2976 z^5 + 18480 z^4 - 11040 z^3 - 132300 z^2 + 175770 z + 2835) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (128 z^7 - 2848 z^6 + 15696 z^5 + 3360 z^4 - 123540 z^3 + 62370 z^2 + 27405 z + 11340) I_1\left(\frac{z}{2}\right)}{675675 z^2}$$

07.25.03.3434.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (-128 z^7 + 3008 z^6 - 17376 z^5 - 7344 z^4 + 167208 z^3 - 71820 z^2 - 44730 z - 23625)}{393216 z^3} + \frac{1}{786432 z^{7/2}} \sqrt{\pi} (256 z^8 - 6144 z^7 + 37632 z^6 - 352800 z^4 + 282240 z^3 + 105840 z^2 + 60480 z + 23625) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3435.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-128 z^7 - 3008 z^6 - 17376 z^5 + 7344 z^4 + 167208 z^3 + 71820 z^2 - 44730 z + 23625)}{393216 z^3} + \frac{1}{786432 z^{7/2}} \sqrt{\pi} (-256 z^8 - 6144 z^7 - 37632 z^6 + 352800 z^4 + 282240 z^3 - 105840 z^2 + 60480 z - 23625) \operatorname{erf}(\sqrt{z})$$

07.25.03.3436.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (128 z^7 - 3360 z^6 + 23808 z^5 - 14640 z^4 - 246960 z^3 + 383670 z^2 + 18900 z + 10395) I_0\left(\frac{z}{2}\right) - 11486475 z^2}{11486475 z^3} + \frac{1}{11486475 z^3} 64 e^{z/2} (64 z^8 - 1616 z^7 + 10320 z^6 + 2256 z^5 - 117480 z^4 + 81585 z^3 + 50085 z^2 + 37800 z + 20790) I_1\left(\frac{z}{2}\right)$$

07.25.03.3437.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{786432 z^4} \left[e^z (-128 z^8 + 3392 z^7 - 22560 z^6 - 9744 z^5 + 305016 z^4 - 185220 z^3 - 156870 z^2 - 146475 z - 99225) + \frac{1}{1572864 z^{9/2}} \sqrt{\pi} (256 z^9 - 6912 z^8 + 48384 z^7 - 635040 z^5 + 635040 z^4 + 317520 z^3 + 272160 z^2 + 212625 z + 99225) \operatorname{erfi}(\sqrt{z}) \right]$$

07.25.03.3438.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{786432 z^4} \left[e^{-z} (-128 z^8 - 3392 z^7 - 22560 z^6 + 9744 z^5 + 305016 z^4 + 185220 z^3 - 156870 z^2 + 146475 z - 99225) + \frac{1}{1572864 z^{9/2}} \sqrt{\pi} (-256 z^9 - 6912 z^8 - 48384 z^7 + 635040 z^5 + 635040 z^4 - 317520 z^3 + 272160 z^2 - 212625 z + 99225) \operatorname{erf}(\sqrt{z}) \right]$$

$$\begin{aligned}
 & \text{07.25.03.3439.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{43\,648\,605\,z^3} \\
 & \quad 32\,e^{z/2}\left(256\,z^8 - 7488\,z^7 + 59\,616\,z^6 - 37\,488\,z^5 - 846\,720\,z^4 + 1\,499\,400\,z^3 + 145\,530\,z^2 + 148\,365\,z + 98\,280\right)I_0\left(\frac{z}{2}\right) - \\
 & \quad \frac{1}{43\,648\,605\,z^4}\left(32\,e^{z/2}\left(256\,z^9 - 7232\,z^8 + 52\,512\,z^7 + 11\,664\,z^6 - 815\,232\,z^5 + \right. \right. \\
 & \quad \left. \left. 723\,240\,z^4 + 560\,070\,z^3 + 594\,405\,z^2 + 593\,460\,z + 393\,120\right)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.3440.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \\
 & \quad \frac{1}{12}\,e^z\left(-4\,z^4 + 52\,z^3 - 165\,z^2 + 96\,z + 12\right) + \frac{1}{24}\,\sqrt{\pi}\left(8\,z^{9/2} - 108\,z^{7/2} + 378\,z^{5/2} - 315\,z^{3/2}\right)\operatorname{erfi}\left(\sqrt{z}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3441.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \\
 & \quad \frac{1}{12}\,e^{-z}\left(-4\,z^4 - 52\,z^3 - 165\,z^2 - 96\,z + 12\right) + \frac{1}{24}\,\sqrt{\pi}\left(-8\,z^{9/2} - 108\,z^{7/2} - 378\,z^{5/2} - 315\,z^{3/2}\right)\operatorname{erf}\left(\sqrt{z}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3442.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \\
 & \quad \frac{1}{192}\,e^z\left(8\,z^4 - 140\,z^3 + 690\,z^2 - 975\,z + 192\right) + \frac{1}{384}\,\sqrt{\pi}\left(-16\,z^{9/2} + 288\,z^{7/2} - 1512\,z^{5/2} + 2520\,z^{3/2} - 945\,\sqrt{z}\right)\operatorname{erfi}\left(\sqrt{z}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3443.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \\
 & \quad \frac{1}{192}\,e^{-z}\left(8\,z^4 + 140\,z^3 + 690\,z^2 + 975\,z + 192\right) + \frac{1}{384}\,\sqrt{\pi}\left(16\,z^{9/2} + 288\,z^{7/2} + 1512\,z^{5/2} + 2520\,z^{3/2} + 945\,\sqrt{z}\right)\operatorname{erf}\left(\sqrt{z}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3444.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{945}\,e^{z/2}\left(-16\,z^5 + 336\,z^4 - 2220\,z^3 + 5484\,z^2 - 4725\,z + 945\right)I_0\left(\frac{z}{2}\right) + \\
 & \quad \frac{1}{945}\,e^{z/2}\left(16\,z^5 - 320\,z^4 + 1908\,z^3 - 3720\,z^2 + 1689\,z\right)I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3445.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \\
 & \quad \frac{e^z\left(16\,z^4 - 352\,z^3 + 2352\,z^2 - 5280\,z + 2895\right)}{3840} + \frac{\sqrt{\pi}\left(-32\,z^5 + 720\,z^4 - 5040\,z^3 + 12\,600\,z^2 - 9450\,z + 945\right)\operatorname{erfi}\left(\sqrt{z}\right)}{7680\,\sqrt{z}}
 \end{aligned}$$

07.25.03.3446.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}(16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{3840} + \frac{\sqrt{\pi}(32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945)\operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.3447.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^{z/2}(-32z^5 + 816z^4 - 6816z^3 + 22524z^2 - 28350z + 10395)I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2}(32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945)I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.3448.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z(32z^5 - 848z^4 + 7152z^3 - 22008z^2 + 20010z - 945)}{30720z} + \frac{\sqrt{\pi}(-64z^6 + 1728z^5 - 15120z^4 + 50400z^3 - 56700z^2 + 11340z + 945)\operatorname{erfi}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.3449.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(32z^5 + 848z^4 + 7152z^3 + 22008z^2 + 20010z + 945)}{30720z} + \frac{\sqrt{\pi}(64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945)\operatorname{erf}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.3450.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, 3; z\right) = \frac{4e^{z/2}(32z^6 - 928z^5 + 8784z^4 - 31776z^3 + 37938z^2 - 5670z - 945)I_1\left(\frac{z}{2}\right)}{135135z} - \frac{8e^{z/2}(16z^5 - 480z^4 + 4848z^3 - 20064z^2 + 33075z - 17010)I_0\left(\frac{z}{2}\right)}{135135}$$

07.25.03.3451.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z(64z^6 - 1984z^5 + 20208z^4 - 79008z^3 + 100716z^2 - 11340z - 2835)}{172032z^2} + \frac{1}{344064z^{5/2}}\sqrt{\pi}(-128z^7 + 4032z^6 - 42336z^5 + 176400z^4 - 264600z^3 + 79380z^2 + 13230z + 2835)\operatorname{erfi}(\sqrt{z})$$

07.25.03.3452.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(64z^6 + 1984z^5 + 20208z^4 + 79008z^3 + 100716z^2 + 11340z - 2835)}{172032z^2} + \frac{1}{344064z^{5/2}}\sqrt{\pi}(128z^7 + 4032z^6 + 42336z^5 + 176400z^4 + 264600z^3 + 79380z^2 - 13230z + 2835)\operatorname{erf}(\sqrt{z})$$

07.25.03.3453.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^7 - 2144 z^6 + 24\,048 z^5 - 107\,040 z^4 + 167\,640 z^3 - 39\,690 z^2 - 12\,285 z - 3780) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (64 z^6 - 2208 z^5 + 26\,160 z^4 - 130\,080 z^3 + 264\,600 z^2 - 171\,990 z - 945) I_0\left(\frac{z}{2}\right)}{675\,675 z^2}$$

07.25.03.3454.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 4544 z^6 + 54\,240 z^5 - 257\,232 z^4 + 422\,616 z^3 - 79\,380 z^2 - 35\,910 z - 14\,175)}{786\,432 z^3} + \frac{1}{1\,572\,864 z^{7/2}} (\sqrt{\pi} (-256 z^8 + 9216 z^7 - 112\,896 z^6 + 564\,480 z^5 - 1\,058\,400 z^4 + 423\,360 z^3 + 105\,840 z^2 + 45\,360 z + 14\,175) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.3455.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 4544 z^6 + 54\,240 z^5 + 257\,232 z^4 + 422\,616 z^3 + 79\,380 z^2 - 35\,910 z + 14\,175)}{786\,432 z^3} + \frac{1}{1\,572\,864 z^{7/2}} (\sqrt{\pi} (256 z^8 + 9216 z^7 + 112\,896 z^6 + 564\,480 z^5 + 1\,058\,400 z^4 + 423\,360 z^3 - 105\,840 z^2 + 45\,360 z - 14\,175) \operatorname{erf}(\sqrt{z}))$$

07.25.03.3456.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, 5; z\right) = \frac{1}{11\,486\,475 z^3} \frac{32 e^{z/2} (64 z^8 - 2432 z^7 + 31\,536 z^6 - 166\,656 z^5 + 323\,160 z^4 - 105\,840 z^3 - 46\,305 z^2 - 26\,460 z - 11\,340) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^7 - 2496 z^6 + 33\,936 z^5 - 197\,040 z^4 + 476\,280 z^3 - 370\,440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right)}{11\,486\,475 z^2}$$

07.25.03.3457.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{3\,145\,728 z^4} e^z (256 z^8 - 10\,240 z^7 + 140\,160 z^6 - 781\,440 z^5 + 1\,572\,864 z^4 - 423\,360 z^3 - 264\,600 z^2 - 189\,000 z - 99\,225) + \frac{1}{6\,291\,456 z^{9/2}} (\sqrt{\pi} (-512 z^9 + 20\,736 z^8 - 290\,304 z^7 + 1\,693\,440 z^6 - 3\,810\,240 z^5 + 1\,905\,120 z^4 + 635\,040 z^3 + 408\,240 z^2 + 255\,150 z + 99\,225) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.3458.01

$${}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{3\,145\,728 z^4} e^{-z} (256 z^8 + 10\,240 z^7 + 140\,160 z^6 + 781\,440 z^5 + 1\,572\,864 z^4 + 423\,360 z^3 - 264\,600 z^2 + 189\,000 z - 99\,225) + \frac{1}{6\,291\,456 z^{9/2}} (\sqrt{\pi} (512 z^9 + 20\,736 z^8 + 290\,304 z^7 + 1\,693\,440 z^6 - 3\,810\,240 z^5 + 1\,905\,120 z^4 - 635\,040 z^3 + 408\,240 z^2 - 255\,150 z + 99\,225) \operatorname{erf}(\sqrt{z}))$$

$$\begin{aligned}
 & \text{07.25.03.3459.01} \\
 & {}_2F_2\left(-\frac{9}{2}, -\frac{1}{2}; -\frac{1}{2}, 6; z\right) = \\
 & \frac{1}{43\,648\,605\,z^4} \left(32 e^{z/2} (128 z^9 - 5440 z^8 + 80064 z^7 - 489\,840 z^6 + 1\,132\,752 z^5 - 476\,280 z^4 - 264\,600 z^3 - \right. \\
 & \quad \left. 214\,515 z^2 - 170\,100 z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \right. \\
 & \quad \left. 32 e^{z/2} (128 z^8 - 5568 z^7 + 85\,440 z^6 - 567\,312 z^5 + 1\,587\,600 z^4 - 1\,428\,840 z^3 - 52\,920 z^2 - 42\,525 z - 22\,680) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{1}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.3460.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{e^z (128 z^7 - 320 z^6 + 1632 z^5 - 6960 z^4 + 24\,600 z^3 - 66\,780 z^2 + 122\,850 z - 114\,345)}{114\,345}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3461.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{e^z (64 z^6 - 192 z^5 + 720 z^4 - 2400 z^3 + 6300 z^2 - 11\,340 z + 10\,395)}{10\,395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3462.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{e^z (32 z^5 - 112 z^4 + 304 z^3 - 744 z^2 + 1290 z - 1155)}{1155}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3463.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{165} e^z (16 z^4 - 64 z^3 + 120 z^2 - 192 z + 165)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3464.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = -\frac{1}{33} e^z (8 z^3 - 36 z^2 + 42 z - 33)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3465.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{11} e^z (4 z^2 - 20 z + 11)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3466.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = -\frac{1}{11} e^z (2 z - 11)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3467.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{11} e^{z/2} (11 - z) I_0\left(\frac{z}{2}\right) - \frac{1}{11} e^{z/2} z I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3468.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{6 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 \sqrt{z}} - \frac{e^z}{11}
 \end{aligned}$$

07.25.03.3469.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{6\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11\sqrt{z}} - \frac{e^{-z}}{11}$$

07.25.03.3470.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{13}{11} e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.3471.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi} (12z+7) \operatorname{erfi}(\sqrt{z})}{44z^{3/2}} - \frac{21e^z}{22z}$$

07.25.03.3472.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi} (12z-7) \operatorname{erf}(\sqrt{z})}{44z^{3/2}} + \frac{21e^{-z}}{22z}$$

07.25.03.3473.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, 3; z\right) = \frac{16}{11} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2} (4z+5) I_1\left(\frac{z}{2}\right)}{11z}$$

07.25.03.3474.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi} (6z^2+7z+6) \operatorname{erfi}(\sqrt{z})}{88z^{5/2}} - \frac{45e^z (z+2)}{44z^2}$$

07.25.03.3475.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{45e^{-z} (z-2)}{44z^2} + \frac{15\sqrt{\pi} (6z^2-7z+6) \operatorname{erf}(\sqrt{z})}{88z^{5/2}}$$

07.25.03.3476.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2} (24z+17) I_0\left(\frac{z}{2}\right)}{55z} - \frac{4e^{z/2} (24z^2+41z+68) I_1\left(\frac{z}{2}\right)}{55z^2}$$

07.25.03.3477.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{105\sqrt{\pi} (16z^3+28z^2+48z+45) \operatorname{erfi}(\sqrt{z})}{1408z^{7/2}} - \frac{105e^z (8z^2+18z+45)}{704z^3}$$

07.25.03.3478.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{105e^{-z} (8z^2-18z+45)}{704z^3} + \frac{105\sqrt{\pi} (16z^3-28z^2+48z-45) \operatorname{erf}(\sqrt{z})}{1408z^{7/2}}$$

07.25.03.3479.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2} (24z^2+31z+57) I_0\left(\frac{z}{2}\right)}{385z^2} - \frac{32e^{z/2} (24z^3+55z^2+124z+228) I_1\left(\frac{z}{2}\right)}{385z^3}$$

07.25.03.3480.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi} (48z^4+112z^3+288z^2+540z+525) \operatorname{erfi}(\sqrt{z})}{11264z^{9/2}} - \frac{315e^z (24z^3+68z^2+190z+525)}{5632z^4}$$

07.25.03.3481.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (24 z^3 - 68 z^2 + 190 z - 525)}{5632 z^4} + \frac{315 \sqrt{\pi} (48 z^4 - 112 z^3 + 288 z^2 - 540 z + 525) \operatorname{erf}(\sqrt{z})}{11264 z^{9/2}}$$

07.25.03.3482.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^3 + 30 z^2 + 87 z + 168) I_0\left(\frac{z}{2}\right)}{231 z^3} - \frac{32 e^{z/2} (16 z^4 + 46 z^3 + 141 z^2 + 348 z + 672) I_1\left(\frac{z}{2}\right)}{231 z^4}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.3483.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{1}{945} e^z (32 z^5 - 80 z^4 + 240 z^3 - 600 z^2 + 1050 z - 945)$$

07.25.03.3484.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{105} e^z (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105)$$

07.25.03.3485.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{1}{15} e^z (8 z^3 - 12 z^2 + 18 z - 15)$$

07.25.03.3486.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (4 z^2 - 4 z + 3)$$

07.25.03.3487.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -e^z (2z - 1)$$

07.25.03.3488.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = e^z$$

07.25.03.3489.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, 1; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

07.25.03.3490.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.3491.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.3492.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.3493.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi}(2z+1)\operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3e^z}{4z}$$

07.25.03.3494.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi}(2z-1)\operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.3495.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, 3; z\right) = \frac{4}{3}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(z+1)I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.3496.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi}(4z^2+4z+3)\operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15e^z(2z+3)}{32z^2}$$

07.25.03.3497.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z}(2z-3)}{32z^2} + \frac{15\sqrt{\pi}(4z^2-4z+3)\operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.3498.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, 4; z\right) = \frac{4e^{z/2}(2z+1)I_0\left(\frac{z}{2}\right)}{5z} - \frac{4e^{z/2}(2z^2+3z+4)I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.3499.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi}(8z^3+12z^2+18z+15)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35e^z(4z^2+8z+15)}{128z^3}$$

07.25.03.3500.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}(4z^2-8z+15)}{128z^3} + \frac{35\sqrt{\pi}(8z^3-12z^2+18z-15)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.3501.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, 5; z\right) = \frac{32e^{z/2}(2z^2+2z+3)I_0\left(\frac{z}{2}\right)}{35z^2} - \frac{64e^{z/2}(z^3+2z^2+4z+6)I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.3502.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi}(16z^4+32z^3+72z^2+120z+105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315e^z(8z^3+20z^2+50z+105)}{2048z^4}$$

07.25.03.3503.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}(8z^3-20z^2+50z-105)}{2048z^4} + \frac{315\sqrt{\pi}(16z^4-32z^3+72z^2-120z+105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.3504.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{9}{2}, 6; z\right) = \frac{32e^{z/2}(4z^3+6z^2+15z+24)I_0\left(\frac{z}{2}\right)}{63z^3} - \frac{32e^{z/2}(4z^4+10z^3+27z^2+60z+96)I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.3505.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{e^z (2048 z^4 - 1496 z^3 + 2796 z^2 - 4350 z + 3675)}{3675} - \frac{2048 \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})}{3675}$$

07.25.03.3506.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{2048 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2}}{3675} + \frac{e^{-z} (2048 z^4 + 1496 z^3 + 2796 z^2 + 4350 z + 3675)}{3675}$$

07.25.03.3507.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1024}{525} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{525} e^z (-1024 z^4 - 512 z^3 + 492 z^2 - 660 z + 525)$$

07.25.03.3508.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{525} e^{-z} (-1024 z^4 + 512 z^3 + 492 z^2 + 660 z + 525) - \frac{1024}{525} \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.3509.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{105} e^z (256 z^4 + 128 z^3 + 192 z^2 - 150 z + 105) - \frac{256}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.3510.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{256}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (256 z^4 - 128 z^3 + 192 z^2 + 150 z + 105)$$

07.25.03.3511.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{128}{105} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^z (-128 z^4 - 64 z^3 - 96 z^2 - 240 z + 105)$$

07.25.03.3512.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} e^{-z} (-128 z^4 + 64 z^3 - 96 z^2 + 240 z + 105) - \frac{128}{105} \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.3513.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.3514.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)$$

07.25.03.3515.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (-2048 z^5 + 1536 z^4 + 960 z^3 + 1680 z^2 + 4725 z + 33075) I_0\left(\frac{z}{2}\right)}{33075} + \frac{e^{z/2} (2048 z^5 + 512 z^4 + 576 z^3 + 1200 z^2 + 3675 z) I_1\left(\frac{z}{2}\right)}{33075}$$

07.25.03.3516.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105)}{1050} + \frac{\sqrt{\pi} (945 - 32 z^5) \operatorname{erfi}(\sqrt{z})}{2100 \sqrt{z}}$$

07.25.03.3517.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (16z^4 - 8z^3 + 12z^2 - 30z + 105)}{1050} + \frac{\sqrt{\pi} (32z^5 + 945) \operatorname{erf}(\sqrt{z})}{2100\sqrt{z}}$$

07.25.03.3518.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (-4096z^5 + 3072z^4 + 1920z^3 + 3360z^2 + 9450z + 363825) I_0\left(\frac{z}{2}\right)}{363825} + \frac{e^{z/2} (4096z^5 + 1024z^4 + 1152z^3 + 2400z^2 + 7350z - 297675) I_1\left(\frac{z}{2}\right)}{363825}$$

07.25.03.3519.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z - 4725)}{8400z} + \frac{\sqrt{\pi} (-64z^6 + 11340z + 4725) \operatorname{erfi}(\sqrt{z})}{16800z^{3/2}}$$

07.25.03.3520.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (32z^5 - 16z^4 + 24z^3 - 60z^2 + 210z + 4725)}{8400z} + \frac{\sqrt{\pi} (64z^6 + 11340z - 4725) \operatorname{erf}(\sqrt{z})}{16800z^{3/2}}$$

07.25.03.3521.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, 3; z\right) = \frac{4e^{z/2} (4096z^6 + 1024z^5 + 1152z^4 + 2400z^3 + 7350z^2 - 1389150z - 1091475) I_1\left(\frac{z}{2}\right)}{4729725z} - \frac{8e^{z/2} (2048z^5 - 1536z^4 - 960z^3 - 1680z^2 - 4725z - 727650) I_0\left(\frac{z}{2}\right)}{4729725}$$

07.25.03.3522.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (64z^6 + 32z^5 + 48z^4 + 120z^3 + 420z^2 - 37800z - 42525)}{47040z^2} + \frac{\sqrt{\pi} (-128z^7 + 79380z^2 + 66150z + 42525) \operatorname{erfi}(\sqrt{z})}{94080z^{5/2}}$$

07.25.03.3523.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (64z^6 - 32z^5 + 48z^4 - 120z^3 + 420z^2 + 37800z - 42525)}{47040z^2} + \frac{\sqrt{\pi} (128z^7 + 79380z^2 - 66150z + 42525) \operatorname{erf}(\sqrt{z})}{94080z^{5/2}}$$

07.25.03.3524.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{23648625z^2} - \frac{4e^{z/2} (8192z^7 + 2048z^6 + 2304z^5 + 4800z^4 + 14700z^3 - 8453970z^2 - 10696455z - 11351340) I_1\left(\frac{z}{2}\right) - 4e^{z/2} (8192z^6 - 6144z^5 - 3840z^4 - 6720z^3 - 18900z^2 - 8586270z - 2837835) I_0\left(\frac{z}{2}\right)}{23648625z}$$

07.25.03.3525.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 + 64 z^6 + 96 z^5 + 240 z^4 + 840 z^3 - 207\,900 z^2 - 349\,650 z - 496\,125)}{215\,040 z^3} + \frac{\sqrt{\pi} (-256 z^8 + 423\,360 z^3 + 529\,200 z^2 + 680\,400 z + 496\,125) \operatorname{erfi}(\sqrt{z})}{430\,080 z^{7/2}}$$

07.25.03.3526.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 - 64 z^6 + 96 z^5 - 240 z^4 + 840 z^3 + 207\,900 z^2 - 349\,650 z + 496\,125)}{215\,040 z^3} + \frac{\sqrt{\pi} (256 z^8 + 423\,360 z^3 - 529\,200 z^2 + 680\,400 z - 496\,125) \operatorname{erf}(\sqrt{z})}{430\,080 z^{7/2}}$$

07.25.03.3527.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{402\,026\,625 z^3} \left(32 e^{z/2} (8192 z^8 + 2048 z^7 + 2304 z^6 + 4800 z^5 + 14\,700 z^4 - 20\,616\,120 z^3 - 35\,020\,755 z^2 - 59\,999\,940 z - 72\,972\,900) I_1\left(\frac{z}{2}\right) - \frac{1}{402\,026\,625 z^2} \right) + 32 e^{z/2} (8192 z^7 - 6144 z^6 - 3840 z^5 - 6720 z^4 - 18\,900 z^3 - 20\,748\,420 z^2 - 14\,999\,985 z - 18\,243\,225) I_0\left(\frac{z}{2}\right)$$

07.25.03.3528.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{e^z (128 z^8 + 64 z^7 + 96 z^6 + 240 z^5 + 840 z^4 - 472\,500 z^3 - 1\,011\,150 z^2 - 2\,149\,875 z - 3\,472\,875)}{430\,080 z^4} + \frac{\sqrt{\pi} (-256 z^9 + 952\,560 z^4 + 1\,587\,600 z^3 + 3\,061\,800 z^2 + 4\,465\,125 z + 3\,472\,875) \operatorname{erfi}(\sqrt{z})}{860\,160 z^{9/2}}$$

07.25.03.3529.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (128 z^8 - 64 z^7 + 96 z^6 - 240 z^5 + 840 z^4 + 472\,500 z^3 - 1\,011\,150 z^2 + 2\,149\,875 z - 3\,472\,875)}{430\,080 z^4} + \frac{\sqrt{\pi} (256 z^9 + 952\,560 z^4 - 1\,587\,600 z^3 + 3\,061\,800 z^2 - 4\,465\,125 z + 3\,472\,875) \operatorname{erf}(\sqrt{z})}{860\,160 z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.3530.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{7}{2}, 6; z\right) = \\
 & \frac{1}{1527701175z^4} \left(32 e^{z/2} (16384z^9 + 4096z^8 + 4608z^7 + 9600z^6 + 29400z^5 - 87178140z^4 - 184906260z^3 - \right. \\
 & \quad \left. 430134705z^2 - 835134300z - 1102701600) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{1527701175z^3} \left(32 e^{z/2} (16384z^8 - 12288z^7 - 7680z^6 - 13440z^5 - 37800z^4 - 87442740z^3 - \right. \\
 & \quad \left. 98918820z^2 - 208783575z - 275675400) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{5}{2}$

$$\text{07.25.03.3531.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{75} e^z (512z^4 - 320z^3 + 96z^2 - 102z + 75) - \frac{64}{75} \sqrt{\pi} (8z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3532.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{75} e^{-z} (512z^4 + 320z^3 + 96z^2 + 102z + 75) + \frac{64}{75} \sqrt{\pi} (8z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.3533.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{15} e^z (-128z^4 + 224z^3 + 48z^2 - 24z + 15) + \frac{32}{15} \sqrt{\pi} (4z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3534.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-128z^4 - 224z^3 + 48z^2 + 24z + 15) - \frac{32}{15} \sqrt{\pi} (4z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.3535.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (64z^4 - 184z^3 - 60z^2 - 42z + 15) - \frac{8}{15} \sqrt{\pi} (8z^{9/2} - 27z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3536.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (64z^4 + 184z^3 - 60z^2 + 42z + 15) + \frac{8}{15} \sqrt{\pi} (8z^{9/2} + 27z^{7/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.3537.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15} \sqrt{\pi} (2z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3538.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15} \sqrt{\pi} (2z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.3539.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, 1; z\right) = \\
 \frac{e^{z/2} (1024z^5 - 5952z^4 + 3408z^3 + 1590z^2 + 1890z + 4725) I_0\left(\frac{z}{2}\right) - 2 e^{z/2} (512z^5 - 2464z^4 - 504z^3 - 429z^2 - 600z) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.3540.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{e^z (-64 z^4 + 328 z^3 + 132 z^2 + 150 z + 255)}{1200} + \frac{\sqrt{\pi} (128 z^5 - 720 z^4 + 945) \operatorname{erfi}(\sqrt{z})}{2400 \sqrt{z}}$$

07.25.03.3541.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-64 z^4 - 328 z^3 + 132 z^2 - 150 z + 255)}{1200} + \frac{\sqrt{\pi} (-128 z^5 - 720 z^4 + 945) \operatorname{erf}(\sqrt{z})}{2400 \sqrt{z}}$$

07.25.03.3542.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (2048 z^5 - 14208 z^4 + 8544 z^3 + 4260 z^2 + 5670 z + 51975) I_0\left(\frac{z}{2}\right)}{51975} + \frac{e^{z/2} (-2048 z^5 + 12160 z^4 + 2592 z^3 + 2364 z^2 + 3750 z - 33075) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.3543.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-32 z^5 + 200 z^4 + 84 z^3 + 102 z^2 + 195 z - 945)}{2400 z} + \frac{\sqrt{\pi} (64 z^6 - 432 z^5 + 2835 z + 945) \operatorname{erfi}(\sqrt{z})}{4800 z^{3/2}}$$

07.25.03.3544.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-32 z^5 - 200 z^4 + 84 z^3 - 102 z^2 + 195 z + 945)}{2400 z} + \frac{\sqrt{\pi} (-64 z^6 - 432 z^5 + 2835 z - 945) \operatorname{erf}(\sqrt{z})}{4800 z^{3/2}}$$

07.25.03.3545.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (2048 z^5 - 16512 z^4 + 10272 z^3 + 5340 z^2 + 7560 z + 193725) I_0\left(\frac{z}{2}\right)}{675675} - \frac{4 e^{z/2} (2048 z^6 - 14464 z^5 - 3168 z^4 - 3012 z^3 - 5100 z^2 + 165375 z + 99225) I_1\left(\frac{z}{2}\right)}{675675 z}$$

07.25.03.3546.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-128 z^6 + 944 z^5 + 408 z^4 + 516 z^3 + 1050 z^2 - 17010 z - 14175)}{26880 z^2} + \frac{\sqrt{\pi} (256 z^7 - 2016 z^6 + 39690 z^2 + 26460 z + 14175) \operatorname{erfi}(\sqrt{z})}{53760 z^{5/2}}$$

07.25.03.3547.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-128 z^6 - 944 z^5 + 408 z^4 - 516 z^3 + 1050 z^2 + 17010 z - 14175)}{26880 z^2} + \frac{\sqrt{\pi} (-256 z^7 - 2016 z^6 + 39690 z^2 - 26460 z + 14175) \operatorname{erf}(\sqrt{z})}{53760 z^{5/2}}$$

07.25.03.3548.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (4096 z^6 - 37632 z^5 + 24000 z^4 + 12840 z^3 + 18900 z^2 + 1107540 z + 218295) I_0\left(\frac{z}{2}\right) - \frac{1}{3378375 z^2} 4 e^{z/2} (4096 z^7 - 33536 z^6 - 7488 z^5 - 7320 z^4 - 12900 z^3 + 1031940 z^2 + 1051785 z + 873180) I_1\left(\frac{z}{2}\right)}{3378375 z^2}$$

07.25.03.3549.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^{-z} (-128 z^7 + 1088 z^6 + 480 z^5 + 624 z^4 + 1320 z^3 - 49140 z^2 - 66150 z - 70875)}{61440 z^3} + \frac{\sqrt{\pi} (256 z^8 - 2304 z^7 + 105840 z^3 + 105840 z^2 + 113400 z + 70875) \operatorname{erfi}(\sqrt{z})}{122880 z^{7/2}}$$

07.25.03.3550.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-128 z^7 - 1088 z^6 + 480 z^5 - 624 z^4 + 1320 z^3 + 49140 z^2 - 66150 z + 70875)}{61440 z^3} + \frac{\sqrt{\pi} (-256 z^8 - 2304 z^7 + 105840 z^3 - 105840 z^2 + 113400 z - 70875) \operatorname{erf}(\sqrt{z})}{122880 z^{7/2}}$$

07.25.03.3551.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, 5; z\right) = \frac{1}{57432375 z^2} 32 e^{z/2} (4096 z^7 - 42240 z^6 + 27456 z^5 + 15000 z^4 + 22680 z^3 + 2638440 z^2 + 1247400 z + 1216215) I_0\left(\frac{z}{2}\right) - \frac{1}{57432375 z^3} 128 e^{z/2} (1024 z^8 - 9536 z^7 - 2160 z^6 - 2154 z^5 - 3900 z^4 + 635985 z^3 + 881685 z^2 + 1247400 z + 1216215) I_1\left(\frac{z}{2}\right)$$

07.25.03.3552.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{983040 z^4} e^{-z} (-1024 z^8 + 9856 z^7 + 4416 z^6 + 5856 z^5 + 12720 z^4 - 914760 z^3 - 1606500 z^2 - 2787750 z - 3472875) + \frac{1}{1966080 z^{9/2}} \sqrt{\pi} (2048 z^9 - 20736 z^8 + 1905120 z^4 + 2540160 z^3 + 4082400 z^2 + 5103000 z + 3472875) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3553.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{983040 z^4} e^{-z} (-1024 z^8 - 9856 z^7 + 4416 z^6 - 5856 z^5 + 12720 z^4 + 914760 z^3 - 1606500 z^2 + 2787750 z - 3472875) + \frac{1}{1966080 z^{9/2}} \sqrt{\pi} (-2048 z^9 - 20736 z^8 + 1905120 z^4 - 2540160 z^3 + 4082400 z^2 - 5103000 z + 3472875) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.3554.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{5}{2}, 6; z\right) = \frac{1}{218243025z^3} \\
 & \quad \left(32e^{z/2}(8192z^8 - 93696z^7 + 61824z^6 + 34320z^5 + 52920z^4 + 11041380z^3 + 8607060z^2 + 14999985z + 16216200)\right. \\
 & \quad \left.I_0\left(\frac{z}{2}\right) - \frac{1}{218243025z^4} \left(32e^{z/2}(8192z^9 - 85504z^8 - 19584z^7 - 19824z^6 - 36600z^5 + \right.\right. \\
 & \quad \left.\left.10814580z^4 + 18760140z^3 + 36455265z^2 + 59999940z + 64864800)\right) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{3}{2}$

$$\text{07.25.03.3555.01} \quad {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{3}e^z(32z^4 - 128z^3 + 36z^2 - 6z + 3) - \frac{4}{3}\sqrt{\pi}(8z^{9/2} - 36z^{7/2} + 21z^{5/2})\operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3556.01} \quad {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3}e^{-z}(32z^4 + 128z^3 + 36z^2 + 6z + 3) + \frac{4}{3}\sqrt{\pi}(8z^{9/2} + 36z^{7/2} + 21z^{5/2})\operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.3557.01} \quad {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3}e^z(-16z^4 + 100z^3 - 84z^2 - 12z + 3) + \frac{2}{3}\sqrt{\pi}(8z^{9/2} - 54z^{7/2} + 63z^{5/2})\operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3558.01} \quad {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3}e^{-z}(-16z^4 - 100z^3 - 84z^2 + 12z + 3) - \frac{2}{3}\sqrt{\pi}(8z^{9/2} + 54z^{7/2} + 63z^{5/2})\operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.3559.01} \quad {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3}e^z(2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6}\sqrt{\pi}(-4z^{9/2} + 36z^{7/2} - 63z^{5/2})\operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3560.01} \quad {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3}e^{-z}(2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6}\sqrt{\pi}(4z^{9/2} + 36z^{7/2} + 63z^{5/2})\operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.3561.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{945}e^{z/2}(-256z^5 + 2784z^4 - 7116z^3 + 2964z^2 + 945z + 945)I_0\left(\frac{z}{2}\right) + \\
 & \quad \frac{1}{945}e^{z/2}(256z^5 - 2528z^4 + 4716z^3 + 744z^2 + 429z)I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\text{07.25.03.3562.01} \quad {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{480}e^z(32z^4 - 344z^3 + 684z^2 + 210z + 165) + \frac{\sqrt{\pi}(-64z^5 + 720z^4 - 1680z^3 + 315)\operatorname{erfi}(\sqrt{z})}{960\sqrt{z}}$$

$$\text{07.25.03.3563.01} \quad {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{480}e^{-z}(32z^4 + 344z^3 + 684z^2 - 210z + 165) + \frac{\sqrt{\pi}(64z^5 + 720z^4 + 1680z^3 + 315)\operatorname{erf}(\sqrt{z})}{960\sqrt{z}}$$

07.25.03.3564.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2}(-512z^5 + 6720z^4 - 21144z^3 + 9924z^2 + 3780z + 10395)I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2}(512z^5 - 6208z^4 + 15192z^3 + 2676z^2 + 1884z - 4725)I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.3565.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z(64z^5 - 832z^4 + 2136z^3 + 732z^2 + 690z - 945)}{3840z} + \frac{\sqrt{\pi}(-128z^6 + 1728z^5 - 5040z^4 + 3780z + 945)\operatorname{erfi}(\sqrt{z})}{7680z^{3/2}}$$

07.25.03.3566.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(64z^5 + 832z^4 + 2136z^3 - 732z^2 + 690z + 945)}{3840z} + \frac{\sqrt{\pi}(128z^6 + 1728z^5 + 5040z^4 + 3780z - 945)\operatorname{erf}(\sqrt{z})}{7680z^{3/2}}$$

07.25.03.3567.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, 3; z\right) = \frac{4e^{z/2}(512z^6 - 7360z^5 + 22296z^4 + 4200z^3 + 3288z^2 - 25200z - 11025)I_1\left(\frac{z}{2}\right)}{135135z} - \frac{16e^{z/2}(128z^5 - 1968z^4 + 7350z^3 - 3732z^2 - 1575z - 9135)I_0\left(\frac{z}{2}\right)}{135135}$$

07.25.03.3568.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z(64z^6 - 976z^5 + 3072z^4 + 1128z^3 + 1176z^2 - 4725z - 2835)}{10752z^2} + \frac{\sqrt{\pi}(-128z^7 + 2016z^6 - 7056z^5 + 13230z^2 + 6615z + 2835)\operatorname{erfi}(\sqrt{z})}{21504z^{5/2}}$$

07.25.03.3569.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(64z^6 + 976z^5 + 3072z^4 - 1128z^3 + 1176z^2 + 4725z - 2835)}{10752z^2} + \frac{\sqrt{\pi}(128z^7 + 2016z^6 + 7056z^5 + 13230z^2 - 6615z + 2835)\operatorname{erf}(\sqrt{z})}{21504z^{5/2}}$$

07.25.03.3570.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{675675z^2} - \frac{4e^{z/2}(1024z^7 - 17024z^6 + 61488z^5 + 12120z^4 + 10140z^3 - 162540z^2 - 125685z - 79380)I_1\left(\frac{z}{2}\right)}{675675z} - \frac{4e^{z/2}(1024z^6 - 18048z^5 + 78000z^4 - 41880z^3 - 18900z^2 - 200340z - 19845)I_0\left(\frac{z}{2}\right)}{675675z}$$

07.25.03.3571.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 2240 z^6 + 8352 z^5 + 3216 z^4 + 3576 z^3 - 28980 z^2 - 29610 z - 23625)}{49152 z^3} + \frac{\sqrt{\pi} (-256 z^8 + 4608 z^7 - 18816 z^6 + 70560 z^5 + 52920 z^4 + 45360 z^3 + 23625) \operatorname{erfi}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.3572.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 2240 z^6 + 8352 z^5 - 3216 z^4 + 3576 z^3 + 28980 z^2 - 29610 z + 23625)}{49152 z^3} + \frac{\sqrt{\pi} (256 z^8 + 4608 z^7 + 18816 z^6 + 70560 z^5 - 52920 z^4 + 45360 z^3 - 23625) \operatorname{erf}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.3573.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, 5; z\right) = \frac{1}{11486475 z^3} - \frac{32 e^{z/2} (1024 z^8 - 19328 z^7 + 81072 z^6 + 16512 z^5 + 14460 z^4 - 408240 z^3 - 435645 z^2 - 487620 z - 374220) I_1\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} 32 e^{z/2} (1024 z^7 - 20352 z^6 + 99888 z^5 - 55920 z^4 - 26460 z^3 - 464940 z^2 - 121905 z - 93555) I_0\left(\frac{z}{2}\right)}{11486475 z^2}$$

07.25.03.3574.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{393216 z^4} e^z (512 z^8 - 10112 z^7 + 43584 z^6 + 17376 z^5 + 20208 z^4 - 279720 z^3 - 381780 z^2 - 519750 z - 496125) + \frac{1}{786432 z^{9/2}} \sqrt{\pi} (-1024 z^9 + 20736 z^8 - 96768 z^7 + 635040 z^4 + 635040 z^3 + 816480 z^2 + 850500 z + 496125) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3575.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{393216 z^4} e^{-z} (512 z^8 + 10112 z^7 + 43584 z^6 - 17376 z^5 + 20208 z^4 + 279720 z^3 - 381780 z^2 + 519750 z - 496125) + \frac{1}{786432 z^{9/2}} \sqrt{\pi} (1024 z^9 + 20736 z^8 + 96768 z^7 + 635040 z^4 - 635040 z^3 + 816480 z^2 - 850500 z + 496125) \operatorname{erf}(\sqrt{z})$$

07.25.03.3576.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{43648605 z^4} \left(32 e^{z/2} (2048 z^9 - 43264 z^8 + 206688 z^7 + 43152 z^6 + 39072 z^5 - 1755180 z^4 - 2354310 z^3 - 3665655 z^2 - 4948020 z - 4324320) I_1\left(\frac{z}{2}\right) - \frac{1}{43648605 z^3} \left(32 e^{z/2} (2048 z^8 - 45312 z^7 + 248928 z^6 - 143952 z^5 - 70560 z^4 - 1913940 z^3 - 882630 z^2 - 1237005 z - 1081080) I_0\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.3577.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{6} e^z (16 z^4 - 154 z^3 + 309 z^2 - 60 z + 6) + \frac{1}{12} \sqrt{\pi} (-32 z^{9/2} + 324 z^{7/2} - 756 z^{5/2} + 315 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3578.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \\
 & \frac{1}{6} e^{-z} (16 z^4 + 154 z^3 + 309 z^2 + 60 z + 6) + \frac{1}{12} \sqrt{\pi} (32 z^{9/2} + 324 z^{7/2} + 756 z^{5/2} + 315 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3579.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{12} e^z (-4 z^4 + 52 z^3 - 165 z^2 + 96 z + 12) + \frac{1}{24} \sqrt{\pi} (8 z^{9/2} - 108 z^{7/2} + 378 z^{5/2} - 315 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3580.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \\
 & \frac{1}{12} e^{-z} (-4 z^4 - 52 z^3 - 165 z^2 - 96 z + 12) + \frac{1}{24} \sqrt{\pi} (-8 z^{9/2} - 108 z^{7/2} - 378 z^{5/2} - 315 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3581.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (128 z^5 - 2040 z^4 + 9336 z^3 - 13416 z^2 + 3780 z + 945) I_0\left(\frac{z}{2}\right) - \\
 & \frac{4}{945} e^{z/2} (32 z^5 - 478 z^4 + 1872 z^3 - 1689 z^2 - 186 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3582.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \\
 & \frac{e^z (-64 z^4 + 1048 z^3 - 4548 z^2 + 4470 z + 975)}{1920} + \frac{\sqrt{\pi} (128 z^5 - 2160 z^4 + 10080 z^3 - 12600 z^2 + 945) \operatorname{erfi}(\sqrt{z})}{3840 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3583.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \\
 & \frac{e^{-z} (-64 z^4 - 1048 z^3 - 4548 z^2 - 4470 z + 975)}{1920} + \frac{\sqrt{\pi} (-128 z^5 - 2160 z^4 - 10080 z^3 - 12600 z^2 + 945) \operatorname{erf}(\sqrt{z})}{3840 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3584.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^{z/2} (256 z^5 - 4944 z^4 + 28392 z^3 - 53076 z^2 + 18900 z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \\
 & \frac{e^{z/2} (-256 z^5 + 4688 z^4 - 23832 z^3 + 31332 z^2 + 4404 z - 2835) I_1\left(\frac{z}{2}\right)}{10395}
 \end{aligned}$$

07.25.03.3585.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (-64 z^5 + 1264 z^4 - 6960 z^3 + 9672 z^2 + 2640 z - 945)}{7680 z} + \frac{\sqrt{\pi} (128 z^6 - 2592 z^5 + 15120 z^4 - 25200 z^3 + 5670 z + 945) \operatorname{erfi}(\sqrt{z})}{15360 z^{3/2}}$$

07.25.03.3586.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-64 z^5 - 1264 z^4 - 6960 z^3 - 9672 z^2 + 2640 z + 945)}{7680 z} + \frac{\sqrt{\pi} (-128 z^6 - 2592 z^5 - 15120 z^4 - 25200 z^3 + 5670 z - 945) \operatorname{erf}(\sqrt{z})}{15360 z^{3/2}}$$

07.25.03.3587.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (256 z^5 - 5808 z^4 + 40128 z^3 - 92172 z^2 + 37800 z + 34965) I_0\left(\frac{z}{2}\right)}{135135} - \frac{4 e^{z/2} (256 z^6 - 5552 z^5 + 34704 z^4 - 59988 z^3 - 9588 z^2 + 16065 z + 4725) I_1\left(\frac{z}{2}\right)}{135135 z}$$

07.25.03.3588.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (-256 z^6 + 5920 z^5 - 39504 z^4 + 71088 z^3 + 22008 z^2 - 20790 z - 8505)}{86016 z^2} + \frac{\sqrt{\pi} (512 z^7 - 12096 z^6 + 84672 z^5 - 176400 z^4 + 79380 z^2 + 26460 z + 8505) \operatorname{erfi}(\sqrt{z})}{172032 z^{5/2}}$$

07.25.03.3589.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-256 z^6 - 5920 z^5 - 39504 z^4 - 71088 z^3 + 22008 z^2 + 20790 z - 8505)}{86016 z^2} + \frac{\sqrt{\pi} (-512 z^7 - 12096 z^6 - 84672 z^5 - 176400 z^4 + 79380 z^2 - 26460 z + 8505) \operatorname{erf}(\sqrt{z})}{172032 z^{5/2}}$$

07.25.03.3590.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (512 z^6 - 13344 z^5 + 107760 z^4 - 293280 z^3 + 132300 z^2 + 183330 z + 6615) I_0\left(\frac{z}{2}\right)}{675675 z} - \frac{1}{675675 z^2} 4 e^{z/2} (512 z^7 - 12832 z^6 + 95184 z^5 - 204000 z^4 - 35340 z^3 + 107730 z^2 + 57645 z + 26460) I_1\left(\frac{z}{2}\right)$$

07.25.03.3591.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (-128 z^7 + 3392 z^6 - 26592 z^5 + 58800 z^4 + 19752 z^3 - 34020 z^2 - 24570 z - 14175)}{98304 z^3} + \frac{1}{196608 z^{7/2}} \sqrt{\pi} (256 z^8 - 6912 z^7 + 56448 z^6 - 141120 z^5 + 105840 z^3 + 52920 z^2 + 34020 z + 14175) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3592.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(-128z^7 - 3392z^6 - 26592z^5 - 58800z^4 + 19752z^3 + 34020z^2 - 24570z + 14175)}{98304z^3} + \frac{1}{196608z^{7/2}} \sqrt{\pi} (-256z^8 - 6912z^7 - 56448z^6 - 141120z^5 + 105840z^3 - 52920z^2 + 34020z - 14175) \operatorname{erf}(\sqrt{z})$$

07.25.03.3593.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, 5; z\right) = \frac{1}{11486475z^2}$$

$$32e^{z/2}(512z^7 - 15072z^6 + 139296z^5 - 438000z^4 + 211680z^3 + 410130z^2 + 43470z + 25515)I_0\left(\frac{z}{2}\right) - \frac{1}{11486475z^3}$$

$$64e^{z/2}(256z^8 - 7280z^7 + 62496z^6 - 159888z^5 - 29280z^4 + 138915z^3 + 103950z^2 + 86940z + 51030)I_1\left(\frac{z}{2}\right)$$

07.25.03.3594.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{1572864z^4}$$

$$e^z(-1024z^8 + 30592z^7 - 275520z^6 + 722976z^5 + 257232z^4 - 687960z^3 - 676620z^2 - 689850z - 496125) + \frac{1}{3145728z^{9/2}} (\sqrt{\pi} (2048z^9 - 62208z^8 + 580608z^7 - 1693440z^6 + 1905120z^4 + 1270080z^3 + 1224720z^2 + 1020600z + 496125) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.3595.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{1572864z^4}$$

$$e^{-z}(-1024z^8 - 30592z^7 - 275520z^6 - 722976z^5 + 257232z^4 + 687960z^3 - 676620z^2 + 689850z - 496125) + \frac{1}{3145728z^{9/2}} (\sqrt{\pi} (-2048z^9 - 62208z^8 - 580608z^7 - 1693440z^6 + 1905120z^4 - 1270080z^3 + 1224720z^2 - 1020600z + 496125) \operatorname{erf}(\sqrt{-z}))$$

07.25.03.3596.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; -\frac{1}{2}, 6; z\right) = \frac{1}{43648605z^3}$$

$$(32e^{z/2}(1024z^8 - 33600z^7 + 349728z^6 - 1247088z^5 + 635040z^4 + 1640520z^3 + 330750z^2 + 360045z + 249480) I_0\left(\frac{z}{2}\right) - \frac{1}{43648605z^4} (32e^{z/2}(1024z^9 - 32576z^8 + 317664z^7 - 944688z^6 - 180192z^5 + 1217160z^4 + 1151010z^3 + 1354185z^2 + 1440180z + 997920) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{1}{2}$, $b_1 = \frac{1}{2}$

07.25.03.3597.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{192} e^z(8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3598.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{192} e^{-z} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3599.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-16z^5 + 336z^4 - 2220z^3 + 5484z^2 - 4725z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^5 - 320z^4 + 1908z^3 - 3720z^2 + 1689z) I_1\left(\frac{z}{2}\right)$$

07.25.03.3600.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z (16z^4 - 352z^3 + 2352z^2 - 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945) \operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.3601.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.3602.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, 2; z\right) = \frac{e^{z/2} (-32z^5 + 816z^4 - 6816z^3 + 22524z^2 - 28350z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2} (32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.3603.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (32z^5 - 848z^4 + 7152z^3 - 22008z^2 + 20010z - 945)}{30720z} + \frac{\sqrt{\pi} (-64z^6 + 1728z^5 - 15120z^4 + 50400z^3 - 56700z^2 + 11340z + 945) \operatorname{erfi}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.3604.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (32z^5 + 848z^4 + 7152z^3 + 22008z^2 + 20010z + 945)}{30720z} + \frac{\sqrt{\pi} (64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945) \operatorname{erf}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.3605.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (32 z^6 - 928 z^5 + 8784 z^4 - 31776 z^3 + 37938 z^2 - 5670 z - 945) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (16 z^5 - 480 z^4 + 4848 z^3 - 20064 z^2 + 33075 z - 17010) I_0\left(\frac{z}{2}\right)}{135135 z}$$

07.25.03.3606.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (64 z^6 - 1984 z^5 + 20208 z^4 - 79008 z^3 + 100716 z^2 - 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (-128 z^7 + 4032 z^6 - 42336 z^5 + 176400 z^4 - 264600 z^3 + 79380 z^2 + 13230 z + 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3607.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1984 z^5 + 20208 z^4 + 79008 z^3 + 100716 z^2 + 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835) \operatorname{erf}(\sqrt{z})$$

07.25.03.3608.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^7 - 2144 z^6 + 24048 z^5 - 107040 z^4 + 167640 z^3 - 39690 z^2 - 12285 z - 3780) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (64 z^6 - 2208 z^5 + 26160 z^4 - 130080 z^3 + 264600 z^2 - 171990 z - 945) I_0\left(\frac{z}{2}\right)}{675675 z^2}$$

07.25.03.3609.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 4544 z^6 + 54240 z^5 - 257232 z^4 + 422616 z^3 - 79380 z^2 - 35910 z - 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} \left(\sqrt{\pi} (-256 z^8 + 9216 z^7 - 112896 z^6 + 564480 z^5 - 1058400 z^4 + 423360 z^3 + 105840 z^2 + 45360 z + 14175) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.3610.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 4544 z^6 + 54240 z^5 + 257232 z^4 + 422616 z^3 + 79380 z^2 - 35910 z + 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} \sqrt{\pi} (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175) \operatorname{erf}(\sqrt{z})$$

07.25.03.3611.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, 5; z\right) = \frac{1}{11486475 z^3} - \frac{32 e^{z/2} (64 z^8 - 2432 z^7 + 31536 z^6 - 166656 z^5 + 323160 z^4 - 105840 z^3 - 46305 z^2 - 26460 z - 11340) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^7 - 2496 z^6 + 33936 z^5 - 197040 z^4 + 476280 z^3 - 370440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right)}{11486475 z^2}$$

07.25.03.3612.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{3\,145\,728\,z^4} e^z (256\,z^8 - 10\,240\,z^7 + 140\,160\,z^6 - 781\,440\,z^5 + 1\,572\,864\,z^4 - 423\,360\,z^3 - 264\,600\,z^2 - 189\,000\,z - 99\,225) + \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (-512\,z^9 + 20\,736\,z^8 - 290\,304\,z^7 + 1\,693\,440\,z^6 - 3\,810\,240\,z^5 + 1\,905\,120\,z^4 + 635\,040\,z^3 + 408\,240\,z^2 + 255\,150\,z + 99\,225) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.3613.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{3\,145\,728\,z^4} e^{-z} (256\,z^8 + 10\,240\,z^7 + 140\,160\,z^6 + 781\,440\,z^5 + 1\,572\,864\,z^4 + 423\,360\,z^3 - 264\,600\,z^2 + 189\,000\,z - 99\,225) + \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (512\,z^9 + 20\,736\,z^8 + 290\,304\,z^7 + 1\,693\,440\,z^6 + 3\,810\,240\,z^5 + 1\,905\,120\,z^4 - 635\,040\,z^3 + 408\,240\,z^2 - 255\,150\,z + 99\,225) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.3614.01

$${}_2F_2\left(-\frac{9}{2}, \frac{1}{2}; \frac{1}{2}, 6; z\right) = \frac{1}{43\,648\,605\,z^4} \left(32\,e^{z/2} (128\,z^9 - 5440\,z^8 + 80\,064\,z^7 - 489\,840\,z^6 + 1\,132\,752\,z^5 - 476\,280\,z^4 - 264\,600\,z^3 - 214\,515\,z^2 - 170\,100\,z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \right) - \frac{1}{43\,648\,605\,z^4} \left(32\,e^{z/2} (128\,z^8 - 5568\,z^7 + 85\,440\,z^6 - 567\,312\,z^5 + 1\,587\,600\,z^4 - 1\,428\,840\,z^3 - 52\,920\,z^2 - 42\,525\,z - 22\,680) I_0\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = -\frac{11}{2}$

07.25.03.3615.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{-128\,z^7 - 64\,z^6 - 32\,z^5 + 144\,z^4 - 600\,z^3 + 2940\,z^2 - 17\,010\,z + 114\,345}{114\,345} - \frac{128\,e^z \sqrt{\pi} (z^{15/2} + z^{13/2}) \operatorname{erf}(\sqrt{z})}{114\,345}$$

07.25.03.3616.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{128\,z^7 - 64\,z^6 + 32\,z^5 + 144\,z^4 + 600\,z^3 + 2940\,z^2 + 17\,010\,z + 114\,345}{114\,345} - \frac{128\,e^{-z} \sqrt{\pi} (z^{15/2} - z^{13/2}) \operatorname{erfi}(\sqrt{z})}{114\,345}$$

07.25.03.3617.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{64 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{64 z^6 - 32 z^5 + 48 z^4 - 120 z^3 + 420 z^2 - 1890 z + 10395}{10395}$$

07.25.03.3618.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 + 1890 z + 10395}{10395} - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.3619.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{-32 z^5 + 48 z^4 - 40 z^3 + 84 z^2 - 270 z + 1155}{1155} - \frac{32 e^z \sqrt{\pi} (z^{11/2} - z^{9/2}) \operatorname{erf}(\sqrt{z})}{1155}$$

07.25.03.3620.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{32 z^5 + 48 z^4 + 40 z^3 + 84 z^2 + 270 z + 1155}{1155} - \frac{32 e^{-z} \sqrt{\pi} (z^{11/2} + z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1155}$$

07.25.03.3621.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{165} (16 z^4 - 40 z^3 + 28 z^2 - 54 z + 165) + \frac{16}{165} e^z \sqrt{\pi} (z^{9/2} - 2 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3622.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{165} (16 z^4 + 40 z^3 + 28 z^2 + 54 z + 165) - \frac{16}{165} e^{-z} \sqrt{\pi} (z^{9/2} + 2 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3623.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{33} (-8 z^3 + 28 z^2 - 18 z + 33) - \frac{8}{33} e^z \sqrt{\pi} (z^{7/2} - 3 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3624.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{33} (8 z^3 + 28 z^2 + 18 z + 33) - \frac{8}{33} e^{-z} \sqrt{\pi} (z^{7/2} + 3 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3625.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{11} (4 z^2 - 18 z + 11) + \frac{4}{11} e^z \sqrt{\pi} (z^{5/2} - 4 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3626.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{11} (4 z^2 + 18 z + 11) - \frac{4}{11} e^{-z} \sqrt{\pi} (z^{5/2} + 4 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3627.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{11} (11 - 2 z) - \frac{2}{11} e^z \sqrt{\pi} (z^{3/2} - 5 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3628.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{11} (2 z + 11) - \frac{2}{11} e^{-z} \sqrt{\pi} (z^{3/2} + 5 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3629.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, 1; z\right) = -\frac{1}{11} e^z (2 z - 11)$$

07.25.03.3630.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (6-z) \operatorname{erf}(\sqrt{z})}{11 \sqrt{z}} - \frac{1}{11}$$

07.25.03.3631.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (z+6) \operatorname{erfi}(\sqrt{z})}{11 \sqrt{z}} - \frac{1}{11}$$

07.25.03.3632.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, 2; z\right) = \frac{e^z (13-2z)}{11z} - \frac{13}{11z}$$

07.25.03.3633.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, \frac{5}{2}; z\right) = -\frac{3 e^z \sqrt{\pi} (z-7) \operatorname{erf}(\sqrt{z})}{22 z^{3/2}} - \frac{21}{11z}$$

07.25.03.3634.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{21}{11z} - \frac{3 e^{-z} \sqrt{\pi} (z+7) \operatorname{erfi}(\sqrt{z})}{22 z^{3/2}}$$

07.25.03.3635.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, 3; z\right) = -\frac{2 e^z (2z-15)}{11 z^2} - \frac{2(13z+15)}{11 z^2}$$

07.25.03.3636.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{5(13z+24)}{22 z^2} - \frac{15 e^z \sqrt{\pi} (z-8) \operatorname{erf}(\sqrt{z})}{44 z^{5/2}}$$

07.25.03.3637.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5(13z-24)}{22 z^2} + \frac{15 e^{-z} \sqrt{\pi} (z+8) \operatorname{erfi}(\sqrt{z})}{44 z^{5/2}}$$

07.25.03.3638.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, 4; z\right) = -\frac{6 e^z (2z-17)}{11 z^3} - \frac{3(13z^2+30z+34)}{11 z^3}$$

07.25.03.3639.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{7(26z^2+75z+135)}{44 z^3} - \frac{105 e^z \sqrt{\pi} (z-9) \operatorname{erf}(\sqrt{z})}{88 z^{7/2}}$$

07.25.03.3640.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{7(26z^2-75z+135)}{44 z^3} - \frac{105 e^{-z} \sqrt{\pi} (z+9) \operatorname{erfi}(\sqrt{z})}{88 z^{7/2}}$$

07.25.03.3641.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, 5; z\right) = -\frac{24 e^z (2z-19)}{11 z^4} - \frac{4(13z^3+45z^2+102z+114)}{11 z^4}$$

07.25.03.3642.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, \frac{11}{2}; z\right) = -\frac{9(52z^3 + 210z^2 + 595z + 1050)}{88z^4} - \frac{945e^z\sqrt{\pi}(z-10)\operatorname{erf}(\sqrt{z})}{176z^{9/2}}$$

07.25.03.3643.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{9(52z^3 - 210z^2 + 595z - 1050)}{88z^4} + \frac{945e^{-z}\sqrt{\pi}(z+10)\operatorname{erfi}(\sqrt{z})}{176z^{9/2}}$$

07.25.03.3644.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{11}{2}, 6; z\right) = -\frac{120e^z(2z-21)}{11z^5} - \frac{5(13z^4 + 60z^3 + 204z^2 + 456z + 504)}{11z^5}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = -\frac{9}{2}$

07.25.03.3645.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{945}(-32z^5 + 16z^4 - 24z^3 + 60z^2 - 210z + 945) - \frac{32}{945}e^z\sqrt{\pi}z^{11/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.3646.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{945}(32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945) - \frac{32}{945}e^{-z}\sqrt{\pi}z^{11/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.3647.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{16}{105}e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2} + \frac{1}{105}(16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

07.25.03.3648.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{105}(16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105}e^{-z}\sqrt{\pi}z^{9/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.3649.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{15}(-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15}e^z\sqrt{\pi}z^{7/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.3650.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15}(8z^3 + 4z^2 + 6z + 15) - \frac{8}{15}e^{-z}\sqrt{\pi}z^{7/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.3651.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{4}{3}e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{3}(4z^2 - 2z + 3)$$

07.25.03.3652.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3}(4z^2 + 2z + 3) - \frac{4}{3}e^{-z}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.3653.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, -\frac{1}{2}; z\right) = -2e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{3/2} - 2z + 1$$

07.25.03.3654.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, -\frac{1}{2}; -z\right) = -2e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{3/2} + 2z + 1$$

07.25.03.3655.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, \frac{1}{2}; z\right) = e^z \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.3656.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, \frac{1}{2}; -z\right) = 1 - e^{-z} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.3657.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, 1; z\right) = e^z$$

07.25.03.3658.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.3659.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.3660.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, 2; z\right) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.3661.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3}{2 z}$$

07.25.03.3662.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{3}{2 z} - \frac{3 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.3663.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, 3; z\right) = \frac{2 e^z}{z^2} - \frac{2(z+1)}{z^2}$$

07.25.03.3664.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5(2z+3)}{4 z^2}$$

07.25.03.3665.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5(2z-3)}{4 z^2} + \frac{15 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.3666.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, 4; z\right) = \frac{6 e^z}{z^3} - \frac{3(z^2 + 2z + 2)}{z^3}$$

07.25.03.3667.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{105 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7(4z^2 + 10z + 15)}{8 z^3}$$

07.25.03.3668.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7(4z^2 - 10z + 15)}{8z^3} - \frac{105 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.3669.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, 5; z\right) = \frac{24 e^z}{z^4} - \frac{4(z^3 + 3z^2 + 6z + 6)}{z^4}$$

07.25.03.3670.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32z^{9/2}} - \frac{9(8z^3 + 28z^2 + 70z + 105)}{16z^4}$$

07.25.03.3671.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{9(8z^3 - 28z^2 + 70z - 105)}{16z^4} + \frac{945 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.3672.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{9}{2}, 6; z\right) = \frac{120 e^z}{z^5} - \frac{5(z^4 + 4z^3 + 12z^2 + 24z + 24)}{z^5}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = -\frac{7}{2}$

07.25.03.3673.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^z (16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.3674.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{7}{2}, 1; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

07.25.03.3675.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{7}{2}, 2; z\right) = -\frac{32 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2}}{1155} + \frac{e^z (32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945)}{1155z} - \frac{9}{11z}$$

07.25.03.3676.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{7}{2}, 2; -z\right) = \frac{32 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2}}{1155} + \frac{e^{-z} (32z^5 - 16z^4 + 24z^3 - 60z^2 + 210z - 945)}{1155z} + \frac{9}{11z}$$

07.25.03.3677.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{7}{2}, 3; z\right) = \frac{128 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2}}{15015} - \frac{18(13z + 11)}{143z^2} + \frac{2 e^z (64z^6 + 32z^5 + 48z^4 + 120z^3 + 420z^2 + 1890z + 10395)}{15015z^2}$$

07.25.03.3678.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{7}{2}, 3; -z\right) = \frac{128 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2}}{15015} + \frac{18(13z - 11)}{143z^2} + \frac{2 e^{-z} (64z^6 - 32z^5 + 48z^4 - 120z^3 + 420z^2 - 1890z + 10395)}{15015z^2}$$

07.25.03.3679.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{7}{2}, 4; z\right) = -\frac{256\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{9/2}}{75075} - \frac{9(195z^2 + 330z + 286)}{715z^3} + \frac{2e^z(128z^7 + 64z^6 + 96z^5 + 240z^4 + 840z^3 + 3780z^2 + 20790z + 135135)}{75075z^3}$$

07.25.03.3680.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{7}{2}, 4; -z\right) = \frac{256\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2}}{75075} + \frac{9(195z^2 - 330z + 286)}{715z^3} + \frac{2e^{-z}(128z^7 - 64z^6 + 96z^5 - 240z^4 + 840z^3 - 3780z^2 + 20790z - 135135)}{75075z^3}$$

07.25.03.3681.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{7}{2}, 5; z\right) = -\frac{2048\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{9/2}}{1276275} - \frac{36(1105z^3 + 2805z^2 + 4862z + 4290)}{12155z^4} + \frac{8e^z(256z^8 + 128z^7 + 192z^6 + 480z^5 + 1680z^4 + 7560z^3 + 41580z^2 + 270270z + 2027025)}{1276275z^4}$$

07.25.03.3682.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{7}{2}, 5; -z\right) = \frac{2048\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2}}{1276275} + \frac{36(1105z^3 - 2805z^2 + 4862z - 4290)}{12155z^4} + \frac{8e^{-z}(256z^8 - 128z^7 + 192z^6 - 480z^5 + 1680z^4 - 7560z^3 + 41580z^2 - 270270z + 2027025)}{1276275z^4}$$

07.25.03.3683.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{7}{2}, 6; z\right) = -\frac{4096\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{9/2}}{4849845} - \frac{9(20995z^4 + 71060z^3 + 184756z^2 + 326040z + 291720)}{46189z^5} + \frac{1}{4849845z^5} 8e^z(512z^9 + 256z^8 + 384z^7 + 960z^6 + 3360z^5 + 15120z^4 + 83160z^3 + 540540z^2 + 4054050z + 34459425)$$

07.25.03.3684.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{7}{2}, 6; -z\right) = \frac{4096\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2}}{4849845} + \frac{9(20995z^4 - 71060z^3 + 184756z^2 - 326040z + 291720)}{46189z^5} + \frac{1}{4849845z^5} 8e^{-z}(512z^9 - 256z^8 + 384z^7 - 960z^6 + 3360z^5 - 15120z^4 + 83160z^3 - 540540z^2 + 4054050z - 34459425)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = -\frac{5}{2}$

07.25.03.3685.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{5}{2}, 1; z\right) = \frac{1}{15}e^z(-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15}\sqrt{\pi}(2z^{9/2} - 9z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.3686.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{5}{2}, 1; -z\right) = \frac{1}{15}e^{-z}(-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15}\sqrt{\pi}(2z^{9/2} + 9z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.3687.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{5}{2}, 2; z\right) = \frac{e^z (-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105)}{165z} + \frac{8}{165} \sqrt{\pi} (2z^{9/2} - 11z^{7/2}) \operatorname{erfi}(\sqrt{z}) - \frac{7}{11z}$$

07.25.03.3688.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{5}{2}, 2; -z\right) = \frac{e^{-z} (-16z^5 - 80z^4 + 32z^3 - 36z^2 + 60z - 105)}{165z} - \frac{8}{165} \sqrt{\pi} (2z^{9/2} + 11z^{7/2}) \operatorname{erf}(\sqrt{z}) + \frac{7}{11z}$$

07.25.03.3689.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{5}{2}, 3; z\right) = \frac{14(13z+9)}{143z^2} - \frac{2e^z(32z^6 - 192z^5 - 80z^4 - 96z^3 - 180z^2 - 420z - 945)}{2145z^2} + \frac{32\sqrt{\pi}(2z^{9/2} - 13z^{7/2})\operatorname{erfi}(\sqrt{z})}{2145}$$

07.25.03.3690.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{5}{2}, 3; -z\right) = \frac{14(13z-9)}{143z^2} - \frac{2e^{-z}(32z^6 + 192z^5 - 80z^4 + 96z^3 - 180z^2 + 420z - 945)}{2145z^2} - \frac{32\sqrt{\pi}(2z^{9/2} + 13z^{7/2})\operatorname{erf}(\sqrt{z})}{2145}$$

07.25.03.3691.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{5}{2}, 4; z\right) = -\frac{21(65z^2 + 90z + 66)}{715z^3} - \frac{2e^z(64z^7 - 448z^6 - 192z^5 - 240z^4 - 480z^3 - 1260z^2 - 3780z - 10395)}{10725z^3} + \frac{64\sqrt{\pi}(2z^{9/2} - 15z^{7/2})\operatorname{erfi}(\sqrt{z})}{10725}$$

07.25.03.3692.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{5}{2}, 4; -z\right) = \frac{21(65z^2 - 90z + 66)}{715z^3} - \frac{2e^{-z}(64z^7 + 448z^6 - 192z^5 + 240z^4 - 480z^3 + 1260z^2 - 3780z + 10395)}{10725z^3} - \frac{64\sqrt{\pi}(2z^{9/2} + 15z^{7/2})\operatorname{erf}(\sqrt{z})}{10725}$$

07.25.03.3693.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{5}{2}, 5; z\right) = -\frac{28(1105z^3 + 2295z^2 + 3366z + 2574)}{12155z^4} - \frac{8e^z(128z^8 - 1024z^7 - 448z^6 - 576z^5 - 1200z^4 - 3360z^3 - 11340z^2 - 41580z - 135135)}{182325z^4} + \frac{512\sqrt{\pi}(2z^{9/2} - 17z^{7/2})\operatorname{erfi}(\sqrt{z})}{182325}$$

07.25.03.3694.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{5}{2}, 5; -z\right) = \frac{28(1105z^3 - 2295z^2 + 3366z - 2574)}{12155z^4} - \frac{8e^{-z}(128z^8 + 1024z^7 - 448z^6 + 576z^5 - 1200z^4 + 3360z^3 - 11340z^2 + 41580z - 135135)}{182325z^4} - \frac{512\sqrt{\pi}(2z^{9/2} + 17z^{7/2})\operatorname{erf}(\sqrt{z})}{182325}$$

07.25.03.3695.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{5}{2}, 6; z\right) = -\frac{7(20995z^4 + 58140z^3 + 127908z^2 + 195624z + 154440)}{46189z^5} - \frac{1}{692835z^5} 8e^z(256z^9 - 2304z^8 - 1024z^7 - 1344z^6 - 2880z^5 - 8400z^4 - 30240z^3 - 124740z^2 - 540540z - 2027025) + \frac{1024\sqrt{\pi}(2z^{9/2} - 19z^{7/2})\operatorname{erfi}(\sqrt{z})}{692835}$$

07.25.03.3696.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{5}{2}, 6; -z\right) = \frac{7(20995z^4 - 58140z^3 + 127908z^2 - 195624z + 154440)}{46189z^5} - \frac{1}{692835z^5} 8e^{-z}(256z^9 + 2304z^8 - 1024z^7 + 1344z^6 - 2880z^5 + 8400z^4 - 30240z^3 + 124740z^2 - 540540z + 2027025) - \frac{1024\sqrt{\pi}(2z^{9/2} + 19z^{7/2})\operatorname{erf}(\sqrt{z})}{692835}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = -\frac{3}{2}$

07.25.03.3697.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{3}{2}, 1; z\right) = \frac{1}{3}e^z(2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6}\sqrt{\pi}(-4z^{9/2} + 36z^{7/2} - 63z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.3698.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{3}{2}, 1; -z\right) = \frac{1}{3}e^{-z}(2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6}\sqrt{\pi}(4z^{9/2} + 36z^{7/2} + 63z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.3699.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{3}{2}, 2; z\right) = \frac{e^z(4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15)}{33z} + \frac{1}{33}\sqrt{\pi}(-4z^{9/2} + 44z^{7/2} - 99z^{5/2})\operatorname{erfi}(\sqrt{z}) - \frac{5}{11z}$$

07.25.03.3700.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{3}{2}, 2; -z\right) = \frac{e^{-z}(4z^5 + 42z^4 + 80z^3 - 24z^2 + 18z - 15)}{33z} + \frac{1}{33}\sqrt{\pi}(4z^{9/2} + 44z^{7/2} + 99z^{5/2})\operatorname{erf}(\sqrt{z}) + \frac{5}{11z}$$

07.25.03.3701.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{3}{2}, 3; z\right) = -\frac{10(13z + 7)}{143z^2} + \frac{2e^z(8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105)}{429z^2} - \frac{4}{429}\sqrt{\pi}(4z^{9/2} - 52z^{7/2} + 143z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.3702.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{3}{2}, 3; -z\right) = \frac{10(13z-7)}{143z^2} + \frac{2e^{-z}(8z^6+100z^5+240z^4-80z^3+72z^2-90z+105)}{429z^2} + \frac{4}{429}\sqrt{\pi}(4z^{9/2}+52z^{7/2}+143z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.3703.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{3}{2}, 4; z\right) = -\frac{3(65z^2+70z+42)}{143z^3} + \frac{2e^z(16z^7-232z^6+672z^5+240z^4+240z^3+360z^2+630z+945)}{2145z^3} - \frac{8\sqrt{\pi}(4z^{9/2}-60z^{7/2}+195z^{5/2})\operatorname{erfi}(\sqrt{z})}{2145}$$

07.25.03.3704.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{3}{2}, 4; -z\right) = \frac{3(65z^2-70z+42)}{143z^3} + \frac{2e^{-z}(16z^7+232z^6+672z^5-240z^4+240z^3-360z^2+630z-945)}{2145z^3} + \frac{8\sqrt{\pi}(4z^{9/2}+60z^{7/2}+195z^{5/2})\operatorname{erf}(\sqrt{z})}{2145}$$

07.25.03.3705.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{3}{2}, 5; z\right) = -\frac{4(1105z^3+1785z^2+2142z+1386)}{2431z^4} + \frac{8e^z(32z^8-528z^7+1792z^6+672z^5+720z^4+1200z^3+2520z^2+5670z+10395)}{36465z^4} - \frac{64\sqrt{\pi}(4z^{9/2}-68z^{7/2}+255z^{5/2})\operatorname{erfi}(\sqrt{z})}{36465}$$

07.25.03.3706.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{3}{2}, 5; -z\right) = \frac{4(1105z^3-1785z^2+2142z-1386)}{2431z^4} + \frac{8e^{-z}(32z^8+528z^7+1792z^6-672z^5+720z^4-1200z^3+2520z^2-5670z+10395)}{36465z^4} + \frac{64\sqrt{\pi}(4z^{9/2}+68z^{7/2}+255z^{5/2})\operatorname{erf}(\sqrt{z})}{36465}$$

07.25.03.3707.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{3}{2}, 6; z\right) = -\frac{5(20995z^4+45220z^3+81396z^2+105336z+72072)}{46189z^5} + \frac{1}{138567z^5} 8e^z(64z^9-1184z^8+4608z^7+1792z^6+2016z^5+3600z^4+8400z^3+22680z^2+62370z+135135) - \frac{128\sqrt{\pi}(4z^{9/2}-76z^{7/2}+323z^{5/2})\operatorname{erfi}(\sqrt{z})}{138567}$$

07.25.03.3708.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{3}{2}, 6; -z\right) = \frac{5(20\,995z^4 - 45\,220z^3 + 81\,396z^2 - 105\,336z + 72\,072)}{46\,189z^5} +$$

$$\frac{1}{138\,567z^5} 8e^{-z}(64z^9 + 1184z^8 + 4608z^7 - 1792z^6 + 2016z^5 - 3600z^4 + 8400z^3 - 22\,680z^2 + 62\,370z - 135\,135) +$$

$$\frac{128\sqrt{\pi}(4z^{9/2} + 76z^{7/2} + 323z^{5/2})\operatorname{erf}(\sqrt{z})}{138\,567}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = -\frac{1}{2}$

07.25.03.3709.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{1}{2}, 1; z\right) = \frac{1}{12}e^{-z}(-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24}\sqrt{\pi}(8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.3710.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{1}{2}, 1; -z\right) = \frac{1}{12}e^{-z}(-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24}\sqrt{\pi}(-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.3711.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{1}{2}, 2; z\right) =$$

$$\frac{e^z(-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18)}{66z} + \frac{1}{132}\sqrt{\pi}(8z^{9/2} - 132z^{7/2} + 594z^{5/2} - 693z^{3/2})\operatorname{erfi}(\sqrt{z}) - \frac{3}{11z}$$

07.25.03.3712.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{1}{2}, 2; -z\right) =$$

$$\frac{e^{-z}(-4z^5 - 64z^4 - 267z^3 - 240z^2 + 48z - 18)}{66z} + \frac{1}{132}\sqrt{\pi}(-8z^{9/2} - 132z^{7/2} - 594z^{5/2} - 693z^{3/2})\operatorname{erf}(\sqrt{z}) + \frac{3}{11z}$$

07.25.03.3713.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{1}{2}, 3; z\right) = -\frac{6(13z + 5)}{143z^2} - \frac{2e^z(4z^6 - 76z^5 + 393z^4 - 480z^3 - 120z^2 - 72z - 45)}{429z^2} +$$

$$\frac{1}{429}\sqrt{\pi}(8z^{9/2} - 156z^{7/2} + 858z^{5/2} - 1287z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.3714.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{1}{2}, 3; -z\right) = \frac{6(13z - 5)}{143z^2} - \frac{2e^{-z}(4z^6 + 76z^5 + 393z^4 + 480z^3 - 120z^2 + 72z - 45)}{429z^2} +$$

$$\frac{1}{429}\sqrt{\pi}(-8z^{9/2} - 156z^{7/2} - 858z^{5/2} - 1287z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.3715.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{1}{2}, 4; z\right) = -\frac{3(39z^2 + 30z + 14)}{143z^3} - \frac{2e^z(8z^7 - 176z^6 + 1086z^5 - 1680z^4 - 480z^3 - 360z^2 - 360z - 315)}{2145z^3} +$$

$$\frac{2\sqrt{\pi}(8z^{9/2} - 180z^{7/2} + 1170z^{5/2} - 2145z^{3/2})\operatorname{erfi}(\sqrt{z})}{2145}$$

07.25.03.3716.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{1}{2}, 4; -z\right) = \frac{3(39z^2 - 30z + 14)}{143z^3} - \frac{2e^{-z}(8z^7 + 176z^6 + 1086z^5 + 1680z^4 - 480z^3 + 360z^2 - 360z + 315)}{2145z^3} - \frac{2\sqrt{\pi}(8z^{9/2} + 180z^{7/2} + 1170z^{5/2} + 2145z^{3/2})\operatorname{erf}(\sqrt{z})}{2145}$$

07.25.03.3717.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{1}{2}, 5; z\right) = -\frac{12(221z^3 + 255z^2 + 238z + 126)}{2431z^4} - \frac{8e^z(16z^8 - 400z^7 + 2868z^6 - 5376z^5 - 1680z^4 - 1440z^3 - 1800z^2 - 2520z - 2835)}{36465z^4} + \frac{16\sqrt{\pi}(8z^{9/2} - 204z^{7/2} + 1530z^{5/2} - 3315z^{3/2})\operatorname{erfi}(\sqrt{z})}{36465}$$

07.25.03.3718.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{1}{2}, 5; -z\right) = \frac{12(221z^3 - 255z^2 + 238z - 126)}{2431z^4} - \frac{8e^{-z}(16z^8 + 400z^7 + 2868z^6 + 5376z^5 - 1680z^4 + 1440z^3 - 1800z^2 + 2520z - 2835)}{36465z^4} - \frac{16\sqrt{\pi}(8z^{9/2} + 204z^{7/2} + 1530z^{5/2} + 3315z^{3/2})\operatorname{erf}(\sqrt{z})}{36465}$$

07.25.03.3719.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{1}{2}, 6; z\right) = -\frac{15(4199z^4 + 6460z^3 + 9044z^2 + 9576z + 5544)}{46189z^5} - \frac{1}{138567z^5} 8e^z(32z^9 - 896z^8 + 7320z^7 - 16128z^6 - 5376z^5 - 5040z^4 - 7200z^3 - 12600z^2 - 22680z - 31185) + \frac{32\sqrt{\pi}(8z^{9/2} - 228z^{7/2} + 1938z^{5/2} - 4845z^{3/2})\operatorname{erfi}(\sqrt{z})}{138567}$$

07.25.03.3720.01

$${}_2F_2\left(-\frac{9}{2}, 1; -\frac{1}{2}, 6; -z\right) = \frac{15(4199z^4 - 6460z^3 + 9044z^2 - 9576z + 5544)}{46189z^5} - \frac{1}{138567z^5} 8e^{-z}(32z^9 + 896z^8 + 7320z^7 + 16128z^6 - 5376z^5 + 5040z^4 - 7200z^3 + 12600z^2 - 22680z + 31185) - \frac{32\sqrt{\pi}(8z^{9/2} + 228z^{7/2} + 1938z^{5/2} + 4845z^{3/2})\operatorname{erf}(\sqrt{z})}{138567}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = \frac{1}{2}$

07.25.03.3721.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{1}{2}, 1; z\right) = \frac{1}{192} e^z (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3722.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{1}{2}, 1; -z\right) = \frac{1}{192} e^{-z} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3723.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{1}{2}, 2; z\right) = \frac{e^z (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96)}{1056z} + \frac{\sqrt{\pi} (-16z^{9/2} + 352z^{7/2} - 2376z^{5/2} + 5544z^{3/2} - 3465\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{2112} - \frac{1}{11z}$$

07.25.03.3724.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{1}{2}, 2; -z\right) = \frac{e^{-z} (8z^5 + 172z^4 + 1106z^3 + 2295z^2 + 960z - 96)}{1056z} + \frac{\sqrt{\pi} (16z^{9/2} + 352z^{7/2} + 2376z^{5/2} + 5544z^{3/2} + 3465\sqrt{z}) \operatorname{erf}(\sqrt{z})}{2112} + \frac{1}{11z}$$

07.25.03.3725.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{1}{2}, 3; z\right) = -\frac{2(13z + 3)}{143z^2} + \frac{e^z (8z^6 - 204z^5 + 1618z^4 - 4431z^3 + 2880z^2 + 480z + 144)}{3432z^2} + \frac{\sqrt{\pi} (-16z^{9/2} + 416z^{7/2} - 3432z^{5/2} + 10296z^{3/2} - 9009\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{6864}$$

07.25.03.3726.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{1}{2}, 3; -z\right) = \frac{2(13z - 3)}{143z^2} + \frac{e^{-z} (8z^6 + 204z^5 + 1618z^4 + 4431z^3 + 2880z^2 - 480z + 144)}{3432z^2} + \frac{\sqrt{\pi} (16z^{9/2} + 416z^{7/2} + 3432z^{5/2} + 10296z^{3/2} + 9009\sqrt{z}) \operatorname{erf}(\sqrt{z})}{6864}$$

07.25.03.3727.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{1}{2}, 4; z\right) = -\frac{3(13z^2 + 6z + 2)}{143z^3} + \frac{e^z (8z^7 - 236z^6 + 2226z^5 - 7575z^4 + 6720z^3 + 1440z^2 + 720z + 360)}{8580z^3} + \frac{\sqrt{\pi} (-16z^{9/2} + 480z^{7/2} - 4680z^{5/2} + 17160z^{3/2} - 19305\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{17160}$$

07.25.03.3728.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{1}{2}, 4; -z\right) = \frac{3(13z^2 - 6z + 2)}{143z^3} + \frac{e^{-z}(8z^7 + 236z^6 + 2226z^5 + 7575z^4 + 6720z^3 - 1440z^2 + 720z - 360)}{8580z^3} + \frac{\sqrt{\pi}(16z^{9/2} + 480z^{7/2} + 4680z^{5/2} + 17160z^{3/2} + 19305\sqrt{z})\operatorname{erf}(\sqrt{z})}{17160}$$

07.25.03.3729.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{1}{2}, 5; z\right) = -\frac{4(221z^3 + 153z^2 + 102z + 42)}{2431z^4} + \frac{2e^z(8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260)}{36465z^4} + \frac{\sqrt{\pi}(-16z^{9/2} + 544z^{7/2} - 6120z^{5/2} + 26520z^{3/2} - 36465\sqrt{z})\operatorname{erfi}(\sqrt{z})}{36465}$$

07.25.03.3730.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{1}{2}, 5; -z\right) = \frac{4(221z^3 - 153z^2 + 102z - 42)}{2431z^4} + \frac{2e^{-z}(8z^8 + 268z^7 + 2930z^6 + 11919z^5 + 13440z^4 - 3360z^3 + 2160z^2 - 1800z + 1260)}{36465z^4} + \frac{\sqrt{\pi}(16z^{9/2} + 544z^{7/2} + 6120z^{5/2} + 26520z^{3/2} + 36465\sqrt{z})\operatorname{erf}(\sqrt{z})}{36465}$$

07.25.03.3731.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{1}{2}, 6; z\right) = -\frac{5(4199z^4 + 3876z^3 + 3876z^2 + 3192z + 1512)}{46189z^5} + \frac{1}{138567z^5} 4e^z(8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670) - \frac{2\sqrt{\pi}(16z^{9/2} - 608z^{7/2} + 7752z^{5/2} - 38760z^{3/2} + 62985\sqrt{z})\operatorname{erfi}(\sqrt{z})}{138567}$$

07.25.03.3732.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{1}{2}, 6; -z\right) = \frac{5(4199z^4 - 3876z^3 + 3876z^2 - 3192z + 1512)}{46189z^5} + \frac{1}{138567z^5} 4e^{-z}(8z^9 + 300z^8 + 3730z^7 + 17655z^6 + 24192z^5 - 6720z^4 + 5040z^3 - 5400z^2 + 6300z - 5670) + \frac{2\sqrt{\pi}(16z^{9/2} + 608z^{7/2} + 7752z^{5/2} + 38760z^{3/2} + 62985\sqrt{z})\operatorname{erf}(\sqrt{z})}{138567}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = 1$

07.25.03.3733.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, 1; z\right) = \frac{1}{945} e^{z/2} (-16z^5 + 336z^4 - 2220z^3 + 5484z^2 - 4725z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^5 - 320z^4 + 1908z^3 - 3720z^2 + 1689z) I_1\left(\frac{z}{2}\right)$$

07.25.03.3734.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, \frac{3}{2}; z\right) = \frac{e^z (16z^4 - 352z^3 + 2352z^2 - 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945) \operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.3735.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, \frac{3}{2}; -z\right) = \frac{e^{-z} (16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.3736.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, 2; z\right) = \frac{e^{z/2} (-32z^5 + 816z^4 - 6816z^3 + 22524z^2 - 28350z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2} (32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.3737.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, \frac{5}{2}; z\right) = \frac{e^z (32z^5 - 848z^4 + 7152z^3 - 22008z^2 + 20010z - 945)}{30720z} + \frac{\sqrt{\pi} (-64z^6 + 1728z^5 - 15120z^4 + 50400z^3 - 56700z^2 + 11340z + 945) \operatorname{erfi}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.3738.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, \frac{5}{2}; -z\right) = \frac{e^{-z} (32z^5 + 848z^4 + 7152z^3 + 22008z^2 + 20010z + 945)}{30720z} + \frac{\sqrt{\pi} (64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945) \operatorname{erf}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.3739.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, 3; z\right) = \frac{4 e^{z/2} (32z^6 - 928z^5 + 8784z^4 - 31776z^3 + 37938z^2 - 5670z - 945) I_1\left(\frac{z}{2}\right)}{135135z} - \frac{8 e^{z/2} (16z^5 - 480z^4 + 4848z^3 - 20064z^2 + 33075z - 17010) I_0\left(\frac{z}{2}\right)}{135135}$$

07.25.03.3740.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, \frac{7}{2}; z\right) = \frac{e^z (64 z^6 - 1984 z^5 + 20\,208 z^4 - 79\,008 z^3 + 100\,716 z^2 - 11\,340 z - 2835)}{172\,032 z^2} + \frac{1}{344\,064 z^{5/2}} \sqrt{\pi} (-128 z^7 + 4032 z^6 - 42\,336 z^5 + 176\,400 z^4 - 264\,600 z^3 + 79\,380 z^2 + 13\,230 z + 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3741.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, \frac{7}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1984 z^5 + 20\,208 z^4 + 79\,008 z^3 + 100\,716 z^2 + 11\,340 z - 2835)}{172\,032 z^2} + \frac{1}{344\,064 z^{5/2}} \sqrt{\pi} (128 z^7 + 4032 z^6 + 42\,336 z^5 + 176\,400 z^4 + 264\,600 z^3 + 79\,380 z^2 - 13\,230 z + 2835) \operatorname{erf}(\sqrt{z})$$

07.25.03.3742.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, 4; z\right) = \frac{4 e^{z/2} (64 z^7 - 2144 z^6 + 24\,048 z^5 - 107\,040 z^4 + 167\,640 z^3 - 39\,690 z^2 - 12\,285 z - 3780) I_1\left(\frac{z}{2}\right)}{675\,675 z^2} - \frac{4 e^{z/2} (64 z^6 - 2208 z^5 + 26\,160 z^4 - 130\,080 z^3 + 264\,600 z^2 - 171\,990 z - 945) I_0\left(\frac{z}{2}\right)}{675\,675 z}$$

07.25.03.3743.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 4544 z^6 + 54\,240 z^5 - 257\,232 z^4 + 422\,616 z^3 - 79\,380 z^2 - 35\,910 z - 14\,175)}{786\,432 z^3} + \frac{1}{1\,572\,864 z^{7/2}} \left(\sqrt{\pi} (-256 z^8 + 9216 z^7 - 112\,896 z^6 + 564\,480 z^5 - 1\,058\,400 z^4 + 423\,360 z^3 + 105\,840 z^2 + 45\,360 z + 14\,175) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.3744.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 4544 z^6 + 54\,240 z^5 + 257\,232 z^4 + 422\,616 z^3 + 79\,380 z^2 - 35\,910 z + 14\,175)}{786\,432 z^3} + \frac{1}{1\,572\,864 z^{7/2}} \sqrt{\pi} (256 z^8 + 9216 z^7 + 112\,896 z^6 + 564\,480 z^5 + 1\,058\,400 z^4 + 423\,360 z^3 - 105\,840 z^2 + 45\,360 z - 14\,175) \operatorname{erf}(\sqrt{z})$$

07.25.03.3745.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, 5; z\right) = \frac{1}{11\,486\,475 z^3} - \frac{32 e^{z/2} (64 z^8 - 2432 z^7 + 31\,536 z^6 - 166\,656 z^5 + 323\,160 z^4 - 105\,840 z^3 - 46\,305 z^2 - 26\,460 z - 11\,340) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^7 - 2496 z^6 + 33\,936 z^5 - 197\,040 z^4 + 476\,280 z^3 - 370\,440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right)}{11\,486\,475 z^2}$$

07.25.03.3746.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, \frac{11}{2}; z\right) = \frac{1}{3\,145\,728\,z^4} e^z (256\,z^8 - 10\,240\,z^7 + 140\,160\,z^6 - 781\,440\,z^5 + 1\,572\,864\,z^4 - 423\,360\,z^3 - 264\,600\,z^2 - 189\,000\,z - 99\,225) + \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (-512\,z^9 + 20\,736\,z^8 - 290\,304\,z^7 + 1\,693\,440\,z^6 - 3\,810\,240\,z^5 + 1\,905\,120\,z^4 + 635\,040\,z^3 + 408\,240\,z^2 + 255\,150\,z + 99\,225) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.3747.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, \frac{11}{2}; -z\right) = \frac{1}{3\,145\,728\,z^4} e^{-z} (256\,z^8 + 10\,240\,z^7 + 140\,160\,z^6 + 781\,440\,z^5 + 1\,572\,864\,z^4 + 423\,360\,z^3 - 264\,600\,z^2 + 189\,000\,z - 99\,225) + \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (512\,z^9 + 20\,736\,z^8 + 290\,304\,z^7 + 1\,693\,440\,z^6 + 3\,810\,240\,z^5 + 1\,905\,120\,z^4 - 635\,040\,z^3 + 408\,240\,z^2 - 255\,150\,z + 99\,225) \operatorname{erf}(\sqrt{-z}) \right)$$

07.25.03.3748.01

$${}_2F_2\left(-\frac{9}{2}, 1; 1, 6; z\right) = \frac{1}{43\,648\,605\,z^4} \left(32\,e^{z/2} (128\,z^9 - 5440\,z^8 + 80\,064\,z^7 - 489\,840\,z^6 + 1\,132\,752\,z^5 - 476\,280\,z^4 - 264\,600\,z^3 - 214\,515\,z^2 - 170\,100\,z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \right) + \frac{32\,e^{z/2} (128\,z^8 - 5568\,z^7 + 85\,440\,z^6 - 567\,312\,z^5 + 1\,587\,600\,z^4 - 1\,428\,840\,z^3 - 52\,920\,z^2 - 42\,525\,z - 22\,680) I_0\left(\frac{z}{2}\right)}{43\,648\,605\,z^4}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = \frac{3}{2}$

07.25.03.3749.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{3}{2}, 2; z\right) = \frac{e^z (16\,z^5 - 432\,z^4 + 3752\,z^3 - 12\,180\,z^2 + 12\,645\,z - 1920)}{21\,120\,z} + \frac{\sqrt{\pi} (-32\,z^5 + 880\,z^4 - 7920\,z^3 + 27\,720\,z^2 - 34\,650\,z + 10\,395) \operatorname{erfi}(\sqrt{z})}{42\,240\,\sqrt{z}} + \frac{1}{11\,z}$$

07.25.03.3750.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (16\,z^5 + 432\,z^4 + 3752\,z^3 + 12\,180\,z^2 + 12\,645\,z + 1920)}{21\,120\,z} + \frac{\sqrt{\pi} (32\,z^5 + 880\,z^4 + 7920\,z^3 + 27\,720\,z^2 + 34\,650\,z + 10\,395) \operatorname{erf}(\sqrt{-z})}{42\,240\,\sqrt{-z}} - \frac{1}{11\,z}$$

07.25.03.3751.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{3}{2}, 3; z\right) = \frac{2(13z+1)}{143z^2} + \frac{e^z(16z^6 - 512z^5 + 5472z^4 - 23240z^3 + 35595z^2 - 11520z - 960)}{68640z^2} + \frac{\sqrt{\pi}(-32z^5 + 1040z^4 - 11440z^3 + 51480z^2 - 90090z + 45045)\operatorname{erfi}(\sqrt{z})}{137280\sqrt{z}}$$

07.25.03.3752.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{3}{2}, 3; -z\right) = -\frac{2(13z-1)}{143z^2} + \frac{e^{-z}(16z^6 + 512z^5 + 5472z^4 + 23240z^3 + 35595z^2 + 11520z - 960)}{68640z^2} + \frac{\sqrt{\pi}(32z^5 + 1040z^4 + 11440z^3 + 51480z^2 + 90090z + 45045)\operatorname{erf}(\sqrt{z})}{137280\sqrt{z}}$$

07.25.03.3753.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{3}{2}, 4; z\right) = \frac{3(65z^2 + 10z + 2)}{715z^3} + \frac{e^z(16z^7 - 592z^6 + 7512z^5 - 39420z^4 + 79905z^3 - 40320z^2 - 5760z - 1440)}{171600z^3} + \frac{\sqrt{\pi}(-32z^5 + 1200z^4 - 15600z^3 + 85800z^2 - 193050z + 135135)\operatorname{erfi}(\sqrt{z})}{343200\sqrt{z}}$$

07.25.03.3754.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{3}{2}, 4; -z\right) = -\frac{3(65z^2 - 10z + 2)}{715z^3} + \frac{e^{-z}(16z^7 + 592z^6 + 7512z^5 + 39420z^4 + 79905z^3 + 40320z^2 - 5760z + 1440)}{171600z^3} + \frac{\sqrt{\pi}(32z^5 + 1200z^4 + 15600z^3 + 85800z^2 + 193050z + 135135)\operatorname{erf}(\sqrt{z})}{343200\sqrt{z}}$$

07.25.03.3755.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{3}{2}, 5; z\right) = \frac{4(1105z^3 + 255z^2 + 102z + 30)}{12155z^4} + \frac{e^z(16z^8 - 672z^7 + 9872z^6 - 61680z^5 + 155655z^4 - 107520z^3 - 20160z^2 - 8640z - 3600)}{364650z^4} + \frac{\sqrt{\pi}(-32z^5 + 1360z^4 - 20400z^3 + 132600z^2 - 364650z + 328185)\operatorname{erfi}(\sqrt{z})}{729300\sqrt{z}}$$

07.25.03.3756.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{3}{2}, 5; -z\right) = -\frac{4(1105z^3 - 255z^2 + 102z - 30)}{12155z^4} + \frac{e^{-z}(16z^8 + 672z^7 + 9872z^6 + 61680z^5 + 155655z^4 + 107520z^3 - 20160z^2 + 8640z - 3600)}{364650z^4} + \frac{\sqrt{\pi}(32z^5 + 1360z^4 + 20400z^3 + 132600z^2 + 364650z + 328185)\operatorname{erf}(\sqrt{z})}{729300\sqrt{z}}$$

07.25.03.3757.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{3}{2}, 6; z\right) = \frac{20995 z^4 + 6460 z^3 + 3876 z^2 + 2280 z + 840}{46189 z^5} + \frac{1}{692835 z^5} e^z (16 z^9 - 752 z^8 + 12552 z^7 - 90980 z^6 + 274845 z^5 - 241920 z^4 - 53760 z^3 - 30240 z^2 - 21600 z - 12600) + \frac{\sqrt{\pi} (-32 z^5 + 1520 z^4 - 25840 z^3 + 193800 z^2 - 629850 z + 692835) \operatorname{erfi}(\sqrt{z})}{1385670 \sqrt{z}}$$

07.25.03.3758.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{3}{2}, 6; -z\right) = \frac{-20995 z^4 + 6460 z^3 - 3876 z^2 + 2280 z - 840}{46189 z^5} + \frac{1}{692835 z^5} e^{-z} (16 z^9 + 752 z^8 + 12552 z^7 + 90980 z^6 + 274845 z^5 + 241920 z^4 - 53760 z^3 + 30240 z^2 - 21600 z + 12600) + \frac{\sqrt{\pi} (32 z^5 + 1520 z^4 + 25840 z^3 + 193800 z^2 + 629850 z + 692835) \operatorname{erf}(\sqrt{z})}{1385670 \sqrt{z}}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = 2$

07.25.03.3759.01

$${}_2F_2\left(-\frac{9}{2}, 1; 2, 2; z\right) = -\frac{2 e^{z/2} (32 z^6 - 992 z^5 + 10512 z^4 - 46944 z^3 + 88674 z^2 - 62370 z + 10395) I_0\left(\frac{z}{2}\right)}{114345 z} + \frac{4 e^{z/2} (16 z^5 - 480 z^4 + 4784 z^3 - 18912 z^2 + 27387 z - 9762) I_1\left(\frac{z}{2}\right)}{114345} + \frac{2}{11 z}$$

07.25.03.3760.01

$${}_2F_2\left(-\frac{9}{2}, 1; 2, \frac{5}{2}; z\right) = \frac{e^z (32 z^5 - 1040 z^4 + 11376 z^3 - 50232 z^2 + 83370 z - 35685)}{168960 z} + \frac{\sqrt{\pi} (-64 z^6 + 2112 z^5 - 23760 z^4 + 110880 z^3 - 207900 z^2 + 124740 z - 10395) \operatorname{erfi}(\sqrt{z})}{337920 z^{3/2}} + \frac{3}{11 z}$$

07.25.03.3761.01

$${}_2F_2\left(-\frac{9}{2}, 1; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 1040 z^4 + 11376 z^3 + 50232 z^2 + 83370 z + 35685)}{168960 z} + \frac{\sqrt{\pi} (64 z^6 + 2112 z^5 + 23760 z^4 + 110880 z^3 + 207900 z^2 + 124740 z + 10395) \operatorname{erf}(\sqrt{z})}{337920 z^{3/2}} - \frac{3}{11 z}$$

07.25.03.3762.01

$${}_2F_2\left(-\frac{9}{2}, 1; 2, 3; z\right) = -\frac{4 e^{z/2} (64 z^6 - 2336 z^5 + 30000 z^4 - 168864 z^3 + 425112 z^2 - 436590 z + 135135) I_0\left(\frac{z}{2}\right)}{1486485 z} + \frac{4 e^{z/2} (64 z^6 - 2272 z^5 + 27760 z^4 - 142176 z^3 + 294744 z^2 - 191442 z + 10395) I_1\left(\frac{z}{2}\right)}{1486485 z} + \frac{4}{11 z}$$

07.25.03.3763.01

$${}_2F_2\left(-\frac{9}{2}, 1; 2, \frac{7}{2}; z\right) = \frac{e^z (64 z^6 - 2432 z^5 + 32080 z^4 - 179136 z^3 + 408828 z^2 - 291480 z + 10395)}{946176 z^2} + \frac{1}{1892352 z^{5/2}}$$

$$\sqrt{\pi} (-128 z^7 + 4928 z^6 - 66528 z^5 + 388080 z^4 - 970200 z^3 + 873180 z^2 - 145530 z - 10395) \operatorname{erfi}(\sqrt{z}) + \frac{5}{11 z}$$

07.25.03.3764.01

$${}_2F_2\left(-\frac{9}{2}, 1; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 2432 z^5 + 32080 z^4 + 179136 z^3 + 408828 z^2 + 291480 z + 10395)}{946176 z^2} + \frac{1}{1892352 z^{5/2}}$$

$$\sqrt{\pi} (128 z^7 + 4928 z^6 + 66528 z^5 + 388080 z^4 + 970200 z^3 + 873180 z^2 + 145530 z - 10395) \operatorname{erf}(\sqrt{z}) - \frac{5}{11 z}$$

07.25.03.3765.01

$${}_2F_2\left(-\frac{9}{2}, 1; 2, 4; z\right) = -\frac{8 e^{z/2} (64 z^6 - 2688 z^5 + 40560 z^4 - 275520 z^3 + 866520 z^2 - 1164240 z + 509355) I_0\left(\frac{z}{2}\right)}{7432425 z} +$$

$$\frac{1}{7432425 z^2} 8 e^{z/2} (64 z^7 - 2624 z^6 + 37968 z^5 - 238800 z^4 + 644280 z^3 - 608760 z^2 + 72765 z + 10395) I_1\left(\frac{z}{2}\right) + \frac{6}{11 z}$$

07.25.03.3766.01

$${}_2F_2\left(-\frac{9}{2}, 1; 2, \frac{9}{2}; z\right) =$$

$$\frac{e^z (128 z^7 - 5568 z^6 + 85984 z^5 - 580560 z^4 + 1686744 z^3 - 1690836 z^2 + 145530 z + 31185)}{4325376 z^3} + \frac{1}{8650752 z^{7/2}}$$

$$\left(\sqrt{\pi} (-256 z^8 + 11264 z^7 - 177408 z^6 + 1241856 z^5 - 3880800 z^4 + 4656960 z^3 - 1164240 z^2 - 166320 z - 31185)\right.$$

$$\left.\operatorname{erfi}(\sqrt{z})\right) + \frac{7}{11 z}$$

07.25.03.3767.01

$${}_2F_2\left(-\frac{9}{2}, 1; 2, \frac{9}{2}; -z\right) =$$

$$\frac{e^{-z} (128 z^7 + 5568 z^6 + 85984 z^5 + 580560 z^4 + 1686744 z^3 + 1690836 z^2 + 145530 z - 31185)}{4325376 z^3} + \frac{1}{8650752 z^{7/2}}$$

$$\left(\sqrt{\pi} (256 z^8 + 11264 z^7 + 177408 z^6 + 1241856 z^5 + 3880800 z^4 + 4656960 z^3 + 1164240 z^2 - 166320 z + 31185)\right.$$

$$\left.\operatorname{erf}(\sqrt{z})\right) - \frac{7}{11 z}$$

07.25.03.3768.01

$${}_2F_2\left(-\frac{9}{2}, 1; 2, 5; z\right) = -\frac{1}{126351225 z^2}$$

$$32 e^{z/2} (128 z^7 - 6080 z^6 + 105408 z^5 - 838800 z^4 + 3163920 z^3 - 5239080 z^2 + 2910600 z + 10395) I_0\left(\frac{z}{2}\right) +$$

$$\frac{1}{126351225 z^3} \left(32 e^{z/2} (128 z^8 - 5952 z^7 + 99520 z^6 - 742128 z^5 + 2466000 z^4 -\right.$$

$$\left.3061560 z^3 + 582120 z^2 + 155925 z + 41580) I_1\left(\frac{z}{2}\right)\right) + \frac{8}{11 z}$$

07.25.03.3769.01

$${}_2F_2\left(-\frac{9}{2}, 1; 2, \frac{11}{2}; z\right) = \frac{1}{17301504z^4} e^z (256z^8 - 12544z^7 + 221952z^6 - 1757760z^5 + 6203040z^4 - 8030448z^3 + 1164240z^2 + 457380z + 155925) + \frac{1}{34603008z^{9/2}} \left(\sqrt{\pi} (-512z^9 + 25344z^8 - 456192z^7 + 3725568z^6 - 13970880z^5 + 20956320z^4 - 6985440z^3 - 1496880z^2 - 561330z - 155925) \operatorname{erfi}(\sqrt{z})\right) + \frac{9}{11z}$$

07.25.03.3770.01

$${}_2F_2\left(-\frac{9}{2}, 1; 2, \frac{11}{2}; -z\right) = \frac{1}{17301504z^4} e^{-z} (256z^8 + 12544z^7 + 221952z^6 + 1757760z^5 + 6203040z^4 + 8030448z^3 + 1164240z^2 - 457380z + 155925) + \frac{1}{34603008z^{9/2}} \left(\sqrt{\pi} (512z^9 + 25344z^8 + 456192z^7 + 3725568z^6 + 13970880z^5 + 20956320z^4 + 6985440z^3 - 1496880z^2 + 561330z - 155925) \operatorname{erf}(\sqrt{z})\right) - \frac{9}{11z}$$

07.25.03.3771.01

$${}_2F_2\left(-\frac{9}{2}, 1; 2, 6; z\right) = -\frac{1}{480134655z^3} \left(64e^{z/2} (128z^8 - 6784z^7 + 132864z^6 - 1212096z^5 + 5331360z^4 - 10478160z^3 + 6985440z^2 + 83160z + 31185) I_0\left(\frac{z}{2}\right)\right) + \frac{1}{480134655z^4} \left(256e^{z/2} (32z^9 - 1664z^8 + 31568z^7 - 272256z^6 + 1074804z^5 - 1654080z^4 + 436590z^3 + 166320z^2 + 83160z + 31185) I_1\left(\frac{z}{2}\right)\right) + \frac{10}{11z}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = \frac{5}{2}$

07.25.03.3772.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{5}{2}, 3; z\right) = \frac{6(13z-1)}{143z^2} + \frac{e^z (32z^6 - 1232z^5 + 16560z^4 - 95256z^3 + 229530z^2 - 187425z + 23040)}{549120z^2} + \frac{\sqrt{\pi} (-64z^6 + 2496z^5 - 34320z^4 + 205920z^3 - 540540z^2 + 540540z - 135135) \operatorname{erfi}(\sqrt{z})}{1098240z^{3/2}}$$

07.25.03.3773.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{5}{2}, 3; -z\right) = -\frac{6(13z+1)}{143z^2} + \frac{e^{-z} (32z^6 + 1232z^5 + 16560z^4 + 95256z^3 + 229530z^2 + 187425z + 23040)}{549120z^2} + \frac{\sqrt{\pi} (64z^6 + 2496z^5 + 34320z^4 + 205920z^3 + 540540z^2 + 540540z + 135135) \operatorname{erf}(\sqrt{z})}{1098240z^{3/2}}$$

07.25.03.3774.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{5}{2}, 4; z\right) = \frac{3(195z^2 - 30z - 2)}{715z^3} + \frac{e^z(32z^7 - 1424z^6 + 22704z^5 - 160920z^4 + 508410z^3 - 614565z^2 + 161280z + 11520)}{1372800z^3} + \frac{\sqrt{\pi}(-64z^6 + 2880z^5 - 46800z^4 + 343200z^3 - 1158300z^2 + 1621620z - 675675)\operatorname{erfi}(\sqrt{z})}{2745600z^{3/2}}$$

07.25.03.3775.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{5}{2}, 4; -z\right) = -\frac{3(195z^2 + 30z - 2)}{715z^3} + \frac{e^{-z}(32z^7 + 1424z^6 + 22704z^5 + 160920z^4 + 508410z^3 + 614565z^2 + 161280z - 11520)}{1372800z^3} + \frac{\sqrt{\pi}(64z^6 + 2880z^5 + 46800z^4 + 343200z^3 + 1158300z^2 + 1621620z + 675675)\operatorname{erf}(\sqrt{z})}{2745600z^{3/2}}$$

07.25.03.3776.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{5}{2}, 5; z\right) = \frac{12(1105z^3 - 255z^2 - 34z - 6)}{12155z^4} + \frac{1}{2917200z^4} e^z(32z^8 - 1616z^7 + 29808z^6 - 251064z^5 + 981450z^4 - 1573425z^3 + 645120z^2 + 80640z + 17280) + \frac{\sqrt{\pi}(-64z^6 + 3264z^5 - 61200z^4 + 530400z^3 - 2187900z^2 + 3938220z - 2297295)\operatorname{erfi}(\sqrt{z})}{5834400z^{3/2}}$$

07.25.03.3777.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{5}{2}, 5; -z\right) = -\frac{12(1105z^3 + 255z^2 - 34z + 6)}{12155z^4} + \frac{1}{2917200z^4} e^{-z}(32z^8 + 1616z^7 + 29808z^6 + 251064z^5 + 981450z^4 + 1573425z^3 + 645120z^2 - 80640z + 17280) + \frac{\sqrt{\pi}(64z^6 + 3264z^5 + 61200z^4 + 530400z^3 + 2187900z^2 + 3938220z + 2297295)\operatorname{erf}(\sqrt{z})}{5834400z^{3/2}}$$

07.25.03.3778.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{5}{2}, 6; z\right) = \frac{3(20995z^4 - 6460z^3 - 1292z^2 - 456z - 120)}{46189z^5} + \frac{1}{5542680z^5} (e^z(32z^9 - 1808z^8 + 37872z^7 - 369528z^6 + 1721610z^5 - 3441285z^4 + 1935360z^3 + 322560z^2 + 120960z + 43200)) + \frac{\sqrt{\pi}(-64z^6 + 3648z^5 - 77520z^4 + 775200z^3 - 3779100z^2 + 8314020z - 6235515)\operatorname{erfi}(\sqrt{z})}{11085360z^{3/2}}$$

$$\begin{aligned}
 & \text{07.25.03.3779.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 1; \frac{5}{2}, 6; -z\right) = \\
 & -\frac{3(20995z^4 + 6460z^3 - 1292z^2 + 456z - 120)}{46189z^5} + \frac{1}{5542680z^5} (e^{-z}(32z^9 + 1808z^8 + 37872z^7 + 369528z^6 + \\
 & 1721610z^5 + 3441285z^4 + 1935360z^3 - 322560z^2 + 120960z - 43200)) + \\
 & \frac{\sqrt{\pi}(64z^6 + 3648z^5 + 77520z^4 + 775200z^3 + 3779100z^2 + 8314020z + 6235515)\operatorname{erf}(\sqrt{z})}{11085360z^{3/2}}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = 3$

$$\begin{aligned}
 & \text{07.25.03.3780.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 1; 3, 3; z\right) = \frac{8(13z - 2)}{143z^2} - \\
 & \frac{1}{19324305z^2} 16e^{z/2}(64z^7 - 2752z^6 + 42896z^5 - 305520z^4 + 1035384z^3 - 1589352z^2 + 945945z - 135135)I_0\left(\frac{z}{2}\right) + \\
 & \frac{16e^{z/2}(64z^6 - 2688z^5 + 40240z^4 - 266560z^3 + 786456z^2 - 903504z + 264207)I_1\left(\frac{z}{2}\right)}{19324305z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3781.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 1; 3, \frac{7}{2}; z\right) = \\
 & \frac{10(13z - 3)}{143z^2} + \frac{e^z(64z^6 - 2880z^5 + 46640z^4 - 338400z^3 + 1112076z^2 - 1458660z + 509985)}{3075072z^2} + \frac{1}{6150144z^{5/2}} \\
 & \sqrt{\pi}(-128z^7 + 5824z^6 - 96096z^5 + 720720z^4 - 2522520z^3 + 3783780z^2 - 1891890z + 135135)\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3782.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 1; 3, \frac{7}{2}; -z\right) = -\frac{10(13z + 3)}{143z^2} + \frac{e^{-z}(64z^6 + 2880z^5 + 46640z^4 + 338400z^3 + 1112076z^2 + 1458660z + 509985)}{3075072z^2} + \\
 & \frac{1}{6150144z^{5/2}} \sqrt{\pi}(128z^7 + 5824z^6 + 96096z^5 + 720720z^4 + 2522520z^3 + 3783780z^2 + 1891890z + 135135)\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3783.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 1; 3, 4; z\right) = \frac{12(13z - 4)}{143z^2} - \frac{1}{96621525z^2} \\
 & 16e^{z/2}(128z^7 - 6336z^6 + 116160z^5 - 1001040z^4 + 4266000z^3 - 8705160z^2 + 7567560z - 2027025)I_0\left(\frac{z}{2}\right) + \\
 & \frac{1}{96621525z^2} 16e^{z/2}(128z^7 - 6208z^6 + 110016z^5 - 894000z^4 + 3421200z^3 - 5638680z^2 + 3017160z - 135135)I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

07.25.03.3784.01

$${}_2F_2\left(-\frac{9}{2}, 1; 3, \frac{9}{2}; z\right) = \frac{14(13z-5)}{143z^2} + \frac{1}{14057472z^3} e^z (128z^7 - 6592z^6 + 124896z^5 - 1093840z^4 + 4552920z^3 - 8232084z^2 + 4809210z - 135135) + \frac{1}{28114944z^{7/2}} \left(\sqrt{\pi} (-256z^8 + 13312z^7 - 256256z^6 + 2306304z^5 - 10090080z^4 + 20180160z^3 - 15135120z^2 + 2162160z + 135135) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.3785.01

$${}_2F_2\left(-\frac{9}{2}, 1; 3, \frac{9}{2}; -z\right) = -\frac{14(13z+5)}{143z^2} + \frac{1}{14057472z^3} e^{-z} (128z^7 + 6592z^6 + 124896z^5 + 1093840z^4 + 4552920z^3 + 8232084z^2 + 4809210z + 135135) + \frac{1}{28114944z^{7/2}} \left(\sqrt{\pi} (256z^8 + 13312z^7 + 256256z^6 + 2306304z^5 + 10090080z^4 + 20180160z^3 + 15135120z^2 + 2162160z - 135135) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.3786.01

$${}_2F_2\left(-\frac{9}{2}, 1; 3, 5; z\right) = \frac{16(13z-6)}{143z^2} - \frac{1}{1642565925z^2} + 1024 e^{z/2} (16z^7 - 896z^6 + 18888z^5 - 191040z^4 + 980970z^3 - 2496240z^2 + 2837835z - 1081080) I_0\left(\frac{z}{2}\right) + \frac{1}{1642565925z^3} \left(128 e^{z/2} (128z^8 - 7040z^7 + 144128z^6 - 1387584z^5 + 6525600z^4 - 14014320z^3 + 10931040z^2 - 1081080z - 135135) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.3787.01

$${}_2F_2\left(-\frac{9}{2}, 1; 3, \frac{11}{2}; z\right) = \frac{18(13z-7)}{143z^2} + \frac{1}{56229888z^4} (e^z (256z^8 - 14848z^7 + 322176z^6 - 3305472z^5 + 16653120z^4 - 38391840z^3 + 31599288z^2 - 2162160z - 405405)) + \frac{1}{112459776z^{9/2}} \left(\sqrt{\pi} (-512z^9 + 29952z^8 - 658944z^7 + 6918912z^6 - 36324288z^5 + 90810720z^4 - 90810720z^3 + 19459440z^2 + 2432430z + 405405) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.3788.01

$${}_2F_2\left(-\frac{9}{2}, 1; 3, \frac{11}{2}; -z\right) = -\frac{18(13z+7)}{143z^2} + \frac{1}{56229888z^4} (e^{-z}(256z^8 + 14848z^7 + 322176z^6 + 3305472z^5 + 16653120z^4 + 38391840z^3 + 31599288z^2 + 2162160z - 405405)) + \frac{1}{112459776z^{9/2}} (\sqrt{\pi}(512z^9 + 29952z^8 + 658944z^7 + 6918912z^6 + 36324288z^5 + 90810720z^4 + 90810720z^3 + 19459440z^2 - 2432430z + 405405) \operatorname{erf}(\sqrt{z}))$$

07.25.03.3789.01

$${}_2F_2\left(-\frac{9}{2}, 1; 3, 6; z\right) = \frac{20(13z-8)}{143z^2} - \frac{1}{6241750515z^3} (128e^{z/2}(256z^8 - 16000z^7 + 381248z^6 - 4426944z^5 + 26599920z^4 - 81070800z^3 + 113513400z^2 - 55135080z - 135135) I_0\left(\frac{z}{2}\right)) + \frac{1}{6241750515z^4} (128e^{z/2}(256z^9 - 15744z^8 + 365632z^7 - 4068928z^6 + 22698864z^5 - 60086640z^4 + 61662360z^3 - 9729720z^2 - 2297295z - 540540) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = \frac{7}{2}$

07.25.03.3790.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{7}{2}, 4; z\right) = \frac{3(65z^2 - 30z + 2)}{143z^3} + \frac{e^z(64z^7 - 3328z^6 + 63888z^5 - 570240z^4 + 2445660z^3 - 4672080z^2 + 3133935z - 322560)}{7687680z^3} + \frac{1}{15375360z^{5/2}} \sqrt{\pi}(-128z^7 + 6720z^6 - 131040z^5 + 1201200z^4 - 5405400z^3 + 11351340z^2 - 9459450z + 2027025) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3791.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{7}{2}, 4; -z\right) = -\frac{3(65z^2 + 30z + 2)}{143z^3} + \frac{1}{7687680z^3} e^{-z}(64z^7 + 3328z^6 + 63888z^5 + 570240z^4 + 2445660z^3 + 4672080z^2 + 3133935z + 322560) + \frac{1}{15375360z^{5/2}} \sqrt{\pi}(128z^7 + 6720z^6 + 131040z^5 + 1201200z^4 + 5405400z^3 + 11351340z^2 + 9459450z + 2027025) \operatorname{erf}(\sqrt{z})$$

07.25.03.3792.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{7}{2}, 5; z\right) = \frac{4(1105z^3 - 765z^2 + 102z + 6)}{2431z^4} + \frac{1}{16336320z^4} e^z (64z^8 - 3776z^7 + 83824z^6 - 888096z^5 + 4698540z^4 - 11789820z^3 + 11737845z^2 - 2580480z - 161280) + \frac{1}{32672640z^{5/2}} (\sqrt{\pi} (-128z^7 + 7616z^6 - 171360z^5 + 1856400z^4 - 10210200z^3 + 27567540z^2 - 32162130z + 11486475) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.3793.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{7}{2}, 5; -z\right) = -\frac{4(1105z^3 + 765z^2 + 102z - 6)}{2431z^4} + \frac{1}{16336320z^4} e^{-z} (64z^8 + 3776z^7 + 83824z^6 + 888096z^5 + 4698540z^4 + 11789820z^3 + 11737845z^2 + 2580480z - 161280) + \frac{1}{32672640z^{5/2}} (\sqrt{\pi} (128z^7 + 7616z^6 + 171360z^5 + 1856400z^4 + 10210200z^3 + 27567540z^2 + 32162130z + 11486475) \operatorname{erf}(\sqrt{z}))$$

07.25.03.3794.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{7}{2}, 6; z\right) = \frac{5(20995z^4 - 19380z^3 + 3876z^2 + 456z + 72)}{46189z^5} + \frac{1}{31039008z^5} (e^z (64z^9 - 4224z^8 + 106448z^7 - 1305408z^6 + 8213436z^5 - 25530120z^4 + 33765795z^3 - 11612160z^2 - 1290240z - 241920)) + \frac{1}{62078016z^{5/2}} (\sqrt{\pi} (-128z^7 + 8512z^6 - 217056z^5 + 2713200z^4 - 17635800z^3 + 58198140z^2 - 87297210z + 43648605) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.3795.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{7}{2}, 6; -z\right) = -\frac{5(20995z^4 + 19380z^3 + 3876z^2 - 456z + 72)}{46189z^5} + \frac{1}{31039008z^5} (e^{-z} (64z^9 + 4224z^8 + 106448z^7 + 1305408z^6 + 8213436z^5 + 25530120z^4 + 33765795z^3 + 11612160z^2 - 1290240z + 241920)) + \frac{1}{62078016z^{5/2}} (\sqrt{\pi} (128z^7 + 8512z^6 + 217056z^5 + 2713200z^4 + 17635800z^3 + 58198140z^2 + 87297210z + 43648605) \operatorname{erf}(\sqrt{z}))$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = 4$

07.25.03.3796.01

$${}_2F_2\left(-\frac{9}{2}, 1; 4, 4; z\right) = \frac{6(195z^2 - 120z + 16)}{715z^3} - \frac{1}{483107625z^3} \left(32e^{z/2}(128z^8 - 7296z^7 + 157440z^6 - 1644480z^5 + 8848800z^4 - 24235920z^3 + 31407840z^2 - 16216200z + 2027025)I_0\left(\frac{z}{2}\right)\right) + \frac{1}{483107625z^2} 256e^{z/2}(16z^7 - 896z^6 + 18792z^5 - 187200z^4 + 927450z^3 - 2179440z^2 + 2071215z - 512280)I_1\left(\frac{z}{2}\right)$$

07.25.03.3797.01

$${}_2F_2\left(-\frac{9}{2}, 1; 4, \frac{9}{2}; z\right) = \frac{21(13z^2 - 10z + 2)}{143z^3} + \frac{1}{35143680z^3} e^z(128z^7 - 7616z^6 + 170976z^5 - 1840080z^4 + 9967320z^3 - 26025300z^2 + 28147770z - 8294895) + \frac{1}{70287360z^{7/2}} \left(\sqrt{\pi}(-256z^8 + 15360z^7 - 349440z^6 + 3843840z^5 - 21621600z^4 + 60540480z^3 - 75675600z^2 + 32432400z - 2027025)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.3798.01

$${}_2F_2\left(-\frac{9}{2}, 1; 4, \frac{9}{2}; -z\right) = -\frac{21(13z^2 + 10z + 2)}{143z^3} + \frac{1}{35143680z^3} e^{-z}(128z^7 + 7616z^6 + 170976z^5 + 1840080z^4 + 9967320z^3 + 26025300z^2 + 28147770z + 8294895) + \frac{1}{70287360z^{7/2}} \left(\sqrt{\pi}(256z^8 + 15360z^7 + 349440z^6 + 3843840z^5 + 21621600z^4 + 60540480z^3 + 75675600z^2 + 32432400z + 2027025)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.3799.01

$${}_2F_2\left(-\frac{9}{2}, 1; 4, 5; z\right) = \frac{24(65z^2 - 60z + 16)}{715z^3} - \frac{1}{8212829625z^3} \left(128e^{z/2}(256z^8 - 16512z^7 + 409920z^6 - 5031360z^5 + 32713200z^4 - 112461840z^3 + 193393080z^2 - 145945800z + 34459425)I_0\left(\frac{z}{2}\right)\right) + \frac{1}{8212829625z^3} \left(128e^{z/2}(256z^8 - 16256z^7 + 393792z^6 - 4645440z^5 + 28249200z^4 - 86189040z^3 + 117719640z^2 - 53453880z + 2027025)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.3800.01

$${}_2F_2\left(-\frac{9}{2}, 1; 4, \frac{11}{2}; z\right) = \frac{9(39z^2 - 42z + 14)}{143z^3} + \frac{1}{140574720z^4} (e^z (256z^8 - 17152z^7 + 440832z^6 - 5553600z^5 + 36342240z^4 - 120344400z^3 + 179776800z^2 - 88727940z + 2027025)) + \frac{1}{281149440z^{9/2}} (\sqrt{\pi} (-512z^9 + 34560z^8 - 898560z^7 + 11531520z^6 - 77837760z^5 + 272432160z^4 - 454053600z^3 + 291891600z^2 - 36486450z - 2027025) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.3801.01

$${}_2F_2\left(-\frac{9}{2}, 1; 4, \frac{11}{2}; -z\right) = -\frac{9(39z^2 + 42z + 14)}{143z^3} + \frac{1}{140574720z^4} (e^{-z} (256z^8 + 17152z^7 + 440832z^6 + 5553600z^5 + 36342240z^4 + 120344400z^3 + 179776800z^2 + 88727940z + 2027025)) + \frac{1}{281149440z^{9/2}} (\sqrt{\pi} (512z^9 + 34560z^8 + 898560z^7 + 11531520z^6 + 77837760z^5 + 272432160z^4 + 454053600z^3 + 291891600z^2 + 36486450z - 2027025) \operatorname{erf}(\sqrt{z}))$$

07.25.03.3802.01

$${}_2F_2\left(-\frac{9}{2}, 1; 4, 6; z\right) = \frac{6(65z^2 - 80z + 32)}{143z^3} - \frac{1}{31208752575z^3} (256e^{z/2} (256z^8 - 18432z^7 + 517440z^6 - 7297920z^5 + 55638000z^4 - 230178240z^3 + 492941880z^2 - 486486000z + 164189025) I_0\left(\frac{z}{2}\right)) + \frac{1}{31208752575z^4} (256e^{z/2} (256z^9 - 18176z^8 + 499392z^7 - 6807360z^6 + 49062960z^5 - 184073040z^4 + 327934440z^3 - 217419480z^2 + 18243225z + 2027025) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = \frac{9}{2}$

07.25.03.3803.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{9}{2}, 5; z\right) = \frac{28(221z^3 - 255z^2 + 102z - 6)}{2431z^4} + \frac{1}{74680320z^4} (e^z (128z^8 - 8640z^7 + 224224z^6 - 2862288z^5 + 19091160z^4 - 65155860z^3 + 102901050z^2 - 58437855z + 5160960)) + \frac{1}{149360640z^{7/2}} (\sqrt{\pi} (-256z^8 + 17408z^7 - 456960z^6 + 5940480z^5 - 40840800z^4 + 147026880z^3 - 257297040z^2 + 183783600z - 34459425) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.3804.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{9}{2}, 5; -z\right) = -\frac{28(221z^3 + 255z^2 + 102z + 6)}{2431z^4} + \frac{1}{74680320z^4} \left(e^{-z} (128z^8 + 8640z^7 + 224224z^6 + 2862288z^5 + 19091160z^4 + 65155860z^3 + 102901050z^2 + 58437855z + 5160960) \right) + \frac{1}{149360640z^{7/2}} \left(\sqrt{\pi} (256z^8 + 17408z^7 + 456960z^6 + 5940480z^5 + 40840800z^4 + 147026880z^3 + 257297040z^2 + 183783600z + 34459425) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.3805.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{9}{2}, 6; z\right) = \frac{35(4199z^4 - 6460z^3 + 3876z^2 - 456z - 24)}{46189z^5} + \frac{1}{141892608z^5} \left(e^z (128z^9 - 9664z^8 + 284640z^7 - 4203472z^6 + 33300696z^5 - 140332500z^4 + 291538170z^3 - 246243375z^2 + 46448640z + 2580480) \right) + \frac{1}{283785216z^{7/2}} \left(\sqrt{\pi} (-256z^8 + 19456z^7 - 578816z^6 + 8682240z^5 - 70543200z^4 + 310390080z^3 - 698377680z^2 + 698377680z - 218243025) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.3806.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{9}{2}, 6; -z\right) = -\frac{35(4199z^4 + 6460z^3 + 3876z^2 + 456z - 24)}{46189z^5} + \frac{1}{141892608z^5} \left(e^{-z} (128z^9 + 9664z^8 + 284640z^7 + 4203472z^6 + 33300696z^5 + 140332500z^4 + 291538170z^3 + 246243375z^2 + 46448640z - 2580480) \right) + \frac{1}{283785216z^{7/2}} \left(\sqrt{\pi} (256z^8 + 19456z^7 + 578816z^6 + 8682240z^5 + 70543200z^4 + 310390080z^3 + 698377680z^2 + 698377680z + 218243025) \operatorname{erf}(\sqrt{z}) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = 5$

07.25.03.3807.01

$${}_2F_2\left(-\frac{9}{2}, 1; 5, 5; z\right) = \frac{32(1105z^3 - 1530z^2 + 816z - 96)}{12155z^4} - \frac{1}{139618103625z^4} \left(1024e^{z/2} (256z^9 - 18688z^8 + 533952z^7 - 7707840z^6 + 60669360z^5 - 262891440z^4 + 605403720z^3 - 679879080z^2 + 310134825z - 34459425) I_0\left(\frac{z}{2}\right) \right) + \frac{1}{139618103625z^3} \left(1024e^{z/2} (256z^8 - 18432z^7 + 515648z^6 - 7201152z^5 + 53708400z^4 - 212322240z^3 + 414123480z^2 - 335139120z + 71697105) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.3808.01

$${}_2F_2\left(-\frac{9}{2}, 1; 5, \frac{11}{2}; z\right) = \frac{36(221z^3 - 357z^2 + 238z - 42)}{2431z^4} + \frac{1}{298721280z^4} (e^z(256z^8 - 19456z^7 + 577920z^6 - 8631168z^5 + 69463680z^4 - 299756160z^3 + 648232200z^2 - 595387800z + 151335135)) + \frac{1}{597442560z^{9/2}} (\sqrt{\pi}(-512z^9 + 39168z^8 - 1175040z^7 + 17821440z^6 - 147026880z^5 + 661620960z^4 - 1543782240z^3 + 1654052400z^2 - 620269650z + 34459425) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.3809.01

$${}_2F_2\left(-\frac{9}{2}, 1; 5, \frac{11}{2}; -z\right) = -\frac{36(221z^3 + 357z^2 + 238z + 42)}{2431z^4} + \frac{1}{298721280z^4} (e^{-z}(256z^8 + 19456z^7 + 577920z^6 + 8631168z^5 + 69463680z^4 + 299756160z^3 + 648232200z^2 + 595387800z + 151335135)) + \frac{1}{597442560z^{9/2}} (\sqrt{\pi}(512z^9 + 39168z^8 + 1175040z^7 + 17821440z^6 + 147026880z^5 + 661620960z^4 + 1543782240z^3 + 1654052400z^2 + 620269650z + 34459425) \operatorname{erf}(\sqrt{z}))$$

07.25.03.3810.01

$${}_2F_2\left(-\frac{9}{2}, 1; 5, 6; z\right) = \frac{8(1105z^3 - 2040z^2 + 1632z - 384)}{2431z^4} - \frac{1}{530548793775z^4} (1024e^{z/2}(512z^9 - 41728z^8 + 1348608z^7 - 22384320z^6 + 206871840z^5 - 1081907280z^4 + 3122658720z^3 - 4647440520z^2 + 3101348250z - 654729075) I_0\left(\frac{z}{2}\right)) + \frac{1}{530548793775z^4} (1024e^{z/2}(512z^9 - 41216z^8 + 1307648z^7 - 21096768z^6 + 186389280z^5 - 904880880z^4 + 2293460640z^3 - 2671512120z^2 + 1052110170z - 34459425) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = \frac{11}{2}$

07.25.03.3811.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{11}{2}, 6; z\right) = \frac{45(4199z^4 - 9044z^3 + 9044z^2 - 3192z + 168)}{46189z^5} + \frac{1}{567570432z^5} (e^z(256z^9 - 21760z^8 + 733440z^7 - 12667200z^6 + 120984864z^5 - 643397040z^4 + 1821037680z^3 - 2447606700z^2 + 1203216525z - 92897280)) + \frac{1}{1135140864z^{9/2}} (\sqrt{\pi}(-512z^9 + 43776z^8 - 1488384z^7 + 26046720z^6 - 253955520z^5 + 1396755360z^4 - 4190266080z^3 + 6285399120z^2 - 3928374450z + 654729075) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.3812.01

$${}_2F_2\left(-\frac{9}{2}, 1; \frac{11}{2}, 6; -z\right) = -\frac{45(4199z^4 + 9044z^3 + 9044z^2 + 3192z + 168)}{46189z^5} + \frac{1}{567570432z^5} (e^{-z}(256z^9 + 21760z^8 + 733440z^7 + 12667200z^6 + 120984864z^5 + 643397040z^4 + 1821037680z^3 + 2447606700z^2 + 1203216525z + 92897280)) + \frac{1}{1135140864z^{9/2}} (\sqrt{\pi}(512z^9 + 43776z^8 + 1488384z^7 + 26046720z^6 + 253955520z^5 + 1396755360z^4 + 4190266080z^3 + 6285399120z^2 + 3928374450z + 654729075)\operatorname{erf}(\sqrt{z}))$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 1$, $b_1 = 6$

07.25.03.3813.01

$${}_2F_2\left(-\frac{9}{2}, 1; 6, 6; z\right) = \frac{10(20995z^4 - 51680z^3 + 62016z^2 - 29184z + 3072)}{46189z^5} - \frac{1}{2016085416345z^5} (2048e^{z/2}(512z^{10} - 46592z^9 + 1703680z^8 - 32529408z^7 + 353320800z^6 - 2234625120z^5 + 8117596080z^4 - 16150111200z^3 + 16019050770z^2 - 6547290750z + 654729075)I_0\left(\frac{z}{2}\right) + \frac{1}{2016085416345z^4} (4096e^{z/2}(256z^9 - 23040z^8 + 828928z^7 - 15447040z^6 + 161605584z^5 - 962670240z^4 + 3163791600z^3 - 5269929120z^2 + 3709876725z - 698352210)I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{3}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.3814.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{e^z(256z^8 + 1280z^7 - 896z^6 + 4032z^5 - 13440z^4 + 38640z^3 - 88200z^2 + 139860z - 114345)}{114345}$$

07.25.03.3815.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{e^z(128z^7 + 448z^6 - 672z^5 + 1680z^4 - 4200z^3 + 8820z^2 - 13230z + 10395)}{10395}$$

07.25.03.3816.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = -\frac{e^z(64z^6 + 128z^5 - 400z^4 + 640z^3 - 1140z^2 + 1560z - 1155)}{1155}$$

07.25.03.3817.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{165} e^z(32z^5 + 16z^4 - 208z^3 + 216z^2 - 246z + 165)$$

07.25.03.3818.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = -\frac{1}{33} e^z (16z^4 - 16z^3 - 96z^2 + 60z - 33)$$

07.25.03.3819.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{11} e^z (8z^3 - 20z^2 - 38z + 11)$$

07.25.03.3820.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = -\frac{1}{11} e^z (4z^2 - 16z - 11)$$

07.25.03.3821.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{11} e^{z/2} (-2z^2 + 8z + 11) I_0\left(\frac{z}{2}\right) - \frac{2}{11} e^{z/2} (z^2 - 5z) I_1\left(\frac{z}{2}\right)$$

07.25.03.3822.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{1}{11} e^z (2z - 11)$$

07.25.03.3823.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{11} e^{z/2} (11 - 2z) I_0\left(\frac{z}{2}\right) + \frac{1}{11} e^{z/2} (13 - 2z) I_1\left(\frac{z}{2}\right)$$

07.25.03.3824.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = -\frac{3 e^z (z - 7)}{11 z} - \frac{21 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{22 z^{3/2}}$$

07.25.03.3825.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{21 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{22 z^{3/2}} - \frac{3 e^{-z} (z + 7)}{11 z}$$

07.25.03.3826.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, 3; z\right) = -\frac{4}{11} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (z - 15) I_1\left(\frac{z}{2}\right)}{11 z}$$

07.25.03.3827.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{15 e^z (z - 12)}{22 z^2} - \frac{15 \sqrt{\pi} (7z + 12) \operatorname{erfi}(\sqrt{z})}{44 z^{5/2}}$$

07.25.03.3828.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{15 e^{-z} (z + 12)}{22 z^2} + \frac{15 \sqrt{\pi} (7z - 12) \operatorname{erf}(\sqrt{z})}{44 z^{5/2}}$$

07.25.03.3829.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (11z + 68) I_1\left(\frac{z}{2}\right)}{11 z^2} - \frac{68 e^{z/2} I_0\left(\frac{z}{2}\right)}{11 z}$$

07.25.03.3830.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{315 e^z (2z + 45)}{352 z^3} - \frac{105 \sqrt{\pi} (28z^2 + 96z + 135) \operatorname{erfi}(\sqrt{z})}{704 z^{7/2}}$$

07.25.03.3831.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{315 e^{-z} (2z - 45)}{352 z^3} + \frac{105 \sqrt{\pi} (28 z^2 - 96 z + 135) \operatorname{erf}(\sqrt{z})}{704 z^{7/2}}$$

07.25.03.3832.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, 5; z\right) = \frac{64 e^{z/2} (7 z^2 + 28 z + 114) I_1\left(\frac{z}{2}\right)}{55 z^3} - \frac{32 e^{z/2} (14 z + 57) I_0\left(\frac{z}{2}\right)}{55 z^2}$$

07.25.03.3833.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{315 e^z (14 z^2 + 55 z + 525)}{704 z^4} - \frac{315 \sqrt{\pi} (28 z^3 + 144 z^2 + 405 z + 525) \operatorname{erfi}(\sqrt{z})}{1408 z^{9/2}}$$

07.25.03.3834.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (14 z^2 - 55 z + 525)}{704 z^4} + \frac{315 \sqrt{\pi} (28 z^3 - 144 z^2 + 405 z - 525) \operatorname{erf}(\sqrt{z})}{1408 z^{9/2}}$$

07.25.03.3835.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (4 z^3 + 25 z^2 + 84 z + 288) I_1\left(\frac{z}{2}\right)}{11 z^4} - \frac{32 e^{z/2} (4 z^2 + 21 z + 72) I_0\left(\frac{z}{2}\right)}{11 z^3}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.3836.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)$$

07.25.03.3837.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{105} e^z (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105)$$

07.25.03.3838.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{15} e^z (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15)$$

07.25.03.3839.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (8 z^3 + 12 z^2 - 6 z + 3)$$

07.25.03.3840.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -e^z (4 z^2 + 4 z - 1)$$

07.25.03.3841.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = e^z (2 z + 1)$$

07.25.03.3842.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, 1; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.3843.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = e^z$$

07.25.03.3844.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.3845.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{3 e^z}{2z} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.3846.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3 e^{-z}}{2z}$$

07.25.03.3847.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, 3; z\right) = \frac{4 e^{z/2} I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.3848.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{45 e^z}{8 z^2} - \frac{15 \sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.3849.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45 e^{-z}}{8 z^2}$$

07.25.03.3850.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (z+4) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.3851.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{105 e^z (2z+15)}{64 z^3} - \frac{105 \sqrt{\pi} (4z^2+12z+15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.3852.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (2z-15)}{64 z^3} + \frac{105 \sqrt{\pi} (4z^2-12z+15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.3853.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (z^2+4z+12) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{32 e^{z/2} (z+3) I_0\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.3854.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{315 e^z (4z^2+20z+105)}{256 z^4} - \frac{315 \sqrt{\pi} (8z^3+36z^2+90z+105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.3855.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2-20z+105)}{256 z^4} + \frac{315 \sqrt{\pi} (8z^3-36z^2+90z-105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.3856.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^3 + 11z^2 + 36z + 96) I_1\left(\frac{z}{2}\right)}{7z^4} - \frac{32 e^{z/2} (2z^2 + 9z + 24) I_0\left(\frac{z}{2}\right)}{7z^3}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.3857.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{735} e^z (3088z^4 - 976z^3 + 1056z^2 - 1140z + 735) - \frac{4096}{735} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.3858.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{4096}{735} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{735} e^{-z} (3088z^4 + 976z^3 + 1056z^2 + 1140z + 735)$$

07.25.03.3859.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{2048}{105} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^z (-2048z^4 - 520z^3 + 228z^2 - 186z + 105)$$

07.25.03.3860.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{105} e^{-z} (-2048z^4 + 520z^3 + 228z^2 + 186z + 105) - \frac{2048}{105} \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.3861.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{21} e^z (512z^4 + 256z^3 + 132z^2 - 48z + 21) - \frac{512}{21} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.3862.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{512}{21} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{21} e^{-z} (512z^4 - 256z^3 + 132z^2 + 48z + 21)$$

07.25.03.3863.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{256}{21} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{21} e^z (-256z^4 - 128z^3 - 192z^2 - 102z + 21)$$

07.25.03.3864.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{21} e^{-z} (-256z^4 + 128z^3 - 192z^2 + 102z + 21) - \frac{256}{21} \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.3865.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{21} e^z (32z^4 + 16z^3 + 24z^2 + 60z + 21) - \frac{32}{21} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.3866.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{32}{21} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{21} e^{-z} (32z^4 - 16z^3 + 24z^2 - 60z + 21)$$

07.25.03.3867.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (-4096z^5 + 3072z^4 + 1920z^3 + 3360z^2 + 9450z + 6615) I_0\left(\frac{z}{2}\right)}{6615} + \frac{2 e^{z/2} (2048z^5 + 512z^4 + 576z^3 + 1200z^2 + 3675z) I_1\left(\frac{z}{2}\right)}{6615}$$

$$07.25.03.3868.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.3869.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

$$07.25.03.3870.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (-8192z^5 + 6144z^4 + 3840z^3 + 6720z^2 + 18900z + 72765) I_0\left(\frac{z}{2}\right)}{72765} + \frac{e^{z/2} (8192z^5 + 2048z^4 + 2304z^3 + 4800z^2 + 14700z + 59535) I_1\left(\frac{z}{2}\right)}{72765}$$

$$07.25.03.3871.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945)}{840z} + \frac{\sqrt{\pi} (-64z^6 - 945) \operatorname{erfi}(\sqrt{z})}{1680z^{3/2}}$$

$$07.25.03.3872.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (32z^5 - 16z^4 + 24z^3 - 60z^2 + 210z - 945)}{840z} + \frac{\sqrt{\pi} (64z^6 + 945) \operatorname{erf}(\sqrt{z})}{1680z^{3/2}}$$

$$07.25.03.3873.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (8192z^6 + 2048z^5 + 2304z^4 + 4800z^3 + 14700z^2 + 59535z + 654885) I_1\left(\frac{z}{2}\right)}{945945z} - \frac{4 e^{z/2} (8192z^5 - 6144z^4 - 3840z^3 - 6720z^2 - 18900z - 72765) I_0\left(\frac{z}{2}\right)}{945945}$$

$$07.25.03.3874.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (32z^6 + 16z^5 + 24z^4 + 60z^3 + 210z^2 + 945z + 8505)}{2352z^2} + \frac{\sqrt{\pi} (-64z^7 - 6615z - 8505) \operatorname{erfi}(\sqrt{z})}{4704z^{5/2}}$$

$$07.25.03.3875.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32z^6 - 16z^5 + 24z^4 - 60z^3 + 210z^2 - 945z + 8505)}{2352z^2} + \frac{\sqrt{\pi} (64z^7 + 6615z - 8505) \operatorname{erf}(\sqrt{z})}{4704z^{5/2}}$$

$$07.25.03.3876.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{4729725z^2} 4 e^{z/2} (16384z^7 + 4096z^6 + 4608z^5 + 9600z^4 + 29400z^3 + 119070z^2 + 4147605z + 11351340) I_1\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (16384z^6 - 12288z^5 - 7680z^4 - 13440z^3 - 37800z^2 - 145530z + 2837835) I_0\left(\frac{z}{2}\right)}{4729725z}$$

07.25.03.3877.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 + 64 z^6 + 96 z^5 + 240 z^4 + 840 z^3 + 3780 z^2 + 73\,710 z + 297\,675)}{21\,504 z^3} + \frac{\sqrt{\pi} (-256 z^8 - 105\,840 z^2 - 272\,160 z - 297\,675) \operatorname{erfi}(\sqrt{z})}{43\,008 z^{7/2}}$$

07.25.03.3878.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 - 64 z^6 + 96 z^5 - 240 z^4 + 840 z^3 - 3780 z^2 + 73\,710 z - 297\,675)}{21\,504 z^3} + \frac{\sqrt{\pi} (256 z^8 + 105\,840 z^2 - 272\,160 z + 297\,675) \operatorname{erf}(\sqrt{z})}{43\,008 z^{7/2}}$$

07.25.03.3879.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{80\,405\,325 z^3} - \frac{64 e^{z/2} (8192 z^8 + 2048 z^7 + 2304 z^6 + 4800 z^5 + 14\,700 z^4 + 59\,535 z^3 + 6\,330\,555 z^2 + 22\,702\,680 z + 51\,081\,030) I_1\left(\frac{z}{2}\right) - \frac{1}{80\,405\,325 z^2} - 32 e^{z/2} (16\,384 z^7 - 12\,288 z^6 - 7\,680 z^5 - 13\,440 z^4 - 37\,800 z^3 - 145\,530 z^2 + 11\,351\,340 z + 25\,540\,515) I_0\left(\frac{z}{2}\right)}{80\,405\,325 z^2}$$

07.25.03.3880.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{e^z (128 z^8 + 64 z^7 + 96 z^6 + 240 z^5 + 840 z^4 + 3780 z^3 + 179\,550 z^2 + 826\,875 z + 2\,778\,300)}{43\,008 z^4} + \frac{\sqrt{\pi} (-256 z^9 - 317\,520 z^3 - 1\,224\,720 z^2 - 2\,679\,075 z - 2\,778\,300) \operatorname{erfi}(\sqrt{z})}{86\,016 z^{9/2}}$$

07.25.03.3881.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (128 z^8 - 64 z^7 + 96 z^6 - 240 z^5 + 840 z^4 - 3780 z^3 + 179\,550 z^2 - 826\,875 z + 2\,778\,300)}{43\,008 z^4} + \frac{\sqrt{\pi} (256 z^9 + 317\,520 z^3 - 1\,224\,720 z^2 + 2\,679\,075 z - 2\,778\,300) \operatorname{erf}(\sqrt{z})}{86\,016 z^{9/2}}$$

07.25.03.3882.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{305\,540\,235 z^4} \left(32 e^{z/2} (32\,768 z^9 + 8192 z^8 + 9216 z^7 + 19\,200 z^6 + 58\,800 z^5 + 238\,140 z^4 + 66\,673\,530 z^3 + 318\,242\,925 z^2 + 948\,647\,700 z + 1\,984\,862\,880) I_1\left(\frac{z}{2}\right) - \frac{1}{305\,540\,235 z^3} \left(32 e^{z/2} (32\,768 z^8 - 24\,576 z^7 - 15\,360 z^6 - 26\,880 z^5 - 75\,600 z^4 - 291\,060 z^3 + 64\,053\,990 z^2 + 237\,161\,925 z + 496\,215\,720) I_0\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.3883.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{75} e^z (5120 z^4 - 2048 z^3 + 276 z^2 - 156 z + 75) - \frac{512}{75} \sqrt{\pi} (10 z^{9/2} - 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3884.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{75} e^{-z} (5120 z^4 + 2048 z^3 + 276 z^2 + 156 z + 75) + \frac{512}{75} \sqrt{\pi} (10 z^{9/2} + 9 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3885.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{15} e^z (-1280 z^4 + 1664 z^3 + 192 z^2 - 42 z + 15) + \frac{256}{15} \sqrt{\pi} (5 z^{9/2} - 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3886.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-1280 z^4 - 1664 z^3 + 192 z^2 + 42 z + 15) - \frac{256}{15} \sqrt{\pi} (5 z^{9/2} + 9 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3887.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (640 z^4 - 1408 z^3 - 384 z^2 - 96 z + 15) - \frac{64}{15} \sqrt{\pi} (10 z^{9/2} - 27 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3888.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (640 z^4 + 1408 z^3 - 384 z^2 + 96 z + 15) + \frac{64}{15} \sqrt{\pi} (10 z^{9/2} + 27 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3889.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (-80 z^4 + 248 z^3 + 84 z^2 + 66 z + 15) + \frac{16}{15} \sqrt{\pi} (5 z^{9/2} - 18 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3890.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-80 z^4 - 248 z^3 + 84 z^2 - 66 z + 15) - \frac{16}{15} \sqrt{\pi} (5 z^{9/2} + 18 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3891.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (10240 z^5 - 49152 z^4 + 26304 z^3 + 11040 z^2 + 10395 z + 4725) I_0\left(\frac{z}{2}\right) + e^{z/2} (-10240 z^5 + 38912 z^4 + 7488 z^3 + 5664 z^2 + 5925 z) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.3892.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{4}{15} \sqrt{\pi} (2z - 9) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{15} e^z (-8 z^4 + 32 z^3 + 12 z^2 + 12 z + 15)$$

07.25.03.3893.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-8 z^4 - 32 z^3 + 12 z^2 - 12 z + 15) - \frac{4}{15} \sqrt{\pi} (2 z^{9/2} + 9 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3894.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (20480 z^5 - 116736 z^4 + 66432 z^3 + 30720 z^2 + 35910 z + 51975) I_0\left(\frac{z}{2}\right) + e^{z/2} (-20480 z^5 + 96256 z^4 + 19584 z^3 + 16512 z^2 + 22650 z + 33075) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.3895.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-160z^5 + 784z^4 + 312z^3 + 348z^2 + 570z + 945)}{1200z} + \frac{\sqrt{\pi} (320z^6 - 1728z^5 - 945) \operatorname{erfi}(\sqrt{z})}{2400z^{3/2}}$$

07.25.03.3896.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-160z^5 - 784z^4 + 312z^3 - 348z^2 + 570z - 945)}{1200z} + \frac{\sqrt{\pi} (-320z^6 - 1728z^5 + 945) \operatorname{erf}(\sqrt{z})}{2400z^{3/2}}$$

07.25.03.3897.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, 3; z\right) = \frac{8e^{z/2} (10240z^5 - 67584z^4 + 40128z^3 + 19680z^2 + 25515z + 47250) I_0\left(\frac{z}{2}\right)}{675675} - \frac{4e^{z/2} (20480z^6 - 114688z^5 - 24192z^4 - 21696z^3 - 33450z^2 - 66150z - 297675) I_1\left(\frac{z}{2}\right)}{675675z}$$

07.25.03.3898.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-320z^6 + 1856z^5 + 768z^4 + 912z^3 + 1680z^2 + 3780z + 14175)}{6720z^2} + \frac{\sqrt{\pi} (640z^7 - 4032z^6 - 13230z - 14175) \operatorname{erfi}(\sqrt{z})}{13440z^{5/2}}$$

07.25.03.3899.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-320z^6 - 1856z^5 + 768z^4 - 912z^3 + 1680z^2 - 3780z + 14175)}{6720z^2} + \frac{\sqrt{\pi} (-640z^7 - 4032z^6 + 13230z - 14175) \operatorname{erf}(\sqrt{z})}{13440z^{5/2}}$$

07.25.03.3900.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, 4; z\right) = \frac{4e^{z/2} (8192z^6 - 61440z^5 + 37632z^4 + 19200z^3 + 26460z^2 + 54810z - 218295) I_0\left(\frac{z}{2}\right)}{675675z} - \frac{1}{675675z^2} 4e^{z/2} (8192z^7 - 53248z^6 - 11520z^5 - 10752z^4 - 17700z^3 - 39690z^2 - 456435z - 873180) I_1\left(\frac{z}{2}\right)$$

07.25.03.3901.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (-640z^7 + 4288z^6 + 1824z^5 + 2256z^4 + 4440z^3 + 11340z^2 + 85050z + 212625)}{30720z^3} + \frac{\sqrt{\pi} (1280z^8 - 9216z^7 - 105840z^2 - 226800z - 212625) \operatorname{erfi}(\sqrt{z})}{61440z^{7/2}}$$

07.25.03.3902.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-640z^7 - 4288z^6 + 1824z^5 - 2256z^4 + 4440z^3 - 11340z^2 + 85050z - 212625)}{30720z^3} + \frac{\sqrt{\pi} (-1280z^8 - 9216z^7 + 105840z^2 - 226800z + 212625) \operatorname{erf}(\sqrt{z})}{61440z^{7/2}}$$

$$\begin{aligned}
 & \text{07.25.03.3903.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, 5; z\right) = \frac{1}{57\,432\,375 z^2} \\
 & \quad 32 e^{z/2} (40\,960 z^7 - 344\,064 z^6 + 215\,808 z^5 + 113\,280 z^4 + 162\,540 z^3 + 359\,100 z^2 - 5\,020\,785 z - 8\,513\,505) I_0\left(\frac{z}{2}\right) - \\
 & \quad \frac{1}{57\,432\,375 z^3} \left(32 e^{z/2} (40\,960 z^8 - 303\,104 z^7 - 66\,816 z^6 - 64\,128 z^5 - 110\,100 z^4 - \right. \\
 & \quad \left. 264\,600 z^3 - 6\,806\,835 z^2 - 20\,083\,140 z - 34\,054\,020) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3904.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \\
 & \quad \frac{1}{122\,880 z^4} e^z (-1280 z^8 + 9728 z^7 + 4224 z^6 + 5376 z^5 + 11\,040 z^4 + 30\,240 z^3 + 415\,800 z^2 + 1\,512\,000 z + 3\,472\,875) + \\
 & \quad \frac{\sqrt{\pi} (2560 z^9 - 20\,736 z^8 - 635\,040 z^3 - 2\,041\,200 z^2 - 3\,827\,250 z - 3\,472\,875) \operatorname{erfi}(\sqrt{z})}{245\,760 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3905.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \\
 & \quad \frac{1}{122\,880 z^4} e^{-z} (-1280 z^8 - 9728 z^7 + 4224 z^6 - 5376 z^5 + 11\,040 z^4 - 30\,240 z^3 + 415\,800 z^2 - 1\,512\,000 z + 3\,472\,875) + \\
 & \quad \frac{\sqrt{\pi} (-2560 z^9 - 20\,736 z^8 + 635\,040 z^3 - 2\,041\,200 z^2 + 3\,827\,250 z - 3\,472\,875) \operatorname{erf}(\sqrt{z})}{245\,760 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3906.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{5}{2}, 6; z\right) = \\
 & \quad \frac{1}{218\,243\,025 z^3} \left(32 e^{z/2} (81\,920 z^8 - 761\,856 z^7 + 486\,912 z^6 + 261\,120 z^5 + 385\,560 z^4 + 888\,300 z^3 - 30\,062\,340 z^2 - \right. \\
 & \quad \left. 88\,783\,695 z - 145\,945\,800) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{218\,243\,025 z^4} \left(32 e^{z/2} (81\,920 z^9 - 679\,936 z^8 - 152\,064 z^7 - 148\,992 z^6 - 263\,400 z^5 - 661\,500 z^4 - \right. \right. \\
 & \quad \left. \left. 34\,825\,140 z^3 - 138\,492\,585 z^2 - 355\,134\,780 z - 583\,783\,200) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{3}{2}$

$$\text{07.25.03.3907.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (320 z^4 - 992 z^3 + 168 z^2 - 12 z + 3) - \frac{8}{3} \sqrt{\pi} (40 z^{9/2} - 144 z^{7/2} + 63 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.3908.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (320 z^4 + 992 z^3 + 168 z^2 + 12 z + 3) + \frac{8}{3} \sqrt{\pi} (40 z^{9/2} + 144 z^{7/2} + 63 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3909.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (-160 z^4 + 784 z^3 - 444 z^2 - 30 z + 3) + \frac{4}{3} \sqrt{\pi} (40 z^{9/2} - 216 z^{7/2} + 189 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3910.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-160 z^4 - 784 z^3 - 444 z^2 + 30 z + 3) - \frac{4}{3} \sqrt{\pi} (40 z^{9/2} + 216 z^{7/2} + 189 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3911.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (20 z^4 - 134 z^3 + 132 z^2 + 24 z + 3) + \frac{1}{3} \sqrt{\pi} (-20 z^{9/2} + 144 z^{7/2} - 189 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3912.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (20 z^4 + 134 z^3 + 132 z^2 - 24 z + 3) + \frac{1}{3} \sqrt{\pi} (20 z^{9/2} + 144 z^{7/2} + 189 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3913.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-2560 z^5 + 22656 z^4 - 46104 z^3 + 16194 z^2 + 3780 z + 945) I_0\left(\frac{z}{2}\right) + \frac{2}{945} e^{z/2} (1280 z^5 - 10048 z^4 + 13644 z^3 + 1803 z^2 + 687 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.3914.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (2 z^4 - 17 z^3 + 24 z^2 + 6 z + 3) - \frac{1}{6} \sqrt{\pi} z^{5/2} (4 z^2 - 36 z + 63) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3915.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{6} \sqrt{\pi} (4 z^2 + 36 z + 63) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (2 z^4 + 17 z^3 + 24 z^2 - 6 z + 3)$$

07.25.03.3916.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2} (-5120 z^5 + 54528 z^4 - 135408 z^3 + 55284 z^2 + 17010 z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (5120 z^5 - 49408 z^4 + 88560 z^3 + 13692 z^2 + 7554 z + 4725) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.3917.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (320 z^5 - 3296 z^4 + 6072 z^3 + 1788 z^2 + 1290 z + 945)}{1920 z} + \frac{\sqrt{\pi} (-640 z^6 + 6912 z^5 - 15120 z^4 - 945) \operatorname{erfi}(\sqrt{z})}{3840 z^{3/2}}$$

07.25.03.3918.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (320 z^5 + 3296 z^4 + 6072 z^3 - 1788 z^2 + 1290 z - 945)}{1920 z} + \frac{\sqrt{\pi} (640 z^6 + 6912 z^5 + 15120 z^4 + 945) \operatorname{erf}(\sqrt{z})}{3840 z^{3/2}}$$

07.25.03.3919.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (5120 z^6 - 58624 z^5 + 130608 z^4 + 22188 z^3 + 14628 z^2 + 14175 z + 33075) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (5120 z^5 - 63744 z^4 + 186672 z^3 - 84228 z^2 - 30240 z - 25515) I_0\left(\frac{z}{2}\right)}{135135 z}$$

07.25.03.3920.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (320 z^6 - 3872 z^5 + 8808 z^4 + 2868 z^3 + 2478 z^2 + 2835 z + 5670)}{5376 z^2} + \frac{\sqrt{\pi} (-640 z^7 + 8064 z^6 - 21168 z^5 - 6615 z - 5670) \operatorname{erfi}(\sqrt{z})}{10752 z^{5/2}}$$

07.25.03.3921.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (320 z^6 + 3872 z^5 + 8808 z^4 - 2868 z^3 + 2478 z^2 - 2835 z + 5670)}{5376 z^2} + \frac{\sqrt{\pi} (640 z^7 + 8064 z^6 + 21168 z^5 + 6615 z - 5670) \operatorname{erf}(\sqrt{z})}{10752 z^{5/2}}$$

07.25.03.3922.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (2048 z^7 - 27136 z^6 + 72288 z^5 + 13080 z^4 + 9588 z^3 + 11340 z^2 + 59535 z + 79380) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (2048 z^6 - 29184 z^5 + 98400 z^4 - 47688 z^3 - 18900 z^2 - 18900 z + 19845) I_0\left(\frac{z}{2}\right)}{135135 z^2}$$

07.25.03.3923.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (640 z^7 - 8896 z^6 + 24096 z^5 + 8400 z^4 + 8088 z^3 + 11340 z^2 + 43470 z + 70875)}{24576 z^3} + \frac{\sqrt{\pi} (-1280 z^8 + 18432 z^7 - 56448 z^6 - 52920 z^2 - 90720 z - 70875) \operatorname{erfi}(\sqrt{z})}{49152 z^{7/2}}$$

07.25.03.3924.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (640 z^7 + 8896 z^6 + 24096 z^5 - 8400 z^4 + 8088 z^3 - 11340 z^2 + 43470 z - 70875)}{24576 z^3} + \frac{\sqrt{\pi} (1280 z^8 + 18432 z^7 + 56448 z^6 + 52920 z^2 - 90720 z + 70875) \operatorname{erf}(\sqrt{z})}{49152 z^{7/2}}$$

07.25.03.3925.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, 5; z\right) = \frac{1}{11486475 z^3} \left(64 e^{z/2} (5120 z^8 - 77056 z^7 + 238896 z^6 + 45228 z^5 + 35580 z^4 + 47250 z^3 + 456435 z^2 + 1031940 z + 1309770) I_1\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} \right) + 32 e^{z/2} (10240 z^7 - 164352 z^6 + 626784 z^5 - 320520 z^4 - 136080 z^3 - 151200 z^2 + 515970 z + 654885) I_0\left(\frac{z}{2}\right)$$

$$\begin{aligned}
 & \text{07.25.03.3926.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{49\,152\,z^4} e^z (640\,z^8 - 10\,048\,z^7 + 31\,584\,z^6 + 11\,568\,z^5 + 11\,976\,z^4 + 18\,900\,z^3 + 115\,290\,z^2 + 307\,125\,z + 496\,125) + \\
 & \frac{\sqrt{\pi} (-1280\,z^9 + 20\,736\,z^8 - 72\,576\,z^7 - 158\,760\,z^3 - 408\,240\,z^2 - 637\,875\,z - 496\,125) \operatorname{erfi}(\sqrt{z})}{98\,304\,z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3927.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{49\,152\,z^4} e^{-z} (640\,z^8 + 10\,048\,z^7 + 31\,584\,z^6 - 11\,568\,z^5 + 11\,976\,z^4 - 18\,900\,z^3 + 115\,290\,z^2 - 307\,125\,z + 496\,125) + \\
 & \frac{\sqrt{\pi} (1280\,z^9 + 20\,736\,z^8 + 72\,576\,z^7 + 158\,760\,z^3 - 408\,240\,z^2 + 637\,875\,z - 496\,125) \operatorname{erf}(\sqrt{z})}{98\,304\,z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3928.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{3}{2}, 6; z\right) = \\
 & \frac{1}{43\,648\,605\,z^4} \left(32\,e^{z/2} (20\,480\,z^9 - 345\,088\,z^8 + 1\,220\,544\,z^7 + 239\,088\,z^6 + 197\,832\,z^5 + 283\,500\,z^4 + 4\,634\,280\,z^3 + \right. \\
 & \quad \left. 14\,461\,335\,z^2 + 30\,311\,820\,z + 38\,918\,880) I_1\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{43\,648\,605\,z^3} \left(32\,e^{z/2} (20\,480\,z^8 - 365\,568\,z^7 + 1\,555\,392\,z^6 - 829\,392\,z^5 - 370\,440\,z^4 - \right. \right. \\
 & \quad \left. \left. 442\,260\,z^3 + 3\,311\,280\,z^2 + 7\,577\,955\,z + 9\,729\,720) I_0\left(\frac{z}{2}\right)\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.3929.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{3} e^z (80\,z^4 - 608\,z^3 + 870\,z^2 - 84\,z + 3) + \frac{1}{3} \sqrt{\pi} (-80\,z^{9/2} + 648\,z^{7/2} - 1134\,z^{5/2} + 315\,z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3930.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \\
 & \frac{1}{3} e^{-z} (80\,z^4 + 608\,z^3 + 870\,z^2 + 84\,z + 3) + \frac{1}{3} \sqrt{\pi} (80\,z^{9/2} + 648\,z^{7/2} + 1134\,z^{5/2} + 315\,z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3931.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (-10\,z^4 + 103\,z^3 - 237\,z^2 + 78\,z + 3) + \frac{1}{6} \sqrt{\pi} (20\,z^{9/2} - 216\,z^{7/2} + 567\,z^{5/2} - 315\,z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.3932.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-10 z^4 - 103 z^3 - 237 z^2 - 78 z + 3) + \frac{1}{6} \sqrt{\pi} (-20 z^{9/2} - 216 z^{7/2} - 567 z^{5/2} - 315 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.3933.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (1280 z^5 - 16512 z^4 + 58692 z^3 - 62556 z^2 + 12285 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-1280 z^5 + 15232 z^4 - 44100 z^3 + 24792 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.3934.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{24} \sqrt{\pi} (8 z^3 - 108 z^2 + 378 z - 315) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{12} e^z (-4 z^4 + 52 z^3 - 165 z^2 + 96 z + 12)$$

07.25.03.3935.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{12} e^{-z} (-4 z^4 - 52 z^3 - 165 z^2 - 96 z + 12) - \frac{1}{24} \sqrt{\pi} z^{3/2} (8 z^3 + 108 z^2 + 378 z + 315) \operatorname{erf}(\sqrt{z})$$

07.25.03.3936.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^{z/2} (2560 z^5 - 39936 z^4 + 177000 z^3 - 242076 z^2 + 64260 z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (-2560 z^5 + 37376 z^4 - 140904 z^3 + 117300 z^2 + 11964 z + 2835) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.3937.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (-320 z^5 + 5024 z^4 - 20328 z^3 + 17148 z^2 + 3210 z + 945)}{3840 z} + \frac{\sqrt{\pi} (640 z^6 - 10368 z^5 + 45360 z^4 - 50400 z^3 - 945) \operatorname{erfi}(\sqrt{z})}{7680 z^{3/2}}$$

07.25.03.3938.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-320 z^5 - 5024 z^4 - 20328 z^3 - 17148 z^2 + 3210 z - 945)}{3840 z} + \frac{\sqrt{\pi} (-640 z^6 - 10368 z^5 - 45360 z^4 - 50400 z^3 + 945) \operatorname{erf}(\sqrt{z})}{7680 z^{3/2}}$$

07.25.03.3939.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, 3; z\right) = \frac{16 e^{z/2} (640 z^5 - 11712 z^4 + 62178 z^3 - 103368 z^2 + 33075 z + 7560) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (2560 z^6 - 44288 z^5 + 205704 z^4 - 227352 z^3 - 28488 z^2 - 11340 z - 14175) I_1\left(\frac{z}{2}\right)}{135135 z}$$

07.25.03.3940.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (-640 z^6 + 11776 z^5 - 57936 z^4 + 64320 z^3 + 14952 z^2 + 7560 z + 8505)}{21504 z^2} + \frac{\sqrt{\pi} (1280 z^7 - 24192 z^6 + 127008 z^5 - 176400 z^4 - 13230 z - 8505) \operatorname{erfi}(\sqrt{z})}{43008 z^{5/2}}$$

07.25.03.3941.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-640 z^6 - 11776 z^5 - 57936 z^4 - 64320 z^3 + 14952 z^2 - 7560 z + 8505)}{21504 z^2} + \frac{\sqrt{\pi} (-1280 z^7 - 24192 z^6 - 127008 z^5 - 176400 z^4 + 13230 z - 8505) \operatorname{erf}(\sqrt{z})}{43008 z^{5/2}}$$

07.25.03.3942.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (1024 z^6 - 21504 z^5 + 133008 z^4 - 259752 z^3 + 94500 z^2 + 26460 z - 6615) I_0\left(\frac{z}{2}\right)}{135135 z} - \frac{1}{135135 z^2} 4 e^{z/2} (1024 z^7 - 20480 z^6 + 113040 z^5 - 155928 z^4 - 22188 z^3 - 11340 z^2 - 29295 z - 26460) I_1\left(\frac{z}{2}\right)$$

07.25.03.3943.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (-640 z^7 + 13504 z^6 - 78240 z^5 + 107952 z^4 + 28776 z^3 + 18900 z^2 + 39690 z + 42525)}{49152 z^3} + \frac{\sqrt{\pi} (1280 z^8 - 27648 z^7 + 169344 z^6 - 282240 z^5 - 52920 z^2 - 68040 z - 42525) \operatorname{erfi}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.3944.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-640 z^7 - 13504 z^6 - 78240 z^5 - 107952 z^4 + 28776 z^3 - 18900 z^2 + 39690 z - 42525)}{49152 z^3} + \frac{\sqrt{\pi} (-1280 z^8 - 27648 z^7 - 169344 z^6 - 282240 z^5 + 52920 z^2 - 68040 z + 42525) \operatorname{erf}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.3945.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, 5; z\right) = \frac{1}{11486475 z^2} 32 e^{z/2} (5120 z^7 - 121344 z^6 + 856848 z^5 - 1919760 z^4 + 767340 z^3 + 245700 z^2 - 191835 z - 178605) I_0\left(\frac{z}{2}\right) - \frac{1}{11486475 z^3} (32 e^{z/2} (5120 z^8 - 116224 z^7 + 743184 z^6 - 1229568 z^5 - 190860 z^4 - 113400 z^3 - 475335 z^2 - 767340 z - 714420) I_1\left(\frac{z}{2}\right))$$

$$\begin{aligned}
 & \text{07.25.03.3946.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{196\,608 z^4} e^z (-1280 z^8 + 30\,464 z^7 - 203\,136 z^6 + 335\,424 z^5 + 98\,304 z^4 + 75\,600 z^3 + 234\,360 z^2 + 434\,700 z + 496\,125) + \\
 & \frac{1}{393\,216 z^{9/2}} \sqrt{\pi} (2560 z^9 - 62\,208 z^8 + 435\,456 z^7 - 846\,720 z^6 - 317\,520 z^3 - 612\,360 z^2 - 765\,450 z - 496\,125) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3947.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{196\,608 z^4} e^{-z} (-1280 z^8 - 30\,464 z^7 - 203\,136 z^6 - 335\,424 z^5 + 98\,304 z^4 - 75\,600 z^3 + 234\,360 z^2 - 434\,700 z + 496\,125) + \\
 & \frac{1}{393\,216 z^{9/2}} \sqrt{\pi} (-2560 z^9 - 62\,208 z^8 - 435\,456 z^7 - 846\,720 z^6 + 317\,520 z^3 - 612\,360 z^2 + 765\,450 z - 496\,125) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3948.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; -\frac{1}{2}, 6; z\right) = \\
 & \frac{1}{43\,648\,605 z^3} \left(32 e^{z/2} (10\,240 z^8 - 270\,336 z^7 + 2\,145\,696 z^6 - 5\,420\,208 z^5 + 2\,328\,480 z^4 + 820\,260 z^3 - \right. \\
 & \quad \left. 1\,324\,890 z^2 - 2\,270\,835 z - 2\,245\,320) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{43\,648\,605 z^4} \left(32 e^{z/2} (10\,240 z^9 - 260\,096 z^8 + 1\,890\,720 z^7 - 3\,649\,296 z^6 - 603\,552 z^5 - \right. \\
 & \quad \left. 396\,900 z^4 - 2\,458\,890 z^3 - 5\,580\,225 z^2 - 9\,083\,340 z - 8\,981\,280) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.3949.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \\
 & \frac{1}{96} e^z (40 z^4 - 556 z^3 + 2010 z^2 - 1743 z + 96) + \frac{1}{192} \sqrt{\pi} (-80 z^{9/2} + 1152 z^{7/2} - 4536 z^{5/2} + 5040 z^{3/2} - 945 \sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3950.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \\
 & \frac{1}{96} e^{-z} (40 z^4 + 556 z^3 + 2010 z^2 + 1743 z + 96) + \frac{1}{192} \sqrt{\pi} (80 z^{9/2} + 1152 z^{7/2} + 4536 z^{5/2} + 5040 z^{3/2} + 945 \sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3951.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-160 z^5 + 2712 z^4 - 13\,776 z^3 + 24\,384 z^2 - 13\,230 z + 945) I_0\left(\frac{z}{2}\right) + \\
 & \frac{2}{945} e^{z/2} (80 z^5 - 1276 z^4 + 5652 z^3 - 7098 z^2 + 1317 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

07.25.03.3952.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{192} e^z (8z^4 - 140z^3 + 690z^2 - 975z + 192) - \frac{1}{384} \sqrt{\pi} \sqrt{z} (16z^4 - 288z^3 + 1512z^2 - 2520z + 945) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3953.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{192} e^{-z} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} \sqrt{\pi} \sqrt{z} (16z^4 + 288z^3 + 1512z^2 + 2520z + 945) \operatorname{erf}(\sqrt{z})$$

07.25.03.3954.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, 2; z\right) = \frac{e^{z/2} (-320z^5 + 6576z^4 - 42024z^3 + 98124z^2 - 75600z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2} (320z^5 - 6256z^4 + 35928z^3 - 65004z^2 + 23304z + 945) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.3955.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (160z^5 - 3376z^4 + 21072z^3 - 41352z^2 + 14730z + 945)}{15360z} + \frac{\sqrt{\pi} (-320z^6 + 6912z^5 - 45360z^4 + 100800z^3 - 56700z^2 - 945) \operatorname{erfi}(\sqrt{z})}{30720z^{3/2}}$$

07.25.03.3956.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (160z^5 + 3376z^4 + 21072z^3 + 41352z^2 + 14730z - 945)}{15360z} + \frac{\sqrt{\pi} (320z^6 + 6912z^5 + 45360z^4 + 100800z^3 + 56700z^2 + 945) \operatorname{erf}(\sqrt{z})}{30720z^{3/2}}$$

07.25.03.3957.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, 3; z\right) = \frac{4e^{z/2} (320z^6 - 7408z^5 + 52272z^4 - 123540z^3 + 66288z^2 + 4725z + 2835) I_1\left(\frac{z}{2}\right)}{135135z} - \frac{4e^{z/2} (320z^5 - 7728z^4 + 59520z^3 - 172428z^2 + 170100z - 33075) I_0\left(\frac{z}{2}\right)}{135135}$$

07.25.03.3958.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (160z^6 - 3952z^5 + 29856z^4 - 75048z^3 + 39354z^2 + 4725z + 2835)}{43008z^2} + \frac{\sqrt{\pi} (-320z^7 + 8064z^6 - 63504z^5 + 176400z^4 - 132300z^3 - 6615z - 2835) \operatorname{erfi}(\sqrt{z})}{86016z^{5/2}}$$

07.25.03.3959.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (160 z^6 + 3952 z^5 + 29856 z^4 + 75048 z^3 + 39354 z^2 - 4725 z + 2835)}{43008 z^2} + \frac{\sqrt{\pi} (320 z^7 + 8064 z^6 + 63504 z^5 + 176400 z^4 + 132300 z^3 + 6615 z - 2835) \operatorname{erf}(\sqrt{z})}{86016 z^{5/2}}$$

07.25.03.3960.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (128 z^7 - 3424 z^6 + 28656 z^5 - 83616 z^4 + 59988 z^3 + 5670 z^2 + 6615 z + 3780) I_1\left(\frac{z}{2}\right)}{135135 z^2} - \frac{4 e^{z/2} (128 z^6 - 3552 z^5 + 32016 z^4 - 110688 z^3 + 132300 z^2 - 32130 z + 945) I_0\left(\frac{z}{2}\right)}{135135 z}$$

07.25.03.3961.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (640 z^7 - 18112 z^6 + 160608 z^5 - 492432 z^4 + 343608 z^3 + 56700 z^2 + 62370 z + 42525)}{393216 z^3} + \frac{1}{786432 z^{7/2}} \sqrt{\pi} (-1280 z^8 + 36864 z^7 - 338688 z^6 + 1128960 z^5 - 1058400 z^4 - 105840 z^2 - 90720 z - 42525) \operatorname{erfi}(\sqrt{z})$$

07.25.03.3962.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (640 z^7 + 18112 z^6 + 160608 z^5 + 492432 z^4 + 343608 z^3 - 56700 z^2 + 62370 z - 42525)}{393216 z^3} + \frac{1}{786432 z^{7/2}} \sqrt{\pi} (1280 z^8 + 36864 z^7 + 338688 z^6 + 1128960 z^5 + 1058400 z^4 + 105840 z^2 - 90720 z + 42525) \operatorname{erf}(\sqrt{z})$$

07.25.03.3963.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, 5; z\right) = \frac{1}{11486475 z^3} - \frac{64 e^{z/2} (320 z^8 - 9712 z^7 + 94032 z^6 - 326544 z^5 + 293880 z^4 + 33075 z^3 + 57645 z^2 + 60480 z + 39690) I_1\left(\frac{z}{2}\right)}{11486475 z^2} - \frac{32 e^{z/2} (640 z^7 - 20064 z^6 + 207168 z^5 - 832080 z^4 + 1164240 z^3 - 330750 z^2 + 30240 z + 19845) I_0\left(\frac{z}{2}\right)}{11486475 z^2}$$

07.25.03.3964.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{786432 z^4} e^z (640 z^8 - 20416 z^7 + 207840 z^6 - 752208 z^5 + 657816 z^4 + 132300 z^3 + 206010 z^2 + 250425 z + 198450) + \frac{1}{1572864 z^{9/2}} \left(\sqrt{\pi} (-1280 z^9 + 41472 z^8 - 435456 z^7 + 1693440 z^6 - 1905120 z^5 - 317520 z^3 - 408240 z^2 - 382725 z - 198450) \operatorname{erfi}(\sqrt{z}) \right)$$

$$\begin{aligned}
 & \text{07.25.03.3965.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{786432 z^4} e^{-z} (640 z^8 + 20416 z^7 + 207840 z^6 + 752208 z^5 + 657816 z^4 - 132300 z^3 + 206010 z^2 - 250425 z + 198450) + \\
 & \frac{1}{1572864 z^{9/2}} \left(\sqrt{\pi} (1280 z^9 + 41472 z^8 + 435456 z^7 + 1693440 z^6 + \right. \\
 & \left. 1905120 z^5 + 317520 z^3 - 408240 z^2 + 382725 z - 198450) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3966.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{1}{2}, 6; z\right) = \\
 & \frac{1}{43648605 z^4} \left(32 e^{z/2} (1280 z^9 - 43456 z^8 + 477792 z^7 - 1924368 z^6 + 2085312 z^5 + 264600 z^4 + 621810 z^3 + \right. \\
 & \left. 925155 z^2 + 1099980 z + 816480) I_1\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{43648605 z^3} \left(32 e^{z/2} (1280 z^8 - 44736 z^7 + 520608 z^6 - 2381712 z^5 + 3810240 z^4 - \right. \right. \\
 & \left. \left. 1217160 z^3 + 224910 z^2 + 274995 z + 204120) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{3}{2}$, $b_1 = 1$

$$\begin{aligned}
 & \text{07.25.03.3967.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{945} e^{z/2} (-16 z^5 + 336 z^4 - 2220 z^3 + 5484 z^2 - 4725 z + 945) I_0\left(\frac{z}{2}\right) + \\
 & \frac{1}{945} e^{z/2} (16 z^5 - 320 z^4 + 1908 z^3 - 3720 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.3968.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \\
 & \frac{e^z (16 z^4 - 352 z^3 + 2352 z^2 - 5280 z + 2895)}{3840} + \frac{\sqrt{\pi} (-32 z^5 + 720 z^4 - 5040 z^3 + 12600 z^2 - 9450 z + 945) \operatorname{erfi}(\sqrt{z})}{7680 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3969.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \\
 & \frac{e^{-z} (16 z^4 + 352 z^3 + 2352 z^2 + 5280 z + 2895)}{3840} + \frac{\sqrt{\pi} (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945) \operatorname{erf}(\sqrt{z})}{7680 \sqrt{z}}
 \end{aligned}$$

07.25.03.3970.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{3}{2}, 2; z\right) = \frac{e^{z/2}(-32z^5 + 816z^4 - 6816z^3 + 22524z^2 - 28350z + 10395)I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2}(32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945)I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.3971.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z(32z^5 - 848z^4 + 7152z^3 - 22008z^2 + 20010z - 945)}{30720z} + \frac{\sqrt{\pi}(-64z^6 + 1728z^5 - 15120z^4 + 50400z^3 - 56700z^2 + 11340z + 945)\operatorname{erfi}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.3972.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(32z^5 + 848z^4 + 7152z^3 + 22008z^2 + 20010z + 945)}{30720z} + \frac{\sqrt{\pi}(64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945)\operatorname{erf}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.3973.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{3}{2}, 3; z\right) = \frac{4e^{z/2}(32z^6 - 928z^5 + 8784z^4 - 31776z^3 + 37938z^2 - 5670z - 945)I_1\left(\frac{z}{2}\right)}{135135z} - \frac{8e^{z/2}(16z^5 - 480z^4 + 4848z^3 - 20064z^2 + 33075z - 17010)I_0\left(\frac{z}{2}\right)}{135135}$$

07.25.03.3974.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z(64z^6 - 1984z^5 + 20208z^4 - 79008z^3 + 100716z^2 - 11340z - 2835)}{172032z^2} + \frac{1}{344064z^{5/2}}\sqrt{\pi}(-128z^7 + 4032z^6 - 42336z^5 + 176400z^4 - 264600z^3 + 79380z^2 + 13230z + 2835)\operatorname{erfi}(\sqrt{z})$$

07.25.03.3975.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(64z^6 + 1984z^5 + 20208z^4 + 79008z^3 + 100716z^2 + 11340z - 2835)}{172032z^2} + \frac{1}{344064z^{5/2}}\sqrt{\pi}(128z^7 + 4032z^6 + 42336z^5 + 176400z^4 + 264600z^3 + 79380z^2 - 13230z + 2835)\operatorname{erf}(\sqrt{z})$$

07.25.03.3976.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{3}{2}, 4; z\right) = \frac{4e^{z/2}(64z^7 - 2144z^6 + 24048z^5 - 107040z^4 + 167640z^3 - 39690z^2 - 12285z - 3780)I_1\left(\frac{z}{2}\right)}{675675z^2} - \frac{4e^{z/2}(64z^6 - 2208z^5 + 26160z^4 - 130080z^3 + 264600z^2 - 171990z - 945)I_0\left(\frac{z}{2}\right)}{675675z}$$

07.25.03.3977.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 4544 z^6 + 54\,240 z^5 - 257\,232 z^4 + 422\,616 z^3 - 79\,380 z^2 - 35\,910 z - 14\,175)}{786\,432 z^3} + \frac{1}{1\,572\,864 z^{7/2}} (\sqrt{\pi} (-256 z^8 + 9216 z^7 - 112\,896 z^6 + 564\,480 z^5 - 1\,058\,400 z^4 + 423\,360 z^3 + 105\,840 z^2 + 45\,360 z + 14\,175) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.3978.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 4544 z^6 + 54\,240 z^5 + 257\,232 z^4 + 422\,616 z^3 + 79\,380 z^2 - 35\,910 z + 14\,175)}{786\,432 z^3} + \frac{1}{1\,572\,864 z^{7/2}} (\sqrt{\pi} (256 z^8 + 9216 z^7 + 112\,896 z^6 + 564\,480 z^5 + 1\,058\,400 z^4 + 423\,360 z^3 - 105\,840 z^2 + 45\,360 z - 14\,175) \operatorname{erf}(\sqrt{z}))$$

07.25.03.3979.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{3}{2}, 5; z\right) = \frac{1}{11\,486\,475 z^3} \frac{32 e^{z/2} (64 z^8 - 2432 z^7 + 31\,536 z^6 - 166\,656 z^5 + 323\,160 z^4 - 105\,840 z^3 - 46\,305 z^2 - 26\,460 z - 11\,340) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^7 - 2496 z^6 + 33\,936 z^5 - 197\,040 z^4 + 476\,280 z^3 - 370\,440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right)}{11\,486\,475 z^2}$$

07.25.03.3980.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{3\,145\,728 z^4} e^z (256 z^8 - 10\,240 z^7 + 140\,160 z^6 - 781\,440 z^5 + 1\,572\,864 z^4 - 423\,360 z^3 - 264\,600 z^2 - 189\,000 z - 99\,225) + \frac{1}{6\,291\,456 z^{9/2}} (\sqrt{\pi} (-512 z^9 + 20\,736 z^8 - 290\,304 z^7 + 1\,693\,440 z^6 - 3\,810\,240 z^5 + 1\,905\,120 z^4 + 635\,040 z^3 + 408\,240 z^2 + 255\,150 z + 99\,225) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.3981.01

$${}_2F_2\left(-\frac{9}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{3\,145\,728 z^4} e^{-z} (256 z^8 + 10\,240 z^7 + 140\,160 z^6 + 781\,440 z^5 + 1\,572\,864 z^4 + 423\,360 z^3 - 264\,600 z^2 + 189\,000 z - 99\,225) + \frac{1}{6\,291\,456 z^{9/2}} (\sqrt{\pi} (512 z^9 + 20\,736 z^8 + 290\,304 z^7 + 1\,693\,440 z^6 + 3\,810\,240 z^5 + 1\,905\,120 z^4 - 635\,040 z^3 + 408\,240 z^2 - 255\,150 z + 99\,225) \operatorname{erf}(\sqrt{z}))$$

$$\begin{aligned}
 & \text{07.25.03.3982.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{3}{2}, \frac{3}{2}, 6; z\right) = \\
 & \frac{1}{43\,648\,605\,z^4} \left(32 e^{z/2} (128 z^9 - 5440 z^8 + 80\,064 z^7 - 489\,840 z^6 + 1\,132\,752 z^5 - 476\,280 z^4 - 264\,600 z^3 - \right. \\
 & \quad \left. 214\,515 z^2 - 170\,100 z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \right. \\
 & \quad \left. 32 e^{z/2} (128 z^8 - 5568 z^7 + 85\,440 z^6 - 567\,312 z^5 + 1\,587\,600 z^4 - 1\,428\,840 z^3 - 52\,920 z^2 - 42\,525 z - 22\,680) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.3983.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{-128 z^8 - 1152 z^7 - 448 z^6 - 192 z^5 + 720 z^4 - 2400 z^3 + 8820 z^2 - 34\,020 z + 114\,345}{114\,345} - \\
 & \frac{64 e^z \sqrt{\pi} (2 z^{17/2} + 19 z^{15/2} + 15 z^{13/2}) \operatorname{erf}(\sqrt{z})}{114\,345}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3984.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{-128 z^8 + 1152 z^7 - 448 z^6 + 192 z^5 + 720 z^4 + 2400 z^3 + 8820 z^2 + 34\,020 z + 114\,345}{114\,345} + \\
 & \frac{64 e^{-z} \sqrt{\pi} (2 z^{17/2} - 19 z^{15/2} + 15 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{114\,345}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3985.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & \frac{64 z^7 + 448 z^6 - 192 z^5 + 240 z^4 - 480 z^3 + 1260 z^2 - 3780 z + 10\,395}{10\,395} + \frac{32 e^z \sqrt{\pi} (2 z^{15/2} + 15 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10\,395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3986.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \\
 & \frac{-64 z^7 + 448 z^6 + 192 z^5 + 240 z^4 + 480 z^3 + 1260 z^2 + 3780 z + 10\,395}{10\,395} + \frac{32 e^{-z} \sqrt{\pi} (2 z^{15/2} - 15 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10\,395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.3987.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{-32 z^6 - 160 z^5 + 240 z^4 - 160 z^3 + 252 z^2 - 540 z + 1155}{1155} - \frac{16 e^z \sqrt{\pi} (2 z^{13/2} + 11 z^{11/2} - 11 z^{9/2}) \operatorname{erf}(\sqrt{z})}{1155}
 \end{aligned}$$

07.25.03.3988.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{-32z^6 + 160z^5 + 240z^4 + 160z^3 + 252z^2 + 540z + 1155}{1155} + \frac{16e^{-z}\sqrt{\pi}(2z^{13/2} - 11z^{11/2} - 11z^{9/2})\operatorname{erfi}(\sqrt{z})}{1155}$$

07.25.03.3989.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{165}(16z^5 + 48z^4 - 160z^3 + 84z^2 - 108z + 165) + \frac{8}{165}e^z\sqrt{\pi}(2z^{11/2} + 7z^{9/2} - 18z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.3990.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{165}(-16z^5 + 48z^4 + 160z^3 + 84z^2 + 108z + 165) + \frac{8}{165}e^{-z}\sqrt{\pi}(2z^{11/2} - 7z^{9/2} - 18z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.3991.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{33}(-8z^4 - 8z^3 + 84z^2 - 36z + 33) - \frac{4}{33}e^z\sqrt{\pi}(2z^{9/2} + 3z^{7/2} - 21z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.3992.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{33}(-8z^4 + 8z^3 + 84z^2 + 36z + 33) + \frac{4}{33}e^{-z}\sqrt{\pi}(2z^{9/2} - 3z^{7/2} - 21z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.3993.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{11}(4z^3 - 4z^2 - 36z + 11) + \frac{2}{11}e^z\sqrt{\pi}(2z^{7/2} - z^{5/2} - 20z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.3994.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{11}(-4z^3 - 4z^2 + 36z + 11) + \frac{2}{11}e^{-z}\sqrt{\pi}(2z^{7/2} + z^{5/2} - 20z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.3995.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{11}(-2z^2 + 6z + 11) + \frac{1}{11}e^z\sqrt{\pi}(-2z^{5/2} + 5z^{3/2} + 15\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.3996.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{11}(-2z^2 - 6z + 11) + \frac{1}{11}e^{-z}\sqrt{\pi}(2z^{5/2} + 5z^{3/2} - 15\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.3997.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, 1; z\right) = -\frac{1}{11}e^z(2z^2 - 7z - 11)$$

07.25.03.3998.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{5-z}{11} + \frac{e^z\sqrt{\pi}(-2z^2 + 9z + 6)\operatorname{erf}(\sqrt{z})}{22\sqrt{z}}$$

07.25.03.3999.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{z+5}{11} + \frac{e^{-z}\sqrt{\pi}(-2z^2 - 9z + 6)\operatorname{erfi}(\sqrt{z})}{22\sqrt{z}}$$

07.25.03.4000.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, 2; z\right) = -\frac{1}{11} e^z (2z - 11)$$

07.25.03.4001.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, \frac{5}{2}; z\right) = -\frac{3(z-7)}{22z} - \frac{3e^z \sqrt{\pi} (2z^2 - 13z + 7) \operatorname{erf}(\sqrt{z})}{44z^{3/2}}$$

07.25.03.4002.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{3e^{-z} \sqrt{\pi} (2z^2 + 13z + 7) \operatorname{erfi}(\sqrt{z})}{44z^{3/2}} - \frac{3(z+7)}{22z}$$

07.25.03.4003.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, 3; z\right) = \frac{30}{11z^2} - \frac{2e^z (2z^2 - 15z + 15)}{11z^2}$$

07.25.03.4004.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{15(z-24)}{44z^2} - \frac{15e^z \sqrt{\pi} (2z^2 - 17z + 24) \operatorname{erf}(\sqrt{z})}{88z^{5/2}}$$

07.25.03.4005.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{15(z+24)}{44z^2} - \frac{15e^{-z} \sqrt{\pi} (2z^2 + 17z + 24) \operatorname{erfi}(\sqrt{z})}{88z^{5/2}}$$

07.25.03.4006.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, 4; z\right) = \frac{6(15z+34)}{11z^3} - \frac{6e^z (2z^2 - 19z + 34)}{11z^3}$$

07.25.03.4007.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{945(z+5)}{88z^3} - \frac{105e^z \sqrt{\pi} (2z^2 - 21z + 45) \operatorname{erf}(\sqrt{z})}{176z^{7/2}}$$

07.25.03.4008.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{945(z-5)}{88z^3} + \frac{105e^{-z} \sqrt{\pi} (2z^2 + 21z + 45) \operatorname{erfi}(\sqrt{z})}{176z^{7/2}}$$

07.25.03.4009.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, 5; z\right) = \frac{12(15z^2 + 68z + 114)}{11z^4} - \frac{24e^z (2z^2 - 23z + 57)}{11z^4}$$

07.25.03.4010.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{315(12z^2 + 65z + 210)}{176z^4} - \frac{945e^z \sqrt{\pi} (2z^2 - 25z + 70) \operatorname{erf}(\sqrt{z})}{352z^{9/2}}$$

07.25.03.4011.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{315(12z^2 - 65z + 210)}{176z^4} - \frac{945e^{-z} \sqrt{\pi} (2z^2 + 25z + 70) \operatorname{erfi}(\sqrt{z})}{352z^{9/2}}$$

07.25.03.4012.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{11}{2}, 6; z\right) = \frac{60(5z^3 + 34z^2 + 114z + 168)}{11z^5} - \frac{120e^z(2z^2 - 27z + 84)}{11z^5}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = -\frac{9}{2}$

07.25.03.4013.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{945}(-32z^6 - 192z^5 + 80z^4 - 96z^3 + 180z^2 - 420z + 945) - \frac{16}{945}e^z\sqrt{\pi}(2z^{13/2} + 13z^{11/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4014.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{945}(-32z^6 + 192z^5 + 80z^4 + 96z^3 + 180z^2 + 420z + 945) + \frac{16}{945}e^{-z}\sqrt{\pi}(2z^{13/2} - 13z^{11/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4015.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{105}(16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105) + \frac{8}{105}e^z\sqrt{\pi}(2z^{11/2} + 11z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4016.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{105}(-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105) + \frac{8}{105}e^{-z}\sqrt{\pi}(2z^{11/2} - 11z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4017.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{15}(-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15}e^z\sqrt{\pi}(2z^{9/2} + 9z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4018.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15}(-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15}e^{-z}\sqrt{\pi}(2z^{9/2} - 9z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4019.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{3}(4z^3 + 12z^2 - 4z + 3) + \frac{2}{3}e^z\sqrt{\pi}(2z^{7/2} + 7z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4020.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3}(-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3}e^{-z}\sqrt{\pi}(2z^{7/2} - 7z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4021.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, -\frac{1}{2}; z\right) = -2z^2 - 4z + e^z\sqrt{\pi}(-2z^{5/2} - 5z^{3/2})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.4022.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, -\frac{1}{2}; -z\right) = -2z^2 + 4z + e^{-z}\sqrt{\pi}(2z^{5/2} - 5z^{3/2})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.4023.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, \frac{1}{2}; z\right) = z + \frac{1}{2}e^z\sqrt{\pi}(2z^{3/2} + 3\sqrt{z})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.4024.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, \frac{1}{2}; -z\right) = -z + \frac{1}{2} e^{-z} \sqrt{\pi} (2z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.4025.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, 1; z\right) = e^z (z + 1)$$

07.25.03.4026.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.4027.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.4028.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, 2; z\right) = e^z$$

07.25.03.4029.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3}{4z}$$

07.25.03.4030.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3}{4z}$$

07.25.03.4031.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, 3; z\right) = \frac{2 e^z (z - 1)}{z^2} + \frac{2}{z^2}$$

07.25.03.4032.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45}{8z^2}$$

07.25.03.4033.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{45}{8z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.4034.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, 4; z\right) = \frac{6 e^z (z - 2)}{z^3} + \frac{6(z + 2)}{z^3}$$

07.25.03.4035.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{35(4z + 15)}{16z^3} + \frac{105 e^z \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.4036.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35(4z - 15)}{16z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.4037.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, 5; z\right) = \frac{24 e^z (z-3)}{z^4} + \frac{12(z^2+4z+6)}{z^4}$$

07.25.03.4038.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{63(8z^2+40z+105)}{32z^4} + \frac{945 e^z \sqrt{\pi} (2z-7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.4039.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{63(8z^2-40z+105)}{32z^4} - \frac{945 e^{-z} \sqrt{\pi} (2z+7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.4040.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{9}{2}, 6; z\right) = \frac{120 e^z (z-4)}{z^5} + \frac{20(z^3+6z^2+18z+24)}{z^5}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = -\frac{7}{2}$

07.25.03.4041.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^z (88z^4+44z^3+66z^2+165z+105) - \frac{88}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4042.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{7}{2}, 1; -z\right) = \frac{88}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (88z^4-44z^3+66z^2-165z+105)$$

07.25.03.4043.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{7}{2}, 2; z\right) = \frac{1}{105} e^z (16z^4+8z^3+12z^2+30z+105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4044.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{7}{2}, 2; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16z^4-8z^3+12z^2-30z+105)$$

07.25.03.4045.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{7}{2}, 3; z\right) = -\frac{64 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2}}{1365} + \frac{2 e^z (32z^6+16z^5+24z^4+60z^3+210z^2+945z-945)}{1365 z^2} + \frac{18}{13 z^2}$$

07.25.03.4046.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{7}{2}, 3; -z\right) = \frac{64 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2}}{1365} + \frac{2 e^{-z} (32z^6-16z^5+24z^4-60z^3+210z^2-945z-945)}{1365 z^2} + \frac{18}{13 z^2}$$

07.25.03.4047.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{7}{2}, 4; z\right) = -\frac{128 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2}}{6825} + \frac{18(15z+26)}{65 z^3} + \frac{2 e^z (64z^7+32z^6+48z^5+120z^4+420z^3+1890z^2+10395z-24570)}{6825 z^3}$$

07.25.03.4048.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{7}{2}, 4; -z\right) = \frac{128 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2}}{6825} + \frac{18(15z - 26)}{65z^3} + \frac{2e^{-z}(64z^7 - 32z^6 + 48z^5 - 120z^4 + 420z^3 - 1890z^2 + 10395z + 24570)}{6825z^3}$$

07.25.03.4049.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{7}{2}, 5; z\right) = -\frac{1024 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2}}{116025} + \frac{36(255z^2 + 884z + 1170)}{1105z^4} + \frac{8e^z(128z^8 + 64z^7 + 96z^6 + 240z^5 + 840z^4 + 3780z^3 + 20790z^2 + 135135z - 552825)}{116025z^4}$$

07.25.03.4050.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{7}{2}, 5; -z\right) = \frac{1024 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2}}{116025} + \frac{36(255z^2 - 884z + 1170)}{1105z^4} + \frac{8e^{-z}(128z^8 - 64z^7 + 96z^6 - 240z^5 + 840z^4 - 3780z^3 + 20790z^2 - 135135z - 552825)}{116025z^4}$$

07.25.03.4051.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{7}{2}, 6; z\right) = -\frac{2048 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2}}{440895} + \frac{36(1615z^3 + 8398z^2 + 22230z + 26520)}{4199z^5} + \frac{1}{440895z^5} 8e^z(256z^9 + 128z^8 + 192z^7 + 480z^6 + 1680z^5 + 7560z^4 + 41580z^3 + 270270z^2 + 2027025z - 12530700)$$

07.25.03.4052.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{7}{2}, 6; -z\right) = \frac{2048 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2}}{440895} + \frac{36(1615z^3 - 8398z^2 + 22230z - 26520)}{4199z^5} + \frac{1}{440895z^5} 8e^{-z}(256z^9 - 128z^8 + 192z^7 - 480z^6 + 1680z^5 - 7560z^4 + 41580z^3 - 270270z^2 + 2027025z + 12530700)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = -\frac{5}{2}$

07.25.03.4053.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{5}{2}, 1; z\right) = \frac{1}{15} e^z(-44z^4 + 140z^3 + 48z^2 + 39z + 15) + \frac{2}{15} \sqrt{\pi} (22z^{9/2} - 81z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4054.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{5}{2}, 1; -z\right) = \frac{1}{15} e^{-z}(-44z^4 - 140z^3 + 48z^2 - 39z + 15) - \frac{2}{15} \sqrt{\pi} (22z^{9/2} + 81z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4055.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{5}{2}, 2; z\right) = \frac{1}{15} e^z(-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15} \sqrt{\pi} (2z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4056.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{5}{2}, 2; -z\right) = \frac{1}{15} e^{-z}(-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15} \sqrt{\pi} (2z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.4057.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; -\frac{5}{2}, 3; z\right) = & \\
 & \frac{2 e^z (176 z^6 - 848 z^5 - 336 z^4 - 372 z^3 - 600 z^2 - 945 z + 945)}{2145 z^2} + \frac{16 \sqrt{\pi} (22 z^{9/2} - 117 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{2145} + \frac{126}{143 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4058.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; -\frac{5}{2}, 3; -z\right) = & \\
 & \frac{2 e^{-z} (176 z^6 + 848 z^5 - 336 z^4 + 372 z^3 - 600 z^2 + 945 z + 945)}{2145 z^2} - \frac{16 \sqrt{\pi} (22 z^{9/2} + 117 z^{7/2}) \operatorname{erf}(\sqrt{z})}{2145} + \frac{126}{143 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4059.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; -\frac{5}{2}, 4; z\right) = & \frac{126 (15 z + 22)}{715 z^3} - \\
 & \frac{2 e^z (352 z^7 - 1984 z^6 - 816 z^5 - 960 z^4 - 1740 z^3 - 3780 z^2 - 6615 z + 20790)}{10725 z^3} + \frac{32 \sqrt{\pi} (22 z^{9/2} - 135 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{10725}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4060.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; -\frac{5}{2}, 4; -z\right) = & \frac{126 (15 z - 22)}{715 z^3} - \\
 & \frac{2 e^{-z} (352 z^7 + 1984 z^6 - 816 z^5 + 960 z^4 - 1740 z^3 + 3780 z^2 - 6615 z - 20790)}{10725 z^3} - \frac{32 \sqrt{\pi} (22 z^{9/2} + 135 z^{7/2}) \operatorname{erf}(\sqrt{z})}{10725}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4061.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; -\frac{5}{2}, 5; z\right) = & \frac{252 (255 z^2 + 748 z + 858)}{12155 z^4} - \\
 & \frac{8 e^z (704 z^8 - 4544 z^7 - 1920 z^6 - 2352 z^5 - 4560 z^4 - 11340 z^3 - 30240 z^2 - 51975 z + 405405)}{182325 z^4} + \\
 & \frac{256 \sqrt{\pi} (22 z^{9/2} - 153 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{182325}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4062.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; -\frac{5}{2}, 5; -z\right) = & \frac{252 (255 z^2 - 748 z + 858)}{12155 z^4} - \\
 & \frac{1}{182325 z^4} 8 e^{-z} (704 z^8 + 4544 z^7 - 1920 z^6 + 2352 z^5 - 4560 z^4 + 11340 z^3 - 30240 z^2 + 51975 z + 405405) - \\
 & \frac{256 \sqrt{\pi} (22 z^{9/2} + 153 z^{7/2}) \operatorname{erf}(\sqrt{z})}{182325}
 \end{aligned}$$

07.25.03.4063.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{5}{2}, 6; z\right) = \frac{252(1615z^3 + 7106z^2 + 16302z + 17160)}{46189z^5} - \frac{1}{692835z^5} \\ \frac{8e^z(1408z^9 - 10240z^8 - 4416z^7 - 5568z^6 - 11280z^5 - 30240z^4 - 94500z^3 - 291060z^2 - 405405z + 8108100) + 512\sqrt{\pi}(22z^{9/2} - 171z^{7/2})\operatorname{erfi}(\sqrt{z})}{692835}$$

07.25.03.4064.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{5}{2}, 6; -z\right) = \frac{252(1615z^3 - 7106z^2 + 16302z - 17160)}{46189z^5} - \frac{1}{692835z^5} \\ (8e^{-z}(1408z^9 + 10240z^8 - 4416z^7 + 5568z^6 - 11280z^5 + 30240z^4 - 94500z^3 + 291060z^2 - 405405z - 8108100)) - 512\sqrt{\pi}(22z^{9/2} + 171z^{7/2})\operatorname{erf}(\sqrt{z}) \\ \frac{}{692835}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = -\frac{3}{2}$

07.25.03.4065.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{3}{2}, 1; z\right) = \frac{1}{6}e^z(22z^4 - 151z^3 + 156z^2 + 30z + 6) + \frac{1}{12}\sqrt{\pi}(-44z^{9/2} + 324z^{7/2} - 441z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4066.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{3}{2}, 1; -z\right) = \frac{1}{6}e^{-z}(22z^4 + 151z^3 + 156z^2 - 30z + 6) + \frac{1}{12}\sqrt{\pi}(44z^{9/2} + 324z^{7/2} + 441z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4067.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{3}{2}, 2; z\right) = \frac{1}{3}e^z(2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6}\sqrt{\pi}(-4z^{9/2} + 36z^{7/2} - 63z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4068.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{3}{2}, 2; -z\right) = \frac{1}{3}e^{-z}(2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6}\sqrt{\pi}(4z^{9/2} + 36z^{7/2} + 63z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4069.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{3}{2}, 3; z\right) = \frac{2e^z(44z^6 - 446z^5 + 800z^4 + 232z^3 + 162z^2 + 105z - 105)}{429z^2} - \frac{2}{429}\sqrt{\pi}(44z^{9/2} - 468z^{7/2} + 1001z^{5/2})\operatorname{erfi}(\sqrt{z}) + \frac{70}{143z^2}$$

07.25.03.4070.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{3}{2}, 3; -z\right) = \frac{2e^{-z}(44z^6 + 446z^5 + 800z^4 - 232z^3 + 162z^2 - 105z - 105)}{429z^2} + \frac{2}{429}\sqrt{\pi}(44z^{9/2} + 468z^{7/2} + 1001z^{5/2})\operatorname{erf}(\sqrt{z}) + \frac{70}{143z^2}$$

07.25.03.4071.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{3}{2}, 4; z\right) = \frac{42(5z+6)}{143z^3} + \frac{2e^z(88z^7 - 1036z^6 + 2256z^5 + 720z^4 + 600z^3 + 630z^2 + 315z - 1890)}{2145z^3} - \frac{4\sqrt{\pi}(44z^{9/2} - 540z^{7/2} + 1365z^{5/2})\operatorname{erfi}(\sqrt{z})}{2145}$$

07.25.03.4072.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{3}{2}, 4; -z\right) = \frac{42(5z-6)}{143z^3} + \frac{2e^{-z}(88z^7 + 1036z^6 + 2256z^5 - 720z^4 + 600z^3 - 630z^2 + 315z + 1890)}{2145z^3} + \frac{4\sqrt{\pi}(44z^{9/2} + 540z^{7/2} + 1365z^{5/2})\operatorname{erf}(\sqrt{z})}{2145}$$

07.25.03.4073.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{3}{2}, 5; z\right) = \frac{84(85z^2 + 204z + 198)}{2431z^4} + \frac{8e^z(176z^8 - 2360z^7 + 6048z^6 + 2064z^5 + 1920z^4 + 2520z^3 + 3150z^2 - 945z - 31185)}{36465z^4} - \frac{32\sqrt{\pi}(44z^{9/2} - 612z^{7/2} + 1785z^{5/2})\operatorname{erfi}(\sqrt{z})}{36465}$$

07.25.03.4074.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{3}{2}, 5; -z\right) = \frac{84(85z^2 - 204z + 198)}{2431z^4} + \frac{8e^{-z}(176z^8 + 2360z^7 + 6048z^6 - 2064z^5 + 1920z^4 - 2520z^3 + 3150z^2 + 945z - 31185)}{36465z^4} + \frac{32\sqrt{\pi}(44z^{9/2} + 612z^{7/2} + 1785z^{5/2})\operatorname{erf}(\sqrt{z})}{36465}$$

07.25.03.4075.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{3}{2}, 6; z\right) = \frac{140(1615z^3 + 5814z^2 + 11286z + 10296)}{46189z^5} + \frac{1}{138567z^5} 8e^z(352z^9 - 5296z^8 + 15616z^7 + 5600z^6 + 5616z^5 + 8400z^4 + 14280z^3 + 17010z^2 - 51975z - 540540) - \frac{64\sqrt{\pi}(44z^{9/2} - 684z^{7/2} + 2261z^{5/2})\operatorname{erfi}(\sqrt{z})}{138567}$$

07.25.03.4076.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{3}{2}, 6; -z\right) = \frac{140(1615z^3 - 5814z^2 + 11286z - 10296)}{46189z^5} + \frac{1}{138567z^5} 8e^{-z}(352z^9 + 5296z^8 + 15616z^7 - 5600z^6 + 5616z^5 - 8400z^4 + 14280z^3 - 17010z^2 - 51975z + 540540) + \frac{64\sqrt{\pi}(44z^{9/2} + 684z^{7/2} + 2261z^{5/2})\operatorname{erf}(\sqrt{z})}{138567}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = -\frac{1}{2}$

07.25.03.4077.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{1}{2}, 1; z\right) = \frac{1}{24} e^z (-44 z^4 + 464 z^3 - 1113 z^2 + 408 z + 24) + \frac{1}{48} \sqrt{\pi} (88 z^{9/2} - 972 z^{7/2} + 2646 z^{5/2} - 1575 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4078.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{1}{2}, 1; -z\right) = \frac{1}{24} e^{-z} (-44 z^4 - 464 z^3 - 1113 z^2 - 408 z + 24) + \frac{1}{48} \sqrt{\pi} (-88 z^{9/2} - 972 z^{7/2} - 2646 z^{5/2} - 1575 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4079.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{1}{2}, 2; z\right) = \frac{1}{12} e^z (-4 z^4 + 52 z^3 - 165 z^2 + 96 z + 12) + \frac{1}{24} \sqrt{\pi} (8 z^{9/2} - 108 z^{7/2} + 378 z^{5/2} - 315 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4080.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{1}{2}, 2; -z\right) = \frac{1}{12} e^{-z} (-4 z^4 - 52 z^3 - 165 z^2 - 96 z + 12) + \frac{1}{24} \sqrt{\pi} (-8 z^{9/2} - 108 z^{7/2} - 378 z^{5/2} - 315 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4081.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{1}{2}, 3; z\right) = \frac{e^z (-44 z^6 + 680 z^5 - 2685 z^4 + 2160 z^3 + 384 z^2 + 90 z - 90)}{429 z^2} + \frac{1}{858} \sqrt{\pi} (88 z^{9/2} - 1404 z^{7/2} + 6006 z^{5/2} - 6435 z^{3/2}) \operatorname{erfi}(\sqrt{z}) + \frac{30}{143 z^2}$$

07.25.03.4082.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{1}{2}, 3; -z\right) = \frac{e^{-z} (-44 z^6 - 680 z^5 - 2685 z^4 - 2160 z^3 + 384 z^2 - 90 z - 90)}{429 z^2} + \frac{1}{858} \sqrt{\pi} (-88 z^{9/2} - 1404 z^{7/2} - 6006 z^{5/2} - 6435 z^{3/2}) \operatorname{erf}(\sqrt{z}) + \frac{30}{143 z^2}$$

07.25.03.4083.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{1}{2}, 4; z\right) = \frac{6(15z + 14)}{143 z^3} - \frac{2 e^z (44 z^7 - 788 z^6 + 3723 z^5 - 3840 z^4 - 840 z^3 - 360 z^2 + 45 z + 630)}{2145 z^3} + \frac{\sqrt{\pi} (88 z^{9/2} - 1620 z^{7/2} + 8190 z^{5/2} - 10725 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{2145}$$

07.25.03.4084.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{1}{2}, 4; -z\right) = \frac{6(15z - 14)}{143 z^3} - \frac{2 e^{-z} (44 z^7 + 788 z^6 + 3723 z^5 + 3840 z^4 - 840 z^3 + 360 z^2 + 45 z - 630)}{2145 z^3} + \frac{\sqrt{\pi} (-88 z^{9/2} - 1620 z^{7/2} - 8190 z^{5/2} - 10725 z^{3/2}) \operatorname{erf}(\sqrt{z})}{2145}$$

07.25.03.4085.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{1}{2}, 5; z\right) = \frac{12(255z^2 + 476z + 378)}{2431z^4} - \frac{8e^z(88z^8 - 1792z^7 + 9858z^6 - 12432z^5 - 3120z^4 - 1800z^3 - 720z^2 + 2205z + 8505)}{36465z^4} + \frac{8\sqrt{\pi}(88z^{9/2} - 1836z^{7/2} + 10710z^{5/2} - 16575z^{3/2})\operatorname{erfi}(\sqrt{z})}{36465}$$

07.25.03.4086.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{1}{2}, 5; -z\right) = \frac{12(255z^2 - 476z + 378)}{2431z^4} - \frac{8e^{-z}(88z^8 + 1792z^7 + 9858z^6 + 12432z^5 - 3120z^4 + 1800z^3 - 720z^2 - 2205z + 8505)}{36465z^4} - \frac{8\sqrt{\pi}(88z^{9/2} + 1836z^{7/2} + 10710z^{5/2} + 16575z^{3/2})\operatorname{erf}(\sqrt{z})}{36465}$$

07.25.03.4087.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{1}{2}, 6; z\right) = \frac{60(1615z^3 + 4522z^2 + 7182z + 5544)}{46189z^5} - \frac{1}{138567z^5} 8e^z(176z^9 - 4016z^8 + 25212z^7 - 37632z^6 - 10416z^5 - 7200z^4 - 5400z^3 + 2520z^2 + 36855z + 124740) + \frac{16\sqrt{\pi}(88z^{9/2} - 2052z^{7/2} + 13566z^{5/2} - 24225z^{3/2})\operatorname{erfi}(\sqrt{z})}{138567}$$

07.25.03.4088.01

$${}_2F_2\left(-\frac{9}{2}, 2; -\frac{1}{2}, 6; -z\right) = \frac{60(1615z^3 - 4522z^2 + 7182z - 5544)}{46189z^5} - \frac{1}{138567z^5} 8e^{-z}(176z^9 + 4016z^8 + 25212z^7 + 37632z^6 - 10416z^5 + 7200z^4 - 5400z^3 - 2520z^2 + 36855z - 124740) - \frac{16\sqrt{\pi}(88z^{9/2} + 2052z^{7/2} + 13566z^{5/2} + 24225z^{3/2})\operatorname{erf}(\sqrt{z})}{138567}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = \frac{1}{2}$

07.25.03.4089.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{1}{2}, 1; z\right) = \frac{1}{384} e^z(88z^4 - 1252z^3 + 4710z^2 - 4461z + 384) + \frac{1}{768} \sqrt{\pi}(-176z^{9/2} + 2592z^{7/2} - 10584z^{5/2} + 12600z^{3/2} - 2835\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4090.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{1}{2}, 1; -z\right) = \frac{1}{384} e^{-z}(88z^4 + 1252z^3 + 4710z^2 + 4461z + 384) + \frac{1}{768} \sqrt{\pi}(176z^{9/2} + 2592z^{7/2} + 10584z^{5/2} + 12600z^{3/2} + 2835\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.4091.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{1}{2}, 2; z\right) = \frac{1}{192} e^z (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4092.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{1}{2}, 2; -z\right) = \frac{1}{192} e^{-z} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4093.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{1}{2}, 3; z\right) = \frac{e^z (88z^6 - 1828z^5 + 11142z^4 - 20973z^3 + 6720z^2 + 288z - 288)}{6864z^2} + \frac{\sqrt{\pi} (-176z^{9/2} + 3744z^{7/2} - 24024z^{5/2} + 51480z^{3/2} - 27027\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{13728} + \frac{6}{143z^2}$$

07.25.03.4094.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{1}{2}, 3; -z\right) = \frac{e^{-z} (88z^6 + 1828z^5 + 11142z^4 + 20973z^3 + 6720z^2 - 288z - 288)}{6864z^2} + \frac{\sqrt{\pi} (176z^{9/2} + 3744z^{7/2} + 24024z^{5/2} + 51480z^{3/2} + 27027\sqrt{z}) \operatorname{erf}(\sqrt{z})}{13728} + \frac{6}{143z^2}$$

07.25.03.4095.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{1}{2}, 4; z\right) = \frac{6(3z+2)}{143z^3} + \frac{e^z (88z^7 - 2116z^6 + 15366z^5 - 36165z^4 + 16320z^3 + 1440z^2 - 720z - 1440)}{17160z^3} + \frac{\sqrt{\pi} (-176z^{9/2} + 4320z^{7/2} - 32760z^{5/2} + 85800z^{3/2} - 57915\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{34320}$$

07.25.03.4096.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{1}{2}, 4; -z\right) = \frac{6(3z-2)}{143z^3} + \frac{e^{-z} (88z^7 + 2116z^6 + 15366z^5 + 36165z^4 + 16320z^3 - 1440z^2 - 720z + 1440)}{17160z^3} + \frac{\sqrt{\pi} (176z^{9/2} + 4320z^{7/2} + 32760z^{5/2} + 85800z^{3/2} + 57915\sqrt{z}) \operatorname{erf}(\sqrt{z})}{34320}$$

07.25.03.4097.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{1}{2}, 5; z\right) = \frac{12(51z^2 + 68z + 42)}{2431z^4} + \frac{e^z (88z^8 - 2404z^7 + 20262z^6 - 57261z^5 + 33600z^4 + 4320z^3 - 720z^2 - 4680z - 7560)}{36465z^4} + \frac{\sqrt{\pi} (-176z^{9/2} + 4896z^{7/2} - 42840z^{5/2} + 132600z^{3/2} - 109395\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{72930}$$

$$\begin{aligned}
 & \text{07.25.03.4098.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; \frac{1}{2}, 5; -z\right) = & \frac{12(51z^2 - 68z + 42)}{2431z^4} + \frac{e^{-z}(88z^8 + 2404z^7 + 20262z^6 + 57261z^5 + 33600z^4 - 4320z^3 - 720z^2 + 4680z - 7560)}{36465z^4} + \\
 & \frac{\sqrt{\pi}(176z^{9/2} + 4896z^{7/2} + 42840z^{5/2} + 132600z^{3/2} + 109395\sqrt{z})\operatorname{erf}(\sqrt{z})}{72930}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4099.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; \frac{1}{2}, 6; z\right) = & \frac{60(323z^3 + 646z^2 + 798z + 504)}{46189z^5} + \\
 & \frac{1}{138567z^5} 2e^z(88z^9 - 2692z^8 + 25830z^7 - 85221z^6 + 61824z^5 + 10080z^4 + 720z^3 - 9000z^2 - 26460z - 45360) + \\
 & \frac{\sqrt{\pi}(-176z^{9/2} + 5472z^{7/2} - 54264z^{5/2} + 193800z^{3/2} - 188955\sqrt{z})\operatorname{erfi}(\sqrt{z})}{138567}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4100.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; \frac{1}{2}, 6; -z\right) = & \frac{60(323z^3 - 646z^2 + 798z - 504)}{46189z^5} + \\
 & \frac{1}{138567z^5} 2e^{-z}(88z^9 + 2692z^8 + 25830z^7 + 85221z^6 + 61824z^5 - 10080z^4 + 720z^3 + 9000z^2 - 26460z + 45360) + \\
 & \frac{\sqrt{\pi}(176z^{9/2} + 5472z^{7/2} + 54264z^{5/2} + 193800z^{3/2} + 188955\sqrt{z})\operatorname{erf}(\sqrt{z})}{138567}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = 1$

$$\begin{aligned}
 & \text{07.25.03.4101.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; 1, 1; z\right) = & \frac{e^{z/2}(-176z^5 + 3048z^4 - 15996z^3 + 29868z^2 - 17955z + 1890)I_0\left(\frac{z}{2}\right)}{1890} + \\
 & \frac{e^{z/2}(176z^5 - 2872z^4 + 13212z^3 - 17916z^2 + 4323z)I_1\left(\frac{z}{2}\right)}{1890}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4102.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; 1, \frac{3}{2}; z\right) = & \frac{e^z(176z^4 - 3152z^3 + 16152z^2 - 24780z + 6735)}{7680} + \\
 & \frac{\sqrt{\pi}(-352z^5 + 6480z^4 - 35280z^3 + 63000z^2 - 28350z + 945)\operatorname{erfi}(\sqrt{z})}{15360\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4103.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; 1, \frac{3}{2}; -z\right) = & \frac{e^{-z}(176z^4 + 3152z^3 + 16152z^2 + 24780z + 6735)}{7680} + \\
 & \frac{\sqrt{\pi}(352z^5 + 6480z^4 + 35280z^3 + 63000z^2 + 28350z + 945)\operatorname{erf}(\sqrt{z})}{15360\sqrt{z}}
 \end{aligned}$$

07.25.03.4104.01

$${}_2F_2\left(-\frac{9}{2}, 2; 1, 2; z\right) = \frac{1}{945} e^{z/2} (-16z^5 + 336z^4 - 2220z^3 + 5484z^2 - 4725z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^5 - 320z^4 + 1908z^3 - 3720z^2 + 1689z) I_1\left(\frac{z}{2}\right)$$

07.25.03.4105.01

$${}_2F_2\left(-\frac{9}{2}, 2; 1, \frac{5}{2}; z\right) = \frac{e^z (352z^5 - 7600z^4 + 49296z^3 - 104712z^2 + 49470z + 945)}{61440z} + \frac{\sqrt{\pi} (-704z^6 + 15552z^5 - 105840z^4 + 252000z^3 - 170100z^2 + 11340z - 945) \operatorname{erfi}(\sqrt{z})}{122880z^{3/2}}$$

07.25.03.4106.01

$${}_2F_2\left(-\frac{9}{2}, 2; 1, \frac{5}{2}; -z\right) = \frac{e^{-z} (352z^5 + 7600z^4 + 49296z^3 + 104712z^2 + 49470z - 945)}{61440z} + \frac{\sqrt{\pi} (704z^6 + 15552z^5 + 105840z^4 + 252000z^3 + 170100z^2 + 11340z + 945) \operatorname{erf}(\sqrt{z})}{122880z^{3/2}}$$

07.25.03.4107.01

$${}_2F_2\left(-\frac{9}{2}, 2; 1, 3; z\right) = \frac{2 e^{z/2} (352z^6 - 8336z^5 + 61056z^4 - 155316z^3 + 104226z^2 - 945z + 1890) I_1\left(\frac{z}{2}\right)}{135135z} - \frac{2 e^{z/2} (352z^5 - 8688z^4 + 69216z^3 - 212556z^2 + 236250z - 67095) I_0\left(\frac{z}{2}\right)}{135135}$$

07.25.03.4108.01

$${}_2F_2\left(-\frac{9}{2}, 2; 1, \frac{7}{2}; z\right) = \frac{e^z (704z^6 - 17792z^5 + 139632z^4 - 379200z^3 + 258132z^2 + 7560z + 8505)}{344064z^2} + \frac{1}{688128z^{5/2}} \sqrt{\pi} (-1408z^7 + 36288z^6 - 296352z^5 + 882000z^4 - 793800z^3 + 79380z^2 - 13230z - 8505) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4109.01

$${}_2F_2\left(-\frac{9}{2}, 2; 1, \frac{7}{2}; -z\right) = \frac{e^{-z} (704z^6 + 17792z^5 + 139632z^4 + 379200z^3 + 258132z^2 - 7560z + 8505)}{344064z^2} + \frac{1}{688128z^{5/2}} \sqrt{\pi} (1408z^7 + 36288z^6 + 296352z^5 + 882000z^4 + 793800z^3 + 79380z^2 + 13230z - 8505) \operatorname{erf}(\sqrt{z})$$

07.25.03.4110.01

$${}_2F_2\left(-\frac{9}{2}, 2; 1, 4; z\right) = \frac{4 e^{z/2} (352z^7 - 9632z^6 + 83664z^5 - 262560z^4 + 233790z^3 - 5670z^2 + 10395z + 7560) I_1\left(\frac{z}{2}\right)}{675675z^2} - \frac{8 e^{z/2} (176z^6 - 4992z^5 + 46560z^4 - 170880z^3 + 231525z^2 - 83160z + 945) I_0\left(\frac{z}{2}\right)}{675675z}$$

07.25.03.4111.01

$${}_2F_2\left(-\frac{9}{2}, 2; 1, \frac{9}{2}; z\right) = \frac{e^z (1408 z^7 - 40768 z^6 + 375456 z^5 - 1242096 z^4 + 1109832 z^3 + 34020 z^2 + 88830 z + 70875)}{1572864 z^3} + \frac{1}{3145728 z^{7/2}} (\sqrt{\pi} (-2816 z^8 + 82944 z^7 - 790272 z^6 + 2822400 z^5 - 3175200 z^4 + 423360 z^3 - 105840 z^2 - 136080 z - 70875) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.4112.01

$${}_2F_2\left(-\frac{9}{2}, 2; 1, \frac{9}{2}; -z\right) = \frac{e^{-z} (1408 z^7 + 40768 z^6 + 375456 z^5 + 1242096 z^4 + 1109832 z^3 - 34020 z^2 + 88830 z - 70875)}{1572864 z^3} + \frac{1}{3145728 z^{7/2}} (\sqrt{\pi} (2816 z^8 + 82944 z^7 + 790272 z^6 + 2822400 z^5 + 3175200 z^4 + 423360 z^3 + 105840 z^2 - 136080 z + 70875) \operatorname{erf}(\sqrt{z}))$$

07.25.03.4113.01

$${}_2F_2\left(-\frac{9}{2}, 2; 1, 5; z\right) = \frac{1}{11486475 z^3} 16 e^{z/2} (704 z^8 - 21856 z^7 + 219600 z^6 - 819744 z^5 + 910920 z^4 - 39690 z^3 + 68985 z^2 + 94500 z + 68040) I_1\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} 16 e^{z/2} (704 z^7 - 22560 z^6 + 241104 z^5 - 1029120 z^4 + 1640520 z^3 - 701190 z^2 + 23625 z + 17010) I_0\left(\frac{z}{2}\right)$$

07.25.03.4114.01

$${}_2F_2\left(-\frac{9}{2}, 2; 1, \frac{11}{2}; z\right) = \frac{1}{6291456 z^4} e^z (2816 z^8 - 91904 z^7 + 971520 z^6 - 3790272 z^5 + 4204128 z^4 + 105840 z^3 + 559440 z^2 + 812700 z + 694575) + \frac{1}{12582912 z^{9/2}} (\sqrt{\pi} (-5632 z^9 + 186624 z^8 - 2032128 z^7 + 8467200 z^6 - 11430720 z^5 + 1905120 z^4 - 635040 z^3 - 1224720 z^2 - 1275750 z - 694575) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.4115.01

$${}_2F_2\left(-\frac{9}{2}, 2; 1, \frac{11}{2}; -z\right) = \frac{1}{6291456 z^4} e^{-z} (2816 z^8 + 91904 z^7 + 971520 z^6 + 3790272 z^5 + 4204128 z^4 - 105840 z^3 + 559440 z^2 - 812700 z + 694575) + \frac{1}{12582912 z^{9/2}} (\sqrt{\pi} (5632 z^9 + 186624 z^8 + 2032128 z^7 + 8467200 z^6 + 11430720 z^5 + 1905120 z^4 + 635040 z^3 - 1224720 z^2 + 1275750 z - 694575) \operatorname{erf}(\sqrt{z}))$$

$$\begin{aligned}
 & \text{07.25.03.4116.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; 1, 6; z\right) = & \frac{1}{43\,648\,605\,z^4} \left(32 e^{z/2} (704 z^9 - 24\,448 z^8 + 278\,928 z^7 - 1\,207\,104 z^6 + 1\,609\,032 z^5 - 105\,840 z^4 + 178\,605 z^3 + \right. \\
 & \left. 355\,320 z^2 + 464\,940 z + 362\,880) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \left(32 e^{z/2} \right. \right. \\
 & \left. \left. (704 z^8 - 25\,152 z^7 + 303\,024 z^6 - 1\,474\,512 z^5 + 2\,698\,920 z^4 - 1\,323\,000 z^3 + 85\,995 z^2 + 116\,235 z + 90\,720) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = \frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.4117.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; \frac{3}{2}, 2; z\right) = & \frac{e^z (16 z^4 - 352 z^3 + 2352 z^2 - 5280 z + 2895)}{3840} + \frac{\sqrt{\pi} (-32 z^5 + 720 z^4 - 5040 z^3 + 12\,600 z^2 - 9450 z + 945) \operatorname{erfi}(\sqrt{z})}{7680 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4118.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; \frac{3}{2}, 2; -z\right) = & \frac{e^{-z} (16 z^4 + 352 z^3 + 2352 z^2 + 5280 z + 2895)}{3840} + \frac{\sqrt{\pi} (32 z^5 + 720 z^4 + 5040 z^3 + 12\,600 z^2 + 9450 z + 945) \operatorname{erf}(\sqrt{z})}{7680 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4119.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; \frac{3}{2}, 3; z\right) = & \frac{e^z (176 z^6 - 4592 z^5 + 37\,832 z^4 - 111\,860 z^3 + 93\,195 z^2 - 1920 z + 1920)}{137\,280 z^2} + \\
 & \frac{\sqrt{\pi} (-352 z^5 + 9360 z^4 - 80\,080 z^3 + 257\,400 z^2 - 270\,270 z + 45\,045) \operatorname{erfi}(\sqrt{z})}{274\,560 \sqrt{z}} - \frac{2}{143 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4120.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; \frac{3}{2}, 3; -z\right) = & \frac{e^{-z} (176 z^6 + 4592 z^5 + 37\,832 z^4 + 111\,860 z^3 + 93\,195 z^2 + 1920 z + 1920)}{137\,280 z^2} + \\
 & \frac{\sqrt{\pi} (352 z^5 + 9360 z^4 + 80\,080 z^3 + 257\,400 z^2 + 270\,270 z + 45\,045) \operatorname{erf}(\sqrt{z})}{274\,560 \sqrt{z}} - \frac{2}{143 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4121.01} \\
 {}_2F_2\left(-\frac{9}{2}, 2; \frac{3}{2}, 4; z\right) = & -\frac{6(5z+2)}{715 z^3} + \frac{e^z (176 z^7 - 5312 z^6 + 52\,032 z^5 - 190\,920 z^4 + 214\,305 z^3 - 11\,520 z^2 + 8640 z + 5760)}{343\,200 z^3} + \\
 & \frac{\sqrt{\pi} (-352 z^5 + 10\,800 z^4 - 109\,200 z^3 + 429\,000 z^2 - 579\,150 z + 135\,135) \operatorname{erfi}(\sqrt{z})}{686\,400 \sqrt{z}}
 \end{aligned}$$

07.25.03.4122.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{3}{2}, 4; -z\right) = -\frac{6(5z-2)}{715z^3} + \frac{e^{-z}(176z^7 + 5312z^6 + 52032z^5 + 190920z^4 + 214305z^3 + 11520z^2 + 8640z - 5760)}{343200z^3} + \frac{\sqrt{\pi}(352z^5 + 10800z^4 + 109200z^3 + 429000z^2 + 579150z + 135135)\operatorname{erfi}(\sqrt{z})}{686400\sqrt{z}}$$

07.25.03.4123.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{3}{2}, 5; z\right) = -\frac{12(85z^2 + 68z + 30)}{12155z^4} + \frac{1}{729300z^4} e^z(176z^8 - 6032z^7 + 68472z^6 - 300060z^5 + 424455z^4 - 40320z^3 + 23040z^2 + 27360z + 21600) + \frac{\sqrt{\pi}(-352z^5 + 12240z^4 - 142800z^3 + 663000z^2 - 1093950z + 328185)\operatorname{erfi}(\sqrt{z})}{1458600\sqrt{z}}$$

07.25.03.4124.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{3}{2}, 5; -z\right) = -\frac{12(85z^2 - 68z + 30)}{12155z^4} + \frac{1}{729300z^4} e^{-z}(176z^8 + 6032z^7 + 68472z^6 + 300060z^5 + 424455z^4 + 40320z^3 + 23040z^2 - 27360z + 21600) + \frac{\sqrt{\pi}(352z^5 + 12240z^4 + 142800z^3 + 663000z^2 + 1093950z + 328185)\operatorname{erfi}(\sqrt{z})}{1458600\sqrt{z}}$$

07.25.03.4125.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{3}{2}, 6; z\right) = -\frac{4(1615z^3 + 1938z^2 + 1710z + 840)}{46189z^5} + \frac{1}{1385670z^5} e^z(176z^9 - 6752z^8 + 87152z^7 - 444080z^6 + 758685z^5 - 107520z^4 + 47040z^3 + 77760z^2 + 104400z + 100800) + \frac{\sqrt{\pi}(-352z^5 + 13680z^4 - 180880z^3 + 969000z^2 - 1889550z + 692835)\operatorname{erfi}(\sqrt{z})}{2771340\sqrt{z}}$$

07.25.03.4126.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{3}{2}, 6; -z\right) = -\frac{4(1615z^3 - 1938z^2 + 1710z - 840)}{46189z^5} + \frac{1}{1385670z^5} (e^{-z}(176z^9 + 6752z^8 + 87152z^7 + 444080z^6 + 758685z^5 + 107520z^4 + 47040z^3 - 77760z^2 + 104400z - 100800)) + \frac{\sqrt{\pi}(352z^5 + 13680z^4 + 180880z^3 + 969000z^2 + 1889550z + 692835)\operatorname{erfi}(\sqrt{z})}{2771340\sqrt{z}}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = 2$

07.25.03.4127.01

$${}_2F_2\left(-\frac{9}{2}, 2; 2, 2; z\right) = \frac{e^{z/2}(-32z^5 + 816z^4 - 6816z^3 + 22524z^2 - 28350z + 10395)I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2}(32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945)I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.4128.01

$${}_2F_2\left(-\frac{9}{2}, 2; 2, \frac{5}{2}; z\right) = \frac{e^z(32z^5 - 848z^4 + 7152z^3 - 22008z^2 + 20010z - 945)}{30720z} + \frac{\sqrt{\pi}(-64z^6 + 1728z^5 - 15120z^4 + 50400z^3 - 56700z^2 + 11340z + 945)\operatorname{erfi}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.4129.01

$${}_2F_2\left(-\frac{9}{2}, 2; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(32z^5 + 848z^4 + 7152z^3 + 22008z^2 + 20010z + 945)}{30720z} + \frac{\sqrt{\pi}(64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945)\operatorname{erf}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.4130.01

$${}_2F_2\left(-\frac{9}{2}, 2; 2, 3; z\right) = \frac{4e^{z/2}(32z^6 - 928z^5 + 8784z^4 - 31776z^3 + 37938z^2 - 5670z - 945)I_1\left(\frac{z}{2}\right)}{135135z} - \frac{8e^{z/2}(16z^5 - 480z^4 + 4848z^3 - 20064z^2 + 33075z - 17010)I_0\left(\frac{z}{2}\right)}{135135}$$

07.25.03.4131.01

$${}_2F_2\left(-\frac{9}{2}, 2; 2, \frac{7}{2}; z\right) = \frac{e^z(64z^6 - 1984z^5 + 20208z^4 - 79008z^3 + 100716z^2 - 11340z - 2835)}{172032z^2} + \frac{1}{344064z^{5/2}}\sqrt{\pi}(-128z^7 + 4032z^6 - 42336z^5 + 176400z^4 - 264600z^3 + 79380z^2 + 13230z + 2835)\operatorname{erfi}(\sqrt{z})$$

07.25.03.4132.01

$${}_2F_2\left(-\frac{9}{2}, 2; 2, \frac{7}{2}; -z\right) = \frac{e^{-z}(64z^6 + 1984z^5 + 20208z^4 + 79008z^3 + 100716z^2 + 11340z - 2835)}{172032z^2} + \frac{1}{344064z^{5/2}}\sqrt{\pi}(128z^7 + 4032z^6 + 42336z^5 + 176400z^4 + 264600z^3 + 79380z^2 - 13230z + 2835)\operatorname{erf}(\sqrt{z})$$

07.25.03.4133.01

$${}_2F_2\left(-\frac{9}{2}, 2; 2, 4; z\right) = \frac{4e^{z/2}(64z^7 - 2144z^6 + 24048z^5 - 107040z^4 + 167640z^3 - 39690z^2 - 12285z - 3780)I_1\left(\frac{z}{2}\right)}{675675z^2} - \frac{4e^{z/2}(64z^6 - 2208z^5 + 26160z^4 - 130080z^3 + 264600z^2 - 171990z - 945)I_0\left(\frac{z}{2}\right)}{675675z}$$

07.25.03.4134.01

$${}_2F_2\left(-\frac{9}{2}, 2; 2, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 4544 z^6 + 54\,240 z^5 - 257\,232 z^4 + 422\,616 z^3 - 79\,380 z^2 - 35\,910 z - 14\,175)}{786\,432 z^3} + \frac{1}{1\,572\,864 z^{7/2}} \left(\sqrt{\pi} (-256 z^8 + 9216 z^7 - 112\,896 z^6 + 564\,480 z^5 - 1\,058\,400 z^4 + 423\,360 z^3 + 105\,840 z^2 + 45\,360 z + 14\,175) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.4135.01

$${}_2F_2\left(-\frac{9}{2}, 2; 2, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 4544 z^6 + 54\,240 z^5 + 257\,232 z^4 + 422\,616 z^3 + 79\,380 z^2 - 35\,910 z + 14\,175)}{786\,432 z^3} + \frac{1}{1\,572\,864 z^{7/2}} \left(\sqrt{\pi} (256 z^8 + 9216 z^7 + 112\,896 z^6 + 564\,480 z^5 + 1\,058\,400 z^4 + 423\,360 z^3 - 105\,840 z^2 + 45\,360 z - 14\,175) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.4136.01

$${}_2F_2\left(-\frac{9}{2}, 2; 2, 5; z\right) = \frac{1}{11\,486\,475 z^3} \frac{32 e^{z/2} (64 z^8 - 2432 z^7 + 31\,536 z^6 - 166\,656 z^5 + 323\,160 z^4 - 105\,840 z^3 - 46\,305 z^2 - 26\,460 z - 11\,340) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^7 - 2496 z^6 + 33\,936 z^5 - 197\,040 z^4 + 476\,280 z^3 - 370\,440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right)}{11\,486\,475 z^2}$$

07.25.03.4137.01

$${}_2F_2\left(-\frac{9}{2}, 2; 2, \frac{11}{2}; z\right) = \frac{1}{3\,145\,728 z^4} e^z (256 z^8 - 10\,240 z^7 + 140\,160 z^6 - 781\,440 z^5 + 1\,572\,864 z^4 - 423\,360 z^3 - 264\,600 z^2 - 189\,000 z - 99\,225) + \frac{1}{6\,291\,456 z^{9/2}} \left(\sqrt{\pi} (-512 z^9 + 20\,736 z^8 - 290\,304 z^7 + 1\,693\,440 z^6 - 3\,810\,240 z^5 + 1\,905\,120 z^4 + 635\,040 z^3 + 408\,240 z^2 + 255\,150 z + 99\,225) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.4138.01

$${}_2F_2\left(-\frac{9}{2}, 2; 2, \frac{11}{2}; -z\right) = \frac{1}{3\,145\,728 z^4} e^{-z} (256 z^8 + 10\,240 z^7 + 140\,160 z^6 + 781\,440 z^5 + 1\,572\,864 z^4 + 423\,360 z^3 - 264\,600 z^2 + 189\,000 z - 99\,225) + \frac{1}{6\,291\,456 z^{9/2}} \left(\sqrt{\pi} (512 z^9 + 20\,736 z^8 + 290\,304 z^7 + 1\,693\,440 z^6 + 3\,810\,240 z^5 + 1\,905\,120 z^4 - 635\,040 z^3 + 408\,240 z^2 - 255\,150 z + 99\,225) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.4139.01

$${}_2F_2\left(-\frac{9}{2}, 2; 2, 6; z\right) = \frac{1}{43\,648\,605\,z^4} \left(32 e^{z/2} (128 z^9 - 5440 z^8 + 80\,064 z^7 - 489\,840 z^6 + 1\,132\,752 z^5 - 476\,280 z^4 - 264\,600 z^3 - 214\,515 z^2 - 170\,100 z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \right. \\ \left. 32 e^{z/2} (128 z^8 - 5568 z^7 + 85\,440 z^6 - 567\,312 z^5 + 1\,587\,600 z^4 - 1\,428\,840 z^3 - 52\,920 z^2 - 42\,525 z - 22\,680) I_0\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = \frac{5}{2}$

07.25.03.4140.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{5}{2}, 3; z\right) = \frac{e^z (352 z^6 - 11\,056 z^5 + 114\,768 z^4 - 462\,504 z^3 + 624\,750 z^2 - 89\,055 z - 46\,080)}{1\,098\,240 z^2} + \frac{1}{2\,196\,480 z^{3/2}} \sqrt{\pi} (-704 z^6 + 22\,464 z^5 - 240\,240 z^4 + 1\,029\,600 z^3 - 1\,621\,620 z^2 + 540\,540 z + 135\,135) \operatorname{erfi}(\sqrt{z}) + \frac{6}{143 z^2}$$

07.25.03.4141.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (352 z^6 + 11\,056 z^5 + 114\,768 z^4 + 462\,504 z^3 + 624\,750 z^2 + 89\,055 z - 46\,080)}{1\,098\,240 z^2} + \frac{\sqrt{\pi} (704 z^6 + 22\,464 z^5 + 240\,240 z^4 + 1\,029\,600 z^3 + 1\,621\,620 z^2 + 540\,540 z - 135\,135) \operatorname{erf}(\sqrt{z})}{2\,196\,480 z^{3/2}} + \frac{6}{143 z^2}$$

07.25.03.4142.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{5}{2}, 4; z\right) = \frac{6(15z+2)}{715 z^3} + \frac{e^z (352 z^7 - 12\,784 z^6 + 157\,584 z^5 - 785\,160 z^4 + 1\,409\,310 z^3 - 353\,115 z^2 - 299\,520 z - 46\,080)}{2\,745\,600 z^3} + \frac{1}{5\,491\,200 z^{3/2}} \sqrt{\pi} (-704 z^6 + 25\,920 z^5 - 327\,600 z^4 + 1\,716\,000 z^3 - 3\,474\,900 z^2 + 1\,621\,620 z + 675\,675) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4143.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{5}{2}, 4; -z\right) = \frac{6(15z-2)}{715 z^3} + \frac{e^{-z} (352 z^7 + 12\,784 z^6 + 157\,584 z^5 + 785\,160 z^4 + 1\,409\,310 z^3 + 353\,115 z^2 - 299\,520 z + 46\,080)}{2\,745\,600 z^3} + \frac{1}{5\,491\,200 z^{3/2}} \sqrt{\pi} (704 z^6 + 25\,920 z^5 + 327\,600 z^4 + 1\,716\,000 z^3 + 3\,474\,900 z^2 + 1\,621\,620 z - 675\,675) \operatorname{erf}(\sqrt{z})$$

07.25.03.4144.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{5}{2}, 5; z\right) = \frac{12(255z^2 + 68z + 18)}{12155z^4} + \frac{1}{5834400z^4} \\ e^z(352z^8 - 14512z^7 + 207120z^6 - 1229256z^5 + 2754270z^4 - 1007055z^3 - 1128960z^2 - 288000z - 103680) + \\ \frac{1}{11668800z^{3/2}} \sqrt{\pi} (-704z^6 + 29376z^5 - 428400z^4 + 2652000z^3 - 6563700z^2 + 3938220z + 2297295) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4145.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{5}{2}, 5; -z\right) = \frac{12(255z^2 - 68z + 18)}{12155z^4} + \frac{1}{5834400z^4} \\ e^{-z}(352z^8 + 14512z^7 + 207120z^6 + 1229256z^5 + 2754270z^4 + 1007055z^3 - 1128960z^2 + 288000z - 103680) + \\ \frac{1}{11668800z^{3/2}} \sqrt{\pi} (704z^6 + 29376z^5 + 428400z^4 + 2652000z^3 + 6563700z^2 + 3938220z - 2297295) \operatorname{erf}(\sqrt{z})$$

07.25.03.4146.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{5}{2}, 6; z\right) = \\ \frac{12(1615z^3 + 646z^2 + 342z + 120)}{46189z^5} + \frac{1}{11085360z^5} (e^z(352z^9 - 16240z^8 + 263376z^7 - 1813992z^6 + 4874670z^5 - \\ 2364795z^4 - 3225600z^3 - 1048320z^2 - 639360z - 345600)) + \\ \frac{1}{22170720z^{3/2}} \sqrt{\pi} (-704z^6 + 32832z^5 - 542640z^4 + 3876000z^3 - 11337300z^2 + 8314020z + 6235515) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4147.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{5}{2}, 6; -z\right) = \\ \frac{12(1615z^3 - 646z^2 + 342z - 120)}{46189z^5} + \frac{1}{11085360z^5} (e^{-z}(352z^9 + 16240z^8 + 263376z^7 + 1813992z^6 + \\ 4874670z^5 + 2364795z^4 - 3225600z^3 + 1048320z^2 - 639360z + 345600)) + \\ \frac{1}{22170720z^{3/2}} \sqrt{\pi} (704z^6 + 32832z^5 + 542640z^4 + 3876000z^3 + 11337300z^2 + 8314020z - 6235515) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = 3$

07.25.03.4148.01

$${}_2F_2\left(-\frac{9}{2}, 2; 3, 3; z\right) = -\frac{1}{19324305z^2} \\ 8e^{z/2}(704z^7 - 24864z^6 + 304208z^5 - 1584192z^4 + 3455688z^3 - 2496966z^2 - 135135z + 270270) I_0\left(\frac{z}{2}\right) + \\ \frac{8e^{z/2}(704z^6 - 24160z^5 + 280400z^4 - 1315168z^3 + 2258760z^2 - 681738z - 393279) I_1\left(\frac{z}{2}\right)}{19324305z} + \frac{16}{143z^2}$$

07.25.03.4149.01

$${}_2F_2\left(-\frac{9}{2}, 2; 3, \frac{7}{2}; z\right) = \frac{e^z (704 z^6 - 25 856 z^5 + 323 760 z^4 - 1 651 968 z^3 + 3 090 612 z^2 - 871 920 z - 884 835)}{6 150 144 z^2} + \frac{1}{12 300 288 z^{5/2}} \sqrt{\pi} (-1408 z^7 + 52 416 z^6 - 672 672 z^5 + 3 603 600 z^4 - 7 567 560 z^3 + 3 783 780 z^2 + 1 891 890 z - 405 405) \operatorname{erfi}(\sqrt{z}) + \frac{30}{143 z^2}$$

07.25.03.4150.01

$${}_2F_2\left(-\frac{9}{2}, 2; 3, \frac{7}{2}; -z\right) = \frac{e^{-z} (704 z^6 + 25 856 z^5 + 323 760 z^4 + 1 651 968 z^3 + 3 090 612 z^2 + 871 920 z - 884 835)}{6 150 144 z^2} + \frac{1}{12 300 288 z^{5/2}} \sqrt{\pi} (1408 z^7 + 52 416 z^6 + 672 672 z^5 + 3 603 600 z^4 + 7 567 560 z^3 + 3 783 780 z^2 - 1 891 890 z - 405 405) \operatorname{erf}(\sqrt{z}) + \frac{30}{143 z^2}$$

07.25.03.4151.01

$${}_2F_2\left(-\frac{9}{2}, 2; 3, 4; z\right) = -\frac{1}{96 621 525 z^2} 16 e^{z/2} (704 z^7 - 28 608 z^6 + 411 120 z^5 - 2 580 720 z^4 + 6 998 760 z^3 - 6 429 960 z^2 - 945 945 z + 2 027 025) I_0\left(\frac{z}{2}\right) + \frac{1}{96 621 525 z^2} 16 e^{z/2} (704 z^7 - 27 904 z^6 + 383 568 z^5 - 2 210 400 z^4 + 4 954 440 z^3 - 2 275 200 z^2 - 2 071 215 z + 270 270) I_1\left(\frac{z}{2}\right) + \frac{48}{143 z^2}$$

07.25.03.4152.01

$${}_2F_2\left(-\frac{9}{2}, 2; 3, \frac{9}{2}; z\right) = \frac{1}{28 114 944 z^3} e^z (1408 z^7 - 59 200 z^6 + 868 000 z^5 - 5 359 600 z^4 + 12 821 832 z^3 - 5 516 700 z^2 - 7 726 530 z + 675 675) + \frac{1}{56 229 888 z^{7/2}} \left(\sqrt{\pi} (-2816 z^8 + 119 808 z^7 - 1 793 792 z^6 + 11 531 520 z^5 - 30 270 240 z^4 + 20 180 160 z^3 + 15 135 120 z^2 - 6 486 480 z - 675 675) \operatorname{erfi}(\sqrt{z}) \right) + \frac{70}{143 z^2}$$

07.25.03.4153.01

$${}_2F_2\left(-\frac{9}{2}, 2; 3, \frac{9}{2}; -z\right) = \frac{1}{28 114 944 z^3} e^{-z} (1408 z^7 + 59 200 z^6 + 868 000 z^5 + 5 359 600 z^4 + 12 821 832 z^3 + 5 516 700 z^2 - 7 726 530 z - 675 675) + \frac{1}{56 229 888 z^{7/2}} \left(\sqrt{\pi} (2816 z^8 + 119 808 z^7 + 1 793 792 z^6 + 11 531 520 z^5 + 30 270 240 z^4 + 20 180 160 z^3 - 15 135 120 z^2 - 6 486 480 z + 675 675) \operatorname{erf}(\sqrt{z}) \right) + \frac{70}{143 z^2}$$

07.25.03.4154.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 2; 3, 5; z\right) = & \\
 & -\frac{1}{1\,642\,565\,925\,z^2} \left(64 e^{z/2} (1408 z^7 - 64\,704 z^6 + 1\,068\,096 z^5 - 7\,847\,760 z^4 + 25\,435\,440 z^3 - 28\,168\,200 z^2 - \right. \\
 & \left. 7\,567\,560 z + 17\,432\,415) I_0\left(\frac{z}{2}\right) + \right. \\
 & \frac{1}{1\,642\,565\,925\,z^3} \left(64 e^{z/2} (1408 z^8 - 63\,296 z^7 + 1\,005\,504 z^6 - 6\,872\,496 z^5 + 19\,006\,800 z^4 - \right. \\
 & \left. 11\,771\,640 z^3 - 14\,294\,520 z^2 + 4\,189\,185 z + 810\,810) I_1\left(\frac{z}{2}\right) + \frac{96}{143 z^2}
 \end{aligned}$$

07.25.03.4155.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 2; 3, \frac{11}{2}; z\right) = & \\
 & \frac{1}{112\,459\,776 z^4} \left(e^z (2816 z^8 - 133\,376 z^7 + 2\,241\,024 z^6 - 16\,239\,936 z^5 + 47\,333\,280 z^4 - 27\,612\,144 z^3 - 48\,063\,456 z^2 + \right. \\
 & \left. 10\,270\,260 z + 2\,837\,835) + \right. \\
 & \frac{1}{224\,919\,552 z^{9/2}} \left(\sqrt{\pi} (-5632 z^9 + 269\,568 z^8 - 4\,612\,608 z^7 + 34\,594\,560 z^6 - 108\,972\,864 z^5 + \right. \\
 & \left. 90\,810\,720 z^4 + 90\,810\,720 z^3 - 58\,378\,320 z^2 - 12\,162\,150 z - 2\,837\,835) \operatorname{erfi}(\sqrt{z})\right) + \frac{126}{143 z^2}
 \end{aligned}$$

07.25.03.4156.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 2; 3, \frac{11}{2}; -z\right) = & \\
 & \frac{1}{112\,459\,776 z^4} \left(e^{-z} (2816 z^8 + 133\,376 z^7 + 2\,241\,024 z^6 + 16\,239\,936 z^5 + 47\,333\,280 z^4 + 27\,612\,144 z^3 - \right. \\
 & \left. 48\,063\,456 z^2 - 10\,270\,260 z + 2\,837\,835) + \right. \\
 & \frac{1}{224\,919\,552 z^{9/2}} \left(\sqrt{\pi} (5632 z^9 + 269\,568 z^8 + 4\,612\,608 z^7 + 34\,594\,560 z^6 + 108\,972\,864 z^5 + 90\,810\,720 z^4 - \right. \\
 & \left. 90\,810\,720 z^3 - 58\,378\,320 z^2 + 12\,162\,150 z - 2\,837\,835) \operatorname{erf}(\sqrt{z})\right) + \frac{126}{143 z^2}
 \end{aligned}$$

07.25.03.4157.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 2; 3, 6; z\right) = & \\
 & -\frac{1}{6\,241\,750\,515 z^3} \left(512 e^{z/2} (352 z^8 - 18\,048 z^7 + 336\,496 z^6 - 2\,832\,576 z^5 + 10\,676\,940 z^4 - 13\,786\,320 z^3 - \right. \\
 & \left. 5\,675\,670 z^2 + 14\,054\,040 z + 135\,135) I_0\left(\frac{z}{2}\right) + \right. \\
 & \frac{1}{6\,241\,750\,515 z^4} \left(128 e^{z/2} (1408 z^9 - 70\,784 z^8 + 1\,275\,904 z^7 - 10\,088\,384 z^6 + 33\,190\,944 z^5 - \right. \\
 & \left. 25\,925\,520 z^4 - 38\,959\,680 z^3 + 18\,378\,360 z^2 + 6\,621\,615 z + 2\,162\,160) I_1\left(\frac{z}{2}\right) + \frac{160}{143 z^2}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = \frac{7}{2}$

07.25.03.4158.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{7}{2}, 4; z\right) = \frac{6(15z-2)}{143z^3} + \frac{1}{15375360z^3} e^z (704z^7 - 29888z^6 + 444048z^5 - 2795040z^4 + 6898500z^3 - 3191580z^2 - 4885965z + 1290240) + \frac{1}{30750720z^{5/2}} (\sqrt{\pi} (-1408z^7 + 60480z^6 - 917280z^5 + 6006000z^4 - 16216200z^3 + 11351340z^2 + 9459450z - 6081075) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.4159.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{7}{2}, 4; -z\right) = \frac{6(15z+2)}{143z^3} + \frac{1}{15375360z^3} e^{-z} (704z^7 + 29888z^6 + 444048z^5 + 2795040z^4 + 6898500z^3 + 3191580z^2 - 4885965z - 1290240) + \frac{1}{30750720z^{5/2}} (\sqrt{\pi} (1408z^7 + 60480z^6 + 917280z^5 + 6006000z^4 + 16216200z^3 + 11351340z^2 - 9459450z - 6081075) \operatorname{erf}(\sqrt{-z}))$$

07.25.03.4160.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{7}{2}, 5; z\right) = \frac{12(255z^2 - 68z - 6)}{2431z^4} + \frac{1}{32672640z^4} (e^z (704z^8 - 33920z^7 + 583152z^6 - 4365504z^5 + 13384980z^4 - 8686440z^3 - 17150175z^2 + 9999360z + 967680)) + \frac{1}{65345280z^{5/2}} (\sqrt{\pi} (-1408z^7 + 68544z^6 - 1199520z^5 + 9282000z^4 - 30630600z^3 + 27567540z^2 + 32162130z - 34459425) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.4161.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{7}{2}, 5; -z\right) = \frac{12(255z^2 + 68z - 6)}{2431z^4} + \frac{1}{32672640z^4} (e^{-z} (704z^8 + 33920z^7 + 583152z^6 + 4365504z^5 + 13384980z^4 + 8686440z^3 - 17150175z^2 - 9999360z + 967680)) + \frac{1}{65345280z^{5/2}} (\sqrt{\pi} (1408z^7 + 68544z^6 + 1199520z^5 + 9282000z^4 + 30630600z^3 + 27567540z^2 - 32162130z - 34459425) \operatorname{erf}(\sqrt{-z}))$$

07.25.03.4162.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{7}{2}, 6; z\right) = \frac{60(1615z^3 - 646z^2 - 114z - 24)}{46189z^5} + \frac{1}{62078016z^5} (e^z(704z^9 - 37952z^8 + 741072z^7 - 6430560z^6 + 23564772z^5 - 19765620z^4 - 47107305z^3 + 43868160z^2 + 7257600z + 1935360)) + \frac{1}{124156032z^{5/2}} (\sqrt{\pi}(-1408z^7 + 76608z^6 - 1519392z^5 + 13566000z^4 - 52907400z^3 + 58198140z^2 + 87297210z - 130945815) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.4163.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{7}{2}, 6; -z\right) = \frac{60(1615z^3 + 646z^2 - 114z + 24)}{46189z^5} + \frac{1}{62078016z^5} (e^{-z}(704z^9 + 37952z^8 + 741072z^7 + 6430560z^6 + 23564772z^5 + 19765620z^4 - 47107305z^3 - 43868160z^2 + 7257600z - 1935360)) + \frac{1}{124156032z^{5/2}} (\sqrt{\pi}(1408z^7 + 76608z^6 + 1519392z^5 + 13566000z^4 + 52907400z^3 + 58198140z^2 - 87297210z - 130945815) \operatorname{erf}(\sqrt{z}))$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = 4$

07.25.03.4164.01

$${}_2F_2\left(-\frac{9}{2}, 2; 4, 4; z\right) = \frac{48(15z - 4)}{715z^3} - \frac{1}{483107625z^3} (16e^{z/2}(1408z^8 - 65856z^7 + 1112640z^6 - 8437680z^5 + 28594800z^4 - 33633720z^3 - 12117960z^2 + 34459425z - 8108100) I_0\left(\frac{z}{2}\right)) + \frac{1}{483107625z^2} (16e^{z/2}(1408z^7 - 64448z^6 + 1048896z^5 - 7419600z^4 + 21639600z^3 - 14838120z^2 - 21021480z + 14365935) I_1\left(\frac{z}{2}\right))$$

07.25.03.4165.01

$${}_2F_2\left(-\frac{9}{2}, 2; 4, \frac{9}{2}; z\right) = \frac{42(5z - 2)}{143z^3} + \frac{1}{70287360z^3} e^z(1408z^7 - 68416z^6 + 1189536z^5 - 9047280z^4 + 28424520z^3 - 19380060z^2 - 40452930z + 31152555) + \frac{1}{140574720z^{7/2}} (\sqrt{\pi}(-2816z^8 + 138240z^7 - 2446080z^6 + 19219200z^5 - 64864800z^4 + 60540480z^3 + 75675600z^2 - 97297200z + 10135125) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.4166.01

$${}_2F_2\left(-\frac{9}{2}, 2; 4, \frac{9}{2}; -z\right) = \frac{42(5z+2)}{143z^3} + \frac{1}{70287360z^3} \\ e^{-z} (1408z^7 + 68416z^6 + 1189536z^5 + 9047280z^4 + 28424520z^3 + 19380060z^2 - 40452930z - 31152555) + \\ \frac{1}{140574720z^{7/2}} \left(\sqrt{\pi} (2816z^8 + 138240z^7 + 2446080z^6 + 19219200z^5 + 64864800z^4 + \right. \\ \left. 60540480z^3 - 75675600z^2 - 97297200z - 10135125) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.4167.01

$${}_2F_2\left(-\frac{9}{2}, 2; 4, 5; z\right) = \\ \frac{96(15z-8)}{715z^3} - \frac{1}{8212829625z^3} \left(256e^{z/2} (704z^8 - 37248z^7 + 723360z^6 - 6431040z^5 + 26145000z^4 - 37312560z^3 - \right. \\ \left. 23122980z^2 + 81081000z - 34459425) I_0\left(\frac{z}{2}\right) + \right. \\ \left. \frac{1}{8212829625z^3} \left(128e^{z/2} (1408z^8 - 73088z^7 + 1374336z^6 - 11522880z^5 + 41385600z^4 - \right. \right. \\ \left. \left. 37836720z^3 - 71473680z^2 + 90691560z - 6081075) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.4168.01

$${}_2F_2\left(-\frac{9}{2}, 2; 4, \frac{11}{2}; z\right) = \\ \frac{126(3z-2)}{143z^3} + \frac{1}{281149440z^4} \left(e^z (2816z^8 - 154112z^7 + 3069312z^6 - 27367680z^5 + 104427840z^4 - \right. \\ \left. 94500000z^3 - 245117880z^2 + 322479360z - 14189175) + \right. \\ \left. \frac{1}{562298880z^{9/2}} \left(\sqrt{\pi} (-5632z^9 + 311040z^8 - 6289920z^7 + 57657600z^6 - 233513280z^5 + \right. \right. \\ \left. \left. 272432160z^4 + 454053600z^3 - 875674800z^2 + 182432250z + 14189175) \operatorname{erfi}(\sqrt{z}) \right) \right)$$

07.25.03.4169.01

$${}_2F_2\left(-\frac{9}{2}, 2; 4, \frac{11}{2}; -z\right) = \\ \frac{126(3z+2)}{143z^3} + \frac{1}{281149440z^4} \left(e^{-z} (2816z^8 + 154112z^7 + 3069312z^6 + 27367680z^5 + 104427840z^4 + \right. \\ \left. 94500000z^3 - 245117880z^2 - 322479360z - 14189175) + \right. \\ \left. \frac{1}{562298880z^{9/2}} \left(\sqrt{\pi} (5632z^9 + 311040z^8 + 6289920z^7 + 57657600z^6 + 233513280z^5 + \right. \right. \\ \left. \left. 272432160z^4 - 454053600z^3 - 875674800z^2 - 182432250z + 14189175) \operatorname{erf}(\sqrt{z}) \right) \right)$$

07.25.03.4170.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 2; 4, 6; z\right) = & \frac{96(5z-4)}{143z^3} - \frac{1}{31208752575z^3} \left(128e^{z/2}(2816z^8 - 166272z^7 + 3648960z^6 - 37212480z^5 + 176446800z^4 - \right. \\
 & \left. 295349040z^3 - 269066520z^2 + 1118917800z - 658783125)I_0\left(\frac{z}{2}\right) + \right. \\
 & \left. \frac{1}{31208752575z^4} \left(128e^{z/2}(2816z^9 - 163456z^8 + 3486912z^7 - 33804480z^6 + 144231120z^5 - \right. \right. \\
 & \left. \left. 165007440z^4 - 386802360z^3 + 723732120z^2 - 107432325z - 16216200)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = \frac{9}{2}$

07.25.03.4171.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 2; \frac{9}{2}, 5; z\right) = & \frac{84(85z^2 - 68z + 6)}{2431z^4} + \frac{1}{149360640z^4} \left(e^z(1408z^8 - 77632z^7 + 1561248z^6 - 14107632z^5 + 54897480z^4 - \right. \\
 & \left. 51494940z^3 - 138894210z^2 + 209613915z - 30965760)\right) + \\
 & \frac{1}{298721280z^{7/2}} \left(\sqrt{\pi}(-2816z^8 + 156672z^7 - 3198720z^6 + 29702400z^5 - 122522400z^4 + \right. \\
 & \left. 147026880z^3 + 257297040z^2 - 551350800z + 172297125)\operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

07.25.03.4172.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 2; \frac{9}{2}, 5; -z\right) = & \frac{84(85z^2 + 68z + 6)}{2431z^4} + \frac{1}{149360640z^4} \left(e^{-z}(1408z^8 + 77632z^7 + 1561248z^6 + 14107632z^5 + 54897480z^4 + \right. \\
 & \left. 51494940z^3 - 138894210z^2 - 209613915z - 30965760)\right) + \\
 & \frac{1}{298721280z^{7/2}} \left(\sqrt{\pi}(2816z^8 + 156672z^7 + 3198720z^6 + 29702400z^5 + 122522400z^4 + \right. \\
 & \left. 147026880z^3 - 257297040z^2 - 551350800z - 172297125)\operatorname{erf}(\sqrt{-z})\right)
 \end{aligned}$$

07.25.03.4173.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 2; \frac{9}{2}, 6; z\right) = & \frac{140(1615z^3 - 1938z^2 + 342z + 24)}{46189z^5} + \frac{1}{283785216z^5} \left(e^z(1408z^9 - 86848z^8 + 1983136z^7 - 20755696z^6 + \right. \\
 & \left. 96326472z^5 - 115301340z^4 - 377185410z^3 + 859627755z^2 - 273530880z - 20643840)\right) + \\
 & \frac{1}{567570432z^{7/2}} \left(\sqrt{\pi}(-2816z^8 + 175104z^7 - 4051712z^6 + 43411200z^5 - 211629600z^4 + \right. \\
 & \left. 310390080z^3 + 698377680z^2 - 2095133040z + 1091215125)\operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4174.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 2; \frac{9}{2}, 6; -z\right) = \\
 & \frac{140(1615z^3 + 1938z^2 + 342z - 24)}{46189z^5} + \frac{1}{283785216z^5} \left(e^{-z} (1408z^9 + 86848z^8 + 1983136z^7 + 20755696z^6 + \right. \\
 & \quad \left. 96326472z^5 + 115301340z^4 - 377185410z^3 - 859627755z^2 - 273530880z + 20643840) \right) + \\
 & \frac{1}{567570432z^{7/2}} \left(\sqrt{\pi} (2816z^8 + 175104z^7 + 4051712z^6 + 43411200z^5 + 211629600z^4 + \right. \\
 & \quad \left. 310390080z^3 - 698377680z^2 - 2095133040z - 1091215125) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = 5$

$$\begin{aligned}
 & 07.25.03.4175.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 2; 5, 5; z\right) = \\
 & \frac{192(255z^2 - 272z + 48)}{12155z^4} - \frac{1}{139618103625z^4} \left(512e^{z/2} (2816z^9 - 168576z^8 + 3764928z^7 - 39286080z^6 + \right. \\
 & \quad \left. 192108240z^5 - 334502640z^4 - 344739960z^3 + 1598195880z^2 - 1274998725z + 206756550) I_0\left(\frac{z}{2}\right) \right) + \\
 & \frac{1}{139618103625z^3} \left(512e^{z/2} (2816z^8 - 165760z^7 + 3600576z^6 - 35765568z^5 + 157986000z^4 - \right. \\
 & \quad \left. 191280240z^3 - 483507000z^2 + 1102118760z - 395723205) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4176.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 2; 5, \frac{11}{2}; z\right) = \\
 & \frac{252(51z^2 - 68z + 18)}{2431z^4} + \frac{1}{597442560z^4} \left(e^z (2816z^8 - 174848z^7 + 4026624z^6 - 42624192z^5 + 201036000z^4 - \right. \\
 & \quad \left. 247317840z^3 - 833187600z^2 + 2063951820z - 873551385) \right) + \\
 & \frac{1}{1194885120z^{9/2}} \left(\sqrt{\pi} (-5632z^9 + 352512z^8 - 8225280z^7 + 89107200z^6 - 441080640z^5 + \right. \\
 & \quad \left. 661620960z^4 + 1543782240z^3 - 4962157200z^2 + 3101348250z - 241215975) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4177.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 2; 5, \frac{11}{2}; -z\right) = \\
 & \frac{252(51z^2 + 68z + 18)}{2431z^4} + \frac{1}{597442560z^4} \left(e^{-z} (2816z^8 + 174848z^7 + 4026624z^6 + 42624192z^5 + 201036000z^4 + \right. \\
 & \quad \left. 247317840z^3 - 833187600z^2 - 2063951820z - 873551385) \right) + \\
 & \frac{1}{1194885120z^{9/2}} \left(\sqrt{\pi} (5632z^9 + 352512z^8 + 8225280z^7 + 89107200z^6 + 441080640z^5 + \right. \\
 & \quad \left. 661620960z^4 - 1543782240z^3 - 4962157200z^2 - 3101348250z - 241215975) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.4178.01

$${}_2F_2\left(-\frac{9}{2}, 2; 5, 6; z\right) = \frac{192(85z^2 - 136z + 48)}{2431z^4} - \frac{1}{530548793775z^4} \left(1024e^{z/2}(2816z^9 - 188160z^8 + 4750656z^7 - 56911680z^6 + 325230480z^5 - 667308240z^4 - 987964200z^3 + 5672059560z^2 - 6512831325z + 1964187225)I_0\left(\frac{z}{2}\right) + \frac{1}{530548793775z^4} \left(1024e^{z/2}(2816z^9 - 185344z^8 + 4566720z^7 - 52434816z^6 + 274902480z^5 - 414599040z^4 - 1305496440z^3 + 4318405200z^2 - 2846195685z + 137837700)I_1\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = \frac{11}{2}$

07.25.03.4179.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{11}{2}, 6; z\right) = \frac{1260(323z^3 - 646z^2 + 342z - 24)}{46189z^5} + \frac{1}{1135140864z^5} \left(e^z(2816z^9 - 195584z^8 + 5112960z^7 - 62654592z^6 + 351931008z^5 - 548190720z^4 - 2251889640z^3 + 8268485400z^2 - 6750364635z + 743178240)\right) + \frac{1}{2270281728z^{9/2}} \left(\sqrt{\pi}(-5632z^9 + 393984z^8 - 10418688z^7 + 130233600z^6 - 761866560z^5 + 1396755360z^4 + 4190266080z^3 - 18856197360z^2 + 19641872250z - 4583103525)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.4180.01

$${}_2F_2\left(-\frac{9}{2}, 2; \frac{11}{2}, 6; -z\right) = \frac{1260(323z^3 + 646z^2 + 342z + 24)}{46189z^5} + \frac{1}{1135140864z^5} \left(e^{-z}(2816z^9 + 195584z^8 + 5112960z^7 + 62654592z^6 + 351931008z^5 + 548190720z^4 - 2251889640z^3 - 8268485400z^2 - 6750364635z - 743178240)\right) + \frac{1}{2270281728z^{9/2}} \left(\sqrt{\pi}(5632z^9 + 393984z^8 + 10418688z^7 + 130233600z^6 + 761866560z^5 + 1396755360z^4 - 4190266080z^3 - 18856197360z^2 - 19641872250z - 4583103525)\operatorname{erf}(\sqrt{z})\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 2$, $b_1 = 6$

07.25.03.4181.01

$${}_2F_2\left(-\frac{9}{2}, 2; 6, 6; z\right) = \frac{320(1615z^3 - 3876z^2 + 2736z - 384)}{46189z^5} - \frac{1}{2016085416345z^5}$$

$$\left(1024e^{z/2}(5632z^{10} - 420096z^9 + 11994112z^8 - 165066816z^7 + 1103998560z^6 - 2679237360z^5 - 5610252960z^4 + 40899519720z^3 - 69226789410z^2 + 39938473575z - 5237832600)I_0\left(\frac{z}{2}\right) + \frac{1}{2016085416345z^4}\left(1024e^{z/2}(5632z^9 - 414464z^8 + 11582464z^7 - 153685952z^6 + 955706976z^5 - 1790012880z^4 - 7044913440z^3 + 33560135640z^2 - 39367934370z + 10518906285)I_1\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{5}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.4182.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{1}{343035}e^z(512z^9 + 7424z^8 + 19968z^7 - 5376z^6 + 25536z^5 - 70560z^4 + 171360z^3 - 337680z^2 + 470610z - 343035)$$

07.25.03.4183.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{e^z(256z^8 + 3072z^7 + 5376z^6 - 5376z^5 + 10080z^4 - 20160z^3 + 35280z^2 - 45360z + 31185)}{31185}$$

07.25.03.4184.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{e^z(128z^7 + 1216z^6 + 864z^5 - 3120z^4 + 3480z^3 - 4860z^2 + 5490z - 3465)}{3465}$$

07.25.03.4185.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{495}e^z(64z^6 + 448z^5 - 240z^4 - 1440z^3 + 1020z^2 - 900z + 495)$$

07.25.03.4186.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = -\frac{1}{99}e^z(32z^5 + 144z^4 - 336z^3 - 552z^2 + 234z - 99)$$

07.25.03.4187.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{33}e^z(16z^4 + 32z^3 - 216z^2 - 168z + 33)$$

07.25.03.4188.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = -\frac{1}{33}e^z(8z^3 - 4z^2 - 102z - 33)$$

07.25.03.4189.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{33}e^{z/2}(-4z^3 + 4z^2 + 51z + 33)I_0\left(\frac{z}{2}\right) + \frac{1}{33}e^{z/2}(-4z^3 + 8z^2 + 41z)I_1\left(\frac{z}{2}\right)$$

07.25.03.4190.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{1}{33} e^z (4z^2 - 12z - 33)$$

07.25.03.4191.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{33} e^{z/2} (-4z^2 + 14z + 33) I_0\left(\frac{z}{2}\right) + \frac{1}{33} e^{z/2} (-4z^2 + 18z + 13) I_1\left(\frac{z}{2}\right)$$

07.25.03.4192.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = -\frac{1}{11} e^z (2z - 11)$$

07.25.03.4193.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, 3; z\right) = -\frac{8}{33} e^{z/2} (z - 6) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (2z^2 - 14z + 15) I_1\left(\frac{z}{2}\right)}{33z}$$

07.25.03.4194.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{30\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11z^{5/2}} - \frac{5e^z (z^2 - 8z + 12)}{11z^2}$$

07.25.03.4195.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{30\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11z^{5/2}} - \frac{5e^{-z} (z^2 + 8z + 12)}{11z^2}$$

07.25.03.4196.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, 4; z\right) = -\frac{4e^{z/2} (2z - 17) I_0\left(\frac{z}{2}\right)}{11z} - \frac{4e^{z/2} (2z^2 - 19z + 68) I_1\left(\frac{z}{2}\right)}{11z^2}$$

07.25.03.4197.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{105\sqrt{\pi} (16z + 45) \operatorname{erfi}(\sqrt{z})}{176z^{7/2}} - \frac{35e^z (4z^2 - 42z + 135)}{88z^3}$$

07.25.03.4198.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} (4z^2 + 42z + 135)}{88z^3} + \frac{105\sqrt{\pi} (16z - 45) \operatorname{erf}(\sqrt{z})}{176z^{7/2}}$$

07.25.03.4199.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, 5; z\right) = -\frac{32e^{z/2} (z - 19) I_0\left(\frac{z}{2}\right)}{11z^2} - \frac{32e^{z/2} (z^2 - 4z + 76) I_1\left(\frac{z}{2}\right)}{11z^3}$$

07.25.03.4200.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{945\sqrt{\pi} (16z^2 + 90z + 175) \operatorname{erfi}(\sqrt{z})}{704z^{9/2}} - \frac{315e^z (8z^2 - 80z + 525)}{352z^4}$$

07.25.03.4201.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{945\sqrt{\pi} (16z^2 - 90z + 175) \operatorname{erf}(\sqrt{z})}{704z^{9/2}} - \frac{315e^{-z} (8z^2 + 80z + 525)}{352z^4}$$

07.25.03.4202.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (11z + 168) I_0\left(\frac{z}{2}\right)}{11z^3} - \frac{32 e^{z/2} (21z^2 + 44z + 672) I_1\left(\frac{z}{2}\right)}{11z^4}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.4203.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{e^z (128z^7 + 1344z^6 + 2016z^5 - 1680z^4 + 2520z^3 - 3780z^2 + 4410z - 2835)}{2835}$$

07.25.03.4204.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{315} e^z (64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)$$

07.25.03.4205.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{1}{45} e^z (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)$$

07.25.03.4206.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} e^z (16z^4 + 96z^3 + 72z^2 - 24z + 9)$$

07.25.03.4207.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -\frac{1}{3} e^z (8z^3 + 36z^2 + 18z - 3)$$

07.25.03.4208.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (4z^2 + 12z + 3)$$

07.25.03.4209.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (2z^2 + 6z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} (z^2 + 2z) I_1\left(\frac{z}{2}\right)$$

07.25.03.4210.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (2z + 3)$$

07.25.03.4211.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{3} e^{z/2} (2z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z + 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.4212.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = e^z$$

07.25.03.4213.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (z - 1) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.4214.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2z-3)}{4 z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.4215.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5 e^{-z} (2z+3)}{4 z^2}$$

07.25.03.4216.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z-4) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.4217.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (4z-15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z+5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.4218.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z+15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z-5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.4219.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.4220.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1575 e^z (2z-21)}{128 z^4} + \frac{945 \sqrt{\pi} (4z^2+20z+35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.4221.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (4z^2-20z+35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 e^{-z} (2z+21)}{128 z^4}$$

07.25.03.4222.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (z+8) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (z^2+4z+32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.4223.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{735} e^z (-672 z^5 + 10672 z^4 - 2224 z^3 + 1704 z^2 - 1410 z + 735) - \frac{16384}{735} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4224.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{16384}{735} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{735} e^{-z} (672 z^5 + 10672 z^4 + 2224 z^3 + 1704 z^2 + 1410 z + 735)$$

07.25.03.4225.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{8192}{105} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^z (-7856 z^4 - 1408 z^3 + 408 z^2 - 240 z + 105)$$

07.25.03.4226.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{105} e^{-z} (-7856 z^4 + 1408 z^3 + 408 z^2 + 240 z + 105) - \frac{8192}{105} \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.4227.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{21} e^z (2048 z^4 + 856 z^3 + 276 z^2 - 66 z + 21) - \frac{2048}{21} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4228.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{2048}{21} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{21} e^{-z} (2048 z^4 - 856 z^3 + 276 z^2 + 66 z + 21)$$

07.25.03.4229.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1024}{21} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{21} e^z (-1024 z^4 - 512 z^3 - 516 z^2 - 156 z + 21)$$

07.25.03.4230.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{21} e^{-z} (-1024 z^4 + 512 z^3 - 516 z^2 + 156 z + 21) - \frac{1024}{21} \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.4231.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{21} e^z (128 z^4 + 64 z^3 + 96 z^2 + 114 z + 21) - \frac{128}{21} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4232.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{128}{21} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{21} e^{-z} (128 z^4 - 64 z^3 + 96 z^2 - 114 z + 21)$$

07.25.03.4233.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (-16384 z^5 + 12288 z^4 + 7680 z^3 + 13440 z^2 + 17955 z + 6615) I_0\left(\frac{z}{2}\right) + e^{z/2} (16384 z^5 + 4096 z^4 + 4608 z^3 + 9600 z^2 + 9555 z) I_1\left(\frac{z}{2}\right)}{6615}$$

07.25.03.4234.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (64 z^4 + 32 z^3 + 48 z^2 + 120 z + 105) - \frac{64}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4235.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{64}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (64 z^4 - 32 z^3 + 48 z^2 - 120 z + 105)$$

07.25.03.4236.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (-32768 z^5 + 24576 z^4 + 15360 z^3 + 26880 z^2 + 75600 z + 72765) I_0\left(\frac{z}{2}\right) + e^{z/2} (32768 z^5 + 8192 z^4 + 9216 z^3 + 19200 z^2 + 58800 z + 19845) I_1\left(\frac{z}{2}\right)}{72765}$$

07.25.03.4237.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{105} e^z (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4238.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

07.25.03.4239.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (32768 z^6 + 8192 z^5 + 9216 z^4 + 19200 z^3 + 58800 z^2 + 238140 z - 218295) I_1\left(\frac{z}{2}\right) - 16 e^{z/2} (8192 z^5 - 6144 z^4 - 3840 z^3 - 6720 z^2 - 18900 z - 72765) I_0\left(\frac{z}{2}\right)}{945945 z}$$

07.25.03.4240.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (64z^6 + 32z^5 + 48z^4 + 120z^3 + 420z^2 + 1890z - 2835)}{1176z^2} + \frac{\sqrt{\pi} (2835 - 128z^7) \operatorname{erfi}(\sqrt{z})}{2352z^{5/2}}$$

07.25.03.4241.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (64z^6 - 32z^5 + 48z^4 - 120z^3 + 420z^2 - 1890z - 2835)}{1176z^2} + \frac{\sqrt{\pi} (128z^7 + 2835) \operatorname{erf}(\sqrt{z})}{2352z^{5/2}}$$

07.25.03.4242.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{4729725z^2} 4 e^{z/2} (65536z^7 + 16384z^6 + 18432z^5 + 38400z^4 + 117600z^3 + 476280z^2 + 2401245z - 11351340) I_1\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (65536z^6 - 49152z^5 - 30720z^4 - 53760z^3 - 151200z^2 - 582120z - 2837835) I_0\left(\frac{z}{2}\right)}{4729725z}$$

07.25.03.4243.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (128z^7 + 64z^6 + 96z^5 + 240z^4 + 840z^3 + 3780z^2 + 20790z - 99225)}{5376z^3} + \frac{\sqrt{\pi} (-256z^8 + 45360z + 99225) \operatorname{erfi}(\sqrt{z})}{10752z^{7/2}}$$

07.25.03.4244.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128z^7 - 64z^6 + 96z^5 - 240z^4 + 840z^3 - 3780z^2 + 20790z + 99225)}{5376z^3} + \frac{\sqrt{\pi} (256z^8 + 45360z - 99225) \operatorname{erf}(\sqrt{z})}{10752z^{7/2}}$$

07.25.03.4245.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{80405325z^3} \left(32 e^{z/2} (65536z^8 + 16384z^7 + 18432z^6 + 38400z^5 + 117600z^4 + 476280z^3 + 2401245z^2 - 11351340z - 170270100) I_1\left(\frac{z}{2}\right) - \frac{1}{80405325z^2} 32 e^{z/2} (65536z^7 - 49152z^6 - 30720z^5 - 53760z^4 - 151200z^3 - 582120z^2 - 2837835z - 42567525) I_0\left(\frac{z}{2}\right) \right)$$

07.25.03.4246.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{e^z (128 z^8 + 64 z^7 + 96 z^6 + 240 z^5 + 840 z^4 + 3780 z^3 + 20790 z^2 + 33075 z - 1389150)}{10752 z^4} + \frac{\sqrt{\pi} (-256 z^9 + 204120 z^2 + 893025 z + 1389150) \operatorname{erfi}(\sqrt{z})}{21504 z^{9/2}}$$

07.25.03.4247.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (128 z^8 - 64 z^7 + 96 z^6 - 240 z^5 + 840 z^4 - 3780 z^3 + 20790 z^2 - 33075 z - 1389150)}{10752 z^4} + \frac{\sqrt{\pi} (256 z^9 + 204120 z^2 - 893025 z + 1389150) \operatorname{erf}(\sqrt{z})}{21504 z^{9/2}}$$

07.25.03.4248.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{305540235 z^4} \left(32 e^{z/2} (131072 z^9 + 32768 z^8 + 36864 z^7 + 76800 z^6 + 235200 z^5 + 952560 z^4 + 4802490 z^3 - 167432265 z^2 - 919458540 z - 4631346720) I_1\left(\frac{z}{2}\right) - \frac{1}{305540235 z^3} \left(32 e^{z/2} (131072 z^8 - 98304 z^7 - 61440 z^6 - 107520 z^5 - 302400 z^4 - 1164240 z^3 - 5675670 z^2 - 229864635 z - 1157836680) I_0\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.4249.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (4096 z^4 - 1192 z^3 + 108 z^2 - 42 z + 15) - \frac{1024}{15} \sqrt{\pi} (4 z^{9/2} - 3 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4250.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (4096 z^4 + 1192 z^3 + 108 z^2 + 42 z + 15) + \frac{1024}{15} \sqrt{\pi} (4 z^{9/2} + 3 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4251.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (-1024 z^4 + 1024 z^3 + 84 z^2 - 12 z + 3) + \frac{512}{3} \sqrt{\pi} (2 z^{9/2} - 3 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4252.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (-1024 z^4 - 1024 z^3 + 84 z^2 + 12 z + 3) - \frac{512}{3} \sqrt{\pi} (2 z^{9/2} + 3 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4253.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (512 z^4 - 896 z^3 - 192 z^2 - 30 z + 3) - \frac{128}{3} \sqrt{\pi} (4 z^{9/2} - 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4254.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (512 z^4 + 896 z^3 - 192 z^2 + 30 z + 3) + \frac{128}{3} \sqrt{\pi} (4 z^{9/2} + 9 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4255.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (-64 z^4 + 160 z^3 + 48 z^2 + 24 z + 3) + \frac{64}{3} \sqrt{\pi} (z^{9/2} - 3 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4256.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-64 z^4 - 160 z^3 + 48 z^2 - 24 z + 3) - \frac{64}{3} \sqrt{\pi} (z^{9/2} + 3 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4257.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (8192 z^5 - 33792 z^4 + 16896 z^3 + 6240 z^2 + 3780 z + 945) I_0\left(\frac{z}{2}\right) - \frac{4}{945} e^{z/2} (2048 z^5 - 6400 z^4 - 1152 z^3 - 744 z^2 - 375 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.4258.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{8}{15} \sqrt{\pi} (4 z - 15) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{15} e^z (-32 z^4 + 104 z^3 + 36 z^2 + 30 z + 15)$$

07.25.03.4259.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-32 z^4 - 104 z^3 + 36 z^2 - 30 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} (4 z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.4260.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (16384 z^5 - 79872 z^4 + 43008 z^3 + 18240 z^2 + 17640 z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (-16384 z^5 + 63488 z^4 + 12288 z^3 + 9408 z^2 + 10200 z + 2205) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.4261.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{4}{15} \sqrt{\pi} (2 z - 9) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{15} e^z (-8 z^4 + 32 z^3 + 12 z^2 + 12 z + 15)$$

07.25.03.4262.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-8 z^4 - 32 z^3 + 12 z^2 - 12 z + 15) - \frac{4}{15} \sqrt{\pi} z^{7/2} (2 z + 9) \operatorname{erf}(\sqrt{z})$$

07.25.03.4263.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (16384 z^5 - 92160 z^4 + 52224 z^3 + 24000 z^2 + 27720 z + 38745) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16384 z^6 - 75776 z^5 - 15360 z^4 - 12864 z^3 - 17400 z^2 - 24255 z + 19845) I_1\left(\frac{z}{2}\right)}{135135 z}$$

07.25.03.4264.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-128 z^6 + 608 z^5 + 240 z^4 + 264 z^3 + 420 z^2 + 630 z - 945)}{672 z^2} + \frac{\sqrt{\pi} (256 z^7 - 1344 z^6 + 945) \operatorname{erfi}(\sqrt{z})}{1344 z^{5/2}}$$

07.25.03.4265.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-128 z^6 - 608 z^5 + 240 z^4 - 264 z^3 + 420 z^2 - 630 z - 945)}{672 z^2} + \frac{\sqrt{\pi} (-256 z^7 - 1344 z^6 + 945) \operatorname{erf}(\sqrt{z})}{1344 z^{5/2}}$$

07.25.03.4266.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (32768 z^6 - 208896 z^5 + 122880 z^4 + 59520 z^3 + 75600 z^2 + 134190 z + 218295) I_0\left(\frac{z}{2}\right)}{675675 z} - \frac{1}{675675 z^2} 4 e^{z/2} (32768 z^7 - 176128 z^6 - 36864 z^5 - 32640 z^4 - 49200 z^3 - 92610 z^2 - 138915 z + 873180) I_1\left(\frac{z}{2}\right)$$

07.25.03.4267.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (-128 z^7 + 704 z^6 + 288 z^5 + 336 z^4 + 600 z^3 + 1260 z^2 + 1890 z - 14175)}{1536 z^3} + \frac{\sqrt{\pi} (256 z^8 - 1536 z^7 + 7560 z + 14175) \operatorname{erfi}(\sqrt{z})}{3072 z^{7/2}}$$

07.25.03.4268.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-128 z^7 - 704 z^6 + 288 z^5 - 336 z^4 + 600 z^3 - 1260 z^2 + 1890 z + 14175)}{1536 z^3} + \frac{\sqrt{\pi} (-256 z^8 - 1536 z^7 + 7560 z - 14175) \operatorname{erf}(\sqrt{z})}{3072 z^{7/2}}$$

07.25.03.4269.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, 5; z\right) = \frac{1}{11486475 z^2} 32 e^{z/2} (32768 z^7 - 233472 z^6 + 141312 z^5 + 71040 z^4 + 95760 z^3 + 190890 z^2 + 436590 z + 2837835) I_0\left(\frac{z}{2}\right) - \frac{1}{11486475 z^3} (64 e^{z/2} (16384 z^8 - 100352 z^7 - 21504 z^6 - 19776 z^5 - 31800 z^4 - 68355 z^3 - 158760 z^2 + 873180 z + 5675670) I_1\left(\frac{z}{2}\right))$$

07.25.03.4270.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{e^z (-512 z^8 + 3200 z^7 + 1344 z^6 + 1632 z^5 + 3120 z^4 + 7560 z^3 + 18900 z^2 - 47250 z - 694575)}{12288 z^4} + \frac{\sqrt{\pi} (1024 z^9 - 6912 z^8 + 136080 z^2 + 510300 z + 694575) \operatorname{erfi}(\sqrt{z})}{24576 z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.4271.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) &= \frac{e^{-z}(-512z^8 - 3200z^7 + 1344z^6 - 1632z^5 + 3120z^4 - 7560z^3 + 18900z^2 + 47250z - 694575)}{12288z^4} + \\
 & \frac{\sqrt{\pi}(-1024z^9 - 6912z^8 + 136080z^2 - 510300z + 694575)\operatorname{erf}(\sqrt{z})}{24576z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4272.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{5}{2}, 6; z\right) &= \\
 & \frac{1}{43648605z^3} \left(32e^{z/2}(65536z^8 - 516096z^7 + 319488z^6 + 165120z^5 + 231840z^4 + 495180z^3 + 1309770z^2 + \right. \\
 & \left. 19864845z + 68108040)I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{43648605z^4} \left(32e^{z/2}(65536z^9 - 450560z^8 - 98304z^7 - 92928z^6 - 156000z^5 - 361620z^4 - \right. \right. \\
 & \left. \left. 992250z^3 + 13752585z^2 + 79459380z + 272432160)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.4273.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) &= \frac{1}{3}e^z(1280z^4 - 3200z^3 + 384z^2 - 18z + 3) - \frac{64}{3}\sqrt{\pi}(20z^{9/2} - 60z^{7/2} + 21z^{5/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4274.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) &= \frac{1}{3}e^{-z}(1280z^4 + 3200z^3 + 384z^2 + 18z + 3) + \frac{64}{3}\sqrt{\pi}(20z^{9/2} + 60z^{7/2} + 21z^{5/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4275.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) &= \frac{1}{3}e^z(-640z^4 + 2560z^3 - 1056z^2 - 48z + 3) + \frac{32}{3}\sqrt{\pi}(20z^{9/2} - 90z^{7/2} + 63z^{5/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4276.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) &= \frac{1}{3}e^{-z}(-640z^4 - 2560z^3 - 1056z^2 + 48z + 3) - \frac{32}{3}\sqrt{\pi}(20z^{9/2} + 90z^{7/2} + 63z^{5/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4277.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) &= \frac{1}{3}e^z(80z^4 - 440z^3 + 324z^2 + 42z + 3) - \frac{8}{3}\sqrt{\pi}(10z^{9/2} - 60z^{7/2} + 63z^{5/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4278.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) &= \frac{1}{3}e^{-z}(80z^4 + 440z^3 + 324z^2 - 42z + 3) + \frac{8}{3}\sqrt{\pi}(10z^{9/2} + 60z^{7/2} + 63z^{5/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4279.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, 1; z\right) &= \frac{1}{945}e^{z/2}(-10240z^5 + 76800z^4 - 131712z^3 + 39504z^2 + 6615z + 945)I_0\left(\frac{z}{2}\right) + \\
 & \frac{1}{945}e^{z/2}(10240z^5 - 66560z^4 + 70272z^3 + 7728z^2 + 1689z)I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

07.25.03.4280.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (8z^4 - 56z^3 + 60z^2 + 12z + 3) - \frac{4}{3} \sqrt{\pi} z^{5/2} (2z^2 - 15z + 21) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4281.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{4}{3} \sqrt{\pi} (2z^2 + 15z + 21) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (8z^4 + 56z^3 + 60z^2 - 12z + 3)$$

07.25.03.4282.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2} (-20480z^5 + 184320z^4 - 383232z^3 + 137184z^2 + 33390z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (20480z^5 - 163840z^4 + 229632z^3 + 31008z^2 + 12594z + 1575) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.4283.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{3} e^z (2z^4 - 17z^3 + 24z^2 + 6z + 3) - \frac{1}{6} \sqrt{\pi} z^{5/2} (4z^2 - 36z + 63) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4284.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{6} \sqrt{\pi} (4z^2 + 36z + 63) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (2z^4 + 17z^3 + 24z^2 - 6z + 3)$$

07.25.03.4285.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (20480z^6 - 194560z^5 + 340224z^4 + 51936z^3 + 27858z^2 + 15750z - 11025) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (10240z^5 - 107520z^4 + 262272z^3 - 105744z^2 - 31815z - 18270) I_0\left(\frac{z}{2}\right)}{135135z}$$

07.25.03.4286.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (320z^6 - 3200z^5 + 5616z^4 + 1608z^3 + 1092z^2 + 630z - 945)}{1344z^2} + \frac{\sqrt{\pi} (-640z^7 + 6720z^6 - 14112z^5 + 945) \operatorname{erfi}(\sqrt{z})}{2688z^{5/2}}$$

07.25.03.4287.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (320z^6 + 3200z^5 + 5616z^4 - 1608z^3 + 1092z^2 - 630z - 945)}{1344z^2} + \frac{\sqrt{\pi} (640z^7 + 6720z^6 + 14112z^5 + 945) \operatorname{erf}(\sqrt{z})}{2688z^{5/2}}$$

07.25.03.4288.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (8192z^7 - 90112z^6 + 188928z^5 + 31296z^4 + 19668z^3 + 17010z^2 + 6615z - 79380) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (8192z^6 - 98304z^5 + 274944z^4 - 120768z^3 - 41580z^2 - 32130z - 19845) I_0\left(\frac{z}{2}\right)}{135135z^2}$$

07.25.03.4289.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (640 z^7 - 7360 z^6 + 15456 z^5 + 4848 z^4 + 3912 z^3 + 3780 z^2 + 630 z - 23625)}{6144 z^3} + \frac{\sqrt{\pi} (-1280 z^8 + 15360 z^7 - 37632 z^6 + 15120 z + 23625) \operatorname{erfi}(\sqrt{z})}{12288 z^{7/2}}$$

07.25.03.4290.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (640 z^7 + 7360 z^6 + 15456 z^5 - 4848 z^4 + 3912 z^3 - 3780 z^2 + 630 z + 23625)}{6144 z^3} + \frac{\sqrt{\pi} (1280 z^8 + 15360 z^7 + 37632 z^6 + 15120 z - 23625) \operatorname{erf}(\sqrt{z})}{12288 z^{7/2}}$$

07.25.03.4291.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, 5; z\right) = \frac{1}{2297295 z^3} - \frac{32 e^{z/2} (8192 z^8 - 102400 z^7 + 250368 z^6 + 43968 z^5 + 30612 z^4 + 32760 z^3 + 33075 z^2 - 238140 z - 873180) I_1\left(\frac{z}{2}\right) - \frac{1}{2297295 z^2} 32 e^{z/2} (8192 z^7 - 110592 z^6 + 348672 z^5 - 163392 z^4 - 61740 z^3 - 56700 z^2 - 59535 z - 218295) I_0\left(\frac{z}{2}\right)}{2297295 z^2}$$

07.25.03.4292.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{24576 z^4} e^z (1280 z^8 - 16640 z^7 + 40704 z^6 + 13632 z^5 + 12288 z^4 + 15120 z^3 + 15120 z^2 - 94500 z - 496125) + \frac{\sqrt{\pi} (-2560 z^9 + 34560 z^8 - 96768 z^7 + 136080 z^2 + 425250 z + 496125) \operatorname{erfi}(\sqrt{z})}{49152 z^{9/2}}$$

07.25.03.4293.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{24576 z^4} e^{-z} (1280 z^8 + 16640 z^7 + 40704 z^6 - 13632 z^5 + 12288 z^4 - 15120 z^3 + 15120 z^2 + 94500 z - 496125) + \frac{\sqrt{\pi} (2560 z^9 + 34560 z^8 + 96768 z^7 + 136080 z^2 - 425250 z + 496125) \operatorname{erf}(\sqrt{z})}{49152 z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.4294.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{3}{2}, 6; z\right) = \\
 & \frac{1}{43\,648\,605\,z^4} \left(32 e^{z/2} (81\,920 z^9 - 1\,146\,880 z^8 + 3\,204\,096 z^7 + 587\,904 z^6 + 439\,752 z^5 + 535\,500 z^4 + 749\,700 z^3 - \right. \\
 & \quad \left. 7\,600\,635 z^2 - 37\,546\,740 z - 90\,810\,720) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{43\,648\,605\,z^3} \left(32 e^{z/2} (81\,920 z^8 - 1\,228\,800 z^7 + 4\,310\,016 z^6 - 2\,124\,672 z^5 - 859\,320 z^4 - \right. \\
 & \quad \left. 883\,260 z^3 - 1\,190\,700 z^2 - 9\,386\,685 z - 22\,702\,680) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.4295.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{3} e^z (320 z^4 - 2000 z^3 + 2184 z^2 - 138 z + 3) - \frac{2}{3} \sqrt{\pi} (160 z^{9/2} - 1080 z^{7/2} + 1512 z^{5/2} - 315 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4296.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \\
 & \frac{1}{3} e^{-z} (320 z^4 + 2000 z^3 + 2184 z^2 + 138 z + 3) + \frac{2}{3} \sqrt{\pi} (160 z^{9/2} + 1080 z^{7/2} + 1512 z^{5/2} + 315 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4297.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (-40 z^4 + 340 z^3 - 606 z^2 + 132 z + 3) + \frac{1}{3} \sqrt{\pi} (40 z^{9/2} - 360 z^{7/2} + 756 z^{5/2} - 315 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4298.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \\
 & \frac{1}{3} e^{-z} (-40 z^4 - 340 z^3 - 606 z^2 - 132 z + 3) + \frac{1}{3} \sqrt{\pi} (-40 z^{9/2} - 360 z^{7/2} - 756 z^{5/2} - 315 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4299.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (5120 z^5 - 55\,680 z^4 + 163\,488 z^3 - 141\,306 z^2 + 20\,790 z + 945) I_0\left(\frac{z}{2}\right) - \\
 & \frac{2}{945} e^{z/2} (2560 z^5 - 25\,280 z^4 + 57\,744 z^3 - 22\,989 z^2 - 1002 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4300.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{12} \sqrt{\pi} (16 z^3 - 180 z^2 + 504 z - 315) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{6} e^z (-8 z^4 + 86 z^3 - 213 z^2 + 84 z + 6)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4301.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{6} e^{-z} (-8 z^4 - 86 z^3 - 213 z^2 - 84 z + 6) - \frac{1}{12} \sqrt{\pi} z^{3/2} (16 z^3 + 180 z^2 + 504 z + 315) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.4302.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^{z/2} (10240 z^5 - 134400 z^4 + 489408 z^3 - 539436 z^2 + 111510 z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (-10240 z^5 + 124160 z^4 - 370368 z^3 + 220908 z^2 + 16374 z + 945) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.4303.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{24} \sqrt{\pi} (8 z^3 - 108 z^2 + 378 z - 315) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{12} e^z (-4 z^4 + 52 z^3 - 165 z^2 + 96 z + 12)$$

07.25.03.4304.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{12} e^{-z} (-4 z^4 - 52 z^3 - 165 z^2 - 96 z + 12) - \frac{1}{24} \sqrt{\pi} z^{3/2} (8 z^3 + 108 z^2 + 378 z + 315) \operatorname{erf}(\sqrt{z})$$

07.25.03.4305.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (10240 z^5 - 157440 z^4 + 684096 z^3 - 911172 z^2 + 234360 z + 34965) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (10240 z^6 - 147200 z^5 + 542016 z^4 - 432516 z^3 - 42348 z^2 - 8505 z + 4725) I_1\left(\frac{z}{2}\right)}{135135 z}$$

07.25.03.4306.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^{-z} (-1280 z^6 + 19520 z^5 - 75552 z^4 + 58584 z^3 + 9996 z^2 + 1890 z - 2835)}{10752 z^2} + \frac{\sqrt{\pi} (2560 z^7 - 40320 z^6 + 169344 z^5 - 176400 z^4 + 2835) \operatorname{erfi}(\sqrt{z})}{21504 z^{5/2}}$$

07.25.03.4307.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-1280 z^6 - 19520 z^5 - 75552 z^4 - 58584 z^3 + 9996 z^2 - 1890 z - 2835)}{10752 z^2} + \frac{\sqrt{\pi} (-2560 z^7 - 40320 z^6 - 169344 z^5 - 176400 z^4 + 2835) \operatorname{erf}(\sqrt{z})}{21504 z^{5/2}}$$

07.25.03.4308.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (4096 z^6 - 72192 z^5 + 364416 z^4 - 567192 z^3 + 170100 z^2 + 34020 z + 6615) I_0\left(\frac{z}{2}\right) - \frac{1}{135135 z^2} 4 e^{z/2} (4096 z^7 - 68096 z^6 + 298368 z^5 - 298776 z^4 - 34788 z^3 - 11340 z^2 + 945 z + 26460) I_1\left(\frac{z}{2}\right)}{135135 z}$$

07.25.03.4309.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (-640 z^7 + 11200 z^6 - 51168 z^5 + 49776 z^4 + 10344 z^3 + 3780 z^2 - 1890 z - 14175)}{12288 z^3} + \frac{\sqrt{\pi} (1280 z^8 - 23040 z^7 + 112896 z^6 - 141120 z^5 + 11340 z + 14175) \operatorname{erfi}(\sqrt{z})}{24576 z^{7/2}}$$

07.25.03.4310.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(-640z^7 - 11200z^6 - 51168z^5 - 49776z^4 + 10344z^3 - 3780z^2 - 1890z + 14175)}{12288z^3} + \frac{\sqrt{\pi}(-1280z^8 - 23040z^7 - 112896z^6 - 141120z^5 + 11340z - 14175)\operatorname{erf}(\sqrt{z})}{24576z^{7/2}}$$

07.25.03.4311.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, 5; z\right) = \frac{1}{2297295z^2} 32e^{z/2}(4096z^7 - 81408z^6 + 468096z^5 - 832008z^4 + 279720z^3 + 68040z^2 + 26460z + 59535)I_0\left(\frac{z}{2}\right) - \frac{1}{2297295z^3} 128e^{z/2}(1024z^8 - 19328z^7 + 98208z^6 - 118434z^5 - 15528z^4 - 6615z^3 - 1890z^2 + 26460z + 59535)I_1\left(\frac{z}{2}\right)$$

07.25.03.4312.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{98304z^4} e^z(-2560z^8 + 50560z^7 - 266304z^6 + 312288z^5 + 74352z^4 + 37800z^3 + 3780z^2 - 179550z - 496125) + \frac{\sqrt{\pi}(5120z^9 - 103680z^8 + 580608z^7 - 846720z^6 + 204120z^2 + 510300z + 496125)\operatorname{erfi}(\sqrt{z})}{196608z^{9/2}}$$

07.25.03.4313.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{98304z^4} e^{-z}(-2560z^8 - 50560z^7 - 266304z^6 - 312288z^5 + 74352z^4 - 37800z^3 + 3780z^2 + 179550z - 496125) + \frac{1}{196608z^{9/2}} \sqrt{\pi}(-5120z^9 - 103680z^8 - 580608z^7 - 846720z^6 + 204120z^2 - 510300z + 496125)\operatorname{erf}(\sqrt{z})$$

07.25.03.4314.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; -\frac{1}{2}, 6; z\right) = \frac{1}{43648605z^3} \left(32e^{z/2}(40960z^8 - 906240z^7 + 5846784z^6 - 11669808z^5 + 4286520z^4 + 1198260z^3 + 661500z^2 + 3036285z + 5239080)I_0\left(\frac{z}{2}\right) - \frac{1}{43648605z^4} \left(32e^{z/2}(40960z^9 - 865280z^8 + 5001984z^7 - 7059504z^6 - 1009272z^5 - 510300z^4 - 283500z^3 + 3300885z^2 + 12145140z + 20956320)I_1\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{1}{2}$

07.25.03.4315.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{24} e^z (40 z^4 - 460 z^3 + 1302 z^2 - 789 z + 24) + \frac{1}{48} \sqrt{\pi} (-80 z^{9/2} + 960 z^{7/2} - 3024 z^{5/2} + 2520 z^{3/2} - 315 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4316.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{24} e^{-z} (40 z^4 + 460 z^3 + 1302 z^2 + 789 z + 24) + \frac{1}{48} \sqrt{\pi} (80 z^{9/2} + 960 z^{7/2} + 3024 z^{5/2} + 2520 z^{3/2} + 315 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4317.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-640 z^5 + 9120 z^4 - 37932 z^3 + 53364 z^2 - 21735 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (640 z^5 - 8480 z^4 + 29772 z^3 - 27192 z^2 + 2949 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.4318.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{48} e^z (8 z^4 - 116 z^3 + 450 z^2 - 453 z + 48) - \frac{1}{96} \sqrt{\pi} \sqrt{z} (16 z^4 - 240 z^3 + 1008 z^2 - 1260 z + 315) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4319.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{48} e^{-z} (8 z^4 + 116 z^3 + 450 z^2 + 453 z + 48) + \frac{1}{96} \sqrt{\pi} \sqrt{z} (16 z^4 + 240 z^3 + 1008 z^2 + 1260 z + 315) \operatorname{erf}(\sqrt{z})$$

07.25.03.4320.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, 2; z\right) = \frac{e^{z/2} (-1280 z^5 + 22080 z^4 - 115032 z^3 + 211524 z^2 - 122220 z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (1280 z^5 - 20800 z^4 + 94872 z^3 - 125772 z^2 + 27084 z + 315) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.4321.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{192} e^z (8 z^4 - 140 z^3 + 690 z^2 - 975 z + 192) - \frac{1}{384} \sqrt{\pi} \sqrt{z} (16 z^4 - 288 z^3 + 1512 z^2 - 2520 z + 945) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4322.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{192} e^{-z} (8 z^4 + 140 z^3 + 690 z^2 + 975 z + 192) + \frac{1}{384} \sqrt{\pi} \sqrt{z} (16 z^4 + 288 z^3 + 1512 z^2 + 2520 z + 945) \operatorname{erf}(\sqrt{z})$$

07.25.03.4323.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (1280 z^6 - 24640 z^5 + 138264 z^4 - 240504 z^3 + 78888 z^2 + 2520 z - 945) I_1\left(\frac{z}{2}\right) - 16 e^{z/2} (320 z^5 - 6480 z^4 + 40566 z^3 - 91932 z^2 + 67725 z - 8505) I_0\left(\frac{z}{2}\right)}{135135 z}$$

07.25.03.4324.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^{-z} (320 z^6 - 6560 z^5 + 39216 z^4 - 71472 z^3 + 21252 z^2 + 630 z - 945)}{21504 z^2} + \frac{\sqrt{\pi} (-640 z^7 + 13440 z^6 - 84672 z^5 + 176400 z^4 - 88200 z^3 + 945) \operatorname{erfi}(\sqrt{z})}{43008 z^{5/2}}$$

07.25.03.4325.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (320 z^6 + 6560 z^5 + 39216 z^4 + 71472 z^3 + 21252 z^2 - 630 z - 945)}{21504 z^2} + \frac{\sqrt{\pi} (640 z^7 + 13440 z^6 + 84672 z^5 + 176400 z^4 + 88200 z^3 + 945) \operatorname{erf}(\sqrt{z})}{43008 z^{5/2}}$$

07.25.03.4326.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (512 z^7 - 11392 z^6 + 75888 z^5 - 163464 z^4 + 72588 z^3 + 3780 z^2 - 945 z - 3780) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (512 z^6 - 11904 z^5 + 87024 z^4 - 234168 z^3 + 207900 z^2 - 34020 z - 945) I_0\left(\frac{z}{2}\right)}{135135 z^2}$$

07.25.03.4327.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^{-z} (640 z^7 - 15040 z^6 + 105696 z^5 - 236112 z^4 + 95352 z^3 + 6300 z^2 - 5670 z - 14175)}{98304 z^3} + \frac{\sqrt{\pi} (-1280 z^8 + 30720 z^7 - 225792 z^6 + 564480 z^5 - 352800 z^4 + 15120 z + 14175) \operatorname{erfi}(\sqrt{z})}{196608 z^{7/2}}$$

07.25.03.4328.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (640 z^7 + 15040 z^6 + 105696 z^5 + 236112 z^4 + 95352 z^3 - 6300 z^2 - 5670 z + 14175)}{98304 z^3} + \frac{\sqrt{\pi} (1280 z^8 + 30720 z^7 + 225792 z^6 + 564480 z^5 + 352800 z^4 + 15120 z - 14175) \operatorname{erf}(\sqrt{z})}{196608 z^{7/2}}$$

07.25.03.4329.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, 5; z\right) = \frac{1}{2297295 z^3} 32 e^{z/2} (512 z^8 - 12928 z^7 + 99696 z^6 - 256128 z^5 + 144012 z^4 + 10080 z^3 - 945 z^2 - 18900 z - 26460) I_1\left(\frac{z}{2}\right) - \frac{1}{2297295 z^2} 32 e^{z/2} (512 z^7 - 13440 z^6 + 112368 z^5 - 349872 z^4 + 361620 z^3 - 71820 z^2 - 4725 z - 6615) I_0\left(\frac{z}{2}\right)$$

07.25.03.4330.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{196608 z^4} e^z (640 z^8 - 16960 z^7 + 136992 z^6 - 362544 z^5 + 186504 z^4 + 18900 z^3 - 9450 z^2 - 61425 z - 99225) + \frac{1}{393216 z^{9/2}} \sqrt{\pi} (-1280 z^9 + 34560 z^8 - 290304 z^7 + 846720 z^6 - 635040 z^5 + 68040 z^2 + 127575 z + 99225) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4331.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{196608 z^4} e^{-z} (640 z^8 + 16960 z^7 + 136992 z^6 + 362544 z^5 + 186504 z^4 - 18900 z^3 - 9450 z^2 + 61425 z - 99225) + \frac{1}{393216 z^{9/2}} \sqrt{\pi} (1280 z^9 + 34560 z^8 + 290304 z^7 + 846720 z^6 + 635040 z^5 + 68040 z^2 - 127575 z + 99225) \operatorname{erf}(\sqrt{z})$$

07.25.03.4332.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{1}{2}, 6; z\right) = \frac{1}{43648605 z^4} \left(32 e^{z/2} (5120 z^9 - 144640 z^8 + 1267296 z^7 - 3782256 z^6 + 2579232 z^5 + 220500 z^4 + 9450 z^3 - 626535 z^2 - 1561140 z - 1905120) I_1\left(\frac{z}{2}\right) - \frac{1}{43648605 z^3} \left(32 e^{z/2} (5120 z^8 - 149760 z^7 + 1409376 z^6 - 4982352 z^5 + 5856480 z^4 - 1349460 z^3 - 141750 z^2 - 390285 z - 476280) I_0\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 1$

07.25.03.4333.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{945} e^{z/2} (-64 z^5 + 1128 z^4 - 6072 z^3 + 11784 z^2 - 7560 z + 945) I_0\left(\frac{z}{2}\right) + \frac{4}{945} e^{z/2} (16 z^5 - 266 z^4 + 1260 z^3 - 1803 z^2 + 501 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.4334.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{945} e^{z/2} (-16 z^5 + 336 z^4 - 2220 z^3 + 5484 z^2 - 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^5 - 320 z^4 + 1908 z^3 - 3720 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{3}{2}$

07.25.03.4335.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (32 z^4 - 584 z^3 + 3084 z^2 - 5010 z + 1605)}{1920} + \frac{\sqrt{\pi} (-64 z^5 + 1200 z^4 - 6720 z^3 + 12600 z^2 - 6300 z + 315) \operatorname{erfi}(\sqrt{z})}{3840 \sqrt{z}}$$

07.25.03.4336.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (32 z^4 + 584 z^3 + 3084 z^2 + 5010 z + 1605)}{1920} + \frac{\sqrt{\pi} (64 z^5 + 1200 z^4 + 6720 z^3 + 12600 z^2 + 6300 z + 315) \operatorname{erf}(\sqrt{z})}{3840 \sqrt{z}}$$

07.25.03.4337.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{3}{2}, 2; z\right) = \frac{e^{z/2} (-128 z^5 + 2736 z^4 - 18552 z^3 + 47724 z^2 - 44100 z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2} (128 z^5 - 2608 z^4 + 16008 z^3 - 32892 z^2 + 17004 z - 315) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.4338.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (16 z^4 - 352 z^3 + 2352 z^2 - 5280 z + 2895)}{3840} + \frac{\sqrt{\pi} (-32 z^5 + 720 z^4 - 5040 z^3 + 12600 z^2 - 9450 z + 945) \operatorname{erfi}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.4339.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (16 z^4 + 352 z^3 + 2352 z^2 + 5280 z + 2895)}{3840} + \frac{\sqrt{\pi} (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945) \operatorname{erf}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.4340.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (128 z^6 - 3088 z^5 + 23280 z^4 - 62364 z^3 + 47388 z^2 - 2205 z + 315) I_1\left(\frac{z}{2}\right)}{135135 z} - \frac{4 e^{z/2} (128 z^5 - 3216 z^4 + 26304 z^3 - 84228 z^2 + 100800 z - 33705) I_0\left(\frac{z}{2}\right)}{135135}$$

07.25.03.4341.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (128 z^6 - 3296 z^5 + 26640 z^4 - 76368 z^3 + 59808 z^2 - 630 z + 945)}{86016 z^2} + \frac{\sqrt{\pi} (-256 z^7 + 6720 z^6 - 56448 z^5 + 176400 z^4 - 176400 z^3 + 26460 z^2 - 945) \operatorname{erfi}(\sqrt{z})}{172032 z^{5/2}}$$

07.25.03.4342.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (128 z^6 + 3296 z^5 + 26640 z^4 + 76368 z^3 + 59808 z^2 + 630 z + 945)}{86016 z^2} + \frac{\sqrt{\pi} (256 z^7 + 6720 z^6 + 56448 z^5 + 176400 z^4 + 176400 z^3 + 26460 z^2 - 945) \operatorname{erf}(\sqrt{z})}{172032 z^{5/2}}$$

07.25.03.4343.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (256 z^7 - 7136 z^6 + 63792 z^5 - 210720 z^4 + 211740 z^3 - 17010 z^2 + 2835 z + 3780) I_1\left(\frac{z}{2}\right)}{675675 z^2} - \frac{4 e^{z/2} (256 z^6 - 7392 z^5 + 70800 z^4 - 271200 z^3 + 396900 z^2 - 168210 z + 945) I_0\left(\frac{z}{2}\right)}{675675 z}$$

07.25.03.4344.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 3776 z^6 + 35808 z^5 - 124944 z^4 + 127704 z^3 - 3780 z^2 + 4410 z + 4725)}{196608 z^3} + \frac{1}{393216 z^{7/2}} \sqrt{\pi} (-256 z^8 + 7680 z^7 - 75264 z^6 + 282240 z^5 - 352800 z^4 + 70560 z^3 - 7560 z - 4725) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4345.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 3776 z^6 + 35808 z^5 + 124944 z^4 + 127704 z^3 + 3780 z^2 + 4410 z - 4725)}{196608 z^3} + \frac{\sqrt{\pi} (256 z^8 + 7680 z^7 + 75264 z^6 + 282240 z^5 + 352800 z^4 + 70560 z^3 - 7560 z + 4725) \operatorname{erf}(\sqrt{z})}{393216 z^{7/2}}$$

07.25.03.4346.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{3}{2}, 5; z\right) = \frac{1}{11486475 z^3} 64 e^{z/2} (128 z^8 - 4048 z^7 + 41856 z^6 - 164400 z^5 + 205680 z^4 - 24255 z^3 + 3780 z^2 + 11340 z + 9450) I_1\left(\frac{z}{2}\right) - \frac{32 e^{z/2} (256 z^7 - 8352 z^6 + 91680 z^5 - 408720 z^4 + 705600 z^3 - 357210 z^2 + 5670 z + 4725) I_0\left(\frac{z}{2}\right)}{11486475 z^2}$$

07.25.03.4347.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{1572864 z^4} e^z (512 z^8 - 17024 z^7 + 185280 z^6 - 761952 z^5 + 962832 z^4 - 52920 z^3 + 49140 z^2 + 103950 z + 99225) + \frac{1}{3145728 z^{9/2}} \left(\sqrt{\pi} (-1024 z^9 + 34560 z^8 - 387072 z^7 + 1693440 z^6 - 2540160 z^5 + 635040 z^4 - 136080 z^2 - 170100 z - 99225) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.4348.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}, \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{1572864 z^4} e^{-z} (512 z^8 + 17024 z^7 + 185280 z^6 + 761952 z^5 + 962832 z^4 + 52920 z^3 + 49140 z^2 - 103950 z + 99225) + \frac{1}{3145728 z^{9/2}} \left(\sqrt{\pi} (1024 z^9 + 34560 z^8 + 387072 z^7 + 1693440 z^6 + 2540160 z^5 + 635040 z^4 - 136080 z^2 + 170100 z - 99225) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.4349.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}, \frac{3}{2}, 6; z\right) = \frac{1}{43648605 z^4} \left(32 e^{z/2} (512 z^9 - 18112 z^8 + 212640 z^7 - 968016 z^6 + 1450272 z^5 - 229320 z^4 + 30870 z^3 + 165375 z^2 + 253260 z + 211680) I_1\left(\frac{z}{2}\right) - \frac{1}{43648605 z^3} \left(32 e^{z/2} (512 z^8 - 18624 z^7 + 230496 z^6 - 1172112 z^5 + 2328480 z^4 - 1358280 z^3 + 39690 z^2 + 63315 z + 52920) I_0\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 2$

07.25.03.4350.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}, 2, \frac{5}{2}; z\right) = \frac{e^{z/2} (-32 z^5 + 816 z^4 - 6816 z^3 + 22524 z^2 - 28350 z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (32 z^5 - 784 z^4 + 6048 z^3 - 16836 z^2 + 13854 z - 945) I_1\left(\frac{z}{2}\right)}{10395}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{5}{2}$

07.25.03.4351.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}, \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (32 z^5 - 848 z^4 + 7152 z^3 - 22008 z^2 + 20010 z - 945)}{30720 z} + \frac{\sqrt{\pi} (-64 z^6 + 1728 z^5 - 15120 z^4 + 50400 z^3 - 56700 z^2 + 11340 z + 945) \operatorname{erfi}(\sqrt{z})}{61440 z^{3/2}}$$

07.25.03.4352.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}, \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 848 z^4 + 7152 z^3 + 22008 z^2 + 20010 z + 945)}{30720 z} + \frac{\sqrt{\pi} (64 z^6 + 1728 z^5 + 15120 z^4 + 50400 z^3 + 56700 z^2 + 11340 z - 945) \operatorname{erf}(\sqrt{z})}{61440 z^{3/2}}$$

07.25.03.4353.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (32 z^6 - 928 z^5 + 8784 z^4 - 31776 z^3 + 37938 z^2 - 5670 z - 945) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (16 z^5 - 480 z^4 + 4848 z^3 - 20064 z^2 + 33075 z - 17010) I_0\left(\frac{z}{2}\right)}{135 135 z}$$

07.25.03.4354.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (64 z^6 - 1984 z^5 + 20208 z^4 - 79008 z^3 + 100716 z^2 - 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (-128 z^7 + 4032 z^6 - 42336 z^5 + 176400 z^4 - 264600 z^3 + 79380 z^2 + 13230 z + 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4355.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1984 z^5 + 20208 z^4 + 79008 z^3 + 100716 z^2 + 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835) \operatorname{erf}(\sqrt{z})$$

07.25.03.4356.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^7 - 2144 z^6 + 24048 z^5 - 107040 z^4 + 167640 z^3 - 39690 z^2 - 12285 z - 3780) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (64 z^6 - 2208 z^5 + 26160 z^4 - 130080 z^3 + 264600 z^2 - 171990 z - 945) I_0\left(\frac{z}{2}\right)}{675 675 z^2}$$

07.25.03.4357.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 4544 z^6 + 54240 z^5 - 257232 z^4 + 422616 z^3 - 79380 z^2 - 35910 z - 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} (\sqrt{\pi} (-256 z^8 + 9216 z^7 - 112896 z^6 + 564480 z^5 - 1058400 z^4 + 423360 z^3 + 105840 z^2 + 45360 z + 14175) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.4358.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 4544 z^6 + 54240 z^5 + 257232 z^4 + 422616 z^3 + 79380 z^2 - 35910 z + 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} \sqrt{\pi} (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175) \operatorname{erf}(\sqrt{z})$$

07.25.03.4359.01

$${}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{5}{2}, 5; z\right) = \frac{1}{11486475 z^3} - \frac{32 e^{z/2} (64 z^8 - 2432 z^7 + 31536 z^6 - 166656 z^5 + 323160 z^4 - 105840 z^3 - 46305 z^2 - 26460 z - 11340) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^7 - 2496 z^6 + 33936 z^5 - 197040 z^4 + 476280 z^3 - 370440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right)}{11486475 z^2}$$

$$\begin{aligned}
 & \text{07.25.03.4360.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{3\,145\,728\,z^4} e^z (256\,z^8 - 10\,240\,z^7 + 140\,160\,z^6 - 781\,440\,z^5 + 1\,572\,864\,z^4 - 423\,360\,z^3 - 264\,600\,z^2 - 189\,000\,z - 99\,225) + \\
 & \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (-512\,z^9 + 20\,736\,z^8 - 290\,304\,z^7 + 1\,693\,440\,z^6 - \right. \\
 & \quad \left. 3\,810\,240\,z^5 + 1\,905\,120\,z^4 + 635\,040\,z^3 + 408\,240\,z^2 + 255\,150\,z + 99\,225) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4361.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{3\,145\,728\,z^4} e^{-z} (256\,z^8 + 10\,240\,z^7 + 140\,160\,z^6 + 781\,440\,z^5 + 1\,572\,864\,z^4 + 423\,360\,z^3 - 264\,600\,z^2 + 189\,000\,z - 99\,225) + \\
 & \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (512\,z^9 + 20\,736\,z^8 + 290\,304\,z^7 + 1\,693\,440\,z^6 + \right. \\
 & \quad \left. 3\,810\,240\,z^5 + 1\,905\,120\,z^4 - 635\,040\,z^3 + 408\,240\,z^2 - 255\,150\,z + 99\,225) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4362.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{5}{2}; \frac{5}{2}, 6; z\right) = \\
 & \frac{1}{43\,648\,605\,z^4} \left(32\,e^{z/2} (128\,z^9 - 5440\,z^8 + 80\,064\,z^7 - 489\,840\,z^6 + 1\,132\,752\,z^5 - 476\,280\,z^4 - 264\,600\,z^3 - \right. \\
 & \quad \left. 214\,515\,z^2 - 170\,100\,z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \right. \\
 & \quad \left. 32\,e^{z/2} (128\,z^8 - 5568\,z^7 + 85\,440\,z^6 - 567\,312\,z^5 + 1\,587\,600\,z^4 - 1\,428\,840\,z^3 - 52\,920\,z^2 - 42\,525\,z - 22\,680) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.4363.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \frac{-64\,z^9 - 1248\,z^8 - 5664\,z^7 - 1792\,z^6 - 672\,z^5 + 2160\,z^4 - 6000\,z^3 + 17\,640\,z^2 - 51\,030\,z + 114\,345}{114\,345} - \\
 & \frac{16\,e^z \sqrt{\pi} (4\,z^{19/2} + 80\,z^{17/2} + 391\,z^{15/2} + 255\,z^{13/2}) \operatorname{erf}(\sqrt{z})}{114\,345}
 \end{aligned}$$

07.25.03.4364.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{64 z^9 - 1248 z^8 + 5664 z^7 - 1792 z^6 + 672 z^5 + 2160 z^4 + 6000 z^3 + 17640 z^2 + 51030 z + 114345}{114345} - \frac{16 e^{-z} \sqrt{\pi} (4 z^{19/2} - 80 z^{17/2} + 391 z^{15/2} - 255 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{114345}$$

07.25.03.4365.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{32 z^8 + 528 z^7 + 1792 z^6 - 672 z^5 + 720 z^4 - 1200 z^3 + 2520 z^2 - 5670 z + 10395}{10395} + \frac{8 e^z \sqrt{\pi} (4 z^{17/2} + 68 z^{15/2} + 255 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.4366.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{32 z^8 - 528 z^7 + 1792 z^6 + 672 z^5 + 720 z^4 + 1200 z^3 + 2520 z^2 + 5670 z + 10395}{10395} - \frac{8 e^{-z} \sqrt{\pi} (4 z^{17/2} - 68 z^{15/2} + 255 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.4367.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{-16 z^7 - 216 z^6 - 472 z^5 + 720 z^4 - 400 z^3 + 504 z^2 - 810 z + 1155}{1155} - \frac{4 e^z \sqrt{\pi} (4 z^{15/2} + 56 z^{13/2} + 143 z^{11/2} - 143 z^{9/2}) \operatorname{erf}(\sqrt{z})}{1155}$$

07.25.03.4368.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{16 z^7 - 216 z^6 + 472 z^5 + 720 z^4 + 400 z^3 + 504 z^2 + 810 z + 1155}{1155} - \frac{4 e^{-z} \sqrt{\pi} (4 z^{15/2} - 56 z^{13/2} + 143 z^{11/2} + 143 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1155}$$

07.25.03.4369.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{165} (8 z^6 + 84 z^5 + 72 z^4 - 400 z^3 + 168 z^2 - 162 z + 165) + \frac{2}{165} e^z \sqrt{\pi} (4 z^{13/2} + 44 z^{11/2} + 55 z^{9/2} - 198 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4370.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{165} (8 z^6 - 84 z^5 + 72 z^4 + 400 z^3 + 168 z^2 + 162 z + 165) - \frac{2}{165} e^{-z} \sqrt{\pi} (4 z^{13/2} - 44 z^{11/2} + 55 z^{9/2} + 198 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4371.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{33}(-4z^5 - 30z^4 + 22z^3 + 168z^2 - 54z + 33) + \frac{1}{33}e^z\sqrt{\pi}(-4z^{11/2} - 32z^{9/2} + 9z^{7/2} + 189z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4372.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{33}(4z^5 - 30z^4 - 22z^3 + 168z^2 + 54z + 33) + \frac{1}{33}e^{-z}\sqrt{\pi}(-4z^{11/2} + 32z^{9/2} + 9z^{7/2} - 189z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4373.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{11}(2z^4 + 9z^3 - 28z^2 - 54z + 11) + \frac{1}{22}e^z\sqrt{\pi}(4z^{9/2} + 20z^{7/2} - 49z^{5/2} - 140z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4374.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{11}(2z^4 - 9z^3 - 28z^2 + 54z + 11) + \frac{1}{22}e^{-z}\sqrt{\pi}(-4z^{9/2} + 20z^{7/2} + 49z^{5/2} - 140z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4375.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{22}(-2z^3 - 3z^2 + 33z + 22) + \frac{1}{44}e^z\sqrt{\pi}(-4z^{7/2} - 8z^{5/2} + 65z^{3/2} + 75\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.4376.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{22}(2z^3 - 3z^2 - 33z + 22) + \frac{1}{44}e^{-z}\sqrt{\pi}(-4z^{7/2} + 8z^{5/2} + 65z^{3/2} - 75\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4377.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, 1; z\right) = -\frac{1}{22}e^z(2z^3 + z^2 - 32z - 22)$$

07.25.03.4378.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{44}(-2z^2 + 3z + 26) + \frac{e^z\sqrt{\pi}(-4z^3 + 4z^2 + 57z + 18)\operatorname{erf}(\sqrt{z})}{88\sqrt{z}}$$

07.25.03.4379.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{44}(-2z^2 - 3z + 26) + \frac{e^{-z}\sqrt{\pi}(4z^3 + 4z^2 - 57z + 18)\operatorname{erfi}(\sqrt{z})}{88\sqrt{z}}$$

07.25.03.4380.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, 2; z\right) = -\frac{1}{22}e^z(2z^2 - 5z - 22)$$

07.25.03.4381.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, \frac{5}{2}; z\right) = -\frac{3(2z^2 - 9z - 7)}{88z} - \frac{3e^z\sqrt{\pi}(4z^3 - 16z^2 - 25z + 7)\operatorname{erf}(\sqrt{z})}{176z^{3/2}}$$

07.25.03.4382.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{3(2z^2 + 9z - 7)}{88z} - \frac{3e^{-z}\sqrt{\pi}(4z^3 + 16z^2 - 25z - 7)\operatorname{erfi}(\sqrt{z})}{176z^{3/2}}$$

07.25.03.4383.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, 3; z\right) = -\frac{1}{11} e^z (2z - 11)$$

07.25.03.4384.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{15(2z^2 - 15z + 24)}{176z^2} - \frac{15e^z \sqrt{\pi} (4z^3 - 28z^2 + 31z - 24) \operatorname{erf}(\sqrt{z})}{352z^{5/2}}$$

07.25.03.4385.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} \sqrt{\pi} (4z^3 + 28z^2 + 31z + 24) \operatorname{erfi}(\sqrt{z})}{352z^{5/2}} - \frac{15(2z^2 + 15z + 24)}{176z^2}$$

07.25.03.4386.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, 4; z\right) = -\frac{3e^z (2z^3 - 17z^2 + 34z - 34)}{11z^3} - \frac{102}{11z^3}$$

07.25.03.4387.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{105(2z^2 - 21z + 135)}{352z^3} - \frac{105e^z \sqrt{\pi} (4z^3 - 40z^2 + 111z - 135) \operatorname{erf}(\sqrt{z})}{704z^{7/2}}$$

07.25.03.4388.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{105(2z^2 + 21z + 135)}{352z^3} - \frac{105e^{-z} \sqrt{\pi} (4z^3 + 40z^2 + 111z + 135) \operatorname{erfi}(\sqrt{z})}{704z^{7/2}}$$

07.25.03.4389.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, 5; z\right) = -\frac{24(17z + 57)}{11z^4} - \frac{12e^z (2z^3 - 23z^2 + 80z - 114)}{11z^4}$$

07.25.03.4390.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, \frac{11}{2}; z\right) = -\frac{315(6z^2 + 55z + 1050)}{704z^4} - \frac{945e^z \sqrt{\pi} (4z^3 - 52z^2 + 215z - 350) \operatorname{erf}(\sqrt{z})}{1408z^{9/2}}$$

07.25.03.4391.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{945e^{-z} \sqrt{\pi} (4z^3 + 52z^2 + 215z + 350) \operatorname{erfi}(\sqrt{z})}{1408z^{9/2}} - \frac{315(6z^2 - 55z + 1050)}{704z^4}$$

07.25.03.4392.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{11}{2}, 6; z\right) = -\frac{60(17z^2 + 114z + 252)}{11z^5} - \frac{60e^z (2z^3 - 29z^2 + 138z - 252)}{11z^5}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = -\frac{9}{2}$

07.25.03.4393.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{945} (-16z^7 - 232z^6 - 672z^5 + 240z^4 - 240z^3 + 360z^2 - 630z + 945) - \frac{4}{945} e^z \sqrt{\pi} (4z^{15/2} + 60z^{13/2} + 195z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4394.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{945} (16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945) - \frac{4}{945} e^{-z} \sqrt{\pi} (4z^{15/2} - 60z^{13/2} + 195z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4395.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{105} (8z^6 + 100z^5 + 240z^4 - 80z^3 + 72z^2 - 90z + 105) + \frac{2}{105} e^z \sqrt{\pi} (4z^{13/2} + 52z^{11/2} + 143z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4396.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{105} (8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} (4z^{13/2} - 52z^{11/2} + 143z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4397.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} (-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) + \frac{1}{15} e^z \sqrt{\pi} (-4z^{11/2} - 44z^{9/2} - 99z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4398.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15} (4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) + \frac{1}{15} e^{-z} \sqrt{\pi} (-4z^{11/2} + 44z^{9/2} - 99z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4399.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} (2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6} e^z \sqrt{\pi} (4z^{9/2} + 36z^{7/2} + 63z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4400.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} (2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6} e^{-z} \sqrt{\pi} (-4z^{9/2} + 36z^{7/2} - 63z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4401.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{2} (-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4} e^z \sqrt{\pi} (-4z^{7/2} - 28z^{5/2} - 35z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4402.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2} (2z^3 - 13z^2 + 12z + 2) + \frac{1}{4} e^{-z} \sqrt{\pi} (-4z^{7/2} + 28z^{5/2} - 35z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4403.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{4} (2z^2 + 9z + 4) + \frac{1}{8} e^z \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4404.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{4} (2z^2 - 9z + 4) + \frac{1}{8} e^{-z} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4405.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, 1; z\right) = \frac{1}{2} e^z (z^2 + 4z + 2)$$

07.25.03.4406.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{8}(2z+5) + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.4407.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{8}(5-2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.4408.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, 2; z\right) = \frac{1}{2}e^z(z+2)$$

07.25.03.4409.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{3(2z+1)}{16z} + \frac{3e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.4410.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{3(2z-1)}{16z} - \frac{3e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.4411.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, 3; z\right) = e^z$$

07.25.03.4412.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{15(2z-3)}{32z^2} + \frac{15e^z \sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.4413.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} \sqrt{\pi} (4z^2 + 4z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15(2z+3)}{32z^2}$$

07.25.03.4414.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, 4; z\right) = \frac{3e^z(z^2 - 2z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.4415.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{105(2z-15)}{64z^3} + \frac{105e^z \sqrt{\pi} (4z^2 - 12z + 15) \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.4416.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{105(2z+15)}{64z^3} - \frac{105e^{-z} \sqrt{\pi} (4z^2 + 12z + 15) \operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.4417.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, 5; z\right) = \frac{12e^z(z^2 - 4z + 6)}{z^4} - \frac{24(z+3)}{z^4}$$

07.25.03.4418.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 (2z + 21)}{128 z^4}$$

07.25.03.4419.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1575 (2z - 21)}{128 z^4} + \frac{945 e^{-z} \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.4420.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{9}{2}, 6; z\right) = \frac{60 e^z (z^2 - 6z + 12)}{z^5} - \frac{60 (z^2 + 6z + 12)}{z^5}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = -\frac{7}{2}$

07.25.03.4421.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{7}{2}, 1; z\right) = \frac{1}{210} e^z (572z^4 + 286z^3 + 429z^2 + 600z + 210) - \frac{286}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4422.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{7}{2}, 1; -z\right) = \frac{286}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{210} e^{-z} (572z^4 - 286z^3 + 429z^2 - 600z + 210)$$

07.25.03.4423.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{7}{2}, 2; z\right) = \frac{1}{210} e^z (104z^4 + 52z^3 + 78z^2 + 195z + 210) - \frac{52}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4424.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{7}{2}, 2; -z\right) = \frac{52}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{210} e^{-z} (104z^4 - 52z^3 + 78z^2 - 195z + 210)$$

07.25.03.4425.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{7}{2}, 3; z\right) = \frac{1}{105} e^z (16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4426.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{7}{2}, 3; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

07.25.03.4427.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{7}{2}, 4; z\right) = -\frac{32}{525} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{e^z (32z^7 + 16z^6 + 24z^5 + 60z^4 + 210z^3 + 945z^2 - 1890z + 1890)}{525 z^3} - \frac{18}{5 z^3}$$

07.25.03.4428.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{7}{2}, 4; -z\right) = \frac{32}{525} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{e^{-z} (32z^7 - 16z^6 + 24z^5 - 60z^4 + 210z^3 - 945z^2 - 1890z - 1890)}{525 z^3} + \frac{18}{5 z^3}$$

07.25.03.4429.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{7}{2}, 5; z\right) = -\frac{256 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2}}{8925} - \frac{72 (17z + 45)}{85 z^4} + \frac{4 e^z (64z^8 + 32z^7 + 48z^6 + 120z^5 + 420z^4 + 1890z^3 + 10395z^2 - 52920z + 85050)}{8925 z^4}$$

07.25.03.4430.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{7}{2}, 5; -z\right) = \frac{256\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2}}{8925} + \frac{72(17z-45)}{85z^4} + \frac{4e^{-z}(64z^8 - 32z^7 + 48z^6 - 120z^5 + 420z^4 - 1890z^3 + 10395z^2 + 52920z + 85050)}{8925z^4}$$

07.25.03.4431.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{7}{2}, 6; z\right) = -\frac{512\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{9/2}}{33915} - \frac{36(323z^2 + 1710z + 3060)}{323z^5} + \frac{1}{33915z^5}4e^z(128z^9 + 64z^8 + 96z^7 + 240z^6 + 840z^5 + 3780z^4 + 20790z^3 + 135135z^2 - 1275750z + 2891700)$$

07.25.03.4432.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{7}{2}, 6; -z\right) = \frac{512\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2}}{33915} + \frac{36(323z^2 - 1710z + 3060)}{323z^5} + \frac{1}{33915z^5}4e^{-z}(128z^9 - 64z^8 + 96z^7 - 240z^6 + 840z^5 - 3780z^4 + 20790z^3 - 135135z^2 - 1275750z - 2891700)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = -\frac{5}{2}$

07.25.03.4433.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{5}{2}, 1; z\right) = \frac{1}{30}e^z(-286z^4 + 748z^3 + 231z^2 + 132z + 30) + \frac{11}{30}\sqrt{\pi}(26z^{9/2} - 81z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4434.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{5}{2}, 1; -z\right) = \frac{1}{30}e^{-z}(-286z^4 - 748z^3 + 231z^2 - 132z + 30) - \frac{11}{30}\sqrt{\pi}(26z^{9/2} + 81z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4435.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{5}{2}, 2; z\right) = \frac{1}{30}e^z(-52z^4 + 172z^3 + 60z^2 + 51z + 30) + \frac{1}{15}\sqrt{\pi}(26z^{9/2} - 99z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4436.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{5}{2}, 2; -z\right) = \frac{1}{30}e^{-z}(-52z^4 - 172z^3 + 60z^2 - 51z + 30) + \frac{1}{15}\sqrt{\pi}(-26z^{9/2} - 99z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4437.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{5}{2}, 3; z\right) = \frac{1}{15}e^z(-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15}\sqrt{\pi}(2z^{9/2} - 9z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4438.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{5}{2}, 3; -z\right) = \frac{1}{15}e^{-z}(-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15}\sqrt{\pi}(2z^{9/2} + 9z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4439.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{5}{2}, 4; z\right) = \frac{e^z (-208 z^7 + 976 z^6 + 384 z^5 + 420 z^4 + 660 z^3 + 945 z^2 - 1890 z + 1890)}{975 z^3} + \frac{8}{975} \sqrt{\pi} (26 z^{9/2} - 135 z^{7/2}) \operatorname{erfi}(\sqrt{z}) - \frac{126}{65 z^3}$$

07.25.03.4440.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{5}{2}, 4; -z\right) = \frac{e^{-z} (-208 z^7 - 976 z^6 + 384 z^5 - 420 z^4 + 660 z^3 - 945 z^2 - 1890 z - 1890)}{975 z^3} - \frac{8}{975} \sqrt{\pi} (26 z^{9/2} + 135 z^{7/2}) \operatorname{erf}(\sqrt{z}) + \frac{126}{65 z^3}$$

07.25.03.4441.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{5}{2}, 5; z\right) = \frac{504 (17 z + 39)}{1105 z^4} - \frac{4 e^z (416 z^8 - 2240 z^7 - 912 z^6 - 1056 z^5 - 1860 z^4 - 3780 z^3 - 4725 z^2 + 41 580 z - 73 710)}{16 575 z^4} + \frac{64 \sqrt{\pi} (26 z^{9/2} - 153 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{16 575}$$

07.25.03.4442.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{5}{2}, 5; -z\right) = \frac{504 (17 z - 39)}{1105 z^4} - \frac{4 e^{-z} (416 z^8 + 2240 z^7 - 912 z^6 + 1056 z^5 - 1860 z^4 + 3780 z^3 - 4725 z^2 - 41 580 z - 73 710)}{16 575 z^4} - \frac{64 \sqrt{\pi} (26 z^{9/2} + 153 z^{7/2}) \operatorname{erf}(\sqrt{z})}{16 575}$$

07.25.03.4443.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{5}{2}, 6; z\right) = -\frac{252 (323 z^2 + 1482 z + 2340)}{4199 z^5} - \frac{1}{62 985 z^5} 4 e^z (832 z^9 - 5056 z^8 - 2112 z^7 - 2544 z^6 - 4800 z^5 - 11 340 z^4 - 26 460 z^3 - 10 395 z^2 + 810 810 z - 2211 300) + \frac{128 \sqrt{\pi} (26 z^{9/2} - 171 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{62 985}$$

07.25.03.4444.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{5}{2}, 6; -z\right) = \frac{252 (323 z^2 - 1482 z + 2340)}{4199 z^5} - \frac{1}{62 985 z^5} 4 e^{-z} (832 z^9 + 5056 z^8 - 2112 z^7 + 2544 z^6 - 4800 z^5 + 11 340 z^4 - 26 460 z^3 + 10 395 z^2 + 810 810 z + 2211 300) - \frac{128 \sqrt{\pi} (26 z^{9/2} + 171 z^{7/2}) \operatorname{erf}(\sqrt{z})}{62 985}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = -\frac{3}{2}$

07.25.03.4445.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{3}{2}, 1; z\right) = \frac{1}{24} e^z (286 z^4 - 1639 z^3 + 1308 z^2 + 192 z + 24) + \frac{1}{48} \sqrt{\pi} (-572 z^{9/2} + 3564 z^{7/2} - 3969 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4446.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{3}{2}, 1; -z\right) = \frac{1}{24} e^{-z} (286 z^4 + 1639 z^3 + 1308 z^2 - 192 z + 24) + \frac{1}{48} \sqrt{\pi} (572 z^{9/2} + 3564 z^{7/2} + 3969 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4447.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{3}{2}, 2; z\right) = \frac{1}{12} e^z (26 z^4 - 185 z^3 + 204 z^2 + 42 z + 12) + \frac{1}{24} \sqrt{\pi} (-52 z^{9/2} + 396 z^{7/2} - 567 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4448.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{3}{2}, 2; -z\right) = \frac{1}{12} e^{-z} (26 z^4 + 185 z^3 + 204 z^2 - 42 z + 12) + \frac{1}{24} \sqrt{\pi} (52 z^{9/2} + 396 z^{7/2} + 567 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4449.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{3}{2}, 3; z\right) = \frac{1}{3} e^z (2 z^4 - 17 z^3 + 24 z^2 + 6 z + 3) + \frac{1}{6} \sqrt{\pi} (-4 z^{9/2} + 36 z^{7/2} - 63 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4450.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{3}{2}, 3; -z\right) = \frac{1}{3} e^{-z} (2 z^4 + 17 z^3 + 24 z^2 - 6 z + 3) + \frac{1}{6} \sqrt{\pi} (4 z^{9/2} + 36 z^{7/2} + 63 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4451.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{3}{2}, 4; z\right) = \frac{e^z (572 z^7 - 5654 z^6 + 9744 z^5 + 2760 z^4 + 1830 z^3 + 945 z^2 - 1890 z + 1890)}{2145 z^3} + \frac{\sqrt{\pi} (-572 z^{9/2} + 5940 z^{7/2} - 12285 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{2145} - \frac{126}{143 z^3}$$

07.25.03.4452.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{3}{2}, 4; -z\right) = \frac{e^{-z} (572 z^7 + 5654 z^6 + 9744 z^5 - 2760 z^4 + 1830 z^3 - 945 z^2 - 1890 z - 1890)}{2145 z^3} + \frac{\sqrt{\pi} (572 z^{9/2} + 5940 z^{7/2} + 12285 z^{5/2}) \operatorname{erf}(\sqrt{z})}{2145} + \frac{126}{143 z^3}$$

07.25.03.4453.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{3}{2}, 5; z\right) = -\frac{504 (17 z + 33)}{2431 z^4} + \frac{4 e^z (1144 z^8 - 12892 z^7 + 26256 z^6 + 8112 z^5 + 6360 z^4 + 5670 z^3 - 945 z^2 - 30240 z + 62370)}{36465 z^4} - \frac{8 \sqrt{\pi} (572 z^{9/2} - 6732 z^{7/2} + 16065 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{36465}$$

$$\begin{aligned}
 & \text{07.25.03.4454.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 3; -\frac{3}{2}, 5; -z\right) = \\
 & \frac{504(17z - 33)}{2431z^4} + \frac{4e^{-z}(1144z^8 + 12892z^7 + 26256z^6 - 8112z^5 + 6360z^4 - 5670z^3 - 945z^2 + 30240z + 62370)}{36465z^4} + \\
 & \frac{8\sqrt{\pi}(572z^{9/2} + 6732z^{7/2} + 16065z^{5/2})\operatorname{erfi}(\sqrt{z})}{36465}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4455.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 3; -\frac{3}{2}, 6; z\right) = -\frac{1260(323z^2 + 1254z + 1716)}{46189z^5} + \frac{1}{138567z^5} \\
 & (4e^z(2288z^9 - 28952z^8 + 68064z^7 + 22416z^6 + 19632z^5 + 22680z^4 + 17010z^3 - 68985z^2 - 436590z + 1621620)) - \\
 & \frac{16\sqrt{\pi}(572z^{9/2} - 7524z^{7/2} + 20349z^{5/2})\operatorname{erfi}(\sqrt{z})}{138567}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4456.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 3; -\frac{3}{2}, 6; -z\right) = \\
 & \frac{1260(323z^2 - 1254z + 1716)}{46189z^5} + \frac{1}{138567z^5} (4e^{-z}(2288z^9 + 28952z^8 + 68064z^7 - 22416z^6 + 19632z^5 - 22680z^4 + \\
 & 17010z^3 + 68985z^2 - 436590z - 1621620)) + \frac{16\sqrt{\pi}(572z^{9/2} + 7524z^{7/2} + 20349z^{5/2})\operatorname{erfi}(\sqrt{z})}{138567}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.4457.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 3; -\frac{1}{2}, 1; z\right) = \\
 & \frac{1}{96}e^z(-572z^4 + 5060z^3 - 9663z^2 + 2496z + 96) + \frac{1}{192}\sqrt{\pi}(1144z^{9/2} - 10692z^{7/2} + 23814z^{5/2} - 11025z^{3/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4458.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 3; -\frac{1}{2}, 1; -z\right) = \\
 & \frac{1}{96}e^{-z}(-572z^4 - 5060z^3 - 9663z^2 - 2496z + 96) + \frac{1}{192}\sqrt{\pi}(-1144z^{9/2} - 10692z^{7/2} - 23814z^{5/2} - 11025z^{3/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4459.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 3; -\frac{1}{2}, 2; z\right) = \\
 & \frac{1}{48}e^z(-52z^4 + 568z^3 - 1443z^2 + 600z + 48) + \frac{1}{96}\sqrt{\pi}(104z^{9/2} - 1188z^{7/2} + 3402z^{5/2} - 2205z^{3/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.4460.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{1}{2}, 2; -z\right) = \frac{1}{48} e^{-z} (-52 z^4 - 568 z^3 - 1443 z^2 - 600 z + 48) + \frac{1}{96} \sqrt{\pi} (-104 z^{9/2} - 1188 z^{7/2} - 3402 z^{5/2} - 2205 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4461.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{1}{2}, 3; z\right) = \frac{1}{12} e^z (-4 z^4 + 52 z^3 - 165 z^2 + 96 z + 12) + \frac{1}{24} \sqrt{\pi} (8 z^{9/2} - 108 z^{7/2} + 378 z^{5/2} - 315 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4462.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{1}{2}, 3; -z\right) = \frac{1}{12} e^{-z} (-4 z^4 - 52 z^3 - 165 z^2 - 96 z + 12) + \frac{1}{24} \sqrt{\pi} (-8 z^{9/2} - 108 z^{7/2} - 378 z^{5/2} - 315 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4463.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{1}{2}, 4; z\right) = \frac{e^z (-572 z^7 + 8624 z^6 - 32\,829 z^5 + 24\,720 z^4 + 4080 z^3 + 630 z^2 - 1260 z + 1260)}{4290 z^3} + \frac{\sqrt{\pi} (1144 z^{9/2} - 17\,820 z^{7/2} + 73\,710 z^{5/2} - 75\,075 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{8580} - \frac{42}{143 z^3}$$

07.25.03.4464.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{1}{2}, 4; -z\right) = \frac{e^{-z} (-572 z^7 - 8624 z^6 - 32\,829 z^5 - 24\,720 z^4 + 4080 z^3 - 630 z^2 - 1260 z - 1260)}{4290 z^3} + \frac{\sqrt{\pi} (-1144 z^{9/2} - 17\,820 z^{7/2} - 73\,710 z^{5/2} - 75\,075 z^{3/2}) \operatorname{erf}(\sqrt{z})}{8580} + \frac{42}{143 z^3}$$

07.25.03.4465.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{1}{2}, 5; z\right) = \frac{168 (17 z + 27)}{2431 z^4} - \frac{4 e^z (572 z^8 - 9812 z^7 + 43\,575 z^6 - 40\,416 z^5 - 8040 z^4 - 2520 z^3 + 2205 z^2 + 6300 z - 17\,010)}{36\,465 z^4} + \frac{2 \sqrt{\pi} (1144 z^{9/2} - 20\,196 z^{7/2} + 96\,390 z^{5/2} - 116\,025 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{36\,465}$$

07.25.03.4466.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{1}{2}, 5; -z\right) = \frac{168 (17 z - 27)}{2431 z^4} - \frac{4 e^{-z} (572 z^8 + 9812 z^7 + 43\,575 z^6 + 40\,416 z^5 - 8040 z^4 + 2520 z^3 + 2205 z^2 - 6300 z - 17\,010)}{36\,465 z^4} + \frac{2 \sqrt{\pi} (1144 z^{9/2} + 20\,196 z^{7/2} + 96\,390 z^{5/2} + 116\,025 z^{3/2}) \operatorname{erf}(\sqrt{z})}{36\,465}$$

07.25.03.4467.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{1}{2}, 6; z\right) = -\frac{420(323z^2 + 1026z + 1188)}{46189z^5} - \frac{1}{138567z^5} \\ + \frac{4e^z(1144z^9 - 22000z^8 + 111666z^7 - 123312z^6 - 28032z^5 - 12600z^4 + 2520z^3 + 34335z^2 + 51030z - 374220) + 4\sqrt{\pi}(1144z^{9/2} - 22572z^{7/2} + 122094z^{5/2} - 169575z^{3/2})\operatorname{erfi}(\sqrt{z})}{138567}$$

07.25.03.4468.01

$${}_2F_2\left(-\frac{9}{2}, 3; -\frac{1}{2}, 6; -z\right) = \frac{420(323z^2 - 1026z + 1188)}{46189z^5} - \frac{1}{138567z^5} \\ + \frac{(4e^{-z}(1144z^9 + 22000z^8 + 111666z^7 + 123312z^6 - 28032z^5 + 12600z^4 + 2520z^3 - 34335z^2 + 51030z + 374220)) - 4\sqrt{\pi}(1144z^{9/2} + 22572z^{7/2} + 122094z^{5/2} + 169575z^{3/2})\operatorname{erf}(\sqrt{z})}{138567}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = \frac{1}{2}$

07.25.03.4469.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{1}{2}, 1; z\right) = \frac{e^z(1144z^4 - 13684z^3 + 41358z^2 - 28833z + 1536)}{1536} + \\ \frac{\sqrt{\pi}(-2288z^{9/2} + 28512z^{7/2} - 95256z^{5/2} + 88200z^{3/2} - 14175\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3072}$$

07.25.03.4470.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{1}{2}, 1; -z\right) = \frac{e^{-z}(1144z^4 + 13684z^3 + 41358z^2 + 28833z + 1536)}{1536} + \\ \frac{\sqrt{\pi}(2288z^{9/2} + 28512z^{7/2} + 95256z^{5/2} + 88200z^{3/2} + 14175\sqrt{z})\operatorname{erf}(\sqrt{z})}{3072}$$

07.25.03.4471.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{1}{2}, 2; z\right) = \frac{1}{768}e^z(104z^4 - 1532z^3 + 6090z^2 - 6411z + 768) + \\ \frac{\sqrt{\pi}(-208z^{9/2} + 3168z^{7/2} - 13608z^{5/2} + 17640z^{3/2} - 4725\sqrt{z})\operatorname{erfi}(\sqrt{z})}{1536}$$

07.25.03.4472.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{1}{2}, 2; -z\right) = \frac{1}{768}e^{-z}(104z^4 + 1532z^3 + 6090z^2 + 6411z + 768) + \\ \frac{\sqrt{\pi}(208z^{9/2} + 3168z^{7/2} + 13608z^{5/2} + 17640z^{3/2} + 4725\sqrt{z})\operatorname{erf}(\sqrt{z})}{1536}$$

07.25.03.4473.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{1}{2}, 3; z\right) = \\ \frac{1}{192}e^z(8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384}\sqrt{\pi}(-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4474.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{1}{2}, 3; -z\right) = \frac{1}{192} e^{-z} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4475.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{1}{2}, 4; z\right) = \frac{e^z (1144z^7 - 23188z^6 + 136398z^5 - 242265z^4 + 68160z^3 + 1440z^2 - 2880z + 2880)}{68640z^3} + \frac{\sqrt{\pi} (-2288z^{9/2} + 47520z^{7/2} - 294840z^{5/2} + 600600z^{3/2} - 289575\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{137280} - \frac{6}{143z^3}$$

07.25.03.4476.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{1}{2}, 4; -z\right) = \frac{e^{-z} (1144z^7 + 23188z^6 + 136398z^5 + 242265z^4 + 68160z^3 - 1440z^2 - 2880z - 2880)}{68640z^3} + \frac{\sqrt{\pi} (2288z^{9/2} + 47520z^{7/2} + 294840z^{5/2} + 600600z^{3/2} + 289575\sqrt{z}) \operatorname{erf}(\sqrt{z})}{137280} + \frac{6}{143z^3}$$

07.25.03.4477.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{1}{2}, 5; z\right) = -\frac{24(17z + 21)}{2431z^4} + \frac{1}{145860z^4} e^z (1144z^8 - 26356z^7 + 180174z^6 - 385761z^5 + 143040z^4 + 7200z^3 - 9360z^2 - 5760z + 30240) + \frac{\sqrt{\pi} (-2288z^{9/2} + 53856z^{7/2} - 385560z^{5/2} + 928200z^{3/2} - 546975\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{291720}$$

07.25.03.4478.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{1}{2}, 5; -z\right) = \frac{24(17z - 21)}{2431z^4} + \frac{1}{145860z^4} e^{-z} (1144z^8 + 26356z^7 + 180174z^6 + 385761z^5 + 143040z^4 - 7200z^3 - 9360z^2 + 5760z + 30240) + \frac{\sqrt{\pi} (2288z^{9/2} + 53856z^{7/2} + 385560z^{5/2} + 928200z^{3/2} + 546975\sqrt{z}) \operatorname{erf}(\sqrt{z})}{291720}$$

07.25.03.4479.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{1}{2}, 6; z\right) = -\frac{60(323z^2 + 798z + 756)}{46189z^5} + \frac{1}{277134z^5} (e^z (1144z^9 - 29524z^8 + 229998z^7 - 576633z^6 + 267456z^5 + 21600z^4 - 18000z^3 - 34920z^2 + 15120z + 272160)) + \frac{\sqrt{\pi} (-2288z^{9/2} + 60192z^{7/2} - 488376z^{5/2} + 1356600z^{3/2} - 944775\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{554268}$$

07.25.03.4480.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{1}{2}, 6; -z\right) = \frac{60(323z^2 - 798z + 756)}{46189z^5} + \frac{1}{277134z^5} \\ \frac{(e^{-z}(1144z^9 + 29524z^8 + 229998z^7 + 576633z^6 + 267456z^5 - 21600z^4 - 18000z^3 + 34920z^2 + 15120z - 272160)) + \sqrt{\pi}(2288z^{9/2} + 60192z^{7/2} + 488376z^{5/2} + 1356600z^{3/2} + 944775\sqrt{z})\operatorname{erf}(\sqrt{z})}{554268}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = 1$

07.25.03.4481.01

$${}_2F_2\left(-\frac{9}{2}, 3; 1, 1; z\right) = \frac{1}{945} e^{z/2} (-286z^5 + 4224z^4 - 18501z^3 + 28164z^2 - 13230z + 945) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2}(1144z^5 - 15752z^4 + 58824z^3 - 60564z^2 + 9591z) I_1\left(\frac{z}{2}\right)}{3780}$$

07.25.03.4482.01

$${}_2F_2\left(-\frac{9}{2}, 3; 1, \frac{3}{2}; z\right) = \frac{e^z(2288z^4 - 34496z^3 + 142656z^2 - 163560z + 27885)}{30720} + \frac{\sqrt{\pi}(-4576z^5 + 71280z^4 - 317520z^3 + 441000z^2 - 141750z + 2835)\operatorname{erfi}(\sqrt{z})}{61440\sqrt{z}}$$

07.25.03.4483.01

$${}_2F_2\left(-\frac{9}{2}, 3; 1, \frac{3}{2}; -z\right) = \frac{e^{-z}(2288z^4 + 34496z^3 + 142656z^2 + 163560z + 27885)}{30720} + \frac{\sqrt{\pi}(4576z^5 + 71280z^4 + 317520z^3 + 441000z^2 + 141750z + 2835)\operatorname{erf}(\sqrt{z})}{61440\sqrt{z}}$$

07.25.03.4484.01

$${}_2F_2\left(-\frac{9}{2}, 3; 1, 2; z\right) = \frac{e^{z/2}(-208z^5 + 3720z^4 - 20436z^3 + 40836z^2 - 27405z + 3780) I_0\left(\frac{z}{2}\right) + e^{z/2}(208z^5 - 3512z^4 + 17028z^3 - 25356z^2 + 7701z) I_1\left(\frac{z}{2}\right)}{3780}$$

07.25.03.4485.01

$${}_2F_2\left(-\frac{9}{2}, 3; 1, \frac{5}{2}; z\right) = \frac{e^z(4576z^5 - 83248z^4 + 436944z^3 - 699432z^2 + 211110z + 945)}{245760z} + \frac{\sqrt{\pi}(-9152z^6 + 171072z^5 - 952560z^4 + 1764000z^3 - 850500z^2 + 34020z - 945)\operatorname{erfi}(\sqrt{z})}{491520z^{3/2}}$$

07.25.03.4486.01

$${}_2F_2\left(-\frac{9}{2}, 3; 1, \frac{5}{2}; -z\right) = \frac{e^{-z} (4576 z^5 + 83248 z^4 + 436944 z^3 + 699432 z^2 + 211110 z - 945)}{245760 z} + \frac{\sqrt{\pi} (9152 z^6 + 171072 z^5 + 952560 z^4 + 1764000 z^3 + 850500 z^2 + 34020 z + 945) \operatorname{erf}(\sqrt{z})}{491520 z^{3/2}}$$

07.25.03.4487.01

$${}_2F_2\left(-\frac{9}{2}, 3; 1, 3; z\right) = \frac{1}{945} e^{z/2} (-16 z^5 + 336 z^4 - 2220 z^3 + 5484 z^2 - 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} z (16 z^4 - 320 z^3 + 1908 z^2 - 3720 z + 1689) I_1\left(\frac{z}{2}\right)$$

07.25.03.4488.01

$${}_2F_2\left(-\frac{9}{2}, 3; 1, \frac{7}{2}; z\right) = \frac{e^{-z} (9152 z^6 - 195008 z^5 + 1240656 z^4 - 2552736 z^3 + 1127028 z^2 + 18900 z - 8505)}{1376256 z^2} + \frac{1}{2752512 z^{5/2}} + \frac{\sqrt{\pi} (-18304 z^7 + 399168 z^6 - 2667168 z^5 + 6174000 z^4 - 3969000 z^3 + 238140 z^2 - 13230 z + 8505) \operatorname{erfi}(\sqrt{z})}{2752512 z^{5/2}}$$

07.25.03.4489.01

$${}_2F_2\left(-\frac{9}{2}, 3; 1, \frac{7}{2}; -z\right) = \frac{e^{-z} (9152 z^6 + 195008 z^5 + 1240656 z^4 + 2552736 z^3 + 1127028 z^2 - 18900 z - 8505)}{1376256 z^2} + \frac{1}{2752512 z^{5/2}} + \frac{\sqrt{\pi} (18304 z^7 + 399168 z^6 + 2667168 z^5 + 6174000 z^4 + 3969000 z^3 + 238140 z^2 + 13230 z + 8505) \operatorname{erf}(\sqrt{z})}{2752512 z^{5/2}}$$

07.25.03.4490.01

$${}_2F_2\left(-\frac{9}{2}, 3; 1, 4; z\right) = \frac{e^{z/2} (-4576 z^6 + 110352 z^5 - 852000 z^4 + 2504820 z^3 - 2617650 z^2 + 673785 z + 3780) I_0\left(\frac{z}{2}\right)}{675675 z} + \frac{1}{675675 z^2} e^{z/2} (4576 z^7 - 105776 z^6 + 748512 z^5 - 1804620 z^4 + 1095810 z^3 - 2835 z^2 + 7560 z - 15120) I_1\left(\frac{z}{2}\right)$$

07.25.03.4491.01

$${}_2F_2\left(-\frac{9}{2}, 3; 1, \frac{9}{2}; z\right) = \frac{1}{6291456 z^3} e^z (18304 z^7 - 447040 z^6 + 3341856 z^5 - 8408112 z^4 + 4930728 z^3 + 139860 z^2 + 5670 z - 212625) + \frac{1}{12582912 z^{7/2}} \left(\sqrt{\pi} (-36608 z^8 + 912384 z^7 - 7112448 z^6 + 19756800 z^5 - 15876000 z^4 + 1270080 z^3 - 105840 z^2 + 136080 z + 212625) \operatorname{erfi}(\sqrt{z}) \right)$$

$$\begin{aligned}
 & \text{07.25.03.4492.01} \\
 {}_2F_2\left(-\frac{9}{2}, 3; 1, \frac{9}{2}; -z\right) = & \\
 & \frac{1}{6291456z^3} e^{-z} (18304z^7 + 447040z^6 + 3341856z^5 + 8408112z^4 + 4930728z^3 - 139860z^2 + 5670z + 212625) + \\
 & \frac{1}{12582912z^{7/2}} \left(\sqrt{\pi} (36608z^8 + 912384z^7 + 7112448z^6 + 19756800z^5 + \right. \\
 & \left. 15876000z^4 + 1270080z^3 + 105840z^2 + 136080z - 212625) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4493.01} \\
 {}_2F_2\left(-\frac{9}{2}, 3; 1, 5; z\right) = & \frac{1}{11486475z^3} \left(8e^{z/2} \right. \\
 & \left. (4576z^8 - 120032z^7 + 983088z^6 - 2824032z^5 + 2152590z^4 - 17010z^3 + 38745z^2 - 60480z - 136080) I_1\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{11486475z^2} 16e^{z/2} (2288z^7 - 62304z^6 + 550416z^5 - 1875840z^4 + 2295405z^3 - 712530z^2 - 7560z - 17010) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4494.01} \\
 {}_2F_2\left(-\frac{9}{2}, 3; 1, \frac{11}{2}; z\right) = & \\
 & \frac{1}{25165824z^4} \left(e^z (36608z^8 - 1008128z^7 + 8658816z^6 - 25764096z^5 + 18933312z^4 + 695520z^3 + 400680z^2 - \right. \\
 & \left. 1512000z - 3472875) + \right. \\
 & \left. \frac{1}{50331648z^{9/2}} \left(\sqrt{\pi} (-73216z^9 + 2052864z^8 - 18289152z^7 + 59270400z^6 - 57153600z^5 + \right. \right. \\
 & \left. \left. 5715360z^4 - 635040z^3 + 1224720z^2 + 3827250z + 3472875) \operatorname{erfi}(\sqrt{z}) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4495.01} \\
 {}_2F_2\left(-\frac{9}{2}, 3; 1, \frac{11}{2}; -z\right) = & \\
 & \frac{1}{25165824z^4} \left(e^{-z} (36608z^8 + 1008128z^7 + 8658816z^6 + 25764096z^5 + 18933312z^4 - 695520z^3 + \right. \\
 & \left. 400680z^2 + 1512000z - 3472875) + \right. \\
 & \left. \frac{1}{50331648z^{9/2}} \left(\sqrt{\pi} (73216z^9 + 2052864z^8 + 18289152z^7 + 59270400z^6 + 57153600z^5 + \right. \right. \\
 & \left. \left. 5715360z^4 + 635040z^3 + 1224720z^2 - 3827250z + 3472875) \operatorname{erf}(\sqrt{z}) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4496.01 \\
 {}_2F_2\left(-\frac{9}{2}, 3; 1, 6; z\right) = & \frac{1}{43\,648\,605\,z^4} \left(8 e^{z/2} (9152 z^9 - 268\,576 z^8 + 2\,498\,832 z^7 - 8\,332\,512 z^6 + 7\,653\,288 z^5 - 119\,070 z^4 + 239\,085 z^3 - \right. \\
 & \left. 336\,420 z^2 - 1\,496\,880 z - 2\,177\,280) I_1\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{43\,648\,605\,z^3} \left(8 e^{z/2} (9152 z^8 - 277\,728 z^7 + 2\,762\,832 z^6 - 10\,706\,208 z^5 + 14\,976\,360 z^4 - \right. \right. \\
 & \left. \left. 5\,384\,610 z^3 - 67\,095 z^2 - 374\,220 z - 544\,320) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = \frac{3}{2}$

$$\begin{aligned}
 & 07.25.03.4497.01 \\
 {}_2F_2\left(-\frac{9}{2}, 3; \frac{3}{2}, 2; z\right) = & \frac{e^z (208 z^4 - 3856 z^3 + 20\,856 z^2 - 35\,340 z + 12\,525)}{15\,360} + \\
 & \frac{\sqrt{\pi} (-416 z^5 + 7920 z^4 - 45\,360 z^3 + 88\,200 z^2 - 47\,250 z + 2835) \operatorname{erfi}(\sqrt{z})}{30\,720 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4498.01 \\
 {}_2F_2\left(-\frac{9}{2}, 3; \frac{3}{2}, 2; -z\right) = & \frac{e^{-z} (208 z^4 + 3856 z^3 + 20\,856 z^2 + 35\,340 z + 12\,525)}{15\,360} + \\
 & \frac{\sqrt{\pi} (416 z^5 + 7920 z^4 + 45\,360 z^3 + 88\,200 z^2 + 47\,250 z + 2835) \operatorname{erf}(\sqrt{z})}{30\,720 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4499.01 \\
 {}_2F_2\left(-\frac{9}{2}, 3; \frac{3}{2}, 3; z\right) = & \frac{e^z (16 z^4 - 352 z^3 + 2352 z^2 - 5280 z + 2895)}{3840} + \frac{\sqrt{\pi} (-32 z^5 + 720 z^4 - 5040 z^3 + 12\,600 z^2 - 9450 z + 945) \operatorname{erfi}(\sqrt{z})}{7680 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4500.01 \\
 {}_2F_2\left(-\frac{9}{2}, 3; \frac{3}{2}, 3; -z\right) = & \frac{e^{-z} (16 z^4 + 352 z^3 + 2352 z^2 + 5280 z + 2895)}{3840} + \frac{\sqrt{\pi} (32 z^5 + 720 z^4 + 5040 z^3 + 12\,600 z^2 + 9450 z + 945) \operatorname{erf}(\sqrt{z})}{7680 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4501.01 \\
 {}_2F_2\left(-\frac{9}{2}, 3; \frac{3}{2}, 4; z\right) = & \frac{e^z (2288 z^7 - 58\,256 z^6 + 463\,416 z^5 - 1\,296\,060 z^4 + 969\,315 z^3 - 5760 z^2 + 11\,520 z - 11\,520)}{1\,372\,800 z^3} + \\
 & \frac{\sqrt{\pi} (-4576 z^5 + 118\,800 z^4 - 982\,800 z^3 + 3\,003\,000 z^2 - 2\,895\,750 z + 405\,405) \operatorname{erfi}(\sqrt{z})}{2\,745\,600 \sqrt{z}} + \frac{6}{715 z^3}
 \end{aligned}$$

07.25.03.4502.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{3}{2}, 4; -z\right) = \frac{e^{-z} (2288 z^7 + 58 256 z^6 + 463 416 z^5 + 1 296 060 z^4 + 969 315 z^3 + 5760 z^2 + 11 520 z + 11 520)}{1 372 800 z^3} + \frac{\sqrt{\pi} (4576 z^5 + 118 800 z^4 + 982 800 z^3 + 3 003 000 z^2 + 2 895 750 z + 405 405) \operatorname{erf}(\sqrt{z})}{2 745 600 \sqrt{z}} - \frac{6}{715 z^3}$$

07.25.03.4503.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{3}{2}, 5; z\right) = \frac{24 (17 z + 15)}{12 155 z^4} + \frac{1}{2 917 200 z^4} e^z (2288 z^8 - 66 176 z^7 + 610 656 z^6 - 2 045 400 z^5 + 1 945 365 z^4 - 34 560 z^3 + 54 720 z^2 - 11 520 z - 86 400) + \frac{\sqrt{\pi} (-4576 z^5 + 134 640 z^4 - 1 285 200 z^3 + 4 641 000 z^2 - 5 469 750 z + 984 555) \operatorname{erfi}(\sqrt{z})}{5 834 400 \sqrt{z}}$$

07.25.03.4504.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{3}{2}, 5; -z\right) = -\frac{24 (17 z - 15)}{12 155 z^4} + \frac{1}{2 917 200 z^4} e^{-z} (2288 z^8 + 66 176 z^7 + 610 656 z^6 + 2 045 400 z^5 + 1 945 365 z^4 + 34 560 z^3 + 54 720 z^2 + 11 520 z - 86 400) + \frac{\sqrt{\pi} (4576 z^5 + 134 640 z^4 + 1 285 200 z^3 + 4 641 000 z^2 + 5 469 750 z + 984 555) \operatorname{erf}(\sqrt{z})}{5 834 400 \sqrt{z}}$$

07.25.03.4505.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{3}{2}, 6; z\right) = \frac{12 (323 z^2 + 570 z + 420)}{46 189 z^5} + \frac{1}{5 542 680 z^5} (e^z (2288 z^9 - 74 096 z^8 + 778 056 z^7 - 3 036 660 z^6 + 3 512 535 z^5 - 120 960 z^4 + 155 520 z^3 + 53 280 z^2 - 216 000 z - 604 800)) + \frac{\sqrt{\pi} (-4576 z^5 + 150 480 z^4 - 1 627 920 z^3 + 6 783 000 z^2 - 9 447 750 z + 2 078 505) \operatorname{erfi}(\sqrt{z})}{11 085 360 \sqrt{z}}$$

07.25.03.4506.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{3}{2}, 6; -z\right) = -\frac{12 (323 z^2 - 570 z + 420)}{46 189 z^5} + \frac{1}{5 542 680 z^5} (e^{-z} (2288 z^9 + 74 096 z^8 + 778 056 z^7 + 3 036 660 z^6 + 3 512 535 z^5 + 120 960 z^4 + 155 520 z^3 - 53 280 z^2 - 216 000 z + 604 800)) + \frac{\sqrt{\pi} (4576 z^5 + 150 480 z^4 + 1 627 920 z^3 + 6 783 000 z^2 + 9 447 750 z + 2 078 505) \operatorname{erf}(\sqrt{z})}{11 085 360 \sqrt{z}}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = 2$

07.25.03.4507.01

$${}_2F_2\left(-\frac{9}{2}, 3; 2, 2; z\right) = \frac{e^{z/2}(-208z^5 + 4512z^4 - 31236z^3 + 82848z^2 - 80325z + 20790)I_0\left(\frac{z}{2}\right)}{20790} + \frac{e^{z/2}(208z^5 - 4304z^4 + 27036z^3 - 57756z^2 + 32433z - 945)I_1\left(\frac{z}{2}\right)}{20790}$$

07.25.03.4508.01

$${}_2F_2\left(-\frac{9}{2}, 3; 2, \frac{5}{2}; z\right) = \frac{e^z(416z^5 - 9296z^4 + 63600z^3 - 148728z^2 + 89490z - 945)}{122880z} + \frac{\sqrt{\pi}(-832z^6 + 19008z^5 - 136080z^4 + 352800z^3 - 283500z^2 + 34020z + 945)\operatorname{erfi}(\sqrt{z})}{245760z^{3/2}}$$

07.25.03.4509.01

$${}_2F_2\left(-\frac{9}{2}, 3; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(416z^5 + 9296z^4 + 63600z^3 + 148728z^2 + 89490z + 945)}{122880z} + \frac{\sqrt{\pi}(832z^6 + 19008z^5 + 136080z^4 + 352800z^3 + 283500z^2 + 34020z - 945)\operatorname{erf}(\sqrt{z})}{245760z^{3/2}}$$

07.25.03.4510.01

$${}_2F_2\left(-\frac{9}{2}, 3; 2, 3; z\right) = \frac{e^{z/2}(-32z^5 + 816z^4 - 6816z^3 + 22524z^2 - 28350z + 10395)I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2}(32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945)I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.4511.01

$${}_2F_2\left(-\frac{9}{2}, 3; 2, \frac{7}{2}; z\right) = \frac{e^z(832z^6 - 21760z^5 + 180048z^4 - 537216z^3 + 459564z^2 - 15120z + 2835)}{688128z^2} + \frac{1}{1376256z^{5/2}}\sqrt{\pi}(-1664z^7 + 44352z^6 - 381024z^5 + 1234800z^4 - 1323000z^3 + 238140z^2 + 13230z - 2835)\operatorname{erfi}(\sqrt{z})$$

07.25.03.4512.01

$${}_2F_2\left(-\frac{9}{2}, 3; 2, \frac{7}{2}; -z\right) = \frac{e^{-z}(832z^6 + 21760z^5 + 180048z^4 + 537216z^3 + 459564z^2 + 15120z + 2835)}{688128z^2} + \frac{1}{1376256z^{5/2}}\sqrt{\pi}(1664z^7 + 44352z^6 + 381024z^5 + 1234800z^4 + 1323000z^3 + 238140z^2 - 13230z - 2835)\operatorname{erf}(\sqrt{z})$$

07.25.03.4513.01

$${}_2F_2\left(-\frac{9}{2}, 3; 2, 4; z\right) = \frac{4e^{z/2}(208z^7 - 5888z^6 + 53856z^5 - 184800z^4 + 200715z^3 - 22680z^2 - 945z + 1890)I_1\left(\frac{z}{2}\right)}{675675z^2} - \frac{2e^{z/2}(416z^6 - 12192z^5 + 119280z^4 - 471840z^3 + 727650z^2 - 338310z + 945)I_0\left(\frac{z}{2}\right)}{675675z}$$

07.25.03.4514.01

$${}_2F_2\left(-\frac{9}{2}, 3; 2, \frac{9}{2}; z\right) = \frac{e^z (1664 z^7 - 49856 z^6 + 483936 z^5 - 1756560 z^4 + 1955064 z^3 - 124740 z^2 + 17010 z + 42525)}{3145728 z^3} + \frac{1}{6291456 z^{7/2}} (\sqrt{\pi} (-3328 z^8 + 101376 z^7 - 1016064 z^6 + 3951360 z^5 - 5292000 z^4 + 1270080 z^3 + 105840 z^2 - 45360 z - 42525) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.4515.01

$${}_2F_2\left(-\frac{9}{2}, 3; 2, \frac{9}{2}; -z\right) = \frac{e^{-z} (1664 z^7 + 49856 z^6 + 483936 z^5 + 1756560 z^4 + 1955064 z^3 + 124740 z^2 + 17010 z - 42525)}{3145728 z^3} + \frac{1}{6291456 z^{7/2}} (\sqrt{\pi} (3328 z^8 + 101376 z^7 + 1016064 z^6 + 3951360 z^5 + 5292000 z^4 + 1270080 z^3 - 105840 z^2 - 45360 z + 42525) \operatorname{erf}(\sqrt{z}))$$

07.25.03.4516.01

$${}_2F_2\left(-\frac{9}{2}, 3; 2, 5; z\right) = \frac{1}{11486475 z^3} + \frac{8 e^{z/2} (832 z^8 - 26720 z^7 + 282672 z^6 - 1153056 z^5 + 1557240 z^4 - 251370 z^3 - 23625 z^2 + 41580 z + 45360) I_1\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} 8 e^{z/2} (832 z^7 - 27552 z^6 + 308976 z^5 - 1423200 z^4 + 2593080 z^3 - 1442070 z^2 + 10395 z + 11340) I_0\left(\frac{z}{2}\right)}{11486475 z^2}$$

07.25.03.4517.01

$${}_2F_2\left(-\frac{9}{2}, 3; 2, \frac{11}{2}; z\right) = \frac{1}{12582912 z^4} + \frac{e^z (3328 z^8 - 112384 z^7 + 1251840 z^6 - 5353152 z^5 + 7349856 z^4 - 740880 z^3 + 30240 z^2 + 434700 z + 496125) + \frac{1}{25165824 z^{9/2}} (\sqrt{\pi} (-6656 z^9 + 228096 z^8 - 2612736 z^7 + 11854080 z^6 - 19051200 z^5 + 5715360 z^4 + 635040 z^3 - 408240 z^2 - 765450 z - 496125) \operatorname{erfi}(\sqrt{z}))}{25165824 z^{9/2}}$$

07.25.03.4518.01

$${}_2F_2\left(-\frac{9}{2}, 3; 2, \frac{11}{2}; -z\right) = \frac{1}{12582912 z^4} + \frac{e^{-z} (3328 z^8 + 112384 z^7 + 1251840 z^6 + 5353152 z^5 + 7349856 z^4 + 740880 z^3 + 30240 z^2 - 434700 z + 496125) + \frac{1}{25165824 z^{9/2}} (\sqrt{\pi} (6656 z^9 + 228096 z^8 + 2612736 z^7 + 11854080 z^6 + 19051200 z^5 + 5715360 z^4 - 635040 z^3 - 408240 z^2 + 765450 z - 496125) \operatorname{erf}(\sqrt{z}))}{25165824 z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.4519.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 3; 2, 6; z\right) = \\
 & \frac{1}{43\,648\,605\,z^4} \left(16 e^{z/2} (832 z^9 - 29\,888 z^8 + 358\,992 z^7 - 1\,696\,944 z^6 + 2\,741\,784 z^5 - 582\,120 z^4 - 85\,995 z^3 + \right. \\
 & \quad \left. 140\,805 z^2 + 294\,840 z + 272\,160) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \right. \\
 & \quad \left. (16 e^{z/2} (832 z^8 - 30\,720 z^7 + 388\,464 z^6 - 2\,041\,824 z^5 + 4\,286\,520 z^4 - 2\,751\,840 z^3 + 33\,075 z^2 + 73\,710 z + 68\,040) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = \frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.4520.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 3; \frac{5}{2}, 3; z\right) = \frac{e^z (32 z^5 - 848 z^4 + 7152 z^3 - 22\,008 z^2 + 20\,010 z - 945)}{30\,720 z} + \\
 & \frac{\sqrt{\pi} (-64 z^6 + 1728 z^5 - 15\,120 z^4 + 50\,400 z^3 - 56\,700 z^2 + 11\,340 z + 945) \operatorname{erfi}(\sqrt{z})}{61\,440 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4521.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 3; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (32 z^5 + 848 z^4 + 7152 z^3 + 22\,008 z^2 + 20\,010 z + 945)}{30\,720 z} + \\
 & \frac{\sqrt{\pi} (64 z^6 + 1728 z^5 + 15\,120 z^4 + 50\,400 z^3 + 56\,700 z^2 + 11\,340 z - 945) \operatorname{erf}(\sqrt{z})}{61\,440 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4522.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 3; \frac{5}{2}, 4; z\right) = \frac{1}{10\,982\,400 z^3} \\
 & e^z (4576 z^7 - 140\,272 z^6 + 1\,406\,352 z^5 - 5\,367\,240 z^4 + 6\,552\,630 z^3 - 629\,595 z^2 - 92\,160 z + 92\,160) + \frac{1}{21\,964\,800 z^{3/2}} \\
 & \sqrt{\pi} (-9152 z^6 + 285\,120 z^5 - 2\,948\,400 z^4 + 12\,012\,000 z^3 - 17\,374\,500 z^2 + 4\,864\,860 z + 675\,675) \operatorname{erfi}(\sqrt{z}) - \frac{6}{715 z^3}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4523.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 3; \frac{5}{2}, 4; -z\right) = \\
 & \frac{1}{10\,982\,400 z^3} e^{-z} (4576 z^7 + 140\,272 z^6 + 1\,406\,352 z^5 + 5\,367\,240 z^4 + 6\,552\,630 z^3 + 629\,595 z^2 - 92\,160 z - 92\,160) + \\
 & \frac{1}{21\,964\,800 z^{3/2}} \sqrt{\pi} (9152 z^6 + 285\,120 z^5 + 2\,948\,400 z^4 + 12\,012\,000 z^3 + 17\,374\,500 z^2 + 4\,864\,860 z - 675\,675) \operatorname{erf}(\sqrt{z}) + \\
 & \frac{6}{715 z^3}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4524.01} \\
 {}_2F_2\left(-\frac{9}{2}, 3; \frac{5}{2}, 5; z\right) &= -\frac{24(17z+9)}{12155z^4} + \frac{1}{23337600z^4} \\
 & \left(e^z(4576z^8 - 159280z^7 + 1850448z^6 - 8430696z^5 + 12941190z^4 - 1974735z^3 - 576000z^2 + 368640z + 414720)\right) + \\
 & \frac{1}{46675200z^{3/2}} \sqrt{\pi} (-9152z^6 + 323136z^5 - 3855600z^4 + 18564000z^3 - 32818500z^2 + 11814660z + 2297295) \\
 & \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4525.01} \\
 {}_2F_2\left(-\frac{9}{2}, 3; \frac{5}{2}, 5; -z\right) &= \\
 & \frac{24(17z-9)}{12155z^4} + \frac{1}{23337600z^4} \left(e^{-z}(4576z^8 + 159280z^7 + 1850448z^6 + 8430696z^5 + 12941190z^4 + 1974735z^3 - \right. \\
 & \left. 576000z^2 - 368640z + 414720)\right) + \frac{1}{46675200z^{3/2}} \\
 & \sqrt{\pi} (9152z^6 + 323136z^5 + 3855600z^4 + 18564000z^3 + 32818500z^2 + 11814660z - 2297295) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4526.01} \\
 {}_2F_2\left(-\frac{9}{2}, 3; \frac{5}{2}, 6; z\right) &= \\
 & -\frac{12(323z^2 + 342z + 180)}{46189z^5} + \frac{1}{44341440z^5} \left(e^z(4576z^9 - 178288z^8 + 2355024z^7 - 12471912z^6 + 23083110z^5 - \right. \\
 & \left. 4945275z^4 - 2096640z^3 + 817920z^2 + 1866240z + 2073600)\right) + \frac{1}{88682880z^{3/2}} \\
 & \sqrt{\pi} (-9152z^6 + 361152z^5 - 4883760z^4 + 27132000z^3 - 56686500z^2 + 24942060z + 6235515) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4527.01} \\
 {}_2F_2\left(-\frac{9}{2}, 3; \frac{5}{2}, 6; -z\right) &= \\
 & \frac{12(323z^2 - 342z + 180)}{46189z^5} + \frac{1}{44341440z^5} \left(e^{-z}(4576z^9 + 178288z^8 + 2355024z^7 + 12471912z^6 + 23083110z^5 + \right. \\
 & \left. 4945275z^4 - 2096640z^3 - 817920z^2 + 1866240z - 2073600)\right) + \\
 & \frac{1}{88682880z^{3/2}} \sqrt{\pi} (9152z^6 + 361152z^5 + 4883760z^4 + 27132000z^3 + 56686500z^2 + 24942060z - 6235515) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = 3$

$$\begin{aligned}
 & \text{07.25.03.4528.01} \\
 {}_2F_2\left(-\frac{9}{2}, 3; 3, 3; z\right) &= \frac{4e^{z/2}(32z^6 - 928z^5 + 8784z^4 - 31776z^3 + 37938z^2 - 5670z - 945)I_1\left(\frac{z}{2}\right)}{135135z} - \\
 & \frac{8e^{z/2}(16z^5 - 480z^4 + 4848z^3 - 20064z^2 + 33075z - 17010)I_0\left(\frac{z}{2}\right)}{135135}
 \end{aligned}$$

07.25.03.4529.01

$${}_2F_2\left(-\frac{9}{2}, 3; 3, \frac{7}{2}; z\right) = \frac{e^z (64 z^6 - 1984 z^5 + 20208 z^4 - 79008 z^3 + 100716 z^2 - 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (-128 z^7 + 4032 z^6 - 42336 z^5 + 176400 z^4 - 264600 z^3 + 79380 z^2 + 13230 z + 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4530.01

$${}_2F_2\left(-\frac{9}{2}, 3; 3, \frac{7}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1984 z^5 + 20208 z^4 + 79008 z^3 + 100716 z^2 + 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835) \operatorname{erf}(\sqrt{z})$$

07.25.03.4531.01

$${}_2F_2\left(-\frac{9}{2}, 3; 3, 4; z\right) = \frac{4 e^{z/2} (64 z^7 - 2144 z^6 + 24048 z^5 - 107040 z^4 + 167640 z^3 - 39690 z^2 - 12285 z - 3780) I_1\left(\frac{z}{2}\right)}{675675 z^2} - \frac{4 e^{z/2} (64 z^6 - 2208 z^5 + 26160 z^4 - 130080 z^3 + 264600 z^2 - 171990 z - 945) I_0\left(\frac{z}{2}\right)}{675675 z}$$

07.25.03.4532.01

$${}_2F_2\left(-\frac{9}{2}, 3; 3, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 4544 z^6 + 54240 z^5 - 257232 z^4 + 422616 z^3 - 79380 z^2 - 35910 z - 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} \sqrt{\pi} (-256 z^8 + 9216 z^7 - 112896 z^6 + 564480 z^5 - 1058400 z^4 + 423360 z^3 + 105840 z^2 + 45360 z + 14175) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4533.01

$${}_2F_2\left(-\frac{9}{2}, 3; 3, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 4544 z^6 + 54240 z^5 + 257232 z^4 + 422616 z^3 + 79380 z^2 - 35910 z + 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} \sqrt{\pi} (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175) \operatorname{erf}(\sqrt{z})$$

07.25.03.4534.01

$${}_2F_2\left(-\frac{9}{2}, 3; 3, 5; z\right) = \frac{1}{11486475 z^3} - \frac{32 e^{z/2} (64 z^8 - 2432 z^7 + 31536 z^6 - 166656 z^5 + 323160 z^4 - 105840 z^3 - 46305 z^2 - 26460 z - 11340) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^7 - 2496 z^6 + 33936 z^5 - 197040 z^4 + 476280 z^3 - 370440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right)}{11486475 z^2}$$

07.25.03.4535.01

$${}_2F_2\left(-\frac{9}{2}, 3; 3, \frac{11}{2}; z\right) = \frac{1}{3\,145\,728\,z^4} e^z (256\,z^8 - 10\,240\,z^7 + 140\,160\,z^6 - 781\,440\,z^5 + 1\,572\,864\,z^4 - 423\,360\,z^3 - 264\,600\,z^2 - 189\,000\,z - 99\,225) + \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (-512\,z^9 + 20\,736\,z^8 - 290\,304\,z^7 + 1\,693\,440\,z^6 - 3\,810\,240\,z^5 + 1\,905\,120\,z^4 + 635\,040\,z^3 + 408\,240\,z^2 + 255\,150\,z + 99\,225) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.4536.01

$${}_2F_2\left(-\frac{9}{2}, 3; 3, \frac{11}{2}; -z\right) = \frac{1}{3\,145\,728\,z^4} e^{-z} (256\,z^8 + 10\,240\,z^7 + 140\,160\,z^6 + 781\,440\,z^5 + 1\,572\,864\,z^4 + 423\,360\,z^3 - 264\,600\,z^2 + 189\,000\,z - 99\,225) + \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (512\,z^9 + 20\,736\,z^8 + 290\,304\,z^7 + 1\,693\,440\,z^6 + 3\,810\,240\,z^5 + 1\,905\,120\,z^4 - 635\,040\,z^3 + 408\,240\,z^2 - 255\,150\,z + 99\,225) \operatorname{erf}(\sqrt{-z}) \right)$$

07.25.03.4537.01

$${}_2F_2\left(-\frac{9}{2}, 3; 3, 6; z\right) = \frac{1}{43\,648\,605\,z^4} \left(32\,e^{z/2} (128\,z^9 - 5440\,z^8 + 80\,064\,z^7 - 489\,840\,z^6 + 1\,132\,752\,z^5 - 476\,280\,z^4 - 264\,600\,z^3 - 214\,515\,z^2 - 170\,100\,z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \right) + \frac{1}{43\,648\,605\,z^4} \left(32\,e^{z/2} (128\,z^8 - 5568\,z^7 + 85\,440\,z^6 - 567\,312\,z^5 + 1\,587\,600\,z^4 - 1\,428\,840\,z^3 - 52\,920\,z^2 - 42\,525\,z - 22\,680) I_0\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = \frac{7}{2}$

07.25.03.4538.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{7}{2}, 4; z\right) = \frac{1}{61\,501\,440\,z^3} e^z (9152\,z^7 - 328\,064\,z^6 + 3\,968\,304\,z^5 - 19\,189\,440\,z^4 + 32\,562\,180\,z^3 - 6\,695\,640\,z^2 - 3\,500\,595\,z - 2\,580\,480) + \frac{1}{123\,002\,880\,z^{5/2}} \left(\sqrt{\pi} (-18\,304\,z^7 + 665\,280\,z^6 - 8\,255\,520\,z^5 + 42\,042\,000\,z^4 - 81\,081\,000\,z^3 + 34\,054\,020\,z^2 + 9\,459\,450\,z + 608\,1075) \operatorname{erfi}(\sqrt{z}) \right) + \frac{6}{143\,z^3}$$

$$\begin{aligned}
 &07.25.03.4539.01 \\
 {}_2F_2\left(-\frac{9}{2}, 3; \frac{7}{2}, 4; -z\right) &= \frac{1}{61\,501\,440 z^3} \\
 &e^{-z} (9152 z^7 + 328\,064 z^6 + 3\,968\,304 z^5 + 19\,189\,440 z^4 + 32\,562\,180 z^3 + 6\,695\,640 z^2 - 3\,500\,595 z + 2\,580\,480) + \\
 &\frac{1}{123\,002\,880 z^{5/2}} \left(\sqrt{\pi} (18\,304 z^7 + 665\,280 z^6 + 8\,255\,520 z^5 + 42\,042\,000 z^4 + \right. \\
 &\left. 81\,081\,000 z^3 + 34\,054\,020 z^2 - 9\,459\,450 z + 6\,081\,075) \operatorname{erf}(\sqrt{z}) \right) - \frac{6}{143 z^3}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.4540.01 \\
 {}_2F_2\left(-\frac{9}{2}, 3; \frac{7}{2}, 5; z\right) &= \\
 &\frac{24(17z+3)}{2431 z^4} + \frac{1}{130\,690\,560 z^4} (e^z (9152 z^8 - 372\,416 z^7 + 5\,216\,208 z^6 - 30\,053\,664 z^5 + 63\,734\,580 z^4 - 19\,511\,100 z^3 - \\
 &14\,460\,705 z^2 - 18\,063\,360 z - 3\,870\,720)) + \\
 &\frac{1}{261\,381\,120 z^{5/2}} \left(\sqrt{\pi} (-18\,304 z^7 + 753\,984 z^6 - 10\,795\,680 z^5 + 64\,974\,000 z^4 - 153\,153\,000 z^3 + \right. \\
 &\left. 82\,702\,620 z^2 + 32\,162\,130 z + 34\,459\,425) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.4541.01 \\
 {}_2F_2\left(-\frac{9}{2}, 3; \frac{7}{2}, 5; -z\right) &= \\
 &-\frac{24(17z-3)}{2431 z^4} + \frac{1}{130\,690\,560 z^4} (e^{-z} (9152 z^8 + 372\,416 z^7 + 5\,216\,208 z^6 + 30\,053\,664 z^5 + 63\,734\,580 z^4 + \\
 &19\,511\,100 z^3 - 14\,460\,705 z^2 + 18\,063\,360 z - 3\,870\,720)) + \\
 &\frac{1}{261\,381\,120 z^{5/2}} \left(\sqrt{\pi} (18\,304 z^7 + 753\,984 z^6 + 10\,795\,680 z^5 + 64\,974\,000 z^4 + 153\,153\,000 z^3 + \right. \\
 &\left. 82\,702\,620 z^2 - 32\,162\,130 z + 34\,459\,425) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.4542.01 \\
 {}_2F_2\left(-\frac{9}{2}, 3; \frac{7}{2}, 6; z\right) &= \\
 &\frac{60(323 z^2 + 114 z + 36)}{46\,189 z^5} + \frac{1}{248\,312\,064 z^5} (e^z (9152 z^9 - 416\,768 z^8 + 6\,633\,456 z^7 - 44\,361\,216 z^6 + 112\,925\,988 z^5 - \\
 &46\,448\,640 z^4 - 43\,209\,495 z^3 - 73\,221\,120 z^2 - 25\,159\,680 z - 11\,612\,160)) + \\
 &\frac{1}{496\,624\,128 z^{5/2}} \left(\sqrt{\pi} (-18\,304 z^7 + 842\,688 z^6 - 13\,674\,528 z^5 + 94\,962\,000 z^4 - 264\,537\,000 z^3 + \right. \\
 &\left. 174\,594\,420 z^2 + 87\,297\,210 z + 130\,945\,815) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.4543.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{7}{2}, 6; -z\right) = -\frac{60(323z^2 - 114z + 36)}{46189z^5} + \frac{1}{248312064z^5} \left(e^{-z} (9152z^9 + 416768z^8 + 6633456z^7 + 44361216z^6 + 112925988z^5 + 46448640z^4 - 43209495z^3 + 73221120z^2 - 25159680z + 11612160) \right) + \frac{1}{496624128z^{5/2}} \left(\sqrt{\pi} (18304z^7 + 842688z^6 + 13674528z^5 + 94962000z^4 + 264537000z^3 + 174594420z^2 - 87297210z + 130945815) \operatorname{erf}(\sqrt{z}) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = 4$

07.25.03.4544.01

$${}_2F_2\left(-\frac{9}{2}, 3; 4, 4; z\right) = -\frac{1}{483107625z^3} \left(8e^{z/2} (9152z^8 - 363264z^7 + 5054160z^6 - 30273120z^5 + 76386600z^4 - 62815680z^3 - 2071215z^2 - 4054050z + 8108100) I_0\left(\frac{z}{2}\right) \right) + \frac{1}{483107625z^2} \left(8e^{z/2} (9152z^7 - 354112z^6 + 4704624z^5 - 25736400z^4 + 52677000z^3 - 19289880z^2 - 10046745z - 10311885) I_1\left(\frac{z}{2}\right) \right) + \frac{96}{715z^3}$$

07.25.03.4545.01

$${}_2F_2\left(-\frac{9}{2}, 3; 4, \frac{9}{2}; z\right) = \frac{1}{281149440z^3} \left(e^z (18304z^7 - 751168z^6 + 10640928z^5 - 62299440z^4 + 135478440z^3 - 43990380z^2 - 34992090z - 52169985) \right) + \frac{1}{562298880z^{7/2}} \left(\sqrt{\pi} (-36608z^8 + 1520640z^7 - 22014720z^6 + 134534400z^5 - 324324000z^4 + 181621440z^3 + 75675600z^2 + 97297200z - 30405375) \operatorname{erfi}(\sqrt{z}) \right) + \frac{42}{143z^3}$$

07.25.03.4546.01

$${}_2F_2\left(-\frac{9}{2}, 3; 4, \frac{9}{2}; -z\right) = \frac{1}{281149440z^3} \left(e^{-z} (18304z^7 + 751168z^6 + 10640928z^5 + 62299440z^4 + 135478440z^3 + 43990380z^2 - 34992090z + 52169985) \right) + \frac{1}{562298880z^{7/2}} \left(\sqrt{\pi} (36608z^8 + 1520640z^7 + 22014720z^6 + 134534400z^5 + 324324000z^4 + 181621440z^3 - 75675600z^2 + 97297200z + 30405375) \operatorname{erf}(\sqrt{z}) \right) - \frac{42}{143z^3}$$

07.25.03.4547.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 3; 4, 5; z\right) = & -\frac{1}{8\,212\,829\,625\,z^3} \left(32 e^{z/2} (18\,304 z^8 - 821\,568 z^7 + 13\,128\,000 z^6 - 91\,992\,240 z^5 + 276\,951\,600 z^4 - 273\,272\,760 z^3 - \right. \\
 & \left. 21\,021\,480 z^2 - 62\,837\,775 z + 137\,837\,700) I_0\left(\frac{z}{2}\right) + \right. \\
 & \left. \frac{1}{8\,212\,829\,625\,z^3} \left(32 e^{z/2} (18\,304 z^8 - 803\,264 z^7 + 12\,333\,888 z^6 - 80\,041\,680 z^5 + 202\,330\,800 z^4 - \right. \right. \\
 & \left. \left. 100\,901\,160 z^3 - 71\,470\,440 z^2 - 118\,545\,345 z + 24\,324\,300) I_1\left(\frac{z}{2}\right) + \frac{384}{715 z^3} \right)
 \end{aligned}$$

07.25.03.4548.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 3; 4, \frac{11}{2}; z\right) = & \frac{1}{1\,124\,597\,760\,z^4} \left(e^z (36\,608 z^8 - 1\,692\,416 z^7 + 27\,476\,736 z^6 - 188\,863\,680 z^5 + 501\,143\,520 z^4 - 225\,182\,160 z^3 - \right. \\
 & \left. 230\,716\,080 z^2 - 490\,904\,820 z + 70\,945\,875) + \right. \\
 & \left. \frac{1}{2\,249\,195\,520\,z^{9/2}} \left(\sqrt{\pi} (-73\,216 z^9 + 3\,421\,440 z^8 - 56\,609\,280 z^7 + 403\,603\,200 z^6 - 1\,167\,566\,400 z^5 + \right. \right. \\
 & \left. \left. 817\,296\,480 z^4 + 454\,053\,600 z^3 + 875\,674\,800 z^2 - 547\,296\,750 z - 70\,945\,875) \operatorname{erfi}(\sqrt{z}) \right) + \frac{126}{143 z^3} \right)
 \end{aligned}$$

07.25.03.4549.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 3; 4, \frac{11}{2}; -z\right) = & \frac{1}{1\,124\,597\,760\,z^4} \left(e^{-z} (36\,608 z^8 + 1\,692\,416 z^7 + 27\,476\,736 z^6 + 188\,863\,680 z^5 + 501\,143\,520 z^4 + 225\,182\,160 z^3 - \right. \\
 & \left. 230\,716\,080 z^2 + 490\,904\,820 z + 70\,945\,875) + \right. \\
 & \left. \frac{1}{2\,249\,195\,520\,z^{9/2}} \left(\sqrt{\pi} (73\,216 z^9 + 3\,421\,440 z^8 + 56\,609\,280 z^7 + 403\,603\,200 z^6 + 1\,167\,566\,400 z^5 + \right. \right. \\
 & \left. \left. 817\,296\,480 z^4 - 454\,053\,600 z^3 + 875\,674\,800 z^2 + 547\,296\,750 z - 70\,945\,875) \operatorname{erf}(\sqrt{z}) \right) - \frac{126}{143 z^3} \right)
 \end{aligned}$$

07.25.03.4550.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 3; 4, 6; z\right) = & -\frac{1}{31\,208\,752\,575\,z^3} \left(64 e^{z/2} (18\,304 z^8 - 916\,608 z^7 + 16\,540\,800 z^6 - 132\,742\,080 z^5 + 464\,169\,600 z^4 - 531\,830\,160 z^3 - \right. \\
 & \left. 71\,473\,680 z^2 - 275\,675\,400 z + 666\,891\,225) I_0\left(\frac{z}{2}\right) + \right. \\
 & \left. \frac{1}{31\,208\,752\,575\,z^4} \left(128 e^{z/2} (9152 z^9 - 449\,152 z^8 + 7\,825\,824 z^7 - 58\,760\,640 z^6 + 176\,816\,520 z^5 - \right. \right. \\
 & \left. \left. 111\,937\,680 z^4 - 98\,796\,420 z^3 - 224\,028\,360 z^2 + 103\,378\,275 z + 24\,324\,300) I_1\left(\frac{z}{2}\right) + \frac{192}{143 z^3} \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = \frac{9}{2}$

$$\begin{aligned}
 & 07.25.03.4551.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 3; \frac{9}{2}, 5; z\right) = \\
 & \frac{168(17z-3)}{2431z^4} + \frac{1}{597442560z^4} \left(e^z (18304z^8 - 852544z^7 + 13977120z^6 - 97373232z^5 + 263626920z^4 - \right. \\
 & \quad \left. 123481260z^3 - 132122970z^2 - 308862225z + 123863040) \right) + \\
 & \frac{1}{1194885120z^{7/2}} \left(\sqrt{\pi} (-36608z^8 + 1723392z^7 - 28788480z^6 + 207916800z^5 - 612612000z^4 + \right. \\
 & \quad \left. 441080640z^3 + 257297040z^2 + 551350800z - 516891375) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4552.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 3; \frac{9}{2}, 5; -z\right) = \\
 & -\frac{168(17z+3)}{2431z^4} + \frac{1}{597442560z^4} \left(e^{-z} (18304z^8 + 852544z^7 + 13977120z^6 + 97373232z^5 + 263626920z^4 + \right. \\
 & \quad \left. 123481260z^3 - 132122970z^2 + 308862225z + 123863040) \right) + \\
 & \frac{1}{1194885120z^{7/2}} \left(\sqrt{\pi} (36608z^8 + 1723392z^7 + 28788480z^6 + 207916800z^5 + 612612000z^4 + \right. \\
 & \quad \left. 441080640z^3 - 257297040z^2 + 551350800z + 516891375) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4553.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 3; \frac{9}{2}, 6; z\right) = \\
 & \frac{420(323z^2 - 114z - 12)}{46189z^5} + \frac{1}{1135140864z^5} \left(e^z (18304z^9 - 953920z^8 + 17764896z^7 - 143510832z^6 + \right. \\
 & \quad \left. 465093288z^5 - 286595820z^4 - 375877530z^3 - 1175102145z^2 + 1052835840z + 123863040) \right) + \\
 & \frac{1}{2270281728z^{7/2}} \left(\sqrt{\pi} (-36608z^8 + 1926144z^7 - 36465408z^6 + 303878400z^5 - 1058148000z^4 + \right. \\
 & \quad \left. 931170240z^3 + 698377680z^2 + 2095133040z - 3273645375) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4554.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 3; \frac{9}{2}, 6; -z\right) = \\
 & -\frac{420(323z^2 + 114z - 12)}{46189z^5} + \frac{1}{1135140864z^5} \left(e^{-z} (18304z^9 + 953920z^8 + 17764896z^7 + 143510832z^6 + \right. \\
 & \quad \left. 465093288z^5 + 286595820z^4 - 375877530z^3 + 1175102145z^2 + 1052835840z - 123863040) \right) + \\
 & \frac{1}{2270281728z^{7/2}} \left(\sqrt{\pi} (36608z^8 + 1926144z^7 + 36465408z^6 + 303878400z^5 + 1058148000z^4 + \right. \\
 & \quad \left. 931170240z^3 - 698377680z^2 + 2095133040z + 3273645375) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = 5$

07.25.03.4555.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 3; 5, 5; z\right) = & \frac{1536(17z-6)}{12155z^4} - \frac{1}{139618103625z^4} \left(1024e^{z/2}(4576z^9 - 232320z^8 + 4266096z^7 - 35020800z^6 + 126178380z^5 - \right. \\
 & \left. 149905440z^4 - 24175350z^3 - 109909440z^2 + 344594250z - 103378275)I_0\left(\frac{z}{2}\right) + \right. \\
 & \left. \frac{1}{139618103625z^3} \left(256e^{z/2}(18304z^8 - 910976z^7 + 16162560z^6 - 124357824z^5 + 387583200z^4 - \right. \right. \\
 & \left. \left. 260663760z^3 - 248038560z^2 - 662481000z + 688068135)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

07.25.03.4556.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 3; 5, \frac{11}{2}; z\right) = & \frac{504(17z-9)}{2431z^4} + \frac{1}{2389770240z^4} \left(e^z(36608z^8 - 1920512z^7 + 36071808z^6 - 294753792z^5 + 971129280z^4 - \right. \\
 & \left. 617228640z^3 - 834253560z^2 - 2773658160z + 3252989565)\right) + \\
 & \frac{1}{4779540480z^{9/2}} \left(\sqrt{\pi}(-73216z^9 + 3877632z^8 - 74027520z^7 + 623750400z^6 - 2205403200z^5 + \right. \\
 & \left. 1984862880z^4 + 1543782240z^3 + 4962157200z^2 - 9304044750z + 1206079875)\operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

07.25.03.4557.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 3; 5, \frac{11}{2}; -z\right) = & -\frac{504(17z+9)}{2431z^4} + \frac{1}{2389770240z^4} \left(e^{-z}(36608z^8 + 1920512z^7 + 36071808z^6 + 294753792z^5 + 971129280z^4 + \right. \\
 & \left. 617228640z^3 - 834253560z^2 + 2773658160z + 3252989565)\right) + \\
 & \frac{1}{4779540480z^{9/2}} \left(\sqrt{\pi}(73216z^9 + 3877632z^8 + 74027520z^7 + 623750400z^6 + 2205403200z^5 + \right. \\
 & \left. 1984862880z^4 - 1543782240z^3 + 4962157200z^2 + 9304044750z + 1206079875)\operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

07.25.03.4558.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{9}{2}, 3; 5, 6; z\right) = & \frac{768(17z-12)}{2431z^4} - \frac{1}{530548793775z^4} \left(256e^{z/2}(36608z^9 - 2073984z^8 + 43029696z^7 - 404965440z^6 + 1698673680z^5 - \right. \\
 & \left. 2351700720z^4 - 622274040z^3 - 3666635640z^2 + 14852012175z - 7856748900)I_0\left(\frac{z}{2}\right) + \right. \\
 & \left. \frac{1}{530548793775z^4} \left(256e^{z/2}(36608z^9 - 2037376z^8 + 41010624z^7 - 364936896z^6 + 1352319120z^5 - \right. \right. \\
 & \left. \left. 1146730320z^4 - 1353654360z^3 - 4970174760z^2 + 9558433215z - 827026200)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = \frac{11}{2}$

07.25.03.4559.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{11}{2}, 6; z\right) = \frac{1260(323z^2 - 342z + 36)}{46189z^5} + \frac{1}{4540563456z^5} (e^z(36608z^9 - 2148608z^8 + 45828096z^7 - 433932096z^6 + 1708097952z^5 - 1409894640z^4 - 2319226560z^3 - 10395827820z^2 + 23904711495z - 4459069440)) + \frac{1}{9081126912z^{9/2}} (\sqrt{\pi}(-73216z^9 + 4333824z^8 - 93768192z^7 + 911635200z^6 - 3809332800z^5 + 4190266080z^4 + 4190266080z^3 + 18856197360z^2 - 58925616750z + 22915517625) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.4560.01

$${}_2F_2\left(-\frac{9}{2}, 3; \frac{11}{2}, 6; -z\right) = -\frac{1260(323z^2 + 342z + 36)}{46189z^5} + \frac{1}{4540563456z^5} (e^{-z}(36608z^9 + 2148608z^8 + 45828096z^7 + 433932096z^6 + 1708097952z^5 + 1409894640z^4 - 2319226560z^3 + 10395827820z^2 + 23904711495z + 4459069440)) + \frac{1}{9081126912z^{9/2}} (\sqrt{\pi}(73216z^9 + 4333824z^8 + 93768192z^7 + 911635200z^6 + 3809332800z^5 + 4190266080z^4 - 4190266080z^3 + 18856197360z^2 + 58925616750z + 22915517625) \operatorname{erf}(\sqrt{z}))$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 3$, $b_1 = 6$

07.25.03.4561.01

$${}_2F_2\left(-\frac{9}{2}, 3; 6, 6; z\right) = \frac{1920(323z^2 - 456z + 96)}{46189z^5} - \frac{1}{2016085416345z^5} (512e^{z/2}(36608z^{10} - 2314752z^9 + 54280128z^8 - 586121472z^7 + 2867383440z^6 - 4641144480z^5 - 1940560920z^4 - 14929427520z^3 + 83936573055z^2 - 82495863450z + 15713497800) I_0\left(\frac{z}{2}\right) + \frac{1}{2016085416345z^4} (512e^{z/2}(36608z^9 - 2278144z^8 + 52020288z^7 - 535203648z^6 + 2356026192z^5 - 2507343120z^4 - 3669692040z^3 - 18630708120z^2 + 64026085095z - 28937802555) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{7}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.4562.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{1}{1715175} (e^z(1024z^{10} + 26624z^9 + 195840z^8 + 368640z^7 - 40320z^6 + 241920z^5 - 574560z^4 + 1209600z^3 - 2097900z^2 + 2608200z - 1715175))$$

$$\begin{aligned}
 & \text{07.25.03.4563.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) &= \frac{1}{155925} e^z (512 z^9 + 11520 z^8 + 69120 z^7 + 80640 z^6 - 60480 z^5 + 90720 z^4 - 151200 z^3 + 226800 z^2 - 255150 z + 155925)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4564.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) &= -\frac{e^z (256 z^8 + 4864 z^7 + 22400 z^6 + 6720 z^5 - 33600 z^4 + 28560 z^3 - 32760 z^2 + 31500 z - 17325)}{17325}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4565.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) &= \frac{e^z (128 z^7 + 1984 z^6 + 6240 z^5 - 6000 z^4 - 13800 z^3 + 7380 z^2 - 5310 z + 2475)}{2475}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4566.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) &= -\frac{1}{495} e^z (64 z^6 + 768 z^5 + 1200 z^4 - 4800 z^3 - 4500 z^2 + 1440 z - 495)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4567.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) &= \frac{1}{165} e^z (32 z^5 + 272 z^4 - 80 z^3 - 2280 z^2 - 1110 z + 165)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4568.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) &= -\frac{1}{165} e^z (16 z^4 + 80 z^3 - 240 z^2 - 780 z - 165)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4569.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, 1; z\right) &= \frac{1}{165} e^{z/2} (-8 z^4 - 32 z^3 + 128 z^2 + 390 z + 165) I_0\left(\frac{z}{2}\right) - \frac{2}{165} e^{z/2} (4 z^4 + 12 z^3 - 74 z^2 - 119 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4570.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) &= -\frac{1}{165} e^z (8 z^3 + 12 z^2 - 150 z - 165)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4571.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, 2; z\right) &= \frac{1}{165} e^{z/2} (-8 z^3 - 4 z^2 + 144 z + 165) I_0\left(\frac{z}{2}\right) + \frac{1}{165} e^{z/2} (-8 z^3 + 4 z^2 + 136 z + 39) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4572.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) &= -\frac{1}{55} e^z (4 z^2 - 8 z - 55)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4573.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, 3; z\right) &= -\frac{4}{165} e^{z/2} (4 z^2 - 12 z - 45) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4 z^3 - 16 z^2 - 27 z + 15) I_1\left(\frac{z}{2}\right)}{165 z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4574.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) &= -\frac{1}{11} e^z (2 z - 11)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4575.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, 4; z\right) &= -\frac{4 e^{z/2} (4 z^2 - 26 z + 17) I_0\left(\frac{z}{2}\right)}{55 z} - \frac{4 e^{z/2} (4 z^3 - 30 z^2 + 49 z - 68) I_1\left(\frac{z}{2}\right)}{55 z^2}
 \end{aligned}$$

07.25.03.4576.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{7 e^z (4 z^3 - 36 z^2 + 90 z - 135)}{44 z^3} - \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{88 z^{7/2}}$$

07.25.03.4577.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{88 z^{7/2}} - \frac{7 e^{-z} (4 z^3 + 36 z^2 + 90 z + 135)}{44 z^3}$$

07.25.03.4578.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, 5; z\right) = -\frac{32 e^{z/2} (2 z^2 - 20 z + 57) I_0\left(\frac{z}{2}\right)}{55 z^2} - \frac{64 e^{z/2} (z^3 - 11 z^2 + 40 z - 114) I_1\left(\frac{z}{2}\right)}{55 z^3}$$

07.25.03.4579.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = -\frac{63 e^z (4 z^3 - 50 z^2 + 215 z - 525)}{88 z^4} - \frac{945 \sqrt{\pi} (9 z + 35) \operatorname{erfi}(\sqrt{z})}{176 z^{9/2}}$$

07.25.03.4580.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (4 z^3 + 50 z^2 + 215 z + 525)}{88 z^4} + \frac{945 \sqrt{\pi} (9 z - 35) \operatorname{erf}(\sqrt{z})}{176 z^{9/2}}$$

07.25.03.4581.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{11}{2}, 6; z\right) = -\frac{32 e^{z/2} (2 z^2 - 27 z + 168) I_0\left(\frac{z}{2}\right)}{11 z^3} - \frac{32 e^{z/2} (2 z^3 - 29 z^2 + 108 z - 672) I_1\left(\frac{z}{2}\right)}{11 z^4}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.4582.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{1}{14175} e^z (256 z^8 + 5120 z^7 + 26880 z^6 + 26880 z^5 - 16800 z^4 + 20160 z^3 - 25200 z^2 + 25200 z - 14175)$$

07.25.03.4583.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{e^z (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575)}{1575}$$

07.25.03.4584.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{1}{225} e^z (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225)$$

07.25.03.4585.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} e^z (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45)$$

07.25.03.4586.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -\frac{1}{15} e^z (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15)$$

07.25.03.4587.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (8 z^3 + 60 z^2 + 90 z + 15)$$

07.25.03.4588.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (4z^3 + 28z^2 + 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^3 + 24z^2 + 23z) I_1\left(\frac{z}{2}\right)$$

07.25.03.4589.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (4z^2 + 20z + 15)$$

07.25.03.4590.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4z^2 + 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^2 + 14z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.4591.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{5} e^z (2z + 5)$$

07.25.03.4592.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, 3; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2z^2 + 2z - 1) I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.4593.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = e^z$$

07.25.03.4594.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (2z - 1) I_0\left(\frac{z}{2}\right)}{5z} + \frac{4 e^{z/2} (2z^2 - 3z + 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.4595.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4z^2 - 10z + 15)}{8z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.4596.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{7 e^{-z} (4z^2 + 10z + 15)}{8z^3}$$

07.25.03.4597.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (z - 3) I_0\left(\frac{z}{2}\right)}{5z^2} + \frac{32 e^{z/2} (z^2 - 4z + 12) I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.4598.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (8z^2 - 40z + 105)}{32z^4} - \frac{945 \sqrt{\pi} (2z + 7) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.4599.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8z^2 + 40z + 105)}{32z^4} + \frac{945 \sqrt{\pi} (2z - 7) \operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.4600.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (z - 8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.4601.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{525} e^z (-192 z^6 - 3072 z^5 + 19184 z^4 - 3008 z^3 + 1788 z^2 - 1200 z + 525) - \frac{32768}{525} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4602.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \\
 & \frac{32768}{525} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{525} e^{-z} (-192 z^6 + 3072 z^5 + 19184 z^4 + 3008 z^3 + 1788 z^2 + 1200 z + 525)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4603.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{16384}{75} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{75} e^z (96 z^5 - 14992 z^4 - 2096 z^3 + 456 z^2 - 210 z + 75)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4604.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{75} e^{-z} (-96 z^5 - 14992 z^4 + 2096 z^3 + 456 z^2 + 210 z + 75) - \frac{16384}{75} \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4605.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{15} e^z (4048 z^4 + 1424 z^3 + 336 z^2 - 60 z + 15) - \frac{4096}{15} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4606.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{4096}{15} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{15} e^{-z} (4048 z^4 - 1424 z^3 + 336 z^2 + 60 z + 15)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4607.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{2048}{15} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{15} e^z (-2048 z^4 - 952 z^3 - 708 z^2 - 150 z + 15)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4608.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-2048 z^4 + 952 z^3 - 708 z^2 + 150 z + 15) - \frac{2048}{15} \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4609.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (256 z^4 + 128 z^3 + 156 z^2 + 120 z + 15) - \frac{256}{15} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4610.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{256}{15} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{15} e^{-z} (256 z^4 - 128 z^3 + 156 z^2 - 120 z + 15)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4611.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (-32768 z^5 + 24576 z^4 + 15360 z^3 + 21210 z^2 + 18900 z + 4725) I_0\left(\frac{z}{2}\right)}{4725} + \\
 & \frac{2 e^{z/2} (16384 z^5 + 4096 z^4 + 4608 z^3 + 6765 z^2 + 3885 z) I_1\left(\frac{z}{2}\right)}{4725}
 \end{aligned}$$

07.25.03.4612.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{75} e^z (128 z^4 + 64 z^3 + 96 z^2 + 150 z + 75) - \frac{128}{75} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4613.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{128}{75} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{75} e^{-z} (128 z^4 - 64 z^3 + 96 z^2 - 150 z + 75)$$

07.25.03.4614.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (-65 536 z^5 + 49 152 z^4 + 30 720 z^3 + 53 760 z^2 + 88 830 z + 51 975) I_0\left(\frac{z}{2}\right)}{51 975} + \frac{e^{z/2} (65 536 z^5 + 16 384 z^4 + 18 432 z^3 + 38 400 z^2 + 55 230 z + 8505) I_1\left(\frac{z}{2}\right)}{51 975}$$

07.25.03.4615.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{75} e^z (32 z^4 + 16 z^3 + 24 z^2 + 60 z + 75) - \frac{32}{75} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4616.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{32}{75} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{75} e^{-z} (32 z^4 - 16 z^3 + 24 z^2 - 60 z + 75)$$

07.25.03.4617.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (65 536 z^6 + 16 384 z^5 + 18 432 z^4 + 38 400 z^3 + 117 600 z^2 + 70 875 z - 31 185) I_1\left(\frac{z}{2}\right)}{675 675 z} - \frac{4 e^{z/2} (65 536 z^5 - 49 152 z^4 - 30 720 z^3 - 53 760 z^2 - 151 200 z - 176 715) I_0\left(\frac{z}{2}\right)}{675 675}$$

07.25.03.4618.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{105} e^z (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4619.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)$$

07.25.03.4620.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{3 378 375 z^2} 4 e^{z/2} (131 072 z^7 + 32 768 z^6 + 36 864 z^5 + 76 800 z^4 + 235 200 z^3 + 952 560 z^2 - 1 278 585 z + 1 621 620) I_1\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (131 072 z^6 - 98 304 z^5 - 61 440 z^4 - 107 520 z^3 - 302 400 z^2 - 1 164 240 z + 405 405) I_0\left(\frac{z}{2}\right)}{3 378 375 z}$$

07.25.03.4621.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 + 64 z^6 + 96 z^5 + 240 z^4 + 840 z^3 + 3780 z^2 - 9450 z + 14 175)}{1920 z^3} + \frac{\sqrt{\pi} (-256 z^8 - 14 175) \operatorname{erfi}(\sqrt{z})}{3840 z^{7/2}}$$

$$\begin{aligned}
 & \text{07.25.03.4622.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = & \frac{e^{-z} (128 z^7 - 64 z^6 + 96 z^5 - 240 z^4 + 840 z^3 - 3780 z^2 - 9450 z - 14175)}{1920 z^3} + \frac{\sqrt{\pi} (256 z^8 + 14175) \operatorname{erf}(\sqrt{z})}{3840 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4623.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, 5; z\right) = & \frac{1}{57432375 z^3} \left(64 e^{z/2} (65536 z^8 + 16384 z^7 + 18432 z^6 + 38400 z^5 + 117600 z^4 + 476280 z^3 + 2401245 z^2 - \right. \\
 & \left. 11351340 z + 36486450) I_1\left(\frac{z}{2}\right) - \frac{1}{57432375 z^2} \right. \\
 & \left. 32 e^{z/2} (131072 z^7 - 98304 z^6 - 61440 z^5 - 107520 z^4 - 302400 z^3 - 1164240 z^2 - 5675670 z + 18243225) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4624.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = & \frac{e^{-z} (128 z^8 + 64 z^7 + 96 z^6 + 240 z^5 + 840 z^4 + 3780 z^3 + 20790 z^2 - 137025 z + 396900)}{3840 z^4} + \\
 & \frac{\sqrt{\pi} (-256 z^9 - 127575 z - 396900) \operatorname{erfi}(\sqrt{z})}{7680 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4625.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = & \frac{e^{-z} (128 z^8 - 64 z^7 + 96 z^6 - 240 z^5 + 840 z^4 - 3780 z^3 + 20790 z^2 + 137025 z + 396900)}{3840 z^4} + \\
 & \frac{\sqrt{\pi} (256 z^9 + 127575 z - 396900) \operatorname{erf}(\sqrt{z})}{7680 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4626.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{7}{2}, 6; z\right) = & \frac{1}{218243025 z^4} \left(32 e^{z/2} (262144 z^9 + 65536 z^8 + 73728 z^7 + 153600 z^6 + 470400 z^5 + 1905120 z^4 + 9604980 z^3 + \right. \\
 & \left. 57972915 z^2 - 267567300 z + 3308104800) I_1\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{218243025 z^3} \left(32 e^{z/2} (262144 z^8 - 196608 z^7 - 122880 z^6 - 215040 z^5 - 604800 z^4 - \right. \right. \\
 & \left. \left. 2328480 z^3 - 11351340 z^2 - 66891825 z + 827026200) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.4627.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = & \frac{1}{75} e^z (57008 z^4 - 12896 z^3 + 888 z^2 - 264 z + 75) - \frac{4096}{75} \sqrt{\pi} (14 z^{9/2} - 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.4628.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{75} e^{-z} (57\,008 z^4 + 12\,896 z^3 + 888 z^2 + 264 z + 75) + \frac{4096}{75} \sqrt{\pi} (14 z^{9/2} + 9 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4629.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{15} e^z (-14\,336 z^4 + 11\,432 z^3 + 732 z^2 - 78 z + 15) + \frac{2048}{15} \sqrt{\pi} (7 z^{9/2} - 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4630.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-14\,336 z^4 - 11\,432 z^3 + 732 z^2 + 78 z + 15) - \frac{2048}{15} \sqrt{\pi} (7 z^{9/2} + 9 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4631.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (7168 z^4 - 10\,240 z^3 - 1788 z^2 - 204 z + 15) - \frac{512}{15} \sqrt{\pi} (14 z^{9/2} - 27 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4632.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (7168 z^4 + 10\,240 z^3 - 1788 z^2 + 204 z + 15) + \frac{512}{15} \sqrt{\pi} (14 z^{9/2} + 27 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4633.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (-896 z^4 + 1856 z^3 + 480 z^2 + 174 z + 15) + \frac{128}{15} \sqrt{\pi} (7 z^{9/2} - 18 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4634.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-896 z^4 - 1856 z^3 + 480 z^2 - 174 z + 15) - \frac{128}{15} \sqrt{\pi} (7 z^{9/2} + 18 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4635.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (114\,688 z^5 - 417\,792 z^4 + 195\,072 z^3 + 61\,440 z^2 + 27\,405 z + 4725) I_0\left(\frac{z}{2}\right) + e^{z/2} (-114\,688 z^5 + 303\,104 z^4 + 50\,688 z^3 + 26\,112 z^2 + 8445 z) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.4636.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{32}{75} \sqrt{\pi} (14 z - 45) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{75} e^z (-448 z^4 + 1216 z^3 + 384 z^2 + 240 z + 75)$$

07.25.03.4637.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{75} e^{-z} (-448 z^4 - 1216 z^3 + 384 z^2 - 240 z + 75) - \frac{32}{75} \sqrt{\pi} z^{7/2} (14 z + 45) \operatorname{erf}(\sqrt{z})$$

07.25.03.4638.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (229\,376 z^5 - 983\,040 z^4 + 500\,736 z^3 + 192\,000 z^2 + 136\,080 z + 51\,975) I_0\left(\frac{z}{2}\right) + e^{z/2} (-229\,376 z^5 + 753\,664 z^4 + 138\,240 z^3 + 93\,696 z^2 + 63\,600 z + 6615) I_1\left(\frac{z}{2}\right)}{51\,975}$$

07.25.03.4639.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{16}{75} \sqrt{\pi} (7 z - 27) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{75} e^z (-112 z^4 + 376 z^3 + 132 z^2 + 114 z + 75)$$

07.25.03.4640.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{75} e^{-z} (-112 z^4 - 376 z^3 + 132 z^2 - 114 z + 75) - \frac{16}{75} \sqrt{\pi} z^{7/2} (7 z + 27) \operatorname{erf}(\sqrt{z})$$

07.25.03.4641.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, 3; z\right) = \frac{32 e^{z/2} (28672 z^5 - 141312 z^4 + 76416 z^3 + 32640 z^2 + 32130 z + 21735) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (229376 z^6 - 901120 z^5 - 175104 z^4 - 135168 z^3 - 150000 z^2 - 52920 z + 19845) I_1\left(\frac{z}{2}\right)}{675675 z}$$

07.25.03.4642.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{4}{15} \sqrt{\pi} (2z - 9) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{15} e^z (-8 z^4 + 32 z^3 + 12 z^2 + 12 z + 15)$$

07.25.03.4643.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{15} e^{-z} (-8 z^4 - 32 z^3 + 12 z^2 - 12 z + 15) - \frac{4}{15} \sqrt{\pi} z^{7/2} (2z + 9) \operatorname{erf}(\sqrt{z})$$

07.25.03.4644.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, 4; z\right) = \frac{1}{3378375 z} + \frac{4 e^{z/2} (458752 z^6 - 2555904 z^5 + 1443840 z^4 + 660480 z^3 + 756000 z^2 + 1028160 z - 218295) I_0\left(\frac{z}{2}\right) - \frac{1}{3378375 z^2} + 4 e^{z/2} (458752 z^7 - 2097152 z^6 - 423936 z^5 - 353280 z^4 - 472800 z^3 - 635040 z^2 + 734265 z - 873180) I_1\left(\frac{z}{2}\right)}{3378375 z}$$

07.25.03.4645.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (-896 z^7 + 4160 z^6 + 1632 z^5 + 1776 z^4 + 2760 z^3 + 3780 z^2 - 9450 z + 14175)}{3840 z^3} + \frac{\sqrt{\pi} (1792 z^8 - 9216 z^7 - 14175) \operatorname{erfi}(\sqrt{z})}{7680 z^{7/2}}$$

07.25.03.4646.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-896 z^7 - 4160 z^6 + 1632 z^5 - 1776 z^4 + 2760 z^3 - 3780 z^2 - 9450 z - 14175)}{3840 z^3} + \frac{\sqrt{\pi} (-1792 z^8 - 9216 z^7 + 14175) \operatorname{erf}(\sqrt{z})}{7680 z^{7/2}}$$

07.25.03.4647.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, 5; z\right) = \frac{1}{57432375 z^2} + \frac{32 e^{z/2} (458752 z^7 - 2850816 z^6 + 1665024 z^5 + 798720 z^4 + 997920 z^3 + 1708560 z^2 + 2401245 z - 8513505) I_0\left(\frac{z}{2}\right) - \frac{1}{57432375 z^3} (32 e^{z/2} (458752 z^8 - 2392064 z^7 - 497664 z^6 - 436224 z^5 - 645600 z^4 - 1164240 z^3 - 1408995 z^2 + 9604980 z - 34054020) I_1\left(\frac{z}{2}\right))}{57432375 z^3}$$

$$\begin{aligned}
 & \text{07.25.03.4648.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \\
 & \frac{e^z (-1792 z^8 + 9472 z^7 + 3840 z^6 + 4416 z^5 + 7680 z^4 + 15120 z^3 + 15120 z^2 - 207900 z + 694575)}{15360 z^4} + \\
 & \frac{\sqrt{\pi} (3584 z^9 - 20736 z^8 - 255150 z - 694575) \operatorname{erfi}(\sqrt{z})}{30720 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4649.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{15360 z^4} e^{-z} (-1792 z^8 - 9472 z^7 + 3840 z^6 - 4416 z^5 + 7680 z^4 - 15120 z^3 + 15120 z^2 + 207900 z + 694575) + \\
 & \frac{\sqrt{\pi} (-3584 z^9 - 20736 z^8 + 255150 z - 694575) \operatorname{erf}(\sqrt{z})}{30720 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4650.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{5}{2}, 6; z\right) = \\
 & \frac{1}{218243025 z^3} \left(32 e^{z/2} (917504 z^8 - 6291456 z^7 + 3772416 z^6 + 1873920 z^5 + 2479680 z^4 + 4777920 z^3 + \right. \\
 & \quad \left. 10041570 z^2 + 8513505 z - 34054200) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{218243025 z^4} \left(32 e^{z/2} (917504 z^9 - 5373952 z^8 - 1142784 z^7 - 1038336 z^6 - 1636800 z^5 - \right. \\
 & \quad \left. 3386880 z^4 - 7104510 z^3 - 2401245 z^2 + 34054020 z - 1362160800) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{3}{2}$

$$\text{07.25.03.4651.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (3584 z^4 - 7424 z^3 + 684 z^2 - 24 z + 3) - \frac{128}{3} \sqrt{\pi} (28 z^{9/2} - 72 z^{7/2} + 21 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.4652.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (3584 z^4 + 7424 z^3 + 684 z^2 + 24 z + 3) + \frac{128}{3} \sqrt{\pi} (28 z^{9/2} + 72 z^{7/2} + 21 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.4653.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (-1792 z^4 + 6016 z^3 - 1920 z^2 - 66 z + 3) + \frac{64}{3} \sqrt{\pi} (28 z^{9/2} - 108 z^{7/2} + 63 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.4654.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-1792 z^4 - 6016 z^3 - 1920 z^2 + 66 z + 3) - \frac{64}{3} \sqrt{\pi} (28 z^{9/2} + 108 z^{7/2} + 63 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4655.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (224 z^4 - 1040 z^3 + 600 z^2 + 60 z + 3) - \frac{16}{3} \sqrt{\pi} (14 z^{9/2} - 72 z^{7/2} + 63 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4656.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (224 z^4 + 1040 z^3 + 600 z^2 - 60 z + 3) + \frac{16}{3} \sqrt{\pi} (14 z^{9/2} + 72 z^{7/2} + 63 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4657.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-28 672 z^5 + 187 392 z^4 - 280 320 z^3 + 72 768 z^2 + 9450 z + 945) I_0\left(\frac{z}{2}\right) + \frac{2}{945} e^{z/2} (14 336 z^5 - 79 360 z^4 + 67 968 z^3 + 6240 z^2 + 939 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.4658.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (112 z^4 - 664 z^3 + 564 z^2 + 90 z + 15) - \frac{8}{15} \sqrt{\pi} z^{5/2} (14 z^2 - 90 z + 105) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4659.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{8}{15} \sqrt{\pi} (14 z^2 + 90 z + 105) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{15} e^{-z} (112 z^4 + 664 z^3 + 564 z^2 - 90 z + 15)$$

07.25.03.4660.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2} (-57 344 z^5 + 448 512 z^4 - 809 472 z^3 + 256 128 z^2 + 49 140 z + 10 395) I_0\left(\frac{z}{2}\right) + e^{z/2} (57 344 z^5 - 391 168 z^4 + 446 976 z^3 + 52 608 z^2 + 14 988 z + 945) I_1\left(\frac{z}{2}\right)}{10 395}$$

07.25.03.4661.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{15} e^z (28 z^4 - 202 z^3 + 228 z^2 + 48 z + 15) - \frac{1}{15} \sqrt{\pi} z^{5/2} (28 z^2 - 216 z + 315) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4662.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{15} \sqrt{\pi} (28 z^2 + 216 z + 315) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{15} e^{-z} (28 z^4 + 202 z^3 + 228 z^2 - 48 z + 15)$$

07.25.03.4663.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (57 344 z^6 - 464 896 z^5 + 665 088 z^4 + 91 008 z^3 + 38 316 z^2 + 7245 z - 2205) I_1\left(\frac{z}{2}\right) + 4 e^{z/2} (57 344 z^5 - 522 240 z^4 + 1 101 312 z^3 - 398 976 z^2 - 99 540 z - 34 335) I_0\left(\frac{z}{2}\right)}{135 135 z}$$

07.25.03.4664.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{3} e^z (2 z^4 - 17 z^3 + 24 z^2 + 6 z + 3) - \frac{1}{6} \sqrt{\pi} z^{5/2} (4 z^2 - 36 z + 63) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4665.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{6} \sqrt{\pi} (4 z^2 + 36 z + 63) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (2 z^4 + 17 z^3 + 24 z^2 - 6 z + 3)$$

07.25.03.4666.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{675\,675\,z^2} 4 e^{z/2} (114\,688 z^7 - 1\,077\,248 z^6 + 1\,852\,416 z^5 + 280\,320 z^4 + 147\,480 z^3 + 77\,490 z^2 - 72\,765 z + 79\,380) I_1\left(\frac{z}{2}\right) - \frac{1}{675\,675\,z} 4 e^{z/2} (114\,688 z^6 - 1\,191\,936 z^5 + 2\,872\,320 z^4 - 1\,148\,160 z^3 - 340\,200 z^2 - 187\,110 z + 19\,845) I_0\left(\frac{z}{2}\right)$$

07.25.03.4667.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^{-z} (896 z^7 - 8768 z^6 + 14\,880 z^5 + 4176 z^4 + 2712 z^3 + 1260 z^2 - 3150 z + 4725)}{3072 z^3} + \frac{\sqrt{\pi} (-1792 z^8 + 18\,432 z^7 - 37\,632 z^6 - 4725) \operatorname{erfi}(\sqrt{z})}{6144 z^{7/2}}$$

07.25.03.4668.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (896 z^7 + 8768 z^6 + 14\,880 z^5 - 4176 z^4 + 2712 z^3 - 1260 z^2 - 3150 z - 4725)}{3072 z^3} + \frac{\sqrt{\pi} (1792 z^8 + 18\,432 z^7 + 37\,632 z^6 + 4725) \operatorname{erf}(\sqrt{z})}{6144 z^{7/2}}$$

07.25.03.4669.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, 5; z\right) = \frac{1}{11\,486\,475 z^3} \left(64 e^{z/2} (57\,344 z^8 - 612\,352 z^7 + 1\,230\,336 z^6 + 200\,064 z^5 + 121\,260 z^4 + 95\,445 z^3 + 6615 z^2 - 317\,520 z + 1\,309\,770) I_1\left(\frac{z}{2}\right) - \frac{1}{11\,486\,475 z^2} 32 e^{z/2} (114\,688 z^7 - 1\,339\,392 z^6 + 3\,628\,032 z^5 - 1\,562\,880 z^4 - 521\,640 z^3 - 376\,110 z^2 - 158\,760 z + 654\,885) I_0\left(\frac{z}{2}\right)\right)$$

07.25.03.4670.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^{-z} (896 z^8 - 9920 z^7 + 19\,680 z^6 + 6000 z^5 + 4584 z^4 + 3780 z^3 - 1890 z^2 - 23\,625 z + 99\,225)}{6144 z^4} + \frac{\sqrt{\pi} (-1792 z^9 + 20\,736 z^8 - 48\,384 z^7 - 42\,525 z - 99\,225) \operatorname{erfi}(\sqrt{z})}{12\,288 z^{9/2}}$$

07.25.03.4671.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (896 z^8 + 9920 z^7 + 19\,680 z^6 - 6000 z^5 + 4584 z^4 - 3780 z^3 - 1890 z^2 + 23\,625 z + 99\,225)}{6144 z^4} + \frac{\sqrt{\pi} (1792 z^9 + 20\,736 z^8 + 48\,384 z^7 + 42\,525 z - 99\,225) \operatorname{erf}(\sqrt{z})}{12\,288 z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.4672.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{3}{2}, 6; z\right) = \\
 & \frac{1}{43\,648\,605\,z^4} \left(32 e^{z/2} (229\,376\,z^9 - 2\,744\,320\,z^8 + 6\,309\,888\,z^7 + 1\,082\,880\,z^6 + 723\,504\,z^5 + 709\,380\,z^4 + \right. \\
 & \quad \left. 507\,150\,z^3 - 1\,448\,685\,z^2 + 4\,365\,900\,z + 90\,810\,720) I_1\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{43\,648\,605\,z^3} \left(32 e^{z/2} (229\,376\,z^8 - 2\,973\,696\,z^7 + 8\,939\,520\,z^6 - 4\,084\,224\,z^5 - 1\,486\,800\,z^4 - \right. \right. \\
 & \quad \left. \left. 1\,271\,340\,z^3 - 1\,071\,630\,z^2 + 1\,091\,475\,z + 22\,702\,680) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.4673.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{3} e^z (896\,z^4 - 4736\,z^3 + 4128\,z^2 - 192\,z + 3) - \frac{16}{3} \sqrt{\pi} (56\,z^{9/2} - 324\,z^{7/2} + 378\,z^{5/2} - 63\,z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4674.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \\
 & \frac{1}{3} e^{-z} (896\,z^4 + 4736\,z^3 + 4128\,z^2 + 192\,z + 3) + \frac{16}{3} \sqrt{\pi} (56\,z^{9/2} + 324\,z^{7/2} + 378\,z^{5/2} + 63\,z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4675.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (-112\,z^4 + 808\,z^3 - 1164\,z^2 + 186\,z + 3) + \frac{8}{3} \sqrt{\pi} (14\,z^{9/2} - 108\,z^{7/2} + 189\,z^{5/2} - 63\,z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4676.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \\
 & \frac{1}{3} e^{-z} (-112\,z^4 - 808\,z^3 - 1164\,z^2 - 186\,z + 3) - \frac{8}{3} \sqrt{\pi} (14\,z^{9/2} + 108\,z^{7/2} + 189\,z^{5/2} + 63\,z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4677.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (14\,336\,z^5 - 135\,168\,z^4 + 340\,608\,z^3 - 249\,792\,z^2 + 29\,295\,z + 945) I_0\left(\frac{z}{2}\right) + \\
 & \quad \frac{1}{945} e^{z/2} (-14\,336\,z^5 + 120\,832\,z^4 - 226\,944\,z^3 + 68\,928\,z^2 + 2193\,z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4678.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{2}{15} \sqrt{\pi} (28\,z^3 - 270\,z^2 + 630\,z - 315) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{15} e^z (-56\,z^4 + 512\,z^3 - 1032\,z^2 + 300\,z + 15)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4679.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \\
 & \frac{1}{15} e^{-z} (-56\,z^4 - 512\,z^3 - 1032\,z^2 - 300\,z + 15) - \frac{2}{15} \sqrt{\pi} z^{3/2} (28\,z^3 + 270\,z^2 + 630\,z + 315) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.4680.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^{z/2} (28\,672 z^5 - 325\,632 z^4 + 1\,012\,992 z^3 - 945\,408 z^2 + 158\,382 z + 10\,395) I_0\left(\frac{z}{2}\right)}{10\,395} +$$

$$\frac{e^{z/2} (-28\,672 z^5 + 296\,960 z^4 - 730\,368 z^3 + 334\,848 z^2 + 18\,642 z + 567) I_1\left(\frac{z}{2}\right)}{10\,395}$$

07.25.03.4681.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{30} \sqrt{\pi} (28 z^3 - 324 z^2 + 945 z - 630) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{15} e^z (-14 z^4 + 155 z^3 - 402 z^2 + 174 z + 15)$$

07.25.03.4682.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-14 z^4 - 155 z^3 - 402 z^2 - 174 z + 15) - \frac{1}{30} \sqrt{\pi} z^{3/2} (28 z^3 + 324 z^2 + 945 z + 630) \operatorname{erf}(\sqrt{z})$$

07.25.03.4683.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, 3; z\right) = \frac{8 e^{z/2} (14\,336 z^5 - 190\,464 z^4 + 704\,640 z^3 - 792\,384 z^2 + 168\,399 z + 17\,010) I_0\left(\frac{z}{2}\right)}{135\,135} -$$

$$\frac{4 e^{z/2} (28\,672 z^6 - 352\,256 z^5 + 1\,071\,360 z^4 - 660\,864 z^3 - 51\,042 z^2 - 4158 z + 945) I_1\left(\frac{z}{2}\right)}{135\,135 z}$$

07.25.03.4684.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{24} \sqrt{\pi} (8 z^3 - 108 z^2 + 378 z - 315) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{12} e^z (-4 z^4 + 52 z^3 - 165 z^2 + 96 z + 12)$$

07.25.03.4685.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{12} e^{-z} (-4 z^4 - 52 z^3 - 165 z^2 - 96 z + 12) - \frac{1}{24} \sqrt{\pi} z^{3/2} (8 z^3 + 108 z^2 + 378 z + 315) \operatorname{erf}(\sqrt{z})$$

07.25.03.4686.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (57\,344 z^6 - 872\,448 z^5 + 3\,740\,160 z^4 - 4\,899\,840 z^3 + 1\,236\,060 z^2 + 175\,770 z - 6615) I_0\left(\frac{z}{2}\right)}{675\,675 z} -$$

$$\frac{1}{675\,675 z^2} 4 e^{z/2} (57\,344 z^7 - 815\,104 z^6 + 2\,953\,728 z^5 - 2\,296\,320 z^4 - 219\,300 z^3 - 39\,690 z^2 + 27\,405 z - 26\,460) I_1\left(\frac{z}{2}\right)$$

07.25.03.4687.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (-896 z^7 + 13\,376 z^6 - 50\,208 z^5 + 36\,912 z^4 + 5928 z^3 + 756 z^2 - 1890 z + 2835)}{6144 z^3} +$$

$$\frac{\sqrt{\pi} (1792 z^8 - 27\,648 z^7 + 112\,896 z^6 - 112\,896 z^5 - 2835) \operatorname{erfi}(\sqrt{z})}{12\,288 z^{7/2}}$$

07.25.03.4688.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-896 z^7 - 13\,376 z^6 - 50\,208 z^5 - 36\,912 z^4 + 5928 z^3 - 756 z^2 - 1890 z - 2835)}{6144 z^3} +$$

$$\frac{\sqrt{\pi} (-1792 z^8 - 27\,648 z^7 - 112\,896 z^6 - 112\,896 z^5 + 2835) \operatorname{erf}(\sqrt{z})}{12\,288 z^{7/2}}$$

$$\begin{aligned}
 & \text{07.25.03.4689.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, 5; z\right) &= \frac{1}{11486475 z^2} \\
 & 32 e^{z/2} (57344 z^7 - 983040 z^6 + 4790784 z^5 - 7146240 z^4 + 2052540 z^3 + 374220 z^2 + 33075 z - 178605) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{11486475 z^3} \left(32 e^{z/2} (57344 z^8 - 925696 z^7 + 3893760 z^6 - 3657984 z^5 - \right. \\
 & \left. 405060 z^4 - 113400 z^3 + 38745 z^2 + 132300 z - 714420) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4690.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) &= \\
 & \frac{1}{24576 z^4} e^z (-1792 z^8 + 30208 z^7 - 130944 z^6 + 116736 z^5 + 22368 z^4 + 6048 z^3 - 7560 z^2 - 15120 z + 99225) + \\
 & \frac{\sqrt{\pi} (3584 z^9 - 62208 z^8 + 290304 z^7 - 338688 z^6 - 51030 z - 99225) \operatorname{erfi}(\sqrt{z})}{49152 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4691.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) &= \\
 & \frac{1}{24576 z^4} e^{-z} (-1792 z^8 - 30208 z^7 - 130944 z^6 - 116736 z^5 + 22368 z^4 - 6048 z^3 - 7560 z^2 + 15120 z + 99225) + \\
 & \frac{\sqrt{\pi} (-3584 z^9 - 62208 z^8 - 290304 z^7 - 338688 z^6 + 51030 z - 99225) \operatorname{erf}(\sqrt{z})}{49152 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4692.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; -\frac{1}{2}, 6; z\right) &= \\
 & \frac{1}{43648605 z^3} \left(32 e^{z/2} (114688 z^8 - 2187264 z^7 + 11940864 z^6 - 19946496 z^5 + 6342840 z^4 + 1387260 z^3 + \right. \\
 & \left. 343980 z^2 - 773955 z - 5239080) I_0\left(\frac{z}{2}\right)\right) - \\
 & \frac{1}{43648605 z^4} \left(32 e^{z/2} (114688 z^9 - 2072576 z^8 + 9925632 z^7 - 10942464 z^6 - 1350984 z^5 - \right. \\
 & \left. 495180 z^4 - 3780 z^3 + 721035 z^2 - 3095820 z - 20956320) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.4693.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; z\right) &= \\
 & \frac{1}{12} e^z (56 z^4 - 548 z^3 + 1266 z^2 - 579 z + 12) + \frac{1}{24} \sqrt{\pi} (-112 z^{9/2} + 1152 z^{7/2} - 3024 z^{5/2} + 2016 z^{3/2} - 189 \sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.4694.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{12} e^{-z} (56z^4 + 548z^3 + 1266z^2 + 579z + 12) + \frac{1}{24} \sqrt{\pi} (112z^{9/2} + 1152z^{7/2} + 3024z^{5/2} + 2016z^{3/2} + 189\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4695.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-1792z^5 + 22080z^4 - 78216z^3 + 92298z^2 - 30240z + 945) I_0\left(\frac{z}{2}\right) + \frac{2}{945} e^{z/2} (896z^5 - 10144z^4 + 29412z^3 - 20913z^2 + 1569z) I_1\left(\frac{z}{2}\right)$$

07.25.03.4696.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{120} e^z (56z^4 - 692z^3 + 2202z^2 - 1695z + 120) - \frac{1}{240} \sqrt{\pi} \sqrt{z} (112z^4 - 1440z^3 + 5040z^2 - 5040z + 945) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4697.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{120} e^{-z} (56z^4 + 692z^3 + 2202z^2 + 1695z + 120) + \frac{1}{240} \sqrt{\pi} \sqrt{z} (112z^4 + 1440z^3 + 5040z^2 + 5040z + 945) \operatorname{erf}(\sqrt{z})$$

07.25.03.4698.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, 2; z\right) = \frac{e^{z/2} (-3584z^5 + 53376z^4 - 235920z^3 + 361716z^2 - 168966z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (3584z^5 - 49792z^4 + 187920z^3 - 195108z^2 + 29226z + 189) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.4699.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{480} e^z (56z^4 - 836z^3 + 3390z^2 - 3693z + 480) - \frac{1}{960} \sqrt{\pi} \sqrt{z} (112z^4 - 1728z^3 + 7560z^2 - 10080z + 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4700.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{480} e^{-z} (56z^4 + 836z^3 + 3390z^2 + 3693z + 480) + \frac{1}{960} \sqrt{\pi} \sqrt{z} (112z^4 + 1728z^3 + 7560z^2 + 10080z + 2835) \operatorname{erf}(\sqrt{z})$$

07.25.03.4701.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (3584z^6 - 59008z^5 + 274320z^4 - 375108z^3 + 86196z^2 + 1323z - 189) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (3584z^5 - 62592z^4 + 331536z^3 - 623508z^2 + 371952z - 33831) I_0\left(\frac{z}{2}\right)}{135135z}$$

07.25.03.4702.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{192} e^z (8z^4 - 140z^3 + 690z^2 - 975z + 192) - \frac{1}{384} \sqrt{\pi} \sqrt{z} (16z^4 - 288z^3 + 1512z^2 - 2520z + 945) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4703.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{192} e^{-z} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} \sqrt{\pi} \sqrt{z} (16z^4 + 288z^3 + 1512z^2 + 2520z + 945) \operatorname{erf}(\sqrt{z})$$

07.25.03.4704.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, 4; z\right) = \frac{1}{675 \cdot 675 z^2} 4 e^{z/2} (7168 z^7 - 136448 z^6 + 753696 z^5 - 1279560 z^4 + 400740 z^3 + 11340 z^2 - 4725 z + 3780) I_1\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (7168 z^6 - 143616 z^5 + 886560 z^4 - 1972200 z^3 + 1417500 z^2 - 170100 z + 945) I_0\left(\frac{z}{2}\right)}{675 \cdot 675 z}$$

07.25.03.4705.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (896 z^7 - 17984 z^6 + 104352 z^5 - 181488 z^4 + 48936 z^3 + 756 z^2 - 1890 z + 2835)}{49 \cdot 152 z^3} + \frac{\sqrt{\pi} (-1792 z^8 + 36864 z^7 - 225792 z^6 + 451584 z^5 - 211680 z^4 - 2835) \operatorname{erfi}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.4706.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (896 z^7 + 17984 z^6 + 104352 z^5 + 181488 z^4 + 48936 z^3 - 756 z^2 - 1890 z - 2835)}{49 \cdot 152 z^3} + \frac{\sqrt{\pi} (1792 z^8 + 36864 z^7 + 225792 z^6 + 451584 z^5 + 211680 z^4 + 2835) \operatorname{erf}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.4707.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, 5; z\right) = \frac{1}{11486475 z^3} 64 e^{z/2} (3584 z^8 - 77440 z^7 + 495504 z^6 - 1005252 z^5 + 400980 z^4 + 17010 z^3 - 6615 z^2 - 3780 z + 39690) I_1\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} 32 e^{z/2} (7168 z^7 - 162048 z^6 + 1142304 z^5 - 2931240 z^4 + 2449440 z^3 - 362880 z^2 - 1890 z + 19845) I_0\left(\frac{z}{2}\right)$$

07.25.03.4708.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{e^z (896 z^8 - 20288 z^7 + 135456 z^6 - 279984 z^5 + 97032 z^4 + 3780 z^3 - 6426 z^2 - 945 z + 39690)}{98304 z^4} + \frac{\sqrt{\pi} (-1792 z^9 + 41472 z^8 - 290304 z^7 + 677376 z^6 - 381024 z^5 - 25515 z - 39690) \operatorname{erfi}(\sqrt{z})}{196608 z^{9/2}}$$

07.25.03.4709.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (896 z^8 + 20288 z^7 + 135456 z^6 + 279984 z^5 + 97032 z^4 - 3780 z^3 - 6426 z^2 + 945 z + 39690)}{98304 z^4} + \frac{\sqrt{\pi} (1792 z^9 + 41472 z^8 + 290304 z^7 + 677376 z^6 + 381024 z^5 + 25515 z - 39690) \operatorname{erf}(\sqrt{z})}{196608 z^{9/2}}$$

07.25.03.4710.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{1}{2}, 6; z\right) = \frac{1}{43648605 z^4} \left(32 e^{z/2} (14336 z^9 - 346624 z^8 + 2521152 z^7 - 5950608 z^6 + 2893224 z^5 + 162540 z^4 - 45360 z^3 - 91665 z^2 + 555660 z + 1905120) I_1\left(\frac{z}{2}\right) - \frac{1}{43648605 z^3} \left(32 e^{z/2} (14336 z^8 - 360960 z^7 + 2860608 z^6 - 8312784 z^5 + 7885080 z^4 - 1379700 z^3 - 37800 z^2 + 138915 z + 476280) I_0\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 1$

07.25.03.4711.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; 1, \frac{3}{2}; z\right) = \frac{e^{z/2} (-896 z^5 + 13632 z^4 - 62220 z^3 + 100500 z^2 - 51975 z + 4725) I_0\left(\frac{z}{2}\right)}{4725} + \frac{e^{z/2} (896 z^5 - 12736 z^4 + 49932 z^3 - 56040 z^2 + 10965 z) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.4712.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; 1, \frac{5}{2}; z\right) = \frac{e^{z/2} (-224 z^5 + 4056 z^4 - 22656 z^3 + 46320 z^2 - 32130 z + 4725) I_0\left(\frac{z}{2}\right)}{4725} + \frac{2 e^{z/2} (112 z^5 - 1916 z^4 + 9468 z^3 - 14538 z^2 + 4695 z) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.4713.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{945} e^{z/2} (-16 z^5 + 336 z^4 - 2220 z^3 + 5484 z^2 - 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^5 - 320 z^4 + 1908 z^3 - 3720 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{3}{2}$

07.25.03.4714.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (112 z^4 - 1744 z^3 + 7584 z^2 - 9540 z + 2085)}{2400} + \frac{\sqrt{\pi} (-224 z^5 + 3600 z^4 - 16800 z^3 + 25200 z^2 - 9450 z + 315) \operatorname{erfi}(\sqrt{z})}{4800 \sqrt{z}}$$

07.25.03.4715.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (112 z^4 + 1744 z^3 + 7584 z^2 + 9540 z + 2085)}{2400} + \frac{\sqrt{\pi} (224 z^5 + 3600 z^4 + 16800 z^3 + 25200 z^2 + 9450 z + 315) \operatorname{erf}(\sqrt{z})}{4800 \sqrt{z}}$$

07.25.03.4716.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{3}{2}, 2; z\right) = \frac{e^{z/2} (-1792 z^5 + 33024 z^4 - 189240 z^3 + 402420 z^2 - 298620 z + 51975) I_0\left(\frac{z}{2}\right)}{51975} + \frac{e^{z/2} (1792 z^5 - 31232 z^4 + 158904 z^3 - 257340 z^2 + 95100 z - 945) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.4717.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (56 z^4 - 1052 z^3 + 5802 z^2 - 10155 z + 3855)}{4800} + \frac{\sqrt{\pi} (-112 z^5 + 2160 z^4 - 12600 z^3 + 25200 z^2 - 14175 z + 945) \operatorname{erfi}(\sqrt{z})}{9600 \sqrt{z}}$$

07.25.03.4718.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (56 z^4 + 1052 z^3 + 5802 z^2 + 10155 z + 3855)}{4800} + \frac{\sqrt{\pi} (112 z^5 + 2160 z^4 + 12600 z^3 + 25200 z^2 + 14175 z + 945) \operatorname{erf}(\sqrt{z})}{9600 \sqrt{z}}$$

07.25.03.4719.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (1792 z^6 - 36992 z^5 + 231384 z^4 - 489960 z^3 + 268440 z^2 - 6300 z + 315) I_1\left(\frac{z}{2}\right)}{675675 z} - \frac{16 e^{z/2} (448 z^5 - 9696 z^4 + 66870 z^3 - 176160 z^2 + 168525 z - 42210) I_0\left(\frac{z}{2}\right)}{675675}$$

07.25.03.4720.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (16 z^4 - 352 z^3 + 2352 z^2 - 5280 z + 2895)}{3840} + \frac{\sqrt{\pi} (-32 z^5 + 720 z^4 - 5040 z^3 + 12600 z^2 - 9450 z + 945) \operatorname{erfi}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.4721.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16 z^4 + 352 z^3 + 2352 z^2 + 5280 z + 2895)}{3840} + \frac{\sqrt{\pi} (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945) \operatorname{erf}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.4722.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{3}{2}, 4; z\right) = \frac{1}{3378375 z^2} 4 e^{z/2} (3584 z^7 - 85504 z^6 + 634608 z^5 - 1660200 z^4 + 1209900 z^3 - 49140 z^2 + 6615 z - 3780) I_1\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (3584 z^6 - 89088 z^5 + 718320 z^4 - 2255640 z^3 + 2627100 z^2 - 842940 z - 945) I_0\left(\frac{z}{2}\right)}{3378375 z}$$

07.25.03.4723.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^{-z} (896 z^7 - 22592 z^6 + 177312 z^5 - 486000 z^4 + 350760 z^3 - 1260 z^2 + 3150 z - 4725)}{491520 z^3} + \frac{1}{983040 z^{7/2}} \sqrt{\pi} (-1792 z^8 + 46080 z^7 - 376320 z^6 + 1128960 z^5 - 1058400 z^4 + 141120 z^3 + 4725) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4724.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (896 z^7 + 22592 z^6 + 177312 z^5 + 486000 z^4 + 350760 z^3 + 1260 z^2 + 3150 z + 4725)}{491520 z^3} + \frac{\sqrt{\pi} (1792 z^8 + 46080 z^7 + 376320 z^6 + 1128960 z^5 + 1058400 z^4 + 141120 z^3 - 4725) \operatorname{erf}(\sqrt{z})}{983040 z^{7/2}}$$

07.25.03.4725.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{3}{2}, 5; z\right) = \frac{1}{57432375 z^3} 32 e^{z/2} (3584 z^8 - 97024 z^7 + 833328 z^6 - 2595840 z^5 + 2365500 z^4 - 143640 z^3 + 25515 z^2 - 3780 z - 56700) I_1\left(\frac{z}{2}\right) - \frac{1}{57432375 z^2} 32 e^{z/2} (3584 z^7 - 100608 z^6 + 928560 z^5 - 3384240 z^4 + 4630500 z^3 - 1787940 z^2 - 945 z - 14175) I_0\left(\frac{z}{2}\right)$$

07.25.03.4726.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{1966080 z^4} e^{-z} (1792 z^8 - 50944 z^7 + 459264 z^6 - 1487040 z^5 + 1335840 z^4 - 15120 z^3 + 30240 z^2 - 18900 z - 99225) + \frac{1}{3932160 z^{9/2}} \sqrt{\pi} (-3584 z^9 + 103680 z^8 - 967680 z^7 + 3386880 z^6 - 3810240 z^5 + 635040 z^4 + 85050 z + 99225) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4727.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{1966080 z^4} e^{-z} (1792 z^8 + 50944 z^7 + 459264 z^6 + 1487040 z^5 + 1335840 z^4 + 15120 z^3 + 30240 z^2 + 18900 z - 99225) + \frac{1}{3932160 z^{9/2}} \sqrt{\pi} (3584 z^9 + 103680 z^8 + 967680 z^7 + 3386880 z^6 + 3810240 z^5 + 635040 z^4 - 85050 z + 99225) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.4728.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{3}{2}, 6; z\right) = \\
 & \frac{1}{218243025 z^4} \left(32 e^{z/2} (7168 z^9 - 217088 z^8 + 2117856 z^7 - 7654320 z^6 + 8380320 z^5 - 696780 z^4 + 132930 z^3 + \right. \\
 & \quad \left. 34965 z^2 - 548100 z - 1058400) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{218243025 z^3} \left(32 e^{z/2} (7168 z^8 - 224256 z^7 + 2331360 z^6 - 9670800 z^5 + 15170400 z^4 - \right. \\
 & \quad \left. 6782580 z^3 + 17010 z^2 - 137025 z - 264600) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 2$

$$\begin{aligned}
 & \text{07.25.03.4729.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; 2, \frac{5}{2}; z\right) = \frac{e^{z/2} (-448 z^5 + 9840 z^4 - 69288 z^3 + 188220 z^2 - 189000 z + 51975) I_0\left(\frac{z}{2}\right) +}{51975} \\
 & \frac{e^{z/2} (448 z^5 - 9392 z^4 + 60120 z^3 - 132348 z^2 + 78720 z - 2835) I_1\left(\frac{z}{2}\right)}{51975}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4730.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; 2, \frac{7}{2}; z\right) = \frac{e^{z/2} (-32 z^5 + 816 z^4 - 6816 z^3 + 22524 z^2 - 28350 z + 10395) I_0\left(\frac{z}{2}\right) +}{10395} \\
 & \frac{e^{z/2} (32 z^5 - 784 z^4 + 6048 z^3 - 16836 z^2 + 13854 z - 945) I_1\left(\frac{z}{2}\right)}{10395}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.4731.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (224 z^5 - 5072 z^4 + 35376 z^3 - 85368 z^2 + 54750 z - 945)}{76800 z} + \\
 & \frac{\sqrt{\pi} (-448 z^6 + 10368 z^5 - 75600 z^4 + 201600 z^3 - 170100 z^2 + 22680 z + 945) \operatorname{erfi}(\sqrt{z})}{153600 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4732.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (224 z^5 + 5072 z^4 + 35376 z^3 + 85368 z^2 + 54750 z + 945)}{76800 z} + \\
 & \frac{\sqrt{\pi} (448 z^6 + 10368 z^5 + 75600 z^4 + 201600 z^3 + 170100 z^2 + 22680 z - 945) \operatorname{erf}(\sqrt{z})}{153600 z^{3/2}}
 \end{aligned}$$

07.25.03.4733.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (448 z^6 - 11\,120 z^5 + 87\,408 z^4 - 250\,644 z^3 + 218\,040 z^2 - 179\,55 z - 945) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (448 z^5 - 11\,568 z^4 + 98\,304 z^3 - 332\,940 z^2 + 434\,700 z - 169\,155) I_0\left(\frac{z}{2}\right)}{675\,675 z}$$

07.25.03.4734.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (32 z^5 - 848 z^4 + 7152 z^3 - 22\,008 z^2 + 20\,010 z - 945)}{30\,720 z} + \frac{\sqrt{\pi} (-64 z^6 + 1728 z^5 - 15\,120 z^4 + 50\,400 z^3 - 56\,700 z^2 + 11\,340 z + 945) \operatorname{erfi}(\sqrt{z})}{61\,440 z^{3/2}}$$

07.25.03.4735.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 848 z^4 + 7152 z^3 + 22\,008 z^2 + 20\,010 z + 945)}{30\,720 z} + \frac{\sqrt{\pi} (64 z^6 + 1728 z^5 + 15\,120 z^4 + 50\,400 z^3 + 56\,700 z^2 + 11\,340 z - 945) \operatorname{erf}(\sqrt{z})}{61\,440 z^{3/2}}$$

07.25.03.4736.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{5}{2}, 4; z\right) = \frac{1}{3\,378\,375 z^2} 4 e^{z/2} (896 z^7 - 25\,696 z^6 + 239\,472 z^5 - 846\,240 z^4 + 970\,500 z^3 - 130\,410 z^2 - 16\,065 z + 3780) I_1\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (896 z^6 - 26\,592 z^5 + 264\,720 z^4 - 1\,073\,760 z^3 + 1\,719\,900 z^2 - 848\,610 z + 945) I_0\left(\frac{z}{2}\right)}{3\,378\,375 z}$$

07.25.03.4737.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (896 z^7 - 27\,200 z^6 + 269\,088 z^5 - 1\,006\,896 z^4 + 1\,188\,840 z^3 - 102\,060 z^2 - 9450 z + 14\,175)}{1\,966\,080 z^3} + \frac{1}{3\,932\,160 z^{7/2}} + \frac{\sqrt{\pi} (-1792 z^8 + 55\,296 z^7 - 564\,480 z^6 + 2\,257\,920 z^5 - 3\,175\,200 z^4 + 846\,720 z^3 + 105\,840 z^2 - 14\,175) \operatorname{erfi}(\sqrt{z})}{3\,932\,160 z^{7/2}}$$

07.25.03.4738.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (896 z^7 + 27\,200 z^6 + 269\,088 z^5 + 1\,006\,896 z^4 + 1\,188\,840 z^3 + 102\,060 z^2 - 9450 z - 14\,175)}{1\,966\,080 z^3} + \frac{1}{3\,932\,160 z^{7/2}} + \frac{\sqrt{\pi} (1792 z^8 + 55\,296 z^7 + 564\,480 z^6 + 2\,257\,920 z^5 + 3\,175\,200 z^4 + 846\,720 z^3 - 105\,840 z^2 + 14\,175) \operatorname{erf}(\sqrt{z})}{3\,932\,160 z^{7/2}}$$

$$\begin{aligned}
 & \text{07.25.03.4739.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}, \frac{5}{2}, 5; z\right) &= \frac{1}{57432375 z^3} \\
 & 64 e^{z/2} (448 z^8 - 14576 z^7 + 157104 z^6 - 659856 z^5 + 940200 z^4 - 178605 z^3 - 34965 z^2 + 7560 z + 17010) I_1\left(\frac{z}{2}\right) - \\
 & \frac{1}{57432375 z^2} 32 e^{z/2} (896 z^7 - 30048 z^6 + 342912 z^5 - 1620240 z^4 + 3069360 z^3 - 1812510 z^2 + 3780 z + 8505) I_0\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4740.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}, \frac{5}{2}, \frac{11}{2}; z\right) &= \\
 & \frac{1}{3932160 z^4} e^z (896 z^8 - 30656 z^7 + 348000 z^6 - 1533648 z^5 + 2230680 z^4 - 291060 z^3 - 58590 z^2 + 61425 z + 99225) + \\
 & \frac{1}{7864320 z^{9/2}} \left(\sqrt{\pi} (-1792 z^9 + 62208 z^8 - 725760 z^7 + 3386880 z^6 - \right. \\
 & \left. 5715360 z^5 + 1905120 z^4 + 317520 z^3 - 127575 z - 99225) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4741.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}, \frac{5}{2}, \frac{11}{2}; -z\right) &= \\
 & \frac{1}{3932160 z^4} e^{-z} (896 z^8 + 30656 z^7 + 348000 z^6 + 1533648 z^5 + 2230680 z^4 + 291060 z^3 - 58590 z^2 - 61425 z + 99225) + \\
 & \frac{1}{7864320 z^{9/2}} \left(\sqrt{\pi} (1792 z^9 + 62208 z^8 + 725760 z^7 + 3386880 z^6 + \right. \\
 & \left. 5715360 z^5 + 1905120 z^4 - 317520 z^3 + 127575 z - 99225) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4742.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}, \frac{5}{2}, 6; z\right) &= \\
 & \frac{1}{218243025 z^4} \left(32 e^{z/2} (1792 z^9 - 65216 z^8 + 798048 z^7 - 3883728 z^6 + 6616320 z^5 - 1640520 z^4 - 436590 z^3 + \right. \\
 & \left. 67095 z^2 + 419580 z + 453600) I_1\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{218243025 z^3} \left(32 e^{z/2} (1792 z^8 - 67008 z^7 + 862368 z^6 - 4650960 z^5 + 10160640 z^4 - \right. \right. \\
 & \left. \left. 6932520 z^3 + 13230 z^2 + 104895 z + 113400) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 3$

$$\begin{aligned}
 & \text{07.25.03.4743.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{7}{2}, 3, \frac{7}{2}; z\right) &= \frac{4 e^{z/2} (32 z^6 - 928 z^5 + 8784 z^4 - 31776 z^3 + 37938 z^2 - 5670 z - 945) I_1\left(\frac{z}{2}\right) -}{135135 z} \\
 & \frac{8 e^{z/2} (16 z^5 - 480 z^4 + 4848 z^3 - 20064 z^2 + 33075 z - 17010) I_0\left(\frac{z}{2}\right)}{135135}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{7}{2}$

07.25.03.4744.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^{-z} (64 z^6 - 1984 z^5 + 20208 z^4 - 79008 z^3 + 100716 z^2 - 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (-128 z^7 + 4032 z^6 - 42336 z^5 + 176400 z^4 - 264600 z^3 + 79380 z^2 + 13230 z + 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4745.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1984 z^5 + 20208 z^4 + 79008 z^3 + 100716 z^2 + 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835) \operatorname{erf}(\sqrt{z})$$

07.25.03.4746.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^7 - 2144 z^6 + 24048 z^5 - 107040 z^4 + 167640 z^3 - 39690 z^2 - 12285 z - 3780) I_1\left(\frac{z}{2}\right)}{675675 z^2} - \frac{4 e^{z/2} (64 z^6 - 2208 z^5 + 26160 z^4 - 130080 z^3 + 264600 z^2 - 171990 z - 945) I_0\left(\frac{z}{2}\right)}{675675 z}$$

07.25.03.4747.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^{-z} (128 z^7 - 4544 z^6 + 54240 z^5 - 257232 z^4 + 422616 z^3 - 79380 z^2 - 35910 z - 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} \left(\sqrt{\pi} (-256 z^8 + 9216 z^7 - 112896 z^6 + 564480 z^5 - 1058400 z^4 + 423360 z^3 + 105840 z^2 + 45360 z + 14175) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.4748.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 4544 z^6 + 54240 z^5 + 257232 z^4 + 422616 z^3 + 79380 z^2 - 35910 z + 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} \sqrt{\pi} (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175) \operatorname{erf}(\sqrt{z})$$

07.25.03.4749.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{7}{2}, 5; z\right) = \frac{1}{11486475 z^3} \frac{32 e^{z/2} (64 z^8 - 2432 z^7 + 31536 z^6 - 166656 z^5 + 323160 z^4 - 105840 z^3 - 46305 z^2 - 26460 z - 11340) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^7 - 2496 z^6 + 33936 z^5 - 197040 z^4 + 476280 z^3 - 370440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right)}{11486475 z^2}$$

07.25.03.4750.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{3\,145\,728\,z^4} e^z (256\,z^8 - 10\,240\,z^7 + 140\,160\,z^6 - 781\,440\,z^5 + 1\,572\,864\,z^4 - 423\,360\,z^3 - 264\,600\,z^2 - 189\,000\,z - 99\,225) + \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (-512\,z^9 + 20\,736\,z^8 - 290\,304\,z^7 + 1\,693\,440\,z^6 - 3\,810\,240\,z^5 + 1\,905\,120\,z^4 + 635\,040\,z^3 + 408\,240\,z^2 + 255\,150\,z + 99\,225) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.4751.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{3\,145\,728\,z^4} e^{-z} (256\,z^8 + 10\,240\,z^7 + 140\,160\,z^6 + 781\,440\,z^5 + 1\,572\,864\,z^4 + 423\,360\,z^3 - 264\,600\,z^2 + 189\,000\,z - 99\,225) + \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (512\,z^9 + 20\,736\,z^8 + 290\,304\,z^7 + 1\,693\,440\,z^6 + 3\,810\,240\,z^5 + 1\,905\,120\,z^4 - 635\,040\,z^3 + 408\,240\,z^2 - 255\,150\,z + 99\,225) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.4752.01

$${}_2F_2\left(-\frac{9}{2}, \frac{7}{2}; \frac{7}{2}, 6; z\right) = \frac{1}{43\,648\,605\,z^4} \left(32\,e^{z/2} (128\,z^9 - 5440\,z^8 + 80\,064\,z^7 - 489\,840\,z^6 + 1\,132\,752\,z^5 - 476\,280\,z^4 - 264\,600\,z^3 - 214\,515\,z^2 - 170\,100\,z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \right) + \frac{32\,e^{z/2} (128\,z^8 - 5568\,z^7 + 85\,440\,z^6 - 567\,312\,z^5 + 1\,587\,600\,z^4 - 1\,428\,840\,z^3 - 52\,920\,z^2 - 42\,525\,z - 22\,680) I_0\left(\frac{z}{2}\right)}{43\,648\,605\,z^4}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = -\frac{11}{2}$

07.25.03.4753.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{343\,035} (-64\,z^{10} - 2048\,z^9 - 19\,984\,z^8 - 60\,720\,z^7 - 16\,128\,z^6 - 5376\,z^5 + 15\,120\,z^4 - 36\,000\,z^3 + 88\,200\,z^2 - 204\,120\,z + 343\,035) - \frac{8\,e^z \sqrt{\pi} (8\,z^{21/2} + 260\,z^{19/2} + 2622\,z^{17/2} + 8721\,z^{15/2} + 4845\,z^{13/2}) \operatorname{erf}(\sqrt{z})}{343\,035}$$

$$\begin{aligned}
 & \text{07.25.03.4754.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; -z\right) = & \frac{1}{343\,035} (-64 z^{10} + 2048 z^9 - 19\,984 z^8 + 60\,720 z^7 - 16\,128 z^6 + 5376 z^5 + 15\,120 z^4 + 36\,000 z^3 + 88\,200 z^2 + \\
 & 204\,120 z + 343\,035) + \frac{8 e^{-z} \sqrt{\pi} (8 z^{21/2} - 260 z^{19/2} + 2622 z^{17/2} - 8721 z^{15/2} + 4845 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{343\,035}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4755.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, -\frac{9}{2}; z\right) = & \frac{32 z^9 + 896 z^8 + 7320 z^7 + 16\,128 z^6 - 5376 z^5 + 5040 z^4 - 7200 z^3 + 12\,600 z^2 - 22\,680 z + 31\,185}{31\,185} + \\
 & \frac{4 e^z \sqrt{\pi} (8 z^{19/2} + 228 z^{17/2} + 1938 z^{15/2} + 4845 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31\,185}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4756.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, -\frac{9}{2}; -z\right) = & \frac{-32 z^9 + 896 z^8 - 7320 z^7 + 16\,128 z^6 + 5376 z^5 + 5040 z^4 + 7200 z^3 + 12\,600 z^2 + 22\,680 z + 31\,185}{31\,185} + \\
 & \frac{4 e^{-z} \sqrt{\pi} (8 z^{19/2} - 228 z^{17/2} + 1938 z^{15/2} - 4845 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31\,185}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4757.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; z\right) = & \frac{-16 z^8 - 384 z^7 - 2516 z^6 - 3204 z^5 + 5040 z^4 - 2400 z^3 + 2520 z^2 - 3240 z + 3465}{3465} - \\
 & \frac{2 e^z \sqrt{\pi} (8 z^{17/2} + 196 z^{15/2} + 1350 z^{13/2} + 2145 z^{11/2} - 2145 z^{9/2}) \operatorname{erf}(\sqrt{z})}{3465}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4758.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; -z\right) = & \frac{-16 z^8 + 384 z^7 - 2516 z^6 + 3204 z^5 + 5040 z^4 + 2400 z^3 + 2520 z^2 + 3240 z + 3465}{3465} + \\
 & \frac{2 e^{-z} \sqrt{\pi} (8 z^{17/2} - 196 z^{15/2} + 1350 z^{13/2} - 2145 z^{11/2} - 2145 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{3465}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4759.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; z\right) = & \frac{1}{495} (8 z^7 + 160 z^6 + 782 z^5 + 108 z^4 - 2400 z^3 + 840 z^2 - 648 z + 495) + \\
 & \frac{1}{495} e^z \sqrt{\pi} (8 z^{15/2} + 164 z^{13/2} + 858 z^{11/2} + 429 z^{9/2} - 2574 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4760.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; -z\right) = & \frac{1}{495} (-8 z^7 + 160 z^6 - 782 z^5 + 108 z^4 + 2400 z^3 + 840 z^2 + 648 z + 495) + \\
 & \frac{1}{495} e^{-z} \sqrt{\pi} (8 z^{15/2} - 164 z^{13/2} + 858 z^{11/2} - 429 z^{9/2} - 2574 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.4761.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{99}(-4z^6 - 64z^5 - 201z^4 + 321z^3 + 840z^2 - 216z + 99) + \frac{1}{198}e^z\sqrt{\pi}(-8z^{13/2} - 132z^{11/2} - 462z^{9/2} + 495z^{7/2} + 2079z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4762.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{99}(-4z^6 + 64z^5 - 201z^4 - 321z^3 + 840z^2 + 216z + 99) + \frac{1}{198}e^{-z}\sqrt{\pi}(8z^{13/2} - 132z^{11/2} + 462z^{9/2} + 495z^{7/2} - 2079z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4763.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{66}(4z^5 + 48z^4 + 59z^3 - 420z^2 - 432z + 66) + \frac{1}{132}e^z\sqrt{\pi}(8z^{11/2} + 100z^{9/2} + 162z^{7/2} - 819z^{5/2} - 1260z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4764.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{66}(-4z^5 + 48z^4 - 59z^3 - 420z^2 + 432z + 66) + \frac{1}{132}e^{-z}\sqrt{\pi}(8z^{11/2} - 100z^{9/2} + 162z^{7/2} + 819z^{5/2} - 1260z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4765.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{132}(-4z^4 - 32z^3 + 35z^2 + 339z + 132) + \frac{1}{264}e^z\sqrt{\pi}(-8z^{9/2} - 68z^{7/2} + 42z^{5/2} + 735z^{3/2} + 525\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.4766.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{132}(-4z^4 + 32z^3 + 35z^2 - 339z + 132) + \frac{1}{264}e^{-z}\sqrt{\pi}(8z^{9/2} - 68z^{7/2} - 42z^{5/2} + 735z^{3/2} - 525\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4767.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, 1; z\right) = -\frac{1}{66}e^z(2z^4 + 13z^3 - 27z^2 - 150z - 66)$$

07.25.03.4768.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{264}(-4z^3 - 16z^2 + 81z + 174) + \frac{e^z\sqrt{\pi}(-8z^4 - 36z^3 + 150z^2 + 435z + 90)\operatorname{erf}(\sqrt{z})}{528\sqrt{z}}$$

07.25.03.4769.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{264}(4z^3 - 16z^2 - 81z + 174) + \frac{e^{-z}\sqrt{\pi}(-8z^4 + 36z^3 + 150z^2 - 435z + 90)\operatorname{erfi}(\sqrt{z})}{528\sqrt{z}}$$

07.25.03.4770.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, 2; z\right) = -\frac{1}{66}e^z(2z^3 + 5z^2 - 42z - 66)$$

07.25.03.4771.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{-4z^3 + 79z + 21}{176z} + \frac{e^z \sqrt{\pi} (-8z^4 - 4z^3 + 162z^2 + 111z - 21) \operatorname{erf}(\sqrt{z})}{352z^{3/2}}$$

07.25.03.4772.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-4z^3 + 79z - 21}{176z} + \frac{e^{-z} \sqrt{\pi} (8z^4 - 4z^3 - 162z^2 + 111z + 21) \operatorname{erfi}(\sqrt{z})}{352z^{3/2}}$$

07.25.03.4773.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, 3; z\right) = -\frac{1}{33} e^z (2z^2 - 3z - 33)$$

07.25.03.4774.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{5(4z^3 - 16z^2 - 29z + 24)}{352z^2} - \frac{5e^z \sqrt{\pi} (8z^4 - 28z^3 - 78z^2 + 45z - 24) \operatorname{erf}(\sqrt{z})}{704z^{5/2}}$$

07.25.03.4775.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^3 + 16z^2 - 29z - 24)}{352z^2} - \frac{5e^{-z} \sqrt{\pi} (8z^4 + 28z^3 - 78z^2 - 45z - 24) \operatorname{erfi}(\sqrt{z})}{704z^{5/2}}$$

07.25.03.4776.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, 4; z\right) = -\frac{1}{11} e^z (2z - 11)$$

07.25.03.4777.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{35(4z^3 - 32z^2 + 69z - 135)}{704z^3} - \frac{35e^z \sqrt{\pi} (8z^4 - 60z^3 + 102z^2 - 159z + 135) \operatorname{erf}(\sqrt{z})}{1408z^{7/2}}$$

07.25.03.4778.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (8z^4 + 60z^3 + 102z^2 + 159z + 135) \operatorname{erfi}(\sqrt{z})}{1408z^{7/2}} - \frac{35(4z^3 + 32z^2 + 69z + 135)}{704z^3}$$

07.25.03.4779.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, 5; z\right) = \frac{456}{11z^4} - \frac{4e^z (2z^4 - 19z^3 + 57z^2 - 114z + 114)}{11z^4}$$

07.25.03.4780.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, \frac{11}{2}; z\right) = -\frac{315(4z^3 - 48z^2 + 215z - 1050)}{1408z^4} - \frac{315e^z \sqrt{\pi} (8z^4 - 92z^3 + 378z^2 - 915z + 1050) \operatorname{erf}(\sqrt{z})}{2816z^{9/2}}$$

07.25.03.4781.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{315(4z^3 + 48z^2 + 215z + 1050)}{1408z^4} - \frac{315e^{-z} \sqrt{\pi} (8z^4 + 92z^3 + 378z^2 + 915z + 1050) \operatorname{erfi}(\sqrt{z})}{2816z^{9/2}}$$

07.25.03.4782.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{11}{2}, 6; z\right) = \frac{120(19z + 84)}{11z^5} - \frac{20e^z (2z^4 - 27z^3 + 138z^2 - 390z + 504)}{11z^5}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = -\frac{9}{2}$

07.25.03.4783.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{-16z^8 - 400z^7 - 2868z^6 - 5376z^5 + 1680z^4 - 1440z^3 + 1800z^2 - 2520z + 2835}{2835} - \frac{2e^z\sqrt{\pi}(8z^{17/2} + 204z^{15/2} + 1530z^{13/2} + 3315z^{11/2})\operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.4784.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{-16z^8 + 400z^7 - 2868z^6 + 5376z^5 + 1680z^4 + 1440z^3 + 1800z^2 + 2520z + 2835}{2835} + \frac{2e^{-z}\sqrt{\pi}(8z^{17/2} - 204z^{15/2} + 1530z^{13/2} - 3315z^{11/2})\operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.4785.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{315}(8z^7 + 176z^6 + 1086z^5 + 1680z^4 - 480z^3 + 360z^2 - 360z + 315) + \frac{1}{315}e^z\sqrt{\pi}(8z^{15/2} + 180z^{13/2} + 1170z^{11/2} + 2145z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4786.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{315}(-8z^7 + 176z^6 - 1086z^5 + 1680z^4 + 480z^3 + 360z^2 + 360z + 315) + \frac{1}{315}e^{-z}\sqrt{\pi}(8z^{15/2} - 180z^{13/2} + 1170z^{11/2} - 2145z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4787.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{45}(-4z^6 - 76z^5 - 393z^4 - 480z^3 + 120z^2 - 72z + 45) + \frac{1}{90}e^z\sqrt{\pi}(-8z^{13/2} - 156z^{11/2} - 858z^{9/2} - 1287z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4788.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{45}(-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45) + \frac{1}{90}e^{-z}\sqrt{\pi}(8z^{13/2} - 156z^{11/2} + 858z^{9/2} - 1287z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4789.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{18}(4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36}e^z\sqrt{\pi}(8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4790.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{18}(-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36}e^{-z}\sqrt{\pi}(8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4791.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{12}(-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24}e^z\sqrt{\pi}(-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.4792.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{12}(-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24}e^{-z}\sqrt{\pi}(8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4793.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{24}(4z^3 + 40z^2 + 87z + 24) + \frac{1}{48}e^z\sqrt{\pi}(8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.4794.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{24}(-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48}e^{-z}\sqrt{\pi}(8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.4795.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, 1; z\right) = \frac{1}{6}e^z(z^3 + 9z^2 + 18z + 6)$$

07.25.03.4796.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{48}(4z^2 + 28z + 33) + \frac{e^z\sqrt{\pi}(8z^3 + 60z^2 + 90z + 15)\operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.4797.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{48}(4z^2 - 28z + 33) + \frac{e^{-z}\sqrt{\pi}(-8z^3 + 60z^2 - 90z + 15)\operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.4798.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, 2; z\right) = \frac{1}{6}e^z(z^2 + 6z + 6)$$

07.25.03.4799.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{4z^2 + 16z + 3}{32z} + \frac{e^z\sqrt{\pi}(8z^3 + 36z^2 + 18z - 3)\operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.4800.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-4z^2 + 16z - 3}{32z} + \frac{e^{-z}\sqrt{\pi}(8z^3 - 36z^2 + 18z + 3)\operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.4801.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, 3; z\right) = \frac{1}{3}e^z(z + 3)$$

07.25.03.4802.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5(4z^2 + 4z - 3)}{64z^2} + \frac{5e^z\sqrt{\pi}(8z^3 + 12z^2 - 6z + 3)\operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.4803.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^2 - 4z - 3)}{64z^2} - \frac{5e^{-z}\sqrt{\pi}(8z^3 - 12z^2 - 6z - 3)\operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.4804.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, 4; z\right) = e^z$$

07.25.03.4805.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{35(4z^2 - 8z + 15)}{128z^3} + \frac{35e^z\sqrt{\pi}(8z^3 - 12z^2 + 18z - 15)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.4806.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(8z^3 + 12z^2 + 18z + 15)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35(4z^2 + 8z + 15)}{128z^3}$$

07.25.03.4807.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, 5; z\right) = \frac{4e^z(z^3 - 3z^2 + 6z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.4808.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{315(4z^2 - 20z + 105)}{256z^4} + \frac{315e^z\sqrt{\pi}(8z^3 - 36z^2 + 90z - 105)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.4809.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{315(4z^2 + 20z + 105)}{256z^4} - \frac{315e^{-z}\sqrt{\pi}(8z^3 + 36z^2 + 90z + 105)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.4810.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{9}{2}, 6; z\right) = \frac{120(z + 4)}{z^5} + \frac{20e^z(z^3 - 6z^2 + 18z - 24)}{z^5}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = -\frac{7}{2}$

07.25.03.4811.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{7}{2}, 1; z\right) = \frac{1}{42}e^z(286z^4 + 143z^3 + 183z^2 + 174z + 42) - \frac{143}{21}\sqrt{\pi}z^{9/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.4812.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{7}{2}, 1; -z\right) = \frac{143}{21}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2} + \frac{1}{42}e^{-z}(286z^4 - 143z^3 + 183z^2 - 174z + 42)$$

07.25.03.4813.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{7}{2}, 2; z\right) = \frac{1}{42}e^z(52z^4 + 26z^3 + 39z^2 + 66z + 42) - \frac{26}{21}\sqrt{\pi}z^{9/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.4814.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{7}{2}, 2; -z\right) = \frac{26}{21}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2} + \frac{1}{42}e^{-z}(52z^4 - 26z^3 + 39z^2 - 66z + 42)$$

07.25.03.4815.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{7}{2}, 3; z\right) = \frac{1}{21} e^z (8z^4 + 4z^3 + 6z^2 + 15z + 21) - \frac{8}{21} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4816.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{7}{2}, 3; -z\right) = \frac{8}{21} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{21} e^{-z} (8z^4 - 4z^3 + 6z^2 - 15z + 21)$$

07.25.03.4817.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{7}{2}, 4; z\right) = \frac{1}{105} e^z (16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4818.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{7}{2}, 4; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

07.25.03.4819.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{7}{2}, 5; z\right) = -\frac{128 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2}}{1785} + \frac{4 e^z (32z^8 + 16z^7 + 24z^6 + 60z^5 + 210z^4 + 945z^3 - 2835z^2 + 5670z - 5670)}{1785 z^4} + \frac{216}{17 z^4}$$

07.25.03.4820.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{7}{2}, 5; -z\right) = \frac{128 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2}}{1785} + \frac{4 e^{-z} (32z^8 - 16z^7 + 24z^6 - 60z^5 + 210z^4 - 945z^3 - 2835z^2 - 5670z - 5670)}{1785 z^4} + \frac{216}{17 z^4}$$

07.25.03.4821.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{7}{2}, 6; z\right) = -\frac{256 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2}}{6783} + \frac{1080 (19z + 68)}{323 z^5} + \frac{1}{6783 z^5} 4 e^z (64z^9 + 32z^8 + 48z^7 + 120z^6 + 420z^5 + 1890z^4 + 10395z^3 - 85050z^2 + 277830z - 385560)$$

07.25.03.4822.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{7}{2}, 6; -z\right) = \frac{256 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2}}{6783} + \frac{1080 (19z - 68)}{323 z^5} + \frac{1}{6783 z^5} 4 e^{-z} (64z^9 - 32z^8 + 48z^7 - 120z^6 + 420z^5 - 1890z^4 + 10395z^3 + 85050z^2 + 277830z + 385560)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = -\frac{5}{2}$

07.25.03.4823.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{5}{2}, 1; z\right) = \frac{1}{30} e^z (-715z^4 + 1573z^3 + 429z^2 + 186z + 30) + \frac{143}{60} \sqrt{\pi} (10z^{9/2} - 27z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4824.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{5}{2}, 1; -z\right) = \frac{1}{30} e^{-z} (-715z^4 - 1573z^3 + 429z^2 - 186z + 30) - \frac{143}{60} \sqrt{\pi} (10z^{9/2} + 27z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4825.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{5}{2}, 2; z\right) = \frac{1}{30} e^z (-130 z^4 + 364 z^3 + 117 z^2 + 78 z + 30) + \frac{13}{30} \sqrt{\pi} (10 z^{9/2} - 33 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4826.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{5}{2}, 2; -z\right) = \frac{1}{30} e^{-z} (-130 z^4 - 364 z^3 + 117 z^2 - 78 z + 30) - \frac{13}{30} \sqrt{\pi} (10 z^{9/2} + 33 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4827.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{5}{2}, 3; z\right) = \frac{1}{15} e^z (-20 z^4 + 68 z^3 + 24 z^2 + 21 z + 15) + \frac{2}{15} \sqrt{\pi} (10 z^{9/2} - 39 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4828.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{5}{2}, 3; -z\right) = \frac{1}{15} e^{-z} (-20 z^4 - 68 z^3 + 24 z^2 - 21 z + 15) - \frac{2}{15} \sqrt{\pi} (10 z^{9/2} + 39 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4829.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{5}{2}, 4; z\right) = \frac{1}{15} e^z (-8 z^4 + 32 z^3 + 12 z^2 + 12 z + 15) + \frac{4}{15} \sqrt{\pi} (2 z^{9/2} - 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4830.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{5}{2}, 4; -z\right) = \frac{1}{15} e^{-z} (-8 z^4 - 32 z^3 + 12 z^2 - 12 z + 15) - \frac{4}{15} \sqrt{\pi} (2 z^{9/2} + 9 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4831.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{5}{2}, 5; z\right) = -\frac{4 e^z (80 z^8 - 368 z^7 - 144 z^6 - 156 z^5 - 240 z^4 - 315 z^3 + 945 z^2 - 1890 z + 1890)}{1275 z^4} + \frac{32 \sqrt{\pi} (10 z^{9/2} - 51 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{1275} + \frac{504}{85 z^4}$$

07.25.03.4832.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{5}{2}, 5; -z\right) = -\frac{4 e^{-z} (80 z^8 + 368 z^7 - 144 z^6 + 156 z^5 - 240 z^4 + 315 z^3 + 945 z^2 + 1890 z + 1890)}{1275 z^4} - \frac{32 \sqrt{\pi} (10 z^{9/2} + 51 z^{7/2}) \operatorname{erf}(\sqrt{z})}{1275} + \frac{504}{85 z^4}$$

07.25.03.4833.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{5}{2}, 6; z\right) = \frac{504 (19 z + 60)}{323 z^5} - \frac{1}{4845 z^5} 4 e^z (160 z^9 - 832 z^8 - 336 z^7 - 384 z^6 - 660 z^5 - 1260 z^4 - 945 z^3 + 20790 z^2 - 77490 z + 113400) + \frac{64 \sqrt{\pi} (10 z^{9/2} - 57 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{4845}$$

$$\begin{aligned}
 & \text{07.25.03.4834.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{5}{2}, 6; -z\right) &= \frac{504(19z - 60)}{323z^5} - \\
 & \frac{1}{4845z^5} 4e^{-z}(160z^9 + 832z^8 - 336z^7 + 384z^6 - 660z^5 + 1260z^4 - 945z^3 - 20790z^2 - 77490z - 113400) - \\
 & \frac{64\sqrt{\pi}(10z^{9/2} + 57z^{7/2})\operatorname{erf}(\sqrt{z})}{4845}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.4835.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{3}{2}, 1; z\right) &= \frac{1}{48} e^z (1430z^4 - 7007z^3 + 4488z^2 + 528z + 48) - \frac{11}{96} \sqrt{\pi} (260z^{9/2} - 1404z^{7/2} + 1323z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4836.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{3}{2}, 1; -z\right) &= \frac{1}{48} e^{-z} (1430z^4 + 7007z^3 + 4488z^2 - 528z + 48) + \frac{11}{96} \sqrt{\pi} (260z^{9/2} + 1404z^{7/2} + 1323z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4837.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{3}{2}, 2; z\right) &= \frac{1}{24} e^z (130z^4 - 793z^3 + 708z^2 + 120z + 24) + \frac{1}{48} \sqrt{\pi} (-260z^{9/2} + 1716z^{7/2} - 2079z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4838.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{3}{2}, 2; -z\right) &= \frac{1}{24} e^{-z} (130z^4 + 793z^3 + 708z^2 - 120z + 24) + \frac{1}{48} \sqrt{\pi} (260z^{9/2} + 1716z^{7/2} + 2079z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4839.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{3}{2}, 3; z\right) &= \frac{1}{6} e^z (10z^4 - 73z^3 + 84z^2 + 18z + 6) + \frac{1}{12} \sqrt{\pi} (-20z^{9/2} + 156z^{7/2} - 231z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4840.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{3}{2}, 3; -z\right) &= \frac{1}{6} e^{-z} (10z^4 + 73z^3 + 84z^2 - 18z + 6) + \frac{1}{12} \sqrt{\pi} (20z^{9/2} + 156z^{7/2} + 231z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4841.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{3}{2}, 4; z\right) &= \frac{1}{3} e^z (2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6} \sqrt{\pi} (-4z^{9/2} + 36z^{7/2} - 63z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4842.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{3}{2}, 4; -z\right) &= \frac{1}{3} e^{-z} (2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6} \sqrt{\pi} (4z^{9/2} + 36z^{7/2} + 63z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4843.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{3}{2}, 5; z\right) &= \frac{4e^z(260z^8 - 2522z^7 + 4224z^6 + 1176z^5 + 750z^4 + 315z^3 - 945z^2 + 1890z - 1890)}{3315z^4} - \\
 & \frac{4\sqrt{\pi}(260z^{9/2} - 2652z^{7/2} + 5355z^{5/2})\operatorname{erfi}(\sqrt{z})}{3315} + \frac{504}{221z^4}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4844.01 \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{3}{2}, 5; -z\right) &= \frac{4 e^{-z} (260 z^8 + 2522 z^7 + 4224 z^6 - 1176 z^5 + 750 z^4 - 315 z^3 - 945 z^2 - 1890 z - 1890)}{3315 z^4} + \\
 & \frac{4 \sqrt{\pi} (260 z^{9/2} + 2652 z^{7/2} + 5355 z^{5/2}) \operatorname{erf}(\sqrt{z})}{3315} + \frac{504}{221 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4845.01 \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{3}{2}, 6; z\right) &= \frac{2520 (19 z + 52)}{4199 z^5} + \\
 & \frac{1}{12597 z^5} 4 e^z (520 z^9 - 5668 z^8 + 10992 z^7 + 3312 z^6 + 2472 z^5 + 1890 z^4 - 1575 z^3 - 13230 z^2 + 62370 z - 98280) - \\
 & \frac{8 \sqrt{\pi} (260 z^{9/2} - 2964 z^{7/2} + 6783 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{12597}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4846.01 \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{3}{2}, 6; -z\right) &= \frac{2520 (19 z - 52)}{4199 z^5} + \\
 & \frac{1}{12597 z^5} 4 e^{-z} (520 z^9 + 5668 z^8 + 10992 z^7 - 3312 z^6 + 2472 z^5 - 1890 z^4 - 1575 z^3 + 13230 z^2 + 62370 z + 98280) + \\
 & \frac{8 \sqrt{\pi} (260 z^{9/2} + 2964 z^{7/2} + 6783 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{12597}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 & 07.25.03.4847.01 \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{1}{2}, 1; z\right) &= \frac{1}{192} e^z (-2860 z^4 + 21736 z^3 - 34221 z^2 + 6720 z + 192) + \\
 & \frac{1}{384} \sqrt{\pi} (5720 z^{9/2} - 46332 z^{7/2} + 87318 z^{5/2} - 33075 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4848.01 \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{1}{2}, 1; -z\right) &= \frac{1}{192} e^{-z} (-2860 z^4 - 21736 z^3 - 34221 z^2 - 6720 z + 192) + \\
 & \frac{1}{384} \sqrt{\pi} (-5720 z^{9/2} - 46332 z^{7/2} - 87318 z^{5/2} - 33075 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4849.01 \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{1}{2}, 2; z\right) &= \\
 & \frac{1}{96} e^z (-260 z^4 + 2444 z^3 - 5145 z^2 + 1632 z + 96) + \frac{1}{192} \sqrt{\pi} (520 z^{9/2} - 5148 z^{7/2} + 12474 z^{5/2} - 6615 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.4850.01 \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{1}{2}, 2; -z\right) &= \\
 & \frac{1}{96} e^{-z} (-260 z^4 - 2444 z^3 - 5145 z^2 - 1632 z + 96) + \frac{1}{192} \sqrt{\pi} (-520 z^{9/2} - 5148 z^{7/2} - 12474 z^{5/2} - 6615 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.4851.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{1}{2}, 3; z\right) = \frac{1}{24} e^z (-20z^4 + 224z^3 - 591z^2 + 264z + 24) + \frac{1}{48} \sqrt{\pi} (40z^{9/2} - 468z^{7/2} + 1386z^{5/2} - 945z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4852.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{1}{2}, 3; -z\right) = \frac{1}{24} e^{-z} (-20z^4 - 224z^3 - 591z^2 - 264z + 24) + \frac{1}{48} \sqrt{\pi} (-40z^{9/2} - 468z^{7/2} - 1386z^{5/2} - 945z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4853.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{1}{2}, 4; z\right) = \frac{1}{12} e^z (-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24} \sqrt{\pi} (8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4854.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{1}{2}, 4; -z\right) = \frac{1}{12} e^{-z} (-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24} \sqrt{\pi} (-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4855.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{1}{2}, 5; z\right) = -\frac{1}{36465z^4} 2e^z (2860z^8 - 42328z^7 + 156981z^6 - 113136z^5 - 17760z^4 - 1890z^3 + 5670z^2 - 11340z + 11340) + \frac{\sqrt{\pi} (5720z^{9/2} - 87516z^{7/2} + 353430z^{5/2} - 348075z^{3/2}) \operatorname{erfi}(\sqrt{z})}{36465} + \frac{1512}{2431z^4}$$

07.25.03.4856.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{1}{2}, 5; -z\right) = -\frac{1}{36465z^4} 2e^{-z} (2860z^8 + 42328z^7 + 156981z^6 + 113136z^5 - 17760z^4 + 1890z^3 + 5670z^2 + 11340z + 11340) + \frac{\sqrt{\pi} (-5720z^{9/2} - 87516z^{7/2} - 353430z^{5/2} - 348075z^{3/2}) \operatorname{erf}(\sqrt{z})}{36465} + \frac{1512}{2431z^4}$$

07.25.03.4857.01

$${}_2F_2\left(-\frac{9}{2}, 4; -\frac{1}{2}, 6; z\right) = \frac{7560(19z + 44)}{46189z^5} - \frac{1}{138567z^5} (4e^z (2860z^9 - 47476z^8 + 201531z^7 - 173760z^6 - 32232z^5 - 7560z^4 + 12285z^3 + 17010z^2 - 141750z + 249480)) + \frac{2\sqrt{\pi} (5720z^{9/2} - 97812z^{7/2} + 447678z^{5/2} - 508725z^{3/2}) \operatorname{erfi}(\sqrt{z})}{138567}$$

$$\begin{aligned}
 & \text{07.25.03.4858.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; -\frac{1}{2}, 6; -z\right) &= \frac{7560(19z - 44)}{46189z^5} - \frac{1}{138567z^5} \\
 & \quad \left(4e^{-z}(2860z^9 + 47476z^8 + 201531z^7 + 173760z^6 - 32232z^5 + 7560z^4 + 12285z^3 - 17010z^2 - 141750z - 249480)\right) - \\
 & \quad \frac{2\sqrt{\pi}(5720z^{9/2} + 97812z^{7/2} + 447678z^{5/2} + 508725z^{3/2})\operatorname{erf}(\sqrt{z})}{138567}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = \frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.4859.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; \frac{1}{2}, 1; z\right) &= \frac{e^z(5720z^4 - 58916z^3 + 148038z^2 - 80589z + 3072)}{3072} + \\
 & \quad \frac{\sqrt{\pi}(-11440z^{9/2} + 123552z^{7/2} - 349272z^{5/2} + 264600z^{3/2} - 33075\sqrt{z})\operatorname{erfi}(\sqrt{z})}{6144}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4860.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; \frac{1}{2}, 1; -z\right) &= \frac{e^{-z}(5720z^4 + 58916z^3 + 148038z^2 + 80589z + 3072)}{3072} + \\
 & \quad \frac{\sqrt{\pi}(11440z^{9/2} + 123552z^{7/2} + 349272z^{5/2} + 264600z^{3/2} + 33075\sqrt{z})\operatorname{erf}(\sqrt{z})}{6144}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4861.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; \frac{1}{2}, 2; z\right) &= \frac{e^z(520z^4 - 6604z^3 + 21906z^2 - 18159z + 1536)}{1536} + \\
 & \quad \frac{\sqrt{\pi}(-1040z^{9/2} + 13728z^{7/2} - 49896z^{5/2} + 52920z^{3/2} - 11025\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3072}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4862.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; \frac{1}{2}, 2; -z\right) &= \frac{e^{-z}(520z^4 + 6604z^3 + 21906z^2 + 18159z + 1536)}{1536} + \\
 & \quad \frac{\sqrt{\pi}(1040z^{9/2} + 13728z^{7/2} + 49896z^{5/2} + 52920z^{3/2} + 11025\sqrt{z})\operatorname{erf}(\sqrt{z})}{3072}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4863.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; \frac{1}{2}, 3; z\right) &= \\
 & \quad \frac{1}{384}e^z(40z^4 - 604z^3 + 2490z^2 - 2787z + 384) + \frac{1}{768}\sqrt{\pi}(-80z^{9/2} + 1248z^{7/2} - 5544z^{5/2} + 7560z^{3/2} - 2205\sqrt{z})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4864.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; \frac{1}{2}, 3; -z\right) &= \\
 & \quad \frac{1}{384}e^{-z}(40z^4 + 604z^3 + 2490z^2 + 2787z + 384) + \frac{1}{768}\sqrt{\pi}(80z^{9/2} + 1248z^{7/2} + 5544z^{5/2} + 7560z^{3/2} + 2205\sqrt{z})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.4865.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{1}{2}, 4; z\right) = \frac{1}{192} e^z (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4866.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{1}{2}, 4; -z\right) = \frac{1}{192} e^{-z} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.4867.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{1}{2}, 5; z\right) = \frac{1}{291720z^4} e^z (5720z^8 - 113828z^7 + 652806z^6 - 1115661z^5 + 290880z^4 + 3360z^3 - 10080z^2 + 20160z - 20160) + \frac{\sqrt{\pi} (-11440z^{9/2} + 233376z^{7/2} - 1413720z^{5/2} + 2784600z^{3/2} - 1276275\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{583440} + \frac{168}{2431z^4}$$

07.25.03.4868.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{1}{2}, 5; -z\right) = \frac{1}{291720z^4} e^{-z} (5720z^8 + 113828z^7 + 652806z^6 + 1115661z^5 + 290880z^4 - 3360z^3 - 10080z^2 - 20160z - 20160) + \frac{\sqrt{\pi} (11440z^{9/2} + 233376z^{7/2} + 1413720z^{5/2} + 2784600z^{3/2} + 1276275\sqrt{z}) \operatorname{erf}(\sqrt{z})}{583440} + \frac{168}{2431z^4}$$

07.25.03.4869.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{1}{2}, 6; z\right) = \frac{840(19z + 36)}{46189z^5} + \frac{1}{554268z^5} (e^z (5720z^9 - 127556z^8 + 834438z^7 - 1674309z^6 + 549312z^5 + 16800z^4 - 35280z^3 + 10080z^2 + 171360z - 362880)) + \frac{\sqrt{\pi} (-11440z^{9/2} + 260832z^{7/2} - 1790712z^{5/2} + 4069800z^{3/2} - 2204475\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1108536}$$

07.25.03.4870.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{1}{2}, 6; -z\right) = \frac{840(19z - 36)}{46189z^5} + \frac{1}{554268z^5} (e^{-z} (5720z^9 + 127556z^8 + 834438z^7 + 1674309z^6 + 549312z^5 - 16800z^4 - 35280z^3 - 10080z^2 + 171360z + 362880)) + \frac{\sqrt{\pi} (11440z^{9/2} + 260832z^{7/2} + 1790712z^{5/2} + 4069800z^{3/2} + 2204475\sqrt{z}) \operatorname{erf}(\sqrt{z})}{1108536}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = 1$

07.25.03.4871.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, 1; z\right) = \frac{e^{z/2}(-5720z^5 + 73788z^4 - 278652z^3 + 361077z^2 - 139860z + 7560)I_0\left(\frac{z}{2}\right) + e^{z/2}(5720z^5 - 68068z^4 + 213444z^3 - 175947z^2 + 20442z)I_1\left(\frac{z}{2}\right)}{7560}$$

07.25.03.4872.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, \frac{3}{2}; z\right) = \frac{e^z(2288z^4 - 29744z^3 + 102696z^2 - 92964z + 11343)}{12288} + \frac{\sqrt{\pi}(-4576z^5 + 61776z^4 - 232848z^3 + 264600z^2 - 66150z + 945)\operatorname{erfi}(\sqrt{z})}{24576\sqrt{z}}$$

07.25.03.4873.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, \frac{3}{2}; -z\right) = \frac{e^{-z}(2288z^4 + 29744z^3 + 102696z^2 + 92964z + 11343)}{12288} + \frac{\sqrt{\pi}(4576z^5 + 61776z^4 + 232848z^3 + 264600z^2 + 66150z + 945)\operatorname{erf}(\sqrt{z})}{24576\sqrt{z}}$$

07.25.03.4874.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, 2; z\right) = \frac{e^{z/2}(-260z^5 + 4056z^4 - 19146z^3 + 32388z^2 - 17955z + 1890)I_0\left(\frac{z}{2}\right) + e^{z/2}(520z^5 - 7592z^4 + 30960z^3 - 37092z^2 + 8331z)I_1\left(\frac{z}{2}\right)}{3780}$$

07.25.03.4875.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, \frac{5}{2}; z\right) = \frac{e^z(22880z^5 - 359216z^4 + 1578192z^3 - 2007912z^2 + 434190z + 945)}{491520z} + \frac{1}{983040z^{3/2}}\sqrt{\pi}(-45760z^6 + 741312z^5 - 3492720z^4 + 5292000z^3 - 1984500z^2 + 56700z - 945)\operatorname{erfi}(\sqrt{z})$$

07.25.03.4876.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, \frac{5}{2}; -z\right) = \frac{e^{-z}(22880z^5 + 359216z^4 + 1578192z^3 + 2007912z^2 + 434190z - 945)}{491520z} + \frac{\sqrt{\pi}(45760z^6 + 741312z^5 + 3492720z^4 + 5292000z^3 + 1984500z^2 + 56700z + 945)\operatorname{erf}(\sqrt{z})}{983040z^{3/2}}$$

07.25.03.4877.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, 3; z\right) = \frac{e^{z/2}(-80z^5 + 1464z^4 - 8292z^3 + 17268z^2 - 12285z + 1890)I_0\left(\frac{z}{2}\right) + e^{z/2}z(80z^4 - 1384z^3 + 6948z^2 - 10932z + 3693)I_1\left(\frac{z}{2}\right)}{1890}$$

07.25.03.4878.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, \frac{7}{2}; z\right) = \frac{e^z (45\,760 z^6 - 841\,984 z^5 + 4\,491\,696 z^4 - 7\,378\,944 z^3 + 2\,346\,036 z^2 + 15\,120 z - 2835)}{2\,752\,512 z^2} + \frac{1}{5\,505\,024 z^{5/2}}$$

$$\sqrt{\pi} (-91\,520 z^7 + 1\,729\,728 z^6 - 9\,779\,616 z^5 + 18\,522\,000 z^4 - 9\,261\,000 z^3 + 396\,900 z^2 - 13\,230 z + 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4879.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, \frac{7}{2}; -z\right) = \frac{e^{-z} (45\,760 z^6 + 841\,984 z^5 + 4\,491\,696 z^4 + 7\,378\,944 z^3 + 2\,346\,036 z^2 - 15\,120 z - 2835)}{2\,752\,512 z^2} + \frac{1}{5\,505\,024 z^{5/2}}$$

$$\sqrt{\pi} (91\,520 z^7 + 1\,729\,728 z^6 + 9\,779\,616 z^5 + 18\,522\,000 z^4 + 9\,261\,000 z^3 + 396\,900 z^2 + 13\,230 z + 2835) \operatorname{erf}(\sqrt{z})$$

07.25.03.4880.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, 4; z\right) = \frac{1}{945} e^{z/2} (-16 z^5 + 336 z^4 - 2220 z^3 + 5484 z^2 - 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} z (16 z^4 - 320 z^3 + 1908 z^2 - 3720 z + 1689) I_1\left(\frac{z}{2}\right)$$

07.25.03.4881.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, \frac{9}{2}; z\right) = \frac{1}{12\,582\,912 z^3} e^z (91\,520 z^7 - 1\,931\,072 z^6 + 12\,119\,712 z^5 - 24\,426\,480 z^4 + 10\,378\,056 z^3 + 154\,980 z^2 - 92\,610 z + 70\,875) + \frac{1}{25\,165\,824 z^{7/2}} \left(\sqrt{\pi} (-183\,040 z^8 + 3\,953\,664 z^7 - 26\,078\,976 z^6 + 59\,270\,400 z^5 - 37\,044\,000 z^4 + 2\,116\,800 z^3 - 105\,840 z^2 + 45\,360 z - 70\,875) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.4882.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, \frac{9}{2}; -z\right) = \frac{1}{12\,582\,912 z^3} e^{-z} (91\,520 z^7 + 1\,931\,072 z^6 + 12\,119\,712 z^5 + 24\,426\,480 z^4 + 10\,378\,056 z^3 - 154\,980 z^2 - 92\,610 z - 70\,875) + \frac{1}{25\,165\,824 z^{7/2}} \left(\sqrt{\pi} (183\,040 z^8 + 3\,953\,664 z^7 + 26\,078\,976 z^6 + 59\,270\,400 z^5 + 37\,044\,000 z^4 + 2\,116\,800 z^3 + 105\,840 z^2 + 45\,360 z + 70\,875) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.4883.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, 5; z\right) = \frac{1}{11\,486\,475 z^3} \left(4 e^{z/2} (22\,880 z^8 - 519\,376 z^7 + 3\,586\,176 z^6 - 8\,343\,492 z^5 + 4\,774\,530 z^4 - 4\,725 z^3 + 17\,010 z^2 - 45\,360 z + 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{11\,486\,475 z^2} \right) + 4 e^{z/2} (22\,880 z^7 - 542\,256 z^6 + 4\,094\,112 z^5 - 11\,692\,860 z^4 + 11\,772\,810 z^3 - 2\,868\,075 z^2 - 11\,340 z + 22\,680) I_0\left(\frac{z}{2}\right)$$

07.25.03.4884.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, \frac{11}{2}; z\right) = \frac{1}{50331648z^4} \left(e^z (183040z^8 - 4356352z^7 + 31443456z^6 - 75133248z^5 + 40235424z^4 + 982800z^3 - 332640z^2 - 1039500z + 3472875) \right) + \frac{1}{100663296z^{9/2}} \left(\sqrt{\pi} (-366080z^9 + 8895744z^8 - 67060224z^7 + 177811200z^6 - 133358400z^5 + 9525600z^4 - 635040z^3 + 408240z^2 - 1275750z - 3472875) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.4885.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, \frac{11}{2}; -z\right) = \frac{1}{50331648z^4} \left(e^{-z} (183040z^8 + 4356352z^7 + 31443456z^6 + 75133248z^5 + 40235424z^4 - 982800z^3 - 332640z^2 + 1039500z + 3472875) \right) + \frac{1}{100663296z^{9/2}} \left(\sqrt{\pi} (366080z^9 + 8895744z^8 + 67060224z^7 + 177811200z^6 + 133358400z^5 + 9525600z^4 + 635040z^3 + 408240z^2 + 1275750z - 3472875) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.4886.01

$${}_2F_2\left(-\frac{9}{2}, 4; 1, 6; z\right) = \frac{1}{43648605z^4} \left(8e^{z/2} (22880z^9 - 581152z^8 + 4560336z^7 - 12330528z^6 + 8530878z^5 - 28350z^4 + 85995z^3 - 158760z^2 + 136080z + 1451520) I_1\left(\frac{z}{2}\right) - \frac{1}{43648605z^3} \left(16e^{z/2} (11440z^8 - 302016z^7 + 2565024z^6 - 8311584z^5 + 9545445z^4 - 2717820z^3 - 25515z^2 + 17010z + 181440) I_0\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = \frac{3}{2}$

07.25.03.4887.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{3}{2}, 2; z\right) = \frac{e^z (208z^4 - 3328z^3 + 15072z^2 - 20328z + 5199)}{6144} + \frac{\sqrt{\pi} (-416z^5 + 6864z^4 - 33264z^3 + 52920z^2 - 22050z + 945) \operatorname{erfi}(\sqrt{z})}{12288\sqrt{z}}$$

07.25.03.4888.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{3}{2}, 2; -z\right) = \frac{e^{-z}(208z^4 + 3328z^3 + 15072z^2 + 20328z + 5199)}{6144} + \frac{\sqrt{\pi}(416z^5 + 6864z^4 + 33264z^3 + 52920z^2 + 22050z + 945)\operatorname{erf}(\sqrt{z})}{12288\sqrt{z}}$$

07.25.03.4889.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{3}{2}, 3; z\right) = \frac{e^z(16z^4 - 304z^3 + 1704z^2 - 3060z + 1221)}{1536} + \frac{\sqrt{\pi}(-32z^5 + 624z^4 - 3696z^3 + 7560z^2 - 4410z + 315)\operatorname{erfi}(\sqrt{z})}{3072\sqrt{z}}$$

07.25.03.4890.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{3}{2}, 3; -z\right) = \frac{e^{-z}(16z^4 + 304z^3 + 1704z^2 + 3060z + 1221)}{1536} + \frac{\sqrt{\pi}(32z^5 + 624z^4 + 3696z^3 + 7560z^2 + 4410z + 315)\operatorname{erf}(\sqrt{z})}{3072\sqrt{z}}$$

07.25.03.4891.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{3}{2}, 4; z\right) = \frac{e^z(16z^4 - 352z^3 + 2352z^2 - 5280z + 2895)}{3840} + \frac{\sqrt{\pi}(-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945)\operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.4892.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{3}{2}, 4; -z\right) = \frac{e^{-z}(16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{3840} + \frac{\sqrt{\pi}(32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945)\operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.4893.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{3}{2}, 5; z\right) = \frac{1}{1166880z^4} e^z(2288z^8 - 57200z^7 + 443784z^6 - 1196148z^5 + 839175z^4 - 1920z^3 + 5760z^2 - 11520z + 11520) + \frac{\sqrt{\pi}(-4576z^5 + 116688z^4 - 942480z^3 + 2784600z^2 - 2552550z + 328185)\operatorname{erfi}(\sqrt{z})}{2333760\sqrt{z}} - \frac{24}{2431z^4}$$

07.25.03.4894.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{3}{2}, 5; -z\right) = \frac{1}{1166880z^4} e^{-z}(2288z^8 + 57200z^7 + 443784z^6 + 1196148z^5 + 839175z^4 + 1920z^3 + 5760z^2 + 11520z + 11520) + \frac{\sqrt{\pi}(4576z^5 + 116688z^4 + 942480z^3 + 2784600z^2 + 2552550z + 328185)\operatorname{erf}(\sqrt{z})}{2333760\sqrt{z}} - \frac{24}{2431z^4}$$

07.25.03.4895.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{3}{2}, 6; z\right) = \frac{-\frac{120(19z+28)}{46189z^5} + \frac{1}{2217072z^5} (e^z (2288z^9 - 64064z^8 + 566016z^7 - 1781064z^6 + 1527453z^5 - 11520z^4 + 27840z^3 - 28800z^2 - 51840z + 161280)) + \sqrt{\pi} (-4576z^5 + 130416z^4 - 1193808z^3 + 4069800z^2 - 4408950z + 692835) \operatorname{erfi}(\sqrt{z})}{4434144\sqrt{z}}$$

07.25.03.4896.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{3}{2}, 6; -z\right) = \frac{-\frac{120(19z-28)}{46189z^5} + \frac{1}{2217072z^5} (e^{-z} (2288z^9 + 64064z^8 + 566016z^7 + 1781064z^6 + 1527453z^5 + 11520z^4 + 27840z^3 + 28800z^2 - 51840z - 161280)) + \sqrt{\pi} (4576z^5 + 130416z^4 + 1193808z^3 + 4069800z^2 + 4408950z + 692835) \operatorname{erf}(\sqrt{z})}{4434144\sqrt{z}}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = 2$

07.25.03.4897.01

$${}_2F_2\left(-\frac{9}{2}, 4; 2, 2; z\right) = \frac{e^{z/2} (-1040z^5 + 19656z^4 - 116580z^3 + 260196z^2 - 207585z + 41580) I_0\left(\frac{z}{2}\right) + e^{z/2} (1040z^5 - 18616z^4 + 98484z^3 - 169980z^2 + 71481z - 1260) I_1\left(\frac{z}{2}\right)}{41580}$$

07.25.03.4898.01

$${}_2F_2\left(-\frac{9}{2}, 4; 2, \frac{5}{2}; z\right) = \frac{e^z (2080z^5 - 40144z^4 + 230448z^3 - 431448z^2 + 189690z - 945)}{245760z} + \frac{\sqrt{\pi} (-4160z^6 + 82368z^5 - 498960z^4 + 1058400z^3 - 661500z^2 + 56700z + 945) \operatorname{erfi}(\sqrt{z})}{491520z^{3/2}}$$

07.25.03.4899.01

$${}_2F_2\left(-\frac{9}{2}, 4; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (2080z^5 + 40144z^4 + 230448z^3 + 431448z^2 + 189690z + 945)}{245760z} + \frac{\sqrt{\pi} (4160z^6 + 82368z^5 + 498960z^4 + 1058400z^3 + 661500z^2 + 56700z - 945) \operatorname{erf}(\sqrt{z})}{491520z^{3/2}}$$

07.25.03.4900.01

$${}_2F_2\left(-\frac{9}{2}, 4; 2, 3; z\right) = \frac{e^{z/2} (-80z^5 + 1776z^4 - 12684z^3 + 35124z^2 - 36225z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (80z^5 - 1696z^4 + 11028z^3 - 24864z^2 + 15429z - 630) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.4901.01

$${}_2F_2\left(-\frac{9}{2}, 4; 2, \frac{7}{2}; z\right) = \frac{e^z (4160 z^6 - 94016 z^5 + 653616 z^4 - 1567200 z^3 + 988428 z^2 - 13860 z + 945)}{1376256 z^2} + \frac{1}{2752512 z^{5/2}} \sqrt{\pi} (-8320 z^7 + 192192 z^6 - 1397088 z^5 + 3704400 z^4 - 3087000 z^3 + 396900 z^2 + 13230 z - 945) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4902.01

$${}_2F_2\left(-\frac{9}{2}, 4; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (4160 z^6 + 94016 z^5 + 653616 z^4 + 1567200 z^3 + 988428 z^2 + 13860 z + 945)}{1376256 z^2} + \frac{1}{2752512 z^{5/2}} \sqrt{\pi} (8320 z^7 + 192192 z^6 + 1397088 z^5 + 3704400 z^4 + 3087000 z^3 + 396900 z^2 - 13230 z - 945) \operatorname{erf}(\sqrt{z})$$

07.25.03.4903.01

$${}_2F_2\left(-\frac{9}{2}, 4; 2, 4; z\right) = \frac{e^{z/2} (-32 z^5 + 816 z^4 - 6816 z^3 + 22524 z^2 - 28350 z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2} (32 z^5 - 784 z^4 + 6048 z^3 - 16836 z^2 + 13854 z - 945) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.4904.01

$${}_2F_2\left(-\frac{9}{2}, 4; 2, \frac{9}{2}; z\right) = \frac{1}{6291456 z^3} e^z (8320 z^7 - 215488 z^6 + 1759200 z^5 - 5144784 z^4 + 4250328 z^3 - 119700 z^2 + 24570 z - 14175) + \frac{1}{12582912 z^{7/2}} \left(\sqrt{\pi} (-16640 z^8 + 439296 z^7 - 3725568 z^6 + 11854080 z^5 - 12348000 z^4 + 2116800 z^3 + 105840 z^2 - 15120 z + 14175) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.4905.01

$${}_2F_2\left(-\frac{9}{2}, 4; 2, \frac{9}{2}; -z\right) = \frac{1}{6291456 z^3} e^{-z} (8320 z^7 + 215488 z^6 + 1759200 z^5 + 5144784 z^4 + 4250328 z^3 + 119700 z^2 + 24570 z + 14175) + \frac{1}{12582912 z^{7/2}} \left(\sqrt{\pi} (16640 z^8 + 439296 z^7 + 3725568 z^6 + 11854080 z^5 + 12348000 z^4 + 2116800 z^3 - 105840 z^2 - 15120 z - 14175) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.4906.01

$${}_2F_2\left(-\frac{9}{2}, 4; 2, 5; z\right) = \frac{1}{11486475 z^3} 8 e^{z/2} (2080 z^8 - 57824 z^7 + 516144 z^6 - 1710048 z^5 + 1755690 z^4 - 173250 z^3 - 2835 z^2 + 7560 z - 15120) I_1\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} 16 e^{z/2} (1040 z^7 - 29952 z^6 + 286464 z^5 - 1099680 z^4 + 1629495 z^3 - 718200 z^2 + 945 z - 1890) I_0\left(\frac{z}{2}\right)$$

07.25.03.4907.01

$${}_2F_2\left(-\frac{9}{2}, 4; 2, \frac{11}{2}; z\right) = \frac{1}{25\,165\,824\,z^4} e^z (16\,640\,z^8 - 485\,888\,z^7 + 4\,555\,392\,z^6 - 15\,725\,568\,z^5 + 16\,110\,912\,z^4 - 756\,000\,z^3 + 173\,880\,z^2 + 75\,600\,z - 496\,125) + \frac{1}{50\,331\,648\,z^{9/2}} \left(\sqrt{\pi} (-33\,280\,z^9 + 988\,416\,z^8 - 9\,580\,032\,z^7 + 35\,562\,240\,z^6 - 44\,452\,800\,z^5 + 9\,525\,600\,z^4 + 635\,040\,z^3 - 136\,080\,z^2 + 255\,150\,z + 496\,125) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.4908.01

$${}_2F_2\left(-\frac{9}{2}, 4; 2, \frac{11}{2}; -z\right) = \frac{1}{25\,165\,824\,z^4} e^{-z} (16\,640\,z^8 + 485\,888\,z^7 + 4\,555\,392\,z^6 + 15\,725\,568\,z^5 + 16\,110\,912\,z^4 + 756\,000\,z^3 + 173\,880\,z^2 - 75\,600\,z - 496\,125) + \frac{1}{50\,331\,648\,z^{9/2}} \left(\sqrt{\pi} (33\,280\,z^9 + 988\,416\,z^8 + 9\,580\,032\,z^7 + 35\,562\,240\,z^6 + 44\,452\,800\,z^5 + 9\,525\,600\,z^4 - 635\,040\,z^3 - 136\,080\,z^2 - 255\,150\,z + 496\,125) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.4909.01

$${}_2F_2\left(-\frac{9}{2}, 4; 2, 6; z\right) = \frac{1}{43\,648\,605\,z^4} \left(8 e^{z/2} (4160\,z^9 - 129\,376\,z^8 + 1\,311\,600\,z^7 - 5\,040\,096\,z^6 + 6\,206\,808\,z^5 - 815\,850\,z^4 - 34\,965\,z^3 + 75\,600\,z^2 - 105\,840\,z - 362\,880) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \left(8 e^{z/2} (4160\,z^8 - 133\,536\,z^7 + 1\,438\,896\,z^6 - 6\,291\,168\,z^5 + 10\,707\,480\,z^4 - 5\,463\,990\,z^3 + 21\,735\,z^2 - 26\,460\,z - 90\,720) I_0\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = \frac{5}{2}$

07.25.03.4910.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{5}{2}, 3; z\right) = \frac{e^z (160\,z^5 - 3664\,z^4 + 25\,968\,z^3 - 64\,248\,z^2 + 43\,170\,z - 945)}{61\,440\,z} + \frac{\sqrt{\pi} (-320\,z^6 + 7488\,z^5 - 55\,440\,z^4 + 151\,200\,z^3 - 132\,300\,z^2 + 18\,900\,z + 945) \operatorname{erfi}(\sqrt{z})}{122\,880\,z^{3/2}}$$

07.25.03.4911.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (160\,z^5 + 3664\,z^4 + 25\,968\,z^3 + 64\,248\,z^2 + 43\,170\,z + 945)}{61\,440\,z} + \frac{\sqrt{\pi} (320\,z^6 + 7488\,z^5 + 55\,440\,z^4 + 151\,200\,z^3 + 132\,300\,z^2 + 18\,900\,z - 945) \operatorname{erf}(\sqrt{z})}{122\,880\,z^{3/2}}$$

07.25.03.4912.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{5}{2}, 4; z\right) = \frac{e^z (32 z^5 - 848 z^4 + 7152 z^3 - 22008 z^2 + 20010 z - 945)}{30720 z} + \frac{\sqrt{\pi} (-64 z^6 + 1728 z^5 - 15120 z^4 + 50400 z^3 - 56700 z^2 + 11340 z + 945) \operatorname{erfi}(\sqrt{z})}{61440 z^{3/2}}$$

07.25.03.4913.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{5}{2}, 4; -z\right) = \frac{e^{-z} (32 z^5 + 848 z^4 + 7152 z^3 + 22008 z^2 + 20010 z + 945)}{30720 z} + \frac{\sqrt{\pi} (64 z^6 + 1728 z^5 + 15120 z^4 + 50400 z^3 + 56700 z^2 + 11340 z - 945) \operatorname{erf}(\sqrt{z})}{61440 z^{3/2}}$$

07.25.03.4914.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{5}{2}, 5; z\right) = \frac{1}{46675200 z^4} (e^z (22880 z^8 - 688688 z^7 + 6735696 z^6 - 24793896 z^5 + 28504110 z^4 - 2251215 z^3 - 138240 z^2 + 276480 z - 276480)) + \frac{1}{93350400 z^{3/2}} \sqrt{\pi} (-45760 z^6 + 1400256 z^5 - 14137200 z^4 + 55692000 z^3 - 76576500 z^2 + 19691100 z + 2297295) \operatorname{erfi}(\sqrt{z}) + \frac{72}{12155 z^4}$$

07.25.03.4915.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{5}{2}, 5; -z\right) = \frac{1}{46675200 z^4} (e^{-z} (22880 z^8 + 688688 z^7 + 6735696 z^6 + 24793896 z^5 + 28504110 z^4 + 2251215 z^3 - 138240 z^2 - 276480 z + 276480)) + \frac{1}{93350400 z^{3/2}} \sqrt{\pi} (45760 z^6 + 1400256 z^5 + 14137200 z^4 + 55692000 z^3 + 76576500 z^2 + 19691100 z - 2297295) \operatorname{erf}(\sqrt{z}) + \frac{72}{12155 z^4}$$

07.25.03.4916.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{5}{2}, 6; z\right) = \frac{72(19z + 20)}{46189 z^5} + \frac{1}{88682880 z^5} (e^z (22880 z^9 - 771056 z^8 + 8579472 z^7 - 36765192 z^6 + 51183390 z^5 - 5912955 z^4 - 852480 z^3 + 1244160 z^2 + 138240 z - 276480)) + \frac{1}{177365760 z^{3/2}} \sqrt{\pi} (-45760 z^6 + 1564992 z^5 - 17907120 z^4 + 81396000 z^3 - 132268500 z^2 + 41570100 z + 6235515) \operatorname{erfi}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.4917.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 4; \frac{5}{2}, 6; -z\right) = \\
 & \frac{72(19z-20)}{46189z^5} + \frac{1}{88682880z^5} \left(e^{-z} (22880z^9 + 771056z^8 + 8579472z^7 + 36765192z^6 + 51183390z^5 + \right. \\
 & \quad \left. 5912955z^4 - 852480z^3 - 1244160z^2 + 138240z + 2764800) \right) + \frac{1}{177365760z^{3/2}} \\
 & \sqrt{\pi} (45760z^6 + 1564992z^5 + 17907120z^4 + 81396000z^3 + 132268500z^2 + 41570100z - 6235515) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = 3$

$$\begin{aligned}
 & \text{07.25.03.4918.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 4; 3, 3; z\right) = \frac{2e^{z/2} (160z^6 - 4016z^5 + 32064z^4 - 94140z^3 + 85326z^2 - 7875z - 630) I_1\left(\frac{z}{2}\right)}{135135z} - \\
 & \frac{2e^{z/2} (160z^5 - 4176z^4 + 36000z^3 - 124356z^2 + 166950z - 67725) I_0\left(\frac{z}{2}\right)}{135135}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4919.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 4; 3, \frac{7}{2}; z\right) = \frac{e^z (320z^6 - 8576z^5 + 73488z^4 - 231744z^3 + 220332z^2 - 12600z - 945)}{344064z^2} + \\
 & \frac{1}{688128z^{5/2}} \sqrt{\pi} (-640z^7 + 17472z^6 - 155232z^5 + 529200z^4 - 617400z^3 + 132300z^2 + 13230z + 945) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4920.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 4; 3, \frac{7}{2}; -z\right) = \frac{e^{-z} (320z^6 + 8576z^5 + 73488z^4 + 231744z^3 + 220332z^2 + 12600z - 945)}{344064z^2} + \\
 & \frac{1}{688128z^{5/2}} \sqrt{\pi} (640z^7 + 17472z^6 + 155232z^5 + 529200z^4 + 617400z^3 + 132300z^2 - 13230z + 945) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4921.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 4; 3, 4; z\right) = \frac{4e^{z/2} (32z^6 - 928z^5 + 8784z^4 - 31776z^3 + 37938z^2 - 5670z - 945) I_1\left(\frac{z}{2}\right)}{135135z} - \\
 & \frac{8e^{z/2} (16z^5 - 480z^4 + 4848z^3 - 20064z^2 + 33075z - 17010) I_0\left(\frac{z}{2}\right)}{135135}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4922.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 4; 3, \frac{9}{2}; z\right) = \\
 & \frac{e^z (640z^7 - 19648z^6 + 197472z^5 - 757008z^4 + 933432z^3 - 94500z^2 - 18270z + 4725)}{1572864z^3} + \frac{1}{3145728z^{7/2}} \left(\sqrt{\pi} \right. \\
 & \quad \left. (-1280z^8 + 39936z^7 - 413952z^6 + 1693440z^5 - 2469600z^4 + 705600z^3 + 105840z^2 + 15120z - 4725) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.4923.01

$${}_2F_2\left(-\frac{9}{2}, 4; 3, \frac{9}{2}; -z\right) = \frac{e^{-z} (640 z^7 + 19\,648 z^6 + 197\,472 z^5 + 757\,008 z^4 + 933\,432 z^3 + 94\,500 z^2 - 18\,270 z - 4725)}{1\,572\,864 z^3} + \frac{1}{3\,145\,728 z^{7/2}} \left(\sqrt{\pi} (1280 z^8 + 39\,936 z^7 + 413\,952 z^6 + 1\,693\,440 z^5 + 2\,469\,600 z^4 + 705\,600 z^3 - 105\,840 z^2 + 15\,120 z + 4725)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.4924.01

$${}_2F_2\left(-\frac{9}{2}, 4; 3, 5; z\right) = \frac{1}{11\,486\,475 z^3} \left(16 e^{z/2} (320 z^8 - 10\,528 z^7 + 115\,248 z^6 - 495\,456 z^5 + 734\,520 z^4 - 154\,350 z^3 - 38\,745 z^2 - 3780 z + 7560) I_1\left(\frac{z}{2}\right) - \frac{1}{11\,486\,475 z^2} 16 e^{z/2} (320 z^7 - 10\,848 z^6 + 125\,616 z^5 - 605\,760 z^4 + 1\,181\,880 z^3 - 727\,650 z^2 - 945 z + 1890) I_0\left(\frac{z}{2}\right)\right)$$

07.25.03.4925.01

$${}_2F_2\left(-\frac{9}{2}, 4; 3, \frac{11}{2}; z\right) = \frac{1}{6\,291\,456 z^4} e^z (1280 z^8 - 44\,288 z^7 + 510\,720 z^6 - 2\,305\,344 z^5 + 3\,498\,528 z^4 - 529\,200 z^3 - 166\,320 z^2 + 18\,900 z + 99\,225) + \frac{1}{12\,582\,912 z^{9/2}} \left(\sqrt{\pi} (-2560 z^9 + 89\,856 z^8 - 1\,064\,448 z^7 + 5\,080\,320 z^6 - 8\,890\,560 z^5 + 3\,175\,200 z^4 + 635\,040 z^3 + 136\,080 z^2 - 85\,050 z - 99\,225)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.4926.01

$${}_2F_2\left(-\frac{9}{2}, 4; 3, \frac{11}{2}; -z\right) = \frac{1}{6\,291\,456 z^4} e^{-z} (1280 z^8 + 44\,288 z^7 + 510\,720 z^6 + 2\,305\,344 z^5 + 3\,498\,528 z^4 + 529\,200 z^3 - 166\,320 z^2 - 18\,900 z + 99\,225) + \frac{1}{12\,582\,912 z^{9/2}} \left(\sqrt{\pi} (2560 z^9 + 89\,856 z^8 + 1\,064\,448 z^7 + 5\,080\,320 z^6 + 8\,890\,560 z^5 + 3\,175\,200 z^4 - 635\,040 z^3 + 136\,080 z^2 + 85\,050 z - 99\,225)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.4927.01

$${}_2F_2\left(-\frac{9}{2}, 4; 3, 6; z\right) = \frac{1}{43\,648\,605 z^4} \left(32 e^{z/2} (320 z^9 - 11\,776 z^8 + 146\,352 z^7 - 728\,928 z^6 + 1\,291\,512 z^5 - 352\,800 z^4 - 116\,865 z^3 - 24\,570 z^2 + 41\,580 z + 60\,480) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605 z^3} 32 e^{z/2} (320 z^8 - 12\,096 z^7 + 157\,968 z^6 - 869\,712 z^5 + 1\,958\,040 z^4 - 1\,393\,560 z^3 - 6615 z^2 + 10\,395 z + 15\,120) I_0\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = \frac{7}{2}$

07.25.03.4928.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{7}{2}, 4; z\right) = \frac{e^z (64 z^6 - 1984 z^5 + 20208 z^4 - 79008 z^3 + 100716 z^2 - 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (-128 z^7 + 4032 z^6 - 42336 z^5 + 176400 z^4 - 264600 z^3 + 79380 z^2 + 13230 z + 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.4929.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{7}{2}, 4; -z\right) = \frac{e^{-z} (64 z^6 + 1984 z^5 + 20208 z^4 + 79008 z^3 + 100716 z^2 + 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835) \operatorname{erf}(\sqrt{z})$$

07.25.03.4930.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{7}{2}, 5; z\right) = \frac{1}{261381120 z^4} (e^z (45760 z^8 - 1610752 z^7 + 19009584 z^6 - 88704384 z^5 + 142029300 z^4 - 24934560 z^3 - 10196235 z^2 - 2580480 z + 2580480)) + \frac{1}{522762240 z^{5/2}} (\sqrt{\pi} (-91520 z^7 + 3267264 z^6 - 39584160 z^5 + 194922000 z^4 - 357357000 z^3 + 137837700 z^2 + 32162130 z + 11486475) \operatorname{erfi}(\sqrt{z})) - \frac{24}{2431 z^4}$$

07.25.03.4931.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{7}{2}, 5; -z\right) = \frac{1}{261381120 z^4} (e^{-z} (45760 z^8 + 1610752 z^7 + 19009584 z^6 + 88704384 z^5 + 142029300 z^4 + 24934560 z^3 - 10196235 z^2 + 2580480 z + 2580480)) + \frac{1}{522762240 z^{5/2}} (\sqrt{\pi} (91520 z^7 + 3267264 z^6 + 39584160 z^5 + 194922000 z^4 + 357357000 z^3 + 137837700 z^2 - 32162130 z + 11486475) \operatorname{erf}(\sqrt{z})) - \frac{24}{2431 z^4}$$

07.25.03.4932.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{7}{2}, 6; z\right) = -\frac{120(19z+12)}{46189 z^5} + \frac{1}{496624128 z^5} (e^z (45760 z^9 - 1802944 z^8 + 24191376 z^7 - 131191584 z^6 + 253084356 z^5 - 61638780 z^4 - 33971805 z^3 - 16773120 z^2 + 9031680 z + 15482880)) + \frac{1}{993248256 z^{5/2}} (\sqrt{\pi} (-91520 z^7 + 3651648 z^6 - 50139936 z^5 + 284886000 z^4 - 617253000 z^3 + 290990700 z^2 + 87297210 z + 43648605) \operatorname{erfi}(\sqrt{z}))$$

$$\begin{aligned}
 & \text{07.25.03.4933.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; \frac{7}{2}, 6; -z\right) = & \\
 & -\frac{120(19z-12)}{46189z^5} + \frac{1}{496624128z^5} \left(e^{-z} (45760z^9 + 1802944z^8 + 24191376z^7 + 131191584z^6 + 253084356z^5 + \right. \\
 & \left. 61638780z^4 - 33971805z^3 + 16773120z^2 + 9031680z - 15482880) \right) + \\
 & \frac{1}{993248256z^{5/2}} \left(\sqrt{\pi} (91520z^7 + 3651648z^6 + 50139936z^5 + 284886000z^4 + 617253000z^3 + \right. \\
 & \left. 290990700z^2 - 87297210z + 43648605) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = 4$

$$\begin{aligned}
 & \text{07.25.03.4934.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; 4, 4; z\right) = & \frac{4e^{z/2} (64z^7 - 2144z^6 + 24048z^5 - 107040z^4 + 167640z^3 - 39690z^2 - 12285z - 3780) I_1\left(\frac{z}{2}\right) -}{675675z^2} \\
 & \frac{4e^{z/2} (64z^6 - 2208z^5 + 26160z^4 - 130080z^3 + 264600z^2 - 171990z - 945) I_0\left(\frac{z}{2}\right)}{675675z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4935.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; 4, \frac{9}{2}; z\right) = & \\
 & \frac{e^z (128z^7 - 4544z^6 + 54240z^5 - 257232z^4 + 422616z^3 - 79380z^2 - 35910z - 14175)}{786432z^3} + \frac{1}{1572864z^{7/2}} \\
 & \left(\sqrt{\pi} (-256z^8 + 9216z^7 - 112896z^6 + 564480z^5 - 1058400z^4 + 423360z^3 + 105840z^2 + 45360z + 14175) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4936.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; 4, \frac{9}{2}; -z\right) = & \\
 & \frac{e^{-z} (128z^7 + 4544z^6 + 54240z^5 + 257232z^4 + 422616z^3 + 79380z^2 - 35910z + 14175)}{786432z^3} + \frac{1}{1572864z^{7/2}} \\
 & \sqrt{\pi} (256z^8 + 9216z^7 + 112896z^6 + 564480z^5 + 1058400z^4 + 423360z^3 - 105840z^2 + 45360z - 14175) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4937.01} \\
 {}_2F_2\left(-\frac{9}{2}, 4; 4, 5; z\right) = & \frac{1}{11486475z^3} \\
 & \frac{32e^{z/2} (64z^8 - 2432z^7 + 31536z^6 - 166656z^5 + 323160z^4 - 105840z^3 - 46305z^2 - 26460z - 11340) I_1\left(\frac{z}{2}\right) -}{11486475z^2} \\
 & \frac{32e^{z/2} (64z^7 - 2496z^6 + 33936z^5 - 197040z^4 + 476280z^3 - 370440z^2 - 6615z - 2835) I_0\left(\frac{z}{2}\right)}{11486475z^2}
 \end{aligned}$$

07.25.03.4938.01

$${}_2F_2\left(-\frac{9}{2}, 4; 4, \frac{11}{2}; z\right) = \frac{1}{3\,145\,728\,z^4} e^z (256\,z^8 - 10\,240\,z^7 + 140\,160\,z^6 - 781\,440\,z^5 + 1\,572\,864\,z^4 - 423\,360\,z^3 - 264\,600\,z^2 - 189\,000\,z - 99\,225) + \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (-512\,z^9 + 20\,736\,z^8 - 290\,304\,z^7 + 1\,693\,440\,z^6 - 3\,810\,240\,z^5 + 1\,905\,120\,z^4 + 635\,040\,z^3 + 408\,240\,z^2 + 255\,150\,z + 99\,225) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.4939.01

$${}_2F_2\left(-\frac{9}{2}, 4; 4, \frac{11}{2}; -z\right) = \frac{1}{3\,145\,728\,z^4} e^{-z} (256\,z^8 + 10\,240\,z^7 + 140\,160\,z^6 + 781\,440\,z^5 + 1\,572\,864\,z^4 + 423\,360\,z^3 - 264\,600\,z^2 + 189\,000\,z - 99\,225) + \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (512\,z^9 + 20\,736\,z^8 + 290\,304\,z^7 + 1\,693\,440\,z^6 + 3\,810\,240\,z^5 + 1\,905\,120\,z^4 - 635\,040\,z^3 + 408\,240\,z^2 - 255\,150\,z + 99\,225) \operatorname{erf}(\sqrt{-z}) \right)$$

07.25.03.4940.01

$${}_2F_2\left(-\frac{9}{2}, 4; 4, 6; z\right) = \frac{1}{43\,648\,605\,z^4} \left(32\,e^{z/2} (128\,z^9 - 5440\,z^8 + 80\,064\,z^7 - 489\,840\,z^6 + 1\,132\,752\,z^5 - 476\,280\,z^4 - 264\,600\,z^3 - 214\,515\,z^2 - 170\,100\,z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \right) + \frac{1}{43\,648\,605\,z^4} \left(32\,e^{z/2} (128\,z^8 - 5568\,z^7 + 85\,440\,z^6 - 567\,312\,z^5 + 1\,587\,600\,z^4 - 1\,428\,840\,z^3 - 52\,920\,z^2 - 42\,525\,z - 22\,680) I_0\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = \frac{9}{2}$

07.25.03.4941.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{9}{2}, 5; z\right) = \frac{1}{1\,194\,885\,120\,z^4} \left(e^z (91\,520\,z^8 - 3\,688\,256\,z^7 + 50\,980\,512\,z^6 - 288\,114\,672\,z^5 + 591\,959\,880\,z^4 - 166\,957\,980\,z^3 - 110\,206\,530\,z^2 - 89\,721\,765\,z - 82\,575\,360) \right) + \frac{1}{2\,389\,770\,240\,z^{7/2}} \left(\sqrt{\pi} (-183\,040\,z^8 + 7\,468\,032\,z^7 - 105\,557\,760\,z^6 + 623\,750\,400\,z^5 - 1\,429\,428\,000\,z^4 + 735\,134\,400\,z^3 + 257\,297\,040\,z^2 + 183\,783\,600\,z + 172\,297\,125) \operatorname{erfi}(\sqrt{z}) \right) + \frac{168}{2431\,z^4}$$

$$\begin{aligned}
 & \text{07.25.03.4942.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 4; \frac{9}{2}, 5; -z\right) = \\
 & \frac{1}{1\,194\,885\,120\,z^4} \left(e^{-z} (91\,520\,z^8 + 3\,688\,256\,z^7 + 50\,980\,512\,z^6 + 288\,114\,672\,z^5 + 591\,959\,880\,z^4 + 166\,957\,980\,z^3 - \right. \\
 & \quad \left. 110\,206\,530\,z^2 + 89\,721\,765\,z - 82\,575\,360) \right) + \\
 & \frac{1}{2\,389\,770\,240\,z^{7/2}} \left(\sqrt{\pi} (183\,040\,z^8 + 7\,468\,032\,z^7 + 105\,557\,760\,z^6 + 623\,750\,400\,z^5 + 1\,429\,428\,000\,z^4 + \right. \\
 & \quad \left. 735\,134\,400\,z^3 - 257\,297\,040\,z^2 + 183\,783\,600\,z - 172\,297\,125) \operatorname{erf}(\sqrt{z}) \right) + \frac{168}{2431\,z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4943.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 4; \frac{9}{2}, 6; z\right) = \\
 & \frac{840(19z+4)}{46\,189\,z^5} + \frac{1}{2\,270\,281\,728\,z^5} \left(e^z (91\,520\,z^9 - 4\,127\,552\,z^8 + 64\,835\,232\,z^7 - 425\,349\,360\,z^6 + 1\,049\,512\,776\,z^5 - \right. \\
 & \quad \left. 399\,920\,220\,z^4 - 335\,608\,770\,z^3 - 389\,324\,565\,z^2 - 619\,315\,200\,z - 165\,150\,720) \right) + \\
 & \frac{1}{4\,540\,563\,456\,z^{7/2}} \left(\sqrt{\pi} (-183\,040\,z^8 + 8\,346\,624\,z^7 - 133\,706\,496\,z^6 + 911\,635\,200\,z^5 - 2\,469\,012\,000\,z^4 + \right. \\
 & \quad \left. 1\,551\,950\,400\,z^3 + 698\,377\,680\,z^2 + 698\,377\,680\,z + 1\,091\,215\,125) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4944.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 4; \frac{9}{2}, 6; -z\right) = \\
 & \frac{840(19z-4)}{46\,189\,z^5} + \frac{1}{2\,270\,281\,728\,z^5} \left(e^{-z} (91\,520\,z^9 + 4\,127\,552\,z^8 + 64\,835\,232\,z^7 + 425\,349\,360\,z^6 + 1\,049\,512\,776\,z^5 + \right. \\
 & \quad \left. 399\,920\,220\,z^4 - 335\,608\,770\,z^3 + 389\,324\,565\,z^2 - 619\,315\,200\,z + 165\,150\,720) \right) + \\
 & \frac{1}{4\,540\,563\,456\,z^{7/2}} \left(\sqrt{\pi} (183\,040\,z^8 + 8\,346\,624\,z^7 + 133\,706\,496\,z^6 + 911\,635\,200\,z^5 + 2\,469\,012\,000\,z^4 + \right. \\
 & \quad \left. 1\,551\,950\,400\,z^3 - 698\,377\,680\,z^2 + 698\,377\,680\,z - 1\,091\,215\,125) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = 5$

$$\begin{aligned}
 & \text{07.25.03.4945.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 4; 5, 5; z\right) = \\
 & -\frac{1}{139\,618\,103\,625\,z^4} \left(128\,e^{z/2} (91\,520\,z^9 - 4\,036\,032\,z^8 + 63\,015\,744\,z^7 - 427\,900\,560\,z^6 + 1\,232\,916\,720\,z^5 - \right. \\
 & \quad \left. 1\,148\,797\,800\,z^4 - 54\,654\,120\,z^3 - 62\,988\,885\,z^2 - 137\,837\,700\,z + 275\,675\,400) I_0\left(\frac{z}{2}\right) \right) + \\
 & \frac{1}{139\,618\,103\,625\,z^3} \left(128\,e^{z/2} (91\,520\,z^8 - 3\,944\,512\,z^7 + 59\,116\,992\,z^6 - 370\,664\,304\,z^5 + 888\,152\,400\,z^4 - \right. \\
 & \quad \left. 397\,997\,400\,z^3 - 239\,640\,120\,z^2 - 230\,102\,955\,z - 320\,874\,390) I_1\left(\frac{z}{2}\right) \right) + \frac{3072}{12\,155\,z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4946.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 4; 5, \frac{11}{2}; z\right) = \\
 & \frac{1}{4\,779\,540\,480\,z^4} \left(e^z (183\,040\,z^8 - 8\,310\,016\,z^7 + 131\,653\,632\,z^6 - 873\,724\,992\,z^5 + 2\,192\,393\,760\,z^4 - 864\,546\,480\,z^3 - \right. \\
 & \quad \left. 751\,222\,080\,z^2 - 932\,688\,540\,z - 1\,766\,633\,085) \right) + \\
 & \frac{1}{9\,559\,080\,960\,z^{9/2}} \left(\sqrt{\pi} (-366\,080\,z^9 + 16\,803\,072\,z^8 - 271\,434\,240\,z^7 + 1\,871\,251\,200\,z^6 - 5\,145\,940\,800\,z^5 + \right. \\
 & \quad \left. 3\,308\,104\,800\,z^4 + 1\,543\,782\,240\,z^3 + 1\,654\,052\,400\,z^2 + 3\,101\,348\,250\,z - 1\,206\,079\,875) \operatorname{erfi}(\sqrt{z}) \right) + \frac{1512}{2431\,z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4947.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 4; 5, \frac{11}{2}; -z\right) = \\
 & \frac{1}{4\,779\,540\,480\,z^4} \left(e^{-z} (183\,040\,z^8 + 8\,310\,016\,z^7 + 131\,653\,632\,z^6 + 873\,724\,992\,z^5 + 2\,192\,393\,760\,z^4 + 864\,546\,480\,z^3 - \right. \\
 & \quad \left. 751\,222\,080\,z^2 + 932\,688\,540\,z - 1\,766\,633\,085) \right) + \\
 & \frac{1}{9\,559\,080\,960\,z^{9/2}} \left(\sqrt{\pi} (366\,080\,z^9 + 16\,803\,072\,z^8 + 271\,434\,240\,z^7 + 1\,871\,251\,200\,z^6 + 5\,145\,940\,800\,z^5 + \right. \\
 & \quad \left. 3\,308\,104\,800\,z^4 - 1\,543\,782\,240\,z^3 + 1\,654\,052\,400\,z^2 - 3\,101\,348\,250\,z - 1\,206\,079\,875) \operatorname{erf}(\sqrt{z}) \right) + \frac{1512}{2431\,z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.4948.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 4; 5, 6; z\right) = \\
 & -\frac{1}{530\,548\,793\,775\,z^4} \left(512\,e^{z/2} (45\,760\,z^9 - 2\,251\,392\,z^8 + 39\,693\,984\,z^7 - 308\,608\,320\,z^6 + 1\,032\,034\,920\,z^5 - \right. \\
 & \quad \left. 1\,114\,902\,000\,z^4 - 98\,796\,420\,z^3 - 169\,974\,360\,z^2 - 585\,810\,225\,z + 1\,309\,458\,150) I_0\left(\frac{z}{2}\right) \right) + \\
 & \frac{1}{530\,548\,793\,775\,z^4} \left(256\,e^{z/2} (91\,520\,z^9 - 4\,411\,264\,z^8 + 75\,022\,464\,z^7 - 544\,308\,288\,z^6 + 1\,553\,147\,520\,z^5 - \right. \\
 & \quad \left. 886\,383\,600\,z^4 - 668\,474\,640\,z^3 - 882\,263\,160\,z^2 - 2\,014\,523\,955\,z + 551\,350\,800) I_1\left(\frac{z}{2}\right) \right) + \frac{3072}{2431\,z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = \frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.4949.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 4; \frac{11}{2}, 6; z\right) = \\
 & \frac{7560(19z-4)}{46\,189\,z^5} + \frac{1}{9\,081\,126\,912\,z^5} \left(e^z (183\,040\,z^9 - 9\,298\,432\,z^8 + 167\,350\,656\,z^7 - 1\,288\,197\,888\,z^6 + 3\,873\,021\,504\,z^5 - \right. \\
 & \quad \left. 2\,029\,255\,200\,z^4 - 2\,191\,303\,800\,z^3 - 3\,705\,397\,920\,z^2 - 11\,270\,681\,415\,z + 5\,945\,425\,920) \right) + \\
 & \frac{1}{18\,162\,253\,824\,z^{9/2}} \left(\sqrt{\pi} (-366\,080\,z^9 + 18\,779\,904\,z^8 - 343\,816\,704\,z^7 + 2\,734\,905\,600\,z^6 - 8\,888\,443\,200\,z^5 + \right. \\
 & \quad \left. 6\,983\,776\,800\,z^4 + 4\,190\,266\,080\,z^3 + 6\,285\,399\,120\,z^2 + 19\,641\,872\,250\,z - 22\,915\,517\,625) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.4950.01

$${}_2F_2\left(-\frac{9}{2}, 4; \frac{11}{2}, 6; -z\right) = \frac{7560(19z+4)}{46189z^5} + \frac{1}{9081126912z^5} (e^{-z}(183040z^9 + 9298432z^8 + 167350656z^7 + 1288197888z^6 + 3873021504z^5 + 2029255200z^4 - 2191303800z^3 + 3705397920z^2 - 11270681415z - 5945425920)) + \frac{1}{18162253824z^{9/2}} (\sqrt{\pi}(366080z^9 + 18779904z^8 + 343816704z^7 + 2734905600z^6 + 8888443200z^5 + 6983776800z^4 - 4190266080z^3 + 6285399120z^2 - 19641872250z - 22915517625) \operatorname{erf}(\sqrt{z}))$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 4$, $b_1 = 6$

07.25.03.4951.01

$${}_2F_2\left(-\frac{9}{2}, 4; 6, 6; z\right) = \frac{15360(19z-8)}{46189z^5} - \frac{1}{2016085416345z^5} (256e^{z/2}(183040z^{10} - 10048896z^9 + 200147904z^8 - 1783285824z^7 + 6935088720z^6 - 8705911920z^5 - 1353654360z^4 - 3316122360z^3 - 17852686965z^2 + 60235074900z - 20951330400) I_0\left(\frac{z}{2}\right) + \frac{1}{2016085416345z^4} (256e^{z/2}(183040z^9 - 9865856z^8 + 190373568z^7 - 1597662144z^6 + 5423319504z^5 - 3919501200z^4 - 3680221560z^3 - 6636829320z^2 - 24831369765z + 33345904140) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.4952.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{1}{12006225} (e^z(2048z^{11} + 80896z^{10} + 1057280z^9 + 5241600z^8 + 7660800z^7 - 282240z^6 + 2963520z^5 - 6199200z^4 + 11529000z^3 - 17860500z^2 + 20043450z - 12006225))$$

07.25.03.4953.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{1091475} (e^z(1024z^{10} + 35840z^9 + 403200z^8 + 1612800z^7 + 1411200z^6 - 846720z^5 + 1058400z^4 - 1512000z^3 + 1984500z^2 - 1984500z + 1091475))$$

07.25.03.4954.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{1}{121275} (e^z(512z^9 + 15616z^8 + 146944z^7 + 439040z^6 + 47040z^5 - 446880z^4 + 305760z^3 - 297360z^2 + 248850z - 121275))$$

$$\begin{aligned}
 &07.25.03.4955.01 \\
 &{}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \\
 &\frac{1}{17325} e^z (256 z^8 + 6656 z^7 + 50176 z^6 + 94080 z^5 - 117600 z^4 - 164640 z^3 + 70560 z^2 - 42840 z + 17325)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.4956.01 \\
 &{}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = -\frac{e^z (128 z^7 + 2752 z^6 + 15456 z^5 + 8400 z^4 - 71400 z^3 - 46620 z^2 + 11970 z - 3465)}{3465}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.4957.01 \\
 &{}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{e^z (64 z^6 + 1088 z^5 + 3920 z^4 - 5600 z^3 - 27300 z^2 - 9660 z + 1155)}{1155}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.4958.01 \\
 &{}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = -\frac{e^z (32 z^5 + 400 z^4 + 560 z^3 - 4200 z^2 - 7350 z - 1155)}{1155}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.4959.01 \\
 &{}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, 1; z\right) = \\
 &\frac{e^{z/2} (-16 z^5 - 176 z^4 - 140 z^3 + 2036 z^2 + 3675 z + 1155) I_0\left(\frac{z}{2}\right) - e^{z/2} (-16 z^5 - 160 z^4 + 12 z^3 + 1960 z^2 + 1831 z) I_1\left(\frac{z}{2}\right)}{1155} + \frac{e^{z/2} (-16 z^5 - 160 z^4 + 12 z^3 + 1960 z^2 + 1831 z) I_1\left(\frac{z}{2}\right)}{1155}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.4960.01 \\
 &{}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{e^z (16 z^4 + 128 z^3 - 168 z^2 - 1680 z - 1155)}{1155}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.4961.01 \\
 &{}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, 2; z\right) = \\
 &\frac{e^{z/2} (-16 z^4 - 104 z^3 + 236 z^2 + 1500 z + 1155) I_0\left(\frac{z}{2}\right) - e^{z/2} (-16 z^4 - 88 z^3 + 316 z^2 + 1156 z + 195) I_1\left(\frac{z}{2}\right)}{1155} + \frac{e^{z/2} (-16 z^4 - 88 z^3 + 316 z^2 + 1156 z + 195) I_1\left(\frac{z}{2}\right)}{1155}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.4962.01 \\
 &{}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = -\frac{1}{385} e^z (8 z^3 + 28 z^2 - 182 z - 385)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.4963.01 \\
 &{}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, 3; z\right) = -\frac{16 e^{z/2} (2 z^3 + 4 z^2 - 45 z - 75) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (8 z^4 + 8 z^3 - 184 z^2 - 120 z + 45) I_1\left(\frac{z}{2}\right)}{1155} - \frac{4 e^{z/2} (8 z^4 + 8 z^3 - 184 z^2 - 120 z + 45) I_1\left(\frac{z}{2}\right)}{1155 z}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.4964.01 \\
 &{}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{1}{77} e^z (4 z^2 - 4 z - 77)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.4965.01 \\
 &{}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, 4; z\right) = -\frac{4 e^{z/2} (8 z^3 - 20 z^2 - 116 z + 17) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (8 z^4 - 28 z^3 - 84 z^2 + 79 z - 68) I_1\left(\frac{z}{2}\right)}{385 z} - \frac{4 e^{z/2} (8 z^4 - 28 z^3 - 84 z^2 + 79 z - 68) I_1\left(\frac{z}{2}\right)}{385 z^2}
 \end{aligned}$$

$$07.25.03.4966.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{1}{11} e^z (2z - 11)$$

$$07.25.03.4967.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, 5; z\right) = -\frac{32 e^{z/2} (4z^3 - 28z^2 + 37z - 57) I_0\left(\frac{z}{2}\right)}{385 z^2} - \frac{32 e^{z/2} (4z^4 - 32z^3 + 71z^2 - 148z + 228) I_1\left(\frac{z}{2}\right)}{385 z^3}$$

$$07.25.03.4968.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{4725 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{88 z^{9/2}} - \frac{9 e^z (4z^4 - 40z^3 + 140z^2 - 350z + 525)}{44 z^4}$$

$$07.25.03.4969.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{4725 \sqrt{\pi} \operatorname{erf}(\sqrt{-z})}{88 z^{9/2}} - \frac{9 e^{-z} (4z^4 + 40z^3 + 140z^2 + 350z + 525)}{44 z^4}$$

$$07.25.03.4970.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, 6; z\right) = -\frac{32 e^{z/2} (4z^3 - 46z^2 + 195z - 504) I_0\left(\frac{z}{2}\right)}{77 z^3} - \frac{32 e^{z/2} (4z^4 - 50z^3 + 247z^2 - 780z + 2016) I_1\left(\frac{z}{2}\right)}{77 z^4}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{9}{2}$

$$07.25.03.4971.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{1}{99225}$$

$$(e^z (512 z^9 + 16128 z^8 + 161280 z^7 + 564480 z^6 + 423360 z^5 - 211680 z^4 + 211680 z^3 - 226800 z^2 + 198450 z - 99225))$$

$$07.25.03.4972.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{11025} e^z (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025)$$

$$07.25.03.4973.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575)}{1575}$$

$$07.25.03.4974.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315)$$

$$07.25.03.4975.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -\frac{1}{105} e^z (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105)$$

$$07.25.03.4976.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105)$$

$$07.25.03.4977.01$$

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8 z^4 + 104 z^3 + 376 z^2 + 420 z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} (2 z^4 + 24 z^3 + 71 z^2 + 44 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.4978.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (8z^3 + 84z^2 + 210z + 105)$$

07.25.03.4979.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (8z^3 + 76z^2 + 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 + 68z^2 + 116z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.4980.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{35} e^z (4z^2 + 28z + 35)$$

07.25.03.4981.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 + 24z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4z^3 + 20z^2 + 9z - 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.4982.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (2z + 7)$$

07.25.03.4983.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (4z^2 + 10z - 1) I_0\left(\frac{z}{2}\right)}{35z} + \frac{4 e^{z/2} (4z^3 + 6z^2 - 5z + 4) I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.4984.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = e^z$$

07.25.03.4985.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 - 2z + 3) I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{64 e^{z/2} (z^3 - 2z^2 + 4z - 6) I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.4986.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (8z^3 - 28z^2 + 70z - 105)}{16z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.4987.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9 e^{-z} (8z^3 + 28z^2 + 70z + 105)}{16z^4}$$

07.25.03.4988.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^2 - 9z + 24) I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{32 e^{z/2} (2z^3 - 11z^2 + 36z - 96) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.4989.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{e^z (-384z^7 - 9792z^6 - 79392z^5 + 281744z^4 - 35528z^3 + 17268z^2 - 9750z + 3675)}{3675} - \frac{524288 \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})}{3675}$$

07.25.03.4990.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{524\,288 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2}}{3675} + \frac{e^{-z} (384 z^7 - 9792 z^6 + 79\,392 z^5 + 281\,744 z^4 + 35\,528 z^3 + 17\,268 z^2 + 9750 z + 3675)}{3675}$$

07.25.03.4991.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{262\,144}{525} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{525} e^z (192 z^6 + 4416 z^5 - 229\,072 z^4 - 26\,336 z^3 + 4596 z^2 - 1740 z + 525)$$

07.25.03.4992.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{525} e^{-z} (192 z^6 - 4416 z^5 - 229\,072 z^4 + 26\,336 z^3 + 4596 z^2 + 1740 z + 525) - \frac{262\,144}{525} \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.4993.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{105} e^z (-96 z^5 + 63\,568 z^4 + 19\,184 z^3 + 3576 z^2 - 510 z + 105) - \frac{65\,536}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4994.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{65\,536}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (96 z^5 + 63\,568 z^4 - 19\,184 z^3 + 3576 z^2 + 510 z + 105)$$

07.25.03.4995.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{32\,768}{105} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^z (-32\,624 z^4 - 13\,792 z^3 - 8088 z^2 - 1320 z + 105)$$

07.25.03.4996.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} e^{-z} (-32\,624 z^4 + 13\,792 z^3 - 8088 z^2 + 1320 z + 105) - \frac{32\,768}{105} \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.4997.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (4096 z^4 + 1976 z^3 + 1956 z^2 + 1110 z + 105) - \frac{4096}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.4998.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{4096}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (4096 z^4 - 1976 z^3 + 1956 z^2 - 1110 z + 105)$$

07.25.03.4999.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (-524\,288 z^5 + 393\,216 z^4 + 234\,420 z^3 + 259\,980 z^2 + 174\,825 z + 33\,075) I_0\left(\frac{z}{2}\right)}{33\,075} + \frac{e^{z/2} (524\,288 z^5 + 131\,072 z^4 + 136\,116 z^3 + 148\,440 z^2 + 59\,115 z) I_1\left(\frac{z}{2}\right)}{33\,075}$$

07.25.03.5000.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{525} e^z (2048 z^4 + 1024 z^3 + 1356 z^2 + 1500 z + 525) - \frac{2048}{525} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5001.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{2048}{525} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{525} e^{-z} (2048 z^4 - 1024 z^3 + 1356 z^2 - 1500 z + 525)$$

07.25.03.5002.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (-1048576 z^5 + 786432 z^4 + 491520 z^3 + 735420 z^2 + 859950 z + 363825) I_0\left(\frac{z}{2}\right) + e^{z/2} (1048576 z^5 + 262144 z^4 + 294912 z^3 + 489660 z^2 + 447090 z + 42525) I_1\left(\frac{z}{2}\right)}{363825}$$

07.25.03.5003.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{525} e^z (512 z^4 + 256 z^3 + 384 z^2 + 690 z + 525) - \frac{512}{525} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5004.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{512}{525} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{525} e^{-z} (512 z^4 - 256 z^3 + 384 z^2 - 690 z + 525)$$

07.25.03.5005.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (1048576 z^6 + 262144 z^5 + 294912 z^4 + 614400 z^3 + 1070790 z^2 + 323190 z - 93555) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (524288 z^5 - 393216 z^4 - 245760 z^3 - 430080 z^2 - 804195 z - 602910) I_0\left(\frac{z}{2}\right)}{4729725 z}$$

07.25.03.5006.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{735} e^z (256 z^4 + 128 z^3 + 192 z^2 + 480 z + 735) - \frac{256}{735} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5007.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{256}{735} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{735} e^{-z} (256 z^4 - 128 z^3 + 192 z^2 - 480 z + 735)$$

07.25.03.5008.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{23648625 z^2} - \frac{4 e^{z/2} (2097152 z^7 + 524288 z^6 + 589824 z^5 + 1228800 z^4 + 3763200 z^3 + 3078810 z^2 - 2214135 z + 1621620) I_1\left(\frac{z}{2}\right) - \frac{1}{23648625 z} 4 e^{z/2} (2097152 z^6 - 1572864 z^5 - 983040 z^4 - 1720320 z^3 - 4838400 z^2 - 6465690 z + 405405) I_0\left(\frac{z}{2}\right)}{23648625 z}$$

07.25.03.5009.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{105} e^z (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5010.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)$$

$$\begin{aligned}
 & \text{07.25.03.5011.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, 5; z\right) = \\
 & \frac{1}{402\,026\,625\,z^3} \left(32 e^{z/2} (2\,097\,152\,z^8 + 524\,288\,z^7 + 589\,824\,z^6 + 1\,228\,800\,z^5 + 3\,763\,200\,z^4 + 15\,240\,960\,z^3 - \right. \\
 & \quad \left. 26\,538\,435\,z^2 + 50\,270\,220\,z - 72\,972\,900) I_1\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{402\,026\,625\,z^2} \left(32 e^{z/2} (2\,097\,152\,z^7 - 1\,572\,864\,z^6 - 983\,040\,z^5 - 1\,720\,320\,z^4 - 4\,838\,400\,z^3 - \right. \right. \\
 & \quad \left. \left. 18\,627\,840\,z^2 + 12\,567\,555\,z - 18\,243\,225) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5012.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \\
 & \frac{e^z (256\,z^8 + 128\,z^7 + 192\,z^6 + 480\,z^5 + 1680\,z^4 + 7560\,z^3 - 26\,460\,z^2 + 66\,150\,z - 99\,225)}{3360\,z^4} + \frac{\sqrt{\pi} (99\,225 - 512\,z^9) \operatorname{erfi}(\sqrt{z})}{6720\,z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5013.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{e^{-z} (256\,z^8 - 128\,z^7 + 192\,z^6 - 480\,z^5 + 1680\,z^4 - 7560\,z^3 - 26\,460\,z^2 - 66\,150\,z - 99\,225)}{3360\,z^4} + \frac{\sqrt{\pi} (512\,z^9 + 99\,225) \operatorname{erf}(\sqrt{z})}{6720\,z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5014.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, 6; z\right) = \\
 & \frac{1}{1\,527\,701\,175\,z^4} \left(32 e^{z/2} (4\,194\,304\,z^9 + 1\,048\,576\,z^8 + 1\,179\,648\,z^7 + 2\,457\,600\,z^6 + 7\,526\,400\,z^5 + 30\,481\,920\,z^4 + \right. \\
 & \quad \left. 153\,679\,680\,z^3 - 1\,036\,620\,585\,z^2 + 3\,575\,672\,100\,z - 9\,924\,314\,400) I_1\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{1\,527\,701\,175\,z^3} \left(32 e^{z/2} (4\,194\,304\,z^8 - 3\,145\,728\,z^7 - 1\,966\,080\,z^6 - 3\,440\,640\,z^5 - 9\,676\,800\,z^4 - \right. \right. \\
 & \quad \left. \left. 37\,255\,680\,z^3 - 181\,621\,440\,z^2 + 893\,918\,025\,z - 2\,481\,078\,600) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.5015.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{75} e^z (-96\,z^5 + 129\,008\,z^4 - 23\,696\,z^3 + 1320\,z^2 - 318\,z + 75) - \frac{8192}{75} \sqrt{\pi} (16\,z^{9/2} - 9\,z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.5016.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{75} e^{-z} (96 z^5 + 129\,008 z^4 + 23\,696 z^3 + 1320 z^2 + 318 z + 75) + \frac{8192}{75} \sqrt{\pi} (16 z^{9/2} + 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5017.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{15} e^z (-32\,720 z^4 + 21\,440 z^3 + 1128 z^2 - 96 z + 15) + \frac{4096}{15} \sqrt{\pi} (8 z^{9/2} - 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5018.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-32\,720 z^4 - 21\,440 z^3 + 1128 z^2 + 96 z + 15) - \frac{4096}{15} \sqrt{\pi} (8 z^{9/2} + 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5019.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (16\,384 z^4 - 19\,528 z^3 - 2868 z^2 - 258 z + 15) - \frac{1024}{15} \sqrt{\pi} (16 z^{9/2} - 27 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5020.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (16\,384 z^4 + 19\,528 z^3 - 2868 z^2 + 258 z + 15) + \frac{1024}{15} \sqrt{\pi} (16 z^{9/2} + 27 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5021.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (-2048 z^4 + 3584 z^3 + 804 z^2 + 228 z + 15) + \frac{512}{15} \sqrt{\pi} (4 z^{9/2} - 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5022.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-2048 z^4 - 3584 z^3 + 804 z^2 - 228 z + 15) - \frac{512}{15} \sqrt{\pi} (4 z^{9/2} + 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5023.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (262\,144 z^5 - 860\,160 z^4 + 374\,784 z^3 + 101\,670 z^2 + 35\,910 z + 4725) I_0\left(\frac{z}{2}\right) - 2 e^{z/2} (131\,072 z^5 - 299\,008 z^4 - 46\,080 z^3 - 19\,347 z^2 - 4560 z) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.5024.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{64}{75} \sqrt{\pi} (16 z - 45) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{75} e^z (-1024 z^4 + 2368 z^3 + 672 z^2 + 330 z + 75)$$

07.25.03.5025.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{75} e^{-z} (-1024 z^4 - 2368 z^3 + 672 z^2 - 330 z + 75) - \frac{64}{75} \sqrt{\pi} z^{7/2} (16 z + 45) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5026.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (524\,288 z^5 - 2\,015\,232 z^4 + 970\,752 z^3 + 330\,240 z^2 + 183\,330 z + 51\,975) I_0\left(\frac{z}{2}\right) + e^{z/2} (-524\,288 z^5 + 1\,490\,944 z^4 + 258\,048 z^3 + 148\,992 z^2 + 71\,970 z + 4725) I_1\left(\frac{z}{2}\right)}{51\,975}$$

07.25.03.5027.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{32}{75} \sqrt{\pi} (8z - 27) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{75} e^z (-256z^4 + 736z^3 + 240z^2 + 168z + 75)$$

07.25.03.5028.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{75} e^{-z} (-256z^4 - 736z^3 + 240z^2 - 168z + 75) - \frac{32}{75} \sqrt{\pi} z^{7/2} (8z + 27) \operatorname{erf}(\sqrt{z})$$

07.25.03.5029.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (524288 z^5 - 2310144 z^4 + 1191936 z^3 + 468480 z^2 + 362880 z + 171045) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (524288 z^6 - 1785856 z^5 - 331776 z^4 - 231936 z^3 - 182400 z^2 - 34965 z + 8505) I_1\left(\frac{z}{2}\right)}{675675 z}$$

07.25.03.5030.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{8}{105} \sqrt{\pi} (16z - 63) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{105} e^z (-128z^4 + 440z^3 + 156z^2 + 138z + 105)$$

07.25.03.5031.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{105} e^{-z} (-128z^4 - 440z^3 + 156z^2 - 138z + 105) - \frac{8}{105} \sqrt{\pi} z^{7/2} (16z + 63) \operatorname{erf}(\sqrt{z})$$

07.25.03.5032.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, 4; z\right) = \frac{1}{3378375 z} + \frac{4 e^{z/2} (1048576 z^6 - 5210112 z^5 + 2826240 z^4 + 1213440 z^3 + 1209600 z^2 + 892080 z - 31185) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (1048576 z^7 - 4161536 z^6 - 811008 z^5 - 629760 z^4 - 710400 z^3 - 317520 z^2 + 189945 z - 124740) I_1\left(\frac{z}{2}\right)}{3378375 z^2}$$

07.25.03.5033.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{4}{15} \sqrt{\pi} (2z - 9) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{15} e^z (-8z^4 + 32z^3 + 12z^2 + 12z + 15)$$

07.25.03.5034.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{15} e^{-z} (-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15} \sqrt{\pi} z^{7/2} (2z + 9) \operatorname{erf}(\sqrt{z})$$

07.25.03.5035.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, 5; z\right) = \frac{1}{57432375 z^2} + \frac{32 e^{z/2} (1048576 z^7 - 5799936 z^6 + 3268608 z^5 + 1489920 z^4 + 1693440 z^3 + 2252880 z^2 - 873180 z + 1216215) I_0\left(\frac{z}{2}\right) - \frac{1}{57432375 z^3} (128 e^{z/2} (262144 z^8 - 1187840 z^7 - 239616 z^6 - 198912 z^5 - 264000 z^4 - 343980 z^3 + 496125 z^2 - 873180 z + 1216215) I_1\left(\frac{z}{2}\right))}{57432375 z^3}$$

07.25.03.5036.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{e^z (-2048 z^8 + 9344 z^7 + 3648 z^6 + 3936 z^5 + 6000 z^4 + 7560 z^3 - 26460 z^2 + 66150 z - 99225)}{7680 z^4} + \frac{\sqrt{\pi} (4096 z^9 - 20736 z^8 + 99225) \operatorname{erfi}(\sqrt{z})}{15360 z^{9/2}}$$

07.25.03.5037.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-2048 z^8 - 9344 z^7 + 3648 z^6 - 3936 z^5 + 6000 z^4 - 7560 z^3 - 26460 z^2 - 66150 z - 99225)}{7680 z^4} + \frac{\sqrt{\pi} (-4096 z^9 - 20736 z^8 + 99225) \operatorname{erf}(\sqrt{z})}{15360 z^{9/2}}$$

07.25.03.5038.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, 6; z\right) = \frac{1}{218243025 z^3} \left(32 e^{z/2} (2097152 z^8 - 12779520 z^7 + 7421952 z^6 + 3532800 z^5 + 4354560 z^4 + 7227360 z^3 + 8731800 z^2 - 49864815 z + 145945800) I_0\left(\frac{z}{2}\right) - \frac{1}{218243025 z^4} \left(32 e^{z/2} (2097152 z^9 - 10682368 z^8 - 2211840 z^7 - 1923072 z^6 - 2803200 z^5 - 4868640 z^4 - 4604040 z^3 + 53170425 z^2 - 199459260 z + 583783200) I_1\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.5039.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (8192 z^4 - 14360 z^3 + 1068 z^2 - 30 z + 3) - \frac{512}{3} \sqrt{\pi} (16 z^{9/2} - 36 z^{7/2} + 9 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5040.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (8192 z^4 + 14360 z^3 + 1068 z^2 + 30 z + 3) + \frac{512}{3} \sqrt{\pi} (16 z^{9/2} + 36 z^{7/2} + 9 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5041.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (-4096 z^4 + 11776 z^3 - 3036 z^2 - 84 z + 3) + \frac{256}{3} \sqrt{\pi} (16 z^{9/2} - 54 z^{7/2} + 27 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5042.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-4096 z^4 - 11776 z^3 - 3036 z^2 + 84 z + 3) - \frac{256}{3} \sqrt{\pi} (16 z^{9/2} + 54 z^{7/2} + 27 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5043.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (512 z^4 - 2048 z^3 + 960 z^2 + 78 z + 3) - \frac{64}{3} \sqrt{\pi} (8 z^{9/2} - 36 z^{7/2} + 27 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5044.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (512 z^4 + 2048 z^3 + 960 z^2 - 78 z + 3) + \frac{64}{3} \sqrt{\pi} (8 z^{9/2} + 36 z^{7/2} + 27 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5045.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-65\,536 z^5 + 380\,928 z^4 - 508\,416 z^3 + 115\,968 z^2 + 12\,285 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (65\,536 z^5 - 315\,392 z^4 + 225\,792 z^3 + 17\,664 z^2 + 2013 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.5046.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (256 z^4 - 1312 z^3 + 912 z^2 + 120 z + 15) - \frac{32}{15} \sqrt{\pi} z^{5/2} (8 z^2 - 45 z + 45) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5047.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{32}{15} \sqrt{\pi} (8 z^2 + 45 z + 45) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{15} e^{-z} (256 z^4 + 1312 z^3 + 912 z^2 - 120 z + 15)$$

07.25.03.5048.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2} (-131\,072 z^5 + 909\,312 z^4 - 1\,459\,200 z^3 + 411\,648 z^2 + 64\,800 z + 10\,395) I_0\left(\frac{z}{2}\right) + e^{z/2} (131\,072 z^5 - 778\,240 z^4 + 746\,496 z^3 + 76\,800 z^2 + 16\,608 z + 675) I_1\left(\frac{z}{2}\right)}{10\,395}$$

07.25.03.5049.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{15} e^z (64 z^4 - 400 z^3 + 372 z^2 + 66 z + 15) - \frac{4}{15} \sqrt{\pi} z^{5/2} (16 z^2 - 108 z + 135) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5050.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{4}{15} \sqrt{\pi} (16 z^2 + 108 z + 135) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{15} e^{-z} (64 z^4 + 400 z^3 + 372 z^2 - 66 z + 15)$$

07.25.03.5051.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (131\,072 z^6 - 925\,696 z^5 + 1\,115\,136 z^4 + 136\,704 z^3 + 44\,256 z^2 + 4860 z - 945) I_1\left(\frac{z}{2}\right) - 16 e^{z/2} (32\,768 z^5 - 264\,192 z^4 + 493\,824 z^3 - 161\,664 z^2 - 33\,480 z - 8505) I_0\left(\frac{z}{2}\right)}{135\,135}$$

07.25.03.5052.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{21} e^z (32 z^4 - 236 z^3 + 276 z^2 + 60 z + 21) - \frac{2}{21} \sqrt{\pi} z^{5/2} (16 z^2 - 126 z + 189) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5053.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{2}{21} \sqrt{\pi} (16 z^2 + 126 z + 189) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{21} e^{-z} (32 z^4 + 236 z^3 + 276 z^2 - 60 z + 21)$$

07.25.03.5054.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{675\,675 z^2} 4 e^{z/2} (262\,144 z^7 - 2\,146\,304 z^6 + 3\,115\,008 z^5 + 430\,080 z^4 + 185\,280 z^3 + 42\,120 z^2 - 19\,845 z + 11\,340) I_1\left(\frac{z}{2}\right) - \frac{1}{675\,675 z} 4 e^{z/2} (262\,144 z^6 - 2\,408\,448 z^5 + 5\,130\,240 z^4 - 1\,873\,920 z^3 - 475\,200 z^2 - 173\,880 z + 2835) I_0\left(\frac{z}{2}\right)$$

07.25.03.5055.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{3} e^z (2z^4 - 17z^3 + 24z^2 + 6z + 3) - \frac{1}{6} \sqrt{\pi} z^{5/2} (4z^2 - 36z + 63) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5056.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{6} \sqrt{\pi} (4z^2 + 36z + 63) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (2z^4 + 17z^3 + 24z^2 - 6z + 3)$$

07.25.03.5057.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, 5; z\right) = \frac{1}{11486475 z^3} \left(32 e^{z/2} (262144 z^8 - 2441216 z^7 + 4147200 z^6 + 623616 z^5 + 323520 z^4 + 160920 z^3 - 178605 z^2 + 283500 z - 374220) I_1\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} \right. \\ \left. 32 e^{z/2} (262144 z^7 - 2703360 z^6 + 6457344 z^5 - 2565120 z^4 - 751680 z^3 - 400680 z^2 + 70875 z - 93555) I_0\left(\frac{z}{2}\right) \right)$$

07.25.03.5058.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z (1024 z^8 - 9856 z^7 + 16320 z^6 + 4512 z^5 + 2832 z^4 + 1080 z^3 - 3780 z^2 + 9450 z - 14175)}{3072 z^4} + \frac{\sqrt{\pi} (-2048 z^9 + 20736 z^8 - 41472 z^7 + 14175) \operatorname{erfi}(\sqrt{z})}{6144 z^{9/2}}$$

07.25.03.5059.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (1024 z^8 + 9856 z^7 + 16320 z^6 - 4512 z^5 + 2832 z^4 - 1080 z^3 - 3780 z^2 - 9450 z - 14175)}{3072 z^4} + \frac{\sqrt{\pi} (2048 z^9 + 20736 z^8 + 41472 z^7 + 14175) \operatorname{erf}(\sqrt{z})}{6144 z^{9/2}}$$

07.25.03.5060.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{43648605 z^4} \left(32 e^{z/2} (524288 z^9 - 5472256 z^8 + 10653696 z^7 + 1708032 z^6 + 1006464 z^5 + 732240 z^4 - 145530 z^3 - 2826495 z^2 + 12349260 z - 38918880) I_1\left(\frac{z}{2}\right) - \frac{1}{43648605 z^3} \left(32 e^{z/2} (524288 z^8 - 5996544 z^7 + 15863808 z^6 - 6733824 z^5 - 2194560 z^4 - 1496880 z^3 - 402570 z^2 + 3087315 z - 9729720) I_0\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.5061.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (2048 z^4 - 9344 z^3 + 6720 z^2 - 246 z + 3) - \frac{32}{3} \sqrt{\pi} (64 z^{9/2} - 324 z^{7/2} + 324 z^{5/2} - 45 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5062.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (2048 z^4 + 9344 z^3 + 6720 z^2 + 246 z + 3) + \frac{32}{3} \sqrt{\pi} (64 z^{9/2} + 324 z^{7/2} + 324 z^{5/2} + 45 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5063.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (-256 z^4 + 1600 z^3 - 1920 z^2 + 240 z + 3) + \frac{16}{3} \sqrt{\pi} (16 z^{9/2} - 108 z^{7/2} + 162 z^{5/2} - 45 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5064.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-256 z^4 - 1600 z^3 - 1920 z^2 - 240 z + 3) - \frac{16}{3} \sqrt{\pi} (16 z^{9/2} + 108 z^{7/2} + 162 z^{5/2} + 45 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5065.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (32\,768 z^5 - 273\,408 z^4 + 606\,720 z^3 - 388\,032 z^2 + 37\,800 z + 945) I_0\left(\frac{z}{2}\right) - \frac{8}{945} e^{z/2} (4096 z^5 - 30\,080 z^4 + 47\,808 z^3 - 11\,640 z^2 - 291 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.5066.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{4}{15} \sqrt{\pi} (32 z^3 - 270 z^2 + 540 z - 225) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{15} e^z (-128 z^4 + 1016 z^3 - 1716 z^2 + 390 z + 15)$$

07.25.03.5067.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-128 z^4 - 1016 z^3 - 1716 z^2 - 390 z + 15) - \frac{4}{15} \sqrt{\pi} z^{3/2} (32 z^3 + 270 z^2 + 540 z + 225) \operatorname{erf}(\sqrt{z})$$

07.25.03.5068.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^{z/2} (65\,536 z^5 - 657\,408 z^4 + 1\,794\,048 z^3 - 1\,460\,352 z^2 + 205\,200 z + 10\,395) I_0\left(\frac{z}{2}\right) + e^{z/2} (-65\,536 z^5 + 591\,872 z^4 - 1\,234\,944 z^3 + 455\,808 z^2 + 20\,208 z + 405) I_1\left(\frac{z}{2}\right)}{10\,395}$$

07.25.03.5069.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{2}{15} \sqrt{\pi} (16 z^3 - 162 z^2 + 405 z - 225) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{15} e^z (-32 z^4 + 308 z^3 - 672 z^2 + 228 z + 15)$$

07.25.03.5070.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-32z^4 - 308z^3 - 672z^2 - 228z + 15) - \frac{2}{15} \sqrt{\pi} z^{3/2} (16z^3 + 162z^2 + 405z + 225) \operatorname{erf}(\sqrt{z})$$

07.25.03.5071.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (65\,536 z^5 - 768\,000 z^4 + 2\,485\,248 z^3 - 2\,434\,944 z^2 + 438\,480 z + 33\,885) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (65\,536 z^6 - 702\,464 z^5 + 1\,815\,552 z^4 - 905\,088 z^3 - 56\,496 z^2 - 2835 z + 405) I_1\left(\frac{z}{2}\right)}{135\,135 z}$$

07.25.03.5072.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{84} \sqrt{\pi} (64z^3 - 756z^2 + 2268z - 1575) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{42} e^z (-32z^4 + 362z^3 - 969z^2 + 444z + 42)$$

07.25.03.5073.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{42} e^{-z} (-32z^4 - 362z^3 - 969z^2 - 444z + 42) - \frac{1}{84} \sqrt{\pi} z^{3/2} (64z^3 + 756z^2 + 2268z + 1575) \operatorname{erf}(\sqrt{z})$$

07.25.03.5074.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (131\,072 z^6 - 1\,757\,184 z^5 + 6\,574\,080 z^4 - 7\,491\,840 z^3 + 1\,620\,000 z^2 + 170\,910 z - 945) I_0\left(\frac{z}{2}\right) - \frac{1}{675\,675 z^2} 4 e^{z/2} (131\,072 z^7 - 1\,626\,112 z^6 + 5\,013\,504 z^5 - 3\,160\,320 z^4 - 250\,080 z^3 - 23\,490 z^2 + 7965 z - 3780) I_1\left(\frac{z}{2}\right)}{675\,675 z}$$

07.25.03.5075.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{24} \sqrt{\pi} (8z^3 - 108z^2 + 378z - 315) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{12} e^z (-4z^4 + 52z^3 - 165z^2 + 96z + 12)$$

07.25.03.5076.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{12} e^{-z} (-4z^4 - 52z^3 - 165z^2 - 96z + 12) - \frac{1}{24} \sqrt{\pi} z^{3/2} (8z^3 + 108z^2 + 378z + 315) \operatorname{erf}(\sqrt{z})$$

07.25.03.5077.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, 5; z\right) = \frac{1}{11\,486\,475 z^2} 32 e^{z/2} (131\,072 z^7 - 1\,978\,368 z^6 + 8\,398\,848 z^5 - 10\,878\,720 z^4 + 2\,708\,640 z^3 + 373\,410 z^2 - 20\,790 z + 25\,515) I_0\left(\frac{z}{2}\right) - \frac{1}{11\,486\,475 z^3} (64 e^{z/2} (65\,536 z^8 - 923\,648 z^7 + 3\,308\,544 z^6 - 2\,527\,104 z^5 - 237\,360 z^4 - 40\,095 z^3 + 30\,510 z^2 - 41\,580 z + 51\,030) I_1\left(\frac{z}{2}\right))$$

$$\begin{aligned}
 & \text{07.25.03.5078.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \\
 & \frac{e^z (-2048 z^8 + 30080 z^7 - 110400 z^6 + 78240 z^5 + 12048 z^4 + 1080 z^3 - 3780 z^2 + 9450 z - 14175)}{12288 z^4} + \\
 & \frac{\sqrt{\pi} (4096 z^9 - 62208 z^8 + 248832 z^7 - 241920 z^6 + 14175) \operatorname{erfi}(\sqrt{z})}{24576 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5079.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{12288 z^4} e^{-z} (-2048 z^8 - 30080 z^7 - 110400 z^6 - 78240 z^5 + 12048 z^4 - 1080 z^3 - 3780 z^2 - 9450 z - 14175) + \\
 & \frac{\sqrt{\pi} (-4096 z^9 - 62208 z^8 - 248832 z^7 - 241920 z^6 + 14175) \operatorname{erf}(\sqrt{z})}{24576 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5080.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, 6; z\right) = \\
 & \frac{1}{43648605 z^3} \left(32 e^{z/2} (262144 z^8 - 4399104 z^7 + 20889600 z^6 - 30245376 z^5 + 8424000 z^4 + 1436940 z^3 + \right. \\
 & \quad \left. 32130 z^2 - 637875 z + 2245320) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{43648605 z^4} \left(32 e^{z/2} (262144 z^9 - 4136960 z^8 + 16883712 z^7 - 15168000 z^6 - 1619904 z^5 - \right. \right. \\
 & \quad \left. \left. 403380 z^4 + 211950 z^3 + 409185 z^2 - 2551500 z + 8981280) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.5081.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \\
 & \frac{1}{3} e^z (32 z^4 - 272 z^3 + 528 z^2 - 192 z + 3) + \frac{1}{3} \sqrt{\pi} (-32 z^{9/2} + 288 z^{7/2} - 648 z^{5/2} + 360 z^{3/2} - 27 \sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5082.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \\
 & \frac{1}{3} e^{-z} (32 z^4 + 272 z^3 + 528 z^2 + 192 z + 3) + \frac{1}{3} \sqrt{\pi} (32 z^{9/2} + 288 z^{7/2} + 648 z^{5/2} + 360 z^{3/2} + 27 \sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5083.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-4096 z^5 + 44544 z^4 - 138048 z^3 + 141168 z^2 - 38745 z + 945) I_0\left(\frac{z}{2}\right) + \\
 & \frac{1}{945} e^{z/2} (4096 z^5 - 40448 z^4 + 99648 z^3 - 57648 z^2 + 3273 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

07.25.03.5084.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (16z^4 - 172z^3 + 462z^2 - 285z + 15) - \frac{1}{30} \sqrt{\pi} \sqrt{z} (32z^4 - 360z^3 + 1080z^2 - 900z + 135) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5085.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (16z^4 + 172z^3 + 462z^2 + 285z + 15) + \frac{1}{30} \sqrt{\pi} \sqrt{z} (32z^4 + 360z^3 + 1080z^2 + 900z + 135) \operatorname{erf}(\sqrt{z})$$

07.25.03.5086.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, 2; z\right) = \frac{e^{z/2} (-8192z^5 + 107520z^4 - 414336z^3 + 548448z^2 - 215730z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (8192z^5 - 99328z^4 + 319104z^3 - 270816z^2 + 30738z + 135) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.5087.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{60} e^z (16z^4 - 208z^3 + 714z^2 - 627z + 60) - \frac{1}{120} \sqrt{\pi} \sqrt{z} (32z^4 - 432z^3 + 1620z^2 - 1800z + 405) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5088.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{60} e^{-z} (16z^4 + 208z^3 + 714z^2 + 627z + 60) + \frac{1}{120} \sqrt{\pi} \sqrt{z} (32z^4 + 432z^3 + 1620z^2 + 1800z + 405) \operatorname{erf}(\sqrt{z})$$

07.25.03.5089.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (8192z^6 - 117760z^5 + 466560z^4 - 523104z^3 + 91218z^2 + 918z - 81) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (4096z^5 - 62976z^4 + 290112z^3 - 469488z^2 + 236601z - 16902) I_0\left(\frac{z}{2}\right)}{135135}$$

07.25.03.5090.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{168} e^z (16z^4 - 244z^3 + 1020z^2 - 1167z + 168) - \frac{1}{336} \sqrt{\pi} \sqrt{z} (32z^4 - 504z^3 + 2268z^2 - 3150z + 945) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5091.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{168} e^{-z} (16z^4 + 244z^3 + 1020z^2 + 1167z + 168) + \frac{1}{336} \sqrt{\pi} \sqrt{z} (32z^4 + 504z^3 + 2268z^2 + 3150z + 945) \operatorname{erf}(\sqrt{z})$$

07.25.03.5092.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, 4; z\right) = \frac{1}{675 \cdot 675 z^2} 4 e^{z/2} (16384 z^7 - 272384 z^6 + 1283328 z^5 - 1790400 z^4 + 426660 z^3 + 7290 z^2 - 1485 z + 540) I_1\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (16384 z^6 - 288768 z^5 + 1547520 z^4 - 2953920 z^3 + 1796580 z^2 - 169290 z + 135) I_0\left(\frac{z}{2}\right)}{675 \cdot 675 z}$$

07.25.03.5093.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{192} e^z (8 z^4 - 140 z^3 + 690 z^2 - 975 z + 192) - \frac{1}{384} \sqrt{\pi} \sqrt{z} (16 z^4 - 288 z^3 + 1512 z^2 - 2520 z + 945) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5094.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{192} e^{-z} (8 z^4 + 140 z^3 + 690 z^2 + 975 z + 192) + \frac{1}{384} \sqrt{\pi} \sqrt{z} (16 z^4 + 288 z^3 + 1512 z^2 + 2520 z + 945) \operatorname{erf}(\sqrt{z})$$

07.25.03.5095.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, 5; z\right) = \frac{1}{11486475 z^3} \left(32 e^{z/2} (16384 z^8 - 309248 z^7 + 1688832 z^6 - 2820288 z^5 + 858660 z^4 + 22680 z^3 - 9585 z^2 + 10260 z - 11340) I_1\left(\frac{z}{2}\right) - \frac{1}{11486475 z^2} 32 e^{z/2} (16384 z^7 - 325632 z^6 + 1989888 z^5 - 4370880 z^4 + 3092580 z^3 - 361260 z^2 + 2565 z - 2835) I_0\left(\frac{z}{2}\right)\right)$$

07.25.03.5096.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{e^z (512 z^8 - 10112 z^7 + 57408 z^6 - 96672 z^5 + 24528 z^4 + 216 z^3 - 756 z^2 + 1890 z - 2835)}{24576 z^4} + \frac{\sqrt{\pi} (-1024 z^9 + 20736 z^8 - 124416 z^7 + 241920 z^6 - 108864 z^5 + 2835) \operatorname{erfi}(\sqrt{z})}{49152 z^{9/2}}$$

07.25.03.5097.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (512 z^8 + 10112 z^7 + 57408 z^6 + 96672 z^5 + 24528 z^4 - 216 z^3 - 756 z^2 - 1890 z - 2835)}{24576 z^4} + \frac{\sqrt{\pi} (1024 z^9 + 20736 z^8 + 124416 z^7 + 241920 z^6 + 108864 z^5 + 2835) \operatorname{erf}(\sqrt{z})}{49152 z^{9/2}}$$

07.25.03.5098.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, 6; z\right) = \frac{1}{43\,648\,605\,z^4} \left(32 e^{z/2} (32\,768 z^9 - 692\,224 z^8 + 4\,299\,264 z^7 - 8\,363\,904 z^6 + 3\,113\,544 z^5 + 115\,020 z^4 - 52\,380 z^3 - 1755 z^2 + 192\,780 z - 816\,480) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \left(32 e^{z/2} (32\,768 z^8 - 724\,992 z^7 + 4\,975\,104 z^6 - 12\,349\,824 z^5 + 9\,917\,640 z^4 - 13\,786\,200 z^3 + 5\,940 z^2 + 48\,195 z - 204\,120) I_0\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 1$

07.25.03.5099.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; 1, \frac{3}{2}; z\right) = \frac{e^{z/2} (-2048 z^5 + 27\,456 z^4 - 109\,200 z^3 + 152\,070 z^2 - 66\,150 z + 4\,725) I_0\left(\frac{z}{2}\right) + 2 e^{z/2} (1024 z^5 - 12\,704 z^4 + 42\,408 z^3 - 38\,955 z^2 + 5\,820 z) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.5100.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; 1, \frac{5}{2}; z\right) = \frac{e^{z/2} (-512 z^5 + 8160 z^4 - 39\,612 z^3 + 69\,540 z^2 - 40\,635 z + 4\,725) I_0\left(\frac{z}{2}\right) + e^{z/2} (512 z^5 - 7\,648 z^4 + 32\,220 z^3 - 40\,632 z^2 + 10\,065 z) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.5101.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; 1, \frac{7}{2}; z\right) = \frac{e^{z/2} (-256 z^5 + 4\,728 z^4 - 27\,096 z^3 + 57\,288 z^2 - 41\,580 z + 6\,615) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^5 - 1\,118 z^4 + 5\,688 z^3 - 9\,129 z^2 + 3\,192 z) I_1\left(\frac{z}{2}\right)}{6\,615}$$

07.25.03.5102.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{945} e^{z/2} (-16 z^5 + 336 z^4 - 2\,220 z^3 + 5\,484 z^2 - 4\,725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^5 - 320 z^4 + 1\,908 z^3 - 3\,720 z^2 + 1\,689 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{3}{2}$

07.25.03.5103.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (128 z^4 - 1\,736 z^3 + 6\,396 z^2 - 6\,510 z + 1\,065)}{1\,200} + \frac{\sqrt{\pi} (-256 z^5 + 3\,600 z^4 - 14\,400 z^3 + 18\,000 z^2 - 5\,400 z + 135) \operatorname{erfi}(\sqrt{z})}{2\,400 \sqrt{z}}$$

07.25.03.5104.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (128 z^4 + 1736 z^3 + 6396 z^2 + 6510 z + 1065)}{1200} + \frac{\sqrt{\pi} (256 z^5 + 3600 z^4 + 14400 z^3 + 18000 z^2 + 5400 z + 135) \operatorname{erf}(\sqrt{z})}{2400 \sqrt{z}}$$

07.25.03.5105.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, 2; z\right) = \frac{e^{z/2} (-4096 z^5 + 66432 z^4 - 330720 z^3 + 603300 z^2 - 376650 z + 51975) I_0\left(\frac{z}{2}\right)}{51975} + \frac{e^{z/2} (4096 z^5 - 62336 z^4 + 270432 z^3 - 359940 z^2 + 102390 z - 675) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.5106.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (64 z^4 - 1048 z^3 + 4908 z^2 - 6990 z + 1995)}{2400} + \frac{\sqrt{\pi} (-128 z^5 + 2160 z^4 - 10800 z^3 + 18000 z^2 - 8100 z + 405) \operatorname{erfi}(\sqrt{z})}{4800 \sqrt{z}}$$

07.25.03.5107.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (64 z^4 + 1048 z^3 + 4908 z^2 + 6990 z + 1995)}{2400} + \frac{\sqrt{\pi} (128 z^5 + 2160 z^4 + 10800 z^3 + 18000 z^2 + 8100 z + 405) \operatorname{erf}(\sqrt{z})}{4800 \sqrt{z}}$$

07.25.03.5108.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (4096 z^6 - 73856 z^5 + 394272 z^4 - 687900 z^3 + 291660 z^2 - 4455 z + 135) I_1\left(\frac{z}{2}\right)}{675675 z} - \frac{4 e^{z/2} (4096 z^5 - 77952 z^4 + 466080 z^3 - 1049340 z^2 + 843480 z - 168885) I_0\left(\frac{z}{2}\right)}{675675}$$

07.25.03.5109.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (128 z^4 - 2456 z^3 + 13956 z^2 - 25590 z + 10605)}{13440} + \frac{\sqrt{\pi} (-256 z^5 + 5040 z^4 - 30240 z^3 + 63000 z^2 - 37800 z + 2835) \operatorname{erfi}(\sqrt{z})}{26880 \sqrt{z}}$$

07.25.03.5110.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (128 z^4 + 2456 z^3 + 13956 z^2 + 25590 z + 10605)}{13440} + \frac{\sqrt{\pi} (256 z^5 + 5040 z^4 + 30240 z^3 + 63000 z^2 + 37800 z + 2835) \operatorname{erf}(\sqrt{z})}{26880 \sqrt{z}}$$

07.25.03.5111.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, 4; z\right) = \frac{1}{3378375 z^2} 4 e^{z/2} (8192 z^7 - 170752 z^6 + 1082304 z^5 - 2337000 z^4 + 1323300 z^3 - 34020 z^2 + 2295 z - 540) I_1\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8192 z^6 - 178944 z^5 + 1248960 z^4 - 3342120 z^3 + 3264300 z^2 - 844020 z - 135) I_0\left(\frac{z}{2}\right)}{3378375 z}$$

07.25.03.5112.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (16 z^4 - 352 z^3 + 2352 z^2 - 5280 z + 2895)}{3840} + \frac{\sqrt{\pi} (-32 z^5 + 720 z^4 - 5040 z^3 + 12600 z^2 - 9450 z + 945) \operatorname{erfi}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.5113.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (16 z^4 + 352 z^3 + 2352 z^2 + 5280 z + 2895)}{3840} + \frac{\sqrt{\pi} (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945) \operatorname{erf}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.5114.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, 5; z\right) = \frac{1}{57432375 z^3} - \frac{128 e^{z/2} (2048 z^8 - 48448 z^7 + 355536 z^6 - 915270 z^5 + 650100 z^4 - 24705 z^3 + 3105 z^2 - 2160 z + 2025) I_1\left(\frac{z}{2}\right) - \frac{1}{57432375 z^2} 32 e^{z/2} (8192 z^7 - 201984 z^6 + 1611840 z^5 - 4994520 z^4 + 5718600 z^3 - 1791720 z^2 - 2160 z + 2025) I_0\left(\frac{z}{2}\right)}{57432375 z^2}$$

07.25.03.5115.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{983040 z^4} e^z (2048 z^8 - 50816 z^7 + 390336 z^6 - 1037280 z^5 + 711120 z^4 - 1080 z^3 + 3780 z^2 - 9450 z + 14175) + \frac{1}{1966080 z^{9/2}} \sqrt{\pi} (-4096 z^9 + 103680 z^8 - 829440 z^7 + 2419200 z^6 - 2177280 z^5 + 272160 z^4 - 14175) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5116.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{983040 z^4} e^{-z} (2048 z^8 + 50816 z^7 + 390336 z^6 + 1037280 z^5 + 711120 z^4 + 1080 z^3 + 3780 z^2 + 9450 z + 14175) + \frac{1}{1966080 z^{9/2}} \sqrt{\pi} (4096 z^9 + 103680 z^8 + 829440 z^7 + 2419200 z^6 + 2177280 z^5 + 272160 z^4 - 14175) \operatorname{erf}(\sqrt{z})$$

07.25.03.5117.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, 6; z\right) = \frac{1}{218243025 z^4} \left(32 e^{z/2} (16384 z^9 - 433664 z^8 + 3616128 z^7 - 10811280 z^6 + 9249720 z^5 - 481140 z^4 + 81540 z^3 - 35505 z^2 - 72900 z + 453600) I_1\left(\frac{z}{2}\right) - \frac{1}{218243025 z^3} \left(32 e^{z/2} (16384 z^8 - 450048 z^7 + 4041600 z^6 - 14226960 z^5 + 18635400 z^4 - 6799140 z^3 - 12420 z^2 - 18225 z + 113400) I_0\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 2$

07.25.03.5118.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; 2, \frac{5}{2}; z\right) = \frac{e^{z/2} (-1024 z^5 + 19776 z^4 - 120696 z^3 + 280020 z^2 - 235980 z + 51975) I_0\left(\frac{z}{2}\right) + e^{z/2} (1024 z^5 - 18752 z^4 + 102456 z^3 - 185916 z^2 + 85740 z - 2025) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.5119.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; 2, \frac{7}{2}; z\right) = \frac{e^{z/2} (-512 z^5 + 11472 z^4 - 82920 z^3 + 233268 z^2 - 245700 z + 72765) I_0\left(\frac{z}{2}\right) + e^{z/2} (512 z^5 - 10960 z^4 + 72216 z^3 - 166020 z^2 + 106428 z - 4725) I_1\left(\frac{z}{2}\right)}{72765}$$

07.25.03.5120.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; 2, \frac{9}{2}; z\right) = \frac{e^{z/2} (-32 z^5 + 816 z^4 - 6816 z^3 + 22524 z^2 - 28350 z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (32 z^5 - 784 z^4 + 6048 z^3 - 16836 z^2 + 13854 z - 945) I_1\left(\frac{z}{2}\right)}{10395}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{5}{2}$

07.25.03.5121.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (128 z^5 - 2528 z^4 + 15000 z^3 - 29604 z^2 + 14430 z - 135)}{19200 z} + \frac{\sqrt{\pi} (-256 z^6 + 5184 z^5 - 32400 z^4 + 72000 z^3 - 48600 z^2 + 4860 z + 135) \operatorname{erfi}(\sqrt{z})}{38400 z^{3/2}}$$

07.25.03.5122.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(128z^5 + 2528z^4 + 15000z^3 + 29604z^2 + 14430z + 135)}{19200z} + \frac{\sqrt{\pi}(256z^6 + 5184z^5 + 32400z^4 + 72000z^3 + 48600z^2 + 4860z - 135)\operatorname{erf}(\sqrt{z})}{38400z^{3/2}}$$

07.25.03.5123.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, 3; z\right) = \frac{4e^{z/2}(1024z^6 - 22208z^5 + 149112z^4 - 353208z^3 + 239640z^2 - 12960z - 405)I_1\left(\frac{z}{2}\right) - 16e^{z/2}(256z^5 - 5808z^4 + 42702z^3 - 123060z^2 + 134325z - 42255)I_0\left(\frac{z}{2}\right)}{675675z}$$

07.25.03.5124.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z(128z^5 - 2960z^4 + 21264z^3 - 53688z^2 + 37380z - 945)}{53760z} + \frac{\sqrt{\pi}(-256z^6 + 6048z^5 - 45360z^4 + 126000z^3 - 113400z^2 + 17010z + 945)\operatorname{erfi}(\sqrt{z})}{107520z^{3/2}}$$

07.25.03.5125.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(128z^5 + 2960z^4 + 21264z^3 + 53688z^2 + 37380z + 945)}{53760z} + \frac{\sqrt{\pi}(256z^6 + 6048z^5 + 45360z^4 + 126000z^3 + 113400z^2 + 17010z - 945)\operatorname{erf}(\sqrt{z})}{107520z^{3/2}}$$

07.25.03.5126.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, 4; z\right) = \frac{1}{3378375z^2} 4e^{z/2}(2048z^7 - 51328z^6 + 408816z^5 - 1195080z^4 + 1073100z^3 - 95580z^2 - 6345z + 540)I_1\left(\frac{z}{2}\right) - \frac{4e^{z/2}(2048z^6 - 53376z^5 + 459120z^4 - 1580280z^3 + 2108700z^2 - 846180z + 135)I_0\left(\frac{z}{2}\right)}{3378375z}$$

07.25.03.5127.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z(32z^5 - 848z^4 + 7152z^3 - 22008z^2 + 20010z - 945)}{30720z} + \frac{\sqrt{\pi}(-64z^6 + 1728z^5 - 15120z^4 + 50400z^3 - 56700z^2 + 11340z + 945)\operatorname{erfi}(\sqrt{z})}{61440z^{3/2}}$$

07.25.03.5128.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(32z^5 + 848z^4 + 7152z^3 + 22008z^2 + 20010z + 945)}{30720z} + \frac{\sqrt{\pi}(64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945)\operatorname{erf}(\sqrt{z})}{61440z^{3/2}}$$

$$\begin{aligned}
 & \text{07.25.03.5129.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, 5; z\right) &= \frac{1}{57\,432\,375\,z^3} \\
 & 32 e^{z/2} (2048 z^8 - 58\,240 z^7 + 536\,688 z^6 - 1\,866\,624 z^5 + 2\,088\,300 z^4 - 265\,680 z^3 - 29\,025 z^2 + 7020 z - 4860) I_1\left(\frac{z}{2}\right) - \\
 & \frac{1}{57\,432\,375\,z^2} 32 e^{z/2} (2048 z^7 - 60\,288 z^6 + 593\,904 z^5 - 2\,376\,240 z^4 + 3\,738\,420 z^3 - 1\,801\,980 z^2 + 1755 z - 1215) I_0\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5130.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; z\right) &= \frac{1}{1\,966\,080\,z^4} \\
 & e^z (1024 z^8 - 30\,592 z^7 + 296\,256 z^6 - 1\,075\,488 z^5 + 1\,209\,840 z^4 - 89\,640 z^3 - 3\,780 z^2 + 9\,450 z - 14\,175) + \frac{1}{3\,932\,160\,z^{9/2}} \\
 & \sqrt{\pi} (-2048 z^9 + 62\,208 z^8 - 622\,080 z^7 + 2\,419\,200 z^6 - 3\,265\,920 z^5 + 816\,480 z^4 + 90\,720 z^3 + 14\,175) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5131.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) &= \\
 & \frac{1}{1\,966\,080\,z^4} e^{-z} (1024 z^8 + 30\,592 z^7 + 296\,256 z^6 + 1\,075\,488 z^5 + 1\,209\,840 z^4 + 89\,640 z^3 - 3\,780 z^2 - 9\,450 z - 14\,175) + \\
 & \frac{1}{3\,932\,160\,z^{9/2}} \\
 & \sqrt{\pi} (2048 z^9 + 62\,208 z^8 + 622\,080 z^7 + 2\,419\,200 z^6 + 3\,265\,920 z^5 + 816\,480 z^4 - 90\,720 z^3 + 14\,175) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5132.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, 6; z\right) &= \\
 & \frac{1}{218\,243\,025\,z^4} \left(32 e^{z/2} (4096 z^9 - 130\,304 z^8 + 1\,363\,680 z^7 - 5\,499\,696 z^6 + 7\,372\,320 z^5 - 1\,236\,060 z^4 - \right. \\
 & \left. 192\,510 z^3 + 53\,325 z^2 + 4860 z - 194\,400) I_1\left(\frac{z}{2}\right) - \frac{1}{218\,243\,025\,z^3} \left(32 e^{z/2} \right. \right. \\
 & \left. \left. (4096 z^8 - 134\,400 z^7 + 1\,491\,936 z^6 - 6\,802\,320 z^5 + 12\,307\,680 z^4 - 6\,868\,260 z^3 + 14\,850 z^2 + 1215 z - 48\,600) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 3$

$$\begin{aligned}
 & \text{07.25.03.5133.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; 3, \frac{7}{2}; z\right) &= \frac{4 e^{z/2} (512 z^6 - 12\,976 z^5 + 104\,976 z^4 - 314\,196 z^3 + 293\,916 z^2 - 29\,295 z - 2835) I_1\left(\frac{z}{2}\right) -}{945\,945\,z} \\
 & \frac{4 e^{z/2} (512 z^5 - 13\,488 z^4 + 117\,696 z^3 - 413\,196 z^2 + 567\,000 z - 237\,195) I_0\left(\frac{z}{2}\right)}{945\,945}
 \end{aligned}$$

07.25.03.5134.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; 3, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (32 z^6 - 928 z^5 + 8784 z^4 - 31776 z^3 + 37938 z^2 - 5670 z - 945) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (16 z^5 - 480 z^4 + 4848 z^3 - 20064 z^2 + 33075 z - 17010) I_0\left(\frac{z}{2}\right)}{135135 z}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{7}{2}$

07.25.03.5135.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (512 z^6 - 13856 z^5 + 120336 z^4 - 387120 z^3 + 380856 z^2 - 24570 z - 2835)}{602112 z^2} + \frac{1}{1204224 z^{5/2}} \sqrt{\pi} (-1024 z^7 + 28224 z^6 - 254016 z^5 + 882000 z^4 - 1058400 z^3 + 238140 z^2 + 26460 z + 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5136.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (512 z^6 + 13856 z^5 + 120336 z^4 + 387120 z^3 + 380856 z^2 + 24570 z - 2835)}{602112 z^2} + \frac{1}{1204224 z^{5/2}} \sqrt{\pi} (1024 z^7 + 28224 z^6 + 254016 z^5 + 882000 z^4 + 1058400 z^3 + 238140 z^2 - 26460 z + 2835) \operatorname{erf}(\sqrt{z})$$

07.25.03.5137.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, 4; z\right) = \frac{1}{4729725 z^2} 4 e^{z/2} (1024 z^7 - 29984 z^6 + 287568 z^5 - 1060320 z^4 + 1305780 z^3 - 209790 z^2 - 40635 z - 3780) I_1\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (1024 z^6 - 31008 z^5 + 317040 z^4 - 1333920 z^3 + 2249100 z^2 - 1192590 z - 945) I_0\left(\frac{z}{2}\right)}{4729725 z}$$

07.25.03.5138.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (64 z^6 - 1984 z^5 + 20208 z^4 - 79008 z^3 + 100716 z^2 - 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (-128 z^7 + 4032 z^6 - 42336 z^5 + 176400 z^4 - 264600 z^3 + 79380 z^2 + 13230 z + 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5139.01

$${}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1984 z^5 + 20208 z^4 + 79008 z^3 + 100716 z^2 + 11340 z - 2835)}{172032 z^2} + \frac{1}{344064 z^{5/2}} \sqrt{\pi} (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.5140.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, 5; z\right) &= \frac{1}{80405325z^3} \\
 & 64e^{z/2} (512z^8 - 17008z^7 + 188640z^6 - 826512z^5 + 1263360z^4 - 284445z^3 - 81270z^2 - 18900z + 5670) I_1\left(\frac{z}{2}\right) - \\
 & \frac{1}{80405325z^2} 32e^{z/2} (1024z^7 - 35040z^6 + 410784z^5 - 2014320z^4 + 4021920z^3 - 2553390z^2 - 9450z + 2835) I_0\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5141.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; z\right) &= \frac{1}{11010048z^4} \\
 & e^z (2048z^8 - 71552z^7 + 836160z^6 - 3848736z^5 + 6034224z^4 - 1005480z^3 - 381780z^2 - 66150z + 99225) + \\
 & \frac{1}{22020096z^{9/2}} \left(\sqrt{\pi} (-4096z^9 + 145152z^8 - 1741824z^7 + 8467200z^6 - \right. \\
 & \left. 15240960z^5 + 5715360z^4 + 1270080z^3 + 408240z^2 - 99225) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5142.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) &= \frac{1}{11010048z^4} \\
 & e^{-z} (2048z^8 + 71552z^7 + 836160z^6 + 3848736z^5 + 6034224z^4 + 1005480z^3 - 381780z^2 + 66150z + 99225) + \\
 & \frac{1}{22020096z^{9/2}} \left(\sqrt{\pi} (4096z^9 + 145152z^8 + 1741824z^7 + 8467200z^6 + \right. \\
 & \left. 15240960z^5 + 5715360z^4 - 1270080z^3 + 408240z^2 - 99225) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5143.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, 6; z\right) &= \\
 & \frac{1}{305540235z^4} \left(32e^{z/2} (2048z^9 - 76096z^8 + 958176z^7 - 4863408z^6 + 8881824z^5 - 2593080z^4 - 965790z^3 - \right. \\
 & \left. 361935z^2 + 79380z + 272160) I_1\left(\frac{z}{2}\right) - \frac{1}{305540235z^3} \left(32e^{z/2} \right. \right. \\
 & \left. \left. (2048z^8 - 78144z^7 + 1033248z^6 - 5785584z^5 + 13335840z^4 - 9790200z^3 - 92610z^2 + 19845z + 68040) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 4$

$$\begin{aligned}
 & \text{07.25.03.5144.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; 4, \frac{9}{2}; z\right) &= \frac{4e^{z/2} (64z^7 - 2144z^6 + 24048z^5 - 107040z^4 + 167640z^3 - 39690z^2 - 12285z - 3780) I_1\left(\frac{z}{2}\right) -}{675675z^2} \\
 & \frac{4e^{z/2} (64z^6 - 2208z^5 + 26160z^4 - 130080z^3 + 264600z^2 - 171990z - 945) I_0\left(\frac{z}{2}\right)}{675675z}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.5145.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \\
 & \frac{e^z (128 z^7 - 4544 z^6 + 54\,240 z^5 - 257\,232 z^4 + 422\,616 z^3 - 79\,380 z^2 - 35\,910 z - 14\,175)}{786\,432 z^3} + \frac{1}{1\,572\,864 z^{7/2}} \\
 & \left(\sqrt{\pi} (-256 z^8 + 9216 z^7 - 112\,896 z^6 + 564\,480 z^5 - 1\,058\,400 z^4 + 423\,360 z^3 + 105\,840 z^2 + 45\,360 z + 14\,175) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5146.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{e^{-z} (128 z^7 + 4544 z^6 + 54\,240 z^5 + 257\,232 z^4 + 422\,616 z^3 + 79\,380 z^2 - 35\,910 z + 14\,175)}{786\,432 z^3} + \frac{1}{1\,572\,864 z^{7/2}} \\
 & \sqrt{\pi} (256 z^8 + 9216 z^7 + 112\,896 z^6 + 564\,480 z^5 + 1\,058\,400 z^4 + 423\,360 z^3 - 105\,840 z^2 + 45\,360 z - 14\,175) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5147.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{9}{2}, 5; z\right) = \frac{1}{11\,486\,475 z^3} \\
 & \frac{32 e^{z/2} (64 z^8 - 2432 z^7 + 31\,536 z^6 - 166\,656 z^5 + 323\,160 z^4 - 105\,840 z^3 - 46\,305 z^2 - 26\,460 z - 11\,340) I_1\left(\frac{z}{2}\right) -}{11\,486\,475 z^2} \\
 & 32 e^{z/2} (64 z^7 - 2496 z^6 + 33\,936 z^5 - 197\,040 z^4 + 476\,280 z^3 - 370\,440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5148.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{3\,145\,728 z^4} e^z (256 z^8 - 10\,240 z^7 + 140\,160 z^6 - 781\,440 z^5 + 1\,572\,864 z^4 - 423\,360 z^3 - 264\,600 z^2 - 189\,000 z - 99\,225) + \\
 & \frac{1}{6\,291\,456 z^{9/2}} \left(\sqrt{\pi} (-512 z^9 + 20\,736 z^8 - 290\,304 z^7 + 1\,693\,440 z^6 - \right. \\
 & \left. 3\,810\,240 z^5 + 1\,905\,120 z^4 + 635\,040 z^3 + 408\,240 z^2 + 255\,150 z + 99\,225) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5149.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{3\,145\,728 z^4} e^{-z} (256 z^8 + 10\,240 z^7 + 140\,160 z^6 + 781\,440 z^5 + 1\,572\,864 z^4 + 423\,360 z^3 - 264\,600 z^2 + 189\,000 z - 99\,225) + \\
 & \frac{1}{6\,291\,456 z^{9/2}} \left(\sqrt{\pi} (512 z^9 + 20\,736 z^8 + 290\,304 z^7 + 1\,693\,440 z^6 + \right. \\
 & \left. 3\,810\,240 z^5 + 1\,905\,120 z^4 - 635\,040 z^3 + 408\,240 z^2 - 255\,150 z + 99\,225) \operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5150.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{9}{2}, \frac{9}{2}; 6; z\right) = \\
 & \frac{1}{43\,648\,605\,z^4} \left(32 e^{z/2} (128 z^9 - 5440 z^8 + 80\,064 z^7 - 489\,840 z^6 + 1\,132\,752 z^5 - 476\,280 z^4 - 264\,600 z^3 - \right. \\
 & \quad \left. 214\,515 z^2 - 170\,100 z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \right. \\
 & \quad \left. 32 e^{z/2} (128 z^8 - 5568 z^7 + 85\,440 z^6 - 567\,312 z^5 + 1\,587\,600 z^4 - 1\,428\,840 z^3 - 52\,920 z^2 - 42\,525 z - 22\,680) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.5151.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \frac{1}{343\,035} (-16 z^{11} - 744 z^{10} - 11\,900 z^9 - 77\,394 z^8 - 176\,670 z^7 - 40\,320 z^6 - 12\,096 z^5 + 30\,240 z^4 - \\
 & \quad 63\,000 z^3 + 132\,300 z^2 - 255\,150 z + 343\,035) + \\
 & \frac{e^z \sqrt{\pi} (-16 z^{23/2} - 752 z^{21/2} - 12\,264 z^{19/2} - 82\,992 z^{17/2} - 210\,273 z^{15/2} - 101\,745 z^{13/2}) \operatorname{erf}(\sqrt{z})}{343\,035}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5152.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \\
 & \frac{1}{343\,035} (16 z^{11} - 744 z^{10} + 11\,900 z^9 - 77\,394 z^8 + 176\,670 z^7 - 40\,320 z^6 + 12\,096 z^5 + 30\,240 z^4 + \\
 & \quad 63\,000 z^3 + 132\,300 z^2 + 255\,150 z + 343\,035) + \\
 & \frac{1}{343\,035} e^{-z} \sqrt{\pi} (-16 z^{23/2} + 752 z^{21/2} - 12\,264 z^{19/2} + 82\,992 z^{17/2} - 210\,273 z^{15/2} + 101\,745 z^{13/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5153.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & \frac{1}{31\,185} (8 z^{10} + 332 z^9 + 4626 z^8 + 24\,975 z^7 + 40\,320 z^6 - 12\,096 z^5 + 10\,080 z^4 - 12\,600 z^3 + 18\,900 z^2 - 28\,350 z + 31\,185) + \\
 & \frac{e^z \sqrt{\pi} (16 z^{21/2} + 672 z^{19/2} + 9576 z^{17/2} + 54\,264 z^{15/2} + 101\,745 z^{13/2}) \operatorname{erf}(\sqrt{z})}{62\,370}
 \end{aligned}$$

07.25.03.5154.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{31185} (8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185) + \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 672z^{19/2} - 9576z^{17/2} + 54264z^{15/2} - 101745z^{13/2}) \operatorname{erfi}(\sqrt{z})}{62370}$$

07.25.03.5155.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{-8z^9 - 292z^8 - 3462z^7 - 14725z^6 - 12273z^5 + 20160z^4 - 8400z^3 + 7560z^2 - 8100z + 6930}{6930} + \frac{e^z \sqrt{\pi} (-16z^{19/2} - 592z^{17/2} - 7208z^{15/2} - 32640z^{13/2} - 36465z^{11/2} + 36465z^{9/2}) \operatorname{erf}(\sqrt{z})}{13860}$$

07.25.03.5156.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{8z^9 - 292z^8 + 3462z^7 - 14725z^6 + 12273z^5 + 20160z^4 + 8400z^3 + 7560z^2 + 8100z + 6930}{6930} + \frac{e^{-z} \sqrt{\pi} (-16z^{19/2} + 592z^{17/2} - 7208z^{15/2} + 32640z^{13/2} - 36465z^{11/2} - 36465z^{9/2}) \operatorname{erfi}(\sqrt{z})}{13860}$$

07.25.03.5157.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{8z^8 + 252z^7 + 2458z^6 + 7467z^5 - 1710z^4 - 16800z^3 + 5040z^2 - 3240z + 1980}{1980} + \frac{e^z \sqrt{\pi} (16z^{17/2} + 512z^{15/2} + 5160z^{13/2} + 17160z^{11/2} + 2145z^{9/2} - 38610z^{7/2}) \operatorname{erf}(\sqrt{z})}{3960}$$

07.25.03.5158.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{8z^8 - 252z^7 + 2458z^6 - 7467z^5 - 1710z^4 + 16800z^3 + 5040z^2 + 3240z + 1980}{1980} + \frac{e^{-z} \sqrt{\pi} (-16z^{17/2} + 512z^{15/2} - 5160z^{13/2} + 17160z^{11/2} - 2145z^{9/2} - 38610z^{7/2}) \operatorname{erfi}(\sqrt{z})}{3960}$$

07.25.03.5159.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{792} (-8z^7 - 212z^6 - 1614z^5 - 2721z^4 + 6573z^3 + 10080z^2 - 2160z + 792) + \frac{e^z \sqrt{\pi} (-16z^{15/2} - 432z^{13/2} - 3432z^{11/2} - 6864z^{9/2} + 11583z^{7/2} + 27027z^{5/2}) \operatorname{erf}(\sqrt{z})}{1584}$$

07.25.03.5160.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{792} (8z^7 - 212z^6 + 1614z^5 - 2721z^4 - 6573z^3 + 10080z^2 + 2160z + 792) + \frac{e^{-z} \sqrt{\pi} (-16z^{15/2} + 432z^{13/2} - 3432z^{11/2} + 6864z^{9/2} + 11583z^{7/2} - 27027z^{5/2}) \operatorname{erfi}(\sqrt{z})}{1584}$$

07.25.03.5161.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{528} (8z^6 + 172z^5 + 930z^4 + 7z^3 - 6300z^2 - 4320z + 528) + \frac{e^z \sqrt{\pi} (16z^{13/2} + 352z^{11/2} + 2024z^{9/2} + 792z^{7/2} - 13167z^{5/2} - 13860z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1056}$$

07.25.03.5162.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{528} (8z^6 - 172z^5 + 930z^4 - 7z^3 - 6300z^2 + 4320z + 528) + \frac{e^{-z} \sqrt{\pi} (-16z^{13/2} + 352z^{11/2} - 2024z^{9/2} + 792z^{7/2} + 13167z^{5/2} - 13860z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1056}$$

07.25.03.5163.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{-8z^5 - 132z^4 - 406z^3 + 1155z^2 + 3915z + 1056}{1056} + \frac{e^z \sqrt{\pi} (-16z^{11/2} - 272z^{9/2} - 936z^{7/2} + 2016z^{5/2} + 9135z^{3/2} + 4725\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{2112}$$

07.25.03.5164.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{8z^5 - 132z^4 + 406z^3 + 1155z^2 - 3915z + 1056}{1056} + \frac{e^{-z} \sqrt{\pi} (-16z^{11/2} + 272z^{9/2} - 936z^{7/2} - 2016z^{5/2} + 9135z^{3/2} - 4725\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{2112}$$

07.25.03.5165.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, 1; z\right) = -\frac{1}{264} e^z (2z^5 + 29z^4 + 64z^3 - 312z^2 - 816z - 264)$$

07.25.03.5166.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{-8z^4 - 92z^3 - 42z^2 + 1245z + 1482}{2112} + \frac{e^z \sqrt{\pi} (-16z^5 - 192z^4 - 168z^3 + 2520z^2 + 4095z + 630) \operatorname{erfi}(\sqrt{z})}{4224\sqrt{z}}$$

07.25.03.5167.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{-8z^4 + 92z^3 - 42z^2 - 1245z + 1482}{2112} + \frac{e^{-z} \sqrt{\pi} (16z^5 - 192z^4 + 168z^3 + 2520z^2 - 4095z + 630) \operatorname{erfi}(\sqrt{z})}{4224\sqrt{z}}$$

07.25.03.5168.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, 2; z\right) = -\frac{1}{264} e^z (2z^4 + 19z^3 - 12z^2 - 276z - 264)$$

$$\begin{aligned}
 & 07.25.03.5169.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, \frac{5}{2}; z\right) = \\
 & \frac{-8z^4 - 52z^3 + 162z^2 + 743z + 105}{1408z} + \frac{e^z \sqrt{\pi} (-16z^5 - 112z^4 + 280z^3 + 1680z^2 + 735z - 105) \operatorname{erf}(\sqrt{z})}{2816z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5170.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, \frac{5}{2}; -z\right) = \\
 & \frac{8z^4 - 52z^3 - 162z^2 + 743z - 105}{1408z} + \frac{e^{-z} \sqrt{\pi} (-16z^5 + 112z^4 + 280z^3 - 1680z^2 + 735z + 105) \operatorname{erfi}(\sqrt{z})}{2816z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5171.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, 3; z\right) = -\frac{1}{132} e^z (2z^3 + 9z^2 - 48z - 132)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5172.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, \frac{7}{2}; z\right) = \\
 & \frac{5(8z^4 + 12z^3 - 206z^2 - 129z + 72)}{2816z^2} - \frac{5e^z \sqrt{\pi} (16z^5 + 32z^4 - 408z^3 - 456z^2 + 177z - 72) \operatorname{erf}(\sqrt{z})}{5632z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5173.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, \frac{7}{2}; -z\right) = \\
 & \frac{5e^{-z} \sqrt{\pi} (16z^5 - 32z^4 - 408z^3 + 456z^2 + 177z + 72) \operatorname{erfi}(\sqrt{z})}{5632z^{5/2}} - \frac{5(8z^4 - 12z^3 - 206z^2 + 129z + 72)}{2816z^2}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5174.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, 4; z\right) = -\frac{1}{44} e^z (2z^2 - z - 44)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5175.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, \frac{9}{2}; z\right) = \\
 & \frac{35(8z^4 - 28z^3 - 90z^2 + 117z - 135)}{5632z^3} - \frac{35e^z \sqrt{\pi} (16z^5 - 48z^4 - 216z^3 + 192z^2 - 207z + 135) \operatorname{erf}(\sqrt{z})}{11264z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5176.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{35(8z^4 + 28z^3 - 90z^2 - 117z - 135)}{5632z^3} - \frac{35e^{-z} \sqrt{\pi} (16z^5 + 48z^4 - 216z^3 - 192z^2 - 207z - 135) \operatorname{erfi}(\sqrt{z})}{11264z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5177.01 \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, 5; z\right) = -\frac{1}{11} e^z (2z - 11)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5178.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, \frac{11}{2}; z\right) = \\
 & \frac{315(8z^4 - 68z^3 + 186z^2 - 485z + 1050)}{11264z^4} - \frac{315e^z\sqrt{\pi}(16z^5 - 128z^4 + 296z^3 - 696z^2 + 1185z - 1050)\operatorname{erf}(\sqrt{z})}{22528z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5179.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{315e^{-z}\sqrt{\pi}(16z^5 + 128z^4 + 296z^3 + 696z^2 + 1185z + 1050)\operatorname{erfi}(\sqrt{z})}{22528z^{9/2}} - \frac{315(8z^4 + 68z^3 + 186z^2 + 485z + 1050)}{11264z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5180.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{11}{2}, 6; z\right) = -\frac{5e^z(2z^5 - 21z^4 + 84z^3 - 252z^2 + 504z - 504)}{11z^5} - \frac{2520}{11z^5}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = -\frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.5181.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{-8z^9 - 300z^8 - 3730z^7 - 17655z^6 - 24192z^5 + 6720z^4 - 5040z^3 + 5400z^2 - 6300z + 5670}{5670} + \\
 & \frac{e^z\sqrt{\pi}(-16z^{19/2} - 608z^{17/2} - 7752z^{15/2} - 38760z^{13/2} - 62985z^{11/2})\operatorname{erf}(\sqrt{z})}{11340}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5182.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670}{5670} + \\
 & \frac{e^{-z}\sqrt{\pi}(-16z^{19/2} + 608z^{17/2} - 7752z^{15/2} + 38760z^{13/2} - 62985z^{11/2})\operatorname{erfi}(\sqrt{z})}{11340}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5183.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{8z^8 + 268z^7 + 2930z^6 + 11919z^5 + 13440z^4 - 3360z^3 + 2160z^2 - 1800z + 1260}{1260} + \\
 & \frac{e^z\sqrt{\pi}(16z^{17/2} + 544z^{15/2} + 6120z^{13/2} + 26520z^{11/2} + 36465z^{9/2})\operatorname{erf}(\sqrt{z})}{2520}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5184.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260}{1260} + \\
 & \frac{e^{-z}\sqrt{\pi}(-16z^{17/2} + 544z^{15/2} - 6120z^{13/2} + 26520z^{11/2} - 36465z^{9/2})\operatorname{erfi}(\sqrt{z})}{2520}
 \end{aligned}$$

07.25.03.5185.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{360} (-8z^7 - 236z^6 - 2226z^5 - 7575z^4 - 6720z^3 + 1440z^2 - 720z + 360) + \frac{1}{720} e^z \sqrt{\pi} (-16z^{15/2} - 480z^{13/2} - 4680z^{11/2} - 17160z^{9/2} - 19305z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5186.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{360} (8z^7 - 236z^6 + 2226z^5 - 7575z^4 + 6720z^3 + 1440z^2 + 720z + 360) + \frac{1}{720} e^{-z} \sqrt{\pi} (-16z^{15/2} + 480z^{13/2} - 4680z^{11/2} + 17160z^{9/2} - 19305z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5187.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{144} (8z^6 + 204z^5 + 1618z^4 + 4431z^3 + 2880z^2 - 480z + 144) + \frac{1}{288} e^z \sqrt{\pi} (16z^{13/2} + 416z^{11/2} + 3432z^{9/2} + 10296z^{7/2} + 9009z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5188.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{144} (8z^6 - 204z^5 + 1618z^4 - 4431z^3 + 2880z^2 + 480z + 144) + \frac{1}{288} e^{-z} \sqrt{\pi} (-16z^{13/2} + 416z^{11/2} - 3432z^{9/2} + 10296z^{7/2} - 9009z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5189.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{96} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) + \frac{1}{192} e^z \sqrt{\pi} (-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5190.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{96} (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) + \frac{1}{192} e^{-z} \sqrt{\pi} (-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5191.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{192} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} e^z \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5192.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{192} (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5193.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, 1; z\right) = \frac{1}{24} e^z (z^4 + 16z^3 + 72z^2 + 96z + 24)$$

07.25.03.5194.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{384} (8z^3 + 108z^2 + 370z + 279) + \frac{e^z \sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.5195.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} (-8z^3 + 108z^2 - 370z + 279) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.5196.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, 2; z\right) = \frac{1}{24} e^z (z^3 + 12z^2 + 36z + 24)$$

07.25.03.5197.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.5198.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.5199.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, 3; z\right) = \frac{1}{12} e^z (z^2 + 8z + 12)$$

07.25.03.5200.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5e^z \sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.5201.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.5202.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, 4; z\right) = \frac{1}{4} e^z (z + 4)$$

07.25.03.5203.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{35(8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35e^z \sqrt{\pi} (16z^4 + 32z^3 - 24z^2 + 24z - 15) \operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.5204.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35e^{-z} \sqrt{\pi} (16z^4 - 32z^3 - 24z^2 - 24z - 15) \operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.5205.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, 5; z\right) = e^z$$

07.25.03.5206.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{315(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315e^z \sqrt{\pi} (16z^4 - 32z^3 + 72z^2 - 120z + 105) \operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.5207.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} \sqrt{\pi} (16 z^4 + 32 z^3 + 72 z^2 + 120 z + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315 (8 z^3 + 20 z^2 + 50 z + 105)}{2048 z^4}$$

07.25.03.5208.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{9}{2}, 6; z\right) = \frac{5 e^z (z^4 - 4 z^3 + 12 z^2 - 24 z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = -\frac{7}{2}$

07.25.03.5209.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{7}{2}, 1; z\right) = \frac{1}{168} e^z (2431 z^4 + 1184 z^3 + 1272 z^2 + 912 z + 168) - \frac{2431}{168} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5210.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{7}{2}, 1; -z\right) = \frac{2431}{168} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{168} e^{-z} (2431 z^4 - 1184 z^3 + 1272 z^2 - 912 z + 168)$$

07.25.03.5211.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{7}{2}, 2; z\right) = \frac{1}{168} e^z (442 z^4 + 221 z^3 + 300 z^2 + 372 z + 168) - \frac{221}{84} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5212.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{7}{2}, 2; -z\right) = \frac{221}{84} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{168} e^{-z} (442 z^4 - 221 z^3 + 300 z^2 - 372 z + 168)$$

07.25.03.5213.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{7}{2}, 3; z\right) = \frac{1}{84} e^z (68 z^4 + 34 z^3 + 51 z^2 + 96 z + 84) - \frac{17}{21} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5214.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{7}{2}, 3; -z\right) = \frac{17}{21} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{84} e^{-z} (68 z^4 - 34 z^3 + 51 z^2 - 96 z + 84)$$

07.25.03.5215.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{7}{2}, 4; z\right) = \frac{1}{420} e^z (136 z^4 + 68 z^3 + 102 z^2 + 255 z + 420) - \frac{34}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5216.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{7}{2}, 4; -z\right) = \frac{34}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{420} e^{-z} (136 z^4 - 68 z^3 + 102 z^2 - 255 z + 420)$$

07.25.03.5217.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{7}{2}, 5; z\right) = \frac{1}{105} e^z (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5218.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{7}{2}, 5; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)$$

$$\begin{aligned}
 &07.25.03.5219.01 \\
 {}_2F_2\left(-\frac{9}{2}, 5; -\frac{7}{2}, 6; z\right) &= -\frac{32}{399} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \\
 &\frac{e^z (32 z^9 + 16 z^8 + 24 z^7 + 60 z^6 + 210 z^5 + 945 z^4 - 3780 z^3 + 11340 z^2 - 22680 z + 22680)}{399 z^5} - \frac{1080}{19 z^5}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.5220.01 \\
 {}_2F_2\left(-\frac{9}{2}, 5; -\frac{7}{2}, 6; -z\right) &= \\
 &\frac{32}{399} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{e^{-z} (32 z^9 - 16 z^8 + 24 z^7 - 60 z^6 + 210 z^5 - 945 z^4 - 3780 z^3 - 11340 z^2 - 22680 z - 22680)}{399 z^5} + \frac{1080}{19 z^5}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 &07.25.03.5221.01 \\
 {}_2F_2\left(-\frac{9}{2}, 5; -\frac{5}{2}, 1; z\right) &= \frac{1}{48} e^z (-2431 z^4 + 4576 z^3 + 1104 z^2 + 384 z + 48) + \frac{143}{96} \sqrt{\pi} (34 z^{9/2} - 81 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.5222.01 \\
 {}_2F_2\left(-\frac{9}{2}, 5; -\frac{5}{2}, 1; -z\right) &= \frac{1}{48} e^{-z} (-2431 z^4 - 4576 z^3 + 1104 z^2 - 384 z + 48) - \frac{143}{96} \sqrt{\pi} (34 z^{9/2} + 81 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.5223.01 \\
 {}_2F_2\left(-\frac{9}{2}, 5; -\frac{5}{2}, 2; z\right) &= \frac{1}{24} e^z (-221 z^4 + 533 z^3 + 156 z^2 + 84 z + 24) + \frac{13}{48} \sqrt{\pi} (34 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.5224.01 \\
 {}_2F_2\left(-\frac{9}{2}, 5; -\frac{5}{2}, 2; -z\right) &= \frac{1}{24} e^{-z} (-221 z^4 - 533 z^3 + 156 z^2 - 84 z + 24) - \frac{13}{48} \sqrt{\pi} (34 z^{9/2} + 99 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.5225.01 \\
 {}_2F_2\left(-\frac{9}{2}, 5; -\frac{5}{2}, 3; z\right) &= \frac{1}{12} e^z (-34 z^4 + 100 z^3 + 33 z^2 + 24 z + 12) + \frac{1}{12} \sqrt{\pi} (34 z^{9/2} - 117 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.5226.01 \\
 {}_2F_2\left(-\frac{9}{2}, 5; -\frac{5}{2}, 3; -z\right) &= \frac{1}{12} e^{-z} (-34 z^4 - 100 z^3 + 33 z^2 - 24 z + 12) + \frac{1}{12} \sqrt{\pi} (-34 z^{9/2} - 117 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.5227.01 \\
 {}_2F_2\left(-\frac{9}{2}, 5; -\frac{5}{2}, 4; z\right) &= \frac{1}{60} e^z (-68 z^4 + 236 z^3 + 84 z^2 + 75 z + 60) + \frac{1}{30} \sqrt{\pi} (34 z^{9/2} - 135 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.5228.01 \\
 {}_2F_2\left(-\frac{9}{2}, 5; -\frac{5}{2}, 4; -z\right) &= \frac{1}{60} e^{-z} (-68 z^4 - 236 z^3 + 84 z^2 - 75 z + 60) + \frac{1}{30} \sqrt{\pi} (-34 z^{9/2} - 135 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.5229.01 \\
 {}_2F_2\left(-\frac{9}{2}, 5; -\frac{5}{2}, 5; z\right) &= \frac{1}{15} e^z (-8 z^4 + 32 z^3 + 12 z^2 + 12 z + 15) + \frac{4}{15} \sqrt{\pi} (2 z^{9/2} - 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.5230.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{5}{2}, 5; -z\right) = \frac{1}{15} e^{-z} (-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15} \sqrt{\pi} (2z^{9/2} + 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5231.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{5}{2}, 6; z\right) = \frac{e^z (-272z^9 + 1232z^8 + 480z^7 + 516z^6 + 780z^5 + 945z^4 - 3780z^3 + 11340z^2 - 22680z + 22680)}{969z^5} + \frac{8}{969} \sqrt{\pi} (34z^{9/2} - 171z^{7/2}) \operatorname{erfi}(\sqrt{z}) - \frac{7560}{323z^5}$$

07.25.03.5232.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{5}{2}, 6; -z\right) = \frac{1}{969z^5} e^{-z} (-272z^9 - 1232z^8 + 480z^7 - 516z^6 + 780z^5 - 945z^4 - 3780z^3 - 11340z^2 - 22680z - 22680) - \frac{8}{969} \sqrt{\pi} (34z^{9/2} + 171z^{7/2}) \operatorname{erfi}(\sqrt{z}) + \frac{7560}{323z^5}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = -\frac{3}{2}$

07.25.03.5233.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{3}{2}, 1; z\right) = \frac{1}{384} e^z (24310z^4 - 103675z^3 + 54912z^2 + 5376z + 384) - \frac{143}{768} \sqrt{\pi} (340z^{9/2} - 1620z^{7/2} + 1323z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5234.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{3}{2}, 1; -z\right) = \frac{1}{384} e^{-z} (24310z^4 + 103675z^3 + 54912z^2 - 5376z + 384) + \frac{143}{768} \sqrt{\pi} (340z^{9/2} + 1620z^{7/2} + 1323z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5235.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{3}{2}, 2; z\right) = \frac{1}{192} e^z (2210z^4 - 11765z^3 + 8736z^2 + 1248z + 192) - \frac{13}{384} \sqrt{\pi} (340z^{9/2} - 1980z^{7/2} + 2079z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5236.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{3}{2}, 2; -z\right) = \frac{1}{192} e^{-z} (2210z^4 + 11765z^3 + 8736z^2 - 1248z + 192) + \frac{13}{384} \sqrt{\pi} (340z^{9/2} + 1980z^{7/2} + 2079z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5237.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{3}{2}, 3; z\right) = \frac{1}{48} e^z (170z^4 - 1085z^3 + 1044z^2 + 192z + 48) + \frac{1}{96} \sqrt{\pi} (-340z^{9/2} + 2340z^{7/2} - 3003z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5238.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{3}{2}, 3; -z\right) = \frac{1}{48} e^{-z} (170 z^4 + 1085 z^3 + 1044 z^2 - 192 z + 48) + \frac{1}{96} \sqrt{\pi} (340 z^{9/2} + 2340 z^{7/2} + 3003 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5239.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{3}{2}, 4; z\right) = \frac{1}{24} e^z (34 z^4 - 253 z^3 + 300 z^2 + 66 z + 24) + \frac{1}{48} \sqrt{\pi} (-68 z^{9/2} + 540 z^{7/2} - 819 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5240.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{3}{2}, 4; -z\right) = \frac{1}{24} e^{-z} (34 z^4 + 253 z^3 + 300 z^2 - 66 z + 24) + \frac{1}{48} \sqrt{\pi} (68 z^{9/2} + 540 z^{7/2} + 819 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5241.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{3}{2}, 5; z\right) = \frac{1}{3} e^z (2 z^4 - 17 z^3 + 24 z^2 + 6 z + 3) + \frac{1}{6} \sqrt{\pi} (-4 z^{9/2} + 36 z^{7/2} - 63 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5242.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{3}{2}, 5; -z\right) = \frac{1}{3} e^{-z} (2 z^4 + 17 z^3 + 24 z^2 - 6 z + 3) + \frac{1}{6} \sqrt{\pi} (4 z^{9/2} + 36 z^{7/2} + 63 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5243.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{3}{2}, 6; z\right) = \frac{e^z (340 z^9 - 3250 z^8 + 5328 z^7 + 1464 z^6 + 906 z^5 + 315 z^4 - 1260 z^3 + 3780 z^2 - 7560 z + 7560)}{969 z^5} + \frac{1}{969} \sqrt{\pi} (-340 z^{9/2} + 3420 z^{7/2} - 6783 z^{5/2}) \operatorname{erfi}(\sqrt{z}) - \frac{2520}{323 z^5}$$

07.25.03.5244.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{3}{2}, 6; -z\right) = \frac{e^{-z} (340 z^9 + 3250 z^8 + 5328 z^7 - 1464 z^6 + 906 z^5 - 315 z^4 - 1260 z^3 - 3780 z^2 - 7560 z - 7560)}{969 z^5} + \frac{1}{969} \sqrt{\pi} (340 z^{9/2} + 3420 z^{7/2} + 6783 z^{5/2}) \operatorname{erf}(\sqrt{z}) + \frac{2520}{323 z^5}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = -\frac{1}{2}$

07.25.03.5245.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{1}{2}, 1; z\right) = \frac{e^z (-48\,620 z^4 + 323\,180 z^3 - 430\,287 z^2 + 67\,584 z + 1536)}{1536} + \frac{11 \sqrt{\pi} (8840 z^{9/2} - 63\,180 z^{7/2} + 103\,194 z^{5/2} - 33\,075 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{3072}$$

07.25.03.5246.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{1}{2}, 1; -z\right) = \frac{e^{-z} (-48\,620 z^4 - 323\,180 z^3 - 430\,287 z^2 - 67\,584 z + 1536)}{1536} - \frac{11 \sqrt{\pi} (8840 z^{9/2} + 63\,180 z^{7/2} + 103\,194 z^{5/2} + 33\,075 z^{3/2}) \operatorname{erf}(\sqrt{z})}{3072}$$

07.25.03.5247.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{1}{2}, 2; z\right) = \frac{1}{768} e^z (-4420 z^4 + 36400 z^3 - 65091 z^2 + 16512 z + 768) + \frac{\sqrt{\pi} (8840 z^{9/2} - 77220 z^{7/2} + 162162 z^{5/2} - 72765 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1536}$$

07.25.03.5248.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{1}{2}, 2; -z\right) = \frac{1}{768} e^{-z} (-4420 z^4 - 36400 z^3 - 65091 z^2 - 16512 z + 768) + \frac{\sqrt{\pi} (-8840 z^{9/2} - 77220 z^{7/2} - 162162 z^{5/2} - 72765 z^{3/2}) \operatorname{erf}(\sqrt{z})}{1536}$$

07.25.03.5249.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{1}{2}, 3; z\right) = \frac{1}{192} e^z (-340 z^4 + 3340 z^3 - 7509 z^2 + 2688 z + 192) + \frac{1}{384} \sqrt{\pi} (680 z^{9/2} - 7020 z^{7/2} + 18018 z^{5/2} - 10395 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5250.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{1}{2}, 3; -z\right) = \frac{1}{192} e^{-z} (-340 z^4 - 3340 z^3 - 7509 z^2 - 2688 z + 192) + \frac{1}{384} \sqrt{\pi} (-680 z^{9/2} - 7020 z^{7/2} - 18018 z^{5/2} - 10395 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5251.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{1}{2}, 4; z\right) = \frac{1}{96} e^z (-68 z^4 + 776 z^3 - 2103 z^2 + 984 z + 96) + \frac{1}{192} \sqrt{\pi} (136 z^{9/2} - 1620 z^{7/2} + 4914 z^{5/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5252.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{1}{2}, 4; -z\right) = \frac{1}{96} e^{-z} (-68 z^4 - 776 z^3 - 2103 z^2 - 984 z + 96) + \frac{1}{192} \sqrt{\pi} (-136 z^{9/2} - 1620 z^{7/2} - 4914 z^{5/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5253.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{1}{2}, 5; z\right) = \frac{1}{12} e^z (-4 z^4 + 52 z^3 - 165 z^2 + 96 z + 12) + \frac{1}{24} \sqrt{\pi} (8 z^{9/2} - 108 z^{7/2} + 378 z^{5/2} - 315 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5254.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{1}{2}, 5; -z\right) = \frac{1}{12} e^{-z} (-4 z^4 - 52 z^3 - 165 z^2 - 96 z + 12) + \frac{1}{24} \sqrt{\pi} (-8 z^{9/2} - 108 z^{7/2} - 378 z^{5/2} - 315 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5255.01

$${}_2F_2\left(-\frac{9}{2}, 5; -\frac{1}{2}, 6; z\right) = \frac{1}{25194 z^5} e^z (-4420 z^9 + 64480 z^8 - 234507 z^7 + 163824 z^6 + 24816 z^5 + 1890 z^4 - 7560 z^3 + 22680 z^2 - 45360 z + 45360) + \frac{\sqrt{\pi} (8840 z^{9/2} - 133380 z^{7/2} + 529074 z^{5/2} - 508725 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{50388} - \frac{7560}{4199 z^5}$$

$$\begin{aligned}
 & \text{07.25.03.5256.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; -\frac{1}{2}, 6; -z\right) &= \frac{1}{25\,194\,z^5} \\
 & \frac{e^{-z}(-4420\,z^9 - 64\,480\,z^8 - 234\,507\,z^7 - 163\,824\,z^6 + 24\,816\,z^5 - 1890\,z^4 - 7560\,z^3 - 22\,680\,z^2 - 45\,360\,z - 45\,360) + \sqrt{\pi}(-8840\,z^{9/2} - 133\,380\,z^{7/2} - 529\,074\,z^{5/2} - 508\,725\,z^{3/2})\operatorname{erf}(\sqrt{z})}{50\,388} + \frac{7560}{4199\,z^5}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = \frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.5257.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; \frac{1}{2}, 1; z\right) &= \frac{e^z(97\,240\,z^4 - 878\,020\,z^3 + 1\,879\,878\,z^2 - 832\,821\,z + 24\,576)}{24\,576} + \\
 & \frac{\sqrt{\pi}(-194\,480\,z^{9/2} + 1\,853\,280\,z^{7/2} - 4\,540\,536\,z^{5/2} + 2\,910\,600\,z^{3/2} - 297\,675\sqrt{z})\operatorname{erfi}(\sqrt{z})}{49\,152}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5258.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; \frac{1}{2}, 1; -z\right) &= \frac{e^{-z}(97\,240\,z^4 + 878\,020\,z^3 + 1\,879\,878\,z^2 + 832\,821\,z + 24\,576)}{24\,576} + \\
 & \frac{\sqrt{\pi}(194\,480\,z^{9/2} + 1\,853\,280\,z^{7/2} + 4\,540\,536\,z^{5/2} + 2\,910\,600\,z^{3/2} + 297\,675\sqrt{z})\operatorname{erf}(\sqrt{z})}{49\,152}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5259.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; \frac{1}{2}, 2; z\right) &= \frac{e^z(8840\,z^4 - 98\,540\,z^3 + 279\,474\,z^2 - 189\,543\,z + 12\,288)}{12\,288} + \\
 & \frac{\sqrt{\pi}(-17\,680\,z^{9/2} + 205\,920\,z^{7/2} - 648\,648\,z^{5/2} + 582\,120\,z^{3/2} - 99\,225\sqrt{z})\operatorname{erfi}(\sqrt{z})}{24\,576}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5260.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; \frac{1}{2}, 2; -z\right) &= \frac{e^{-z}(8840\,z^4 + 98\,540\,z^3 + 279\,474\,z^2 + 189\,543\,z + 12\,288)}{12\,288} + \\
 & \frac{\sqrt{\pi}(17\,680\,z^{9/2} + 205\,920\,z^{7/2} + 648\,648\,z^{5/2} + 582\,120\,z^{3/2} + 99\,225\sqrt{z})\operatorname{erf}(\sqrt{z})}{24\,576}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5261.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; \frac{1}{2}, 3; z\right) &= \frac{e^z(680\,z^4 - 9020\,z^3 + 31\,866\,z^2 - 29\,307\,z + 3072)}{3072} + \\
 & \frac{\sqrt{\pi}(-1360\,z^{9/2} + 18\,720\,z^{7/2} - 72\,072\,z^{5/2} + 83\,160\,z^{3/2} - 19\,845\sqrt{z})\operatorname{erfi}(\sqrt{z})}{6144}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5262.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; \frac{1}{2}, 3; -z\right) &= \frac{e^{-z}(680\,z^4 + 9020\,z^3 + 31\,866\,z^2 + 29\,307\,z + 3072)}{3072} + \\
 & \frac{\sqrt{\pi}(1360\,z^{9/2} + 18\,720\,z^{7/2} + 72\,072\,z^{5/2} + 83\,160\,z^{3/2} + 19\,845\sqrt{z})\operatorname{erf}(\sqrt{z})}{6144}
 \end{aligned}$$

07.25.03.5263.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{1}{2}, 4; z\right) = \frac{e^z (136 z^4 - 2092 z^3 + 8850 z^2 - 10311 z + 1536)}{1536} + \frac{\sqrt{\pi} (-272 z^{9/2} + 4320 z^{7/2} - 19656 z^{5/2} + 27720 z^{3/2} - 8505 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3072}$$

07.25.03.5264.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{1}{2}, 4; -z\right) = \frac{e^{-z} (136 z^4 + 2092 z^3 + 8850 z^2 + 10311 z + 1536)}{1536} + \frac{\sqrt{\pi} (272 z^{9/2} + 4320 z^{7/2} + 19656 z^{5/2} + 27720 z^{3/2} + 8505 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{3072}$$

07.25.03.5265.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{1}{2}, 5; z\right) = \frac{1}{192} e^z (8 z^4 - 140 z^3 + 690 z^2 - 975 z + 192) + \frac{1}{384} \sqrt{\pi} (-16 z^{9/2} + 288 z^{7/2} - 1512 z^{5/2} + 2520 z^{3/2} - 945 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5266.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{1}{2}, 5; -z\right) = \frac{1}{192} e^{-z} (8 z^4 + 140 z^3 + 690 z^2 + 975 z + 192) + \frac{1}{384} \sqrt{\pi} (16 z^{9/2} + 288 z^{7/2} + 1512 z^{5/2} + 2520 z^{3/2} + 945 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5267.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{1}{2}, 6; z\right) = \frac{1}{4434144 z^5} (e^z (97240 z^9 - 1907620 z^8 + 10734438 z^7 - 17848941 z^6 + 4428096 z^5 + 30240 z^4 - 120960 z^3 + 362880 z^2 - 725760 z + 725760)) + \frac{\sqrt{\pi} (-194480 z^{9/2} + 3912480 z^{7/2} - 23279256 z^{5/2} + 44767800 z^{3/2} - 19840275 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{8868288} - \frac{7560}{46189 z^5}$$

07.25.03.5268.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{1}{2}, 6; -z\right) = \frac{1}{4434144 z^5} (e^{-z} (97240 z^9 + 1907620 z^8 + 10734438 z^7 + 17848941 z^6 + 4428096 z^5 - 30240 z^4 - 120960 z^3 - 362880 z^2 - 725760 z - 725760)) + \frac{\sqrt{\pi} (194480 z^{9/2} + 3912480 z^{7/2} + 23279256 z^{5/2} + 44767800 z^{3/2} + 19840275 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{8868288} + \frac{7560}{46189 z^5}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = 1$

07.25.03.5269.01

$${}_2F_2\left(-\frac{9}{2}, 5; 1, 1; z\right) = \frac{e^{z/2}(-48\,620 z^5 + 557\,700 z^4 - 1\,857\,999 z^3 + 2\,106\,753 z^2 - 695\,520 z + 30\,240) I_0\left(\frac{z}{2}\right)}{30\,240} + \frac{e^{z/2}(48\,620 z^5 - 509\,080 z^4 + 1\,373\,229 z^3 - 939\,444 z^2 + 85\,548 z) I_1\left(\frac{z}{2}\right)}{30\,240}$$

07.25.03.5270.01

$${}_2F_2\left(-\frac{9}{2}, 5; 1, \frac{3}{2}; z\right) = \frac{e^z(38\,896 z^4 - 443\,872 z^3 + 1\,311\,024 z^2 - 973\,104 z + 91\,689)}{98\,304} + \frac{\sqrt{\pi}(-77\,792 z^5 + 926\,640 z^4 - 3\,027\,024 z^3 + 2\,910\,600 z^2 - 595\,350 z + 6615) \operatorname{erfi}(\sqrt{z})}{196\,608 \sqrt{z}}$$

07.25.03.5271.01

$${}_2F_2\left(-\frac{9}{2}, 5; 1, \frac{3}{2}; -z\right) = \frac{e^{-z}(38\,896 z^4 + 443\,872 z^3 + 1\,311\,024 z^2 + 973\,104 z + 91\,689)}{98\,304} + \frac{\sqrt{\pi}(77\,792 z^5 + 926\,640 z^4 + 3\,027\,024 z^3 + 2\,910\,600 z^2 + 595\,350 z + 6615) \operatorname{erf}(\sqrt{z})}{196\,608 \sqrt{z}}$$

07.25.03.5272.01

$${}_2F_2\left(-\frac{9}{2}, 5; 1, 2; z\right) = \frac{e^{z/2}(-8840 z^5 + 122\,460 z^4 - 508\,404 z^3 + 749\,733 z^2 - 355\,320 z + 30\,240) I_0\left(\frac{z}{2}\right)}{30\,240} + \frac{e^{z/2}(8840 z^5 - 113\,620 z^4 + 399\,204 z^3 - 398\,499 z^2 + 70\,428 z) I_1\left(\frac{z}{2}\right)}{30\,240}$$

07.25.03.5273.01

$${}_2F_2\left(-\frac{9}{2}, 5; 1, \frac{5}{2}; z\right) = \frac{e^z(77\,792 z^5 - 1\,073\,072 z^4 + 4\,042\,896 z^3 - 4\,239\,048 z^2 + 706\,422 z + 945)}{786\,432 z} + \frac{1}{1\,572\,864 z^{3/2}} \sqrt{\pi}(-155\,584 z^6 + 2\,223\,936 z^5 - 9\,081\,072 z^4 + 11\,642\,400 z^3 - 3\,572\,100 z^2 + 79\,380 z - 945) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5274.01

$${}_2F_2\left(-\frac{9}{2}, 5; 1, \frac{5}{2}; -z\right) = \frac{e^{-z}(77\,792 z^5 + 1\,073\,072 z^4 + 4\,042\,896 z^3 + 4\,239\,048 z^2 + 706\,422 z - 945)}{786\,432 z} + \frac{1}{1\,572\,864 z^{3/2}} \sqrt{\pi}(155\,584 z^6 + 2\,223\,936 z^5 + 9\,081\,072 z^4 + 11\,642\,400 z^3 + 3\,572\,100 z^2 + 79\,380 z + 945) \operatorname{erf}(\sqrt{z})$$

07.25.03.5275.01

$${}_2F_2\left(-\frac{9}{2}, 5; 1, 3; z\right) = \frac{e^{z/2}(-170 z^5 + 2760 z^4 - 13\,719 z^3 + 24\,828 z^2 - 15\,120 z + 1890) I_0\left(\frac{z}{2}\right)}{1890} + \frac{e^{z/2} z(680 z^4 - 10\,360 z^3 + 44\,856 z^2 - 58\,956 z + 15\,717) I_1\left(\frac{z}{2}\right)}{7560}$$

07.25.03.5276.01

$${}_2F_2\left(-\frac{9}{2}, 5; 1, \frac{7}{2}; z\right) = \frac{e^z (777\,920 z^6 - 12\,584\,000 z^5 + 57\,664\,464 z^4 - 78\,358\,368 z^3 + 19\,195\,428 z^2 + 71\,820 z - 8505)}{22\,020\,096 z^2} + \frac{1}{44\,040\,192 z^{5/2}}$$

$$\left(\sqrt{\pi} (-1\,555\,840 z^7 + 25\,945\,920 z^6 - 127\,135\,008 z^5 + 203\,742\,000 z^4 - 83\,349\,000 z^3 + 2\,778\,300 z^2 - 66\,150 z + 8505)\right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5277.01

$${}_2F_2\left(-\frac{9}{2}, 5; 1, \frac{7}{2}; -z\right) = \frac{e^{-z} (777\,920 z^6 + 12\,584\,000 z^5 + 57\,664\,464 z^4 + 78\,358\,368 z^3 + 19\,195\,428 z^2 - 71\,820 z - 8505)}{22\,020\,096 z^2} + \frac{1}{44\,040\,192 z^{5/2}}$$

$$\left(\sqrt{\pi} (1\,555\,840 z^7 + 25\,945\,920 z^6 + 127\,135\,008 z^5 + 203\,742\,000 z^4 + 83\,349\,000 z^3 + 2\,778\,300 z^2 + 66\,150 z + 8505)\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.5278.01

$${}_2F_2\left(-\frac{9}{2}, 5; 1, 4; z\right) = \frac{e^{z/2} (-272 z^5 + 5064 z^4 - 29\,316 z^3 + 62\,772 z^2 - 46\,305 z + 7560) I_0\left(\frac{z}{2}\right)}{7560} + \frac{e^{z/2} z (272 z^4 - 4792 z^3 + 24\,660 z^2 - 40\,236 z + 14\,457) I_1\left(\frac{z}{2}\right)}{7560}$$

07.25.03.5279.01

$${}_2F_2\left(-\frac{9}{2}, 5; 1, \frac{9}{2}; z\right) = \frac{1}{100\,663\,296 z^3} \frac{e^z (1\,555\,840 z^7 - 28\,874\,560 z^6 + 155\,853\,984 z^5 - 260\,552\,688 z^4 + 85\,451\,208 z^3 + 638\,820 z^2 - 183\,330 z + 70\,875) + \frac{1}{201\,326\,592 z^{7/2}} \left(\sqrt{\pi} (-3\,111\,680 z^8 + 59\,304\,960 z^7 - 339\,026\,688 z^6 + 651\,974\,400 z^5 - 333\,396\,000 z^4 + 14\,817\,600 z^3 - 529\,200 z^2 + 136\,080 z - 70\,875)\right) \operatorname{erfi}(\sqrt{z})}{1}$$

07.25.03.5280.01

$${}_2F_2\left(-\frac{9}{2}, 5; 1, \frac{9}{2}; -z\right) = \frac{1}{100\,663\,296 z^3} \frac{e^{-z} (1\,555\,840 z^7 + 28\,874\,560 z^6 + 155\,853\,984 z^5 + 260\,552\,688 z^4 + 85\,451\,208 z^3 - 638\,820 z^2 - 183\,330 z - 70\,875) + \frac{1}{201\,326\,592 z^{7/2}} \left(\sqrt{\pi} (3\,111\,680 z^8 + 59\,304\,960 z^7 + 339\,026\,688 z^6 + 651\,974\,400 z^5 + 333\,396\,000 z^4 + 14\,817\,600 z^3 + 529\,200 z^2 + 136\,080 z + 70\,875)\right) \operatorname{erf}(\sqrt{z})}{1}$$

07.25.03.5281.01

$${}_2F_2\left(-\frac{9}{2}, 5; 1, 5; z\right) = \frac{1}{945} e^{z/2} (-16 z^5 + 336 z^4 - 2220 z^3 + 5484 z^2 - 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} z (16 z^4 - 320 z^3 + 1908 z^2 - 3720 z + 1689) I_1\left(\frac{z}{2}\right)$$

$$\begin{aligned}
 & \text{07.25.03.5282.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; 1, \frac{11}{2}; z\right) = & \\
 & \frac{1}{402\,653\,184\,z^4} \left(e^z (3\,111\,680\,z^8 - 65\,162\,240\,z^7 + 404\,866\,176\,z^6 - 804\,220\,032\,z^5 + 333\,374\,592\,z^4 + 4\,596\,480\,z^3 - \right. \\
 & \left. 3\,001\,320\,z^2 + 3\,591\,000\,z - 3\,472\,875) \right) + \\
 & \frac{1}{805\,306\,368\,z^{9/2}} \left(\sqrt{\pi} (-6\,223\,360\,z^9 + 133\,436\,160\,z^8 - 871\,782\,912\,z^7 + 1\,955\,923\,200\,z^6 - 1\,200\,225\,600\,z^5 + \right. \\
 & \left. 66\,679\,200\,z^4 - 3\,175\,200\,z^3 + 1\,224\,720\,z^2 - 1\,275\,750\,z + 3\,472\,875) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5283.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; 1, \frac{11}{2}; -z\right) = & \\
 & \frac{1}{402\,653\,184\,z^4} \left(e^{-z} (3\,111\,680\,z^8 + 65\,162\,240\,z^7 + 404\,866\,176\,z^6 + 804\,220\,032\,z^5 + 333\,374\,592\,z^4 - 4\,596\,480\,z^3 - \right. \\
 & \left. 3\,001\,320\,z^2 - 3\,591\,000\,z - 3\,472\,875) \right) + \\
 & \frac{1}{805\,306\,368\,z^{9/2}} \left(\sqrt{\pi} (6\,223\,360\,z^9 + 133\,436\,160\,z^8 + 871\,782\,912\,z^7 + 1\,955\,923\,200\,z^6 + 1\,200\,225\,600\,z^5 + \right. \\
 & \left. 66\,679\,200\,z^4 + 3\,175\,200\,z^3 + 1\,224\,720\,z^2 + 1\,275\,750\,z + 3\,472\,875) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5284.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; 1, 6; z\right) = & \\
 & \frac{1}{43\,648\,605\,z^3} \left(e^{z/2} (-388\,960\,z^8 + 9\,094\,800\,z^7 - 67\,528\,032\,z^6 + 188\,918\,004\,z^5 - 185\,501\,610\,z^4 + 43\,622\,145\,z^3 + \right. \\
 & \left. 113\,400\,z^2 - 362\,880\,z + 725\,760) I_0\left(\frac{z}{2}\right) \right) + \\
 & \frac{1}{43\,648\,605\,z^4} \left(e^{z/2} (388\,960\,z^9 - 8\,705\,840\,z^8 + 59\,016\,672\,z^7 - 133\,865\,292\,z^6 + 73\,654\,314\,z^5 - \right. \\
 & \left. 33\,075\,z^4 + 151\,200\,z^3 - 544\,320\,z^2 + 1\,451\,520\,z - 2\,903\,040) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = \frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.5285.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; \frac{3}{2}, 2; z\right) = & \frac{e^z (3536\,z^4 - 49\,712\,z^3 + 193\,128\,z^2 - 214\,932\,z + 42\,537)}{49\,152} + \\
 & \frac{\sqrt{\pi} (-7072\,z^5 + 102\,960\,z^4 - 432\,432\,z^3 + 582\,120\,z^2 - 198\,450\,z + 6615) \operatorname{erfi}(\sqrt{z})}{98\,304\,\sqrt{z}}
 \end{aligned}$$

07.25.03.5286.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{3}{2}, 2; -z\right) = \frac{e^{-z}(3536z^4 + 49712z^3 + 193128z^2 + 214932z + 42537)}{49152} + \frac{\sqrt{\pi}(7072z^5 + 102960z^4 + 432432z^3 + 582120z^2 + 198450z + 6615)\operatorname{erf}(\sqrt{z})}{98304\sqrt{z}}$$

07.25.03.5287.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{3}{2}, 3; z\right) = \frac{e^z(272z^4 - 4544z^3 + 21888z^2 - 32568z + 10083)}{12288} + \frac{\sqrt{\pi}(-544z^5 + 9360z^4 - 48048z^3 + 83160z^2 - 39690z + 2205)\operatorname{erfi}(\sqrt{z})}{24576\sqrt{z}}$$

07.25.03.5288.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{3}{2}, 3; -z\right) = \frac{e^{-z}(272z^4 + 4544z^3 + 21888z^2 + 32568z + 10083)}{12288} + \frac{\sqrt{\pi}(544z^5 + 9360z^4 + 48048z^3 + 83160z^2 + 39690z + 2205)\operatorname{erf}(\sqrt{z})}{24576\sqrt{z}}$$

07.25.03.5289.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{3}{2}, 4; z\right) = \frac{e^z(272z^4 - 5264z^3 + 30264z^2 - 56460z + 24105)}{30720} + \frac{\sqrt{\pi}(-544z^5 + 10800z^4 - 65520z^3 + 138600z^2 - 85050z + 6615)\operatorname{erfi}(\sqrt{z})}{61440\sqrt{z}}$$

07.25.03.5290.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{3}{2}, 4; -z\right) = \frac{e^{-z}(272z^4 + 5264z^3 + 30264z^2 + 56460z + 24105)}{30720} + \frac{\sqrt{\pi}(544z^5 + 10800z^4 + 65520z^3 + 138600z^2 + 85050z + 6615)\operatorname{erf}(\sqrt{z})}{61440\sqrt{z}}$$

07.25.03.5291.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{3}{2}, 5; z\right) = \frac{e^z(16z^4 - 352z^3 + 2352z^2 - 5280z + 2895)}{3840} + \frac{\sqrt{\pi}(-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945)\operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.5292.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{3}{2}, 5; -z\right) = \frac{e^{-z}(16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{3840} + \frac{\sqrt{\pi}(32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945)\operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

$$\begin{aligned}
 & \text{07.25.03.5293.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; \frac{3}{2}, 6; z\right) = & \frac{1}{17736576z^5} \left(e^z (38896z^9 - 958672z^8 + 7299864z^7 - 19164684z^6 + 12889419z^5 - 13440z^4 + 53760z^3 - \right. \\
 & \left. 161280z^2 + 322560z - 322560) \right) + \frac{1}{35473152\sqrt{z}} \\
 & \sqrt{\pi} (-77792z^5 + 1956240z^4 - 15519504z^3 + 44767800z^2 - 39680550z + 4849845) \operatorname{erfi}(\sqrt{z}) + \frac{840}{46189z^5}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5294.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; \frac{3}{2}, 6; -z\right) = & \frac{1}{17736576z^5} \left(e^{-z} (38896z^9 + 958672z^8 + 7299864z^7 + 19164684z^6 + 12889419z^5 + 13440z^4 + 53760z^3 + \right. \\
 & \left. 161280z^2 + 322560z + 322560) \right) + \\
 & \frac{\sqrt{\pi} (77792z^5 + 1956240z^4 + 15519504z^3 + 44767800z^2 + 39680550z + 4849845) \operatorname{erf}(\sqrt{z})}{35473152\sqrt{z}} - \frac{840}{46189z^5}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = 2$

$$\begin{aligned}
 & \text{07.25.03.5295.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; 2, 2; z\right) = & \frac{e^{z/2} (-8840z^5 + 148200z^4 - 770952z^3 + 1493124z^2 - 1017765z + 166320) I_0\left(\frac{z}{2}\right)}{166320} + \\
 & \frac{e^{z/2} (2210z^5 - 34840z^4 + 159003z^3 - 229488z^2 + 76521z - 945) I_1\left(\frac{z}{2}\right)}{41580}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5296.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; 2, \frac{5}{2}; z\right) = & \frac{e^z (7072z^5 - 120016z^4 + 592176z^3 - 919320z^2 + 314466z - 945)}{393216z} + \\
 & \frac{1}{786432z^{3/2}} \sqrt{\pi} (-14144z^6 + 247104z^5 - 1297296z^4 + 2328480z^3 - 1190700z^2 + 79380z + 945) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5297.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; 2, \frac{5}{2}; -z\right) = & \frac{e^{-z} (7072z^5 + 120016z^4 + 592176z^3 + 919320z^2 + 314466z + 945)}{393216z} + \\
 & \frac{\sqrt{\pi} (14144z^6 + 247104z^5 + 1297296z^4 + 2328480z^3 + 1190700z^2 + 79380z - 945) \operatorname{erf}(\sqrt{z})}{786432z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5298.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; 2, 3; z\right) = & \frac{e^{z/2} (-1360z^5 + 26760z^4 - 167316z^3 + 400692z^2 - 352485z + 83160) I_0\left(\frac{z}{2}\right)}{83160} + \\
 & \frac{e^{z/2} (1360z^5 - 25400z^4 + 142596z^3 - 269436z^2 + 133197z - 3780) I_1\left(\frac{z}{2}\right)}{83160}
 \end{aligned}$$

07.25.03.5299.01

$${}_2F_2\left(-\frac{9}{2}, 5; 2, \frac{7}{2}; z\right) = \frac{e^z (70720 z^6 - 1406080 z^5 + 8413392 z^4 - 16782144 z^3 + 8276604 z^2 - 68040 z + 2835)}{11010048 z^2} + \frac{1}{22020096 z^{5/2}} \left(\sqrt{\pi} (-141440 z^7 + 2882880 z^6 - 18162144 z^5 + 40748400 z^4 - 27783000 z^3 + 2778300 z^2 + 66150 z - 2835) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.5300.01

$${}_2F_2\left(-\frac{9}{2}, 5; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (70720 z^6 + 1406080 z^5 + 8413392 z^4 + 16782144 z^3 + 8276604 z^2 + 68040 z + 2835)}{11010048 z^2} + \frac{1}{22020096 z^{5/2}} \left(\sqrt{\pi} (141440 z^7 + 2882880 z^6 + 18162144 z^5 + 40748400 z^4 + 27783000 z^3 + 2778300 z^2 - 66150 z - 2835) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.5301.01

$${}_2F_2\left(-\frac{9}{2}, 5; 2, 4; z\right) = \frac{e^{z/2} (-272 z^5 + 6144 z^4 - 44868 z^3 + 127896 z^2 - 137025 z + 41580) I_0\left(\frac{z}{2}\right)}{41580} + \frac{e^{z/2} (272 z^5 - 5872 z^4 + 39132 z^3 - 91428 z^2 + 60141 z - 2835) I_1\left(\frac{z}{2}\right)}{41580}$$

07.25.03.5302.01

$${}_2F_2\left(-\frac{9}{2}, 5; 2, \frac{9}{2}; z\right) = \frac{1}{50331648 z^3} e^z (141440 z^7 - 3224000 z^6 + 22674912 z^5 - 55295184 z^4 + 35880024 z^3 - 563220 z^2 + 54810 z - 14175) + \frac{1}{100663296 z^{7/2}} \left(\sqrt{\pi} (-282880 z^8 + 6589440 z^7 - 48432384 z^6 + 130394880 z^5 - 111132000 z^4 + 14817600 z^3 + 529200 z^2 - 45360 z + 14175) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.5303.01

$${}_2F_2\left(-\frac{9}{2}, 5; 2, \frac{9}{2}; -z\right) = \frac{1}{50331648 z^3} e^{-z} (141440 z^7 + 3224000 z^6 + 22674912 z^5 + 55295184 z^4 + 35880024 z^3 + 563220 z^2 + 54810 z + 14175) + \frac{1}{100663296 z^{7/2}} \left(\sqrt{\pi} (282880 z^8 + 6589440 z^7 + 48432384 z^6 + 130394880 z^5 + 111132000 z^4 + 14817600 z^3 - 529200 z^2 - 45360 z - 14175) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.5304.01

$${}_2F_2\left(-\frac{9}{2}, 5; 2, 5; z\right) = \frac{e^{z/2} (-32 z^5 + 816 z^4 - 6816 z^3 + 22524 z^2 - 28350 z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2} (32 z^5 - 784 z^4 + 6048 z^3 - 16836 z^2 + 13854 z - 945) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.5305.01

$${}_2F_2\left(-\frac{9}{2}, 5; 2, \frac{11}{2}; z\right) = \frac{1}{201\,326\,592\,z^4} \left(e^z (282\,880\,z^8 - 7\,271\,680\,z^7 + 58\,775\,808\,z^6 - 169\,486\,656\,z^5 + 136\,900\,896\,z^4 - 3\,553\,200\,z^3 + 710\,640\,z^2 - 585\,900\,z + 496\,125) \right) + \frac{1}{402\,653\,184\,z^{9/2}} \left(\sqrt{\pi} (-565\,760\,z^9 + 14\,826\,240\,z^8 - 124\,540\,416\,z^7 + 391\,184\,640\,z^6 - 400\,075\,200\,z^5 + 66\,679\,200\,z^4 + 3\,175\,200\,z^3 - 408\,240\,z^2 + 255\,150\,z - 496\,125) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.5306.01

$${}_2F_2\left(-\frac{9}{2}, 5; 2, \frac{11}{2}; -z\right) = \frac{1}{201\,326\,592\,z^4} \left(e^{-z} (282\,880\,z^8 + 7\,271\,680\,z^7 + 58\,775\,808\,z^6 + 169\,486\,656\,z^5 + 136\,900\,896\,z^4 + 3\,553\,200\,z^3 + 710\,640\,z^2 + 585\,900\,z + 496\,125) \right) + \frac{1}{402\,653\,184\,z^{9/2}} \left(\sqrt{\pi} (565\,760\,z^9 + 14\,826\,240\,z^8 + 124\,540\,416\,z^7 + 391\,184\,640\,z^6 + 400\,075\,200\,z^5 + 66\,679\,200\,z^4 - 3\,175\,200\,z^3 - 408\,240\,z^2 - 255\,150\,z - 496\,125) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.5307.01

$${}_2F_2\left(-\frac{9}{2}, 5; 2, 6; z\right) = \frac{1}{43\,648\,605\,z^4} \left(4 e^{z/2} (17\,680\,z^9 - 484\,640\,z^8 + 4\,247\,568\,z^7 - 13\,725\,408\,z^6 + 13\,575\,651\,z^5 - 1\,237\,950\,z^4 - 9450\,z^3 + 34\,020\,z^2 - 90\,720\,z + 181\,440) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \left(2 e^{z/2} (35\,360\,z^8 - 1\,004\,640\,z^7 + 9\,446\,736\,z^6 - 35\,496\,672\,z^5 + 51\,213\,330\,z^4 - 21\,827\,610\,z^3 + 14\,175\,z^2 - 45\,360\,z + 90\,720) I_0\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = \frac{5}{2}$

07.25.03.5308.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{5}{2}, 3; z\right) = \frac{e^z (544\,z^5 - 10\,960\,z^4 + 66\,864\,z^3 - 137\,688\,z^2 + 72\,474\,z - 945)}{98\,304\,z} + \frac{\sqrt{\pi} (-1088\,z^6 + 22\,464\,z^5 - 144\,144\,z^4 + 332\,640\,z^3 - 238\,140\,z^2 + 26\,460\,z + 945) \operatorname{erfi}(\sqrt{z})}{196\,608\,z^{3/2}}$$

07.25.03.5309.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (544\,z^5 + 10\,960\,z^4 + 66\,864\,z^3 + 137\,688\,z^2 + 72\,474\,z + 945)}{98\,304\,z} + \frac{\sqrt{\pi} (1088\,z^6 + 22\,464\,z^5 + 144\,144\,z^4 + 332\,640\,z^3 + 238\,140\,z^2 + 26\,460\,z - 945) \operatorname{erf}(\sqrt{z})}{196\,608\,z^{3/2}}$$

07.25.03.5310.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{5}{2}, 4; z\right) = \frac{e^z (544 z^5 - 12\,688 z^4 + 92\,208 z^3 - 236\,760 z^2 + 169\,530 z - 4725)}{245\,760 z} + \frac{\sqrt{\pi} (-1088 z^6 + 25\,920 z^5 - 196\,560 z^4 + 554\,400 z^3 - 510\,300 z^2 + 79\,380 z + 4725) \operatorname{erfi}(\sqrt{z})}{491\,520 z^{3/2}}$$

07.25.03.5311.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{5}{2}, 4; -z\right) = \frac{e^{-z} (544 z^5 + 12\,688 z^4 + 92\,208 z^3 + 236\,760 z^2 + 169\,530 z + 4725)}{245\,760 z} + \frac{\sqrt{\pi} (1088 z^6 + 25\,920 z^5 + 196\,560 z^4 + 554\,400 z^3 + 510\,300 z^2 + 79\,380 z - 4725) \operatorname{erf}(\sqrt{z})}{491\,520 z^{3/2}}$$

07.25.03.5312.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{5}{2}, 5; z\right) = \frac{e^z (32 z^5 - 848 z^4 + 7152 z^3 - 22\,008 z^2 + 20\,010 z - 945)}{30\,720 z} + \frac{\sqrt{\pi} (-64 z^6 + 1728 z^5 - 15\,120 z^4 + 50\,400 z^3 - 56\,700 z^2 + 11\,340 z + 945) \operatorname{erfi}(\sqrt{z})}{61\,440 z^{3/2}}$$

07.25.03.5313.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{5}{2}, 5; -z\right) = \frac{e^{-z} (32 z^5 + 848 z^4 + 7152 z^3 + 22\,008 z^2 + 20\,010 z + 945)}{30\,720 z} + \frac{\sqrt{\pi} (64 z^6 + 1728 z^5 + 15\,120 z^4 + 50\,400 z^3 + 56\,700 z^2 + 11\,340 z - 945) \operatorname{erf}(\sqrt{z})}{61\,440 z^{3/2}}$$

07.25.03.5314.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{5}{2}, 6; z\right) = \frac{1}{141\,892\,608 z^5} (e^z (77\,792 z^9 - 2\,308\,592 z^8 + 22\,163\,856 z^7 - 79\,510\,728 z^6 + 87\,842\,262 z^5 - 6\,189\,435 z^4 - 184\,320 z^3 + 552\,960 z^2 - 1\,105\,920 z + 1\,105\,920)) + \frac{1}{283\,785\,216 z^{3/2}} \sqrt{\pi} (-155\,584 z^6 + 4\,694\,976 z^5 - 46\,558\,512 z^4 + 179\,071\,200 z^3 - 238\,083\,300 z^2 + 58\,198\,140 z + 6\,235\,515) \operatorname{erfi}(\sqrt{z}) - \frac{360}{46\,189 z^5}$$

$$\begin{aligned}
 & \text{07.25.03.5315.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; \frac{5}{2}, 6; -z\right) = \\
 & \frac{1}{141\,892\,608\,z^5} \left(e^{-z} (77\,792\,z^9 + 2\,308\,592\,z^8 + 22\,163\,856\,z^7 + 79\,510\,728\,z^6 + 87\,842\,262\,z^5 + 6\,189\,435\,z^4 - \right. \\
 & \quad \left. 184\,320\,z^3 - 552\,960\,z^2 - 1\,105\,920\,z - 1\,105\,920) \right) + \frac{1}{283\,785\,216\,z^{3/2}} \\
 & \sqrt{\pi} (155\,584\,z^6 + 4\,694\,976\,z^5 + 46\,558\,512\,z^4 + 179\,071\,200\,z^3 + 238\,083\,300\,z^2 + 58\,198\,140\,z - 6\,235\,515) \\
 & \operatorname{erf}(\sqrt{z}) + \frac{360}{46\,189\,z^5}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = 3$

$$\begin{aligned}
 & \text{07.25.03.5316.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; 3, 3; z\right) = \frac{e^{z/2} (-1360\,z^5 + 31\,440\,z^4 - 236\,892\,z^3 + 705\,324\,z^2 - 804\,825\,z + 270\,585) I_0\left(\frac{z}{2}\right)}{270\,270} + \\
 & \frac{e^{z/2} (1360\,z^6 - 30\,080\,z^5 + 207\,492\,z^4 - 511\,512\,z^3 + 371\,229\,z^2 - 23\,940\,z - 1260) I_1\left(\frac{z}{2}\right)}{270\,270\,z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5317.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; 3, \frac{7}{2}; z\right) = \frac{e^z (5440\,z^6 - 128\,320\,z^5 + 947\,568\,z^4 - 2\,494\,176\,z^3 + 1\,869\,756\,z^2 - 64\,260\,z - 2835)}{2\,752\,512\,z^2} + \frac{1}{5\,505\,024\,z^{5/2}} \\
 & \sqrt{\pi} (-10\,880\,z^7 + 262\,080\,z^6 - 2\,018\,016\,z^5 + 5\,821\,200\,z^4 - 5\,556\,600\,z^3 + 926\,100\,z^2 + 66\,150\,z + 2835) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5318.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; 3, \frac{7}{2}; -z\right) = \frac{e^{-z} (5440\,z^6 + 128\,320\,z^5 + 947\,568\,z^4 + 2\,494\,176\,z^3 + 1\,869\,756\,z^2 + 64\,260\,z - 2835)}{2\,752\,512\,z^2} + \frac{1}{5\,505\,024\,z^{5/2}} \\
 & \sqrt{\pi} (10\,880\,z^7 + 262\,080\,z^6 + 2\,018\,016\,z^5 + 5\,821\,200\,z^4 + 5\,556\,600\,z^3 + 926\,100\,z^2 - 66\,150\,z + 2835) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5319.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; 3, 4; z\right) = \frac{e^{z/2} (-544\,z^5 + 14\,448\,z^4 - 127\,392\,z^3 + 453\,324\,z^2 - 633\,150\,z + 271\,215) I_0\left(\frac{z}{2}\right)}{270\,270} + \\
 & \frac{e^{z/2} (544\,z^6 - 13\,904\,z^5 + 113\,760\,z^4 - 345\,972\,z^3 + 331\,854\,z^2 - 34\,965\,z - 3780) I_1\left(\frac{z}{2}\right)}{270\,270\,z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5320.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; 3, \frac{9}{2}; z\right) = \\
 & \frac{1}{12\,582\,912\,z^3} e^z (10\,880\,z^7 - 294\,080\,z^6 + 2\,549\,088\,z^5 - 8\,172\,816\,z^4 + 7\,984\,056\,z^3 - 497\,700\,z^2 - 48\,510\,z + 4725) + \\
 & \frac{1}{25\,165\,824\,z^{7/2}} \left(\sqrt{\pi} (-21\,760\,z^8 + 599\,040\,z^7 - 5\,381\,376\,z^6 + \right. \\
 & \quad \left. 18\,627\,840\,z^5 - 22\,226\,400\,z^4 + 49\,392\,000\,z^3 + 529\,200\,z^2 + 45\,360\,z - 4725) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.5321.01

$${}_2F_2\left(-\frac{9}{2}, 5; 3, \frac{9}{2}; -z\right) = \frac{1}{12582912 z^3} e^{-z} (10880 z^7 + 294080 z^6 + 2549088 z^5 + 8172816 z^4 + 7984056 z^3 + 497700 z^2 - 48510 z - 4725) + \frac{1}{25165824 z^{7/2}} \left(\sqrt{\pi} (21760 z^8 + 599040 z^7 + 5381376 z^6 + 18627840 z^5 + 22226400 z^4 + 4939200 z^3 - 529200 z^2 + 45360 z + 4725)\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.5322.01

$${}_2F_2\left(-\frac{9}{2}, 5; 3, 5; z\right) = \frac{4 e^{z/2} (32 z^6 - 928 z^5 + 8784 z^4 - 31776 z^3 + 37938 z^2 - 5670 z - 945) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (16 z^5 - 480 z^4 + 4848 z^3 - 20064 z^2 + 33075 z - 17010) I_0\left(\frac{z}{2}\right)}{135135 z}$$

07.25.03.5323.01

$${}_2F_2\left(-\frac{9}{2}, 5; 3, \frac{11}{2}; z\right) = \frac{1}{50331648 z^4} e^z (21760 z^8 - 663040 z^7 + 6598272 z^6 - 24946944 z^5 + 30105024 z^4 - 2872800 z^3 - 491400 z^2 + 151200 z - 99225) + \frac{1}{100663296 z^{9/2}} \left(\sqrt{\pi} (-43520 z^9 + 1347840 z^8 - 13837824 z^7 + 55883520 z^6 - 80015040 z^5 + 22226400 z^4 + 3175200 z^3 + 408240 z^2 - 85050 z + 99225)\right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5324.01

$${}_2F_2\left(-\frac{9}{2}, 5; 3, \frac{11}{2}; -z\right) = \frac{1}{50331648 z^4} \left(e^{-z} (21760 z^8 + 663040 z^7 + 6598272 z^6 + 24946944 z^5 + 30105024 z^4 + 2872800 z^3 - 491400 z^2 - 151200 z - 99225)\right) + \frac{1}{100663296 z^{9/2}} \left(\sqrt{\pi} (43520 z^9 + 1347840 z^8 + 13837824 z^7 + 55883520 z^6 + 80015040 z^5 + 22226400 z^4 - 3175200 z^3 + 408240 z^2 + 85050 z + 99225)\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.5325.01

$${}_2F_2\left(-\frac{9}{2}, 5; 3, 6; z\right) = \frac{1}{43648605 z^4} \left(4 e^{z/2} (5440 z^9 - 176480 z^8 + 1897008 z^7 - 7955808 z^6 + 11372856 z^5 - 2227050 z^4 - 502425 z^3 - 22680 z^2 + 60480 z - 120960) I_1\left(\frac{z}{2}\right) - 43648605 z^3 (4 e^{z/2} (5440 z^8 - 181920 z^7 + 2070768 z^6 - 9770016 z^5 + 18539640 z^4 - 11038230 z^3 - 4725 z^2 + 15120 z - 30240) I_0\left(\frac{z}{2}\right))\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = \frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.5326.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; \frac{7}{2}, 4; z\right) &= \frac{e^z (1088 z^6 - 29696 z^5 + 260880 z^4 - 853248 z^3 + 862428 z^2 - 60480 z - 8505)}{1376256 z^2} + \\
 & \frac{1}{2752512 z^{5/2}} \sqrt{\pi} (-2176 z^7 + 60480 z^6 - 550368 z^5 + 1940400 z^4 - 2381400 z^3 + 555660 z^2 + 66150 z + 8505) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5327.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; \frac{7}{2}, 4; -z\right) &= \frac{e^{-z} (1088 z^6 + 29696 z^5 + 260880 z^4 + 853248 z^3 + 862428 z^2 + 60480 z - 8505)}{1376256 z^2} + \\
 & \frac{1}{2752512 z^{5/2}} \sqrt{\pi} (2176 z^7 + 60480 z^6 + 550368 z^5 + 1940400 z^4 + 2381400 z^3 + 555660 z^2 - 66150 z + 8505) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5328.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; \frac{7}{2}, 5; z\right) &= \frac{e^z (64 z^6 - 1984 z^5 + 20208 z^4 - 79008 z^3 + 100716 z^2 - 11340 z - 2835)}{172032 z^2} + \\
 & \frac{1}{344064 z^{5/2}} \sqrt{\pi} (-128 z^7 + 4032 z^6 - 42336 z^5 + 176400 z^4 - 264600 z^3 + 79380 z^2 + 13230 z + 2835) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5329.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; \frac{7}{2}, 5; -z\right) &= \frac{e^{-z} (64 z^6 + 1984 z^5 + 20208 z^4 + 79008 z^3 + 100716 z^2 + 11340 z - 2835)}{172032 z^2} + \\
 & \frac{1}{344064 z^{5/2}} \sqrt{\pi} (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5330.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; \frac{7}{2}, 6; z\right) &= \\
 & \frac{1}{3972993024 z^5} (e^z (777920 z^9 - 26998400 z^8 + 312799344 z^7 - 1423000128 z^6 + 2192387988 z^5 - 350479080 z^4 - \\
 & \quad 125784855 z^3 - 15482880 z^2 + 30965760 z - 30965760)) + \\
 & \frac{1}{7945986048 z^{5/2}} (\sqrt{\pi} (-1555840 z^7 + 54774720 z^6 - 651819168 z^5 + 3133746000 z^4 - \\
 & \quad 5555277000 z^3 + 2036934900 z^2 + 436486050 z + 130945815) \operatorname{erfi}(\sqrt{z})) + \frac{360}{46189 z^5}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5331.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; \frac{7}{2}, 6; -z\right) = & \frac{1}{3972993024 z^5} \left(e^{-z} (777920 z^9 + 26998400 z^8 + 312799344 z^7 + 1423000128 z^6 + 2192387988 z^5 + \right. \\
 & \left. 350479080 z^4 - 125784855 z^3 + 15482880 z^2 + 30965760 z + 30965760) \right) + \\
 & \frac{1}{7945986048 z^{5/2}} \left(\sqrt{\pi} (1555840 z^7 + 54774720 z^6 + 651819168 z^5 + 3133746000 z^4 + \right. \\
 & \left. 5555277000 z^3 + 2036934900 z^2 - 436486050 z + 130945815) \operatorname{erf}(\sqrt{z}) \right) - \frac{360}{46189 z^5}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = 4$

$$\begin{aligned}
 & \text{07.25.03.5332.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; 4, 4; z\right) = & \frac{e^{z/2} (-544 z^6 + 16608 z^5 - 171600 z^4 + 732000 z^3 - 1256850 z^2 + 682290 z + 945) I_0\left(\frac{z}{2}\right)}{675675 z} + \\
 & \frac{2 e^{z/2} (272 z^7 - 8032 z^6 + 77904 z^5 - 291840 z^4 + 368355 z^3 - 62370 z^2 - 13230 z - 1890) I_1\left(\frac{z}{2}\right)}{675675 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5333.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; 4, \frac{9}{2}; z\right) = & \frac{e^z (2176 z^7 - 68032 z^6 + 700896 z^5 - 2785488 z^4 + 3645528 z^3 - 442260 z^2 - 126630 z - 14175)}{6291456 z^3} + \frac{1}{12582912 z^{7/2}} \\
 & \left(\sqrt{\pi} (-4352 z^8 + 138240 z^7 - 1467648 z^6 + 6209280 z^5 - 9525600 z^4 + 2963520 z^3 + 529200 z^2 + 136080 z + 14175) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5334.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; 4, \frac{9}{2}; -z\right) = & \frac{1}{6291456 z^3} e^{-z} (2176 z^7 + 68032 z^6 + 700896 z^5 + 2785488 z^4 + 3645528 z^3 + 442260 z^2 - 126630 z + 14175) + \\
 & \frac{1}{12582912 z^{7/2}} \left(\sqrt{\pi} (4352 z^8 + 138240 z^7 + 1467648 z^6 + 6209280 z^5 + \right. \\
 & \left. 9525600 z^4 + 2963520 z^3 - 529200 z^2 + 136080 z - 14175) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5335.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; 4, 5; z\right) = & \frac{4 e^{z/2} (64 z^7 - 2144 z^6 + 24048 z^5 - 107040 z^4 + 167640 z^3 - 39690 z^2 - 12285 z - 3780) I_1\left(\frac{z}{2}\right)}{675675 z^2} - \\
 & \frac{4 e^{z/2} (64 z^6 - 2208 z^5 + 26160 z^4 - 130080 z^3 + 264600 z^2 - 171990 z - 945) I_0\left(\frac{z}{2}\right)}{675675 z}
 \end{aligned}$$

07.25.03.5336.01

$${}_2F_2\left(-\frac{9}{2}, 5; 4, \frac{11}{2}; z\right) = \frac{1}{25\,165\,824\,z^4} e^z (4352\,z^8 - 153\,344\,z^7 + 1\,812\,480\,z^6 - 8\,478\,912\,z^5 + 13\,641\,312\,z^4 - 2\,434\,320\,z^3 - 1\,028\,160\,z^2 - 321\,300\,z + 99\,225) + \frac{1}{50\,331\,648\,z^{9/2}} \left(\sqrt{\pi} (-8704\,z^9 + 311\,040\,z^8 - 3\,773\,952\,z^7 + 18\,627\,840\,z^6 - 34\,292\,160\,z^5 + 13\,335\,840\,z^4 + 3\,175\,200\,z^3 + 1\,224\,720\,z^2 + 255\,150\,z - 99\,225) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.5337.01

$${}_2F_2\left(-\frac{9}{2}, 5; 4, \frac{11}{2}; -z\right) = \frac{1}{25\,165\,824\,z^4} e^{-z} (4352\,z^8 + 153\,344\,z^7 + 1\,812\,480\,z^6 + 8\,478\,912\,z^5 + 13\,641\,312\,z^4 + 2\,434\,320\,z^3 - 1\,028\,160\,z^2 + 321\,300\,z + 99\,225) + \frac{1}{50\,331\,648\,z^{9/2}} \left(\sqrt{\pi} (8704\,z^9 + 311\,040\,z^8 + 3\,773\,952\,z^7 + 18\,627\,840\,z^6 + 34\,292\,160\,z^5 + 13\,335\,840\,z^4 - 3\,175\,200\,z^3 + 1\,224\,720\,z^2 - 255\,150\,z - 99\,225) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.5338.01

$${}_2F_2\left(-\frac{9}{2}, 5; 4, 6; z\right) = \frac{1}{43\,648\,605\,z^4} \left(8\,e^{z/2} (1088\,z^9 - 40\,768\,z^8 + 519\,120\,z^7 - 2\,676\,624\,z^6 + 5\,007\,288\,z^5 - 1\,534\,680\,z^4 - 615\,195\,z^3 - 288\,225\,z^2 - 45\,360\,z + 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \left(8\,e^{z/2} (1088\,z^8 - 41\,856\,z^7 + 559\,344\,z^6 - 3\,176\,448\,z^5 + 7\,461\,720\,z^4 - 5\,609\,520\,z^3 - 72\,765\,z^2 - 11\,340\,z + 22\,680) I_0\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = \frac{9}{2}$

07.25.03.5339.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{9}{2}, 5; z\right) = \frac{e^z (128\,z^7 - 4544\,z^6 + 54\,240\,z^5 - 257\,232\,z^4 + 422\,616\,z^3 - 79\,380\,z^2 - 35\,910\,z - 14\,175)}{786\,432\,z^3} + \frac{1}{1\,572\,864\,z^{7/2}} \left(\sqrt{\pi} (-256\,z^8 + 9216\,z^7 - 112\,896\,z^6 + 564\,480\,z^5 - 1\,058\,400\,z^4 + 423\,360\,z^3 + 105\,840\,z^2 + 45\,360\,z + 14\,175) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.5340.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{9}{2}, 5; -z\right) = \frac{e^{-z} (128\,z^7 + 4544\,z^6 + 54\,240\,z^5 + 257\,232\,z^4 + 422\,616\,z^3 + 79\,380\,z^2 - 35\,910\,z + 14\,175)}{786\,432\,z^3} + \frac{1}{1\,572\,864\,z^{7/2}} \left(\sqrt{\pi} (256\,z^8 + 9216\,z^7 + 112\,896\,z^6 + 564\,480\,z^5 + 1\,058\,400\,z^4 + 423\,360\,z^3 - 105\,840\,z^2 + 45\,360\,z - 14\,175) \operatorname{erf}(\sqrt{z})\right)$$

$$\begin{aligned}
 & \text{07.25.03.5341.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; \frac{9}{2}, 6; z\right) = \\
 & \frac{1}{18\,162\,253\,824\,z^5} \left(e^z (1\,555\,840\,z^9 - 61\,821\,760\,z^8 + 838\,959\,264\,z^7 - 4\,623\,480\,048\,z^6 + 9\,148\,212\,168\,z^5 - \right. \\
 & \quad \left. 2\,372\,361\,180\,z^4 - 1\,422\,706\,530\,z^3 - 926\,064\,405\,z^2 - 330\,301\,440\,z + 330\,301\,440) \right) + \\
 & \frac{1}{36\,324\,507\,648\,z^{7/2}} \left(\sqrt{\pi} (-3\,111\,680\,z^8 + 125\,199\,360\,z^7 - 1\,738\,184\,448\,z^6 + 10\,027\,987\,200\,z^5 - 22\,221\,108\,000\,z^4 + \right. \\
 & \quad \left. 10\,863\,652\,800\,z^3 + 3\,491\,888\,400\,z^2 + 2\,095\,133\,040\,z + 1\,091\,215\,125) \operatorname{erfi}(\sqrt{z}) \right) - \frac{840}{46\,189\,z^5}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5342.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; \frac{9}{2}, 6; -z\right) = \\
 & \frac{1}{18\,162\,253\,824\,z^5} \left(e^{-z} (1\,555\,840\,z^9 + 61\,821\,760\,z^8 + 838\,959\,264\,z^7 + 4\,623\,480\,048\,z^6 + 9\,148\,212\,168\,z^5 + \right. \\
 & \quad \left. 2\,372\,361\,180\,z^4 - 1\,422\,706\,530\,z^3 + 926\,064\,405\,z^2 - 330\,301\,440\,z - 330\,301\,440) \right) + \\
 & \frac{1}{36\,324\,507\,648\,z^{7/2}} \left(\sqrt{\pi} (3\,111\,680\,z^8 + 125\,199\,360\,z^7 + 1\,738\,184\,448\,z^6 + 10\,027\,987\,200\,z^5 + 22\,221\,108\,000\,z^4 + \right. \\
 & \quad \left. 10\,863\,652\,800\,z^3 - 3\,491\,888\,400\,z^2 + 2\,095\,133\,040\,z - 1\,091\,215\,125) \operatorname{erf}(\sqrt{z}) \right) + \frac{840}{46\,189\,z^5}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = 5$

$$\begin{aligned}
 & \text{07.25.03.5343.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; 5, 5; z\right) = \frac{1}{11\,486\,475\,z^3} \\
 & \frac{32\,e^{z/2} (64\,z^8 - 2432\,z^7 + 31\,536\,z^6 - 166\,656\,z^5 + 323\,160\,z^4 - 105\,840\,z^3 - 46\,305\,z^2 - 26\,460\,z - 11\,340) I_1\left(\frac{z}{2}\right) -}{11\,486\,475\,z^2} \\
 & \frac{32\,e^{z/2} (64\,z^7 - 2496\,z^6 + 33\,936\,z^5 - 197\,040\,z^4 + 476\,280\,z^3 - 370\,440\,z^2 - 6615\,z - 2835) I_0\left(\frac{z}{2}\right)}{11\,486\,475\,z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5344.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 5; 5, \frac{11}{2}; z\right) = \\
 & \frac{1}{3\,145\,728\,z^4} e^z (256\,z^8 - 10\,240\,z^7 + 140\,160\,z^6 - 781\,440\,z^5 + 1\,572\,864\,z^4 - 423\,360\,z^3 - 264\,600\,z^2 - 189\,000\,z - 99\,225) + \\
 & \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (-512\,z^9 + 20\,736\,z^8 - 290\,304\,z^7 + 1\,693\,440\,z^6 - \right. \\
 & \quad \left. 3\,810\,240\,z^5 + 1\,905\,120\,z^4 + 635\,040\,z^3 + 408\,240\,z^2 + 255\,150\,z + 99\,225) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.5345.01

$${}_2F_2\left(-\frac{9}{2}, 5; 5, \frac{11}{2}; -z\right) = \frac{1}{3\,145\,728\,z^4} e^{-z} (256\,z^8 + 10\,240\,z^7 + 140\,160\,z^6 + 781\,440\,z^5 + 1\,572\,864\,z^4 + 423\,360\,z^3 - 264\,600\,z^2 + 189\,000\,z - 99\,225) + \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (512\,z^9 + 20\,736\,z^8 + 290\,304\,z^7 + 1\,693\,440\,z^6 + 3\,810\,240\,z^5 + 1\,905\,120\,z^4 - 635\,040\,z^3 + 408\,240\,z^2 - 255\,150\,z + 99\,225) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.5346.01

$${}_2F_2\left(-\frac{9}{2}, 5; 5, 6; z\right) = \frac{1}{43\,648\,605\,z^4} \left(32\,e^{z/2} (128\,z^9 - 5440\,z^8 + 80\,064\,z^7 - 489\,840\,z^6 + 1\,132\,752\,z^5 - 476\,280\,z^4 - 264\,600\,z^3 - 214\,515\,z^2 - 170\,100\,z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \right. \\ \left. 32\,e^{z/2} (128\,z^8 - 5568\,z^7 + 85\,440\,z^6 - 567\,312\,z^5 + 1\,587\,600\,z^4 - 1\,428\,840\,z^3 - 52\,920\,z^2 - 42\,525\,z - 22\,680) I_0\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = \frac{11}{2}$

07.25.03.5347.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{11}{2}, 6; z\right) = \frac{1}{72\,649\,015\,296\,z^5} \left(e^z (3\,111\,680\,z^9 - 139\,293\,440\,z^8 + 2\,166\,717\,696\,z^7 - 14\,024\,379\,072\,z^6 + 33\,909\,438\,432\,z^5 - 12\,367\,872\,720\,z^4 - 9\,890\,611\,920\,z^3 - 10\,310\,286\,420\,z^2 - 11\,024\,665\,785\,z - 11\,890\,851\,840) \right) + \frac{1}{145\,298\,030\,592\,z^{9/2}} \left(\sqrt{\pi} (-6\,223\,360\,z^9 + 281\,698\,560\,z^8 - 4\,469\,617\,152\,z^7 + 30\,083\,961\,600\,z^6 - 79\,995\,988\,800\,z^5 + 48\,886\,437\,600\,z^4 + 20\,951\,330\,400\,z^3 + 18\,856\,197\,360\,z^2 + 19\,641\,872\,250\,z + 22\,915\,517\,625) \operatorname{erfi}(\sqrt{z}) \right) + \frac{7560}{46\,189\,z^5}$$

07.25.03.5348.01

$${}_2F_2\left(-\frac{9}{2}, 5; \frac{11}{2}, 6; -z\right) = \frac{1}{72\,649\,015\,296\,z^5} \left(e^{-z} (3\,111\,680\,z^9 + 139\,293\,440\,z^8 + 2\,166\,717\,696\,z^7 + 14\,024\,379\,072\,z^6 + 33\,909\,438\,432\,z^5 + 12\,367\,872\,720\,z^4 - 9\,890\,611\,920\,z^3 + 10\,310\,286\,420\,z^2 - 11\,024\,665\,785\,z + 11\,890\,851\,840) \right) + \frac{1}{145\,298\,030\,592\,z^{9/2}} \left(\sqrt{\pi} (6\,223\,360\,z^9 + 281\,698\,560\,z^8 + 4\,469\,617\,152\,z^7 + 30\,083\,961\,600\,z^6 + 79\,995\,988\,800\,z^5 + 48\,886\,437\,600\,z^4 - 20\,951\,330\,400\,z^3 + 18\,856\,197\,360\,z^2 - 19\,641\,872\,250\,z + 22\,915\,517\,625) \operatorname{erf}(\sqrt{z}) \right) - \frac{7560}{46\,189\,z^5}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 5$, $b_1 = 6$

$$\begin{aligned}
 & \text{07.25.03.5349.01} \\
 {}_2F_2\left(-\frac{9}{2}, 5; 6, 6; z\right) &= -\frac{1}{2016085416345z^5} \\
 & \left(64e^{z/2}(1555840z^{10} - 75504000z^9 + 1308223488z^8 - 9943830336z^7 + 32282238240z^6 - 33660364080z^5 - \right. \\
 & \quad \left. 2400609600z^4 - 3142903320z^3 - 4408101585z^2 - 10475665200z + 20951330400)I_0\left(\frac{z}{2}\right) + \right. \\
 & \quad \frac{1}{2016085416345z^4} \left(256e^{z/2}(388960z^9 - 18487040z^8 + 308763312z^7 - 2186048832z^6 + 6021620844z^5 - \right. \\
 & \quad \left. 3230446800z^4 - 2255199150z^3 - 2531542680z^2 - 3361146345z - 5717559735)I_1\left(\frac{z}{2}\right) + \frac{30720}{46189z^5} \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.5350.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) &= \\
 & -\frac{1}{108056025} \left(e^z(4096z^{12} + 225280z^{11} + 4460544z^{10} + 39029760z^9 + 146361600z^8 + 175633920z^7 + \right. \\
 & \quad \left. 43908480z^5 - 82328400z^4 + 137214000z^3 - 192099600z^2 + 196465500z - 108056025)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5351.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) &= \\
 & \frac{1}{9823275} \left(e^z(2048z^{11} + 101376z^{10} + 1774080z^9 + 13305600z^8 + 39916800z^7 + 27941760z^6 - \right. \\
 & \quad \left. 13970880z^5 + 14968800z^4 - 18711000z^3 + 21829500z^2 - 19646550z + 9823275)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5352.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) &= \\
 & -\frac{1}{1091475} \left(e^z(1024z^{10} + 45056z^9 + 684288z^8 + 4257792z^7 + 9313920z^6 - 6985440z^4 + 3991680z^3 - \right. \\
 & \quad \left. 3367980z^2 + 2494800z - 1091475)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5353.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) &= \\
 & \frac{1}{155925} \left(e^z(512z^9 + 19712z^8 + 253440z^7 + 1241856z^6 + 1552320z^5 - 2328480z^4 - 2328480z^3 + \right. \\
 & \quad \left. 831600z^2 - 436590z + 155925)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5354.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) &= -\frac{e^z(256z^8 + 8448z^7 + 88704z^6 + 310464z^5 - 1164240z^3 - 582120z^2 + 124740z - 31185)}{31185}
 \end{aligned}$$

07.25.03.5355.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 3520 z^6 + 28512 z^5 + 55440 z^4 - 138600 z^3 - 374220 z^2 - 103950 z + 10395)}{10395}$$

07.25.03.5356.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = -\frac{e^z (64 z^6 + 1408 z^5 + 7920 z^4 - 69300 z^2 - 83160 z - 10395)}{10395}$$

07.25.03.5357.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (-32 z^6 - 640 z^5 - 3120 z^4 + 1896 z^3 + 31974 z^2 + 41580 z + 10395) I_0\left(\frac{z}{2}\right) - 2 e^{z/2} (16 z^6 + 304 z^5 + 1264 z^4 - 2076 z^3 - 13533 z^2 - 8817 z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.5358.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{e^z (32 z^5 + 528 z^4 + 1584 z^3 - 5544 z^2 - 20790 z - 10395)}{10395}$$

07.25.03.5359.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (-32 z^5 - 464 z^4 - 1008 z^3 + 5724 z^2 + 17850 z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (-32 z^5 - 432 z^4 - 592 z^3 + 6132 z^2 + 11754 z + 1365) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.5360.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = -\frac{e^z (16 z^4 + 176 z^3 - 2772 z - 3465)}{3465}$$

07.25.03.5361.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (16 z^4 + 144 z^3 - 156 z^2 - 2400 z - 2655) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16 z^5 + 128 z^4 - 276 z^3 - 2076 z^2 - 795 z + 225) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.5362.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{1}{693} e^z (8 z^3 + 44 z^2 - 198 z - 693)$$

07.25.03.5363.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 + 56 z^3 - 420 z^2 - 948 z + 51) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16 z^5 + 40 z^4 - 452 z^3 - 492 z^2 + 327 z - 204) I_1\left(\frac{z}{2}\right)}{3465 z}$$

07.25.03.5364.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{1}{99} e^z (4 z^2 - 99)$$

$$\begin{aligned}
 & 07.25.03.5365.01 \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = \\
 & \frac{32 e^{z/2} (8 z^4 - 16 z^3 - 144 z^2 + 54 z - 57) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (4 z^5 - 12 z^4 - 58 z^3 + 75 z^2 - 108 z + 114) I_1\left(\frac{z}{2}\right)}{3465 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5366.01 \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = -\frac{1}{11} e^z (2 z - 11)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5367.01 \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \\
 & \frac{32 e^{z/2} (8 z^4 - 60 z^3 + 120 z^2 - 309 z + 504) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (8 z^5 - 68 z^4 + 192 z^3 - 543 z^2 + 1236 z - 2016) I_1\left(\frac{z}{2}\right)}{693 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{9}{2}$

$$\begin{aligned}
 & 07.25.03.5368.01 \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \\
 & -\frac{1}{893025} (e^z (1024 z^{10} + 46080 z^9 + 725760 z^8 + 4838400 z^7 + 12700800 z^6 + 7620480 z^5 - 3175200 z^4 + \\
 & 2721600 z^3 - 2551500 z^2 + 1984500 z - 893025))
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5369.01 \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{99225} (e^z (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + \\
 & 408240 z^2 - 255150 z + 99225))
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5370.01 \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \\
 & -\frac{1}{14175} e^z (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5371.01 \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835)}{2835}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5372.01 \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 1728 z^5 + 15120 z^4 + 50400 z^3 + 56700 z^2 + 11340 z - 945)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5373.01 \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945)
 \end{aligned}$$

07.25.03.5374.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (16z^5 + 336z^4 + 2220z^3 + 5484z^2 + 4725z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^5 + 320z^4 + 1908z^3 + 3720z^2 + 1689z) I_1\left(\frac{z}{2}\right)$$

07.25.03.5375.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (16z^4 + 288z^3 + 1512z^2 + 2520z + 945)$$

07.25.03.5376.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (16z^4 + 264z^3 + 1284z^2 + 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^4 + 248z^3 + 1044z^2 + 1164z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.5377.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (8z^3 + 108z^2 + 378z + 315)$$

07.25.03.5378.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, 3; z\right) = \frac{16}{945} e^{z/2} (2z^3 + 24z^2 + 75z + 60) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8z^4 + 88z^3 + 216z^2 + 60z - 15) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.5379.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (4z^2 + 36z + 63)$$

07.25.03.5380.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 + 60z^2 + 84z - 3) I_0\left(\frac{z}{2}\right)}{315z} + \frac{4 e^{z/2} (8z^4 + 52z^3 + 36z^2 - 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.5381.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2z + 9)$$

07.25.03.5382.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^3 + 12z^2 - 3z + 3) I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{32 e^{z/2} (4z^4 + 8z^3 - 9z^2 + 12z - 12) I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.5383.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = e^z$$

07.25.03.5384.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 - 6z^2 + 15z - 24) I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{32 e^{z/2} (4z^4 - 10z^3 + 27z^2 - 60z + 96) I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.5385.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{11025} e^z (-256 z^8 - 9472 z^7 - 121472 z^6 - 664512 z^5 + 1572864 z^4 - 166128 z^3 + 68328 z^2 - 33300 z + 11025) - \frac{1048576 \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})}{3675}$$

07.25.03.5386.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1048576 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2}}{3675} + \frac{1}{11025} e^{-z} (-256 z^8 + 9472 z^7 - 121472 z^6 + 664512 z^5 + 1572864 z^4 + 166128 z^3 + 68328 z^2 + 33300 z + 11025)$$

07.25.03.5387.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{524288}{525} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{e^z (128 z^7 + 4288 z^6 + 50016 z^5 - 1315632 z^4 - 128616 z^3 + 18756 z^2 - 6030 z + 1575)}{1575}$$

07.25.03.5388.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{e^{-z} (-128 z^7 + 4288 z^6 - 50016 z^5 - 1315632 z^4 + 128616 z^3 + 18756 z^2 + 6030 z + 1575)}{1575} - \frac{524288}{525} \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.5389.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} e^z (-64 z^6 - 1920 z^5 + 373008 z^4 + 98304 z^3 + 15156 z^2 - 1800 z + 315) - \frac{131072}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5390.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{131072}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{315} e^{-z} (-64 z^6 + 1920 z^5 + 373008 z^4 - 98304 z^3 + 15156 z^2 + 1800 z + 315)$$

07.25.03.5391.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{65536}{105} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^z (32 z^5 - 64688 z^4 - 24784 z^3 - 11976 z^2 - 1590 z + 105)$$

07.25.03.5392.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} e^{-z} (-32 z^5 - 64688 z^4 + 24784 z^3 - 11976 z^2 + 1590 z + 105) - \frac{65536}{105} \sqrt{\pi} z^{9/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.5393.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (8176 z^4 + 3728 z^3 + 3072 z^2 + 1380 z + 105) - \frac{8192}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5394.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{8192}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (8176 z^4 - 3728 z^3 + 3072 z^2 - 1380 z + 105)$$

07.25.03.5395.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (-1048576 z^5 + 783912 z^4 + 436080 z^3 + 401520 z^2 + 217350 z + 33075) I_0\left(\frac{z}{2}\right) + 2 e^{z/2} (524288 z^5 + 129812 z^4 + 120996 z^3 + 103710 z^2 + 31395 z) I_1\left(\frac{z}{2}\right)}{33075}$$

07.25.03.5396.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{525} e^z (4096 z^4 + 2008 z^3 + 2292 z^2 + 1950 z + 525) - \frac{4096}{525} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5397.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{4096}{525} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{525} e^{-z} (4096 z^4 - 2008 z^3 + 2292 z^2 - 1950 z + 525)$$

07.25.03.5398.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (-2097152 z^5 + 1572864 z^4 + 955320 z^3 + 1207500 z^2 + 1096200 z + 363825) I_0\left(\frac{z}{2}\right) + e^{z/2} (2097152 z^5 + 524288 z^4 + 562104 z^3 + 743700 z^2 + 492240 z + 33075) I_1\left(\frac{z}{2}\right)}{363825}$$

07.25.03.5399.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{525} e^z (1024 z^4 + 512 z^3 + 708 z^2 + 960 z + 525) - \frac{1024}{525} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5400.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{1024}{525} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{525} e^{-z} (1024 z^4 - 512 z^3 + 708 z^2 - 960 z + 525)$$

07.25.03.5401.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{4729725 z} 4 e^{z/2} (2097152 z^6 + 524288 z^5 + 589824 z^4 + 1048620 z^3 + 1240680 z^2 + 240975 z - 51975) I_1\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (2097152 z^5 - 1572864 z^4 - 983040 z^3 - 1540140 z^2 - 2135700 z - 1195425) I_0\left(\frac{z}{2}\right)}{4729725}$$

07.25.03.5402.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{735} e^z (512 z^4 + 256 z^3 + 384 z^2 + 750 z + 735) - \frac{512}{735} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5403.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{512}{735} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{735} e^{-z} (512 z^4 - 256 z^3 + 384 z^2 - 750 z + 735)$$

$$\begin{aligned}
 & \text{07.25.03.5404.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, 4; z\right) &= \frac{1}{23\,648\,625\,z^2} 4 e^{z/2} \\
 & (4\,194\,304\,z^7 + 1\,048\,576\,z^6 + 1\,179\,648\,z^5 + 2\,457\,600\,z^4 + 4\,823\,700\,z^3 + 2\,103\,570\,z^2 - 1\,049\,895\,z + 540\,540) I_1\left(\frac{z}{2}\right) - \\
 & \frac{1}{23\,648\,625\,z} 4 e^{z/2} (4\,194\,304\,z^6 - 3\,145\,728\,z^5 - 1\,966\,080\,z^4 - 3\,440\,640\,z^3 - 6\,974\,100\,z^2 - 6\,174\,630\,z + 135\,135) I_0\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5405.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) &= \frac{1}{105} e^z (32\,z^4 + 16\,z^3 + 24\,z^2 + 60\,z + 105) - \frac{32}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5406.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) &= \frac{32}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (32\,z^4 - 16\,z^3 + 24\,z^2 - 60\,z + 105)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5407.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, 5; z\right) &= \\
 & \frac{1}{402\,026\,625\,z^3} \left(64 e^{z/2} (2\,097\,152\,z^8 + 524\,288\,z^7 + 589\,824\,z^6 + 1\,228\,800\,z^5 + 3\,763\,200\,z^4 + 3\,754\,485\,z^3 - \right. \\
 & \quad \left. 3\,565\,485\,z^2 + 4\,324\,320\,z - 4\,054\,050) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{402\,026\,625\,z^2} \left(32 e^{z/2} (4\,194\,304\,z^7 - 3\,145\,728\,z^6 - 1\,966\,080\,z^5 - 3\,440\,640\,z^4 - 9\,676\,800\,z^3 - \right. \\
 & \quad \left. 14\,282\,730\,z^2 + 2\,162\,160\,z - 2\,027\,025) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5408.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) &= \frac{1}{105} e^z (16\,z^4 + 8\,z^3 + 12\,z^2 + 30\,z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5409.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) &= \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16\,z^4 - 8\,z^3 + 12\,z^2 - 30\,z + 105)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5410.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, 6; z\right) &= \\
 & \frac{1}{1\,527\,701\,175\,z^4} \left(32 e^{z/2} (8\,388\,608\,z^9 + 2\,097\,152\,z^8 + 2\,359\,296\,z^7 + 4\,915\,200\,z^6 + 15\,052\,800\,z^5 + 60\,963\,840\,z^4 - \right. \\
 & \quad \left. 129\,126\,690\,z^3 + 327\,432\,105\,z^2 - 705\,404\,700\,z + 1\,102\,701\,600) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{1\,527\,701\,175\,z^3} \left(32 e^{z/2} (8\,388\,608\,z^8 - 6\,291\,456\,z^7 - 3\,932\,160\,z^6 - 6\,881\,280\,z^5 - 19\,353\,600\,z^4 - \right. \\
 & \quad \left. 74\,511\,360\,z^3 + 73\,243\,170\,z^2 - 176\,351\,175\,z + 275\,675\,400) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.5411.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225} e^{-z} (-64 z^6 - 1984 z^5 + 764\,400 z^4 - 117\,600 z^3 + 5508 z^2 - 1116 z + 225) - \frac{131\,072}{75} \sqrt{\pi} (2 z^{9/2} - z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5412.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{225} e^{-z} (-64 z^6 + 1984 z^5 + 764\,400 z^4 + 117\,600 z^3 + 5508 z^2 + 1116 z + 225) + \frac{131\,072}{75} \sqrt{\pi} (2 z^{9/2} + z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5413.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} e^{-z} (32 z^5 - 195\,696 z^4 + 107\,952 z^3 + 4824 z^2 - 342 z + 45) + \frac{65\,536}{15} \sqrt{\pi} (z^{9/2} - z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5414.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{45} e^{-z} (-32 z^5 - 195\,696 z^4 - 107\,952 z^3 + 4824 z^2 + 342 z + 45) - \frac{65\,536}{15} \sqrt{\pi} (z^{9/2} + z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5415.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^{-z} (32\,752 z^4 - 33\,184 z^3 - 4200 z^2 - 312 z + 15) - \frac{16\,384}{15} \sqrt{\pi} (2 z^{9/2} - 3 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5416.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (32\,752 z^4 + 33\,184 z^3 - 4200 z^2 + 312 z + 15) + \frac{16\,384}{15} \sqrt{\pi} (2 z^{9/2} + 3 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5417.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^{-z} (-4096 z^4 + 6152 z^3 + 1212 z^2 + 282 z + 15) + \frac{4096}{15} \sqrt{\pi} (z^{9/2} - 2 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5418.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-4096 z^4 - 6152 z^3 + 1212 z^2 - 282 z + 15) - \frac{4096}{15} \sqrt{\pi} (z^{9/2} + 2 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5419.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (524\,288 z^5 - 1\,572\,864 z^4 + 640\,236 z^3 + 151\,860 z^2 + 44\,415 z + 4725) I_0\left(\frac{z}{2}\right) + e^{z/2} (-524\,288 z^5 + 1\,048\,576 z^4 + 148\,716 z^3 + 52\,296 z^2 + 9645 z) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.5420.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1024}{75} \sqrt{\pi} (2 z - 5) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{75} e^{-z} (-2048 z^4 + 4096 z^3 + 1044 z^2 + 420 z + 75)$$

07.25.03.5421.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{75} e^{-z} (-2048 z^4 - 4096 z^3 + 1044 z^2 - 420 z + 75) - \frac{1024}{75} \sqrt{\pi} z^{7/2} (2 z + 5) \operatorname{erf}(\sqrt{z})$$

07.25.03.5422.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (1048576 z^5 - 3670016 z^4 + 1671168 z^3 + 505380 z^2 + 230370 z + 51975) I_0\left(\frac{z}{2}\right) + e^{z/2} (-1048576 z^5 + 2621440 z^4 + 425984 z^3 + 210468 z^2 + 78270 z + 3675) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.5423.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{512}{75} \sqrt{\pi} (z-3) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{75} e^z (-512 z^4 + 1280 z^3 + 384 z^2 + 222 z + 75)$$

07.25.03.5424.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{75} e^{-z} (-512 z^4 - 1280 z^3 + 384 z^2 - 222 z + 75) - \frac{512}{75} \sqrt{\pi} z^{7/2} (z+3) \operatorname{erf}(\sqrt{z})$$

07.25.03.5425.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = \frac{8 e^{z/2} (524288 z^5 - 2097152 z^4 + 1032192 z^3 + 368640 z^2 + 233205 z + 85050) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (1048576 z^6 - 3145728 z^5 - 557056 z^4 - 344064 z^3 - 205290 z^2 - 26250 z + 4725) I_1\left(\frac{z}{2}\right)}{675675 z}$$

07.25.03.5426.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{128}{105} \sqrt{\pi} (2z-7) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{105} e^z (-256 z^4 + 768 z^3 + 256 z^2 + 192 z + 105)$$

07.25.03.5427.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{105} e^{-z} (-256 z^4 - 768 z^3 + 256 z^2 - 192 z + 105) - \frac{128}{105} \sqrt{\pi} z^{7/2} (2z+7) \operatorname{erf}(\sqrt{z})$$

07.25.03.5428.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = \frac{1}{3378375 z}$$

$$4 e^{z/2} (2097152 z^6 - 9437184 z^5 + 4915200 z^4 + 1966080 z^3 + 1612800 z^2 + 867510 z - 10395) I_0\left(\frac{z}{2}\right) - \frac{1}{3378375 z^2}$$

$$4 e^{z/2} (2097152 z^7 - 7340032 z^6 - 1376256 z^5 - 983040 z^4 - 844800 z^3 - 222390 z^2 + 91665 z - 41580) I_1\left(\frac{z}{2}\right)$$

07.25.03.5429.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{16}{15} \sqrt{\pi} (z-4) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{15} e^z (-16 z^4 + 56 z^3 + 20 z^2 + 18 z + 15)$$

07.25.03.5430.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{15} e^{-z} (-16 z^4 - 56 z^3 + 20 z^2 - 18 z + 15) - \frac{16}{15} \sqrt{\pi} z^{7/2} (z+4) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 &07.25.03.5431.01 \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, 5; z\right) &= \frac{1}{57432375 z^2} \left(32 e^{z/2} \right. \\
 &\quad \left.(2097152 z^7 - 10485760 z^6 + 5701632 z^5 + 2457600 z^4 + 2472960 z^3 + 1935360 z^2 - 155925 z + 135135\right) I_0\left(\frac{z}{2}\right) - \\
 &\quad \frac{1}{57432375 z^3} \left(32 e^{z/2} (2097152 z^8 - 8388608 z^7 - 1638400 z^6 - 1277952 z^5 - \right. \\
 &\quad \left.1459200 z^4 - 752640 z^3 + 579285 z^2 - 623700 z + 540540) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.5432.01 \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) &= \frac{4}{15} \sqrt{\pi} (2z - 9) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{15} e^z (-8z^4 + 32z^3 + 12z^2 + 12z + 15)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.5433.01 \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) &= \frac{1}{15} e^{-z} (-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15} \sqrt{\pi} z^{7/2} (2z + 9) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.5434.01 \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, 6; z\right) &= \\
 &\quad \frac{1}{218243025 z^3} \left(32 e^{z/2} (4194304 z^8 - 23068672 z^7 + 12976128 z^6 + 5898240 z^5 + 6666240 z^4 + 8709120 z^3 - \right. \\
 &\quad \left.4656960 z^2 + 10675665 z - 16216200) I_0\left(\frac{z}{2}\right) - \right. \\
 &\quad \left. \frac{1}{218243025 z^4} \left(32 e^{z/2} (4194304 z^9 - 18874368 z^8 - 3801088 z^7 - 3145728 z^6 - 4147200 z^5 - \right. \right. \\
 &\quad \left. \left. 5268480 z^4 + 8890560 z^3 - 20654865 z^2 + 42702660 z - 64864800) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 &07.25.03.5435.01 \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) &= \frac{1}{9} e^z (49136 z^4 - 74160 z^3 + 4608 z^2 - 108 z + 9) - \frac{1024}{3} \sqrt{\pi} (16 z^{9/2} - 32 z^{7/2} + 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.5436.01 \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) &= \\
 &\quad \frac{1}{9} e^{-z} (49136 z^4 + 74160 z^3 + 4608 z^2 + 108 z + 9) + \frac{1024}{3} \sqrt{\pi} (16 z^{9/2} + 32 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.5437.01 \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) &= \frac{1}{3} e^z (-8192 z^4 + 20488 z^3 - 4404 z^2 - 102 z + 3) + \frac{512}{3} \sqrt{\pi} (16 z^{9/2} - 48 z^{7/2} + 21 z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.5438.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-8192 z^4 - 20488 z^3 - 4404 z^2 + 102 z + 3) - \frac{512}{3} \sqrt{\pi} (16 z^{9/2} + 48 z^{7/2} + 21 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5439.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (1024 z^4 - 3584 z^3 + 1404 z^2 + 96 z + 3) - \frac{128}{3} \sqrt{\pi} (8 z^{9/2} - 32 z^{7/2} + 21 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5440.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (1024 z^4 + 3584 z^3 + 1404 z^2 - 96 z + 3) + \frac{128}{3} \sqrt{\pi} (8 z^{9/2} + 32 z^{7/2} + 21 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5441.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-131\,072 z^5 + 688\,128 z^4 - 832\,512 z^3 + 169\,098 z^2 + 15\,120 z + 945) I_0\left(\frac{z}{2}\right) + \frac{2}{945} e^{z/2} (65\,536 z^5 - 278\,528 z^4 + 170\,496 z^3 + 11\,589 z^2 + 1059 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.5442.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (512 z^4 - 2304 z^3 + 1344 z^2 + 150 z + 15) - \frac{64}{15} \sqrt{\pi} z^{5/2} (8 z^2 - 40 z + 35) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5443.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{64}{15} \sqrt{\pi} (8 z^2 + 40 z + 35) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{15} e^{-z} (512 z^4 + 2304 z^3 + 1344 z^2 - 150 z + 15)$$

07.25.03.5444.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2} (-262\,144 z^5 + 1\,638\,400 z^4 - 2\,377\,728 z^3 + 603\,648 z^2 + 80\,430 z + 10\,395) I_0\left(\frac{z}{2}\right) + e^{z/2} (262\,144 z^5 - 1\,376\,256 z^4 + 1\,132\,544 z^3 + 102\,912 z^2 + 17\,838 z + 525) I_1\left(\frac{z}{2}\right)}{10\,395}$$

07.25.03.5445.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{15} e^z (128 z^4 - 704 z^3 + 552 z^2 + 84 z + 15) - \frac{8}{15} \sqrt{\pi} z^{5/2} (16 z^2 - 96 z + 105) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5446.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{8}{15} \sqrt{\pi} (16 z^2 + 96 z + 105) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{15} e^{-z} (128 z^4 + 704 z^3 + 552 z^2 - 84 z + 15)$$

07.25.03.5447.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (262\,144 z^6 - 1\,638\,400 z^5 + 1\,697\,792 z^4 + 186\,880 z^3 + 48\,576 z^2 + 3675 z - 525) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (262\,144 z^5 - 1\,900\,544 z^4 + 3\,205\,120 z^3 - 953\,856 z^2 - 168\,000 z - 33\,915) I_1\left(\frac{z}{2}\right)}{135\,135 z}$$

07.25.03.5448.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{21} e^z (64 z^4 - 416 z^3 + 412 z^2 + 78 z + 21) - \frac{4}{21} \sqrt{\pi} z^{5/2} (16 z^2 - 112 z + 147) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5449.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{4}{21} \sqrt{\pi} (16z^2 + 112z + 147) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{21} e^{-z} (64z^4 + 416z^3 + 412z^2 - 78z + 21)$$

07.25.03.5450.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{675675z^2} 4e^{z/2} (524288z^7 - 3801088z^6 + 4755456z^5 + 599040z^4 + 209280z^3 + 30240z^2 - 9765z + 3780) I_1\left(\frac{z}{2}\right) - \frac{1}{675675z} 4e^{z/2} (524288z^6 - 4325376z^5 + 8294400z^4 - 2780160z^3 - 604800z^2 - 171360z + 945) I_0\left(\frac{z}{2}\right)$$

07.25.03.5451.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{3} e^z (4z^4 - 30z^3 + 36z^2 + 8z + 3) - \frac{1}{3} \sqrt{\pi} z^{5/2} (4z^2 - 32z + 49) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5452.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{3} \sqrt{\pi} (4z^2 + 32z + 49) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4z^4 + 30z^3 + 36z^2 - 8z + 3)$$

07.25.03.5453.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = \frac{1}{11486475z^3} (64e^{z/2} (262144z^8 - 2162688z^7 + 3172352z^6 + 440832z^5 + 192960z^4 + 48720z^3 - 28665z^2 + 26460z - 20790) I_1\left(\frac{z}{2}\right)) - \frac{1}{11486475z^2} 32e^{z/2} (524288z^7 - 4849664z^6 + 10407936z^5 - 3824640z^4 - 981120z^3 - 372960z^2 + 13230z - 10395) I_0\left(\frac{z}{2}\right)$$

07.25.03.5454.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{3} e^z (2z^4 - 17z^3 + 24z^2 + 6z + 3) - \frac{1}{6} \sqrt{\pi} z^{5/2} (4z^2 - 36z + 63) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5455.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{6} \sqrt{\pi} (4z^2 + 36z + 63) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (2z^4 + 17z^3 + 24z^2 - 6z + 3)$$

07.25.03.5456.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{43648605z^4} (32e^{z/2} (1048576z^9 - 9699328z^8 + 16326656z^7 + 2443264z^6 + 1254144z^5 + 598080z^4 - 737940z^3 + 1511055z^2 - 2952180z + 4324320) I_1\left(\frac{z}{2}\right)) - \frac{1}{43648605z^3} (32e^{z/2} (1048576z^8 - 10747904z^7 + 25501696z^6 - 10082304z^5 - 2929920z^4 - 1525440z^3 + 343980z^2 - 738045z + 1081080) I_0\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.5457.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (4096 z^4 - 16384 z^3 + 9972 z^2 - 300 z + 3) - \frac{128}{3} \sqrt{\pi} (32 z^{9/2} - 144 z^{7/2} + 126 z^{5/2} - 15 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5458.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (4096 z^4 + 16384 z^3 + 9972 z^2 + 300 z + 3) + \frac{128}{3} \sqrt{\pi} (32 z^{9/2} + 144 z^{7/2} + 126 z^{5/2} + 15 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5459.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (-512 z^4 + 2816 z^3 - 2880 z^2 + 294 z + 3) + \frac{64}{3} \sqrt{\pi} (8 z^{9/2} - 48 z^{7/2} + 63 z^{5/2} - 15 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5460.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-512 z^4 - 2816 z^3 - 2880 z^2 - 294 z + 3) - \frac{64}{3} \sqrt{\pi} (8 z^{9/2} + 48 z^{7/2} + 63 z^{5/2} + 15 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5461.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (65\,536 z^5 - 491\,520 z^4 + 978\,432 z^3 - 556\,032 z^2 + 46\,305 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-65\,536 z^5 + 425\,984 z^4 - 585\,216 z^3 + 118\,272 z^2 + 2433 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.5462.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{16}{15} \sqrt{\pi} (16 z^3 - 120 z^2 + 210 z - 75) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{15} e^z (-256 z^4 + 1792 z^3 - 2592 z^2 + 480 z + 15)$$

07.25.03.5463.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-256 z^4 - 1792 z^3 - 2592 z^2 - 480 z + 15) - \frac{16}{15} \sqrt{\pi} z^{3/2} (16 z^3 + 120 z^2 + 210 z + 75) \operatorname{erf}(\sqrt{z})$$

07.25.03.5464.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^{z/2} (131\,072 z^5 - 1\,179\,648 z^4 + 2\,878\,464 z^3 - 2\,084\,352 z^2 + 252\,000 z + 10\,395) I_0\left(\frac{z}{2}\right) + e^{z/2} (-131\,072 z^5 + 1\,048\,576 z^4 - 1\,895\,424 z^3 + 582\,144 z^2 + 21\,408 z + 315) I_1\left(\frac{z}{2}\right)}{10\,395}$$

07.25.03.5465.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{4}{15} \sqrt{\pi} (16 z^3 - 144 z^2 + 315 z - 150) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{15} e^z (-64 z^4 + 544 z^3 - 1020 z^2 + 282 z + 15)$$

07.25.03.5466.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-64 z^4 - 544 z^3 - 1020 z^2 - 282 z + 15) - \frac{4}{15} \sqrt{\pi} z^{3/2} (16 z^3 + 144 z^2 + 315 z + 150) \operatorname{erf}(\sqrt{z})$$

07.25.03.5467.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = \frac{64 e^{z/2} (8192 z^5 - 86016 z^4 + 248256 z^3 - 216384 z^2 + 33750 z + 2115) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (131072 z^6 - 1245184 z^5 + 2792448 z^4 - 1161216 z^3 - 60576 z^2 - 2160 z + 225) I_1\left(\frac{z}{2}\right)}{135135 z}$$

07.25.03.5468.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{21} \sqrt{\pi} (32 z^3 - 336 z^2 + 882 z - 525) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{21} e^z (-32 z^4 + 320 z^3 - 738 z^2 + 276 z + 21)$$

07.25.03.5469.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{21} e^{-z} (-32 z^4 - 320 z^3 - 738 z^2 - 276 z + 21) - \frac{1}{21} \sqrt{\pi} z^{3/2} (32 z^3 + 336 z^2 + 882 z + 525) \operatorname{erf}(\sqrt{z})$$

07.25.03.5470.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = \frac{1}{675675 z} 4 e^{z/2} (262144 z^6 - 3145728 z^5 + 10475520 z^4 - 10613760 z^3 + 2001600 z^2 + 169920 z - 315) I_0\left(\frac{z}{2}\right) - \frac{1}{675675 z^2} 4 e^{z/2} (262144 z^7 - 2883584 z^6 + 7723008 z^5 - 4070400 z^4 - 271680 z^3 - 17280 z^2 + 4005 z - 1260) I_1\left(\frac{z}{2}\right)$$

07.25.03.5471.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{6} \sqrt{\pi} (4 z^3 - 48 z^2 + 147 z - 105) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{3} e^z (-2 z^4 + 23 z^3 - 63 z^2 + 30 z + 3)$$

07.25.03.5472.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{3} e^{-z} (-2 z^4 - 23 z^3 - 63 z^2 - 30 z + 3) - \frac{1}{6} \sqrt{\pi} z^{3/2} (4 z^3 + 48 z^2 + 147 z + 105) \operatorname{erf}(\sqrt{z})$$

07.25.03.5473.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = \frac{1}{11486475 z^2} 32 e^{z/2} (262144 z^7 - 3538944 z^6 + 13350912 z^5 - 15360000 z^4 + 3360960 z^3 + 364320 z^2 - 4095 z + 2835) I_0\left(\frac{z}{2}\right) - \frac{1}{11486475 z^3} (32 e^{z/2} (262144 z^8 - 3276800 z^7 + 10205184 z^6 - 6531072 z^5 - 525120 z^4 - 53280 z^3 + 21825 z^2 - 16380 z + 11340) I_1\left(\frac{z}{2}\right))$$

07.25.03.5474.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{24} \sqrt{\pi} (8 z^3 - 108 z^2 + 378 z - 315) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{12} e^z (-4 z^4 + 52 z^3 - 165 z^2 + 96 z + 12)$$

$${}_{2}F_{2}\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{12} e^{-z} (-4z^4 - 52z^3 - 165z^2 - 96z + 12) - \frac{1}{24} \sqrt{\pi} z^{3/2} (8z^3 + 108z^2 + 378z + 315) \operatorname{erf}(\sqrt{z})$$

$${}_{2}F_{2}\left(-\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = \frac{1}{43\,648\,605 z^3} \left(32 e^{z/2} (524\,288 z^8 - 7\,864\,320 z^7 + 33\,140\,736 z^6 - 42\,571\,776 z^5 + 10\,500\,480 z^4 + 1\,416\,960 z^3 - 91\,350 z^2 + 178\,605 z - 249\,480) I_0\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605 z^4} \left(32 e^{z/2} (524\,288 z^9 - 7\,340\,032 z^8 + 26\,062\,848 z^7 - 19\,654\,656 z^6 - 1\,824\,384 z^5 - 293\,760 z^4 + 234\,090 z^3 - 396\,585 z^2 + 714\,420 z - 997\,920) I_1\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{1}{2}$

$${}_{2}F_{2}\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (64z^4 - 480z^3 + 800z^2 - 240z + 3) - \frac{2}{3} \sqrt{\pi} (32z^{9/2} - 256z^{7/2} + 504z^{5/2} - 240z^{3/2} + 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

$${}_{2}F_{2}\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (64z^4 + 480z^3 + 800z^2 + 240z + 3) + \frac{2}{3} \sqrt{\pi} (32z^{9/2} + 256z^{7/2} + 504z^{5/2} + 240z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

$${}_{2}F_{2}\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-8192z^5 + 79\,872z^4 - 220\,800z^3 + 199\,968z^2 - 47\,250z + 945) I_0\left(\frac{z}{2}\right) + \frac{2}{945} e^{z/2} (4096z^5 - 35\,840z^4 + 76\,608z^3 - 37\,200z^2 + 1689z) I_1\left(\frac{z}{2}\right)$$

$${}_{2}F_{2}\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (32z^4 - 304z^3 + 704z^2 - 360z + 15) - \frac{1}{15} \sqrt{\pi} \sqrt{z} (32z^4 - 320z^3 + 840z^2 - 600z + 75) \operatorname{erfi}(\sqrt{z})$$

$${}_{2}F_{2}\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (32z^4 + 304z^3 + 704z^2 + 360z + 15) + \frac{1}{15} \sqrt{\pi} \sqrt{z} (32z^4 + 320z^3 + 840z^2 + 600z + 75) \operatorname{erf}(\sqrt{z})$$

07.25.03.5482.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{e^{z/2} (-16384 z^5 + 192512 z^4 - 659712 z^3 + 771648 z^2 - 262500 z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (16384 z^5 - 176128 z^4 + 491776 z^3 - 351552 z^2 + 31908 z + 105) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.5483.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{30} e^z (16 z^4 - 184 z^3 + 546 z^2 - 399 z + 30) - \frac{1}{60} \sqrt{\pi} \sqrt{z} (32 z^4 - 384 z^3 + 1260 z^2 - 1200 z + 225) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5484.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{30} e^{-z} (16 z^4 + 184 z^3 + 546 z^2 + 399 z + 30) + \frac{1}{60} \sqrt{\pi} \sqrt{z} (32 z^4 + 384 z^3 + 1260 z^2 + 1200 z + 225) \operatorname{erf}(\sqrt{z})$$

07.25.03.5485.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (16384 z^6 - 208896 z^5 + 720128 z^4 - 681792 z^3 + 95076 z^2 + 705 z - 45) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (16384 z^5 - 225280 z^4 + 920832 z^3 - 1313856 z^2 + 574500 z - 33795) I_0\left(\frac{z}{2}\right)}{135135 z}$$

07.25.03.5486.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{84} e^z (16 z^4 - 216 z^3 + 782 z^2 - 747 z + 84) - \frac{1}{168} \sqrt{\pi} \sqrt{z} (32 z^4 - 448 z^3 + 1764 z^2 - 2100 z + 525) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5487.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{84} e^{-z} (16 z^4 + 216 z^3 + 782 z^2 + 747 z + 84) + \frac{1}{168} \sqrt{\pi} \sqrt{z} (32 z^4 + 448 z^3 + 1764 z^2 + 2100 z + 525) \operatorname{erf}(\sqrt{z})$$

07.25.03.5488.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, 4; z\right) = \frac{1}{675675 z^2} 4 e^{z/2} (32768 z^7 - 483328 z^6 + 1982976 z^5 - 2340480 z^4 + 446280 z^3 + 5490 z^2 - 765 z + 180) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (32768 z^6 - 516096 z^5 + 2449920 z^4 - 4114560 z^3 + 2176200 z^2 - 169110 z + 45) I_0\left(\frac{z}{2}\right)$$

07.25.03.5489.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{96} e^z (8 z^4 - 124 z^3 + 530 z^2 - 627 z + 96) - \frac{1}{192} \sqrt{\pi} \sqrt{z} (16 z^4 - 256 z^3 + 1176 z^2 - 1680 z + 525) \operatorname{erfi}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.5490.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{1}{96} e^{-z} (8z^4 + 124z^3 + 530z^2 + 627z + 96) + \frac{1}{192} \sqrt{\pi} \sqrt{z} (16z^4 + 256z^3 + 1176z^2 + 1680z + 525) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5491.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{1}{11486475 z^3} \\
 & 64 e^{z/2} (16384 z^8 - 274432 z^7 + 1305856 z^6 - 1847616 z^5 + 450660 z^4 + 8145 z^3 - 1935 z^2 + 1080 z - 630) I_1\left(\frac{z}{2}\right) - \\
 & \frac{1}{11486475 z^2} 32 e^{z/2} (32768 z^7 - 581632 z^6 + 3144192 z^5 - 6065280 z^4 + 3737160 z^3 - 359910 z^2 + 540 z - 315) I_0\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5492.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{192} e^z (8z^4 - 140z^3 + 690z^2 - 975z + 192) - \frac{1}{384} \sqrt{\pi} \sqrt{z} (16z^4 - 288z^3 + 1512z^2 - 2520z + 945) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5493.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{192} e^{-z} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} \sqrt{\pi} \sqrt{z} (16z^4 + 288z^3 + 1512z^2 + 2520z + 945) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5494.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \\
 & \frac{1}{43648605 z^4} \left(32 e^{z/2} (65536 z^9 - 1228800 z^8 + 6652928 z^7 - 10978560 z^6 + 3279504 z^5 + 82980 z^4 - \right. \\
 & \quad \left. 34650 z^3 + 43515 z^2 - 69300 z + 90720) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{43648605 z^3} \left(32 e^{z/2} (65536 z^8 - 1294336 z^7 + 7848960 z^6 - 17082624 z^5 + 11955600 z^4 - \right. \\
 & \quad \left. 1372140 z^3 + 10170 z^2 - 17325 z + 22680) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 1$

$$\begin{aligned}
 & \text{07.25.03.5495.01} \\
 & {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \frac{e^{z/2} (-4096 z^5 + 49152 z^4 - 173760 z^3 + 213600 z^2 - 80325 z + 4725) I_0\left(\frac{z}{2}\right) +}{4725} \\
 & \frac{e^{z/2} (4096 z^5 - 45056 z^4 + 130752 z^3 - 101280 z^2 + 12165 z) I_1\left(\frac{z}{2}\right)}{4725}
 \end{aligned}$$

07.25.03.5496.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \frac{e^{z/2} (-1024 z^5 + 14592 z^4 - 62808 z^3 + 97050 z^2 - 49140 z + 4725) I_0\left(\frac{z}{2}\right) + 2 e^{z/2} (512 z^5 - 6784 z^4 + 24876 z^3 - 26529 z^2 + 5295 z) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.5497.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{e^{z/2} (-512 z^5 + 8448 z^4 - 42852 z^3 + 79548 z^2 - 50085 z + 6615) I_0\left(\frac{z}{2}\right) + e^{z/2} (512 z^5 - 7936 z^4 + 35172 z^3 - 47832 z^2 + 13503 z) I_1\left(\frac{z}{2}\right)}{6615}$$

07.25.03.5498.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{945} e^{z/2} (-32 z^5 + 600 z^4 - 3504 z^3 + 7584 z^2 - 5670 z + 945) I_0\left(\frac{z}{2}\right) + \frac{2}{945} e^{z/2} (16 z^5 - 284 z^4 + 1476 z^3 - 2442 z^2 + 897 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.5499.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; 1, \frac{11}{2}; z\right) = \frac{1}{945} e^{z/2} (-16 z^5 + 336 z^4 - 2220 z^3 + 5484 z^2 - 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^5 - 320 z^4 + 1908 z^3 - 3720 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{3}{2}$

07.25.03.5500.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{150} e^z (32 z^4 - 384 z^3 + 1224 z^2 - 1040 z + 135) + \frac{\sqrt{\pi} (-64 z^5 + 800 z^4 - 2800 z^3 + 3000 z^2 - 750 z + 15) \operatorname{erfi}(\sqrt{z})}{300 \sqrt{z}}$$

07.25.03.5501.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{150} e^{-z} (32 z^4 + 384 z^3 + 1224 z^2 + 1040 z + 135) + \frac{\sqrt{\pi} (64 z^5 + 800 z^4 + 2800 z^3 + 3000 z^2 + 750 z + 15) \operatorname{erf}(\sqrt{z})}{300 \sqrt{z}}$$

07.25.03.5502.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{e^{z/2} (-8192 z^5 + 118784 z^4 - 524160 z^3 + 840960 z^2 - 454650 z + 51975) I_0\left(\frac{z}{2}\right) + e^{z/2} (8192 z^5 - 110592 z^4 + 417664 z^3 - 470400 z^2 + 108090 z - 525) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.5503.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{300} e^z (16z^4 - 232z^3 + 942z^2 - 1125z + 255) + \frac{\sqrt{\pi} (-32z^5 + 480z^4 - 2100z^3 + 3000z^2 - 1125z + 45) \operatorname{erfi}(\sqrt{z})}{600\sqrt{z}}$$

07.25.03.5504.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{300} e^{-z} (16z^4 + 232z^3 + 942z^2 + 1125z + 255) + \frac{\sqrt{\pi} (32z^5 + 480z^4 + 2100z^3 + 3000z^2 + 1125z + 45) \operatorname{erf}(\sqrt{z})}{600\sqrt{z}}$$

07.25.03.5505.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (8192z^6 - 131072z^5 + 609664z^4 - 902080z^3 + 309930z^2 - 3450z + 75) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (4096z^5 - 69632z^4 + 368320z^3 - 727200z^2 + 506325z - 84450) I_0\left(\frac{z}{2}\right)}{675675z}$$

07.25.03.5506.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (32z^4 - 544z^3 + 2684z^2 - 4140z + 1365)}{1680} + \frac{\sqrt{\pi} (-64z^5 + 1120z^4 - 5880z^3 + 10500z^2 - 5250z + 315) \operatorname{erfi}(\sqrt{z})}{3360\sqrt{z}}$$

07.25.03.5507.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32z^4 + 544z^3 + 2684z^2 + 4140z + 1365)}{1680} + \frac{\sqrt{\pi} (64z^5 + 1120z^4 + 5880z^3 + 10500z^2 + 5250z + 315) \operatorname{erf}(\sqrt{z})}{3360\sqrt{z}}$$

07.25.03.5508.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{1}{3378375z^2} 4 e^{z/2} (16384z^7 - 303104z^6 + 1675008z^5 - 3072000z^4 + 1413300z^3 - 26190z^2 + 1215z - 180) I_1\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (16384z^6 - 319488z^5 + 1969920z^4 - 4611840z^3 + 3899700z^2 - 844290z - 45) I_0\left(\frac{z}{2}\right)}{3378375z}$$

07.25.03.5509.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{960} e^z (8z^4 - 156z^3 + 906z^2 - 1715z + 750) + \frac{\sqrt{\pi} (-16z^5 + 320z^4 - 1960z^3 + 4200z^2 - 2625z + 210) \operatorname{erfi}(\sqrt{z})}{1920\sqrt{z}}$$

$$\begin{aligned}
 & \text{07.25.03.5510.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = & \\
 & \frac{1}{960} e^{-z} (8z^4 + 156z^3 + 906z^2 + 1715z + 750) + \frac{\sqrt{\pi} (16z^5 + 320z^4 + 1960z^3 + 4200z^2 + 2625z + 210) \operatorname{erf}(\sqrt{z})}{1920\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5511.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, 5; z\right) = & \frac{1}{57432375z^3} \\
 & 32 e^{z/2} (16384z^8 - 344064z^7 + 2202368z^6 - 4821120z^5 + 2788500z^4 - 75240z^3 + 5715z^2 - 1980z + 900) I_1\left(\frac{z}{2}\right) - \\
 & \frac{1}{57432375z^2} 32 e^{z/2} (16384z^7 - 360448z^6 + 2538240z^5 - 6867840z^4 + 6801300z^3 - 1793340z^2 - 495z + 225) I_0\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5512.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = & \\
 & \frac{e^z (16z^4 - 352z^3 + 2352z^2 - 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945) \operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5513.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = & \\
 & \frac{e^{-z} (16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5514.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, 6; z\right) = & \\
 & \frac{1}{218243025z^4} \left(32 e^{z/2} (32768z^9 - 770048z^8 + 5602816z^7 - 14256640z^6 + 9951720z^5 - 363780z^4 + \right. \\
 & \left. 43380z^3 - 32535z^2 + 42300z - 50400) I_1\left(\frac{z}{2}\right) \right) - \\
 & \frac{1}{218243025z^3} \left(32 e^{z/2} (32768z^8 - 802816z^7 + 6356480z^6 - 19507200z^5 + 22074600z^4 - \right. \\
 & \left. 6809580z^3 - 7740z^2 + 10575z - 12600) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 2$

$$\begin{aligned}
 & \text{07.25.03.5515.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; 2, \frac{5}{2}; z\right) = & \frac{e^{z/2} (-2048z^5 + 35328z^4 - 190704z^3 + 387780z^2 - 282870z + 51975) I_0\left(\frac{z}{2}\right)}{51975} + \\
 & \frac{e^{z/2} (2048z^5 - 33280z^4 + 158448z^3 - 243924z^2 + 91290z - 1575) I_1\left(\frac{z}{2}\right)}{51975}
 \end{aligned}$$

07.25.03.5516.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{e^{z/2}(-1024z^5 + 20480z^4 - 130728z^3 + 321468z^2 - 292740z + 72765)I_0\left(\frac{z}{2}\right)}{72765} + \frac{e^{z/2}(1024z^5 - 19456z^4 + 111784z^3 - 218388z^2 + 113988z - 3675)I_1\left(\frac{z}{2}\right)}{72765}$$

07.25.03.5517.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{e^{z/2}(-64z^5 + 1456z^4 - 10728z^3 + 30924z^2 - 33600z + 10395)I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2}(64z^5 - 1392z^4 + 9368z^3 - 22188z^2 + 14904z - 735)I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.5518.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; 2, \frac{11}{2}; z\right) = \frac{e^{z/2}(-32z^5 + 816z^4 - 6816z^3 + 22524z^2 - 28350z + 10395)I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2}(32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945)I_1\left(\frac{z}{2}\right)}{10395}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{5}{2}$

07.25.03.5519.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z(128z^5 - 2240z^4 + 11544z^3 - 19188z^2 + 7470z - 45)}{9600z} + \frac{\sqrt{\pi}(-256z^6 + 4608z^5 - 25200z^4 + 48000z^3 - 27000z^2 + 2160z + 45)\operatorname{erfi}(\sqrt{z})}{19200z^{3/2}}$$

07.25.03.5520.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(128z^5 + 2240z^4 + 11544z^3 + 19188z^2 + 7470z + 45)}{9600z} + \frac{\sqrt{\pi}(256z^6 + 4608z^5 + 25200z^4 + 48000z^3 + 27000z^2 + 2160z - 45)\operatorname{erf}(\sqrt{-z})}{19200z^{3/2}}$$

07.25.03.5521.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{4e^{z/2}(2048z^6 - 39424z^5 + 230832z^4 - 464772z^3 + 256980z^2 - 10125z - 225)I_1\left(\frac{z}{2}\right)}{675675z} - \frac{4e^{z/2}(2048z^5 - 41472z^4 + 269232z^3 - 677940z^2 + 639360z - 168975)I_0\left(\frac{z}{2}\right)}{675675}$$

07.25.03.5522.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z(128z^5 - 2624z^4 + 16392z^3 - 34956z^2 + 19530z - 315)}{26880z} + \frac{\sqrt{\pi}(-256z^6 + 5376z^5 - 35280z^4 + 84000z^3 - 63000z^2 + 7560z + 315)\operatorname{erfi}(\sqrt{z})}{53760z^{3/2}}$$

07.25.03.5523.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(128z^5 + 2624z^4 + 16392z^3 + 34956z^2 + 19530z + 315)}{26880z} + \frac{\sqrt{\pi}(256z^6 + 5376z^5 + 35280z^4 + 84000z^3 + 63000z^2 + 7560z - 315)\operatorname{erf}(\sqrt{z})}{53760z^{3/2}}$$

07.25.03.5524.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{1}{3378375z^2} 4e^{z/2}(4096z^7 - 91136z^6 + 633312z^5 - 1575720z^4 + 1156500z^3 - 75060z^2 - 3465z + 180)I_1\left(\frac{z}{2}\right) - \frac{4e^{z/2}(4096z^6 - 95232z^5 + 722400z^4 - 2167560z^3 + 2493900z^2 - 845460z + 45)I_0\left(\frac{z}{2}\right)}{3378375z}$$

07.25.03.5525.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z(32z^5 - 752z^4 + 5520z^3 - 14376z^2 + 10530z - 315)}{15360z} + \frac{\sqrt{\pi}(-64z^6 + 1536z^5 - 11760z^4 + 33600z^3 - 31500z^2 + 5040z + 315)\operatorname{erfi}(\sqrt{z})}{30720z^{3/2}}$$

07.25.03.5526.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(32z^5 + 752z^4 + 5520z^3 + 14376z^2 + 10530z + 315)}{15360z} + \frac{\sqrt{\pi}(64z^6 + 1536z^5 + 11760z^4 + 33600z^3 + 31500z^2 + 5040z - 315)\operatorname{erf}(\sqrt{z})}{30720z^{3/2}}$$

07.25.03.5527.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{1}{57432375z^3} - \frac{64e^{z/2}(2048z^8 - 51712z^7 + 415920z^6 - 1232388z^5 + 1129500z^4 - 105030z^3 - 7605z^2 + 900z - 270)I_1\left(\frac{z}{2}\right)}{57432375z^2} - \frac{32e^{z/2}(4096z^7 - 107520z^6 + 933216z^5 - 3249000z^4 + 4398480z^3 - 1798560z^2 + 450z - 135)I_0\left(\frac{z}{2}\right)}{57432375z^2}$$

07.25.03.5528.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{e^z(32z^5 - 848z^4 + 7152z^3 - 22008z^2 + 20010z - 945)}{30720z} + \frac{\sqrt{\pi}(-64z^6 + 1728z^5 - 15120z^4 + 50400z^3 - 56700z^2 + 11340z + 945)\operatorname{erfi}(\sqrt{z})}{61440z^{3/2}}$$

$$\begin{aligned}
 & \text{07.25.03.5529.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) &= \frac{e^{-z} (32 z^5 + 848 z^4 + 7152 z^3 + 22008 z^2 + 20010 z + 945)}{30720 z} + \\
 & \frac{\sqrt{\pi} (64 z^6 + 1728 z^5 + 15120 z^4 + 50400 z^3 + 56700 z^2 + 11340 z - 945) \operatorname{erf}(\sqrt{z})}{61440 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5530.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, 6; z\right) &= \\
 & \frac{1}{218243025 z^4} \left(32 e^{z/2} (8192 z^9 - 231424 z^8 + 2114496 z^7 - 7270224 z^6 + 7998120 z^5 - 984420 z^4 - 101160 z^3 + \right. \\
 & \left. 23715 z^2 - 21060 z + 21600) I_1\left(\frac{z}{2}\right) - \frac{1}{218243025 z^3} \left(32 e^{z/2} \right. \right. \\
 & \left. \left. (8192 z^8 - 239616 z^7 + 2341824 z^6 - 9277200 z^5 + 14416920 z^4 - 6845220 z^3 + 5760 z^2 - 5265 z + 5400) I_0\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 3$

$$\begin{aligned}
 & \text{07.25.03.5531.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; 3, \frac{7}{2}; z\right) &= \frac{4 e^{z/2} (1024 z^6 - 23040 z^5 + 162632 z^4 - 414360 z^3 + 317016 z^2 - 23100 z - 1575) I_1\left(\frac{z}{2}\right) -}{945945 z} \\
 & \frac{16 e^{z/2} (256 z^5 - 6016 z^4 + 46290 z^3 - 141624 z^2 + 167475 z - 59220) I_0\left(\frac{z}{2}\right)}{945945}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5532.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; 3, \frac{9}{2}; z\right) &= \frac{4 e^{z/2} (64 z^6 - 1648 z^5 + 13616 z^4 - 41972 z^3 + 41088 z^2 - 4515 z - 525) I_1\left(\frac{z}{2}\right) -}{135135 z} \\
 & \frac{4 e^{z/2} (64 z^5 - 1712 z^4 + 15232 z^3 - 54828 z^2 + 77700 z - 33915) I_0\left(\frac{z}{2}\right)}{135135}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5533.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; 3, \frac{11}{2}; z\right) &= \frac{4 e^{z/2} (32 z^6 - 928 z^5 + 8784 z^4 - 31776 z^3 + 37938 z^2 - 5670 z - 945) I_1\left(\frac{z}{2}\right) -}{135135 z} \\
 & \frac{8 e^{z/2} (16 z^5 - 480 z^4 + 4848 z^3 - 20064 z^2 + 33075 z - 17010) I_0\left(\frac{z}{2}\right)}{135135}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.5534.01} \\
 {}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) &= \frac{e^z (256 z^6 - 6144 z^5 + 46448 z^4 - 126528 z^3 + 100464 z^2 - 4200 z - 315)}{150528 z^2} + \\
 & \frac{1}{301056 z^{5/2}} \sqrt{\pi} (-512 z^7 + 12544 z^6 - 98784 z^5 + 294000 z^4 - 294000 z^3 + 52920 z^2 + 4410 z + 315) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.5535.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(256z^6 + 6144z^5 + 46448z^4 + 126528z^3 + 100464z^2 + 4200z - 315)}{150528z^2} + \frac{\sqrt{\pi}(512z^7 + 12544z^6 + 98784z^5 + 294000z^4 + 294000z^3 + 52920z^2 - 4410z + 315)\operatorname{erf}(\sqrt{z})}{301056z^{5/2}}$$

07.25.03.5536.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{1}{4729725z^2} 4e^{z/2}(2048z^7 - 53248z^6 + 445776z^5 - 1400760z^4 + 1414980z^3 - 167580z^2 - 22995z - 1260)I_1\left(\frac{z}{2}\right) - \frac{4e^{z/2}(2048z^6 - 55296z^5 + 498000z^4 - 1821960z^3 + 2639700z^2 - 1188180z - 315)I_0\left(\frac{z}{2}\right)}{4729725z}$$

07.25.03.5537.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z(32z^6 - 880z^5 + 7808z^4 - 25896z^3 + 26754z^2 - 1995z - 315)}{43008z^2} + \frac{\sqrt{\pi}(-64z^7 + 1792z^6 - 16464z^5 + 58800z^4 - 73500z^3 + 17640z^2 + 2205z + 315)\operatorname{erfi}(\sqrt{z})}{86016z^{5/2}}$$

07.25.03.5538.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(32z^6 + 880z^5 + 7808z^4 + 25896z^3 + 26754z^2 + 1995z - 315)}{43008z^2} + \frac{\sqrt{\pi}(64z^7 + 1792z^6 + 16464z^5 + 58800z^4 + 73500z^3 + 17640z^2 - 2205z + 315)\operatorname{erf}(\sqrt{z})}{86016z^{5/2}}$$

07.25.03.5539.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{1}{80405325z^3} 32e^{z/2}(2048z^8 - 60416z^7 + 585104z^6 - 2186496z^5 + 2747220z^4 - 459480z^3 - 94815z^2 - 11340z + 1260)I_1\left(\frac{z}{2}\right) - \frac{1}{80405325z^2} 32e^{z/2}(2048z^7 - 62464z^6 + 644496z^5 - 2743440z^4 + 4695180z^3 - 2536380z^2 - 2835z + 315)I_0\left(\frac{z}{2}\right)$$

07.25.03.5540.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{e^z(64z^6 - 1984z^5 + 20208z^4 - 79008z^3 + 100716z^2 - 11340z - 2835)}{172032z^2} + \frac{1}{344064z^{5/2}} \sqrt{\pi}(-128z^7 + 4032z^6 - 42336z^5 + 176400z^4 - 264600z^3 + 79380z^2 + 13230z + 2835)\operatorname{erfi}(\sqrt{z})$$

07.25.03.5541.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z}(64z^6 + 1984z^5 + 20208z^4 + 79008z^3 + 100716z^2 + 11340z - 2835)}{172032z^2} + \frac{1}{344064z^{5/2}} \sqrt{\pi}(128z^7 + 4032z^6 + 42336z^5 + 176400z^4 + 264600z^3 + 79380z^2 - 13230z + 2835)\operatorname{erf}(\sqrt{z})$$

07.25.03.5542.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \frac{1}{305\,540\,235\,z^4} \left(32 e^{z/2} (4096 z^9 - 135\,168 z^8 + 1\,486\,496 z^7 - 6\,439\,056 z^6 + 9\,681\,504 z^5 - 2\,113\,860 z^4 - 578\,970 z^3 - 119\,385 z^2 + 39\,060 z - 30\,240) I_1\left(\frac{z}{2}\right) - \frac{1}{305\,540\,235\,z^3} \left(32 e^{z/2} (4096 z^8 - 139\,264 z^7 + 1\,619\,616 z^6 - 7\,862\,064 z^5 + 15\,499\,680 z^4 - 9\,693\,180 z^3 - 29\,610 z^2 + 9765 z - 7560) I_0\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 4$

07.25.03.5543.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; 4, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (128 z^7 - 3808 z^6 + 37\,296 z^5 - 141\,600 z^4 + 182\,340 z^3 - 32\,130 z^2 - 7245 z - 1260) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (128 z^6 - 3936 z^5 + 41\,040 z^4 - 177\,120 z^3 + 308\,700 z^2 - 170\,730 z - 315) I_0\left(\frac{z}{2}\right)}{675\,675\,z^2}$$

07.25.03.5544.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; 4, \frac{11}{2}; z\right) = \frac{4 e^{z/2} (64 z^7 - 2144 z^6 + 24\,048 z^5 - 107\,040 z^4 + 167\,640 z^3 - 39\,690 z^2 - 12\,285 z - 3780) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (64 z^6 - 2208 z^5 + 26\,160 z^4 - 130\,080 z^3 + 264\,600 z^2 - 171\,990 z - 945) I_0\left(\frac{z}{2}\right)}{675\,675\,z}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{9}{2}$

07.25.03.5545.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 - 4032 z^6 + 41\,952 z^5 - 169\,040 z^4 + 226\,008 z^3 - 28\,980 z^2 - 9030 z - 1575)}{393\,216\,z^3} + \frac{1}{786\,432\,z^{7/2}} - \sqrt{\pi} (-256 z^8 + 8192 z^7 - 87\,808 z^6 + 376\,320 z^5 - 588\,000 z^4 + 188\,160 z^3 + 35\,280 z^2 + 10\,080 z + 1575) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5546.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 4032 z^6 + 41\,952 z^5 + 169\,040 z^4 + 226\,008 z^3 + 28\,980 z^2 - 9030 z + 1575)}{393\,216\,z^3} + \frac{1}{786\,432\,z^{7/2}} - \sqrt{\pi} (256 z^8 + 8192 z^7 + 87\,808 z^6 + 376\,320 z^5 + 588\,000 z^4 + 188\,160 z^3 - 35\,280 z^2 + 10\,080 z - 1575) \operatorname{erf}(\sqrt{z})$$

07.25.03.5547.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{1}{11486475 z^3} \left(64 e^{z/2} (64 z^8 - 2160 z^7 + 24464 z^6 - 110352 z^5 + 176280 z^4 - 43365 z^3 - 14175 z^2 - 5040 z - 630) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (128 z^7 - 4448 z^6 + 53184 z^5 - 267600 z^4 + 552720 z^3 - 366030 z^2 - 2520 z - 315) I_0\left(\frac{z}{2}\right) \right) - \frac{1}{11486475 z^2}$$

07.25.03.5548.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (128 z^7 - 4544 z^6 + 54240 z^5 - 257232 z^4 + 422616 z^3 - 79380 z^2 - 35910 z - 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} + \frac{\sqrt{\pi} (-256 z^8 + 9216 z^7 - 112896 z^6 + 564480 z^5 - 1058400 z^4 + 423360 z^3 + 105840 z^2 + 45360 z + 14175) \operatorname{erfi}(\sqrt{z})}{1572864 z^{7/2}}$$

07.25.03.5549.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 4544 z^6 + 54240 z^5 + 257232 z^4 + 422616 z^3 + 79380 z^2 - 35910 z + 14175)}{786432 z^3} + \frac{1}{1572864 z^{7/2}} + \frac{\sqrt{\pi} (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175) \operatorname{erf}(\sqrt{z})}{1572864 z^{7/2}}$$

07.25.03.5550.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{1}{43648605 z^4} \left(32 e^{z/2} (256 z^9 - 9664 z^8 + 124256 z^7 - 649232 z^6 + 1238592 z^5 - 393960 z^4 - 166110 z^3 - 87885 z^2 - 28980 z + 10080) I_1\left(\frac{z}{2}\right) - \frac{1}{43648605 z^3} \right) - \frac{1}{43648605 z^4} \left(32 e^{z/2} (256 z^8 - 9920 z^7 + 133792 z^6 - 768912 z^5 + 1834560 z^4 - 1405320 z^3 - 22050 z^2 - 7245 z + 2520) I_0\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 5$

07.25.03.5551.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; 5, \frac{11}{2}; z\right) = \frac{1}{11486475 z^3} \left(32 e^{z/2} (64 z^8 - 2432 z^7 + 31536 z^6 - 166656 z^5 + 323160 z^4 - 105840 z^3 - 46305 z^2 - 26460 z - 11340) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^7 - 2496 z^6 + 33936 z^5 - 197040 z^4 + 476280 z^3 - 370440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right) \right) - \frac{1}{11486475 z^2}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{11}{2}$

07.25.03.5552.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{3\,145\,728\,z^4} e^z (256\,z^8 - 10\,240\,z^7 + 140\,160\,z^6 - 781\,440\,z^5 + 1\,572\,864\,z^4 - 423\,360\,z^3 - 264\,600\,z^2 - 189\,000\,z - 99\,225) + \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (-512\,z^9 + 20\,736\,z^8 - 290\,304\,z^7 + 1\,693\,440\,z^6 - 3\,810\,240\,z^5 + 1\,905\,120\,z^4 + 635\,040\,z^3 + 408\,240\,z^2 + 255\,150\,z + 99\,225) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.5553.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{3\,145\,728\,z^4} e^{-z} (256\,z^8 + 10\,240\,z^7 + 140\,160\,z^6 + 781\,440\,z^5 + 1\,572\,864\,z^4 + 423\,360\,z^3 - 264\,600\,z^2 + 189\,000\,z - 99\,225) + \frac{1}{6\,291\,456\,z^{9/2}} \left(\sqrt{\pi} (512\,z^9 + 20\,736\,z^8 + 290\,304\,z^7 + 1\,693\,440\,z^6 + 3\,810\,240\,z^5 + 1\,905\,120\,z^4 - 635\,040\,z^3 + 408\,240\,z^2 - 255\,150\,z + 99\,225) \operatorname{erf}(\sqrt{-z})\right)$$

07.25.03.5554.01

$${}_2F_2\left(-\frac{9}{2}, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{1}{43\,648\,605\,z^4} \left(32\,e^{z/2} (128\,z^9 - 5440\,z^8 + 80\,064\,z^7 - 489\,840\,z^6 + 1\,132\,752\,z^5 - 476\,280\,z^4 - 264\,600\,z^3 - 214\,515\,z^2 - 170\,100\,z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} 32\,e^{z/2} (128\,z^8 - 5568\,z^7 + 85\,440\,z^6 - 567\,312\,z^5 + 1\,587\,600\,z^4 - 1\,428\,840\,z^3 - 52\,920\,z^2 - 42\,525\,z - 22\,680) I_0\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = -\frac{11}{2}$

07.25.03.5555.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{1\,715\,175} (-16\,z^{12} - 1008\,z^{11} - 23\,424\,z^{10} - 249\,592\,z^9 - 1\,216\,395\,z^8 - 2\,221\,785\,z^7 - 443\,520\,z^6 - 120\,960\,z^5 + 272\,160\,z^4 - 504\,000\,z^3 + 926\,100\,z^2 - 1\,530\,900\,z + 1\,715\,175) + \frac{1}{3\,430\,350} \left(e^z \sqrt{\pi} (-32\,z^{25/2} - 2032\,z^{23/2} - 47\,840\,z^{21/2} - 521\,640\,z^{19/2} - 2\,661\,330\,z^{17/2} - 5\,460\,315\,z^{15/2} - 2\,340\,135\,z^{13/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.5556.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{1715175} (-16z^{12} + 1008z^{11} - 23424z^{10} + 249592z^9 - 1216395z^8 + 2221785z^7 - 443520z^6 + 120960z^5 + 272160z^4 + 504000z^3 + 926100z^2 + 1530900z + 1715175) + \frac{1}{3430350} (e^{-z}\sqrt{\pi} (32z^{25/2} - 2032z^{23/2} + 47840z^{21/2} - 521640z^{19/2} + 2661330z^{17/2} - 5460315z^{15/2} + 2340135z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.5557.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{311850} (16z^{11} + 912z^{10} + 18872z^9 + 174540z^8 + 701145z^7 + 887040z^6 - 241920z^5 + 181440z^4 - 201600z^3 + 264600z^2 - 340200z + 311850) + \frac{1}{623700} e^z \sqrt{\pi} (32z^{23/2} + 1840z^{21/2} + 38640z^{19/2} + 367080z^{17/2} + 1560090z^{15/2} + 2340135z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5558.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{311850} (-16z^{11} + 912z^{10} - 18872z^9 + 174540z^8 - 701145z^7 + 887040z^6 + 241920z^5 + 181440z^4 + 201600z^3 + 264600z^2 + 340200z + 311850) + \frac{1}{623700} e^{-z} \sqrt{\pi} (32z^{23/2} - 1840z^{21/2} + 38640z^{19/2} - 367080z^{17/2} + 1560090z^{15/2} - 2340135z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5559.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{69300} (-16z^{10} - 816z^9 - 14800z^8 - 115728z^7 - 360415z^6 - 208995z^5 + 362880z^4 - 134400z^3 + 105840z^2 - 97200z + 69300) + \frac{1}{138600} e^z \sqrt{\pi} (-32z^{21/2} - 1648z^{19/2} - 30400z^{17/2} - 245480z^{15/2} - 823650z^{13/2} - 692835z^{11/2} + 692835z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5560.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{69300} (-16z^{10} + 816z^9 - 14800z^8 + 115728z^7 - 360415z^6 + 208995z^5 + 362880z^4 + 134400z^3 + 105840z^2 + 97200z + 69300) + \frac{1}{138600} e^{-z} \sqrt{\pi} (32z^{21/2} - 1648z^{19/2} + 30400z^{17/2} - 245480z^{15/2} + 823650z^{13/2} - 692835z^{11/2} - 692835z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5561.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{19800} (16z^9 + 720z^8 + 11208z^7 + 71236z^6 + 151485z^5 - 69390z^4 - 268800z^3 + 70560z^2 - 38880z + 19800) + \frac{1}{39600} e^z \sqrt{\pi} (32z^{19/2} + 1456z^{17/2} + 23120z^{15/2} + 153000z^{13/2} + 364650z^{11/2} - 36465z^{9/2} - 656370z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5562.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{19800} (-16z^9 + 720z^8 - 11208z^7 + 71236z^6 - 151485z^5 - 69390z^4 + 268800z^3 + 70560z^2 + 38880z + 19800) + \frac{1}{39600} e^{-z} \sqrt{\pi} (32z^{19/2} - 1456z^{17/2} + 23120z^{15/2} - 153000z^{13/2} + 364650z^{11/2} + 36465z^{9/2} - 656370z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5563.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{-16z^8 - 624z^7 - 8096z^6 - 39144z^5 - 37395z^4 + 132195z^3 + 141120z^2 - 25920z + 7920}{7920} + \frac{1}{15840} e^z \sqrt{\pi} (-32z^{17/2} - 1264z^{15/2} - 16800z^{13/2} - 85800z^{11/2} - 107250z^{9/2} + 250965z^{7/2} + 405405z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5564.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{-16z^8 + 624z^7 - 8096z^6 + 39144z^5 - 37395z^4 - 132195z^3 + 141120z^2 + 25920z + 7920}{7920} + \frac{1}{15840} e^{-z} \sqrt{\pi} (32z^{17/2} - 1264z^{15/2} + 16800z^{13/2} - 85800z^{11/2} + 107250z^{9/2} + 250965z^{7/2} - 405405z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5565.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{16z^7 + 528z^6 + 5464z^5 + 17532z^4 - 13055z^3 - 102060z^2 - 51840z + 5280}{5280} + \frac{1}{10560} e^z \sqrt{\pi} (32z^{15/2} + 1072z^{13/2} + 11440z^{11/2} + 40040z^{9/2} - 12870z^{7/2} - 225225z^{5/2} - 180180z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5566.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{-16z^7 + 528z^6 - 5464z^5 + 17532z^4 + 13055z^3 - 102060z^2 + 51840z + 5280}{5280} + \frac{1}{10560} e^{-z} \sqrt{\pi} (32z^{15/2} - 1072z^{13/2} + 11440z^{11/2} - 40040z^{9/2} - 12870z^{7/2} + 225225z^{5/2} - 180180z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5567.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{-16z^6 - 432z^5 - 3312z^4 - 4480z^3 + 25305z^2 + 51705z + 10560}{10560} + \frac{1}{21120} e^z \sqrt{\pi} (-32z^{13/2} - 880z^{11/2} - 7040z^{9/2} - 11880z^{7/2} + 48510z^{5/2} + 128205z^{3/2} + 51975\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5568.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{-16z^6 + 432z^5 - 3312z^4 + 4480z^3 + 25305z^2 - 51705z + 10560}{10560} + \frac{1}{21120} e^{-z} \sqrt{\pi} (32z^{13/2} - 880z^{11/2} + 7040z^{9/2} - 11880z^{7/2} - 48510z^{5/2} + 128205z^{3/2} - 51975\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5569.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, 1; z\right) = -\frac{e^z (2z^6 + 49z^5 + 325z^4 + 200z^3 - 3000z^2 - 5160z - 1320)}{1320}$$

07.25.03.5570.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{-16z^5 - 336z^4 - 1640z^3 + 1932z^2 + 19035z + 15450}{21120} + \frac{e^z \sqrt{\pi} (-32z^6 - 688z^5 - 3600z^4 + 2520z^3 + 40950z^2 + 46305z + 5670) \operatorname{erf}(\sqrt{z})}{42240\sqrt{z}}$$

07.25.03.5571.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{16z^5 - 336z^4 + 1640z^3 + 1932z^2 - 19035z + 15450}{21120} + \frac{e^{-z} \sqrt{\pi} (-32z^6 + 688z^5 - 3600z^4 - 2520z^3 + 40950z^2 - 46305z + 5670) \operatorname{erfi}(\sqrt{z})}{42240\sqrt{z}}$$

07.25.03.5572.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, 2; z\right) = -\frac{e^z (2z^5 + 37z^4 + 140z^3 - 360z^2 - 1920z - 1320)}{1320}$$

07.25.03.5573.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{-16z^5 - 240z^4 - 448z^3 + 3624z^2 + 8165z + 735}{14080z} + \frac{e^z \sqrt{\pi} (-32z^6 - 496z^5 - 1120z^4 + 7000z^3 + 19950z^2 + 6405z - 735) \operatorname{erf}(\sqrt{z})}{28160z^{3/2}}$$

07.25.03.5574.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-16z^5 + 240z^4 - 448z^3 - 3624z^2 + 8165z - 735}{14080z} + \frac{e^{-z} \sqrt{\pi} (32z^6 - 496z^5 + 1120z^4 + 7000z^3 - 19950z^2 + 6405z + 735) \operatorname{erfi}(\sqrt{z})}{28160z^{3/2}}$$

07.25.03.5575.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, 3; z\right) = -\frac{1}{660} e^z (2z^4 + 25z^3 + 15z^2 - 420z - 660)$$

07.25.03.5576.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{-16z^5 - 144z^4 + 264z^3 + 2516z^2 + 855z - 360}{5632z^2} + \frac{e^z \sqrt{\pi} (-32z^6 - 304z^5 + 400z^4 + 5400z^3 + 3750z^2 - 1095z + 360) \operatorname{erf}(\sqrt{z})}{11264z^{5/2}}$$

07.25.03.5577.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{16z^5 - 144z^4 - 264z^3 + 2516z^2 - 855z - 360}{5632z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^6 + 304z^5 + 400z^4 - 5400z^3 + 3750z^2 + 1095z + 360) \operatorname{erfi}(\sqrt{z})}{11264z^{5/2}}$$

$$07.25.03.5578.01$$

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, 4; z\right) = -\frac{1}{220} e^z (2z^3 + 13z^2 - 50z - 220)$$

$$07.25.03.5579.01$$

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{7(16z^5 + 48z^4 - 496z^3 - 528z^2 + 495z - 405)}{11264z^3} - \frac{7e^z \sqrt{\pi} (32z^6 + 112z^5 - 960z^4 - 1560z^3 + 930z^2 - 765z + 405) \operatorname{erf}(\sqrt{z})}{22528z^{7/2}}$$

$$07.25.03.5580.01$$

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (32z^6 - 112z^5 - 960z^4 + 1560z^3 + 930z^2 + 765z + 405) \operatorname{erfi}(\sqrt{z})}{22528z^{7/2}} - \frac{7(16z^5 - 48z^4 - 496z^3 + 528z^2 + 495z + 405)}{11264z^3}$$

$$07.25.03.5581.01$$

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, 5; z\right) = -\frac{1}{55} e^z (2z^2 + z - 55)$$

$$07.25.03.5582.01$$

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, \frac{11}{2}; z\right) = -\frac{63(16z^5 - 48z^4 - 248z^3 + 420z^2 - 755z + 1050)}{22528z^4} - \frac{63e^z \sqrt{\pi} (32z^6 - 80z^5 - 560z^4 + 680z^3 - 1110z^2 + 1455z - 1050) \operatorname{erf}(\sqrt{z})}{45056z^{9/2}}$$

$$07.25.03.5583.01$$

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{63(16z^5 + 48z^4 - 248z^3 - 420z^2 - 755z - 1050)}{22528z^4} - \frac{63e^{-z} \sqrt{\pi} (32z^6 + 80z^5 - 560z^4 - 680z^3 - 1110z^2 - 1455z - 1050) \operatorname{erfi}(\sqrt{z})}{45056z^{9/2}}$$

$$07.25.03.5584.01$$

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{11}{2}, 6; z\right) = -\frac{1}{11} e^z (2z - 11)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = -\frac{9}{2}$

$$07.25.03.5585.01$$

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{56700} (-16z^{10} - 832z^9 - 15552z^8 - 128280z^7 - 451395z^6 - 483840z^5 + 120960z^4 - 80640z^3 + 75600z^2 - 75600z + 56700) + \frac{1}{113400} e^z \sqrt{\pi} (-32z^{21/2} - 1680z^{19/2} - 31920z^{17/2} - 271320z^{15/2} - 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5586.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{56700} (-16z^{10} + 832z^9 - 15552z^8 + 128280z^7 - 451395z^6 + 483840z^5 + 120960z^4 + 80640z^3 + 75600z^2 + 75600z + 56700) + \frac{1}{113400} e^{-z} \sqrt{\pi} (32z^{21/2} - 1680z^{19/2} + 31920z^{17/2} - 271320z^{15/2} + 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5587.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{12600} (16z^9 + 752z^8 + 12552z^7 + 90980z^6 + 274845z^5 + 241920z^4 - 53760z^3 + 30240z^2 - 21600z + 12600) + \frac{e^z \sqrt{\pi} (32z^{19/2} + 1520z^{17/2} + 25840z^{15/2} + 193800z^{13/2} + 629850z^{11/2} + 692835z^{9/2}) \operatorname{erf}(\sqrt{z})}{25200}$$

07.25.03.5588.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{12600} (-16z^9 + 752z^8 - 12552z^7 + 90980z^6 - 274845z^5 + 241920z^4 + 53760z^3 + 30240z^2 + 21600z + 12600) + \frac{1}{25200} e^{-z} \sqrt{\pi} (32z^{19/2} - 1520z^{17/2} + 25840z^{15/2} - 193800z^{13/2} + 629850z^{11/2} - 692835z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5589.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{-16z^8 - 672z^7 - 9872z^6 - 61680z^5 - 155655z^4 - 107520z^3 + 20160z^2 - 8640z + 3600}{3600} + \frac{e^z \sqrt{\pi} (-32z^{17/2} - 1360z^{15/2} - 20400z^{13/2} - 132600z^{11/2} - 364650z^{9/2} - 328185z^{7/2}) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.5590.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{-16z^8 + 672z^7 - 9872z^6 + 61680z^5 - 155655z^4 + 107520z^3 + 20160z^2 + 8640z + 3600}{3600} + \frac{e^{-z} \sqrt{\pi} (32z^{17/2} - 1360z^{15/2} + 20400z^{13/2} - 132600z^{11/2} + 364650z^{9/2} - 328185z^{7/2}) \operatorname{erfi}(\sqrt{z})}{7200}$$

07.25.03.5591.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{16z^7 + 592z^6 + 7512z^5 + 39420z^4 + 79905z^3 + 40320z^2 - 5760z + 1440}{1440} + \frac{e^z \sqrt{\pi} (32z^{15/2} + 1200z^{13/2} + 15600z^{11/2} + 85800z^{9/2} + 193050z^{7/2} + 135135z^{5/2}) \operatorname{erf}(\sqrt{z})}{2880}$$

07.25.03.5592.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{-16z^7 + 592z^6 - 7512z^5 + 39420z^4 - 79905z^3 + 40320z^2 + 5760z + 1440}{1440} + \frac{e^{-z} \sqrt{\pi} (32z^{15/2} - 1200z^{13/2} + 15600z^{11/2} - 85800z^{9/2} + 193050z^{7/2} - 135135z^{5/2}) \operatorname{erfi}(\sqrt{z})}{2880}$$

07.25.03.5593.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{960} (-16 z^6 - 512 z^5 - 5472 z^4 - 23\,240 z^3 - 35\,595 z^2 - 11\,520 z + 960) + \frac{e^z \sqrt{\pi} (-32 z^{13/2} - 1040 z^{11/2} - 11\,440 z^{9/2} - 51\,480 z^{7/2} - 90\,090 z^{5/2} - 45\,045 z^{3/2}) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.5594.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{960} (-16 z^6 + 512 z^5 - 5472 z^4 + 23\,240 z^3 - 35\,595 z^2 + 11\,520 z + 960) + \frac{e^{-z} \sqrt{\pi} (32 z^{13/2} - 1040 z^{11/2} + 11\,440 z^{9/2} - 51\,480 z^{7/2} + 90\,090 z^{5/2} - 45\,045 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.5595.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{16 z^5 + 432 z^4 + 3752 z^3 + 12\,180 z^2 + 12\,645 z + 1920}{1920} + \frac{e^z \sqrt{\pi} (32 z^{11/2} + 880 z^{9/2} + 7920 z^{7/2} + 27\,720 z^{5/2} + 34\,650 z^{3/2} + 10\,395 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.5596.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{-16 z^5 + 432 z^4 - 3752 z^3 + 12\,180 z^2 - 12\,645 z + 1920}{1920} + \frac{e^{-z} \sqrt{\pi} (32 z^{11/2} - 880 z^{9/2} + 7920 z^{7/2} - 27\,720 z^{5/2} + 34\,650 z^{3/2} - 10\,395 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.5597.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, 1; z\right) = \frac{1}{120} e^z (z^5 + 25 z^4 + 200 z^3 + 600 z^2 + 600 z + 120)$$

07.25.03.5598.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{16 z^4 + 352 z^3 + 2352 z^2 + 5280 z + 2895}{3840} + \frac{e^z \sqrt{\pi} (32 z^5 + 720 z^4 + 5040 z^3 + 12\,600 z^2 + 9450 z + 945) \operatorname{erf}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.5599.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{16 z^4 - 352 z^3 + 2352 z^2 - 5280 z + 2895}{3840} + \frac{e^{-z} \sqrt{\pi} (-32 z^5 + 720 z^4 - 5040 z^3 + 12\,600 z^2 - 9450 z + 945) \operatorname{erfi}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.5600.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, 2; z\right) = \frac{1}{120} e^z (z^4 + 20 z^3 + 120 z^2 + 240 z + 120)$$

07.25.03.5601.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z \sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.5602.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z} \sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.5603.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, 3; z\right) = \frac{1}{60} e^z (z^3 + 15z^2 + 60z + 60)$$

07.25.03.5604.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{16z^4 + 192z^3 + 512z^2 + 120z - 45}{1024z^2} + \frac{e^z \sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.5605.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.5606.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, 4; z\right) = \frac{1}{20} e^z (z^2 + 10z + 20)$$

07.25.03.5607.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z \sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.5608.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.5609.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, 5; z\right) = \frac{1}{5} e^z (z + 5)$$

07.25.03.5610.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z\sqrt{\pi}(32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.5611.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z}\sqrt{\pi}(32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.5612.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{9}{2}, 6; z\right) = e^z$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = -\frac{7}{2}$

07.25.03.5613.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{7}{2}, 1; z\right) = \frac{1}{840}e^z(23063z^4 + 10744z^3 + 9816z^2 + 5640z + 840) - \frac{46189\sqrt{\pi}z^{9/2}\operatorname{erfi}(\sqrt{z})}{1680}$$

07.25.03.5614.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{7}{2}, 1; -z\right) = \frac{46189\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2}}{1680} + \frac{1}{840}e^{-z}(23063z^4 - 10744z^3 + 9816z^2 - 5640z + 840)$$

07.25.03.5615.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{7}{2}, 2; z\right) = \frac{1}{840}e^z(4199z^4 + 2068z^3 + 2472z^2 + 2400z + 840) - \frac{4199}{840}\sqrt{\pi}z^{9/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.5616.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{7}{2}, 2; -z\right) = \frac{4199}{840}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2} + \frac{1}{840}e^{-z}(4199z^4 - 2068z^3 + 2472z^2 - 2400z + 840)$$

07.25.03.5617.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{7}{2}, 3; z\right) = \frac{1}{420}e^z(646z^4 + 323z^3 + 453z^2 + 660z + 420) - \frac{323}{210}\sqrt{\pi}z^{9/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.5618.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{7}{2}, 3; -z\right) = \frac{323}{210}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2} + \frac{1}{420}e^{-z}(646z^4 - 323z^3 + 453z^2 - 660z + 420)$$

07.25.03.5619.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{7}{2}, 4; z\right) = \frac{e^z(1292z^4 + 646z^3 + 969z^2 + 1950z + 2100)}{2100} - \frac{323}{525}\sqrt{\pi}z^{9/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.5620.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{7}{2}, 4; -z\right) = \frac{323}{525}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2} + \frac{e^{-z}(1292z^4 - 646z^3 + 969z^2 - 1950z + 2100)}{2100}$$

07.25.03.5621.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{7}{2}, 5; z\right) = \frac{1}{525} e^z (152 z^4 + 76 z^3 + 114 z^2 + 285 z + 525) - \frac{152}{525} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5622.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{7}{2}, 5; -z\right) = \frac{152}{525} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{525} e^{-z} (152 z^4 - 76 z^3 + 114 z^2 - 285 z + 525)$$

07.25.03.5623.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{7}{2}, 6; z\right) = \frac{1}{105} e^z (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5624.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{7}{2}, 6; -z\right) = \frac{16}{105} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} e^{-z} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = -\frac{5}{2}$

07.25.03.5625.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{5}{2}, 1; z\right) = \frac{1}{480} e^z (-46 189 z^4 + 75 424 z^3 + 16 224 z^2 + 4704 z + 480) + \frac{2431}{960} \sqrt{\pi} (38 z^{9/2} - 81 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5626.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{5}{2}, 1; -z\right) = \frac{1}{480} e^{-z} (-46 189 z^4 - 75 424 z^3 + 16 224 z^2 - 4704 z + 480) - \frac{2431}{960} \sqrt{\pi} (38 z^{9/2} + 81 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5627.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{5}{2}, 2; z\right) = \frac{1}{240} e^z (-4199 z^4 + 8840 z^3 + 2352 z^2 + 1056 z + 240) + \frac{221}{480} \sqrt{\pi} (38 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5628.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{5}{2}, 2; -z\right) = \frac{1}{240} e^{-z} (-4199 z^4 - 8840 z^3 + 2352 z^2 - 1056 z + 240) - \frac{221}{480} \sqrt{\pi} (38 z^{9/2} + 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5629.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{5}{2}, 3; z\right) = \frac{1}{60} e^z (-323 z^4 + 833 z^3 + 255 z^2 + 156 z + 60) + \frac{17}{120} \sqrt{\pi} (38 z^{9/2} - 117 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5630.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{5}{2}, 3; -z\right) = \frac{1}{60} e^{-z} (-323 z^4 - 833 z^3 + 255 z^2 - 156 z + 60) - \frac{17}{120} \sqrt{\pi} (38 z^{9/2} + 117 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5631.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{5}{2}, 4; z\right) = \frac{1}{300} e^z (-646 z^4 + 1972 z^3 + 663 z^2 + 510 z + 300) + \frac{17}{300} \sqrt{\pi} (38 z^{9/2} - 135 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5632.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{5}{2}, 4; -z\right) = \frac{1}{300} e^{-z} (-646 z^4 - 1972 z^3 + 663 z^2 - 510 z + 300) - \frac{17}{300} \sqrt{\pi} (38 z^{9/2} + 135 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5633.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{5}{2}, 5; z\right) = \frac{1}{75} e^z (-76 z^4 + 268 z^3 + 96 z^2 + 87 z + 75) + \frac{2}{75} \sqrt{\pi} (38 z^{9/2} - 153 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5634.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{5}{2}, 5; -z\right) = \frac{1}{75} e^{-z} (-76 z^4 - 268 z^3 + 96 z^2 - 87 z + 75) - \frac{2}{75} \sqrt{\pi} (38 z^{9/2} + 153 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5635.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{5}{2}, 6; z\right) = \frac{1}{15} e^z (-8 z^4 + 32 z^3 + 12 z^2 + 12 z + 15) + \frac{4}{15} \sqrt{\pi} (2 z^{9/2} - 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5636.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{5}{2}, 6; -z\right) = \frac{1}{15} e^{-z} (-8 z^4 - 32 z^3 + 12 z^2 - 12 z + 15) - \frac{4}{15} \sqrt{\pi} (2 z^{9/2} + 9 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = -\frac{3}{2}$

07.25.03.5637.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{3}{2}, 1; z\right) = \frac{1}{768} e^z (92\,378 z^4 - 347\,633 z^3 + 155\,904 z^2 + 13\,056 z + 768) - \frac{143 \sqrt{\pi} (1292 z^{9/2} - 5508 z^{7/2} + 3969 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{1536}$$

07.25.03.5638.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{3}{2}, 1; -z\right) = \frac{1}{768} e^{-z} (92\,378 z^4 + 347\,633 z^3 + 155\,904 z^2 - 13\,056 z + 768) + \frac{143 \sqrt{\pi} (1292 z^{9/2} + 5508 z^{7/2} + 3969 z^{5/2}) \operatorname{erf}(\sqrt{z})}{1536}$$

07.25.03.5639.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{3}{2}, 2; z\right) = \frac{1}{384} e^z (8398 z^4 - 39\,559 z^3 + 24\,960 z^2 + 3072 z + 384) - \frac{13}{768} \sqrt{\pi} (1292 z^{9/2} - 6732 z^{7/2} + 6237 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5640.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{3}{2}, 2; -z\right) = \frac{1}{384} e^{-z} (8398 z^4 + 39\,559 z^3 + 24\,960 z^2 - 3072 z + 384) + \frac{13}{768} \sqrt{\pi} (1292 z^{9/2} + 6732 z^{7/2} + 6237 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5641.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{3}{2}, 3; z\right) = \frac{1}{96} e^z (646 z^4 - 3655 z^3 + 3000 z^2 + 480 z + 96) + \frac{1}{192} \sqrt{\pi} (-1292 z^{9/2} + 7956 z^{7/2} - 9009 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5642.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{3}{2}, 3; -z\right) = \frac{1}{96} e^{-z} (646 z^4 + 3655 z^3 + 3000 z^2 - 480 z + 96) + \frac{1}{192} \sqrt{\pi} (1292 z^{9/2} + 7956 z^{7/2} + 9009 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5643.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{3}{2}, 4; z\right) = \frac{1}{240} e^z (646 z^4 - 4267 z^3 + 4332 z^2 + 840 z + 240) + \frac{1}{480} \sqrt{\pi} (-1292 z^{9/2} + 9180 z^{7/2} - 12285 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5644.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{3}{2}, 4; -z\right) = \frac{1}{240} e^{-z} (646 z^4 + 4267 z^3 + 4332 z^2 - 840 z + 240) + \frac{1}{480} \sqrt{\pi} (1292 z^{9/2} + 9180 z^{7/2} + 12285 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5645.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{3}{2}, 5; z\right) = \frac{1}{30} e^z (38 z^4 - 287 z^3 + 348 z^2 + 78 z + 30) + \frac{1}{60} \sqrt{\pi} (-76 z^{9/2} + 612 z^{7/2} - 945 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5646.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{3}{2}, 5; -z\right) = \frac{1}{30} e^{-z} (38 z^4 + 287 z^3 + 348 z^2 - 78 z + 30) + \frac{1}{60} \sqrt{\pi} (76 z^{9/2} + 612 z^{7/2} + 945 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5647.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{3}{2}, 6; z\right) = \frac{1}{3} e^z (2 z^4 - 17 z^3 + 24 z^2 + 6 z + 3) + \frac{1}{6} \sqrt{\pi} (-4 z^{9/2} + 36 z^{7/2} - 63 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5648.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{3}{2}, 6; -z\right) = \frac{1}{3} e^{-z} (2 z^4 + 17 z^3 + 24 z^2 - 6 z + 3) + \frac{1}{6} \sqrt{\pi} (4 z^{9/2} + 36 z^{7/2} + 63 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = -\frac{1}{2}$

07.25.03.5649.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{1}{2}, 1; z\right) = \frac{e^z (-184756 z^4 + 1089088 z^3 - 1250535 z^2 + 162816 z + 3072)}{3072} + \frac{143 \sqrt{\pi} (2584 z^{9/2} - 16524 z^{7/2} + 23814 z^{5/2} - 6615 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{6144}$$

07.25.03.5650.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{1}{2}, 1; -z\right) = \frac{e^{-z} (-184756 z^4 - 1089088 z^3 - 1250535 z^2 - 162816 z + 3072)}{3072} - \frac{143 \sqrt{\pi} (2584 z^{9/2} + 16524 z^{7/2} + 23814 z^{5/2} + 6615 z^{3/2}) \operatorname{erf}(\sqrt{z})}{6144}$$

07.25.03.5651.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{1}{2}, 2; z\right) = \frac{e^z (-16796 z^4 + 122876 z^3 - 190203 z^2 + 39936 z + 1536)}{1536} + \frac{13 \sqrt{\pi} (2584 z^{9/2} - 20196 z^{7/2} + 37422 z^{5/2} - 14553 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{3072}$$

07.25.03.5652.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{1}{2}, 2; -z\right) = \frac{e^{-z}(-16796z^4 - 122876z^3 - 190203z^2 - 39936z + 1536)}{1536} - \frac{13\sqrt{\pi}(2584z^{9/2} + 20196z^{7/2} + 37422z^{5/2} + 14553z^{3/2})\operatorname{erf}(\sqrt{z})}{3072}$$

07.25.03.5653.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{1}{2}, 3; z\right) = \frac{1}{384}e^z(-1292z^4 + 11288z^3 - 22029z^2 + 6528z + 384) + \frac{1}{768}\sqrt{\pi}(2584z^{9/2} - 23868z^{7/2} + 54054z^{5/2} - 27027z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.5654.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{1}{2}, 3; -z\right) = \frac{1}{384}e^{-z}(-1292z^4 - 11288z^3 - 22029z^2 - 6528z + 384) + \frac{1}{768}\sqrt{\pi}(-2584z^{9/2} - 23868z^{7/2} - 54054z^{5/2} - 27027z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.5655.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{1}{2}, 4; z\right) = \frac{1}{960}e^z(-1292z^4 + 13124z^3 - 30939z^2 + 12000z + 960) + \frac{\sqrt{\pi}(2584z^{9/2} - 27540z^{7/2} + 73710z^{5/2} - 45045z^{3/2})\operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.5656.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{1}{2}, 4; -z\right) = \frac{1}{960}e^{-z}(-1292z^4 - 13124z^3 - 30939z^2 - 12000z + 960) + \frac{\sqrt{\pi}(-2584z^{9/2} - 27540z^{7/2} - 73710z^{5/2} - 45045z^{3/2})\operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.5657.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{1}{2}, 5; z\right) = \frac{1}{120}e^z(-76z^4 + 880z^3 - 2433z^2 + 1176z + 120) + \frac{1}{240}\sqrt{\pi}(152z^{9/2} - 1836z^{7/2} + 5670z^{5/2} - 4095z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.5658.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{1}{2}, 5; -z\right) = \frac{1}{120}e^{-z}(-76z^4 - 880z^3 - 2433z^2 - 1176z + 120) + \frac{1}{240}\sqrt{\pi}(-152z^{9/2} - 1836z^{7/2} - 5670z^{5/2} - 4095z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.5659.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{1}{2}, 6; z\right) = \frac{1}{12}e^z(-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24}\sqrt{\pi}(8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.5660.01

$${}_2F_2\left(-\frac{9}{2}, 6; -\frac{1}{2}, 6; -z\right) = \frac{1}{12}e^{-z}(-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24}\sqrt{\pi}(-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2})\operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = \frac{1}{2}$

07.25.03.5661.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{1}{2}, 1; z\right) = \frac{e^z (369\,512 z^4 - 2\,965\,820 z^3 + 5\,512\,650 z^2 - 2\,048\,475 z + 49\,152)}{49\,152} - \frac{11 \sqrt{\pi} (67\,184 z^{9/2} - 572\,832 z^{7/2} + 1\,238\,328 z^{5/2} - 687\,960 z^{3/2} + 59\,535 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{98\,304}$$

07.25.03.5662.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{1}{2}, 1; -z\right) = \frac{e^{-z} (369\,512 z^4 + 2\,965\,820 z^3 + 5\,512\,650 z^2 + 2\,048\,475 z + 49\,152)}{49\,152} + \frac{11 \sqrt{\pi} (67\,184 z^{9/2} + 572\,832 z^{7/2} + 1\,238\,328 z^{5/2} + 687\,960 z^{3/2} + 59\,535 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{98\,304}$$

07.25.03.5663.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{1}{2}, 2; z\right) = \frac{e^z (33\,592 z^4 - 333\,268 z^3 + 823\,134 z^2 - 469\,833 z + 24\,576)}{24\,576} + \frac{\sqrt{\pi} (-67\,184 z^{9/2} + 700\,128 z^{7/2} - 1\,945\,944 z^{5/2} + 1\,513\,512 z^{3/2} - 218\,295 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{49\,152}$$

07.25.03.5664.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{1}{2}, 2; -z\right) = \frac{e^{-z} (33\,592 z^4 + 333\,268 z^3 + 823\,134 z^2 + 469\,833 z + 24\,576)}{24\,576} + \frac{\sqrt{\pi} (67\,184 z^{9/2} + 700\,128 z^{7/2} + 1\,945\,944 z^{5/2} + 1\,513\,512 z^{3/2} + 218\,295 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{49\,152}$$

07.25.03.5665.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{1}{2}, 3; z\right) = \frac{e^z (2584 z^4 - 30\,532 z^3 + 94\,134 z^2 - 73\,077 z + 6144)}{6144} + \frac{\sqrt{\pi} (-5168 z^{9/2} + 63\,648 z^{7/2} - 216\,216 z^{5/2} + 216\,216 z^{3/2} - 43\,659 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{12\,288}$$

07.25.03.5666.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{1}{2}, 3; -z\right) = \frac{e^{-z} (2584 z^4 + 30\,532 z^3 + 94\,134 z^2 + 73\,077 z + 6144)}{6144} + \frac{\sqrt{\pi} (5168 z^{9/2} + 63\,648 z^{7/2} + 216\,216 z^{5/2} + 216\,216 z^{3/2} + 43\,659 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{12\,288}$$

07.25.03.5667.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{1}{2}, 4; z\right) = \frac{e^z (2584 z^4 - 35\,428 z^3 + 130\,998 z^2 - 129\,165 z + 15\,360)}{15\,360} + \frac{\sqrt{\pi} (-5168 z^{9/2} + 73\,440 z^{7/2} - 294\,840 z^{5/2} + 360\,360 z^{3/2} - 93\,555 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{30\,720}$$

07.25.03.5668.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{1}{2}, 4; -z\right) = \frac{e^{-z}(2584z^4 + 35428z^3 + 130998z^2 + 129165z + 15360)}{15360} + \frac{\sqrt{\pi}(5168z^{9/2} + 73440z^{7/2} + 294840z^{5/2} + 360360z^{3/2} + 93555\sqrt{z})\operatorname{erf}(\sqrt{z})}{30720}$$

07.25.03.5669.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{1}{2}, 5; z\right) = \frac{e^z(152z^4 - 2372z^3 + 10230z^2 - 12261z + 1920)}{1920} + \frac{\sqrt{\pi}(-304z^{9/2} + 4896z^{7/2} - 22680z^{5/2} + 32760z^{3/2} - 10395\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.5670.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{1}{2}, 5; -z\right) = \frac{e^{-z}(152z^4 + 2372z^3 + 10230z^2 + 12261z + 1920)}{1920} + \frac{\sqrt{\pi}(304z^{9/2} + 4896z^{7/2} + 22680z^{5/2} + 32760z^{3/2} + 10395\sqrt{z})\operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.5671.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{1}{2}, 6; z\right) = \frac{1}{192}e^z(8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384}\sqrt{\pi}(-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.5672.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{1}{2}, 6; -z\right) = \frac{1}{192}e^{-z}(8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384}\sqrt{\pi}(16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z})\operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = 1$

07.25.03.5673.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, 1; z\right) = \frac{e^{z/2}(-184756z^5 + 1910766z^4 - 5712135z^3 + 5776914z^2 - 1663200z + 60480)I_0\left(\frac{z}{2}\right)}{60480} + \frac{11e^{z/2}(16796z^5 - 156910z^4 + 370773z^3 - 216060z^2 + 16104z)I_1\left(\frac{z}{2}\right)}{60480}$$

07.25.03.5674.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, \frac{3}{2}; z\right) = \frac{11e^z(67184z^4 - 682448z^3 + 1756248z^2 - 1099020z + 83955)}{983040} + \frac{1}{1966080\sqrt{z}}\sqrt{\pi}(-1478048z^5 + 15752880z^4 - 45405360z^3 + 37837800z^2 - 6548850z + 59535)\operatorname{erfi}(\sqrt{z})$$

07.25.03.5675.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, \frac{3}{2}; -z\right) = \frac{11 e^{-z} (67\,184 z^4 + 682\,448 z^3 + 1\,756\,248 z^2 + 1\,099\,020 z + 83\,955)}{983\,040} + \frac{\sqrt{\pi} (1\,478\,048 z^5 + 15\,752\,880 z^4 + 45\,405\,360 z^3 + 37\,837\,800 z^2 + 6\,548\,850 z + 59\,535) \operatorname{erf}(\sqrt{z})}{1\,966\,080 \sqrt{z}}$$

07.25.03.5676.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, 2; z\right) = \frac{e^{z/2} (-16\,796 z^5 + 209\,508 z^4 - 778\,323 z^3 + 1\,021\,137 z^2 - 423\,360 z + 30\,240) I_0\left(\frac{z}{2}\right)}{30\,240} + \frac{e^{z/2} (16\,796 z^5 - 192\,712 z^4 + 594\,009 z^3 - 506\,688 z^2 + 73\,452 z) I_1\left(\frac{z}{2}\right)}{30\,240}$$

07.25.03.5677.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, \frac{5}{2}; z\right) = \frac{e^z (1\,478\,048 z^5 - 18\,164\,432 z^4 + 59\,764\,848 z^3 - 53\,027\,832 z^2 + 7\,145\,490 z + 6615)}{7\,864\,320 z} + \frac{1}{15\,728\,640 z^{3/2}} + \frac{\sqrt{\pi} (-2\,956\,096 z^6 + 37\,806\,912 z^5 - 136\,216\,080 z^4 + 151\,351\,200 z^3 - 39\,293\,100 z^2 + 714\,420 z - 6615) \operatorname{erfi}(\sqrt{z})}{15\,728\,640 z^{3/2}}$$

07.25.03.5678.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, \frac{5}{2}; -z\right) = \frac{e^{-z} (1\,478\,048 z^5 + 18\,164\,432 z^4 + 59\,764\,848 z^3 + 53\,027\,832 z^2 + 7\,145\,490 z - 6615)}{7\,864\,320 z} + \frac{1}{15\,728\,640 z^{3/2}} + \frac{\sqrt{\pi} (2\,956\,096 z^6 + 37\,806\,912 z^5 + 136\,216\,080 z^4 + 151\,351\,200 z^3 + 39\,293\,100 z^2 + 714\,420 z + 6615) \operatorname{erf}(\sqrt{z})}{15\,728\,640 z^{3/2}}$$

07.25.03.5679.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, 3; z\right) = \frac{e^{z/2} (-2584 z^5 + 37\,740 z^4 - 167\,532 z^3 + 269\,121 z^2 - 143\,640 z + 15\,120) I_0\left(\frac{z}{2}\right)}{15\,120} + \frac{e^{z/2} z (2584 z^4 - 35\,156 z^3 + 133\,668 z^2 - 150\,447 z + 32\,946) I_1\left(\frac{z}{2}\right)}{15\,120}$$

07.25.03.5680.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, \frac{7}{2}; z\right) = \frac{1}{44\,040\,192 z^2} e^z (2\,956\,096 z^6 - 42\,630\,016 z^5 + 170\,865\,552 z^4 - 197\,051\,712 z^3 + 38\,975\,244 z^2 + 98\,280 z - 8505) + \frac{1}{88\,080\,384 z^{5/2}} \left(\sqrt{\pi} (-5\,912\,192 z^7 + 88\,216\,128 z^6 - 381\,405\,024 z^5 + 529\,729\,200 z^4 - 183\,367\,800 z^3 + 5\,000\,940 z^2 - 92\,610 z + 8505) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.5681.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, \frac{7}{2}; -z\right) = \frac{1}{44\,040\,192 z^2} e^{-z} (2\,956\,096 z^6 + 42\,630\,016 z^5 + 170\,865\,552 z^4 + 197\,051\,712 z^3 + 38\,975\,244 z^2 - 98\,280 z - 8505) + \frac{1}{88\,080\,384 z^{5/2}} \left(\sqrt{\pi} (5\,912\,192 z^7 + 88\,216\,128 z^6 + 381\,405\,024 z^5 + 529\,729\,200 z^4 + 183\,367\,800 z^3 + 5\,000\,940 z^2 + 92\,610 z + 8505) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.5682.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, 4; z\right) = \frac{e^{z/2} (-1292 z^5 + 21\,624 z^4 - 111\,630 z^3 + 211\,740 z^2 - 137\,025 z + 18\,900) I_0\left(\frac{z}{2}\right)}{18\,900} + \frac{e^{z/2} z (2584 z^4 - 40\,664 z^3 + 183\,888 z^2 - 257\,340 z + 76\,065) I_1\left(\frac{z}{2}\right)}{37\,800}$$

07.25.03.5683.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, \frac{9}{2}; z\right) = \frac{1}{201\,326\,592 z^3} e^z (5\,912\,192 z^7 - 97\,862\,336 z^6 + 462\,564\,960 z^5 - 657\,825\,168 z^4 + 174\,121\,464 z^3 + 842\,940 z^2 - 164\,430 z + 42\,525) + \frac{1}{402\,653\,184 z^{7/2}} \left(\sqrt{\pi} (-11\,824\,384 z^8 + 201\,636\,864 z^7 - 1\,017\,080\,064 z^6 + 1\,695\,133\,440 z^5 - 733\,471\,200 z^4 + 26\,671\,680 z^3 - 740\,880 z^2 + 136\,080 z - 42\,525) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.5684.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, \frac{9}{2}; -z\right) = \frac{1}{201\,326\,592 z^3} e^{-z} (5\,912\,192 z^7 + 97\,862\,336 z^6 + 462\,564\,960 z^5 + 657\,825\,168 z^4 + 174\,121\,464 z^3 - 842\,940 z^2 - 164\,430 z - 42\,525) + \frac{1}{402\,653\,184 z^{7/2}} \left(\sqrt{\pi} (11\,824\,384 z^8 + 201\,636\,864 z^7 + 1\,017\,080\,064 z^6 + 1\,695\,133\,440 z^5 + 733\,471\,200 z^4 + 26\,671\,680 z^3 + 740\,880 z^2 + 136\,080 z + 42\,525) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.5685.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, 5; z\right) = \frac{e^{z/2} (-304 z^5 + 5736 z^4 - 33\,756 z^3 + 73\,740 z^2 - 55\,755 z + 9450) I_0\left(\frac{z}{2}\right)}{9450} + \frac{e^{z/2} z (304 z^4 - 5432 z^3 + 28476 z^2 - 47\,676 z + 17\,835) I_1\left(\frac{z}{2}\right)}{9450}$$

07.25.03.5686.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, \frac{11}{2}; z\right) = \frac{1}{805\,306\,368\,z^4} \left(e^z (11\,824\,384\,z^8 - 220\,929\,280\,z^7 + 1\,203\,121\,920\,z^6 - 2\,036\,823\,360\,z^5 + 681\,923\,616\,z^4 + 5\,518\,800\,z^3 - 1\,920\,240\,z^2 + 1\,228\,500\,z - 694\,575) \right) + \frac{1}{1\,610\,612\,736\,z^{9/2}} \left(\sqrt{\pi} (-23\,648\,768\,z^9 + 453\,682\,944\,z^8 - 2\,615\,348\,736\,z^7 + 5\,085\,400\,320\,z^6 - 2\,640\,496\,320\,z^5 + 120\,022\,560\,z^4 - 4\,445\,280\,z^3 + 1\,224\,720\,z^2 - 765\,450\,z + 694\,575) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.5687.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, \frac{11}{2}; -z\right) = \frac{1}{805\,306\,368\,z^4} \left(e^{-z} (11\,824\,384\,z^8 + 220\,929\,280\,z^7 + 1\,203\,121\,920\,z^6 + 2\,036\,823\,360\,z^5 + 681\,923\,616\,z^4 - 5\,518\,800\,z^3 - 1\,920\,240\,z^2 - 1\,228\,500\,z - 694\,575) \right) + \frac{1}{1\,610\,612\,736\,z^{9/2}} \left(\sqrt{\pi} (23\,648\,768\,z^9 + 453\,682\,944\,z^8 + 2\,615\,348\,736\,z^7 + 5\,085\,400\,320\,z^6 + 2\,640\,496\,320\,z^5 + 120\,022\,560\,z^4 + 4\,445\,280\,z^3 + 1\,224\,720\,z^2 + 765\,450\,z + 694\,575) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.5688.01

$${}_2F_2\left(-\frac{9}{2}, 6; 1, 6; z\right) = \frac{1}{945} e^{z/2} (-16\,z^5 + 336\,z^4 - 2220\,z^3 + 5484\,z^2 - 4725\,z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} z (16\,z^4 - 320\,z^3 + 1908\,z^2 - 3720\,z + 1689) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = \frac{3}{2}$

07.25.03.5689.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{3}{2}, 2; z\right) = \frac{e^z (67\,184\,z^4 - 841\,568\,z^3 + 2\,856\,048\,z^2 - 2\,692\,560\,z + 431\,985)}{491\,520} + \frac{\sqrt{\pi} (-134\,368\,z^5 + 1\,750\,320\,z^4 - 6\,486\,480\,z^3 + 7\,567\,560\,z^2 - 2\,182\,950\,z + 59\,535) \operatorname{erfi}(\sqrt{z})}{983\,040\,\sqrt{z}}$$

07.25.03.5690.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (67\,184\,z^4 + 841\,568\,z^3 + 2\,856\,048\,z^2 + 2\,692\,560\,z + 431\,985)}{491\,520} + \frac{\sqrt{\pi} (134\,368\,z^5 + 1\,750\,320\,z^4 + 6\,486\,480\,z^3 + 7\,567\,560\,z^2 + 2\,182\,950\,z + 59\,535) \operatorname{erf}(\sqrt{z})}{983\,040\,\sqrt{z}}$$

07.25.03.5691.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{3}{2}, 3; z\right) = \frac{e^z (5168 z^4 - 76976 z^3 + 324456 z^2 - 410340 z + 103035)}{122880} + \frac{\sqrt{\pi} (-10336 z^5 + 159120 z^4 - 720720 z^3 + 1081080 z^2 - 436590 z + 19845) \operatorname{erfi}(\sqrt{z})}{245760 \sqrt{z}}$$

07.25.03.5692.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{3}{2}, 3; -z\right) = \frac{e^{-z} (5168 z^4 + 76976 z^3 + 324456 z^2 + 410340 z + 103035)}{122880} + \frac{\sqrt{\pi} (10336 z^5 + 159120 z^4 + 720720 z^3 + 1081080 z^2 + 436590 z + 19845) \operatorname{erf}(\sqrt{z})}{245760 \sqrt{z}}$$

07.25.03.5693.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{3}{2}, 4; z\right) = \frac{e^z (5168 z^4 - 89216 z^3 + 449376 z^2 - 714360 z + 247665)}{307200} + \frac{\sqrt{\pi} (-10336 z^5 + 183600 z^4 - 982800 z^3 + 1801800 z^2 - 935550 z + 59535) \operatorname{erfi}(\sqrt{z})}{614400 \sqrt{z}}$$

07.25.03.5694.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{3}{2}, 4; -z\right) = \frac{e^{-z} (5168 z^4 + 89216 z^3 + 449376 z^2 + 714360 z + 247665)}{307200} + \frac{\sqrt{\pi} (10336 z^5 + 183600 z^4 + 982800 z^3 + 1801800 z^2 + 935550 z + 59535) \operatorname{erf}(\sqrt{z})}{614400 \sqrt{z}}$$

07.25.03.5695.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{3}{2}, 5; z\right) = \frac{e^z (304 z^4 - 5968 z^3 + 34968 z^2 - 67020 z + 29895)}{38400} + \frac{\sqrt{\pi} (-608 z^5 + 12240 z^4 - 75600 z^3 + 163800 z^2 - 103950 z + 8505) \operatorname{erfi}(\sqrt{z})}{76800 \sqrt{z}}$$

07.25.03.5696.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{3}{2}, 5; -z\right) = \frac{e^{-z} (304 z^4 + 5968 z^3 + 34968 z^2 + 67020 z + 29895)}{38400} + \frac{\sqrt{\pi} (608 z^5 + 12240 z^4 + 75600 z^3 + 163800 z^2 + 103950 z + 8505) \operatorname{erf}(\sqrt{z})}{76800 \sqrt{z}}$$

07.25.03.5697.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{3}{2}, 6; z\right) = \frac{e^z (16 z^4 - 352 z^3 + 2352 z^2 - 5280 z + 2895)}{3840} + \frac{\sqrt{\pi} (-32 z^5 + 720 z^4 - 5040 z^3 + 12600 z^2 - 9450 z + 945) \operatorname{erfi}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.5698.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{3}{2}, 6; -z\right) = \frac{e^{-z} (16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{3840} + \frac{\sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = 2$

07.25.03.5699.01

$${}_2F_2\left(-\frac{9}{2}, 6; 2, 2; z\right) = \frac{e^{z/2} (-33592z^5 + 506532z^4 - 2352012z^3 + 4038411z^2 - 2410128z + 332640) I_0\left(\frac{z}{2}\right)}{332640} + \frac{e^{z/2} (33592z^5 - 472940z^4 + 1895868z^3 - 2345421z^2 + 644676z - 6048) I_1\left(\frac{z}{2}\right)}{332640}$$

07.25.03.5700.01

$${}_2F_2\left(-\frac{9}{2}, 6; 2, \frac{5}{2}; z\right) = \frac{e^z (134368z^5 - 2033200z^4 + 8780304z^3 - 11593608z^2 + 3222150z - 6615)}{3932160z} + \frac{1}{7864320z^{3/2}} \sqrt{\pi} (-268736z^6 + 4200768z^5 - 19459440z^4 + 30270240z^3 - 13097700z^2 + 714420z + 6615) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5701.01

$${}_2F_2\left(-\frac{9}{2}, 6; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (134368z^5 + 2033200z^4 + 8780304z^3 + 11593608z^2 + 3222150z + 6615)}{3932160z} + \frac{1}{7864320z^{3/2}} \sqrt{\pi} (268736z^6 + 4200768z^5 + 19459440z^4 + 30270240z^3 + 13097700z^2 + 714420z - 6615) \operatorname{erf}(\sqrt{z})$$

07.25.03.5702.01

$${}_2F_2\left(-\frac{9}{2}, 6; 2, 3; z\right) = \frac{e^{z/2} (-646z^5 + 11424z^4 - 63645z^3 + 134760z^2 - 103761z + 20790) I_0\left(\frac{z}{2}\right)}{20790} + \frac{e^{z/2} (2584z^5 - 43112z^4 + 212760z^3 - 345252z^2 + 141135z - 3024) I_1\left(\frac{z}{2}\right)}{83160}$$

07.25.03.5703.01

$${}_2F_2\left(-\frac{9}{2}, 6; 2, \frac{7}{2}; z\right) = \frac{e^z (268736z^6 - 4766528z^5 + 24994320z^4 - 42523104z^3 + 17081652z^2 - 94500z + 2835)}{2202096z^2} + \frac{1}{44040192z^{5/2}} \left(\sqrt{\pi} (-537472z^7 + 9801792z^6 - 54486432z^5 + 105945840z^4 - 61122600z^3 + 5000940z^2 + 92610z - 2835) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.5704.01

$${}_2F_2\left(-\frac{9}{2}, 6; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (268\,736 z^6 + 4\,766\,528 z^5 + 24\,994\,320 z^4 + 42\,523\,104 z^3 + 17\,081\,652 z^2 + 94\,500 z + 2835)}{22\,020\,096 z^2} + \frac{1}{44\,040\,192 z^{5/2}} \left(\sqrt{\pi} (537\,472 z^7 + 9\,801\,792 z^6 + 54\,486\,432 z^5 + 105\,945\,840 z^4 + 61\,122\,600 z^3 + 5\,000\,940 z^2 - 92\,610 z - 2835) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.5705.01

$${}_2F_2\left(-\frac{9}{2}, 6; 2, 4; z\right) = \frac{e^{z/2} (-5168 z^5 + 104\,856 z^4 - 681\,420 z^3 + 1\,713\,660 z^2 - 1\,605\,555 z + 415\,800) I_0\left(\frac{z}{2}\right)}{415\,800} + \frac{e^{z/2} (5168 z^5 - 99\,688 z^4 + 584\,316 z^3 - 1\,174\,020 z^2 + 640\,155 z - 22\,680) I_1\left(\frac{z}{2}\right)}{415\,800}$$

07.25.03.5706.01

$${}_2F_2\left(-\frac{9}{2}, 6; 2, \frac{9}{2}; z\right) = \frac{1}{100\,663\,296 z^3} e^z (537\,472 z^7 - 10\,933\,312 z^6 + 67\,450\,656 z^5 - 140\,582\,832 z^4 + 74\,498\,280 z^3 - 773\,388 z^2 + 51\,030 z - 8505) + \frac{1}{201\,326\,592 z^{7/2}} \left(\sqrt{\pi} (-1\,074\,944 z^8 + 22\,404\,096 z^7 - 145\,297\,152 z^6 + 339\,026\,688 z^5 - 244\,490\,400 z^4 + 26\,671\,680 z^3 + 740\,880 z^2 - 45\,360 z + 8505) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.5707.01

$${}_2F_2\left(-\frac{9}{2}, 6; 2, \frac{9}{2}; -z\right) = \frac{1}{100\,663\,296 z^3} e^{-z} (537\,472 z^7 + 10\,933\,312 z^6 + 67\,450\,656 z^5 + 140\,582\,832 z^4 + 74\,498\,280 z^3 + 773\,388 z^2 + 51\,030 z + 8505) + \frac{1}{201\,326\,592 z^{7/2}} \left(\sqrt{\pi} (1\,074\,944 z^8 + 22\,404\,096 z^7 + 145\,297\,152 z^6 + 339\,026\,688 z^5 + 244\,490\,400 z^4 + 26\,671\,680 z^3 - 740\,880 z^2 - 45\,360 z - 8505) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.5708.01

$${}_2F_2\left(-\frac{9}{2}, 6; 2, 5; z\right) = \frac{e^{z/2} (-304 z^5 + 6960 z^4 - 51\,684 z^3 + 150\,420 z^2 - 165\,375 z + 51\,975) I_0\left(\frac{z}{2}\right)}{51\,975} + \frac{e^{z/2} (304 z^5 - 6656 z^4 + 45\,180 z^3 - 108\,264 z^2 + 73\,995 z - 3780) I_1\left(\frac{z}{2}\right)}{51\,975}$$

07.25.03.5709.01

$${}_2F_2\left(-\frac{9}{2}, 6; 2, \frac{11}{2}; z\right) = \frac{1}{402\,653\,184 z^4} \left(e^z (1\,074\,944 z^8 - 24\,667\,136 z^7 + 175\,014\,528 z^6 - 432\,022\,656 z^5 + 285\,716\,352 z^4 - 4\,765\,824 z^3 + 536\,760 z^2 - 219\,240 z + 99\,225)\right) + \frac{1}{805\,306\,368 z^{9/2}} \left(\sqrt{\pi} (-2\,149\,888 z^9 + 50\,409\,216 z^8 - 373\,621\,248 z^7 + 1\,017\,080\,064 z^6 - 880\,165\,440 z^5 + 120\,022\,560 z^4 + 4\,445\,280 z^3 - 408\,240 z^2 + 153\,090 z - 99\,225) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.5710.01

$${}_2F_2\left(-\frac{9}{2}, 6; 2, \frac{11}{2}; -z\right) = \frac{1}{402\,653\,184\,z^4} (e^{-z} (1074\,944\,z^8 + 24\,667\,136\,z^7 + 175\,014\,528\,z^6 + 432\,022\,656\,z^5 + 285\,716\,352\,z^4 + 4\,765\,824\,z^3 + 536\,760\,z^2 + 219\,240\,z + 99\,225)) + \frac{1}{805\,306\,368\,z^{9/2}} (\sqrt{\pi} (2\,149\,888\,z^9 + 50\,409\,216\,z^8 + 373\,621\,248\,z^7 + 1\,017\,080\,064\,z^6 + 880\,165\,440\,z^5 + 120\,022\,560\,z^4 - 4\,445\,280\,z^3 - 408\,240\,z^2 - 153\,090\,z - 99\,225) \operatorname{erf}(\sqrt{z}))$$

07.25.03.5711.01

$${}_2F_2\left(-\frac{9}{2}, 6; 2, 6; z\right) = \frac{e^{z/2} (-32\,z^5 + 816\,z^4 - 6816\,z^3 + 22\,524\,z^2 - 28\,350\,z + 10\,395) I_0\left(\frac{z}{2}\right)}{10\,395} + \frac{e^{z/2} (32\,z^5 - 784\,z^4 + 6048\,z^3 - 16\,836\,z^2 + 13\,854\,z - 945) I_1\left(\frac{z}{2}\right)}{10\,395}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = \frac{5}{2}$

07.25.03.5712.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{5}{2}, 3; z\right) = \frac{e^z (10\,336\,z^5 - 185\,776\,z^4 + 993\,360\,z^3 - 1\,745\,448\,z^2 + 749\,310\,z - 6615)}{983\,040\,z} + \frac{1}{1\,966\,080\,z^{3/2}} \sqrt{\pi} (-20\,672\,z^6 + 381\,888\,z^5 - 2\,162\,160\,z^4 + 4\,324\,320\,z^3 - 2\,619\,540\,z^2 + 238\,140\,z + 6615) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5713.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (10\,336\,z^5 + 185\,776\,z^4 + 993\,360\,z^3 + 1\,745\,448\,z^2 + 749\,310\,z + 6615)}{983\,040\,z} + \frac{1}{1\,966\,080\,z^{3/2}} \sqrt{\pi} (20\,672\,z^6 + 381\,888\,z^5 + 2\,162\,160\,z^4 + 4\,324\,320\,z^3 + 2\,619\,540\,z^2 + 238\,140\,z - 6615) \operatorname{erf}(\sqrt{z})$$

07.25.03.5714.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{5}{2}, 4; z\right) = \frac{e^z (10\,336\,z^5 - 215\,152\,z^4 + 1\,371\,792\,z^3 - 3\,012\,360\,z^2 + 1\,765\,230\,z - 33\,075)}{2\,457\,600\,z} + \frac{1}{4\,915\,200\,z^{3/2}} \sqrt{\pi} (-20\,672\,z^6 + 440\,640\,z^5 - 2\,948\,400\,z^4 + 7\,207\,200\,z^3 - 5\,613\,300\,z^2 + 714\,420\,z + 33\,075) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5715.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{5}{2}, 4; -z\right) = \frac{e^{-z} (10\,336\,z^5 + 215\,152\,z^4 + 1\,371\,792\,z^3 + 3\,012\,360\,z^2 + 1\,765\,230\,z + 33\,075)}{2\,457\,600\,z} + \frac{1}{4\,915\,200\,z^{3/2}} \sqrt{\pi} (20\,672\,z^6 + 440\,640\,z^5 + 2\,948\,400\,z^4 + 7\,207\,200\,z^3 + 5\,613\,300\,z^2 + 714\,420\,z - 33\,075) \operatorname{erf}(\sqrt{z})$$

07.25.03.5716.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{5}{2}, 5; z\right) = \frac{e^z (608 z^5 - 14384 z^4 + 106512 z^3 - 280776 z^2 + 209550 z - 6615)}{307200 z} + \frac{\sqrt{\pi} (-1216 z^6 + 29376 z^5 - 226800 z^4 + 655200 z^3 - 623700 z^2 + 102060 z + 6615) \operatorname{erfi}(\sqrt{z})}{614400 z^{3/2}}$$

07.25.03.5717.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{5}{2}, 5; -z\right) = \frac{e^{-z} (608 z^5 + 14384 z^4 + 106512 z^3 + 280776 z^2 + 209550 z + 6615)}{307200 z} + \frac{\sqrt{\pi} (1216 z^6 + 29376 z^5 + 226800 z^4 + 655200 z^3 + 623700 z^2 + 102060 z - 6615) \operatorname{erf}(\sqrt{z})}{614400 z^{3/2}}$$

07.25.03.5718.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{5}{2}, 6; z\right) = \frac{e^z (32 z^5 - 848 z^4 + 7152 z^3 - 22008 z^2 + 20010 z - 945)}{30720 z} + \frac{\sqrt{\pi} (-64 z^6 + 1728 z^5 - 15120 z^4 + 50400 z^3 - 56700 z^2 + 11340 z + 945) \operatorname{erfi}(\sqrt{z})}{61440 z^{3/2}}$$

07.25.03.5719.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{5}{2}, 6; -z\right) = \frac{e^{-z} (32 z^5 + 848 z^4 + 7152 z^3 + 22008 z^2 + 20010 z + 945)}{30720 z} + \frac{\sqrt{\pi} (64 z^6 + 1728 z^5 + 15120 z^4 + 50400 z^3 + 56700 z^2 + 11340 z - 945) \operatorname{erf}(\sqrt{z})}{61440 z^{3/2}}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = 3$

07.25.03.5720.01

$${}_2F_2\left(-\frac{9}{2}, 6; 3, 3; z\right) = \frac{e^{z/2} (-5168 z^5 + 107304 z^4 - 719292 z^3 + 1888188 z^2 - 1882251 z + 540918) I_0\left(\frac{z}{2}\right)}{540540} + \frac{e^{z/2} (5168 z^6 - 102136 z^5 + 619740 z^4 - 1314348 z^3 + 791787 z^2 - 38556 z - 1512) I_1\left(\frac{z}{2}\right)}{540540 z}$$

07.25.03.5721.01

$${}_2F_2\left(-\frac{9}{2}, 6; 3, \frac{7}{2}; z\right) = \frac{e^z (20672 z^6 - 435200 z^5 + 2819760 z^4 - 6349440 z^3 + 3899028 z^2 - 90720 z - 2835)}{5505024 z^2} + \frac{1}{11010048 z^{5/2}} + \frac{\sqrt{\pi} (-41344 z^7 + 891072 z^6 - 6054048 z^5 + 15135120 z^4 - 12224520 z^3 + 1666980 z^2 + 92610 z + 2835) \operatorname{erfi}(\sqrt{z})}{11010048 z^{5/2}}$$

07.25.03.5722.01

$${}_2F_2\left(-\frac{9}{2}, 6; 3, \frac{7}{2}; -z\right) = \frac{e^{-z} (20\,672 z^6 + 435\,200 z^5 + 2\,819\,760 z^4 + 6\,349\,440 z^3 + 3\,899\,028 z^2 + 90\,720 z - 2835)}{5\,505\,024 z^2} + \frac{1}{11\,010\,048 z^{5/2}} + \frac{\sqrt{\pi} (41\,344 z^7 + 891\,072 z^6 + 6\,054\,048 z^5 + 15\,135\,120 z^4 + 12\,224\,520 z^3 + 1\,666\,980 z^2 - 92\,610 z + 2835) \operatorname{erf}(\sqrt{z})}{11\,010\,048 z^{5/2}}$$

07.25.03.5723.01

$${}_2F_2\left(-\frac{9}{2}, 6; 3, 4; z\right) = \frac{e^{z/2} (-5168 z^5 + 123\,216 z^4 - 965\,460 z^3 + 3\,022\,620 z^2 - 3\,680\,775 z + 1\,354\,185) I_0\left(\frac{z}{2}\right)}{1\,351\,350} + \frac{e^{z/2} (5168 z^6 - 118\,048 z^5 + 849\,996 z^4 - 2\,226\,480 z^3 + 1\,777\,395 z^2 - 141\,750 z - 11\,340) I_1\left(\frac{z}{2}\right)}{1\,351\,350 z}$$

07.25.03.5724.01

$${}_2F_2\left(-\frac{9}{2}, 6; 3, \frac{9}{2}; z\right) = \frac{1}{25\,165\,824 z^3} e^z (41\,344 z^7 - 997\,696 z^6 + 7\,593\,888 z^5 - 20\,866\,416 z^4 + 16\,756\,872 z^3 - 709\,884 z^2 - 47\,250 z + 2835) + \frac{1}{50\,331\,648 z^{7/2}} \left(\sqrt{\pi} (-82\,688 z^8 + 2\,036\,736 z^7 - 16\,144\,128 z^6 + 48\,432\,384 z^5 - 48\,898\,080 z^4 + 8\,890\,560 z^3 + 740\,880 z^2 + 45\,360 z - 2835) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.5725.01

$${}_2F_2\left(-\frac{9}{2}, 6; 3, \frac{9}{2}; -z\right) = \frac{1}{25\,165\,824 z^3} e^{-z} (41\,344 z^7 + 997\,696 z^6 + 7\,593\,888 z^5 + 20\,866\,416 z^4 + 16\,756\,872 z^3 + 709\,884 z^2 - 47\,250 z - 2835) + \frac{1}{50\,331\,648 z^{7/2}} \left(\sqrt{\pi} (82\,688 z^8 + 2\,036\,736 z^7 + 16\,144\,128 z^6 + 48\,432\,384 z^5 + 48\,898\,080 z^4 + 8\,890\,560 z^3 - 740\,880 z^2 + 45\,360 z + 2835) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.5726.01

$${}_2F_2\left(-\frac{9}{2}, 6; 3, 5; z\right) = \frac{2 e^{z/2} (608 z^6 - 15\,760 z^5 + 131\,328 z^4 - 409\,524 z^3 + 407\,730 z^2 - 46\,305 z - 5670) I_1\left(\frac{z}{2}\right)}{675\,675 z} - \frac{2 e^{z/2} (608 z^5 - 16\,368 z^4 + 146\,784 z^3 - 533\,580 z^2 + 765\,450 z - 339\,255) I_0\left(\frac{z}{2}\right)}{675\,675}$$

07.25.03.5727.01

$${}_2F_2\left(-\frac{9}{2}, 6; 3, \frac{11}{2}; z\right) = \frac{1}{100\,663\,296\,z^4} \left(e^z (82\,688\,z^8 - 2\,249\,984\,z^7 + 19\,673\,088\,z^6 - 63\,833\,664\,z^5 + 63\,506\,208\,z^4 - 4\,158\,000\,z^3 - 447\,552\,z^2 + 64\,260\,z - 19\,845) \right) + \frac{1}{201\,326\,592\,z^{9/2}} \left(\sqrt{\pi} (-165\,376\,z^9 + 4\,582\,656\,z^8 - 41\,513\,472\,z^7 + 145\,297\,152\,z^6 - 176\,033\,088\,z^5 + 40\,007\,520\,z^4 + 4\,445\,280\,z^3 + 408\,240\,z^2 - 51\,030\,z + 19\,845) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.5728.01

$${}_2F_2\left(-\frac{9}{2}, 6; 3, \frac{11}{2}; -z\right) = \frac{1}{100\,663\,296\,z^4} \left(e^{-z} (82\,688\,z^8 + 2\,249\,984\,z^7 + 19\,673\,088\,z^6 + 63\,833\,664\,z^5 + 63\,506\,208\,z^4 + 4\,158\,000\,z^3 - 447\,552\,z^2 - 64\,260\,z - 19\,845) \right) + \frac{1}{201\,326\,592\,z^{9/2}} \left(\sqrt{\pi} (165\,376\,z^9 + 4\,582\,656\,z^8 + 41\,513\,472\,z^7 + 145\,297\,152\,z^6 + 176\,033\,088\,z^5 + 40\,007\,520\,z^4 - 4\,445\,280\,z^3 + 408\,240\,z^2 + 51\,030\,z + 19\,845) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.5729.01

$${}_2F_2\left(-\frac{9}{2}, 6; 3, 6; z\right) = \frac{4\,e^{z/2} (32\,z^6 - 928\,z^5 + 8784\,z^4 - 31\,776\,z^3 + 37\,938\,z^2 - 5670\,z - 945) I_1\left(\frac{z}{2}\right)}{135\,135\,z} - \frac{8\,e^{z/2} (16\,z^5 - 480\,z^4 + 4848\,z^3 - 20\,064\,z^2 + 33\,075\,z - 17\,010) I_0\left(\frac{z}{2}\right)}{135\,135}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = \frac{7}{2}$

07.25.03.5730.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{7}{2}, 4; z\right) = \frac{e^z (20\,672\,z^6 - 503\,744\,z^5 + 3\,886\,224\,z^4 - 10\,895\,520\,z^3 + 9\,058\,980\,z^2 - 434\,700\,z - 42\,525)}{13\,762\,560\,z^2} + \frac{1}{27\,525\,120\,z^{5/2}} \left(\sqrt{\pi} (-41\,344\,z^7 + 1\,028\,160\,z^6 - 8\,255\,520\,z^5 + 25\,225\,200\,z^4 - 26\,195\,400\,z^3 + 5\,000\,940\,z^2 + 463\,050\,z + 42\,525) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.5731.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{7}{2}, 4; -z\right) = \frac{e^{-z} (20\,672\,z^6 + 503\,744\,z^5 + 3\,886\,224\,z^4 + 10\,895\,520\,z^3 + 9\,058\,980\,z^2 + 434\,700\,z - 42\,525)}{13\,762\,560\,z^2} + \frac{1}{27\,525\,120\,z^{5/2}} \left(\sqrt{\pi} (41\,344\,z^7 + 1\,028\,160\,z^6 + 8\,255\,520\,z^5 + 25\,225\,200\,z^4 + 26\,195\,400\,z^3 + 5\,000\,940\,z^2 - 463\,050\,z + 42\,525) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.5732.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{7}{2}, 5; z\right) = \frac{e^z (1216 z^6 - 33 664 z^5 + 301 296 z^4 - 1 011 264 z^3 + 1 063 860 z^2 - 83 160 z - 14 175)}{1 720 320 z^2} + \frac{1}{3 440 640 z^{5/2}} \\ \sqrt{\pi} (-2432 z^7 + 68 544 z^6 - 635 040 z^5 + 2 293 200 z^4 - 2 910 600 z^3 + 714 420 z^2 + 92 610 z + 14 175) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5733.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{7}{2}, 5; -z\right) = \frac{e^{-z} (1216 z^6 + 33 664 z^5 + 301 296 z^4 + 1 011 264 z^3 + 1 063 860 z^2 + 83 160 z - 14 175)}{1 720 320 z^2} + \\ \frac{1}{3 440 640 z^{5/2}} \sqrt{\pi} (2432 z^7 + 68 544 z^6 + 635 040 z^5 + 2 293 200 z^4 + 2 910 600 z^3 + 714 420 z^2 - 92 610 z + 14 175) \operatorname{erf}(\sqrt{z})$$

07.25.03.5734.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{7}{2}, 6; z\right) = \frac{e^z (64 z^6 - 1984 z^5 + 20 208 z^4 - 79 008 z^3 + 100 716 z^2 - 11 340 z - 2835)}{172 032 z^2} + \\ \frac{1}{344 064 z^{5/2}} \sqrt{\pi} (-128 z^7 + 4032 z^6 - 42 336 z^5 + 176 400 z^4 - 264 600 z^3 + 79 380 z^2 + 13 230 z + 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5735.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{7}{2}, 6; -z\right) = \frac{e^{-z} (64 z^6 + 1984 z^5 + 20 208 z^4 + 79 008 z^3 + 100 716 z^2 + 11 340 z - 2835)}{172 032 z^2} + \\ \frac{1}{344 064 z^{5/2}} \sqrt{\pi} (128 z^7 + 4032 z^6 + 42 336 z^5 + 176 400 z^4 + 264 600 z^3 + 79 380 z^2 - 13 230 z + 2835) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = 4$

07.25.03.5736.01

$${}_2F_2\left(-\frac{9}{2}, 6; 4, 4; z\right) = \frac{1}{6 756 750 z} \\ e^{z/2} (-10 336 z^6 + 283 152 z^5 - 2 597 280 z^4 + 9 727 860 z^3 - 14 524 650 z^2 + 6 797 385 z + 3780) I_0\left(\frac{z}{2}\right) + \frac{1}{6 756 750 z^2} \\ e^{z/2} (10 336 z^7 - 272 816 z^6 + 2 329 632 z^5 - 7 524 300 z^4 + 7 924 650 z^3 - 1 023 435 z^2 - 162 540 z - 15 120) I_1\left(\frac{z}{2}\right)$$

07.25.03.5737.01

$${}_2F_2\left(-\frac{9}{2}, 6; 4, \frac{9}{2}; z\right) = \frac{1}{62 914 560 z^3} \\ e^z (41 344 z^7 - 1 154 368 z^6 + 10 450 848 z^5 - 35 660 400 z^4 + 38 534 280 z^3 - 3 262 140 z^2 - 652 050 z - 42 525) + \\ \frac{1}{125 829 120 z^{7/2}} \left(\sqrt{\pi} (-82 688 z^8 + 2 350 080 z^7 - 22 014 720 z^6 + 80 720 640 z^5 - \right. \\ \left. 104 781 600 z^4 + 26 671 680 z^3 + 3 704 400 z^2 + 680 400 z + 42 525) \operatorname{erfi}(\sqrt{z}) \right)$$

$$\begin{aligned}
 & \text{07.25.03.5738.01} \\
 {}_2F_2\left(-\frac{9}{2}, 6; 4, \frac{9}{2}; -z\right) &= \frac{1}{62914560z^3} \\
 & e^{-z} (41344z^7 + 1154368z^6 + 10450848z^5 + 35660400z^4 + 38534280z^3 + 3262140z^2 - 652050z + 42525) + \\
 & \frac{1}{125829120z^{7/2}} \left(\sqrt{\pi} (82688z^8 + 2350080z^7 + 22014720z^6 + 80720640z^5 + \right. \\
 & \left. 104781600z^4 + 26671680z^3 - 3704400z^2 + 680400z - 42525) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5739.01} \\
 {}_2F_2\left(-\frac{9}{2}, 6; 4, 5; z\right) &= \\
 & \frac{1}{3378375z^2} 4e^{z/2} (608z^7 - 18208z^6 + 179856z^5 - 690720z^4 + 904350z^3 - 164430z^2 - 38745z - 7560) I_1\left(\frac{z}{2}\right) - \\
 & \frac{8e^{z/2} (304z^6 - 9408z^5 + 98880z^4 - 431040z^3 + 760725z^2 - 427140z - 945) I_0\left(\frac{z}{2}\right)}{3378375z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5740.01} \\
 {}_2F_2\left(-\frac{9}{2}, 6; 4, \frac{11}{2}; z\right) &= \\
 & \frac{1}{251658240z^4} \left(e^z (82688z^8 - 2602496z^7 + 27044736z^6 - 108756480z^5 + 144880320z^4 - 18355680z^3 - \right. \\
 & \left. 5586840z^2 - 831600z + 99225) \right) + \\
 & \frac{1}{503316480z^{9/2}} \left(\sqrt{\pi} (-165376z^9 + 5287680z^8 - 56609280z^7 + 242161920z^6 - 377213760z^5 + \right. \\
 & \left. 120022560z^4 + 22226400z^3 + 6123600z^2 + 765450z - 99225) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5741.01} \\
 {}_2F_2\left(-\frac{9}{2}, 6; 4, \frac{11}{2}; -z\right) &= \\
 & \frac{1}{251658240z^4} \left(e^{-z} (82688z^8 + 2602496z^7 + 27044736z^6 + 108756480z^5 + 144880320z^4 + 18355680z^3 - \right. \\
 & \left. 5586840z^2 + 831600z + 99225) \right) + \\
 & \frac{1}{503316480z^{9/2}} \left(\sqrt{\pi} (165376z^9 + 5287680z^8 + 56609280z^7 + 242161920z^6 + 377213760z^5 + \right. \\
 & \left. 120022560z^4 - 22226400z^3 + 6123600z^2 - 765450z - 99225) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5742.01} \\
 {}_2F_2\left(-\frac{9}{2}, 6; 4, 6; z\right) &= \frac{4e^{z/2} (64z^7 - 2144z^6 + 24048z^5 - 107040z^4 + 167640z^3 - 39690z^2 - 12285z - 3780) I_1\left(\frac{z}{2}\right)}{675675z^2} \\
 & \frac{4e^{z/2} (64z^6 - 2208z^5 + 26160z^4 - 130080z^3 + 264600z^2 - 171990z - 945) I_0\left(\frac{z}{2}\right)}{675675z}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = \frac{9}{2}$

07.25.03.5743.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{9}{2}, 5; z\right) = \frac{e^z (2432 z^7 - 77 120 z^6 + 809 376 z^5 - 3 299 952 z^4 + 4 490 760 z^3 - 601 020 z^2 - 198 450 z - 42 525)}{7 864 320 z^3} + \frac{1}{15 728 640 z^{7/2}} \left(\sqrt{\pi} (-4864 z^8 + 156 672 z^7 - 1 693 440 z^6 + 7 338 240 z^5 - 11 642 400 z^4 + 3 810 240 z^3 + 740 880 z^2 + 226 800 z + 42 525) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.5744.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{9}{2}, 5; -z\right) = \frac{1}{7 864 320 z^3} e^{-z} (2432 z^7 + 77 120 z^6 + 809 376 z^5 + 3 299 952 z^4 + 4 490 760 z^3 + 601 020 z^2 - 198 450 z + 42 525) + \frac{1}{15 728 640 z^{7/2}} \left(\sqrt{\pi} (4864 z^8 + 156 672 z^7 + 1 693 440 z^6 + 7 338 240 z^5 + 11 642 400 z^4 + 3 810 240 z^3 - 740 880 z^2 + 226 800 z - 42 525) \operatorname{erf}(\sqrt{-z}) \right)$$

07.25.03.5745.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{9}{2}, 6; z\right) = \frac{e^z (128 z^7 - 4544 z^6 + 54 240 z^5 - 257 232 z^4 + 422 616 z^3 - 79 380 z^2 - 35 910 z - 14 175)}{786 432 z^3} + \frac{1}{1 572 864 z^{7/2}} \left(\sqrt{\pi} (-256 z^8 + 9216 z^7 - 112 896 z^6 + 564 480 z^5 - 1 058 400 z^4 + 423 360 z^3 + 105 840 z^2 + 45 360 z + 14 175) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.5746.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{9}{2}, 6; -z\right) = \frac{e^{-z} (128 z^7 + 4544 z^6 + 54 240 z^5 + 257 232 z^4 + 422 616 z^3 + 79 380 z^2 - 35 910 z + 14 175)}{786 432 z^3} + \frac{1}{1 572 864 z^{7/2}} \left(\sqrt{\pi} (256 z^8 + 9216 z^7 + 112 896 z^6 + 564 480 z^5 + 1 058 400 z^4 + 423 360 z^3 - 105 840 z^2 + 45 360 z - 14 175) \operatorname{erf}(\sqrt{-z}) \right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = 5$

07.25.03.5747.01

$${}_2F_2\left(-\frac{9}{2}, 6; 5, 5; z\right) = \frac{1}{57 432 375 z^3} \left(16 e^{z/2} (1216 z^8 - 41 312 z^7 + 471 888 z^6 - 2 152 992 z^5 + 3 496 200 z^4 - 886 410 z^3 - 301 455 z^2 - 117 180 z - 22 680) I_1\left(\frac{z}{2}\right) - \frac{1}{57 432 375 z^2} 16 e^{z/2} (1216 z^7 - 42 528 z^6 + 512 592 z^5 - 2 605 440 z^4 + 5 450 760 z^3 - 3 664 710 z^2 - 29 295 z - 5670) I_0\left(\frac{z}{2}\right) \right)$$

07.25.03.5748.01

$${}_2F_2\left(-\frac{9}{2}, 6; 5, \frac{11}{2}; z\right) = \frac{1}{31457280z^4} e^z (4864z^8 - 173824z^7 + 2092800z^6 - 10041792z^5 + 16787040z^4 - 3281040z^3 - 1557360z^2 - 699300z - 99225) + \frac{1}{62914560z^{9/2}} \left(\sqrt{\pi} (-9728z^9 + 352512z^8 - 4354560z^7 + 22014720z^6 - 41912640z^5 + 17146080z^4 + 4445280z^3 + 2041200z^2 + 765450z + 99225) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.5749.01

$${}_2F_2\left(-\frac{9}{2}, 6; 5, \frac{11}{2}; -z\right) = \frac{1}{31457280z^4} (e^{-z} (4864z^8 + 173824z^7 + 2092800z^6 + 10041792z^5 + 16787040z^4 + 3281040z^3 - 1557360z^2 + 699300z - 99225)) + \frac{1}{62914560z^{9/2}} \left(\sqrt{\pi} (9728z^9 + 352512z^8 + 4354560z^7 + 22014720z^6 + 41912640z^5 + 17146080z^4 - 4445280z^3 + 2041200z^2 - 765450z + 99225) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.5750.01

$${}_2F_2\left(-\frac{9}{2}, 6; 5, 6; z\right) = \frac{1}{11486475z^3} \frac{32e^{z/2} (64z^8 - 2432z^7 + 31536z^6 - 166656z^5 + 323160z^4 - 105840z^3 - 46305z^2 - 26460z - 11340) I_1\left(\frac{z}{2}\right) - 32e^{z/2} (64z^7 - 2496z^6 + 33936z^5 - 197040z^4 + 476280z^3 - 370440z^2 - 6615z - 2835) I_0\left(\frac{z}{2}\right)}{11486475z^2}$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = \frac{11}{2}$

07.25.03.5751.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{11}{2}, 6; z\right) = \frac{1}{3145728z^4} e^z (256z^8 - 10240z^7 + 140160z^6 - 781440z^5 + 1572864z^4 - 423360z^3 - 264600z^2 - 189000z - 99225) + \frac{1}{6291456z^{9/2}} \left(\sqrt{\pi} (-512z^9 + 20736z^8 - 290304z^7 + 1693440z^6 - 3810240z^5 + 1905120z^4 + 635040z^3 + 408240z^2 + 255150z + 99225) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.5752.01

$${}_2F_2\left(-\frac{9}{2}, 6; \frac{11}{2}, 6; -z\right) = \frac{1}{3145728z^4} e^{-z} (256z^8 + 10240z^7 + 140160z^6 + 781440z^5 + 1572864z^4 + 423360z^3 - 264600z^2 + 189000z - 99225) + \frac{1}{6291456z^{9/2}} \left(\sqrt{\pi} (512z^9 + 20736z^8 + 290304z^7 + 1693440z^6 - 3810240z^5 + 1905120z^4 - 635040z^3 + 408240z^2 - 255150z + 99225) \operatorname{erf}(\sqrt{z})\right)$$

For fixed z and $a_1 = -\frac{9}{2}$, $a_2 = 6$, $b_1 = 6$

$$\begin{aligned}
 & \text{07.25.03.5753.01} \\
 & {}_2F_2\left(-\frac{9}{2}, 6; 6, 6; z\right) = \\
 & \frac{1}{43\,648\,605\,z^4} \left(32 e^{z/2} (128 z^9 - 5440 z^8 + 80\,064 z^7 - 489\,840 z^6 + 1\,132\,752 z^5 - 476\,280 z^4 - 264\,600 z^3 - \right. \\
 & \quad \left. 214\,515 z^2 - 170\,100 z - 90\,720) I_1\left(\frac{z}{2}\right) - \frac{1}{43\,648\,605\,z^3} \right. \\
 & \quad \left. 32 e^{z/2} (128 z^8 - 5568 z^7 + 85\,440 z^6 - 567\,312 z^5 + 1\,587\,600 z^4 - 1\,428\,840 z^3 - 52\,920 z^2 - 42\,525 z - 22\,680) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 \geq -\frac{7}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{7}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{7}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.5754.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{e^z (16 z^4 - 224 z^3 + 1544 z^2 - 5832 z + 9801)}{9801}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5755.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{891} e^z (8 z^3 - 92 z^2 + 450 z - 891)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5756.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{99} e^z (4 z^2 - 36 z + 99)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5757.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{e^z (64 z^3 + 32 z^2 - 162 z + 1485)}{1485} - \frac{64 \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})}{1485}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5758.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{e^{-z} (-64 z^3 + 32 z^2 + 162 z + 1485)}{1485} - \frac{64 \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})}{1485}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5759.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{297} e^z (-32 z^3 + 320 z^2 + 144 z + 297) + \frac{16}{297} \sqrt{\pi} (2 z^{7/2} - 21 z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5760.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{297} e^{-z} (32 z^3 + 320 z^2 - 144 z + 297) + \frac{16}{297} \sqrt{\pi} (2 z^{7/2} + 21 z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5761.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{99} e^z (8 z^3 - 164 z^2 + 342 z + 99) - \frac{4}{99} \sqrt{\pi} (2 z^{7/2} - 42 z^{5/2} + 105 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.5762.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{99} e^{-z} (-8z^3 - 164z^2 - 342z + 99) - \frac{4}{99} \sqrt{\pi} (2z^{7/2} + 42z^{5/2} + 105z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5763.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{297} e^z (-4z^3 + 124z^2 - 570z + 297) + \frac{1}{297} \sqrt{\pi} (4z^{7/2} - 126z^{5/2} + 630z^{3/2} - 525\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5764.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{297} e^{-z} (4z^3 + 124z^2 + 570z + 297) + \frac{1}{297} \sqrt{\pi} (4z^{7/2} + 126z^{5/2} + 630z^{3/2} + 525\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5765.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (64z^4 - 2400z^3 + 16434z^2 - 28350z + 10395) I_0\left(\frac{z}{2}\right) - 2e^{z/2} (32z^4 - 1168z^3 + 7065z^2 - 7662z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.5766.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (-8z^3 + 332z^2 - 2358z + 3177)}{4752} + \frac{\sqrt{\pi} (16z^4 - 672z^3 + 5040z^2 - 8400z + 1575) \operatorname{erfi}(\sqrt{z})}{9504\sqrt{z}}$$

07.25.03.5767.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (8z^3 + 332z^2 + 2358z + 3177)}{4752} + \frac{\sqrt{\pi} (16z^4 + 672z^3 + 5040z^2 + 8400z + 1575) \operatorname{erf}(\sqrt{z})}{9504\sqrt{z}}$$

07.25.03.5768.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (128z^4 - 6144z^3 + 57396z^2 - 147210z + 93555) I_0\left(\frac{z}{2}\right) - e^{z/2} (-128z^4 + 6016z^3 - 51444z^2 + 98646z - 15015) I_1\left(\frac{z}{2}\right)}{93555}$$

07.25.03.5769.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16z^4 + 832z^3 - 7992z^2 + 17400z - 2205)}{31680z} + \frac{\sqrt{\pi} (32z^5 - 1680z^4 + 16800z^3 - 42000z^2 + 15750z + 2205) \operatorname{erfi}(\sqrt{z})}{63360z^{3/2}}$$

07.25.03.5770.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (16z^4 + 832z^3 + 7992z^2 + 17400z + 2205)}{31680z} + \frac{\sqrt{\pi} (32z^5 + 1680z^4 + 16800z^3 + 42000z^2 + 15750z - 2205) \operatorname{erf}(\sqrt{z})}{63360z^{3/2}}$$

07.25.03.5771.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, 3; z\right) = \frac{4e^{z/2} (128z^4 - 7488z^3 + 88644z^2 - 301560z + 262395) I_0\left(\frac{z}{2}\right) - 4e^{z/2} (128z^5 - 7360z^4 + 81348z^3 - 223764z^2 + 72345z + 20475) I_1\left(\frac{z}{2}\right)}{1029105z}$$

07.25.03.5772.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (-8z^5 + 500z^4 - 6054z^3 + 18213z^2 - 5145z - 2205)}{38016z^2} + \frac{\sqrt{\pi} (16z^6 - 1008z^5 + 12600z^4 - 42000z^3 + 23625z^2 + 6615z + 2205) \operatorname{erfi}(\sqrt{z})}{76032z^{5/2}}$$

07.25.03.5773.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (8z^5 + 500z^4 + 6054z^3 + 18213z^2 + 5145z - 2205)}{38016z^2} + \frac{\sqrt{\pi} (16z^6 + 1008z^5 + 12600z^4 + 42000z^3 + 23625z^2 - 6615z + 2205) \operatorname{erf}(\sqrt{z})}{76032z^{5/2}}$$

07.25.03.5774.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2} (256z^5 - 17664z^4 + 253224z^3 - 1073100z^2 + 1168020z + 26775) I_0\left(\frac{z}{2}\right)}{4459455z} - \frac{4e^{z/2} (256z^6 - 17408z^5 + 235944z^4 - 845604z^3 + 423780z^2 + 212625z + 107100) I_1\left(\frac{z}{2}\right)}{4459455z^2}$$

07.25.03.5775.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (-16z^6 + 1168z^5 - 17064z^4 + 65532z^3 - 29505z^2 - 21420z - 14175)}{152064z^3} + \frac{1}{304128z^{7/2}} \sqrt{\pi} (32z^7 - 2352z^6 + 35280z^5 - 147000z^4 + 110250z^3 + 46305z^2 + 30870z + 14175) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5776.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (16z^6 + 1168z^5 + 17064z^4 + 65532z^3 + 29505z^2 - 21420z + 14175)}{152064z^3} + \frac{1}{304128z^{7/2}} \sqrt{\pi} (32z^7 + 2352z^6 + 35280z^5 + 147000z^4 + 110250z^3 - 46305z^2 + 30870z - 14175) \operatorname{erf}(\sqrt{z})$$

07.25.03.5777.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2} (256z^6 - 20352z^5 + 342600z^4 - 1737960z^3 + 2255400z^2 + 149940z + 101745) I_0\left(\frac{z}{2}\right)}{66891825z^2} - \frac{1}{66891825z^3} 128e^{z/2} (64z^7 - 5024z^6 + 80658z^5 - 356280z^4 + 243075z^3 + 168210z^2 + 149940z + 101745) I_1\left(\frac{z}{2}\right)$$

07.25.03.5778.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (-128z^7 + 10688z^6 - 182880z^5 + 854544z^4 - 533400z^3 - 515340z^2 - 576450z - 496125)}{2162688z^4} + \frac{1}{4325376z^{9/2}} \left(\sqrt{\pi} (256z^8 - 21504z^7 + 376320z^6 - 1881600z^5 + 1764000z^4 + 987840z^3 + 987840z^2 + 907200z + 496125) \operatorname{erfi}(\sqrt{z}) \right)$$

$$\begin{aligned}
 & \text{07.25.03.5779.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{e^{-z} (128 z^7 + 10\,688 z^6 + 182\,880 z^5 + 854\,544 z^4 + 533\,400 z^3 - 515\,340 z^2 + 576\,450 z - 496\,125)}{2\,162\,688 z^4} + \\
 & \frac{1}{4\,325\,376 z^{9/2}} \left(\sqrt{\pi} (256 z^8 + 21\,504 z^7 + 376\,320 z^6 + 1\,881\,600 z^5 + \right. \\
 & \left. 1\,764\,000 z^4 - 987\,840 z^3 + 987\,840 z^2 - 907\,200 z + 496\,125) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5780.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{227\,432\,205 z^3} \\
 & 32 e^{z/2} (512 z^7 - 46\,080 z^6 + 890\,832 z^5 - 5\,262\,600 z^4 + 7\,901\,460 z^3 + 999\,180 z^2 + 1\,226\,925 z + 1\,005\,480) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{227\,432\,205 z^4} \left(32 e^{z/2} (512 z^8 - 45\,568 z^7 + 845\,520 z^6 - 4\,439\,352 z^5 + \right. \\
 & \left. 3\,840\,900 z^4 + 3\,330\,180 z^3 + 4\,122\,405 z^2 + 4\,907\,700 z + 4\,021\,920) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{7}{2}$, $b_1 = -\frac{9}{2}$

$$\text{07.25.03.5781.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{81} e^z (4 z^2 - 32 z + 81)$$

$$\text{07.25.03.5782.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{9} e^z (2 z - 9)$$

$$\text{07.25.03.5783.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{135} e^z (16 z^3 + 8 z^2 + 12 z + 135) - \frac{16}{135} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.5784.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{135} e^{-z} (-16 z^3 + 8 z^2 - 12 z + 135) - \frac{16}{135} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.5785.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{27} e^z (-8 z^3 + 52 z^2 + 22 z + 27) + \frac{8}{27} \sqrt{\pi} (z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.5786.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{27} e^{-z} (8 z^3 + 52 z^2 - 22 z + 27) + \frac{8}{27} \sqrt{\pi} (z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.5787.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{9} e^z (2 z^3 - 27 z^2 + 40 z + 9) + \frac{1}{18} \sqrt{\pi} (-4 z^{7/2} + 56 z^{5/2} - 105 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5788.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{9} e^{-z} (-2z^3 - 27z^2 - 40z + 9) + \frac{1}{18} \sqrt{\pi} (-4z^{7/2} - 56z^{5/2} - 105z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5789.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{54} e^z (-2z^3 + 41z^2 - 138z + 54) + \frac{1}{108} \sqrt{\pi} (4z^{7/2} - 84z^{5/2} + 315z^{3/2} - 210\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5790.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{54} e^{-z} (2z^3 + 41z^2 + 138z + 54) + \frac{1}{108} \sqrt{\pi} (4z^{7/2} + 84z^{5/2} + 315z^{3/2} + 210\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5791.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (16z^4 - 404z^3 + 2124z^2 - 3045z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16z^4 + 388z^3 - 1744z^2 + 1479z) I_1\left(\frac{z}{2}\right)$$

07.25.03.5792.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z (-8z^3 + 220z^2 - 1154z + 1203)}{1728} + \frac{\sqrt{\pi} (16z^4 - 448z^3 + 2520z^2 - 3360z + 525) \operatorname{erfi}(\sqrt{z})}{3456\sqrt{z}}$$

07.25.03.5793.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (8z^3 + 220z^2 + 1154z + 1203)}{1728} + \frac{\sqrt{\pi} (16z^4 + 448z^3 + 2520z^2 + 3360z + 525) \operatorname{erf}(\sqrt{z})}{3456\sqrt{z}}$$

07.25.03.5794.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (32z^4 - 1032z^3 + 7356z^2 - 15540z + 8505) I_0\left(\frac{z}{2}\right)}{8505} + \frac{e^{z/2} (-32z^4 + 1000z^3 - 6372z^2 + 9636z - 1155) I_1\left(\frac{z}{2}\right)}{8505}$$

07.25.03.5795.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (-8z^4 + 276z^3 - 1966z^2 + 3345z - 315)}{5760z} + \frac{\sqrt{\pi} (16z^5 - 560z^4 + 4200z^3 - 8400z^2 + 2625z + 315) \operatorname{erfi}(\sqrt{z})}{11520z^{3/2}}$$

07.25.03.5796.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^4 + 276z^3 + 1966z^2 + 3345z + 315)}{5760z} + \frac{\sqrt{\pi} (16z^5 + 560z^4 + 4200z^3 + 8400z^2 + 2625z - 315) \operatorname{erf}(\sqrt{z})}{11520z^{3/2}}$$

07.25.03.5797.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, 3; z\right) = \frac{8 e^{z/2} (16z^4 - 628z^3 + 5652z^2 - 15750z + 11865) I_0\left(\frac{z}{2}\right)}{93555} - \frac{4 e^{z/2} (32z^5 - 1224z^4 + 10096z^3 - 21984z^2 + 5670z + 1365) I_1\left(\frac{z}{2}\right)}{93555z}$$

07.25.03.5798.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (-32 z^5 + 1328 z^4 - 11\,952 z^3 + 28\,248 z^2 - 6090 z - 2205)}{55\,296 z^2} + \frac{\sqrt{\pi} (64 z^6 - 2688 z^5 + 25\,200 z^4 - 67\,200 z^3 + 31\,500 z^2 + 7560 z + 2205) \operatorname{erfi}(\sqrt{z})}{110\,592 z^{5/2}}$$

07.25.03.5799.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 1328 z^4 + 11\,952 z^3 + 28\,248 z^2 + 6090 z - 2205)}{55\,296 z^2} + \frac{\sqrt{\pi} (64 z^6 + 2688 z^5 + 25\,200 z^4 + 67\,200 z^3 + 31\,500 z^2 - 7560 z + 2205) \operatorname{erf}(\sqrt{z})}{110\,592 z^{5/2}}$$

07.25.03.5800.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^5 - 2960 z^4 + 32\,184 z^3 - 111\,300 z^2 + 105\,000 z + 1575) I_0\left(\frac{z}{2}\right)}{405\,405 z} - \frac{4 e^{z/2} (64 z^6 - 2896 z^5 + 29\,320 z^4 - 83\,364 z^3 + 33\,600 z^2 + 14\,595 z + 6300) I_1\left(\frac{z}{2}\right)}{405\,405 z^2}$$

07.25.03.5801.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (-32 z^6 + 1552 z^5 - 16\,880 z^4 + 51\,096 z^3 - 17\,850 z^2 - 11\,235 z - 6300)}{110\,592 z^3} + \frac{\sqrt{\pi} (64 z^7 - 3136 z^6 + 35\,280 z^5 - 117\,600 z^4 + 73\,500 z^3 + 26\,460 z^2 + 15\,435 z + 6300) \operatorname{erfi}(\sqrt{z})}{221\,184 z^{7/2}}$$

07.25.03.5802.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (32 z^6 + 1552 z^5 + 16\,880 z^4 + 51\,096 z^3 + 17\,850 z^2 - 11\,235 z + 6300)}{110\,592 z^3} + \frac{\sqrt{\pi} (64 z^7 + 3136 z^6 + 35\,280 z^5 + 117\,600 z^4 + 73\,500 z^3 - 26\,460 z^2 + 15\,435 z - 6300) \operatorname{erf}(\sqrt{z})}{221\,184 z^{7/2}}$$

07.25.03.5803.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (64 z^6 - 3408 z^5 + 43\,440 z^4 - 179\,340 z^3 + 201\,600 z^2 + 9135 z + 5355) I_0\left(\frac{z}{2}\right)}{6081\,075 z^2} - \frac{32 e^{z/2} (64 z^7 - 3344 z^6 + 40\,128 z^5 - 140\,820 z^4 + 77\,700 z^3 + 46\,935 z^2 + 36\,540 z + 21\,420) I_1\left(\frac{z}{2}\right)}{6081\,075 z^3}$$

07.25.03.5804.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (-128 z^7 + 7104 z^6 - 90\,592 z^5 + 334\,416 z^4 - 163\,800 z^3 - 139\,020 z^2 - 135\,450 z - 99\,225)}{786\,432 z^4} + \frac{1}{1\,572\,864 z^{9/2}} + \frac{\sqrt{\pi} (256 z^8 - 14\,336 z^7 + 188\,160 z^6 - 752\,640 z^5 + 588\,000 z^4 + 282\,240 z^3 + 246\,960 z^2 + 201\,600 z + 99\,225) \operatorname{erfi}(\sqrt{z})}{1\,572\,864 z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.5805.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{e^{-z} (128 z^7 + 7104 z^6 + 90592 z^5 + 334416 z^4 + 163800 z^3 - 139020 z^2 + 135450 z - 99225)}{786432 z^4} + \frac{1}{1572864 z^{9/2}} \\
 & \left(\sqrt{\pi} (256 z^8 + 14336 z^7 + 188160 z^6 + 752640 z^5 + 588000 z^4 - 282240 z^3 + 246960 z^2 - 201600 z + 99225) \operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5806.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{9}{2}, 6; z\right) = \frac{1}{20675655 z^3} \\
 & 32 e^{z/2} (128 z^7 - 7712 z^6 + 112752 z^5 - 540960 z^4 + 702660 z^3 + 62370 z^2 + 67095 z + 47880) I_0\left(\frac{z}{2}\right) - \frac{1}{20675655 z^4} \\
 & \left(32 e^{z/2} (128 z^8 - 7584 z^7 + 105232 z^6 - 439392 z^5 + 308700 z^4 + 234570 z^3 + 255465 z^2 + 268380 z + 191520) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{7}{2}$, $b_1 = -\frac{7}{2}$

$$\text{07.25.03.5807.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = e^z$$

$$\text{07.25.03.5808.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (8 z^3 + 4 z^2 + 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.5809.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-8 z^3 + 4 z^2 - 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.5810.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (-4 z^3 + 12 z^2 + 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.5811.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (4 z^3 + 12 z^2 - 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.5812.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{2} e^z (2 z^3 - 13 z^2 + 12 z + 2) + \frac{1}{4} \sqrt{\pi} (-4 z^{7/2} + 28 z^{5/2} - 35 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.5813.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2} e^{-z} (-2 z^3 - 13 z^2 - 12 z + 2) + \frac{1}{4} \sqrt{\pi} (-4 z^{7/2} - 28 z^{5/2} - 35 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.5814.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{24} e^z (-4 z^3 + 40 z^2 - 87 z + 24) + \frac{1}{48} \sqrt{\pi} (8 z^{7/2} - 84 z^{5/2} + 210 z^{3/2} - 105 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.5815.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{24} e^{-z} (4 z^3 + 40 z^2 + 87 z + 24) + \frac{1}{48} \sqrt{\pi} (8 z^{7/2} + 84 z^{5/2} + 210 z^{3/2} + 105 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5816.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8z^4 - 104z^3 + 376z^2 - 420z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} (2z^4 - 24z^3 + 71z^2 - 44z) I_1\left(\frac{z}{2}\right)$$

07.25.03.5817.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{384} e^z (-8z^3 + 108z^2 - 370z + 279) + \frac{\sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.5818.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} e^{-z} (8z^3 + 108z^2 + 370z + 279) + \frac{\sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.5819.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (16z^4 - 264z^3 + 1284z^2 - 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16z^4 + 248z^3 - 1044z^2 + 1164z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.5820.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16z^4 + 272z^3 - 1272z^2 + 1580z - 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.5821.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (16z^4 + 272z^3 + 1272z^2 + 1580z + 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.5822.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (16z^4 - 320z^3 + 1956z^2 - 4200z + 2625) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16z^5 - 304z^4 + 1660z^3 - 2676z^2 + 525z + 105) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.5823.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (-32z^5 + 656z^4 - 3888z^3 + 6744z^2 - 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi} (64z^6 - 1344z^5 + 8400z^4 - 16800z^3 + 6300z^2 + 1260z + 315) \operatorname{erfi}(\sqrt{z})}{24576z^{5/2}}$$

07.25.03.5824.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32z^5 + 656z^4 + 3888z^3 + 6744z^2 + 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi} (64z^6 + 1344z^5 + 8400z^4 + 16800z^3 + 6300z^2 - 1260z + 315) \operatorname{erf}(\sqrt{z})}{24576z^{5/2}}$$

07.25.03.5825.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 - 752 z^4 + 5536 z^3 - 14700 z^2 + 11550 z + 105) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (32 z^6 - 720 z^5 + 4832 z^4 - 10196 z^3 + 3150 z^2 + 1155 z + 420) I_1\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.5826.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (-64 z^6 + 1536 z^5 - 11024 z^4 + 24576 z^3 - 6300 z^2 - 3360 z - 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 - 3136 z^6 + 23520 z^5 - 58800 z^4 + 29400 z^3 + 8820 z^2 + 4410 z + 1575) \operatorname{erfi}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.5827.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1536 z^5 + 11024 z^4 + 24576 z^3 + 6300 z^2 - 3360 z + 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.5828.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23520 z^3 + 22050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675675 z^3}$$

07.25.03.5829.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{1048576 z^{9/2}} - \frac{3 \sqrt{\pi} (256 z^8 - 7168 z^7 + 62720 z^6 - 188160 z^5 + 117600 z^4 + 47040 z^3 + 35280 z^2 + 25200 z + 11025) \operatorname{erfi}(\sqrt{z}) - 3 e^z (128 z^7 - 3520 z^6 + 29664 z^5 - 80848 z^4 + 29400 z^3 + 21420 z^2 + 17850 z + 11025)}{524288 z^4}$$

07.25.03.5830.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29664 z^5 + 80848 z^4 + 29400 z^3 - 21420 z^2 + 17850 z - 11025)}{524288 z^4} + \frac{1}{1048576 z^{9/2}} - \frac{3 \sqrt{\pi} (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025) \operatorname{erf}(\sqrt{z})}{524288 z^4}$$

07.25.03.5831.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{7}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)}{2297295 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{5}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{5}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.5832.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{e^z (32 z^5 - 432 z^4 + 3312 z^3 - 16296 z^2 + 48762 z - 68607)}{68607}$$

07.25.03.5833.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{e^z (16 z^4 - 192 z^3 + 1176 z^2 - 4032 z + 6237)}{6237}$$

07.25.03.5834.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{1}{693} e^z (8 z^3 - 84 z^2 + 378 z - 693)$$

07.25.03.5835.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{99} e^z (4 z^2 - 36 z + 99)$$

07.25.03.5836.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{99} e^z (32 z^2 + 6 z + 99) - \frac{32}{99} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5837.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{32}{99} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{99} e^{-z} (32 z^2 - 6 z + 99)$$

07.25.03.5838.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{33} e^z (-16 z^2 + 72 z + 33) + \frac{16}{33} \sqrt{\pi} (z^{5/2} - 5 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5839.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{33} e^{-z} (-16 z^2 - 72 z + 33) - \frac{16}{33} \sqrt{\pi} (z^{5/2} + 5 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5840.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{33} e^z (4 z^2 - 38 z + 33) - \frac{2}{33} \sqrt{\pi} (2 z^{5/2} - 20 z^{3/2} + 25 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5841.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{33} e^{-z} (4 z^2 + 38 z + 33) + \frac{2}{33} \sqrt{\pi} (2 z^{5/2} + 20 z^{3/2} + 25 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5842.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{495} e^{z/2} (-32 z^3 + 424 z^2 - 1035 z + 495) I_0\left(\frac{z}{2}\right) + \frac{1}{495} e^{z/2} (32 z^3 - 392 z^2 + 659 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.5843.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{198} e^z (4 z^2 - 58 z + 123) + \frac{\sqrt{\pi} (-8 z^3 + 120 z^2 - 300 z + 75) \operatorname{erfi}(\sqrt{z})}{396 \sqrt{z}}$$

07.25.03.5844.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{198} e^{-z} (4z^2 + 58z + 123) + \frac{\sqrt{\pi} (8z^3 + 120z^2 + 300z + 75) \operatorname{erf}(\sqrt{z})}{396\sqrt{z}}$$

07.25.03.5845.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (-64z^3 + 1168z^2 - 4310z + 3465) I_0\left(\frac{z}{2}\right)}{3465} + \frac{e^{z/2} (64z^3 - 1104z^2 + 3238z - 715) I_1\left(\frac{z}{2}\right)}{3465}$$

07.25.03.5846.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^3 - 156z^2 + 526z - 105)}{1056z} + \frac{\sqrt{\pi} (-16z^4 + 320z^3 - 1200z^2 + 600z + 105) \operatorname{erfi}(\sqrt{z})}{2112z^{3/2}}$$

07.25.03.5847.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^3 + 156z^2 + 526z + 105)}{1056z} + \frac{\sqrt{\pi} (16z^4 + 320z^3 + 1200z^2 + 600z - 105) \operatorname{erf}(\sqrt{z})}{2112z^{3/2}}$$

07.25.03.5848.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (64z^4 - 1424z^3 + 5958z^2 - 2730z - 975) I_1\left(\frac{z}{2}\right)}{31185z} - \frac{8 e^{z/2} (32z^3 - 744z^2 + 3675z - 4020) I_0\left(\frac{z}{2}\right)}{31185}$$

07.25.03.5849.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (8z^4 - 196z^3 + 906z^2 - 385z - 210)}{2112z^2} + \frac{\sqrt{\pi} (-16z^5 + 400z^4 - 2000z^3 + 1500z^2 + 525z + 210) \operatorname{erfi}(\sqrt{z})}{4224z^{5/2}}$$

07.25.03.5850.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (8z^4 + 196z^3 + 906z^2 + 385z - 210)}{2112z^2} + \frac{\sqrt{\pi} (16z^5 + 400z^4 + 2000z^3 + 1500z^2 - 525z + 210) \operatorname{erf}(\sqrt{z})}{4224z^{5/2}}$$

07.25.03.5851.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (128z^5 - 3488z^4 + 18956z^3 - 13290z^2 - 8175z - 5100) I_1\left(\frac{z}{2}\right)}{114345z^2} - \frac{4 e^{z/2} (128z^4 - 3616z^3 + 22380z^2 - 30630z - 1275) I_0\left(\frac{z}{2}\right)}{114345z}$$

07.25.03.5852.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (8z^5 - 236z^4 + 1386z^3 - 915z^2 - 810z - 675)}{25344z^3} - \frac{7\sqrt{\pi} (16z^6 - 480z^5 + 3000z^4 - 3000z^3 - 1575z^2 - 1260z - 675) \operatorname{erfi}(\sqrt{z})}{50688z^{7/2}}$$

07.25.03.5853.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (8 z^5 + 236 z^4 + 1386 z^3 + 915 z^2 - 810 z + 675)}{25\,344 z^3} + \frac{7 \sqrt{\pi} (16 z^6 + 480 z^5 + 3000 z^4 + 3000 z^3 - 1575 z^2 + 1260 z - 675) \operatorname{erf}(\sqrt{z})}{50\,688 z^{7/2}}$$

07.25.03.5854.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (128 z^6 - 4128 z^5 + 27\,596 z^4 - 26\,120 z^3 - 21\,915 z^2 - 23\,460 z - 19\,380) I_1\left(\frac{z}{2}\right)}{1\,486\,485 z^3} - \frac{32 e^{z/2} (128 z^5 - 4256 z^4 + 31\,660 z^3 - 51\,780 z^2 - 5865 z - 4845) I_0\left(\frac{z}{2}\right)}{1\,486\,485 z^2}$$

07.25.03.5855.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (64 z^6 - 2208 z^5 + 15\,728 z^4 - 14\,160 z^3 - 16\,380 z^2 - 22\,050 z - 23\,625)}{45\,056 z^4} + \frac{1}{90\,112 z^{9/2}} \sqrt{\pi} (-128 z^7 + 4480 z^6 - 33\,600 z^5 + 42\,000 z^4 + 29\,400 z^3 + 35\,280 z^2 + 37\,800 z + 23\,625) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5856.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 2208 z^5 + 15\,728 z^4 + 14\,160 z^3 - 16\,380 z^2 + 22\,050 z - 23\,625)}{45\,056 z^4} + \frac{1}{90\,112 z^{9/2}} \sqrt{\pi} (128 z^7 + 4480 z^6 + 33\,600 z^5 + 42\,000 z^4 - 29\,400 z^3 + 35\,280 z^2 - 37\,800 z + 23\,625) \operatorname{erf}(\sqrt{z})$$

07.25.03.5857.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{4\,459\,455 z^4} 32 e^{z/2} (256 z^7 - 9536 z^6 + 75\,672 z^5 - 90\,300 z^4 - 94\,500 z^3 - 139\,185 z^2 - 194\,940 z - 191\,520) I_1\left(\frac{z}{2}\right) - \frac{32 e^{z/2} (256 z^6 - 9792 z^5 + 85\,080 z^4 - 161\,460 z^3 - 33\,300 z^2 - 48\,735 z - 47\,880) I_0\left(\frac{z}{2}\right)}{4\,459\,455 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{5}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.5858.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{1}{567} e^z (8 z^3 - 76 z^2 + 322 z - 567)$$

07.25.03.5859.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{63} e^z (4 z^2 - 28 z + 63)$$

07.25.03.5860.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{1}{9} e^z (2 z - 9)$$

07.25.03.5861.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{27} e^z (16z^2 + 8z + 27) - \frac{16}{27} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5862.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{16}{27} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{27} e^{-z} (16z^2 - 8z + 27)$$

07.25.03.5863.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{9} e^z (-8z^2 + 26z + 9) + \frac{2}{9} \sqrt{\pi} (4z^{5/2} - 15z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5864.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{9} e^{-z} (-8z^2 - 26z + 9) - \frac{2}{9} \sqrt{\pi} (4z^{5/2} + 15z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5865.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{9} e^z (2z^2 - 14z + 9) + \frac{1}{9} \sqrt{\pi} (-2z^{5/2} + 15z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5866.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{9} e^{-z} (2z^2 + 14z + 9) + \frac{1}{9} \sqrt{\pi} (2z^{5/2} + 15z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5867.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{135} e^{z/2} (-16z^3 + 162z^2 - 330z + 135) I_0\left(\frac{z}{2}\right) + \frac{2}{135} e^{z/2} (8z^3 - 73z^2 + 96z) I_1\left(\frac{z}{2}\right)$$

07.25.03.5868.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{216} e^z (8z^2 - 86z + 141) + \frac{\sqrt{\pi} (-16z^3 + 180z^2 - 360z + 75) \operatorname{erfi}(\sqrt{z})}{432 \sqrt{z}}$$

07.25.03.5869.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{216} e^{-z} (8z^2 + 86z + 141) + \frac{\sqrt{\pi} (16z^3 + 180z^2 + 360z + 75) \operatorname{erf}(\sqrt{z})}{432 \sqrt{z}}$$

07.25.03.5870.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (-32z^3 + 444z^2 - 1350z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (32z^3 - 412z^2 + 954z - 165) I_1\left(\frac{z}{2}\right)$$

07.25.03.5871.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^3 - 116z^2 + 306z - 45)}{576z} + \frac{\sqrt{\pi} (-16z^4 + 240z^3 - 720z^2 + 300z + 45) \operatorname{erfi}(\sqrt{z})}{1152 z^{3/2}}$$

07.25.03.5872.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^3 + 116z^2 + 306z + 45)}{576z} + \frac{\sqrt{\pi} (16z^4 + 240z^3 + 720z^2 + 300z - 45) \operatorname{erf}(\sqrt{z})}{1152 z^{3/2}}$$

07.25.03.5873.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, 3; z\right) = \frac{4 e^{z/2} (32z^4 - 532z^3 + 1764z^2 - 645z - 195) I_1\left(\frac{z}{2}\right)}{8505z} - \frac{4 e^{z/2} (32z^3 - 564z^2 + 2280z - 2175) I_0\left(\frac{z}{2}\right)}{8505}$$

$$\begin{aligned}
 & 07.25.03.5874.01 \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \\
 & \frac{e^z (32 z^4 - 584 z^3 + 2124 z^2 - 690 z - 315)}{4608 z^2} + \frac{\sqrt{\pi} (-64 z^5 + 1200 z^4 - 4800 z^3 + 3000 z^2 + 900 z + 315) \operatorname{erfi}(\sqrt{z})}{9216 z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5875.01 \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \\
 & \frac{e^{-z} (32 z^4 + 584 z^3 + 2124 z^2 + 690 z - 315)}{4608 z^2} + \frac{\sqrt{\pi} (64 z^5 + 1200 z^4 + 4800 z^3 + 3000 z^2 - 900 z + 315) \operatorname{erf}(\sqrt{z})}{9216 z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5876.01 \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, 4; z\right) = \\
 & \frac{4 e^{z/2} (64 z^5 - 1304 z^4 + 5628 z^3 - 3180 z^2 - 1695 z - 900) I_1\left(\frac{z}{2}\right)}{31185 z^2} - \frac{4 e^{z/2} (64 z^4 - 1368 z^3 + 6900 z^2 - 8220 z - 225) I_0\left(\frac{z}{2}\right)}{31185 z}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5877.01 \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (16 z^5 - 352 z^4 + 1632 z^3 - 840 z^2 - 645 z - 450)}{27648 z^3} - \\
 & \frac{7 \sqrt{\pi} (32 z^6 - 720 z^5 + 3600 z^4 - 3000 z^3 - 1350 z^2 - 945 z - 450) \operatorname{erfi}(\sqrt{z})}{55296 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5878.01 \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (16 z^5 + 352 z^4 + 1632 z^3 + 840 z^2 - 645 z + 450)}{27648 z^3} + \\
 & \frac{7 \sqrt{\pi} (32 z^6 + 720 z^5 + 3600 z^4 + 3000 z^3 - 1350 z^2 + 945 z - 450) \operatorname{erf}(\sqrt{z})}{55296 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5879.01 \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, 5; z\right) = \frac{128 e^{z/2} (16 z^6 - 386 z^5 + 2052 z^4 - 1575 z^3 - 1155 z^2 - 1080 z - 765) I_1\left(\frac{z}{2}\right)}{405405 z^3} - \\
 & \frac{32 e^{z/2} (64 z^5 - 1608 z^4 + 9720 z^3 - 13800 z^2 - 1080 z - 765) I_0\left(\frac{z}{2}\right)}{405405 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.5880.01 \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (128 z^6 - 3296 z^5 + 18576 z^4 - 13200 z^3 - 13440 z^2 - 15750 z - 14175)}{49152 z^4} + \\
 & \frac{1}{98304 z^{9/2}} \sqrt{\pi} (-256 z^7 + 6720 z^6 - 40320 z^5 + 42000 z^4 + 25200 z^3 + 26460 z^2 + 25200 z + 14175) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5881.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{11}{2}; -z\right) = \frac{e^{-z} (128 z^6 + 3296 z^5 + 18576 z^4 + 13200 z^3 - 13440 z^2 + 15750 z - 14175)}{49152 z^4} + \\
 & \frac{1}{98304 z^{9/2}} \sqrt{\pi} (256 z^7 + 6720 z^6 + 40320 z^5 + 42000 z^4 - 25200 z^3 + 26460 z^2 - 25200 z + 14175) \operatorname{erf}(\sqrt{z}) \\
 & \text{07.25.03.5882.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (128 z^7 - 3568 z^6 + 22536 z^5 - 21900 z^4 - 20100 z^3 - 26055 z^2 - 32220 z - 27360) I_1\left(\frac{z}{2}\right)}{1216215 z^4} - \\
 & \frac{32 e^{z/2} (128 z^6 - 3696 z^5 + 26040 z^4 - 42780 z^3 - 6300 z^2 - 8055 z - 6840) I_0\left(\frac{z}{2}\right)}{1216215 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{5}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.5883.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = -\frac{1}{7} e^z (2z - 7) \\
 & \text{07.25.03.5884.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = e^z \\
 & \text{07.25.03.5885.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (4z^2 + 2z + 3) - \frac{4}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z}) \\
 & \text{07.25.03.5886.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{4}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4z^2 - 2z + 3) \\
 & \text{07.25.03.5887.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = e^z (-2z^2 + 4z + 1) + \sqrt{\pi} (2z^{5/2} - 5z^{3/2}) \operatorname{erfi}(\sqrt{z}) \\
 & \text{07.25.03.5888.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = e^{-z} (-2z^2 - 4z + 1) + \sqrt{\pi} (-2z^{5/2} - 5z^{3/2}) \operatorname{erf}(\sqrt{z}) \\
 & \text{07.25.03.5889.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{4} e^z (2z^2 - 9z + 4) + \frac{1}{8} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z}) \\
 & \text{07.25.03.5890.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{4} e^{-z} (2z^2 + 9z + 4) + \frac{1}{8} \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z}) \\
 & \text{07.25.03.5891.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-4z^3 + 28z^2 - 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^3 - 24z^2 + 23z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

07.25.03.5892.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{48} e^z (4z^2 - 28z + 33) + \frac{\sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.5893.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{48} e^{-z} (4z^2 + 28z + 33) + \frac{\sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.5894.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-8z^3 + 76z^2 - 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 - 68z^2 + 116z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.5895.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^3 - 76z^2 + 146z - 15)}{256z} + \frac{\sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.5896.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^3 + 76z^2 + 146z + 15)}{256z} + \frac{\sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.5897.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (8z^4 - 88z^3 + 216z^2 - 60z - 15) I_1\left(\frac{z}{2}\right)}{945z} - \frac{16}{945} e^{z/2} (2z^3 - 24z^2 + 75z - 60) I_0\left(\frac{z}{2}\right)$$

07.25.03.5898.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (16z^4 - 192z^3 + 512z^2 - 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.5899.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16z^4 + 192z^3 + 512z^2 + 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.5900.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (16z^5 - 216z^4 + 692z^3 - 300z^2 - 135z - 60) I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4 e^{z/2} (16z^4 - 232z^3 + 900z^2 - 900z - 15) I_0\left(\frac{z}{2}\right)}{3465z}$$

07.25.03.5901.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (32z^5 - 464z^4 + 1584z^3 - 600z^2 - 390z - 225)}{24576z^3} - \frac{7\sqrt{\pi} (64z^6 - 960z^5 + 3600z^4 - 2400z^3 - 900z^2 - 540z - 225) \operatorname{erfi}(\sqrt{z})}{49152z^{7/2}}$$

07.25.03.5902.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (32 z^5 + 464 z^4 + 1584 z^3 + 600 z^2 - 390 z + 225)}{24 576 z^3} + \frac{7 \sqrt{\pi} (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225) \operatorname{erf}(\sqrt{z})}{49 152 z^{7/2}}$$

07.25.03.5903.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^6 - 256 z^5 + 1012 z^4 - 600 z^3 - 375 z^2 - 300 z - 180) I_1\left(\frac{z}{2}\right)}{45 045 z^3} - \frac{32 e^{z/2} (16 z^5 - 272 z^4 + 1260 z^3 - 1500 z^2 - 75 z - 45) I_0\left(\frac{z}{2}\right)}{45 045 z^2}$$

07.25.03.5904.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (64 z^6 - 1088 z^5 + 4528 z^4 - 2400 z^3 - 2100 z^2 - 2100 z - 1575)}{32 768 z^4} - \frac{3 \sqrt{\pi} (128 z^7 - 2240 z^6 + 10 080 z^5 - 8400 z^4 - 4200 z^3 - 3780 z^2 - 3150 z - 1575) \operatorname{erfi}(\sqrt{z})}{65 536 z^{9/2}}$$

07.25.03.5905.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 + 1088 z^5 + 4528 z^4 + 2400 z^3 - 2100 z^2 + 2100 z - 1575)}{32 768 z^4} + \frac{3 \sqrt{\pi} (128 z^7 + 2240 z^6 + 10 080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575) \operatorname{erfi}(\sqrt{z})}{65 536 z^{9/2}}$$

07.25.03.5906.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right)}{135 135 z^4} - \frac{32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135 135 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{5}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.5907.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (8 z^3 + 4 z^2 + 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5908.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-8 z^3 + 4 z^2 - 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.5909.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (-4 z^3 + 12 z^2 + 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5910.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (4z^3 + 12z^2 - 4z + 3) + \frac{2}{3} \sqrt{\pi} (2z^{7/2} + 7z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5911.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{2} e^z (2z^3 - 13z^2 + 12z + 2) + \frac{1}{4} \sqrt{\pi} (-4z^{7/2} + 28z^{5/2} - 35z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5912.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2} e^{-z} (-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4} \sqrt{\pi} (-4z^{7/2} - 28z^{5/2} - 35z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5913.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{24} e^z (-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48} \sqrt{\pi} (8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5914.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{24} e^{-z} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} \sqrt{\pi} (8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5915.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8z^4 - 104z^3 + 376z^2 - 420z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} (2z^4 - 24z^3 + 71z^2 - 44z) I_1\left(\frac{z}{2}\right)$$

07.25.03.5916.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{384} e^z (-8z^3 + 108z^2 - 370z + 279) + \frac{\sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.5917.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} e^{-z} (8z^3 + 108z^2 + 370z + 279) + \frac{\sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.5918.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (16z^4 - 264z^3 + 1284z^2 - 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16z^4 + 248z^3 - 1044z^2 + 1164z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.5919.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16z^4 + 272z^3 - 1272z^2 + 1580z - 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.5920.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (16z^4 + 272z^3 + 1272z^2 + 1580z + 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.5921.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (16 z^4 - 320 z^3 + 1956 z^2 - 4200 z + 2625) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16 z^5 - 304 z^4 + 1660 z^3 - 2676 z^2 + 525 z + 105) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.5922.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-32 z^5 + 656 z^4 - 3888 z^3 + 6744 z^2 - 1050 z - 315)}{12288 z^2} + \frac{\sqrt{\pi} (64 z^6 - 1344 z^5 + 8400 z^4 - 16800 z^3 + 6300 z^2 + 1260 z + 315) \operatorname{erfi}(\sqrt{z})}{24576 z^{5/2}}$$

07.25.03.5923.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 656 z^4 + 3888 z^3 + 6744 z^2 + 1050 z - 315)}{12288 z^2} + \frac{\sqrt{\pi} (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315) \operatorname{erf}(\sqrt{z})}{24576 z^{5/2}}$$

07.25.03.5924.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 - 752 z^4 + 5536 z^3 - 14700 z^2 + 11550 z + 105) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (32 z^6 - 720 z^5 + 4832 z^4 - 10196 z^3 + 3150 z^2 + 1155 z + 420) I_1\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.5925.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (-64 z^6 + 1536 z^5 - 11024 z^4 + 24576 z^3 - 6300 z^2 - 3360 z - 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 - 3136 z^6 + 23520 z^5 - 58800 z^4 + 29400 z^3 + 8820 z^2 + 4410 z + 1575) \operatorname{erfi}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.5926.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1536 z^5 + 11024 z^4 + 24576 z^3 + 6300 z^2 - 3360 z + 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.5927.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23520 z^3 + 22050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675675 z^3}$$

$$\begin{aligned}
 & \text{07.25.03.5928.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{1048576 z^{9/2}} \\
 & \quad \frac{3\sqrt{\pi} (256 z^8 - 7168 z^7 + 62720 z^6 - 188160 z^5 + 117600 z^4 + 47040 z^3 + 35280 z^2 + 25200 z + 11025) \operatorname{erfi}(\sqrt{z}) - 3 e^z (128 z^7 - 3520 z^6 + 29664 z^5 - 80848 z^4 + 29400 z^3 + 21420 z^2 + 17850 z + 11025)}{524288 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5929.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \\
 & \quad \frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29664 z^5 + 80848 z^4 + 29400 z^3 - 21420 z^2 + 17850 z - 11025)}{524288 z^4} + \frac{1}{1048576 z^{9/2}} \\
 & \quad \frac{3\sqrt{\pi} (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025) \operatorname{erf}(\sqrt{z})}{524288 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5930.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{5}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right)}{2297295 z^3} - \\
 & \quad \frac{1}{2297295 z^4} 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{3}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.5931.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{e^z (64 z^6 - 704 z^5 + 5328 z^4 - 29280 z^3 + 113820 z^2 - 283500 z + 343035)}{343035}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5932.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{e^z (32 z^5 - 336 z^4 + 2160 z^3 - 9240 z^2 + 24570 z - 31185)}{31185}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5933.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (16 z^4 - 160 z^3 + 840 z^2 - 2520 z + 3465)}{3465}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5934.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{495} e^z (8 z^3 - 76 z^2 + 306 z - 495)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5935.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{99} e^z (4 z^2 - 36 z + 99)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5936.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{11} e^z (10 z + 11) - \frac{32}{33} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.5937.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{11} e^{-z} (11 - 10z) - \frac{32}{33} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.5938.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{33} e^z (33 - 16z) + \frac{8}{33} \sqrt{\pi} (2z^{3/2} - 5\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5939.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{33} e^{-z} (16z + 33) + \frac{8}{33} \sqrt{\pi} (2z^{3/2} + 5\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5940.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{99} e^{z/2} (32z^2 - 144z + 99) I_0\left(\frac{z}{2}\right) - \frac{16}{99} e^{z/2} (2z^2 - 7z) I_1\left(\frac{z}{2}\right)$$

07.25.03.5941.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (8z^2 - 40z + 15) \operatorname{erfi}(\sqrt{z})}{66\sqrt{z}} - \frac{2}{33} e^z (2z - 9)$$

07.25.03.5942.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{2}{33} e^{-z} (2z + 9) + \frac{\sqrt{\pi} (8z^2 + 40z + 15) \operatorname{erf}(\sqrt{z})}{66\sqrt{z}}$$

07.25.03.5943.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{495} e^{z/2} (64z^2 - 448z + 495) I_0\left(\frac{z}{2}\right) + \frac{1}{495} e^{z/2} (-64z^2 + 384z - 143) I_1\left(\frac{z}{2}\right)$$

07.25.03.5944.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (-8z^2 + 56z - 21)}{132z} + \frac{\sqrt{\pi} (16z^3 - 120z^2 + 90z + 21) \operatorname{erfi}(\sqrt{z})}{264z^{3/2}}$$

07.25.03.5945.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^2 + 56z + 21)}{132z} + \frac{\sqrt{\pi} (16z^3 + 120z^2 + 90z - 21) \operatorname{erf}(\sqrt{z})}{264z^{3/2}}$$

07.25.03.5946.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (64z^2 - 608z + 915) I_0\left(\frac{z}{2}\right)}{3465} - \frac{4 e^{z/2} (64z^3 - 544z^2 + 403z + 195) I_1\left(\frac{z}{2}\right)}{3465z}$$

07.25.03.5947.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (8z^4 - 80z^3 + 90z^2 + 42z + 21) \operatorname{erfi}(\sqrt{z})}{1056z^{5/2}} - \frac{5e^z (4z^3 - 38z^2 + 28z + 21)}{528z^2}$$

07.25.03.5948.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} (4z^3 + 38z^2 + 28z - 21)}{528z^2} + \frac{5\sqrt{\pi} (8z^4 + 80z^3 + 90z^2 - 42z + 21) \operatorname{erf}(\sqrt{z})}{1056z^{5/2}}$$

$$\begin{aligned}
 & \text{07.25.03.5949.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, 4; z\right) = \\
 & \frac{4 e^{z/2} (128 z^3 - 1536 z^2 + 2910 z + 255) I_0\left(\frac{z}{2}\right)}{10395 z} - \frac{4 e^{z/2} (128 z^4 - 1408 z^3 + 1566 z^2 + 1245 z + 1020) I_1\left(\frac{z}{2}\right)}{10395 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5950.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \\
 & \frac{7 \sqrt{\pi} (16 z^5 - 200 z^4 + 300 z^3 + 210 z^2 + 210 z + 135) \operatorname{erfi}(\sqrt{z})}{4224 z^{7/2}} - \frac{7 e^z (8 z^4 - 96 z^3 + 106 z^2 + 120 z + 135)}{2112 z^3}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5951.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{7 e^{-z} (8 z^4 + 96 z^3 + 106 z^2 - 120 z + 135)}{2112 z^3} + \frac{7 \sqrt{\pi} (16 z^5 + 200 z^4 + 300 z^3 - 210 z^2 + 210 z - 135) \operatorname{erf}(\sqrt{z})}{4224 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5952.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, 5; z\right) = \\
 & \frac{32 e^{z/2} (128 z^4 - 1856 z^3 + 4230 z^2 + 918 z + 969) I_0\left(\frac{z}{2}\right)}{114345 z^2} - \frac{64 e^{z/2} (64 z^5 - 864 z^4 + 1283 z^3 + 1374 z^2 + 1836 z + 1938) I_1\left(\frac{z}{2}\right)}{114345 z^3}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5953.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{7 \sqrt{\pi} (128 z^6 - 1920 z^5 + 3600 z^4 + 3360 z^3 + 5040 z^2 + 6480 z + 4725) \operatorname{erfi}(\sqrt{z})}{45056 z^{9/2}} - \\
 & \frac{7 e^z (64 z^5 - 928 z^4 + 1368 z^3 + 1980 z^2 + 3330 z + 4725)}{22528 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5954.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{7 e^{-z} (64 z^5 + 928 z^4 + 1368 z^3 - 1980 z^2 + 3330 z - 4725)}{22528 z^4} + \\
 & \frac{7 \sqrt{\pi} (128 z^6 + 1920 z^5 + 3600 z^4 - 3360 z^3 + 5040 z^2 - 6480 z + 4725) \operatorname{erf}(\sqrt{z})}{45056 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.5955.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (256 z^5 - 4352 z^4 + 11580 z^3 + 4314 z^2 + 7809 z + 9576) I_0\left(\frac{z}{2}\right)}{297297 z^3} - \\
 & \frac{32 e^{z/2} (256 z^6 - 4096 z^5 + 7612 z^4 + 10134 z^3 + 18453 z^2 + 31236 z + 38304) I_1\left(\frac{z}{2}\right)}{297297 z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.5956.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{e^z (16z^4 - 144z^3 + 720z^2 - 2100z + 2835)}{2835}$$

07.25.03.5957.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{315} e^z (8z^3 - 60z^2 + 210z - 315)$$

07.25.03.5958.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{45} e^z (4z^2 - 24z + 45)$$

07.25.03.5959.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{9} e^z (2z - 9)$$

07.25.03.5960.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (4z + 3) - \frac{4}{3} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5961.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (3 - 4z) - \frac{4}{3} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.5962.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (3 - 2z) + \frac{2}{3} \sqrt{\pi} (z^{3/2} - 2\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5963.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (2z + 3) + \frac{2}{3} \sqrt{\pi} (z^{3/2} + 2\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5964.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{9} e^{z/2} (4z^2 - 15z + 9) I_0\left(\frac{z}{2}\right) + \frac{1}{9} e^{z/2} (11z - 4z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.5965.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{12} e^z (7 - 2z) + \frac{\sqrt{\pi} (4z^2 - 16z + 5) \operatorname{erfi}(\sqrt{z})}{24 \sqrt{z}}$$

07.25.03.5966.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{12} e^{-z} (2z + 7) + \frac{\sqrt{\pi} (4z^2 + 16z + 5) \operatorname{erf}(\sqrt{z})}{24 \sqrt{z}}$$

07.25.03.5967.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{45} e^{z/2} (8z^2 - 46z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (-8z^2 + 38z - 11) I_1\left(\frac{z}{2}\right)$$

07.25.03.5968.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (-2z^2 + 11z - 3)}{24z} + \frac{\sqrt{\pi} (4z^3 - 24z^2 + 15z + 3) \operatorname{erfi}(\sqrt{z})}{48 z^{3/2}}$$

07.25.03.5969.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(2z^2 + 11z + 3)}{24z} + \frac{\sqrt{\pi}(4z^3 + 24z^2 + 15z - 3)\operatorname{erf}(\sqrt{z})}{48z^{3/2}}$$

07.25.03.5970.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, 3; z\right) = \frac{8}{315} e^{z/2}(4z^2 - 31z + 41)I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(8z^3 - 54z^2 + 32z + 13)I_1\left(\frac{z}{2}\right)}{315z}$$

07.25.03.5971.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi}(16z^4 - 128z^3 + 120z^2 + 48z + 21)\operatorname{erfi}(\sqrt{z})}{1536z^{5/2}} - \frac{5e^z(8z^3 - 60z^2 + 34z + 21)}{768z^2}$$

07.25.03.5972.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}(8z^3 + 60z^2 + 34z - 21)}{768z^2} + \frac{5\sqrt{\pi}(16z^4 + 128z^3 + 120z^2 - 48z + 21)\operatorname{erf}(\sqrt{z})}{1536z^{5/2}}$$

07.25.03.5973.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, 4; z\right) = \frac{4e^{z/2}(16z^3 - 156z^2 + 258z + 15)I_0\left(\frac{z}{2}\right)}{945z} - \frac{4e^{z/2}(16z^4 - 140z^3 + 126z^2 + 87z + 60)I_1\left(\frac{z}{2}\right)}{945z^2}$$

07.25.03.5974.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(16z^5 - 160z^4 + 200z^3 + 120z^2 + 105z + 60)\operatorname{erfi}(\sqrt{z})}{3072z^{7/2}} - \frac{7e^z(8z^4 - 76z^3 + 66z^2 + 65z + 60)}{1536z^3}$$

07.25.03.5975.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}(8z^4 + 76z^3 + 66z^2 - 65z + 60)}{1536z^3} + \frac{7\sqrt{\pi}(16z^5 + 160z^4 + 200z^3 - 120z^2 + 105z - 60)\operatorname{erf}(\sqrt{z})}{3072z^{7/2}}$$

07.25.03.5976.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, 5; z\right) = \frac{32e^{z/2}(16z^4 - 188z^3 + 372z^2 + 57z + 51)I_0\left(\frac{z}{2}\right)}{10395z^2} - \frac{32e^{z/2}(16z^5 - 172z^4 + 208z^3 + 195z^2 + 228z + 204)I_1\left(\frac{z}{2}\right)}{10395z^3}$$

07.25.03.5977.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{7\sqrt{\pi}(64z^6 - 768z^5 + 1200z^4 + 960z^3 + 1260z^2 + 1440z + 945)\operatorname{erfi}(\sqrt{z})}{16384z^{9/2}} - \frac{7e^z(32z^5 - 368z^4 + 432z^3 + 552z^2 + 810z + 945)}{8192z^4}$$

07.25.03.5978.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{7 e^{-z} (32 z^5 + 368 z^4 + 432 z^3 - 552 z^2 + 810 z - 945)}{8192 z^4} + \frac{7 \sqrt{\pi} (64 z^6 + 768 z^5 + 1200 z^4 - 960 z^3 + 1260 z^2 - 1440 z + 945) \operatorname{erf}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.5979.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^5 - 440 z^4 + 1012 z^3 + 276 z^2 + 435 z + 456) I_0\left(\frac{z}{2}\right)}{27027 z^3} - \frac{32 e^{z/2} (32 z^6 - 408 z^5 + 620 z^4 + 724 z^3 + 1161 z^2 + 1740 z + 1824) I_1\left(\frac{z}{2}\right)}{27027 z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.5980.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{35} e^z (4 z^2 - 20 z + 35)$$

07.25.03.5981.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{5} e^z (2 z - 5)$$

07.25.03.5982.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = e^z$$

07.25.03.5983.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = e^z (2 z + 1) - 2 \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.5984.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = e^{-z} (1 - 2 z) - 2 \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.5985.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = e^z (1 - z) + \frac{1}{2} \sqrt{\pi} (2 z^{3/2} - 3 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.5986.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = e^{-z} (z + 1) + \frac{1}{2} \sqrt{\pi} (2 z^{3/2} + 3 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.5987.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (2 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z - 2) z I_1\left(\frac{z}{2}\right)$$

07.25.03.5988.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{8} e^z (5 - 2 z) + \frac{\sqrt{\pi} (4 z^2 - 12 z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.5989.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{8} e^{-z} (2z + 5) + \frac{\sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.5990.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4z^2 - 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4z^2 + 14z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.5991.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (-4z^2 + 16z - 3)}{32z} + \frac{\sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.5992.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (4z^2 + 16z + 3)}{32z} + \frac{\sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.5993.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 - 24z + 27) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4z^3 - 20z^2 + 9z + 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.5994.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5 e^z (8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.5995.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5\sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.5996.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 - 60z^2 + 84z + 3) I_0\left(\frac{z}{2}\right)}{315z} - \frac{4 e^{z/2} (8z^4 - 52z^3 + 36z^2 + 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.5997.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7 e^z (16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.5998.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7\sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.5999.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (8z^4 - 72z^3 + 120z^2 + 12z + 9) I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{128 e^{z/2} (2z^5 - 16z^4 + 15z^3 + 12z^2 + 12z + 9) I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.6000.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi}(64z^6 - 576z^5 + 720z^4 + 480z^3 + 540z^2 + 540z + 315)\operatorname{erfi}(\sqrt{z})}{32768z^{9/2}} - \frac{21e^z(32z^5 - 272z^4 + 240z^3 + 264z^2 + 330z + 315)}{16384z^4}$$

07.25.03.6001.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z}(32z^5 + 272z^4 + 240z^3 - 264z^2 + 330z - 315)}{16384z^4} + \frac{21\sqrt{\pi}(64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)\operatorname{erf}(\sqrt{z})}{32768z^{9/2}}$$

07.25.03.6002.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{7}{2}, 6; z\right) = \frac{32e^{z/2}(16z^5 - 168z^4 + 324z^3 + 60z^2 + 81z + 72)I_0\left(\frac{z}{2}\right)}{9009z^3} - \frac{32e^{z/2}(16z^6 - 152z^5 + 180z^4 + 180z^3 + 249z^2 + 324z + 288)I_1\left(\frac{z}{2}\right)}{9009z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.6003.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{16}{75}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{7/2} + \frac{1}{75}e^z(-16z^3 - 8z^2 - 12z + 75)$$

07.25.03.6004.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{16}{75}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{7/2} + \frac{1}{75}e^{-z}(16z^3 - 8z^2 + 12z + 75)$$

07.25.03.6005.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{15}e^z(8z^3 + 4z^2 + 6z + 15) - \frac{8}{15}\sqrt{\pi}z^{7/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.6006.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{15}e^{-z}(-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15}\sqrt{\pi}z^{7/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.6007.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{5}e^z(-2z^3 - z^2 + 16z + 5) + \frac{1}{10}\sqrt{\pi}(4z^{7/2} - 35z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6008.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{5}e^{-z}(2z^3 - z^2 - 16z + 5) + \frac{1}{10}\sqrt{\pi}(4z^{7/2} - 35z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.6009.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{30}e^z(2z^3 + z^2 - 51z + 30) + \frac{1}{60}\sqrt{\pi}(-4z^{7/2} + 105z^{3/2} - 105\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6010.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{30} e^{-z} (-2z^3 + z^2 + 51z + 30) + \frac{1}{60} \sqrt{\pi} (-4z^{7/2} + 105z^{3/2} + 105\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6011.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{525} e^{z/2} (-16z^4 + 12z^3 + 620z^2 - 1365z + 525) I_0\left(\frac{z}{2}\right) + \frac{1}{525} e^{z/2} (16z^4 + 4z^3 - 608z^2 + 775z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6012.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{960} e^{-z} (8z^3 + 4z^2 - 414z + 645) + \frac{\sqrt{\pi} (-16z^4 + 840z^2 - 1680z + 315) \operatorname{erfi}(\sqrt{z})}{1920\sqrt{z}}$$

07.25.03.6013.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{960} e^{-z} (-8z^3 + 4z^2 + 414z + 645) + \frac{\sqrt{\pi} (-16z^4 + 840z^2 + 1680z + 315) \operatorname{erfi}(\sqrt{z})}{1920\sqrt{z}}$$

07.25.03.6014.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (-32z^4 + 24z^3 + 2220z^2 - 7140z + 4725) I_0\left(\frac{z}{2}\right) + e^{z/2} (32z^4 + 8z^3 - 2196z^2 + 4980z - 735) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.6015.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^4 + 4z^3 - 694z^2 + 1765z - 210)}{3200z} + \frac{\sqrt{\pi} (-16z^5 + 1400z^3 - 4200z^2 + 1575z + 210) \operatorname{erfi}(\sqrt{z})}{6400z^{3/2}}$$

07.25.03.6016.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-8z^4 + 4z^3 + 694z^2 + 1765z + 210)}{3200z} + \frac{\sqrt{\pi} (-16z^5 + 1400z^3 + 4200z^2 + 1575z - 210) \operatorname{erfi}(\sqrt{z})}{6400z^{3/2}}$$

07.25.03.6017.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (32z^5 + 8z^4 - 3456z^3 + 11280z^2 - 3570z - 945) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (16z^4 - 12z^3 - 1740z^2 + 7350z - 6615) I_0\left(\frac{z}{2}\right)}{51975z}$$

07.25.03.6018.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (32z^5 + 16z^4 - 4176z^3 + 14760z^2 - 3990z - 1575)}{30720z^2} + \frac{\sqrt{\pi} (-64z^6 + 8400z^4 - 33600z^3 + 18900z^2 + 5040z + 1575) \operatorname{erfi}(\sqrt{z})}{61440z^{5/2}}$$

07.25.03.6019.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(-32z^5 + 16z^4 + 4176z^3 + 14760z^2 + 3990z - 1575)}{30720z^2} + \frac{\sqrt{\pi}(-64z^6 + 8400z^4 + 33600z^3 + 18900z^2 - 5040z + 1575)\operatorname{erf}(\sqrt{z})}{61440z^{5/2}}$$

07.25.03.6020.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, 4; z\right) = \frac{4e^{z/2}(64z^6 + 16z^5 - 9992z^4 + 42580z^3 - 21000z^2 - 9975z - 4620)I_1\left(\frac{z}{2}\right)}{225225z^2} - \frac{4e^{z/2}(64z^5 - 48z^4 - 10040z^3 + 52500z^2 - 58800z - 1155)I_0\left(\frac{z}{2}\right)}{225225z}$$

07.25.03.6021.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z(32z^6 + 16z^5 - 5856z^4 + 26520z^3 - 11550z^2 - 7875z - 4725)}{61440z^3} + \frac{\sqrt{\pi}(-64z^7 + 11760z^5 - 58800z^4 + 44100z^3 + 17640z^2 + 11025z + 4725)\operatorname{erfi}(\sqrt{z})}{122880z^{7/2}}$$

07.25.03.6022.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(-32z^6 + 16z^5 + 5856z^4 + 26520z^3 + 11550z^2 - 7875z + 4725)}{61440z^3} + \frac{\sqrt{\pi}(-64z^7 + 11760z^5 + 58800z^4 + 44100z^3 - 17640z^2 + 11025z - 4725)\operatorname{erf}(\sqrt{z})}{122880z^{7/2}}$$

07.25.03.6023.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, 5; z\right) = \frac{32e^{z/2}(64z^7 + 16z^6 - 13632z^5 + 71700z^4 - 48300z^3 - 31815z^2 - 26460z - 16380)I_1\left(\frac{z}{2}\right)}{3378375z^3} - \frac{32e^{z/2}(64z^6 - 48z^5 - 13680z^4 + 85260z^3 - 113400z^2 - 6615z - 4095)I_0\left(\frac{z}{2}\right)}{3378375z^2}$$

07.25.03.6024.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{3e^z(128z^7 + 64z^6 - 31264z^5 + 172720z^4 - 105000z^3 - 96180z^2 - 99750z - 77175)}{1310720z^4} - \frac{1}{2621440z^{9/2}} 3\sqrt{\pi}(256z^8 - 62720z^6 + 376320z^5 - 352800z^4 - 188160z^3 - 176400z^2 - 151200z - 77175)\operatorname{erfi}(\sqrt{z})$$

07.25.03.6025.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = -\frac{3e^{-z}(128z^7 - 64z^6 - 31264z^5 - 172720z^4 - 105000z^3 + 96180z^2 - 99750z + 77175)}{1310720z^4} - \frac{1}{2621440z^{9/2}} 3\sqrt{\pi}(256z^8 - 62720z^6 - 376320z^5 - 352800z^4 + 188160z^3 - 176400z^2 + 151200z - 77175)\operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.6026.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{5}{2}, 6; z\right) = \frac{1}{11486475 z^4} \\
 & \frac{32 e^{z/2} (128 z^8 + 32 z^7 - 35664 z^6 + 223200 z^5 - 191100 z^4 - 158130 z^3 - 183645 z^2 - 202860 z - 151200) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (128 z^7 - 96 z^6 - 35760 z^5 + 258720 z^4 - 396900 z^3 - 44730 z^2 - 50715 z - 37800) I_0\left(\frac{z}{2}\right)}{11486475 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{3}{2}$

$$\text{07.25.03.6027.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (-4 z^3 + 12 z^2 + 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.6028.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (4 z^3 + 12 z^2 - 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.6029.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{2} e^z (2 z^3 - 13 z^2 + 12 z + 2) + \frac{1}{4} \sqrt{\pi} (-4 z^{7/2} + 28 z^{5/2} - 35 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.6030.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2} e^{-z} (-2 z^3 - 13 z^2 - 12 z + 2) + \frac{1}{4} \sqrt{\pi} (-4 z^{7/2} - 28 z^{5/2} - 35 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.6031.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{24} e^z (-4 z^3 + 40 z^2 - 87 z + 24) + \frac{1}{48} \sqrt{\pi} (8 z^{7/2} - 84 z^{5/2} + 210 z^{3/2} - 105 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.6032.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{24} e^{-z} (4 z^3 + 40 z^2 + 87 z + 24) + \frac{1}{48} \sqrt{\pi} (8 z^{7/2} + 84 z^{5/2} + 210 z^{3/2} + 105 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.6033.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8 z^4 - 104 z^3 + 376 z^2 - 420 z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} (2 z^4 - 24 z^3 + 71 z^2 - 44 z) I_1\left(\frac{z}{2}\right)$$

$$\text{07.25.03.6034.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{384} e^z (-8 z^3 + 108 z^2 - 370 z + 279) + \frac{\sqrt{\pi} (16 z^4 - 224 z^3 + 840 z^2 - 840 z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

$$\text{07.25.03.6035.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} e^{-z} (8 z^3 + 108 z^2 + 370 z + 279) + \frac{\sqrt{\pi} (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

$$\begin{aligned}
 & \text{07.25.03.6036.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, 2; z\right) = \\
 & \frac{1}{945} e^{z/2} (16 z^4 - 264 z^3 + 1284 z^2 - 2100 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16 z^4 + 248 z^3 - 1044 z^2 + 1164 z - 105) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

07.25.03.6037.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16z^4 + 272z^3 - 1272z^2 + 1580z - 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.6038.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (16z^4 + 272z^3 + 1272z^2 + 1580z + 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.6039.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, 3; z\right) = \frac{4e^{z/2} (16z^4 - 320z^3 + 1956z^2 - 4200z + 2625) I_0\left(\frac{z}{2}\right) - 4e^{z/2} (16z^5 - 304z^4 + 1660z^3 - 2676z^2 + 525z + 105) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.6040.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (-32z^5 + 656z^4 - 3888z^3 + 6744z^2 - 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi} (64z^6 - 1344z^5 + 8400z^4 - 16800z^3 + 6300z^2 + 1260z + 315) \operatorname{erfi}(\sqrt{z})}{24576z^{5/2}}$$

07.25.03.6041.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32z^5 + 656z^4 + 3888z^3 + 6744z^2 + 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi} (64z^6 + 1344z^5 + 8400z^4 + 16800z^3 + 6300z^2 - 1260z + 315) \operatorname{erf}(\sqrt{z})}{24576z^{5/2}}$$

07.25.03.6042.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, 4; z\right) = \frac{4e^{z/2} (32z^5 - 752z^4 + 5536z^3 - 14700z^2 + 11550z + 105) I_0\left(\frac{z}{2}\right) - 4e^{z/2} (32z^6 - 720z^5 + 4832z^4 - 10196z^3 + 3150z^2 + 1155z + 420) I_1\left(\frac{z}{2}\right)}{45045z^2}$$

07.25.03.6043.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (-64z^6 + 1536z^5 - 11024z^4 + 24576z^3 - 6300z^2 - 3360z - 1575)}{49152z^3} + \frac{\sqrt{\pi} (128z^7 - 3136z^6 + 23520z^5 - 58800z^4 + 29400z^3 + 8820z^2 + 4410z + 1575) \operatorname{erfi}(\sqrt{z})}{98304z^{7/2}}$$

$$\begin{aligned}
 &07.25.03.6044.01 \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) &= \frac{e^{-z} (64 z^6 + 1536 z^5 + 11024 z^4 + 24576 z^3 + 6300 z^2 - 3360 z + 1575)}{49152 z^3} + \\
 &\frac{\sqrt{\pi} (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{98304 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.6045.01 \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, 5; z\right) &= \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23520 z^3 + 22050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right)}{675675 z^2} - \\
 &\frac{64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675675 z^3}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.6046.01 \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) &= \frac{1}{1048576 z^{9/2}} \\
 &\frac{3\sqrt{\pi} (256 z^8 - 7168 z^7 + 62720 z^6 - 188160 z^5 + 117600 z^4 + 47040 z^3 + 35280 z^2 + 25200 z + 11025) \operatorname{erfi}(\sqrt{z}) - 3 e^z (128 z^7 - 3520 z^6 + 29664 z^5 - 80848 z^4 + 29400 z^3 + 21420 z^2 + 17850 z + 11025)}{524288 z^4}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.6047.01 \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) &= \\
 &\frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29664 z^5 + 80848 z^4 + 29400 z^3 - 21420 z^2 + 17850 z - 11025)}{524288 z^4} + \frac{1}{1048576 z^{9/2}} \\
 &3\sqrt{\pi} (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.6048.01 \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{3}{2}; -\frac{3}{2}, 6; z\right) &= \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right)}{2297295 z^3} - \\
 &\frac{1}{2297295 z^4} 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{1}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 &07.25.03.6049.01 \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) &= -\frac{e^z (128 z^7 - 832 z^6 + 5728 z^5 - 31920 z^4 + 139800 z^3 - 453180 z^2 + 969570 z - 1029105)}{1029105}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.6050.01 \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) &= \frac{e^z (64 z^6 - 448 z^5 + 2640 z^4 - 12000 z^3 + 39900 z^2 - 86940 z + 93555)}{93555}
 \end{aligned}$$

07.25.03.6051.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{e^z (32 z^5 - 240 z^4 + 1200 z^3 - 4200 z^2 + 9450 z - 10395)}{10395}$$

07.25.03.6052.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{e^z (16 z^4 - 128 z^3 + 536 z^2 - 1296 z + 1485)}{1485}$$

07.25.03.6053.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = -\frac{1}{297} e^z (8 z^3 - 68 z^2 + 234 z - 297)$$

07.25.03.6054.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{99} e^z (4 z^2 - 36 z + 99)$$

07.25.03.6055.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{99} e^z (99 - 2z) - \frac{80}{99} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6056.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{99} e^{-z} (2z + 99) + \frac{80}{99} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.6057.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{11} e^{z/2} (11 - 9z) I_0\left(\frac{z}{2}\right) + \frac{79}{99} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.6058.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{13 e^z}{33} - \frac{10 \sqrt{\pi} (4z - 3) \operatorname{erfi}(\sqrt{z})}{99 \sqrt{z}}$$

07.25.03.6059.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{10 \sqrt{\pi} (4z + 3) \operatorname{erf}(\sqrt{z})}{99 \sqrt{z}} + \frac{13 e^{-z}}{33}$$

07.25.03.6060.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{297} e^{z/2} (297 - 160z) I_0\left(\frac{z}{2}\right) + \frac{1}{297} e^{z/2} (160z - 143) I_1\left(\frac{z}{2}\right)$$

07.25.03.6061.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (20z - 21)}{66z} + \frac{\sqrt{\pi} (-40z^2 + 60z + 21) \operatorname{erfi}(\sqrt{z})}{132 z^{3/2}}$$

07.25.03.6062.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (20z + 21)}{66z} + \frac{\sqrt{\pi} (40z^2 + 60z - 21) \operatorname{erf}(\sqrt{z})}{132 z^{3/2}}$$

07.25.03.6063.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (32 z^2 - 52 z - 39) I_1\left(\frac{z}{2}\right)}{297 z} - \frac{16}{297} e^{z/2} (8z - 21) I_0\left(\frac{z}{2}\right)$$

07.25.03.6064.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (20 z^2 - 35 z - 42)}{396 z^2} - \frac{5 \sqrt{\pi} (40 z^3 - 90 z^2 - 63 z - 42) \operatorname{erfi}(\sqrt{z})}{792 z^{5/2}}$$

07.25.03.6065.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (20 z^2 + 35 z - 42)}{396 z^2} + \frac{5 \sqrt{\pi} (40 z^3 + 90 z^2 - 63 z + 42) \operatorname{erf}(\sqrt{z})}{792 z^{5/2}}$$

07.25.03.6066.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^3 - 152 z^2 - 171 z - 204) I_1\left(\frac{z}{2}\right)}{693 z^2} - \frac{4 e^{z/2} (64 z^2 - 216 z - 51) I_0\left(\frac{z}{2}\right)}{693 z}$$

07.25.03.6067.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (20 z^3 - 50 z^2 - 78 z - 135)}{3168 z^3} - \frac{35 \sqrt{\pi} (40 z^4 - 120 z^3 - 126 z^2 - 168 z - 135) \operatorname{erfi}(\sqrt{z})}{6336 z^{7/2}}$$

07.25.03.6068.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (20 z^3 + 50 z^2 - 78 z + 135)}{3168 z^3} + \frac{35 \sqrt{\pi} (40 z^4 + 120 z^3 - 126 z^2 + 168 z - 135) \operatorname{erf}(\sqrt{z})}{6336 z^{7/2}}$$

07.25.03.6069.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (320 z^4 - 1000 z^3 - 1503 z^2 - 2652 z - 3876) I_1\left(\frac{z}{2}\right)}{31185 z^3} - \frac{32 e^{z/2} (320 z^3 - 1320 z^2 - 663 z - 969) I_0\left(\frac{z}{2}\right)}{31185 z^2}$$

07.25.03.6070.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{35 e^z (32 z^4 - 104 z^3 - 204 z^2 - 450 z - 945)}{5632 z^4} - \frac{35 \sqrt{\pi} (64 z^5 - 240 z^4 - 336 z^3 - 672 z^2 - 1080 z - 945) \operatorname{erfi}(\sqrt{z})}{11264 z^{9/2}}$$

07.25.03.6071.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{35 e^{-z} (32 z^4 + 104 z^3 - 204 z^2 + 450 z - 945)}{5632 z^4} + \frac{35 \sqrt{\pi} (64 z^5 + 240 z^4 - 336 z^3 + 672 z^2 - 1080 z + 945) \operatorname{erf}(\sqrt{z})}{11264 z^{9/2}}$$

07.25.03.6072.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (640 z^5 - 2480 z^4 - 4638 z^3 - 11109 z^2 - 23484 z - 38304) I_1\left(\frac{z}{2}\right)}{68607 z^4} - \frac{32 e^{z/2} (640 z^4 - 3120 z^3 - 2478 z^2 - 5871 z - 9576) I_0\left(\frac{z}{2}\right)}{68607 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.6073.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{e^z (32z^5 - 208z^4 + 1008z^3 - 3480z^2 + 7770z - 8505)}{8505}$$

07.25.03.6074.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{945} e^z (16z^4 - 96z^3 + 360z^2 - 840z + 945)$$

07.25.03.6075.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{1}{135} e^z (8z^3 - 44z^2 + 114z - 135)$$

07.25.03.6076.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{27} e^z (4z^2 - 20z + 27)$$

07.25.03.6077.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -\frac{1}{9} e^z (2z - 9)$$

07.25.03.6078.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = e^z - \frac{8}{9} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6079.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{8}{9} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.6080.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{9} e^{z/2} (9 - 8z) I_0\left(\frac{z}{2}\right) + \frac{8}{9} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.6081.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (5 - 8z) \operatorname{erfi}(\sqrt{z})}{18 \sqrt{z}} + \frac{4 e^z}{9}$$

07.25.03.6082.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} (8z + 5) \operatorname{erf}(\sqrt{z})}{18 \sqrt{z}} + \frac{4 e^{-z}}{9}$$

07.25.03.6083.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{27} e^{z/2} (27 - 16z) I_0\left(\frac{z}{2}\right) + \frac{1}{27} e^{z/2} (16z - 11) I_1\left(\frac{z}{2}\right)$$

07.25.03.6084.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (4z - 3)}{12z} + \frac{\sqrt{\pi} (-8z^2 + 10z + 3) \operatorname{erfi}(\sqrt{z})}{24 z^{3/2}}$$

07.25.03.6085.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (4z + 3)}{12z} + \frac{\sqrt{\pi} (8z^2 + 10z - 3) \operatorname{erf}(\sqrt{z})}{24 z^{3/2}}$$

07.25.03.6086.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, 3; z\right) = \frac{4 e^{z/2} (16 z^2 - 21 z - 13) I_1\left(\frac{z}{2}\right)}{135 z} - \frac{4}{135} e^{z/2} (16 z - 37) I_0\left(\frac{z}{2}\right)$$

07.25.03.6087.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (16 z^2 - 22 z - 21)}{288 z^2} - \frac{5 \sqrt{\pi} (32 z^3 - 60 z^2 - 36 z - 21) \operatorname{erfi}(\sqrt{z})}{576 z^{5/2}}$$

07.25.03.6088.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (16 z^2 + 22 z - 21)}{288 z^2} + \frac{5 \sqrt{\pi} (32 z^3 + 60 z^2 - 36 z + 21) \operatorname{erf}(\sqrt{z})}{576 z^{5/2}}$$

07.25.03.6089.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^3 - 62 z^2 - 61 z - 60) I_1\left(\frac{z}{2}\right)}{315 z^2} - \frac{4 e^{z/2} (32 z^2 - 94 z - 15) I_0\left(\frac{z}{2}\right)}{315 z}$$

07.25.03.6090.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (4 z^3 - 8 z^2 - 11 z - 15)}{576 z^3} - \frac{35 \sqrt{\pi} (8 z^4 - 20 z^3 - 18 z^2 - 21 z - 15) \operatorname{erfi}(\sqrt{z})}{1152 z^{7/2}}$$

07.25.03.6091.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4 z^3 + 8 z^2 - 11 z + 15)}{576 z^3} + \frac{35 \sqrt{\pi} (8 z^4 + 20 z^3 - 18 z^2 + 21 z - 15) \operatorname{erf}(\sqrt{z})}{1152 z^{7/2}}$$

07.25.03.6092.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, 5; z\right) = \frac{64 e^{z/2} (16 z^4 - 41 z^3 - 54 z^2 - 84 z - 102) I_1\left(\frac{z}{2}\right)}{2835 z^3} - \frac{32 e^{z/2} (32 z^3 - 114 z^2 - 42 z - 51) I_0\left(\frac{z}{2}\right)}{2835 z^2}$$

07.25.03.6093.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{7 e^z (64 z^4 - 168 z^3 - 292 z^2 - 570 z - 945)}{2048 z^4} - \frac{7 \sqrt{\pi} (128 z^5 - 400 z^4 - 480 z^3 - 840 z^2 - 1200 z - 945) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.6094.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{7 e^{-z} (64 z^4 + 168 z^3 - 292 z^2 + 570 z - 945)}{2048 z^4} + \frac{7 \sqrt{\pi} (128 z^5 + 400 z^4 - 480 z^3 + 840 z^2 - 1200 z + 945) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.6095.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^5 - 204 z^4 - 334 z^3 - 705 z^2 - 1332 z - 1824) I_1\left(\frac{z}{2}\right)}{6237 z^4} - \frac{32 e^{z/2} (64 z^4 - 268 z^3 - 162 z^2 - 333 z - 456) I_0\left(\frac{z}{2}\right)}{6237 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.6096.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = -\frac{1}{105} e^z (8z^3 - 36z^2 + 90z - 105)$$

07.25.03.6097.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (4z^2 - 12z + 15)$$

07.25.03.6098.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = -\frac{1}{3} e^z (2z - 3)$$

07.25.03.6099.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = e^z$$

07.25.03.6100.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6101.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.6102.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, 1; z\right) = e^{z/2} (1-z) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.6103.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (1-2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{e^z}{2}$$

07.25.03.6104.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.6105.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, 2; z\right) = e^{z/2} \left(1 - \frac{2z}{3}\right) I_0\left(\frac{z}{2}\right) + e^{z/2} \left(\frac{2z}{3} - \frac{1}{3}\right) I_1\left(\frac{z}{2}\right)$$

07.25.03.6106.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{3e^z(2z-1)}{16z} - \frac{3\sqrt{\pi}(4z^2-4z-1)\operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.6107.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{3e^{-z}(2z+1)}{16z} + \frac{3\sqrt{\pi}(4z^2+4z-1)\operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.6108.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, 3; z\right) = \frac{4e^{z/2}(2z^2-2z-1)I_1\left(\frac{z}{2}\right)}{15z} - \frac{8}{15} e^{z/2} (z-2) I_0\left(\frac{z}{2}\right)$$

07.25.03.6109.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (4 z^2 - 4 z - 3)}{64 z^2} - \frac{5 \sqrt{\pi} (8 z^3 - 12 z^2 - 6 z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.6110.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (4 z^2 + 4 z - 3)}{64 z^2} + \frac{5 \sqrt{\pi} (8 z^3 + 12 z^2 - 6 z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.6111.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (4 z^3 - 6 z^2 - 5 z - 4) I_1\left(\frac{z}{2}\right)}{35 z^2} - \frac{4 e^{z/2} (4 z^2 - 10 z - 1) I_0\left(\frac{z}{2}\right)}{35 z}$$

07.25.03.6112.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (8 z^3 - 12 z^2 - 14 z - 15)}{1024 z^3} - \frac{35 \sqrt{\pi} (16 z^4 - 32 z^3 - 24 z^2 - 24 z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.6113.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.6114.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (4 z^4 - 8 z^3 - 9 z^2 - 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3} - \frac{32 e^{z/2} (4 z^3 - 12 z^2 - 3 z - 3) I_0\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.6115.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (16 z^4 - 32 z^3 - 48 z^2 - 80 z - 105)}{4096 z^4} - \frac{63 \sqrt{\pi} (32 z^5 - 80 z^4 - 80 z^3 - 120 z^2 - 150 z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.6116.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16 z^4 + 32 z^3 - 48 z^2 + 80 z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.6117.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^5 - 20 z^4 - 28 z^3 - 51 z^2 - 84 z - 96) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (8 z^4 - 28 z^3 - 12 z^2 - 21 z - 24) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.6118.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225} e^z (64 z^3 + 32 z^2 - 162 z + 225) - \frac{64}{225} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6119.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{225} e^{-z} (-64 z^3 + 32 z^2 + 162 z + 225) - \frac{64}{225} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.6120.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{32}{45} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{45} e^z (-32 z^3 - 16 z^2 - 24 z + 45)$$

07.25.03.6121.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{32}{45} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{1}{45} e^{-z} (32 z^3 - 16 z^2 + 24 z + 45)$$

07.25.03.6122.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (8 z^3 + 4 z^2 + 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6123.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-8 z^3 + 4 z^2 - 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.6124.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{45} e^z (-4 z^3 - 2 z^2 - 3 z + 45) + \frac{1}{90} \sqrt{\pi} (8 z^{7/2} - 105 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6125.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{45} e^{-z} (4 z^3 - 2 z^2 + 3 z + 45) + \frac{1}{90} \sqrt{\pi} (8 z^{7/2} + 105 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6126.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (64 z^4 - 48 z^3 - 30 z^2 - 1890 z + 1575) I_0\left(\frac{z}{2}\right)}{1575} - \frac{2 e^{z/2} (32 z^4 + 8 z^3 + 9 z^2 - 900 z) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.6127.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{720} e^z (-8 z^3 - 4 z^2 - 6 z + 405) + \frac{\sqrt{\pi} (16 z^4 - 840 z + 315) \operatorname{erfi}(\sqrt{z})}{1440 \sqrt{z}}$$

07.25.03.6128.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{720} e^{-z} (8 z^3 - 4 z^2 + 6 z + 405) + \frac{\sqrt{\pi} (16 z^4 + 840 z + 315) \operatorname{erf}(\sqrt{z})}{1440 \sqrt{z}}$$

07.25.03.6129.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (128 z^4 - 96 z^3 - 60 z^2 - 11130 z + 14175) I_0\left(\frac{z}{2}\right)}{14175} + \frac{e^{z/2} (-128 z^4 - 32 z^3 - 36 z^2 + 10950 z - 3675) I_1\left(\frac{z}{2}\right)}{14175}$$

07.25.03.6130.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-8 z^4 - 4 z^3 - 6 z^2 + 1035 z - 315)}{2400 z} + \frac{\sqrt{\pi} (16 z^5 - 2100 z^2 + 1575 z + 315) \operatorname{erfi}(\sqrt{z})}{4800 z^{3/2}}$$

07.25.03.6131.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(8z^4 - 4z^3 + 6z^2 + 1035z + 315)}{2400z} + \frac{\sqrt{\pi}(16z^5 + 2100z^2 + 1575z - 315)\operatorname{erf}(\sqrt{z})}{4800z^{3/2}}$$

07.25.03.6132.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, 3; z\right) = \frac{4e^{z/2}(128z^4 - 96z^3 - 60z^2 - 24360z + 40635)I_0\left(\frac{z}{2}\right)}{155925} - \frac{4e^{z/2}(128z^5 + 32z^4 + 36z^3 - 24180z^2 + 16905z + 6615)I_1\left(\frac{z}{2}\right)}{155925z}$$

07.25.03.6133.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z(-16z^5 - 8z^4 - 12z^3 + 4170z^2 - 2730z - 1575)}{11520z^2} + \frac{\sqrt{\pi}(32z^6 - 8400z^3 + 9450z^2 + 3780z + 1575)\operatorname{erfi}(\sqrt{z})}{23040z^{5/2}}$$

07.25.03.6134.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(16z^5 - 8z^4 + 12z^3 + 4170z^2 + 2730z - 1575)}{11520z^2} + \frac{\sqrt{\pi}(32z^6 + 8400z^3 + 9450z^2 - 3780z + 1575)\operatorname{erf}(\sqrt{z})}{23040z^{5/2}}$$

07.25.03.6135.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, 4; z\right) = \frac{4e^{z/2}(256z^5 - 192z^4 - 120z^3 - 90300z^2 + 185220z + 10395)I_0\left(\frac{z}{2}\right)}{675675z} - \frac{4e^{z/2}(256z^6 + 64z^5 + 72z^4 - 89940z^3 + 96180z^2 + 65205z + 41580)I_1\left(\frac{z}{2}\right)}{675675z^2}$$

07.25.03.6136.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z(-64z^6 - 32z^5 - 48z^4 + 29280z^3 - 29820z^2 - 28350z - 23625)}{92160z^3} + \frac{\sqrt{\pi}(128z^7 - 58800z^4 + 88200z^3 + 52920z^2 + 44100z + 23625)\operatorname{erfi}(\sqrt{z})}{184320z^{7/2}}$$

07.25.03.6137.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(64z^6 - 32z^5 + 48z^4 + 29280z^3 + 29820z^2 - 28350z + 23625)}{92160z^3} + \frac{\sqrt{\pi}(128z^7 + 58800z^4 + 88200z^3 - 52920z^2 + 44100z - 23625)\operatorname{erf}(\sqrt{z})}{184320z^{7/2}}$$

07.25.03.6138.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, 5; z\right) = \frac{32e^{z/2}(256z^6 - 192z^5 - 120z^4 - 150360z^3 + 365400z^2 + 55440z + 45045)I_0\left(\frac{z}{2}\right)}{10135125z^2} - \frac{128e^{z/2}(64z^7 + 16z^6 + 18z^5 - 37500z^4 + 54075z^3 + 50085z^2 + 55440z + 45045)I_1\left(\frac{z}{2}\right)}{10135125z^3}$$

07.25.03.6139.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{e^z (-128 z^7 - 64 z^6 - 96 z^5 + 93\,840 z^4 - 130\,200 z^3 - 162\,540 z^2 - 223\,650 z - 231\,525)}{327\,680 z^4} + \frac{\sqrt{\pi} (256 z^8 - 188\,160 z^5 + 352\,800 z^4 + 282\,240 z^3 + 352\,800 z^2 + 378\,000 z + 231\,525) \operatorname{erfi}(\sqrt{z})}{655\,360 z^{9/2}}$$

07.25.03.6140.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (128 z^7 - 64 z^6 + 96 z^5 + 93\,840 z^4 + 130\,200 z^3 - 162\,540 z^2 + 223\,650 z - 231\,525)}{327\,680 z^4} + \frac{\sqrt{\pi} (256 z^8 + 188\,160 z^5 + 352\,800 z^4 - 282\,240 z^3 + 352\,800 z^2 - 378\,000 z + 231\,525) \operatorname{erf}(\sqrt{z})}{655\,360 z^{9/2}}$$

07.25.03.6141.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{5}{2}, 6; z\right) = \frac{1}{34\,459\,425 z^3}$$

$$32 e^{z/2} (512 z^7 - 384 z^6 - 240 z^5 - 464\,520 z^4 + 1\,304\,100 z^3 + 356\,580 z^2 + 520\,065 z + 491\,400) I_0\left(\frac{z}{2}\right) - \frac{1}{34\,459\,425 z^4}$$

$$32 e^{z/2} (512 z^8 + 128 z^7 + 144 z^6 - 463\,800 z^5 + 842\,100 z^4 + 973\,980 z^3 + 1\,487\,745 z^2 + 2\,080\,260 z + 1\,965\,600) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.6142.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} e^z (16 z^3 - 20 z^2 - 2 z + 9) - \frac{4}{9} \sqrt{\pi} (4 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6143.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9} e^{-z} (-16 z^3 - 20 z^2 + 2 z + 9) - \frac{4}{9} \sqrt{\pi} (4 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6144.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (-4 z^3 + 12 z^2 + 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6145.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (4 z^3 + 12 z^2 - 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6146.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{36} e^z (8 z^3 - 38 z^2 - 15 z + 36) + \frac{1}{72} \sqrt{\pi} (-16 z^{7/2} + 84 z^{5/2} - 105 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6147.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{36} e^{-z} (-8 z^3 - 38 z^2 + 15 z + 36) + \frac{1}{72} \sqrt{\pi} (-16 z^{7/2} - 84 z^{5/2} + 105 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6148.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (-32 z^4 + 220 z^3 - 132 z^2 - 525 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (32 z^4 - 188 z^3 - 40 z^2 + 423 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6149.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{288} e^z (8 z^3 - 52 z^2 - 22 z + 183) + \frac{\sqrt{\pi} (-16 z^4 + 112 z^3 - 420 z + 105) \operatorname{erfi}(\sqrt{z})}{576 \sqrt{z}}$$

07.25.03.6150.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{288} e^{-z} (-8 z^3 - 52 z^2 + 22 z + 183) + \frac{\sqrt{\pi} (-16 z^4 - 112 z^3 + 420 z + 105) \operatorname{erf}(\sqrt{z})}{576 \sqrt{z}}$$

07.25.03.6151.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2} (-64 z^4 + 552 z^3 - 348 z^2 - 2940 z + 2835) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^4 - 488 z^3 - 108 z^2 + 2652 z - 525) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.6152.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (32 z^4 - 264 z^3 - 116 z^2 + 1950 z - 315)}{3840 z} + \frac{\sqrt{\pi} (-64 z^5 + 560 z^4 - 4200 z^2 + 2100 z + 315) \operatorname{erfi}(\sqrt{z})}{7680 z^{3/2}}$$

07.25.03.6153.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-32 z^4 - 264 z^3 + 116 z^2 + 1950 z + 315)}{3840 z} + \frac{\sqrt{\pi} (-64 z^5 - 560 z^4 + 4200 z^2 + 2100 z - 315) \operatorname{erf}(\sqrt{z})}{7680 z^{3/2}}$$

07.25.03.6154.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^5 - 600 z^4 - 136 z^3 + 5928 z^2 - 2520 z - 735) I_1\left(\frac{z}{2}\right) - 16 e^{z/2} (16 z^4 - 166 z^3 + 108 z^2 + 1575 z - 1995) I_0\left(\frac{z}{2}\right)}{31185 z}$$

07.25.03.6155.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (16 z^5 - 160 z^4 - 72 z^3 + 2004 z^2 - 735 z - 315)}{4608 z^2} + \frac{\sqrt{\pi} (-32 z^6 + 336 z^5 - 4200 z^3 + 3150 z^2 + 945 z + 315) \operatorname{erfi}(\sqrt{z})}{9216 z^{5/2}}$$

07.25.03.6156.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(-16z^5 - 160z^4 + 72z^3 + 2004z^2 + 735z - 315)}{4608z^2} + \frac{\sqrt{\pi}(-32z^6 - 336z^5 + 4200z^3 + 3150z^2 - 945z + 315)\operatorname{erf}(\sqrt{z})}{9216z^{5/2}}$$

07.25.03.6157.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, 4; z\right) = \frac{4e^{z/2}(128z^6 - 1424z^5 - 328z^4 + 22188z^3 - 14700z^2 - 7665z - 3780)I_1\left(\frac{z}{2}\right)}{135135z^2} - \frac{4e^{z/2}(128z^5 - 1552z^4 + 1032z^3 + 23100z^2 - 35700z - 945)I_0\left(\frac{z}{2}\right)}{135135z}$$

07.25.03.6158.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z(128z^6 - 1504z^5 - 688z^4 + 28464z^3 - 16800z^2 - 12390z - 7875)}{73728z^3} + \frac{\sqrt{\pi}(-256z^7 + 3136z^6 - 58800z^4 + 58800z^3 + 26460z^2 + 17640z + 7875)\operatorname{erfi}(\sqrt{z})}{147456z^{7/2}}$$

07.25.03.6159.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(-128z^6 - 1504z^5 + 688z^4 + 28464z^3 + 16800z^2 - 12390z + 7875)}{73728z^3} + \frac{\sqrt{\pi}(-256z^7 - 3136z^6 + 58800z^4 + 58800z^3 - 26460z^2 + 17640z - 7875)\operatorname{erf}(\sqrt{z})}{147456z^{7/2}}$$

07.25.03.6160.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, 5; z\right) = \frac{32e^{z/2}(128z^7 - 1648z^6 - 384z^5 + 37140z^4 - 33600z^3 - 24255z^2 - 21420z - 13860)I_1\left(\frac{z}{2}\right)}{2027025z^3} - \frac{32e^{z/2}(128z^6 - 1776z^5 + 1200z^4 + 38220z^3 - 69300z^2 - 5355z - 3465)I_0\left(\frac{z}{2}\right)}{2027025z^2}$$

07.25.03.6161.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z(128z^7 - 1728z^6 - 800z^5 + 45936z^4 - 37800z^3 - 37380z^2 - 40950z - 33075)}{131072z^4} + \frac{1}{262144z^{9/2}}\sqrt{\pi}(-256z^8 + 3584z^7 - 94080z^5 + 117600z^4 + 70560z^3 + 70560z^2 + 63000z + 33075)\operatorname{erfi}(\sqrt{z})$$

07.25.03.6162.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z}(-128z^7 - 1728z^6 + 800z^5 + 45936z^4 + 37800z^3 - 37380z^2 + 40950z - 33075)}{131072z^4} + \frac{1}{262144z^{9/2}}\sqrt{\pi}(-256z^8 - 3584z^7 + 94080z^5 + 117600z^4 - 70560z^3 + 70560z^2 - 63000z + 33075)\operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.6163.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{6891885 z^4} \\
 & \quad 32 e^{z/2} (256 z^8 - 3744 z^7 - 880 z^6 + 115104 z^5 - 132300 z^4 - 119910 z^3 - 147735 z^2 - 170100 z - 131040) I_1\left(\frac{z}{2}\right) - \\
 & \quad \frac{1}{6891885 z^3} 32 e^{z/2} (256 z^7 - 4000 z^6 + 2736 z^5 + 117600 z^4 - 244020 z^3 - 35910 z^2 - 42525 z - 32760) I_0\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{1}{2}$

$$\text{07.25.03.6164.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{2} e^z (2z^3 - 13z^2 + 12z + 2) + \frac{1}{4} \sqrt{\pi} (-4z^{7/2} + 28z^{5/2} - 35z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.6165.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2} e^{-z} (-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4} \sqrt{\pi} (-4z^{7/2} - 28z^{5/2} - 35z^{3/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.6166.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{24} e^z (-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48} \sqrt{\pi} (8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.6167.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{24} e^{-z} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} \sqrt{\pi} (8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.6168.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8z^4 - 104z^3 + 376z^2 - 420z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} (2z^4 - 24z^3 + 71z^2 - 44z) I_1\left(\frac{z}{2}\right)$$

$$\text{07.25.03.6169.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{384} e^z (-8z^3 + 108z^2 - 370z + 279) + \frac{\sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

$$\text{07.25.03.6170.01} \\
 {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} e^{-z} (8z^3 + 108z^2 + 370z + 279) + \frac{\sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

$$\begin{aligned}
 & \text{07.25.03.6171.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, 2; z\right) = \\
 & \quad \frac{1}{945} e^{z/2} (16z^4 - 264z^3 + 1284z^2 - 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16z^4 + 248z^3 - 1044z^2 + 1164z - 105) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6172.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \\
 & \quad \frac{e^z (-16z^4 + 272z^3 - 1272z^2 + 1580z - 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6173.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \\
 & \frac{e^{-z} (16z^4 + 272z^3 + 1272z^2 + 1580z + 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6174.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, 3; z\right) = \\
 & \frac{4e^{z/2} (16z^4 - 320z^3 + 1956z^2 - 4200z + 2625) I_0\left(\frac{z}{2}\right)}{10395} - \frac{4e^{z/2} (16z^5 - 304z^4 + 1660z^3 - 2676z^2 + 525z + 105) I_1\left(\frac{z}{2}\right)}{10395z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6175.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (-32z^5 + 656z^4 - 3888z^3 + 6744z^2 - 1050z - 315)}{12288z^2} + \\
 & \frac{\sqrt{\pi} (64z^6 - 1344z^5 + 8400z^4 - 16800z^3 + 6300z^2 + 1260z + 315) \operatorname{erfi}(\sqrt{z})}{24576z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6176.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32z^5 + 656z^4 + 3888z^3 + 6744z^2 + 1050z - 315)}{12288z^2} + \\
 & \frac{\sqrt{\pi} (64z^6 + 1344z^5 + 8400z^4 + 16800z^3 + 6300z^2 - 1260z + 315) \operatorname{erf}(\sqrt{z})}{24576z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6177.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, 4; z\right) = \frac{4e^{z/2} (32z^5 - 752z^4 + 5536z^3 - 14700z^2 + 11550z + 105) I_0\left(\frac{z}{2}\right)}{45045z} - \\
 & \frac{4e^{z/2} (32z^6 - 720z^5 + 4832z^4 - 10196z^3 + 3150z^2 + 1155z + 420) I_1\left(\frac{z}{2}\right)}{45045z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6178.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (-64z^6 + 1536z^5 - 11024z^4 + 24576z^3 - 6300z^2 - 3360z - 1575)}{49152z^3} + \\
 & \frac{\sqrt{\pi} (128z^7 - 3136z^6 + 23520z^5 - 58800z^4 + 29400z^3 + 8820z^2 + 4410z + 1575) \operatorname{erfi}(\sqrt{z})}{98304z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6179.01} \\
 & {}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (64z^6 + 1536z^5 + 11024z^4 + 24576z^3 + 6300z^2 - 3360z + 1575)}{49152z^3} + \\
 & \frac{\sqrt{\pi} (128z^7 + 3136z^6 + 23520z^5 + 58800z^4 + 29400z^3 - 8820z^2 + 4410z - 1575) \operatorname{erf}(\sqrt{z})}{98304z^{7/2}}
 \end{aligned}$$

07.25.03.6180.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23520 z^3 + 22050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675 675 z^2}$$

07.25.03.6181.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{1048576 z^{9/2}} - \frac{3 \sqrt{\pi} (256 z^8 - 7168 z^7 + 62720 z^6 - 188160 z^5 + 117600 z^4 + 47040 z^3 + 35280 z^2 + 25200 z + 11025) \operatorname{erfi}(\sqrt{z}) - 3 e^z (128 z^7 - 3520 z^6 + 29664 z^5 - 80848 z^4 + 29400 z^3 + 21420 z^2 + 17850 z + 11025)}{524288 z^4}$$

07.25.03.6182.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29664 z^5 + 80848 z^4 + 29400 z^3 - 21420 z^2 + 17850 z - 11025)}{524288 z^4} + \frac{1}{1048576 z^{9/2}} - \frac{3 \sqrt{\pi} (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025) \operatorname{erf}(\sqrt{z})}{524288 z^4}$$

07.25.03.6183.01

$${}_2F_2\left(-\frac{7}{2}, -\frac{1}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right) - \frac{1}{2297295 z^4} 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)}{2297295 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{1}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.6184.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{e^z (256 z^8 + 2304 z^6 - 12288 z^5 + 56160 z^4 - 207360 z^3 + 579600 z^2 - 1088640 z + 1029105)}{1029105}$$

07.25.03.6185.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{e^z (128 z^7 - 192 z^6 + 1248 z^5 - 5520 z^4 + 19800 z^3 - 54180 z^2 + 100170 z - 93555)}{93555}$$

07.25.03.6186.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{e^z (64 z^6 - 192 z^5 + 720 z^4 - 2400 z^3 + 6300 z^2 - 11340 z + 10395)}{10395}$$

07.25.03.6187.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (32 z^5 - 144 z^4 + 432 z^3 - 984 z^2 + 1674 z - 1485)}{1485}$$

07.25.03.6188.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{297} e^z (16z^4 - 96z^3 + 264z^2 - 360z + 297)$$

07.25.03.6189.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{99} e^z (8z^3 - 60z^2 + 162z - 99)$$

07.25.03.6190.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{99} e^z (4z^2 - 36z + 99)$$

07.25.03.6191.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{99} e^{z/2} (2z^2 - 18z + 99) I_0\left(\frac{z}{2}\right) + \frac{2}{99} e^{z/2} (z^2 - 10z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6192.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{99} e^z (2z - 21) + \frac{20\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{33\sqrt{z}}$$

07.25.03.6193.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{99} e^{-z} (-2z - 21) + \frac{20\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{33\sqrt{z}}$$

07.25.03.6194.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{99} e^{z/2} (2z + 99) I_0\left(\frac{z}{2}\right) + \frac{1}{99} e^{z/2} (2z - 143) I_1\left(\frac{z}{2}\right)$$

07.25.03.6195.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (z - 42)}{33z} + \frac{\sqrt{\pi} (10z + 7) \operatorname{erfi}(\sqrt{z})}{11z^{3/2}}$$

07.25.03.6196.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (z + 42)}{33z} + \frac{\sqrt{\pi} (10z - 7) \operatorname{erf}(\sqrt{z})}{11z^{3/2}}$$

07.25.03.6197.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, 3; z\right) = \frac{164}{99} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{52 e^{z/2} (3z + 5) I_1\left(\frac{z}{2}\right)}{99z}$$

07.25.03.6198.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (5z^2 + 7z + 7) \operatorname{erfi}(\sqrt{z})}{22z^{5/2}} - \frac{35 e^z (z + 3)}{33z^2}$$

07.25.03.6199.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{35 e^{-z} (z - 3)}{33z^2} + \frac{5\sqrt{\pi} (5z^2 - 7z + 7) \operatorname{erf}(\sqrt{z})}{22z^{5/2}}$$

07.25.03.6200.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (16z + 17) I_0\left(\frac{z}{2}\right)}{33z} - \frac{4 e^{z/2} (16z^2 + 31z + 68) I_1\left(\frac{z}{2}\right)}{33z^2}$$

07.25.03.6201.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi}(10z^3 + 21z^2 + 42z + 45)\operatorname{erfi}(\sqrt{z})}{264z^{7/2}} - \frac{35e^z(5z^2 + 12z + 45)}{132z^3}$$

07.25.03.6202.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}(5z^2 - 12z + 45)}{132z^3} + \frac{35\sqrt{\pi}(10z^3 - 21z^2 + 42z - 45)\operatorname{erf}(\sqrt{z})}{264z^{7/2}}$$

07.25.03.6203.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2}(80z^2 + 136z + 323)I_0\left(\frac{z}{2}\right)}{1155z^2} - \frac{128e^{z/2}(20z^3 + 54z^2 + 136z + 323)I_1\left(\frac{z}{2}\right)}{1155z^3}$$

07.25.03.6204.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{105\sqrt{\pi}(80z^4 + 224z^3 + 672z^2 + 1440z + 1575)\operatorname{erfi}(\sqrt{z})}{5632z^{9/2}} - \frac{105e^z(40z^3 + 132z^2 + 390z + 1575)}{2816z^4}$$

07.25.03.6205.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{105e^{-z}(40z^3 - 132z^2 + 390z - 1575)}{2816z^4} + \frac{105\sqrt{\pi}(80z^4 - 224z^3 + 672z^2 - 1440z + 1575)\operatorname{erf}(\sqrt{z})}{5632z^{9/2}}$$

07.25.03.6206.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{11}{2}, 6; z\right) = \frac{32e^{z/2}(160z^3 + 384z^2 + 1311z + 3192)I_0\left(\frac{z}{2}\right)}{2079z^3} - \frac{32e^{z/2}(160z^4 + 544z^3 + 1935z^2 + 5244z + 12768)I_1\left(\frac{z}{2}\right)}{2079z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.6207.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{e^z(64z^6 - 128z^5 + 560z^4 - 1920z^3 + 5100z^2 - 9240z + 8505)}{8505}$$

07.25.03.6208.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{945}e^z(32z^5 - 80z^4 + 240z^3 - 600z^2 + 1050z - 945)$$

07.25.03.6209.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{135}e^z(16z^4 - 48z^3 + 96z^2 - 156z + 135)$$

07.25.03.6210.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{27}e^z(8z^3 - 28z^2 + 34z - 27)$$

07.25.03.6211.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{9} e^z (4z^2 - 16z + 9)$$

07.25.03.6212.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{9} e^z (2z - 9)$$

07.25.03.6213.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{9} e^{z/2} (9 - z) I_0\left(\frac{z}{2}\right) - \frac{1}{9} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.6214.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{5\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{9\sqrt{z}} - \frac{e^z}{9}$$

07.25.03.6215.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{5\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{9\sqrt{z}} - \frac{e^{-z}}{9}$$

07.25.03.6216.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{11}{9} e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.6217.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{\sqrt{\pi} (5z + 3) \operatorname{erfi}(\sqrt{z})}{6z^{3/2}} - \frac{e^z}{z}$$

07.25.03.6218.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{\sqrt{\pi} (5z - 3) \operatorname{erf}(\sqrt{z})}{6z^{3/2}} + \frac{e^{-z}}{z}$$

07.25.03.6219.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, 3; z\right) = \frac{40}{27} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (10z + 13) I_1\left(\frac{z}{2}\right)}{27z}$$

07.25.03.6220.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (20z^2 + 24z + 21) \operatorname{erfi}(\sqrt{z})}{96z^{5/2}} - \frac{5e^z (10z + 21)}{48z^2}$$

07.25.03.6221.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} (10z - 21)}{48z^2} + \frac{5\sqrt{\pi} (20z^2 - 24z + 21) \operatorname{erf}(\sqrt{z})}{96z^{5/2}}$$

07.25.03.6222.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (4z + 3) I_0\left(\frac{z}{2}\right)}{9z} - \frac{4 e^{z/2} (4z^2 + 7z + 12) I_1\left(\frac{z}{2}\right)}{9z^2}$$

07.25.03.6223.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi} (20z^3 + 36z^2 + 63z + 60) \operatorname{erfi}(\sqrt{z})}{576z^{7/2}} - \frac{35e^z (10z^2 + 23z + 60)}{288z^3}$$

07.25.03.6224.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (10 z^2 - 23 z + 60)}{288 z^3} + \frac{35 \sqrt{\pi} (20 z^3 - 36 z^2 + 63 z - 60) \operatorname{erf}(\sqrt{z})}{576 z^{7/2}}$$

07.25.03.6225.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (20 z^2 + 27 z + 51) I_0\left(\frac{z}{2}\right)}{315 z^2} - \frac{32 e^{z/2} (20 z^3 + 47 z^2 + 108 z + 204) I_1\left(\frac{z}{2}\right)}{315 z^3}$$

07.25.03.6226.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{35 \sqrt{\pi} (80 z^4 + 192 z^3 + 504 z^2 + 960 z + 945) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}} - \frac{35 e^z (40 z^3 + 116 z^2 + 330 z + 945)}{1024 z^4}$$

07.25.03.6227.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{35 e^{-z} (40 z^3 - 116 z^2 + 330 z - 945)}{1024 z^4} + \frac{35 \sqrt{\pi} (80 z^4 - 192 z^3 + 504 z^2 - 960 z + 945) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.6228.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (40 z^3 + 78 z^2 + 231 z + 456) I_0\left(\frac{z}{2}\right)}{567 z^3} - \frac{32 e^{z/2} (40 z^4 + 118 z^3 + 369 z^2 + 924 z + 1824) I_1\left(\frac{z}{2}\right)}{567 z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.6229.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{105} e^z (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105)$$

07.25.03.6230.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{15} e^z (8 z^3 - 12 z^2 + 18 z - 15)$$

07.25.03.6231.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (4 z^2 - 4 z + 3)$$

07.25.03.6232.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -e^z (2 z - 1)$$

07.25.03.6233.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = e^z$$

07.25.03.6234.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, 1; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

07.25.03.6235.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.6236.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.6237.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.6238.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi} (2z+1) \operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3e^z}{4z}$$

07.25.03.6239.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi} (2z-1) \operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.6240.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2} (z+1) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.6241.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi} (4z^2+4z+3) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15e^z (2z+3)}{32z^2}$$

07.25.03.6242.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} (2z-3)}{32z^2} + \frac{15\sqrt{\pi} (4z^2-4z+3) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.6243.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, 4; z\right) = \frac{4e^{z/2} (2z+1) I_0\left(\frac{z}{2}\right)}{5z} - \frac{4e^{z/2} (2z^2+3z+4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.6244.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi} (8z^3+12z^2+18z+15) \operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35e^z (4z^2+8z+15)}{128z^3}$$

07.25.03.6245.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} (4z^2-8z+15)}{128z^3} + \frac{35\sqrt{\pi} (8z^3-12z^2+18z-15) \operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.6246.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, 5; z\right) = \frac{32e^{z/2} (2z^2+2z+3) I_0\left(\frac{z}{2}\right)}{35z^2} - \frac{64e^{z/2} (z^3+2z^2+4z+6) I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.6247.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi} (16z^4+32z^3+72z^2+120z+105) \operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315e^z (8z^3+20z^2+50z+105)}{2048z^4}$$

07.25.03.6248.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (8z^3 - 20z^2 + 50z - 105)}{2048 z^4} + \frac{315 \sqrt{\pi} (16z^4 - 32z^3 + 72z^2 - 120z + 105) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.6249.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 + 6z^2 + 15z + 24) I_0\left(\frac{z}{2}\right)}{63 z^3} - \frac{32 e^{z/2} (4z^4 + 10z^3 + 27z^2 + 60z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.6250.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{128}{75} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{75} e^z (-128z^3 + 76z^2 - 96z + 75)$$

07.25.03.6251.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{128}{75} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{1}{75} e^{-z} (128z^3 + 76z^2 + 96z + 75)$$

07.25.03.6252.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{15} e^z (64z^3 + 32z^2 - 22z + 15) - \frac{64}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6253.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-64z^3 + 32z^2 + 22z + 15) - \frac{64}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.6254.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{16}{5} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{5} e^z (-16z^3 - 8z^2 - 12z + 5)$$

07.25.03.6255.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{16}{5} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{1}{5} e^{-z} (16z^3 - 8z^2 + 12z + 5)$$

07.25.03.6256.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (8z^3 + 4z^2 + 6z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6257.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.6258.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{525} e^{z/2} (-128z^4 + 96z^3 + 60z^2 + 105z + 525) I_0\left(\frac{z}{2}\right) + \frac{1}{525} e^{z/2} (128z^4 + 32z^3 + 36z^2 + 75z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6259.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{120} e^z (8z^3 + 4z^2 + 6z + 15) + \frac{\sqrt{\pi} (105 - 16z^4) \operatorname{erfi}(\sqrt{z})}{240 \sqrt{z}}$$

07.25.03.6260.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{120} e^{-z} (-8z^3 + 4z^2 - 6z + 15) + \frac{\sqrt{\pi} (105 - 16z^4) \operatorname{erf}(\sqrt{z})}{240 \sqrt{z}}$$

07.25.03.6261.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (-256z^4 + 192z^3 + 120z^2 + 210z + 4725) I_0\left(\frac{z}{2}\right)}{4725} + \frac{e^{z/2} (256z^4 + 64z^3 + 72z^2 + 150z - 3675) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.6262.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^4 + 4z^3 + 6z^2 + 15z - 210)}{400z} + \frac{\sqrt{\pi} (-16z^5 + 525z + 210) \operatorname{erfi}(\sqrt{z})}{800z^{3/2}}$$

07.25.03.6263.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-8z^4 + 4z^3 - 6z^2 + 15z + 210)}{400z} + \frac{\sqrt{\pi} (-16z^5 + 525z - 210) \operatorname{erf}(\sqrt{z})}{800z^{3/2}}$$

07.25.03.6264.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (256z^5 + 64z^4 + 72z^3 + 150z^2 - 14700z - 11025) I_1\left(\frac{z}{2}\right)}{51975z} - \frac{8 e^{z/2} (128z^4 - 96z^3 - 60z^2 - 105z - 7875) I_0\left(\frac{z}{2}\right)}{51975}$$

07.25.03.6265.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (16z^5 + 8z^4 + 12z^3 + 30z^2 - 1470z - 1575)}{1920z^2} + \frac{\sqrt{\pi} (-32z^6 + 3150z^2 + 2520z + 1575) \operatorname{erfi}(\sqrt{z})}{3840z^{5/2}}$$

07.25.03.6266.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-16z^5 + 8z^4 - 12z^3 + 30z^2 + 1470z - 1575)}{1920z^2} + \frac{\sqrt{\pi} (-32z^6 + 3150z^2 - 2520z + 1575) \operatorname{erf}(\sqrt{z})}{3840z^{5/2}}$$

07.25.03.6267.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (512z^6 + 128z^5 + 144z^4 + 300z^3 - 77910z^2 - 94815z - 97020) I_1\left(\frac{z}{2}\right)}{225225z^2} - \frac{4 e^{z/2} (512z^5 - 384z^4 - 240z^3 - 420z^2 - 80010z - 24255) I_0\left(\frac{z}{2}\right)}{225225z}$$

07.25.03.6268.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (16z^6 + 8z^5 + 12z^4 + 30z^3 - 3570z^2 - 5775z - 7875)}{3840z^3} + \frac{\sqrt{\pi} (-32z^7 + 7350z^3 + 8820z^2 + 11025z + 7875) \operatorname{erfi}(\sqrt{z})}{7680z^{7/2}}$$

$$\begin{aligned}
 & \text{07.25.03.6269.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{e^{-z}(-16z^6 + 8z^5 - 12z^4 + 30z^3 + 3570z^2 - 5775z + 7875)}{3840z^3} + \frac{\sqrt{\pi}(-32z^7 + 7350z^3 - 8820z^2 + 11025z - 7875)\operatorname{erf}(\sqrt{z})}{7680z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6270.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, 5; z\right) = \frac{32e^{z/2}(512z^7 + 128z^6 + 144z^5 + 300z^4 - 168000z^3 - 274995z^2 - 457380z - 540540)I_1\left(\frac{z}{2}\right)}{3378375z^3} - \\
 & \frac{32e^{z/2}(512z^6 - 384z^5 - 240z^4 - 420z^3 - 170100z^2 - 114345z - 135135)I_0\left(\frac{z}{2}\right)}{3378375z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6271.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{3e^{-z}(128z^7 + 64z^6 + 96z^5 + 240z^4 - 57960z^3 - 119700z^2 - 246750z - 385875)}{163840z^4} - \\
 & \frac{3\sqrt{\pi}(256z^8 - 117600z^4 - 188160z^3 - 352800z^2 - 504000z - 385875)\operatorname{erfi}(\sqrt{z})}{327680z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6272.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = -\frac{3e^{-z}(128z^7 - 64z^6 + 96z^5 - 240z^4 - 57960z^3 + 119700z^2 - 246750z + 385875)}{163840z^4} - \\
 & \frac{3\sqrt{\pi}(256z^8 - 117600z^4 + 188160z^3 - 352800z^2 + 504000z - 385875)\operatorname{erf}(\sqrt{z})}{327680z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6273.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{5}{2}, 6; z\right) = \frac{1}{11486475z^4} \\
 & \frac{32e^{z/2}(1024z^8 + 256z^7 + 288z^6 + 600z^5 - 636300z^4 - 1300740z^3 - 2941785z^2 - 5585580z - 7207200)I_1\left(\frac{z}{2}\right)}{11486475z^3} - \\
 & \frac{1}{11486475z^3} 32e^{z/2}(1024z^7 - 768z^6 - 480z^5 - 840z^4 - 640500z^3 - 679140z^2 - 1396395z - 1801800)I_0\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{3}{2}$

$$\text{07.25.03.6274.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9}e^z(-96z^3 + 64z^2 - 16z + 9) + \frac{16}{9}\sqrt{\pi}(6z^{7/2} - 7z^{5/2})\operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.6275.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9}e^{-z}(96z^3 + 64z^2 + 16z + 9) + \frac{16}{9}\sqrt{\pi}(6z^{7/2} + 7z^{5/2})\operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.6276.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3}e^z(24z^3 - 44z^2 - 10z + 3) - \frac{8}{3}\sqrt{\pi}(3z^{7/2} - 7z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6277.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-24z^3 - 44z^2 + 10z + 3) - \frac{8}{3} \sqrt{\pi} (3z^{7/2} + 7z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6278.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3} \sqrt{\pi} (2z^{7/2} - 7z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6279.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (4z^3 + 12z^2 - 4z + 3) + \frac{2}{3} \sqrt{\pi} (2z^{7/2} + 7z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6280.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (192z^4 - 928z^3 + 498z^2 + 210z + 315) I_0\left(\frac{z}{2}\right) - \frac{2}{315} e^{z/2} (96z^4 - 368z^3 - 71z^2 - 54z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6281.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{144} e^z (-24z^3 + 100z^2 + 38z + 39) + \frac{\sqrt{\pi} (48z^4 - 224z^3 + 105) \operatorname{erfi}(\sqrt{z})}{288 \sqrt{z}}$$

07.25.03.6282.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{144} e^{-z} (24z^3 + 100z^2 - 38z + 39) + \frac{\sqrt{\pi} (48z^4 + 224z^3 + 105) \operatorname{erf}(\sqrt{z})}{288 \sqrt{z}}$$

07.25.03.6283.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (128z^4 - 768z^3 + 444z^2 + 210z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-128z^4 + 640z^3 + 132z^2 + 114z - 525) I_1\left(\frac{z}{2}\right)$$

07.25.03.6284.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (-48z^4 + 256z^3 + 104z^2 + 120z - 315)}{960z} + \frac{\sqrt{\pi} (96z^5 - 560z^4 + 1050z + 315) \operatorname{erfi}(\sqrt{z})}{1920z^{3/2}}$$

07.25.03.6285.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (48z^4 + 256z^3 - 104z^2 + 120z + 315)}{960z} + \frac{\sqrt{\pi} (96z^5 + 560z^4 + 1050z - 315) \operatorname{erf}(\sqrt{z})}{1920z^{3/2}}$$

07.25.03.6286.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (384z^4 - 2752z^3 + 1668z^2 + 840z + 8715) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (384z^5 - 2368z^4 - 508z^3 - 468z^2 + 6825z + 3675) I_1\left(\frac{z}{2}\right)}{31185z}$$

07.25.03.6287.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (-16z^5 + 104z^4 + 44z^3 + 54z^2 - 420z - 315)}{768z^2} + \frac{\sqrt{\pi} (32z^6 - 224z^5 + 1050z^2 + 630z + 315) \operatorname{erfi}(\sqrt{z})}{1536z^{5/2}}$$

07.25.03.6288.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16z^5 + 104z^4 - 44z^3 + 54z^2 + 420z - 315)}{768z^2} + \frac{\sqrt{\pi} (32z^6 + 224z^5 + 1050z^2 - 630z + 315) \operatorname{erf}(\sqrt{z})}{1536z^{5/2}}$$

07.25.03.6289.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, 4; z\right) = \frac{4e^{z/2} (768z^5 - 6400z^4 + 4008z^3 + 2100z^2 + 42420z + 6615) I_0\left(\frac{z}{2}\right)}{135135z} - \frac{4e^{z/2} (768z^6 - 5632z^5 - 1240z^4 - 1188z^3 + 37380z^2 + 34545z + 26460) I_1\left(\frac{z}{2}\right)}{135135z^2}$$

07.25.03.6290.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^{-z} (-96z^6 + 736z^5 + 320z^4 + 408z^3 - 6510z^2 - 7980z - 7875)}{9216z^3} + \frac{\sqrt{\pi} (192z^7 - 1568z^6 + 14700z^3 + 13230z^2 + 13230z + 7875) \operatorname{erfi}(\sqrt{z})}{18432z^{7/2}}$$

07.25.03.6291.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (96z^6 + 736z^5 - 320z^4 + 408z^3 + 6510z^2 - 7980z + 7875)}{9216z^3} + \frac{\sqrt{\pi} (192z^7 + 1568z^6 + 14700z^3 - 13230z^2 + 13230z - 7875) \operatorname{erf}(\sqrt{z})}{18432z^{7/2}}$$

07.25.03.6292.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, 5; z\right) = \frac{32e^{z/2} (256z^6 - 2432z^5 + 1560z^4 + 840z^3 + 29400z^2 + 11340z + 10395) I_0\left(\frac{z}{2}\right)}{675675z^2} - \frac{128e^{z/2} (64z^7 - 544z^6 - 122z^5 - 120z^4 + 6825z^3 + 8610z^2 + 11340z + 10395) I_1\left(\frac{z}{2}\right)}{675675z^3}$$

07.25.03.6293.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^{-z} (-384z^7 + 3392z^6 + 1504z^5 + 1968z^4 - 54600z^3 - 87780z^2 - 141750z - 165375)}{65536z^4} + \frac{\sqrt{\pi} (768z^8 - 7168z^7 + 117600z^4 + 141120z^3 + 211680z^2 + 252000z + 165375) \operatorname{erfi}(\sqrt{z})}{131072z^{9/2}}$$

07.25.03.6294.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (384z^7 + 3392z^6 - 1504z^5 + 1968z^4 + 54600z^3 - 87780z^2 + 141750z - 165375)}{65536z^4} + \frac{\sqrt{\pi} (768z^8 + 7168z^7 + 117600z^4 - 141120z^3 + 211680z^2 - 252000z + 165375) \operatorname{erf}(\sqrt{z})}{131072z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.6295.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{6891885 z^3} \\
 & 32 e^{z/2} (1536 z^7 - 16384 z^6 + 10704 z^5 + 5880 z^4 + 328020 z^3 + 212940 z^2 + 349965 z + 360360) I_0\left(\frac{z}{2}\right) - \frac{1}{6891885 z^4} \\
 & \left(32 e^{z/2} (1536 z^8 - 14848 z^7 - 3376 z^6 - 3384 z^5 + 312900 z^4 + 494340 z^3 + 896805 z^2 + 1399860 z + 1441440) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{1}{2}$

$$\text{07.25.03.6296.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = e^z (-6 z^3 + 25 z^2 - 8 z + 1) + \frac{1}{2} \sqrt{\pi} (12 z^{7/2} - 56 z^{5/2} + 35 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.6297.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = e^{-z} (6 z^3 + 25 z^2 + 8 z + 1) + \frac{1}{2} \sqrt{\pi} (12 z^{7/2} + 56 z^{5/2} + 35 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.6298.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{2} e^z (2 z^3 - 13 z^2 + 12 z + 2) + \frac{1}{4} \sqrt{\pi} (-4 z^{7/2} + 28 z^{5/2} - 35 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.6299.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{2} e^{-z} (-2 z^3 - 13 z^2 - 12 z + 2) + \frac{1}{4} \sqrt{\pi} (-4 z^{7/2} - 28 z^{5/2} - 35 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.6300.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, 1; z\right) = \\
 & \frac{1}{105} e^{z/2} (-48 z^4 + 428 z^3 - 884 z^2 + 315 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (48 z^4 - 380 z^3 + 528 z^2 + 71 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6301.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{192} e^z (24 z^3 - 212 z^2 + 326 z + 87) + \frac{\sqrt{\pi} (-48 z^4 + 448 z^3 - 840 z^2 + 105) \operatorname{erfi}(\sqrt{z})}{384 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6302.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{192} e^{-z} (-24 z^3 - 212 z^2 - 326 z + 87) + \frac{\sqrt{\pi} (-48 z^4 - 448 z^3 - 840 z^2 + 105) \operatorname{erf}(\sqrt{z})}{384 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6303.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, 2; z\right) = \\
 & \frac{1}{315} e^{z/2} (-32 z^4 + 360 z^3 - 972 z^2 + 420 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (32 z^4 - 328 z^3 + 660 z^2 + 108 z - 105) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6304.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (24 z^4 - 268 z^3 + 578 z^2 + 185 z - 105)}{640 z} + \frac{\sqrt{\pi} (-48 z^5 + 560 z^4 - 1400 z^3 + 525 z + 105) \operatorname{erfi}(\sqrt{z})}{1280 z^{3/2}}
 \end{aligned}$$

07.25.03.6305.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(-24z^4 - 268z^3 - 578z^2 + 185z + 105)}{640z} + \frac{\sqrt{\pi}(-48z^5 - 560z^4 - 1400z^3 + 525z - 105)\operatorname{erf}(\sqrt{z})}{1280z^{3/2}}$$

07.25.03.6306.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, 3; z\right) = \frac{4e^{z/2}(96z^5 - 1208z^4 + 3184z^3 + 576z^2 - 1470z - 525)I_1\left(\frac{z}{2}\right)}{10395z} - \frac{8e^{z/2}(48z^4 - 652z^3 + 2172z^2 - 1050z - 1365)I_0\left(\frac{z}{2}\right)}{10395}$$

07.25.03.6307.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z(32z^5 - 432z^4 + 1200z^3 + 424z^2 - 630z - 315)}{2048z^2} + \frac{\sqrt{\pi}(-64z^6 + 896z^5 - 2800z^4 + 2100z^2 + 840z + 315)\operatorname{erfi}(\sqrt{z})}{4096z^{5/2}}$$

07.25.03.6308.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(-32z^5 - 432z^4 - 1200z^3 + 424z^2 + 630z - 315)}{2048z^2} + \frac{\sqrt{\pi}(-64z^6 - 896z^5 - 2800z^4 + 2100z^2 - 840z + 315)\operatorname{erf}(\sqrt{z})}{4096z^{5/2}}$$

07.25.03.6309.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, 4; z\right) = \frac{4e^{z/2}(192z^6 - 2864z^5 + 9336z^4 + 1796z^3 - 8400z^2 - 5355z - 2940)I_1\left(\frac{z}{2}\right)}{45045z^2} - \frac{4e^{z/2}(192z^5 - 3056z^4 + 12104z^3 - 6300z^2 - 12600z - 735)I_0\left(\frac{z}{2}\right)}{45045z}$$

07.25.03.6310.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z(96z^6 - 1520z^5 + 5168z^4 + 1944z^3 - 5250z^2 - 4515z - 3150)}{12288z^3} + \frac{\sqrt{\pi}(-192z^7 + 3136z^6 - 11760z^5 + 14700z^3 + 8820z^2 + 6615z + 3150)\operatorname{erfi}(\sqrt{z})}{24576z^{7/2}}$$

07.25.03.6311.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(-96z^6 - 1520z^5 - 5168z^4 + 1944z^3 + 5250z^2 - 4515z + 3150)}{12288z^3} + \frac{\sqrt{\pi}(-192z^7 - 3136z^6 - 11760z^5 + 14700z^3 - 8820z^2 + 6615z - 3150)\operatorname{erf}(\sqrt{z})}{24576z^{7/2}}$$

07.25.03.6312.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (64 z^7 - 1104 z^6 + 4288 z^5 + 860 z^4 - 6300 z^3 - 5565 z^2 - 5460 z - 3780) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^6 - 1168 z^5 + 5360 z^4 - 2940 z^3 - 8400 z^2 - 1365 z - 945) I_0\left(\frac{z}{2}\right)}{225 225 z^3}$$

07.25.03.6313.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (384 z^7 - 6976 z^6 + 28064 z^5 + 11024 z^4 - 46200 z^3 - 53340 z^2 - 64050 z - 55125)}{262144 z^4} - \frac{1}{524288 z^{9/2}} 3 \sqrt{\pi} (768 z^8 - 14336 z^7 + 62720 z^6 - 117600 z^4 - 94080 z^3 - 105840 z^2 - 100800 z - 55125) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6314.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{3 e^{-z} (384 z^7 + 6976 z^6 + 28064 z^5 - 11024 z^4 - 46200 z^3 + 53340 z^2 - 64050 z + 55125)}{262144 z^4} - \frac{1}{524288 z^{9/2}} 3 \sqrt{\pi} (768 z^8 + 14336 z^7 + 62720 z^6 - 117600 z^4 + 94080 z^3 - 105840 z^2 + 100800 z - 55125) \operatorname{erf}(\sqrt{z})$$

07.25.03.6315.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; -\frac{1}{2}, 6; z\right) = \frac{1}{2297295 z^4} 32 e^{z/2} (384 z^8 - 7520 z^7 + 33904 z^6 + 7008 z^5 - 73500 z^4 - 81690 z^3 - 111825 z^2 - 137340 z - 110880) I_1\left(\frac{z}{2}\right) - \frac{32 e^{z/2} (384 z^7 - 7904 z^6 + 41232 z^5 - 23520 z^4 - 91140 z^3 - 27090 z^2 - 34335 z - 27720) I_0\left(\frac{z}{2}\right)}{2297295 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{1}{2}$, $b_1 = \frac{1}{2}$

07.25.03.6316.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{24} e^z (-4 z^3 + 40 z^2 - 87 z + 24) + \frac{1}{48} \sqrt{\pi} (8 z^{7/2} - 84 z^{5/2} + 210 z^{3/2} - 105 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6317.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{24} e^{-z} (4 z^3 + 40 z^2 + 87 z + 24) + \frac{1}{48} \sqrt{\pi} (8 z^{7/2} + 84 z^{5/2} + 210 z^{3/2} + 105 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6318.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8 z^4 - 104 z^3 + 376 z^2 - 420 z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} (2 z^4 - 24 z^3 + 71 z^2 - 44 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6319.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{384} e^z (-8 z^3 + 108 z^2 - 370 z + 279) + \frac{\sqrt{\pi} (16 z^4 - 224 z^3 + 840 z^2 - 840 z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.6320.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} e^{-z} (8 z^3 + 108 z^2 + 370 z + 279) + \frac{\sqrt{\pi} (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.6321.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (16z^4 - 264z^3 + 1284z^2 - 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16z^4 + 248z^3 - 1044z^2 + 1164z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.6322.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16z^4 + 272z^3 - 1272z^2 + 1580z - 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.6323.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (16z^4 + 272z^3 + 1272z^2 + 1580z + 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.6324.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (16z^4 - 320z^3 + 1956z^2 - 4200z + 2625) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16z^5 - 304z^4 + 1660z^3 - 2676z^2 + 525z + 105) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.6325.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (-32z^5 + 656z^4 - 3888z^3 + 6744z^2 - 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi} (64z^6 - 1344z^5 + 8400z^4 - 16800z^3 + 6300z^2 + 1260z + 315) \operatorname{erfi}(\sqrt{z})}{24576z^{5/2}}$$

07.25.03.6326.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32z^5 + 656z^4 + 3888z^3 + 6744z^2 + 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi} (64z^6 + 1344z^5 + 8400z^4 + 16800z^3 + 6300z^2 - 1260z + 315) \operatorname{erf}(\sqrt{z})}{24576z^{5/2}}$$

07.25.03.6327.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (32z^5 - 752z^4 + 5536z^3 - 14700z^2 + 11550z + 105) I_0\left(\frac{z}{2}\right)}{45045z} - \frac{4 e^{z/2} (32z^6 - 720z^5 + 4832z^4 - 10196z^3 + 3150z^2 + 1155z + 420) I_1\left(\frac{z}{2}\right)}{45045z^2}$$

07.25.03.6328.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (-64 z^6 + 1536 z^5 - 11024 z^4 + 24576 z^3 - 6300 z^2 - 3360 z - 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 - 3136 z^6 + 23520 z^5 - 58800 z^4 + 29400 z^3 + 8820 z^2 + 4410 z + 1575) \operatorname{erfi}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.6329.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1536 z^5 + 11024 z^4 + 24576 z^3 + 6300 z^2 - 3360 z + 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.6330.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23520 z^3 + 22050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675675 z^3}$$

07.25.03.6331.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{1048576 z^{9/2}} - \frac{3 \sqrt{\pi} (256 z^8 - 7168 z^7 + 62720 z^6 - 188160 z^5 + 117600 z^4 + 47040 z^3 + 35280 z^2 + 25200 z + 11025) \operatorname{erfi}(\sqrt{z}) - 3 e^z (128 z^7 - 3520 z^6 + 29664 z^5 - 80848 z^4 + 29400 z^3 + 21420 z^2 + 17850 z + 11025)}{524288 z^4}$$

07.25.03.6332.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29664 z^5 + 80848 z^4 + 29400 z^3 - 21420 z^2 + 17850 z - 11025)}{524288 z^4} + \frac{1}{1048576 z^{9/2}} - \frac{3 \sqrt{\pi} (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025) \operatorname{erf}(\sqrt{z})}{524288 z^4}$$

07.25.03.6333.01

$${}_2F_2\left(-\frac{7}{2}, \frac{1}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right) - \frac{1}{2297295 z^4} 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)}{2297295 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = -\frac{11}{2}$

07.25.03.6334.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{256 z^8 + 896 z^7 + 192 z^6 + 32 z^5 + 144 z^4 - 1800 z^3 + 14700 z^2 - 119070 z + 1029105}{1029105} + \frac{256 e^z \sqrt{\pi} (z^{17/2} + 4 z^{15/2} + 2 z^{13/2}) \operatorname{erf}(\sqrt{z})}{1029105}$$

07.25.03.6335.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{256 z^8 - 896 z^7 + 192 z^6 - 32 z^5 + 144 z^4 + 1800 z^3 + 14700 z^2 + 119070 z + 1029105}{1029105} - \frac{256 e^{-z} \sqrt{\pi} (z^{17/2} - 4 z^{15/2} + 2 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{1029105}$$

07.25.03.6336.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{-128 z^7 - 192 z^6 + 32 z^5 + 48 z^4 - 360 z^3 + 2100 z^2 - 13230 z + 93555}{93555} - \frac{128 e^z \sqrt{\pi} (z^{15/2} + 2 z^{13/2}) \operatorname{erf}(\sqrt{z})}{93555}$$

07.25.03.6337.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{128 z^7 - 192 z^6 - 32 z^5 + 48 z^4 + 360 z^3 + 2100 z^2 + 13230 z + 93555}{93555} - \frac{128 e^{-z} \sqrt{\pi} (z^{15/2} - 2 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{93555}$$

07.25.03.6338.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{64 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{64 z^6 - 32 z^5 + 48 z^4 - 120 z^3 + 420 z^2 - 1890 z + 10395}{10395}$$

07.25.03.6339.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 + 1890 z + 10395}{10395} - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.6340.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{-32 z^5 + 80 z^4 - 120 z^3 + 140 z^2 - 378 z + 1485}{1485} - \frac{32 e^z \sqrt{\pi} (z^{11/2} - 2 z^{9/2} + 2 z^{7/2}) \operatorname{erf}(\sqrt{z})}{1485}$$

07.25.03.6341.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{32 z^5 + 80 z^4 + 120 z^3 + 140 z^2 + 378 z + 1485}{1485} - \frac{32 e^{-z} \sqrt{\pi} (z^{11/2} + 2 z^{9/2} + 2 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{1485}$$

07.25.03.6342.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{297} (16 z^4 - 72 z^3 + 140 z^2 - 126 z + 297) + \frac{16}{297} e^z \sqrt{\pi} (z^{9/2} - 4 z^{7/2} + 6 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6343.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{297} (16 z^4 + 72 z^3 + 140 z^2 + 126 z + 297) - \frac{16}{297} e^{-z} \sqrt{\pi} (z^{9/2} + 4 z^{7/2} + 6 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6344.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{99}(-8z^3 + 52z^2 - 126z + 99) - \frac{8}{99}e^z \sqrt{\pi} (z^{7/2} - 6z^{5/2} + 12z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6345.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{99}(8z^3 + 52z^2 + 126z + 99) - \frac{8}{99}e^{-z} \sqrt{\pi} (z^{7/2} + 6z^{5/2} + 12z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6346.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{99}(4z^2 - 34z + 99) + \frac{4}{99}e^z \sqrt{\pi} (z^{5/2} - 8z^{3/2} + 20\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6347.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{99}(4z^2 + 34z + 99) - \frac{4}{99}e^{-z} \sqrt{\pi} (z^{5/2} + 8z^{3/2} + 20\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6348.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, 1; z\right) = \frac{1}{99}e^z(4z^2 - 36z + 99)$$

07.25.03.6349.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{99}(2z - 21) + \frac{2e^z \sqrt{\pi} (z^2 - 10z + 30) \operatorname{erf}(\sqrt{z})}{99\sqrt{z}}$$

07.25.03.6350.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{99}(-2z - 21) + \frac{2e^{-z} \sqrt{\pi} (z^2 + 10z + 30) \operatorname{erfi}(\sqrt{z})}{99\sqrt{z}}$$

07.25.03.6351.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, 2; z\right) = \frac{e^z(4z^2 - 44z + 143)}{99z} - \frac{13}{9z}$$

07.25.03.6352.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{z - 84}{33z} + \frac{e^z \sqrt{\pi} (z^2 - 12z + 42) \operatorname{erf}(\sqrt{z})}{33z^{3/2}}$$

07.25.03.6353.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{z + 84}{33z} + \frac{e^{-z} \sqrt{\pi} (-z^2 - 12z - 42) \operatorname{erfi}(\sqrt{z})}{33z^{3/2}}$$

07.25.03.6354.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, 3; z\right) = \frac{2e^z(4z^2 - 52z + 195)}{99z^2} - \frac{26(11z + 15)}{99z^2}$$

07.25.03.6355.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5e^z \sqrt{\pi} (z^2 - 14z + 56) \operatorname{erf}(\sqrt{z})}{66z^{5/2}} - \frac{70(5z + 12)}{99z^2}$$

07.25.03.6356.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{70(5z - 12)}{99z^2} + \frac{5e^{-z} \sqrt{\pi} (z^2 + 14z + 56) \operatorname{erfi}(\sqrt{z})}{66z^{5/2}}$$

07.25.03.6357.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, 4; z\right) = \frac{-143 z^2 - 390 z - 510}{33 z^3} + \frac{2 e^z (4 z^2 - 60 z + 255)}{33 z^3}$$

07.25.03.6358.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{35 e^z \sqrt{\pi} (z^2 - 16 z + 72) \operatorname{erf}(\sqrt{z})}{132 z^{7/2}} - \frac{7 (143 z^2 + 480 z + 1080)}{198 z^3}$$

07.25.03.6359.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{7 (143 z^2 - 480 z + 1080)}{198 z^3} - \frac{35 e^{-z} \sqrt{\pi} (z^2 + 16 z + 72) \operatorname{erfi}(\sqrt{z})}{132 z^{7/2}}$$

07.25.03.6360.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, 5; z\right) = \frac{8 e^z (4 z^2 - 68 z + 323)}{33 z^4} - \frac{4 (143 z^3 + 585 z^2 + 1530 z + 1938)}{99 z^4}$$

07.25.03.6361.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{-286 z^3 - 1365 z^2 - 4410 z - 9450}{44 z^4} + \frac{105 e^z \sqrt{\pi} (z^2 - 18 z + 90) \operatorname{erf}(\sqrt{z})}{88 z^{9/2}}$$

07.25.03.6362.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{286 z^3 - 1365 z^2 + 4410 z - 9450}{44 z^4} + \frac{105 e^{-z} \sqrt{\pi} (z^2 + 18 z + 90) \operatorname{erfi}(\sqrt{z})}{88 z^{9/2}}$$

07.25.03.6363.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{11}{2}, 6; z\right) = \frac{40 e^z (4 z^2 - 76 z + 399)}{33 z^5} - \frac{5 (143 z^4 + 780 z^3 + 3060 z^2 + 7752 z + 9576)}{99 z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = -\frac{9}{2}$

07.25.03.6364.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{64 z^6 + 32 z^5 + 16 z^4 - 72 z^3 + 300 z^2 - 1470 z + 8505}{8505} + \frac{64 e^z \sqrt{\pi} (z^{13/2} + z^{11/2}) \operatorname{erf}(\sqrt{z})}{8505}$$

07.25.03.6365.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{64 z^6 - 32 z^5 + 16 z^4 + 72 z^3 + 300 z^2 + 1470 z + 8505}{8505} - \frac{64 e^{-z} \sqrt{\pi} (z^{13/2} - z^{11/2}) \operatorname{erfi}(\sqrt{z})}{8505}$$

07.25.03.6366.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{945} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.6367.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{945} (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6368.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{135} (16 z^4 - 24 z^3 + 20 z^2 - 42 z + 135) + \frac{16}{135} e^z \sqrt{\pi} (z^{9/2} - z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6369.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{135} (16z^4 + 24z^3 + 20z^2 + 42z + 135) - \frac{16}{135} e^{-z} \sqrt{\pi} (z^{9/2} + z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6370.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{27} (-8z^3 + 20z^2 - 14z + 27) - \frac{8}{27} e^z \sqrt{\pi} (z^{7/2} - 2z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6371.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{27} (8z^3 + 20z^2 + 14z + 27) - \frac{8}{27} e^{-z} \sqrt{\pi} (z^{7/2} + 2z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6372.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{9} (4z^2 - 14z + 9) + \frac{4}{9} e^z \sqrt{\pi} (z^{5/2} - 3z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6373.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{9} (4z^2 + 14z + 9) - \frac{4}{9} e^{-z} \sqrt{\pi} (z^{5/2} + 3z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6374.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{9} (9 - 2z) - \frac{2}{9} e^z \sqrt{\pi} (z^{3/2} - 4\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6375.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{9} (2z + 9) - \frac{2}{9} e^{-z} \sqrt{\pi} (z^{3/2} + 4\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6376.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, 1; z\right) = -\frac{1}{9} e^z (2z - 9)$$

07.25.03.6377.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (5 - z) \operatorname{erf}(\sqrt{z})}{9\sqrt{z}} - \frac{1}{9}$$

07.25.03.6378.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (z + 5) \operatorname{erfi}(\sqrt{z})}{9\sqrt{z}} - \frac{1}{9}$$

07.25.03.6379.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, 2; z\right) = \frac{e^z (11 - 2z)}{9z} - \frac{11}{9z}$$

07.25.03.6380.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z \sqrt{\pi} (6 - z) \operatorname{erf}(\sqrt{z})}{6z^{3/2}} - \frac{2}{z}$$

07.25.03.6381.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (-z - 6) \operatorname{erfi}(\sqrt{z})}{6z^{3/2}} + \frac{2}{z}$$

07.25.03.6382.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, 3; z\right) = -\frac{2e^z(2z-13)}{9z^2} - \frac{2(11z+13)}{9z^2}$$

07.25.03.6383.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{5(11z+21)}{18z^2} - \frac{5e^z\sqrt{\pi}(z-7)\operatorname{erf}(\sqrt{z})}{12z^{5/2}}$$

07.25.03.6384.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5(11z-21)}{18z^2} + \frac{5e^{-z}\sqrt{\pi}(z+7)\operatorname{erfi}(\sqrt{z})}{12z^{5/2}}$$

07.25.03.6385.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, 4; z\right) = \frac{-11z^2-26z-30}{3z^3} - \frac{2e^z(2z-15)}{3z^3}$$

07.25.03.6386.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{7(22z^2+65z+120)}{36z^3} - \frac{35e^z\sqrt{\pi}(z-8)\operatorname{erf}(\sqrt{z})}{24z^{7/2}}$$

07.25.03.6387.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7(22z^2-65z+120)}{36z^3} - \frac{35e^{-z}\sqrt{\pi}(z+8)\operatorname{erfi}(\sqrt{z})}{24z^{7/2}}$$

07.25.03.6388.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, 5; z\right) = -\frac{8e^z(2z-17)}{3z^4} - \frac{4(11z^3+39z^2+90z+102)}{9z^4}$$

07.25.03.6389.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-44z^3-182z^2-525z-945}{8z^4} - \frac{105e^z\sqrt{\pi}(z-9)\operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.6390.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{44z^3-182z^2+525z-945}{8z^4} + \frac{105e^{-z}\sqrt{\pi}(z+9)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.6391.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{9}{2}, 6; z\right) = -\frac{40e^z(2z-19)}{3z^5} - \frac{5(11z^4+52z^3+180z^2+408z+456)}{9z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = -\frac{7}{2}$

07.25.03.6392.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{16}{105}e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2} + \frac{1}{105}(16z^4-8z^3+12z^2-30z+105)$$

07.25.03.6393.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{105}(16z^4+8z^3+12z^2+30z+105) - \frac{16}{105}e^{-z}\sqrt{\pi}z^{9/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.6394.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{15}(-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15}e^z \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.6395.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15}(8z^3 + 4z^2 + 6z + 15) - \frac{8}{15}e^{-z} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6396.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{4}{3}e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3}(4z^2 - 2z + 3)$$

07.25.03.6397.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3}(4z^2 + 2z + 3) - \frac{4}{3}e^{-z} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6398.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, -\frac{1}{2}; z\right) = -2e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} - 2z + 1$$

07.25.03.6399.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, -\frac{1}{2}; -z\right) = -2e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + 2z + 1$$

07.25.03.6400.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, \frac{1}{2}; z\right) = e^z \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.6401.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, \frac{1}{2}; -z\right) = 1 - e^{-z} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6402.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, 1; z\right) = e^z$$

07.25.03.6403.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.6404.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.6405.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, 2; z\right) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.6406.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{3e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3}{2z}$$

07.25.03.6407.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{3}{2z} - \frac{3 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.6408.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, 3; z\right) = \frac{2 e^z}{z^2} - \frac{2(z+1)}{z^2}$$

07.25.03.6409.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5(2z+3)}{4 z^2}$$

07.25.03.6410.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5(2z-3)}{4 z^2} + \frac{15 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.6411.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, 4; z\right) = \frac{6 e^z}{z^3} - \frac{3(z^2 + 2z + 2)}{z^3}$$

07.25.03.6412.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{105 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7(4z^2 + 10z + 15)}{8 z^3}$$

07.25.03.6413.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{7(4z^2 - 10z + 15)}{8 z^3} - \frac{105 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.6414.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, 5; z\right) = \frac{24 e^z}{z^4} - \frac{4(z^3 + 3z^2 + 6z + 6)}{z^4}$$

07.25.03.6415.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9(8z^3 + 28z^2 + 70z + 105)}{16 z^4}$$

07.25.03.6416.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(8z^3 - 28z^2 + 70z - 105)}{16 z^4} + \frac{945 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.6417.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{7}{2}, 6; z\right) = \frac{120 e^z}{z^5} - \frac{5(z^4 + 4z^3 + 12z^2 + 24z + 24)}{z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = -\frac{5}{2}$

07.25.03.6418.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{5}{2}, 1; z\right) = \frac{1}{15} e^z (8z^3 + 4z^2 + 6z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6419.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{5}{2}, 1; -z\right) = \frac{1}{15} e^{-z} (-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.6420.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{5}{2}, 2; z\right) = -\frac{16}{135} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{e^z (16z^4 + 8z^3 + 12z^2 + 30z + 105)}{135z} - \frac{7}{9z}$$

07.25.03.6421.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{5}{2}, 2; -z\right) = -\frac{16}{135} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{e^{-z} (-16z^4 + 8z^3 - 12z^2 + 30z - 105)}{135z} + \frac{7}{9z}$$

07.25.03.6422.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{5}{2}, 3; z\right) = -\frac{64 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2}}{1485} - \frac{14(11z + 9)}{99z^2} + \frac{2e^z (32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945)}{1485z^2}$$

07.25.03.6423.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{5}{2}, 3; -z\right) = -\frac{64 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2}}{1485} + \frac{14(11z - 9)}{99z^2} - \frac{2e^{-z} (32z^5 - 16z^4 + 24z^3 - 60z^2 + 210z - 945)}{1485z^2}$$

07.25.03.6424.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{5}{2}, 4; z\right) = \frac{128 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2}}{6435} - \frac{7(143z^2 + 234z + 198)}{429z^3} + \frac{2e^z (64z^6 + 32z^5 + 48z^4 + 120z^3 + 420z^2 + 1890z + 10395)}{6435z^3}$$

07.25.03.6425.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{5}{2}, 4; -z\right) = -\frac{128 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2}}{6435} + \frac{7(143z^2 - 234z + 198)}{429z^3} - \frac{2e^{-z} (64z^6 - 32z^5 + 48z^4 - 120z^3 + 420z^2 - 1890z + 10395)}{6435z^3}$$

07.25.03.6426.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{5}{2}, 5; z\right) = -\frac{1024 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2}}{96525} - \frac{28(715z^3 + 1755z^2 + 2970z + 2574)}{6435z^4} + \frac{8e^z (128z^7 + 64z^6 + 96z^5 + 240z^4 + 840z^3 + 3780z^2 + 20790z + 135135)}{96525z^4}$$

07.25.03.6427.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{5}{2}, 5; -z\right) = -\frac{1024 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2}}{96525} + \frac{28(715z^3 - 1755z^2 + 2970z - 2574)}{6435z^4} - \frac{8e^{-z} (128z^7 - 64z^6 + 96z^5 - 240z^4 + 840z^3 - 3780z^2 + 20790z - 135135)}{96525z^4}$$

07.25.03.6428.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{5}{2}, 6; z\right) = -\frac{2048 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2}}{328185} - \frac{7(12155 z^4 + 39780 z^3 + 100980 z^2 + 175032 z + 154440)}{21879 z^5} + \frac{8 e^z (256 z^8 + 128 z^7 + 192 z^6 + 480 z^5 + 1680 z^4 + 7560 z^3 + 41580 z^2 + 270270 z + 2027025)}{328185 z^5}$$

07.25.03.6429.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{5}{2}, 6; -z\right) = -\frac{2048 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2}}{328185} + \frac{7(12155 z^4 - 39780 z^3 + 100980 z^2 - 175032 z + 154440)}{21879 z^5} - \frac{8 e^{-z} (256 z^8 - 128 z^7 + 192 z^6 - 480 z^5 + 1680 z^4 - 7560 z^3 + 41580 z^2 - 270270 z + 2027025)}{328185 z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = -\frac{3}{2}$

07.25.03.6430.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{3}{2}, 1; z\right) = \frac{1}{3} e^z (-4 z^3 + 12 z^2 + 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6431.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{3}{2}, 1; -z\right) = \frac{1}{3} e^{-z} (4 z^3 + 12 z^2 - 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6432.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{3}{2}, 2; z\right) = \frac{e^z (-8 z^4 + 32 z^3 + 12 z^2 + 12 z + 15)}{27 z} + \frac{4}{27} \sqrt{\pi} (2 z^{7/2} - 9 z^{5/2}) \operatorname{erfi}(\sqrt{z}) - \frac{5}{9 z}$$

07.25.03.6433.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{3}{2}, 2; -z\right) = \frac{e^{-z} (8 z^4 + 32 z^3 - 12 z^2 + 12 z - 15)}{27 z} + \frac{4}{27} \sqrt{\pi} (2 z^{7/2} + 9 z^{5/2}) \operatorname{erf}(\sqrt{z}) + \frac{5}{9 z}$$

07.25.03.6434.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{3}{2}, 3; z\right) = -\frac{10(11 z + 7)}{99 z^2} - \frac{2 e^z (16 z^5 - 80 z^4 - 32 z^3 - 36 z^2 - 60 z - 105)}{297 z^2} + \frac{16}{297} \sqrt{\pi} (2 z^{7/2} - 11 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6435.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{3}{2}, 3; -z\right) = \frac{10(11 z - 7)}{99 z^2} + \frac{2 e^{-z} (16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105)}{297 z^2} + \frac{16}{297} \sqrt{\pi} (2 z^{7/2} + 11 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6436.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{3}{2}, 4; z\right) = \frac{5(143 z^2 + 182 z + 126)}{429 z^3} - \frac{2 e^z (32 z^6 - 192 z^5 - 80 z^4 - 96 z^3 - 180 z^2 - 420 z - 945)}{1287 z^3} + \frac{32 \sqrt{\pi} (2 z^{7/2} - 13 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{1287}$$

$$\begin{aligned}
 & \text{07.25.03.6437.01} \\
 {}_2F_2\left(-\frac{7}{2}, 1; -\frac{3}{2}, 4; -z\right) &= \\
 & \frac{5(143z^2 - 182z + 126)}{429z^3} + \frac{2e^{-z}(32z^6 + 192z^5 - 80z^4 + 96z^3 - 180z^2 + 420z - 945)}{1287z^3} + \frac{32\sqrt{\pi}(2z^{7/2} + 13z^{5/2})\operatorname{erf}(\sqrt{z})}{1287}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6438.01} \\
 {}_2F_2\left(-\frac{7}{2}, 1; -\frac{3}{2}, 5; z\right) &= -\frac{4(715z^3 + 1365z^2 + 1890z + 1386)}{1287z^4} - \\
 & \frac{8e^z(64z^7 - 448z^6 - 192z^5 - 240z^4 - 480z^3 - 1260z^2 - 3780z - 10395)}{19305z^4} + \frac{256\sqrt{\pi}(2z^{7/2} - 15z^{5/2})\operatorname{erfi}(\sqrt{z})}{19305}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6439.01} \\
 {}_2F_2\left(-\frac{7}{2}, 1; -\frac{3}{2}, 5; -z\right) &= \frac{4(715z^3 - 1365z^2 + 1890z - 1386)}{1287z^4} + \\
 & \frac{8e^{-z}(64z^7 + 448z^6 - 192z^5 + 240z^4 - 480z^3 + 1260z^2 - 3780z + 10395)}{19305z^4} + \frac{256\sqrt{\pi}(2z^{7/2} + 15z^{5/2})\operatorname{erf}(\sqrt{z})}{19305}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6440.01} \\
 {}_2F_2\left(-\frac{7}{2}, 1; -\frac{3}{2}, 6; z\right) &= -\frac{5(12155z^4 + 30940z^3 + 64260z^2 + 94248z + 72072)}{21879z^5} - \\
 & \frac{8e^z(128z^8 - 1024z^7 - 448z^6 - 576z^5 - 1200z^4 - 3360z^3 - 11340z^2 - 41580z - 135135)}{65637z^5} + \\
 & \frac{512\sqrt{\pi}(2z^{7/2} - 17z^{5/2})\operatorname{erfi}(\sqrt{z})}{65637}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6441.01} \\
 {}_2F_2\left(-\frac{7}{2}, 1; -\frac{3}{2}, 6; -z\right) &= \frac{5(12155z^4 - 30940z^3 + 64260z^2 - 94248z + 72072)}{21879z^5} + \\
 & \frac{8e^{-z}(128z^8 + 1024z^7 - 448z^6 + 576z^5 - 1200z^4 + 3360z^3 - 11340z^2 + 41580z - 135135)}{65637z^5} + \\
 & \frac{512\sqrt{\pi}(2z^{7/2} + 17z^{5/2})\operatorname{erf}(\sqrt{z})}{65637}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.6442.01} \\
 {}_2F_2\left(-\frac{7}{2}, 1; -\frac{1}{2}, 1; z\right) &= \frac{1}{2}e^z(2z^3 - 13z^2 + 12z + 2) + \frac{1}{4}\sqrt{\pi}(-4z^{7/2} + 28z^{5/2} - 35z^{3/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6443.01} \\
 {}_2F_2\left(-\frac{7}{2}, 1; -\frac{1}{2}, 1; -z\right) &= \frac{1}{2}e^{-z}(-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4}\sqrt{\pi}(-4z^{7/2} - 28z^{5/2} - 35z^{3/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.6444.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{1}{2}, 2; z\right) = \frac{e^z (2z^4 - 17z^3 + 24z^2 + 6z + 3)}{9z} + \frac{1}{18} \sqrt{\pi} (-4z^{7/2} + 36z^{5/2} - 63z^{3/2}) \operatorname{erfi}(\sqrt{z}) - \frac{1}{3z}$$

07.25.03.6445.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{1}{2}, 2; -z\right) = \frac{e^{-z} (-2z^4 - 17z^3 - 24z^2 + 6z - 3)}{9z} + \frac{1}{18} \sqrt{\pi} (-4z^{7/2} - 36z^{5/2} - 63z^{3/2}) \operatorname{erf}(\sqrt{z}) + \frac{1}{3z}$$

07.25.03.6446.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{1}{2}, 3; z\right) = -\frac{2(11z + 5)}{33z^2} + \frac{2e^z (4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15)}{99z^2} - \frac{2}{99} \sqrt{\pi} (4z^{7/2} - 44z^{5/2} + 99z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6447.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{1}{2}, 3; -z\right) = \frac{2(11z - 5)}{33z^2} - \frac{2e^{-z} (4z^5 + 42z^4 + 80z^3 - 24z^2 + 18z - 15)}{99z^2} - \frac{2}{99} \sqrt{\pi} (4z^{7/2} + 44z^{5/2} + 99z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6448.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{1}{2}, 4; z\right) = \frac{-143z^2 - 130z - 70}{143z^3} + \frac{2e^z (8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105)}{429z^3} - \frac{4}{429} \sqrt{\pi} (4z^{7/2} - 52z^{5/2} + 143z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6449.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{1}{2}, 4; -z\right) = \frac{143z^2 - 130z + 70}{143z^3} - \frac{2e^{-z} (8z^6 + 100z^5 + 240z^4 - 80z^3 + 72z^2 - 90z + 105)}{429z^3} - \frac{4}{429} \sqrt{\pi} (4z^{7/2} + 52z^{5/2} + 143z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6450.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{1}{2}, 5; z\right) = -\frac{4(143z^3 + 195z^2 + 210z + 126)}{429z^4} + \frac{8e^z (16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945)}{6435z^4} - \frac{32\sqrt{\pi} (4z^{7/2} - 60z^{5/2} + 195z^{3/2}) \operatorname{erfi}(\sqrt{z})}{6435}$$

07.25.03.6451.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{1}{2}, 5; -z\right) = \frac{4(143z^3 - 195z^2 + 210z - 126)}{429z^4} - \frac{8e^{-z} (16z^7 + 232z^6 + 672z^5 - 240z^4 + 240z^3 - 360z^2 + 630z - 945)}{6435z^4} - \frac{32\sqrt{\pi} (4z^{7/2} + 60z^{5/2} + 195z^{3/2}) \operatorname{erf}(\sqrt{z})}{6435}$$

07.25.03.6452.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{1}{2}, 6; z\right) = -\frac{5(2431z^4 + 4420z^3 + 7140z^2 + 8568z + 5544)}{7293z^5} + \frac{8e^z(32z^8 - 528z^7 + 1792z^6 + 672z^5 + 720z^4 + 1200z^3 + 2520z^2 + 5670z + 10395)}{21879z^5} - \frac{64\sqrt{\pi}(4z^{7/2} - 68z^{5/2} + 255z^{3/2})\operatorname{erfi}(\sqrt{z})}{21879}$$

07.25.03.6453.01

$${}_2F_2\left(-\frac{7}{2}, 1; -\frac{1}{2}, 6; -z\right) = \frac{5(2431z^4 - 4420z^3 + 7140z^2 - 8568z + 5544)}{7293z^5} - \frac{8e^{-z}(32z^8 + 528z^7 + 1792z^6 - 672z^5 + 720z^4 - 1200z^3 + 2520z^2 - 5670z + 10395)}{21879z^5} - \frac{64\sqrt{\pi}(4z^{7/2} + 68z^{5/2} + 255z^{3/2})\operatorname{erf}(\sqrt{z})}{21879}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = \frac{1}{2}$

07.25.03.6454.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{1}{2}, 1; z\right) = \frac{1}{24}e^z(-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48}\sqrt{\pi}(8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6455.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{1}{2}, 1; -z\right) = \frac{1}{24}e^{-z}(4z^3 + 40z^2 + 87z + 24) + \frac{1}{48}\sqrt{\pi}(8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.6456.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{1}{2}, 2; z\right) = \frac{e^z(-4z^4 + 52z^3 - 165z^2 + 96z + 12)}{108z} + \frac{1}{216}\sqrt{\pi}(8z^{7/2} - 108z^{5/2} + 378z^{3/2} - 315\sqrt{z})\operatorname{erfi}(\sqrt{z}) - \frac{1}{9z}$$

07.25.03.6457.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{1}{2}, 2; -z\right) = \frac{e^{-z}(4z^4 + 52z^3 + 165z^2 + 96z - 12)}{108z} + \frac{1}{216}\sqrt{\pi}(8z^{7/2} + 108z^{5/2} + 378z^{3/2} + 315\sqrt{z})\operatorname{erf}(\sqrt{z}) + \frac{1}{9z}$$

07.25.03.6458.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{1}{2}, 3; z\right) = -\frac{2(11z + 3)}{99z^2} + \frac{e^z(-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18)}{297z^2} + \frac{1}{594}\sqrt{\pi}(8z^{7/2} - 132z^{5/2} + 594z^{3/2} - 693\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6459.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{1}{2}, 3; -z\right) = \frac{2(11z - 3)}{99z^2} + \frac{e^{-z}(4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18)}{297z^2} + \frac{1}{594}\sqrt{\pi}(8z^{7/2} + 132z^{5/2} + 594z^{3/2} + 693\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.6460.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{1}{2}, 4; z\right) = \frac{-143 z^2 - 78 z - 30}{429 z^3} - \frac{2 e^z (4 z^6 - 76 z^5 + 393 z^4 - 480 z^3 - 120 z^2 - 72 z - 45)}{1287 z^3} + \frac{\sqrt{\pi} (8 z^{7/2} - 156 z^{5/2} + 858 z^{3/2} - 1287 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1287}$$

07.25.03.6461.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{1}{2}, 4; -z\right) = \frac{143 z^2 - 78 z + 30}{429 z^3} + \frac{2 e^{-z} (4 z^6 + 76 z^5 + 393 z^4 + 480 z^3 - 120 z^2 + 72 z - 45)}{1287 z^3} + \frac{\sqrt{\pi} (8 z^{7/2} + 156 z^{5/2} + 858 z^{3/2} + 1287 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{1287}$$

07.25.03.6462.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{1}{2}, 5; z\right) = \frac{4 (143 z^3 + 117 z^2 + 90 z + 42)}{1287 z^4} - \frac{8 e^z (8 z^7 - 176 z^6 + 1086 z^5 - 1680 z^4 - 480 z^3 - 360 z^2 - 360 z - 315)}{19305 z^4} + \frac{8 \sqrt{\pi} (8 z^{7/2} - 180 z^{5/2} + 1170 z^{3/2} - 2145 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{19305}$$

07.25.03.6463.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{1}{2}, 5; -z\right) = \frac{4 (143 z^3 - 117 z^2 + 90 z - 42)}{1287 z^4} + \frac{8 e^{-z} (8 z^7 + 176 z^6 + 1086 z^5 + 1680 z^4 - 480 z^3 + 360 z^2 - 360 z + 315)}{19305 z^4} + \frac{8 \sqrt{\pi} (8 z^{7/2} + 180 z^{5/2} + 1170 z^{3/2} + 2145 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{19305}$$

07.25.03.6464.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{1}{2}, 6; z\right) = -\frac{5 (2431 z^4 + 2652 z^3 + 3060 z^2 + 2856 z + 1512)}{21879 z^5} - \frac{8 e^z (16 z^8 - 400 z^7 + 2868 z^6 - 5376 z^5 - 1680 z^4 - 1440 z^3 - 1800 z^2 - 2520 z - 2835)}{65637 z^5} + \frac{16 \sqrt{\pi} (8 z^{7/2} - 204 z^{5/2} + 1530 z^{3/2} - 3315 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{65637}$$

07.25.03.6465.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{1}{2}, 6; -z\right) = \frac{5 (2431 z^4 - 2652 z^3 + 3060 z^2 - 2856 z + 1512)}{21879 z^5} + \frac{8 e^{-z} (16 z^8 + 400 z^7 + 2868 z^6 + 5376 z^5 - 1680 z^4 + 1440 z^3 - 1800 z^2 + 2520 z - 2835)}{65637 z^5} + \frac{16 \sqrt{\pi} (8 z^{7/2} + 204 z^{5/2} + 1530 z^{3/2} + 3315 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{65637}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = 1$

07.25.03.6466.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, 1; z\right) = \frac{1}{105} e^{z/2} (8z^4 - 104z^3 + 376z^2 - 420z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} (2z^4 - 24z^3 + 71z^2 - 44z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6467.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, \frac{3}{2}; z\right) = \frac{1}{384} e^z (-8z^3 + 108z^2 - 370z + 279) + \frac{\sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.6468.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, \frac{3}{2}; -z\right) = \frac{1}{384} e^{-z} (8z^3 + 108z^2 + 370z + 279) + \frac{\sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.6469.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, 2; z\right) = \frac{1}{945} e^{z/2} (16z^4 - 264z^3 + 1284z^2 - 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16z^4 + 248z^3 - 1044z^2 + 1164z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.6470.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, \frac{5}{2}; z\right) = \frac{e^z (-16z^4 + 272z^3 - 1272z^2 + 1580z - 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.6471.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, \frac{5}{2}; -z\right) = \frac{e^{-z} (16z^4 + 272z^3 + 1272z^2 + 1580z + 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.6472.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, 3; z\right) = \frac{4 e^{z/2} (16z^4 - 320z^3 + 1956z^2 - 4200z + 2625) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16z^5 - 304z^4 + 1660z^3 - 2676z^2 + 525z + 105) I_1\left(\frac{z}{2}\right)}{10395z}$$

07.25.03.6473.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, \frac{7}{2}; z\right) = \frac{e^z (-32z^5 + 656z^4 - 3888z^3 + 6744z^2 - 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi} (64z^6 - 1344z^5 + 8400z^4 - 16800z^3 + 6300z^2 + 1260z + 315) \operatorname{erfi}(\sqrt{z})}{24576z^{5/2}}$$

07.25.03.6474.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, \frac{7}{2}; -z\right) = \frac{e^{-z}(32z^5 + 656z^4 + 3888z^3 + 6744z^2 + 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi}(64z^6 + 1344z^5 + 8400z^4 + 16800z^3 + 6300z^2 - 1260z + 315)\operatorname{erf}(\sqrt{z})}{24576z^{5/2}}$$

07.25.03.6475.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, 4; z\right) = \frac{4e^{z/2}(32z^5 - 752z^4 + 5536z^3 - 14700z^2 + 11550z + 105)I_0\left(\frac{z}{2}\right)}{45045z} - \frac{4e^{z/2}(32z^6 - 720z^5 + 4832z^4 - 10196z^3 + 3150z^2 + 1155z + 420)I_1\left(\frac{z}{2}\right)}{45045z^2}$$

07.25.03.6476.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, \frac{9}{2}; z\right) = \frac{e^z(-64z^6 + 1536z^5 - 11024z^4 + 24576z^3 - 6300z^2 - 3360z - 1575)}{49152z^3} + \frac{\sqrt{\pi}(128z^7 - 3136z^6 + 23520z^5 - 58800z^4 + 29400z^3 + 8820z^2 + 4410z + 1575)\operatorname{erfi}(\sqrt{z})}{98304z^{7/2}}$$

07.25.03.6477.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, \frac{9}{2}; -z\right) = \frac{e^{-z}(64z^6 + 1536z^5 + 11024z^4 + 24576z^3 + 6300z^2 - 3360z + 1575)}{49152z^3} + \frac{\sqrt{\pi}(128z^7 + 3136z^6 + 23520z^5 + 58800z^4 + 29400z^3 - 8820z^2 + 4410z - 1575)\operatorname{erf}(\sqrt{z})}{98304z^{7/2}}$$

07.25.03.6478.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, 5; z\right) = \frac{32e^{z/2}(32z^6 - 864z^5 + 7440z^4 - 23520z^3 + 22050z^2 + 630z + 315)I_0\left(\frac{z}{2}\right)}{675675z^2} - \frac{64e^{z/2}(16z^7 - 416z^6 + 3312z^5 - 8640z^4 + 3675z^3 + 1890z^2 + 1260z + 630)I_1\left(\frac{z}{2}\right)}{675675z^3}$$

07.25.03.6479.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, \frac{11}{2}; z\right) = \frac{1}{1048576z^{9/2}} - \frac{3\sqrt{\pi}(256z^8 - 7168z^7 + 62720z^6 - 188160z^5 + 117600z^4 + 47040z^3 + 35280z^2 + 25200z + 11025)\operatorname{erfi}(\sqrt{z}) - 3e^z(128z^7 - 3520z^6 + 29664z^5 - 80848z^4 + 29400z^3 + 21420z^2 + 17850z + 11025)}{524288z^4}$$

07.25.03.6480.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, \frac{11}{2}; -z\right) = \frac{3e^{-z}(128z^7 + 3520z^6 + 29664z^5 + 80848z^4 + 29400z^3 - 21420z^2 + 17850z - 11025)}{524288z^4} + \frac{1}{1048576z^{9/2}} - \frac{3\sqrt{\pi}(256z^8 + 7168z^7 + 62720z^6 + 188160z^5 + 117600z^4 - 47040z^3 + 35280z^2 - 25200z + 11025)\operatorname{erf}(\sqrt{z})}{524288z^4}$$

07.25.03.6481.01

$${}_2F_2\left(-\frac{7}{2}, 1; 1, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right) - \frac{1}{2297295 z^4} 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)}{2297295 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = \frac{3}{2}$

07.25.03.6482.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{3}{2}, 2; z\right) = \frac{e^z (-8 z^4 + 140 z^3 - 690 z^2 + 975 z - 192)}{1728 z} + \frac{\sqrt{\pi} (16 z^4 - 288 z^3 + 1512 z^2 - 2520 z + 945) \operatorname{erfi}(\sqrt{z})}{3456 \sqrt{z}} + \frac{1}{9 z}$$

07.25.03.6483.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (8 z^4 + 140 z^3 + 690 z^2 + 975 z + 192)}{1728 z} + \frac{\sqrt{\pi} (16 z^4 + 288 z^3 + 1512 z^2 + 2520 z + 945) \operatorname{erf}(\sqrt{z})}{3456 \sqrt{z}} - \frac{1}{9 z}$$

07.25.03.6484.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{3}{2}, 3; z\right) = \frac{2(11 z + 1)}{99 z^2} + \frac{e^z (-8 z^5 + 172 z^4 - 1106 z^3 + 2295 z^2 - 960 z - 96)}{4752 z^2} + \frac{\sqrt{\pi} (16 z^4 - 352 z^3 + 2376 z^2 - 5544 z + 3465) \operatorname{erfi}(\sqrt{z})}{9504 \sqrt{z}}$$

07.25.03.6485.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{3}{2}, 3; -z\right) = -\frac{2(11 z - 1)}{99 z^2} + \frac{e^{-z} (8 z^5 + 172 z^4 + 1106 z^3 + 2295 z^2 + 960 z - 96)}{4752 z^2} + \frac{\sqrt{\pi} (16 z^4 + 352 z^3 + 2376 z^2 + 5544 z + 3465) \operatorname{erf}(\sqrt{z})}{9504 \sqrt{z}}$$

07.25.03.6486.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{3}{2}, 4; z\right) = \frac{143 z^2 + 26 z + 6}{429 z^3} + \frac{e^z (-8 z^6 + 204 z^5 - 1618 z^4 + 4431 z^3 - 2880 z^2 - 480 z - 144)}{10296 z^3} + \frac{\sqrt{\pi} (16 z^4 - 416 z^3 + 3432 z^2 - 10296 z + 9009) \operatorname{erfi}(\sqrt{z})}{20592 \sqrt{z}}$$

07.25.03.6487.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{3}{2}, 4; -z\right) = \frac{-143 z^2 + 26 z - 6}{429 z^3} + \frac{e^{-z} (8 z^6 + 204 z^5 + 1618 z^4 + 4431 z^3 + 2880 z^2 - 480 z + 144)}{10296 z^3} + \frac{\sqrt{\pi} (16 z^4 + 416 z^3 + 3432 z^2 + 10296 z + 9009) \operatorname{erf}(\sqrt{z})}{20592 \sqrt{z}}$$

$$\begin{aligned}
 & 07.25.03.6488.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 1; \frac{3}{2}, 5; z\right) = \\
 & \frac{4(143z^3 + 39z^2 + 18z + 6)}{1287z^4} + \frac{e^z(-8z^7 + 236z^6 - 2226z^5 + 7575z^4 - 6720z^3 - 1440z^2 - 720z - 360)}{19305z^4} + \\
 & \frac{\sqrt{\pi}(16z^4 - 480z^3 + 4680z^2 - 17160z + 19305)\operatorname{erfi}(\sqrt{z})}{38610\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.6489.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 1; \frac{3}{2}, 5; -z\right) = \\
 & -\frac{4(143z^3 - 39z^2 + 18z - 6)}{1287z^4} + \frac{e^{-z}(8z^7 + 236z^6 + 2226z^5 + 7575z^4 + 6720z^3 - 1440z^2 + 720z - 360)}{19305z^4} + \\
 & \frac{\sqrt{\pi}(16z^4 + 480z^3 + 4680z^2 + 17160z + 19305)\operatorname{erf}(\sqrt{z})}{38610\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.6490.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 1; \frac{3}{2}, 6; z\right) = \frac{5(2431z^4 + 884z^3 + 612z^2 + 408z + 168)}{21879z^5} - \\
 & \frac{2e^z(8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260)}{65637z^5} + \\
 & \frac{\sqrt{\pi}(16z^4 - 544z^3 + 6120z^2 - 26520z + 36465)\operatorname{erfi}(\sqrt{z})}{65637\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.6491.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 1; \frac{3}{2}, 6; -z\right) = -\frac{5(2431z^4 - 884z^3 + 612z^2 - 408z + 168)}{21879z^5} + \\
 & \frac{2e^{-z}(8z^8 + 268z^7 + 2930z^6 + 11919z^5 + 13440z^4 - 3360z^3 + 2160z^2 - 1800z + 1260)}{65637z^5} + \\
 & \frac{\sqrt{\pi}(16z^4 + 544z^3 + 6120z^2 + 26520z + 36465)\operatorname{erf}(\sqrt{z})}{65637\sqrt{z}}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = 2$

$$\begin{aligned}
 & 07.25.03.6492.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 1; 2, 2; z\right) = \\
 & \frac{2e^{z/2}(16z^5 - 336z^4 + 2220z^3 - 5484z^2 + 4725z - 945)I_0\left(\frac{z}{2}\right)}{8505z} - \frac{2e^{z/2}(16z^4 - 320z^3 + 1908z^2 - 3720z + 1689)I_1\left(\frac{z}{2}\right)}{8505} + \frac{2}{9z}
 \end{aligned}$$

07.25.03.6493.01

$${}_2F_2\left(-\frac{7}{2}, 1; 2, \frac{5}{2}; z\right) = \frac{e^z (-16z^4 + 352z^3 - 2352z^2 + 5280z - 2895)}{11520z} + \frac{\sqrt{\pi} (32z^5 - 720z^4 + 5040z^3 - 12600z^2 + 9450z - 945) \operatorname{erfi}(\sqrt{z})}{23040z^{3/2}} + \frac{1}{3z}$$

07.25.03.6494.01

$${}_2F_2\left(-\frac{7}{2}, 1; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{11520z} + \frac{\sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erf}(\sqrt{z})}{23040z^{3/2}} - \frac{1}{3z}$$

07.25.03.6495.01

$${}_2F_2\left(-\frac{7}{2}, 1; 2, 3; z\right) = \frac{4e^{z/2} (32z^5 - 816z^4 + 6816z^3 - 22524z^2 + 28350z - 10395) I_0\left(\frac{z}{2}\right)}{93555z} - \frac{4e^{z/2} (32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945) I_1\left(\frac{z}{2}\right)}{93555z} + \frac{4}{9z}$$

07.25.03.6496.01

$${}_2F_2\left(-\frac{7}{2}, 1; 2, \frac{7}{2}; z\right) = \frac{e^z (-32z^5 + 848z^4 - 7152z^3 + 22008z^2 - 20010z + 945)}{55296z^2} + \frac{\sqrt{\pi} (64z^6 - 1728z^5 + 15120z^4 - 50400z^3 + 56700z^2 - 11340z - 945) \operatorname{erfi}(\sqrt{z})}{110592z^{5/2}} + \frac{5}{9z}$$

07.25.03.6497.01

$${}_2F_2\left(-\frac{7}{2}, 1; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (32z^5 + 848z^4 + 7152z^3 + 22008z^2 + 20010z + 945)}{55296z^2} + \frac{\sqrt{\pi} (64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945) \operatorname{erf}(\sqrt{z})}{110592z^{5/2}} - \frac{5}{9z}$$

07.25.03.6498.01

$${}_2F_2\left(-\frac{7}{2}, 1; 2, 4; z\right) = \frac{16e^{z/2} (16z^5 - 480z^4 + 4848z^3 - 20064z^2 + 33075z - 17010) I_0\left(\frac{z}{2}\right)}{405405z} - \frac{8e^{z/2} (32z^6 - 928z^5 + 8784z^4 - 31776z^3 + 37938z^2 - 5670z - 945) I_1\left(\frac{z}{2}\right)}{405405z^2} + \frac{2}{3z}$$

07.25.03.6499.01

$${}_2F_2\left(-\frac{7}{2}, 1; 2, \frac{9}{2}; z\right) = \frac{e^z (-64z^6 + 1984z^5 - 20208z^4 + 79008z^3 - 100716z^2 + 11340z + 2835)}{221184z^3} + \frac{1}{442368z^{7/2}} \sqrt{\pi} (128z^7 - 4032z^6 + 42336z^5 - 176400z^4 + 264600z^3 - 79380z^2 - 13230z - 2835) \operatorname{erfi}(\sqrt{z}) + \frac{7}{9z}$$

07.25.03.6500.01

$${}_2F_2\left(-\frac{7}{2}, 1; 2, \frac{9}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1984 z^5 + 20\,208 z^4 + 79\,008 z^3 + 100\,716 z^2 + 11\,340 z - 2835)}{221\,184 z^3} + \frac{1}{442\,368 z^{7/2}} \sqrt{\pi} (128 z^7 + 4032 z^6 + 42\,336 z^5 + 176\,400 z^4 + 264\,600 z^3 + 79\,380 z^2 - 13\,230 z + 2835) \operatorname{erf}(\sqrt{z}) - \frac{7}{9z}$$

07.25.03.6501.01

$${}_2F_2\left(-\frac{7}{2}, 1; 2, 5; z\right) = \frac{32 e^{z/2} (64 z^6 - 2208 z^5 + 26\,160 z^4 - 130\,080 z^3 + 264\,600 z^2 - 171\,990 z - 945) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^7 - 2144 z^6 + 24\,048 z^5 - 107\,040 z^4 + 167\,640 z^3 - 39\,690 z^2 - 12\,285 z - 3780) I_1\left(\frac{z}{2}\right) + \frac{8}{9z}}{6\,081\,075 z^2}$$

07.25.03.6502.01

$${}_2F_2\left(-\frac{7}{2}, 1; 2, \frac{11}{2}; z\right) = \frac{e^z (-128 z^7 + 4544 z^6 - 54\,240 z^5 + 257\,232 z^4 - 422\,616 z^3 + 79\,380 z^2 + 35\,910 z + 14\,175)}{786\,432 z^4} + \frac{1}{1\,572\,864 z^{9/2}} \sqrt{\pi} (256 z^8 - 9216 z^7 + 112\,896 z^6 - 564\,480 z^5 + 1\,058\,400 z^4 - 423\,360 z^3 - 105\,840 z^2 - 45\,360 z - 14\,175) \operatorname{erfi}(\sqrt{z}) + \frac{1}{z}$$

07.25.03.6503.01

$${}_2F_2\left(-\frac{7}{2}, 1; 2, \frac{11}{2}; -z\right) = \frac{e^{-z} (128 z^7 + 4544 z^6 + 54\,240 z^5 + 257\,232 z^4 + 422\,616 z^3 + 79\,380 z^2 - 35\,910 z + 14\,175)}{786\,432 z^4} + \frac{1}{1\,572\,864 z^{9/2}} \sqrt{\pi} (256 z^8 + 9216 z^7 + 112\,896 z^6 + 564\,480 z^5 + 1\,058\,400 z^4 + 423\,360 z^3 - 105\,840 z^2 + 45\,360 z - 14\,175) \operatorname{erf}(\sqrt{z}) - \frac{1}{z}$$

07.25.03.6504.01

$${}_2F_2\left(-\frac{7}{2}, 1; 2, 6; z\right) = \frac{64 e^{z/2} (64 z^7 - 2496 z^6 + 33\,936 z^5 - 197\,040 z^4 + 476\,280 z^3 - 370\,440 z^2 - 6615 z - 2835) I_0\left(\frac{z}{2}\right) - \frac{1}{20\,675\,655 z^4}}{20\,675\,655 z^3} + \frac{1}{20\,675\,655 z^4} 64 e^{z/2} (64 z^8 - 2432 z^7 + 31\,536 z^6 - 166\,656 z^5 + 323\,160 z^4 - 105\,840 z^3 - 46\,305 z^2 - 26\,460 z - 11\,340) I_1\left(\frac{z}{2}\right) + \frac{10}{9z}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = \frac{5}{2}$

07.25.03.6505.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{5}{2}, 3; z\right) = \frac{2(11z-1)}{33z^2} + \frac{e^z (-16z^5 + 432z^4 - 3752z^3 + 12\,180z^2 - 12\,645z + 1920)}{31\,680z^2} + \frac{\sqrt{\pi} (32z^5 - 880z^4 + 7920z^3 - 27\,720z^2 + 34\,650z - 10\,395) \operatorname{erfi}(\sqrt{z})}{63\,360z^{3/2}}$$

07.25.03.6506.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{5}{2}, 3; -z\right) = -\frac{2(11z+1)}{33z^2} + \frac{e^{-z}(16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{31680z^2} +$$

$$\frac{\sqrt{\pi}(32z^5 + 880z^4 + 7920z^3 + 27720z^2 + 34650z + 10395)\operatorname{erf}(\sqrt{z})}{63360z^{3/2}}$$

07.25.03.6507.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{5}{2}, 4; z\right) = \frac{143z^2 - 26z - 2}{143z^3} + \frac{e^{-z}(-16z^6 + 512z^5 - 5472z^4 + 23240z^3 - 35595z^2 + 11520z + 960)}{68640z^3} +$$

$$\frac{\sqrt{\pi}(32z^5 - 1040z^4 + 11440z^3 - 51480z^2 + 90090z - 45045)\operatorname{erfi}(\sqrt{z})}{137280z^{3/2}}$$

07.25.03.6508.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{5}{2}, 4; -z\right) = \frac{-143z^2 - 26z + 2}{143z^3} + \frac{e^{-z}(16z^6 + 512z^5 + 5472z^4 + 23240z^3 + 35595z^2 + 11520z - 960)}{68640z^3} +$$

$$\frac{\sqrt{\pi}(32z^5 + 1040z^4 + 11440z^3 + 51480z^2 + 90090z + 45045)\operatorname{erf}(\sqrt{z})}{137280z^{3/2}}$$

07.25.03.6509.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{5}{2}, 5; z\right) =$$

$$\frac{4(715z^3 - 195z^2 - 30z - 6)}{2145z^4} + \frac{e^{-z}(-16z^7 + 592z^6 - 7512z^5 + 39420z^4 - 79905z^3 + 40320z^2 + 5760z + 1440)}{128700z^4} +$$

$$\frac{\sqrt{\pi}(32z^5 - 1200z^4 + 15600z^3 - 85800z^2 + 193050z - 135135)\operatorname{erfi}(\sqrt{z})}{257400z^{3/2}}$$

07.25.03.6510.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{5}{2}, 5; -z\right) =$$

$$-\frac{4(715z^3 + 195z^2 - 30z + 6)}{2145z^4} + \frac{e^{-z}(16z^7 + 592z^6 + 7512z^5 + 39420z^4 + 79905z^3 + 40320z^2 - 5760z + 1440)}{128700z^4} +$$

$$\frac{\sqrt{\pi}(32z^5 + 1200z^4 + 15600z^3 + 85800z^2 + 193050z + 135135)\operatorname{erf}(\sqrt{z})}{257400z^{3/2}}$$

07.25.03.6511.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{5}{2}, 6; z\right) = \frac{12155z^4 - 4420z^3 - 1020z^2 - 408z - 120}{7293z^5} +$$

$$\frac{e^{-z}(-16z^8 + 672z^7 - 9872z^6 + 61680z^5 - 155655z^4 + 107520z^3 + 20160z^2 + 8640z + 3600)}{218790z^5} +$$

$$\frac{\sqrt{\pi}(32z^5 - 1360z^4 + 20400z^3 - 132600z^2 + 364650z - 328185)\operatorname{erfi}(\sqrt{z})}{437580z^{3/2}}$$

07.25.03.6512.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{5}{2}, 6; -z\right) = \frac{-12\,155 z^4 - 4420 z^3 + 1020 z^2 - 408 z + 120}{7293 z^5} + \frac{e^{-z} (16 z^8 + 672 z^7 + 9872 z^6 + 61\,680 z^5 + 155\,655 z^4 + 107\,520 z^3 - 20\,160 z^2 + 8640 z - 3600)}{218\,790 z^5} + \frac{\sqrt{\pi} (32 z^5 + 1360 z^4 + 20\,400 z^3 + 132\,600 z^2 + 364\,650 z + 328\,185) \operatorname{erf}(\sqrt{z})}{437\,580 z^{3/2}}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = 3$

07.25.03.6513.01

$${}_2F_2\left(-\frac{7}{2}, 1; 3, 3; z\right) = \frac{8(11z-2)}{99z^2} + \frac{16 e^{z/2} (32 z^6 - 992 z^5 + 10\,512 z^4 - 46\,944 z^3 + 88\,674 z^2 - 62\,370 z + 10\,395) I_0\left(\frac{z}{2}\right)}{1\,029\,105 z^2} - \frac{32 e^{z/2} (16 z^5 - 480 z^4 + 4784 z^3 - 18\,912 z^2 + 27\,387 z - 9762) I_1\left(\frac{z}{2}\right)}{1\,029\,105 z}$$

07.25.03.6514.01

$${}_2F_2\left(-\frac{7}{2}, 1; 3, \frac{7}{2}; z\right) = \frac{10(11z-3)}{99z^2} + \frac{e^z (-32 z^5 + 1040 z^4 - 11\,376 z^3 + 50\,232 z^2 - 83\,370 z + 35\,685)}{152\,064 z^2} + \frac{\sqrt{\pi} (64 z^6 - 2112 z^5 + 23\,760 z^4 - 110\,880 z^3 + 207\,900 z^2 - 124\,740 z + 10\,395) \operatorname{erfi}(\sqrt{z})}{304\,128 z^{5/2}}$$

07.25.03.6515.01

$${}_2F_2\left(-\frac{7}{2}, 1; 3, \frac{7}{2}; -z\right) = -\frac{10(11z+3)}{99z^2} + \frac{e^{-z} (32 z^5 + 1040 z^4 + 11\,376 z^3 + 50\,232 z^2 + 83\,370 z + 35\,685)}{152\,064 z^2} + \frac{\sqrt{\pi} (64 z^6 + 2112 z^5 + 23\,760 z^4 + 110\,880 z^3 + 207\,900 z^2 + 124\,740 z + 10\,395) \operatorname{erf}(\sqrt{z})}{304\,128 z^{5/2}}$$

07.25.03.6516.01

$${}_2F_2\left(-\frac{7}{2}, 1; 3, 4; z\right) = \frac{4(11z-4)}{33z^2} + \frac{16 e^{z/2} (64 z^6 - 2336 z^5 + 30\,000 z^4 - 168\,864 z^3 + 425\,112 z^2 - 436\,590 z + 135\,135) I_0\left(\frac{z}{2}\right)}{4\,459\,455 z^2} - \frac{16 e^{z/2} (64 z^6 - 2272 z^5 + 27\,760 z^4 - 142\,176 z^3 + 294\,744 z^2 - 191\,442 z + 10\,395) I_1\left(\frac{z}{2}\right)}{4\,459\,455 z^2}$$

07.25.03.6517.01

$${}_2F_2\left(-\frac{7}{2}, 1; 3, \frac{9}{2}; z\right) = \frac{14(11z-5)}{99z^2} + \frac{e^z (-64 z^6 + 2432 z^5 - 32\,080 z^4 + 179\,136 z^3 - 408\,828 z^2 + 291\,480 z - 10\,395)}{608\,256 z^3} + \frac{1}{1216512 z^{7/2}} \sqrt{\pi} (128 z^7 - 4928 z^6 + 66\,528 z^5 - 388\,080 z^4 + 970\,200 z^3 - 873\,180 z^2 + 145\,530 z + 10\,395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6518.01

$${}_2F_2\left(-\frac{7}{2}, 1; 3, \frac{9}{2}; -z\right) = -\frac{14(11z+5)}{99z^2} + \frac{e^{-z}(64z^6 + 2432z^5 + 32080z^4 + 179136z^3 + 408828z^2 + 291480z + 10395)}{608256z^3} + \frac{1}{1216512z^{7/2}} \sqrt{\pi} (128z^7 + 4928z^6 + 66528z^5 + 388080z^4 + 970200z^3 + 873180z^2 + 145530z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.6519.01

$${}_2F_2\left(-\frac{7}{2}, 1; 3, 5; z\right) = \frac{16(11z-6)}{99z^2} + \frac{128e^{z/2}(64z^6 - 2688z^5 + 40560z^4 - 275520z^3 + 866520z^2 - 1164240z + 509355)I_0\left(\frac{z}{2}\right)}{66891825z^2} - \frac{1}{66891825z^3} 128e^{z/2}(64z^7 - 2624z^6 + 37968z^5 - 238800z^4 + 644280z^3 - 608760z^2 + 72765z + 10395)I_1\left(\frac{z}{2}\right)$$

07.25.03.6520.01

$${}_2F_2\left(-\frac{7}{2}, 1; 3, \frac{11}{2}; z\right) = \frac{2(11z-7)}{11z^2} + \frac{e^z(-128z^7 + 5568z^6 - 85984z^5 + 580560z^4 - 1686744z^3 + 1690836z^2 - 145530z - 31185)}{2162688z^4} + \frac{1}{4325376z^{9/2}} \left(\sqrt{\pi} (256z^8 - 11264z^7 + 177408z^6 - 1241856z^5 + 3880800z^4 - 4656960z^3 + 1164240z^2 + 166320z + 31185) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.6521.01

$${}_2F_2\left(-\frac{7}{2}, 1; 3, \frac{11}{2}; -z\right) = -\frac{2(11z+7)}{11z^2} + \frac{e^{-z}(128z^7 + 5568z^6 + 85984z^5 + 580560z^4 + 1686744z^3 + 1690836z^2 + 145530z - 31185)}{2162688z^4} + \frac{1}{4325376z^{9/2}} \left(\sqrt{\pi} (256z^8 + 11264z^7 + 177408z^6 + 1241856z^5 + 3880800z^4 + 4656960z^3 + 1164240z^2 - 166320z + 31185) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.6522.01

$${}_2F_2\left(-\frac{7}{2}, 1; 3, 6; z\right) = \frac{20(11z-8)}{99z^2} + \frac{1}{227432205z^3} 128e^{z/2} (128z^7 - 6080z^6 + 105408z^5 - 838800z^4 + 3163920z^3 - 5239080z^2 + 2910600z + 10395)I_0\left(\frac{z}{2}\right) - \frac{1}{227432205z^4} (128e^{z/2}(128z^8 - 5952z^7 + 99520z^6 - 742128z^5 + 2466000z^4 - 3061560z^3 + 582120z^2 + 155925z + 41580)I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = \frac{7}{2}$

07.25.03.6523.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{7}{2}, 4; z\right) = \frac{5(143z^2 - 78z + 6)}{429z^3} + \frac{e^z(-32z^6 + 1232z^5 - 16560z^4 + 95256z^3 - 229530z^2 + 187425z - 23040)}{329472z^3} +$$

$$\frac{\sqrt{\pi}(64z^6 - 2496z^5 + 34320z^4 - 205920z^3 + 540540z^2 - 540540z + 135135)\operatorname{erfi}(\sqrt{z})}{658944z^{5/2}}$$

07.25.03.6524.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{7}{2}, 4; -z\right) =$$

$$-\frac{5(143z^2 + 78z + 6)}{429z^3} + \frac{e^{-z}(32z^6 + 1232z^5 + 16560z^4 + 95256z^3 + 229530z^2 + 187425z + 23040)}{329472z^3} +$$

$$\frac{\sqrt{\pi}(64z^6 + 2496z^5 + 34320z^4 + 205920z^3 + 540540z^2 + 540540z + 135135)\operatorname{erf}(\sqrt{z})}{658944z^{5/2}}$$

07.25.03.6525.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{7}{2}, 5; z\right) = \frac{4(715z^3 - 585z^2 + 90z + 6)}{1287z^4} +$$

$$\frac{e^z(-32z^7 + 1424z^6 - 22704z^5 + 160920z^4 - 508410z^3 + 614565z^2 - 161280z - 11520)}{617760z^4} +$$

$$\frac{\sqrt{\pi}(64z^6 - 2880z^5 + 46800z^4 - 343200z^3 + 1158300z^2 - 1621620z + 675675)\operatorname{erfi}(\sqrt{z})}{1235520z^{5/2}}$$

07.25.03.6526.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{7}{2}, 5; -z\right) = -\frac{4(715z^3 + 585z^2 + 90z - 6)}{1287z^4} +$$

$$\frac{e^{-z}(32z^7 + 1424z^6 + 22704z^5 + 160920z^4 + 508410z^3 + 614565z^2 + 161280z - 11520)}{617760z^4} +$$

$$\frac{\sqrt{\pi}(64z^6 + 2880z^5 + 46800z^4 + 343200z^3 + 1158300z^2 + 1621620z + 675675)\operatorname{erf}(\sqrt{z})}{1235520z^{5/2}}$$

07.25.03.6527.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{7}{2}, 6; z\right) = \frac{5(12155z^4 - 13260z^3 + 3060z^2 + 408z + 72)}{21879z^5} +$$

$$\frac{1}{1050192z^5} e^z(-32z^8 + 1616z^7 - 29808z^6 + 251064z^5 - 981450z^4 + 1573425z^3 - 645120z^2 - 80640z - 17280) +$$

$$\frac{\sqrt{\pi}(64z^6 - 3264z^5 + 61200z^4 - 530400z^3 + 2187900z^2 - 3938220z + 2297295)\operatorname{erfi}(\sqrt{z})}{2100384z^{5/2}}$$

07.25.03.6528.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{7}{2}, 6; -z\right) = -\frac{5(12155z^4 + 13260z^3 + 3060z^2 - 408z + 72)}{21879z^5} +$$

$$\frac{1}{1050192z^5} e^{-z} (32z^8 + 1616z^7 + 29808z^6 + 251064z^5 + 981450z^4 + 1573425z^3 + 645120z^2 - 80640z + 17280) +$$

$$\frac{\sqrt{\pi} (64z^6 + 3264z^5 + 61200z^4 + 530400z^3 + 2187900z^2 + 3938220z + 2297295) \operatorname{erf}(\sqrt{z})}{2100384z^{5/2}}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = 4$

07.25.03.6529.01

$${}_2F_2\left(-\frac{7}{2}, 1; 4, 4; z\right) = \frac{2(143z^2 - 104z + 16)}{143z^3} +$$

$$\frac{1}{19324305z^3} 32e^{z/2} (64z^7 - 2752z^6 + 42896z^5 - 305520z^4 + 1035384z^3 - 1589352z^2 + 945945z - 135135) I_0\left(\frac{z}{2}\right) -$$

$$\frac{32e^{z/2} (64z^6 - 2688z^5 + 40240z^4 - 266560z^3 + 786456z^2 - 903504z + 264207) I_1\left(\frac{z}{2}\right)}{19324305z^2}$$

07.25.03.6530.01

$${}_2F_2\left(-\frac{7}{2}, 1; 4, \frac{9}{2}; z\right) =$$

$$\frac{7(143z^2 - 130z + 30)}{429z^3} + \frac{e^z (-64z^6 + 2880z^5 - 46640z^4 + 338400z^3 - 1112076z^2 + 1458660z - 509985)}{1317888z^3} +$$

$$\frac{1}{2635776z^{7/2}} \sqrt{\pi} (128z^7 - 5824z^6 + 96096z^5 - 720720z^4 + 2522520z^3 - 3783780z^2 + 1891890z - 135135) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6531.01

$${}_2F_2\left(-\frac{7}{2}, 1; 4, \frac{9}{2}; -z\right) =$$

$$-\frac{7(143z^2 + 130z + 30)}{429z^3} + \frac{e^{-z} (64z^6 + 2880z^5 + 46640z^4 + 338400z^3 + 1112076z^2 + 1458660z + 509985)}{1317888z^3} +$$

$$\frac{1}{2635776z^{7/2}} \sqrt{\pi} (128z^7 + 5824z^6 + 96096z^5 + 720720z^4 + 2522520z^3 + 3783780z^2 + 1891890z + 135135) \operatorname{erf}(\sqrt{z})$$

07.25.03.6532.01

$${}_2F_2\left(-\frac{7}{2}, 1; 4, 5; z\right) = \frac{8(143z^2 - 156z + 48)}{429z^3} +$$

$$\frac{1}{289864575z^3} 128e^{z/2} (128z^7 - 6336z^6 + 116160z^5 - 1001040z^4 + 4266000z^3 - 8705160z^2 + 7567560z - 2027025)$$

$$I_0\left(\frac{z}{2}\right) - \frac{1}{289864575z^3}$$

$$128e^{z/2} (128z^7 - 6208z^6 + 110016z^5 - 894000z^4 + 3421200z^3 - 5638680z^2 + 3017160z - 135135) I_1\left(\frac{z}{2}\right) +$$

07.25.03.6533.01

$${}_2F_2\left(-\frac{7}{2}, 1; 4, \frac{11}{2}; z\right) = \frac{3(143z^2 - 182z + 70)}{143z^3} + \frac{1}{4685824z^4} e^z (-128z^7 + 6592z^6 - 124896z^5 + 1093840z^4 - 4552920z^3 + 8232084z^2 - 4809210z + 135135) + \frac{1}{9371648z^{9/2}} \left(\sqrt{\pi} (256z^8 - 13312z^7 + 256256z^6 - 2306304z^5 + 10090080z^4 - 20180160z^3 + 15135120z^2 - 2162160z - 135135) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.6534.01

$${}_2F_2\left(-\frac{7}{2}, 1; 4, \frac{11}{2}; -z\right) = -\frac{3(143z^2 + 182z + 70)}{143z^3} + \frac{1}{4685824z^4} e^{-z} (128z^7 + 6592z^6 + 124896z^5 + 1093840z^4 + 4552920z^3 + 8232084z^2 + 4809210z + 135135) + \frac{1}{9371648z^{9/2}} \left(\sqrt{\pi} (256z^8 + 13312z^7 + 256256z^6 + 2306304z^5 + 10090080z^4 + 20180160z^3 + 15135120z^2 + 2162160z - 135135) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.6535.01

$${}_2F_2\left(-\frac{7}{2}, 1; 4, 6; z\right) = \frac{10(143z^2 - 208z + 96)}{429z^3} + \frac{1}{985539555z^3} - 2048 e^{z/2} (16z^7 - 896z^6 + 18888z^5 - 191040z^4 + 980970z^3 - 2496240z^2 + 2837835z - 1081080) I_0\left(\frac{z}{2}\right) - \frac{1}{985539555z^4} \left(256 e^{z/2} (128z^8 - 7040z^7 + 144128z^6 - 1387584z^5 + 6525600z^4 - 14014320z^3 + 10931040z^2 - 1081080z - 135135) I_1\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = \frac{9}{2}$

07.25.03.6536.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{9}{2}, 5; z\right) = \frac{28(143z^3 - 195z^2 + 90z - 6)}{1287z^4} + \frac{1}{2471040z^4} e^z (-64z^7 + 3328z^6 - 63888z^5 + 570240z^4 - 2445660z^3 + 4672080z^2 - 3133935z + 322560) + \frac{1}{4942080z^{7/2}} \sqrt{\pi} (128z^7 - 6720z^6 + 131040z^5 - 1201200z^4 + 5405400z^3 - 11351340z^2 + 9459450z - 2027025) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6537.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{9}{2}, 5; -z\right) = -\frac{28(143z^3 + 195z^2 + 90z + 6)}{1287z^4} + \frac{1}{2471040z^4} e^{-z} (64z^7 + 3328z^6 + 63888z^5 + 570240z^4 + 2445660z^3 + 4672080z^2 + 3133935z + 322560) + \frac{1}{4942080z^{7/2}} \sqrt{\pi} (128z^7 + 6720z^6 + 131040z^5 + 1201200z^4 + 5405400z^3 + 11351340z^2 + 9459450z + 2027025) \operatorname{erf}(\sqrt{z})$$

07.25.03.6538.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{9}{2}, 6; z\right) = \frac{35(2431z^4 - 4420z^3 + 3060z^2 - 408z - 24)}{21879z^5} + \frac{1}{4200768z^5} e^z (-64z^8 + 3776z^7 - 83824z^6 + 888096z^5 - 4698540z^4 + 11789820z^3 - 11737845z^2 + 2580480z + 161280) + \frac{1}{8401536z^{7/2}} \sqrt{\pi} (128z^7 - 7616z^6 + 171360z^5 - 1856400z^4 + 10210200z^3 - 27567540z^2 + 32162130z - 11486475) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6539.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{9}{2}, 6; -z\right) = -\frac{35(2431z^4 + 4420z^3 + 3060z^2 + 408z - 24)}{21879z^5} + \frac{1}{4200768z^5} e^{-z} (64z^8 + 3776z^7 + 83824z^6 + 888096z^5 + 4698540z^4 + 11789820z^3 + 11737845z^2 + 2580480z - 161280) + \frac{1}{8401536z^{7/2}} \sqrt{\pi} (128z^7 + 7616z^6 + 171360z^5 + 1856400z^4 + 10210200z^3 + 27567540z^2 + 32162130z + 11486475) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = 5$

07.25.03.6540.01

$${}_2F_2\left(-\frac{7}{2}, 1; 5, 5; z\right) = \frac{32(715z^3 - 1170z^2 + 720z - 96)}{6435z^4} + \frac{1}{4347968625z^4} \left(1024e^{z/2}(128z^8 - 7296z^7 + 157440z^6 - 1644480z^5 + 8848800z^4 - 24235920z^3 + 31407840z^2 - 16216200z + 2027025) I_0\left(\frac{z}{2}\right) - \frac{1}{4347968625z^3} 8192e^{z/2}(16z^7 - 896z^6 + 18792z^5 - 187200z^4 + 927450z^3 - 2179440z^2 + 2071215z - 512280) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.6541.01

$${}_2F_2\left(-\frac{7}{2}, 1; 5, \frac{11}{2}; z\right) = \frac{4(143z^3 - 273z^2 + 210z - 42)}{143z^4} + \frac{1}{8785920z^4} e^z (-128z^7 + 7616z^6 - 170976z^5 + 1840080z^4 - 9967320z^3 + 26025300z^2 - 28147770z + 8294895) + \frac{1}{17571840z^{9/2}} \left(\sqrt{\pi} (256z^8 - 15360z^7 + 349440z^6 - 3843840z^5 + 21621600z^4 - 60540480z^3 + 75675600z^2 - 32432400z + 2027025) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.6542.01

$${}_2F_2\left(-\frac{7}{2}, 1; 5, \frac{11}{2}; -z\right) = -\frac{4(143z^3 + 273z^2 + 210z + 42)}{143z^4} + \frac{1}{8785920z^4} e^{-z} (128z^7 + 7616z^6 + 170976z^5 + 1840080z^4 + 9967320z^3 + 26025300z^2 + 28147770z + 8294895) + \frac{1}{17571840z^{9/2}} \left(\sqrt{\pi} (256z^8 + 15360z^7 + 349440z^6 + 3843840z^5 + 21621600z^4 + 60540480z^3 + 75675600z^2 + 32432400z + 2027025) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.6543.01

$${}_2F_2\left(-\frac{7}{2}, 1; 5, 6; z\right) = \frac{8(715z^3 - 1560z^2 + 1440z - 384)}{1287z^4} + \frac{1}{14783093325z^4} \left(1024e^{z/2} (256z^8 - 16512z^7 + 409920z^6 - 5031360z^5 + 32713200z^4 - 112461840z^3 + 193393080z^2 - 145945800z + 34459425) I_0\left(\frac{z}{2}\right) - \frac{1}{14783093325z^4} \left(1024e^{z/2} (256z^8 - 16256z^7 + 393792z^6 - 4645440z^5 + 28249200z^4 - 86189040z^3 + 117719640z^2 - 53453880z + 2027025) I_1\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = \frac{11}{2}$

07.25.03.6544.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{11}{2}, 6; z\right) = \frac{5(2431z^4 - 6188z^3 + 7140z^2 - 2856z + 168)}{2431z^5} + \frac{1}{14936064z^5} \left(e^z (-128z^8 + 8640z^7 - 224224z^6 + 2862288z^5 - 19091160z^4 + 65155860z^3 - 102901050z^2 + 58437855z - 5160960)\right) + \frac{1}{29872128z^{9/2}} \left(\sqrt{\pi} (256z^8 - 17408z^7 + 456960z^6 - 5940480z^5 + 40840800z^4 - 147026880z^3 + 257297040z^2 - 183783600z + 34459425) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.6545.01

$${}_2F_2\left(-\frac{7}{2}, 1; \frac{11}{2}, 6; -z\right) = -\frac{5(2431z^4 + 6188z^3 + 7140z^2 + 2856z + 168)}{2431z^5} + \frac{1}{14936064z^5} \left(e^{-z} (128z^8 + 8640z^7 + 224224z^6 + 2862288z^5 + 19091160z^4 + 65155860z^3 + 102901050z^2 + 58437855z + 5160960)\right) + \frac{1}{29872128z^{9/2}} \left(\sqrt{\pi} (256z^8 + 17408z^7 + 456960z^6 + 5940480z^5 + 40840800z^4 + 147026880z^3 + 257297040z^2 + 183783600z + 34459425) \operatorname{erf}(\sqrt{z})\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 1$, $b_1 = 6$

$$\begin{aligned}
 & \text{07.25.03.6546.01} \\
 {}_2F_2\left(-\frac{7}{2}, 1; 6, 6; z\right) &= \frac{10(12\,155 z^4 - 35\,360 z^3 + 48\,960 z^2 - 26\,112 z + 3072)}{21\,879 z^5} + \\
 & \frac{1}{50\,262\,517\,305 z^5} \left(2048 e^{z/2} (256 z^9 - 18\,688 z^8 + 533\,952 z^7 - 7\,707\,840 z^6 + 60\,669\,360 z^5 - \right. \\
 & \quad \left. 262\,891\,440 z^4 + 605\,403\,720 z^3 - 679\,879\,080 z^2 + 310\,134\,825 z - 34\,459\,425) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{50\,262\,517\,305 z^4} \left(2048 e^{z/2} (256 z^8 - 18\,432 z^7 + 515\,648 z^6 - 7\,201\,152 z^5 + 53\,708\,400 z^4 - \right. \right. \\
 & \quad \left. \left. 212\,322\,240 z^3 + 414\,123\,480 z^2 - 335\,139\,120 z + 71\,697\,105) I_1\left(\frac{z}{2}\right)\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{3}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.6547.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) &= \\
 & \frac{1}{1\,029\,105} e^z (512 z^9 + 4352 z^8 + 4608 z^7 + 5376 z^6 - 22\,848 z^5 + 90\,720 z^4 - 292\,320 z^3 + 720\,720 z^2 - 1\,207\,710 z + 1\,029\,105)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6548.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) &= -\frac{e^z (256 z^8 + 1536 z^7 + 2688 z^5 - 10\,080 z^4 + 30\,240 z^3 - 70\,560 z^2 + 113\,400 z - 93\,555)}{93\,555}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6549.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) &= \frac{e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13\,230 z + 10\,395)}{10\,395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6550.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) &= -\frac{e^z (64 z^6 + 64 z^5 - 432 z^4 + 1056 z^3 - 1572 z^2 + 2052 z - 1485)}{1485}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6551.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) &= \frac{1}{297} e^z (32 z^5 - 48 z^4 - 144 z^3 + 600 z^2 - 486 z + 297)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6552.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) &= -\frac{1}{99} e^z (16 z^4 - 64 z^3 + 24 z^2 + 288 z - 99)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6553.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; z\right) &= \frac{1}{99} e^z (8 z^3 - 52 z^2 + 90 z + 99)
 \end{aligned}$$

07.25.03.6554.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{99} e^{z/2} (4z^3 - 28z^2 + 45z + 99) I_0\left(\frac{z}{2}\right) + \frac{1}{99} e^{z/2} (4z^3 - 32z^2 + 79z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6555.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{99} e^z (4z^2 - 36z + 99)$$

07.25.03.6556.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{99} e^{z/2} (4z^2 - 38z + 99) I_0\left(\frac{z}{2}\right) + \frac{1}{99} e^{z/2} (4z^2 - 42z + 143) I_1\left(\frac{z}{2}\right)$$

07.25.03.6557.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (2z^2 - 23z + 84)}{33z} - \frac{14\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11z^{3/2}}$$

07.25.03.6558.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-2z^2 - 23z - 84)}{33z} + \frac{14\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11z^{3/2}}$$

07.25.03.6559.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, 3; z\right) = \frac{8}{99} e^{z/2} (z - 12) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2z^2 - 26z + 195) I_1\left(\frac{z}{2}\right)}{99z}$$

07.25.03.6560.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (z^2 - 14z + 84)}{33z^2} - \frac{35\sqrt{\pi} (z + 2) \operatorname{erfi}(\sqrt{z})}{11z^{5/2}}$$

07.25.03.6561.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (z^2 + 14z + 84)}{33z^2} + \frac{35\sqrt{\pi} (z - 2) \operatorname{erf}(\sqrt{z})}{11z^{5/2}}$$

07.25.03.6562.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (2z - 85) I_0\left(\frac{z}{2}\right)}{33z} + \frac{4 e^{z/2} (2z^2 + 25z + 340) I_1\left(\frac{z}{2}\right)}{33z^2}$$

07.25.03.6563.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (z^2 - 6z + 135)}{66z^3} - \frac{35\sqrt{\pi} (7z^2 + 28z + 45) \operatorname{erfi}(\sqrt{z})}{44z^{7/2}}$$

07.25.03.6564.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35\sqrt{\pi} (7z^2 - 28z + 45) \operatorname{erf}(\sqrt{z})}{44z^{7/2}} - \frac{35 e^{-z} (z^2 + 6z + 135)}{66z^3}$$

07.25.03.6565.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (61z^2 + 204z + 1292) I_1\left(\frac{z}{2}\right)}{165z^3} - \frac{544 e^{z/2} (3z + 19) I_0\left(\frac{z}{2}\right)}{165z^2}$$

07.25.03.6566.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{315 e^z (12z^2 + 10z + 525)}{352z^4} - \frac{105\sqrt{\pi} (56z^3 + 336z^2 + 1080z + 1575) \operatorname{erfi}(\sqrt{z})}{704z^{9/2}}$$

07.25.03.6567.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (12 z^2 - 10 z + 525)}{352 z^4} + \frac{105 \sqrt{\pi} (56 z^3 - 336 z^2 + 1080 z - 1575) \operatorname{erf}(\sqrt{z})}{704 z^{9/2}}$$

07.25.03.6568.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^3 + 121 z^2 + 380 z + 1824) I_1\left(\frac{z}{2}\right)}{33 z^4} - \frac{32 e^{z/2} (16 z^2 + 95 z + 456) I_0\left(\frac{z}{2}\right)}{33 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.6569.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{e^z (128 z^7 + 576 z^6 - 288 z^5 + 1200 z^4 - 3240 z^3 + 7020 z^2 - 10710 z + 8505)}{8505}$$

07.25.03.6570.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)$$

07.25.03.6571.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{135} e^z (32 z^5 + 48 z^4 - 144 z^3 + 168 z^2 - 198 z + 135)$$

07.25.03.6572.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{27} e^z (16 z^4 - 72 z^2 + 48 z - 27)$$

07.25.03.6573.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{9} e^z (8 z^3 - 12 z^2 - 30 z + 9)$$

07.25.03.6574.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{9} e^z (4 z^2 - 12 z - 9)$$

07.25.03.6575.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{9} e^{z/2} (-2 z^2 + 6 z + 9) I_0\left(\frac{z}{2}\right) - \frac{2}{9} e^{z/2} (z^2 - 4 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6576.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{9} e^z (2 z - 9)$$

07.25.03.6577.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{9} e^{z/2} (9 - 2 z) I_0\left(\frac{z}{2}\right) + \frac{1}{9} e^{z/2} (11 - 2 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6578.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (6 - z)}{3 z} - \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{3/2}}$$

07.25.03.6579.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-z - 6)}{3 z} + \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{3/2}}$$

07.25.03.6580.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, 3; z\right) = -\frac{4}{9} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (z-13) I_1\left(\frac{z}{2}\right)}{9z}$$

07.25.03.6581.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{5 e^z (2z-21)}{12z^2} - \frac{5\sqrt{\pi} (4z+7) \operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.6582.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (2z+21)}{12z^2} + \frac{5\sqrt{\pi} (4z-7) \operatorname{erf}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.6583.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (3z+20) I_1\left(\frac{z}{2}\right)}{3z^2} - \frac{20 e^{z/2} I_0\left(\frac{z}{2}\right)}{3z}$$

07.25.03.6584.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (z+30)}{24z^3} - \frac{35\sqrt{\pi} (2z^2+7z+10) \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.6585.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (z-30)}{24z^3} + \frac{35\sqrt{\pi} (2z^2-7z+10) \operatorname{erf}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.6586.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, 5; z\right) = \frac{128 e^{z/2} (z^2+4z+17) I_1\left(\frac{z}{2}\right)}{15z^3} - \frac{32 e^{z/2} (4z+17) I_0\left(\frac{z}{2}\right)}{15z^2}$$

07.25.03.6587.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{105 e^z (8z^2+30z+315)}{128z^4} - \frac{105\sqrt{\pi} (16z^3+84z^2+240z+315) \operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.6588.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{105 e^{-z} (8z^2-30z+315)}{128z^4} + \frac{105\sqrt{\pi} (16z^3-84z^2+240z-315) \operatorname{erf}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.6589.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (8z^3+51z^2+172z+608) I_1\left(\frac{z}{2}\right)}{21z^4} - \frac{32 e^{z/2} (8z^2+43z+152) I_0\left(\frac{z}{2}\right)}{21z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.6590.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{105} e^z (32z^5+80z^4-80z^3+120z^2-150z+105)$$

07.25.03.6591.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{15} e^z (16z^4+32z^3-24z^2+24z-15)$$

07.25.03.6592.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (8z^3 + 12z^2 - 6z + 3)$$

07.25.03.6593.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -e^z (4z^2 + 4z - 1)$$

07.25.03.6594.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = e^z (2z + 1)$$

07.25.03.6595.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, 1; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.6596.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = e^z$$

07.25.03.6597.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.6598.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{3e^z}{2z} - \frac{3\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.6599.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3e^{-z}}{2z}$$

07.25.03.6600.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, 3; z\right) = \frac{4e^{z/2} I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.6601.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{45e^z}{8z^2} - \frac{15\sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.6602.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15\sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45e^{-z}}{8z^2}$$

07.25.03.6603.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, 4; z\right) = \frac{4e^{z/2} (z + 4) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4e^{z/2} I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.6604.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{105e^z (2z + 15)}{64z^3} - \frac{105\sqrt{\pi} (4z^2 + 12z + 15) \operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.6605.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (2z - 15)}{64 z^3} + \frac{105 \sqrt{\pi} (4z^2 - 12z + 15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.6606.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (z^2 + 4z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{32 e^{z/2} (z + 3) I_0\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.6607.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{315 e^z (4z^2 + 20z + 105)}{256 z^4} - \frac{315 \sqrt{\pi} (8z^3 + 36z^2 + 90z + 105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.6608.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2 - 20z + 105)}{256 z^4} + \frac{315 \sqrt{\pi} (8z^3 - 36z^2 + 90z - 105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.6609.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^3 + 11z^2 + 36z + 96) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{32 e^{z/2} (2z^2 + 9z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.6610.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1024}{75} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{75} e^z (-744z^3 + 188z^2 - 138z + 75)$$

07.25.03.6611.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1024}{75} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{1}{75} e^{-z} (744z^3 + 188z^2 + 138z + 75)$$

07.25.03.6612.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{15} e^z (512z^3 + 116z^2 - 36z + 15) - \frac{512}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6613.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-512z^3 + 116z^2 + 36z + 15) - \frac{512}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.6614.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{128}{5} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{5} e^z (-128z^3 - 64z^2 - 26z + 5)$$

07.25.03.6615.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{128}{5} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{1}{5} e^{-z} (128z^3 - 64z^2 + 26z + 5)$$

07.25.03.6616.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (64z^3 + 32z^2 + 48z + 15) - \frac{64}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6617.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-64 z^3 + 32 z^2 - 48 z + 15) - \frac{64}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.6618.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{525} e^{z/2} (-1024 z^4 + 768 z^3 + 480 z^2 + 840 z + 525) I_0\left(\frac{z}{2}\right) + \frac{8}{525} e^{z/2} (128 z^4 + 32 z^3 + 36 z^2 + 75 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6619.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (8 z^3 + 4 z^2 + 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6620.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-8 z^3 + 4 z^2 - 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.6621.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (-2048 z^4 + 1536 z^3 + 960 z^2 + 1680 z + 4725) I_0\left(\frac{z}{2}\right) + e^{z/2} (2048 z^4 + 512 z^3 + 576 z^2 + 1200 z + 3675) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.6622.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105)}{100 z} + \frac{\sqrt{\pi} (-32 z^5 - 105) \operatorname{erfi}(\sqrt{z})}{200 z^{3/2}}$$

07.25.03.6623.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-16 z^4 + 8 z^3 - 12 z^2 + 30 z - 105)}{100 z} + \frac{\sqrt{\pi} (105 - 32 z^5) \operatorname{erf}(\sqrt{z})}{200 z^{3/2}}$$

07.25.03.6624.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (2048 z^5 + 512 z^4 + 576 z^3 + 1200 z^2 + 3675 z + 33075) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (2048 z^4 - 1536 z^3 - 960 z^2 - 1680 z - 4725) I_0\left(\frac{z}{2}\right)}{51975 z}$$

07.25.03.6625.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 1575)}{480 z^2} + \frac{\sqrt{\pi} (-64 z^6 - 1260 z - 1575) \operatorname{erfi}(\sqrt{z})}{960 z^{5/2}}$$

07.25.03.6626.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 1575)}{480 z^2} + \frac{\sqrt{\pi} (-64 z^6 + 1260 z - 1575) \operatorname{erf}(\sqrt{z})}{960 z^{5/2}}$$

07.25.03.6627.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (4096 z^6 + 1024 z^5 + 1152 z^4 + 2400 z^3 + 7350 z^2 + 187425 z + 485100) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (4096 z^5 - 3072 z^4 - 1920 z^3 - 3360 z^2 - 9450 z + 121275) I_0\left(\frac{z}{2}\right)}{225225 z^2}$$

07.25.03.6628.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 + 6300 z + 23625)}{1920 z^3} + \frac{\sqrt{\pi} (-128 z^7 - 8820 z^2 - 22050 z - 23625) \operatorname{erfi}(\sqrt{z})}{3840 z^{7/2}}$$

07.25.03.6629.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-64 z^6 + 32 z^5 - 48 z^4 + 120 z^3 - 420 z^2 + 6300 z - 23625)}{1920 z^3} + \frac{\sqrt{\pi} (-128 z^7 + 8820 z^2 + 22050 z + 23625) \operatorname{erf}(\sqrt{z})}{3840 z^{7/2}}$$

07.25.03.6630.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, 5; z\right) = \frac{64 e^{z/2} (2048 z^7 + 512 z^6 + 576 z^5 + 1200 z^4 + 3675 z^3 + 251370 z^2 + 873180 z + 1891890) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (4096 z^6 - 3072 z^5 - 1920 z^4 - 3360 z^3 - 9450 z^2 + 436590 z + 945945) I_0\left(\frac{z}{2}\right)}{3378375 z^3}$$

07.25.03.6631.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (128 z^7 + 64 z^6 + 96 z^5 + 240 z^4 + 840 z^3 + 27300 z^2 + 120750 z + 385875)}{20480 z^4} - \frac{3 \sqrt{\pi} (256 z^8 + 47040 z^3 + 176400 z^2 + 378000 z + 385875) \operatorname{erfi}(\sqrt{z})}{40960 z^{9/2}}$$

07.25.03.6632.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = -\frac{3 e^{-z} (128 z^7 - 64 z^6 + 96 z^5 - 240 z^4 + 840 z^3 - 27300 z^2 + 120750 z - 385875)}{20480 z^4} - \frac{3 \sqrt{\pi} (256 z^8 - 47040 z^3 + 176400 z^2 - 378000 z + 385875) \operatorname{erf}(\sqrt{z})}{40960 z^{9/2}}$$

07.25.03.6633.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{5}{2}, 6; z\right) = \frac{1}{11486475 z^4} \left(32 e^{z/2} (8192 z^8 + 2048 z^7 + 2304 z^6 + 4800 z^5 + 14700 z^4 + 2356830 z^3 + 10925145 z^2 + 31891860 z + 64864800) I_1\left(\frac{z}{2}\right) - \frac{1}{11486475 z^3} 32 e^{z/2} (8192 z^7 - 6144 z^6 - 3840 z^5 - 6720 z^4 - 18900 z^3 + 2224530 z^2 + 7972965 z + 16216200) I_0\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.6634.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (-256 z^3 + 96 z^2 - 10 z + 3) + \frac{32}{3} \sqrt{\pi} (8 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6635.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (256 z^3 + 96 z^2 + 10 z + 3) + \frac{32}{3} \sqrt{\pi} (8 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6636.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = e^z (64 z^3 - 80 z^2 - 8 z + 1) - 16 \sqrt{\pi} (4 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6637.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = e^{-z} (-64 z^3 - 80 z^2 + 8 z + 1) - 16 \sqrt{\pi} (4 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6638.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (-32 z^3 + 68 z^2 + 18 z + 3) + \frac{4}{3} \sqrt{\pi} (8 z^{7/2} - 21 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6639.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (32 z^3 + 68 z^2 - 18 z + 3) + \frac{4}{3} \sqrt{\pi} (8 z^{7/2} + 21 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6640.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (512 z^4 - 1952 z^3 + 936 z^2 + 315 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-512 z^4 + 1440 z^3 + 248 z^2 + 141 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6641.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (-4 z^3 + 12 z^2 + 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6642.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (4 z^3 + 12 z^2 - 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6643.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (1024 z^4 - 4800 z^3 + 2544 z^2 + 1050 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-1024 z^4 + 3776 z^3 + 720 z^2 + 534 z + 525) I_1\left(\frac{z}{2}\right)$$

07.25.03.6644.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (-64 z^4 + 248 z^3 + 92 z^2 + 90 z + 105)}{160 z} + \frac{\sqrt{\pi} (128 z^5 - 560 z^4 - 105) \operatorname{erfi}(\sqrt{z})}{320 z^{3/2}}$$

07.25.03.6645.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (64 z^4 + 248 z^3 - 92 z^2 + 90 z - 105)}{160 z} + \frac{\sqrt{\pi} (128 z^5 + 560 z^4 + 105) \operatorname{erf}(\sqrt{z})}{320 z^{3/2}}$$

$$\begin{aligned}
 & 07.25.03.6646.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, 3; z\right) &= \frac{8 e^{z/2} (512 z^4 - 2848 z^3 + 1608 z^2 + 735 z + 840) I_0\left(\frac{z}{2}\right)}{10395} - \frac{4 e^{z/2} (1024 z^5 - 4672 z^4 - 944 z^3 - 786 z^2 - 1050 z - 3675) I_1\left(\frac{z}{2}\right)}{10395 z}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.6647.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) &= \frac{e^z (-32 z^5 + 152 z^4 + 60 z^3 + 66 z^2 + 105 z + 315)}{192 z^2} + \frac{\sqrt{\pi} (64 z^6 - 336 z^5 - 315 z - 315) \operatorname{erfi}(\sqrt{z})}{384 z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.6648.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) &= \frac{e^{-z} (32 z^5 + 152 z^4 - 60 z^3 + 66 z^2 - 105 z + 315)}{192 z^2} + \frac{\sqrt{\pi} (64 z^6 + 336 z^5 + 315 z - 315) \operatorname{erf}(\sqrt{z})}{384 z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.6649.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, 4; z\right) &= \frac{4 e^{z/2} (2048 z^5 - 13184 z^4 + 7776 z^3 + 3780 z^2 + 4830 z - 11025) I_0\left(\frac{z}{2}\right)}{45045 z} - \\
 & \frac{4 e^{z/2} (2048 z^6 - 11136 z^5 - 2336 z^4 - 2076 z^3 - 3150 z^2 - 25725 z - 44100) I_1\left(\frac{z}{2}\right)}{45045 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.6650.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) &= \frac{e^z (-128 z^6 + 720 z^5 + 296 z^4 + 348 z^3 + 630 z^2 + 3570 z + 7875)}{1536 z^3} + \\
 & \frac{\sqrt{\pi} (256 z^7 - 1568 z^6 - 4410 z^2 - 8820 z - 7875) \operatorname{erfi}(\sqrt{z})}{3072 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.6651.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) &= \\
 & \frac{e^{-z} (128 z^6 + 720 z^5 - 296 z^4 + 348 z^3 - 630 z^2 + 3570 z - 7875)}{1536 z^3} + \frac{\sqrt{\pi} (256 z^7 + 1568 z^6 + 4410 z^2 - 8820 z + 7875) \operatorname{erf}(\sqrt{z})}{3072 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.6652.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, 5; z\right) &= \frac{32 e^{z/2} (2048 z^6 - 14976 z^5 + 9120 z^4 + 4620 z^3 + 6300 z^2 - 46305 z - 72765) I_0\left(\frac{z}{2}\right)}{675675 z^2} - \\
 & \frac{32 e^{z/2} (2048 z^7 - 12928 z^6 - 2784 z^5 - 2580 z^4 - 4200 z^3 - 68355 z^2 - 185220 z - 291060) I_1\left(\frac{z}{2}\right)}{675675 z^3}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.6653.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) &= \frac{3 \sqrt{\pi} (256 z^8 - 1792 z^7 - 11760 z^3 - 35280 z^2 - 63000 z - 55125) \operatorname{erfi}(\sqrt{z})}{16384 z^{9/2}} - \\
 & \frac{3 e^z (128 z^7 - 832 z^6 - 352 z^5 - 432 z^4 - 840 z^3 - 7980 z^2 - 26250 z - 55125)}{8192 z^4}
 \end{aligned}$$

07.25.03.6654.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 + 832 z^6 - 352 z^5 + 432 z^4 - 840 z^3 + 7980 z^2 - 26250 z + 55125)}{8192 z^4} + \frac{3 \sqrt{\pi} (256 z^8 + 1792 z^7 + 11760 z^6 - 35280 z^5 + 63000 z^4 - 55125 z^3) \operatorname{erf}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.6655.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{2297295 z^3} \left(32 e^{z/2} (4096 z^7 - 33536 z^6 + 20928 z^5 + 10920 z^4 + 15540 z^3 - 253260 z^2 - 696465 z - 1081080) I_0\left(\frac{z}{2}\right) - \frac{1}{2297295 z^4} (32 e^{z/2} (4096 z^8 - 29440 z^7 - 6464 z^6 - 6168 z^5 - 10500 z^4 - 312060 z^3 - 1148175 z^2 - 2785860 z - 4324320) I_1\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.6656.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = e^{-z} (-48 z^3 + 144 z^2 - 22 z + 1) + 2 \sqrt{\pi} (24 z^{7/2} - 84 z^{5/2} + 35 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6657.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = e^{-z} (48 z^3 + 144 z^2 + 22 z + 1) + 2 \sqrt{\pi} (24 z^{7/2} + 84 z^{5/2} + 35 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6658.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = e^{-z} (8 z^3 - 38 z^2 + 20 z + 1) + \sqrt{\pi} (-8 z^{7/2} + 42 z^{5/2} - 35 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6659.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z} (-8 z^3 - 38 z^2 - 20 z + 1) + \sqrt{\pi} (-8 z^{7/2} - 42 z^{5/2} - 35 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6660.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (-384 z^4 + 2640 z^3 - 4034 z^2 + 1050 z + 105) I_0\left(\frac{z}{2}\right) + \frac{2}{105} e^{z/2} (192 z^4 - 1128 z^3 + 985 z^2 + 88 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6661.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{2} e^z (2 z^3 - 13 z^2 + 12 z + 2) - \frac{1}{4} \sqrt{\pi} z^{3/2} (4 z^2 - 28 z + 35) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6662.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{2} e^{-z} (-2 z^3 - 13 z^2 - 12 z + 2) - \frac{1}{4} \sqrt{\pi} z^{3/2} (4 z^2 + 28 z + 35) \operatorname{erf}(\sqrt{z})$$

07.25.03.6663.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (-256 z^4 + 2208 z^3 - 4332 z^2 + 1470 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (256 z^4 - 1952 z^3 + 2508 z^2 + 318 z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.6664.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (96 z^4 - 792 z^3 + 1052 z^2 + 250 z + 105)}{320 z} + \frac{\sqrt{\pi} (-192 z^5 + 1680 z^4 - 2800 z^3 - 105) \operatorname{erfi}(\sqrt{z})}{640 z^{3/2}}$$

07.25.03.6665.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-96 z^4 - 792 z^3 - 1052 z^2 + 250 z - 105)}{320 z} + \frac{\sqrt{\pi} (-192 z^5 - 1680 z^4 - 2800 z^3 + 105) \operatorname{erf}(\sqrt{z})}{640 z^{3/2}}$$

07.25.03.6666.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (256 z^5 - 2400 z^4 + 4076 z^3 + 612 z^2 + 315 z + 525) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (256 z^4 - 2656 z^3 + 6348 z^2 - 2520 z - 735) I_0\left(\frac{z}{2}\right)}{3465 z} - \frac{3465}{3465}$$

07.25.03.6667.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (64 z^5 - 640 z^4 + 1112 z^3 + 316 z^2 + 210 z + 315)}{512 z^2} + \frac{\sqrt{\pi} (-128 z^6 + 1344 z^5 - 2800 z^4 - 420 z - 315) \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.6668.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-64 z^5 - 640 z^4 - 1112 z^3 + 316 z^2 - 210 z + 315)}{512 z^2} + \frac{\sqrt{\pi} (-128 z^6 - 1344 z^5 - 2800 z^4 + 420 z - 315) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.6669.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (1536 z^6 - 17088 z^5 + 36104 z^4 + 5996 z^3 + 3780 z^2 + 13125 z + 14700) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (1536 z^5 - 18624 z^4 + 52424 z^3 - 23100 z^2 - 7980 z + 3675) I_0\left(\frac{z}{2}\right)}{45045 z}$$

07.25.03.6670.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (64 z^6 - 752 z^5 + 1616 z^4 + 512 z^3 + 420 z^2 + 1155 z + 1575)}{1024 z^3} + \frac{\sqrt{\pi} (-128 z^7 + 1568 z^6 - 3920 z^5 - 1470 z^2 - 2205 z - 1575) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.6671.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-64 z^6 - 752 z^5 - 1616 z^4 + 512 z^3 - 420 z^2 + 1155 z - 1575)}{1024 z^3} + \frac{\sqrt{\pi} (-128 z^7 - 1568 z^6 - 3920 z^5 + 1470 z^2 - 2205 z + 1575) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.6672.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, 5; z\right) = \frac{128 e^{z/2} (128 z^7 - 1648 z^6 + 4166 z^5 + 740 z^4 + 525 z^3 + 3045 z^2 + 5880 z + 6615) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (512 z^6 - 7104 z^5 + 23000 z^4 - 10920 z^3 - 4200 z^2 + 5880 z + 6615) I_0\left(\frac{z}{2}\right)}{225 225 z^3}$$

07.25.03.6673.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (384 z^7 - 5184 z^6 + 13280 z^5 + 4528 z^4 + 4200 z^3 + 17220 z^2 + 38850 z + 55125)}{32 768 z^4} - \frac{3 \sqrt{\pi} (768 z^8 - 10752 z^7 + 31360 z^6 + 23520 z^3 + 52920 z^2 + 75600 z + 55125) \operatorname{erfi}(\sqrt{z})}{65536 z^{9/2}}$$

07.25.03.6674.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{3 e^{-z} (384 z^7 + 5184 z^6 + 13280 z^5 - 4528 z^4 + 4200 z^3 - 17220 z^2 + 38850 z - 55125)}{32 768 z^4} - \frac{3 \sqrt{\pi} (768 z^8 + 10752 z^7 + 31360 z^6 - 23520 z^3 + 52920 z^2 - 75600 z + 55125) \operatorname{erf}(\sqrt{z})}{65536 z^{9/2}}$$

07.25.03.6675.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; -\frac{1}{2}, 6; z\right) = \frac{1}{765 765 z^4} 32 e^{z/2} (1024 z^8 - 14976 z^7 + 44080 z^6 + 8216 z^5 + 6300 z^4 + 55860 z^3 + 149835 z^2 + 283500 z + 332640) I_1\left(\frac{z}{2}\right) - \frac{1}{765 765 z^3} 32 e^{z/2} (1024 z^7 - 16000 z^6 + 58544 z^5 - 29400 z^4 - 12180 z^3 + 34860 z^2 + 70875 z + 83160) I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{1}{2}$

07.25.03.6676.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{12} e^z (-16 z^3 + 118 z^2 - 159 z + 12) + \frac{1}{24} \sqrt{\pi} (32 z^{7/2} - 252 z^{5/2} + 420 z^{3/2} - 105 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6677.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{12} e^{-z} (16 z^3 + 118 z^2 + 159 z + 12) + \frac{1}{24} \sqrt{\pi} (32 z^{7/2} + 252 z^{5/2} + 420 z^{3/2} + 105 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6678.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (64 z^4 - 636 z^3 + 1636 z^2 - 1155 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-64 z^4 + 572 z^3 - 1096 z^2 + 281 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6679.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{24} e^z (-4 z^3 + 40 z^2 - 87 z + 24) + \frac{1}{48} \sqrt{\pi} \sqrt{z} (8 z^3 - 84 z^2 + 210 z - 105) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6680.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{24} e^{-z} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} \sqrt{\pi} \sqrt{z} (8z^3 + 84z^2 + 210z + 105) \operatorname{erf}(\sqrt{z})$$

07.25.03.6681.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (128z^4 - 1608z^3 + 5484z^2 - 5460z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-128z^4 + 1480z^3 - 4068z^2 + 2004z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.6682.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (-64z^4 + 808z^3 - 2428z^2 + 1210z + 105)}{1280z} + \frac{\sqrt{\pi} (128z^5 - 1680z^4 + 5600z^3 - 4200z^2 - 105) \operatorname{erfi}(\sqrt{z})}{2560z^{3/2}}$$

07.25.03.6683.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (64z^4 + 808z^3 + 2428z^2 + 1210z - 105)}{1280z} + \frac{\sqrt{\pi} (128z^5 + 1680z^4 + 5600z^3 + 4200z^2 + 105) \operatorname{erf}(\sqrt{z})}{2560z^{3/2}}$$

07.25.03.6684.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, 3; z\right) = \frac{16 e^{z/2} (32z^4 - 486z^3 + 2064z^2 - 2625z + 630) I_0\left(\frac{z}{2}\right)}{10395} - \frac{4 e^{z/2} (128z^5 - 1816z^4 + 6504z^3 - 4776z^2 - 420z - 315) I_1\left(\frac{z}{2}\right)}{10395z}$$

07.25.03.6685.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (-64z^5 + 976z^4 - 3744z^3 + 2736z^2 + 420z + 315)}{3072z^2} + \frac{\sqrt{\pi} (128z^6 - 2016z^5 + 8400z^4 - 8400z^3 - 630z - 315) \operatorname{erfi}(\sqrt{z})}{6144z^{5/2}}$$

07.25.03.6686.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (64z^5 + 976z^4 + 3744z^3 + 2736z^2 - 420z + 315)}{3072z^2} + \frac{\sqrt{\pi} (128z^6 + 2016z^5 + 8400z^4 + 8400z^3 + 630z - 315) \operatorname{erf}(\sqrt{z})}{6144z^{5/2}}$$

07.25.03.6687.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (256z^5 - 4560z^4 + 23176z^3 - 35700z^2 + 10500z - 525) I_0\left(\frac{z}{2}\right)}{45045z} - \frac{4 e^{z/2} (256z^6 - 4304z^5 + 19000z^4 - 18596z^3 - 2100z^2 - 3045z - 2100) I_1\left(\frac{z}{2}\right)}{45045z^2}$$

07.25.03.6688.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (-256 z^6 + 4576 z^5 - 21360 z^4 + 20688 z^3 + 4200 z^2 + 5670 z + 4725)}{24576 z^3} + \frac{\sqrt{\pi} (512 z^7 - 9408 z^6 + 47040 z^5 - 58800 z^4 - 8820 z^2 - 8820 z - 4725) \operatorname{erfi}(\sqrt{z})}{49152 z^{7/2}}$$

07.25.03.6689.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (256 z^6 + 4576 z^5 + 21360 z^4 + 20688 z^3 - 4200 z^2 + 5670 z - 4725)}{24576 z^3} + \frac{\sqrt{\pi} (512 z^7 + 9408 z^6 + 47040 z^5 + 58800 z^4 + 8820 z^2 - 8820 z + 4725) \operatorname{erf}(\sqrt{z})}{49152 z^{7/2}}$$

07.25.03.6690.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (256 z^6 - 5232 z^5 + 30960 z^4 - 55860 z^3 + 18900 z^2 - 2835 z - 2205) I_0\left(\frac{z}{2}\right)}{675675 z^2} - \frac{32 e^{z/2} (256 z^7 - 4976 z^6 + 26112 z^5 - 31980 z^4 - 4200 z^3 - 9135 z^2 - 11340 z - 8820) I_1\left(\frac{z}{2}\right)}{675675 z^3}$$

07.25.03.6691.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{131072 z^{9/2}} 3 \sqrt{\pi} (256 z^8 - 5376 z^7 + 31360 z^6 - 47040 z^5 - 11760 z^3 - 17640 z^2 - 18900 z - 11025) \operatorname{erfi}(\sqrt{z}) - \frac{3 e^z (128 z^7 - 2624 z^6 + 14432 z^5 - 17456 z^4 - 4200 z^3 - 7980 z^2 - 11550 z - 11025)}{65536 z^4}$$

07.25.03.6692.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 + 2624 z^6 + 14432 z^5 + 17456 z^4 - 4200 z^3 + 7980 z^2 - 11550 z + 11025)}{65536 z^4} + \frac{1}{131072 z^{9/2}} 3 \sqrt{\pi} (256 z^8 + 5376 z^7 + 31360 z^6 + 47040 z^5 + 11760 z^3 - 17640 z^2 + 18900 z - 11025) \operatorname{erf}(\sqrt{z})$$

07.25.03.6693.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{1}{2}, 6; z\right) = \frac{1}{2297295 z^3} 32 e^{z/2} (512 z^7 - 11808 z^6 + 79728 z^5 - 164640 z^4 + 61740 z^3 - 18270 z^2 - 26145 z - 22680) I_0\left(\frac{z}{2}\right) - \frac{1}{2297295 z^4} 32 e^{z/2} (512 z^8 - 11296 z^7 + 68688 z^6 - 101088 z^5 - 14700 z^4 - 43470 z^3 - 75915 z^2 - 104580 z - 90720) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{3}{2}$, $b_1 = 1$

07.25.03.6694.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{105} e^{z/2} (8 z^4 - 104 z^3 + 376 z^2 - 420 z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} (2 z^4 - 24 z^3 + 71 z^2 - 44 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{3}{2}$

07.25.03.6695.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{384} e^z (-8z^3 + 108z^2 - 370z + 279) + \frac{\sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.6696.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} e^{-z} (8z^3 + 108z^2 + 370z + 279) + \frac{\sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.6697.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (16z^4 - 264z^3 + 1284z^2 - 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16z^4 + 248z^3 - 1044z^2 + 1164z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.6698.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16z^4 + 272z^3 - 1272z^2 + 1580z - 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.6699.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (16z^4 + 272z^3 + 1272z^2 + 1580z + 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.6700.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (16z^4 - 320z^3 + 1956z^2 - 4200z + 2625) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16z^5 - 304z^4 + 1660z^3 - 2676z^2 + 525z + 105) I_1\left(\frac{z}{2}\right)}{10395z}$$

07.25.03.6701.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (-32z^5 + 656z^4 - 3888z^3 + 6744z^2 - 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi} (64z^6 - 1344z^5 + 8400z^4 - 16800z^3 + 6300z^2 + 1260z + 315) \operatorname{erfi}(\sqrt{z})}{24576z^{5/2}}$$

07.25.03.6702.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32z^5 + 656z^4 + 3888z^3 + 6744z^2 + 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi} (64z^6 + 1344z^5 + 8400z^4 + 16800z^3 + 6300z^2 - 1260z + 315) \operatorname{erf}(\sqrt{z})}{24576z^{5/2}}$$

07.25.03.6703.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 - 752 z^4 + 5536 z^3 - 14700 z^2 + 11550 z + 105) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (32 z^6 - 720 z^5 + 4832 z^4 - 10196 z^3 + 3150 z^2 + 1155 z + 420) I_1\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.6704.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (-64 z^6 + 1536 z^5 - 11024 z^4 + 24576 z^3 - 6300 z^2 - 3360 z - 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 - 3136 z^6 + 23520 z^5 - 58800 z^4 + 29400 z^3 + 8820 z^2 + 4410 z + 1575) \operatorname{erfi}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.6705.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1536 z^5 + 11024 z^4 + 24576 z^3 + 6300 z^2 - 3360 z + 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.6706.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23520 z^3 + 22050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675675 z^3}$$

07.25.03.6707.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{1048576 z^{9/2}} - \frac{3 \sqrt{\pi} (256 z^8 - 7168 z^7 + 62720 z^6 - 188160 z^5 + 117600 z^4 + 47040 z^3 + 35280 z^2 + 25200 z + 11025) \operatorname{erfi}(\sqrt{z}) - 3 e^z (128 z^7 - 3520 z^6 + 29664 z^5 - 80848 z^4 + 29400 z^3 + 21420 z^2 + 17850 z + 11025)}{524288 z^4}$$

07.25.03.6708.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29664 z^5 + 80848 z^4 + 29400 z^3 - 21420 z^2 + 17850 z - 11025)}{524288 z^4} + \frac{1}{1048576 z^{9/2}} + \frac{3 \sqrt{\pi} (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025) \operatorname{erf}(\sqrt{z})}{524288 z^4}$$

07.25.03.6709.01

$${}_2F_2\left(-\frac{7}{2}, \frac{3}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)}{2297295 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.6710.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \frac{256 z^9 + 3328 z^8 + 7680 z^7 + 1344 z^6 + 192 z^5 + 720 z^4 - 7200 z^3 + 44100 z^2 - 238140 z + 1029105}{1029105} + \\
 & \frac{128 e^z \sqrt{\pi} (2 z^{19/2} + 27 z^{17/2} + 72 z^{15/2} + 30 z^{13/2}) \operatorname{erf}(\sqrt{z})}{1029105}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6711.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \\
 & \frac{1}{1029105} (-256 z^9 + 3328 z^8 - 7680 z^7 + 1344 z^6 - 192 z^5 + 720 z^4 + 7200 z^3 + 44100 z^2 + 238140 z + 1029105) + \\
 & \frac{128 e^{-z} \sqrt{\pi} (2 z^{19/2} - 27 z^{17/2} + 72 z^{15/2} - 30 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{1029105}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6712.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{-128 z^8 - 1280 z^7 - 1344 z^6 + 192 z^5 + 240 z^4 - 1440 z^3 + 6300 z^2 - 26460 z + 93555}{93555} - \\
 & \frac{64 e^z \sqrt{\pi} (2 z^{17/2} + 21 z^{15/2} + 30 z^{13/2}) \operatorname{erf}(\sqrt{z})}{93555}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6713.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{-128 z^8 + 1280 z^7 - 1344 z^6 - 192 z^5 + 240 z^4 + 1440 z^3 + 6300 z^2 + 26460 z + 93555}{93555} + \\
 & \frac{64 e^{-z} \sqrt{\pi} (2 z^{17/2} - 21 z^{15/2} + 30 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{93555}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6714.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{64 z^7 + 448 z^6 - 192 z^5 + 240 z^4 - 480 z^3 + 1260 z^2 - 3780 z + 10395}{10395} + \frac{32 e^z \sqrt{\pi} (2 z^{15/2} + 15 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6715.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \\
 & \frac{-64 z^7 + 448 z^6 + 192 z^5 + 240 z^4 + 480 z^3 + 1260 z^2 + 3780 z + 10395}{10395} + \frac{32 e^{-z} \sqrt{\pi} (2 z^{15/2} - 15 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}
 \end{aligned}$$

07.25.03.6716.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{-32z^6 - 128z^5 + 336z^4 - 480z^3 + 420z^2 - 756z + 1485}{1485} - \frac{16e^z\sqrt{\pi}(2z^{13/2} + 9z^{11/2} - 18z^{9/2} + 18z^{7/2})\operatorname{erf}(\sqrt{z})}{1485}$$

07.25.03.6717.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{-32z^6 + 128z^5 + 336z^4 + 480z^3 + 420z^2 + 756z + 1485}{1485} + \frac{16e^{-z}\sqrt{\pi}(2z^{13/2} - 9z^{11/2} - 18z^{9/2} - 18z^{7/2})\operatorname{erfi}(\sqrt{z})}{1485}$$

07.25.03.6718.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{297}(16z^5 + 16z^4 - 192z^3 + 420z^2 - 252z + 297) + \frac{8}{297}e^z\sqrt{\pi}(2z^{11/2} + 3z^{9/2} - 24z^{7/2} + 42z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.6719.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{297}(-16z^5 + 16z^4 + 192z^3 + 420z^2 + 252z + 297) + \frac{8}{297}e^{-z}\sqrt{\pi}(2z^{11/2} - 3z^{9/2} - 24z^{7/2} - 42z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6720.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{99}(-8z^4 + 16z^3 + 60z^2 - 252z + 99) - \frac{4}{99}e^z\sqrt{\pi}(2z^{9/2} - 3z^{7/2} - 18z^{5/2} + 60z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.6721.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{99}(-8z^4 - 16z^3 + 60z^2 + 252z + 99) + \frac{4}{99}e^{-z}\sqrt{\pi}(2z^{9/2} + 3z^{7/2} - 18z^{5/2} - 60z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6722.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{99}(4z^3 - 20z^2 + 12z + 99) + \frac{2}{99}e^z\sqrt{\pi}(2z^{7/2} - 9z^{5/2} + 60\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.6723.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{99}(-4z^3 - 20z^2 - 12z + 99) + \frac{2}{99}e^{-z}\sqrt{\pi}(2z^{7/2} + 9z^{5/2} - 60\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6724.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, 1; z\right) = \frac{1}{99}e^z(4z^3 - 24z^2 + 27z + 99)$$

07.25.03.6725.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{99}(2z^2 - 16z + 39) + \frac{e^z\sqrt{\pi}(2z^3 - 15z^2 + 30z + 30)\operatorname{erf}(\sqrt{z})}{99\sqrt{z}}$$

07.25.03.6726.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{99}(2z^2 + 16z + 39) + \frac{e^{-z}\sqrt{\pi}(-2z^3 - 15z^2 - 30z + 30)\operatorname{erfi}(\sqrt{z})}{99\sqrt{z}}$$

07.25.03.6727.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, 2; z\right) = \frac{1}{99} e^z (4z^2 - 36z + 99)$$

07.25.03.6728.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{z^2 - 11z + 42}{33z} + \frac{e^z \sqrt{\pi} (2z^3 - 21z^2 + 72z - 42) \operatorname{erf}(\sqrt{z})}{66z^{3/2}}$$

07.25.03.6729.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-z^2 - 11z - 42}{33z} + \frac{e^{-z} \sqrt{\pi} (2z^3 + 21z^2 + 72z + 42) \operatorname{erfi}(\sqrt{z})}{66z^{3/2}}$$

07.25.03.6730.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, 3; z\right) = \frac{2e^z (4z^3 - 48z^2 + 195z - 195)}{99z^2} + \frac{130}{33z^2}$$

07.25.03.6731.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5(z^2 - 14z + 168)}{66z^2} + \frac{5e^z \sqrt{\pi} (2z^3 - 27z^2 + 126z - 168) \operatorname{erf}(\sqrt{z})}{132z^{5/2}}$$

07.25.03.6732.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5(z^2 + 14z + 168)}{66z^2} - \frac{5e^{-z} \sqrt{\pi} (2z^3 + 27z^2 + 126z + 168) \operatorname{erfi}(\sqrt{z})}{132z^{5/2}}$$

07.25.03.6733.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, 4; z\right) = \frac{10(13z + 34)}{11z^3} + \frac{2e^z (4z^3 - 60z^2 + 315z - 510)}{33z^3}$$

07.25.03.6734.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{35(z^2 + 48z + 360)}{132z^3} + \frac{35e^z \sqrt{\pi} (2z^3 - 33z^2 + 192z - 360) \operatorname{erf}(\sqrt{z})}{264z^{7/2}}$$

07.25.03.6735.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (2z^3 + 33z^2 + 192z + 360) \operatorname{erfi}(\sqrt{z})}{264z^{7/2}} - \frac{35(z^2 - 48z + 360)}{132z^3}$$

07.25.03.6736.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, 5; z\right) = \frac{4(65z^2 + 340z + 646)}{11z^4} + \frac{8e^z (4z^3 - 72z^2 + 459z - 969)}{33z^4}$$

07.25.03.6737.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{315(9z^2 + 50z + 210)}{88z^4} + \frac{105e^z \sqrt{\pi} (2z^3 - 39z^2 + 270z - 630) \operatorname{erf}(\sqrt{z})}{176z^{9/2}}$$

07.25.03.6738.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{315(9z^2 - 50z + 210)}{88z^4} - \frac{105e^{-z} \sqrt{\pi} (2z^3 + 39z^2 + 270z + 630) \operatorname{erfi}(\sqrt{z})}{176z^{9/2}}$$

07.25.03.6739.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{11}{2}, 6; z\right) = \frac{40 e^z (4 z^3 - 84 z^2 + 627 z - 1596)}{33 z^5} + \frac{20 (65 z^3 + 510 z^2 + 1938 z + 3192)}{33 z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = -\frac{9}{2}$

07.25.03.6740.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{64 z^7 + 512 z^6 + 192 z^5 + 80 z^4 - 288 z^3 + 900 z^2 - 2940 z + 8505}{8505} + \frac{32 e^z \sqrt{\pi} (2 z^{15/2} + 17 z^{13/2} + 13 z^{11/2}) \operatorname{erf}(\sqrt{z})}{8505}$$

07.25.03.6741.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{-64 z^7 + 512 z^6 - 192 z^5 + 80 z^4 + 288 z^3 + 900 z^2 + 2940 z + 8505}{8505} + \frac{32 e^{-z} \sqrt{\pi} (2 z^{15/2} - 17 z^{13/2} + 13 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{8505}$$

07.25.03.6742.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{945} (-32 z^6 - 192 z^5 + 80 z^4 - 96 z^3 + 180 z^2 - 420 z + 945) - \frac{16}{945} e^z \sqrt{\pi} (2 z^{13/2} + 13 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6743.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{945} (-32 z^6 + 192 z^5 + 80 z^4 + 96 z^3 + 180 z^2 + 420 z + 945) + \frac{16}{945} e^{-z} \sqrt{\pi} (2 z^{13/2} - 13 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6744.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{135} (16 z^5 + 64 z^4 - 96 z^3 + 60 z^2 - 84 z + 135) + \frac{8}{135} e^z \sqrt{\pi} (2 z^{11/2} + 9 z^{9/2} - 9 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6745.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{135} (-16 z^5 + 64 z^4 + 96 z^3 + 60 z^2 + 84 z + 135) + \frac{8}{135} e^{-z} \sqrt{\pi} (2 z^{11/2} - 9 z^{9/2} - 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6746.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{27} (-8 z^4 - 16 z^3 + 60 z^2 - 28 z + 27) - \frac{4}{27} e^z \sqrt{\pi} (2 z^{9/2} + 5 z^{7/2} - 14 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6747.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{27} (-8 z^4 + 16 z^3 + 60 z^2 + 28 z + 27) + \frac{4}{27} e^{-z} \sqrt{\pi} (2 z^{9/2} - 5 z^{7/2} - 14 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6748.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{9} (4 z^3 - 28 z + 9) + \frac{2}{9} e^z \sqrt{\pi} (2 z^{7/2} + z^{5/2} - 15 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6749.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{9}(-4z^3 + 28z + 9) + \frac{2}{9}e^{-z}\sqrt{\pi}(2z^{7/2} - z^{5/2} - 15z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6750.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{9}(-2z^2 + 4z + 9) + \frac{1}{9}e^z\sqrt{\pi}(-2z^{5/2} + 3z^{3/2} + 12\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.6751.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{9}(-2z^2 - 4z + 9) + \frac{1}{9}e^{-z}\sqrt{\pi}(2z^{5/2} + 3z^{3/2} - 12\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6752.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, 1; z\right) = -\frac{1}{9}e^z(2z^2 - 5z - 9)$$

07.25.03.6753.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{4-z}{9} + \frac{e^z\sqrt{\pi}(-2z^2 + 7z + 5)\operatorname{erf}(\sqrt{z})}{18\sqrt{z}}$$

07.25.03.6754.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{z+4}{9} + \frac{e^{-z}\sqrt{\pi}(-2z^2 - 7z + 5)\operatorname{erfi}(\sqrt{z})}{18\sqrt{z}}$$

07.25.03.6755.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, 2; z\right) = -\frac{1}{9}e^z(2z - 9)$$

07.25.03.6756.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{6-z}{6z} + \frac{e^z\sqrt{\pi}(-2z^2 + 11z - 6)\operatorname{erf}(\sqrt{z})}{12z^{3/2}}$$

07.25.03.6757.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-z-6}{6z} + \frac{e^{-z}\sqrt{\pi}(2z^2 + 11z + 6)\operatorname{erfi}(\sqrt{z})}{12z^{3/2}}$$

07.25.03.6758.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, 3; z\right) = \frac{26}{9z^2} - \frac{2e^z(2z^2 - 13z + 13)}{9z^2}$$

07.25.03.6759.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{5(z-21)}{12z^2} - \frac{5e^z\sqrt{\pi}(2z^2 - 15z + 21)\operatorname{erf}(\sqrt{z})}{24z^{5/2}}$$

07.25.03.6760.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5(z+21)}{12z^2} - \frac{5e^{-z}\sqrt{\pi}(2z^2 + 15z + 21)\operatorname{erfi}(\sqrt{z})}{24z^{5/2}}$$

07.25.03.6761.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, 4; z\right) = \frac{2(13z+30)}{3z^3} - \frac{2e^z(2z^2 - 17z + 30)}{3z^3}$$

07.25.03.6762.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{35(23z + 120)}{72z^3} - \frac{35e^z\sqrt{\pi}(2z^2 - 19z + 40)\operatorname{erf}(\sqrt{z})}{48z^{7/2}}$$

07.25.03.6763.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35(23z - 120)}{72z^3} + \frac{35e^{-z}\sqrt{\pi}(2z^2 + 19z + 40)\operatorname{erfi}(\sqrt{z})}{48z^{7/2}}$$

07.25.03.6764.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, 5; z\right) = \frac{4(13z^2 + 60z + 102)}{3z^4} - \frac{8e^z(2z^2 - 21z + 51)}{3z^4}$$

07.25.03.6765.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{7(52z^2 + 285z + 945)}{16z^4} - \frac{105e^z\sqrt{\pi}(2z^2 - 23z + 63)\operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.6766.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{7(52z^2 - 285z + 945)}{16z^4} - \frac{105e^{-z}\sqrt{\pi}(2z^2 + 23z + 63)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.6767.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{9}{2}, 6; z\right) = \frac{20(13z^3 + 90z^2 + 306z + 456)}{9z^5} - \frac{40e^z(2z^2 - 25z + 76)}{3z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = -\frac{7}{2}$

07.25.03.6768.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{105}(16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105) + \frac{8}{105}e^z\sqrt{\pi}(2z^{11/2} + 11z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.6769.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{105}(-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105) + \frac{8}{105}e^{-z}\sqrt{\pi}(2z^{11/2} - 11z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6770.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{15}(-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15}e^z\sqrt{\pi}(2z^{9/2} + 9z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.6771.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15}(-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15}e^{-z}\sqrt{\pi}(2z^{9/2} - 9z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6772.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{3}(4z^3 + 12z^2 - 4z + 3) + \frac{2}{3}e^z\sqrt{\pi}(2z^{7/2} + 7z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.6773.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3}(-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3}e^{-z}\sqrt{\pi}(2z^{7/2} - 7z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6774.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, -\frac{1}{2}; z\right) = -2z^2 - 4z + e^z \sqrt{\pi} (-2z^{5/2} - 5z^{3/2}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.6775.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, -\frac{1}{2}; -z\right) = -2z^2 + 4z + e^{-z} \sqrt{\pi} (2z^{5/2} - 5z^{3/2}) \operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.6776.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, \frac{1}{2}; z\right) = z + \frac{1}{2} e^z \sqrt{\pi} (2z^{3/2} + 3\sqrt{z}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.6777.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, \frac{1}{2}; -z\right) = -z + \frac{1}{2} e^{-z} \sqrt{\pi} (2z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.6778.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, 1; z\right) = e^z (z + 1)$$

07.25.03.6779.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.6780.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.6781.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, 2; z\right) = e^z$$

07.25.03.6782.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3}{4z}$$

07.25.03.6783.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3}{4z}$$

07.25.03.6784.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, 3; z\right) = \frac{2 e^z (z - 1)}{z^2} + \frac{2}{z^2}$$

07.25.03.6785.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45}{8z^2}$$

07.25.03.6786.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{45}{8z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.6787.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, 4; z\right) = \frac{6 e^z (z-2)}{z^3} + \frac{6 (z+2)}{z^3}$$

07.25.03.6788.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{35 (4z+15)}{16 z^3} + \frac{105 e^z \sqrt{\pi} (2z-5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.6789.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{35 (4z-15)}{16 z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z+5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.6790.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, 5; z\right) = \frac{24 e^z (z-3)}{z^4} + \frac{12 (z^2+4z+6)}{z^4}$$

07.25.03.6791.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{63 (8z^2+40z+105)}{32 z^4} + \frac{945 e^z \sqrt{\pi} (2z-7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.6792.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{63 (8z^2-40z+105)}{32 z^4} - \frac{945 e^{-z} \sqrt{\pi} (2z+7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.6793.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{7}{2}, 6; z\right) = \frac{120 e^z (z-4)}{z^5} + \frac{20 (z^3+6z^2+18z+24)}{z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = -\frac{5}{2}$

07.25.03.6794.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{5}{2}, 1; z\right) = \frac{1}{5} e^z (12z^3+6z^2+9z+5) - \frac{12}{5} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6795.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{5}{2}, 1; -z\right) = \frac{1}{5} e^{-z} (-12z^3+6z^2-9z+5) - \frac{12}{5} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.6796.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{5}{2}, 2; z\right) = \frac{1}{15} e^z (8z^3+4z^2+6z+15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6797.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{5}{2}, 2; -z\right) = \frac{1}{15} e^{-z} (-8z^3+4z^2-6z+15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.6798.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{5}{2}, 3; z\right) = -\frac{32}{165} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{2 e^z (16z^5+8z^4+12z^3+30z^2+105z-105)}{165 z^2} + \frac{14}{11 z^2}$$

07.25.03.6799.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{5}{2}, 3; -z\right) = -\frac{32}{165} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} - \frac{2 e^{-z} (16 z^5 - 8 z^4 + 12 z^3 - 30 z^2 + 105 z + 105)}{165 z^2} + \frac{14}{11 z^2}$$

07.25.03.6800.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{5}{2}, 4; z\right) = -\frac{64}{715} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{42 (13 z + 22)}{143 z^3} + \frac{2 e^z (32 z^6 + 16 z^5 + 24 z^4 + 60 z^3 + 210 z^2 + 945 z - 2310)}{715 z^3}$$

07.25.03.6801.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{5}{2}, 4; -z\right) = -\frac{64}{715} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{42 (13 z - 22)}{143 z^3} - \frac{2 e^{-z} (32 z^6 - 16 z^5 + 24 z^4 - 60 z^3 + 210 z^2 - 945 z - 2310)}{715 z^3}$$

07.25.03.6802.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{5}{2}, 5; z\right) = -\frac{512 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2}}{10725} + \frac{84 (65 z^2 + 220 z + 286)}{715 z^4} + \frac{8 e^z (64 z^7 + 32 z^6 + 48 z^5 + 120 z^4 + 420 z^3 + 1890 z^2 + 10395 z - 45045)}{10725 z^4}$$

07.25.03.6803.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{5}{2}, 5; -z\right) = -\frac{512 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2}}{10725} + \frac{84 (65 z^2 - 220 z + 286)}{715 z^4} - \frac{8 e^{-z} (64 z^7 - 32 z^6 + 48 z^5 - 120 z^4 + 420 z^3 - 1890 z^2 + 10395 z + 45045)}{10725 z^4}$$

07.25.03.6804.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{5}{2}, 6; z\right) = -\frac{1024 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2}}{36465} + \frac{28 (1105 z^3 + 5610 z^2 + 14586 z + 17160)}{2431 z^5} + \frac{8 e^z (128 z^8 + 64 z^7 + 96 z^6 + 240 z^5 + 840 z^4 + 3780 z^3 + 20790 z^2 + 135135 z - 900900)}{36465 z^5}$$

07.25.03.6805.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{5}{2}, 6; -z\right) = -\frac{1024 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2}}{36465} + \frac{28 (1105 z^3 - 5610 z^2 + 14586 z - 17160)}{2431 z^5} - \frac{8 e^{-z} (128 z^8 - 64 z^7 + 96 z^6 - 240 z^5 + 840 z^4 - 3780 z^3 + 20790 z^2 - 135135 z - 900900)}{36465 z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = -\frac{3}{2}$

07.25.03.6806.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{3}{2}, 1; z\right) = \frac{1}{3} e^z (-18 z^3 + 40 z^2 + 11 z + 3) + \frac{1}{3} \sqrt{\pi} (18 z^{7/2} - 49 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6807.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{3}{2}, 1; -z\right) = \frac{1}{3} e^{-z} (18z^3 + 40z^2 - 11z + 3) + \frac{1}{3} \sqrt{\pi} (18z^{7/2} + 49z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6808.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{3}{2}, 2; z\right) = \frac{1}{3} e^z (-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3} \sqrt{\pi} (2z^{7/2} - 7z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6809.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{3}{2}, 2; -z\right) = \frac{1}{3} e^{-z} (4z^3 + 12z^2 - 4z + 3) + \frac{2}{3} \sqrt{\pi} (2z^{7/2} + 7z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6810.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{3}{2}, 3; z\right) = -\frac{2e^z(72z^5 - 272z^4 - 100z^3 - 96z^2 - 105z + 105)}{297z^2} + \frac{8}{297} \sqrt{\pi} (18z^{7/2} - 77z^{5/2}) \operatorname{erfi}(\sqrt{z}) + \frac{70}{99z^2}$$

07.25.03.6811.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{3}{2}, 3; -z\right) = \frac{2e^{-z}(72z^5 + 272z^4 - 100z^3 + 96z^2 - 105z - 105)}{297z^2} + \frac{8}{297} \sqrt{\pi} (18z^{7/2} + 77z^{5/2}) \operatorname{erf}(\sqrt{z}) + \frac{70}{99z^2}$$

07.25.03.6812.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{3}{2}, 4; z\right) = \frac{70(13z + 18)}{429z^3} - \frac{2e^z(144z^6 - 656z^5 - 256z^4 - 276z^3 - 420z^2 - 525z + 1890)}{1287z^3} + \frac{16\sqrt{\pi}(18z^{7/2} - 91z^{5/2}) \operatorname{erfi}(\sqrt{z})}{1287}$$

07.25.03.6813.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{3}{2}, 4; -z\right) = \frac{70(13z - 18)}{429z^3} + \frac{2e^{-z}(144z^6 + 656z^5 - 256z^4 + 276z^3 - 420z^2 + 525z + 1890)}{1287z^3} + \frac{16\sqrt{\pi}(18z^{7/2} + 91z^{5/2}) \operatorname{erf}(\sqrt{z})}{1287}$$

07.25.03.6814.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{3}{2}, 5; z\right) = \frac{28(65z^2 + 180z + 198)}{429z^4} - \frac{8e^z(96z^7 - 512z^6 - 208z^5 - 240z^4 - 420z^3 - 840z^2 - 945z + 10395)}{6435z^4} + \frac{128\sqrt{\pi}(6z^{7/2} - 35z^{5/2}) \operatorname{erfi}(\sqrt{z})}{6435}$$

07.25.03.6815.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{3}{2}, 5; -z\right) = \frac{28(65z^2 - 180z + 198)}{429z^4} + \frac{8e^{-z}(96z^7 + 512z^6 - 208z^5 + 240z^4 - 420z^3 + 840z^2 - 945z - 10395)}{6435z^4} + \frac{128\sqrt{\pi}(6z^{7/2} + 35z^{5/2}) \operatorname{erf}(\sqrt{z})}{6435}$$

07.25.03.6816.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{3}{2}, 6; z\right) = \frac{140(1105z^3 + 4590z^2 + 10098z + 10296)}{21879z^5} - \frac{8e^z(576z^8 - 3520z^7 - 1472z^6 - 1776z^5 - 3360z^4 - 7980z^3 - 18900z^2 - 10395z + 540540)}{65637z^5} + \frac{256\sqrt{\pi}(18z^{7/2} - 119z^{5/2})\operatorname{erfi}(\sqrt{z})}{65637}$$

07.25.03.6817.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{3}{2}, 6; -z\right) = \frac{140(1105z^3 - 4590z^2 + 10098z - 10296)}{21879z^5} + \frac{8e^{-z}(576z^8 + 3520z^7 - 1472z^6 + 1776z^5 - 3360z^4 + 7980z^3 - 18900z^2 + 10395z + 540540)}{65637z^5} + \frac{256\sqrt{\pi}(18z^{7/2} + 119z^{5/2})\operatorname{erf}(\sqrt{z})}{65637}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = -\frac{1}{2}$

07.25.03.6818.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{1}{2}, 1; z\right) = \frac{1}{4}e^z(18z^3 - 89z^2 + 52z + 4) + \frac{1}{8}\sqrt{\pi}(-36z^{7/2} + 196z^{5/2} - 175z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6819.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{1}{2}, 1; -z\right) = \frac{1}{4}e^{-z}(-18z^3 - 89z^2 - 52z + 4) + \frac{1}{8}\sqrt{\pi}(-36z^{7/2} - 196z^{5/2} - 175z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.6820.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{1}{2}, 2; z\right) = \frac{1}{2}e^z(2z^3 - 13z^2 + 12z + 2) + \frac{1}{4}\sqrt{\pi}(-4z^{7/2} + 28z^{5/2} - 35z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6821.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{1}{2}, 2; -z\right) = \frac{1}{2}e^{-z}(-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4}\sqrt{\pi}(-4z^{7/2} - 28z^{5/2} - 35z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.6822.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{1}{2}, 3; z\right) = \frac{2e^z(18z^5 - 145z^4 + 184z^3 + 42z^2 + 15z - 15)}{99z^2} + \frac{1}{99}\sqrt{\pi}(-36z^{7/2} + 308z^{5/2} - 495z^{3/2})\operatorname{erfi}(\sqrt{z}) + \frac{10}{33z^2}$$

07.25.03.6823.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{1}{2}, 3; -z\right) = -\frac{2e^{-z}(18z^5 + 145z^4 + 184z^3 - 42z^2 + 15z + 15)}{99z^2} + \frac{1}{99}\sqrt{\pi}(-36z^{7/2} - 308z^{5/2} - 495z^{3/2})\operatorname{erf}(\sqrt{z}) + \frac{10}{33z^2}$$

07.25.03.6824.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{1}{2}, 4; z\right) = \frac{10(13z+14)}{143z^3} + \frac{2e^z(36z^6 - 346z^5 + 560z^4 + 152z^3 + 90z^2 + 15z - 210)}{429z^3} - \frac{2}{429}\sqrt{\pi}(36z^{7/2} - 364z^{5/2} + 715z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.6825.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{1}{2}, 4; -z\right) = \frac{10(13z-14)}{143z^3} - \frac{2e^{-z}(36z^6 + 346z^5 + 560z^4 - 152z^3 + 90z^2 - 15z - 210)}{429z^3} - \frac{2}{429}\sqrt{\pi}(36z^{7/2} + 364z^{5/2} + 715z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.6826.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{1}{2}, 5; z\right) = \frac{4(65z^2 + 140z + 126)}{143z^4} + \frac{8e^z(24z^7 - 268z^6 + 528z^5 + 160z^4 + 120z^3 + 90z^2 - 105z - 945)}{2145z^4} - \frac{16\sqrt{\pi}(12z^{7/2} - 140z^{5/2} + 325z^{3/2})\operatorname{erfi}(\sqrt{z})}{2145}$$

07.25.03.6827.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{1}{2}, 5; -z\right) = \frac{4(65z^2 - 140z + 126)}{143z^4} - \frac{8e^{-z}(24z^7 + 268z^6 + 528z^5 - 160z^4 + 120z^3 - 90z^2 - 105z + 945)}{2145z^4} - \frac{16\sqrt{\pi}(12z^{7/2} + 140z^{5/2} + 325z^{3/2})\operatorname{erf}(\sqrt{z})}{2145}$$

07.25.03.6828.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{1}{2}, 6; z\right) = \frac{20(1105z^3 + 3570z^2 + 6426z + 5544)}{7293z^5} + \frac{8e^z(144z^8 - 1832z^7 + 4256z^6 + 1392z^5 + 1200z^4 + 1320z^3 + 630z^2 - 6615z - 41580)}{21879z^5} - \frac{32\sqrt{\pi}(36z^{7/2} - 476z^{5/2} + 1275z^{3/2})\operatorname{erfi}(\sqrt{z})}{21879}$$

07.25.03.6829.01

$${}_2F_2\left(-\frac{7}{2}, 2; -\frac{1}{2}, 6; -z\right) = \frac{20(1105z^3 - 3570z^2 + 6426z - 5544)}{7293z^5} - \frac{8e^{-z}(144z^8 + 1832z^7 + 4256z^6 - 1392z^5 + 1200z^4 - 1320z^3 + 630z^2 + 6615z - 41580)}{21879z^5} - \frac{32\sqrt{\pi}(36z^{7/2} + 476z^{5/2} + 1275z^{3/2})\operatorname{erf}(\sqrt{z})}{21879}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = \frac{1}{2}$

07.25.03.6830.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{1}{2}, 1; z\right) = \frac{1}{16} e^z (-12z^3 + 92z^2 - 135z + 16) + \frac{1}{32} \sqrt{\pi} (24z^{7/2} - 196z^{5/2} + 350z^{3/2} - 105\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6831.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{1}{2}, 1; -z\right) = \frac{1}{16} e^{-z} (12z^3 + 92z^2 + 135z + 16) + \frac{1}{32} \sqrt{\pi} (24z^{7/2} + 196z^{5/2} + 350z^{3/2} + 105\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6832.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{1}{2}, 2; z\right) = \frac{1}{24} e^z (-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48} \sqrt{\pi} (8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6833.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{1}{2}, 2; -z\right) = \frac{1}{24} e^{-z} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} \sqrt{\pi} (8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6834.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{1}{2}, 3; z\right) = \frac{e^z (-12z^5 + 148z^4 - 427z^3 + 192z^2 + 12z - 12)}{198z^2} + \frac{1}{396} \sqrt{\pi} (24z^{7/2} - 308z^{5/2} + 990z^{3/2} - 693\sqrt{z}) \operatorname{erfi}(\sqrt{z}) + \frac{2}{33z^2}$$

07.25.03.6835.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{1}{2}, 3; -z\right) = \frac{e^{-z} (12z^5 + 148z^4 + 427z^3 + 192z^2 - 12z - 12)}{198z^2} + \frac{1}{396} \sqrt{\pi} (24z^{7/2} + 308z^{5/2} + 990z^{3/2} + 693\sqrt{z}) \operatorname{erf}(\sqrt{z}) + \frac{2}{33z^2}$$

07.25.03.6836.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{1}{2}, 4; z\right) = \frac{2(13z + 10)}{143z^3} + \frac{e^z (-12z^6 + 176z^5 - 633z^4 + 400z^3 + 48z^2 - 18z - 60)}{429z^3} + \frac{1}{858} \sqrt{\pi} (24z^{7/2} - 364z^{5/2} + 1430z^{3/2} - 1287\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6837.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{1}{2}, 4; -z\right) = \frac{2(13z - 10)}{143z^3} + \frac{e^{-z} (12z^6 + 176z^5 + 633z^4 + 400z^3 - 48z^2 - 18z + 60)}{429z^3} + \frac{1}{858} \sqrt{\pi} (24z^{7/2} + 364z^{5/2} + 1430z^{3/2} + 1287\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.6838.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{1}{2}, 5; z\right) = \frac{4(13z^2 + 20z + 14)}{143z^4} - \frac{8e^z (4z^7 - 68z^6 + 293z^5 - 240z^4 - 40z^3 + 45z + 105)}{2145z^4} + \frac{4\sqrt{\pi} (8z^{7/2} - 140z^{5/2} + 650z^{3/2} - 715\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{2145}$$

07.25.03.6839.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{1}{2}, 5; -z\right) = \frac{4(13z^2 - 20z + 14)}{143z^4} + \frac{8e^{-z}(4z^7 + 68z^6 + 293z^5 + 240z^4 - 40z^3 + 45z - 105)}{2145z^4} + \frac{4\sqrt{\pi}(8z^{7/2} + 140z^{5/2} + 650z^{3/2} + 715\sqrt{z})\operatorname{erf}(\sqrt{z})}{2145}$$

07.25.03.6840.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{1}{2}, 6; z\right) = \frac{20(221z^3 + 510z^2 + 714z + 504)}{7293z^5} - \frac{8e^z(24z^8 - 464z^7 + 2330z^6 - 2352z^5 - 480z^4 - 120z^3 + 360z^2 + 1575z + 3780)}{21879z^5} + \frac{8\sqrt{\pi}(24z^{7/2} - 476z^{5/2} + 2550z^{3/2} - 3315\sqrt{z})\operatorname{erfi}(\sqrt{z})}{21879}$$

07.25.03.6841.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{1}{2}, 6; -z\right) = \frac{20(221z^3 - 510z^2 + 714z - 504)}{7293z^5} + \frac{8e^{-z}(24z^8 + 464z^7 + 2330z^6 + 2352z^5 - 480z^4 + 120z^3 + 360z^2 - 1575z + 3780)}{21879z^5} + \frac{8\sqrt{\pi}(24z^{7/2} + 476z^{5/2} + 2550z^{3/2} + 3315\sqrt{z})\operatorname{erf}(\sqrt{-z})}{21879}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = 1$

07.25.03.6842.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, 1; z\right) = \frac{1}{210}e^{z/2}(72z^4 - 740z^3 + 2012z^2 - 1575z + 210)I_0\left(\frac{z}{2}\right) + \frac{1}{210}e^{z/2}(-72z^4 + 668z^3 - 1380z^2 + 457z)I_1\left(\frac{z}{2}\right)$$

07.25.03.6843.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, \frac{3}{2}; z\right) = \frac{1}{768}e^z(-72z^3 + 748z^2 - 1762z + 663) + \frac{\sqrt{\pi}(144z^4 - 1568z^3 + 4200z^2 - 2520z + 105)\operatorname{erfi}(\sqrt{z})}{1536\sqrt{z}}$$

07.25.03.6844.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, \frac{3}{2}; -z\right) = \frac{1}{768}e^{-z}(72z^3 + 748z^2 + 1762z + 663) + \frac{\sqrt{\pi}(144z^4 + 1568z^3 + 4200z^2 + 2520z + 105)\operatorname{erf}(\sqrt{-z})}{1536\sqrt{-z}}$$

07.25.03.6845.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, 2; z\right) = \frac{1}{105}e^{z/2}(8z^4 - 104z^3 + 376z^2 - 420z + 105)I_0\left(\frac{z}{2}\right) - \frac{4}{105}e^{z/2}(2z^4 - 24z^3 + 71z^2 - 44z)I_1\left(\frac{z}{2}\right)$$

07.25.03.6846.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, \frac{5}{2}; z\right) = \frac{e^z (-144 z^4 + 1888 z^3 - 6128 z^2 + 4000 z + 105)}{5120 z} + \frac{\sqrt{\pi} (288 z^5 - 3920 z^4 + 14000 z^3 - 12600 z^2 + 1050 z - 105) \operatorname{erfi}(\sqrt{z})}{10240 z^{3/2}}$$

07.25.03.6847.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, \frac{5}{2}; -z\right) = \frac{e^{-z} (144 z^4 + 1888 z^3 + 6128 z^2 + 4000 z - 105)}{5120 z} + \frac{\sqrt{\pi} (288 z^5 + 3920 z^4 + 14000 z^3 + 12600 z^2 + 1050 z + 105) \operatorname{erf}(\sqrt{z})}{10240 z^{3/2}}$$

07.25.03.6848.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, 3; z\right) = \frac{2 e^{z/2} (144 z^4 - 2264 z^3 + 10212 z^2 - 14700 z + 5145) I_0\left(\frac{z}{2}\right)}{10395} - \frac{2 e^{z/2} (144 z^5 - 2120 z^4 + 8164 z^3 - 7452 z^2 + 105 z - 210) I_1\left(\frac{z}{2}\right)}{10395 z}$$

07.25.03.6849.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, \frac{7}{2}; z\right) = \frac{e^z (-96 z^5 + 1520 z^4 - 6288 z^3 + 5896 z^2 + 210 z + 315)}{8192 z^2} + \frac{\sqrt{\pi} (192 z^6 - 3136 z^5 + 14000 z^4 - 16800 z^3 + 2100 z^2 - 420 z - 315) \operatorname{erfi}(\sqrt{z})}{16384 z^{5/2}}$$

07.25.03.6850.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, \frac{7}{2}; -z\right) = \frac{e^{-z} (96 z^5 + 1520 z^4 + 6288 z^3 + 5896 z^2 - 210 z + 315)}{8192 z^2} + \frac{\sqrt{\pi} (192 z^6 + 3136 z^5 + 14000 z^4 + 16800 z^3 + 2100 z^2 + 420 z - 315) \operatorname{erf}(\sqrt{z})}{16384 z^{5/2}}$$

07.25.03.6851.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, 4; z\right) = \frac{4 e^{z/2} (144 z^5 - 2656 z^4 + 14356 z^3 - 25200 z^2 + 11025 z - 210) I_0\left(\frac{z}{2}\right)}{45045 z} - \frac{4 e^{z/2} (144 z^6 - 2512 z^5 + 11916 z^4 - 14396 z^3 + 525 z^2 - 945 z - 840) I_1\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.6852.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, \frac{9}{2}; z\right) = \frac{e^z (-576 z^6 + 10688 z^5 - 53744 z^4 + 65952 z^3 + 2100 z^2 + 7980 z + 7875)}{98304 z^3} + \frac{1}{196608 z^{7/2}} \sqrt{\pi} (1152 z^7 - 21952 z^6 + 117600 z^5 - 176400 z^4 + 29400 z^3 - 8820 z^2 - 13230 z - 7875) \operatorname{erfi}(\sqrt{z})$$

07.25.03.6853.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, \frac{9}{2}; -z\right) = \frac{e^{-z} (576 z^6 + 10688 z^5 + 53744 z^4 + 65952 z^3 - 2100 z^2 + 7980 z - 7875)}{98304 z^3} + \frac{1}{196608 z^{7/2}} \sqrt{\pi} (1152 z^7 + 21952 z^6 + 117600 z^5 + 176400 z^4 + 29400 z^3 + 8820 z^2 - 13230 z + 7875) \operatorname{erf}(\sqrt{z})$$

07.25.03.6854.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, 5; z\right) = \frac{16 e^{z/2} (96 z^6 - 2032 z^5 + 12800 z^4 - 26460 z^3 + 13650 z^2 - 735 z - 630) I_0\left(\frac{z}{2}\right)}{225225 z^2} - \frac{16 e^{z/2} (96 z^7 - 1936 z^6 + 10912 z^5 - 16420 z^4 + 1050 z^3 - 1785 z^2 - 2940 z - 2520) I_1\left(\frac{z}{2}\right)}{225225 z^3}$$

07.25.03.6855.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, \frac{11}{2}; z\right) = \frac{1}{2097152 z^{9/2}} \left(3 \sqrt{\pi} (2304 z^8 - 50176 z^7 + 313600 z^6 - 564480 z^5 + 117600 z^4 - 47040 z^3 - 105840 z^2 - 126000 z - 77175) \operatorname{erfi}(\sqrt{z})\right) - \frac{3 e^z (1152 z^7 - 24512 z^6 + 145120 z^5 - 220496 z^4 - 4200 z^3 - 42420 z^2 - 74550 z - 77175)}{1048576 z^4}$$

07.25.03.6856.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (1152 z^7 + 24512 z^6 + 145120 z^5 + 220496 z^4 - 4200 z^3 + 42420 z^2 - 74550 z + 77175)}{1048576 z^4} + \frac{1}{2097152 z^{9/2}} \left(3 \sqrt{\pi} (2304 z^8 + 50176 z^7 + 313600 z^6 + 564480 z^5 + 117600 z^4 + 47040 z^3 - 105840 z^2 + 126000 z - 77175) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.6857.01

$${}_2F_2\left(-\frac{7}{2}, 2; 1, 6; z\right) = \frac{32 e^{z/2} (288 z^7 - 6880 z^6 + 49488 z^5 - 117600 z^4 + 69090 z^3 - 6930 z^2 - 11025 z - 10080) I_0\left(\frac{z}{2}\right)}{2297295 z^3} - \frac{1}{2297295 z^4} 64 e^{z/2} (144 z^8 - 3296 z^7 + 21520 z^6 - 38784 z^5 + 3675 z^4 - 6090 z^3 - 14490 z^2 - 22050 z - 20160) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = \frac{3}{2}$

07.25.03.6858.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{3}{2}, 2; z\right) = \frac{1}{384} e^z (-8 z^3 + 108 z^2 - 370 z + 279) + \frac{\sqrt{\pi} (16 z^4 - 224 z^3 + 840 z^2 - 840 z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.6859.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{3}{2}, 2; -z\right) = \frac{1}{384} e^{-z} (8 z^3 + 108 z^2 + 370 z + 279) + \frac{\sqrt{\pi} (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.6860.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{3}{2}, 3; z\right) = \frac{e^z (-72 z^5 + 1196 z^4 - 5378 z^3 + 6135 z^2 - 192 z + 192)}{9504 z^2} + \frac{\sqrt{\pi} (144 z^4 - 2464 z^3 + 11880 z^2 - 16632 z + 3465) \operatorname{erfi}(\sqrt{z})}{19008 \sqrt{z}} - \frac{2}{99 z^2}$$

07.25.03.6861.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{3}{2}, 3; -z\right) = \frac{e^{-z} (72 z^5 + 1196 z^4 + 5378 z^3 + 6135 z^2 + 192 z + 192)}{9504 z^2} + \frac{\sqrt{\pi} (144 z^4 + 2464 z^3 + 11880 z^2 + 16632 z + 3465) \operatorname{erf}(\sqrt{z})}{19008 \sqrt{z}} - \frac{2}{99 z^2}$$

07.25.03.6862.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{3}{2}, 4; z\right) = -\frac{2(13z+6)}{429 z^3} + \frac{e^z (-72 z^6 + 1420 z^5 - 7906 z^4 + 12111 z^3 - 960 z^2 + 672 z + 576)}{20592 z^3} + \frac{\sqrt{\pi} (144 z^4 - 2912 z^3 + 17160 z^2 - 30888 z + 9009) \operatorname{erfi}(\sqrt{z})}{41184 \sqrt{z}}$$

07.25.03.6863.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{3}{2}, 4; -z\right) = -\frac{2(13z-6)}{429 z^3} + \frac{e^{-z} (72 z^6 + 1420 z^5 + 7906 z^4 + 12111 z^3 + 960 z^2 + 672 z - 576)}{20592 z^3} + \frac{\sqrt{\pi} (144 z^4 + 2912 z^3 + 17160 z^2 + 30888 z + 9009) \operatorname{erf}(\sqrt{z})}{41184 \sqrt{z}}$$

07.25.03.6864.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{3}{2}, 5; z\right) = -\frac{4(13z^2+12z+6)}{429 z^4} + \frac{e^z (-24 z^7 + 548 z^6 - 3638 z^5 + 7005 z^4 - 960 z^3 + 480 z^2 + 720 z + 720)}{12870 z^4} + \frac{\sqrt{\pi} (48 z^4 - 1120 z^3 + 7800 z^2 - 17160 z + 6435) \operatorname{erfi}(\sqrt{z})}{25740 \sqrt{z}}$$

07.25.03.6865.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{3}{2}, 5; -z\right) = -\frac{4(13z^2-12z+6)}{429 z^4} + \frac{e^{-z} (24 z^7 + 548 z^6 + 3638 z^5 + 7005 z^4 + 960 z^3 + 480 z^2 - 720 z + 720)}{12870 z^4} + \frac{\sqrt{\pi} (48 z^4 + 1120 z^3 + 7800 z^2 + 17160 z + 6435) \operatorname{erf}(\sqrt{z})}{25740 \sqrt{z}}$$

07.25.03.6866.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{3}{2}, 6; z\right) = -\frac{20(221z^3 + 306z^2 + 306z + 168)}{21879z^5} + \frac{e^z(-72z^8 + 1868z^7 - 14402z^6 + 33423z^5 - 6720z^4 + 2400z^3 + 5040z^2 + 8280z + 10080)}{65637z^5} + \frac{\sqrt{\pi}(144z^4 - 3808z^3 + 30600z^2 - 79560z + 36465)\operatorname{erfi}(\sqrt{z})}{131274\sqrt{z}}$$

07.25.03.6867.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{3}{2}, 6; -z\right) = -\frac{20(221z^3 - 306z^2 + 306z - 168)}{21879z^5} + \frac{e^{-z}(72z^8 + 1868z^7 + 14402z^6 + 33423z^5 + 6720z^4 + 2400z^3 - 5040z^2 + 8280z - 10080)}{65637z^5} + \frac{\sqrt{\pi}(144z^4 + 3808z^3 + 30600z^2 + 79560z + 36465)\operatorname{erf}(\sqrt{z})}{131274\sqrt{z}}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = 2$

07.25.03.6868.01

$${}_2F_2\left(-\frac{7}{2}, 2; 2, 2; z\right) = \frac{1}{945} e^{z/2} (16z^4 - 264z^3 + 1284z^2 - 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16z^4 + 248z^3 - 1044z^2 + 1164z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.6869.01

$${}_2F_2\left(-\frac{7}{2}, 2; 2, \frac{5}{2}; z\right) = \frac{e^z(-16z^4 + 272z^3 - 1272z^2 + 1580z - 105)}{2560z} + \frac{\sqrt{\pi}(32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105)\operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.6870.01

$${}_2F_2\left(-\frac{7}{2}, 2; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(16z^4 + 272z^3 + 1272z^2 + 1580z + 105)}{2560z} + \frac{\sqrt{\pi}(32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105)\operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.6871.01

$${}_2F_2\left(-\frac{7}{2}, 2; 2, 3; z\right) = \frac{4e^{z/2}(16z^4 - 320z^3 + 1956z^2 - 4200z + 2625)I_0\left(\frac{z}{2}\right)}{10395} - \frac{4e^{z/2}(16z^5 - 304z^4 + 1660z^3 - 2676z^2 + 525z + 105)I_1\left(\frac{z}{2}\right)}{10395z}$$

07.25.03.6872.01

$${}_2F_2\left(-\frac{7}{2}, 2; 2, \frac{7}{2}; z\right) = \frac{e^z (-32 z^5 + 656 z^4 - 3888 z^3 + 6744 z^2 - 1050 z - 315)}{12\,288 z^2} + \frac{\sqrt{\pi} (64 z^6 - 1344 z^5 + 8400 z^4 - 16\,800 z^3 + 6300 z^2 + 1260 z + 315) \operatorname{erfi}(\sqrt{z})}{24\,576 z^{5/2}}$$

07.25.03.6873.01

$${}_2F_2\left(-\frac{7}{2}, 2; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 656 z^4 + 3888 z^3 + 6744 z^2 + 1050 z - 315)}{12\,288 z^2} + \frac{\sqrt{\pi} (64 z^6 + 1344 z^5 + 8400 z^4 + 16\,800 z^3 + 6300 z^2 - 1260 z + 315) \operatorname{erf}(\sqrt{z})}{24\,576 z^{5/2}}$$

07.25.03.6874.01

$${}_2F_2\left(-\frac{7}{2}, 2; 2, 4; z\right) = \frac{4 e^{z/2} (32 z^5 - 752 z^4 + 5536 z^3 - 14\,700 z^2 + 11\,550 z + 105) I_0\left(\frac{z}{2}\right)}{45\,045 z} - \frac{4 e^{z/2} (32 z^6 - 720 z^5 + 4832 z^4 - 10\,196 z^3 + 3150 z^2 + 1155 z + 420) I_1\left(\frac{z}{2}\right)}{45\,045 z^2}$$

07.25.03.6875.01

$${}_2F_2\left(-\frac{7}{2}, 2; 2, \frac{9}{2}; z\right) = \frac{e^z (-64 z^6 + 1536 z^5 - 11\,024 z^4 + 24\,576 z^3 - 6300 z^2 - 3360 z - 1575)}{49\,152 z^3} + \frac{\sqrt{\pi} (128 z^7 - 3136 z^6 + 23\,520 z^5 - 58\,800 z^4 + 29\,400 z^3 + 8820 z^2 + 4410 z + 1575) \operatorname{erfi}(\sqrt{z})}{98\,304 z^{7/2}}$$

07.25.03.6876.01

$${}_2F_2\left(-\frac{7}{2}, 2; 2, \frac{9}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1536 z^5 + 11\,024 z^4 + 24\,576 z^3 + 6300 z^2 - 3360 z + 1575)}{49\,152 z^3} + \frac{\sqrt{\pi} (128 z^7 + 3136 z^6 + 23\,520 z^5 + 58\,800 z^4 + 29\,400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{98\,304 z^{7/2}}$$

07.25.03.6877.01

$${}_2F_2\left(-\frac{7}{2}, 2; 2, 5; z\right) = \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23\,520 z^3 + 22\,050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right)}{675\,675 z^2} - \frac{64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675\,675 z^3}$$

07.25.03.6878.01

$${}_2F_2\left(-\frac{7}{2}, 2; 2, \frac{11}{2}; z\right) = \frac{1}{1048\,576 z^{9/2}} - \frac{3 \sqrt{\pi} (256 z^8 - 7168 z^7 + 62\,720 z^6 - 188\,160 z^5 + 117\,600 z^4 + 47\,040 z^3 + 35\,280 z^2 + 25\,200 z + 11\,025) \operatorname{erfi}(\sqrt{z}) - 3 e^z (128 z^7 - 3520 z^6 + 29\,664 z^5 - 80\,848 z^4 + 29\,400 z^3 + 21\,420 z^2 + 17\,850 z + 11\,025)}{524\,288 z^4}$$

07.25.03.6879.01

$${}_2F_2\left(-\frac{7}{2}, 2; 2, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29664 z^5 + 80848 z^4 + 29400 z^3 - 21420 z^2 + 17850 z - 11025)}{524288 z^4} + \frac{1}{1048576 z^{9/2}}$$

$$3 \sqrt{\pi} (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025) \operatorname{erf}(\sqrt{z})$$

07.25.03.6880.01

$${}_2F_2\left(-\frac{7}{2}, 2; 2, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right)}{2297295 z^3} - \frac{1}{2297295 z^4} 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = \frac{5}{2}$

07.25.03.6881.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{5}{2}, 3; z\right) = \frac{e^z (-144 z^5 + 3008 z^4 - 18368 z^3 + 33720 z^2 - 6555 z - 3840)}{63360 z^2} + \frac{\sqrt{\pi} (288 z^5 - 6160 z^4 + 39600 z^3 - 83160 z^2 + 34650 z + 10395) \operatorname{erfi}(\sqrt{z})}{126720 z^{3/2}} + \frac{2}{33 z^2}$$

07.25.03.6882.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (144 z^5 + 3008 z^4 + 18368 z^3 + 33720 z^2 + 6555 z - 3840)}{63360 z^2} + \frac{\sqrt{\pi} (288 z^5 + 6160 z^4 + 39600 z^3 + 83160 z^2 + 34650 z - 10395) \operatorname{erf}(\sqrt{z})}{126720 z^{3/2}} + \frac{2}{33 z^2}$$

07.25.03.6883.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{5}{2}, 4; z\right) = \frac{2(13z+2)}{143z^3} + \frac{e^z (-144 z^6 + 3568 z^5 - 26888 z^4 + 65380 z^3 - 22005 z^2 - 21120 z - 3840)}{137280 z^3} + \frac{\sqrt{\pi} (288 z^5 - 7280 z^4 + 57200 z^3 - 154440 z^2 + 90090 z + 45045) \operatorname{erfi}(\sqrt{z})}{274560 z^{3/2}}$$

07.25.03.6884.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{5}{2}, 4; -z\right) = \frac{2(13z-2)}{143z^3} + \frac{e^{-z} (144 z^6 + 3568 z^5 + 26888 z^4 + 65380 z^3 + 22005 z^2 - 21120 z + 3840)}{137280 z^3} + \frac{\sqrt{\pi} (288 z^5 + 7280 z^4 + 57200 z^3 + 154440 z^2 + 90090 z - 45045) \operatorname{erf}(\sqrt{z})}{274560 z^{3/2}}$$

$$\begin{aligned}
 & 07.25.03.6885.01 \\
 {}_2F_2\left(-\frac{7}{2}, 2; \frac{5}{2}, 5; z\right) = & \frac{4(65z^2 + 20z + 6)}{715z^4} + \frac{e^z(-48z^7 + 1376z^6 - 12336z^5 + 37360z^4 - 18165z^3 - 23040z^2 - 6720z - 2880)}{85800z^4} + \\
 & \frac{\sqrt{\pi}(96z^5 - 2800z^4 + 26000z^3 - 85800z^2 + 64350z + 45045)\operatorname{erfi}(\sqrt{z})}{171600z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.6886.01 \\
 {}_2F_2\left(-\frac{7}{2}, 2; \frac{5}{2}, 5; -z\right) = & \frac{4(65z^2 - 20z + 6)}{715z^4} + \frac{e^{-z}(48z^7 + 1376z^6 + 12336z^5 + 37360z^4 + 18165z^3 - 23040z^2 + 6720z - 2880)}{85800z^4} + \\
 & \frac{\sqrt{\pi}(96z^5 + 2800z^4 + 26000z^3 + 85800z^2 + 64350z - 45045)\operatorname{erf}(\sqrt{z})}{171600z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.6887.01 \\
 {}_2F_2\left(-\frac{7}{2}, 2; \frac{5}{2}, 6; z\right) = & \frac{4(1105z^3 + 510z^2 + 306z + 120)}{7293z^5} + \\
 & \frac{1}{437580z^5} e^z(-144z^8 + 4688z^7 - 48728z^6 + 176700z^5 - 113145z^4 - 174720z^3 - 63360z^2 - 44640z - 28800) + \\
 & \frac{\sqrt{\pi}(288z^5 - 9520z^4 + 102000z^3 - 397800z^2 + 364650z + 328185)\operatorname{erfi}(\sqrt{z})}{875160z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.6888.01 \\
 {}_2F_2\left(-\frac{7}{2}, 2; \frac{5}{2}, 6; -z\right) = & \frac{4(1105z^3 - 510z^2 + 306z - 120)}{7293z^5} + \\
 & \frac{1}{437580z^5} e^{-z}(144z^8 + 4688z^7 + 48728z^6 + 176700z^5 + 113145z^4 - 174720z^3 + 63360z^2 - 44640z + 28800) + \\
 & \frac{\sqrt{\pi}(288z^5 + 9520z^4 + 102000z^3 + 397800z^2 + 364650z - 328185)\operatorname{erf}(\sqrt{z})}{875160z^{3/2}}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = 3$

$$\begin{aligned}
 & 07.25.03.6889.01 \\
 {}_2F_2\left(-\frac{7}{2}, 2; 3, 3; z\right) = & \frac{8e^{z/2}(288z^6 - 6992z^5 + 53952z^4 - 153876z^3 + 134502z^2 + 10395z - 20790)I_0\left(\frac{z}{2}\right)}{1029105z^2} - \\
 & \frac{8e^{z/2}(288z^5 - 6704z^4 + 47392z^3 - 109548z^2 + 42846z + 28653)I_1\left(\frac{z}{2}\right)}{1029105z} + \frac{16}{99z^2}
 \end{aligned}$$

07.25.03.6890.01

$${}_2F_2\left(-\frac{7}{2}, 2; 3, \frac{7}{2}; z\right) = \frac{e^z (-96 z^5 + 2416 z^4 - 18640 z^3 + 47208 z^2 - 17790 z - 20325)}{101376 z^2} + \frac{\sqrt{\pi} (192 z^6 - 4928 z^5 + 39600 z^4 - 110880 z^3 + 69300 z^2 + 41580 z - 10395) \operatorname{erfi}(\sqrt{z})}{202752 z^{5/2}} + \frac{10}{33 z^2}$$

07.25.03.6891.01

$${}_2F_2\left(-\frac{7}{2}, 2; 3, \frac{7}{2}; -z\right) = \frac{e^{-z} (96 z^5 + 2416 z^4 + 18640 z^3 + 47208 z^2 + 17790 z - 20325)}{101376 z^2} + \frac{\sqrt{\pi} (192 z^6 + 4928 z^5 + 39600 z^4 + 110880 z^3 + 69300 z^2 - 41580 z - 10395) \operatorname{erf}(\sqrt{z})}{202752 z^{5/2}} + \frac{10}{33 z^2}$$

07.25.03.6892.01

$${}_2F_2\left(-\frac{7}{2}, 2; 3, 4; z\right) = \frac{16 e^{z/2} (288 z^6 - 8224 z^5 + 76656 z^4 - 272544 z^3 + 302538 z^2 + 62370 z - 135135) I_0\left(\frac{z}{2}\right)}{4459455 z^2} - \frac{32 e^{z/2} (144 z^6 - 3968 z^5 + 34432 z^4 - 103680 z^3 + 61287 z^2 + 64536 z - 10395) I_1\left(\frac{z}{2}\right)}{4459455 z^2} + \frac{16}{33 z^2}$$

07.25.03.6893.01

$${}_2F_2\left(-\frac{7}{2}, 2; 3, \frac{9}{2}; z\right) = \frac{e^z (-576 z^6 + 16960 z^5 - 158128 z^4 + 510816 z^3 - 290220 z^2 - 458220 z + 51975)}{1216512 z^3} + \frac{1}{2433024 z^{7/2}} + \frac{\sqrt{\pi} (1152 z^7 - 34496 z^6 + 332640 z^5 - 1164240 z^4 + 970200 z^3 + 873180 z^2 - 436590 z - 51975) \operatorname{erfi}(\sqrt{z})}{99 z^2}$$

07.25.03.6894.01

$${}_2F_2\left(-\frac{7}{2}, 2; 3, \frac{9}{2}; -z\right) = \frac{e^{-z} (576 z^6 + 16960 z^5 + 158128 z^4 + 510816 z^3 + 290220 z^2 - 458220 z - 51975)}{1216512 z^3} + \frac{1}{2433024 z^{7/2}} + \frac{\sqrt{\pi} (1152 z^7 + 34496 z^6 + 332640 z^5 + 1164240 z^4 + 970200 z^3 - 873180 z^2 - 436590 z + 51975) \operatorname{erf}(\sqrt{z})}{99 z^2}$$

07.25.03.6895.01

$${}_2F_2\left(-\frac{7}{2}, 2; 3, 5; z\right) = \frac{64 e^{z/2} (192 z^6 - 6304 z^5 + 68880 z^4 - 293280 z^3 + 392520 z^2 + 145530 z - 343035) I_0\left(\frac{z}{2}\right)}{22297275 z^2} - \frac{1}{22297275 z^3} 64 e^{z/2} (192 z^7 - 6112 z^6 + 62864 z^5 - 233280 z^4 + 185160 z^3 + 260310 z^2 - 93555 z - 20790) I_1\left(\frac{z}{2}\right) + \frac{32}{33 z^2}$$

07.25.03.6896.01

$${}_2F_2\left(-\frac{7}{2}, 2; 3, \frac{11}{2}; z\right) = \frac{1}{4325376 z^4} e^z (-1152 z^7 + 38848 z^6 - 424672 z^5 + 1668432 z^4 - 1275288 z^3 - 2508492 z^2 + 686070 z + 218295) + \frac{1}{8650752 z^{9/2}} \left(\sqrt{\pi} (2304 z^8 - 78848 z^7 + 887040 z^6 - 3725568 z^5 + 3880800 z^4 + 4656960 z^3 - 3492720 z^2 - 831600 z - 218295) \operatorname{erfi}(\sqrt{z}) \right) + \frac{14}{11 z^2}$$

$$\begin{aligned}
 & \text{07.25.03.6897.01} \\
 {}_2F_2\left(-\frac{7}{2}, 2; 3, \frac{11}{2}; -z\right) = & \\
 & \frac{1}{4\,325\,376\,z^4} e^{-z} (1152\,z^7 + 38\,848\,z^6 + 424\,672\,z^5 + 1\,668\,432\,z^4 + 1\,275\,288\,z^3 - 2\,508\,492\,z^2 - 686\,070\,z + 218\,295) + \\
 & \frac{1}{8\,650\,752\,z^{9/2}} \left(\sqrt{\pi} (2304\,z^8 + 78\,848\,z^7 + 887\,040\,z^6 + 3\,725\,568\,z^5 + \right. \\
 & \left. 3\,880\,800\,z^4 - 4\,656\,960\,z^3 - 3\,492\,720\,z^2 + 831\,600\,z - 218\,295) \operatorname{erf}(\sqrt{z}) \right) + \frac{14}{11\,z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6898.01} \\
 {}_2F_2\left(-\frac{7}{2}, 2; 3, 6; z\right) = & \frac{1}{227\,432\,205\,z^3} \\
 & 128\,e^{z/2} (576\,z^7 - 21\,376\,z^6 + 267\,888\,z^5 - 1\,328\,640\,z^4 + 2\,075\,160\,z^3 + 1\,164\,240\,z^2 - 2\,983\,365\,z - 41\,580) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{227\,432\,205\,z^4} \left(128\,e^{z/2} (576\,z^8 - 20\,800\,z^7 + 247\,376\,z^6 - 1\,091\,088\,z^5 + 1\,088\,760\,z^4 + \right. \\
 & \left. 1\,897\,320\,z^3 - 1\,091\,475\,z^2 - 446\,985\,z - 166\,320) I_1\left(\frac{z}{2}\right) \right) + \frac{160}{99\,z^2}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = \frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.6899.01} \\
 {}_2F_2\left(-\frac{7}{2}, 2; \frac{7}{2}, 4; z\right) = & \frac{10(13z-2)}{143z^3} + \frac{e^z(-96z^6 + 2864z^5 - 27\,216z^4 + 90\,664z^3 - 55\,230z^2 - 95\,265z + 30\,720)}{219\,648z^3} + \\
 & \frac{\sqrt{\pi} (192z^6 - 5824z^5 + 57\,200z^4 - 205\,920z^3 + 180\,180z^2 + 180\,180z - 135\,135) \operatorname{erfi}(\sqrt{z})}{439\,296z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6900.01} \\
 {}_2F_2\left(-\frac{7}{2}, 2; \frac{7}{2}, 4; -z\right) = & \frac{10(13z+2)}{143z^3} + \frac{e^{-z}(96z^6 + 2864z^5 + 27\,216z^4 + 90\,664z^3 + 55\,230z^2 - 95\,265z - 30\,720)}{219\,648z^3} + \\
 & \frac{\sqrt{\pi} (192z^6 + 5824z^5 + 57\,200z^4 + 205\,920z^3 + 180\,180z^2 - 180\,180z - 135\,135) \operatorname{erf}(\sqrt{z})}{439\,296z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6901.01} \\
 {}_2F_2\left(-\frac{7}{2}, 2; \frac{7}{2}, 5; z\right) = & \\
 & \frac{4(65z^2 - 20z - 2)}{143z^4} + \frac{e^z(-32z^7 + 1104z^6 - 12\,464z^5 + 51\,480z^4 - 43\,610z^3 - 97\,335z^2 + 69\,120z + 7680)}{137\,280z^4} + \\
 & \frac{\sqrt{\pi} (64z^6 - 2240z^5 + 26\,000z^4 - 114\,400z^3 + 128\,700z^2 + 180\,180z - 225\,225) \operatorname{erfi}(\sqrt{z})}{274\,560z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6902.01} \\
 {}_2F_2\left(-\frac{7}{2}, 2; \frac{7}{2}, 5; -z\right) = & \frac{4(65z^2 + 20z - 2)}{143z^4} + \frac{e^{-z}(32z^7 + 1104z^6 + 12464z^5 + 51480z^4 + 43610z^3 - 97335z^2 - 69120z + 7680)}{137280z^4} + \\
 & \frac{\sqrt{\pi}(64z^6 + 2240z^5 + 26000z^4 + 114400z^3 + 128700z^2 - 180180z - 225225)\operatorname{erf}(\sqrt{z})}{274560z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6903.01} \\
 {}_2F_2\left(-\frac{7}{2}, 2; \frac{7}{2}, 6; z\right) = & \frac{20(1105z^3 - 510z^2 - 102z - 24)}{7293z^5} + \\
 & \frac{1}{700128z^5} e^z(-96z^8 + 3760z^7 - 49168z^6 + 242376z^5 - 263790z^4 - 713265z^3 + 806400z^2 + 149760z + 46080) + \\
 & \frac{\sqrt{\pi}(192z^6 - 7616z^5 + 102000z^4 - 530400z^3 + 729300z^2 + 1312740z - 2297295)\operatorname{erfi}(\sqrt{z})}{1400256z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6904.01} \\
 {}_2F_2\left(-\frac{7}{2}, 2; \frac{7}{2}, 6; -z\right) = & \frac{20(1105z^3 + 510z^2 - 102z + 24)}{7293z^5} + \\
 & \frac{1}{700128z^5} e^{-z}(96z^8 + 3760z^7 + 49168z^6 + 242376z^5 + 263790z^4 - 713265z^3 - 806400z^2 + 149760z - 46080) + \\
 & \frac{\sqrt{\pi}(192z^6 + 7616z^5 + 102000z^4 + 530400z^3 + 729300z^2 - 1312740z - 2297295)\operatorname{erf}(\sqrt{z})}{1400256z^{5/2}}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = 4$

$$\begin{aligned}
 & \text{07.25.03.6905.01} \\
 {}_2F_2\left(-\frac{7}{2}, 2; 4, 4; z\right) = & \frac{16(13z - 4)}{143z^3} + \frac{1}{19324305z^3} \\
 & \frac{16e^{z/2}(576z^7 - 19360z^6 + 218416z^5 - 973152z^4 + 1384920z^3 + 681738z^2 - 2027025z + 540540)I_0\left(\frac{z}{2}\right) -}{19324305z^2} \\
 & 16e^{z/2}(576z^6 - 18784z^5 + 199920z^4 - 782048z^3 + 685848z^2 + 1125270z - 921693)I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.6906.01} \\
 {}_2F_2\left(-\frac{7}{2}, 2; 4, \frac{9}{2}; z\right) = & \frac{70(13z - 6)}{429z^3} + \frac{e^z(-576z^6 + 20096z^5 - 230480z^4 + 975168z^3 - 866460z^2 - 2045400z + 1904805)}{2635776z^3} + \frac{1}{5271552z^{7/2}} + \\
 & \frac{\sqrt{\pi}(1152z^7 - 40768z^6 + 480480z^5 - 2162160z^4 + 2522520z^3 + 3783780z^2 - 5675670z + 675675)\operatorname{erfi}(\sqrt{z})}{5271552z^{7/2}}
 \end{aligned}$$

07.25.03.6907.01

$${}_2F_2\left(-\frac{7}{2}, 2; 4, \frac{9}{2}; -z\right) = \frac{70(13z+6)}{429z^3} + \frac{e^{-z}(576z^6 + 20096z^5 + 230480z^4 + 975168z^3 + 866460z^2 - 2045400z - 1904805)}{2635776z^3} + \frac{1}{5271552z^{7/2}} - \frac{\sqrt{\pi}(1152z^7 + 40768z^6 + 480480z^5 + 2162160z^4 + 2522520z^3 - 3783780z^2 - 5675670z - 675675)\operatorname{erf}(\sqrt{z})}{1}$$

07.25.03.6908.01

$${}_2F_2\left(-\frac{7}{2}, 2; 4, 5; z\right) = \frac{32(13z-8)}{143z^3} + \frac{1}{96621525z^3} 128e^{z/2}(192z^7 - 7424z^6 + 98320z^5 - 526560z^4 + 910920z^3 + 758400z^2 - 2837835z + 1351350)I_0\left(\frac{z}{2}\right) - \frac{1}{96621525z^3} 128e^{z/2}(192z^7 - 7232z^6 + 91184z^5 - 438800z^4 + 511080z^3 + 1121160z^2 - 1696125z + 135135)I_1\left(\frac{z}{2}\right)$$

07.25.03.6909.01

$${}_2F_2\left(-\frac{7}{2}, 2; 4, \frac{11}{2}; z\right) = \frac{42(13z-10)}{143z^3} + \frac{1}{9371648z^4} e^z(-1152z^7 + 46016z^6 - 618208z^5 + 3171920z^4 - 3715992z^3 - 10947468z^2 + 17344950z - 945945) + \frac{1}{18743296z^{9/2}} (\sqrt{\pi}(2304z^8 - 93184z^7 + 1281280z^6 - 6918912z^5 + 10090080z^4 + 20180160z^3 - 45405360z^2 + 10810800z + 945945)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.6910.01

$${}_2F_2\left(-\frac{7}{2}, 2; 4, \frac{11}{2}; -z\right) = \frac{42(13z+10)}{143z^3} + \frac{1}{9371648z^4} e^{-z}(1152z^7 + 46016z^6 + 618208z^5 + 3171920z^4 + 3715992z^3 - 10947468z^2 - 17344950z - 945945) + \frac{1}{18743296z^{9/2}} (\sqrt{\pi}(2304z^8 + 93184z^7 + 1281280z^6 + 6918912z^5 + 10090080z^4 - 20180160z^3 - 45405360z^2 - 10810800z + 945945)\operatorname{erf}(\sqrt{z}))$$

07.25.03.6911.01

$${}_2F_2\left(-\frac{7}{2}, 2; 4, 6; z\right) = \frac{160(13z-12)}{429z^3} + \frac{1}{985539555z^3} (128e^{z/2}(1152z^7 - 50368z^6 + 765888z^5 - 4791120z^4 + 9739920z^3 + 11771640z^2 - 52972920z + 34729695)I_0\left(\frac{z}{2}\right) - \frac{1}{985539555z^4} (128e^{z/2}(1152z^8 - 49216z^7 + 717248z^6 - 4097328z^5 + 5955600z^4 + 16257000z^3 - 36156600z^2 + 6351345z + 1081080)I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = \frac{9}{2}$

07.25.03.6912.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{9}{2}, 5; z\right) = \frac{28(65z^2 - 60z + 6)}{429z^4} + \frac{1}{1647360z^4}$$

$$e^z(-192z^7 + 7744z^6 - 105424z^5 + 551520z^4 - 669060z^3 - 2050860z^2 + 3717945z - 645120) + \frac{1}{3294720z^{7/2}}$$

$$\sqrt{\pi}(384z^7 - 15680z^6 + 218400z^5 - 1201200z^4 + 1801800z^3 + 3783780z^2 - 9459450z + 3378375)\operatorname{erfi}(\sqrt{z})$$

07.25.03.6913.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{9}{2}, 5; -z\right) = \frac{28(65z^2 + 60z + 6)}{429z^4} + \frac{1}{1647360z^4}$$

$$e^{-z}(192z^7 + 7744z^6 + 105424z^5 + 551520z^4 + 669060z^3 - 2050860z^2 - 3717945z - 645120) + \frac{1}{3294720z^{7/2}}$$

$$\sqrt{\pi}(384z^7 + 15680z^6 + 218400z^5 + 1201200z^4 + 1801800z^3 - 3783780z^2 - 9459450z - 3378375)\operatorname{erf}(\sqrt{z})$$

07.25.03.6914.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{9}{2}, 6; z\right) =$$

$$\frac{140(1105z^3 - 1530z^2 + 306z + 24)}{21879z^5} + \frac{1}{8401536z^5} (e^z(-576z^8 + 26368z^7 - 415504z^6 + 2589312z^5 -$$

$$3987900z^4 - 14893200z^3 + 40625865z^2 - 15160320z - 1290240)) + \frac{1}{16803072z^{7/2}} (\sqrt{\pi}$$

$$(1152z^7 - 53312z^6 + 856800z^5 - 5569200z^4 + 10210200z^3 + 27567540z^2 - 96486390z + 57432375)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.6915.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{9}{2}, 6; -z\right) =$$

$$\frac{140(1105z^3 + 1530z^2 + 306z - 24)}{21879z^5} + \frac{1}{8401536z^5} (e^{-z}(576z^8 + 26368z^7 + 415504z^6 + 2589312z^5 +$$

$$3987900z^4 - 14893200z^3 - 40625865z^2 - 15160320z + 1290240)) + \frac{1}{16803072z^{7/2}} (\sqrt{\pi}$$

$$(1152z^7 + 53312z^6 + 856800z^5 + 5569200z^4 + 10210200z^3 - 27567540z^2 - 96486390z - 57432375)\operatorname{erf}(\sqrt{z}))$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = 5$

07.25.03.6916.01

$${}_2F_2\left(-\frac{7}{2}, 2; 5, 5; z\right) =$$

$$\frac{64(65z^2 - 80z + 16)}{715z^4} + \frac{1}{483107625z^4} \left(512e^{z/2}(128z^8 - 5696z^7 + 88640z^6 - 572080z^5 + 1210800z^4 +$$

$$1648680z^3 - 8325960z^2 + 7432425z - 1351350)I_0\left(\frac{z}{2}\right) - \frac{1}{483107625z^3}$$

$$512e^{z/2}(128z^7 - 5568z^6 + 83136z^5 - 491600z^4 + 755600z^3 + 2225880z^2 - 6017880z + 2506935)I_1\left(\frac{z}{2}\right)$$

07.25.03.6917.01

$${}_2F_2\left(-\frac{7}{2}, 2; 5, \frac{11}{2}; z\right) = \frac{84(13z^2 - 20z + 6)}{143z^4} + \frac{1}{5857280z^4} e^z (-384z^7 + 17728z^6 - 282528z^5 + 1789040z^4 - 2829960z^3 - 10890180z^2 + 32249490z - 15914115) + \frac{1}{11714560z^{9/2}} \left(\sqrt{\pi} (768z^8 - 35840z^7 + 582400z^6 - 3843840z^5 + 7207200z^4 + 20180160z^3 - 75675600z^2 + 54054000z - 4729725) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.6918.01

$${}_2F_2\left(-\frac{7}{2}, 2; 5, \frac{11}{2}; -z\right) = \frac{84(13z^2 + 20z + 6)}{143z^4} + \frac{1}{5857280z^4} e^{-z} (384z^7 + 17728z^6 + 282528z^5 + 1789040z^4 + 2829960z^3 - 10890180z^2 - 32249490z - 15914115) + \frac{1}{11714560z^{9/2}} \left(\sqrt{\pi} (768z^8 + 35840z^7 + 582400z^6 + 3843840z^5 + 7207200z^4 - 20180160z^3 - 75675600z^2 - 54054000z - 4729725) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.6919.01

$${}_2F_2\left(-\frac{7}{2}, 2; 5, 6; z\right) = \frac{64(65z^2 - 120z + 48)}{429z^4} + \frac{1}{4927697775z^4} \left(1024 e^{z/2} (384z^8 - 19328z^7 + 345600z^6 - 2610240z^5 + 6525600z^4 + 12612240z^3 - 79879680z^2 + 102702600z - 34459425) I_0\left(\frac{z}{2}\right) - \frac{1}{4927697775z^4} (4096 e^{z/2} (96z^8 - 4736z^7 + 81712z^6 - 573120z^5 + 1094700z^4 + 4029360z^3 - 15766110z^2 + 12012120z - 675675) I_1\left(\frac{z}{2}\right))\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = \frac{11}{2}$

07.25.03.6920.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{11}{2}, 6; z\right) = \frac{140(221z^3 - 510z^2 + 306z - 24)}{2431z^5} + \frac{1}{29872128z^5} \left(e^z (-1152z^8 + 60352z^7 - 1112800z^6 + 8383056z^5 - 16715160z^4 - 78816780z^3 + 344696310z^2 - 326489625z + 41287680)\right) + \frac{1}{59744256z^{9/2}} \left(\sqrt{\pi} (2304z^8 - 121856z^7 + 2284800z^6 - 17821440z^5 + 40840800z^4 + 147026880z^3 - 771891120z^2 + 918918000z - 241215975) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.6921.01

$${}_2F_2\left(-\frac{7}{2}, 2; \frac{11}{2}, 6; -z\right) = \frac{140(221z^3 + 510z^2 + 306z + 24)}{2431z^5} + \frac{1}{29872128z^5} (e^{-z}(1152z^8 + 60352z^7 + 1112800z^6 + 8383056z^5 + 16715160z^4 - 78816780z^3 - 344696310z^2 - 326489625z - 41287680)) + \frac{1}{59744256z^{9/2}} (\sqrt{\pi}(2304z^8 + 121856z^7 + 2284800z^6 + 17821440z^5 + 40840800z^4 - 147026880z^3 - 771891120z^2 - 918918000z - 241215975)\operatorname{erf}(\sqrt{z}))$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 2$, $b_1 = 6$

07.25.03.6922.01

$${}_2F_2\left(-\frac{7}{2}, 2; 6, 6; z\right) = \frac{320(1105z^3 - 3060z^2 + 2448z - 384)}{21879z^5} + \frac{1}{50262517305z^5} (1024e^{z/2}(2304z^9 - 131200z^8 + 2697024z^7 - 23870400z^6 + 70769520z^5 + 191280240z^4 - 1555547400z^3 + 2957954040z^2 - 1895268375z + 275675400)I_0\left(\frac{z}{2}\right)) - \frac{1}{50262517305z^4} (1024e^{z/2}(2304z^8 - 128896z^7 + 2569280z^6 - 21363264z^5 + 50569200z^4 + 233364240z^3 - 1311753960z^2 + 1772397000z - 539117415)I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{5}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.6923.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{3087315} (e^z(1024z^{10} + 19456z^9 + 91904z^8 + 89088z^7 + 34944z^6 - 115584z^5 + 413280z^4 - 1189440z^3 + 2629620z^2 - 3980340z + 3087315))$$

07.25.03.6924.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{280665} e^z(512z^9 + 7936z^8 + 26112z^7 + 5376z^6 + 14784z^5 - 50400z^4 + 131040z^3 - 267120z^2 + 379890z - 280665)$$

07.25.03.6925.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{e^z(256z^8 + 3072z^7 + 5376z^6 - 5376z^5 + 10080z^4 - 20160z^3 + 35280z^2 - 45360z + 31185)}{31185}$$

07.25.03.6926.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (128 z^7 + 1088 z^6 - 32 z^5 - 2640 z^4 + 6360 z^3 - 6900 z^2 + 7290 z - 4455)}{4455}$$

07.25.03.6927.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{891} e^z (64 z^6 + 320 z^5 - 816 z^4 - 96 z^3 + 3228 z^2 - 1836 z + 891)$$

07.25.03.6928.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{297} e^z (32 z^5 + 48 z^4 - 528 z^3 + 744 z^2 + 1242 z - 297)$$

07.25.03.6929.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{297} e^z (16 z^4 - 32 z^3 - 184 z^2 + 648 z + 297)$$

07.25.03.6930.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{297} e^{z/2} (8 z^4 - 24 z^3 - 72 z^2 + 324 z + 297) I_0\left(\frac{z}{2}\right) + \frac{4}{297} e^{z/2} (2 z^4 - 8 z^3 - 9 z^2 + 84 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6931.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{297} e^z (8 z^3 - 44 z^2 + 18 z + 297)$$

07.25.03.6932.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{297} e^{z/2} (8 z^3 - 52 z^2 + 52 z + 297) I_0\left(\frac{z}{2}\right) + \frac{1}{297} e^{z/2} (8 z^3 - 60 z^2 + 116 z + 143) I_1\left(\frac{z}{2}\right)$$

07.25.03.6933.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{99} e^z (4 z^2 - 36 z + 99)$$

07.25.03.6934.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, 3; z\right) = \frac{4}{297} e^{z/2} (4 z^2 - 40 z + 123) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4 z^3 - 44 z^2 + 169 z - 195) I_1\left(\frac{z}{2}\right)}{297 z}$$

07.25.03.6935.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2 z^3 - 25 z^2 + 112 z - 168)}{99 z^2} + \frac{140 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{33 z^{5/2}}$$

07.25.03.6936.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{140 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{33 z^{5/2}} - \frac{5 e^{-z} (2 z^3 + 25 z^2 + 112 z + 168)}{99 z^2}$$

07.25.03.6937.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (4 z^2 - 54 z + 255) I_0\left(\frac{z}{2}\right)}{99 z} + \frac{4 e^{z/2} (4 z^3 - 58 z^2 + 315 z - 1020) I_1\left(\frac{z}{2}\right)}{99 z^2}$$

07.25.03.6938.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (z^3 - 16 z^2 + 96 z - 270)}{99 z^3} + \frac{35 \sqrt{\pi} (14 z + 45) \operatorname{erfi}(\sqrt{z})}{33 z^{7/2}}$$

07.25.03.6939.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (z^3 + 16 z^2 + 96 z + 270)}{99 z^3} + \frac{35 \sqrt{\pi} (14 z - 45) \operatorname{erf}(\sqrt{z})}{33 z^{7/2}}$$

07.25.03.6940.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (2 z^2 - 34 z + 323) I_0\left(\frac{z}{2}\right)}{99 z^2} + \frac{64 e^{z/2} (z^3 - 18 z^2 + 68 z - 646) I_1\left(\frac{z}{2}\right)}{99 z^3}$$

07.25.03.6941.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{35 e^z (8 z^3 - 156 z^2 + 990 z - 4725)}{176 z^4} + \frac{105 \sqrt{\pi} (112 z^2 + 720 z + 1575) \operatorname{erfi}(\sqrt{z})}{352 z^{9/2}}$$

07.25.03.6942.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{105 \sqrt{\pi} (112 z^2 - 720 z + 1575) \operatorname{erf}(\sqrt{z})}{352 z^{9/2}} - \frac{35 e^{-z} (8 z^3 + 156 z^2 + 990 z + 4725)}{176 z^4}$$

07.25.03.6943.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (10 z^2 + 19 z + 3192) I_0\left(\frac{z}{2}\right)}{99 z^3} + \frac{32 e^{z/2} (10 z^3 - 439 z^2 - 76 z - 12768) I_1\left(\frac{z}{2}\right)}{99 z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.6944.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{e^z (256 z^8 + 3328 z^7 + 8064 z^6 - 1344 z^5 + 6720 z^4 - 15120 z^3 + 27720 z^2 - 36540 z + 25515)}{25515}$$

07.25.03.6945.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{e^z (128 z^7 + 1344 z^6 + 2016 z^5 - 1680 z^4 + 2520 z^3 - 3780 z^2 + 4410 z - 2835)}{2835}$$

07.25.03.6946.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{405} e^z (64 z^6 + 512 z^5 + 240 z^4 - 960 z^3 + 780 z^2 - 720 z + 405)$$

07.25.03.6947.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{81} e^z (32 z^5 + 176 z^4 - 144 z^3 - 408 z^2 + 186 z - 81)$$

07.25.03.6948.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{27} e^z (16 z^4 + 48 z^3 - 144 z^2 - 132 z + 27)$$

07.25.03.6949.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{27} e^z (8 z^3 + 4 z^2 - 78 z - 27)$$

07.25.03.6950.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{27} e^{z/2} (-4 z^3 + 39 z + 27) I_0\left(\frac{z}{2}\right) + \frac{1}{27} e^{z/2} (-4 z^3 + 4 z^2 + 33 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6951.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{27} e^z (4z^2 - 8z - 27)$$

07.25.03.6952.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{27} e^{z/2} (-4z^2 + 10z + 27) I_0\left(\frac{z}{2}\right) + \frac{1}{27} e^{z/2} (-4z^2 + 14z + 11) I_1\left(\frac{z}{2}\right)$$

07.25.03.6953.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{9} e^z (2z - 9)$$

07.25.03.6954.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, 3; z\right) = -\frac{8}{27} e^{z/2} (z - 5) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (2z^2 - 12z + 13) I_1\left(\frac{z}{2}\right)}{27z}$$

07.25.03.6955.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{35 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{12 z^{5/2}} - \frac{5 e^z (2z^2 - 14z + 21)}{18 z^2}$$

07.25.03.6956.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{35 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{12 z^{5/2}} - \frac{5 e^{-z} (2z^2 + 14z + 21)}{18 z^2}$$

07.25.03.6957.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, 4; z\right) = -\frac{4 e^{z/2} (2z - 15) I_0\left(\frac{z}{2}\right)}{9z} - \frac{4 e^{z/2} (2z^2 - 17z + 60) I_1\left(\frac{z}{2}\right)}{9z^2}$$

07.25.03.6958.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 \sqrt{\pi} (7z + 20) \operatorname{erfi}(\sqrt{z})}{24 z^{7/2}} - \frac{35 e^z (2z^2 - 19z + 60)}{36 z^3}$$

07.25.03.6959.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (2z^2 + 19z + 60)}{36 z^3} + \frac{35 \sqrt{\pi} (7z - 20) \operatorname{erf}(\sqrt{z})}{24 z^{7/2}}$$

07.25.03.6960.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, 5; z\right) = -\frac{32 e^{z/2} (z - 17) I_0\left(\frac{z}{2}\right)}{9z^2} - \frac{32 e^{z/2} (z^2 - 4z + 68) I_1\left(\frac{z}{2}\right)}{9z^3}$$

07.25.03.6961.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{105 \sqrt{\pi} (28z^2 + 160z + 315) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}} - \frac{35 e^z (16z^2 - 150z + 945)}{64 z^4}$$

07.25.03.6962.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{105 \sqrt{\pi} (28z^2 - 160z + 315) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}} - \frac{35 e^{-z} (16z^2 + 150z + 945)}{64 z^4}$$

07.25.03.6963.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (9z + 152) I_0\left(\frac{z}{2}\right)}{9z^3} - \frac{32 e^{z/2} (19z^2 + 36z + 608) I_1\left(\frac{z}{2}\right)}{9z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.6964.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{315} e^z (64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)$$

07.25.03.6965.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{45} e^z (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)$$

07.25.03.6966.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} e^z (16z^4 + 96z^3 + 72z^2 - 24z + 9)$$

07.25.03.6967.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{3} e^z (8z^3 + 36z^2 + 18z - 3)$$

07.25.03.6968.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (4z^2 + 12z + 3)$$

07.25.03.6969.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (2z^2 + 6z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} (z^2 + 2z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6970.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (2z + 3)$$

07.25.03.6971.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{3} e^{z/2} (2z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z + 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.6972.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = e^z$$

07.25.03.6973.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (z - 1) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.6974.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2z - 3)}{4z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.6975.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5e^{-z}(2z+3)}{4z^2}$$

07.25.03.6976.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, 4; z\right) = \frac{4e^{z/2}I_0\left(\frac{z}{2}\right)}{z} + \frac{4e^{z/2}(z-4)I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.6977.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{35e^z(4z-15)}{16z^3} + \frac{105\sqrt{\pi}(2z+5)\operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.6978.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}(4z+15)}{16z^3} + \frac{105\sqrt{\pi}(2z-5)\operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.6979.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, 5; z\right) = \frac{32e^{z/2}I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128e^{z/2}I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.6980.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1575e^z(2z-21)}{128z^4} + \frac{945\sqrt{\pi}(4z^2+20z+35)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.6981.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{945\sqrt{\pi}(4z^2-20z+35)\operatorname{erf}(\sqrt{z})}{256z^{9/2}} - \frac{1575e^{-z}(2z+21)}{128z^4}$$

07.25.03.6982.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{7}{2}, 6; z\right) = \frac{32e^{z/2}(z+8)I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32e^{z/2}(z^2+4z+32)I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.6983.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{2048}{45}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{7/2} + \frac{1}{45}e^z(112z^4 - 1264z^3 + 208z^2 - 108z + 45)$$

07.25.03.6984.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{2048}{45}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{7/2} + \frac{1}{45}e^{-z}(112z^4 + 1264z^3 + 208z^2 + 108z + 45)$$

07.25.03.6985.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{9}e^z(968z^3 + 148z^2 - 30z + 9) - \frac{1024}{9}\sqrt{\pi}z^{7/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.6986.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9}e^{-z}(-968z^3 + 148z^2 + 30z + 9) - \frac{1024}{9}\sqrt{\pi}z^{7/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.6987.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{256}{3} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{3} e^z (-256 z^3 - 100 z^2 - 24 z + 3)$$

07.25.03.6988.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{256}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{1}{3} e^{-z} (256 z^3 - 100 z^2 + 24 z + 3)$$

07.25.03.6989.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{9} e^z (128 z^3 + 64 z^2 + 54 z + 9) - \frac{128}{9} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6990.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{9} e^{-z} (-128 z^3 + 64 z^2 - 54 z + 9) - \frac{128}{9} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.6991.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (-2048 z^4 + 1536 z^3 + 960 z^2 + 945 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (2048 z^4 + 512 z^3 + 576 z^2 + 465 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.6992.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{9} e^z (16 z^3 + 8 z^2 + 12 z + 9) - \frac{16}{9} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6993.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{9} e^{-z} (-16 z^3 + 8 z^2 - 12 z + 9) - \frac{16}{9} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.6994.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (-4096 z^4 + 3072 z^3 + 1920 z^2 + 3360 z + 2835) I_0\left(\frac{z}{2}\right) + e^{z/2} (4096 z^4 + 1024 z^3 + 1152 z^2 + 2400 z + 735) I_1\left(\frac{z}{2}\right)}{2835} + \frac{e^{z/2} (4096 z^4 + 1024 z^3 + 1152 z^2 + 2400 z + 735) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.6995.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{15} e^z (8 z^3 + 4 z^2 + 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.6996.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-8 z^3 + 4 z^2 - 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.6997.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (4096 z^5 + 1024 z^4 + 1152 z^3 + 2400 z^2 + 7350 z - 6615) I_1\left(\frac{z}{2}\right)}{31185 z} - \frac{8 e^{z/2} (2048 z^4 - 1536 z^3 - 960 z^2 - 1680 z - 4725) I_0\left(\frac{z}{2}\right)}{31185}$$

07.25.03.6998.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z - 315)}{144 z^2} + \frac{\sqrt{\pi} (315 - 64 z^6) \operatorname{erfi}(\sqrt{z})}{288 z^{5/2}}$$

07.25.03.6999.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z - 315)}{144 z^2} + \frac{\sqrt{\pi} (315 - 64 z^6) \operatorname{erf}(\sqrt{z})}{288 z^{5/2}}$$

07.25.03.7000.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (8192 z^6 + 2048 z^5 + 2304 z^4 + 4800 z^3 + 14700 z^2 + 59535 z - 291060) I_1\left(\frac{z}{2}\right)}{135135 z^2} - \frac{4 e^{z/2} (8192 z^5 - 6144 z^4 - 3840 z^3 - 6720 z^2 - 18900 z - 72765) I_0\left(\frac{z}{2}\right)}{135135 z}$$

07.25.03.7001.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (32 z^6 + 16 z^5 + 24 z^4 + 60 z^3 + 210 z^2 + 945 z - 4725)}{288 z^3} + \frac{\sqrt{\pi} (-64 z^7 + 2205 z + 4725) \operatorname{erfi}(\sqrt{z})}{576 z^{7/2}}$$

07.25.03.7002.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-32 z^6 + 16 z^5 - 24 z^4 + 60 z^3 - 210 z^2 + 945 z + 4725)}{288 z^3} + \frac{\sqrt{\pi} (-64 z^7 + 2205 z - 4725) \operatorname{erf}(\sqrt{z})}{576 z^{7/2}}$$

07.25.03.7003.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (8192 z^7 + 2048 z^6 + 2304 z^5 + 4800 z^4 + 14700 z^3 + 59535 z^2 - 291060 z - 3783780) I_1\left(\frac{z}{2}\right)}{2027025 z^3} - \frac{32 e^{z/2} (8192 z^6 - 6144 z^5 - 3840 z^4 - 6720 z^3 - 18900 z^2 - 72765 z - 945945) I_0\left(\frac{z}{2}\right)}{2027025 z^2}$$

07.25.03.7004.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{e^z (128 z^7 + 64 z^6 + 96 z^5 + 240 z^4 + 840 z^3 + 3780 z^2 + 3150 z - 231525)}{2048 z^4} + \frac{\sqrt{\pi} (-256 z^8 + 35280 z^2 + 151200 z + 231525) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.7005.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-128 z^7 + 64 z^6 - 96 z^5 + 240 z^4 - 840 z^3 + 3780 z^2 - 3150 z - 231525)}{2048 z^4} + \frac{\sqrt{\pi} (-256 z^8 + 35280 z^2 - 151200 z + 231525) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.7006.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{5}{2}, 6; z\right) &= \frac{1}{6891885 z^4} \left(32 e^{z/2} \right. \\
 & \quad \left. (16384 z^8 + 4096 z^7 + 4608 z^6 + 9600 z^5 + 29400 z^4 + 119070 z^3 - 3419955 z^2 - 18918900 z - 90810720) I_1\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{6891885 z^3} 32 e^{z/2} (16384 z^7 - 12288 z^6 - 7680 z^5 - 13440 z^4 - 37800 z^3 - 145530 z^2 - 4729725 z - 22702680) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{3}{2}$

$$\text{07.25.03.7007.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} e^z (-2560 z^3 + 652 z^2 - 44 z + 9) + \frac{256}{9} \sqrt{\pi} (10 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.7008.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9} e^{-z} (2560 z^3 + 652 z^2 + 44 z + 9) + \frac{256}{9} \sqrt{\pi} (10 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.7009.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (640 z^3 - 576 z^2 - 38 z + 3) - \frac{128}{3} \sqrt{\pi} (5 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.7010.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-640 z^3 - 576 z^2 + 38 z + 3) - \frac{128}{3} \sqrt{\pi} (5 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.7011.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{9} e^z (-320 z^3 + 512 z^2 + 96 z + 9) + \frac{32}{9} \sqrt{\pi} (10 z^{7/2} - 21 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.7012.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{9} e^{-z} (320 z^3 + 512 z^2 - 96 z + 9) + \frac{32}{9} \sqrt{\pi} (10 z^{7/2} + 21 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.7013.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, 1; z\right) &= \\
 & \quad \frac{1}{315} e^{z/2} (5120 z^4 - 16384 z^3 + 7008 z^2 + 1680 z + 315) I_0\left(\frac{z}{2}\right) - \frac{16}{315} e^{z/2} (320 z^4 - 704 z^3 - 106 z^2 - 33 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\text{07.25.03.7014.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{8}{9} \sqrt{\pi} (5 z - 14) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{9} e^z (-40 z^3 + 92 z^2 + 26 z + 9)$$

$$\text{07.25.03.7015.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{8}{9} \sqrt{\pi} (5 z + 14) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{9} e^{-z} (40 z^3 + 92 z^2 - 26 z + 9)$$

07.25.03.7016.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2} (10240 z^4 - 39936 z^3 + 19392 z^2 + 6720 z + 2835) I_0\left(\frac{z}{2}\right)}{2835} + \frac{e^{z/2} (-10240 z^4 + 29696 z^3 + 5184 z^2 + 3072 z + 525) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.7017.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{2}{3} \sqrt{\pi} (2z - 7) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^z (-4z^3 + 12z^2 + 4z + 3)$$

07.25.03.7018.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{2}{3} \sqrt{\pi} (2z + 7) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4z^3 + 12z^2 - 4z + 3)$$

07.25.03.7019.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (10240 z^4 - 47104 z^3 + 24768 z^2 + 10080 z + 8715) I_0\left(\frac{z}{2}\right)}{31185} - \frac{4 e^{z/2} (10240 z^5 - 36864 z^4 - 6976 z^3 - 5088 z^2 - 4725 z + 3675) I_1\left(\frac{z}{2}\right)}{31185 z}$$

07.25.03.7020.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (-160 z^5 + 592 z^4 + 216 z^3 + 204 z^2 + 210 z - 315)}{288 z^2} + \frac{\sqrt{\pi} (320 z^6 - 1344 z^5 + 315) \operatorname{erfi}(\sqrt{z})}{576 z^{5/2}}$$

07.25.03.7021.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (160 z^5 + 592 z^4 - 216 z^3 + 204 z^2 - 210 z - 315)}{288 z^2} + \frac{\sqrt{\pi} (320 z^6 + 1344 z^5 + 315) \operatorname{erf}(\sqrt{z})}{576 z^{5/2}}$$

07.25.03.7022.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (20480 z^5 - 108544 z^4 + 60288 z^3 + 26880 z^2 + 29190 z + 33075) I_0\left(\frac{z}{2}\right)}{135135 z} - \frac{4 e^{z/2} (20480 z^6 - 88064 z^5 - 17536 z^4 - 14208 z^3 - 17850 z^2 - 18375 z + 132300) I_1\left(\frac{z}{2}\right)}{135135 z^2}$$

07.25.03.7023.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (-320 z^6 + 1408 z^5 + 544 z^4 + 576 z^3 + 840 z^2 + 840 z - 7875)}{1152 z^3} + \frac{\sqrt{\pi} (640 z^7 - 3136 z^6 + 4410 z + 7875) \operatorname{erfi}(\sqrt{z})}{2304 z^{7/2}}$$

07.25.03.7024.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (320 z^6 + 1408 z^5 - 544 z^4 + 576 z^3 - 840 z^2 + 840 z + 7875)}{1152 z^3} + \frac{\sqrt{\pi} (640 z^7 + 3136 z^6 + 4410 z - 7875) \operatorname{erf}(\sqrt{z})}{2304 z^{7/2}}$$

07.25.03.7025.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (4096 z^6 - 24576 z^5 + 14208 z^4 + 6720 z^3 + 8190 z^2 + 13230 z + 72765) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (2048 z^7 - 10240 z^6 - 2112 z^5 - 1824 z^4 - 2625 z^3 - 4410 z^2 + 26460 z + 145530) I_1\left(\frac{z}{2}\right)}{405405 z^3}$$

07.25.03.7026.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z (-640 z^7 + 3264 z^6 + 1312 z^5 + 1488 z^4 + 2520 z^3 + 4620 z^2 - 15750 z - 165375)}{4096 z^4} + \frac{\sqrt{\pi} (1280 z^8 - 7168 z^7 + 35280 z^2 + 126000 z + 165375) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.7027.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (640 z^7 + 3264 z^6 - 1312 z^5 + 1488 z^4 - 2520 z^3 + 4620 z^2 + 15750 z - 165375)}{4096 z^4} + \frac{\sqrt{\pi} (1280 z^8 + 7168 z^7 + 35280 z^2 - 126000 z + 165375) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.7028.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{6891885 z^3} - \frac{32 e^{z/2} (40960 z^7 - 274432 z^6 + 163584 z^5 + 80640 z^4 + 105420 z^3 + 198450 z^2 + 2401245 z + 7567560) I_0\left(\frac{z}{2}\right) - \frac{1}{6891885 z^4} (32 e^{z/2} (40960 z^8 - 233472 z^7 - 49408 z^6 - 44544 z^5 - 69300 z^4 - 139650 z^3 + 1739745 z^2 + 9604980 z + 30270240) I_1\left(\frac{z}{2}\right))}{6891885 z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.7029.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = e^z (-160 z^3 + 368 z^2 - 36 z + 1) + 4 \sqrt{\pi} (40 z^{7/2} - 112 z^{5/2} + 35 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7030.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = e^{-z} (160 z^3 + 368 z^2 + 36 z + 1) + 4 \sqrt{\pi} (40 z^{7/2} + 112 z^{5/2} + 35 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7031.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (80 z^3 - 296 z^2 + 102 z + 3) - \frac{2}{3} \sqrt{\pi} (40 z^{7/2} - 168 z^{5/2} + 105 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7032.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-80 z^3 - 296 z^2 - 102 z + 3) - \frac{2}{3} \sqrt{\pi} (40 z^{7/2} + 168 z^{5/2} + 105 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7033.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (-1280 z^4 + 7232 z^3 - 9004 z^2 + 1785 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (1280 z^4 - 5952 z^3 + 3692 z^2 + 211 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.7034.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (10 z^3 - 51 z^2 + 32 z + 3) + \frac{1}{6} \sqrt{\pi} (-20 z^{7/2} + 112 z^{5/2} - 105 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7035.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (-10 z^3 - 51 z^2 - 32 z + 3) + \frac{1}{6} \sqrt{\pi} (-20 z^{7/2} - 112 z^{5/2} - 105 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7036.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (-2560 z^4 + 18048 z^3 - 28536 z^2 + 7770 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (2560 z^4 - 15488 z^3 + 14328 z^2 + 1374 z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.7037.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{2} e^z (2 z^3 - 13 z^2 + 12 z + 2) - \frac{1}{4} \sqrt{\pi} z^{3/2} (4 z^2 - 28 z + 35) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7038.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{2} e^{-z} (-2 z^3 - 13 z^2 - 12 z + 2) - \frac{1}{4} \sqrt{\pi} z^{3/2} (4 z^2 + 28 z + 35) \operatorname{erf}(\sqrt{z})$$

07.25.03.7039.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (2560 z^5 - 19072 z^4 + 23512 z^3 + 2886 z^2 + 840 z - 525) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (1280 z^4 - 10816 z^3 + 20652 z^2 - 6825 z - 1365) I_0\left(\frac{z}{2}\right)}{10395 z}$$

07.25.03.7040.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (320 z^5 - 2528 z^4 + 3096 z^3 + 684 z^2 + 210 z - 315)}{768 z^2} + \frac{\sqrt{\pi} (-640 z^6 + 5376 z^5 - 8400 z^4 + 315) \operatorname{erfi}(\sqrt{z})}{1536 z^{5/2}}$$

07.25.03.7041.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-320 z^5 - 2528 z^4 - 3096 z^3 + 684 z^2 - 210 z - 315)}{768 z^2} + \frac{\sqrt{\pi} (-640 z^6 - 5376 z^5 - 8400 z^4 + 315) \operatorname{erf}(\sqrt{z})}{1536 z^{5/2}}$$

07.25.03.7042.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (5120 z^6 - 45312 z^5 + 69872 z^4 + 9916 z^3 + 4410 z^2 + 525 z - 14700) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (5120 z^5 - 50432 z^4 + 112624 z^3 - 42420 z^2 - 11130 z - 3675) I_0\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.7043.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (320 z^6 - 2976 z^5 + 4552 z^4 + 1188 z^3 + 630 z^2 - 105 z - 3150)}{1536 z^3} + \frac{\sqrt{\pi} (-640 z^7 + 6272 z^6 - 11760 z^5 + 2205 z + 3150) \operatorname{erfi}(\sqrt{z})}{3072 z^{7/2}}$$

07.25.03.7044.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-320 z^6 - 2976 z^5 - 4552 z^4 + 1188 z^3 - 630 z^2 - 105 z + 3150)}{1536 z^3} + \frac{\sqrt{\pi} (-640 z^7 - 6272 z^6 - 11760 z^5 + 2205 z - 3150) \operatorname{erf}(\sqrt{z})}{3072 z^{7/2}}$$

07.25.03.7045.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (1024 z^7 - 10496 z^6 + 19440 z^5 + 3036 z^4 + 1680 z^3 + 945 z^2 - 8820 z - 26460) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (1024 z^6 - 11520 z^5 + 29424 z^4 - 12180 z^3 - 3780 z^2 - 2205 z - 6615) I_0\left(\frac{z}{2}\right)}{135135 z^3}$$

07.25.03.7046.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (640 z^7 - 6848 z^6 + 12576 z^5 + 3664 z^4 + 2520 z^3 + 1260 z^2 - 13650 z - 55125)}{16384 z^4} + \frac{3 \sqrt{\pi} (1280 z^8 - 14336 z^7 + 31360 z^6 - 17640 z^2 - 50400 z - 55125) \operatorname{erfi}(\sqrt{z})}{32768 z^{9/2}}$$

07.25.03.7047.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{3 e^{-z} (640 z^7 + 6848 z^6 + 12576 z^5 - 3664 z^4 + 2520 z^3 - 1260 z^2 - 13650 z + 55125)}{16384 z^4} + \frac{3 \sqrt{\pi} (1280 z^8 + 14336 z^7 + 31360 z^6 - 17640 z^2 + 50400 z - 55125) \operatorname{erf}(\sqrt{z})}{32768 z^{9/2}}$$

$$\begin{aligned}
 &07.25.03.7048.01 \\
 &{}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; -\frac{1}{2}, 6; z\right) = \\
 &\frac{1}{2297295z^4} \left(32e^{z/2}(10240z^8 - 119296z^7 + 258016z^6 + 43128z^5 + 27300z^4 + 23100z^3 - 249165z^2 - \right. \\
 &\quad \left.1084860z - 2328480)I_1\left(\frac{z}{2}\right) - \right. \\
 &\quad \left.\frac{1}{2297295z^3} 32e^{z/2}(10240z^7 - 129536z^6 + 372192z^5 - 165480z^4 - 57540z^3 - 44100z^2 - 271215z - 582120)I_0\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{1}{2}$

$$\begin{aligned}
 &07.25.03.7049.01 \\
 &{}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{9}e^z(-40z^3 + 232z^2 - 219z + 9) + \frac{1}{18}\sqrt{\pi}(80z^{7/2} - 504z^{5/2} + 630z^{3/2} - 105\sqrt{z})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7050.01 \\
 &{}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{9}e^{-z}(40z^3 + 232z^2 + 219z + 9) + \frac{1}{18}\sqrt{\pi}(80z^{7/2} + 504z^{5/2} + 630z^{3/2} + 105\sqrt{z})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7051.01 \\
 &{}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, 1; z\right) = \\
 &\frac{1}{315}e^{z/2}(640z^4 - 5184z^3 + 10578z^2 - 5670z + 315)I_0\left(\frac{z}{2}\right) - \frac{2}{315}e^{z/2}(320z^4 - 2272z^3 + 3177z^2 - 474z)I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7052.01 \\
 &{}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{18}e^z(-10z^3 + 79z^2 - 123z + 18) + \frac{1}{36}\sqrt{\pi}\sqrt{z}(20z^3 - 168z^2 + 315z - 105)\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7053.01 \\
 &{}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{18}e^{-z}(10z^3 + 79z^2 + 123z + 18) + \frac{1}{36}\sqrt{\pi}\sqrt{z}(20z^3 + 168z^2 + 315z + 105)\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7054.01 \\
 &{}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, 2; z\right) = \\
 &\frac{e^{z/2}(1280z^4 - 13056z^3 + 34932z^2 - 26250z + 2835)I_0\left(\frac{z}{2}\right) - e^{z/2}(-1280z^4 + 11776z^3 - 23796z^2 + 7062z + 105)I_1\left(\frac{z}{2}\right)}{2835}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7055.01 \\
 &{}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{24}e^z(-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48}\sqrt{\pi}\sqrt{z}(8z^3 - 84z^2 + 210z - 105)\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7056.01 \\
 &{}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{24}e^{-z}(4z^3 + 40z^2 + 87z + 24) + \frac{1}{48}\sqrt{\pi}\sqrt{z}(8z^3 + 84z^2 + 210z + 105)\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.7057.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (1280 z^4 - 15744 z^3 + 52068 z^2 - 49560 z + 7875) I_0\left(\frac{z}{2}\right)}{31185} - \frac{4 e^{z/2} (1280 z^5 - 14464 z^4 + 38244 z^3 - 17268 z^2 - 735 z + 315) I_1\left(\frac{z}{2}\right)}{31185 z}$$

07.25.03.7058.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (-320 z^5 + 3872 z^4 - 10824 z^3 + 4524 z^2 + 210 z - 315)}{4608 z^2} + \frac{\sqrt{\pi} (640 z^6 - 8064 z^5 + 25200 z^4 - 16800 z^3 + 315) \operatorname{erfi}(\sqrt{z})}{9216 z^{5/2}}$$

07.25.03.7059.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (320 z^5 + 3872 z^4 + 10824 z^3 + 4524 z^2 - 210 z - 315)}{4608 z^2} + \frac{\sqrt{\pi} (640 z^6 + 8064 z^5 + 25200 z^4 + 16800 z^3 + 315) \operatorname{erf}(\sqrt{z})}{9216 z^{5/2}}$$

07.25.03.7060.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (2560 z^5 - 36864 z^4 + 145128 z^3 - 165900 z^2 + 34020 z + 1575) I_0\left(\frac{z}{2}\right)}{135135 z} - \frac{4 e^{z/2} (2560 z^6 - 34304 z^5 + 112104 z^4 - 68388 z^3 - 4620 z^2 + 945 z + 6300) I_1\left(\frac{z}{2}\right)}{135135 z^2}$$

07.25.03.7061.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (-640 z^6 + 9088 z^5 - 31056 z^4 + 17616 z^3 + 1680 z^2 - 1260 z - 4725)}{18432 z^3} + \frac{\sqrt{\pi} (1280 z^7 - 18816 z^6 + 70560 z^5 - 58800 z^4 + 4410 z + 4725) \operatorname{erfi}(\sqrt{z})}{36864 z^{7/2}}$$

07.25.03.7062.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (640 z^6 + 9088 z^5 + 31056 z^4 + 17616 z^3 - 1680 z^2 - 1260 z + 4725)}{18432 z^3} + \frac{\sqrt{\pi} (1280 z^7 + 18816 z^6 + 70560 z^5 + 58800 z^4 + 4410 z - 4725) \operatorname{erf}(\sqrt{z})}{36864 z^{7/2}}$$

07.25.03.7063.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (512 z^6 - 8448 z^5 + 38568 z^4 - 51240 z^3 + 12600 z^2 + 1260 z + 2205) I_0\left(\frac{z}{2}\right)}{405405 z^2} - \frac{128 e^{z/2} (128 z^7 - 1984 z^6 + 7722 z^5 - 5952 z^4 - 525 z^3 + 1260 z + 2205) I_1\left(\frac{z}{2}\right)}{405405 z^3}$$

07.25.03.7064.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{e^z (-640 z^7 + 10432 z^6 - 42144 z^5 + 30384 z^4 + 4200 z^3 - 1260 z^2 - 15750 z - 33075)}{32768 z^4} + \frac{\sqrt{\pi} (1280 z^8 - 21504 z^7 + 94080 z^6 - 94080 z^5 + 17640 z^2 + 37800 z + 33075) \operatorname{erfi}(\sqrt{z})}{65536 z^{9/2}}$$

07.25.03.7065.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (640 z^7 + 10432 z^6 + 42144 z^5 + 30384 z^4 - 4200 z^3 - 1260 z^2 + 15750 z - 33075)}{32768 z^4} + \frac{\sqrt{\pi} (1280 z^8 + 21504 z^7 + 94080 z^6 + 94080 z^5 + 17640 z^2 - 37800 z + 33075) \operatorname{erf}(\sqrt{z})}{65536 z^{9/2}}$$

07.25.03.7066.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{1}{2}, 6; z\right) = \frac{1}{6891885 z^3} \\ 32 e^{z/2} (5120 z^7 - 95232 z^6 + 494544 z^5 - 746760 z^4 + 210420 z^3 + 31500 z^2 + 108045 z + 158760) I_0\left(\frac{z}{2}\right) - \frac{1}{6891885 z^4} \\ 32 e^{z/2} (5120 z^8 - 90112 z^7 + 406992 z^6 - 379704 z^5 - 39900 z^4 - 6300 z^3 + 145845 z^2 + 432180 z + 635040) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 1$

07.25.03.7067.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{315} e^{z/2} (80 z^4 - 844 z^3 + 2388 z^2 - 1995 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-80 z^4 + 764 z^3 - 1664 z^2 + 633 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.7068.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{105} e^{z/2} (8 z^4 - 104 z^3 + 376 z^2 - 420 z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} (2 z^4 - 24 z^3 + 71 z^2 - 44 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{3}{2}$

07.25.03.7069.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{576} e^z (-40 z^3 + 428 z^2 - 1066 z + 471) + \frac{\sqrt{\pi} (80 z^4 - 896 z^3 + 2520 z^2 - 1680 z + 105) \operatorname{erfi}(\sqrt{z})}{1152 \sqrt{z}}$$

07.25.03.7070.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{576} e^{-z} (40 z^3 + 428 z^2 + 1066 z + 471) + \frac{\sqrt{\pi} (80 z^4 + 896 z^3 + 2520 z^2 + 1680 z + 105) \operatorname{erf}(\sqrt{z})}{1152 \sqrt{z}}$$

07.25.03.7071.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}, \frac{3}{2}, 2; z\right) = \frac{e^{z/2} (160 z^4 - 2136 z^3 + 8052 z^2 - 9660 z + 2835) I_0\left(\frac{z}{2}\right)}{2835} + \frac{e^{z/2} (-160 z^4 + 1976 z^3 - 6156 z^2 + 4332 z - 105) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.7072.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}, \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{384} e^z (-8 z^3 + 108 z^2 - 370 z + 279) + \frac{\sqrt{\pi} (16 z^4 - 224 z^3 + 840 z^2 - 840 z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.7073.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}, \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{384} e^{-z} (8 z^3 + 108 z^2 + 370 z + 279) + \frac{\sqrt{\pi} (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.7074.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}, \frac{3}{2}, 3; z\right) = \frac{8 e^{z/2} (80 z^4 - 1292 z^3 + 6084 z^2 - 9450 z + 3885) I_0\left(\frac{z}{2}\right)}{31185} - \frac{4 e^{z/2} (160 z^5 - 2424 z^4 + 9824 z^3 - 10128 z^2 + 630 z - 105) I_1\left(\frac{z}{2}\right)}{31185 z}$$

07.25.03.7075.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}, \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (-160 z^5 + 2608 z^4 - 11376 z^3 + 12216 z^2 - 210 z + 315)}{18432 z^2} + \frac{\sqrt{\pi} (320 z^6 - 5376 z^5 + 25200 z^4 - 33600 z^3 + 6300 z^2 - 315) \operatorname{erfi}(\sqrt{z})}{36864 z^{5/2}}$$

07.25.03.7076.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}, \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (160 z^5 + 2608 z^4 + 11376 z^3 + 12216 z^2 + 210 z + 315)}{18432 z^2} + \frac{\sqrt{\pi} (320 z^6 + 5376 z^5 + 25200 z^4 + 33600 z^3 + 6300 z^2 - 315) \operatorname{erf}(\sqrt{z})}{36864 z^{5/2}}$$

07.25.03.7077.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}, \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (320 z^5 - 6064 z^4 + 34248 z^3 - 65100 z^2 + 33600 z - 315) I_0\left(\frac{z}{2}\right)}{135135 z} - \frac{4 e^{z/2} (320 z^6 - 5744 z^5 + 28664 z^4 - 38988 z^3 + 4200 z^2 - 735 z - 1260) I_1\left(\frac{z}{2}\right)}{135135 z^2}$$

07.25.03.7078.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}, \frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (-160 z^6 + 3056 z^5 - 16192 z^4 + 22632 z^3 - 1050 z^2 + 1155 z + 1575)}{36864 z^3} + \frac{\sqrt{\pi} (320 z^7 - 6272 z^6 + 35280 z^5 - 58800 z^4 + 14700 z^3 - 2205 z - 1575) \operatorname{erfi}(\sqrt{z})}{73728 z^{7/2}}$$

07.25.03.7079.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (160 z^6 + 3056 z^5 + 16192 z^4 + 22632 z^3 + 1050 z^2 + 1155 z - 1575)}{36864 z^3} + \frac{\sqrt{\pi} (320 z^7 + 6272 z^6 + 35280 z^5 + 58800 z^4 + 14700 z^3 - 2205 z + 1575) \operatorname{erf}(\sqrt{z})}{73728 z^{7/2}}$$

07.25.03.7080.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (64 z^6 - 1392 z^5 + 9168 z^4 - 20580 z^3 + 12600 z^2 - 315 z - 315) I_0\left(\frac{z}{2}\right)}{405405 z^2} - \frac{32 e^{z/2} (64 z^7 - 1328 z^6 + 7872 z^5 - 13308 z^4 + 2100 z^3 - 315 z^2 - 1260 z - 1260) I_1\left(\frac{z}{2}\right)}{405405 z^3}$$

07.25.03.7081.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^{-z} (-640 z^7 + 14016 z^6 - 87392 z^5 + 150672 z^4 - 12600 z^3 + 10500 z^2 + 28350 z + 33075)}{262144 z^4} + \frac{1}{524288 z^{9/2}} \sqrt{\pi} (1280 z^8 - 28672 z^7 + 188160 z^6 - 376320 z^5 + 117600 z^4 - 35280 z^2 - 50400 z - 33075) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7082.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (640 z^7 + 14016 z^6 + 87392 z^5 + 150672 z^4 + 12600 z^3 + 10500 z^2 - 28350 z + 33075)}{262144 z^4} + \frac{1}{524288 z^{9/2}} \sqrt{\pi} (1280 z^8 + 28672 z^7 + 188160 z^6 + 376320 z^5 + 117600 z^4 - 35280 z^2 + 50400 z - 33075) \operatorname{erf}(\sqrt{z})$$

07.25.03.7083.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{3}{2}, 6; z\right) = \frac{1}{6891885 z^3} 32 e^{z/2} (640 z^7 - 15712 z^6 + 118224 z^5 - 305760 z^4 + 214620 z^3 - 9450 z^2 - 17955 z - 17640) I_0\left(\frac{z}{2}\right) - \frac{1}{6891885 z^4} 32 e^{z/2} (640 z^8 - 15072 z^7 + 103472 z^6 - 209184 z^5 + 44100 z^4 - 5250 z^3 - 40005 z^2 - 71820 z - 70560) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 2$

07.25.03.7084.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{945} e^{z/2} (16 z^4 - 264 z^3 + 1284 z^2 - 2100 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16 z^4 + 248 z^3 - 1044 z^2 + 1164 z - 105) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{5}{2}$

07.25.03.7085.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}, \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16z^4 + 272z^3 - 1272z^2 + 1580z - 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.7086.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}, \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (16z^4 + 272z^3 + 1272z^2 + 1580z + 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.7087.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}, \frac{5}{2}, 3; z\right) = \frac{4e^{z/2} (16z^4 - 320z^3 + 1956z^2 - 4200z + 2625) I_0\left(\frac{z}{2}\right) - 4e^{z/2} (16z^5 - 304z^4 + 1660z^3 - 2676z^2 + 525z + 105) I_1\left(\frac{z}{2}\right)}{10395z}$$

07.25.03.7088.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}, \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-32z^5 + 656z^4 - 3888z^3 + 6744z^2 - 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi} (64z^6 - 1344z^5 + 8400z^4 - 16800z^3 + 6300z^2 + 1260z + 315) \operatorname{erfi}(\sqrt{z})}{24576z^{5/2}}$$

07.25.03.7089.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}, \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32z^5 + 656z^4 + 3888z^3 + 6744z^2 + 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi} (64z^6 + 1344z^5 + 8400z^4 + 16800z^3 + 6300z^2 - 1260z + 315) \operatorname{erf}(\sqrt{z})}{24576z^{5/2}}$$

07.25.03.7090.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}, \frac{5}{2}, 4; z\right) = \frac{4e^{z/2} (32z^5 - 752z^4 + 5536z^3 - 14700z^2 + 11550z + 105) I_0\left(\frac{z}{2}\right) - 4e^{z/2} (32z^6 - 720z^5 + 4832z^4 - 10196z^3 + 3150z^2 + 1155z + 420) I_1\left(\frac{z}{2}\right)}{45045z^2}$$

07.25.03.7091.01

$${}_2F_2\left(-\frac{7}{2}, \frac{5}{2}, \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (-64z^6 + 1536z^5 - 11024z^4 + 24576z^3 - 6300z^2 - 3360z - 1575)}{49152z^3} + \frac{\sqrt{\pi} (128z^7 - 3136z^6 + 23520z^5 - 58800z^4 + 29400z^3 + 8820z^2 + 4410z + 1575) \operatorname{erfi}(\sqrt{z})}{98304z^{7/2}}$$

$$\begin{aligned}
 & \text{07.25.03.7092.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) &= \frac{e^{-z} (64 z^6 + 1536 z^5 + 11\,024 z^4 + 24\,576 z^3 + 6300 z^2 - 3360 z + 1575)}{49\,152 z^3} + \\
 & \frac{\sqrt{\pi} (128 z^7 + 3136 z^6 + 23\,520 z^5 + 58\,800 z^4 + 29\,400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{98\,304 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7093.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{5}{2}, 5; z\right) &= \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23\,520 z^3 + 22\,050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right)}{675\,675 z^2} - \\
 & \frac{64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675\,675 z^3}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7094.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; z\right) &= \frac{1}{1\,048\,576 z^{9/2}} \\
 & \frac{3 \sqrt{\pi} (256 z^8 - 7168 z^7 + 62\,720 z^6 - 188\,160 z^5 + 117\,600 z^4 + 47\,040 z^3 + 35\,280 z^2 + 25\,200 z + 11\,025) \operatorname{erfi}(\sqrt{z}) -}{524\,288 z^4} \\
 & \frac{3 e^z (128 z^7 - 3520 z^6 + 29\,664 z^5 - 80\,848 z^4 + 29\,400 z^3 + 21\,420 z^2 + 17\,850 z + 11\,025)}{524\,288 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7095.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) &= \\
 & \frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29\,664 z^5 + 80\,848 z^4 + 29\,400 z^3 - 21\,420 z^2 + 17\,850 z - 11\,025)}{524\,288 z^4} + \frac{1}{1\,048\,576 z^{9/2}} \\
 & \frac{3 \sqrt{\pi} (256 z^8 + 7168 z^7 + 62\,720 z^6 + 188\,160 z^5 + 117\,600 z^4 - 47\,040 z^3 + 35\,280 z^2 - 25\,200 z + 11\,025) \operatorname{erf}(\sqrt{z})}{524\,288 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7096.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{5}{2}; \frac{5}{2}, 6; z\right) &= \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19\,248 z^5 - 70\,560 z^4 + 76\,440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right)}{2\,297\,295 z^3} - \\
 & \frac{1}{2\,297\,295 z^4} \frac{32 e^{z/2} (64 z^8 - 1888 z^7 + 17\,392 z^6 - 54\,048 z^5 + 29\,400 z^4 + 19\,110 z^3 + 17\,955 z^2 + 16\,380 z + 10\,080) I_1\left(\frac{z}{2}\right)}{2\,297\,295 z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.7097.01} \\
 {}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; z\right) &= \frac{1}{1\,029\,105} \\
 & \frac{(128 z^{10} + 3136 z^9 + 21\,248 z^8 + 36\,480 z^7 + 5376 z^6 + 672 z^5 + 2160 z^4 - 18\,000 z^3 + 88\,200 z^2 - 357\,210 z + 1\,029\,105) +}{1\,029\,105} \\
 & \frac{32 e^z \sqrt{\pi} (4 z^{21/2} + 100 z^{19/2} + 711 z^{17/2} + 1428 z^{15/2} + 510 z^{13/2}) \operatorname{erf}(\sqrt{z})}{1\,029\,105}
 \end{aligned}$$

07.25.03.7098.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{1029105} \frac{(128z^{10} - 3136z^9 + 21248z^8 - 36480z^7 + 5376z^6 - 672z^5 + 2160z^4 + 18000z^3 + 88200z^2 + 357210z + 1029105) - 32e^{-z}\sqrt{\pi}(4z^{21/2} - 100z^{19/2} + 711z^{17/2} - 1428z^{15/2} + 510z^{13/2})\operatorname{erfi}(\sqrt{z})}{1029105}$$

07.25.03.7099.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{-64z^9 - 1312z^8 - 6720z^7 - 5376z^6 + 672z^5 + 720z^4 - 3600z^3 + 12600z^2 - 39690z + 93555}{93555} - \frac{16e^{-z}\sqrt{\pi}(4z^{19/2} + 84z^{17/2} + 459z^{15/2} + 510z^{13/2})\operatorname{erf}(\sqrt{z})}{93555}$$

07.25.03.7100.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{64z^9 - 1312z^8 + 6720z^7 - 5376z^6 - 672z^5 + 720z^4 + 3600z^3 + 12600z^2 + 39690z + 93555}{93555} - \frac{16e^{-z}\sqrt{\pi}(4z^{19/2} - 84z^{17/2} + 459z^{15/2} - 510z^{13/2})\operatorname{erfi}(\sqrt{z})}{93555}$$

07.25.03.7101.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{32z^8 + 528z^7 + 1792z^6 - 672z^5 + 720z^4 - 1200z^3 + 2520z^2 - 5670z + 10395}{10395} + \frac{8e^z\sqrt{\pi}(4z^{17/2} + 68z^{15/2} + 255z^{13/2})\operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.7102.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{32z^8 - 528z^7 + 1792z^6 + 672z^5 + 720z^4 + 1200z^3 + 2520z^2 + 5670z + 10395}{10395} - \frac{8e^{-z}\sqrt{\pi}(4z^{17/2} - 68z^{15/2} + 255z^{13/2})\operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.7103.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{-16z^7 - 200z^6 - 304z^5 + 864z^4 - 1200z^3 + 840z^2 - 1134z + 1485}{1485} - \frac{4e^z\sqrt{\pi}(4z^{15/2} + 52z^{13/2} + 99z^{11/2} - 198z^{9/2} + 198z^{7/2})\operatorname{erf}(\sqrt{z})}{1485}$$

07.25.03.7104.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{16z^7 - 200z^6 + 304z^5 + 864z^4 + 1200z^3 + 840z^2 + 1134z + 1485}{1485} - \frac{4e^{-z}\sqrt{\pi}(4z^{15/2} - 52z^{13/2} + 99z^{11/2} + 198z^{9/2} + 198z^{7/2})\operatorname{erfi}(\sqrt{z})}{1485}$$

07.25.03.7105.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{297} (8z^6 + 68z^5 - 48z^4 - 312z^3 + 840z^2 - 378z + 297) + \frac{2}{297} e^z \sqrt{\pi} (4z^{13/2} + 36z^{11/2} - 9z^{9/2} - 180z^{7/2} + 378z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7106.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{297} (8z^6 - 68z^5 - 48z^4 + 312z^3 + 840z^2 + 378z + 297) - \frac{2}{297} e^{-z} \sqrt{\pi} (4z^{13/2} - 36z^{11/2} - 9z^{9/2} + 180z^{7/2} + 378z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7107.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{99} (-4z^5 - 18z^4 + 76z^3 - 378z + 99) + \frac{1}{99} e^z \sqrt{\pi} (-4z^{11/2} - 20z^{9/2} + 69z^{7/2} + 42z^{5/2} - 420z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7108.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{99} (4z^5 - 18z^4 - 76z^3 + 378z + 99) + \frac{1}{99} e^{-z} \sqrt{\pi} (-4z^{11/2} + 20z^{9/2} + 69z^{7/2} - 42z^{5/2} - 420z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7109.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{99} (2z^4 + z^3 - 40z^2 + 78z + 99) + \frac{1}{198} e^z \sqrt{\pi} (4z^{9/2} + 4z^{7/2} - 81z^{5/2} + 120z^{3/2} + 300\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7110.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{99} (2z^4 - z^3 - 40z^2 - 78z + 99) + \frac{1}{198} e^{-z} \sqrt{\pi} (-4z^{9/2} + 4z^{7/2} + 81z^{5/2} + 120z^{3/2} - 300\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7111.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, 1; z\right) = \frac{1}{198} e^z (4z^4 - 4z^3 - 69z^2 + 180z + 198)$$

07.25.03.7112.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{198} (2z^3 - 7z^2 - 18z + 108) + \frac{e^z \sqrt{\pi} (4z^4 - 12z^3 - 45z^2 + 210z + 90) \operatorname{erf}(\sqrt{z})}{396\sqrt{z}}$$

07.25.03.7113.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{198} (-2z^3 - 7z^2 + 18z + 108) + \frac{e^{-z} \sqrt{\pi} (4z^4 + 12z^3 - 45z^2 - 210z + 90) \operatorname{erfi}(\sqrt{z})}{396\sqrt{z}}$$

07.25.03.7114.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, 2; z\right) = \frac{1}{198} e^z (4z^3 - 20z^2 - 9z + 198)$$

07.25.03.7115.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{2z^3 - 15z^2 + 28z + 42}{132z} + \frac{e^z \sqrt{\pi} (4z^4 - 28z^3 + 39z^2 + 132z - 42) \operatorname{erf}(\sqrt{z})}{264z^{3/2}}$$

07.25.03.7116.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{2z^3 + 15z^2 + 28z - 42}{132z} + \frac{e^{-z} \sqrt{\pi} (-4z^4 - 28z^3 - 39z^2 + 132z + 42) \operatorname{erfi}(\sqrt{z})}{264z^{3/2}}$$

07.25.03.7117.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, 3; z\right) = \frac{1}{99} e^z (4z^2 - 36z + 99)$$

07.25.03.7118.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5(2z^3 - 23z^2 + 98z - 168)}{264z^2} + \frac{5e^z \sqrt{\pi} (4z^4 - 44z^3 + 171z^2 - 210z + 168) \operatorname{erf}(\sqrt{z})}{528z^{5/2}}$$

07.25.03.7119.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (4z^4 + 44z^3 + 171z^2 + 210z + 168) \operatorname{erfi}(\sqrt{z})}{528z^{5/2}} - \frac{5(2z^3 + 23z^2 + 98z + 168)}{264z^2}$$

07.25.03.7120.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, 4; z\right) = \frac{e^z (4z^4 - 52z^3 + 255z^2 - 510z + 510)}{33z^3} - \frac{170}{11z^3}$$

07.25.03.7121.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{35(2z^3 - 31z^2 + 192z - 1080)}{528z^3} + \frac{35e^z \sqrt{\pi} (4z^4 - 60z^3 + 351z^2 - 912z + 1080) \operatorname{erf}(\sqrt{z})}{1056z^{7/2}}$$

07.25.03.7122.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35(2z^3 + 31z^2 + 192z + 1080)}{528z^3} - \frac{35e^{-z} \sqrt{\pi} (4z^4 + 60z^3 + 351z^2 + 912z + 1080) \operatorname{erfi}(\sqrt{z})}{1056z^{7/2}}$$

07.25.03.7123.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, 5; z\right) = \frac{4e^z (4z^4 - 68z^3 + 459z^2 - 1428z + 1938)}{33z^4} - \frac{136(5z + 19)}{11z^4}$$

07.25.03.7124.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{105(2z^3 - 39z^2 - 30z - 3150)}{352z^4} + \frac{105e^z \sqrt{\pi} (4z^4 - 76z^3 + 579z^2 - 2070z + 3150) \operatorname{erf}(\sqrt{z})}{704z^{9/2}}$$

07.25.03.7125.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{105e^{-z} \sqrt{\pi} (4z^4 + 76z^3 + 579z^2 + 2070z + 3150) \operatorname{erfi}(\sqrt{z})}{704z^{9/2}} - \frac{105(2z^3 + 39z^2 - 30z + 3150)}{352z^4}$$

07.25.03.7126.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{11}{2}, 6; z\right) = \frac{20e^z (4z^4 - 84z^3 + 711z^2 - 2850z + 4788)}{33z^5} - \frac{20(85z^2 + 646z + 1596)}{11z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = -\frac{9}{2}$

07.25.03.7127.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{32z^8 + 560z^7 + 2256z^6 + 672z^5 + 240z^4 - 720z^3 + 1800z^2 - 4410z + 8505}{8505} + \frac{8e^z\sqrt{\pi}(4z^{17/2} + 72z^{15/2} + 315z^{13/2} + 195z^{11/2})\operatorname{erf}(\sqrt{z})}{8505}$$

07.25.03.7128.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{32z^8 - 560z^7 + 2256z^6 - 672z^5 + 240z^4 + 720z^3 + 1800z^2 + 4410z + 8505}{8505} - \frac{8e^{-z}\sqrt{\pi}(4z^{17/2} - 72z^{15/2} + 315z^{13/2} - 195z^{11/2})\operatorname{erfi}(\sqrt{z})}{8505}$$

07.25.03.7129.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{945}(-16z^7 - 232z^6 - 672z^5 + 240z^4 - 240z^3 + 360z^2 - 630z + 945) - \frac{4}{945}e^z\sqrt{\pi}(4z^{15/2} + 60z^{13/2} + 195z^{11/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.7130.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{945}(16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945) - \frac{4}{945}e^{-z}\sqrt{\pi}(4z^{15/2} - 60z^{13/2} + 195z^{11/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.7131.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{135}(8z^6 + 92z^5 + 156z^4 - 240z^3 + 120z^2 - 126z + 135) + \frac{2}{135}e^z\sqrt{\pi}(4z^{13/2} + 48z^{11/2} + 99z^{9/2} - 99z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.7132.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{135}(8z^6 - 92z^5 + 156z^4 + 240z^3 + 120z^2 + 126z + 135) - \frac{2}{135}e^{-z}\sqrt{\pi}(4z^{13/2} - 48z^{11/2} + 99z^{9/2} + 99z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.7133.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{27}(-4z^5 - 34z^4 - 12z^3 + 120z^2 - 42z + 27) + \frac{1}{27}e^z\sqrt{\pi}(-4z^{11/2} - 36z^{9/2} - 27z^{7/2} + 126z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.7134.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{27}(4z^5 - 34z^4 + 12z^3 + 120z^2 + 42z + 27) + \frac{1}{27}e^{-z}\sqrt{\pi}(-4z^{11/2} + 36z^{9/2} - 27z^{7/2} - 126z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.7135.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{9} (2z^4 + 11z^3 - 15z^2 - 42z + 9) + \frac{1}{18} e^z \sqrt{\pi} (4z^{9/2} + 24z^{7/2} - 21z^{5/2} - 105z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7136.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{9} (2z^4 - 11z^3 - 15z^2 + 42z + 9) + \frac{1}{18} e^{-z} \sqrt{\pi} (-4z^{9/2} + 24z^{7/2} + 21z^{5/2} - 105z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7137.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{18} (-2z^3 - 5z^2 + 24z + 18) + \frac{1}{36} e^z \sqrt{\pi} (-4z^{7/2} - 12z^{5/2} + 45z^{3/2} + 60\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7138.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{18} (2z^3 - 5z^2 - 24z + 18) + \frac{1}{36} e^{-z} \sqrt{\pi} (-4z^{7/2} + 12z^{5/2} + 45z^{3/2} - 60\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7139.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, 1; z\right) = -\frac{1}{18} e^z (2z^3 + 3z^2 - 24z - 18)$$

07.25.03.7140.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{36} (-2z^2 + z + 21) + \frac{e^z \sqrt{\pi} (-4z^3 + 45z + 15) \operatorname{erf}(\sqrt{z})}{72\sqrt{z}}$$

07.25.03.7141.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{36} (-2z^2 - z + 21) + \frac{e^{-z} \sqrt{\pi} (4z^3 - 45z + 15) \operatorname{erfi}(\sqrt{z})}{72\sqrt{z}}$$

07.25.03.7142.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, 2; z\right) = -\frac{1}{18} e^z (2z^2 - 3z - 18)$$

07.25.03.7143.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-2z^2 + 7z + 6}{24z} + \frac{e^z \sqrt{\pi} (-4z^3 + 12z^2 + 21z - 6) \operatorname{erf}(\sqrt{z})}{48z^{3/2}}$$

07.25.03.7144.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{2z^2 + 7z - 6}{24z} + \frac{e^{-z} \sqrt{\pi} (-4z^3 - 12z^2 + 21z + 6) \operatorname{erfi}(\sqrt{z})}{48z^{3/2}}$$

07.25.03.7145.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, 3; z\right) = -\frac{1}{9} e^z (2z - 9)$$

07.25.03.7146.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{5(2z^2 - 13z + 21)}{48z^2} - \frac{5e^z \sqrt{\pi} (4z^3 - 24z^2 + 27z - 21) \operatorname{erf}(\sqrt{z})}{96z^{5/2}}$$

07.25.03.7147.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (4z^3 + 24z^2 + 27z + 21) \operatorname{erfi}(\sqrt{z})}{96z^{5/2}} - \frac{5(2z^2 + 13z + 21)}{48z^2}$$

07.25.03.7148.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, 4; z\right) = \frac{e^z(-2z^3 + 15z^2 - 30z + 30)}{3z^3} - \frac{10}{z^3}$$

07.25.03.7149.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{35(2z^2 - 19z + 120)}{96z^3} - \frac{35e^z\sqrt{\pi}(4z^3 - 36z^2 + 99z - 120)\operatorname{erf}(\sqrt{z})}{192z^{7/2}}$$

07.25.03.7150.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35(2z^2 + 19z + 120)}{96z^3} - \frac{35e^{-z}\sqrt{\pi}(4z^3 + 36z^2 + 99z + 120)\operatorname{erfi}(\sqrt{z})}{192z^{7/2}}$$

07.25.03.7151.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, 5; z\right) = -\frac{8(5z + 17)}{z^4} - \frac{4e^z(2z^3 - 21z^2 + 72z - 102)}{3z^4}$$

07.25.03.7152.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, \frac{11}{2}; z\right) = -\frac{105(2z^2 + 15z + 315)}{64z^4} - \frac{105e^z\sqrt{\pi}(4z^3 - 48z^2 + 195z - 315)\operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.7153.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{105e^{-z}\sqrt{\pi}(4z^3 + 48z^2 + 195z + 315)\operatorname{erfi}(\sqrt{z})}{128z^{9/2}} - \frac{105(2z^2 - 15z + 315)}{64z^4}$$

07.25.03.7154.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{9}{2}, 6; z\right) = -\frac{20(5z^2 + 34z + 76)}{z^5} - \frac{20e^z(2z^3 - 27z^2 + 126z - 228)}{3z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = -\frac{7}{2}$

07.25.03.7155.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{105}(8z^6 + 100z^5 + 240z^4 - 80z^3 + 72z^2 - 90z + 105) + \frac{2}{105}e^z\sqrt{\pi}(4z^{13/2} + 52z^{11/2} + 143z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.7156.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{105}(8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105) - \frac{2}{105}e^{-z}\sqrt{\pi}(4z^{13/2} - 52z^{11/2} + 143z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.7157.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{15}(-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) + \frac{1}{15}e^z\sqrt{\pi}(-4z^{11/2} - 44z^{9/2} - 99z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.7158.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15}(4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) + \frac{1}{15}e^{-z}\sqrt{\pi}(-4z^{11/2} + 44z^{9/2} - 99z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.7159.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} (2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6} e^z \sqrt{\pi} (4z^{9/2} + 36z^{7/2} + 63z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7160.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3} (2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6} e^{-z} \sqrt{\pi} (-4z^{9/2} + 36z^{7/2} - 63z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7161.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{2} (-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4} e^z \sqrt{\pi} (-4z^{7/2} - 28z^{5/2} - 35z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7162.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2} (2z^3 - 13z^2 + 12z + 2) + \frac{1}{4} e^{-z} \sqrt{\pi} (-4z^{7/2} + 28z^{5/2} - 35z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7163.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{4} (2z^2 + 9z + 4) + \frac{1}{8} e^z \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7164.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{4} (2z^2 - 9z + 4) + \frac{1}{8} e^{-z} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7165.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, 1; z\right) = \frac{1}{2} e^z (z^2 + 4z + 2)$$

07.25.03.7166.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{8} (2z + 5) + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.7167.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{8} (5 - 2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.7168.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, 2; z\right) = \frac{1}{2} e^z (z + 2)$$

07.25.03.7169.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{3(2z + 1)}{16z} + \frac{3e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.7170.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{3(2z - 1)}{16z} - \frac{3e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.7171.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, 3; z\right) = e^z$$

07.25.03.7172.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{15(2z-3)}{32z^2} + \frac{15e^z\sqrt{\pi}(4z^2-4z+3)\operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.7173.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z}\sqrt{\pi}(4z^2+4z+3)\operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15(2z+3)}{32z^2}$$

07.25.03.7174.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, 4; z\right) = \frac{3e^z(z^2-2z+2)}{z^3} - \frac{6}{z^3}$$

07.25.03.7175.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{105(2z-15)}{64z^3} + \frac{105e^z\sqrt{\pi}(4z^2-12z+15)\operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.7176.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{105(2z+15)}{64z^3} - \frac{105e^{-z}\sqrt{\pi}(4z^2+12z+15)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.7177.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, 5; z\right) = \frac{12e^z(z^2-4z+6)}{z^4} - \frac{24(z+3)}{z^4}$$

07.25.03.7178.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{945e^z\sqrt{\pi}(4z^2-20z+35)\operatorname{erf}(\sqrt{z})}{256z^{9/2}} - \frac{1575(2z+21)}{128z^4}$$

07.25.03.7179.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1575(2z-21)}{128z^4} + \frac{945e^{-z}\sqrt{\pi}(4z^2+20z+35)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.7180.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{7}{2}, 6; z\right) = \frac{60e^z(z^2-6z+12)}{z^5} - \frac{60(z^2+6z+12)}{z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = -\frac{5}{2}$

07.25.03.7181.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{5}{2}, 1; z\right) = \frac{1}{10}e^z(66z^3+33z^2+32z+10) - \frac{33}{5}\sqrt{\pi}z^{7/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.7182.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{5}{2}, 1; -z\right) = \frac{1}{10}e^{-z}(-66z^3+33z^2-32z+10) - \frac{33}{5}\sqrt{\pi}z^{7/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.7183.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{5}{2}, 2; z\right) = \frac{1}{30}e^z(44z^3+22z^2+33z+30) - \frac{22}{15}\sqrt{\pi}z^{7/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.7184.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{5}{2}, 2; -z\right) = \frac{1}{30} e^{-z} (-44 z^3 + 22 z^2 - 33 z + 30) - \frac{22}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7185.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{5}{2}, 3; z\right) = \frac{1}{15} e^z (8 z^3 + 4 z^2 + 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.7186.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{5}{2}, 3; -z\right) = \frac{1}{15} e^{-z} (-8 z^3 + 4 z^2 - 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7187.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{5}{2}, 4; z\right) = -\frac{16}{65} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{e^z (16 z^6 + 8 z^5 + 12 z^4 + 30 z^3 + 105 z^2 - 210 z + 210)}{65 z^3} - \frac{42}{13 z^3}$$

07.25.03.7188.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{5}{2}, 4; -z\right) = -\frac{16}{65} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{e^{-z} (-16 z^6 + 8 z^5 - 12 z^4 + 30 z^3 - 105 z^2 - 210 z - 210)}{65 z^3} + \frac{42}{13 z^3}$$

07.25.03.7189.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{5}{2}, 5; z\right) = -\frac{128}{975} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} - \frac{168(5z+13)}{65 z^4} + \frac{4 e^z (32 z^7 + 16 z^6 + 24 z^5 + 60 z^4 + 210 z^3 + 945 z^2 - 5040 z + 8190)}{975 z^4}$$

07.25.03.7190.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{5}{2}, 5; -z\right) = -\frac{128}{975} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{168(5z-13)}{65 z^4} - \frac{4 e^{-z} (32 z^7 - 16 z^6 + 24 z^5 - 60 z^4 + 210 z^3 - 945 z^2 - 5040 z - 8190)}{975 z^4}$$

07.25.03.7191.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{5}{2}, 6; z\right) = -\frac{256 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2}}{3315} - \frac{84(85 z^2 + 442 z + 780)}{221 z^5} + \frac{4 e^z (64 z^8 + 32 z^7 + 48 z^6 + 120 z^5 + 420 z^4 + 1890 z^3 + 10395 z^2 - 106470 z + 245700)}{3315 z^5}$$

07.25.03.7192.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{5}{2}, 6; -z\right) = -\frac{256 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2}}{3315} + \frac{84(85 z^2 - 442 z + 780)}{221 z^5} - \frac{4 e^{-z} (64 z^8 - 32 z^7 + 48 z^6 - 120 z^5 + 420 z^4 - 1890 z^3 + 10395 z^2 + 106470 z + 245700)}{3315 z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = -\frac{3}{2}$

07.25.03.7193.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{3}{2}, 1; z\right) = \frac{1}{2} e^z (-33 z^3 + 57 z^2 + 12 z + 2) + \frac{3}{4} \sqrt{\pi} (22 z^{7/2} - 49 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7194.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{3}{2}, 1; -z\right) = \frac{1}{2} e^{-z} (33 z^3 + 57 z^2 - 12 z + 2) + \frac{3}{4} \sqrt{\pi} (22 z^{7/2} + 49 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7195.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{3}{2}, 2; z\right) = \frac{1}{6} e^z (-22 z^3 + 52 z^2 + 15 z + 6) + \frac{1}{6} \sqrt{\pi} (22 z^{7/2} - 63 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7196.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{3}{2}, 2; -z\right) = \frac{1}{6} e^{-z} (22 z^3 + 52 z^2 - 15 z + 6) + \frac{1}{6} \sqrt{\pi} (22 z^{7/2} + 63 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7197.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{3}{2}, 3; z\right) = \frac{1}{3} e^z (-4 z^3 + 12 z^2 + 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7198.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{3}{2}, 3; -z\right) = \frac{1}{3} e^{-z} (4 z^3 + 12 z^2 - 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7199.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{3}{2}, 4; z\right) = \frac{e^z (-88 z^6 + 320 z^5 + 116 z^4 + 108 z^3 + 105 z^2 - 210 z + 210)}{143 z^3} + \frac{4}{143} \sqrt{\pi} (22 z^{7/2} - 91 z^{5/2}) \operatorname{erfi}(\sqrt{z}) - \frac{210}{143 z^3}$$

07.25.03.7200.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{3}{2}, 4; -z\right) = \frac{e^{-z} (88 z^6 + 320 z^5 - 116 z^4 + 108 z^3 - 105 z^2 - 210 z - 210)}{143 z^3} + \frac{4}{143} \sqrt{\pi} (22 z^{7/2} + 91 z^{5/2}) \operatorname{erf}(\sqrt{z}) + \frac{210}{143 z^3}$$

07.25.03.7201.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{3}{2}, 5; z\right) = -\frac{168(5z+11)}{143z^4} - \frac{4e^z(176z^7 - 752z^6 - 288z^5 - 300z^4 - 420z^3 - 315z^2 + 3780z - 6930)}{2145z^4} + \frac{32\sqrt{\pi}(22z^{7/2} - 105z^{5/2})\operatorname{erfi}(\sqrt{z})}{2145}$$

07.25.03.7202.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{3}{2}, 5; -z\right) = \frac{168(5z-11)}{143z^4} + \frac{4e^{-z}(176z^7 + 752z^6 - 288z^5 + 300z^4 - 420z^3 + 315z^2 + 3780z + 6930)}{2145z^4} + \frac{32\sqrt{\pi}(22z^{7/2} + 105z^{5/2})\operatorname{erf}(\sqrt{z})}{2145}$$

07.25.03.7203.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{3}{2}, 6; z\right) = \frac{420(85z^2 + 374z + 572)}{2431z^5} - \frac{4e^z(352z^8 - 1728z^7 - 688z^6 - 768z^5 - 1260z^4 - 2100z^3 + 945z^2 + 62370z - 180180)}{7293z^5} + \frac{64\sqrt{\pi}(22z^{7/2} - 119z^{5/2})\operatorname{erfi}(\sqrt{z})}{7293}$$

07.25.03.7204.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{3}{2}, 6; -z\right) = \frac{420(85z^2 - 374z + 572)}{2431z^5} + \frac{4e^{-z}(352z^8 + 1728z^7 - 688z^6 + 768z^5 - 1260z^4 + 2100z^3 + 945z^2 - 62370z - 180180)}{7293z^5} + \frac{64\sqrt{\pi}(22z^{7/2} + 119z^{5/2})\operatorname{erf}(\sqrt{z})}{7293}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = -\frac{1}{2}$

07.25.03.7205.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{1}{2}, 1; z\right) = \frac{1}{16}e^z(198z^3 - 783z^2 + 320z + 16) + \frac{1}{32}\sqrt{\pi}(-396z^{7/2} + 1764z^{5/2} - 1225z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.7206.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{1}{2}, 1; -z\right) = \frac{1}{16}e^{-z}(-198z^3 - 783z^2 - 320z + 16) + \frac{1}{32}\sqrt{\pi}(-396z^{7/2} - 1764z^{5/2} - 1225z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.7207.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{1}{2}, 2; z\right) = \frac{1}{8}e^z(22z^3 - 115z^2 + 76z + 8) + \frac{1}{16}\sqrt{\pi}(-44z^{7/2} + 252z^{5/2} - 245z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.7208.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{1}{2}, 2; -z\right) = \frac{1}{8}e^{-z}(-22z^3 - 115z^2 - 76z + 8) + \frac{1}{16}\sqrt{\pi}(-44z^{7/2} - 252z^{5/2} - 245z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.7209.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{1}{2}, 3; z\right) = \frac{1}{2}e^z(2z^3 - 13z^2 + 12z + 2) + \frac{1}{4}\sqrt{\pi}(-4z^{7/2} + 28z^{5/2} - 35z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.7210.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{1}{2}, 3; -z\right) = \frac{1}{2}e^{-z}(-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4}\sqrt{\pi}(-4z^{7/2} - 28z^{5/2} - 35z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.7211.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{1}{2}, 4; z\right) = \frac{e^z(198z^6 - 1539z^5 + 1832z^4 + 394z^3 + 105z^2 - 210z + 210)}{429z^3} + \frac{1}{858}\sqrt{\pi}(-396z^{7/2} + 3276z^{5/2} - 5005z^{3/2})\operatorname{erfi}(\sqrt{z}) - \frac{70}{143z^3}$$

07.25.03.7212.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{1}{2}, 4; -z\right) = \frac{e^{-z}(-198z^6 - 1539z^5 - 1832z^4 + 394z^3 - 105z^2 - 210z - 210)}{429z^3} + \frac{1}{858} \sqrt{\pi} (-396z^{7/2} - 3276z^{5/2} - 5005z^{3/2}) \operatorname{erf}(\sqrt{z}) + \frac{70}{143z^3}$$

07.25.03.7213.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{1}{2}, 5; z\right) = -\frac{56(5z+9)}{143z^4} + \frac{4e^z(132z^7 - 1194z^6 + 1744z^5 + 440z^4 + 210z^3 - 105z^2 - 840z + 1890)}{2145z^4} - \frac{4\sqrt{\pi}(132z^{7/2} - 1260z^{5/2} + 2275z^{3/2}) \operatorname{erfi}(\sqrt{z})}{2145}$$

07.25.03.7214.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{1}{2}, 5; -z\right) = \frac{56(5z-9)}{143z^4} - \frac{4e^{-z}(132z^7 + 1194z^6 + 1744z^5 - 440z^4 + 210z^3 + 105z^2 - 840z - 1890)}{2145z^4} - \frac{4\sqrt{\pi}(132z^{7/2} + 1260z^{5/2} + 2275z^{3/2}) \operatorname{erf}(\sqrt{z})}{2145}$$

07.25.03.7215.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{1}{2}, 6; z\right) = -\frac{140(85z^2 + 306z + 396)}{2431z^5} + \frac{4e^z(264z^8 - 2724z^7 + 4720z^6 + 1328z^5 + 840z^4 + 210z^3 - 2415z^2 - 9450z + 41580)}{7293z^5} - \frac{8\sqrt{\pi}(132z^{7/2} - 1428z^{5/2} + 2975z^{3/2}) \operatorname{erfi}(\sqrt{z})}{7293}$$

07.25.03.7216.01

$${}_2F_2\left(-\frac{7}{2}, 3; -\frac{1}{2}, 6; -z\right) = \frac{140(85z^2 - 306z + 396)}{2431z^5} - \frac{4e^{-z}(264z^8 + 2724z^7 + 4720z^6 - 1328z^5 + 840z^4 - 210z^3 - 2415z^2 + 9450z + 41580)}{7293z^5} - \frac{8\sqrt{\pi}(132z^{7/2} + 1428z^{5/2} + 2975z^{3/2}) \operatorname{erf}(\sqrt{z})}{7293}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = \frac{1}{2}$

07.25.03.7217.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{1}{2}, 1; z\right) = \frac{1}{64} e^z (-132z^3 + 816z^2 - 883z + 64) + \frac{1}{128} \sqrt{\pi} (264z^{7/2} - 1764z^{5/2} + 2450z^{3/2} - 525\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7218.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{1}{2}, 1; -z\right) = \frac{1}{64} e^{-z} (132z^3 + 816z^2 + 883z + 64) + \frac{1}{128} \sqrt{\pi} (264z^{7/2} + 1764z^{5/2} + 2450z^{3/2} + 525\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7219.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{1}{2}, 2; z\right) = \frac{1}{96} e^z (-44 z^3 + 356 z^2 - 579 z + 96) + \frac{1}{192} \sqrt{\pi} (88 z^{7/2} - 756 z^{5/2} + 1470 z^{3/2} - 525 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7220.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{1}{2}, 2; -z\right) = \frac{1}{96} e^{-z} (44 z^3 + 356 z^2 + 579 z + 96) + \frac{1}{192} \sqrt{\pi} (88 z^{7/2} + 756 z^{5/2} + 1470 z^{3/2} + 525 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7221.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{1}{2}, 3; z\right) = \frac{1}{24} e^z (-4 z^3 + 40 z^2 - 87 z + 24) + \frac{1}{48} \sqrt{\pi} (8 z^{7/2} - 84 z^{5/2} + 210 z^{3/2} - 105 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7222.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{1}{2}, 3; -z\right) = \frac{1}{24} e^{-z} (4 z^3 + 40 z^2 + 87 z + 24) + \frac{1}{48} \sqrt{\pi} (8 z^{7/2} + 84 z^{5/2} + 210 z^{3/2} + 105 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7223.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{1}{2}, 4; z\right) = \frac{e^z (-132 z^6 + 1572 z^5 - 4285 z^4 + 1696 z^3 + 60 z^2 - 120 z + 120)}{1716 z^3} + \frac{\sqrt{\pi} (264 z^{7/2} - 3276 z^{5/2} + 10010 z^{3/2} - 6435 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3432} - \frac{10}{143 z^3}$$

07.25.03.7224.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{1}{2}, 4; -z\right) = \frac{e^{-z} (132 z^6 + 1572 z^5 + 4285 z^4 + 1696 z^3 - 60 z^2 - 120 z - 120)}{1716 z^3} + \frac{\sqrt{\pi} (264 z^{7/2} + 3276 z^{5/2} + 10010 z^{3/2} + 6435 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{3432} + \frac{10}{143 z^3}$$

07.25.03.7225.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{1}{2}, 5; z\right) = -\frac{8(5z+7)}{143 z^4} - \frac{2 e^z (44 z^7 - 608 z^6 + 1993 z^5 - 1040 z^4 - 80 z^3 + 90 z^2 + 120 z - 420)}{2145 z^4} + \frac{\sqrt{\pi} (88 z^{7/2} - 1260 z^{5/2} + 4550 z^{3/2} - 3575 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{2145}$$

07.25.03.7226.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{1}{2}, 5; -z\right) = \frac{8(5z-7)}{143 z^4} + \frac{2 e^{-z} (44 z^7 + 608 z^6 + 1993 z^5 + 1040 z^4 - 80 z^3 - 90 z^2 + 120 z + 420)}{2145 z^4} + \frac{\sqrt{\pi} (88 z^{7/2} + 1260 z^{5/2} + 4550 z^{3/2} + 3575 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{2145}$$

07.25.03.7227.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{1}{2}, 6; z\right) = \frac{20(85 z^2 + 238 z + 252)}{2431 z^5} - \frac{4 e^z (44 z^8 - 692 z^7 + 2651 z^6 - 1728 z^5 - 200 z^4 + 120 z^3 + 405 z^2 + 210 z - 3780)}{7293 z^5} + \frac{2 \sqrt{\pi} (88 z^{7/2} - 1428 z^{5/2} + 5950 z^{3/2} - 5525 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{7293}$$

07.25.03.7228.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{1}{2}, 6; -z\right) = \frac{20(85z^2 - 238z + 252)}{2431z^5} + \frac{4e^{-z}(44z^8 + 692z^7 + 2651z^6 + 1728z^5 - 200z^4 - 120z^3 + 405z^2 - 210z - 3780)}{7293z^5} + \frac{2\sqrt{\pi}(88z^{7/2} + 1428z^{5/2} + 5950z^{3/2} + 5525\sqrt{z})\operatorname{erf}(\sqrt{z})}{7293}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = 1$

07.25.03.7229.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, 1; z\right) = \frac{1}{420}e^{z/2}(396z^4 - 3384z^3 + 7489z^2 - 4620z + 420)I_0\left(\frac{z}{2}\right) + \frac{1}{420}e^{z/2}(-396z^4 + 2988z^3 - 4699z^2 + 1019z)I_1\left(\frac{z}{2}\right)$$

07.25.03.7230.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, \frac{3}{2}; z\right) = \frac{e^{-z}(-264z^3 + 2220z^2 - 3922z + 919)}{1024} + \frac{\sqrt{\pi}(528z^4 - 4704z^3 + 9800z^2 - 4200z + 105)\operatorname{erfi}(\sqrt{z})}{2048\sqrt{z}}$$

07.25.03.7231.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, \frac{3}{2}; -z\right) = \frac{e^{-z}(264z^3 + 2220z^2 + 3922z + 919)}{1024} + \frac{\sqrt{\pi}(528z^4 + 4704z^3 + 9800z^2 + 4200z + 105)\operatorname{erf}(\sqrt{z})}{2048\sqrt{z}}$$

07.25.03.7232.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, 2; z\right) = \frac{1}{420}e^{z/2}(88z^4 - 948z^3 + 2764z^2 - 2415z + 420)I_0\left(\frac{z}{2}\right) + \frac{1}{420}e^{z/2}(-88z^4 + 860z^3 - 1948z^2 + 809z)I_1\left(\frac{z}{2}\right)$$

07.25.03.7233.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, \frac{5}{2}; z\right) = \frac{e^{-z}(-1584z^4 + 16848z^3 - 41368z^2 + 17260z + 105)}{20480z} + \frac{\sqrt{\pi}(3168z^5 - 35280z^4 + 98000z^3 - 63000z^2 + 3150z - 105)\operatorname{erfi}(\sqrt{z})}{40960z^{3/2}}$$

07.25.03.7234.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, \frac{5}{2}; -z\right) = \frac{e^{-z}(1584z^4 + 16848z^3 + 41368z^2 + 17260z - 105)}{20480z} + \frac{\sqrt{\pi}(3168z^5 + 35280z^4 + 98000z^3 + 63000z^2 + 3150z + 105)\operatorname{erf}(\sqrt{z})}{40960z^{3/2}}$$

07.25.03.7235.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, 3; z\right) = \frac{1}{105}e^{z/2}(8z^4 - 104z^3 + 376z^2 - 420z + 105)I_0\left(\frac{z}{2}\right) - \frac{4}{105}e^{z/2}z(2z^3 - 24z^2 + 71z - 44)I_1\left(\frac{z}{2}\right)$$

07.25.03.7236.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, \frac{7}{2}; z\right) = \frac{e^z (-1056 z^5 + 13584 z^4 - 42736 z^3 + 26104 z^2 + 630 z - 315)}{32768 z^2} + \frac{\sqrt{\pi} (2112 z^6 - 28224 z^5 + 98000 z^4 - 84000 z^3 + 6300 z^2 - 420 z + 315) \operatorname{erfi}(\sqrt{z})}{65536 z^{5/2}}$$

07.25.03.7237.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, \frac{7}{2}; -z\right) = \frac{e^{-z} (1056 z^5 + 13584 z^4 + 42736 z^3 + 26104 z^2 - 630 z - 315)}{32768 z^2} + \frac{\sqrt{\pi} (2112 z^6 + 28224 z^5 + 98000 z^4 + 84000 z^3 + 6300 z^2 + 420 z + 315) \operatorname{erf}(\sqrt{z})}{65536 z^{5/2}}$$

07.25.03.7238.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, 4; z\right) = \frac{e^{z/2} (1584 z^5 - 24120 z^4 + 104044 z^3 - 140700 z^2 + 44835 z + 420) I_0\left(\frac{z}{2}\right)}{45045 z} + \frac{e^{z/2} (-1584 z^6 + 22536 z^5 - 82300 z^4 + 68084 z^3 - 315 z^2 + 840 z - 1680) I_1\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.7239.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, \frac{9}{2}; z\right) = \frac{e^z (-2112 z^6 + 31872 z^5 - 122320 z^4 + 99136 z^3 + 3780 z^2 + 840 z - 7875)}{131072 z^3} + \frac{1}{262144 z^{7/2}} \sqrt{\pi} (4224 z^7 - 65856 z^6 + 274400 z^5 - 294000 z^4 + 29400 z^3 - 2940 z^2 + 4410 z + 7875) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7240.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, \frac{9}{2}; -z\right) = \frac{e^{-z} (2112 z^6 + 31872 z^5 + 122320 z^4 + 99136 z^3 - 3780 z^2 + 840 z + 7875)}{131072 z^3} + \frac{1}{262144 z^{7/2}} \sqrt{\pi} (4224 z^7 + 65856 z^6 + 274400 z^5 + 294000 z^4 + 29400 z^3 + 2940 z^2 + 4410 z - 7875) \operatorname{erf}(\sqrt{z})$$

07.25.03.7241.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, 5; z\right) = \frac{8 e^{z/2} (528 z^6 - 9216 z^5 + 46180 z^4 - 73080 z^3 + 27825 z^2 + 420 z + 1260) I_0\left(\frac{z}{2}\right)}{225225 z^2} - \frac{8 e^{z/2} (528 z^7 - 8688 z^6 + 37756 z^5 - 39140 z^4 + 525 z^3 - 1155 z^2 + 1680 z + 5040) I_1\left(\frac{z}{2}\right)}{225225 z^3}$$

07.25.03.7242.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, \frac{11}{2}; z\right) = \frac{1}{8388608 z^{9/2}} \left(3 \sqrt{\pi} (25344 z^8 - 451584 z^7 + 2195200 z^6 - 2822400 z^5 + 352800 z^4 - 47040 z^3 + 105840 z^2 + 378000 z + 385875) \operatorname{erfi}(\sqrt{z}) \right) - \frac{1}{4194304 z^4} 3 e^z (12672 z^7 - 219456 z^6 + 994208 z^5 - 1007984 z^4 - 46200 z^3 - 43260 z^2 + 120750 z + 385875)$$

07.25.03.7243.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, \frac{11}{2}; -z\right) = \frac{1}{4\,194\,304\,z^4} 3 e^{-z} (12\,672\,z^7 + 219\,456\,z^6 + 994\,208\,z^5 + 1\,007\,984\,z^4 - 46\,200\,z^3 + 43\,260\,z^2 + 120\,750\,z - 385\,875) + \frac{1}{8\,388\,608\,z^{9/2}} (3\sqrt{\pi} (25\,344\,z^8 + 451\,584\,z^7 + 2\,195\,200\,z^6 + 2\,822\,400\,z^5 + 352\,800\,z^4 + 47\,040\,z^3 + 105\,840\,z^2 - 378\,000\,z + 385\,875) \operatorname{erf}(\sqrt{z}))$$

07.25.03.7244.01

$${}_2F_2\left(-\frac{7}{2}, 3; 1, 6; z\right) = \frac{8 e^{z/2} (1056\,z^7 - 20\,784\,z^6 + 118\,624\,z^5 - 214\,620\,z^4 + 93\,870\,z^3 + 1365\,z^2 + 11\,340\,z + 20\,160) I_0\left(\frac{z}{2}\right)}{765\,765\,z^3} - \frac{1}{765\,765\,z^4} 8 e^{z/2} (1056\,z^8 - 19\,728\,z^7 + 99\,424\,z^6 - 124\,004\,z^5 + 3150\,z^4 - 5985\,z^3 + 7980\,z^2 + 45\,360\,z + 80\,640) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = \frac{3}{2}$

07.25.03.7245.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{3}{2}, 2; z\right) = \frac{e^z (-88\,z^3 + 964\,z^2 - 2502\,z + 1221)}{1536} + \frac{\sqrt{\pi} (176\,z^4 - 2016\,z^3 + 5880\,z^2 - 4200\,z + 315) \operatorname{erfi}(\sqrt{z})}{3072\sqrt{z}}$$

07.25.03.7246.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (88\,z^3 + 964\,z^2 + 2502\,z + 1221)}{1536} + \frac{\sqrt{\pi} (176\,z^4 + 2016\,z^3 + 5880\,z^2 + 4200\,z + 315) \operatorname{erf}(\sqrt{z})}{3072\sqrt{z}}$$

07.25.03.7247.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{3}{2}, 3; z\right) = \frac{1}{384} e^z (-8\,z^3 + 108\,z^2 - 370\,z + 279) + \frac{\sqrt{\pi} (16\,z^4 - 224\,z^3 + 840\,z^2 - 840\,z + 105) \operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.7248.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{3}{2}, 3; -z\right) = \frac{1}{384} e^{-z} (8\,z^3 + 108\,z^2 + 370\,z + 279) + \frac{\sqrt{\pi} (16\,z^4 + 224\,z^3 + 840\,z^2 + 840\,z + 105) \operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.7249.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{3}{2}, 4; z\right) = \frac{e^z (-264\,z^6 + 4236\,z^5 - 18\,034\,z^4 + 18\,511\,z^3 - 192\,z^2 + 384\,z - 384)}{27\,456\,z^3} + \frac{\sqrt{\pi} (528\,z^4 - 8736\,z^3 + 40\,040\,z^2 - 51\,480\,z + 9009) \operatorname{erfi}(\sqrt{z})}{54\,912\sqrt{z}} + \frac{2}{143\,z^3}$$

07.25.03.7250.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{3}{2}, 4; -z\right) = \frac{e^{-z} (264\,z^6 + 4236\,z^5 + 18\,034\,z^4 + 18\,511\,z^3 + 192\,z^2 + 384\,z + 384)}{27\,456\,z^3} + \frac{\sqrt{\pi} (528\,z^4 + 8736\,z^3 + 40\,040\,z^2 + 51\,480\,z + 9009) \operatorname{erf}(\sqrt{z})}{54\,912\sqrt{z}} - \frac{2}{143\,z^3}$$

07.25.03.7251.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{3}{2}, 5; z\right) = \frac{8(z+1)}{143z^4} + \frac{e^z(-88z^7 + 1636z^6 - 8326z^5 + 10845z^4 - 320z^3 + 480z^2 - 960)}{17160z^4} +$$

$$\frac{\sqrt{\pi}(176z^4 - 3360z^3 + 18200z^2 - 28600z + 6435)\operatorname{erfi}(\sqrt{z})}{34320\sqrt{z}}$$

07.25.03.7252.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{3}{2}, 5; -z\right) = -\frac{8(z-1)}{143z^4} + \frac{e^{-z}(88z^7 + 1636z^6 + 8326z^5 + 10845z^4 + 320z^3 + 480z^2 - 960)}{17160z^4} +$$

$$\frac{\sqrt{\pi}(176z^4 + 3360z^3 + 18200z^2 + 28600z + 6435)\operatorname{erf}(\sqrt{z})}{34320\sqrt{z}}$$

07.25.03.7253.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{3}{2}, 6; z\right) =$$

$$\frac{20(17z^2 + 34z + 28)}{2431z^5} + \frac{e^z(-88z^8 + 1860z^7 - 11014z^6 + 17413z^5 - 960z^4 + 1120z^3 + 720z^2 - 1440z - 6720)}{29172z^5} +$$

$$\frac{\sqrt{\pi}(176z^4 - 3808z^3 + 23800z^2 - 44200z + 12155)\operatorname{erfi}(\sqrt{z})}{58344\sqrt{z}}$$

07.25.03.7254.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{3}{2}, 6; -z\right) =$$

$$-\frac{20(17z^2 - 34z + 28)}{2431z^5} + \frac{e^{-z}(88z^8 + 1860z^7 + 11014z^6 + 17413z^5 + 960z^4 + 1120z^3 - 720z^2 - 1440z + 6720)}{29172z^5} +$$

$$\frac{\sqrt{\pi}(176z^4 + 3808z^3 + 23800z^2 + 44200z + 12155)\operatorname{erf}(\sqrt{z})}{58344\sqrt{z}}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = 2$

07.25.03.7255.01

$${}_2F_2\left(-\frac{7}{2}, 3; 2, 2; z\right) =$$

$$\frac{1}{945} e^{z/2} (44z^4 - 600z^3 + 2334z^2 - 2940z + 945) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2}(-88z^4 + 1112z^3 - 3600z^2 + 2748z - 105) I_1\left(\frac{z}{2}\right)}{1890}$$

07.25.03.7256.01

$${}_2F_2\left(-\frac{7}{2}, 3; 2, \frac{5}{2}; z\right) =$$

$$\frac{e^z(-176z^4 + 2432z^3 - 8672z^2 + 7160z - 105)}{10240z} + \frac{\sqrt{\pi}(352z^5 - 5040z^4 + 19600z^3 - 21000z^2 + 3150z + 105)\operatorname{erfi}(\sqrt{z})}{20480z^{3/2}}$$

07.25.03.7257.01

$${}_2F_2\left(-\frac{7}{2}, 3; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (176 z^4 + 2432 z^3 + 8672 z^2 + 7160 z + 105)}{10240 z} + \frac{\sqrt{\pi} (352 z^5 + 5040 z^4 + 19600 z^3 + 21000 z^2 + 3150 z - 105) \operatorname{erf}(\sqrt{z})}{20480 z^{3/2}}$$

07.25.03.7258.01

$${}_2F_2\left(-\frac{7}{2}, 3; 2, 3; z\right) = \frac{1}{945} e^{z/2} (16 z^4 - 264 z^3 + 1284 z^2 - 2100 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16 z^4 + 248 z^3 - 1044 z^2 + 1164 z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.7259.01

$${}_2F_2\left(-\frac{7}{2}, 3; 2, \frac{7}{2}; z\right) = \frac{e^{-z} (-352 z^5 + 5872 z^4 - 26640 z^3 + 31176 z^2 - 1470 z + 315)}{49152 z^2} + \frac{\sqrt{\pi} (704 z^6 - 12096 z^5 + 58800 z^4 - 84000 z^3 + 18900 z^2 + 1260 z - 315) \operatorname{erfi}(\sqrt{z})}{98304 z^{5/2}}$$

07.25.03.7260.01

$${}_2F_2\left(-\frac{7}{2}, 3; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (352 z^5 + 5872 z^4 + 26640 z^3 + 31176 z^2 + 1470 z + 315)}{49152 z^2} + \frac{\sqrt{\pi} (704 z^6 + 12096 z^5 + 58800 z^4 + 84000 z^3 + 18900 z^2 - 1260 z - 315) \operatorname{erf}(\sqrt{z})}{98304 z^{5/2}}$$

07.25.03.7261.01

$${}_2F_2\left(-\frac{7}{2}, 3; 2, 4; z\right) = \frac{2 e^{z/2} (176 z^5 - 3408 z^4 + 19892 z^3 - 39900 z^2 + 22575 z - 105) I_0\left(\frac{z}{2}\right)}{45045 z} - \frac{2 e^{z/2} (176 z^6 - 3232 z^5 + 16748 z^4 - 24592 z^3 + 3675 z^2 + 210 z - 420) I_1\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.7262.01

$${}_2F_2\left(-\frac{7}{2}, 3; 2, \frac{9}{2}; z\right) = \frac{e^{-z} (-704 z^6 + 13760 z^5 - 75792 z^4 + 115104 z^3 - 10500 z^2 + 1260 z + 4725)}{196608 z^3} + \frac{1}{393216 z^{7/2}} \sqrt{\pi} (1408 z^7 - 28224 z^6 + 164640 z^5 - 294000 z^4 + 88200 z^3 + 8820 z^2 - 4410 z - 4725) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7263.01

$${}_2F_2\left(-\frac{7}{2}, 3; 2, \frac{9}{2}; -z\right) = \frac{e^{-z} (704 z^6 + 13760 z^5 + 75792 z^4 + 115104 z^3 + 10500 z^2 + 1260 z - 4725)}{196608 z^3} + \frac{1}{393216 z^{7/2}} \sqrt{\pi} (1408 z^7 + 28224 z^6 + 164640 z^5 + 294000 z^4 + 88200 z^3 - 8820 z^2 - 4410 z + 4725) \operatorname{erf}(\sqrt{z})$$

07.25.03.7264.01

$${}_2F_2\left(-\frac{7}{2}, 3; 2, 5; z\right) = \frac{8 e^{z/2} (352 z^6 - 7824 z^5 + 53\,280 z^4 - 126\,420 z^3 + 85\,050 z^2 - 945 z - 1260) I_0\left(\frac{z}{2}\right) - 8 e^{z/2} (352 z^7 - 7472 z^6 + 45\,984 z^5 - 83\,820 z^4 + 17\,850 z^3 + 2205 z^2 - 3780 z - 5040) I_1\left(\frac{z}{2}\right)}{675\,675 z^2}$$

07.25.03.7265.01

$${}_2F_2\left(-\frac{7}{2}, 3; 2, \frac{11}{2}; z\right) = \frac{1}{4\,194\,304 z^{9/2}} - \frac{3 \sqrt{\pi} (2816 z^8 - 64\,512 z^7 + 439\,040 z^6 - 940\,800 z^5 + 352\,800 z^4 + 47\,040 z^3 - 35\,280 z^2 - 75\,600 z - 55\,125) \operatorname{erfi}(\sqrt{z}) - 3 e^z (1408 z^7 - 31\,552 z^6 + 204\,448 z^5 - 382\,192 z^4 + 54\,600 z^3 + 420 z^2 - 38\,850 z - 55\,125)}{2\,097\,152 z^4}$$

07.25.03.7266.01

$${}_2F_2\left(-\frac{7}{2}, 3; 2, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (1408 z^7 + 31\,552 z^6 + 204\,448 z^5 + 382\,192 z^4 + 54\,600 z^3 - 420 z^2 - 38\,850 z + 55\,125)}{2\,097\,152 z^4} + \frac{1}{4\,194\,304 z^{9/2}} - \frac{3 \sqrt{\pi} (2816 z^8 + 64\,512 z^7 + 439\,040 z^6 + 940\,800 z^5 + 352\,800 z^4 - 47\,040 z^3 - 35\,280 z^2 + 75\,600 z - 55\,125) \operatorname{erf}(\sqrt{z})}{2\,097\,152 z^4}$$

07.25.03.7267.01

$${}_2F_2\left(-\frac{7}{2}, 3; 2, 6; z\right) = \frac{32 e^{z/2} (176 z^7 - 4416 z^6 + 34\,368 z^5 - 94\,080 z^4 + 72\,765 z^3 - 1260 z^2 - 3465 z - 3780) I_0\left(\frac{z}{2}\right) - 16 e^{z/2} (352 z^8 - 8480 z^7 + 60\,432 z^6 - 131\,616 z^5 + 36\,750 z^4 + 6930 z^3 - 11\,025 z^2 - 27\,720 z - 30\,240) I_1\left(\frac{z}{2}\right)}{2\,297\,295 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = \frac{5}{2}$

07.25.03.7268.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{5}{2}, 3; z\right) = \frac{e^z (-16 z^4 + 272 z^3 - 1272 z^2 + 1580 z - 105)}{2560 z} + \frac{\sqrt{\pi} (32 z^5 - 560 z^4 + 2800 z^3 - 4200 z^2 + 1050 z + 105) \operatorname{erfi}(\sqrt{z})}{5120 z^{3/2}}$$

07.25.03.7269.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (16 z^4 + 272 z^3 + 1272 z^2 + 1580 z + 105)}{2560 z} + \frac{\sqrt{\pi} (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105) \operatorname{erf}(\sqrt{z})}{5120 z^{3/2}}$$

07.25.03.7270.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{5}{2}, 4; z\right) = \frac{e^z (-1584 z^6 + 31968 z^5 - 185008 z^4 + 307600 z^3 - 41205 z^2 - 7680 z + 7680)}{549120 z^3} + \frac{\sqrt{\pi} (3168 z^5 - 65520 z^4 + 400400 z^3 - 772200 z^2 + 270270 z + 45045) \operatorname{erfi}(\sqrt{z})}{1098240 z^{3/2}} - \frac{2}{143 z^3}$$

07.25.03.7271.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{5}{2}, 4; -z\right) = \frac{e^{-z} (1584 z^6 + 31968 z^5 + 185008 z^4 + 307600 z^3 + 41205 z^2 - 7680 z - 7680)}{549120 z^3} + \frac{\sqrt{\pi} (3168 z^5 + 65520 z^4 + 400400 z^3 + 772200 z^2 + 270270 z - 45045) \operatorname{erf}(\sqrt{z})}{1098240 z^{3/2}} + \frac{2}{143 z^3}$$

07.25.03.7272.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{5}{2}, 5; z\right) = -\frac{8(5z+3)}{715 z^4} + \frac{e^z (-528 z^7 + 12336 z^6 - 85096 z^5 + 177460 z^4 - 37365 z^3 - 13440 z^2 + 7680 z + 11520)}{343200 z^4} + \frac{\sqrt{\pi} (1056 z^5 - 25200 z^4 + 182000 z^3 - 429000 z^2 + 193050 z + 45045) \operatorname{erfi}(\sqrt{z})}{686400 z^{3/2}}$$

07.25.03.7273.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{5}{2}, 5; -z\right) = \frac{8(5z-3)}{715 z^4} + \frac{e^{-z} (528 z^7 + 12336 z^6 + 85096 z^5 + 177460 z^4 + 37365 z^3 - 13440 z^2 - 7680 z + 11520)}{343200 z^4} + \frac{\sqrt{\pi} (1056 z^5 + 25200 z^4 + 182000 z^3 + 429000 z^2 + 193050 z - 45045) \operatorname{erf}(\sqrt{z})}{686400 z^{3/2}}$$

07.25.03.7274.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{5}{2}, 6; z\right) = -\frac{4(85 z^2 + 102 z + 60)}{2431 z^5} + \frac{1}{583440 z^5} e^z (-528 z^8 + 14016 z^7 - 112256 z^6 + 281720 z^5 - 82515 z^4 - 42240 z^3 + 12480 z^2 + 40320 z + 57600) + \frac{\sqrt{\pi} (1056 z^5 - 28560 z^4 + 238000 z^3 - 663000 z^2 + 364650 z + 109395) \operatorname{erfi}(\sqrt{z})}{1166880 z^{3/2}}$$

$$\begin{aligned}
 & \text{07.25.03.7275.01} \\
 {}_2F_2\left(-\frac{7}{2}, 3; \frac{5}{2}, 6; -z\right) &= \frac{4(85z^2 - 102z + 60)}{2431z^5} + \\
 & \frac{1}{583440z^5} e^{-z} (528z^8 + 14016z^7 + 112256z^6 + 281720z^5 + 82515z^4 - 42240z^3 - 12480z^2 + 40320z - 57600) + \\
 & \frac{\sqrt{\pi} (1056z^5 + 28560z^4 + 238000z^3 + 663000z^2 + 364650z - 109395) \operatorname{erf}(\sqrt{z})}{1166880z^{3/2}}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = 3$

$$\begin{aligned}
 & \text{07.25.03.7276.01} \\
 {}_2F_2\left(-\frac{7}{2}, 3; 3, 3; z\right) &= \\
 & \frac{4e^{z/2} (16z^4 - 320z^3 + 1956z^2 - 4200z + 2625) I_0\left(\frac{z}{2}\right) - 4e^{z/2} (16z^5 - 304z^4 + 1660z^3 - 2676z^2 + 525z + 105) I_1\left(\frac{z}{2}\right)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7277.01} \\
 {}_2F_2\left(-\frac{7}{2}, 3; 3, \frac{7}{2}; z\right) &= \frac{e^z (-32z^5 + 656z^4 - 3888z^3 + 6744z^2 - 1050z - 315)}{12288z^2} + \\
 & \frac{\sqrt{\pi} (64z^6 - 1344z^5 + 8400z^4 - 16800z^3 + 6300z^2 + 1260z + 315) \operatorname{erfi}(\sqrt{z})}{24576z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7278.01} \\
 {}_2F_2\left(-\frac{7}{2}, 3; 3, \frac{7}{2}; -z\right) &= \frac{e^{-z} (32z^5 + 656z^4 + 3888z^3 + 6744z^2 + 1050z - 315)}{12288z^2} + \\
 & \frac{\sqrt{\pi} (64z^6 + 1344z^5 + 8400z^4 + 16800z^3 + 6300z^2 - 1260z + 315) \operatorname{erf}(\sqrt{z})}{24576z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7279.01} \\
 {}_2F_2\left(-\frac{7}{2}, 3; 3, 4; z\right) &= \frac{4e^{z/2} (32z^5 - 752z^4 + 5536z^3 - 14700z^2 + 11550z + 105) I_0\left(\frac{z}{2}\right) - 4e^{z/2} (32z^6 - 720z^5 + 4832z^4 - 10196z^3 + 3150z^2 + 1155z + 420) I_1\left(\frac{z}{2}\right)}{45045z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7280.01} \\
 {}_2F_2\left(-\frac{7}{2}, 3; 3, \frac{9}{2}; z\right) &= \frac{e^z (-64z^6 + 1536z^5 - 11024z^4 + 24576z^3 - 6300z^2 - 3360z - 1575)}{49152z^3} + \\
 & \frac{\sqrt{\pi} (128z^7 - 3136z^6 + 23520z^5 - 58800z^4 + 29400z^3 + 8820z^2 + 4410z + 1575) \operatorname{erfi}(\sqrt{z})}{98304z^{7/2}}
 \end{aligned}$$

07.25.03.7281.01

$${}_2F_2\left(-\frac{7}{2}, 3; 3, \frac{9}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1536 z^5 + 11 024 z^4 + 24 576 z^3 + 6300 z^2 - 3360 z + 1575)}{49 152 z^3} + \frac{\sqrt{\pi} (128 z^7 + 3136 z^6 + 23 520 z^5 + 58 800 z^4 + 29 400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{98 304 z^{7/2}}$$

07.25.03.7282.01

$${}_2F_2\left(-\frac{7}{2}, 3; 3, 5; z\right) = \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23 520 z^3 + 22 050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right)}{675 675 z^2} - \frac{64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675 675 z^3}$$

07.25.03.7283.01

$${}_2F_2\left(-\frac{7}{2}, 3; 3, \frac{11}{2}; z\right) = \frac{1}{1 048 576 z^{9/2}} - \frac{3 \sqrt{\pi} (256 z^8 - 7168 z^7 + 62 720 z^6 - 188 160 z^5 + 117 600 z^4 + 47 040 z^3 + 35 280 z^2 + 25 200 z + 11 025) \operatorname{erfi}(\sqrt{z}) - 3 e^z (128 z^7 - 3520 z^6 + 29 664 z^5 - 80 848 z^4 + 29 400 z^3 + 21 420 z^2 + 17 850 z + 11 025)}{524 288 z^4}$$

07.25.03.7284.01

$${}_2F_2\left(-\frac{7}{2}, 3; 3, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29 664 z^5 + 80 848 z^4 + 29 400 z^3 - 21 420 z^2 + 17 850 z - 11 025)}{524 288 z^4} + \frac{1}{1 048 576 z^{9/2}} - \frac{3 \sqrt{\pi} (256 z^8 + 7168 z^7 + 62 720 z^6 + 188 160 z^5 + 117 600 z^4 - 47 040 z^3 + 35 280 z^2 - 25 200 z + 11 025) \operatorname{erf}(\sqrt{z})}{524 288 z^4}$$

07.25.03.7285.01

$${}_2F_2\left(-\frac{7}{2}, 3; 3, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19 248 z^5 - 70 560 z^4 + 76 440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right)}{2 297 295 z^3} - \frac{1}{2 297 295 z^4} - \frac{32 e^{z/2} (64 z^8 - 1888 z^7 + 17 392 z^6 - 54 048 z^5 + 29 400 z^4 + 19 110 z^3 + 17 955 z^2 + 16 380 z + 10 080) I_1\left(\frac{z}{2}\right)}{1 757 184 z^{5/2}}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = \frac{7}{2}$

07.25.03.7286.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{7}{2}, 4; z\right) = \frac{e^z (-1056 z^6 + 25 680 z^5 - 187 888 z^4 + 432 376 z^3 - 120 810 z^2 - 73 695 z - 61 440)}{878 592 z^3} + \frac{\sqrt{\pi} (2112 z^6 - 52 416 z^5 + 400 400 z^4 - 1 029 600 z^3 + 540 540 z^2 + 180 180 z + 135 135) \operatorname{erfi}(\sqrt{z})}{1 757 184 z^{5/2}} + \frac{10}{143 z^3}$$

07.25.03.7287.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{7}{2}, 4; -z\right) = \frac{e^{-z} (1056 z^6 + 25\,680 z^5 + 187\,888 z^4 + 432\,376 z^3 + 120\,810 z^2 - 73\,695 z + 61\,440)}{878\,592 z^3} + \frac{\sqrt{\pi} (2112 z^6 + 52\,416 z^5 + 400\,400 z^4 + 1\,029\,600 z^3 + 540\,540 z^2 - 180\,180 z + 135\,135) \operatorname{erf}(\sqrt{z})}{1\,757\,184 z^{5/2}} - \frac{10}{143 z^3}$$

07.25.03.7288.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{7}{2}, 5; z\right) = \frac{8(5z+1)}{143 z^4} + \frac{e^z (-352 z^7 + 9904 z^6 - 86\,224 z^5 + 247\,400 z^4 - 101\,710 z^3 - 86\,985 z^2 - 122\,880 z - 30\,720)}{549\,120 z^4} + \frac{\sqrt{\pi} (704 z^6 - 20\,160 z^5 + 182\,000 z^4 - 572\,000 z^3 + 386\,100 z^2 + 180\,180 z + 225\,225) \operatorname{erfi}(\sqrt{z})}{1\,098\,240 z^{5/2}}$$

07.25.03.7289.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{7}{2}, 5; -z\right) = -\frac{8(5z-1)}{143 z^4} + \frac{e^{-z} (352 z^7 + 9904 z^6 + 86\,224 z^5 + 247\,400 z^4 + 101\,710 z^3 - 86\,985 z^2 + 122\,880 z - 30\,720)}{549\,120 z^4} + \frac{\sqrt{\pi} (704 z^6 + 20\,160 z^5 + 182\,000 z^4 + 572\,000 z^3 + 386\,100 z^2 - 180\,180 z + 225\,225) \operatorname{erf}(\sqrt{z})}{1\,098\,240 z^{5/2}}$$

07.25.03.7290.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{7}{2}, 6; z\right) = \frac{20(85 z^2 + 34 z + 12)}{2431 z^5} + \frac{1}{933\,504 z^5} e^z (-352 z^8 + 11\,248 z^7 - 113\,552 z^6 + 390\,408 z^5 - 213\,790 z^4 - 228\,165 z^3 - 437\,760 z^2 - 168\,960 z - 92\,160) + \frac{\sqrt{\pi} (704 z^6 - 22\,848 z^5 + 238\,000 z^4 - 884\,000 z^3 + 729\,300 z^2 + 437\,580 z + 765\,765) \operatorname{erfi}(\sqrt{z})}{1\,867\,008 z^{5/2}}$$

07.25.03.7291.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{7}{2}, 6; -z\right) = -\frac{20(85 z^2 - 34 z + 12)}{2431 z^5} + \frac{1}{933\,504 z^5} e^{-z} (352 z^8 + 11\,248 z^7 + 113\,552 z^6 + 390\,408 z^5 + 213\,790 z^4 - 228\,165 z^3 + 437\,760 z^2 - 168\,960 z + 92\,160) + \frac{\sqrt{\pi} (704 z^6 + 22\,848 z^5 + 238\,000 z^4 + 884\,000 z^3 + 729\,300 z^2 - 437\,580 z + 765\,765) \operatorname{erf}(\sqrt{z})}{1\,867\,008 z^{5/2}}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = 4$

07.25.03.7292.01

$${}_2F_2\left(-\frac{7}{2}, 3; 4, 4; z\right) = \frac{1}{19\,324\,305\,z^3} 16 e^{z/2} (1584 z^7 - 43\,776 z^6 + 389\,056 z^5 - 1\,284\,960 z^4 + 1\,274\,037 z^3 + 64\,536 z^2 + 135\,135 z - 270\,270) I_0\left(\frac{z}{2}\right) - \frac{8 e^{z/2} (3168 z^6 - 84\,384 z^5 + 695\,312 z^4 - 1\,913\,632 z^3 + 907\,614 z^2 + 552\,666 z + 651\,423) I_1\left(\frac{z}{2}\right) + \frac{32}{143 z^3}}{19\,324\,305 z^2}$$

07.25.03.7293.01

$${}_2F_2\left(-\frac{7}{2}, 3; 4, \frac{9}{2}; z\right) = \frac{e^z (-2112 z^6 + 60\,096 z^5 - 531\,568 z^4 + 1\,563\,424 z^3 - 679\,980 z^2 - 622\,020 z - 1\,044\,645)}{3\,514\,368 z^3} + \frac{1}{7\,028\,736 z^{7/2}} \sqrt{\pi} (4224 z^7 - 122\,304 z^6 + 1\,121\,120 z^5 - 3\,603\,600 z^4 + 2\,522\,520 z^3 + 1\,261\,260 z^2 + 1\,891\,890 z - 675\,675) \operatorname{erfi}(\sqrt{z}) + \frac{70}{143 z^3}$$

07.25.03.7294.01

$${}_2F_2\left(-\frac{7}{2}, 3; 4, \frac{9}{2}; -z\right) = \frac{e^{-z} (2112 z^6 + 60\,096 z^5 + 531\,568 z^4 + 1\,563\,424 z^3 + 679\,980 z^2 - 622\,020 z + 1\,044\,645)}{3\,514\,368 z^3} + \frac{1}{7\,028\,736 z^{7/2}} \sqrt{\pi} (4224 z^7 + 122\,304 z^6 + 1\,121\,120 z^5 + 3\,603\,600 z^4 + 2\,522\,520 z^3 - 1\,261\,260 z^2 + 1\,891\,890 z + 675\,675) \operatorname{erf}(\sqrt{z}) - \frac{70}{143 z^3}$$

07.25.03.7295.01

$${}_2F_2\left(-\frac{7}{2}, 3; 4, 5; z\right) = \frac{1}{96\,621\,525 z^3} 32 e^{z/2} (2112 z^7 - 67\,104 z^6 + 698\,800 z^5 - 2\,759\,520 z^4 + 3\,280\,920 z^3 + 375\,090 z^2 + 1\,216\,215 z - 2\,702\,700) I_0\left(\frac{z}{2}\right) - \frac{1}{96\,621\,525 z^3} 32 e^{z/2} (2112 z^7 - 64\,992 z^6 + 634\,864 z^5 - 2\,155\,040 z^4 + 1\,384\,920 z^3 + 1\,141\,710 z^2 + 2\,176\,035 z - 540\,540) I_1\left(\frac{z}{2}\right) + \frac{128}{143 z^3}$$

07.25.03.7296.01

$${}_2F_2\left(-\frac{7}{2}, 3; 4, \frac{11}{2}; z\right) = \frac{1}{37\,486\,592 z^4} e^z (-12\,672 z^7 + 412\,992 z^6 - 4\,284\,320 z^5 + 15\,345\,776 z^4 - 9\,146\,760 z^3 - 10\,715\,460 z^2 - 25\,770\,990 z + 4\,729\,725) + \frac{1}{74\,973\,184 z^{9/2}} \left(\sqrt{\pi} (25\,344 z^8 - 838\,656 z^7 + 8\,968\,960 z^6 - 34\,594\,560 z^5 + 30\,270\,240 z^4 + 20\,180\,160 z^3 + 45\,405\,360 z^2 - 32\,432\,400 z - 4\,729\,725) \operatorname{erfi}(\sqrt{z}) \right) + \frac{210}{143 z^3}$$

$$\begin{aligned}
 & \text{07.25.03.7297.01} \\
 {}_2F_2\left(-\frac{7}{2}, 3; 4, \frac{11}{2}; -z\right) &= \frac{1}{37486592z^4} \\
 & e^{-z} (12672z^7 + 412992z^6 + 4284320z^5 + 15345776z^4 + 9146760z^3 - 10715460z^2 + 25770990z + 4729725) + \\
 & \frac{1}{74973184z^{9/2}} \left(\sqrt{\pi} (25344z^8 + 838656z^7 + 8968960z^6 + 34594560z^5 + 30270240z^4 - \right. \\
 & \left. 20180160z^3 + 45405360z^2 + 32432400z - 4729725) \operatorname{erf}(\sqrt{z}) \right) - \frac{210}{143z^3}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7298.01} \\
 {}_2F_2\left(-\frac{7}{2}, 3; 4, 6; z\right) &= \frac{1}{328513185z^3} \\
 & 64e^{z/2} (2112z^7 - 75840z^6 + 905552z^5 - 4160400z^4 + 5745720z^3 + 1121160z^2 + 4729725z - 11756745) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{328513185z^4} \left(64e^{z/2} (2112z^8 - 73728z^7 + 832880z^6 - 3362272z^5 + 2732760z^4 + \right. \\
 & \left. 2802720z^3 + 7322475z^2 - 4054050z - 1081080) I_1\left(\frac{z}{2}\right) \right) + \frac{320}{143z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = \frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.7299.01} \\
 {}_2F_2\left(-\frac{7}{2}, 3; \frac{9}{2}, 5; z\right) &= \frac{56(5z-1)}{143z^4} + \frac{1}{2196480z^4} \\
 & e^z (-704z^7 + 23168z^6 - 243568z^5 + 889920z^4 - 552020z^3 - 674520z^2 - 1782585z + 860160) + \frac{1}{4392960z^{7/2}} \\
 & \sqrt{\pi} (1408z^7 - 47040z^6 + 509600z^5 - 2002000z^4 + 1801800z^3 + 1261260z^2 + 3153150z - 3378375) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7300.01} \\
 {}_2F_2\left(-\frac{7}{2}, 3; \frac{9}{2}, 5; -z\right) &= -\frac{56(5z+1)}{143z^4} + \frac{1}{2196480z^4} \\
 & e^{-z} (704z^7 + 23168z^6 + 243568z^5 + 889920z^4 + 552020z^3 - 674520z^2 + 1782585z + 860160) + \frac{1}{4392960z^{7/2}} \\
 & \sqrt{\pi} (1408z^7 + 47040z^6 + 509600z^5 + 2002000z^4 + 1801800z^3 - 1261260z^2 + 3153150z + 3378375) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7301.01} \\
 {}_2F_2\left(-\frac{7}{2}, 3; \frac{9}{2}, 6; z\right) &= \\
 & \frac{140(85z^2 - 34z - 4)}{2431z^5} + \frac{1}{3734016z^5} e^z (-704z^8 + 26304z^7 - 320400z^6 + 1399072z^5 - 1132740z^4 - 1692740z^3 - \\
 & 6015555z^2 + 6451200z + 860160) + \frac{1}{7468032z^{7/2}} \\
 & \sqrt{\pi} (1408z^7 - 53312z^6 + 666400z^5 - 3094000z^4 + 3403400z^3 + 3063060z^2 + 10720710z - 19144125) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.7302.01

$${}_2F_2\left(-\frac{7}{2}, 3; \frac{9}{2}, 6; -z\right) = -\frac{140(85z^2 + 34z - 4)}{2431z^5} + \frac{1}{3734016z^5} e^{-z} (704z^8 + 26304z^7 + 320400z^6 + 1399072z^5 + 1132740z^4 - 1692740z^3 + 6015555z^2 + 6451200z - 860160) + \frac{1}{7468032z^{7/2}} \sqrt{\pi} (1408z^7 + 53312z^6 + 666400z^5 + 3094000z^4 + 3403400z^3 - 3063060z^2 + 10720710z + 19144125) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = 5$

07.25.03.7303.01

$${}_2F_2\left(-\frac{7}{2}, 3; 5, 5; z\right) = \frac{512(5z - 2)}{715z^4} + \frac{1}{483107625z^4} (256e^{z/2} (704z^8 - 25728z^7 + 314320z^6 - 1488640z^5 + 2133000z^4 + 494640z^3 + 2462745z^2 - 8108100z + 2702700) I_0\left(\frac{z}{2}\right) - \frac{1}{483107625z^3} 256e^{z/2} (704z^7 - 25024z^6 + 289648z^5 - 1210800z^4 + 1044200z^3 + 1154040z^2 + 3555135z - 4338195) I_1\left(\frac{z}{2}\right)$$

07.25.03.7304.01

$${}_2F_2\left(-\frac{7}{2}, 3; 5, \frac{11}{2}; z\right) = \frac{168(5z - 3)}{143z^4} + \frac{1}{23429120z^4} e^z (-4224z^7 + 159168z^6 - 1960928z^5 + 8703440z^4 - 7260120z^3 - 11176620z^2 - 42273210z + 58926735) + \frac{1}{46858240z^{9/2}} (\sqrt{\pi} (8448z^8 - 322560z^7 + 4076800z^6 - 19219200z^5 + 21621600z^4 + 20180160z^3 + 75675600z^2 - 162162000z + 23648625) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.7305.01

$${}_2F_2\left(-\frac{7}{2}, 3; 5, \frac{11}{2}; -z\right) = -\frac{168(5z + 3)}{143z^4} + \frac{1}{23429120z^4} e^{-z} (4224z^7 + 159168z^6 + 1960928z^5 + 8703440z^4 + 7260120z^3 - 11176620z^2 + 42273210z + 58926735) + \frac{1}{46858240z^{9/2}} (\sqrt{\pi} (8448z^8 + 322560z^7 + 4076800z^6 + 19219200z^5 + 21621600z^4 - 20180160z^3 + 75675600z^2 + 162162000z + 23648625) \operatorname{erf}(\sqrt{z}))$$

07.25.03.7306.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{7}{2}, 3; 5, 6; z\right) = & \frac{256(5z-4)}{143z^4} + \frac{1}{1642565925z^4} \left(256e^{z/2}(1408z^8 - 58176z^7 + 815680z^6 - 4504880z^5 + 7532400z^4 + 2803080z^3 + \right. \\
 & \left. 18218040z^2 - 79053975z + 45945900)I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{1642565925z^4} \left(256e^{z/2}(1408z^8 - 56768z^7 + 759616z^6 - 3772240z^5 + 4087600z^4 + \right. \right. \\
 & \left. \left. 5605080z^3 + 23824920z^2 - 53479065z + 5405400)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = \frac{11}{2}$

07.25.03.7307.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{7}{2}, 3; \frac{11}{2}, 6; z\right) = & \frac{420(85z^2 - 102z + 12)}{2431z^5} + \frac{1}{39829504z^5} \left(e^z(-4224z^8 + 180672z^7 - 2577376z^6 + 13647568z^5 - 14679000z^4 - \right. \\
 & \left. 27499500z^3 - 141151290z^2 + 382439295z - 82575360)\right) + \\
 & \frac{1}{79659008z^{9/2}} \left(\sqrt{\pi}(8448z^8 - 365568z^7 + 5331200z^6 - 29702400z^5 + 40840800z^4 + \right. \\
 & \left. 49008960z^3 + 257297040z^2 - 918918000z + 402026625)\operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

07.25.03.7308.01

$$\begin{aligned}
 {}_2F_2\left(-\frac{7}{2}, 3; \frac{11}{2}, 6; -z\right) = & -\frac{420(85z^2 + 102z + 12)}{2431z^5} + \frac{1}{39829504z^5} \left(e^{-z}(4224z^8 + 180672z^7 + 2577376z^6 + 13647568z^5 + 14679000z^4 - \right. \\
 & \left. 27499500z^3 + 141151290z^2 + 382439295z + 82575360)\right) + \\
 & \frac{1}{79659008z^{9/2}} \left(\sqrt{\pi}(8448z^8 + 365568z^7 + 5331200z^6 + 29702400z^5 + 40840800z^4 - \right. \\
 & \left. 49008960z^3 + 257297040z^2 + 918918000z + 402026625)\operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 3$, $b_1 = 6$

$$\begin{aligned}
 & 07.25.03.7309.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 3; 6, 6; z\right) = \\
 & \frac{640(85z^2 - 136z + 32)}{2431z^5} + \frac{1}{5584724145z^5} \left(1024e^{z/2}(704z^9 - 32896z^8 + 529696z^7 - 3417280z^6 + 6694280z^5 + \right. \\
 & \quad \left. 3854640z^4 + 32932140z^3 - 202001640z^2 + 218243025z - 45945900)I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{5584724145z^4} \left(512e^{z/2}(1408z^8 - 64384z^7 + 995712z^6 - 5869632z^5 + 7956800z^4 + \right. \right. \\
 & \quad \left. \left. 13544080z^3 + 79886160z^2 - 318524280z + 164390505)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & 07.25.03.7310.01 \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \frac{1}{15436575} \left(e^z(2048z^{11} + 64512z^{10} + 631296z^9 + 2108160z^8 + 1762560z^7 + 362880z^6 - 907200z^5 + \right. \\
 & \quad \left. 2993760z^4 - 7824600z^3 + 15705900z^2 - 21687750z + 15436575)\right)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7311.01 \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & -\frac{1}{1403325} \left(e^z(1024z^{10} + 27648z^9 + 218880z^8 + 506880z^7 + 120960z^6 + 120960z^5 - 393120z^4 + \right. \\
 & \quad \left. 907200z^3 - 1644300z^2 + 2097900z - 1403325)\right)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7312.01 \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{155925} e^z(512z^9 + 11520z^8 + 69120z^7 + 80640z^6 - 60480z^5 + 90720z^4 - 151200z^3 + 226800z^2 - 255150z + 155925)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7313.01 \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{e^z(256z^8 + 4608z^7 + 18432z^6 - 5760z^5 - 21600z^4 + 56160z^3 - 47520z^2 + 42120z - 22275)}{22275}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7314.01 \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{e^z(128z^7 + 1728z^6 + 3168z^5 - 10800z^4 + 5400z^3 + 25380z^2 - 11070z + 4455)}{4455}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7315.01 \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{e^z(64z^6 + 576z^5 - 432z^4 - 4320z^3 + 9180z^2 + 8100z - 1485)}{1485}
 \end{aligned}$$

07.25.03.7316.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (32 z^5 + 144 z^4 - 720 z^3 - 360 z^2 + 5130 z + 1485)}{1485}$$

07.25.03.7317.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (16 z^5 + 48 z^4 - 372 z^3 + 12 z^2 + 2565 z + 1485) I_0\left(\frac{z}{2}\right) + e^{z/2} (16 z^5 + 32 z^4 - 396 z^3 + 408 z^2 + 1977 z) I_1\left(\frac{z}{2}\right)}{1485}$$

07.25.03.7318.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (16 z^4 - 360 z^2 + 720 z + 1485)}{1485}$$

07.25.03.7319.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (16 z^4 - 24 z^3 - 300 z^2 + 804 z + 1485) I_0\left(\frac{z}{2}\right) + e^{z/2} (16 z^4 - 40 z^3 - 252 z^2 + 1020 z + 429) I_1\left(\frac{z}{2}\right)}{1485}$$

07.25.03.7320.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{495} e^z (8 z^3 - 36 z^2 - 54 z + 495)$$

07.25.03.7321.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, 3; z\right) = \frac{16 e^{z/2} (2 z^3 - 12 z^2 + 3 z + 105) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (8 z^4 - 56 z^3 + 72 z^2 + 312 z - 195) I_1\left(\frac{z}{2}\right)}{1485}$$

07.25.03.7322.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{99} e^z (4 z^2 - 36 z + 99)$$

07.25.03.7323.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (8 z^3 - 84 z^2 + 300 z - 255) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (8 z^4 - 92 z^3 + 396 z^2 - 705 z + 1020) I_1\left(\frac{z}{2}\right)}{495 z}$$

07.25.03.7324.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (2 z^4 - 27 z^3 + 144 z^2 - 360 z + 540)}{99 z^3} - \frac{210 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.7325.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{210 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{7/2}} - \frac{7 e^{-z} (2 z^4 + 27 z^3 + 144 z^2 + 360 z + 540)}{99 z^3}$$

07.25.03.7326.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (4 z^3 - 60 z^2 + 357 z - 969) I_0\left(\frac{z}{2}\right) + 32 e^{z/2} (4 z^4 - 64 z^3 + 423 z^2 - 1428 z + 3876) I_1\left(\frac{z}{2}\right)}{495 z^2}$$

07.25.03.7327.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{7 e^z (4 z^4 - 72 z^3 + 540 z^2 - 2070 z + 4725)}{44 z^4} - \frac{945 \sqrt{\pi} (8 z + 35) \operatorname{erfi}(\sqrt{z})}{88 z^{9/2}}$$

07.25.03.7328.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{7 e^{-z} (4 z^4 + 72 z^3 + 540 z^2 + 2070 z + 4725)}{44 z^4} + \frac{945 \sqrt{\pi} (8 z - 35) \operatorname{erf}(\sqrt{z})}{88 z^{9/2}}$$

07.25.03.7329.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (4 z^3 - 78 z^2 + 627 z - 3192) I_0\left(\frac{z}{2}\right)}{99 z^3} + \frac{32 e^{z/2} (4 z^4 - 82 z^3 + 711 z^2 - 2508 z + 12768) I_1\left(\frac{z}{2}\right)}{99 z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.7330.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{127575} e^z (512 z^9 + 12032 z^8 + 79360 z^7 + 134400 z^6 - 6720 z^5 + 57120 z^4 - 110880 z^3 + 176400 z^2 - 204750 z + 127575)$$

07.25.03.7331.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{14175} e^z (256 z^8 + 5120 z^7 + 26880 z^6 + 26880 z^5 - 16800 z^4 + 20160 z^3 - 25200 z^2 + 25200 z - 14175)$$

07.25.03.7332.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 2112 z^6 + 8160 z^5 + 1200 z^4 - 9000 z^3 + 5580 z^2 - 4230 z + 2025)}{2025}$$

07.25.03.7333.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{405} e^z (64 z^6 + 832 z^5 + 2000 z^4 - 2400 z^3 - 3300 z^2 + 1140 z - 405)$$

07.25.03.7334.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{135} e^z (32 z^5 + 304 z^4 + 240 z^3 - 1560 z^2 - 870 z + 135)$$

07.25.03.7335.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{135} e^z (16 z^4 + 96 z^3 - 120 z^2 - 600 z - 135)$$

07.25.03.7336.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{135} e^{z/2} (-8 z^4 - 40 z^3 + 72 z^2 + 300 z + 135) I_0\left(\frac{z}{2}\right) - \frac{4}{135} e^{z/2} (2 z^4 + 8 z^3 - 25 z^2 - 48 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.7337.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{135} e^z (8 z^3 + 20 z^2 - 110 z - 135)$$

07.25.03.7338.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{135} e^{z/2} (-8 z^3 - 12 z^2 + 108 z + 135) I_0\left(\frac{z}{2}\right) + \frac{1}{135} e^{z/2} (-8 z^3 - 4 z^2 + 108 z + 33) I_1\left(\frac{z}{2}\right)$$

07.25.03.7339.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{45} e^z (4 z^2 - 4 z - 45)$$

07.25.03.7340.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, 3; z\right) = -\frac{4}{135} e^{z/2} (4z^2 - 8z - 37) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4z^3 - 12z^2 - 23z + 13) I_1\left(\frac{z}{2}\right)}{135z}$$

07.25.03.7341.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{1}{9} e^z (2z - 9)$$

07.25.03.7342.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, 4; z\right) = -\frac{4 e^{z/2} (4z^2 - 22z + 15) I_0\left(\frac{z}{2}\right)}{45z} - \frac{4 e^{z/2} (4z^3 - 26z^2 + 43z - 60) I_1\left(\frac{z}{2}\right)}{45z^2}$$

07.25.03.7343.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{7 e^z (z^3 - 8z^2 + 20z - 30)}{9z^3} - \frac{35 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{3z^{7/2}}$$

07.25.03.7344.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{3z^{7/2}} - \frac{7 e^{-z} (z^3 + 8z^2 + 20z + 30)}{9z^3}$$

07.25.03.7345.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, 5; z\right) = -\frac{32 e^{z/2} (2z^2 - 18z + 51) I_0\left(\frac{z}{2}\right)}{45z^2} - \frac{64 e^{z/2} (z^3 - 10z^2 + 36z - 102) I_1\left(\frac{z}{2}\right)}{45z^3}$$

07.25.03.7346.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = -\frac{7 e^z (8z^3 - 92z^2 + 390z - 945)}{16z^4} - \frac{105 \sqrt{\pi} (16z + 63) \operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.7347.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{7 e^{-z} (8z^3 + 92z^2 + 390z + 945)}{16z^4} + \frac{105 \sqrt{\pi} (16z - 63) \operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.7348.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, 6; z\right) = -\frac{32 e^{z/2} (2z^2 - 25z + 152) I_0\left(\frac{z}{2}\right)}{9z^3} - \frac{32 e^{z/2} (2z^3 - 27z^2 + 100z - 608) I_1\left(\frac{z}{2}\right)}{9z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.7349.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{e^z (128z^7 + 2240z^6 + 10080z^5 + 8400z^4 - 4200z^3 + 3780z^2 - 3150z + 1575)}{1575}$$

07.25.03.7350.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{225} e^z (64z^6 + 960z^5 + 3600z^4 + 2400z^3 - 900z^2 + 540z - 225)$$

07.25.03.7351.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} e^z (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45)$$

07.25.03.7352.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{15} e^z (16z^4 + 160z^3 + 360z^2 + 120z - 15)$$

07.25.03.7353.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (8z^3 + 60z^2 + 90z + 15)$$

07.25.03.7354.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (4z^3 + 28z^2 + 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^3 + 24z^2 + 23z) I_1\left(\frac{z}{2}\right)$$

07.25.03.7355.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (4z^2 + 20z + 15)$$

07.25.03.7356.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4z^2 + 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^2 + 14z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.7357.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{5} e^z (2z + 5)$$

07.25.03.7358.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, 3; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2z^2 + 2z - 1) I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.7359.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = e^z$$

07.25.03.7360.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (2z - 1) I_0\left(\frac{z}{2}\right)}{5z} + \frac{4 e^{z/2} (2z^2 - 3z + 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.7361.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4z^2 - 10z + 15)}{8z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.7362.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{7 e^{-z} (4z^2 + 10z + 15)}{8z^3}$$

07.25.03.7363.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (z - 3) I_0\left(\frac{z}{2}\right)}{5z^2} + \frac{32 e^{z/2} (z^2 - 4z + 12) I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.7364.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (8z^2 - 40z + 105)}{32z^4} - \frac{945 \sqrt{\pi} (2z + 7) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.7365.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8 z^2 + 40 z + 105)}{32 z^4} + \frac{945 \sqrt{\pi} (2 z - 7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.7366.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (z - 8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4 z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.7367.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{8192}{75} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{225} e^z (224 z^5 + 3024 z^4 - 13488 z^3 + 1656 z^2 - 666 z + 225)$$

07.25.03.7368.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{8192}{75} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{1}{225} e^{-z} (-224 z^5 + 3024 z^4 + 13488 z^3 + 1656 z^2 + 666 z + 225)$$

07.25.03.7369.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} e^z (-112 z^4 + 10944 z^3 + 1272 z^2 - 192 z + 45) - \frac{4096}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.7370.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{45} e^{-z} (-112 z^4 - 10944 z^3 + 1272 z^2 + 192 z + 45) - \frac{4096}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7371.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1024}{5} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{15} e^z (-3016 z^3 - 948 z^2 - 162 z + 15)$$

07.25.03.7372.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1024}{5} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{1}{15} e^{-z} (3016 z^3 - 948 z^2 + 162 z + 15)$$

07.25.03.7373.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (512 z^3 + 228 z^2 + 132 z + 15) - \frac{512}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.7374.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-512 z^3 + 228 z^2 - 132 z + 15) - \frac{512}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7375.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{525} e^{z/2} (-8192 z^4 + 6144 z^3 + 3350 z^2 + 2310 z + 525) I_0\left(\frac{z}{2}\right) + \frac{2}{525} e^{z/2} (4096 z^4 + 1024 z^3 + 907 z^2 + 440 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.7376.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (64 z^3 + 32 z^2 + 34 z + 15) - \frac{64}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.7377.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-64 z^3 + 32 z^2 - 34 z + 15) - \frac{64}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7378.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (-16384 z^4 + 12288 z^3 + 7680 z^2 + 9030 z + 4725) I_0\left(\frac{z}{2}\right) + e^{z/2} (16384 z^4 + 4096 z^3 + 4608 z^2 + 5190 z + 735) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.7379.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{25} e^z (32 z^3 + 16 z^2 + 24 z + 25) - \frac{32}{25} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.7380.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{25} e^{-z} (-32 z^3 + 16 z^2 - 24 z + 25) - \frac{32}{25} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7381.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (16384 z^5 + 4096 z^4 + 4608 z^3 + 9600 z^2 + 5145 z - 2205) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (16384 z^4 - 12288 z^3 - 7680 z^2 - 13440 z - 13545) I_0\left(\frac{z}{2}\right)}{51975 z}$$

07.25.03.7382.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{15} e^z (8 z^3 + 4 z^2 + 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.7383.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{15} e^{-z} (-8 z^3 + 4 z^2 - 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7384.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (32768 z^6 + 8192 z^5 + 9216 z^4 + 19200 z^3 + 58800 z^2 - 77175 z + 97020) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (32768 z^5 - 24576 z^4 - 15360 z^3 - 26880 z^2 - 75600 z + 24255) I_0\left(\frac{z}{2}\right)}{225225 z^2}$$

07.25.03.7385.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 - 1050 z + 1575)}{240 z^3} + \frac{\sqrt{\pi} (-128 z^7 - 1575) \operatorname{erfi}(\sqrt{z})}{480 z^{7/2}}$$

07.25.03.7386.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-64 z^6 + 32 z^5 - 48 z^4 + 120 z^3 - 420 z^2 - 1050 z - 1575)}{240 z^3} + \frac{\sqrt{\pi} (1575 - 128 z^7) \operatorname{erf}(\sqrt{z})}{480 z^{7/2}}$$

07.25.03.7387.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, 5; z\right) = \frac{128 e^{z/2} (8192 z^7 + 2048 z^6 + 2304 z^5 + 4800 z^4 + 14700 z^3 + 59535 z^2 - 291060 z + 945945) I_1\left(\frac{z}{2}\right)}{3378375 z^3} - \frac{32 e^{z/2} (32768 z^6 - 24576 z^5 - 15360 z^4 - 26880 z^3 - 75600 z^2 - 291060 z + 945945) I_0\left(\frac{z}{2}\right)}{3378375 z^2}$$

07.25.03.7388.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (128 z^7 + 64 z^6 + 96 z^5 + 240 z^4 + 840 z^3 + 3780 z^2 - 26250 z + 77175)}{2560 z^4} - \frac{3 \sqrt{\pi} (256 z^8 + 25200 z + 77175) \operatorname{erfi}(\sqrt{z})}{5120 z^{9/2}}$$

07.25.03.7389.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 - 64 z^6 + 96 z^5 - 240 z^4 + 840 z^3 - 3780 z^2 - 26250 z - 77175)}{2560 z^4} - \frac{3 \sqrt{\pi} (256 z^8 - 25200 z + 77175) \operatorname{erf}(\sqrt{z})}{5120 z^{9/2}}$$

07.25.03.7390.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, 6; z\right) = \frac{1}{11486475 z^4} \left(32 e^{z/2} (65536 z^8 + 16384 z^7 + 18432 z^6 + 38400 z^5 + 117600 z^4 + 476280 z^3 + 2401245 z^2 - 11351340 z + 151351200) I_1\left(\frac{z}{2}\right) - \frac{1}{11486475 z^3} \right) - \frac{32 e^{z/2} (65536 z^7 - 49152 z^6 - 30720 z^5 - 53760 z^4 - 151200 z^3 - 582120 z^2 - 2837835 z + 37837800) I_0\left(\frac{z}{2}\right)}{11486475 z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.7391.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} e^z (-6088 z^3 + 1156 z^2 - 58 z + 9) + \frac{512}{9} \sqrt{\pi} (12 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7392.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9} e^{-z} (6088 z^3 + 1156 z^2 + 58 z + 9) + \frac{512}{9} \sqrt{\pi} (12 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7393.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (1536 z^3 - 1052 z^2 - 52 z + 3) - \frac{256}{3} \sqrt{\pi} (6 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7394.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-1536 z^3 - 1052 z^2 + 52 z + 3) - \frac{256}{3} \sqrt{\pi} (6 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7395.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (-256 z^3 + 320 z^2 + 46 z + 3) + \frac{64}{3} \sqrt{\pi} (4 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7396.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (256 z^3 + 320 z^2 - 46 z + 3) + \frac{64}{3} \sqrt{\pi} (4 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7397.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (12288 z^4 - 34304 z^3 + 13056 z^2 + 2415 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-12288 z^4 + 22016 z^3 + 2816 z^2 + 591 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.7398.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{32}{9} \sqrt{\pi} (3 z - 7) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{9} e^z (-96 z^3 + 176 z^2 + 40 z + 9)$$

07.25.03.7399.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{32}{9} \sqrt{\pi} (3 z + 7) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{9} e^{-z} (96 z^3 + 176 z^2 - 40 z + 9)$$

07.25.03.7400.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (8192 z^4 - 27648 z^3 + 12288 z^2 + 3360 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-8192 z^4 + 19456 z^3 + 3072 z^2 + 1248 z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.7401.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{4}{15} \sqrt{\pi} (12 z - 35) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{15} e^z (-48 z^3 + 116 z^2 + 34 z + 15)$$

07.25.03.7402.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{4}{15} \sqrt{\pi} (12 z + 35) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{15} e^{-z} (48 z^3 + 116 z^2 - 34 z + 15)$$

07.25.03.7403.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, 3; z\right) = \frac{16 e^{z/2} (6144 z^4 - 24320 z^3 + 11904 z^2 + 4200 z + 1995) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (24576 z^5 - 72704 z^4 - 12800 z^3 - 7776 z^2 - 2100 z + 735) I_1\left(\frac{z}{2}\right)}{31185 z}$$

07.25.03.7404.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{2}{3} \sqrt{\pi} (2 z - 7) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^z (-4 z^3 + 12 z^2 + 4 z + 3)$$

07.25.03.7405.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{2}{3} \sqrt{\pi} (2 z + 7) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4 z^3 + 12 z^2 - 4 z + 3)$$

07.25.03.7406.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (49 152 z^5 - 223 232 z^4 + 116 736 z^3 + 47 040 z^2 + 39 480 z - 6615) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (49 152 z^6 - 174 080 z^5 - 32 768 z^4 - 23 616 z^3 - 21 000 z^2 + 22 785 z - 26 460) I_1\left(\frac{z}{2}\right)}{135 135 z^2}$$

07.25.03.7407.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (-384 z^6 + 1376 z^5 + 496 z^4 + 456 z^3 + 420 z^2 - 1050 z + 1575)}{576 z^3} + \frac{\sqrt{\pi} (768 z^7 - 3136 z^6 - 1575) \operatorname{erfi}(\sqrt{z})}{1152 z^{7/2}}$$

07.25.03.7408.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (384 z^6 + 1376 z^5 - 496 z^4 + 456 z^3 - 420 z^2 - 1050 z - 1575)}{576 z^3} + \frac{\sqrt{\pi} (768 z^7 + 3136 z^6 + 1575) \operatorname{erf}(\sqrt{z})}{1152 z^{7/2}}$$

07.25.03.7409.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (16 384 z^6 - 83 968 z^5 + 46 080 z^4 + 20 160 z^3 + 21 000 z^2 + 19 845 z - 72 765) I_0\left(\frac{z}{2}\right) - \frac{1}{675 675 z^3} 32 e^{z/2} (16 384 z^7 - 67 584 z^6 - 13 312 z^5 - 10 560 z^4 - 12 600 z^3 - 9555 z^2 + 79 380 z - 291 060) I_1\left(\frac{z}{2}\right)}{675 675 z^2}$$

07.25.03.7410.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z (-384 z^7 + 1600 z^6 + 608 z^5 + 624 z^4 + 840 z^3 + 420 z^2 - 9450 z + 33 075)}{1024 z^4} + \frac{\sqrt{\pi} (768 z^8 - 3584 z^7 - 12 600 z - 33 075) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.7411.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (384 z^7 + 1600 z^6 - 608 z^5 + 624 z^4 - 840 z^3 + 420 z^2 + 9450 z + 33 075)}{1024 z^4} + \frac{\sqrt{\pi} (768 z^8 + 3584 z^7 + 12 600 z - 33 075) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.7412.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{6 891 885 z^3} 32 e^{z/2} (98 304 z^7 - 561 152 z^6 + 319 488 z^5 + 147 840 z^4 + 173 040 z^3 + 251 370 z^2 + 72 765 z - 7 567 560) I_0\left(\frac{z}{2}\right) - \frac{1}{6 891 885 z^4} \left(32 e^{z/2} (98 304 z^8 - 462 848 z^7 - 94 208 z^6 - 79 488 z^5 - 109 200 z^4 - 160 230 z^3 + 59 535 z^2 + 291 060 z - 30 270 240) I_1\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.7413.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = e^z (-384 z^3 + 704 z^2 - 50 z + 1) + 32 \sqrt{\pi} (12 z^{7/2} - 28 z^{5/2} + 7 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7414.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = e^{-z} (384 z^3 + 704 z^2 + 50 z + 1) + 32 \sqrt{\pi} (12 z^{7/2} + 28 z^{5/2} + 7 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7415.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = e^z (64 z^3 - 192 z^2 + 48 z + 1) - 16 \sqrt{\pi} (4 z^{7/2} - 14 z^{5/2} + 7 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7416.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z} (-64 z^3 - 192 z^2 - 48 z + 1) - 16 \sqrt{\pi} (4 z^{7/2} + 14 z^{5/2} + 7 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7417.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (-3072 z^4 + 14848 z^3 - 15808 z^2 + 2520 z + 105) I_0\left(\frac{z}{2}\right) + \frac{8}{105} e^{z/2} (384 z^4 - 1472 z^3 + 696 z^2 + 29 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.7418.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (24 z^3 - 100 z^2 + 46 z + 3) - \frac{4}{3} \sqrt{\pi} (6 z^{7/2} - 28 z^{5/2} + 21 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7419.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (-24 z^3 - 100 z^2 - 46 z + 3) - \frac{4}{3} \sqrt{\pi} (6 z^{7/2} + 28 z^{5/2} + 21 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7420.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (-2048 z^4 + 12288 z^3 - 16512 z^2 + 3696 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (2048 z^4 - 10240 z^3 + 7296 z^2 + 528 z + 21) I_1\left(\frac{z}{2}\right)$$

07.25.03.7421.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{5} e^z (12 z^3 - 64 z^2 + 44 z + 5) - \frac{2}{5} \sqrt{\pi} z^{3/2} (6 z^2 - 35 z + 35) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7422.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{5} e^{-z} (-12 z^3 - 64 z^2 - 44 z + 5) - \frac{2}{5} \sqrt{\pi} z^{3/2} (6 z^2 + 35 z + 35) \operatorname{erf}(\sqrt{z})$$

07.25.03.7423.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (6144 z^5 - 37888 z^4 + 36224 z^3 + 3600 z^2 + 399 z - 105) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (6144 z^4 - 44032 z^3 + 71040 z^2 - 19824 z - 2625) I_0\left(\frac{z}{2}\right)}{10395 z}$$

10395

07.25.03.7424.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{2} e^z (2z^3 - 13z^2 + 12z + 2) - \frac{1}{4} \sqrt{\pi} z^{3/2} (4z^2 - 28z + 35) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7425.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{2} e^{-z} (-2z^3 - 13z^2 - 12z + 2) - \frac{1}{4} \sqrt{\pi} z^{3/2} (4z^2 + 28z + 35) \operatorname{erf}(\sqrt{z})$$

07.25.03.7426.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (12288 z^6 - 90112 z^5 + 108288 z^4 + 13024 z^3 + 3486 z^2 - 2835 z + 2940) I_1\left(\frac{z}{2}\right)}{45045 z^2} - \frac{4 e^{z/2} (12288 z^5 - 102400 z^4 + 192256 z^3 - 62496 z^2 - 11970 z + 735) I_0\left(\frac{z}{2}\right)}{45045 z}$$

07.25.03.7427.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (192 z^6 - 1472 z^5 + 1712 z^4 + 360 z^3 + 84 z^2 - 210 z + 315)}{384 z^3} + \frac{\sqrt{\pi} (-384 z^7 + 3136 z^6 - 4704 z^5 - 315) \operatorname{erfi}(\sqrt{z})}{768 z^{7/2}}$$

07.25.03.7428.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-192 z^6 - 1472 z^5 - 1712 z^4 + 360 z^3 - 84 z^2 - 210 z - 315)}{384 z^3} + \frac{\sqrt{\pi} (-384 z^7 - 3136 z^6 - 4704 z^5 + 315) \operatorname{erf}(\sqrt{z})}{768 z^{7/2}}$$

07.25.03.7429.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, 5; z\right) = \frac{64 e^{z/2} (2048 z^7 - 17408 z^6 + 25216 z^5 + 3440 z^4 + 1365 z^3 - 210 z^2 - 2940 z + 13230) I_1\left(\frac{z}{2}\right)}{225225 z^3} - \frac{32 e^{z/2} (4096 z^6 - 38912 z^5 + 83200 z^4 - 30240 z^3 - 7350 z^2 - 1470 z + 6615) I_0\left(\frac{z}{2}\right)}{225225 z^2}$$

07.25.03.7430.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (384 z^7 - 3392 z^6 + 4768 z^5 + 1168 z^4 + 504 z^3 - 420 z^2 - 2310 z + 11025)}{4096 z^4} - \frac{3 \sqrt{\pi} (768 z^8 - 7168 z^7 + 12544 z^6 + 5040 z + 11025) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.7431.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{3 e^{-z} (384 z^7 + 3392 z^6 + 4768 z^5 - 1168 z^4 + 504 z^3 + 420 z^2 - 2310 z - 11025)}{4096 z^4} - \frac{3 \sqrt{\pi} (768 z^8 + 7168 z^7 + 12544 z^6 - 5040 z + 11025) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.7432.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, 6; z\right) = \frac{1}{2297295 z^4} \\
 & \quad 32 e^{z/2} (24576 z^8 - 237568 z^7 + 402944 z^6 + 60096 z^5 + 29820 z^4 + 9030 z^3 - 50715 z^2 + 185220 z + 2328480) I_1\left(\frac{z}{2}\right) - \\
 & \quad \frac{1}{2297295 z^3} 32 e^{z/2} (24576 z^7 - 262144 z^6 + 628224 z^5 - 248640 z^4 - 70980 z^3 - 30870 z^2 + 46305 z + 582120) I_0\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{1}{2}$

$$\text{07.25.03.7433.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (-32 z^3 + 152 z^2 - 108 z + 3) + \frac{1}{3} \sqrt{\pi} (32 z^{7/2} - 168 z^{5/2} + 168 z^{3/2} - 21 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.7434.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (32 z^3 + 152 z^2 + 108 z + 3) + \frac{1}{3} \sqrt{\pi} (32 z^{7/2} + 168 z^{5/2} + 168 z^{3/2} + 21 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.7435.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, 1; z\right) = \\
 & \quad \frac{1}{105} e^{z/2} (512 z^4 - 3520 z^3 + 6032 z^2 - 2625 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-512 z^4 + 3008 z^3 - 3280 z^2 + 337 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\text{07.25.03.7436.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (-4 z^3 + 26 z^2 - 31 z + 3) + \frac{1}{6} \sqrt{\pi} \sqrt{z} (8 z^3 - 56 z^2 + 84 z - 21) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.7437.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (4 z^3 + 26 z^2 + 31 z + 3) + \frac{1}{6} \sqrt{\pi} \sqrt{z} (8 z^3 + 56 z^2 + 84 z + 21) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.7438.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (1024 z^4 - 8832 z^3 + 19680 z^2 - 12054 z + 945) I_0\left(\frac{z}{2}\right) + \\
 & \quad \frac{1}{945} e^{z/2} (-1024 z^4 + 7808 z^3 - 12384 z^2 + 2550 z + 21) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\text{07.25.03.7439.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{20} e^z (-8 z^3 + 66 z^2 - 111 z + 20) + \frac{1}{40} \sqrt{\pi} \sqrt{z} (16 z^3 - 140 z^2 + 280 z - 105) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.7440.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{20} e^{-z} (8 z^3 + 66 z^2 + 111 z + 20) + \frac{1}{40} \sqrt{\pi} \sqrt{z} (16 z^3 + 140 z^2 + 280 z + 105) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.7441.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, 3; z\right) = \frac{8 e^{z/2} (512 z^4 - 5312 z^3 + 14544 z^2 - 11277 z + 1302) I_0\left(\frac{z}{2}\right) -}{10395} \\
 & \quad \frac{4 e^{z/2} (1024 z^5 - 9600 z^4 + 20000 z^3 - 6330 z^2 - 126 z + 21) I_1\left(\frac{z}{2}\right)}{10395 z}
 \end{aligned}$$

$$07.25.03.7442.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{24} e^z (-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48} \sqrt{\pi} \sqrt{z} (8z^3 - 84z^2 + 210z - 105) \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.7443.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{24} e^{-z} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} \sqrt{\pi} \sqrt{z} (8z^3 + 84z^2 + 210z + 105) \operatorname{erf}(\sqrt{z})$$

$$07.25.03.7444.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (2048 z^5 - 24832 z^4 + 80576 z^3 - 74844 z^2 + 11382 z - 105) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (2048 z^6 - 22784 z^5 + 58816 z^4 - 25372 z^3 - 966 z^2 + 483 z - 420) I_1\left(\frac{z}{2}\right)}{45045 z^2}$$

$$07.25.03.7445.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (-256 z^6 + 3008 z^5 - 8032 z^4 + 3048 z^3 + 84 z^2 - 210 z + 315)}{3072 z^3} + \frac{\sqrt{\pi} (512 z^7 - 6272 z^6 + 18816 z^5 - 11760 z^4 - 315) \operatorname{erfi}(\sqrt{z})}{6144 z^{7/2}}$$

$$07.25.03.7446.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (256 z^6 + 3008 z^5 + 8032 z^4 + 3048 z^3 - 84 z^2 - 210 z - 315)}{3072 z^3} + \frac{\sqrt{\pi} (512 z^7 + 6272 z^6 + 18816 z^5 + 11760 z^4 + 315) \operatorname{erf}(\sqrt{z})}{6144 z^{7/2}}$$

$$07.25.03.7447.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (2048 z^6 - 28416 z^5 + 106560 z^4 - 114660 z^3 + 21420 z^2 + 315 z - 2205) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (2048 z^7 - 26368 z^6 + 81216 z^5 - 44580 z^4 - 2520 z^3 + 945 z^2 + 1260 z - 8820) I_1\left(\frac{z}{2}\right)}{675675 z^2}$$

$$07.25.03.7448.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 \sqrt{\pi} (256 z^8 - 3584 z^7 + 12544 z^6 - 9408 z^5 - 1260 z - 2205) \operatorname{erfi}(\sqrt{z})}{16384 z^{9/2}} - \frac{3 e^z (128 z^7 - 1728 z^6 + 5472 z^5 - 2672 z^4 - 168 z^3 + 252 z^2 + 210 z - 2205)}{8192 z^4}$$

$$07.25.03.7449.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 + 1728 z^6 + 5472 z^5 + 2672 z^4 - 168 z^3 - 252 z^2 + 210 z + 2205)}{8192 z^4} + \frac{3 \sqrt{\pi} (256 z^8 + 3584 z^7 + 12544 z^6 + 9408 z^5 + 1260 z - 2205) \operatorname{erf}(\sqrt{z})}{16384 z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.7450.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, 6; z\right) = \frac{1}{2\,297\,295\,z^3} \\
 & 32 e^{z/2} (4096 z^7 - 64\,000 z^6 + 272\,256 z^5 - 331\,800 z^4 + 72\,660 z^3 + 3780 z^2 - 11\,025 z - 52\,920) I_0\left(\frac{z}{2}\right) - \frac{1}{2\,297\,295\,z^4} \\
 & 32 e^{z/2} (4096 z^8 - 59\,904 z^7 + 214\,400 z^6 - 143\,256 z^5 - 10\,500 z^4 + 2100 z^3 + 8505 z^2 - 44\,100 z - 211\,680) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 1$

$$\begin{aligned}
 & \text{07.25.03.7451.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; 1, \frac{3}{2}; z\right) = \\
 & \frac{1}{315} e^{z/2} (192 z^4 - 1712 z^3 + 4026 z^2 - 2730 z + 315) I_0\left(\frac{z}{2}\right) - \frac{2}{315} e^{z/2} (96 z^4 - 760 z^3 + 1301 z^2 - 348 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7452.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; 1, \frac{5}{2}; z\right) = \\
 & \frac{1}{525} e^{z/2} (96 z^4 - 1052 z^3 + 3140 z^2 - 2835 z + 525) I_0\left(\frac{z}{2}\right) + \frac{1}{525} e^{z/2} (-96 z^4 + 956 z^3 - 2232 z^2 + 985 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7453.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{105} e^{z/2} (8 z^4 - 104 z^3 + 376 z^2 - 420 z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} (2 z^4 - 24 z^3 + 71 z^2 - 44 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.7454.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{144} e^z (-24 z^3 + 212 z^2 - 410 z + 123) + \frac{\sqrt{\pi} (48 z^4 - 448 z^3 + 1008 z^2 - 504 z + 21) \operatorname{erfi}(\sqrt{z})}{288 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7455.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{144} e^{-z} (24 z^3 + 212 z^2 + 410 z + 123) + \frac{\sqrt{\pi} (48 z^4 + 448 z^3 + 1008 z^2 + 504 z + 21) \operatorname{erf}(\sqrt{z})}{288 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7456.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, 2; z\right) = \\
 & \frac{1}{945} e^{z/2} (128 z^4 - 1440 z^3 + 4476 z^2 - 4326 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-128 z^4 + 1312 z^3 - 3228 z^2 + 1626 z - 21) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7457.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{480} e^z (-24 z^3 + 268 z^2 - 718 z + 375) + \frac{\sqrt{\pi} (48 z^4 - 560 z^3 + 1680 z^2 - 1260 z + 105) \operatorname{erfi}(\sqrt{z})}{960 \sqrt{z}}
 \end{aligned}$$

07.25.03.7458.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{480} e^{-z} (24z^3 + 268z^2 + 718z + 375) + \frac{\sqrt{\pi} (48z^4 + 560z^3 + 1680z^2 + 1260z + 105) \operatorname{erf}(\sqrt{z})}{960\sqrt{z}}$$

07.25.03.7459.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, 3; z\right) = \frac{4e^{z/2} (384z^4 - 5216z^3 + 20148z^2 - 25032z + 7791) I_0\left(\frac{z}{2}\right)}{31185} - \frac{4e^{z/2} (384z^5 - 4832z^4 + 15508z^3 - 11556z^2 + 357z - 21) I_1\left(\frac{z}{2}\right)}{31185z}$$

07.25.03.7460.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{384} e^z (-8z^3 + 108z^2 - 370z + 279) + \frac{\sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.7461.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{384} e^{-z} (8z^3 + 108z^2 + 370z + 279) + \frac{\sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.7462.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, 4; z\right) = \frac{4e^{z/2} (768z^5 - 12224z^4 + 56424z^3 - 85260z^2 + 33684z + 63) I_0\left(\frac{z}{2}\right)}{135135z} - \frac{4e^{z/2} (768z^6 - 11456z^5 + 45352z^4 - 44868z^3 + 2436z^2 - 399z + 252) I_1\left(\frac{z}{2}\right)}{135135z^2}$$

07.25.03.7463.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (-192z^6 + 3040z^5 - 12688z^4 + 12576z^3 - 84z^2 + 210z - 315)}{18432z^3} + \frac{\sqrt{\pi} (384z^7 - 6272z^6 + 28224z^5 - 35280z^4 + 5880z^3 + 315) \operatorname{erfi}(\sqrt{z})}{36864z^{7/2}}$$

07.25.03.7464.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (192z^6 + 3040z^5 + 12688z^4 + 12576z^3 + 84z^2 + 210z + 315)}{18432z^3} + \frac{\sqrt{\pi} (384z^7 + 6272z^6 + 28224z^5 + 35280z^4 + 5880z^3 - 315) \operatorname{erf}(\sqrt{z})}{36864z^{7/2}}$$

07.25.03.7465.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, 5; z\right) = \frac{32e^{z/2} (256z^6 - 4672z^5 + 25080z^4 - 44520z^3 + 21000z^2 + 315) I_0\left(\frac{z}{2}\right)}{675675z^2} - \frac{128e^{z/2} (64z^7 - 1104z^6 + 5198z^5 - 6420z^4 + 525z^3 - 105z^2 + 315) I_1\left(\frac{z}{2}\right)}{675675z^3}$$

07.25.03.7466.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z (-384 z^7 + 6976 z^6 - 34336 z^5 + 42288 z^4 - 840 z^3 + 1596 z^2 - 630 z - 6615)}{65536 z^4} + \frac{\sqrt{\pi} (768 z^8 - 14336 z^7 + 75264 z^6 - 112896 z^5 + 23520 z^4 + 5040 z + 6615) \operatorname{erfi}(\sqrt{z})}{131072 z^{9/2}}$$

07.25.03.7467.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (384 z^7 + 6976 z^6 + 34336 z^5 + 42288 z^4 + 840 z^3 + 1596 z^2 + 630 z - 6615)}{65536 z^4} + \frac{\sqrt{\pi} (768 z^8 + 14336 z^7 + 75264 z^6 + 112896 z^5 + 23520 z^4 - 5040 z + 6615) \operatorname{erf}(\sqrt{z})}{131072 z^{9/2}}$$

07.25.03.7468.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, 6; z\right) = \frac{1}{6891885 z^3} 32 e^{z/2} (1536 z^7 - 31616 z^6 + 193488 z^5 - 393960 z^4 + 213780 z^3 - 1260 z^2 + 7245 z + 17640) I_0\left(\frac{z}{2}\right) - \frac{1}{6891885 z^4} 32 e^{z/2} (1536 z^8 - 30080 z^7 + 164176 z^6 - 243288 z^5 + 27300 z^4 - 5460 z^3 - 2835 z^2 + 28980 z + 70560) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 2$

07.25.03.7469.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; 2, \frac{5}{2}; z\right) = \frac{e^{z/2} (64 z^4 - 888 z^3 + 3540 z^2 - 4620 z + 1575) I_0\left(\frac{z}{2}\right)}{1575} + \frac{e^{z/2} (-64 z^4 + 824 z^3 - 2748 z^2 + 2220 z - 105) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.7470.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{945} e^{z/2} (16 z^4 - 264 z^3 + 1284 z^2 - 2100 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16 z^4 + 248 z^3 - 1044 z^2 + 1164 z - 105) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{5}{2}$

07.25.03.7471.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-96 z^4 + 1352 z^3 - 4972 z^2 + 4370 z - 105)}{6400 z} + \frac{\sqrt{\pi} (192 z^5 - 2800 z^4 + 11200 z^3 - 12600 z^2 + 2100 z + 105) \operatorname{erfi}(\sqrt{z})}{12800 z^{3/2}}$$

07.25.03.7472.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (96 z^4 + 1352 z^3 + 4972 z^2 + 4370 z + 105)}{6400 z} + \frac{\sqrt{\pi} (192 z^5 + 2800 z^4 + 11200 z^3 + 12600 z^2 + 2100 z - 105) \operatorname{erf}(\sqrt{z})}{12800 z^{3/2}}$$

07.25.03.7473.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, 3; z\right) = \frac{16 e^{z/2} (48 z^4 - 806 z^3 + 4020 z^2 - 6825 z + 3255) I_0\left(\frac{z}{2}\right)}{51975} - \frac{4 e^{z/2} (192 z^5 - 3032 z^4 + 13144 z^3 - 15480 z^2 + 1680 z + 105) I_1\left(\frac{z}{2}\right)}{51975 z}$$

07.25.03.7474.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-16 z^4 + 272 z^3 - 1272 z^2 + 1580 z - 105)}{2560 z} + \frac{\sqrt{\pi} (32 z^5 - 560 z^4 + 2800 z^3 - 4200 z^2 + 1050 z + 105) \operatorname{erfi}(\sqrt{z})}{5120 z^{3/2}}$$

07.25.03.7475.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16 z^4 + 272 z^3 + 1272 z^2 + 1580 z + 105)}{2560 z} + \frac{\sqrt{\pi} (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105) \operatorname{erf}(\sqrt{z})}{5120 z^{3/2}}$$

07.25.03.7476.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (384 z^5 - 7568 z^4 + 45320 z^3 - 94500 z^2 + 56700 z - 105) I_0\left(\frac{z}{2}\right)}{225225 z} - \frac{4 e^{z/2} (384 z^6 - 7184 z^5 + 38328 z^4 - 59380 z^3 + 10500 z^2 + 1575 z - 420) I_1\left(\frac{z}{2}\right)}{225225 z^2}$$

07.25.03.7477.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (-384 z^6 + 7648 z^5 - 43408 z^4 + 69840 z^3 - 8400 z^2 - 1050 z + 1575)}{122880 z^3} + \frac{\sqrt{\pi} (768 z^7 - 15680 z^6 + 94080 z^5 - 176400 z^4 + 58800 z^3 + 8820 z^2 - 1575) \operatorname{erfi}(\sqrt{z})}{245760 z^{7/2}}$$

07.25.03.7478.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (384 z^6 + 7648 z^5 + 43408 z^4 + 69840 z^3 + 8400 z^2 - 1050 z - 1575)}{122880 z^3} + \frac{\sqrt{\pi} (768 z^7 + 15680 z^6 + 94080 z^5 + 176400 z^4 + 58800 z^3 - 8820 z^2 + 1575) \operatorname{erf}(\sqrt{z})}{245760 z^{7/2}}$$

07.25.03.7479.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (128 z^6 - 2896 z^5 + 20240 z^4 - 49980 z^3 + 35700 z^2 - 105 z - 315) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (128 z^7 - 2768 z^6 + 17536 z^5 - 33700 z^4 + 8400 z^3 + 1995 z^2 - 420 z - 1260) I_1\left(\frac{z}{2}\right)}{1126125 z^2}$$

07.25.03.7480.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{1310720 z^{9/2}} 3\sqrt{\pi} (768 z^8 - 17920 z^7 + 125440 z^6 - 282240 z^5 + 117600 z^4 + 23520 z^3 - 12600 z - 11025) \operatorname{erfi}(\sqrt{z}) - \frac{3 e^z (384 z^7 - 8768 z^6 + 58528 z^5 - 115760 z^4 + 21000 z^3 + 5460 z^2 - 5250 z - 11025)}{655360 z^4}$$

07.25.03.7481.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (384 z^7 + 8768 z^6 + 58528 z^5 + 115760 z^4 + 21000 z^3 - 5460 z^2 - 5250 z + 11025)}{655360 z^4} + \frac{1}{1310720 z^{9/2}} 3\sqrt{\pi} (768 z^8 + 17920 z^7 + 125440 z^6 + 282240 z^5 + 117600 z^4 - 23520 z^3 + 12600 z - 11025) \operatorname{erf}(\sqrt{z})$$

07.25.03.7482.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (768 z^7 - 19616 z^6 + 156720 z^5 - 446880 z^4 + 367500 z^3 - 630 z^2 - 9765 z - 12600) I_0\left(\frac{z}{2}\right) - 1}{11486475 z^3} - \frac{32 e^{z/2} (768 z^8 - 18848 z^7 + 138256 z^6 - 317280 z^5 + 102900 z^4 + 32970 z^3 - 4095 z^2 - 39060 z - 50400) I_1\left(\frac{z}{2}\right)}{11486475 z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 3$

07.25.03.7483.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; 3, \frac{7}{2}; z\right) = \frac{4 e^{z/2} (16 z^4 - 320 z^3 + 1956 z^2 - 4200 z + 2625) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16 z^5 - 304 z^4 + 1660 z^3 - 2676 z^2 + 525 z + 105) I_1\left(\frac{z}{2}\right)}{10395} - \frac{1}{10395 z}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{7}{2}$

07.25.03.7484.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (-32 z^5 + 656 z^4 - 3888 z^3 + 6744 z^2 - 1050 z - 315)}{12288 z^2} + \frac{\sqrt{\pi} (64 z^6 - 1344 z^5 + 8400 z^4 - 16800 z^3 + 6300 z^2 + 1260 z + 315) \operatorname{erfi}(\sqrt{z})}{24576 z^{5/2}}$$

$$\begin{aligned}
 &07.25.03.7485.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) &= \frac{e^{-z} (32 z^5 + 656 z^4 + 3888 z^3 + 6744 z^2 + 1050 z - 315)}{12\,288 z^2} + \\
 &\frac{\sqrt{\pi} (64 z^6 + 1344 z^5 + 8400 z^4 + 16\,800 z^3 + 6300 z^2 - 1260 z + 315) \operatorname{erf}(\sqrt{z})}{24\,576 z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7486.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, 4; z\right) &= \frac{4 e^{z/2} (32 z^5 - 752 z^4 + 5536 z^3 - 14\,700 z^2 + 11\,550 z + 105) I_0\left(\frac{z}{2}\right)}{45\,045 z} - \\
 &\frac{4 e^{z/2} (32 z^6 - 720 z^5 + 4832 z^4 - 10\,196 z^3 + 3150 z^2 + 1155 z + 420) I_1\left(\frac{z}{2}\right)}{45\,045 z^2}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7487.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; z\right) &= \frac{e^z (-64 z^6 + 1536 z^5 - 11\,024 z^4 + 24\,576 z^3 - 6300 z^2 - 3360 z - 1575)}{49\,152 z^3} + \\
 &\frac{\sqrt{\pi} (128 z^7 - 3136 z^6 + 23\,520 z^5 - 58\,800 z^4 + 29\,400 z^3 + 8820 z^2 + 4410 z + 1575) \operatorname{erfi}(\sqrt{z})}{98\,304 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7488.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) &= \frac{e^{-z} (64 z^6 + 1536 z^5 + 11\,024 z^4 + 24\,576 z^3 + 6300 z^2 - 3360 z + 1575)}{49\,152 z^3} + \\
 &\frac{\sqrt{\pi} (128 z^7 + 3136 z^6 + 23\,520 z^5 + 58\,800 z^4 + 29\,400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{98\,304 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7489.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, 5; z\right) &= \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23\,520 z^3 + 22\,050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right)}{675\,675 z^2} - \\
 &\frac{64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675\,675 z^3}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7490.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; z\right) &= \frac{1}{1\,048\,576 z^{9/2}} \\
 &3 \sqrt{\pi} (256 z^8 - 7168 z^7 + 62\,720 z^6 - 188\,160 z^5 + 117\,600 z^4 + 47\,040 z^3 + 35\,280 z^2 + 25\,200 z + 11\,025) \operatorname{erfi}(\sqrt{z}) - \\
 &\frac{3 e^z (128 z^7 - 3520 z^6 + 29\,664 z^5 - 80\,848 z^4 + 29\,400 z^3 + 21\,420 z^2 + 17\,850 z + 11\,025)}{524\,288 z^4}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7491.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) &= \\
 &\frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29\,664 z^5 + 80\,848 z^4 + 29\,400 z^3 - 21\,420 z^2 + 17\,850 z - 11\,025)}{524\,288 z^4} + \frac{1}{1\,048\,576 z^{9/2}} \\
 &3 \sqrt{\pi} (256 z^8 + 7168 z^7 + 62\,720 z^6 + 188\,160 z^5 + 117\,600 z^4 - 47\,040 z^3 + 35\,280 z^2 - 25\,200 z + 11\,025) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.7492.01

$${}_2F_2\left(-\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right) - \frac{1}{2297295 z^4} 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)}{2297295 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = -\frac{11}{2}$

07.25.03.7493.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{3087315} (128 z^{11} + 4864 z^{10} + 60384 z^9 + 279424 z^8 + 381120 z^7 + 48384 z^6 + 5376 z^5 + 15120 z^4 - 108000 z^3 + 441000 z^2 - 1428840 z + 3087315) + \frac{16 e^z \sqrt{\pi} (8 z^{23/2} + 308 z^{21/2} + 3922 z^{19/2} + 19209 z^{17/2} + 31008 z^{15/2} + 9690 z^{13/2}) \operatorname{erf}(\sqrt{z})}{3087315}$$

07.25.03.7494.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{3087315} (-128 z^{11} + 4864 z^{10} - 60384 z^9 + 279424 z^8 - 381120 z^7 + 48384 z^6 - 5376 z^5 + 15120 z^4 + 108000 z^3 + 441000 z^2 + 1428840 z + 3087315) + \frac{16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 308 z^{21/2} + 3922 z^{19/2} - 19209 z^{17/2} + 31008 z^{15/2} - 9690 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{3087315}$$

07.25.03.7495.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{280665} (-64 z^{10} - 2112 z^9 - 21776 z^8 - 75360 z^7 - 48384 z^6 + 5376 z^5 + 5040 z^4 - 21600 z^3 + 63000 z^2 - 158760 z + 280665) - \frac{8 e^z \sqrt{\pi} (8 z^{21/2} + 268 z^{19/2} + 2850 z^{17/2} + 10659 z^{15/2} + 9690 z^{13/2}) \operatorname{erf}(\sqrt{z})}{280665}$$

07.25.03.7496.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{280665} (-64 z^{10} + 2112 z^9 - 21776 z^8 + 75360 z^7 - 48384 z^6 - 5376 z^5 + 5040 z^4 + 21600 z^3 + 63000 z^2 + 158760 z + 280665) + \frac{8 e^{-z} \sqrt{\pi} (8 z^{21/2} - 268 z^{19/2} + 2850 z^{17/2} - 10659 z^{15/2} + 9690 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{280665}$$

$$\begin{aligned}
 & \text{07.25.03.7497.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; z\right) &= \frac{32z^9 + 896z^8 + 7320z^7 + 16128z^6 - 5376z^5 + 5040z^4 - 7200z^3 + 12600z^2 - 22680z + 31185}{31185} + \\
 & \frac{4e^z\sqrt{\pi}\left(8z^{19/2} + 228z^{17/2} + 1938z^{15/2} + 4845z^{13/2}\right)\operatorname{erf}(\sqrt{z})}{31185}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7498.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; -z\right) &= \\
 & \frac{-32z^9 + 896z^8 - 7320z^7 + 16128z^6 + 5376z^5 + 5040z^4 + 7200z^3 + 12600z^2 + 22680z + 31185}{31185} + \\
 & \frac{4e^{-z}\sqrt{\pi}\left(8z^{19/2} - 228z^{17/2} + 1938z^{15/2} - 4845z^{13/2}\right)\operatorname{erfi}(\sqrt{z})}{31185}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7499.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; z\right) &= \frac{-16z^8 - 368z^7 - 2196z^6 - 1640z^5 + 5256z^4 - 7200z^3 + 4200z^2 - 4536z + 4455}{4455} - \\
 & \frac{2e^z\sqrt{\pi}\left(8z^{17/2} + 188z^{15/2} + 1186z^{13/2} + 1287z^{11/2} - 2574z^{9/2} + 2574z^{7/2}\right)\operatorname{erf}(\sqrt{z})}{4455}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7500.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; -z\right) &= \frac{-16z^8 + 368z^7 - 2196z^6 + 1640z^5 + 5256z^4 + 7200z^3 + 4200z^2 + 4536z + 4455}{4455} + \\
 & \frac{2e^{-z}\sqrt{\pi}\left(8z^{17/2} - 188z^{15/2} + 1186z^{13/2} - 1287z^{11/2} - 2574z^{9/2} - 2574z^{7/2}\right)\operatorname{erfi}(\sqrt{z})}{4455}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7501.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; z\right) &= \frac{1}{891}\left(8z^7 + 144z^6 + 526z^5 - 696z^4 - 1116z^3 + 4200z^2 - 1512z + 891\right) + \\
 & \frac{1}{891}e^z\sqrt{\pi}\left(8z^{15/2} + 148z^{13/2} + 594z^{11/2} - 495z^{9/2} - 1584z^{7/2} + 4158z^{5/2}\right)\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7502.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; -z\right) &= \frac{1}{891}\left(-8z^7 + 144z^6 - 526z^5 - 696z^4 + 1116z^3 + 4200z^2 + 1512z + 891\right) + \\
 & \frac{1}{891}e^{-z}\sqrt{\pi}\left(8z^{15/2} - 148z^{13/2} + 594z^{11/2} + 495z^{9/2} - 1584z^{7/2} - 4158z^{5/2}\right)\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7503.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; z\right) &= \frac{1}{297}\left(-4z^6 - 52z^5 - 57z^4 + 498z^3 - 420z^2 - 1512z + 297\right) + \\
 & \frac{1}{594}e^z\sqrt{\pi}\left(-8z^{13/2} - 108z^{11/2} - 162z^{9/2} + 981z^{7/2} - 378z^{5/2} - 3780z^{3/2}\right)\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.7504.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{297} (-4z^6 + 52z^5 - 57z^4 - 498z^3 - 420z^2 + 1512z + 297) + \frac{1}{594} e^{-z} \sqrt{\pi} (8z^{13/2} - 108z^{11/2} + 162z^{9/2} + 981z^{7/2} + 378z^{5/2} - 3780z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7505.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{594} (4z^5 + 32z^4 - 69z^3 - 280z^2 + 924z + 594) + \frac{e^z \sqrt{\pi} (8z^{11/2} + 68z^{9/2} - 110z^{7/2} - 651z^{5/2} + 1680z^{3/2} + 2100\sqrt{z}) \operatorname{erf}(\sqrt{z})}{1188}$$

07.25.03.7506.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{594} (-4z^5 + 32z^4 + 69z^3 - 280z^2 - 924z + 594) + \frac{e^{-z} \sqrt{\pi} (8z^{11/2} - 68z^{9/2} - 110z^{7/2} + 651z^{5/2} + 1680z^{3/2} - 2100\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1188}$$

07.25.03.7507.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, 1; z\right) = \frac{1}{594} e^z (4z^5 + 24z^4 - 93z^3 - 165z^2 + 918z + 594)$$

07.25.03.7508.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{4z^4 + 12z^3 - 115z^2 + 66z + 738}{1188} + \frac{e^z \sqrt{\pi} (8z^5 + 28z^4 - 222z^3 + 15z^2 + 1650z + 450) \operatorname{erf}(\sqrt{z})}{2376\sqrt{z}}$$

07.25.03.7509.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{4z^4 - 12z^3 - 115z^2 - 66z + 738}{1188} + \frac{e^{-z} \sqrt{\pi} (-8z^5 + 28z^4 + 222z^3 + 15z^2 - 1650z + 450) \operatorname{erfi}(\sqrt{z})}{2376\sqrt{z}}$$

07.25.03.7510.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, 2; z\right) = \frac{1}{594} e^z (4z^4 + 4z^3 - 109z^2 + 162z + 594)$$

07.25.03.7511.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{4z^4 - 8z^3 - 81z^2 + 300z + 126}{792z} + \frac{e^z \sqrt{\pi} (8z^5 - 12z^4 - 174z^3 + 537z^2 + 576z - 126) \operatorname{erf}(\sqrt{z})}{1584z^{3/2}}$$

07.25.03.7512.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-4z^4 - 8z^3 + 81z^2 + 300z - 126}{792z} + \frac{e^{-z} \sqrt{\pi} (8z^5 + 12z^4 - 174z^3 - 537z^2 + 576z + 126) \operatorname{erfi}(\sqrt{z})}{1584z^{3/2}}$$

07.25.03.7513.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, 3; z\right) = \frac{1}{297} e^z (4z^3 - 16z^2 - 45z + 297)$$

$$\begin{aligned}
 & 07.25.03.7514.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, \frac{7}{2}; z\right) = \\
 & \frac{5(4z^4 - 28z^3 + 33z^2 + 182z - 168)}{1584z^2} + \frac{5e^z\sqrt{\pi}(8z^5 - 52z^4 + 34z^3 + 435z^2 - 294z + 168)\operatorname{erf}(\sqrt{z})}{3168z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7515.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, \frac{7}{2}; -z\right) = \\
 & \frac{5(4z^4 + 28z^3 + 33z^2 - 182z - 168)}{1584z^2} - \frac{5e^{-z}\sqrt{\pi}(8z^5 + 52z^4 + 34z^3 - 435z^2 - 294z - 168)\operatorname{erfi}(\sqrt{z})}{3168z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7516.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, 4; z\right) = \frac{1}{99}e^z(4z^2 - 36z + 99)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7517.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, \frac{9}{2}; z\right) = \\
 & \frac{35(4z^4 - 48z^3 + 227z^2 - 528z + 1080)}{3168z^3} + \frac{35e^z\sqrt{\pi}(8z^5 - 92z^4 + 402z^3 - 771z^2 + 1248z - 1080)\operatorname{erf}(\sqrt{z})}{6336z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7518.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{35e^{-z}\sqrt{\pi}(8z^5 + 92z^4 + 402z^3 + 771z^2 + 1248z + 1080)\operatorname{erfi}(\sqrt{z})}{6336z^{7/2}} - \frac{35(4z^4 + 48z^3 + 227z^2 + 528z + 1080)}{3168z^3}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7519.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, 5; z\right) = \frac{4e^z(4z^5 - 56z^4 + 323z^3 - 969z^2 + 1938z - 1938)}{99z^4} + \frac{2584}{33z^4}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7520.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, \frac{11}{2}; z\right) = \\
 & \frac{35(4z^4 - 68z^3 + 501z^2 - 2070z + 9450)}{704z^4} + \frac{35e^z\sqrt{\pi}(8z^5 - 132z^4 + 930z^3 - 3561z^2 + 8370z - 9450)\operatorname{erf}(\sqrt{z})}{1408z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7521.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{35(4z^4 + 68z^3 + 501z^2 + 2070z + 9450)}{704z^4} - \frac{35e^{-z}\sqrt{\pi}(8z^5 + 132z^4 + 930z^3 + 3561z^2 + 8370z + 9450)\operatorname{erfi}(\sqrt{z})}{1408z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7522.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 4; -\frac{11}{2}, 6; z\right) = \frac{760(17z + 84)}{33z^5} + \frac{20e^z(4z^5 - 76z^4 + 627z^3 - 2850z^2 + 7638z - 9576)}{99z^5}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = -\frac{9}{2}$

$$\begin{aligned}
 &07.25.03.7523.01 \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; z\right) &= \frac{32 z^9 + 928 z^8 + 8120 z^7 + 21\,864 z^6 + 5376 z^5 + 1680 z^4 - 4320 z^3 + 9000 z^2 - 17\,640 z + 25\,515}{25\,515} + \\
 &\frac{4 e^z \sqrt{\pi} (8 z^{19/2} + 236 z^{17/2} + 2142 z^{15/2} + 6375 z^{13/2} + 3315 z^{11/2}) \operatorname{erf}(\sqrt{z})}{25\,515}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7524.01 \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; -z\right) &= \frac{-32 z^9 + 928 z^8 - 8120 z^7 + 21\,864 z^6 - 5376 z^5 + 1680 z^4 + 4320 z^3 + 9000 z^2 + 17\,640 z + 25\,515}{25\,515} + \\
 &\frac{4 e^{-z} \sqrt{\pi} (8 z^{19/2} - 236 z^{17/2} + 2142 z^{15/2} - 6375 z^{13/2} + 3315 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{25\,515}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7525.01 \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; z\right) &= \frac{-16 z^8 - 400 z^7 - 2868 z^6 - 5376 z^5 + 1680 z^4 - 1440 z^3 + 1800 z^2 - 2520 z + 2835}{2835} - \\
 &\frac{2 e^z \sqrt{\pi} (8 z^{17/2} + 204 z^{15/2} + 1530 z^{13/2} + 3315 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7526.01 \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; -z\right) &= \frac{-16 z^8 + 400 z^7 - 2868 z^6 + 5376 z^5 + 1680 z^4 + 1440 z^3 + 1800 z^2 + 2520 z + 2835}{2835} + \\
 &\frac{2 e^{-z} \sqrt{\pi} (8 z^{17/2} - 204 z^{15/2} + 1530 z^{13/2} - 3315 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7527.01 \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; z\right) &= \frac{1}{405} (8 z^7 + 168 z^6 + 934 z^5 + 894 z^4 - 1440 z^3 + 600 z^2 - 504 z + 405) + \\
 &\frac{1}{405} e^z \sqrt{\pi} (8 z^{15/2} + 172 z^{13/2} + 1014 z^{11/2} + 1287 z^{9/2} - 1287 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7528.01 \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; -z\right) &= \frac{1}{405} (-8 z^7 + 168 z^6 - 934 z^5 + 894 z^4 + 1440 z^3 + 600 z^2 + 504 z + 405) + \\
 &\frac{1}{405} e^{-z} \sqrt{\pi} (8 z^{15/2} - 172 z^{13/2} + 1014 z^{11/2} - 1287 z^{9/2} - 1287 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.7529.01 \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; z\right) &= \frac{1}{81} (-4 z^6 - 68 z^5 - 265 z^4 + 54 z^3 + 600 z^2 - 168 z + 81) + \\
 &\frac{1}{162} e^z \sqrt{\pi} (-8 z^{13/2} - 140 z^{11/2} - 594 z^{9/2} - 99 z^{7/2} + 1386 z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.7530.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{81}(-4z^6 + 68z^5 - 265z^4 - 54z^3 + 600z^2 + 168z + 81) + \frac{1}{162}e^{-z}\sqrt{\pi}(8z^{13/2} - 140z^{11/2} + 594z^{9/2} - 99z^{7/2} - 1386z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.7531.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{54}(4z^5 + 52z^4 + 111z^3 - 255z^2 - 336z + 54) + \frac{1}{108}e^z\sqrt{\pi}(8z^{11/2} + 108z^{9/2} + 270z^{7/2} - 441z^{5/2} - 945z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.7532.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{54}(-4z^5 + 52z^4 - 111z^3 - 255z^2 + 336z + 54) + \frac{1}{108}e^{-z}\sqrt{\pi}(8z^{11/2} - 108z^{9/2} + 270z^{7/2} + 441z^{5/2} - 945z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.7533.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{108}(-4z^4 - 36z^3 - 5z^2 + 252z + 108) + \frac{1}{216}e^z\sqrt{\pi}(-8z^{9/2} - 76z^{7/2} - 42z^{5/2} + 525z^{3/2} + 420\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.7534.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{108}(-4z^4 + 36z^3 - 5z^2 - 252z + 108) + \frac{1}{216}e^{-z}\sqrt{\pi}(8z^{9/2} - 76z^{7/2} + 42z^{5/2} + 525z^{3/2} - 420\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.7535.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, 1; z\right) = -\frac{1}{54}e^z(2z^4 + 15z^3 - 9z^2 - 114z - 54)$$

07.25.03.7536.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{216}(-4z^3 - 20z^2 + 53z + 141) + \frac{e^z\sqrt{\pi}(-8z^4 - 44z^3 + 90z^2 + 345z + 75)\operatorname{erf}(\sqrt{z})}{432\sqrt{z}}$$

07.25.03.7537.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{216}(4z^3 - 20z^2 - 53z + 141) + \frac{e^{-z}\sqrt{\pi}(-8z^4 + 44z^3 + 90z^2 - 345z + 75)\operatorname{erfi}(\sqrt{z})}{432\sqrt{z}}$$

07.25.03.7538.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, 2; z\right) = -\frac{1}{54}e^z(2z^3 + 7z^2 - 30z - 54)$$

07.25.03.7539.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-4z^3 - 4z^2 + 63z + 18}{144z} + \frac{e^z\sqrt{\pi}(-8z^4 - 12z^3 + 126z^2 + 93z - 18)\operatorname{erf}(\sqrt{z})}{288z^{3/2}}$$

07.25.03.7540.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-4z^3 + 4z^2 + 63z - 18}{144z} + \frac{e^{-z}\sqrt{\pi}(8z^4 - 12z^3 - 126z^2 + 93z + 18)\operatorname{erfi}(\sqrt{z})}{288z^{3/2}}$$

07.25.03.7541.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, 3; z\right) = -\frac{1}{27}e^z(2z^2 - z - 27)$$

07.25.03.7542.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{5(4z^3 - 12z^2 - 25z + 21)}{288z^2} - \frac{5e^z\sqrt{\pi}(8z^4 - 20z^3 - 66z^2 + 39z - 21)\operatorname{erf}(\sqrt{z})}{576z^{5/2}}$$

07.25.03.7543.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^3 + 12z^2 - 25z - 21)}{288z^2} - \frac{5e^{-z}\sqrt{\pi}(8z^4 + 20z^3 - 66z^2 - 39z - 21)\operatorname{erfi}(\sqrt{z})}{576z^{5/2}}$$

07.25.03.7544.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, 4; z\right) = -\frac{1}{9}e^z(2z - 9)$$

07.25.03.7545.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{35(4z^3 - 28z^2 + 61z - 120)}{576z^3} - \frac{35e^z\sqrt{\pi}(8z^4 - 52z^3 + 90z^2 - 141z + 120)\operatorname{erf}(\sqrt{z})}{1152z^{7/2}}$$

07.25.03.7546.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(8z^4 + 52z^3 + 90z^2 + 141z + 120)\operatorname{erfi}(\sqrt{z})}{1152z^{7/2}} - \frac{35(4z^3 + 28z^2 + 61z + 120)}{576z^3}$$

07.25.03.7547.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, 5; z\right) = \frac{136}{3z^4} - \frac{4e^z(2z^4 - 17z^3 + 51z^2 - 102z + 102)}{9z^4}$$

07.25.03.7548.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, \frac{11}{2}; z\right) = -\frac{35(4z^3 - 44z^2 + 195z - 945)}{128z^4} - \frac{35e^z\sqrt{\pi}(8z^4 - 84z^3 + 342z^2 - 825z + 945)\operatorname{erf}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.7549.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{35(4z^3 + 44z^2 + 195z + 945)}{128z^4} - \frac{35e^{-z}\sqrt{\pi}(8z^4 + 84z^3 + 342z^2 + 825z + 945)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.7550.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{9}{2}, 6; z\right) = \frac{40(17z + 76)}{3z^5} - \frac{20e^z(2z^4 - 25z^3 + 126z^2 - 354z + 456)}{9z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.7551.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; z\right) &= \frac{1}{315} (8z^7 + 176z^6 + 1086z^5 + 1680z^4 - 480z^3 + 360z^2 - 360z + 315) + \\
 & \frac{1}{315} e^z \sqrt{\pi} (8z^{15/2} + 180z^{13/2} + 1170z^{11/2} + 2145z^{9/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7552.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; -z\right) &= \frac{1}{315} (-8z^7 + 176z^6 - 1086z^5 + 1680z^4 + 480z^3 + 360z^2 + 360z + 315) + \\
 & \frac{1}{315} e^{-z} \sqrt{\pi} (8z^{15/2} - 180z^{13/2} + 1170z^{11/2} - 2145z^{9/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7553.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; z\right) &= \\
 & \frac{1}{45} (-4z^6 - 76z^5 - 393z^4 - 480z^3 + 120z^2 - 72z + 45) + \frac{1}{90} e^z \sqrt{\pi} (-8z^{13/2} - 156z^{11/2} - 858z^{9/2} - 1287z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7554.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; -z\right) &= \\
 & \frac{1}{45} (-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45) + \frac{1}{90} e^{-z} \sqrt{\pi} (8z^{13/2} - 156z^{11/2} + 858z^{9/2} - 1287z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7555.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; z\right) &= \\
 & \frac{1}{18} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36} e^z \sqrt{\pi} (8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7556.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; -z\right) &= \\
 & \frac{1}{18} (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36} e^{-z} \sqrt{\pi} (8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7557.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; z\right) &= \frac{1}{12} (-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24} e^z \sqrt{\pi} (-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7558.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; -z\right) &= \\
 & \frac{1}{12} (-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24} e^{-z} \sqrt{\pi} (8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7559.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, \frac{1}{2}; z\right) &= \frac{1}{24} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} e^z \sqrt{\pi} (8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7560.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, \frac{1}{2}; -z\right) &= \frac{1}{24} (-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48} e^{-z} \sqrt{\pi} (8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.7561.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, 1; z\right) = \frac{1}{6} e^z (z^3 + 9z^2 + 18z + 6)$$

07.25.03.7562.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{48} (4z^2 + 28z + 33) + \frac{e^z \sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.7563.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{48} (4z^2 - 28z + 33) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.7564.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, 2; z\right) = \frac{1}{6} e^z (z^2 + 6z + 6)$$

07.25.03.7565.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{4z^2 + 16z + 3}{32z} + \frac{e^z \sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.7566.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{-4z^2 + 16z - 3}{32z} + \frac{e^{-z} \sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.7567.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, 3; z\right) = \frac{1}{3} e^z (z + 3)$$

07.25.03.7568.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{5(4z^2 + 4z - 3)}{64 z^2} + \frac{5 e^z \sqrt{\pi} (8z^3 + 12z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.7569.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^2 - 4z - 3)}{64 z^2} - \frac{5 e^{-z} \sqrt{\pi} (8z^3 - 12z^2 - 6z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.7570.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, 4; z\right) = e^z$$

07.25.03.7571.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{35(4z^2 - 8z + 15)}{128 z^3} + \frac{35 e^z \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.7572.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} \sqrt{\pi} (8z^3 + 12z^2 + 18z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{35(4z^2 + 8z + 15)}{128 z^3}$$

07.25.03.7573.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, 5; z\right) = \frac{4 e^z (z^3 - 3z^2 + 6z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.7574.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{315(4z^2 - 20z + 105)}{256z^4} + \frac{315e^z\sqrt{\pi}(8z^3 - 36z^2 + 90z - 105)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.7575.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{315(4z^2 + 20z + 105)}{256z^4} - \frac{315e^{-z}\sqrt{\pi}(8z^3 + 36z^2 + 90z + 105)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.7576.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{7}{2}, 6; z\right) = \frac{120(z+4)}{z^5} + \frac{20e^z(z^3 - 6z^2 + 18z - 24)}{z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = -\frac{5}{2}$

07.25.03.7577.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{5}{2}, 1; z\right) = \frac{1}{30}e^z(429z^3 + 197z^2 + 138z + 30) - \frac{143}{10}\sqrt{\pi}z^{7/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.7578.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{5}{2}, 1; -z\right) = \frac{1}{30}e^{-z}(-429z^3 + 197z^2 - 138z + 30) - \frac{143}{10}\sqrt{\pi}z^{7/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.7579.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{5}{2}, 2; z\right) = \frac{1}{90}e^z(286z^3 + 143z^2 + 162z + 90) - \frac{143}{45}\sqrt{\pi}z^{7/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.7580.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{5}{2}, 2; -z\right) = \frac{1}{90}e^{-z}(-286z^3 + 143z^2 - 162z + 90) - \frac{143}{45}\sqrt{\pi}z^{7/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.7581.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{5}{2}, 3; z\right) = \frac{1}{45}e^z(52z^3 + 26z^2 + 39z + 45) - \frac{52}{45}\sqrt{\pi}z^{7/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.7582.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{5}{2}, 3; -z\right) = \frac{1}{45}e^{-z}(-52z^3 + 26z^2 - 39z + 45) - \frac{52}{45}\sqrt{\pi}z^{7/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.7583.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{5}{2}, 4; z\right) = \frac{1}{15}e^z(8z^3 + 4z^2 + 6z + 15) - \frac{8}{15}\sqrt{\pi}z^{7/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.7584.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{5}{2}, 4; -z\right) = \frac{1}{15}e^{-z}(-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15}\sqrt{\pi}z^{7/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.7585.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{5}{2}, 5; z\right) = -\frac{64}{225}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{7/2} + \frac{4e^z(16z^7 + 8z^6 + 12z^5 + 30z^4 + 105z^3 - 315z^2 + 630z - 630)}{225z^4} + \frac{56}{5z^4}$$

07.25.03.7586.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{5}{2}, 5; -z\right) = -\frac{64}{225} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} - \frac{4 e^{-z} (16 z^7 - 8 z^6 + 12 z^5 - 30 z^4 + 105 z^3 + 315 z^2 + 630 z + 630)}{225 z^4} + \frac{56}{5 z^4}$$

07.25.03.7587.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{5}{2}, 6; z\right) = -\frac{128}{765} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{56(17z+60)}{17z^5} + \frac{4 e^z (32 z^8 + 16 z^7 + 24 z^6 + 60 z^5 + 210 z^4 + 945 z^3 - 8190 z^2 + 27090 z - 37800)}{765 z^5}$$

07.25.03.7588.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{5}{2}, 6; -z\right) = -\frac{128}{765} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{56(17z-60)}{17z^5} - \frac{4 e^{-z} (32 z^8 - 16 z^7 + 24 z^6 - 60 z^5 + 210 z^4 - 945 z^3 - 8190 z^2 - 27090 z - 37800)}{765 z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = -\frac{3}{2}$

07.25.03.7589.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{3}{2}, 1; z\right) = \frac{1}{12} e^z (-429 z^3 + 594 z^2 + 100 z + 12) + \frac{11}{8} \sqrt{\pi} (26 z^{7/2} - 49 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7590.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{3}{2}, 1; -z\right) = \frac{1}{12} e^{-z} (429 z^3 + 594 z^2 - 100 z + 12) + \frac{11}{8} \sqrt{\pi} (26 z^{7/2} + 49 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7591.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{3}{2}, 2; z\right) = \frac{1}{18} e^z (-143 z^3 + 275 z^2 + 66 z + 18) + \frac{11}{36} \sqrt{\pi} (26 z^{7/2} - 63 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7592.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{3}{2}, 2; -z\right) = \frac{1}{18} e^{-z} (143 z^3 + 275 z^2 - 66 z + 18) + \frac{11}{36} \sqrt{\pi} (26 z^{7/2} + 63 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7593.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{3}{2}, 3; z\right) = \frac{1}{9} e^z (-26 z^3 + 64 z^2 + 19 z + 9) + \frac{1}{9} \sqrt{\pi} (26 z^{7/2} - 77 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7594.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{3}{2}, 3; -z\right) = \frac{1}{9} e^{-z} (26 z^3 + 64 z^2 - 19 z + 9) + \frac{1}{9} \sqrt{\pi} (26 z^{7/2} + 77 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7595.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{3}{2}, 4; z\right) = \frac{1}{3} e^z (-4 z^3 + 12 z^2 + 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7596.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{3}{2}, 4; -z\right) = \frac{1}{3} e^{-z} (4 z^3 + 12 z^2 - 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.7597.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; -\frac{3}{2}, 5; z\right) = \\
 & -\frac{4 e^z (104 z^7 - 368 z^6 - 132 z^5 - 120 z^4 - 105 z^3 + 315 z^2 - 630 z + 630)}{585 z^4} + \frac{16}{585} \sqrt{\pi} (26 z^{7/2} - 105 z^{5/2}) \operatorname{erfi}(\sqrt{z}) + \frac{56}{13 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7598.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; -\frac{3}{2}, 5; -z\right) = \\
 & \frac{4 e^{-z} (104 z^7 + 368 z^6 - 132 z^5 + 120 z^4 - 105 z^3 - 315 z^2 - 630 z - 630)}{585 z^4} + \frac{16}{585} \sqrt{\pi} (26 z^{7/2} + 105 z^{5/2}) \operatorname{erf}(\sqrt{z}) + \frac{56}{13 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7599.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; -\frac{3}{2}, 6; z\right) = \\
 & \frac{280 (17 z + 52)}{221 z^5} - \frac{4 e^z (208 z^8 - 848 z^7 - 320 z^6 - 324 z^5 - 420 z^4 - 105 z^3 + 5670 z^2 - 22050 z + 32760)}{1989 z^5} + \\
 & \frac{32 \sqrt{\pi} (26 z^{7/2} - 119 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{1989}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7600.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; -\frac{3}{2}, 6; -z\right) = \\
 & \frac{280 (17 z - 52)}{221 z^5} + \frac{4 e^{-z} (208 z^8 + 848 z^7 - 320 z^6 + 324 z^5 - 420 z^4 + 105 z^3 + 5670 z^2 + 22050 z + 32760)}{1989 z^5} + \\
 & \frac{32 \sqrt{\pi} (26 z^{7/2} + 119 z^{5/2}) \operatorname{erf}(\sqrt{z})}{1989}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = -\frac{1}{2}$

$$\text{07.25.03.7601.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{1}{2}, 1; z\right) = \frac{1}{32} e^z (858 z^3 - 2805 z^2 + 864 z + 32) - \frac{3}{64} \sqrt{\pi} (572 z^{7/2} - 2156 z^{5/2} + 1225 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.7602.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{1}{2}, 1; -z\right) = \frac{1}{32} e^{-z} (-858 z^3 - 2805 z^2 - 864 z + 32) - \frac{3}{64} \sqrt{\pi} (572 z^{7/2} + 2156 z^{5/2} + 1225 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.7603.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{1}{2}, 2; z\right) = \frac{1}{48} e^z (286 z^3 - 1243 z^2 + 624 z + 48) + \frac{1}{96} \sqrt{\pi} (-572 z^{7/2} + 2772 z^{5/2} - 2205 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.7604.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{1}{2}, 2; -z\right) = \frac{1}{48} e^{-z} (-286 z^3 - 1243 z^2 - 624 z + 48) + \frac{1}{96} \sqrt{\pi} (-572 z^{7/2} - 2772 z^{5/2} - 2205 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.7605.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; -\frac{1}{2}, 3; z\right) = \frac{1}{12} e^z (26 z^3 - 141 z^2 + 100 z + 12) + \frac{1}{24} \sqrt{\pi} (-52 z^{7/2} + 308 z^{5/2} - 315 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7606.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{1}{2}, 3; -z\right) = \frac{1}{12} e^{-z} (-26 z^3 - 141 z^2 - 100 z + 12) + \frac{1}{24} \sqrt{\pi} (-52 z^{7/2} - 308 z^{5/2} - 315 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7607.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{1}{2}, 4; z\right) = \frac{1}{2} e^z (2 z^3 - 13 z^2 + 12 z + 2) + \frac{1}{4} \sqrt{\pi} (-4 z^{7/2} + 28 z^{5/2} - 35 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7608.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{1}{2}, 4; -z\right) = \frac{1}{2} e^{-z} (-2 z^3 - 13 z^2 - 12 z + 2) + \frac{1}{4} \sqrt{\pi} (-4 z^{7/2} - 28 z^{5/2} - 35 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7609.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{1}{2}, 5; z\right) = \frac{4 e^z (286 z^7 - 2167 z^6 + 2472 z^5 + 510 z^4 + 105 z^3 - 315 z^2 + 630 z - 630)}{2145 z^4} - \frac{2 \sqrt{\pi} (572 z^{7/2} - 4620 z^{5/2} + 6825 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{2145} + \frac{168}{143 z^4}$$

07.25.03.7610.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{1}{2}, 5; -z\right) = -\frac{4 e^{-z} (286 z^7 + 2167 z^6 + 2472 z^5 - 510 z^4 + 105 z^3 + 315 z^2 + 630 z + 630)}{2145 z^4} - \frac{2 \sqrt{\pi} (572 z^{7/2} + 4620 z^{5/2} + 6825 z^{3/2}) \operatorname{erf}(\sqrt{z})}{2145} + \frac{168}{143 z^4}$$

07.25.03.7611.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{1}{2}, 6; z\right) = \frac{840 (17 z + 44)}{2431 z^5} + \frac{4 e^z (572 z^8 - 4950 z^7 + 6736 z^6 + 1608 z^5 + 630 z^4 - 735 z^3 - 3150 z^2 + 17010 z - 27720)}{7293 z^5} + \frac{4 \sqrt{\pi} (572 z^{7/2} - 5236 z^{5/2} + 8925 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{7293}$$

07.25.03.7612.01

$${}_2F_2\left(-\frac{7}{2}, 4; -\frac{1}{2}, 6; -z\right) = \frac{840 (17 z - 44)}{2431 z^5} - \frac{4 e^{-z} (572 z^8 + 4950 z^7 + 6736 z^6 - 1608 z^5 + 630 z^4 + 735 z^3 - 3150 z^2 - 17010 z - 27720)}{7293 z^5} + \frac{4 \sqrt{\pi} (572 z^{7/2} + 5236 z^{5/2} + 8925 z^{3/2}) \operatorname{erf}(\sqrt{z})}{7293}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = \frac{1}{2}$

07.25.03.7613.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{1}{2}, 1; z\right) = \frac{1}{128} e^z (-572 z^3 + 2948 z^2 - 2487 z + 128) + \frac{1}{256} \sqrt{\pi} (1144 z^{7/2} - 6468 z^{5/2} + 7350 z^{3/2} - 1225 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7614.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{1}{2}, 1; -z\right) = \frac{1}{128} e^{-z} (572 z^3 + 2948 z^2 + 2487 z + 128) + \frac{1}{256} \sqrt{\pi} (1144 z^{7/2} + 6468 z^{5/2} + 7350 z^{3/2} + 1225 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7615.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{1}{2}, 2; z\right) = \frac{1}{576} e^z (-572 z^3 + 3872 z^2 - 4965 z + 576) + \frac{\sqrt{\pi} (1144 z^{7/2} - 8316 z^{5/2} + 13230 z^{3/2} - 3675 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1152}$$

07.25.03.7616.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{1}{2}, 2; -z\right) = \frac{1}{576} e^{-z} (572 z^3 + 3872 z^2 + 4965 z + 576) + \frac{\sqrt{\pi} (1144 z^{7/2} + 8316 z^{5/2} + 13230 z^{3/2} + 3675 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{1152}$$

07.25.03.7617.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{1}{2}, 3; z\right) = \frac{1}{144} e^z (-52 z^3 + 436 z^2 - 753 z + 144) + \frac{1}{288} \sqrt{\pi} (104 z^{7/2} - 924 z^{5/2} + 1890 z^{3/2} - 735 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7618.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{1}{2}, 3; -z\right) = \frac{1}{144} e^{-z} (52 z^3 + 436 z^2 + 753 z + 144) + \frac{1}{288} \sqrt{\pi} (104 z^{7/2} + 924 z^{5/2} + 1890 z^{3/2} + 735 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7619.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{1}{2}, 4; z\right) = \frac{1}{24} e^z (-4 z^3 + 40 z^2 - 87 z + 24) + \frac{1}{48} \sqrt{\pi} (8 z^{7/2} - 84 z^{5/2} + 210 z^{3/2} - 105 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7620.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{1}{2}, 4; -z\right) = \frac{1}{24} e^{-z} (4 z^3 + 40 z^2 + 87 z + 24) + \frac{1}{48} \sqrt{\pi} (8 z^{7/2} + 84 z^{5/2} + 210 z^{3/2} + 105 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7621.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{1}{2}, 5; z\right) = \frac{e^z (-572 z^7 + 6644 z^6 - 17439 z^5 + 6400 z^4 + 140 z^3 - 420 z^2 + 840 z - 840)}{6435 z^4} + \frac{\sqrt{\pi} (1144 z^{7/2} - 13860 z^{5/2} + 40950 z^{3/2} - 25025 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{12870} + \frac{56}{429 z^4}$$

07.25.03.7622.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{1}{2}, 5; -z\right) = \frac{e^{-z} (572 z^7 + 6644 z^6 + 17439 z^5 + 6400 z^4 - 140 z^3 - 420 z^2 - 840 z - 840)}{6435 z^4} + \frac{\sqrt{\pi} (1144 z^{7/2} + 13860 z^{5/2} + 40950 z^{3/2} + 25025 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{12870} + \frac{56}{429 z^4}$$

$$\begin{aligned}
 & \text{07.25.03.7623.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; \frac{1}{2}, 6; z\right) = \\
 & \frac{280(17z+36)}{7293z^5} - \frac{2e^z(572z^8 - 7568z^7 + 23277z^6 - 10768z^5 - 560z^4 + 1050z^3 + 420z^2 - 7980z + 15120)}{21879z^5} + \\
 & \frac{\sqrt{\pi}(1144z^{7/2} - 15708z^{5/2} + 53550z^{3/2} - 38675\sqrt{z})\operatorname{erfi}(\sqrt{z})}{21879}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7624.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; \frac{1}{2}, 6; -z\right) = \\
 & \frac{280(17z-36)}{7293z^5} + \frac{2e^{-z}(572z^8 + 7568z^7 + 23277z^6 + 10768z^5 - 560z^4 - 1050z^3 + 420z^2 + 7980z + 15120)}{21879z^5} + \\
 & \frac{\sqrt{\pi}(1144z^{7/2} + 15708z^{5/2} + 53550z^{3/2} + 38675\sqrt{z})\operatorname{erf}(\sqrt{z})}{21879}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = 1$

$$\begin{aligned}
 & \text{07.25.03.7625.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; 1, 1; z\right) = \\
 & \frac{1}{280}e^{z/2}(572z^4 - 4202z^3 + 7921z^2 - 4060z + 280)I_0\left(\frac{z}{2}\right) + \frac{1}{280}e^{z/2}(-572z^4 + 3630z^3 - 4577z^2 + 726z)I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7626.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; 1, \frac{3}{2}; z\right) = \\
 & \frac{e^z(-1144z^3 + 8052z^2 - 11246z + 1873)}{2048} + \frac{\sqrt{\pi}(2288z^4 - 17248z^3 + 29400z^2 - 9800z + 175)\operatorname{erfi}(\sqrt{z})}{4096\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7627.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; 1, \frac{3}{2}; -z\right) = \\
 & \frac{e^{-z}(1144z^3 + 8052z^2 + 11246z + 1873)}{2048} + \frac{\sqrt{\pi}(2288z^4 + 17248z^3 + 29400z^2 + 9800z + 175)\operatorname{erf}(\sqrt{z})}{4096\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7628.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; 1, 2; z\right) = \\
 & \frac{e^{z/2}(572z^4 - 5280z^3 + 13017z^2 - 9450z + 1260)I_0\left(\frac{z}{2}\right)}{1260} + \frac{e^{z/2}(-572z^4 + 4708z^3 - 8595z^2 + 2637z)I_1\left(\frac{z}{2}\right)}{1260}
 \end{aligned}$$

07.25.03.7629.01

$${}_2F_2\left(-\frac{7}{2}, 4; 1, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi} (4576 z^5 - 43\,120 z^4 + 98\,000 z^3 - 49\,000 z^2 + 1750 z - 35) \operatorname{erfi}(\sqrt{z})}{81\,920 z^{3/2}} - \frac{3 e^z (2288 z^4 - 20\,416 z^3 + 39\,936 z^2 - 11\,880 z - 35)}{40\,960 z}$$

07.25.03.7630.01

$${}_2F_2\left(-\frac{7}{2}, 4; 1, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (2288 z^4 + 20\,416 z^3 + 39\,936 z^2 + 11\,880 z - 35)}{40\,960 z} + \frac{3\sqrt{\pi} (4576 z^5 + 43\,120 z^4 + 98\,000 z^3 + 49\,000 z^2 + 1750 z + 35) \operatorname{erf}(\sqrt{z})}{81\,920 z^{3/2}}$$

07.25.03.7631.01

$${}_2F_2\left(-\frac{7}{2}, 4; 1, 3; z\right) = \frac{1}{630} e^{z/2} (104 z^4 - 1156 z^3 + 3516 z^2 - 3255 z + 630) I_0\left(\frac{z}{2}\right) - \frac{1}{630} e^{z/2} z (104 z^3 - 1052 z^2 + 2516 z - 1161) I_1\left(\frac{z}{2}\right)$$

07.25.03.7632.01

$${}_2F_2\left(-\frac{7}{2}, 4; 1, \frac{7}{2}; z\right) = \frac{e^z (-4576 z^5 + 49\,456 z^4 - 124\,560 z^3 + 54\,728 z^2 + 490 z - 105)}{65\,536 z^2} + \frac{\sqrt{\pi} (9152 z^6 - 103\,488 z^5 + 294\,000 z^4 - 196\,000 z^3 + 10\,500 z^2 - 420 z + 105) \operatorname{erfi}(\sqrt{z})}{131\,072 z^{5/2}}$$

07.25.03.7633.01

$${}_2F_2\left(-\frac{7}{2}, 4; 1, \frac{7}{2}; -z\right) = \frac{e^{-z} (4576 z^5 + 49\,456 z^4 + 124\,560 z^3 + 54\,728 z^2 - 490 z - 105)}{65\,536 z^2} + \frac{\sqrt{\pi} (9152 z^6 + 103\,488 z^5 + 294\,000 z^4 + 196\,000 z^3 + 10\,500 z^2 + 420 z + 105) \operatorname{erf}(\sqrt{z})}{131\,072 z^{5/2}}$$

07.25.03.7634.01

$${}_2F_2\left(-\frac{7}{2}, 4; 1, 4; z\right) = \frac{1}{105} e^{z/2} (8 z^4 - 104 z^3 + 376 z^2 - 420 z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} z (2 z^3 - 24 z^2 + 71 z - 44) I_1\left(\frac{z}{2}\right)$$

07.25.03.7635.01

$${}_2F_2\left(-\frac{7}{2}, 4; 1, \frac{9}{2}; z\right) = \frac{e^z (-9152 z^6 + 116\,160 z^5 - 358\,096 z^4 + 210\,592 z^3 + 4620 z^2 - 3220 z + 2625)}{262\,144 z^3} + \frac{1}{524\,288 z^{7/2}} \sqrt{\pi} (18\,304 z^7 - 241\,472 z^6 + 823\,200 z^5 - 686\,000 z^4 + 49\,000 z^3 - 2940 z^2 + 1470 z - 2625) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7636.01

$${}_2F_2\left(-\frac{7}{2}, 4; 1, \frac{9}{2}; -z\right) = \frac{e^{-z} (9152 z^6 + 116\,160 z^5 + 358\,096 z^4 + 210\,592 z^3 - 4620 z^2 - 3220 z - 2625)}{262\,144 z^3} + \frac{1}{524\,288 z^{7/2}} \sqrt{\pi} (18\,304 z^7 + 241\,472 z^6 + 823\,200 z^5 + 686\,000 z^4 + 49\,000 z^3 + 2940 z^2 + 1470 z + 2625) \operatorname{erf}(\sqrt{z})$$

07.25.03.7637.01

$${}_2F_2\left(-\frac{7}{2}, 4; 1, 5; z\right) = \frac{4 e^{z/2} (2288 z^6 - 34056 z^5 + 142620 z^4 - 185780 z^3 + 56175 z^2 + 420 z - 840) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (2288 z^7 - 31768 z^6 + 111996 z^5 - 87380 z^4 + 175 z^3 - 630 z^2 + 1680 z - 3360) I_1\left(\frac{z}{2}\right)}{225225 z^2}$$

07.25.03.7638.01

$${}_2F_2\left(-\frac{7}{2}, 4; 1, \frac{11}{2}; z\right) = \frac{1}{16777216 z^{9/2}} \left(9\sqrt{\pi} (36608 z^8 - 551936 z^7 + 2195200 z^6 - 2195200 z^5 + 196000 z^4 - 15680 z^3 + 11760 z^2 - 42000 z - 128625) \operatorname{erfi}(\sqrt{z}) - \frac{9 e^z (18304 z^7 - 266816 z^6 + 973344 z^5 - 721456 z^4 - 24920 z^3 + 5460 z^2 + 43750 z - 128625)}{8388608 z^4}\right)$$

07.25.03.7639.01

$${}_2F_2\left(-\frac{7}{2}, 4; 1, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (18304 z^7 + 266816 z^6 + 973344 z^5 + 721456 z^4 - 24920 z^3 - 5460 z^2 + 43750 z + 128625)}{8388608 z^4} + \frac{1}{16777216 z^{9/2}} \left(9\sqrt{\pi} (36608 z^8 + 551936 z^7 + 2195200 z^6 + 2195200 z^5 + 196000 z^4 + 15680 z^3 + 11760 z^2 + 42000 z - 128625) \operatorname{erf}(\sqrt{-z})\right)$$

07.25.03.7640.01

$${}_2F_2\left(-\frac{7}{2}, 4; 1, 6; z\right) = \frac{8 e^{z/2} (2288 z^7 - 38368 z^6 + 182604 z^5 - 271040 z^4 + 95095 z^3 + 1470 z^2 - 420 z - 13440) I_0\left(\frac{z}{2}\right) - \frac{1}{765765 z^4} 8 e^{z/2} (2288 z^8 - 36080 z^7 + 147668 z^6 - 139124 z^5 + 875 z^4 - 2555 z^3 + 4200 z^2 - 1680 z - 53760) I_1\left(\frac{z}{2}\right)}{765765 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = \frac{3}{2}$

07.25.03.7641.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{3}{2}, 2; z\right) = \frac{e^z (-1144 z^3 + 10516 z^2 - 21774 z + 7641)}{9216} + \frac{\sqrt{\pi} (2288 z^4 - 22176 z^3 + 52920 z^2 - 29400 z + 1575) \operatorname{erfi}(\sqrt{z})}{18432 \sqrt{z}}$$

07.25.03.7642.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (1144 z^3 + 10516 z^2 + 21774 z + 7641)}{9216} + \frac{\sqrt{\pi} (2288 z^4 + 22176 z^3 + 52920 z^2 + 29400 z + 1575) \operatorname{erf}(\sqrt{-z})}{18432 \sqrt{-z}}$$

07.25.03.7643.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{3}{2}, 3; z\right) = \frac{e^z (-104 z^3 + 1180 z^2 - 3242 z + 1779)}{2304} + \frac{\sqrt{\pi} (208 z^4 - 2464 z^3 + 7560 z^2 - 5880 z + 525) \operatorname{erfi}(\sqrt{z})}{4608 \sqrt{z}}$$

07.25.03.7644.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{3}{2}, 3; -z\right) = \frac{e^{-z}(104z^3 + 1180z^2 + 3242z + 1779)}{2304} + \frac{\sqrt{\pi}(208z^4 + 2464z^3 + 7560z^2 + 5880z + 525)\operatorname{erf}(\sqrt{z})}{4608\sqrt{z}}$$

07.25.03.7645.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{3}{2}, 4; z\right) = \frac{1}{384}e^z(-8z^3 + 108z^2 - 370z + 279) + \frac{\sqrt{\pi}(16z^4 - 224z^3 + 840z^2 - 840z + 105)\operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.7646.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{3}{2}, 4; -z\right) = \frac{1}{384}e^{-z}(8z^3 + 108z^2 + 370z + 279) + \frac{\sqrt{\pi}(16z^4 + 224z^3 + 840z^2 + 840z + 105)\operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.7647.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{3}{2}, 5; z\right) = \frac{e^z(-1144z^7 + 17908z^6 - 73518z^5 + 70865z^4 - 320z^3 + 960z^2 - 1920z + 1920)}{102960z^4} + \frac{\sqrt{\pi}(2288z^4 - 36960z^3 + 163800z^2 - 200200z + 32175)\operatorname{erfi}(\sqrt{z})}{205920\sqrt{z}} - \frac{8}{429z^4}$$

07.25.03.7648.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{3}{2}, 5; -z\right) = \frac{e^{-z}(1144z^7 + 17908z^6 + 73518z^5 + 70865z^4 + 320z^3 + 960z^2 + 1920z + 1920)}{102960z^4} + \frac{\sqrt{\pi}(2288z^4 + 36960z^3 + 163800z^2 + 200200z + 32175)\operatorname{erf}(\sqrt{z})}{205920\sqrt{z}} - \frac{8}{429z^4}$$

07.25.03.7649.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{3}{2}, 6; z\right) = -\frac{40(17z + 28)}{7293z^5} + \frac{1}{175032z^5}e^z(-1144z^8 + 20372z^7 - 97486z^6 + 114713z^5 - 1600z^4 + 3680z^3 - 2880z^2 - 10560z + 26880) + \frac{\sqrt{\pi}(2288z^4 - 41888z^3 + 214200z^2 - 309400z + 60775)\operatorname{erfi}(\sqrt{z})}{350064\sqrt{z}}$$

07.25.03.7650.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{3}{2}, 6; -z\right) = -\frac{40(17z - 28)}{7293z^5} + \frac{1}{175032z^5}e^{-z}(1144z^8 + 20372z^7 + 97486z^6 + 114713z^5 + 1600z^4 + 3680z^3 + 2880z^2 - 10560z - 26880) + \frac{\sqrt{\pi}(2288z^4 + 41888z^3 + 214200z^2 + 309400z + 60775)\operatorname{erf}(\sqrt{z})}{350064\sqrt{z}}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = 2$

07.25.03.7651.01

$${}_2F_2\left(-\frac{7}{2}, 4; 2, 2; z\right) = \frac{e^{z/2} (1144 z^4 - 13332 z^3 + 43548 z^2 - 45255 z + 11340) I_0\left(\frac{z}{2}\right) - e^{z/2} (-1144 z^4 + 12188 z^3 - 31932 z^2 + 18273 z - 420) I_1\left(\frac{z}{2}\right)}{11340}$$

07.25.03.7652.01

$${}_2F_2\left(-\frac{7}{2}, 4; 2, \frac{5}{2}; z\right) = \frac{e^{-z} (-2288 z^4 + 26576 z^3 - 76056 z^2 + 45900 z - 315)}{61440 z} + \frac{\sqrt{\pi} (4576 z^5 - 55440 z^4 + 176400 z^3 - 147000 z^2 + 15750 z + 315) \operatorname{erfi}(\sqrt{z})}{122880 z^{3/2}}$$

07.25.03.7653.01

$${}_2F_2\left(-\frac{7}{2}, 4; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (2288 z^4 + 26576 z^3 + 76056 z^2 + 45900 z + 315)}{61440 z} + \frac{\sqrt{\pi} (4576 z^5 + 55440 z^4 + 176400 z^3 + 147000 z^2 + 15750 z - 315) \operatorname{erf}(\sqrt{z})}{122880 z^{3/2}}$$

07.25.03.7654.01

$${}_2F_2\left(-\frac{7}{2}, 4; 2, 3; z\right) = \frac{e^{z/2} (104 z^4 - 1464 z^3 + 5952 z^2 - 7980 z + 2835) I_0\left(\frac{z}{2}\right) - 2 e^{z/2} (52 z^4 - 680 z^3 + 2322 z^2 - 1956 z + 105) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.7655.01

$${}_2F_2\left(-\frac{7}{2}, 4; 2, \frac{7}{2}; z\right) = \frac{e^{-z} (-4576 z^5 + 64240 z^4 - 234768 z^3 + 203016 z^2 - 3990 z + 315)}{294912 z^2} + \frac{\sqrt{\pi} (9152 z^6 - 133056 z^5 + 529200 z^4 - 588000 z^3 + 94500 z^2 + 3780 z - 315) \operatorname{erfi}(\sqrt{z})}{589824 z^{5/2}}$$

07.25.03.7656.01

$${}_2F_2\left(-\frac{7}{2}, 4; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (4576 z^5 + 64240 z^4 + 234768 z^3 + 203016 z^2 + 3990 z + 315)}{294912 z^2} + \frac{\sqrt{\pi} (9152 z^6 + 133056 z^5 + 529200 z^4 + 588000 z^3 + 94500 z^2 - 3780 z - 315) \operatorname{erf}(\sqrt{z})}{589824 z^{5/2}}$$

07.25.03.7657.01

$${}_2F_2\left(-\frac{7}{2}, 4; 2, 4; z\right) = \frac{1}{945} e^{z/2} (16 z^4 - 264 z^3 + 1284 z^2 - 2100 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16 z^4 + 248 z^3 - 1044 z^2 + 1164 z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.7658.01

$${}_2F_2\left(-\frac{7}{2}, 4; 2, \frac{9}{2}; z\right) = \frac{e^z (-9152 z^6 + 150656 z^5 - 670128 z^4 + 757824 z^3 - 30660 z^2 + 7560 z - 4725)}{1179648 z^3} + \frac{1}{2359296 z^{7/2}} \sqrt{\pi} (18304 z^7 - 310464 z^6 + 1481760 z^5 - 2058000 z^4 + 441000 z^3 + 26460 z^2 - 4410 z + 4725) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7659.01

$${}_2F_2\left(-\frac{7}{2}, 4; 2, \frac{9}{2}; -z\right) = \frac{e^{-z} (9152 z^6 + 150656 z^5 + 670128 z^4 + 757824 z^3 + 30660 z^2 + 7560 z + 4725)}{1179648 z^3} + \frac{1}{2359296 z^{7/2}} \sqrt{\pi} (18304 z^7 + 310464 z^6 + 1481760 z^5 + 2058000 z^4 + 441000 z^3 - 26460 z^2 - 4410 z - 4725) \operatorname{erf}(\sqrt{z})$$

07.25.03.7660.01

$${}_2F_2\left(-\frac{7}{2}, 4; 2, 5; z\right) = \frac{8 e^{z/2} (2288 z^6 - 43296 z^5 + 245100 z^4 - 472080 z^3 + 253575 z^2 - 630 z + 1260) I_0\left(\frac{z}{2}\right)}{2027025 z^2} - \frac{8 e^{z/2} (2288 z^7 - 41008 z^6 + 205236 z^5 - 285060 z^4 + 37275 z^3 + 945 z^2 - 2520 z + 5040) I_1\left(\frac{z}{2}\right)}{2027025 z^3}$$

07.25.03.7661.01

$${}_2F_2\left(-\frac{7}{2}, 4; 2, \frac{11}{2}; z\right) = \frac{1}{4194304 z^4} e^z (-18304 z^7 + 345664 z^6 - 1812000 z^5 + 2536752 z^4 - 172200 z^3 + 41580 z^2 + 34650 z - 165375) + \frac{1}{8388608 z^{9/2}} \left(\sqrt{\pi} (36608 z^8 - 709632 z^7 + 3951360 z^6 - 6585600 z^5 + 1764000 z^4 + 141120 z^3 - 35280 z^2 + 75600 z + 165375) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.7662.01

$${}_2F_2\left(-\frac{7}{2}, 4; 2, \frac{11}{2}; -z\right) = \frac{1}{4194304 z^4} e^{-z} (18304 z^7 + 345664 z^6 + 1812000 z^5 + 2536752 z^4 + 172200 z^3 + 41580 z^2 - 34650 z - 165375) + \frac{1}{8388608 z^{9/2}} \left(\sqrt{\pi} (36608 z^8 + 709632 z^7 + 3951360 z^6 + 6585600 z^5 + 1764000 z^4 - 141120 z^3 - 35280 z^2 - 75600 z + 165375) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.7663.01

$${}_2F_2\left(-\frac{7}{2}, 4; 2, 6; z\right) = \frac{1}{6891885 z^3} \left(8 e^{z/2} (4576 z^7 - 97680 z^6 + 630816 z^5 - 1396500 z^4 + 863730 z^3 - 5985 z^2 + 6300 z + 30240) I_0\left(\frac{z}{2}\right) - \frac{1}{6891885 z^4} \right) + \frac{8 e^{z/2} (4576 z^8 - 93104 z^7 + 540000 z^6 - 898476 z^5 + 156450 z^4 + 9765 z^3 - 20160 z^2 + 25200 z + 120960) I_1\left(\frac{z}{2}\right)}{6891885 z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = \frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.7664.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; \frac{5}{2}, 3; z\right) = \\
 & \frac{e^z (-208 z^4 + 2976 z^3 - 11\,216 z^2 + 10\,320 z - 315)}{15\,360 z} + \frac{\sqrt{\pi} (416 z^5 - 6160 z^4 + 25\,200 z^3 - 29\,400 z^2 + 5250 z + 315) \operatorname{erfi}(\sqrt{z})}{30\,720 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7665.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; \frac{5}{2}, 3; -z\right) = \\
 & \frac{e^{-z} (208 z^4 + 2976 z^3 + 11\,216 z^2 + 10\,320 z + 315)}{15\,360 z} + \frac{\sqrt{\pi} (416 z^5 + 6160 z^4 + 25\,200 z^3 + 29\,400 z^2 + 5250 z - 315) \operatorname{erf}(\sqrt{z})}{30\,720 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7666.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; \frac{5}{2}, 4; z\right) = \\
 & \frac{e^z (-16 z^4 + 272 z^3 - 1272 z^2 + 1580 z - 105)}{2560 z} + \frac{\sqrt{\pi} (32 z^5 - 560 z^4 + 2800 z^3 - 4200 z^2 + 1050 z + 105) \operatorname{erfi}(\sqrt{z})}{5120 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7667.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; \frac{5}{2}, 4; -z\right) = \\
 & \frac{e^{-z} (16 z^4 + 272 z^3 + 1272 z^2 + 1580 z + 105)}{2560 z} + \frac{\sqrt{\pi} (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105) \operatorname{erf}(\sqrt{z})}{5120 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7668.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; \frac{5}{2}, 5; z\right) = \frac{e^z (-2288 z^7 + 45\,056 z^6 - 251\,616 z^5 + 394\,360 z^4 - 43\,765 z^3 - 3840 z^2 + 7680 z - 7680)}{686\,400 z^4} + \\
 & \frac{\sqrt{\pi} (4576 z^5 - 92\,400 z^4 + 546\,000 z^3 - 1\,001\,000 z^2 + 321\,750 z + 45\,045) \operatorname{erfi}(\sqrt{z})}{1\,372\,800 z^{3/2}} + \frac{8}{715 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7669.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; \frac{5}{2}, 5; -z\right) = \frac{e^{-z} (2288 z^7 + 45\,056 z^6 + 251\,616 z^5 + 394\,360 z^4 + 43\,765 z^3 - 3840 z^2 - 7680 z - 7680)}{686\,400 z^4} + \\
 & \frac{\sqrt{\pi} (4576 z^5 + 92\,400 z^4 + 546\,000 z^3 + 1\,001\,000 z^2 + 321\,750 z - 45\,045) \operatorname{erf}(\sqrt{z})}{1\,372\,800 z^{3/2}} + \frac{8}{715 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7670.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; \frac{5}{2}, 6; z\right) = \frac{8(17 z + 20)}{2431 z^5} + \\
 & \frac{1}{1\,166\,880 z^5} e^z (-2288 z^8 + 51\,216 z^7 - 332\,536 z^6 + 629\,980 z^5 - 101\,715 z^4 - 19\,840 z^3 + 26\,880 z^2 + 11\,520 z - 76\,800) + \\
 & \frac{\sqrt{\pi} (4576 z^5 - 104\,720 z^4 + 714\,000 z^3 - 1\,547\,000 z^2 + 607\,750 z + 109\,395) \operatorname{erfi}(\sqrt{z})}{2\,333\,760 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7671.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; \frac{5}{2}, 6; -z\right) = \frac{8(17z - 20)}{2431z^5} + \\
 & \frac{1}{1166880z^5} e^{-z} (2288z^8 + 51216z^7 + 332536z^6 + 629980z^5 + 101715z^4 - 19840z^3 - 26880z^2 + 11520z + 76800) + \\
 & \frac{\sqrt{\pi} (4576z^5 + 104720z^4 + 714000z^3 + 1547000z^2 + 607750z - 109395) \operatorname{erf}(\sqrt{z})}{2333760z^{3/2}}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = 3$

$$\begin{aligned}
 & \text{07.25.03.7672.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; 3, 3; z\right) = \frac{2e^{z/2} (208z^4 - 3544z^3 + 18036z^2 - 31500z + 15645) I_0\left(\frac{z}{2}\right)}{31185} - \\
 & \frac{2e^{z/2} (208z^5 - 3336z^4 + 14804z^3 - 18156z^2 + 2205z + 210) I_1\left(\frac{z}{2}\right)}{31185z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7673.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; 3, \frac{7}{2}; z\right) = \frac{e^z (-416z^5 + 7184z^4 - 34416z^3 + 44664z^2 - 3570z - 315)}{73728z^2} + \\
 & \frac{\sqrt{\pi} (832z^6 - 14784z^5 + 75600z^4 - 117600z^3 + 31500z^2 + 3780z + 315) \operatorname{erfi}(\sqrt{z})}{147456z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7674.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; 3, \frac{7}{2}; -z\right) = \frac{e^{-z} (416z^5 + 7184z^4 + 34416z^3 + 44664z^2 + 3570z - 315)}{73728z^2} + \\
 & \frac{\sqrt{\pi} (832z^6 + 14784z^5 + 75600z^4 + 117600z^3 + 31500z^2 - 3780z + 315) \operatorname{erf}(\sqrt{z})}{147456z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7675.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; 3, 4; z\right) = \\
 & \frac{4e^{z/2} (16z^4 - 320z^3 + 1956z^2 - 4200z + 2625) I_0\left(\frac{z}{2}\right)}{10395} - \frac{4e^{z/2} (16z^5 - 304z^4 + 1660z^3 - 2676z^2 + 525z + 105) I_1\left(\frac{z}{2}\right)}{10395z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7676.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; 3, \frac{9}{2}; z\right) = \frac{e^z (-832z^6 + 16832z^5 - 97840z^4 + 164256z^3 - 23100z^2 - 5460z + 1575)}{294912z^3} + \\
 & \frac{1}{589824z^{7/2}} \sqrt{\pi} (1664z^7 - 34496z^6 + 211680z^5 - 411600z^4 + 147000z^3 + 26460z^2 + 4410z - 1575) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.7677.01

$${}_2F_2\left(-\frac{7}{2}, 4; 3, \frac{9}{2}; -z\right) = \frac{e^{-z} (832 z^6 + 16832 z^5 + 97840 z^4 + 164256 z^3 + 23100 z^2 - 5460 z - 1575)}{294912 z^3} + \frac{1}{589824 z^{7/2}} \sqrt{\pi} (1664 z^7 + 34496 z^6 + 211680 z^5 + 411600 z^4 + 147000 z^3 - 26460 z^2 + 4410 z + 1575) \operatorname{erf}(\sqrt{z})$$

07.25.03.7678.01

$${}_2F_2\left(-\frac{7}{2}, 4; 3, 5; z\right) = \frac{16 e^{z/2} (416 z^6 - 9552 z^5 + 68160 z^4 - 173460 z^3 + 129150 z^2 + 315 z - 630) I_0\left(\frac{z}{2}\right)}{2027025 z^2} - \frac{16 e^{z/2} (416 z^7 - 9136 z^6 + 59232 z^5 - 118380 z^4 + 32550 z^3 + 9765 z^2 + 1260 z - 2520) I_1\left(\frac{z}{2}\right)}{2027025 z^3}$$

07.25.03.7679.01

$${}_2F_2\left(-\frac{7}{2}, 4; 3, \frac{11}{2}; z\right) = \frac{e^z (-1664 z^7 + 38592 z^6 - 263776 z^5 + 543888 z^4 - 113400 z^3 - 43260 z^2 + 3150 z + 33075)}{1048576 z^4} + \frac{1}{2097152 z^{9/2}} (\sqrt{\pi} (3328 z^8 - 78848 z^7 + 564480 z^6 - 1317120 z^5 + 588000 z^4 + 141120 z^3 + 35280 z^2 - 25200 z - 33075) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.7680.01

$${}_2F_2\left(-\frac{7}{2}, 4; 3, \frac{11}{2}; -z\right) = \frac{e^{-z} (1664 z^7 + 38592 z^6 + 263776 z^5 + 543888 z^4 + 113400 z^3 - 43260 z^2 - 3150 z + 33075)}{1048576 z^4} + \frac{1}{2097152 z^{9/2}} (\sqrt{\pi} (3328 z^8 + 78848 z^7 + 564480 z^6 + 1317120 z^5 + 588000 z^4 - 141120 z^3 + 35280 z^2 + 25200 z - 33075) \operatorname{erf}(\sqrt{z}))$$

07.25.03.7681.01

$${}_2F_2\left(-\frac{7}{2}, 4; 3, 6; z\right) = \frac{32 e^{z/2} (416 z^7 - 10784 z^6 + 87984 z^5 - 258720 z^4 + 221970 z^3 + 1890 z^2 - 2835 z - 5040) I_0\left(\frac{z}{2}\right)}{6891885 z^3} - \frac{1}{6891885 z^4} 64 e^{z/2} (208 z^8 - 5184 z^7 + 38912 z^6 - 92832 z^5 + 33075 z^4 + 13020 z^3 + 3465 z^2 - 5670 z - 10080) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = \frac{7}{2}$

07.25.03.7682.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{7}{2}, 4; z\right) = \frac{e^z (-32 z^5 + 656 z^4 - 3888 z^3 + 6744 z^2 - 1050 z - 315)}{12288 z^2} + \frac{\sqrt{\pi} (64 z^6 - 1344 z^5 + 8400 z^4 - 16800 z^3 + 6300 z^2 + 1260 z + 315) \operatorname{erfi}(\sqrt{z})}{24576 z^{5/2}}$$

07.25.03.7683.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{7}{2}, 4; -z\right) = \frac{e^{-z} (32 z^5 + 656 z^4 + 3888 z^3 + 6744 z^2 + 1050 z - 315)}{12288 z^2} + \frac{\sqrt{\pi} (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315) \operatorname{erf}(\sqrt{z})}{24576 z^{5/2}}$$

07.25.03.7684.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{7}{2}, 5; z\right) = \frac{e^z (-4576 z^7 + 108592 z^6 - 766992 z^5 + 1667080 z^4 - 400630 z^3 - 194505 z^2 - 61440 z + 61440)}{3294720 z^4} + \frac{1}{6589440 z^{5/2}} - \frac{\sqrt{\pi} (9152 z^6 - 221760 z^5 + 1638000 z^4 - 4004000 z^3 + 1930500 z^2 + 540540 z + 225225) \operatorname{erfi}(\sqrt{z})}{429 z^4}$$

07.25.03.7685.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{7}{2}, 5; -z\right) = \frac{e^{-z} (4576 z^7 + 108592 z^6 + 766992 z^5 + 1667080 z^4 + 400630 z^3 - 194505 z^2 + 61440 z + 61440)}{3294720 z^4} + \frac{1}{6589440 z^{5/2}} - \frac{\sqrt{\pi} (9152 z^6 + 221760 z^5 + 1638000 z^4 + 4004000 z^3 + 1930500 z^2 - 540540 z + 225225) \operatorname{erfi}(\sqrt{z})}{429 z^4}$$

07.25.03.7686.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{7}{2}, 6; z\right) = -\frac{40(17z+12)}{7293 z^5} + \frac{1}{5601024 z^5} + \frac{e^z (-4576 z^8 + 123376 z^7 - 1011600 z^6 + 2644168 z^5 - 873910 z^4 - 566085 z^3 - 337920 z^2 + 153600 z + 368640)}{11202048 z^{5/2}} + \frac{\sqrt{\pi} (9152 z^6 - 251328 z^5 + 2142000 z^4 - 6188000 z^3 + 3646500 z^2 + 1312740 z + 765765) \operatorname{erfi}(\sqrt{z})}{11202048 z^{5/2}}$$

07.25.03.7687.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{7}{2}, 6; -z\right) = -\frac{40(17z-12)}{7293 z^5} + \frac{1}{5601024 z^5} + \frac{e^{-z} (4576 z^8 + 123376 z^7 + 1011600 z^6 + 2644168 z^5 + 873910 z^4 - 566085 z^3 + 337920 z^2 + 153600 z - 368640)}{11202048 z^{5/2}} + \frac{\sqrt{\pi} (9152 z^6 + 251328 z^5 + 2142000 z^4 + 6188000 z^3 + 3646500 z^2 - 1312740 z + 765765) \operatorname{erfi}(\sqrt{z})}{11202048 z^{5/2}}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = 4$

07.25.03.7688.01

$${}_2F_2\left(-\frac{7}{2}, 4; 4, 4; z\right) = \frac{4 e^{z/2} (32 z^5 - 752 z^4 + 5536 z^3 - 14700 z^2 + 11550 z + 105) I_0\left(\frac{z}{2}\right)}{45045 z} - \frac{4 e^{z/2} (32 z^6 - 720 z^5 + 4832 z^4 - 10196 z^3 + 3150 z^2 + 1155 z + 420) I_1\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.7689.01

$${}_2F_2\left(-\frac{7}{2}, 4; 4, \frac{9}{2}; z\right) = \frac{e^z (-64 z^6 + 1536 z^5 - 11024 z^4 + 24576 z^3 - 6300 z^2 - 3360 z - 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 - 3136 z^6 + 23520 z^5 - 58800 z^4 + 29400 z^3 + 8820 z^2 + 4410 z + 1575) \operatorname{erfi}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.7690.01

$${}_2F_2\left(-\frac{7}{2}, 4; 4, \frac{9}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1536 z^5 + 11024 z^4 + 24576 z^3 + 6300 z^2 - 3360 z + 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.7691.01

$${}_2F_2\left(-\frac{7}{2}, 4; 4, 5; z\right) = \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23520 z^3 + 22050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675675 z^3}$$

07.25.03.7692.01

$${}_2F_2\left(-\frac{7}{2}, 4; 4, \frac{11}{2}; z\right) = \frac{1}{1048576 z^{9/2}} - \frac{3 \sqrt{\pi} (256 z^8 - 7168 z^7 + 62720 z^6 - 188160 z^5 + 117600 z^4 + 47040 z^3 + 35280 z^2 + 25200 z + 11025) \operatorname{erfi}(\sqrt{z}) - 3 e^z (128 z^7 - 3520 z^6 + 29664 z^5 - 80848 z^4 + 29400 z^3 + 21420 z^2 + 17850 z + 11025)}{524288 z^4}$$

07.25.03.7693.01

$${}_2F_2\left(-\frac{7}{2}, 4; 4, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29664 z^5 + 80848 z^4 + 29400 z^3 - 21420 z^2 + 17850 z - 11025)}{524288 z^4} + \frac{1}{1048576 z^{9/2}} - \frac{3 \sqrt{\pi} (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025) \operatorname{erf}(\sqrt{z})}{524288 z^4}$$

07.25.03.7694.01

$${}_2F_2\left(-\frac{7}{2}, 4; 4, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right) - \frac{1}{2297295 z^4} 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)}{2297295 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = \frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.7695.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; \frac{9}{2}, 5; z\right) = \\
 & \frac{1}{13\,178\,880 z^4} e^z (-9152 z^7 + 254\,144 z^6 - 2\,170\,704 z^5 + 6\,037\,280 z^4 - 2\,295\,860 z^3 - 1\,761\,060 z^2 - 1\,658\,055 z - 1\,720\,320) + \\
 & \frac{1}{26\,357\,760 z^{7/2}} \left(\sqrt{\pi} (18\,304 z^7 - 517\,440 z^6 + 4\,586\,400 z^5 - 14\,014\,000 z^4 + \right. \\
 & \quad \left. 9\,009\,000 z^3 + 3\,783\,780 z^2 + 3\,153\,150 z + 3\,378\,375) \operatorname{erfi}(\sqrt{z}) \right) + \frac{56}{429 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7696.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; \frac{9}{2}, 5; -z\right) = \\
 & \frac{1}{13\,178\,880 z^4} e^{-z} (9152 z^7 + 254\,144 z^6 + 2\,170\,704 z^5 + 6\,037\,280 z^4 + 2\,295\,860 z^3 - 1\,761\,060 z^2 + 1\,658\,055 z - 1\,720\,320) + \\
 & \frac{1}{26\,357\,760 z^{7/2}} \left(\sqrt{\pi} (18\,304 z^7 + 517\,440 z^6 + 4\,586\,400 z^5 + 14\,014\,000 z^4 + \right. \\
 & \quad \left. 9\,009\,000 z^3 - 3\,783\,780 z^2 + 3\,153\,150 z - 3\,378\,375) \operatorname{erf}(\sqrt{z}) \right) + \frac{56}{429 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7697.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; \frac{9}{2}, 6; z\right) = \\
 & \frac{280(17z+4)}{7293 z^5} + \frac{1}{22\,404\,096 z^5} (e^z (-9152 z^8 + 288\,640 z^7 - 2\,859\,056 z^6 + 9\,532\,352 z^5 - 4\,853\,380 z^4 - 4\,695\,880 z^3 - \\
 & \quad 6\,241\,725 z^2 - 11\,182\,080 z - 3\,440\,640)) + \\
 & \frac{1}{44\,808\,192 z^{7/2}} \left(\sqrt{\pi} (18\,304 z^7 - 586\,432 z^6 + 5\,997\,600 z^5 - 21\,658\,000 z^4 + 17\,017\,000 z^3 + \right. \\
 & \quad \left. 9\,189\,180 z^2 + 10\,720\,710 z + 19\,144\,125) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7698.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 4; \frac{9}{2}, 6; -z\right) = \\
 & \frac{280(17z-4)}{7293 z^5} + \frac{1}{22\,404\,096 z^5} (e^{-z} (9152 z^8 + 288\,640 z^7 + 2\,859\,056 z^6 + 9\,532\,352 z^5 + 4\,853\,380 z^4 - 4\,695\,880 z^3 + \\
 & \quad 6\,241\,725 z^2 - 11\,182\,080 z + 3\,440\,640)) + \\
 & \frac{1}{44\,808\,192 z^{7/2}} \left(\sqrt{\pi} (18\,304 z^7 + 586\,432 z^6 + 5\,997\,600 z^5 + 21\,658\,000 z^4 + 17\,017\,000 z^3 - \right. \\
 & \quad \left. 9\,189\,180 z^2 + 10\,720\,710 z - 19\,144\,125) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = 5$

$$\begin{aligned}
 & \text{07.25.03.7699.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; 5, 5; z\right) = & \frac{1}{1449322875z^4} \left(128 e^{z/2} (9152 z^8 - 284064 z^7 + 2865360 z^6 - 10820320 z^5 + 12138600 z^4 + 886170 z^3 + \right. \\
 & \left. 1155585 z^2 + 2702700 z - 5405400) I_0\left(\frac{z}{2}\right) - \frac{1}{1449322875 z^3} \right. \\
 & \left. (128 e^{z/2} (9152 z^7 - 274912 z^6 + 2595024 z^5 - 8353600 z^4 + 4836200 z^3 + 3400470 z^2 + 3769905 z + 5973690) \right. \\
 & \left. I_1\left(\frac{z}{2}\right) + \frac{1024}{2145 z^4} \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7700.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; 5, \frac{11}{2}; z\right) = & \frac{1}{46858240z^4} \\
 & e^z (-18304 z^7 + 582208 z^6 - 5833248 z^5 + 19774000 z^4 - 10404520 z^3 - 10408020 z^2 - 14769510 z - 31401615) + \\
 & \frac{1}{93716480 z^{9/2}} \left(\sqrt{\pi} (36608 z^8 - 1182720 z^7 + 12230400 z^6 - 44844800 z^5 + 36036000 z^4 + \right. \\
 & \left. 20180160 z^3 + 25225200 z^2 + 54054000 z - 23648625) \operatorname{erfi}(\sqrt{z})\right) + \frac{168}{143 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7701.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; 5, \frac{11}{2}; -z\right) = & \frac{1}{46858240z^4} \\
 & e^{-z} (18304 z^7 + 582208 z^6 + 5833248 z^5 + 19774000 z^4 + 10404520 z^3 - 10408020 z^2 + 14769510 z - 31401615) + \\
 & \frac{1}{93716480 z^{9/2}} \left(\sqrt{\pi} (36608 z^8 + 1182720 z^7 + 12230400 z^6 + 44844800 z^5 + 36036000 z^4 - \right. \\
 & \left. 20180160 z^3 + 25225200 z^2 - 54054000 z - 23648625) \operatorname{erf}(\sqrt{z})\right) + \frac{168}{143 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7702.01} \\
 {}_2F_2\left(-\frac{7}{2}, 4; 5, 6; z\right) = & \frac{1}{4927697775z^4} \left(256 e^{z/2} (9152 z^8 - 321024 z^7 + 3712080 z^6 - 16297120 z^5 + 21196200 z^4 + 2802720 z^3 + \right. \\
 & \left. 5430585 z^2 + 20270250 z - 45945900) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{4927697775z^4} \left(256 e^{z/2} (9152 z^8 - 311872 z^7 + 3404784 z^6 - 13039120 z^5 + 9576200 z^4 + \right. \right. \\
 & \left. \left. 8408520 z^3 + 12787455 z^2 + 33208815 z - 10810800) I_1\left(\frac{z}{2}\right) + \frac{1024}{429 z^4} \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = \frac{11}{2}$

07.25.03.7703.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{11}{2}, 6; z\right) = \frac{840(17z-4)}{2431z^5} + \frac{1}{79659008z^5} \left(e^z (-18304z^8 + 661056z^7 - 7675424z^6 + 31122736z^5 - 21568680z^4 - 26668180z^3 - 51346470z^2 - 176000895z + 110100480) \right) + \frac{1}{159318016z^{9/2}} \left(\sqrt{\pi} (36608z^8 - 1340416z^7 + 15993600z^6 - 69305600z^5 + 68068000z^4 + 49008960z^3 + 85765680z^2 + 306306000z - 402026625) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.7704.01

$${}_2F_2\left(-\frac{7}{2}, 4; \frac{11}{2}, 6; -z\right) = \frac{840(17z+4)}{2431z^5} + \frac{1}{79659008z^5} \left(e^{-z} (18304z^8 + 661056z^7 + 7675424z^6 + 31122736z^5 + 21568680z^4 - 26668180z^3 + 51346470z^2 - 176000895z - 110100480) \right) + \frac{1}{159318016z^{9/2}} \left(\sqrt{\pi} (36608z^8 + 1340416z^7 + 15993600z^6 + 69305600z^5 + 68068000z^4 - 49008960z^3 + 85765680z^2 - 306306000z - 402026625) \operatorname{erf}(\sqrt{z}) \right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 4$, $b_1 = 6$

07.25.03.7705.01

$${}_2F_2\left(-\frac{7}{2}, 4; 6, 6; z\right) = \frac{5120(17z-8)}{7293z^5} + \frac{1}{16754172435z^5} \left(256 e^{z/2} (18304z^9 - 725824z^8 + 9628992z^7 - 49244720z^6 + 74496560z^5 + 16815240z^4 + 46249560z^3 + 272095545z^2 - 964863900z + 367567200) I_0\left(\frac{z}{2}\right) - \frac{1}{16754172435z^4} \left(256 e^{z/2} (18304z^8 - 707520z^7 + 8930624z^6 - 40649552z^5 + 37662000z^4 + 41110040z^3 + 85479000z^2 + 364953015z - 565670220) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.7706.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{108056025} \left(e^z (4096z^{12} + 188416z^{11} + 3004416z^{10} + 19998720z^9 + 52012800z^8 + 37739520z^7 + 5080320z^6 - 9434880z^5 + 29257200z^4 - 70308000z^3 + 129389400z^2 - 164316600z + 108056025) \right)$$

$$\begin{aligned}
 & \text{07.25.03.7707.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & \frac{1}{9823275} \left(e^z (2048 z^{11} + 82944 z^{10} + 1128960 z^9 + 6048000 z^8 + 10886400 z^7 + 2540160 z^6 + 1270080 z^5 - \right. \\
 & \left. 4082400 z^4 + 8505000 z^3 - 13891500 z^2 + 16074450 z - 9823275) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7708.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{1091475} \left(e^z (1024 z^{10} + 35840 z^9 + 403200 z^8 + 1612800 z^7 + 1411200 z^6 - 846720 z^5 + 1058400 z^4 - \right. \\
 & \left. 1512000 z^3 + 1984500 z^2 - 1984500 z + 1091475) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7709.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{155925} \left(e^z (512 z^9 + 15104 z^8 + 133632 z^7 + 338688 z^6 - 141120 z^5 - 211680 z^4 + 635040 z^3 - \right. \\
 & \left. 438480 z^2 + 334530 z - 155925) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7710.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{31185} e^z (256 z^8 + 6144 z^7 + 39168 z^6 + 32256 z^5 - 151200 z^4 + 120960 z^3 + 257040 z^2 - 90720 z + 31185)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7711.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{e^z (128 z^7 + 2368 z^6 + 8928 z^5 - 15120 z^4 - 37800 z^3 + 117180 z^2 + 69930 z - 10395)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7712.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (64 z^6 + 832 z^5 + 720 z^4 - 10080 z^3 + 6300 z^2 + 49140 z + 10395)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7713.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (32 z^6 + 352 z^5 - 48 z^4 - 4416 z^3 + 4674 z^2 + 24570 z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \\
 & \frac{2 e^{z/2} (16 z^6 + 160 z^5 - 176 z^4 - 1968 z^3 + 4107 z^2 + 7662 z) I_1\left(\frac{z}{2}\right)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7714.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (32 z^5 + 240 z^4 - 720 z^3 - 2520 z^2 + 9450 z + 10395)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7715.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, 2; z\right) = \\
 & \frac{e^{z/2} (32 z^5 + 176 z^4 - 864 z^3 - 1476 z^2 + 9150 z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2} (32 z^5 + 144 z^4 - 992 z^3 - 444 z^2 + 9054 z + 2145) I_1\left(\frac{z}{2}\right)}{10395}
 \end{aligned}$$

07.25.03.7716.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (16z^4 + 32z^3 - 504z^2 + 504z + 3465)}{3465}$$

07.25.03.7717.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, 3; z\right) = \frac{4e^{z/2}(16z^4 - 444z^2 + 840z + 2745)I_0\left(\frac{z}{2}\right) + 4e^{z/2}(16z^5 - 16z^4 - 420z^3 + 1236z^2 + 1365z - 585)I_1\left(\frac{z}{2}\right)}{10395 + 10395z}$$

07.25.03.7718.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{693} e^z (8z^3 - 28z^2 - 126z + 693)$$

07.25.03.7719.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2}(16z^4 - 88z^3 - 60z^2 + 1140z - 255)I_0\left(\frac{z}{2}\right) + 4e^{z/2}(16z^5 - 104z^4 + 52z^3 + 1020z^2 - 1095z + 1020)I_1\left(\frac{z}{2}\right)}{3465z + 3465z^2}$$

07.25.03.7720.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{99} e^z (4z^2 - 36z + 99)$$

07.25.03.7721.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2}(8z^4 - 88z^3 + 360z^2 - 612z + 969)I_0\left(\frac{z}{2}\right) + 128e^{z/2}(2z^5 - 24z^4 + 115z^3 - 282z^2 + 612z - 969)I_1\left(\frac{z}{2}\right)}{3465z^2 + 3465z^3}$$

07.25.03.7722.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z(4z^5 - 58z^4 + 360z^3 - 1260z^2 + 3150z - 4725)}{22z^4} + \frac{4725\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{44z^{9/2}}$$

07.25.03.7723.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z}(-4z^5 - 58z^4 - 360z^3 - 1260z^2 - 3150z - 4725)}{22z^4} + \frac{4725\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{44z^{9/2}}$$

07.25.03.7724.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, 6; z\right) = \frac{32e^{z/2}(8z^4 - 132z^3 + 948z^2 - 3819z + 9576)I_0\left(\frac{z}{2}\right) + 32e^{z/2}(8z^5 - 140z^4 + 1092z^3 - 4989z^2 + 15276z - 38304)I_1\left(\frac{z}{2}\right)}{693z^3 + 693z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.7725.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{893025} (e^z (1024 z^{10} + 36864 z^9 + 435456 z^8 + 1935360 z^7 + 2540160 z^6 + 635040 z^4 - 1088640 z^3 + 1530900 z^2 - 1587600 z + 893025))$$

07.25.03.7726.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{99225} (e^z (512 z^9 + 16128 z^8 + 161280 z^7 + 564480 z^6 + 423360 z^5 - 211680 z^4 + 211680 z^3 - 226800 z^2 + 198450 z - 99225))$$

07.25.03.7727.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{e^z (256 z^8 + 6912 z^7 + 56448 z^6 + 141120 z^5 - 105840 z^3 + 52920 z^2 - 34020 z + 14175)}{14175}$$

07.25.03.7728.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{e^z (128 z^7 + 2880 z^6 + 18144 z^5 + 25200 z^4 - 37800 z^3 - 34020 z^2 + 9450 z - 2835)}{2835}$$

07.25.03.7729.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} e^z (64 z^6 + 1152 z^5 + 5040 z^4 - 18900 z^2 - 7560 z + 945)$$

07.25.03.7730.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{945} e^z (32 z^5 + 432 z^4 + 1008 z^3 - 2520 z^2 - 5670 z - 945)$$

07.25.03.7731.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-16 z^5 - 192 z^4 - 348 z^3 + 1284 z^2 + 2835 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16 z^5 - 176 z^4 - 180 z^3 + 1392 z^2 + 1479 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.7732.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{945} e^z (16 z^4 + 144 z^3 - 1260 z - 945)$$

07.25.03.7733.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (-16 z^4 - 120 z^3 + 84 z^2 + 1140 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16 z^4 - 104 z^3 + 180 z^2 + 924 z + 165) I_1\left(\frac{z}{2}\right)$$

07.25.03.7734.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{315} e^z (8 z^3 + 36 z^2 - 126 z - 315)$$

07.25.03.7735.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, 3; z\right) = -\frac{8}{945} e^{z/2} (4 z^3 + 12 z^2 - 66 z - 123) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8 z^4 + 16 z^3 - 144 z^2 - 102 z + 39) I_1\left(\frac{z}{2}\right)}{945 z}$$

$$07.25.03.7736.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{1}{63} e^z (4z^2 - 63)$$

$$07.25.03.7737.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, 4; z\right) = -\frac{4 e^{z/2} (8z^3 - 12z^2 - 96z + 15) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (8z^4 - 20z^3 - 72z^2 + 69z - 60) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

$$07.25.03.7738.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{1}{9} e^z (2z - 9)$$

$$07.25.03.7739.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, 5; z\right) = -\frac{32 e^{z/2} (4z^3 - 24z^2 + 33z - 51) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (4z^4 - 28z^3 + 63z^2 - 132z + 204) I_1\left(\frac{z}{2}\right)}{315 z^3}$$

$$07.25.03.7740.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (-8z^4 + 72z^3 - 252z^2 + 630z - 945)}{8z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{9/2}}$$

$$07.25.03.7741.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-8z^4 - 72z^3 - 252z^2 - 630z - 945)}{8z^4} + \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{9/2}}$$

$$07.25.03.7742.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, 6; z\right) = -\frac{32 e^{z/2} (4z^3 - 42z^2 + 177z - 456) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (4z^4 - 46z^3 + 225z^2 - 708z + 1824) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{7}{2}$

$$07.25.03.7743.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{11025} e^z (256z^8 + 7168z^7 + 62720z^6 + 188160z^5 + 117600z^4 - 47040z^3 + 35280z^2 - 25200z + 11025)$$

$$07.25.03.7744.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (128z^7 + 3136z^6 + 23520z^5 + 58800z^4 + 29400z^3 - 8820z^2 + 4410z - 1575)}{1575}$$

$$07.25.03.7745.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} e^z (64z^6 + 1344z^5 + 8400z^4 + 16800z^3 + 6300z^2 - 1260z + 315)$$

$$07.25.03.7746.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{105} e^z (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105)$$

$$07.25.03.7747.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (16z^4 + 224z^3 + 840z^2 + 840z + 105)$$

07.25.03.7748.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8z^4 + 104z^3 + 376z^2 + 420z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} (2z^4 + 24z^3 + 71z^2 + 44z) I_1\left(\frac{z}{2}\right)$$

07.25.03.7749.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (8z^3 + 84z^2 + 210z + 105)$$

07.25.03.7750.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (8z^3 + 76z^2 + 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 + 68z^2 + 116z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.7751.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{35} e^z (4z^2 + 28z + 35)$$

07.25.03.7752.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 + 24z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4z^3 + 20z^2 + 9z - 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.7753.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (2z + 7)$$

07.25.03.7754.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (4z^2 + 10z - 1) I_0\left(\frac{z}{2}\right)}{35z} + \frac{4 e^{z/2} (4z^3 + 6z^2 - 5z + 4) I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.7755.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = e^z$$

07.25.03.7756.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 - 2z + 3) I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{64 e^{z/2} (z^3 - 2z^2 + 4z - 6) I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.7757.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (8z^3 - 28z^2 + 70z - 105)}{16z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.7758.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32z^{9/2}} - \frac{9 e^{-z} (8z^3 + 28z^2 + 70z + 105)}{16z^4}$$

07.25.03.7759.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^2 - 9z + 24) I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{32 e^{z/2} (2z^3 - 11z^2 + 36z - 96) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.7760.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{16384}{75} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{225} e^z (64 z^6 + 1408 z^5 + 9648 z^4 - 24576 z^3 + 2412 z^2 - 792 z + 225)$$

07.25.03.7761.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{16384}{75} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{1}{225} e^{-z} (64 z^6 - 1408 z^5 + 9648 z^4 + 24576 z^3 + 2412 z^2 + 792 z + 225)$$

07.25.03.7762.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} e^z (-32 z^5 - 624 z^4 + 20688 z^3 + 1944 z^2 - 234 z + 45) - \frac{8192}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.7763.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{45} e^{-z} (32 z^5 - 624 z^4 - 20688 z^3 + 1944 z^2 + 234 z + 45) - \frac{8192}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7764.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{2048}{5} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{15} e^z (16 z^4 - 5872 z^3 - 1536 z^2 - 204 z + 15)$$

07.25.03.7765.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{2048}{5} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{1}{15} e^{-z} (16 z^4 + 5872 z^3 - 1536 z^2 + 204 z + 15)$$

07.25.03.7766.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (1016 z^3 + 396 z^2 + 174 z + 15) - \frac{1024}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.7767.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-1016 z^3 + 396 z^2 - 174 z + 15) - \frac{1024}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7768.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{525} e^{z/2} (-16384 z^4 + 12148 z^3 + 5720 z^2 + 3045 z + 525) I_0\left(\frac{z}{2}\right) + \frac{1}{525} e^{z/2} (16384 z^4 + 3956 z^3 + 2788 z^2 + 955 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.7769.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (128 z^3 + 60 z^2 + 48 z + 15) - \frac{128}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.7770.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-128 z^3 + 60 z^2 - 48 z + 15) - \frac{128}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7771.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (-32768 z^4 + 24576 z^3 + 14100 z^2 + 12390 z + 4725) I_0\left(\frac{z}{2}\right) + e^{z/2} (32768 z^4 + 8192 z^3 + 7956 z^2 + 5970 z + 525) I_1\left(\frac{z}{2}\right)}{4725} + \frac{e^{z/2} (32768 z^4 + 8192 z^3 + 7956 z^2 + 5970 z + 525) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.7772.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{25} e^z (64 z^3 + 32 z^2 + 38 z + 25) - \frac{64}{25} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.7773.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{25} e^{-z} (-64 z^3 + 32 z^2 - 38 z + 25) - \frac{64}{25} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7774.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (32 768 z^5 + 8192 z^4 + 9216 z^3 + 12 270 z^2 + 3360 z - 945) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (16 384 z^4 - 12 288 z^3 - 7680 z^2 - 9975 z - 6615) I_0\left(\frac{z}{2}\right)}{51 975 z}$$

07.25.03.7775.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{15} e^z (16 z^3 + 8 z^2 + 12 z + 15) - \frac{16}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.7776.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{15} e^{-z} (-16 z^3 + 8 z^2 - 12 z + 15) - \frac{16}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7777.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (65 536 z^6 + 16 384 z^5 + 18 432 z^4 + 38 400 z^3 + 27 510 z^2 - 19 215 z + 13 860) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (65 536 z^5 - 49 152 z^4 - 30 720 z^3 - 53 760 z^2 - 61 110 z + 3465) I_0\left(\frac{z}{2}\right)}{225 225 z^2}$$

07.25.03.7778.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{15} e^z (8 z^3 + 4 z^2 + 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.7779.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{15} e^{-z} (-8 z^3 + 4 z^2 - 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7780.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, 5; z\right) = \frac{1}{3 378 375 z^3} 32 e^{z/2} (65 536 z^7 + 16 384 z^6 + 18 432 z^5 + 38 400 z^4 + 117 600 z^3 - 199 395 z^2 + 374 220 z - 540 540) I_1\left(\frac{z}{2}\right) - \frac{32 e^{z/2} (65 536 z^6 - 49 152 z^5 - 30 720 z^4 - 53 760 z^3 - 151 200 z^2 + 93 555 z - 135 135) I_0\left(\frac{z}{2}\right)}{3 378 375 z^2}$$

07.25.03.7781.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (128 z^7 + 64 z^6 + 96 z^5 + 240 z^4 + 840 z^3 - 2940 z^2 + 7350 z - 11 025)}{1280 z^4} - \frac{3 \sqrt{\pi} (256 z^8 - 11 025) \operatorname{erfi}(\sqrt{z})}{2560 z^{9/2}}$$

07.25.03.7782.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 - 64 z^6 + 96 z^5 - 240 z^4 + 840 z^3 + 2940 z^2 + 7350 z + 11025)}{1280 z^4} - \frac{3 \sqrt{\pi} (256 z^8 - 11025) \operatorname{erf}(\sqrt{z})}{2560 z^{9/2}}$$

07.25.03.7783.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, 6; z\right) = \frac{1}{11486475 z^4} \left(32 e^{z/2} (131072 z^8 + 32768 z^7 + 36864 z^6 + 76800 z^5 + 235200 z^4 + 952560 z^3 - 6683985 z^2 + 23243220 z - 64864800) I_1\left(\frac{z}{2}\right) - \frac{1}{11486475 z^3} \right. \\ \left. 32 e^{z/2} (131072 z^7 - 98304 z^6 - 61440 z^5 - 107520 z^4 - 302400 z^3 - 1164240 z^2 + 5810805 z - 16216200) I_0\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.7784.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} e^z (16 z^4 - 12000 z^3 + 1800 z^2 - 72 z + 9) + \frac{2048}{3} \sqrt{\pi} (2 z^{7/2} - z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7785.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9} e^{-z} (16 z^4 + 12000 z^3 + 1800 z^2 + 72 z + 9) + \frac{2048}{3} \sqrt{\pi} (2 z^{7/2} + z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7786.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (3064 z^3 - 1668 z^2 - 66 z + 3) - 1024 \sqrt{\pi} (z^{7/2} - z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7787.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-3064 z^3 - 1668 z^2 + 66 z + 3) - 1024 \sqrt{\pi} (z^{7/2} + z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7788.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (-512 z^3 + 516 z^2 + 60 z + 3) + \frac{256}{3} \sqrt{\pi} (2 z^{7/2} - 3 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7789.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (512 z^3 + 516 z^2 - 60 z + 3) + \frac{256}{3} \sqrt{\pi} (2 z^{7/2} + 3 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7790.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8192 z^4 - 20480 z^3 + 6982 z^2 + 1050 z + 105) I_0\left(\frac{z}{2}\right) - \frac{2}{105} e^{z/2} (4096 z^4 - 6144 z^3 - 675 z^2 - 106 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.7791.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{64}{3} \sqrt{\pi} (z-2) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^z (-64 z^3 + 96 z^2 + 18 z + 3)$$

07.25.03.7792.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{64}{3} \sqrt{\pi} (z+2) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (64 z^3 + 96 z^2 - 18 z + 3)$$

07.25.03.7793.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (16384 z^4 - 49152 z^3 + 19968 z^2 + 4470 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16384 z^4 + 32768 z^3 + 4608 z^2 + 1398 z + 75) I_1\left(\frac{z}{2}\right)$$

07.25.03.7794.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{16}{5} \sqrt{\pi} (2z-5) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{5} e^{-z} (-32 z^3 + 64 z^2 + 16 z + 5)$$

07.25.03.7795.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{16}{5} \sqrt{\pi} (2z+5) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{5} e^{-z} (32 z^3 + 64 z^2 - 16 z + 5)$$

07.25.03.7796.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (16384 z^4 - 57344 z^3 + 26112 z^2 + 7680 z + 2625) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16384 z^5 - 40960 z^4 - 6656 z^3 - 3072 z^2 - 465 z + 105) I_1\left(\frac{z}{2}\right)}{10395 z}$$

07.25.03.7797.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{8}{3} \sqrt{\pi} (z-3) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (-8 z^3 + 20 z^2 + 6 z + 3)$$

07.25.03.7798.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{8}{3} \sqrt{\pi} (z+3) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (8 z^3 + 20 z^2 - 6 z + 3)$$

07.25.03.7799.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (32768 z^5 - 131072 z^4 + 64512 z^3 + 23040 z^2 + 11760 z - 315) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (32768 z^6 - 98304 z^5 - 17408 z^4 - 10752 z^3 - 3600 z^2 + 1995 z - 1260) I_1\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.7800.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{2}{3} \sqrt{\pi} (2z-7) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (-4 z^3 + 12 z^2 + 4 z + 3)$$

07.25.03.7801.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{2}{3} \sqrt{\pi} (2z+7) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4 z^3 + 12 z^2 - 4 z + 3)$$

07.25.03.7802.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (32768 z^6 - 147456 z^5 + 76800 z^4 + 30720 z^3 + 25200 z^2 - 7560 z + 10395) I_0\left(\frac{z}{2}\right) - 128 e^{z/2} (8192 z^7 - 28672 z^6 - 5376 z^5 - 3840 z^4 - 3300 z^3 + 4410 z^2 - 7560 z + 10395) I_1\left(\frac{z}{2}\right)}{675675 z^3}$$

07.25.03.7803.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{3\sqrt{\pi}(256z^8 - 1024z^7 + 1575)\operatorname{erfi}(\sqrt{z})}{1024z^{9/2}} - \frac{3e^z(128z^7 - 448z^6 - 160z^5 - 144z^4 - 120z^3 + 420z^2 - 1050z + 1575)}{512z^4}$$

07.25.03.7804.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z}(128z^7 + 448z^6 - 160z^5 + 144z^4 - 120z^3 - 420z^2 - 1050z - 1575)}{512z^4} + \frac{3\sqrt{\pi}(256z^8 + 1024z^7 + 1575)\operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.7805.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{2297295z^3} 32e^{z/2}(65536z^7 - 327680z^6 + 178176z^5 + 76800z^4 + 77280z^3 + 60480z^2 - 363825z + 1081080)I_0\left(\frac{z}{2}\right) - \frac{1}{2297295z^4} \left(32e^{z/2}(65536z^8 - 262144z^7 - 51200z^6 - 39936z^5 - 45600z^4 - 23520z^3 + 377055z^2 - 1455300z + 4324320)I_1\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.7806.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = e^z(-768z^3 + 1156z^2 - 64z + 1) + 64\sqrt{\pi}(12z^{7/2} - 24z^{5/2} + 5z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.7807.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = e^{-z}(768z^3 + 1156z^2 + 64z + 1) + 64\sqrt{\pi}(12z^{7/2} + 24z^{5/2} + 5z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.7808.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = e^z(128z^3 - 320z^2 + 62z + 1) - 32\sqrt{\pi}(4z^{7/2} - 12z^{5/2} + 5z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.7809.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z}(-128z^3 - 320z^2 - 62z + 1) - 32\sqrt{\pi}(4z^{7/2} + 12z^{5/2} + 5z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.7810.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{105}e^{z/2}(-6144z^4 + 26112z^3 - 24448z^2 + 3255z + 105)I_0\left(\frac{z}{2}\right) + \frac{1}{105}e^{z/2}(6144z^4 - 19968z^3 + 7552z^2 + 247z)I_1\left(\frac{z}{2}\right)$$

07.25.03.7811.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = e^z(16z^3 - 56z^2 + 20z + 1) - 8\sqrt{\pi}z^{3/2}(2z^2 - 8z + 5)\operatorname{erfi}(\sqrt{z})$$

07.25.03.7812.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = e^{-z}(-16z^3 - 56z^2 - 20z + 1) - 8\sqrt{\pi} z^{3/2}(2z^2 + 8z + 5)\operatorname{erf}(\sqrt{z})$$

07.25.03.7813.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{315} e^{z/2}(-4096z^4 + 21504z^3 - 25344z^2 + 4800z + 315)I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2}(4096z^4 - 17408z^3 + 9984z^2 + 576z + 15)I_1\left(\frac{z}{2}\right)$$

07.25.03.7814.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{5} e^z(24z^3 - 108z^2 + 58z + 5) - \frac{4}{5}\sqrt{\pi} z^{3/2}(6z^2 - 30z + 25)\operatorname{erfi}(\sqrt{z})$$

07.25.03.7815.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{5} e^{-z}(-24z^3 - 108z^2 - 58z + 5) - \frac{4}{5}\sqrt{\pi} z^{3/2}(6z^2 + 30z + 25)\operatorname{erf}(\sqrt{z})$$

07.25.03.7816.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2}(4096z^5 - 21504z^4 + 16640z^3 + 1344z^2 + 90z - 15)I_1\left(\frac{z}{2}\right) - 8 e^{z/2}(2048z^4 - 12800z^3 + 18048z^2 - 4320z - 435)I_0\left(\frac{z}{2}\right)}{3465z}$$

07.25.03.7817.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = e^z(2z^3 - 11z^2 + 8z + 1) - \frac{1}{2}\sqrt{\pi} z^{3/2}(4z^2 - 24z + 25)\operatorname{erfi}(\sqrt{z})$$

07.25.03.7818.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = e^{-z}(-2z^3 - 11z^2 - 8z + 1) - \frac{1}{2}\sqrt{\pi} z^{3/2}(4z^2 + 24z + 25)\operatorname{erf}(\sqrt{z})$$

07.25.03.7819.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2}(24576z^6 - 153600z^5 + 150016z^4 + 15232z^3 + 1980z^2 - 795z + 420)I_1\left(\frac{z}{2}\right) - 4 e^{z/2}(24576z^5 - 178176z^4 + 291328z^3 - 82560z^2 - 11460z + 105)I_0\left(\frac{z}{2}\right)}{45045z^2}$$

07.25.03.7820.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{2} e^z(2z^3 - 13z^2 + 12z + 2) - \frac{1}{4}\sqrt{\pi} z^{3/2}(4z^2 - 28z + 35)\operatorname{erfi}(\sqrt{z})$$

07.25.03.7821.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{2} e^{-z}(-2z^3 - 13z^2 - 12z + 2) - \frac{1}{4}\sqrt{\pi} z^{3/2}(4z^2 + 28z + 35)\operatorname{erf}(\sqrt{z})$$

07.25.03.7822.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2}(8192z^7 - 59392z^6 + 70144z^5 + 8320z^4 + 2100z^3 - 1965z^2 + 2940z - 3780)I_1\left(\frac{z}{2}\right) - 32 e^{z/2}(8192z^6 - 67584z^5 + 125440z^4 - 40320z^3 - 7500z^2 + 735z - 945)I_0\left(\frac{z}{2}\right)}{225225z^3}$$

07.25.03.7823.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (384 z^7 - 2880 z^6 + 3232 z^5 + 656 z^4 + 120 z^3 - 420 z^2 + 1050 z - 1575)}{2048 z^4} - \frac{3 \sqrt{\pi} (768 z^8 - 6144 z^7 + 8960 z^6 - 1575) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.7824.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{3 e^{-z} (384 z^7 + 2880 z^6 + 3232 z^5 - 656 z^4 + 120 z^3 + 420 z^2 + 1050 z + 1575)}{2048 z^4} - \frac{3 \sqrt{\pi} (768 z^8 + 6144 z^7 + 8960 z^6 - 1575) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.7825.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, 6; z\right) = \frac{1}{765 765 z^4} - \frac{32 e^{z/2} (16384 z^8 - 135168 z^7 + 187392 z^6 + 24832 z^5 + 9000 z^4 - 3330 z^3 - 21315 z^2 + 102060 z - 332640) I_1\left(\frac{z}{2}\right) - \frac{1}{765 765 z^3} 32 e^{z/2} (16384 z^7 - 151552 z^6 + 314368 z^5 - 111360 z^4 - 25560 z^3 - 2730 z^2 + 25515 z - 83160) I_0\left(\frac{z}{2}\right)}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{1}{2}$

07.25.03.7826.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (-64 z^3 + 256 z^2 - 144 z + 3) + \frac{8}{3} \sqrt{\pi} (8 z^{7/2} - 36 z^{5/2} + 30 z^{3/2} - 3 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7827.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (64 z^3 + 256 z^2 + 144 z + 3) + \frac{8}{3} \sqrt{\pi} (8 z^{7/2} + 36 z^{5/2} + 30 z^{3/2} + 3 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7828.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (1024 z^4 - 6144 z^3 + 9152 z^2 - 3360 z + 105) I_0\left(\frac{z}{2}\right) - \frac{32}{105} e^{z/2} (32 z^4 - 160 z^3 + 142 z^2 - 11 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.7829.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (-8 z^3 + 44 z^2 - 42 z + 3) + \frac{4}{3} \sqrt{\pi} \sqrt{z} (2 z^3 - 12 z^2 + 15 z - 3) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7830.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (8 z^3 + 44 z^2 + 42 z + 3) + \frac{4}{3} \sqrt{\pi} \sqrt{z} (2 z^3 + 12 z^2 + 15 z + 3) \operatorname{erf}(\sqrt{z})$$

07.25.03.7831.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (2048 z^4 - 15360 z^3 + 29568 z^2 - 15360 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-2048 z^4 + 13312 z^3 - 17280 z^2 + 2688 z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.7832.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{5} e^z (-4z^3 + 28z^2 - 38z + 5) + \frac{1}{5} \sqrt{\pi} \sqrt{z} (4z^3 - 30z^2 + 50z - 15) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7833.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{5} e^{-z} (4z^3 + 28z^2 + 38z + 5) + \frac{1}{5} \sqrt{\pi} \sqrt{z} (4z^3 + 30z^2 + 50z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.7834.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (2048z^4 - 18432z^3 + 43392z^2 - 28608z + 2601) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (2048z^5 - 16384z^4 + 28032z^3 - 6720z^2 - 87z + 9) I_1\left(\frac{z}{2}\right)}{10395 z}$$

07.25.03.7835.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{6} e^z (-2z^3 + 17z^2 - 30z + 6) + \frac{1}{12} \sqrt{\pi} \sqrt{z} (4z^3 - 36z^2 + 75z - 30) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7836.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{6} e^{-z} (2z^3 + 17z^2 + 30z + 6) + \frac{1}{12} \sqrt{\pi} \sqrt{z} (4z^3 + 36z^2 + 75z + 30) \operatorname{erf}(\sqrt{z})$$

07.25.03.7837.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (4096z^5 - 43008z^4 + 119552z^3 - 94464z^2 + 11298z - 15) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (4096z^6 - 38912z^5 + 82688z^4 - 27136z^3 - 606z^2 + 147z - 60) I_1\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.7838.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{24} e^z (-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48} \sqrt{\pi} \sqrt{z} (8z^3 - 84z^2 + 210z - 105) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7839.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{24} e^{-z} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} \sqrt{\pi} \sqrt{z} (8z^3 + 84z^2 + 210z + 105) \operatorname{erf}(\sqrt{z})$$

07.25.03.7840.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (4096z^6 - 49152z^5 + 157440z^4 - 144000z^3 + 21330z^2 - 270z + 315) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (2048z^7 - 22528z^6 + 57216z^5 - 24000z^4 - 855z^3 + 450z^2 - 540z + 630) I_1\left(\frac{z}{2}\right)}{675675 z^2}$$

07.25.03.7841.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 \sqrt{\pi} (256z^8 - 3072z^7 + 8960z^6 - 5376z^5 + 315) \operatorname{erfi}(\sqrt{z}) - 3 e^z (128z^7 - 1472z^6 + 3808z^5 - 1360z^4 - 24z^3 + 84z^2 - 210z + 315)}{8192 z^{9/2} \cdot 4096 z^4}$$

07.25.03.7842.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 + 1472 z^6 + 3808 z^5 + 1360 z^4 - 24 z^3 - 84 z^2 - 210 z - 315)}{4096 z^4} + \frac{3 \sqrt{\pi} (256 z^8 + 3072 z^7 + 8960 z^6 + 5376 z^5 + 315) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.7843.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (8192 z^7 - 110592 z^6 + 400896 z^5 - 414720 z^4 + 72900 z^3 - 90 z^2 - 5985 z + 22680) I_0\left(\frac{z}{2}\right)}{2297295 z^3} - \frac{1}{2297295 z^4} 32 e^{z/2} (8192 z^8 - 102400 z^7 + 302592 z^6 - 155136 z^5 - 7740 z^4 + 3690 z^3 + 2475 z^2 - 23940 z + 90720) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 1$

07.25.03.7844.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{105} e^{z/2} (128 z^4 - 992 z^3 + 2012 z^2 - 1155 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-128 z^4 + 864 z^3 - 1212 z^2 + 247 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.7845.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{525} e^{z/2} (192 z^4 - 1824 z^3 + 4670 z^2 - 3570 z + 525) I_0\left(\frac{z}{2}\right) - \frac{2}{525} e^{z/2} (96 z^4 - 816 z^3 + 1567 z^2 - 530 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.7846.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{105} e^{z/2} (16 z^4 - 180 z^3 + 556 z^2 - 525 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-16 z^4 + 164 z^3 - 400 z^2 + 191 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.7847.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{105} e^{z/2} (8 z^4 - 104 z^3 + 376 z^2 - 420 z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} (2 z^4 - 24 z^3 + 71 z^2 - 44 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{3}{2}$

07.25.03.7848.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{24} e^z (-8 z^3 + 60 z^2 - 94 z + 21) + \frac{\sqrt{\pi} (16 z^4 - 128 z^3 + 240 z^2 - 96 z + 3) \operatorname{erfi}(\sqrt{z})}{48 \sqrt{z}}$$

07.25.03.7849.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{24} e^{-z} (8 z^3 + 60 z^2 + 94 z + 21) + \frac{\sqrt{\pi} (16 z^4 + 128 z^3 + 240 z^2 + 96 z + 3) \operatorname{erf}(\sqrt{z})}{48 \sqrt{z}}$$

07.25.03.7850.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (256 z^4 - 2496 z^3 + 6648 z^2 - 5430 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-256 z^4 + 2240 z^3 - 4536 z^2 + 1758 z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.7851.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{80} e^z (-8 z^3 + 76 z^2 - 166 z + 65) + \frac{\sqrt{\pi} (16 z^4 - 160 z^3 + 400 z^2 - 240 z + 15) \operatorname{erfi}(\sqrt{z})}{160 \sqrt{z}}$$

07.25.03.7852.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{80} e^{-z} (8 z^3 + 76 z^2 + 166 z + 65) + \frac{\sqrt{\pi} (16 z^4 + 160 z^3 + 400 z^2 + 240 z + 15) \operatorname{erf}(\sqrt{z})}{160 \sqrt{z}}$$

07.25.03.7853.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, 3; z\right) = \frac{8 e^{z/2} (128 z^4 - 1504 z^3 + 4956 z^2 - 5187 z + 1299) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (256 z^5 - 2752 z^4 + 7288 z^3 - 4206 z^2 + 84 z - 3) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.7854.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{192} e^z (-8 z^3 + 92 z^2 - 258 z + 147) + \frac{\sqrt{\pi} (16 z^4 - 192 z^3 + 600 z^2 - 480 z + 45) \operatorname{erfi}(\sqrt{z})}{384 \sqrt{z}}$$

07.25.03.7855.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{192} e^{-z} (8 z^3 + 92 z^2 + 258 z + 147) + \frac{\sqrt{\pi} (16 z^4 + 192 z^3 + 600 z^2 + 480 z + 45) \operatorname{erf}(\sqrt{z})}{384 \sqrt{z}}$$

07.25.03.7856.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (512 z^5 - 7040 z^4 + 27632 z^3 - 35052 z^2 + 11250 z + 3) I_0\left(\frac{z}{2}\right)}{45045 z} - \frac{4 e^{z/2} (512 z^6 - 6528 z^5 + 21360 z^4 - 16444 z^3 + 558 z^2 - 45 z + 12) I_1\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.7857.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{384} e^z (-8 z^3 + 108 z^2 - 370 z + 279) + \frac{\sqrt{\pi} (16 z^4 - 224 z^3 + 840 z^2 - 840 z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.7858.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{384} e^{-z} (8 z^3 + 108 z^2 + 370 z + 279) + \frac{\sqrt{\pi} (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.7859.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (512 z^6 - 8064 z^5 + 36720 z^4 - 54540 z^3 + 21060 z^2 + 45 z - 45) I_0\left(\frac{z}{2}\right)}{675675 z^2} - \frac{32 e^{z/2} (512 z^7 - 7552 z^6 + 29424 z^5 - 28380 z^4 + 1440 z^3 - 225 z^2 + 180 z - 180) I_1\left(\frac{z}{2}\right)}{675675 z^3}$$

07.25.03.7860.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{3\sqrt{\pi} (256z^8 - 4096z^7 + 17920z^6 - 21504z^5 + 3360z^4 - 315) \operatorname{erfi}(\sqrt{z})}{65536z^{9/2}} - \frac{3e^z (128z^7 - 1984z^6 + 8032z^5 - 7568z^4 + 24z^3 - 84z^2 + 210z - 315)}{32768z^4}$$

07.25.03.7861.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z} (128z^7 + 1984z^6 + 8032z^5 + 7568z^4 + 24z^3 + 84z^2 + 210z + 315)}{32768z^4} + \frac{3\sqrt{\pi} (256z^8 + 4096z^7 + 17920z^6 + 21504z^5 + 3360z^4 - 315) \operatorname{erf}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.7862.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, 6; z\right) = \frac{32e^{z/2} (1024z^7 - 18176z^6 + 94176z^5 - 159960z^4 + 71460z^3 + 180z^2 + 495z - 2520) I_0\left(\frac{z}{2}\right)}{2297295z^3} - \frac{1}{2297295z^4} 32e^{z/2} (1024z^8 - 17152z^7 + 77536z^6 - 89976z^5 + 6300z^4 - 1260z^3 + 405z^2 + 1980z - 10080) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 2$

07.25.03.7863.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; 2, \frac{5}{2}; z\right) = \frac{e^{z/2} (128z^4 - 1536z^3 + 5220z^2 - 5730z + 1575) I_0\left(\frac{z}{2}\right)}{1575} + \frac{e^{z/2} (-128z^4 + 1408z^3 - 3876z^2 + 2430z - 75) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.7864.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{945} e^{z/2} (32z^4 - 456z^3 + 1884z^2 - 2580z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-32z^4 + 424z^3 - 1476z^2 + 1284z - 75) I_1\left(\frac{z}{2}\right)$$

07.25.03.7865.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{945} e^{z/2} (16z^4 - 264z^3 + 1284z^2 - 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16z^4 + 248z^3 - 1044z^2 + 1164z - 105) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{5}{2}$

07.25.03.7866.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-48z^4 + 576z^3 - 1736z^2 + 1160z - 15)}{1600z} + \frac{\sqrt{\pi} (96z^5 - 1200z^4 + 4000z^3 - 3600z^2 + 450z + 15) \operatorname{erfi}(\sqrt{z})}{3200z^{3/2}}$$

07.25.03.7867.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (48z^4 + 576z^3 + 1736z^2 + 1160z + 15)}{1600z} + \frac{\sqrt{\pi} (96z^5 + 1200z^4 + 4000z^3 + 3600z^2 + 450z - 15) \operatorname{erf}(\sqrt{z})}{3200z^{3/2}}$$

07.25.03.7868.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, 3; z\right) = \frac{4e^{z/2} (128z^4 - 1856z^3 + 7860z^2 - 11160z + 4335) I_0\left(\frac{z}{2}\right)}{17325} - \frac{4e^{z/2} (128z^5 - 1728z^4 + 6196z^3 - 5700z^2 + 405z + 15) I_1\left(\frac{z}{2}\right)}{17325z}$$

07.25.03.7869.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-8z^4 + 116z^3 - 446z^2 + 425z - 15)}{640z} + \frac{\sqrt{\pi} (16z^5 - 240z^4 + 1000z^3 - 1200z^2 + 225z + 15) \operatorname{erfi}(\sqrt{z})}{1280z^{3/2}}$$

07.25.03.7870.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (8z^4 + 116z^3 + 446z^2 + 425z + 15)}{640z} + \frac{\sqrt{\pi} (16z^5 + 240z^4 + 1000z^3 + 1200z^2 + 225z - 15) \operatorname{erf}(\sqrt{z})}{1280z^{3/2}}$$

07.25.03.7871.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, 4; z\right) = \frac{4e^{z/2} (768z^5 - 13056z^4 + 66200z^3 - 114900z^2 + 56460z - 15) I_0\left(\frac{z}{2}\right)}{225225z} - \frac{4e^{z/2} (768z^6 - 12288z^5 + 54296z^4 - 65980z^3 + 7740z^2 + 615z - 60) I_1\left(\frac{z}{2}\right)}{225225z^2}$$

07.25.03.7872.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (-16z^4 + 272z^3 - 1272z^2 + 1580z - 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.7873.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (16z^4 + 272z^3 + 1272z^2 + 1580z + 105)}{2560z} + \frac{\sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.7874.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (256 z^6 - 4992 z^5 + 29480 z^4 - 60360 z^3 + 35400 z^2 - 60 z + 45) I_0\left(\frac{z}{2}\right)}{1126125 z^2} - \frac{128 e^{z/2} (64 z^7 - 1184 z^6 + 6218 z^5 - 9400 z^4 + 1575 z^3 + 210 z^2 - 60 z + 45) I_1\left(\frac{z}{2}\right)}{1126125 z^3}$$

07.25.03.7875.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{3 \sqrt{\pi} (768 z^8 - 15360 z^7 + 89600 z^6 - 161280 z^5 + 50400 z^4 + 6720 z^3 + 1575) \operatorname{erfi}(\sqrt{z})}{655360 z^{9/2}} - \frac{3 e^z (384 z^7 - 7488 z^6 + 41248 z^5 - 63280 z^4 + 6600 z^3 + 420 z^2 - 1050 z + 1575)}{327680 z^4}$$

07.25.03.7876.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (384 z^7 + 7488 z^6 + 41248 z^5 + 63280 z^4 + 6600 z^3 - 420 z^2 - 1050 z - 1575)}{327680 z^4} + \frac{3 \sqrt{\pi} (768 z^8 + 15360 z^7 + 89600 z^6 + 161280 z^5 + 50400 z^4 - 6720 z^3 + 1575) \operatorname{erf}(\sqrt{z})}{655360 z^{9/2}}$$

07.25.03.7877.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (512 z^7 - 11264 z^6 + 75920 z^5 - 178920 z^4 + 120900 z^3 - 420 z^2 - 135 z + 1800) I_0\left(\frac{z}{2}\right)}{3828825 z^3} - \frac{1}{3828825 z^4} \frac{32 e^{z/2} (512 z^8 - 10752 z^7 + 65424 z^6 - 118360 z^5 + 26100 z^4 + 4980 z^3 - 1455 z^2 - 540 z + 7200) I_1\left(\frac{z}{2}\right)}{3828825 z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 3$

07.25.03.7878.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; 3, \frac{7}{2}; z\right) = \frac{8 e^{z/2} (16 z^4 - 276 z^3 + 1428 z^2 - 2550 z + 1305) I_0\left(\frac{z}{2}\right)}{10395} - \frac{4 e^{z/2} (32 z^5 - 520 z^4 + 2352 z^3 - 2976 z^2 + 390 z + 45) I_1\left(\frac{z}{2}\right)}{10395 z}$$

07.25.03.7879.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; 3, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (16 z^4 - 320 z^3 + 1956 z^2 - 4200 z + 2625) I_0\left(\frac{z}{2}\right)}{10395} - \frac{4 e^{z/2} (16 z^5 - 304 z^4 + 1660 z^3 - 2676 z^2 + 525 z + 105) I_1\left(\frac{z}{2}\right)}{10395 z}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{7}{2}$

07.25.03.7880.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (-32 z^5 + 560 z^4 - 2736 z^3 + 3672 z^2 - 330 z - 45)}{6144 z^2} + \frac{\sqrt{\pi} (64 z^6 - 1152 z^5 + 6000 z^4 - 9600 z^3 + 2700 z^2 + 360 z + 45) \operatorname{erfi}(\sqrt{z})}{12288 z^{5/2}}$$

07.25.03.7881.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 560 z^4 + 2736 z^3 + 3672 z^2 + 330 z - 45)}{6144 z^2} + \frac{\sqrt{\pi} (64 z^6 + 1152 z^5 + 6000 z^4 + 9600 z^3 + 2700 z^2 - 360 z + 45) \operatorname{erf}(\sqrt{z})}{12288 z^{5/2}}$$

07.25.03.7882.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^5 - 1296 z^4 + 8056 z^3 - 17700 z^2 + 11400 z + 15) I_0\left(\frac{z}{2}\right)}{45045 z} - \frac{4 e^{z/2} (64 z^6 - 1232 z^5 + 6856 z^4 - 11396 z^3 + 2400 z^2 + 555 z + 60) I_1\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.7883.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (-32 z^5 + 656 z^4 - 3888 z^3 + 6744 z^2 - 1050 z - 315)}{12288 z^2} + \frac{\sqrt{\pi} (64 z^6 - 1344 z^5 + 8400 z^4 - 16800 z^3 + 6300 z^2 + 1260 z + 315) \operatorname{erfi}(\sqrt{z})}{24576 z^{5/2}}$$

07.25.03.7884.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 656 z^4 + 3888 z^3 + 6744 z^2 + 1050 z - 315)}{12288 z^2} + \frac{\sqrt{\pi} (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315) \operatorname{erf}(\sqrt{z})}{24576 z^{5/2}}$$

07.25.03.7885.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (64 z^6 - 1488 z^5 + 10800 z^4 - 28140 z^3 + 21600 z^2 + 135 z - 45) I_0\left(\frac{z}{2}\right)}{675675 z^2} - \frac{32 e^{z/2} (64 z^7 - 1424 z^6 + 9408 z^5 - 19380 z^4 + 5700 z^3 + 1935 z^2 + 540 z - 180) I_1\left(\frac{z}{2}\right)}{675675 z^3}$$

07.25.03.7886.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{3 \sqrt{\pi} (256 z^8 - 6144 z^7 + 44800 z^6 - 107520 z^5 + 50400 z^4 + 13440 z^3 + 5040 z^2 - 1575) \operatorname{erfi}(\sqrt{z})}{524288 z^{9/2}} - \frac{3 e^z (128 z^7 - 3008 z^6 + 20960 z^5 - 44624 z^4 + 10200 z^3 + 4620 z^2 + 1050 z - 1575)}{262144 z^4}$$

07.25.03.7887.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z}(128z^7 + 3008z^6 + 20960z^5 + 44624z^4 + 10200z^3 - 4620z^2 + 1050z + 1575)}{262144z^4} + \frac{1}{524288z^{9/2}} 3\sqrt{\pi}(256z^8 + 6144z^7 + 44800z^6 + 107520z^5 + 50400z^4 - 13440z^3 + 5040z^2 - 1575)\operatorname{erf}(\sqrt{z})$$

07.25.03.7888.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, 6; z\right) = \frac{32e^{z/2}(128z^7 - 3360z^6 + 27888z^5 - 84000z^4 + 74340z^3 + 1170z^2 - 225z - 1080)I_0\left(\frac{z}{2}\right)}{2297295z^3} - \frac{1}{2297295z^4} 32e^{z/2}(128z^8 - 3232z^7 + 24720z^6 - 60768z^5 + 23100z^4 + 10170z^3 + 4545z^2 - 900z - 4320)I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 4$

07.25.03.7889.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; 4, \frac{9}{2}; z\right) = \frac{4e^{z/2}(32z^5 - 752z^4 + 5536z^3 - 14700z^2 + 11550z + 105)I_0\left(\frac{z}{2}\right)}{45045z} - \frac{4e^{z/2}(32z^6 - 720z^5 + 4832z^4 - 10196z^3 + 3150z^2 + 1155z + 420)I_1\left(\frac{z}{2}\right)}{45045z^2}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{9}{2}$

07.25.03.7890.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z(-64z^6 + 1536z^5 - 11024z^4 + 24576z^3 - 6300z^2 - 3360z - 1575)}{49152z^3} + \frac{\sqrt{\pi}(128z^7 - 3136z^6 + 23520z^5 - 58800z^4 + 29400z^3 + 8820z^2 + 4410z + 1575)\operatorname{erfi}(\sqrt{z})}{98304z^{7/2}}$$

07.25.03.7891.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(64z^6 + 1536z^5 + 11024z^4 + 24576z^3 + 6300z^2 - 3360z + 1575)}{49152z^3} + \frac{\sqrt{\pi}(128z^7 + 3136z^6 + 23520z^5 + 58800z^4 + 29400z^3 - 8820z^2 + 4410z - 1575)\operatorname{erf}(\sqrt{z})}{98304z^{7/2}}$$

07.25.03.7892.01

$${}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{9}{2}, 5; z\right) = \frac{32e^{z/2}(32z^6 - 864z^5 + 7440z^4 - 23520z^3 + 22050z^2 + 630z + 315)I_0\left(\frac{z}{2}\right)}{675675z^2} - \frac{64e^{z/2}(16z^7 - 416z^6 + 3312z^5 - 8640z^4 + 3675z^3 + 1890z^2 + 1260z + 630)I_1\left(\frac{z}{2}\right)}{675675z^3}$$

$$\begin{aligned}
 & \text{07.25.03.7893.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{1048576 z^{9/2}} \\
 & \quad \frac{3\sqrt{\pi} (256 z^8 - 7168 z^7 + 62720 z^6 - 188160 z^5 + 117600 z^4 + 47040 z^3 + 35280 z^2 + 25200 z + 11025) \operatorname{erfi}(\sqrt{z}) -}{524288 z^4} \\
 & \quad 3 e^z (128 z^7 - 3520 z^6 + 29664 z^5 - 80848 z^4 + 29400 z^3 + 21420 z^2 + 17850 z + 11025)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7894.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \\
 & \quad \frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29664 z^5 + 80848 z^4 + 29400 z^3 - 21420 z^2 + 17850 z - 11025)}{524288 z^4} + \frac{1}{1048576 z^{9/2}} \\
 & \quad 3\sqrt{\pi} (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7895.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{9}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right)}{2297295 z^3} - \\
 & \quad \frac{1}{2297295 z^4} 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.7896.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \quad \frac{1}{3087315} (32 z^{12} + 1712 z^{11} + 32712 z^{10} + 273084 z^9 + 962304 z^8 + 1086840 z^7 + 120960 z^6 + 12096 z^5 + \\
 & \quad 30240 z^4 - 189000 z^3 + 661500 z^2 - 1786050 z + 3087315) + \\
 & \quad \frac{1}{3087315} 2 e^z \sqrt{\pi} (16 z^{25/2} + 864 z^{23/2} + 16776 z^{21/2} + 144312 z^{19/2} + 542241 z^{17/2} + 732564 z^{15/2} + 203490 z^{13/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7897.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \\
 & \quad \frac{1}{3087315} (32 z^{12} - 1712 z^{11} + 32712 z^{10} - 273084 z^9 + 962304 z^8 - 1086840 z^7 + 120960 z^6 - 12096 z^5 + \\
 & \quad 30240 z^4 + 189000 z^3 + 661500 z^2 + 1786050 z + 3087315) - \frac{1}{3087315} \\
 & \quad 2 e^{-z} \sqrt{\pi} (16 z^{25/2} - 864 z^{23/2} + 16776 z^{21/2} - 144312 z^{19/2} + 542241 z^{17/2} - 732564 z^{15/2} + 203490 z^{13/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7898.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & \frac{1}{280665} \left(-16z^{11} - 760z^{10} - 12564z^9 - 86646z^8 - 226620z^7 - 120960z^6 + 12096z^5 + 10080z^4 - \right. \\
 & \quad \left. 37800z^3 + 94500z^2 - 198450z + 280665 \right) + \\
 & \frac{e^z \sqrt{\pi} \left(-16z^{23/2} - 768z^{21/2} - 12936z^{19/2} - 92568z^{17/2} - 264537z^{15/2} - 203490z^{13/2} \right) \operatorname{erf}(\sqrt{z})}{280665}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7899.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \\
 & \frac{1}{280665} \left(16z^{11} - 760z^{10} + 12564z^9 - 86646z^8 + 226620z^7 - 120960z^6 - 12096z^5 + 10080z^4 + \right. \\
 & \quad \left. 37800z^3 + 94500z^2 + 198450z + 280665 \right) + \\
 & \frac{1}{280665} e^{-z} \sqrt{\pi} \left(-16z^{23/2} + 768z^{21/2} - 12936z^{19/2} + 92568z^{17/2} - 264537z^{15/2} + 203490z^{13/2} \right) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7900.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{31185} \left(8z^{10} + 332z^9 + 4626z^8 + 24975z^7 + 40320z^6 - 12096z^5 + 10080z^4 - 12600z^3 + 18900z^2 - 28350z + 31185 \right) + \\
 & \frac{e^z \sqrt{\pi} \left(16z^{21/2} + 672z^{19/2} + 9576z^{17/2} + 54264z^{15/2} + 101745z^{13/2} \right) \operatorname{erf}(\sqrt{z})}{62370}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7901.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \\
 & \frac{1}{31185} \left(8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185 \right) + \\
 & \frac{e^{-z} \sqrt{\pi} \left(-16z^{21/2} + 672z^{19/2} - 9576z^{17/2} + 54264z^{15/2} - 101745z^{13/2} \right) \operatorname{erfi}(\sqrt{z})}{62370}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.7902.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{-8z^9 - 284z^8 - 3210z^7 - 12267z^6 - 4806z^5 + 18450z^4 - 25200z^3 + 12600z^2 - 11340z + 8910}{8910} + \\
 & \frac{1}{17820} e^z \sqrt{\pi} \left(-16z^{19/2} - 576z^{17/2} - 6696z^{15/2} - 27480z^{13/2} - 19305z^{11/2} + 38610z^{9/2} - 38610z^{7/2} \right) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.7903.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{8z^9 - 284z^8 + 3210z^7 - 12267z^6 + 4806z^5 + 18450z^4 + 25200z^3 + 12600z^2 + 11340z + 8910}{8910} + \frac{1}{17820} e^{-z} \sqrt{\pi} (-16z^{19/2} + 576z^{17/2} - 6696z^{15/2} + 27480z^{13/2} - 19305z^{11/2} - 38610z^{9/2} - 38610z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7904.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{8z^8 + 236z^7 + 2034z^6 + 4239z^5 - 7152z^4 - 3654z^3 + 25200z^2 - 7560z + 3564}{3564} + \frac{1}{7128} e^z \sqrt{\pi} (16z^{17/2} + 480z^{15/2} + 4296z^{13/2} + 10296z^{11/2} - 11583z^{9/2} - 15444z^{7/2} + 54054z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7905.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{8z^8 - 236z^7 + 2034z^6 - 4239z^5 - 7152z^4 + 3654z^3 + 25200z^2 + 7560z + 3564}{3564} + \frac{1}{7128} e^{-z} \sqrt{\pi} (-16z^{17/2} + 480z^{15/2} - 4296z^{13/2} + 10296z^{11/2} + 11583z^{9/2} - 15444z^{7/2} - 54054z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7906.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{-8z^7 - 188z^6 - 1098z^5 + 69z^4 + 6594z^3 - 8820z^2 - 15120z + 2376}{2376} + \frac{1}{4752} e^z \sqrt{\pi} (-16z^{15/2} - 384z^{13/2} - 2376z^{11/2} - 792z^{9/2} + 13959z^{7/2} - 12474z^{5/2} - 41580z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7907.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{8z^7 - 188z^6 + 1098z^5 + 69z^4 - 6594z^3 - 8820z^2 + 15120z + 2376}{2376} + \frac{1}{4752} e^{-z} \sqrt{\pi} (-16z^{15/2} + 384z^{13/2} - 2376z^{11/2} + 792z^{9/2} + 13959z^{7/2} + 12474z^{5/2} - 41580z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7908.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{8z^6 + 140z^5 + 402z^4 - 1617z^3 - 1680z^2 + 11340z + 4752}{4752} + \frac{e^z \sqrt{\pi} (16z^{13/2} + 288z^{11/2} + 936z^{9/2} - 2952z^{7/2} - 5103z^{5/2} + 22680z^{3/2} + 18900\sqrt{z}) \operatorname{erf}(\sqrt{z})}{9504}$$

07.25.03.7909.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{8z^6 - 140z^5 + 402z^4 + 1617z^3 - 1680z^2 - 11340z + 4752}{4752} + \frac{1}{9504} e^{-z} \sqrt{\pi} (-16z^{13/2} + 288z^{11/2} - 936z^{9/2} - 2952z^{7/2} + 5103z^{5/2} + 22680z^{3/2} - 18900\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7910.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, 1; z\right) = \frac{e^z (4z^6 + 60z^5 + 99z^4 - 816z^3 - 72z^2 + 5184z + 2376)}{2376}$$

07.25.03.7911.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{8z^5 + 92z^4 - 54z^3 - 1365z^2 + 2310z + 6354}{9504} + \frac{e^z \sqrt{\pi} (16z^6 + 192z^5 - 24z^4 - 2856z^3 + 3465z^2 + 15750z + 3150) \operatorname{erf}(\sqrt{z})}{19008 \sqrt{z}}$$

07.25.03.7912.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{-8z^5 + 92z^4 + 54z^3 - 1365z^2 - 2310z + 6354}{9504} + \frac{e^{-z} \sqrt{\pi} (16z^6 - 192z^5 - 24z^4 + 2856z^3 + 3465z^2 - 15750z + 3150) \operatorname{erfi}(\sqrt{z})}{19008 \sqrt{z}}$$

07.25.03.7913.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, 2; z\right) = \frac{e^z (4z^5 + 36z^4 - 81z^3 - 492z^2 + 1404z + 2376)}{2376}$$

07.25.03.7914.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{8z^5 + 44z^4 - 270z^3 - 273z^2 + 2976z + 630}{6336z} + \frac{e^z \sqrt{\pi} (16z^6 + 96z^5 - 504z^4 - 840z^3 + 5985z^2 + 3780z - 630) \operatorname{erf}(\sqrt{z})}{12672 z^{3/2}}$$

07.25.03.7915.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{8z^5 - 44z^4 - 270z^3 + 273z^2 + 2976z - 630}{6336z} + \frac{e^{-z} \sqrt{\pi} (-16z^6 + 96z^5 + 504z^4 - 840z^3 - 5985z^2 + 3780z + 630) \operatorname{erfi}(\sqrt{z})}{12672 z^{3/2}}$$

07.25.03.7916.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, 3; z\right) = \frac{e^z (4z^4 + 12z^3 - 141z^2 + 72z + 1188)}{1188}$$

07.25.03.7917.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5(8z^5 - 4z^4 - 246z^3 + 699z^2 + 798z - 504)}{12672 z^2} + \frac{5 e^z \sqrt{\pi} (16z^6 - 504z^4 + 1176z^3 + 2457z^2 - 1134z + 504) \operatorname{erf}(\sqrt{z})}{25344 z^{5/2}}$$

07.25.03.7918.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} \sqrt{\pi} (16z^6 - 504z^4 - 1176z^3 + 2457z^2 + 1134z + 504) \operatorname{erfi}(\sqrt{z})}{25344 z^{5/2}} - \frac{5(8z^5 + 4z^4 - 246z^3 - 699z^2 + 798z + 504)}{12672 z^2}$$

07.25.03.7919.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, 4; z\right) = \frac{1}{396} e^z (4z^3 - 12z^2 - 81z + 396)$$

07.25.03.7920.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{35(8z^5 - 52z^4 + 18z^3 + 591z^2 - 864z + 1080)}{25344z^3} + \frac{35e^z\sqrt{\pi}(16z^6 - 96z^5 - 24z^4 + 1272z^3 - 1359z^2 + 1584z - 1080)\operatorname{erf}(\sqrt{z})}{50688z^{7/2}}$$

07.25.03.7921.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^5 + 52z^4 + 18z^3 - 591z^2 - 864z - 1080)}{25344z^3} - \frac{35e^{-z}\sqrt{\pi}(16z^6 + 96z^5 - 24z^4 - 1272z^3 - 1359z^2 - 1584z - 1080)\operatorname{erfi}(\sqrt{z})}{50688z^{7/2}}$$

07.25.03.7922.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, 5; z\right) = \frac{1}{99}e^z(4z^2 - 36z + 99)$$

07.25.03.7923.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{35(8z^5 - 100z^4 + 522z^3 - 1557z^2 + 4230z - 9450)}{5632z^4} + \frac{35e^z\sqrt{\pi}(16z^6 - 192z^5 + 936z^4 - 2472z^3 + 6057z^2 - 10530z + 9450)\operatorname{erf}(\sqrt{z})}{11264z^{9/2}}$$

07.25.03.7924.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(16z^6 + 192z^5 + 936z^4 + 2472z^3 + 6057z^2 + 10530z + 9450)\operatorname{erfi}(\sqrt{z})}{11264z^{9/2}} - \frac{35(8z^5 + 100z^4 + 522z^3 + 1557z^2 + 4230z + 9450)}{5632z^4}$$

07.25.03.7925.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{11}{2}, 6; z\right) = \frac{5e^z(4z^6 - 60z^5 + 399z^4 - 1596z^3 + 4788z^2 - 9576z + 9576)}{99z^5} - \frac{5320}{11z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = -\frac{9}{2}$

07.25.03.7926.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{25515}(8z^{10} + 340z^9 + 4926z^8 + 28705z^7 + 57975z^6 + 12096z^5 + 3360z^4 - 7560z^3 + 13500z^2 - 22050z + 25515) + \frac{e^z\sqrt{\pi}(16z^{21/2} + 688z^{19/2} + 10184z^{17/2} + 62016z^{15/2} + 140505z^{13/2} + 62985z^{11/2})\operatorname{erf}(\sqrt{z})}{51030}$$

$$\begin{aligned}
 & \text{07.25.03.7927.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \\
 & \frac{1}{25515} (8z^{10} - 340z^9 + 4926z^8 - 28705z^7 + 57975z^6 - 12096z^5 + 3360z^4 + 7560z^3 + 13500z^2 + 22050z + 25515) + \\
 & \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 688z^{19/2} - 10184z^{17/2} + 62016z^{15/2} - 140505z^{13/2} + 62985z^{11/2}) \operatorname{erfi}(\sqrt{z})}{51030}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7928.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{-8z^9 - 300z^8 - 3730z^7 - 17655z^6 - 24192z^5 + 6720z^4 - 5040z^3 + 5400z^2 - 6300z + 5670}{5670} + \\
 & \frac{e^z \sqrt{\pi} (-16z^{19/2} - 608z^{17/2} - 7752z^{15/2} - 38760z^{13/2} - 62985z^{11/2}) \operatorname{erf}(\sqrt{z})}{11340}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7929.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670}{5670} + \\
 & \frac{e^{-z} \sqrt{\pi} (-16z^{19/2} + 608z^{17/2} - 7752z^{15/2} + 38760z^{13/2} - 62985z^{11/2}) \operatorname{erfi}(\sqrt{z})}{11340}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7930.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{8z^8 + 260z^7 + 2694z^6 + 9693z^5 + 5865z^4 - 10080z^3 + 3600z^2 - 2520z + 1620}{1620} + \\
 & \frac{e^z \sqrt{\pi} (16z^{17/2} + 528z^{15/2} + 5640z^{13/2} + 21840z^{11/2} + 19305z^{9/2} - 19305z^{7/2}) \operatorname{erf}(\sqrt{z})}{3240}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7931.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{8z^8 - 260z^7 + 2694z^6 - 9693z^5 + 5865z^4 + 10080z^3 + 3600z^2 + 2520z + 1620}{1620} + \\
 & \frac{e^{-z} \sqrt{\pi} (-16z^{17/2} + 528z^{15/2} - 5640z^{13/2} + 21840z^{11/2} - 19305z^{9/2} - 19305z^{7/2}) \operatorname{erfi}(\sqrt{z})}{3240}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7932.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{648} (-8z^7 - 220z^6 - 1818z^5 - 4339z^4 + 2142z^3 + 7200z^2 - 1680z + 648) + \\
 & \frac{e^z \sqrt{\pi} (-16z^{15/2} - 448z^{13/2} - 3848z^{11/2} - 10296z^{9/2} + 1287z^{7/2} + 18018z^{5/2}) \operatorname{erf}(\sqrt{z})}{1296}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7933.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{648} (8z^7 - 220z^6 + 1818z^5 - 4339z^4 - 2142z^3 + 7200z^2 + 1680z + 648) + \\
 & \frac{e^{-z} \sqrt{\pi} (-16z^{15/2} + 448z^{13/2} - 3848z^{11/2} + 10296z^{9/2} + 1287z^{7/2} - 18018z^{5/2}) \operatorname{erfi}(\sqrt{z})}{1296}
 \end{aligned}$$

07.25.03.7934.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{432} (8z^6 + 180z^5 + 1102z^4 + 1113z^3 - 4005z^2 - 3360z + 432) + \frac{1}{864} e^z \sqrt{\pi} (16z^{13/2} + 368z^{11/2} + 2376z^{9/2} + 3168z^{7/2} - 7623z^{5/2} - 10395z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7935.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{432} (8z^6 - 180z^5 + 1102z^4 - 1113z^3 - 4005z^2 + 3360z + 432) + \frac{1}{864} e^{-z} \sqrt{\pi} (-16z^{13/2} + 368z^{11/2} - 2376z^{9/2} + 3168z^{7/2} + 7623z^{5/2} - 10395z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7936.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{864} (-8z^5 - 140z^4 - 546z^3 + 465z^2 + 2940z + 864) + \frac{e^z \sqrt{\pi} (-16z^{11/2} - 288z^{9/2} - 1224z^{7/2} + 504z^{5/2} + 6615z^{3/2} + 3780\sqrt{z}) \operatorname{erf}(\sqrt{z})}{1728}$$

07.25.03.7937.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{864} (8z^5 - 140z^4 + 546z^3 + 465z^2 - 2940z + 864) + \frac{e^{-z} \sqrt{\pi} (-16z^{11/2} + 288z^{9/2} - 1224z^{7/2} - 504z^{5/2} + 6615z^{3/2} - 3780\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1728}$$

07.25.03.7938.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, 1; z\right) = -\frac{1}{216} e^z (2z^5 + 31z^4 + 96z^3 - 168z^2 - 624z - 216)$$

07.25.03.7939.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{-8z^4 - 100z^3 - 150z^2 + 875z + 1203}{1728} + \frac{e^z \sqrt{\pi} (-16z^5 - 208z^4 - 392z^3 + 1680z^2 + 3255z + 525) \operatorname{erf}(\sqrt{z})}{3456\sqrt{z}}$$

07.25.03.7940.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{-8z^4 + 100z^3 - 150z^2 - 875z + 1203}{1728} + \frac{e^{-z} \sqrt{\pi} (16z^5 - 208z^4 + 392z^3 + 1680z^2 - 3255z + 525) \operatorname{erfi}(\sqrt{z})}{3456\sqrt{z}}$$

07.25.03.7941.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, 2; z\right) = -\frac{1}{216} e^z (2z^4 + 21z^3 + 12z^2 - 204z - 216)$$

07.25.03.7942.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-8z^4 - 60z^3 + 86z^2 + 597z + 90}{1152z} + \frac{e^z \sqrt{\pi} (-16z^5 - 128z^4 + 120z^3 + 1320z^2 + 615z - 90) \operatorname{erf}(\sqrt{z})}{2304z^{3/2}}$$

$$\begin{aligned}
 & \text{07.25.03.7943.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, \frac{5}{2}; -z\right) = \\
 & \frac{8z^4 - 60z^3 - 86z^2 + 597z - 90}{1152z} + \frac{e^{-z}\sqrt{\pi}(-16z^5 + 128z^4 + 120z^3 - 1320z^2 + 615z + 90)\operatorname{erfi}(\sqrt{z})}{2304z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7944.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, 3; z\right) = -\frac{1}{108}e^z(2z^3 + 11z^2 - 32z - 108)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7945.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, \frac{7}{2}; z\right) = \\
 & \frac{5(8z^4 + 20z^3 - 162z^2 - 111z + 63)}{2304z^2} - \frac{5e^z\sqrt{\pi}(16z^5 + 48z^4 - 312z^3 - 384z^2 + 153z - 63)\operatorname{erf}(\sqrt{z})}{4608z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7946.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, \frac{7}{2}; -z\right) = \\
 & \frac{5e^{-z}\sqrt{\pi}(16z^5 - 48z^4 - 312z^3 + 384z^2 + 153z + 63)\operatorname{erfi}(\sqrt{z})}{4608z^{5/2}} - \frac{5(8z^4 - 20z^3 - 162z^2 + 111z + 63)}{2304z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7947.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, 4; z\right) = -\frac{1}{36}e^z(2z^2 + z - 36)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7948.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, \frac{9}{2}; z\right) = \\
 & \frac{35(8z^4 - 20z^3 - 78z^2 + 103z - 120)}{4608z^3} - \frac{35e^z\sqrt{\pi}(16z^5 - 32z^4 - 184z^3 + 168z^2 - 183z + 120)\operatorname{erf}(\sqrt{z})}{9216z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7949.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{35(8z^4 + 20z^3 - 78z^2 - 103z - 120)}{4608z^3} - \frac{35e^{-z}\sqrt{\pi}(16z^5 + 32z^4 - 184z^3 - 168z^2 - 183z - 120)\operatorname{erfi}(\sqrt{z})}{9216z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7950.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, 5; z\right) = -\frac{1}{9}e^z(2z - 9)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7951.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, \frac{11}{2}; z\right) = \\
 & \frac{35(8z^4 - 60z^3 + 166z^2 - 435z + 945)}{1024z^4} - \frac{35e^z\sqrt{\pi}(16z^5 - 112z^4 + 264z^3 - 624z^2 + 1065z - 945)\operatorname{erf}(\sqrt{z})}{2048z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7952.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{35 e^{-z} \sqrt{\pi} (16 z^5 + 112 z^4 + 264 z^3 + 624 z^2 + 1065 z + 945) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}} - \frac{35 (8 z^4 + 60 z^3 + 166 z^2 + 435 z + 945)}{1024 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7953.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{9}{2}, 6; z\right) = -\frac{5 e^z (2 z^5 - 19 z^4 + 76 z^3 - 228 z^2 + 456 z - 456)}{9 z^5} - \frac{760}{3 z^5}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.7954.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{8 z^8 + 268 z^7 + 2930 z^6 + 11\,919 z^5 + 13\,440 z^4 - 3360 z^3 + 2160 z^2 - 1800 z + 1260}{1260} + \\
 & \frac{e^z \sqrt{\pi} (16 z^{17/2} + 544 z^{15/2} + 6120 z^{13/2} + 26\,520 z^{11/2} + 36\,465 z^{9/2}) \operatorname{erf}(\sqrt{z})}{2520}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7955.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{8 z^8 - 268 z^7 + 2930 z^6 - 11\,919 z^5 + 13\,440 z^4 + 3360 z^3 + 2160 z^2 + 1800 z + 1260}{1260} + \\
 & \frac{e^{-z} \sqrt{\pi} (-16 z^{17/2} + 544 z^{15/2} - 6120 z^{13/2} + 26\,520 z^{11/2} - 36\,465 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{2520}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7956.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{360} (-8 z^7 - 236 z^6 - 2226 z^5 - 7575 z^4 - 6720 z^3 + 1440 z^2 - 720 z + 360) + \\
 & \frac{1}{720} e^z \sqrt{\pi} (-16 z^{15/2} - 480 z^{13/2} - 4680 z^{11/2} - 17\,160 z^{9/2} - 19\,305 z^{7/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7957.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{360} (8 z^7 - 236 z^6 + 2226 z^5 - 7575 z^4 + 6720 z^3 + 1440 z^2 + 720 z + 360) + \\
 & \frac{1}{720} e^{-z} \sqrt{\pi} (-16 z^{15/2} + 480 z^{13/2} - 4680 z^{11/2} + 17\,160 z^{9/2} - 19\,305 z^{7/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7958.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{144} (8 z^6 + 204 z^5 + 1618 z^4 + 4431 z^3 + 2880 z^2 - 480 z + 144) + \\
 & \frac{1}{288} e^z \sqrt{\pi} (16 z^{13/2} + 416 z^{11/2} + 3432 z^{9/2} + 10\,296 z^{7/2} + 9009 z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.7959.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{144} (8 z^6 - 204 z^5 + 1618 z^4 - 4431 z^3 + 2880 z^2 + 480 z + 144) + \\
 & \frac{1}{288} e^{-z} \sqrt{\pi} (-16 z^{13/2} + 416 z^{11/2} - 3432 z^{9/2} + 10\,296 z^{7/2} - 9009 z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.7960.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{96} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) + \frac{1}{192} e^z \sqrt{\pi} (-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7961.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{96} (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) + \frac{1}{192} e^{-z} \sqrt{\pi} (-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7962.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{192} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} e^z \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7963.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{192} (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7964.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, 1; z\right) = \frac{1}{24} e^z (z^4 + 16z^3 + 72z^2 + 96z + 24)$$

07.25.03.7965.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{384} (8z^3 + 108z^2 + 370z + 279) + \frac{e^z \sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.7966.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} (-8z^3 + 108z^2 - 370z + 279) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.7967.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, 2; z\right) = \frac{1}{24} e^z (z^3 + 12z^2 + 36z + 24)$$

07.25.03.7968.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.7969.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.7970.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, 3; z\right) = \frac{1}{12} e^z (z^2 + 8z + 12)$$

07.25.03.7971.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5e^z\sqrt{\pi}(16z^4 + 96z^3 + 72z^2 - 24z + 9)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.7972.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}\sqrt{\pi}(16z^4 - 96z^3 + 72z^2 + 24z + 9)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.7973.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, 4; z\right) = \frac{1}{4}e^z(z + 4)$$

07.25.03.7974.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{35(8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35e^z\sqrt{\pi}(16z^4 + 32z^3 - 24z^2 + 24z - 15)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.7975.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35e^{-z}\sqrt{\pi}(16z^4 - 32z^3 - 24z^2 - 24z - 15)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.7976.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, 5; z\right) = e^z$$

07.25.03.7977.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{315(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315e^z\sqrt{\pi}(16z^4 - 32z^3 + 72z^2 - 120z + 105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.7978.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(16z^4 + 32z^3 + 72z^2 + 120z + 105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315(8z^3 + 20z^2 + 50z + 105)}{2048z^4}$$

07.25.03.7979.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{7}{2}, 6; z\right) = \frac{5e^z(z^4 - 4z^3 + 12z^2 - 24z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = -\frac{5}{2}$

07.25.03.7980.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{5}{2}, 1; z\right) = \frac{1}{3}e^z(80z^3 + 33z^2 + 18z + 3) - \frac{429}{16}\sqrt{\pi}z^{7/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.7981.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{5}{2}, 1; -z\right) = \frac{1}{3}e^{-z}(-80z^3 + 33z^2 - 18z + 3) - \frac{429}{16}\sqrt{\pi}z^{7/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.7982.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{5}{2}, 2; z\right) = \frac{1}{24}e^z(143z^3 + 68z^2 + 60z + 24) - \frac{143}{24}\sqrt{\pi}z^{7/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.7983.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{5}{2}, 2; -z\right) = \frac{1}{24} e^{-z} (-143 z^3 + 68 z^2 - 60 z + 24) - \frac{143}{24} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7984.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{5}{2}, 3; z\right) = \frac{1}{12} e^z (26 z^3 + 13 z^2 + 16 z + 12) - \frac{13}{6} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.7985.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{5}{2}, 3; -z\right) = \frac{1}{12} e^{-z} (-26 z^3 + 13 z^2 - 16 z + 12) - \frac{13}{6} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7986.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{5}{2}, 4; z\right) = \frac{1}{4} e^z (4 z^3 + 2 z^2 + 3 z + 4) - \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.7987.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{5}{2}, 4; -z\right) = \frac{1}{4} e^{-z} (-4 z^3 + 2 z^2 - 3 z + 4) - \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7988.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{5}{2}, 5; z\right) = \frac{1}{15} e^z (8 z^3 + 4 z^2 + 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.7989.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{5}{2}, 5; -z\right) = \frac{1}{15} e^{-z} (-8 z^3 + 4 z^2 - 6 z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.7990.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{5}{2}, 6; z\right) = -\frac{16}{51} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{e^z (16 z^8 + 8 z^7 + 12 z^6 + 30 z^5 + 105 z^4 - 420 z^3 + 1260 z^2 - 2520 z + 2520)}{51 z^5} - \frac{840}{17 z^5}$$

07.25.03.7991.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{5}{2}, 6; -z\right) = -\frac{16}{51} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{e^{-z} (-16 z^8 + 8 z^7 - 12 z^6 + 30 z^5 - 105 z^4 - 420 z^3 - 1260 z^2 - 2520 z - 2520)}{51 z^5} + \frac{840}{17 z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = -\frac{3}{2}$

07.25.03.7992.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{3}{2}, 1; z\right) = \frac{1}{96} e^z (-6435 z^3 + 7328 z^2 + 1024 z + 96) + \frac{143}{64} \sqrt{\pi} (30 z^{7/2} - 49 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7993.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{3}{2}, 1; -z\right) = \frac{1}{96} e^{-z} (6435 z^3 + 7328 z^2 - 1024 z + 96) + \frac{143}{64} \sqrt{\pi} (30 z^{7/2} + 49 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7994.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{3}{2}, 2; z\right) = \frac{1}{48} e^z (-715 z^3 + 1144 z^2 + 232 z + 48) + \frac{143}{96} \sqrt{\pi} (10 z^{7/2} - 21 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7995.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{3}{2}, 2; -z\right) = \frac{1}{48} e^{-z} (715 z^3 + 1144 z^2 - 232 z + 48) + \frac{143}{96} \sqrt{\pi} (10 z^{7/2} + 21 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7996.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{3}{2}, 3; z\right) = \frac{1}{36} e^z (-195 z^3 + 403 z^2 + 104 z + 36) + \frac{13}{72} \sqrt{\pi} (30 z^{7/2} - 77 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7997.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{3}{2}, 3; -z\right) = \frac{1}{36} e^{-z} (195 z^3 + 403 z^2 - 104 z + 36) + \frac{13}{72} \sqrt{\pi} (30 z^{7/2} + 77 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.7998.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{3}{2}, 4; z\right) = \frac{1}{12} e^z (-30 z^3 + 76 z^2 + 23 z + 12) + \frac{1}{12} \sqrt{\pi} (30 z^{7/2} - 91 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.7999.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{3}{2}, 4; -z\right) = \frac{1}{12} e^{-z} (30 z^3 + 76 z^2 - 23 z + 12) + \frac{1}{12} \sqrt{\pi} (30 z^{7/2} + 91 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8000.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{3}{2}, 5; z\right) = \frac{1}{3} e^z (-4 z^3 + 12 z^2 + 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8001.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{3}{2}, 5; -z\right) = \frac{1}{3} e^{-z} (4 z^3 + 12 z^2 - 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8002.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{3}{2}, 6; z\right) = \frac{e^z (-120 z^8 + 416 z^7 + 148 z^6 + 132 z^5 + 105 z^4 - 420 z^3 + 1260 z^2 - 2520 z + 2520)}{153 z^5} + \frac{4}{153} \sqrt{\pi} (30 z^{7/2} - 119 z^{5/2}) \operatorname{erfi}(\sqrt{z}) - \frac{280}{17 z^5}$$

07.25.03.8003.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{3}{2}, 6; -z\right) = \frac{e^{-z} (120 z^8 + 416 z^7 - 148 z^6 + 132 z^5 - 105 z^4 - 420 z^3 - 1260 z^2 - 2520 z - 2520)}{153 z^5} + \frac{4}{153} \sqrt{\pi} (30 z^{7/2} + 119 z^{5/2}) \operatorname{erf}(\sqrt{z}) + \frac{280}{17 z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = -\frac{1}{2}$

07.25.03.8004.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{1}{2}, 1; z\right) = \frac{1}{256} e^z (12870 z^3 - 35607 z^2 + 8704 z + 256) - \frac{33}{512} \sqrt{\pi} (780 z^{7/2} - 2548 z^{5/2} + 1225 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8005.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{1}{2}, 1; -z\right) = \frac{1}{256} e^{-z} (-12870 z^3 - 35607 z^2 - 8704 z + 256) - \frac{33}{512} \sqrt{\pi} (780 z^{7/2} + 2548 z^{5/2} + 1225 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8006.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{1}{2}, 2; z\right) = \frac{1}{128} e^z (1430 z^3 - 5291 z^2 + 2112 z + 128) - \frac{11}{256} \sqrt{\pi} (260 z^{7/2} - 1092 z^{5/2} + 735 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8007.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{1}{2}, 2; -z\right) = \frac{1}{128} e^{-z} (-1430 z^3 - 5291 z^2 - 2112 z + 128) - \frac{11}{256} \sqrt{\pi} (260 z^{7/2} + 1092 z^{5/2} + 735 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8008.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{1}{2}, 3; z\right) = \frac{1}{96} e^z (390 z^3 - 1807 z^2 + 1024 z + 96) + \frac{1}{192} \sqrt{\pi} (-780 z^{7/2} + 4004 z^{5/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8009.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{1}{2}, 3; -z\right) = \frac{1}{96} e^{-z} (-390 z^3 - 1807 z^2 - 1024 z + 96) + \frac{1}{192} \sqrt{\pi} (-780 z^{7/2} - 4004 z^{5/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8010.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{1}{2}, 4; z\right) = \frac{1}{16} e^z (30 z^3 - 167 z^2 + 124 z + 16) + \frac{1}{32} \sqrt{\pi} (-60 z^{7/2} + 364 z^{5/2} - 385 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8011.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{1}{2}, 4; -z\right) = \frac{1}{16} e^{-z} (-30 z^3 - 167 z^2 - 124 z + 16) + \frac{1}{32} \sqrt{\pi} (-60 z^{7/2} - 364 z^{5/2} - 385 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8012.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{1}{2}, 5; z\right) = \frac{1}{2} e^z (2 z^3 - 13 z^2 + 12 z + 2) + \frac{1}{4} \sqrt{\pi} (-4 z^{7/2} + 28 z^{5/2} - 35 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8013.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{1}{2}, 5; -z\right) = \frac{1}{2} e^{-z} (-2 z^3 - 13 z^2 - 12 z + 2) + \frac{1}{4} \sqrt{\pi} (-4 z^{7/2} - 28 z^{5/2} - 35 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8014.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{1}{2}, 6; z\right) = \frac{e^z (390 z^8 - 2899 z^7 + 3208 z^6 + 642 z^5 + 105 z^4 - 420 z^3 + 1260 z^2 - 2520 z + 2520)}{663 z^5} + \frac{\sqrt{\pi} (-780 z^{7/2} + 6188 z^{5/2} - 8925 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1326} - \frac{840}{221 z^5}$$

07.25.03.8015.01

$${}_2F_2\left(-\frac{7}{2}, 5; -\frac{1}{2}, 6; -z\right) = \frac{e^{-z} (-390 z^8 - 2899 z^7 - 3208 z^6 + 642 z^5 - 105 z^4 - 420 z^3 - 1260 z^2 - 2520 z - 2520)}{663 z^5} + \frac{\sqrt{\pi} (-780 z^{7/2} - 6188 z^{5/2} - 8925 z^{3/2}) \operatorname{erf}(\sqrt{z})}{1326} + \frac{840}{221 z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = \frac{1}{2}$

07.25.03.8016.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{1}{2}, 1; z\right) = \frac{e^z (-8580 z^3 + 37752 z^2 - 25839 z + 1024)}{1024} + \frac{3 \sqrt{\pi} (5720 z^{7/2} - 28028 z^{5/2} + 26950 z^{3/2} - 3675 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{2048}$$

07.25.03.8017.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{1}{2}, 1; -z\right) = \frac{e^{-z} (8580 z^3 + 37752 z^2 + 25839 z + 1024)}{1024} + \frac{3 \sqrt{\pi} (5720 z^{7/2} + 28028 z^{5/2} + 26950 z^{3/2} + 3675 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{2048}$$

07.25.03.8018.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{1}{2}, 2; z\right) = \frac{e^z (-2860 z^3 + 16588 z^2 - 17391 z + 1536)}{1536} + \frac{\sqrt{\pi} (5720 z^{7/2} - 36036 z^{5/2} + 48510 z^{3/2} - 11025 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3072}$$

07.25.03.8019.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{1}{2}, 2; -z\right) = \frac{e^{-z} (2860 z^3 + 16588 z^2 + 17391 z + 1536)}{1536} + \frac{\sqrt{\pi} (5720 z^{7/2} + 36036 z^{5/2} + 48510 z^{3/2} + 11025 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{3072}$$

07.25.03.8020.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{1}{2}, 3; z\right) = \frac{1}{384} e^z (-260 z^3 + 1872 z^2 - 2659 z + 384) + \frac{1}{768} \sqrt{\pi} (520 z^{7/2} - 4004 z^{5/2} + 6930 z^{3/2} - 2205 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8021.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{1}{2}, 3; -z\right) = \frac{1}{384} e^{-z} (260 z^3 + 1872 z^2 + 2659 z + 384) + \frac{1}{768} \sqrt{\pi} (520 z^{7/2} + 4004 z^{5/2} + 6930 z^{3/2} + 2205 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8022.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{1}{2}, 4; z\right) = \frac{1}{64} e^z (-20 z^3 + 172 z^2 - 309 z + 64) + \frac{1}{128} \sqrt{\pi} (40 z^{7/2} - 364 z^{5/2} + 770 z^{3/2} - 315 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8023.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{1}{2}, 4; -z\right) = \frac{1}{64} e^{-z} (20 z^3 + 172 z^2 + 309 z + 64) + \frac{1}{128} \sqrt{\pi} (40 z^{7/2} + 364 z^{5/2} + 770 z^{3/2} + 315 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8024.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{1}{2}, 5; z\right) = \frac{1}{24} e^z (-4 z^3 + 40 z^2 - 87 z + 24) + \frac{1}{48} \sqrt{\pi} (8 z^{7/2} - 84 z^{5/2} + 210 z^{3/2} - 105 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8025.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{1}{2}, 5; -z\right) = \frac{1}{24} e^{-z} (4 z^3 + 40 z^2 + 87 z + 24) + \frac{1}{48} \sqrt{\pi} (8 z^{7/2} + 84 z^{5/2} + 210 z^{3/2} + 105 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8026.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{1}{2}, 6; z\right) = \frac{e^z (-2860 z^8 + 32604 z^7 - 83303 z^6 + 29088 z^5 + 420 z^4 - 1680 z^3 + 5040 z^2 - 10080 z + 10080)}{29172 z^5} + \frac{\sqrt{\pi} (5720 z^{7/2} - 68068 z^{5/2} + 196350 z^{3/2} - 116025 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{58344} - \frac{840}{2431 z^5}$$

07.25.03.8027.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{1}{2}, 6; -z\right) = \frac{e^{-z} (2860 z^8 + 32\,604 z^7 + 83\,303 z^6 + 29\,088 z^5 - 420 z^4 - 1680 z^3 - 5040 z^2 - 10\,080 z - 10\,080)}{29\,172 z^5} + \frac{\sqrt{\pi} (5720 z^{7/2} + 68\,068 z^{5/2} + 196\,350 z^{3/2} + 116\,025 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{58\,344} + \frac{840}{2431 z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = 1$

07.25.03.8028.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, 1; z\right) = \frac{e^{z/2} (4290 z^4 - 27\,742 z^3 + 45\,859 z^2 - 20\,160 z + 1120) I_0\left(\frac{z}{2}\right)}{1120} + \frac{1}{560} e^{z/2} (-2145 z^4 + 11\,726 z^3 - 12\,276 z^2 + 1522 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.8029.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, \frac{3}{2}; z\right) = \frac{e^z (-17\,160 z^3 + 103\,532 z^2 - 118\,514 z + 15\,159)}{16\,384} + \frac{\sqrt{\pi} (34\,320 z^4 - 224\,224 z^3 + 323\,400 z^2 - 88\,200 z + 1225) \operatorname{erfi}(\sqrt{z})}{32\,768 \sqrt{z}}$$

07.25.03.8030.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, \frac{3}{2}; -z\right) = \frac{e^{-z} (17\,160 z^3 + 103\,532 z^2 + 118\,514 z + 15\,159)}{16\,384} + \frac{\sqrt{\pi} (34\,320 z^4 + 224\,224 z^3 + 323\,400 z^2 + 88\,200 z + 1225) \operatorname{erf}(\sqrt{z})}{32\,768 \sqrt{z}}$$

07.25.03.8031.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, 2; z\right) = \frac{e^{z/2} (2860 z^4 - 23\,166 z^3 + 49\,797 z^2 - 31\,080 z + 3360) I_0\left(\frac{z}{2}\right)}{3360} + \frac{e^{z/2} (-2860 z^4 + 20\,306 z^3 - 30\,921 z^2 + 7452 z) I_1\left(\frac{z}{2}\right)}{3360}$$

07.25.03.8032.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, \frac{5}{2}; z\right) = \frac{3 \sqrt{\pi} (13\,728 z^5 - 112\,112 z^4 + 215\,600 z^3 - 88\,200 z^2 + 2450 z - 35) \operatorname{erfi}(\sqrt{z})}{131\,072 z^{3/2}} - \frac{3 e^z (6864 z^4 - 52\,624 z^3 + 84\,920 z^2 - 19\,372 z - 35)}{65\,536 z}$$

07.25.03.8033.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (6864 z^4 + 52\,624 z^3 + 84\,920 z^2 + 19\,372 z - 35)}{65\,536 z} + \frac{3 \sqrt{\pi} (13\,728 z^5 + 112\,112 z^4 + 215\,600 z^3 + 88\,200 z^2 + 2450 z + 35) \operatorname{erf}(\sqrt{z})}{131\,072 z^{3/2}}$$

07.25.03.8034.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, 3; z\right) = \frac{e^{z/2} (780 z^4 - 7592 z^3 + 20049 z^2 - 15960 z + 2520) I_0\left(\frac{z}{2}\right) - e^{z/2} z (780 z^3 - 6812 z^2 + 13627 z - 4959) I_1\left(\frac{z}{2}\right)}{2520}$$

07.25.03.8035.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, \frac{7}{2}; z\right) = \frac{3\sqrt{\pi} (45760 z^6 - 448448 z^5 + 1078000 z^4 - 588000 z^3 + 24500 z^2 - 700 z + 105) \operatorname{erfi}(\sqrt{z}) - 3 e^z (22880 z^5 - 212784 z^4 + 444048 z^3 - 149768 z^2 - 770 z + 105)}{1048576 z^{5/2}}$$

07.25.03.8036.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, \frac{7}{2}; -z\right) = \frac{3 e^{-z} (22880 z^5 + 212784 z^4 + 444048 z^3 + 149768 z^2 - 770 z - 105)}{524288 z^2} + \frac{3\sqrt{\pi} (45760 z^6 + 448448 z^5 + 1078000 z^4 + 588000 z^3 + 24500 z^2 + 700 z + 105) \operatorname{erf}(\sqrt{z})}{1048576 z^{5/2}}$$

07.25.03.8037.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, 4; z\right) = \frac{1}{840} e^{z/2} (120 z^4 - 1364 z^3 + 4268 z^2 - 4095 z + 840) I_0\left(\frac{z}{2}\right) - \frac{1}{840} e^{z/2} z (120 z^3 - 1244 z^2 + 3084 z - 1513) I_1\left(\frac{z}{2}\right)$$

07.25.03.8038.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, \frac{9}{2}; z\right) = \frac{e^z (-137280 z^6 + 1500928 z^5 - 3845776 z^4 + 1742976 z^3 + 18340 z^2 - 6160 z + 2625)}{2097152 z^3} + \frac{1}{4194304 z^{7/2}} + \frac{\sqrt{\pi} (274560 z^7 - 3139136 z^6 + 9055200 z^5 - 6174000 z^4 + 343000 z^3 - 14700 z^2 + 4410 z - 2625) \operatorname{erfi}(\sqrt{z})}{4194304 z^{7/2}}$$

07.25.03.8039.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, \frac{9}{2}; -z\right) = \frac{e^{-z} (137280 z^6 + 1500928 z^5 + 3845776 z^4 + 1742976 z^3 - 18340 z^2 - 6160 z - 2625)}{2097152 z^3} + \frac{1}{4194304 z^{7/2}} + \frac{\sqrt{\pi} (274560 z^7 + 3139136 z^6 + 9055200 z^5 + 6174000 z^4 + 343000 z^3 + 14700 z^2 + 4410 z + 2625) \operatorname{erf}(\sqrt{z})}{4194304 z^{7/2}}$$

07.25.03.8040.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, 5; z\right) = \frac{1}{105} e^{z/2} (8 z^4 - 104 z^3 + 376 z^2 - 420 z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} z (2 z^3 - 24 z^2 + 71 z - 44) I_1\left(\frac{z}{2}\right)$$

07.25.03.8041.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, \frac{11}{2}; z\right) = \frac{1}{134217728 z^{9/2}} \left(9\sqrt{\pi} (549120 z^8 - 7175168 z^7 + 24147200 z^6 - 19756800 z^5 + 1372000 z^4 - 78400 z^3 + 35280 z^2 - 42000 z + 128625) \operatorname{erfi}(\sqrt{z})\right) - \frac{1}{67108864 z^4} 9 e^z (274560 z^7 - 3450304 z^6 + 10485728 z^5 - 6017488 z^4 - 122920 z^3 + 97580 z^2 - 127750 z + 128625)$$

07.25.03.8042.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, \frac{11}{2}; -z\right) = \frac{1}{67108864 z^4} 9 e^{-z} (274560 z^7 + 3450304 z^6 + 10485728 z^5 + 6017488 z^4 - 122920 z^3 - 97580 z^2 - 127750 z - 128625) + \frac{1}{134217728 z^{9/2}} \left(9\sqrt{\pi} (549120 z^8 + 7175168 z^7 + 24147200 z^6 + 19756800 z^5 + 1372000 z^4 + 78400 z^3 + 35280 z^2 + 42000 z + 128625) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.8043.01

$${}_2F_2\left(-\frac{7}{2}, 5; 1, 6; z\right) = \frac{1}{765765 z^3} e^{z/2} (34320 z^7 - 502216 z^6 + 2059332 z^5 - 2616180 z^4 + 764785 z^3 + 4200 z^2 - 13440 z + 26880) I_0\left(\frac{z}{2}\right) + \frac{1}{765765 z^4} e^{z/2} (-34320 z^8 + 467896 z^7 - 1608596 z^6 + 1207212 z^5 - 1225 z^4 + 5600 z^3 - 20160 z^2 + 53760 z - 107520) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = \frac{3}{2}$

07.25.03.8044.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{3}{2}, 2; z\right) = \frac{e^z (-5720 z^3 + 45188 z^2 - 77286 z + 20901)}{24576} + \frac{\sqrt{\pi} (11440 z^4 - 96096 z^3 + 194040 z^2 - 88200 z + 3675) \operatorname{erfi}(\sqrt{z})}{49152 \sqrt{z}}$$

07.25.03.8045.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (5720 z^3 + 45188 z^2 + 77286 z + 20901)}{24576} + \frac{\sqrt{\pi} (11440 z^4 + 96096 z^3 + 194040 z^2 + 88200 z + 3675) \operatorname{erf}(\sqrt{z})}{49152 \sqrt{z}}$$

07.25.03.8046.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{3}{2}, 3; z\right) = \frac{e^z (-1560 z^3 + 15236 z^2 - 34742 z + 14757)}{18432} + \frac{\sqrt{\pi} (3120 z^4 - 32032 z^3 + 83160 z^2 - 52920 z + 3675) \operatorname{erfi}(\sqrt{z})}{36864 \sqrt{z}}$$

$$\begin{aligned}
 & 07.25.03.8047.01 \\
 {}_2F_2\left(-\frac{7}{2}, 5; \frac{3}{2}, 3; -z\right) = & \frac{e^{-z} (1560 z^3 + 15\,236 z^2 + 34\,742 z + 14\,757)}{18\,432} + \frac{\sqrt{\pi} (3120 z^4 + 32\,032 z^3 + 83\,160 z^2 + 52\,920 z + 3675) \operatorname{erf}(\sqrt{z})}{36\,864 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8048.01 \\
 {}_2F_2\left(-\frac{7}{2}, 5; \frac{3}{2}, 4; z\right) = & \frac{e^z (-120 z^3 + 1396 z^2 - 3982 z + 2337)}{3072} + \frac{\sqrt{\pi} (240 z^4 - 2912 z^3 + 9240 z^2 - 7560 z + 735) \operatorname{erfi}(\sqrt{z})}{6144 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8049.01 \\
 {}_2F_2\left(-\frac{7}{2}, 5; \frac{3}{2}, 4; -z\right) = & \frac{e^{-z} (120 z^3 + 1396 z^2 + 3982 z + 2337)}{3072} + \frac{\sqrt{\pi} (240 z^4 + 2912 z^3 + 9240 z^2 + 7560 z + 735) \operatorname{erf}(\sqrt{z})}{6144 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8050.01 \\
 {}_2F_2\left(-\frac{7}{2}, 5; \frac{3}{2}, 5; z\right) = & \frac{1}{384} e^z (-8 z^3 + 108 z^2 - 370 z + 279) + \frac{\sqrt{\pi} (16 z^4 - 224 z^3 + 840 z^2 - 840 z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8051.01 \\
 {}_2F_2\left(-\frac{7}{2}, 5; \frac{3}{2}, 5; -z\right) = & \frac{1}{384} e^{-z} (8 z^3 + 108 z^2 + 370 z + 279) + \frac{\sqrt{\pi} (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8052.01 \\
 {}_2F_2\left(-\frac{7}{2}, 5; \frac{3}{2}, 6; z\right) = & \frac{1}{1400\,256 z^5} e^z (-17\,160 z^8 + 263\,692 z^7 - 1\,054\,834 z^6 + 975\,279 z^5 - 2240 z^4 + 8960 z^3 - 26\,880 z^2 + 53\,760 z - 53\,760) + \\
 & \frac{\sqrt{\pi} (34\,320 z^4 - 544\,544 z^3 + 2\,356\,200 z^2 - 2\,784\,600 z + 425\,425) \operatorname{erfi}(\sqrt{z})}{2\,800\,512 \sqrt{z}} + \frac{280}{7293 z^5}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8053.01 \\
 {}_2F_2\left(-\frac{7}{2}, 5; \frac{3}{2}, 6; -z\right) = & \frac{1}{1400\,256 z^5} e^{-z} (17\,160 z^8 + 263\,692 z^7 + 1\,054\,834 z^6 + 975\,279 z^5 + 2240 z^4 + 8960 z^3 + 26\,880 z^2 + 53\,760 z + 53\,760) + \\
 & \frac{\sqrt{\pi} (34\,320 z^4 + 544\,544 z^3 + 2\,356\,200 z^2 + 2\,784\,600 z + 425\,425) \operatorname{erf}(\sqrt{z})}{2\,800\,512 \sqrt{z}} - \frac{280}{7293 z^5}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = 2$

$$\begin{aligned}
 & 07.25.03.8054.01 \\
 {}_2F_2\left(-\frac{7}{2}, 5; 2, 2; z\right) = & \frac{e^{z/2} (2860 z^4 - 29\,172 z^3 + 82\,599 z^2 - 73\,605 z + 15\,120) I_0\left(\frac{z}{2}\right)}{15\,120} + \frac{e^{z/2} (-2860 z^4 + 26\,312 z^3 - 57\,717 z^2 + 26\,184 z - 420) I_1\left(\frac{z}{2}\right)}{15\,120}
 \end{aligned}$$

07.25.03.8055.01

$${}_2F_2\left(-\frac{7}{2}, 5; 2, \frac{5}{2}; z\right) = \frac{e^z (-2288 z^4 + 22880 z^3 - 54384 z^2 + 25488 z - 105)}{32768 z} + \frac{\sqrt{\pi} (4576 z^5 - 48048 z^4 + 129360 z^3 - 88200 z^2 + 7350 z + 105) \operatorname{erfi}(\sqrt{z})}{65536 z^{3/2}}$$

07.25.03.8056.01

$${}_2F_2\left(-\frac{7}{2}, 5; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (2288 z^4 + 22880 z^3 + 54384 z^2 + 25488 z + 105)}{32768 z} + \frac{\sqrt{\pi} (4576 z^5 + 48048 z^4 + 129360 z^3 + 88200 z^2 + 7350 z - 105) \operatorname{erf}(\sqrt{z})}{65536 z^{3/2}}$$

07.25.03.8057.01

$${}_2F_2\left(-\frac{7}{2}, 5; 2, 3; z\right) = \frac{e^{z/2} (520 z^4 - 6396 z^3 + 22452 z^2 - 25725 z + 7560) I_0\left(\frac{z}{2}\right)}{7560} + \frac{e^{z/2} (-520 z^4 + 5876 z^3 - 16836 z^2 + 11307 z - 420) I_1\left(\frac{z}{2}\right)}{7560}$$

07.25.03.8058.01

$${}_2F_2\left(-\frac{7}{2}, 5; 2, \frac{7}{2}; z\right) = \frac{e^z (-22880 z^5 + 276848 z^4 - 843216 z^3 + 570216 z^2 - 6510 z + 315)}{786432 z^2} + \frac{\sqrt{\pi} (45760 z^6 - 576576 z^5 + 1940400 z^4 - 1764000 z^3 + 220500 z^2 + 6300 z - 315) \operatorname{erfi}(\sqrt{z})}{1572864 z^{5/2}}$$

07.25.03.8059.01

$${}_2F_2\left(-\frac{7}{2}, 5; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (22880 z^5 + 276848 z^4 + 843216 z^3 + 570216 z^2 + 6510 z + 315)}{786432 z^2} + \frac{\sqrt{\pi} (45760 z^6 + 576576 z^5 + 1940400 z^4 + 1764000 z^3 + 220500 z^2 - 6300 z - 315) \operatorname{erf}(\sqrt{z})}{1572864 z^{5/2}}$$

07.25.03.8060.01

$${}_2F_2\left(-\frac{7}{2}, 5; 2, 4; z\right) = \frac{1}{315} e^{z/2} (10 z^4 - 144 z^3 + 603 z^2 - 840 z + 315) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (-40 z^4 + 536 z^3 - 1896 z^2 + 1692 z - 105) I_1\left(\frac{z}{2}\right)}{1260}$$

07.25.03.8061.01

$${}_2F_2\left(-\frac{7}{2}, 5; 2, \frac{9}{2}; z\right) = \frac{e^z (-45760 z^6 + 649792 z^5 - 2414544 z^4 + 2147424 z^3 - 47460 z^2 + 5460 z - 1575)}{3145728 z^3} + \frac{1}{6291456 z^{7/2}} + \frac{\sqrt{\pi} (91520 z^7 - 1345344 z^6 + 5433120 z^5 - 6174000 z^4 + 1029000 z^3 + 44100 z^2 - 4410 z + 1575) \operatorname{erfi}(\sqrt{z})}{6291456 z^{7/2}}$$

07.25.03.8062.01

$${}_2F_2\left(-\frac{7}{2}, 5; 2, \frac{9}{2}; -z\right) = \frac{e^{-z} (45760 z^6 + 649792 z^5 + 2414544 z^4 + 2147424 z^3 + 47460 z^2 + 5460 z + 1575)}{3145728 z^3} + \frac{1}{6291456 z^{7/2}} + \frac{\sqrt{\pi} (91520 z^7 + 1345344 z^6 + 5433120 z^5 + 6174000 z^4 + 1029000 z^3 - 44100 z^2 - 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{6291456 z^{7/2}}$$

07.25.03.8063.01

$${}_2F_2\left(-\frac{7}{2}, 5; 2, 5; z\right) = \frac{1}{945} e^{z/2} (16z^4 - 264z^3 + 1284z^2 - 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16z^4 + 248z^3 - 1044z^2 + 1164z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.8064.01

$${}_2F_2\left(-\frac{7}{2}, 5; 2, \frac{11}{2}; z\right) = \frac{1}{67108864z^{9/2}} \left(3\sqrt{\pi} (183040z^8 - 3075072z^7 + 14488320z^6 - 19756800z^5 + 4116000z^4 + 235200z^3 - 35280z^2 + 25200z - 55125) \operatorname{erfi}(\sqrt{z}) \right) - \frac{1}{33554432z^4} 3e^z (91520z^7 - 1491776z^6 + 6544032z^5 - 7237872z^4 + 269640z^3 - 66780z^2 + 61950z - 55125)$$

07.25.03.8065.01

$${}_2F_2\left(-\frac{7}{2}, 5; 2, \frac{11}{2}; -z\right) = \frac{1}{33554432z^4} 3e^{-z} (91520z^7 + 1491776z^6 + 6544032z^5 + 7237872z^4 + 269640z^3 + 66780z^2 + 61950z + 55125) + \frac{1}{67108864z^{9/2}} \left(3\sqrt{\pi} (183040z^8 + 3075072z^7 + 14488320z^6 + 19756800z^5 + 4116000z^4 - 235200z^3 - 35280z^2 - 25200z - 55125) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.8066.01

$${}_2F_2\left(-\frac{7}{2}, 5; 2, 6; z\right) = \frac{1}{2297295z^3} 2e^{z/2} (11440z^7 - 212784z^6 + 1178628z^5 - 2209620z^4 + 1149015z^3 - 1575z^2 + 5040z - 10080) I_0\left(\frac{z}{2}\right) - \frac{1}{2297295z^4} 2e^{z/2} (11440z^8 - 201344z^7 + 983004z^6 - 1315848z^5 + 159075z^4 + 2100z^3 - 7560z^2 + 20160z - 40320) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = \frac{5}{2}$

07.25.03.8067.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{5}{2}, 3; z\right) = \frac{e^z (-624z^4 + 7696z^3 - 24184z^2 + 17436z - 315)}{24576z} + \frac{\sqrt{\pi} (1248z^5 - 16016z^4 + 55440z^3 - 52920z^2 + 7350z + 315) \operatorname{erfi}(\sqrt{z})}{49152z^{3/2}}$$

07.25.03.8068.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (624 z^4 + 7696 z^3 + 24 184 z^2 + 17 436 z + 315)}{24 576 z} + \frac{\sqrt{\pi} (1248 z^5 + 16 016 z^4 + 55 440 z^3 + 52 920 z^2 + 7350 z - 315) \operatorname{erf}(\sqrt{z})}{49 152 z^{3/2}}$$

07.25.03.8069.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{5}{2}, 4; z\right) = \frac{e^z (-48 z^4 + 704 z^3 - 2752 z^2 + 2696 z - 105)}{4096 z} + \frac{\sqrt{\pi} (96 z^5 - 1456 z^4 + 6160 z^3 - 7560 z^2 + 1470 z + 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{3/2}}$$

07.25.03.8070.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{5}{2}, 4; -z\right) = \frac{e^{-z} (48 z^4 + 704 z^3 + 2752 z^2 + 2696 z + 105)}{4096 z} + \frac{\sqrt{\pi} (96 z^5 + 1456 z^4 + 6160 z^3 + 7560 z^2 + 1470 z - 105) \operatorname{erf}(\sqrt{z})}{8192 z^{3/2}}$$

07.25.03.8071.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{5}{2}, 5; z\right) = \frac{e^z (-16 z^4 + 272 z^3 - 1272 z^2 + 1580 z - 105)}{2560 z} + \frac{\sqrt{\pi} (32 z^5 - 560 z^4 + 2800 z^3 - 4200 z^2 + 1050 z + 105) \operatorname{erfi}(\sqrt{z})}{5120 z^{3/2}}$$

07.25.03.8072.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{5}{2}, 5; -z\right) = \frac{e^{-z} (16 z^4 + 272 z^3 + 1272 z^2 + 1580 z + 105)}{2560 z} + \frac{\sqrt{\pi} (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105) \operatorname{erf}(\sqrt{z})}{5120 z^{3/2}}$$

07.25.03.8073.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{5}{2}, 6; z\right) = \frac{1}{1 867 008 z^5} e^z (-6864 z^8 + 132 704 z^7 - 722 480 z^6 + 1 088 832 z^5 - 108 115 z^4 - 5120 z^3 + 15 360 z^2 - 30 720 z + 30 720) + \frac{\sqrt{\pi} (13 728 z^5 - 272 272 z^4 + 1 570 800 z^3 - 2 784 600 z^2 + 850 850 z + 109 395) \operatorname{erfi}(\sqrt{z})}{3 734 016 z^{3/2}} - \frac{40}{2431 z^5}$$

07.25.03.8074.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{5}{2}, 6; -z\right) = \frac{1}{1867008z^5} e^{-z} (6864z^8 + 132704z^7 + 722480z^6 + 1088832z^5 + 108115z^4 - 5120z^3 - 15360z^2 - 30720z - 30720) + \frac{\sqrt{\pi} (13728z^5 + 272272z^4 + 1570800z^3 + 2784600z^2 + 850850z - 109395) \operatorname{erf}(\sqrt{z})}{3734016z^{3/2}} + \frac{40}{2431z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = 3$

07.25.03.8075.01

$${}_2F_2\left(-\frac{7}{2}, 5; 3, 3; z\right) = \frac{e^{z/2} (1560z^4 - 23192z^3 + 101544z^2 - 150780z + 62475) I_0\left(\frac{z}{2}\right)}{62370} - \frac{2e^{z/2} (390z^5 - 5408z^4 + 20173z^3 - 19836z^2 + 1680z + 105) I_1\left(\frac{z}{2}\right)}{31185z}$$

07.25.03.8076.01

$${}_2F_2\left(-\frac{7}{2}, 5; 3, \frac{7}{2}; z\right) = \frac{e^{-z} (-2080z^5 + 30992z^4 - 124144z^3 + 127224z^2 - 6090z - 315)}{196608z^2} + \frac{\sqrt{\pi} (4160z^6 - 64064z^5 + 277200z^4 - 352800z^3 + 73500z^2 + 6300z + 315) \operatorname{erfi}(\sqrt{z})}{393216z^{5/2}}$$

07.25.03.8077.01

$${}_2F_2\left(-\frac{7}{2}, 5; 3, \frac{7}{2}; -z\right) = \frac{e^{-z} (2080z^5 + 30992z^4 + 124144z^3 + 127224z^2 + 6090z - 315)}{196608z^2} + \frac{\sqrt{\pi} (4160z^6 + 64064z^5 + 277200z^4 + 352800z^3 + 73500z^2 - 6300z + 315) \operatorname{erf}(\sqrt{z})}{393216z^{5/2}}$$

07.25.03.8078.01

$${}_2F_2\left(-\frac{7}{2}, 5; 3, 4; z\right) = \frac{e^{z/2} (240z^4 - 4184z^3 + 21948z^2 - 39900z + 20895) I_0\left(\frac{z}{2}\right)}{20790} + \frac{e^{z/2} (-240z^5 + 3944z^4 - 18124z^3 + 23508z^2 - 3255z - 420) I_1\left(\frac{z}{2}\right)}{20790z}$$

07.25.03.8079.01

$${}_2F_2\left(-\frac{7}{2}, 5; 3, \frac{9}{2}; z\right) = \frac{e^z (-12480z^6 + 217984z^5 - 1061488z^4 + 1414848z^3 - 123060z^2 - 14280z + 1575)}{2359296z^3} + \frac{1}{4718592z^{7/2}} + \frac{\sqrt{\pi} (24960z^7 - 448448z^6 + 2328480z^5 - 3704400z^4 + 1029000z^3 + 132300z^2 + 13230z - 1575) \operatorname{erfi}(\sqrt{z})}{4718592z^{7/2}}$$

07.25.03.8080.01

$${}_2F_2\left(-\frac{7}{2}, 5; 3, \frac{9}{2}; -z\right) = \frac{e^{-z} (12480 z^6 + 217984 z^5 + 1061488 z^4 + 1414848 z^3 + 123060 z^2 - 14280 z - 1575)}{2359296 z^3} + \frac{1}{4718592 z^{7/2}} \sqrt{\pi} (24960 z^7 + 448448 z^6 + 2328480 z^5 + 3704400 z^4 + 1029000 z^3 - 132300 z^2 + 13230 z + 1575) \operatorname{erf}(\sqrt{z})$$

07.25.03.8081.01

$${}_2F_2\left(-\frac{7}{2}, 5; 3, 5; z\right) = \frac{4 e^{z/2} (16 z^4 - 320 z^3 + 1956 z^2 - 4200 z + 2625) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16 z^5 - 304 z^4 + 1660 z^3 - 2676 z^2 + 525 z + 105) I_1\left(\frac{z}{2}\right)}{10395 z}$$

07.25.03.8082.01

$${}_2F_2\left(-\frac{7}{2}, 5; 3, \frac{11}{2}; z\right) = \frac{1}{8388608 z^4} e^z (-24960 z^7 + 500032 z^6 - 2867104 z^5 + 4712304 z^4 - 625800 z^3 - 131460 z^2 + 47250 z - 33075) + \frac{1}{16777216 z^{9/2}} \left(\sqrt{\pi} (49920 z^8 - 1025024 z^7 + 6209280 z^6 - 11854080 z^5 + 4116000 z^4 + 705600 z^3 + 105840 z^2 - 25200 z + 33075) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.8083.01

$${}_2F_2\left(-\frac{7}{2}, 5; 3, \frac{11}{2}; -z\right) = \frac{1}{8388608 z^4} e^{-z} (24960 z^7 + 500032 z^6 + 2867104 z^5 + 4712304 z^4 + 625800 z^3 - 131460 z^2 - 47250 z - 33075) + \frac{1}{16777216 z^{9/2}} \left(\sqrt{\pi} (49920 z^8 + 1025024 z^7 + 6209280 z^6 + 11854080 z^5 + 4116000 z^4 - 705600 z^3 + 105840 z^2 + 25200 z + 33075) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.8084.01

$${}_2F_2\left(-\frac{7}{2}, 5; 3, 6; z\right) = \frac{1}{6891885 z^3} \left(4 e^{z/2} (6240 z^7 - 140816 z^6 + 982752 z^5 - 2431380 z^4 + 1751610 z^3 + 1575 z^2 - 5040 z + 10080) I_0\left(\frac{z}{2}\right) - \frac{1}{6891885 z^4} 4 e^{z/2} (6240 z^8 - 134576 z^7 + 851296 z^6 - 1641132 z^5 + 421050 z^4 + 113925 z^3 + 7560 z^2 - 20160 z + 40320) I_1\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = \frac{7}{2}$

07.25.03.8085.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{7}{2}, 4; z\right) = \frac{e^z (-160 z^5 + 2832 z^4 - 14064 z^3 + 19384 z^2 - 1890 z - 315)}{32768 z^2} + \frac{\sqrt{\pi} (320 z^6 - 5824 z^5 + 30800 z^4 - 50400 z^3 + 14700 z^2 + 2100 z + 315) \operatorname{erfi}(\sqrt{z})}{65536 z^{5/2}}$$

07.25.03.8086.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{7}{2}, 4; -z\right) = \frac{e^{-z} (160 z^5 + 2832 z^4 + 14064 z^3 + 19384 z^2 + 1890 z - 315)}{32768 z^2} + \frac{\sqrt{\pi} (320 z^6 + 5824 z^5 + 30800 z^4 + 50400 z^3 + 14700 z^2 - 2100 z + 315) \operatorname{erf}(\sqrt{z})}{65536 z^{5/2}}$$

07.25.03.8087.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{7}{2}, 5; z\right) = \frac{e^z (-32 z^5 + 656 z^4 - 3888 z^3 + 6744 z^2 - 1050 z - 315)}{12288 z^2} + \frac{\sqrt{\pi} (64 z^6 - 1344 z^5 + 8400 z^4 - 16800 z^3 + 6300 z^2 + 1260 z + 315) \operatorname{erfi}(\sqrt{z})}{24576 z^{5/2}}$$

07.25.03.8088.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{7}{2}, 5; -z\right) = \frac{e^{-z} (32 z^5 + 656 z^4 + 3888 z^3 + 6744 z^2 + 1050 z - 315)}{12288 z^2} + \frac{\sqrt{\pi} (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315) \operatorname{erf}(\sqrt{z})}{24576 z^{5/2}}$$

07.25.03.8089.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{7}{2}, 6; z\right) = \frac{1}{14936064 z^5} + \frac{e^z (-22880 z^8 + 533104 z^7 - 3671888 z^6 + 7684008 z^5 - 1687630 z^4 - 724805 z^3 - 122880 z^2 + 245760 z - 245760)}{29872128 z^{5/2}} \sqrt{\pi} (45760 z^6 - 1089088 z^5 + 7854000 z^4 - 18564000 z^3 + 8508500 z^2 + 2187900 z + 765765) + \frac{\operatorname{erfi}(\sqrt{z}) + \frac{40}{2431 z^5}}{2431 z^5}$$

07.25.03.8090.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{7}{2}, 6; -z\right) = \frac{1}{14936064 z^5} + \frac{e^{-z} (22880 z^8 + 533104 z^7 + 3671888 z^6 + 7684008 z^5 + 1687630 z^4 - 724805 z^3 + 122880 z^2 + 245760 z + 245760)}{29872128 z^{5/2}} \sqrt{\pi} (45760 z^6 + 1089088 z^5 + 7854000 z^4 + 18564000 z^3 + 8508500 z^2 - 2187900 z + 765765) + \frac{\operatorname{erf}(\sqrt{z}) - \frac{40}{2431 z^5}}{2431 z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = 4$

07.25.03.8091.01

$${}_2F_2\left(-\frac{7}{2}, 5; 4, 4; z\right) = \frac{e^{z/2} (240 z^5 - 4912 z^4 + 30964 z^3 - 69300 z^2 + 45675 z + 105) I_0\left(\frac{z}{2}\right)}{45045 z} + \frac{e^{z/2} (-240 z^6 + 4672 z^5 - 26412 z^4 + 44984 z^3 - 9975 z^2 - 2520 z - 420) I_1\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.8092.01

$${}_2F_2\left(-\frac{7}{2}, 5; 4, \frac{9}{2}; z\right) = \frac{e^z (-960 z^6 + 19904 z^5 - 119888 z^4 + 213408 z^3 - 35700 z^2 - 12180 z - 1575)}{393216 z^3} + \frac{1}{786432 z^{7/2}} \sqrt{\pi} (1920 z^7 - 40768 z^6 + 258720 z^5 - 529200 z^4 + 205800 z^3 + 44100 z^2 + 13230 z + 1575) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8093.01

$${}_2F_2\left(-\frac{7}{2}, 5; 4, \frac{9}{2}; -z\right) = \frac{e^{-z} (960 z^6 + 19904 z^5 + 119888 z^4 + 213408 z^3 + 35700 z^2 - 12180 z + 1575)}{393216 z^3} + \frac{1}{786432 z^{7/2}} \sqrt{\pi} (1920 z^7 + 40768 z^6 + 258720 z^5 + 529200 z^4 + 205800 z^3 - 44100 z^2 + 13230 z - 1575) \operatorname{erf}(\sqrt{z})$$

07.25.03.8094.01

$${}_2F_2\left(-\frac{7}{2}, 5; 4, 5; z\right) = \frac{4 e^{z/2} (32 z^5 - 752 z^4 + 5536 z^3 - 14700 z^2 + 11550 z + 105) I_0\left(\frac{z}{2}\right)}{45045 z} - \frac{4 e^{z/2} (32 z^6 - 720 z^5 + 4832 z^4 - 10196 z^3 + 3150 z^2 + 1155 z + 420) I_1\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.8095.01

$${}_2F_2\left(-\frac{7}{2}, 5; 4, \frac{11}{2}; z\right) = \frac{1}{8388608 z^{9/2}} (3 \sqrt{\pi} (3840 z^8 - 93184 z^7 + 689920 z^6 - 1693440 z^5 + 823200 z^4 + 235200 z^3 + 105840 z^2 + 25200 z - 11025) \operatorname{erfi}(\sqrt{z})) - \frac{3 e^z (1920 z^7 - 45632 z^6 + 323104 z^5 - 705584 z^4 + 172200 z^3 + 86100 z^2 + 32550 z - 11025)}{4194304 z^4}$$

07.25.03.8096.01

$${}_2F_2\left(-\frac{7}{2}, 5; 4, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (1920 z^7 + 45632 z^6 + 323104 z^5 + 705584 z^4 + 172200 z^3 - 86100 z^2 + 32550 z + 11025)}{4194304 z^4} + \frac{1}{8388608 z^{9/2}} (3 \sqrt{\pi} (3840 z^8 + 93184 z^7 + 689920 z^6 + 1693440 z^5 + 823200 z^4 - 235200 z^3 + 105840 z^2 - 25200 z - 11025) \operatorname{erf}(\sqrt{z}))$$

07.25.03.8097.01

$${}_2F_2\left(-\frac{7}{2}, 5; 4, 6; z\right) = \frac{16 e^{z/2} (240 z^7 - 6368 z^6 + 53616 z^5 - 164640 z^4 + 149205 z^3 + 3150 z^2 + 630 z - 1260) I_0\left(\frac{z}{2}\right)}{2297295 z^3} - \frac{1}{2297295 z^4} 8 e^{z/2} (480 z^8 - 12256 z^7 + 95216 z^6 - 239712 z^5 + 95550 z^4 + 45150 z^3 + 24885 z^2 + 5040 z - 10080) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = \frac{9}{2}$

07.25.03.8098.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{9}{2}, 5; z\right) = \frac{e^z (-64 z^6 + 1536 z^5 - 11024 z^4 + 24576 z^3 - 6300 z^2 - 3360 z - 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 - 3136 z^6 + 23520 z^5 - 58800 z^4 + 29400 z^3 + 8820 z^2 + 4410 z + 1575) \operatorname{erfi}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.8099.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{9}{2}, 5; -z\right) = \frac{e^{-z} (64 z^6 + 1536 z^5 + 11024 z^4 + 24576 z^3 + 6300 z^2 - 3360 z + 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.8100.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{9}{2}, 6; z\right) = \frac{1}{179232768 z^5} (e^z (-137280 z^8 + 3743168 z^7 - 31183856 z^6 + 83569056 z^5 - 29322860 z^4 - 20546260 z^3 - 15703485 z^2 - 6881280 z + 6881280)) + \frac{1}{358465536 z^{7/2}} (\sqrt{\pi} (274560 z^7 - 7623616 z^6 + 65973600 z^5 - 194922000 z^4 + 119119000 z^3 + 45945900 z^2 + 32162130 z + 19144125) \operatorname{erfi}(\sqrt{z})) - \frac{280}{7293 z^5}$$

07.25.03.8101.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{9}{2}, 6; -z\right) = \frac{1}{179232768 z^5} (e^{-z} (137280 z^8 + 3743168 z^7 + 31183856 z^6 + 83569056 z^5 + 29322860 z^4 - 20546260 z^3 + 15703485 z^2 - 6881280 z - 6881280)) + \frac{1}{358465536 z^{7/2}} (\sqrt{\pi} (274560 z^7 + 7623616 z^6 + 65973600 z^5 + 194922000 z^4 + 119119000 z^3 - 45945900 z^2 + 32162130 z - 19144125) \operatorname{erf}(\sqrt{z})) + \frac{280}{7293 z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = 5$

07.25.03.8102.01

$${}_2F_2\left(-\frac{7}{2}, 5; 5, 5; z\right) = \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23520 z^3 + 22050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right)}{675675 z^2} - \frac{64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675675 z^3}$$

07.25.03.8103.01

$${}_2F_2\left(-\frac{7}{2}, 5; 5, \frac{11}{2}; z\right) = \frac{1}{1048576 z^{9/2}}$$

$$\frac{3\sqrt{\pi} (256 z^8 - 7168 z^7 + 62720 z^6 - 188160 z^5 + 117600 z^4 + 47040 z^3 + 35280 z^2 + 25200 z + 11025) \operatorname{erfi}(\sqrt{z}) - 3 e^z (128 z^7 - 3520 z^6 + 29664 z^5 - 80848 z^4 + 29400 z^3 + 21420 z^2 + 17850 z + 11025)}{524288 z^4}$$

07.25.03.8104.01

$${}_2F_2\left(-\frac{7}{2}, 5; 5, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29664 z^5 + 80848 z^4 + 29400 z^3 - 21420 z^2 + 17850 z - 11025)}{524288 z^4} + \frac{1}{1048576 z^{9/2}}$$

$$+ \frac{3\sqrt{\pi} (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025) \operatorname{erf}(\sqrt{z})}{524288 z^4}$$

07.25.03.8105.01

$${}_2F_2\left(-\frac{7}{2}, 5; 5, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right) - \frac{1}{2297295 z^4} 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)}{2297295 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = \frac{11}{2}$

07.25.03.8106.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{11}{2}, 6; z\right) = \frac{1}{637272064 z^5} (e^z (-274560 z^8 + 8575424 z^7 - 83814368 z^6 + 273912528 z^5 - 133739480 z^4 - 123599980 z^3 - 148388730 z^2 - 181825665 z - 220200960)) + \frac{1}{1274544128 z^{9/2}} (\sqrt{\pi} (549120 z^8 - 17425408 z^7 + 175929600 z^6 - 623750400 z^5 + 476476000 z^4 + 245044800 z^3 + 257297040 z^2 + 306306000 z + 402026625) \operatorname{erfi}(\sqrt{z})) + \frac{840}{2431 z^5}$$

07.25.03.8107.01

$${}_2F_2\left(-\frac{7}{2}, 5; \frac{11}{2}, 6; -z\right) = \frac{1}{637272064 z^5} (e^{-z} (274560 z^8 + 8575424 z^7 + 83814368 z^6 + 273912528 z^5 + 133739480 z^4 - 123599980 z^3 + 148388730 z^2 - 181825665 z + 220200960)) + \frac{1}{1274544128 z^{9/2}} (\sqrt{\pi} (549120 z^8 + 17425408 z^7 + 175929600 z^6 + 623750400 z^5 + 476476000 z^4 - 245044800 z^3 + 257297040 z^2 - 306306000 z + 402026625) \operatorname{erf}(\sqrt{z})) - \frac{840}{2431 z^5}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 5$, $b_1 = 6$

$$\begin{aligned}
 & \text{07.25.03.8108.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 5; 6, 6; z\right) = \\
 & \frac{1}{16754\,172\,435\,z^5} \left(64 e^{z/2} (137\,280\,z^9 - 4\,731\,584\,z^8 + 53\,476\,368\,z^7 - 227\,806\,320\,z^6 + 285\,838\,840\,z^5 + 30\,831\,000\,z^4 + \right. \\
 & \quad \left. 46\,070\,385\,z^3 + 72\,498\,705\,z^2 + 183\,783\,600\,z - 367\,567\,200) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{16754\,172\,435\,z^4} \left(64 e^{z/2} (137\,280\,z^8 - 4\,594\,304\,z^7 + 48\,950\,704\,z^6 - 181\,015\,488\,z^5 + 125\,133\,400\,z^4 + \right. \right. \\
 & \quad \left. \left. 101\,834\,800\,z^3 + 131\,907\,735\,z^2 + 199\,596\,840\,z + 381\,886\,620) I_1\left(\frac{z}{2}\right) + \frac{10\,240}{7293\,z^5} \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.8109.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{972\,504\,225} \\
 & \left(e^z (8192\,z^{13} + 512\,000\,z^{12} + 11\,849\,728\,z^{11} + 127\,125\,504\,z^{10} + 643\,991\,040\,z^9 + 1\,375\,799\,040\,z^8 + 878\,169\,600\,z^7 + \right. \\
 & \quad \left. 87\,816\,960\,z^6 - 120\,748\,320\,z^5 + 356\,756\,400\,z^4 - 795\,841\,200\,z^3 + 1\,353\,429\,000\,z^2 - 1\,591\,370\,550\,z + 972\,504\,225) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8110.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & -\frac{1}{88\,409\,475} \left(e^z (4096\,z^{12} + 229\,376\,z^{11} + 4\,663\,296\,z^{10} + 42\,577\,920\,z^9 + 172\,972\,800\,z^8 + 255\,467\,520\,z^7 + 55\,883\,520\,z^6 + \right. \\
 & \quad \left. 15\,966\,720\,z^5 - 52\,390\,800\,z^4 + 99\,792\,000\,z^3 - 148\,440\,600\,z^2 + 157\,172\,400\,z - 88\,409\,475) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8111.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{9\,823\,275} \left(e^z (2048\,z^{11} + 101\,376\,z^{10} + 1\,774\,080\,z^9 + 13\,305\,600\,z^8 + 39\,916\,800\,z^7 + 27\,941\,760\,z^6 - \right. \\
 & \quad \left. 13\,970\,880\,z^5 + 14\,968\,800\,z^4 - 18\,711\,000\,z^3 + 21\,829\,500\,z^2 - 19\,646\,550\,z + 9\,823\,275) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8112.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \\
 & -\frac{1}{1403\,325} \left(e^z (1024\,z^{10} + 44\,032\,z^9 + 644\,864\,z^8 + 3\,750\,912\,z^7 + 6\,830\,208\,z^6 - 3\,104\,640\,z^5 - 2\,328\,480\,z^4 + \right. \\
 & \quad \left. 8\,648\,640\,z^3 - 5\,031\,180\,z^2 + 3\,367\,980\,z - 1\,403\,325) \right)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8113.01 \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{280665} \left(e^z (512 z^9 + 18688 z^8 + 219648 z^7 + 887040 z^6 + 310464 z^5 - 2328480 z^4 + 2328480 z^3 + \right. \\
 & \left. 3160080 z^2 - 935550 z + 280665) \right)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8114.01 \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \\
 & -\frac{1}{93555} e^z (256 z^8 + 7680 z^7 + 67584 z^6 + 139392 z^5 - 332640 z^4 - 332640 z^3 + 1663200 z^2 + 748440 z - 93555)
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8115.01 \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 3008 z^6 + 17248 z^5 - 7920 z^4 - 138600 z^3 + 180180 z^2 + 561330 z + 93555)}{93555}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8116.01 \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (64 z^7 + 1344 z^6 + 6288 z^5 - 9168 z^4 - 53352 z^3 + 100656 z^2 + 280665 z + 93555) I_0\left(\frac{z}{2}\right)}{93555} + \\
 & \frac{e^{z/2} (64 z^7 + 1280 z^6 + 5040 z^5 - 13632 z^4 - 38280 z^3 + 130248 z^2 + 148311 z) I_1\left(\frac{z}{2}\right)}{93555}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8117.01 \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (64 z^6 + 1088 z^5 + 2640 z^4 - 15840 z^3 - 13860 z^2 + 124740 z + 93555)}{93555}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8118.01 \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 + 928 z^5 + 1136 z^4 - 14880 z^3 - 984 z^2 + 113190 z + 93555) I_0\left(\frac{z}{2}\right)}{93555} + \\
 & \frac{e^{z/2} (64 z^6 + 864 z^5 + 304 z^4 - 14816 z^3 + 13320 z^2 + 94026 z + 15015) I_1\left(\frac{z}{2}\right)}{93555}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8119.01 \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (32 z^5 + 336 z^4 - 528 z^3 - 5544 z^2 + 12474 z + 31185)}{31185}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8120.01 \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, 3; z\right) = \frac{8 e^{z/2} (16 z^5 + 128 z^4 - 432 z^3 - 1848 z^2 + 6675 z + 12060) I_0\left(\frac{z}{2}\right)}{93555} + \\
 & \frac{4 e^{z/2} (32 z^6 + 224 z^5 - 1072 z^4 - 2544 z^3 + 15234 z^2 + 8970 z - 2925) I_1\left(\frac{z}{2}\right)}{93555 z}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8121.01 \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (16 z^4 + 64 z^3 - 616 z^2 + 6237)}{6237}
 \end{aligned}$$

07.25.03.8122.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 + 48 z^4 - 1152 z^3 + 1500 z^2 + 8910 z - 765) I_0\left(\frac{z}{2}\right)}{31\,185 z} + \frac{4 e^{z/2} (32 z^6 + 16 z^5 - 1152 z^4 + 2628 z^3 + 5790 z^2 - 4455 z + 3060) I_1\left(\frac{z}{2}\right)}{31\,185 z^2}$$

07.25.03.8123.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{891} e^z (8 z^3 - 20 z^2 - 198 z + 891)$$

07.25.03.8124.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^5 - 80 z^4 - 148 z^3 + 1500 z^2 - 867 z + 969) I_0\left(\frac{z}{2}\right)}{31\,185 z^2} + \frac{32 e^{z/2} (16 z^6 - 96 z^5 - 44 z^4 + 1480 z^3 - 2223 z^2 + 3468 z - 3876) I_1\left(\frac{z}{2}\right)}{31\,185 z^3}$$

07.25.03.8125.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{99} e^z (4 z^2 - 36 z + 99)$$

07.25.03.8126.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 184 z^4 + 852 z^3 - 2172 z^2 + 5757 z - 9576) I_0\left(\frac{z}{2}\right)}{6237 z^3} + \frac{32 e^{z/2} (16 z^6 - 200 z^5 + 1060 z^4 - 3348 z^3 + 9885 z^2 - 23\,028 z + 38\,304) I_1\left(\frac{z}{2}\right)}{6237 z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.8127.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{8037225} (e^z (2048 z^{11} + 103424 z^{10} + 1866240 z^9 + 14757120 z^8 + 49593600 z^7 + 53343360 z^6 + 1270080 z^5 + 8618400 z^4 - 13267800 z^3 + 16726500 z^2 - 15677550 z + 8037225))$$

07.25.03.8128.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{893025} (e^z (1024 z^{10} + 46080 z^9 + 725760 z^8 + 4838400 z^7 + 12700800 z^6 + 7620480 z^5 - 3175200 z^4 + 2721600 z^3 - 2551500 z^2 + 1984500 z - 893025))$$

$$\begin{aligned}
 & \text{07.25.03.8129.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{127575} (e^z (512 z^9 + 20224 z^8 + 271872 z^7 + 1467648 z^6 + 2681280 z^5 - 211680 z^4 - 1481760 z^3 + \\
 & 619920 z^2 - 345870 z + 127575))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8130.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \\
 & -\frac{1}{25515} e^z (256 z^8 + 8704 z^7 + 96768 z^6 + 395136 z^5 + 352800 z^4 - 635040 z^3 - 423360 z^2 + 98280 z - 25515)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8131.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 3648 z^6 + 31968 z^5 + 85680 z^4 - 37800 z^3 - 260820 z^2 - 81270 z + 8505)}{8505}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8132.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{e^z (64 z^6 + 1472 z^5 + 9360 z^4 + 10080 z^3 - 44100 z^2 - 64260 z - 8505)}{8505}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8133.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (-32 z^6 - 672 z^5 - 3792 z^4 - 2544 z^3 + 21006 z^2 + 32130 z + 8505) I_0\left(\frac{z}{2}\right) - \\
 & 2 e^{z/2} (16 z^6 + 320 z^5 + 1584 z^4 - 168 z^3 - 9813 z^2 - 7128 z) I_1\left(\frac{z}{2}\right)}{8505}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8134.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{e^z (32 z^5 + 560 z^4 + 2160 z^3 - 2520 z^2 - 15750 z - 8505)}{8505}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8135.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (-32 z^5 - 496 z^4 - 1536 z^3 + 3156 z^2 + 13650 z + 8505) I_0\left(\frac{z}{2}\right) + \\
 & e^{z/2} (-32 z^5 - 464 z^4 - 1088 z^3 + 4044 z^2 + 9426 z + 1155) I_1\left(\frac{z}{2}\right)}{8505}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8136.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{e^z (16 z^4 + 192 z^3 + 216 z^2 - 2016 z - 2835)}{2835}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8137.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, 3; z\right) = \\
 & \frac{4 e^{z/2} (16 z^4 + 160 z^3 + 36 z^2 - 1800 z - 2175) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16 z^5 + 144 z^4 - 100 z^3 - 1644 z^2 - 675 z + 195) I_1\left(\frac{z}{2}\right)}{8505}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8138.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{1}{567} e^z (8 z^3 + 52 z^2 - 126 z - 567)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8139.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = \\
 & \frac{4 e^{z/2} (16 z^4 + 72 z^3 - 300 z^2 - 780 z + 45) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16 z^5 + 56 z^4 - 348 z^3 - 420 z^2 + 285 z - 180) I_1\left(\frac{z}{2}\right)}{2835 z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8140.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{1}{81} e^z (4 z^2 + 4 z - 81)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8141.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, 5; z\right) = \\
 & \frac{32 e^{z/2} (8 z^4 - 8 z^3 - 120 z^2 + 48 z - 51) I_0\left(\frac{z}{2}\right) - 128 e^{z/2} (2 z^5 - 4 z^4 - 25 z^3 + 33 z^2 - 48 z + 51) I_1\left(\frac{z}{2}\right)}{2835 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8142.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = -\frac{1}{9} e^z (2 z - 9)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8143.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = \\
 & \frac{32 e^{z/2} (8 z^4 - 52 z^3 + 108 z^2 - 279 z + 456) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (8 z^5 - 60 z^4 + 172 z^3 - 489 z^2 + 1116 z - 1824) I_1\left(\frac{z}{2}\right)}{567 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.8144.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{99225} (e^z (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + \\
 & 408240 z^2 - 255150 z + 99225))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8145.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \\
 & -\frac{1}{14175} e^z (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8146.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835)}{2835}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8147.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 1728 z^5 + 15120 z^4 + 50400 z^3 + 56700 z^2 + 11340 z - 945)
 \end{aligned}$$

07.25.03.8148.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 720 z^4 + 5040 z^3 + 12\,600 z^2 + 9450 z + 945)$$

07.25.03.8149.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (16 z^5 + 336 z^4 + 2220 z^3 + 5484 z^2 + 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^5 + 320 z^4 + 1908 z^3 + 3720 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.8150.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (16 z^4 + 288 z^3 + 1512 z^2 + 2520 z + 945)$$

07.25.03.8151.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (16 z^4 + 264 z^3 + 1284 z^2 + 2100 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^4 + 248 z^3 + 1044 z^2 + 1164 z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.8152.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (8 z^3 + 108 z^2 + 378 z + 315)$$

07.25.03.8153.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, 3; z\right) = \frac{16}{945} e^{z/2} (2 z^3 + 24 z^2 + 75 z + 60) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8 z^4 + 88 z^3 + 216 z^2 + 60 z - 15) I_1\left(\frac{z}{2}\right)}{945 z}$$

07.25.03.8154.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (4 z^2 + 36 z + 63)$$

07.25.03.8155.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (8 z^3 + 60 z^2 + 84 z - 3) I_0\left(\frac{z}{2}\right)}{315 z} + \frac{4 e^{z/2} (8 z^4 + 52 z^3 + 36 z^2 - 21 z + 12) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.8156.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2 z + 9)$$

07.25.03.8157.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (4 z^3 + 12 z^2 - 3 z + 3) I_0\left(\frac{z}{2}\right)}{315 z^2} + \frac{32 e^{z/2} (4 z^4 + 8 z^3 - 9 z^2 + 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3}$$

07.25.03.8158.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = e^z$$

07.25.03.8159.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (4 z^3 - 6 z^2 + 15 z - 24) I_0\left(\frac{z}{2}\right)}{63 z^3} + \frac{32 e^{z/2} (4 z^4 - 10 z^3 + 27 z^2 - 60 z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.8160.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{262\,144}{675} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{e^z (128 z^7 + 4160 z^6 + 46\,048 z^5 + 213\,168 z^4 - 363\,816 z^3 + 29\,772 z^2 - 8262 z + 2025)}{2025}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8161.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \\
 & \frac{262\,144}{675} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{e^{-z} (-128 z^7 + 4160 z^6 - 46\,048 z^5 + 213\,168 z^4 + 363\,816 z^3 + 29\,772 z^2 + 8262 z + 2025)}{2025}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8162.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{405} e^z (-64 z^6 - 1856 z^5 - 18\,384 z^4 + 314\,208 z^3 + 24\,804 z^2 - 2484 z + 405) - \frac{131\,072}{135} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8163.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \\
 & \frac{1}{405} e^{-z} (-64 z^6 + 1856 z^5 - 18\,384 z^4 - 314\,208 z^3 + 24\,804 z^2 + 2484 z + 405) - \frac{131\,072}{135} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8164.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{32\,768}{45} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{135} e^z (32 z^5 + 816 z^4 - 91\,152 z^3 - 20\,376 z^2 - 2214 z + 135)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8165.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{32\,768}{45} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{7/2} + \frac{1}{135} e^{-z} (-32 z^5 + 816 z^4 + 91\,152 z^3 - 20\,376 z^2 + 2214 z + 135)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8166.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{135} e^z (-16 z^4 + 16\,032 z^3 + 5496 z^2 + 1944 z + 135) - \frac{16\,384}{135} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8167.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{135} e^{-z} (-16 z^4 - 16\,032 z^3 + 5496 z^2 - 1944 z + 135) - \frac{16\,384}{135} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8168.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, 1; z\right) = \\
 & \frac{e^{z/2} (-262\,424 z^4 + 190\,728 z^3 + 78\,360 z^2 + 34\,020 z + 4725) J_0\left(\frac{z}{2}\right)}{4725} + \frac{4 e^{z/2} (65\,466 z^4 + 14\,984 z^3 + 8667 z^2 + 2280 z) I_1\left(\frac{z}{2}\right)}{4725}
 \end{aligned}$$

07.25.03.8169.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{45} e^z (680 z^3 + 292 z^2 + 186 z + 45) - \frac{2048}{135} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8170.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{45} e^{-z} (-680 z^3 + 292 z^2 - 186 z + 45) - \frac{2048}{135} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.8171.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (-524 288 z^4 + 390 696 z^3 + 201 660 z^2 + 141 540 z + 42 525) I_0\left(\frac{z}{2}\right) + e^{z/2} (524 288 z^4 + 128 552 z^3 + 105 876 z^2 + 58 980 z + 3675) I_1\left(\frac{z}{2}\right)}{42 525}$$

07.25.03.8172.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{225} e^z (1024 z^3 + 492 z^2 + 468 z + 225) - \frac{1024}{225} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8173.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{225} e^{-z} (-1024 z^3 + 492 z^2 - 468 z + 225) - \frac{1024}{225} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.8174.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (524 288 z^5 + 131 072 z^4 + 133 596 z^3 + 127 020 z^2 + 22 575 z - 4725) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (524 288 z^4 - 393 216 z^3 - 231 900 z^2 - 236 040 z - 118 125) I_0\left(\frac{z}{2}\right)}{467 775 z}$$

07.25.03.8175.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{135} e^z (256 z^3 + 128 z^2 + 162 z + 135) - \frac{256}{135} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8176.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{135} e^{-z} (-256 z^3 + 128 z^2 - 162 z + 135) - \frac{256}{135} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.8177.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (1 048 576 z^6 + 262 144 z^5 + 294 912 z^4 + 434 220 z^3 + 169 890 z^2 - 82 215 z + 41 580) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (1 048 576 z^5 - 786 432 z^4 - 491 520 z^3 - 679 980 z^2 - 527 310 z + 10 395) I_0\left(\frac{z}{2}\right)}{2 027 025 z^2}$$

07.25.03.8178.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{135} e^z (128 z^3 + 64 z^2 + 96 z + 135) - \frac{128}{135} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8179.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{135} e^{-z} (-128 z^3 + 64 z^2 - 96 z + 135) - \frac{128}{135} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.8180.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, 5; z\right) &= \frac{1}{30405375z^3} \\
 & 64e^{z/2} (524288z^7 + 131072z^6 + 147456z^5 + 307200z^4 + 265125z^3 - 243810z^2 + 291060z - 270270) I_1\left(\frac{z}{2}\right) - \\
 & \frac{1}{30405375z^2} 32e^{z/2} (1048576z^6 - 786432z^5 - 491520z^4 - 860160z^3 - 1067850z^2 + 145530z - 135135) I_0\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8181.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) &= \frac{1}{15} e^z (8z^3 + 4z^2 + 6z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8182.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) &= \frac{1}{15} e^{-z} (-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8183.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, 6; z\right) &= \\
 & \frac{1}{103378275z^4} \left(32e^{z/2} (2097152z^8 + 524288z^7 + 589824z^6 + 1228800z^5 + 3763200z^4 - 7731990z^3 + \right. \\
 & \quad \left. 19407465z^2 - 41621580z + 64864800) I_1\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{103378275z^3} \left(32e^{z/2} (2097152z^7 - 1572864z^6 - 983040z^5 - 1720320z^4 - 4838400z^3 + \right. \\
 & \quad \left. 4345110z^2 - 10405395z + 16216200) I_0\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.8184.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) &= \frac{1}{81} e^z (32z^5 + 848z^4 - 188688z^3 + 23256z^2 - 774z + 81) + \frac{4096}{27} \sqrt{\pi} (16z^{7/2} - 7z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8185.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) &= \\
 & \frac{1}{81} e^{-z} (-32z^5 + 848z^4 + 188688z^3 + 23256z^2 + 774z + 81) + \frac{4096}{27} \sqrt{\pi} (16z^{7/2} + 7z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8186.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) &= \frac{1}{27} e^z (-16z^4 + 48768z^3 - 21816z^2 - 720z + 27) - \frac{2048}{9} \sqrt{\pi} (8z^{7/2} - 7z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8187.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) &= \frac{1}{27} e^{-z} (-16z^4 - 48768z^3 - 21816z^2 + 720z + 27) - \frac{2048}{9} \sqrt{\pi} (8z^{7/2} + 7z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8188.01} \\
 {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) &= \frac{1}{9} e^z (-2728z^3 + 2276z^2 + 222z + 9) + \frac{512}{27} \sqrt{\pi} (16z^{7/2} - 21z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.8189.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{9} e^{-z} (2728 z^3 + 2276 z^2 - 222 z + 9) + \frac{512}{27} \sqrt{\pi} (16 z^{7/2} + 21 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8190.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (131\,072 z^4 - 298\,868 z^3 + 92\,028 z^2 + 11\,655 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-131\,072 z^4 + 168\,076 z^3 + 16\,112 z^2 + 2013 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.8191.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{256}{27} \sqrt{\pi} (4z - 7) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{27} e^z (-1024 z^3 + 1284 z^2 + 204 z + 27)$$

07.25.03.8192.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{256}{27} \sqrt{\pi} (4z + 7) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{27} e^{-z} (1024 z^3 + 1284 z^2 - 204 z + 27)$$

07.25.03.8193.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2} (262\,144 z^4 - 712\,704 z^3 + 265\,452 z^2 + 50\,190 z + 8505) I_0\left(\frac{z}{2}\right)}{8505} + \frac{e^{z/2} (-262\,144 z^4 + 450\,560 z^3 + 56\,556 z^2 + 13\,602 z + 525) I_1\left(\frac{z}{2}\right)}{8505}$$

07.25.03.8194.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{32}{45} \sqrt{\pi} (16z - 35) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{45} e^z (-512 z^3 + 864 z^2 + 186 z + 45)$$

07.25.03.8195.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{32}{45} \sqrt{\pi} (16z + 35) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{45} e^{-z} (512 z^3 + 864 z^2 - 186 z + 45)$$

07.25.03.8196.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{8 e^{z/2} (131\,072 z^4 - 413\,696 z^3 + 175\,104 z^2 + 43\,785 z + 11\,760) I_0\left(\frac{z}{2}\right)}{93\,555} - \frac{4 e^{z/2} (262\,144 z^5 - 565\,248 z^4 - 83\,968 z^3 - 30\,738 z^2 - 3150 z + 525) I_1\left(\frac{z}{2}\right)}{93\,555 z}$$

07.25.03.8197.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{16}{27} \sqrt{\pi} (8z - 21) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{27} e^z (-128 z^3 + 272 z^2 + 72 z + 27)$$

07.25.03.8198.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{16}{27} \sqrt{\pi} (8z + 21) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{27} e^{-z} (128 z^3 + 272 z^2 - 72 z + 27)$$

07.25.03.8199.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (524\,288 z^5 - 1\,884\,160 z^4 + 872\,448 z^3 + 268\,800 z^2 + 103\,530 z - 945) I_0\left(\frac{z}{2}\right)}{405\,405 z} - \frac{4 e^{z/2} (524\,288 z^6 - 1\,359\,872 z^5 - 225\,280 z^4 - 112\,128 z^3 - 22\,890 z^2 + 8715 z - 3780) I_1\left(\frac{z}{2}\right)}{405\,405 z^2}$$

07.25.03.8200.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{4}{27} \sqrt{\pi} (16z - 49) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{27} e^z (-64z^3 + 164z^2 + 50z + 27)$$

07.25.03.8201.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{4}{27} \sqrt{\pi} (16z + 49) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{27} e^{-z} (64z^3 + 164z^2 - 50z + 27)$$

07.25.03.8202.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (524288 z^6 - 2113536 z^5 + 1044480 z^4 + 376320 z^3 + 201600 z^2 - 12285 z + 10395) I_0\left(\frac{z}{2}\right) - \frac{1}{6081075 z^3} (32 e^{z/2} (524288 z^7 - 1589248 z^6 - 282624 z^5 - 176640 z^4 - 67200 z^3 + 47565 z^2 - 49140 z + 41580) I_1\left(\frac{z}{2}\right) - 6081075 z^2)}{6081075 z^2}$$

07.25.03.8203.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{2}{3} \sqrt{\pi} (2z - 7) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^z (-4z^3 + 12z^2 + 4z + 3)$$

07.25.03.8204.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{2}{3} \sqrt{\pi} (2z + 7) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4z^3 + 12z^2 - 4z + 3)$$

07.25.03.8205.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{20675655 z^3} (32 e^{z/2} (1048576 z^7 - 4685824 z^6 + 2433024 z^5 + 967680 z^4 + 779520 z^3 - 317520 z^2 + 717255 z - 1081080) I_0\left(\frac{z}{2}\right) - \frac{1}{20675655 z^4} (32 e^{z/2} (1048576 z^8 - 3637248 z^7 - 679936 z^6 - 482304 z^5 - 403200 z^4 + 623280 z^3 - 1405215 z^2 + 2869020 z - 4324320) I_1\left(\frac{z}{2}\right) - 20675655 z^3)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.8206.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{9} e^z (-12280 z^3 + 15540 z^2 - 702 z + 9) + \frac{256}{3} \sqrt{\pi} (16 z^{7/2} - 28 z^{5/2} + 5 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8207.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{9} e^{-z} (12280 z^3 + 15540 z^2 + 702 z + 9) + \frac{256}{3} \sqrt{\pi} (16 z^{7/2} + 28 z^{5/2} + 5 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8208.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{9} e^z (2048 z^3 - 4356 z^2 + 684 z + 9) - \frac{128}{9} \sqrt{\pi} (16 z^{7/2} - 42 z^{5/2} + 15 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8209.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{9} e^{-z} (-2048 z^3 - 4356 z^2 - 684 z + 9) - \frac{128}{9} \sqrt{\pi} (16 z^{7/2} + 42 z^{5/2} + 15 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8210.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (-32768 z^4 + 124928 z^3 - 104774 z^2 + 11970 z + 315) I_0\left(\frac{z}{2}\right) + \frac{2}{315} e^{z/2} (16384 z^4 - 46080 z^3 + 14429 z^2 + 388 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.8211.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{9} e^z (256 z^3 - 768 z^2 + 222 z + 9) - \frac{32}{9} \sqrt{\pi} z^{3/2} (8 z^2 - 28 z + 15) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8212.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{9} e^{-z} (-256 z^3 - 768 z^2 - 222 z + 9) - \frac{32}{9} \sqrt{\pi} z^{3/2} (8 z^2 + 28 z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.8213.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^{z/2} (-65536 z^4 + 307200 z^3 - 324096 z^2 + 53130 z + 2835) I_0\left(\frac{z}{2}\right) + e^{z/2} (65536 z^4 - 241664 z^3 + 115200 z^2 + 5514 z + 105) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.8214.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{15} e^z (128 z^3 - 496 z^2 + 216 z + 15) - \frac{16}{15} \sqrt{\pi} z^{3/2} (8 z^2 - 35 z + 25) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8215.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} (-128 z^3 - 496 z^2 - 216 z + 15) - \frac{16}{15} \sqrt{\pi} z^{3/2} (8 z^2 + 35 z + 25) \operatorname{erf}(\sqrt{z})$$

07.25.03.8216.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (65536 z^5 - 299008 z^4 + 193024 z^3 + 13056 z^2 + 615 z - 75) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (65536 z^4 - 364544 z^3 + 459264 z^2 - 96000 z - 7815) I_0\left(\frac{z}{2}\right)}{31185 z}$$

07.25.03.8217.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{9} e^z (32 z^3 - 152 z^2 + 90 z + 9) - \frac{2}{9} \sqrt{\pi} z^{3/2} (16 z^2 - 84 z + 75) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8218.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{9} e^{-z} (-32 z^3 - 152 z^2 - 90 z + 9) - \frac{2}{9} \sqrt{\pi} z^{3/2} (16 z^2 + 84 z + 75) \operatorname{erf}(\sqrt{z})$$

07.25.03.8219.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (131072 z^6 - 712704 z^5 + 582656 z^4 + 50176 z^3 + 4320 z^2 - 1185 z + 420) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (131072 z^5 - 843776 z^4 + 1229824 z^3 - 307200 z^2 - 34080 z + 105) I_0\left(\frac{z}{2}\right)}{135135 z^2}$$

07.25.03.8220.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{9} e^z (16 z^3 - 90 z^2 + 68 z + 9) - \frac{1}{9} \sqrt{\pi} z^{3/2} (16 z^2 - 98 z + 105) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8221.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{9} e^{-z} (-16z^3 - 90z^2 - 68z + 9) - \frac{1}{9} \sqrt{\pi} z^{3/2} (16z^2 + 98z + 105) \operatorname{erf}(\sqrt{z})$$

07.25.03.8222.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = \frac{128 e^{z/2} (32768z^7 - 206848z^6 + 205056z^5 + 21120z^4 + 3000z^3 - 1485z^2 + 1260z - 945) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (131072z^6 - 958464z^5 + 1582080z^4 - 453120z^3 - 64800z^2 + 1260z - 945) I_0\left(\frac{z}{2}\right)}{2027025z^3}$$

07.25.03.8223.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{2} e^z (2z^3 - 13z^2 + 12z + 2) - \frac{1}{4} \sqrt{\pi} z^{3/2} (4z^2 - 28z + 35) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8224.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{2} e^{-z} (-2z^3 - 13z^2 - 12z + 2) - \frac{1}{4} \sqrt{\pi} z^{3/2} (4z^2 + 28z + 35) \operatorname{erf}(\sqrt{z})$$

07.25.03.8225.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = \frac{1}{6891885z^4} \left(32 e^{z/2} (262144z^8 - 1884160z^7 + 2197504z^6 + 258048z^5 + 62400z^4 - 63480z^3 + 121275z^2 - 230580z + 332640) I_1\left(\frac{z}{2}\right) - \frac{1}{6891885z^3} \right) - 32 e^{z/2} (262144z^7 - 2146304z^6 + 3950592z^5 - 1259520z^4 - 229440z^3 + 27720z^2 - 57645z + 83160) I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{1}{2}$

07.25.03.8226.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{27} e^z (-1024z^3 + 3520z^2 - 1626z + 27) + \frac{16}{27} \sqrt{\pi} (64z^{7/2} - 252z^{5/2} + 180z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8227.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{27} e^{-z} (1024z^3 + 3520z^2 + 1626z + 27) + \frac{16}{27} \sqrt{\pi} (64z^{7/2} + 252z^{5/2} + 180z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8228.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (16384z^4 - 87552z^3 + 115968z^2 - 36855z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16384z^4 + 71168z^3 - 52992z^2 + 3273z) I_1\left(\frac{z}{2}\right)$$

07.25.03.8229.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{27} e^z (-128z^3 + 608z^2 - 480z + 27) + \frac{8}{27} \sqrt{\pi} \sqrt{z} (16z^3 - 84z^2 + 90z - 15) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8230.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{27} e^{-z} (128z^3 + 608z^2 + 480z + 27) + \frac{8}{27} \sqrt{\pi} \sqrt{z} (16z^3 + 84z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.8231.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{e^{z/2} (32768 z^4 - 218112 z^3 + 371712 z^2 - 168000 z + 8505) I_0\left(\frac{z}{2}\right)}{8505} + \frac{e^{z/2} (-32768 z^4 + 185344 z^3 - 202752 z^2 + 25152 z + 105) I_1\left(\frac{z}{2}\right)}{8505}$$

07.25.03.8232.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{45} e^z (-64 z^3 + 388 z^2 - 438 z + 45) + \frac{2}{45} \sqrt{\pi} \sqrt{z} (32 z^3 - 210 z^2 + 300 z - 75) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8233.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{45} e^{-z} (64 z^3 + 388 z^2 + 438 z + 45) + \frac{2}{45} \sqrt{\pi} \sqrt{z} (32 z^3 + 210 z^2 + 300 z + 75) \operatorname{erf}(\sqrt{z})$$

07.25.03.8234.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, 3; z\right) = \frac{32 e^{z/2} (4096 z^4 - 32640 z^3 + 67776 z^2 - 39000 z + 2925) I_0\left(\frac{z}{2}\right)}{93555} - \frac{4 e^{z/2} (32768 z^5 - 228352 z^4 + 330240 z^3 - 63168 z^2 - 600 z + 45) I_1\left(\frac{z}{2}\right)}{93555 z}$$

07.25.03.8235.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{27} e^z (-16 z^3 + 118 z^2 - 174 z + 27) + \frac{1}{27} \sqrt{\pi} \sqrt{z} (16 z^3 - 126 z^2 + 225 z - 75) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8236.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{27} e^{-z} (16 z^3 + 118 z^2 + 174 z + 27) + \frac{1}{27} \sqrt{\pi} \sqrt{z} (16 z^3 + 126 z^2 + 225 z + 75) \operatorname{erf}(\sqrt{z})$$

07.25.03.8237.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (65536 z^5 - 608256 z^4 + 1486848 z^3 - 1027200 z^2 + 101520 z - 45) I_0\left(\frac{z}{2}\right)}{405405 z} - \frac{4 e^{z/2} (65536 z^6 - 542720 z^5 + 976896 z^4 - 256128 z^3 - 4080 z^2 + 675 z - 180) I_1\left(\frac{z}{2}\right)}{405405 z^2}$$

07.25.03.8238.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{108} e^z (-32 z^3 + 278 z^2 - 507 z + 108) + \frac{1}{216} \sqrt{\pi} \sqrt{z} (64 z^3 - 588 z^2 + 1260 z - 525) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8239.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{108} e^{-z} (32 z^3 + 278 z^2 + 507 z + 108) + \frac{1}{216} \sqrt{\pi} \sqrt{z} (64 z^3 + 588 z^2 + 1260 z + 525) \operatorname{erf}(\sqrt{z})$$

07.25.03.8240.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (65536 z^6 - 694272 z^5 + 1950720 z^4 - 1560960 z^3 + 190800 z^2 - 495 z + 315) I_0\left(\frac{z}{2}\right)}{6081075 z^2} - \frac{1}{6081075 z^3} 32 e^{z/2} (65536 z^7 - 628736 z^6 + 1354752 z^5 - 455040 z^4 - 10800 z^3 + 3105 z^2 - 1980 z + 1260) I_1\left(\frac{z}{2}\right)$$

07.25.03.8241.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{24} e^z (-4 z^3 + 40 z^2 - 87 z + 24) + \frac{1}{48} \sqrt{\pi} \sqrt{z} (8 z^3 - 84 z^2 + 210 z - 105) \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.8242.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{24} e^{-z} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} \sqrt{\pi} \sqrt{z} (8z^3 + 84z^2 + 210z + 105) \operatorname{erf}(\sqrt{z})$$

$$07.25.03.8243.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, 6; z\right) =$$

$$\frac{1}{20675655z^3} 32 e^{z/2} (131072z^7 - 1560576z^6 + 4952064z^5 - 4481280z^4 + 652320z^3 - 9090z^2 + 16695z - 22680)$$

$$I_0\left(\frac{z}{2}\right) - \frac{1}{20675655z^4} (32 e^{z/2}$$

$$(131072z^8 - 1429504z^7 + 3588096z^6 - 1476864z^5 - 50400z^4 + 26910z^3 - 39195z^2 + 66780z - 90720) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 1$

$$07.25.03.8244.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; 1, \frac{3}{2}; z\right) =$$

$$\frac{1}{945} e^{z/2} (2048z^4 - 14080z^3 + 25248z^2 - 12600z + 945) I_0\left(\frac{z}{2}\right) - \frac{8}{945} e^{z/2} (256z^4 - 1504z^3 + 1780z^2 - 291z) I_1\left(\frac{z}{2}\right)$$

$$07.25.03.8245.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; 1, \frac{5}{2}; z\right) =$$

$$\frac{e^{z/2} (1024z^4 - 8608z^3 + 19400z^2 - 12915z + 1575) I_0\left(\frac{z}{2}\right) + e^{z/2} (-1024z^4 + 7584z^3 - 12328z^2 + 3355z) I_1\left(\frac{z}{2}\right)}{1575}$$

$$07.25.03.8246.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; 1, \frac{7}{2}; z\right) =$$

$$\frac{1}{945} e^{z/2} (256z^4 - 2544z^3 + 6894z^2 - 5670z + 945) I_0\left(\frac{z}{2}\right) - \frac{2}{945} e^{z/2} (128z^4 - 1144z^3 + 2367z^2 - 912z) I_1\left(\frac{z}{2}\right)$$

$$07.25.03.8247.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; 1, \frac{9}{2}; z\right) =$$

$$\frac{1}{945} e^{z/2} (128z^4 - 1468z^3 + 4644z^2 - 4515z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-128z^4 + 1340z^3 - 3368z^2 + 1689z) I_1\left(\frac{z}{2}\right)$$

$$07.25.03.8248.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; 1, \frac{11}{2}; z\right) = \frac{1}{105} e^{z/2} (8z^4 - 104z^3 + 376z^2 - 420z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} (2z^4 - 24z^3 + 71z^2 - 44z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{3}{2}$

$$07.25.03.8249.01$$

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (32z^4 - 224z^3 + 360z^2 - 120z + 3) \operatorname{erfi}(\sqrt{z})}{54\sqrt{z}} - \frac{8}{27} e^z (2z^3 - 13z^2 + 17z - 3)$$

07.25.03.8250.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{8}{27} e^{-z} (2z^3 + 13z^2 + 17z + 3) + \frac{\sqrt{\pi} (32z^4 + 224z^3 + 360z^2 + 120z + 3) \operatorname{erf}(\sqrt{z})}{54\sqrt{z}}$$

07.25.03.8251.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{e^{z/2} (4096z^4 - 35328z^3 + 82752z^2 - 58800z + 8505) I_0\left(\frac{z}{2}\right)}{8505} + \frac{e^{z/2} (-4096z^4 + 31232z^3 - 53568z^2 + 16752z - 105) I_1\left(\frac{z}{2}\right)}{8505}$$

07.25.03.8252.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{90} e^z (-16z^3 + 132z^2 - 242z + 75) + \frac{\sqrt{\pi} (32z^4 - 280z^3 + 600z^2 - 300z + 15) \operatorname{erfi}(\sqrt{z})}{180\sqrt{z}}$$

07.25.03.8253.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{90} e^{-z} (16z^3 + 132z^2 + 242z + 75) + \frac{\sqrt{\pi} (32z^4 + 280z^3 + 600z^2 + 300z + 15) \operatorname{erf}(\sqrt{z})}{180\sqrt{z}}$$

07.25.03.8254.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (4096z^4 - 42496z^3 + 122688z^2 - 111600z + 23385) I_0\left(\frac{z}{2}\right)}{93555} - \frac{4 e^{z/2} (4096z^5 - 38400z^4 + 86336z^3 - 40368z^2 + 585z - 15) I_1\left(\frac{z}{2}\right)}{93555z}$$

07.25.03.8255.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{216} e^z (-16z^3 + 160z^2 - 378z + 171) + \frac{\sqrt{\pi} (32z^4 - 336z^3 + 900z^2 - 600z + 45) \operatorname{erfi}(\sqrt{z})}{432\sqrt{z}}$$

07.25.03.8256.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{216} e^{-z} (16z^3 + 160z^2 + 378z + 171) + \frac{\sqrt{\pi} (32z^4 + 336z^3 + 900z^2 + 600z + 45) \operatorname{erf}(\sqrt{z})}{432\sqrt{z}}$$

07.25.03.8257.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (8192z^5 - 99328z^4 + 340608z^3 - 374880z^2 + 101298z + 9) I_0\left(\frac{z}{2}\right)}{405405z} - \frac{4 e^{z/2} (8192z^6 - 91136z^5 + 253568z^4 - 158688z^3 + 3858z^2 - 213z + 36) I_1\left(\frac{z}{2}\right)}{405405z^2}$$

07.25.03.8258.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{432} e^z (-16z^3 + 188z^2 - 544z + 327) + \frac{\sqrt{\pi} (32z^4 - 392z^3 + 1260z^2 - 1050z + 105) \operatorname{erfi}(\sqrt{z})}{864\sqrt{z}}$$

07.25.03.8259.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{432} e^{-z} (16z^3 + 188z^2 + 544z + 327) + \frac{\sqrt{\pi} (32z^4 + 392z^3 + 1260z^2 + 1050z + 105) \operatorname{erf}(\sqrt{z})}{864\sqrt{z}}$$

07.25.03.8260.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (8192 z^6 - 113 664 z^5 + 451 200 z^4 - 580 320 z^3 + 189 810 z^2 + 90 z - 45) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (4096 z^7 - 52 736 z^6 + 174 912 z^5 - 137 520 z^4 + 4905 z^3 - 450 z^2 + 180 z - 90) I_1\left(\frac{z}{2}\right)}{6081 075 z^2}$$

07.25.03.8261.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{384} e^z (-8 z^3 + 108 z^2 - 370 z + 279) + \frac{\sqrt{\pi} (16 z^4 - 224 z^3 + 840 z^2 - 840 z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.8262.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{384} e^{-z} (8 z^3 + 108 z^2 + 370 z + 279) + \frac{\sqrt{\pi} (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.8263.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \frac{1}{20 675 655 z^3}$$

$$32 e^{z/2} (16 384 z^7 - 256 000 z^6 + 1 154 304 z^5 - 1 694 400 z^4 + 644 580 z^3 + 1350 z^2 - 2025 z + 2520) I_0\left(\frac{z}{2}\right) - \frac{1}{20 675 655 z^4}$$

$$32 e^{z/2} (16 384 z^8 - 239 616 z^7 + 922 880 z^6 - 874 944 z^5 + 42 660 z^4 - 6390 z^3 + 5715 z^2 - 8100 z + 10 080) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 2$

07.25.03.8264.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \frac{e^{z/2} (2048 z^4 - 21 696 z^3 + 64 560 z^2 - 61 530 z + 14 175) I_0\left(\frac{z}{2}\right) + e^{z/2} (-2048 z^4 + 19 648 z^3 - 45 936 z^2 + 23 370 z - 525) I_1\left(\frac{z}{2}\right)}{14 175}$$

07.25.03.8265.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{e^{z/2} (512 z^4 - 6432 z^3 + 23 196 z^2 - 27 510 z + 8505) I_0\left(\frac{z}{2}\right) + e^{z/2} (-512 z^4 + 5920 z^3 - 17 532 z^2 + 12 426 z - 525) I_1\left(\frac{z}{2}\right)}{8505}$$

07.25.03.8266.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{e^{z/2} (256 z^4 - 3720 z^3 + 15 756 z^2 - 22 260 z + 8505) I_0\left(\frac{z}{2}\right) + e^{z/2} (-256 z^4 + 3464 z^3 - 12 420 z^2 + 11 316 z - 735) I_1\left(\frac{z}{2}\right)}{8505}$$

07.25.03.8267.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; 2, \frac{11}{2}; z\right) = \frac{1}{945} e^{z/2} (16 z^4 - 264 z^3 + 1284 z^2 - 2100 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16 z^4 + 248 z^3 - 1044 z^2 + 1164 z - 105) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{5}{2}$

07.25.03.8268.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-128 z^4 + 1336 z^3 - 3396 z^2 + 1810 z - 15)}{2400 z} + \frac{\sqrt{\pi} (256 z^5 - 2800 z^4 + 8000 z^3 - 6000 z^2 + 600 z + 15) \operatorname{erfi}(\sqrt{z})}{4800 z^{3/2}}$$

07.25.03.8269.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (128 z^4 + 1336 z^3 + 3396 z^2 + 1810 z + 15)}{2400 z} + \frac{\sqrt{\pi} (256 z^5 + 2800 z^4 + 8000 z^3 + 6000 z^2 + 600 z - 15) \operatorname{erf}(\sqrt{z})}{4800 z^{3/2}}$$

07.25.03.8270.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{8 e^{z/2} (1024 z^4 - 13088 z^3 + 48360 z^2 - 59415 z + 19500) I_0\left(\frac{z}{2}\right)}{155925} - \frac{4 e^{z/2} (2048 z^5 - 24128 z^4 + 73616 z^3 - 55230 z^2 + 2850 z + 75) I_1\left(\frac{z}{2}\right)}{155925 z}$$

07.25.03.8271.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-64 z^4 + 808 z^3 - 2628 z^2 + 2010 z - 45)}{2880 z} + \frac{\sqrt{\pi} (128 z^5 - 1680 z^4 + 6000 z^3 - 6000 z^2 + 900 z + 45) \operatorname{erfi}(\sqrt{z})}{5760 z^{3/2}}$$

07.25.03.8272.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (64 z^4 + 808 z^3 + 2628 z^2 + 2010 z + 45)}{2880 z} + \frac{\sqrt{\pi} (128 z^5 + 1680 z^4 + 6000 z^3 + 6000 z^2 + 900 z - 45) \operatorname{erf}(\sqrt{z})}{5760 z^{3/2}}$$

07.25.03.8273.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (4096 z^5 - 61312 z^4 + 270560 z^3 - 405060 z^2 + 169170 z - 15) I_0\left(\frac{z}{2}\right)}{675675 z} - \frac{4 e^{z/2} (4096 z^6 - 57216 z^5 + 215392 z^4 - 214180 z^3 + 18270 z^2 + 1005 z - 60) I_1\left(\frac{z}{2}\right)}{675675 z^2}$$

07.25.03.8274.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (-128 z^4 + 1896 z^3 - 7516 z^2 + 7530 z - 315)}{11520 z} + \frac{\sqrt{\pi} (256 z^5 - 3920 z^4 + 16800 z^3 - 21000 z^2 + 4200 z + 315) \operatorname{erfi}(\sqrt{z})}{23040 z^{3/2}}$$

07.25.03.8275.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^4 + 1896 z^3 + 7516 z^2 + 7530 z + 315)}{11\,520 z} + \frac{\sqrt{\pi} (256 z^5 + 3920 z^4 + 16\,800 z^3 + 21\,000 z^2 + 4200 z - 315) \operatorname{erf}(\sqrt{z})}{23\,040 z^{3/2}}$$

07.25.03.8276.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (4096 z^6 - 70\,272 z^5 + 360\,480 z^4 - 634\,860 z^3 + 317\,700 z^2 - 135 z + 45) I_0\left(\frac{z}{2}\right)}{10\,135\,125 z^2} - \frac{32 e^{z/2} (4096 z^7 - 66\,176 z^6 + 296\,352 z^5 - 367\,500 z^4 + 45\,000 z^3 + 3915 z^2 - 540 z + 180) I_1\left(\frac{z}{2}\right)}{10\,135\,125 z^3}$$

07.25.03.8277.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{e^z (-16 z^4 + 272 z^3 - 1272 z^2 + 1580 z - 105)}{2560 z} + \frac{\sqrt{\pi} (32 z^5 - 560 z^4 + 2800 z^3 - 4200 z^2 + 1050 z + 105) \operatorname{erfi}(\sqrt{z})}{5120 z^{3/2}}$$

07.25.03.8278.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (16 z^4 + 272 z^3 + 1272 z^2 + 1580 z + 105)}{2560 z} + \frac{\sqrt{\pi} (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105) \operatorname{erf}(\sqrt{z})}{5120 z^{3/2}}$$

07.25.03.8279.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{1}{34\,459\,425 z^3} - \frac{32 e^{z/2} (8192 z^7 - 158\,464 z^6 + 926\,400 z^5 - 1\,873\,320 z^4 + 1\,082\,700 z^3 - 1620 z^2 + 1665 z - 1800) I_0\left(\frac{z}{2}\right) - \frac{1}{34\,459\,425 z^4}}{34\,459\,425 z^3} - \frac{32 e^{z/2} (8192 z^8 - 150\,272 z^7 + 780\,224 z^6 - 1\,160\,040 z^5 + 188\,100 z^4 + 23\,580 z^3 - 6705 z^2 + 6660 z - 7200) I_1\left(\frac{z}{2}\right)}{34\,459\,425 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 3$

07.25.03.8280.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{4 e^{z/2} (512 z^4 - 7776 z^3 + 35\,004 z^2 - 53\,880 z + 23\,445) I_0\left(\frac{z}{2}\right)}{93\,555} - \frac{4 e^{z/2} (512 z^5 - 7264 z^4 + 27\,996 z^3 - 29\,004 z^2 + 2775 z + 225) I_1\left(\frac{z}{2}\right)}{93\,555 z}$$

07.25.03.8281.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{16 e^{z/2} (64 z^4 - 1126 z^3 + 5976 z^2 - 11\,025 z + 5880) I_0\left(\frac{z}{2}\right)}{93\,555} - \frac{4 e^{z/2} (256 z^5 - 4248 z^4 + 19\,784 z^3 - 26\,184 z^2 + 3780 z + 525) I_1\left(\frac{z}{2}\right)}{93\,555 z}$$

$$\begin{aligned}
 & \text{07.25.03.8282.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; 3, \frac{11}{2}; z\right) = \\
 & \frac{4 e^{z/2} (16 z^4 - 320 z^3 + 1956 z^2 - 4200 z + 2625) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16 z^5 - 304 z^4 + 1660 z^3 - 2676 z^2 + 525 z + 105) I_1\left(\frac{z}{2}\right)}{10395}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.8283.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (-128 z^5 + 1952 z^4 - 8088 z^3 + 8772 z^2 - 510 z - 45)}{13824 z^2} + \\
 & \frac{\sqrt{\pi} (256 z^6 - 4032 z^5 + 18000 z^4 - 24000 z^3 + 5400 z^2 + 540 z + 45) \operatorname{erfi}(\sqrt{z})}{27648 z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8284.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (128 z^5 + 1952 z^4 + 8088 z^3 + 8772 z^2 + 510 z - 45)}{13824 z^2} + \\
 & \frac{\sqrt{\pi} (256 z^6 + 4032 z^5 + 18000 z^4 + 24000 z^3 + 5400 z^2 - 540 z + 45) \operatorname{erf}(\sqrt{z})}{27648 z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8285.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (1024 z^5 - 18240 z^4 + 98424 z^3 - 185700 z^2 + 102060 z + 45) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (1024 z^6 - 17216 z^5 + 81720 z^4 - 111564 z^3 + 17340 z^2 + 2835 z + 180) I_1\left(\frac{z}{2}\right)}{405405 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8286.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (-128 z^5 + 2288 z^4 - 11520 z^3 + 16224 z^2 - 1680 z - 315)}{27648 z^2} + \\
 & \frac{\sqrt{\pi} (256 z^6 - 4704 z^5 + 25200 z^4 - 42000 z^3 + 12600 z^2 + 1890 z + 315) \operatorname{erfi}(\sqrt{z})}{55296 z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8287.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (128 z^5 + 2288 z^4 + 11520 z^3 + 16224 z^2 + 1680 z - 315)}{27648 z^2} + \\
 & \frac{\sqrt{\pi} (256 z^6 + 4704 z^5 + 25200 z^4 + 42000 z^3 + 12600 z^2 - 1890 z + 315) \operatorname{erf}(\sqrt{z})}{55296 z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8288.01} \\
 & {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (1024 z^6 - 20928 z^5 + 131640 z^4 - 293640 z^3 + 192600 z^2 + 360 z - 45) I_0\left(\frac{z}{2}\right) - 128 e^{z/2} (256 z^7 - 4976 z^6 + 28062 z^5 - 47580 z^4 + 10425 z^3 + 2565 z^2 + 360 z - 45) I_1\left(\frac{z}{2}\right)}{6081075 z^3}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8289.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) &= \frac{e^z(-32z^5 + 656z^4 - 3888z^3 + 6744z^2 - 1050z - 315)}{12288z^2} + \\
 & \frac{\sqrt{\pi}(64z^6 - 1344z^5 + 8400z^4 - 16800z^3 + 6300z^2 + 1260z + 315)\operatorname{erfi}(\sqrt{z})}{24576z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8290.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) &= \frac{e^{-z}(32z^5 + 656z^4 + 3888z^3 + 6744z^2 + 1050z - 315)}{12288z^2} + \\
 & \frac{\sqrt{\pi}(64z^6 + 1344z^5 + 8400z^4 + 16800z^3 + 6300z^2 - 1260z + 315)\operatorname{erf}(\sqrt{z})}{24576z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8291.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{7}{2}, 6; z\right) &= \\
 & \frac{32e^{z/2}(2048z^7 - 47232z^6 + 339312z^5 - 872760z^4 + 660060z^3 + 3420z^2 - 1305z + 1080)I_0\left(\frac{z}{2}\right)}{20675655z^3} - \frac{1}{20675655z^4} \\
 & \frac{32e^{z/2}(2048z^8 - 45184z^7 + 295152z^6 - 598152z^5 + 170700z^4 + 55620z^3 + 13815z^2 - 5220z + 4320)I_1\left(\frac{z}{2}\right)}{20675655z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 4$

$$\begin{aligned}
 & 07.25.03.8292.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; 4, \frac{9}{2}; z\right) &= \frac{4e^{z/2}(512z^5 - 10576z^4 + 67464z^3 - 153300z^2 + 102900z + 315)I_0\left(\frac{z}{2}\right)}{405405z} - \\
 & \frac{4e^{z/2}(512z^6 - 10064z^5 + 57656z^4 - 100164z^3 + 23100z^2 + 6195z + 1260)I_1\left(\frac{z}{2}\right)}{405405z^2}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8293.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; 4, \frac{11}{2}; z\right) &= \frac{4e^{z/2}(32z^5 - 752z^4 + 5536z^3 - 14700z^2 + 11550z + 105)I_0\left(\frac{z}{2}\right)}{45045z} - \\
 & \frac{4e^{z/2}(32z^6 - 720z^5 + 4832z^4 - 10196z^3 + 3150z^2 + 1155z + 420)I_1\left(\frac{z}{2}\right)}{45045z^2}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{9}{2}$

$$\begin{aligned}
 & 07.25.03.8294.01 \\
 {}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) &= \frac{e^z(-512z^6 + 10720z^5 - 65456z^4 + 118992z^3 - 21000z^2 - 7770z - 1575)}{221184z^3} + \\
 & \frac{1}{442368z^{7/2}}\sqrt{\pi}(1024z^7 - 21952z^6 + 141120z^5 - 294000z^4 + 117600z^3 + 26460z^2 + 8820z + 1575)\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.8295.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (512 z^6 + 10720 z^5 + 65456 z^4 + 118992 z^3 + 21000 z^2 - 7770 z + 1575)}{221184 z^3} + \frac{1}{442368 z^{7/2}} \sqrt{\pi} (1024 z^7 + 21952 z^6 + 141120 z^5 + 294000 z^4 + 117600 z^3 - 26460 z^2 + 8820 z - 1575) \operatorname{erf}(\sqrt{z})$$

07.25.03.8296.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (512 z^6 - 12144 z^5 + 90480 z^4 - 244020 z^3 + 195300 z^2 + 2205 z + 315) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (512 z^7 - 11632 z^6 + 79104 z^5 - 170220 z^4 + 54600 z^3 + 21105 z^2 + 8820 z + 1260) I_1\left(\frac{z}{2}\right)}{6081075 z^2}$$

07.25.03.8297.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (-64 z^6 + 1536 z^5 - 11024 z^4 + 24576 z^3 - 6300 z^2 - 3360 z - 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 - 3136 z^6 + 23520 z^5 - 58800 z^4 + 29400 z^3 + 8820 z^2 + 4410 z + 1575) \operatorname{erfi}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.8298.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1536 z^5 + 11024 z^4 + 24576 z^3 + 6300 z^2 - 3360 z + 1575)}{49152 z^3} + \frac{\sqrt{\pi} (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.8299.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{1}{20675655 z^3} + \frac{32 e^{z/2} (1024 z^7 - 27424 z^6 + 233712 z^5 - 729120 z^4 + 673260 z^3 + 17010 z^2 + 6615 z - 2520) I_0\left(\frac{z}{2}\right) - \frac{1}{20675655 z^4} + 32 e^{z/2} (1024 z^8 - 26400 z^7 + 207824 z^6 - 533472 z^5 + 220500 z^4 + 109410 z^3 + 67725 z^2 + 26460 z - 10080) I_1\left(\frac{z}{2}\right)}{20675655 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 5$

07.25.03.8300.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; 5, \frac{11}{2}; z\right) = \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23520 z^3 + 22050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675675 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{11}{2}$

07.25.03.8301.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{1048576 z^{9/2}}$$

$$\frac{3\sqrt{\pi} (256 z^8 - 7168 z^7 + 62720 z^6 - 188160 z^5 + 117600 z^4 + 47040 z^3 + 35280 z^2 + 25200 z + 11025) \operatorname{erfi}(\sqrt{z}) - 3 e^z (128 z^7 - 3520 z^6 + 29664 z^5 - 80848 z^4 + 29400 z^3 + 21420 z^2 + 17850 z + 11025)}{524288 z^4}$$

07.25.03.8302.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29664 z^5 + 80848 z^4 + 29400 z^3 - 21420 z^2 + 17850 z - 11025)}{524288 z^4} + \frac{1}{1048576 z^{9/2}}$$

$$3\sqrt{\pi} (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025) \operatorname{erf}(\sqrt{z})$$

07.25.03.8303.01

$${}_2F_2\left(-\frac{7}{2}, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right) - \frac{1}{2297295 z^4} 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)}{2297295 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = -\frac{11}{2}$

07.25.03.8304.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{15436575} (32 z^{13} + 2272 z^{12} + 60944 z^{11} + 779304 z^{10} + 4907658 z^9 + 13975080 z^8 + 13449060 z^7 + 1330560 z^6 + 120960 z^5 + 272160 z^4 - 1512000 z^3 + 4630500 z^2 - 10716300 z + 15436575) + \frac{1}{15436575} (e^z \sqrt{\pi} (32 z^{27/2} + 2288 z^{25/2} + 62064 z^{23/2} + 808680 z^{21/2} + 5269530 z^{19/2} + 16105635 z^{17/2} + 18721080 z^{15/2} + 4680270 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.8305.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{15436575} (-32 z^{13} + 2272 z^{12} - 60944 z^{11} + 779304 z^{10} - 4907658 z^9 + 13975080 z^8 - 13449060 z^7 + 1330560 z^6 - 120960 z^5 + 272160 z^4 + 1512000 z^3 + 4630500 z^2 + 10716300 z + 15436575) + \frac{1}{15436575} (e^{-z} \sqrt{\pi} (32 z^{27/2} - 2288 z^{25/2} + 62064 z^{23/2} - 808680 z^{21/2} + 5269530 z^{19/2} - 16105635 z^{17/2} + 18721080 z^{15/2} - 4680270 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.8306.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{1403325} (-16z^{12} - 1024z^{11} - 24336z^{10} - 268464z^9 - 1390935z^8 - 2922930z^7 - 1330560z^6 + 120960z^5 + 90720z^4 - 302400z^3 + 661500z^2 - 1190700z + 1403325) + \frac{1}{2806650} (e^z \sqrt{\pi} (-32z^{25/2} - 2064z^{23/2} - 49680z^{21/2} - 560280z^{19/2} - 3028410z^{17/2} - 7020405z^{15/2} - 4680270z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.8307.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{1403325} (-16z^{12} + 1024z^{11} - 24336z^{10} + 268464z^9 - 1390935z^8 + 2922930z^7 - 1330560z^6 - 120960z^5 + 90720z^4 + 302400z^3 + 661500z^2 + 1190700z + 1403325) + \frac{1}{2806650} (e^{-z} \sqrt{\pi} (32z^{25/2} - 2064z^{23/2} + 49680z^{21/2} - 560280z^{19/2} + 3028410z^{17/2} - 7020405z^{15/2} + 4680270z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.8308.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{311850} (16z^{11} + 912z^{10} + 18872z^9 + 174540z^8 + 701145z^7 + 887040z^6 - 241920z^5 + 181440z^4 - 201600z^3 + 264600z^2 - 340200z + 311850) + \frac{1}{623700} e^z \sqrt{\pi} (32z^{23/2} + 1840z^{21/2} + 38640z^{19/2} + 367080z^{17/2} + 1560090z^{15/2} + 2340135z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8309.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{311850} (-16z^{11} + 912z^{10} - 18872z^9 + 174540z^8 - 701145z^7 + 887040z^6 + 241920z^5 + 181440z^4 + 201600z^3 + 264600z^2 + 340200z + 311850) + \frac{1}{623700} e^{-z} \sqrt{\pi} (32z^{23/2} - 1840z^{21/2} + 38640z^{19/2} - 367080z^{17/2} + 1560090z^{15/2} - 2340135z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8310.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{89100} (-16z^{10} - 800z^9 - 14080z^8 - 104520z^7 - 289179z^6 - 57510z^5 + 293490z^4 - 403200z^3 + 176400z^2 - 136080z + 89100) + \frac{1}{178200} (e^z \sqrt{\pi} (-32z^{21/2} - 1616z^{19/2} - 28944z^{17/2} - 222360z^{15/2} - 670650z^{13/2} - 328185z^{11/2} + 656370z^{9/2} - 656370z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.8311.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{89100} (-16z^{10} + 800z^9 - 14080z^8 + 104520z^7 - 289179z^6 + 57510z^5 + 293490z^4 + 403200z^3 + 176400z^2 + 136080z + 89100) + \frac{1}{178200} (e^{-z} \sqrt{\pi} (32z^{21/2} - 1616z^{19/2} + 28944z^{17/2} - 222360z^{15/2} + 670650z^{13/2} - 328185z^{11/2} - 656370z^{9/2} - 656370z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.8312.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{35640} (16z^9 + 688z^8 + 9960z^7 + 55044z^6 + 73197z^5 - 144180z^4 - 4410z^3 + 352800z^2 - 90720z + 35640) + \frac{1}{71280} (e^z \sqrt{\pi} (32z^{19/2} + 1392z^{17/2} + 20592z^{15/2} + 119400z^{13/2} + 193050z^{11/2} - 250965z^{9/2} - 154440z^{7/2} + 810810z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.8313.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{35640} (-16z^9 + 688z^8 - 9960z^7 + 55044z^6 - 73197z^5 - 144180z^4 + 4410z^3 + 352800z^2 + 90720z + 35640) + \frac{1}{71280} (e^{-z} \sqrt{\pi} (32z^{19/2} - 1392z^{17/2} + 20592z^{15/2} - 119400z^{13/2} + 193050z^{11/2} + 250965z^{9/2} - 154440z^{7/2} - 810810z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.8314.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{-16z^8 - 576z^7 - 6512z^6 - 22752z^5 + 15201z^4 + 93030z^3 - 165060z^2 - 181440z + 23760}{23760} + \frac{1}{47520} (e^z \sqrt{\pi} (-32z^{17/2} - 1168z^{15/2} - 13584z^{13/2} - 51480z^{11/2} + 12870z^{9/2} + 212355z^{7/2} - 270270z^{5/2} - 540540z^{3/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.8315.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{-16z^8 + 576z^7 - 6512z^6 + 22752z^5 + 15201z^4 - 93030z^3 - 165060z^2 + 181440z + 23760}{23760} + \frac{1}{47520} (e^{-z} \sqrt{\pi} (32z^{17/2} - 1168z^{15/2} + 13584z^{13/2} - 51480z^{11/2} - 12870z^{9/2} + 212355z^{7/2} + 270270z^{5/2} - 540540z^{3/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.8316.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{16z^7 + 464z^6 + 3736z^5 + 4284z^4 - 30975z^3 - 840z^2 + 154980z + 47520}{47520} + \frac{1}{95040} (e^z \sqrt{\pi} (32z^{15/2} + 944z^{13/2} + 7920z^{11/2} + 11880z^{9/2} - 60390z^{7/2} - 31185z^{5/2} + 332640z^{3/2} + 207900\sqrt{z}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.8317.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{-16z^7 + 464z^6 - 3736z^5 + 4284z^4 + 30975z^3 - 840z^2 - 154980z + 47520}{47520} + \frac{1}{95040} \\ \left(e^{-z}\sqrt{\pi}\left(32z^{15/2} - 944z^{13/2} + 7920z^{11/2} - 11880z^{9/2} - 60390z^{7/2} + 31185z^{5/2} + 332640z^{3/2} - 207900\sqrt{z}\right)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.8318.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, 1; z\right) = \frac{e^z(4z^7 + 104z^6 + 699z^5 + 75z^4 - 6600z^3 + 4680z^2 + 33480z + 11880)}{11880}$$

07.25.03.8319.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{16z^6 + 352z^5 + 1632z^4 - 3720z^3 - 15645z^2 + 43470z + 66690}{95040} + \\ \frac{e^z\sqrt{\pi}\left(32z^7 + 720z^6 + 3600z^5 - 6120z^4 - 35910z^3 + 76545z^2 + 179550z + 28350\right)\operatorname{erf}(\sqrt{z})}{190080\sqrt{z}}$$

07.25.03.8320.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{16z^6 - 352z^5 + 1632z^4 + 3720z^3 - 15645z^2 - 43470z + 66690}{95040} + \\ \frac{1}{190080\sqrt{z}} e^{-z}\sqrt{\pi}\left(-32z^7 + 720z^6 - 3600z^5 - 6120z^4 + 35910z^3 + 76545z^2 - 179550z + 28350\right)\operatorname{erfi}(\sqrt{z})$$

07.25.03.8321.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, 2; z\right) = \frac{e^z(4z^6 + 76z^5 + 243z^4 - 1140z^3 - 2040z^2 + 10800z + 11880)}{11880}$$

07.25.03.8322.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{16z^6 + 240z^5 + 200z^4 - 4620z^3 + 2709z^2 + 33540z + 4410}{63360z} + \\ \frac{e^z\sqrt{\pi}\left(32z^7 + 496z^6 + 624z^5 - 9240z^4 + 1050z^3 + 73395z^2 + 32760z - 4410\right)\operatorname{erf}(\sqrt{z})}{126720z^{3/2}}$$

07.25.03.8323.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-16z^6 + 240z^5 - 200z^4 - 4620z^3 - 2709z^2 + 33540z - 4410}{63360z} + \\ \frac{e^{-z}\sqrt{\pi}\left(32z^7 - 496z^6 + 624z^5 + 9240z^4 + 1050z^3 - 73395z^2 + 32760z + 4410\right)\operatorname{erfi}(\sqrt{z})}{126720z^{3/2}}$$

07.25.03.8324.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, 3; z\right) = \frac{e^z(4z^5 + 48z^4 - 45z^3 - 915z^2 + 1620z + 5940)}{5940}$$

07.25.03.8325.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{16z^6 + 128z^5 - 560z^4 - 1776z^3 + 9447z^2 + 5250z - 2520}{25344z^2} + \\ \frac{e^z\sqrt{\pi}\left(32z^7 + 272z^6 - 1008z^5 - 4200z^4 + 17850z^3 + 19845z^2 - 6930z + 2520\right)\operatorname{erf}(\sqrt{z})}{50688z^{5/2}}$$

$$\begin{aligned}
 & \text{07.25.03.8326.01} \\
 {}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, \frac{7}{2}; -z\right) &= \frac{16z^6 - 128z^5 - 560z^4 + 1776z^3 + 9447z^2 - 5250z - 2520}{25344z^2} + \\
 & \frac{e^{-z}\sqrt{\pi}(-32z^7 + 272z^6 + 1008z^5 - 4200z^4 - 17850z^3 + 19845z^2 + 6930z + 2520)\operatorname{erfi}(\sqrt{z})}{50688z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8327.01} \\
 {}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, 4; z\right) &= \frac{e^z(4z^4 + 20z^3 - 165z^2 - 90z + 1980)}{1980}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8328.01} \\
 {}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, \frac{9}{2}; z\right) &= \frac{7(16z^6 + 16z^5 - 648z^4 + 1452z^3 + 3369z^2 - 3600z + 3240)}{50688z^3} + \\
 & \frac{7e^z\sqrt{\pi}(32z^7 + 48z^6 - 1296z^5 + 2280z^4 + 8730z^3 - 6345z^2 + 5760z - 3240)\operatorname{erf}(\sqrt{z})}{101376z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8329.01} \\
 {}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, \frac{9}{2}; -z\right) &= \frac{7e^{-z}\sqrt{\pi}(32z^7 - 48z^6 - 1296z^5 - 2280z^4 + 8730z^3 + 6345z^2 + 5760z + 3240)\operatorname{erfi}(\sqrt{z})}{101376z^{7/2}} - \\
 & \frac{7(16z^6 - 16z^5 - 648z^4 - 1452z^3 + 3369z^2 + 3600z + 3240)}{50688z^3}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8330.01} \\
 {}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, 5; z\right) &= \frac{1}{495}e^z(4z^3 - 8z^2 - 117z + 495)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8331.01} \\
 {}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, \frac{11}{2}; z\right) &= \frac{7(16z^6 - 96z^5 - 64z^4 + 1704z^3 - 3285z^2 + 6390z - 9450)}{11264z^4} + \\
 & \frac{7e^z\sqrt{\pi}(32z^7 - 176z^6 - 240z^5 + 3480z^4 - 5190z^3 + 9225z^2 - 12690z + 9450)\operatorname{erf}(\sqrt{z})}{22528z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8332.01} \\
 {}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, \frac{11}{2}; -z\right) &= \frac{7(16z^6 + 96z^5 - 64z^4 - 1704z^3 - 3285z^2 - 6390z - 9450)}{11264z^4} - \\
 & \frac{7e^{-z}\sqrt{\pi}(32z^7 + 176z^6 - 240z^5 - 3480z^4 - 5190z^3 - 9225z^2 - 12690z - 9450)\operatorname{erfi}(\sqrt{z})}{22528z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8333.01} \\
 {}_2F_2\left(-\frac{7}{2}, 6; -\frac{11}{2}, 6; z\right) &= \frac{1}{99}e^z(4z^2 - 36z + 99)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = -\frac{9}{2}$

07.25.03.8334.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{255150} (16z^{11} + 928z^{10} + 19704z^9 + 190092z^8 + 829425z^7 + 1338435z^6 + 241920z^5 + 60480z^4 - 120960z^3 + 189000z^2 - 264600z + 255150) + \frac{1}{510300} (e^z \sqrt{\pi} (32z^{23/2} + 1872z^{21/2} + 40320z^{19/2} + 399000z^{17/2} + 1831410z^{15/2} + 3357585z^{13/2} + 1322685z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.8335.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{255150} (-16z^{11} + 928z^{10} - 19704z^9 + 190092z^8 - 829425z^7 + 1338435z^6 - 241920z^5 + 60480z^4 + 120960z^3 + 189000z^2 + 264600z + 255150) + \frac{1}{510300} (e^{-z} \sqrt{\pi} (32z^{23/2} - 1872z^{21/2} + 40320z^{19/2} - 399000z^{17/2} + 1831410z^{15/2} - 3357585z^{13/2} + 1322685z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.8336.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{56700} (-16z^{10} - 832z^9 - 15552z^8 - 128280z^7 - 451395z^6 - 483840z^5 + 120960z^4 - 80640z^3 + 75600z^2 - 75600z + 56700) + \frac{1}{113400} e^z \sqrt{\pi} (-32z^{21/2} - 1680z^{19/2} - 31920z^{17/2} - 271320z^{15/2} - 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8337.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{56700} (-16z^{10} + 832z^9 - 15552z^8 + 128280z^7 - 451395z^6 + 483840z^5 + 120960z^4 + 80640z^3 + 75600z^2 + 75600z + 56700) + \frac{1}{113400} e^{-z} \sqrt{\pi} (32z^{21/2} - 1680z^{19/2} + 31920z^{17/2} - 271320z^{15/2} + 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8338.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{16200} (16z^9 + 736z^8 + 11880z^7 + 81108z^6 + 213165z^5 + 86265z^4 - 161280z^3 + 50400z^2 - 30240z + 16200) + \frac{1}{32400} e^z \sqrt{\pi} (32z^{19/2} + 1488z^{17/2} + 24480z^{15/2} + 173400z^{13/2} + 497250z^{11/2} + 328185z^{9/2} - 328185z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8339.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{16200} (-16z^9 + 736z^8 - 11880z^7 + 81108z^6 - 213165z^5 + 86265z^4 + 161280z^3 + 50400z^2 + 30240z + 16200) + \frac{1}{32400} e^{-z} \sqrt{\pi} (32z^{19/2} - 1488z^{17/2} + 24480z^{15/2} - 173400z^{13/2} + 497250z^{11/2} - 328185z^{9/2} - 328185z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8340.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{-16z^8 - 640z^7 - 8688z^6 - 46656z^5 - 76815z^4 + 52290z^3 + 100800z^2 - 20160z + 6480}{6480} + \frac{1}{12960} e^z \sqrt{\pi} (-32z^{17/2} - 1296z^{15/2} - 18000z^{13/2} - 101400z^{11/2} - 193050z^{9/2} + 57915z^{7/2} + 270270z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8341.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{-16z^8 + 640z^7 - 8688z^6 + 46656z^5 - 76815z^4 - 52290z^3 + 100800z^2 + 20160z + 6480}{6480} + \frac{1}{12960} e^{-z} \sqrt{\pi} (32z^{17/2} - 1296z^{15/2} + 18000z^{13/2} - 101400z^{11/2} + 193050z^{9/2} + 57915z^{7/2} - 270270z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8342.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{16z^7 + 544z^6 + 5976z^5 + 23004z^4 + 10185z^3 - 66465z^2 - 40320z + 4320}{4320} + \frac{1}{8640} e^z \sqrt{\pi} (32z^{15/2} + 1104z^{13/2} + 12480z^{11/2} + 51480z^{9/2} + 38610z^{7/2} - 135135z^{5/2} - 135135z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8343.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{-16z^7 + 544z^6 - 5976z^5 + 23004z^4 - 10185z^3 - 66465z^2 + 40320z + 4320}{4320} + \frac{1}{8640} e^{-z} \sqrt{\pi} (32z^{15/2} - 1104z^{13/2} + 12480z^{11/2} - 51480z^{9/2} + 38610z^{7/2} + 135135z^{5/2} - 135135z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8344.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{-16z^6 - 448z^5 - 3744z^4 - 8232z^3 + 13125z^2 + 39060z + 8640}{8640} + \frac{1}{17280} e^z \sqrt{\pi} (-32z^{13/2} - 912z^{11/2} - 7920z^{9/2} - 19800z^{7/2} + 20790z^{5/2} + 93555z^{3/2} + 41580\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8345.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{-16z^6 + 448z^5 - 3744z^4 + 8232z^3 + 13125z^2 - 39060z + 8640}{8640} + \frac{1}{17280} e^{-z} \sqrt{\pi} (32z^{13/2} - 912z^{11/2} + 7920z^{9/2} - 19800z^{7/2} - 20790z^{5/2} + 93555z^{3/2} - 41580\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8346.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, 1; z\right) = -\frac{e^z (2z^6 + 51z^5 + 375z^4 + 600z^3 - 1800z^2 - 3960z - 1080)}{1080}$$

07.25.03.8347.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{-16z^5 - 352z^4 - 1992z^3 - 420z^2 + 13755z + 12555}{17280} + \frac{e^z \sqrt{\pi} (-32z^6 - 720z^5 - 4320z^4 - 2520z^3 + 28350z^2 + 36855z + 4725) \operatorname{erf}(\sqrt{z})}{34560\sqrt{z}}$$

07.25.03.8348.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{16z^5 - 352z^4 + 1992z^3 - 420z^2 - 13755z + 12555}{17280} + \frac{e^{-z}\sqrt{\pi}(-32z^6 + 720z^5 - 4320z^4 + 2520z^3 + 28350z^2 - 36855z + 4725)\operatorname{erfi}(\sqrt{z})}{34560\sqrt{z}}$$

07.25.03.8349.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, 2; z\right) = -\frac{e^z(2z^5 + 39z^4 + 180z^3 - 120z^2 - 1440z - 1080)}{1080}$$

07.25.03.8350.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-16z^5 - 256z^4 - 720z^3 + 2352z^2 + 6585z + 630}{11520z} + \frac{e^z\sqrt{\pi}(-32z^6 - 528z^5 - 1680z^4 + 4200z^3 + 15750z^2 + 5355z - 630)\operatorname{erf}(\sqrt{z})}{23040z^{3/2}}$$

07.25.03.8351.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-16z^5 + 256z^4 - 720z^3 - 2352z^2 + 6585z - 630}{11520z} + \frac{e^{-z}\sqrt{\pi}(32z^6 - 528z^5 + 1680z^4 + 4200z^3 - 15750z^2 + 5355z + 630)\operatorname{erfi}(\sqrt{z})}{23040z^{3/2}}$$

07.25.03.8352.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, 3; z\right) = -\frac{1}{540}e^z(2z^4 + 27z^3 + 45z^2 - 300z - 540)$$

07.25.03.8353.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-16z^5 - 160z^4 + 72z^3 + 2004z^2 + 735z - 315}{4608z^2} + \frac{e^z\sqrt{\pi}(-32z^6 - 336z^5 + 4200z^3 + 3150z^2 - 945z + 315)\operatorname{erf}(\sqrt{z})}{9216z^{5/2}}$$

07.25.03.8354.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{16z^5 - 160z^4 - 72z^3 + 2004z^2 - 735z - 315}{4608z^2} + \frac{e^{-z}\sqrt{\pi}(-32z^6 + 336z^5 - 4200z^3 + 3150z^2 + 945z + 315)\operatorname{erfi}(\sqrt{z})}{9216z^{5/2}}$$

07.25.03.8355.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, 4; z\right) = -\frac{1}{180}e^z(2z^3 + 15z^2 - 30z - 180)$$

07.25.03.8356.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{7(16z^5 + 64z^4 - 384z^3 - 456z^2 + 435z - 360)}{9216z^3} - \frac{7e^z\sqrt{\pi}(32z^6 + 144z^5 - 720z^4 - 1320z^3 + 810z^2 - 675z + 360)\operatorname{erf}(\sqrt{z})}{18432z^{7/2}}$$

07.25.03.8357.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} \sqrt{\pi} (32 z^6 - 144 z^5 - 720 z^4 + 1320 z^3 + 810 z^2 + 675 z + 360) \operatorname{erfi}(\sqrt{z})}{18432 z^{7/2}} - \frac{7(16 z^5 - 64 z^4 - 384 z^3 + 456 z^2 + 435 z + 360)}{9216 z^3}$$

07.25.03.8358.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, 5; z\right) = -\frac{1}{45} e^z (2 z^2 + 3 z - 45)$$

07.25.03.8359.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, \frac{11}{2}; z\right) = -\frac{7(16 z^5 - 32 z^4 - 216 z^3 + 372 z^2 - 675 z + 945)}{2048 z^4} - \frac{7 e^z \sqrt{\pi} (32 z^6 - 48 z^5 - 480 z^4 + 600 z^3 - 990 z^2 + 1305 z - 945) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.8360.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{7(16 z^5 + 32 z^4 - 216 z^3 - 372 z^2 - 675 z - 945)}{2048 z^4} - \frac{7 e^{-z} \sqrt{\pi} (32 z^6 + 48 z^5 - 480 z^4 - 600 z^3 - 990 z^2 - 1305 z - 945) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.8361.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{9}{2}, 6; z\right) = -\frac{1}{9} e^z (2 z - 9)$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = -\frac{7}{2}$

07.25.03.8362.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{12600} (16 z^9 + 752 z^8 + 12552 z^7 + 90980 z^6 + 274845 z^5 + 241920 z^4 - 53760 z^3 + 30240 z^2 - 21600 z + 12600) + \frac{e^z \sqrt{\pi} (32 z^{19/2} + 1520 z^{17/2} + 25840 z^{15/2} + 193800 z^{13/2} + 629850 z^{11/2} + 692835 z^{9/2}) \operatorname{erf}(\sqrt{z})}{25200}$$

07.25.03.8363.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{12600} (-16 z^9 + 752 z^8 - 12552 z^7 + 90980 z^6 - 274845 z^5 + 241920 z^4 + 53760 z^3 + 30240 z^2 + 21600 z + 12600) + \frac{1}{25200} e^{-z} \sqrt{\pi} (32 z^{19/2} - 1520 z^{17/2} + 25840 z^{15/2} - 193800 z^{13/2} + 629850 z^{11/2} - 692835 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.8364.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{-16z^8 - 672z^7 - 9872z^6 - 61680z^5 - 155655z^4 - 107520z^3 + 20160z^2 - 8640z + 3600}{3600} + \\
 & \frac{e^z \sqrt{\pi} (-32z^{17/2} - 1360z^{15/2} - 20400z^{13/2} - 132600z^{11/2} - 364650z^{9/2} - 328185z^{7/2}) \operatorname{erf}(\sqrt{z})}{7200}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8365.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{-16z^8 + 672z^7 - 9872z^6 + 61680z^5 - 155655z^4 + 107520z^3 + 20160z^2 + 8640z + 3600}{3600} + \\
 & \frac{e^{-z} \sqrt{\pi} (32z^{17/2} - 1360z^{15/2} + 20400z^{13/2} - 132600z^{11/2} + 364650z^{9/2} - 328185z^{7/2}) \operatorname{erfi}(\sqrt{z})}{7200}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8366.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{16z^7 + 592z^6 + 7512z^5 + 39420z^4 + 79905z^3 + 40320z^2 - 5760z + 1440}{1440} + \\
 & \frac{e^z \sqrt{\pi} (32z^{15/2} + 1200z^{13/2} + 15600z^{11/2} + 85800z^{9/2} + 193050z^{7/2} + 135135z^{5/2}) \operatorname{erf}(\sqrt{z})}{2880}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8367.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{-16z^7 + 592z^6 - 7512z^5 + 39420z^4 - 79905z^3 + 40320z^2 + 5760z + 1440}{1440} + \\
 & \frac{e^{-z} \sqrt{\pi} (32z^{15/2} - 1200z^{13/2} + 15600z^{11/2} - 85800z^{9/2} + 193050z^{7/2} - 135135z^{5/2}) \operatorname{erfi}(\sqrt{z})}{2880}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8368.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{960} (-16z^6 - 512z^5 - 5472z^4 - 23240z^3 - 35595z^2 - 11520z + 960) + \\
 & \frac{e^z \sqrt{\pi} (-32z^{13/2} - 1040z^{11/2} - 11440z^{9/2} - 51480z^{7/2} - 90090z^{5/2} - 45045z^{3/2}) \operatorname{erf}(\sqrt{z})}{1920}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8369.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{960} (-16z^6 + 512z^5 - 5472z^4 + 23240z^3 - 35595z^2 + 11520z + 960) + \\
 & \frac{e^{-z} \sqrt{\pi} (32z^{13/2} - 1040z^{11/2} + 11440z^{9/2} - 51480z^{7/2} + 90090z^{5/2} - 45045z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1920}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8370.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920}{1920} + \\
 & \frac{e^z \sqrt{\pi} (32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z}) \operatorname{erf}(\sqrt{z})}{3840}
 \end{aligned}$$

07.25.03.8371.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920}{1920} + \frac{e^{-z}\sqrt{\pi}(32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.8372.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, 1; z\right) = \frac{1}{120} e^z (z^5 + 25z^4 + 200z^3 + 600z^2 + 600z + 120)$$

07.25.03.8373.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{16z^4 + 352z^3 + 2352z^2 + 5280z + 2895}{3840} + \frac{e^z\sqrt{\pi}(32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945)\operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.8374.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{16z^4 - 352z^3 + 2352z^2 - 5280z + 2895}{3840} + \frac{e^{-z}\sqrt{\pi}(-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945)\operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.8375.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, 2; z\right) = \frac{1}{120} e^z (z^4 + 20z^3 + 120z^2 + 240z + 120)$$

07.25.03.8376.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z\sqrt{\pi}(32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105)\operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.8377.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z}\sqrt{\pi}(32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105)\operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.8378.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, 3; z\right) = \frac{1}{60} e^z (z^3 + 15z^2 + 60z + 60)$$

07.25.03.8379.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{16z^4 + 192z^3 + 512z^2 + 120z - 45}{1024z^2} + \frac{e^z\sqrt{\pi}(32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45)\operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

$$\begin{aligned}
 & \text{07.25.03.8380.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, \frac{7}{2}; -z\right) = \\
 & \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z}\sqrt{\pi}(-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45)\operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8381.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, 4; z\right) = \frac{1}{20} e^z (z^2 + 10z + 20)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8382.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, \frac{9}{2}; z\right) = \\
 & \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z\sqrt{\pi}(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)\operatorname{erf}(\sqrt{z})}{4096z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8383.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{7e^{-z}\sqrt{\pi}(32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45)\operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8384.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, 5; z\right) = \frac{1}{5} e^z (z + 5)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8385.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, \frac{11}{2}; z\right) = \\
 & \frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z\sqrt{\pi}(32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8386.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z}\sqrt{\pi}(32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8387.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{7}{2}, 6; z\right) = e^z
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.8388.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; -\frac{5}{2}, 1; z\right) = \frac{1}{240} e^z (-7z^4 + 10768z^3 + 3984z^2 + 1776z + 240) - \frac{7293}{160} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.8389.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{5}{2}, 1; -z\right) = \frac{1}{240} e^{-z} (-7z^4 - 10768z^3 + 3984z^2 - 1776z + 240) - \frac{7293}{160} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.8390.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{5}{2}, 2; z\right) = \frac{1}{30} e^z (303z^3 + 134z^2 + 96z + 30) - \frac{2431}{240} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8391.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{5}{2}, 2; -z\right) = \frac{1}{30} e^{-z} (-303z^3 + 134z^2 - 96z + 30) - \frac{2431}{240} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.8392.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{5}{2}, 3; z\right) = \frac{1}{60} e^z (221z^3 + 107z^2 + 108z + 60) - \frac{221}{60} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8393.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{5}{2}, 3; -z\right) = \frac{1}{60} e^{-z} (-221z^3 + 107z^2 - 108z + 60) - \frac{221}{60} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.8394.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{5}{2}, 4; z\right) = \frac{1}{20} e^z (34z^3 + 17z^2 + 22z + 20) - \frac{17}{10} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8395.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{5}{2}, 4; -z\right) = \frac{1}{20} e^{-z} (-34z^3 + 17z^2 - 22z + 20) - \frac{17}{10} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.8396.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{5}{2}, 5; z\right) = \frac{1}{75} e^z (68z^3 + 34z^2 + 51z + 75) - \frac{68}{75} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8397.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{5}{2}, 5; -z\right) = \frac{1}{75} e^{-z} (-68z^3 + 34z^2 - 51z + 75) - \frac{68}{75} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.8398.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{5}{2}, 6; z\right) = \frac{1}{15} e^z (8z^3 + 4z^2 + 6z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8399.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{5}{2}, 6; -z\right) = \frac{1}{15} e^{-z} (-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15} \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = -\frac{3}{2}$

07.25.03.8400.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{3}{2}, 1; z\right) = \frac{1}{192} e^z (-21865z^3 + 20928z^2 + 2496z + 192) + \frac{429}{128} \sqrt{\pi} (34z^{7/2} - 49z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8401.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{3}{2}, 1; -z\right) = \frac{1}{192} e^{-z} (21865z^3 + 20928z^2 - 2496z + 192) + \frac{429}{128} \sqrt{\pi} (34z^{7/2} + 49z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8402.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{3}{2}, 2; z\right) = \frac{1}{96} e^z (-2431 z^3 + 3296 z^2 + 576 z + 96) + \frac{143}{192} \sqrt{\pi} (34 z^{7/2} - 63 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8403.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{3}{2}, 2; -z\right) = \frac{1}{96} e^{-z} (2431 z^3 + 3296 z^2 - 576 z + 96) + \frac{143}{192} \sqrt{\pi} (34 z^{7/2} + 63 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8404.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{3}{2}, 3; z\right) = \frac{1}{24} e^z (-221 z^3 + 390 z^2 + 88 z + 24) + \frac{13}{48} \sqrt{\pi} (34 z^{7/2} - 77 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8405.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{3}{2}, 3; -z\right) = \frac{1}{24} e^{-z} (221 z^3 + 390 z^2 - 88 z + 24) + \frac{13}{48} \sqrt{\pi} (34 z^{7/2} + 77 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8406.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{3}{2}, 4; z\right) = \frac{1}{4} e^z (-17 z^3 + 37 z^2 + 10 z + 4) + \frac{1}{8} \sqrt{\pi} (34 z^{7/2} - 91 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8407.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{3}{2}, 4; -z\right) = \frac{1}{4} e^{-z} (17 z^3 + 37 z^2 - 10 z + 4) + \frac{1}{8} \sqrt{\pi} (34 z^{7/2} + 91 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8408.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{3}{2}, 5; z\right) = \frac{1}{15} e^z (-34 z^3 + 88 z^2 + 27 z + 15) + \frac{1}{15} \sqrt{\pi} (34 z^{7/2} - 105 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8409.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{3}{2}, 5; -z\right) = \frac{1}{15} e^{-z} (34 z^3 + 88 z^2 - 27 z + 15) + \frac{1}{15} \sqrt{\pi} (34 z^{7/2} + 105 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8410.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{3}{2}, 6; z\right) = \frac{1}{3} e^z (-4 z^3 + 12 z^2 + 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8411.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{3}{2}, 6; -z\right) = \frac{1}{3} e^{-z} (4 z^3 + 12 z^2 - 4 z + 3) + \frac{2}{3} \sqrt{\pi} (2 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = -\frac{1}{2}$

07.25.03.8412.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{1}{2}, 1; z\right) = \frac{1}{512} e^z (43\,758 z^3 - 104\,303 z^2 + 20\,992 z + 512) - \frac{429 \sqrt{\pi} (204 z^{7/2} - 588 z^{5/2} + 245 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1024}$$

07.25.03.8413.01

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{1}{2}, 1; -z\right) = \frac{1}{512} e^{-z} (-43\,758 z^3 - 104\,303 z^2 - 20\,992 z + 512) - \frac{429 \sqrt{\pi} (204 z^{7/2} + 588 z^{5/2} + 245 z^{3/2}) \operatorname{erf}(\sqrt{z})}{1024}$$

$$07.25.03.8414.01$$

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{1}{2}, 2; z\right) = \frac{1}{256} e^z (4862 z^3 - 15\,587 z^2 + 5120 z + 256) - \frac{143}{512} \sqrt{\pi} (68 z^{7/2} - 252 z^{5/2} + 147 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.8415.01$$

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{1}{2}, 2; -z\right) = \frac{1}{256} e^{-z} (-4862 z^3 - 15\,587 z^2 - 5120 z + 256) - \frac{143}{512} \sqrt{\pi} (68 z^{7/2} + 252 z^{5/2} + 147 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

$$07.25.03.8416.01$$

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{1}{2}, 3; z\right) = \frac{1}{64} e^z (442 z^3 - 1781 z^2 + 832 z + 64) - \frac{13}{128} \sqrt{\pi} (68 z^{7/2} - 308 z^{5/2} + 231 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.8417.01$$

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{1}{2}, 3; -z\right) = \frac{1}{64} e^{-z} (-442 z^3 - 1781 z^2 - 832 z + 64) - \frac{13}{128} \sqrt{\pi} (68 z^{7/2} + 308 z^{5/2} + 231 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

$$07.25.03.8418.01$$

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{1}{2}, 4; z\right) = \frac{1}{32} e^z (102 z^3 - 495 z^2 + 304 z + 32) + \frac{1}{64} \sqrt{\pi} (-204 z^{7/2} + 1092 z^{5/2} - 1001 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.8419.01$$

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{1}{2}, 4; -z\right) = \frac{1}{32} e^{-z} (-102 z^3 - 495 z^2 - 304 z + 32) + \frac{1}{64} \sqrt{\pi} (-204 z^{7/2} - 1092 z^{5/2} - 1001 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

$$07.25.03.8420.01$$

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{1}{2}, 5; z\right) = \frac{1}{20} e^z (34 z^3 - 193 z^2 + 148 z + 20) + \frac{1}{40} \sqrt{\pi} (-68 z^{7/2} + 420 z^{5/2} - 455 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.8421.01$$

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{1}{2}, 5; -z\right) = \frac{1}{20} e^{-z} (-34 z^3 - 193 z^2 - 148 z + 20) + \frac{1}{40} \sqrt{\pi} (-68 z^{7/2} - 420 z^{5/2} - 455 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

$$07.25.03.8422.01$$

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{1}{2}, 6; z\right) = \frac{1}{2} e^z (2 z^3 - 13 z^2 + 12 z + 2) + \frac{1}{4} \sqrt{\pi} (-4 z^{7/2} + 28 z^{5/2} - 35 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.8423.01$$

$${}_2F_2\left(-\frac{7}{2}, 6; -\frac{1}{2}, 6; -z\right) = \frac{1}{2} e^{-z} (-2 z^3 - 13 z^2 - 12 z + 2) + \frac{1}{4} \sqrt{\pi} (-4 z^{7/2} - 28 z^{5/2} - 35 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = \frac{1}{2}$

$$07.25.03.8424.01$$

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{1}{2}, 1; z\right) = \frac{e^z (-29\,172 z^3 + 111\,540 z^2 - 63\,809 z + 2048)}{2048} + \frac{33 \sqrt{\pi} (1768 z^{7/2} - 7644 z^{5/2} + 6370 z^{3/2} - 735 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{4096}$$

$$07.25.03.8425.01$$

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{1}{2}, 1; -z\right) = \frac{e^{-z} (29\,172 z^3 + 111\,540 z^2 + 63\,809 z + 2048)}{2048} + \frac{33 \sqrt{\pi} (1768 z^{7/2} + 7644 z^{5/2} + 6370 z^{3/2} + 735 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{4096}$$

07.25.03.8426.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{1}{2}, 2; z\right) = \frac{e^z (-9724 z^3 + 49192 z^2 - 43329 z + 3072)}{3072} + \frac{11 \sqrt{\pi} (1768 z^{7/2} - 9828 z^{5/2} + 11466 z^{3/2} - 2205 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{6144}$$

07.25.03.8427.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{1}{2}, 2; -z\right) = \frac{e^{-z} (9724 z^3 + 49192 z^2 + 43329 z + 3072)}{3072} + \frac{11 \sqrt{\pi} (1768 z^{7/2} + 9828 z^{5/2} + 11466 z^{3/2} + 2205 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{6144}$$

07.25.03.8428.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{1}{2}, 3; z\right) = \frac{1}{768} e^z (-884 z^3 + 5564 z^2 - 6669 z + 768) + \frac{\sqrt{\pi} (1768 z^{7/2} - 12012 z^{5/2} + 18018 z^{3/2} - 4851 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1536}$$

07.25.03.8429.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{1}{2}, 3; -z\right) = \frac{1}{768} e^{-z} (884 z^3 + 5564 z^2 + 6669 z + 768) + \frac{\sqrt{\pi} (1768 z^{7/2} + 12012 z^{5/2} + 18018 z^{3/2} + 4851 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{1536}$$

07.25.03.8430.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{1}{2}, 4; z\right) = \frac{1}{128} e^z (-68 z^3 + 512 z^2 - 779 z + 128) + \frac{1}{256} \sqrt{\pi} (136 z^{7/2} - 1092 z^{5/2} + 2002 z^{3/2} - 693 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8431.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{1}{2}, 4; -z\right) = \frac{1}{128} e^{-z} (68 z^3 + 512 z^2 + 779 z + 128) + \frac{1}{256} \sqrt{\pi} (136 z^{7/2} + 1092 z^{5/2} + 2002 z^{3/2} + 693 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8432.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{1}{2}, 5; z\right) = \frac{1}{240} e^z (-68 z^3 + 596 z^2 - 1101 z + 240) + \frac{1}{480} \sqrt{\pi} (136 z^{7/2} - 1260 z^{5/2} + 2730 z^{3/2} - 1155 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8433.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{1}{2}, 5; -z\right) = \frac{1}{240} e^{-z} (68 z^3 + 596 z^2 + 1101 z + 240) + \frac{1}{480} \sqrt{\pi} (136 z^{7/2} + 1260 z^{5/2} + 2730 z^{3/2} + 1155 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8434.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{1}{2}, 6; z\right) = \frac{1}{24} e^z (-4 z^3 + 40 z^2 - 87 z + 24) + \frac{1}{48} \sqrt{\pi} (8 z^{7/2} - 84 z^{5/2} + 210 z^{3/2} - 105 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8435.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{1}{2}, 6; -z\right) = \frac{1}{24} e^{-z} (4 z^3 + 40 z^2 + 87 z + 24) + \frac{1}{48} \sqrt{\pi} (8 z^{7/2} + 84 z^{5/2} + 210 z^{3/2} + 105 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = 1$

$$\begin{aligned}
 & \text{07.25.03.8436.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; 1, 1; z\right) = \\
 & \frac{e^{z/2} (14586 z^4 - 84513 z^3 + 124982 z^2 - 48160 z + 2240) I_0\left(\frac{z}{2}\right) - e^{z/2} (-14586 z^4 + 69927 z^3 - 62348 z^2 + 6312 z) I_1\left(\frac{z}{2}\right)}{2240} + \frac{e^{z/2} (-14586 z^4 + 69927 z^3 - 62348 z^2 + 6312 z) I_1\left(\frac{z}{2}\right)}{2240}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8437.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; 1, \frac{3}{2}; z\right) = \\
 & \frac{3\sqrt{\pi} (38896 z^4 - 224224 z^3 + 280280 z^2 - 64680 z + 735) \operatorname{erfi}(\sqrt{z})}{65536\sqrt{z}} - \frac{13 e^{-z} (4488 z^3 - 23628 z^2 + 22770 z - 2351)}{32768}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8438.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; 1, \frac{3}{2}; -z\right) = \\
 & \frac{13 e^{-z} (4488 z^3 + 23628 z^2 + 22770 z + 2351)}{32768} + \frac{3\sqrt{\pi} (38896 z^4 + 224224 z^3 + 280280 z^2 + 64680 z + 735) \operatorname{erf}(\sqrt{z})}{65536\sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8439.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; 1, 2; z\right) = \\
 & \frac{e^{z/2} (4862 z^4 - 35178 z^3 + 67353 z^2 - 36960 z + 3360) I_0\left(\frac{z}{2}\right) - 11 e^{z/2} (221 z^4 - 1378 z^3 + 1794 z^2 - 354 z) I_1\left(\frac{z}{2}\right)}{3360} - \frac{11 e^{z/2} (221 z^4 - 1378 z^3 + 1794 z^2 - 354 z) I_1\left(\frac{z}{2}\right)}{1680}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8440.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; 1, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi} (233376 z^5 - 1681680 z^4 + 2802800 z^3 - 970200 z^2 + 22050 z - 245) \operatorname{erfi}(\sqrt{z})}{1310720 z^{3/2}} - \\
 & \frac{3 e^{-z} (116688 z^4 - 782496 z^3 + 1068496 z^2 - 196240 z - 245)}{655360 z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8441.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; 1, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (116688 z^4 + 782496 z^3 + 1068496 z^2 + 196240 z - 245)}{655360 z} + \\
 & \frac{3\sqrt{\pi} (233376 z^5 + 1681680 z^4 + 2802800 z^3 + 970200 z^2 + 22050 z + 245) \operatorname{erf}(\sqrt{z})}{1310720 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8442.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; 1, 3; z\right) = \\
 & \frac{e^{z/2} (884 z^4 - 7670 z^3 + 17979 z^2 - 12600 z + 1680) I_0\left(\frac{z}{2}\right) - e^{z/2} z (884 z^3 - 6786 z^2 + 11635 z - 3474) I_1\left(\frac{z}{2}\right)}{1680} - \frac{e^{z/2} z (884 z^3 - 6786 z^2 + 11635 z - 3474) I_1\left(\frac{z}{2}\right)}{1680}
 \end{aligned}$$

07.25.03.8443.01

$${}_2F_2\left(-\frac{7}{2}, 6; 1, \frac{7}{2}; z\right) = \frac{3\sqrt{\pi} (155\,584 z^6 - 1\,345\,344 z^5 + 2\,802\,800 z^4 - 1\,293\,600 z^3 + 44\,100 z^2 - 980 z + 105) \operatorname{erfi}(\sqrt{z})}{2\,097\,152 z^{5/2}} - \frac{3 e^z (77\,792 z^5 - 633\,776 z^4 + 1\,123\,408 z^3 - 304\,744 z^2 - 1\,050 z + 105)}{1\,048\,576 z^2}$$

07.25.03.8444.01

$${}_2F_2\left(-\frac{7}{2}, 6; 1, \frac{7}{2}; -z\right) = \frac{3 e^{-z} (77\,792 z^5 + 633\,776 z^4 + 1\,123\,408 z^3 + 304\,744 z^2 - 1\,050 z - 105)}{1\,048\,576 z^2} + \frac{3\sqrt{\pi} (155\,584 z^6 + 1\,345\,344 z^5 + 2\,802\,800 z^4 + 1\,293\,600 z^3 + 44\,100 z^2 + 980 z + 105) \operatorname{erf}(\sqrt{z})}{2\,097\,152 z^{5/2}}$$

07.25.03.8445.01

$${}_2F_2\left(-\frac{7}{2}, 6; 1, 4; z\right) = \frac{1}{840} e^{z/2} (204 z^4 - 2064 z^3 + 5717 z^2 - 4830 z + 840) I_0\left(\frac{z}{2}\right) - \frac{1}{840} e^{z/2} z (204 z^3 - 1860 z^2 + 3959 z - 1597) I_1\left(\frac{z}{2}\right)$$

07.25.03.8446.01

$${}_2F_2\left(-\frac{7}{2}, 6; 1, \frac{9}{2}; z\right) = \frac{1}{8\,388\,608 z^{7/2}} 3\sqrt{\pi} (311\,168 z^7 - 3\,139\,136 z^6 + 7\,847\,840 z^5 - 4\,527\,600 z^4 + 205\,800 z^3 - 6860 z^2 + 1470 z - 525) \operatorname{erfi}(\sqrt{z}) - \frac{3 e^z (155\,584 z^6 - 1\,491\,776 z^5 + 3\,255\,824 z^4 - 1\,187\,296 z^3 - 7980 z^2 + 1820 z - 525)}{4\,194\,304 z^3}$$

07.25.03.8447.01

$${}_2F_2\left(-\frac{7}{2}, 6; 1, \frac{9}{2}; -z\right) = \frac{3 e^{-z} (155\,584 z^6 + 1\,491\,776 z^5 + 3\,255\,824 z^4 + 1\,187\,296 z^3 - 7980 z^2 - 1820 z - 525)}{4\,194\,304 z^3} + \frac{1}{8\,388\,608 z^{7/2}} 3\sqrt{\pi} (311\,168 z^7 + 3\,139\,136 z^6 + 7\,847\,840 z^5 + 4\,527\,600 z^4 + 205\,800 z^3 + 6860 z^2 + 1470 z + 525) \operatorname{erf}(\sqrt{z})$$

07.25.03.8448.01

$${}_2F_2\left(-\frac{7}{2}, 6; 1, 5; z\right) = \frac{e^{z/2} (136 z^4 - 1572 z^3 + 5020 z^2 - 4935 z + 1050) I_0\left(\frac{z}{2}\right)}{1050} - \frac{e^{z/2} z (136 z^3 - 1436 z^2 + 3652 z - 1865) I_1\left(\frac{z}{2}\right)}{1050}$$

07.25.03.8449.01

$${}_2F_2\left(-\frac{7}{2}, 6; 1, \frac{11}{2}; z\right) = \frac{1}{268\,435\,456 z^{9/2}} \left(9\sqrt{\pi} (1\,867\,008 z^8 - 21\,525\,504 z^7 + 62\,782\,720 z^6 - 43\,464\,960 z^5 + 2\,469\,600 z^4 - 109\,760 z^3 + 35\,280 z^2 - 25\,200 z + 25\,725) \operatorname{erfi}(\sqrt{z})\right) - \frac{1}{134\,217\,728 z^4} 9 e^z (933\,504 z^7 - 10\,296\,000 z^6 + 26\,710\,112 z^5 - 12\,358\,544 z^4 - 141\,960 z^3 + 58\,940 z^2 - 42\,350 z + 25\,725)$$

$$\begin{aligned}
 & \text{07.25.03.8450.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; 1, \frac{11}{2}; -z\right) = \\
 & \frac{1}{134217728 z^4} 9 e^{-z} (933504 z^7 + 10296000 z^6 + 26710112 z^5 + 12358544 z^4 - 141960 z^3 - 58940 z^2 - 42350 z - 25725) + \\
 & \frac{1}{268435456 z^{9/2}} \left(9 \sqrt{\pi} (1867008 z^8 + 21525504 z^7 + 62782720 z^6 + \right. \\
 & \left. 43464960 z^5 + 2469600 z^4 + 109760 z^3 + 35280 z^2 + 25200 z + 25725) \operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8451.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; 1, 6; z\right) = \frac{1}{105} e^{z/2} (8 z^4 - 104 z^3 + 376 z^2 - 420 z + 105) I_0\left(\frac{z}{2}\right) - \frac{4}{105} e^{z/2} z (2 z^3 - 24 z^2 + 71 z - 44) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = \frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.8452.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; \frac{3}{2}, 2; z\right) = \\
 & \frac{\sqrt{\pi} (38896 z^4 - 288288 z^3 + 504504 z^2 - 194040 z + 6615) \operatorname{erfi}(\sqrt{z})}{98304 \sqrt{z}} - \frac{11 e^z (1768 z^3 - 12220 z^2 + 17706 z - 3867)}{49152}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8453.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; \frac{3}{2}, 2; -z\right) = \\
 & \frac{11 e^{-z} (1768 z^3 + 12220 z^2 + 17706 z + 3867)}{49152} + \frac{\sqrt{\pi} (38896 z^4 + 288288 z^3 + 504504 z^2 + 194040 z + 6615) \operatorname{erf}(\sqrt{z})}{98304 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8454.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; \frac{3}{2}, 3; z\right) = \\
 & \frac{e^z (-1768 z^3 + 15132 z^2 - 29354 z + 10083)}{12288} + \frac{\sqrt{\pi} (3536 z^4 - 32032 z^3 + 72072 z^2 - 38808 z + 2205) \operatorname{erfi}(\sqrt{z})}{24576 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8455.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; \frac{3}{2}, 3; -z\right) = \\
 & \frac{e^{-z} (1768 z^3 + 15132 z^2 + 29354 z + 10083)}{12288} + \frac{\sqrt{\pi} (3536 z^4 + 32032 z^3 + 72072 z^2 + 38808 z + 2205) \operatorname{erf}(\sqrt{z})}{24576 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8456.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; \frac{3}{2}, 4; z\right) = \frac{e^z (-136 z^3 + 1388 z^2 - 3378 z + 1607)}{2048} + \frac{\sqrt{\pi} (272 z^4 - 2912 z^3 + 8008 z^2 - 5544 z + 441) \operatorname{erfi}(\sqrt{z})}{4096 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8457.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; \frac{3}{2}, 4; -z\right) = \frac{e^{-z} (136 z^3 + 1388 z^2 + 3378 z + 1607)}{2048} + \frac{\sqrt{\pi} (272 z^4 + 2912 z^3 + 8008 z^2 + 5544 z + 441) \operatorname{erf}(\sqrt{z})}{4096 \sqrt{z}}
 \end{aligned}$$

07.25.03.8458.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{3}{2}, 5; z\right) = \frac{e^z(-136z^3 + 1612z^2 - 4722z + 2895)}{3840} + \frac{\sqrt{\pi}(272z^4 - 3360z^3 + 10920z^2 - 9240z + 945)\operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.8459.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{3}{2}, 5; -z\right) = \frac{e^{-z}(136z^3 + 1612z^2 + 4722z + 2895)}{3840} + \frac{\sqrt{\pi}(272z^4 + 3360z^3 + 10920z^2 + 9240z + 945)\operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.8460.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{3}{2}, 6; z\right) = \frac{1}{384} e^z(-8z^3 + 108z^2 - 370z + 279) + \frac{\sqrt{\pi}(16z^4 - 224z^3 + 840z^2 - 840z + 105)\operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.8461.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{3}{2}, 6; -z\right) = \frac{1}{384} e^{-z}(8z^3 + 108z^2 + 370z + 279) + \frac{\sqrt{\pi}(16z^4 + 224z^3 + 840z^2 + 840z + 105)\operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = 2$

07.25.03.8462.01

$${}_2F_2\left(-\frac{7}{2}, 6; 2, 2; z\right) = \frac{e^{z/2}(9724z^4 - 88374z^3 + 221793z^2 - 173712z + 30240)I_0\left(\frac{z}{2}\right)}{30240} + \frac{e^{z/2}(-9724z^4 + 78650z^3 - 148005z^2 + 55308z - 672)I_1\left(\frac{z}{2}\right)}{30240}$$

07.25.03.8463.01

$${}_2F_2\left(-\frac{7}{2}, 6; 2, \frac{5}{2}; z\right) = \frac{e^z(-38896z^4 + 340912z^3 - 689832z^2 + 262020z - 735)}{327680z} + \frac{\sqrt{\pi}(77792z^5 - 720720z^4 + 1681680z^3 - 970200z^2 + 66150z + 735)\operatorname{erfi}(\sqrt{z})}{655360z^{3/2}}$$

07.25.03.8464.01

$${}_2F_2\left(-\frac{7}{2}, 6; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(38896z^4 + 340912z^3 + 689832z^2 + 262020z + 735)}{327680z} + \frac{\sqrt{\pi}(77792z^5 + 720720z^4 + 1681680z^3 + 970200z^2 + 66150z - 735)\operatorname{erf}(\sqrt{z})}{655360z^{3/2}}$$

07.25.03.8465.01

$${}_2F_2\left(-\frac{7}{2}, 6; 2, 3; z\right) = \frac{e^{z/2}(884z^4 - 9672z^3 + 29991z^2 - 30156z + 7560)I_0\left(\frac{z}{2}\right)}{7560} + \frac{e^{z/2}(-884z^4 + 8788z^3 - 21645z^2 + 12021z - 336)I_1\left(\frac{z}{2}\right)}{7560}$$

07.25.03.8466.01

$${}_2F_2\left(-\frac{7}{2}, 6; 2, \frac{7}{2}; z\right) = \frac{e^z (-77792 z^5 + 825968 z^4 - 2148432 z^3 + 1181928 z^2 - 9030 z + 315)}{1572864 z^2} + \frac{\sqrt{\pi} (155584 z^6 - 1729728 z^5 + 5045040 z^4 - 3880800 z^3 + 396900 z^2 + 8820 z - 315) \operatorname{erfi}(\sqrt{z})}{3145728 z^{5/2}}$$

07.25.03.8467.01

$${}_2F_2\left(-\frac{7}{2}, 6; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (77792 z^5 + 825968 z^4 + 2148432 z^3 + 1181928 z^2 + 9030 z + 315)}{1572864 z^2} + \frac{\sqrt{\pi} (155584 z^6 + 1729728 z^5 + 5045040 z^4 + 3880800 z^3 + 396900 z^2 - 8820 z - 315) \operatorname{erf}(\sqrt{z})}{3145728 z^{5/2}}$$

07.25.03.8468.01

$${}_2F_2\left(-\frac{7}{2}, 6; 2, 4; z\right) = \frac{e^{z/2} (136 z^4 - 1740 z^3 + 6420 z^2 - 7833 z + 2520) I_0\left(\frac{z}{2}\right)}{2520} + \frac{e^{z/2} (-136 z^4 + 1604 z^3 - 4884 z^2 + 3615 z - 168) I_1\left(\frac{z}{2}\right)}{2520}$$

07.25.03.8469.01

$${}_2F_2\left(-\frac{7}{2}, 6; 2, \frac{9}{2}; z\right) = \frac{e^z (-155584 z^6 + 1940224 z^5 - 6170736 z^4 + 4481664 z^3 - 64932 z^2 + 5040 z - 945)}{6291456 z^3} + \frac{1}{12582912 z^{7/2}} + \frac{\sqrt{\pi} (311168 z^7 - 4036032 z^6 + 14126112 z^5 - 13582800 z^4 + 1852200 z^3 + 61740 z^2 - 4410 z + 945) \operatorname{erfi}(\sqrt{z})}{12582912 z^{7/2}}$$

07.25.03.8470.01

$${}_2F_2\left(-\frac{7}{2}, 6; 2, \frac{9}{2}; -z\right) = \frac{e^{-z} (155584 z^6 + 1940224 z^5 + 6170736 z^4 + 4481664 z^3 + 64932 z^2 + 5040 z + 945)}{6291456 z^3} + \frac{1}{12582912 z^{7/2}} + \frac{\sqrt{\pi} (311168 z^7 + 4036032 z^6 + 14126112 z^5 + 13582800 z^4 + 1852200 z^3 - 61740 z^2 - 4410 z - 945) \operatorname{erf}(\sqrt{z})}{12582912 z^{7/2}}$$

07.25.03.8471.01

$${}_2F_2\left(-\frac{7}{2}, 6; 2, 5; z\right) = \frac{e^{z/2} (136 z^4 - 1992 z^3 + 8520 z^2 - 12180 z + 4725) I_0\left(\frac{z}{2}\right)}{4725} - \frac{4 e^{z/2} (34 z^4 - 464 z^3 + 1683 z^2 - 1560 z + 105) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.8472.01

$${}_2F_2\left(-\frac{7}{2}, 6; 2, \frac{11}{2}; z\right) = \frac{1}{134217728 z^{9/2}} \left(3 \sqrt{\pi} (622336 z^8 - 9225216 z^7 + 37669632 z^6 - 43464960 z^5 + 7408800 z^4 + 329280 z^3 - 35280 z^2 + 15120 z - 11025) \operatorname{erfi}(\sqrt{z}) \right) - \frac{1}{67108864 z^4} 3 e^z (311168 z^7 - 4457024 z^6 + 16761888 z^5 - 15191088 z^4 + 357672 z^3 - 48300 z^2 + 22470 z - 11025)$$

$$\begin{aligned}
 & \text{07.25.03.8473.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; 2, \frac{11}{2}; -z\right) = \\
 & \frac{1}{67\,108\,864\,z^4} 3 e^{-z} (311\,168\,z^7 + 4457\,024\,z^6 + 16\,761\,888\,z^5 + 15\,191\,088\,z^4 + 357\,672\,z^3 + 48\,300\,z^2 + 22\,470\,z + 11\,025) + \\
 & \frac{1}{134\,217\,728\,z^{9/2}} \left(3\sqrt{\pi} (622\,336\,z^8 + 9\,225\,216\,z^7 + 37\,669\,632\,z^6 + \right. \\
 & \left. 43\,464\,960\,z^5 + 7\,408\,800\,z^4 - 329\,280\,z^3 - 35\,280\,z^2 - 15\,120\,z - 11\,025) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8474.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; 2, 6; z\right) = \\
 & \frac{1}{945} e^{z/2} (16\,z^4 - 264\,z^3 + 1284\,z^2 - 2100\,z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16\,z^4 + 248\,z^3 - 1044\,z^2 + 1164\,z - 105) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = \frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.8475.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; \frac{5}{2}, 3; z\right) = \frac{e^{-z} (-3536\,z^4 + 38\,272\,z^3 - 102\,752\,z^2 + 60\,360\,z - 735)}{81\,920\,z} + \\
 & \frac{\sqrt{\pi} (7072\,z^5 - 80\,080\,z^4 + 240\,240\,z^3 - 194\,040\,z^2 + 22\,050\,z + 735) \operatorname{erfi}(\sqrt{z})}{163\,840\,z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8476.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (3536\,z^4 + 38\,272\,z^3 + 102\,752\,z^2 + 60\,360\,z + 735)}{81\,920\,z} + \\
 & \frac{\sqrt{\pi} (7072\,z^5 + 80\,080\,z^4 + 240\,240\,z^3 + 194\,040\,z^2 + 22\,050\,z - 735) \operatorname{erf}(\sqrt{z})}{163\,840\,z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8477.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; \frac{5}{2}, 4; z\right) = \frac{e^{-z} (-816\,z^4 + 10\,512\,z^3 - 35\,192\,z^2 + 28\,220\,z - 735)}{40\,960\,z} + \\
 & \frac{\sqrt{\pi} (1632\,z^5 - 21\,840\,z^4 + 80\,080\,z^3 - 83\,160\,z^2 + 13\,230\,z + 735) \operatorname{erfi}(\sqrt{z})}{81\,920\,z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8478.01} \\
 & {}_2F_2\left(-\frac{7}{2}, 6; \frac{5}{2}, 4; -z\right) = \frac{e^{-z} (816\,z^4 + 10\,512\,z^3 + 35\,192\,z^2 + 28\,220\,z + 735)}{40\,960\,z} + \\
 & \frac{\sqrt{\pi} (1632\,z^5 + 21\,840\,z^4 + 80\,080\,z^3 + 83\,160\,z^2 + 13\,230\,z - 735) \operatorname{erf}(\sqrt{z})}{81\,920\,z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8479.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 6; \frac{5}{2}, 5; z\right) = \\
 & \frac{e^z (-272 z^4 + 4064 z^3 - 16304 z^2 + 16640 z - 735)}{25600 z} + \frac{\sqrt{\pi} (544 z^5 - 8400 z^4 + 36400 z^3 - 46200 z^2 + 9450 z + 735) \operatorname{erfi}(\sqrt{z})}{51200 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8480.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 6; \frac{5}{2}, 5; -z\right) = \\
 & \frac{e^{-z} (272 z^4 + 4064 z^3 + 16304 z^2 + 16640 z + 735)}{25600 z} + \frac{\sqrt{\pi} (544 z^5 + 8400 z^4 + 36400 z^3 + 46200 z^2 + 9450 z - 735) \operatorname{erf}(\sqrt{z})}{51200 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8481.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 6; \frac{5}{2}, 6; z\right) = \\
 & \frac{e^z (-16 z^4 + 272 z^3 - 1272 z^2 + 1580 z - 105)}{2560 z} + \frac{\sqrt{\pi} (32 z^5 - 560 z^4 + 2800 z^3 - 4200 z^2 + 1050 z + 105) \operatorname{erfi}(\sqrt{z})}{5120 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8482.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 6; \frac{5}{2}, 6; -z\right) = \\
 & \frac{e^{-z} (16 z^4 + 272 z^3 + 1272 z^2 + 1580 z + 105)}{2560 z} + \frac{\sqrt{\pi} (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105) \operatorname{erf}(\sqrt{z})}{5120 z^{3/2}}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = 3$

$$\begin{aligned}
 & 07.25.03.8483.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 6; 3, 3; z\right) = \frac{e^{z/2} (1768 z^4 - 23348 z^3 + 90012 z^2 - 116907 z + 41622) I_0\left(\frac{z}{2}\right)}{41580} + \\
 & \frac{e^{z/2} (-1768 z^5 + 21580 z^4 - 69316 z^3 + 56613 z^2 - 3612 z - 168) I_1\left(\frac{z}{2}\right)}{41580 z}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8484.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 6; 3, \frac{7}{2}; z\right) = \frac{e^z (-7072 z^5 + 92560 z^4 - 317616 z^3 + 266712 z^2 - 8610 z - 315)}{393216 z^2} + \\
 & \frac{\sqrt{\pi} (14144 z^6 - 192192 z^5 + 720720 z^4 - 776160 z^3 + 132300 z^2 + 8820 z + 315) \operatorname{erfi}(\sqrt{z})}{786432 z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.8485.01 \\
 & {}_2F_2\left(-\frac{7}{2}, 6; 3, \frac{7}{2}; -z\right) = \frac{e^{-z} (7072 z^5 + 92560 z^4 + 317616 z^3 + 266712 z^2 + 8610 z - 315)}{393216 z^2} + \\
 & \frac{\sqrt{\pi} (14144 z^6 + 192192 z^5 + 720720 z^4 + 776160 z^3 + 132300 z^2 - 8820 z + 315) \operatorname{erf}(\sqrt{z})}{786432 z^{5/2}}
 \end{aligned}$$

07.25.03.8486.01

$${}_2F_2\left(-\frac{7}{2}, 6; 3, 4; z\right) = \frac{e^{z/2} (136 z^4 - 2104 z^3 + 9696 z^2 - 15372 z + 6951) I_0\left(\frac{z}{2}\right) + e^{z/2} (-68 z^5 + 984 z^4 - 3898 z^3 + 4212 z^2 - 441 z - 42) I_1\left(\frac{z}{2}\right)}{6930 + 3465 z}$$

07.25.03.8487.01

$${}_2F_2\left(-\frac{7}{2}, 6; 3, \frac{9}{2}; z\right) = \frac{e^{-z} (-14144 z^6 + 217152 z^5 - 907504 z^4 + 995424 z^3 - 58716 z^2 - 4620 z + 315)}{1572864 z^3} + \frac{1}{3145728 z^{7/2}} \sqrt{\pi} (28288 z^7 - 448448 z^6 + 2018016 z^5 - 2716560 z^4 + 617400 z^3 + 61740 z^2 + 4410 z - 315) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8488.01

$${}_2F_2\left(-\frac{7}{2}, 6; 3, \frac{9}{2}; -z\right) = \frac{e^{-z} (14144 z^6 + 217152 z^5 + 907504 z^4 + 995424 z^3 + 58716 z^2 - 4620 z - 315)}{1572864 z^3} + \frac{1}{3145728 z^{7/2}} \sqrt{\pi} (28288 z^7 + 448448 z^6 + 2018016 z^5 + 2716560 z^4 + 617400 z^3 - 61740 z^2 + 4410 z + 315) \operatorname{erf}(\sqrt{z})$$

07.25.03.8489.01

$${}_2F_2\left(-\frac{7}{2}, 6; 3, 5; z\right) = \frac{2 e^{z/2} (272 z^4 - 4824 z^3 + 25860 z^2 - 48300 z + 26145) I_0\left(\frac{z}{2}\right) - 2 e^{z/2} (272 z^5 - 4552 z^4 + 21444 z^3 - 28860 z^2 + 4305 z + 630) I_1\left(\frac{z}{2}\right)}{51975 z}$$

07.25.03.8490.01

$${}_2F_2\left(-\frac{7}{2}, 6; 3, \frac{11}{2}; z\right) = \frac{1}{33554432 z^{9/2}} \left(3 \sqrt{\pi} (56576 z^8 - 1025024 z^7 + 5381376 z^6 - 8692992 z^5 + 2469600 z^4 + 329280 z^3 + 35280 z^2 - 5040 z + 2205) \operatorname{erfi}(\sqrt{z})\right) - \frac{1}{16777216 z^4} 3 e^{-z} (28288 z^7 - 498368 z^6 + 2455648 z^5 - 3332496 z^4 + 304248 z^3 + 39228 z^2 - 6510 z + 2205)$$

07.25.03.8491.01

$${}_2F_2\left(-\frac{7}{2}, 6; 3, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (28288 z^7 + 498368 z^6 + 2455648 z^5 + 3332496 z^4 + 304248 z^3 - 39228 z^2 - 6510 z - 2205)}{16777216 z^4} + \frac{1}{33554432 z^{9/2}} \left(3 \sqrt{\pi} (56576 z^8 + 1025024 z^7 + 5381376 z^6 + 8692992 z^5 + 2469600 z^4 - 329280 z^3 + 35280 z^2 + 5040 z + 2205) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.8492.01

$${}_2F_2\left(-\frac{7}{2}, 6; 3, 6; z\right) = \frac{4 e^{z/2} (16 z^4 - 320 z^3 + 1956 z^2 - 4200 z + 2625) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16 z^5 - 304 z^4 + 1660 z^3 - 2676 z^2 + 525 z + 105) I_1\left(\frac{z}{2}\right)}{10395 z}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = \frac{7}{2}$

07.25.03.8493.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{7}{2}, 4; z\right) = \frac{e^z(-544z^5 + 8464z^4 - 36080z^3 + 40952z^2 - 2730z - 315)}{65536z^2} + \frac{\sqrt{\pi}(1088z^6 - 17472z^5 + 80080z^4 - 110880z^3 + 26460z^2 + 2940z + 315)\operatorname{erfi}(\sqrt{z})}{131072z^{5/2}}$$

07.25.03.8494.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{7}{2}, 4; -z\right) = \frac{e^{-z}(544z^5 + 8464z^4 + 36080z^3 + 40952z^2 + 2730z - 315)}{65536z^2} + \frac{\sqrt{\pi}(1088z^6 + 17472z^5 + 80080z^4 + 110880z^3 + 26460z^2 - 2940z + 315)\operatorname{erf}(\sqrt{z})}{131072z^{5/2}}$$

07.25.03.8495.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{7}{2}, 5; z\right) = \frac{e^z(-544z^5 + 9808z^4 - 49968z^3 + 71640z^2 - 7770z - 1575)}{122880z^2} + \frac{\sqrt{\pi}(1088z^6 - 20160z^5 + 109200z^4 - 184800z^3 + 56700z^2 + 8820z + 1575)\operatorname{erfi}(\sqrt{z})}{245760z^{5/2}}$$

07.25.03.8496.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{7}{2}, 5; -z\right) = \frac{e^{-z}(544z^5 + 9808z^4 + 49968z^3 + 71640z^2 + 7770z - 1575)}{122880z^2} + \frac{\sqrt{\pi}(1088z^6 + 20160z^5 + 109200z^4 + 184800z^3 + 56700z^2 - 8820z + 1575)\operatorname{erf}(\sqrt{z})}{245760z^{5/2}}$$

07.25.03.8497.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{7}{2}, 6; z\right) = \frac{e^z(-32z^5 + 656z^4 - 3888z^3 + 6744z^2 - 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi}(64z^6 - 1344z^5 + 8400z^4 - 16800z^3 + 6300z^2 + 1260z + 315)\operatorname{erfi}(\sqrt{z})}{24576z^{5/2}}$$

07.25.03.8498.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{7}{2}, 6; -z\right) = \frac{e^{-z}(32z^5 + 656z^4 + 3888z^3 + 6744z^2 + 1050z - 315)}{12288z^2} + \frac{\sqrt{\pi}(64z^6 + 1344z^5 + 8400z^4 + 16800z^3 + 6300z^2 - 1260z + 315)\operatorname{erf}(\sqrt{z})}{24576z^{5/2}}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = 4$

07.25.03.8499.01

$${}_2F_2\left(-\frac{7}{2}, 6; 4, 4; z\right) = \frac{e^{z/2} (816 z^5 - 14 808 z^4 + 81 836 z^3 - 159 180 z^2 + 90 867 z + 84) I_0\left(\frac{z}{2}\right)}{90 090 z} + \frac{e^{z/2} (-816 z^6 + 13 992 z^5 - 68 252 z^4 + 97 108 z^3 - 16 443 z^2 - 3108 z - 336) I_1\left(\frac{z}{2}\right)}{90 090 z^2}$$

07.25.03.8500.01

$${}_2F_2\left(-\frac{7}{2}, 6; 4, \frac{9}{2}; z\right) = \frac{e^z (-1088 z^6 + 19 840 z^5 - 102 736 z^4 + 151 232 z^3 - 17 724 z^2 - 4200 z - 315)}{262 144 z^3} + \frac{1}{524 288 z^{7/2}} \sqrt{\pi} (2176 z^7 - 40 768 z^6 + 224 224 z^5 - 388 080 z^4 + 123 480 z^3 + 20 580 z^2 + 4410 z + 315) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8501.01

$${}_2F_2\left(-\frac{7}{2}, 6; 4, \frac{9}{2}; -z\right) = \frac{e^{-z} (1088 z^6 + 19 840 z^5 + 102 736 z^4 + 151 232 z^3 + 17 724 z^2 - 4200 z + 315)}{262 144 z^3} + \frac{1}{524 288 z^{7/2}} \sqrt{\pi} (2176 z^7 + 40 768 z^6 + 224 224 z^5 + 388 080 z^4 + 123 480 z^3 - 20 580 z^2 + 4410 z - 315) \operatorname{erf}(\sqrt{z})$$

07.25.03.8502.01

$${}_2F_2\left(-\frac{7}{2}, 6; 4, 5; z\right) = \frac{4 e^{z/2} (272 z^5 - 5664 z^4 + 36 500 z^3 - 84 000 z^2 + 57 225 z + 210) I_0\left(\frac{z}{2}\right)}{225 225 z} - \frac{4 e^{z/2} (272 z^6 - 5392 z^5 + 31 244 z^4 - 55 180 z^3 + 13 125 z^2 + 3675 z + 840) I_1\left(\frac{z}{2}\right)}{225 225 z^2}$$

07.25.03.8503.01

$${}_2F_2\left(-\frac{7}{2}, 6; 4, \frac{11}{2}; z\right) = \frac{1}{16 777 216 z^{9/2}} \left(3 \sqrt{\pi} (13 056 z^8 - 279 552 z^7 + 1 793 792 z^6 - 3 725 568 z^5 + 1 481 760 z^4 + 329 280 z^3 + 105 840 z^2 + 15 120 z - 2205) \operatorname{erfi}(\sqrt{z}) - \frac{3 e^z (6528 z^7 - 136 512 z^6 + 831 904 z^5 - 1 506 928 z^4 + 262 920 z^3 + 95 172 z^2 + 16 590 z - 2205)}{8 388 608 z^4} \right)$$

07.25.03.8504.01

$${}_2F_2\left(-\frac{7}{2}, 6; 4, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (6528 z^7 + 136 512 z^6 + 831 904 z^5 + 1 506 928 z^4 + 262 920 z^3 - 95 172 z^2 + 16 590 z + 2205)}{8 388 608 z^4} + \frac{1}{16 777 216 z^{9/2}} \left(3 \sqrt{\pi} (13 056 z^8 + 279 552 z^7 + 1 793 792 z^6 + 3 725 568 z^5 + 1 481 760 z^4 - 329 280 z^3 + 105 840 z^2 - 15 120 z - 2205) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.8505.01

$${}_2F_2\left(-\frac{7}{2}, 6; 4, 6; z\right) = \frac{4 e^{z/2} (32 z^5 - 752 z^4 + 5536 z^3 - 14 700 z^2 + 11 550 z + 105) I_0\left(\frac{z}{2}\right)}{45 045 z} - \frac{4 e^{z/2} (32 z^6 - 720 z^5 + 4832 z^4 - 10 196 z^3 + 3150 z^2 + 1155 z + 420) I_1\left(\frac{z}{2}\right)}{45 045 z^2}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = \frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.8506.01} \\
 {}_2F_2\left(-\frac{7}{2}, 6; \frac{9}{2}, 5; z\right) &= \frac{e^z (-1088 z^6 + 22976 z^5 - 141936 z^4 + 262560 z^3 - 48300 z^2 - 18900 z - 4725)}{491520 z^3} + \\
 & \frac{1}{983040 z^{7/2}} \sqrt{\pi} (2176 z^7 - 47040 z^6 + 305760 z^5 - 646800 z^4 + 264600 z^3 + 61740 z^2 + 22050 z + 4725) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8507.01} \\
 {}_2F_2\left(-\frac{7}{2}, 6; \frac{9}{2}, 5; -z\right) &= \frac{e^{-z} (1088 z^6 + 22976 z^5 + 141936 z^4 + 262560 z^3 + 48300 z^2 - 18900 z + 4725)}{491520 z^3} + \\
 & \frac{1}{983040 z^{7/2}} \sqrt{\pi} (2176 z^7 + 47040 z^6 + 305760 z^5 + 646800 z^4 + 264600 z^3 - 61740 z^2 + 22050 z - 4725) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8508.01} \\
 {}_2F_2\left(-\frac{7}{2}, 6; \frac{9}{2}, 6; z\right) &= \frac{e^z (-64 z^6 + 1536 z^5 - 11024 z^4 + 24576 z^3 - 6300 z^2 - 3360 z - 1575)}{49152 z^3} + \\
 & \frac{\sqrt{\pi} (128 z^7 - 3136 z^6 + 23520 z^5 - 58800 z^4 + 29400 z^3 + 8820 z^2 + 4410 z + 1575) \operatorname{erfi}(\sqrt{z})}{98304 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8509.01} \\
 {}_2F_2\left(-\frac{7}{2}, 6; \frac{9}{2}, 6; -z\right) &= \frac{e^{-z} (64 z^6 + 1536 z^5 + 11024 z^4 + 24576 z^3 + 6300 z^2 - 3360 z + 1575)}{49152 z^3} + \\
 & \frac{\sqrt{\pi} (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{98304 z^{7/2}}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = 5$

$$\begin{aligned}
 & \text{07.25.03.8510.01} \\
 {}_2F_2\left(-\frac{7}{2}, 6; 5, 5; z\right) &= \frac{16 e^{z/2} (544 z^6 - 13008 z^5 + 97920 z^4 - 267540 z^3 + 217350 z^2 + 2835 z + 630) I_0\left(\frac{z}{2}\right)}{3378375 z^2} - \\
 & \frac{1}{3378375 z^3} 16 e^{z/2} (544 z^7 - 12464 z^6 + 85728 z^5 - 187500 z^4 + 61950 z^3 + 24885 z^2 + 11340 z + 2520) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8511.01} \\
 {}_2F_2\left(-\frac{7}{2}, 6; 5, \frac{11}{2}; z\right) &= \frac{1}{10485760 z^{9/2}} \\
 & \left(3 \sqrt{\pi} (4352 z^8 - 107520 z^7 + 815360 z^6 - 2069760 z^5 + 1058400 z^4 + 329280 z^3 + 176400 z^2 + 75600 z + 11025) \operatorname{erfi}(\sqrt{z})\right) - \\
 & \frac{3 e^z (2176 z^7 - 52672 z^6 + 382432 z^5 - 867280 z^4 + 231000 z^3 + 128940 z^2 + 68250 z + 11025)}{5242880 z^4}
 \end{aligned}$$

07.25.03.8512.01

$${}_2F_2\left(-\frac{7}{2}, 6; 5, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (2176 z^7 + 52672 z^6 + 382432 z^5 + 867280 z^4 + 231000 z^3 - 128940 z^2 + 68250 z - 11025)}{5242880 z^4} + \frac{1}{10485760 z^{9/2}}$$

$$\left(3 \sqrt{\pi} (4352 z^8 + 107520 z^7 + 815360 z^6 + 2069760 z^5 + 1058400 z^4 - 329280 z^3 + 176400 z^2 - 75600 z + 11025) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.8513.01

$${}_2F_2\left(-\frac{7}{2}, 6; 5, 6; z\right) = \frac{32 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23520 z^3 + 22050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right)}{675675 z^2} - \frac{64 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{675675 z^3}$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = \frac{11}{2}$

07.25.03.8514.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{11}{2}, 6; z\right) = \frac{1}{10485760 z^{9/2}}$$

$$\frac{3 \sqrt{\pi} (256 z^8 - 7168 z^7 + 62720 z^6 - 188160 z^5 + 117600 z^4 + 47040 z^3 + 35280 z^2 + 25200 z + 11025) \operatorname{erfi}(\sqrt{z}) - 3 e^z (128 z^7 - 3520 z^6 + 29664 z^5 - 80848 z^4 + 29400 z^3 + 21420 z^2 + 17850 z + 11025)}{5242880 z^4}$$

07.25.03.8515.01

$${}_2F_2\left(-\frac{7}{2}, 6; \frac{11}{2}, 6; -z\right) = \frac{3 e^{-z} (128 z^7 + 3520 z^6 + 29664 z^5 + 80848 z^4 + 29400 z^3 - 21420 z^2 + 17850 z - 11025)}{5242880 z^4} + \frac{1}{10485760 z^{9/2}}$$

$$3 \sqrt{\pi} (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{7}{2}$, $a_2 = 6$, $b_1 = 6$

07.25.03.8516.01

$${}_2F_2\left(-\frac{7}{2}, 6; 6, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 1952 z^6 + 19248 z^5 - 70560 z^4 + 76440 z^3 + 4410 z^2 + 4095 z + 2520) I_0\left(\frac{z}{2}\right)}{2297295 z^3} - \frac{1}{2297295 z^4} 32 e^{z/2} (64 z^8 - 1888 z^7 + 17392 z^6 - 54048 z^5 + 29400 z^4 + 19110 z^3 + 17955 z^2 + 16380 z + 10080) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 \geq -\frac{5}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{5}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{5}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.8517.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{e^z (64 z^6 - 768 z^5 + 6192 z^4 - 35904 z^3 + 146412 z^2 - 381024 z + 480249)}{480249}$$

07.25.03.8518.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{e^z (32 z^5 - 368 z^4 + 2544 z^3 - 11592 z^2 + 32634 z - 43659)}{43659}$$

07.25.03.8519.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{e^z (16 z^4 - 176 z^3 + 1008 z^2 - 3276 z + 4851)}{4851}$$

07.25.03.8520.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{693} e^z (8 z^3 - 84 z^2 + 378 z - 693)$$

07.25.03.8521.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{33} e^z (4 z^2 - 8 z + 33) - \frac{64}{693} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8522.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{64}{693} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{33} e^{-z} (4 z^2 + 8 z + 33)$$

07.25.03.8523.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{231} e^z (-32 z^2 + 294 z + 231) + \frac{32}{231} \sqrt{\pi} (z^{5/2} - 10 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8524.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{231} e^{-z} (-32 z^2 - 294 z + 231) - \frac{32}{231} \sqrt{\pi} (z^{5/2} + 10 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8525.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{231} e^z (8 z^2 - 156 z + 231) - \frac{4}{231} \sqrt{\pi} (2 z^{5/2} - 40 z^{3/2} + 75 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8526.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{231} e^{-z} (8 z^2 + 156 z + 231) + \frac{4}{231} \sqrt{\pi} (2 z^{5/2} + 40 z^{3/2} + 75 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8527.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (-64 z^3 + 1648 z^2 - 5670 z + 3465) I_0\left(\frac{z}{2}\right)}{3465} + \frac{2 e^{z/2} (32 z^3 - 792 z^2 + 2059 z) I_1\left(\frac{z}{2}\right)}{3465}$$

07.25.03.8528.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{693} e^z (4 z^2 - 118 z + 393) - \frac{2 \sqrt{\pi} (2 z^3 - 60 z^2 + 225 z - 75) \operatorname{erfi}(\sqrt{z})}{693 \sqrt{z}}$$

07.25.03.8529.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{693} e^{-z} (4z^2 + 118z + 393) + \frac{2\sqrt{\pi} (2z^3 + 60z^2 + 225z + 75) \operatorname{erf}(\sqrt{z})}{693\sqrt{z}}$$

07.25.03.8530.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (-128z^3 + 4576z^2 - 24300z + 24255) I_0\left(\frac{z}{2}\right)}{24255} + \frac{e^{z/2} (128z^3 - 4448z^2 + 19916z - 6435) I_1\left(\frac{z}{2}\right)}{24255}$$

07.25.03.8531.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^3 - 316z^2 + 1646z - 525)}{3696z} + \frac{\sqrt{\pi} (-16z^4 + 640z^3 - 3600z^2 + 2400z + 525) \operatorname{erfi}(\sqrt{z})}{7392z^{3/2}}$$

07.25.03.8532.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^3 + 316z^2 + 1646z + 525)}{3696z} + \frac{\sqrt{\pi} (16z^4 + 640z^3 + 3600z^2 + 2400z - 525) \operatorname{erf}(\sqrt{z})}{7392z^{3/2}}$$

07.25.03.8533.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, 3; z\right) = \frac{4e^{z/2} (128z^4 - 5728z^3 + 36396z^2 - 23595z - 10725) I_1\left(\frac{z}{2}\right)}{218295z} - \frac{4e^{z/2} (128z^3 - 5856z^2 + 42060z - 57255) I_0\left(\frac{z}{2}\right)}{218295}$$

07.25.03.8534.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (8z^4 - 396z^3 + 2806z^2 - 1785z - 1260)}{7392z^2} + \frac{\sqrt{\pi} (-16z^5 + 800z^4 - 6000z^3 + 6000z^2 + 2625z + 1260) \operatorname{erfi}(\sqrt{z})}{14784z^{5/2}}$$

07.25.03.8535.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (8z^4 + 396z^3 + 2806z^2 + 1785z - 1260)}{7392z^2} + \frac{\sqrt{\pi} (16z^5 + 800z^4 + 6000z^3 + 6000z^2 - 2625z + 1260) \operatorname{erf}(\sqrt{z})}{14784z^{5/2}}$$

07.25.03.8536.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2} (256z^5 - 14016z^4 + 115352z^3 - 112710z^2 - 84825z - 66300) I_1\left(\frac{z}{2}\right)}{800415z^2} - \frac{4e^{z/2} (256z^4 - 14272z^3 + 129240z^2 - 221310z - 16575) I_0\left(\frac{z}{2}\right)}{800415z}$$

07.25.03.8537.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (8z^5 - 476z^4 + 4266z^3 - 4095z^2 - 4410z - 4725)}{12672z^3} + \frac{\sqrt{\pi} (-16z^6 + 960z^5 - 9000z^4 + 12000z^3 + 7875z^2 + 7560z + 4725) \operatorname{erfi}(\sqrt{z})}{25344z^{7/2}}$$

07.25.03.8538.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (8z^5 + 476z^4 + 4266z^3 + 4095z^2 - 4410z + 4725)}{12672z^3} + \frac{\sqrt{\pi} (16z^6 + 960z^5 + 9000z^4 + 12000z^3 - 7875z^2 + 7560z - 4725) \operatorname{erf}(\sqrt{z})}{25344z^{7/2}}$$

07.25.03.8539.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, 5; z\right) = \frac{64e^{z/2} (128z^6 - 8288z^5 + 83756z^4 - 109515z^3 - 111225z^2 - 142800z - 145350) I_1\left(\frac{z}{2}\right) - 32e^{z/2} (256z^5 - 16832z^4 + 183960z^3 - 378510z^2 - 71400z - 72675) I_0\left(\frac{z}{2}\right)}{10405395z^3}$$

07.25.03.8540.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (8z^6 - 556z^5 + 6026z^4 - 7755z^3 - 10710z^2 - 17325z - 23625)}{19712z^4} + \frac{1}{39424z^{9/2}} \sqrt{\pi} (-16z^7 + 1120z^6 - 12600z^5 + 21000z^4 + 18375z^3 + 26460z^2 + 33075z + 23625) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8541.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (8z^6 + 556z^5 + 6026z^4 + 7755z^3 - 10710z^2 + 17325z - 23625)}{19712z^4} + \frac{\sqrt{\pi} (16z^7 + 1120z^6 + 12600z^5 + 21000z^4 - 18375z^3 + 26460z^2 - 33075z + 23625) \operatorname{erf}(\sqrt{z})}{39424z^{9/2}}$$

07.25.03.8542.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{31216185z^4} - \frac{32e^{z/2} (512z^7 - 38272z^6 + 458544z^5 - 751500z^4 - 949050z^3 - 1662345z^2 - 2732580z - 3255840) I_1\left(\frac{z}{2}\right) - 32e^{z/2} (512z^6 - 38784z^5 + 496560z^4 - 1191420z^3 - 390150z^2 - 683145z - 813960) I_0\left(\frac{z}{2}\right)}{31216185z^3}$$

For fixed z and $a_1 = -\frac{5}{2}, a_2 = -\frac{5}{2}, b_1 = -\frac{9}{2}$

07.25.03.8543.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{e^z (16z^4 - 160z^3 + 872z^2 - 2744z + 3969)}{3969}$$

07.25.03.8544.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{1}{441} e^z (8z^3 - 68z^2 + 266z - 441)$$

07.25.03.8545.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{63} e^z (4z^2 - 28z + 63)$$

07.25.03.8546.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{189} e^z (32 z^2 - 14 z + 189) - \frac{32}{189} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8547.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{32}{189} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{189} e^{-z} (32 z^2 + 14 z + 189)$$

07.25.03.8548.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{63} e^z (-16 z^2 + 112 z + 63) + \frac{8}{63} \sqrt{\pi} (2 z^{5/2} - 15 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8549.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{63} e^{-z} (-16 z^2 - 112 z + 63) - \frac{8}{63} \sqrt{\pi} (2 z^{5/2} + 15 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8550.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{63} e^z (4 z^2 - 58 z + 63) - \frac{2}{63} \sqrt{\pi} (2 z^{5/2} - 30 z^{3/2} + 45 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8551.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{63} e^{-z} (4 z^2 + 58 z + 63) + \frac{2}{63} \sqrt{\pi} (2 z^{5/2} + 30 z^{3/2} + 45 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8552.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-32 z^3 + 624 z^2 - 1785 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (32 z^3 - 592 z^2 + 1209 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.8553.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{2}{189} e^z (z^2 - 22 z + 57) + \frac{\sqrt{\pi} (-4 z^3 + 90 z^2 - 270 z + 75) \operatorname{erfi}(\sqrt{z})}{378 \sqrt{z}}$$

07.25.03.8554.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{2}{189} e^{-z} (z^2 + 22 z + 57) + \frac{\sqrt{\pi} (4 z^3 + 90 z^2 + 270 z + 75) \operatorname{erf}(\sqrt{z})}{378 \sqrt{z}}$$

07.25.03.8555.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (-64 z^3 + 1728 z^2 - 7530 z + 6615) I_0\left(\frac{z}{2}\right)}{6615} + \frac{e^{z/2} (64 z^3 - 1664 z^2 + 5898 z - 1485) I_1\left(\frac{z}{2}\right)}{6615}$$

07.25.03.8556.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (8 z^3 - 236 z^2 + 966 z - 225)}{2016 z} + \frac{\sqrt{\pi} (-16 z^4 + 480 z^3 - 2160 z^2 + 1200 z + 225) \operatorname{erfi}(\sqrt{z})}{4032 z^{3/2}}$$

07.25.03.8557.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8 z^3 + 236 z^2 + 966 z + 225)}{2016 z} + \frac{\sqrt{\pi} (16 z^4 + 480 z^3 + 2160 z^2 + 1200 z - 225) \operatorname{erf}(\sqrt{z})}{4032 z^{3/2}}$$

$$\begin{aligned}
 & \text{07.25.03.8558.01} \\
 & {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, 3; z\right) = \\
 & \frac{4 e^{z/2} (64 z^4 - 2144 z^3 + 10818 z^2 - 5610 z - 2145) I_1\left(\frac{z}{2}\right)}{59535 z} - \frac{8 e^{z/2} (32 z^3 - 1104 z^2 + 6465 z - 7710) I_0\left(\frac{z}{2}\right)}{59535}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8559.01} \\
 & {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \\
 & \frac{e^z (16 z^4 - 592 z^3 + 3312 z^2 - 1620 z - 945)}{8064 z^2} + \frac{\sqrt{\pi} (-32 z^5 + 1200 z^4 - 7200 z^3 + 6000 z^2 + 2250 z + 945) \operatorname{erfi}(\sqrt{z})}{16128 z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8560.01} \\
 & {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \\
 & \frac{e^{-z} (16 z^4 + 592 z^3 + 3312 z^2 + 1620 z - 945)}{8064 z^2} + \frac{\sqrt{\pi} (32 z^5 + 1200 z^4 + 7200 z^3 + 6000 z^2 - 2250 z + 945) \operatorname{erf}(\sqrt{z})}{16128 z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8561.01} \\
 & {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (128 z^5 - 5248 z^4 + 34356 z^3 - 27150 z^2 - 17745 z - 11700) I_1\left(\frac{z}{2}\right)}{218295 z^2} - \\
 & \frac{4 e^{z/2} (128 z^4 - 5376 z^3 + 39540 z^2 - 59010 z - 2925) I_0\left(\frac{z}{2}\right)}{218295 z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8562.01} \\
 & {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (8 z^5 - 356 z^4 + 2526 z^3 - 1905 z^2 - 1785 z - 1575)}{6912 z^3} + \\
 & \frac{\sqrt{\pi} (-16 z^6 + 720 z^5 - 5400 z^4 + 6000 z^3 + 3375 z^2 + 2835 z + 1575) \operatorname{erfi}(\sqrt{z})}{13824 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8563.01} \\
 & {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (8 z^5 + 356 z^4 + 2526 z^3 + 1905 z^2 - 1785 z + 1575)}{6912 z^3} + \\
 & \frac{\sqrt{\pi} (16 z^6 + 720 z^5 + 5400 z^4 + 6000 z^3 - 3375 z^2 + 2835 z - 1575) \operatorname{erf}(\sqrt{z})}{13824 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8564.01} \\
 & {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (128 z^6 - 6208 z^5 + 49956 z^4 - 53160 z^3 - 47265 z^2 - 53100 z - 45900) I_1\left(\frac{z}{2}\right)}{2837835 z^3} - \\
 & \frac{32 e^{z/2} (128 z^5 - 6336 z^4 + 56100 z^3 - 100140 z^2 - 13275 z - 11475) I_0\left(\frac{z}{2}\right)}{2837835 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8565.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{11}{2}; z\right) &= \frac{e^z (16 z^6 - 832 z^5 + 7152 z^4 - 7320 z^3 - 8925 z^2 - 12600 z - 14175)}{21504 z^4} + \\
 & \frac{1}{43008 z^{9/2}} \sqrt{\pi} (-32 z^7 + 1680 z^6 - 15120 z^5 + 21000 z^4 + 15750 z^3 + 19845 z^2 + 22050 z + 14175) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8566.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, -\frac{11}{2}; -z\right) &= \frac{e^{-z} (16 z^6 + 832 z^5 + 7152 z^4 + 7320 z^3 - 8925 z^2 + 12600 z - 14175)}{21504 z^4} + \\
 & \frac{\sqrt{\pi} (32 z^7 + 1680 z^6 + 15120 z^5 + 21000 z^4 - 15750 z^3 + 19845 z^2 - 22050 z + 14175) \operatorname{erf}(\sqrt{z})}{43008 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8567.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{9}{2}, 6; z\right) &= \\
 & \frac{1}{8513505 z^4} 32 e^{z/2} (256 z^7 - 14336 z^6 + 136872 z^5 - 183300 z^4 - 203100 z^3 - 313335 z^2 - 455940 z - 465120) I_1\left(\frac{z}{2}\right) - \\
 & \frac{32 e^{z/2} (256 z^6 - 14592 z^5 + 151080 z^4 - 313260 z^3 - 74700 z^2 - 113985 z - 116280) I_0\left(\frac{z}{2}\right)}{8513505 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{5}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.8568.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) &= \frac{1}{49} e^z (4 z^2 - 24 z + 49)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8569.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) &= -\frac{1}{7} e^z (2 z - 7)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8570.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) &= \frac{1}{21} e^z (8 z^2 + 4 z + 21) - \frac{8}{21} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8571.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) &= \frac{8}{21} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{21} e^{-z} (8 z^2 - 4 z + 21)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8572.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) &= \frac{1}{7} e^z (-4 z^2 + 18 z + 7) + \frac{4}{7} \sqrt{\pi} (z^{5/2} - 5 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8573.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) &= \frac{1}{7} e^{-z} (-4 z^2 - 18 z + 7) - \frac{4}{7} \sqrt{\pi} (z^{5/2} + 5 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8574.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) &= \frac{1}{14} e^z (2 z^2 - 19 z + 14) + \frac{1}{28} \sqrt{\pi} (-4 z^{5/2} + 40 z^{3/2} - 45 \sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.8575.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{14} e^{-z} (2z^2 + 19z + 14) + \frac{1}{28} \sqrt{\pi} (4z^{5/2} + 40z^{3/2} + 45\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8576.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (-8z^3 + 106z^2 - 240z + 105) I_0\left(\frac{z}{2}\right) + \frac{2}{105} e^{z/2} (4z^3 - 49z^2 + 73z) I_1\left(\frac{z}{2}\right)$$

07.25.03.8577.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{84} e^z (2z^2 - 29z + 54) + \frac{\sqrt{\pi} (-4z^3 + 60z^2 - 135z + 30) \operatorname{erfi}(\sqrt{z})}{168\sqrt{z}}$$

07.25.03.8578.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{84} e^{-z} (2z^2 + 29z + 54) + \frac{\sqrt{\pi} (4z^3 + 60z^2 + 135z + 30) \operatorname{erf}(\sqrt{z})}{168\sqrt{z}}$$

07.25.03.8579.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{735} e^{z/2} (-16z^3 + 292z^2 - 990z + 735) I_0\left(\frac{z}{2}\right) + \frac{1}{735} e^{z/2} (16z^3 - 276z^2 + 722z - 135) I_1\left(\frac{z}{2}\right)$$

07.25.03.8580.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^3 - 156z^2 + 466z - 75)}{896z} + \frac{\sqrt{\pi} (-16z^4 + 320z^3 - 1080z^2 + 480z + 75) \operatorname{erfi}(\sqrt{z})}{1792z^{3/2}}$$

07.25.03.8581.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^3 + 156z^2 + 466z + 75)}{896z} + \frac{\sqrt{\pi} (16z^4 + 320z^3 + 1080z^2 + 480z - 75) \operatorname{erf}(\sqrt{z})}{1792z^{3/2}}$$

07.25.03.8582.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, 3; z\right) = \frac{4e^{z/2} (16z^4 - 356z^3 + 1332z^2 - 525z - 165) I_1\left(\frac{z}{2}\right)}{6615z} - \frac{4e^{z/2} (16z^3 - 372z^2 + 1680z - 1695) I_0\left(\frac{z}{2}\right)}{6615}$$

07.25.03.8583.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (8z^4 - 196z^3 + 806z^2 - 285z - 135)}{1792z^2} + \frac{\sqrt{\pi} (-16z^5 + 400z^4 - 1800z^3 + 1200z^2 + 375z + 135) \operatorname{erfi}(\sqrt{z})}{3584z^{5/2}}$$

07.25.03.8584.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (8z^4 + 196z^3 + 806z^2 + 285z - 135)}{1792z^2} + \frac{\sqrt{\pi} (16z^5 + 400z^4 + 1800z^3 + 1200z^2 - 375z + 135) \operatorname{erf}(\sqrt{z})}{3584z^{5/2}}$$

$$\begin{aligned}
 & \text{07.25.03.8585.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, 4; z\right) &= \\
 & \frac{4 e^{z/2} (32 z^5 - 872 z^4 + 4244 z^3 - 2580 z^2 - 1425 z - 780) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (32 z^4 - 904 z^3 + 5100 z^2 - 6420 z - 195) I_0\left(\frac{z}{2}\right)}{24\,255 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8586.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) &= \frac{e^z (32 z^5 - 944 z^4 + 4944 z^3 - 2760 z^2 - 2190 z - 1575)}{12\,288 z^3} + \\
 & \frac{\sqrt{\pi} (-64 z^6 + 1920 z^5 - 10\,800 z^4 + 9600 z^3 + 4500 z^2 + 3240 z + 1575) \operatorname{erfi}(\sqrt{z})}{24\,576 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8587.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) &= \frac{e^{-z} (32 z^5 + 944 z^4 + 4944 z^3 + 2760 z^2 - 2190 z + 1575)}{12\,288 z^3} + \\
 & \frac{\sqrt{\pi} (64 z^6 + 1920 z^5 + 10\,800 z^4 + 9600 z^3 - 4500 z^2 + 3240 z - 1575) \operatorname{erf}(\sqrt{z})}{24\,576 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8588.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, 5; z\right) &= \frac{64 e^{z/2} (16 z^6 - 516 z^5 + 3092 z^4 - 2550 z^3 - 1935 z^2 - 1860 z - 1350) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (32 z^5 - 1064 z^4 + 7200 z^3 - 10\,800 z^2 - 930 z - 675) I_0\left(\frac{z}{2}\right)}{315\,315 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8589.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) &= \frac{3 e^z (32 z^6 - 1104 z^5 + 7024 z^4 - 5400 z^3 - 5670 z^2 - 6825 z - 6300)}{57\,344 z^4} - \\
 & \frac{3 \sqrt{\pi} (64 z^7 - 2240 z^6 + 15\,120 z^5 - 16\,800 z^4 - 10\,500 z^3 - 11\,340 z^2 - 11\,025 z - 6300) \operatorname{erfi}(\sqrt{z})}{114\,688 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8590.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) &= \frac{3 e^{-z} (32 z^6 + 1104 z^5 + 7024 z^4 + 5400 z^3 - 5670 z^2 + 6825 z - 6300)}{57\,344 z^4} + \\
 & \frac{3 \sqrt{\pi} (64 z^7 + 2240 z^6 + 15\,120 z^5 + 16\,800 z^4 - 10\,500 z^3 + 11\,340 z^2 - 11\,025 z + 6300) \operatorname{erf}(\sqrt{z})}{114\,688 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8591.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{7}{2}, 6; z\right) &= \frac{32 e^{z/2} (64 z^7 - 2384 z^6 + 16\,968 z^5 - 17\,700 z^4 - 16\,800 z^3 - 22\,365 z^2 - 28\,260 z - 24\,480) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^6 - 2448 z^5 + 19\,320 z^4 - 33\,540 z^3 - 5400 z^2 - 7065 z - 6120) I_0\left(\frac{z}{2}\right)}{945\,945 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{5}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.8592.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = e^z$$

07.25.03.8593.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (4z^2 + 2z + 3) - \frac{4}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8594.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{4}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4z^2 - 2z + 3)$$

07.25.03.8595.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = e^z (-2z^2 + 4z + 1) + \sqrt{\pi} (2z^{5/2} - 5z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8596.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = e^{-z} (-2z^2 - 4z + 1) + \sqrt{\pi} (-2z^{5/2} - 5z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8597.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{4} e^z (2z^2 - 9z + 4) + \frac{1}{8} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8598.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{4} e^{-z} (2z^2 + 9z + 4) + \frac{1}{8} \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8599.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-4z^3 + 28z^2 - 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^3 - 24z^2 + 23z) I_1\left(\frac{z}{2}\right)$$

07.25.03.8600.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{48} e^z (4z^2 - 28z + 33) + \frac{\sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.8601.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{48} e^{-z} (4z^2 + 28z + 33) + \frac{\sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.8602.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-8z^3 + 76z^2 - 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 - 68z^2 + 116z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.8603.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^3 - 76z^2 + 146z - 15)}{256z} + \frac{\sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.8604.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^3 + 76z^2 + 146z + 15)}{256z} + \frac{\sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.8605.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (8 z^4 - 88 z^3 + 216 z^2 - 60 z - 15) I_1\left(\frac{z}{2}\right)}{945 z} - \frac{16}{945} e^{z/2} (2 z^3 - 24 z^2 + 75 z - 60) I_0\left(\frac{z}{2}\right)$$

07.25.03.8606.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (16 z^4 - 192 z^3 + 512 z^2 - 120 z - 45)}{1024 z^2} + \frac{\sqrt{\pi} (-32 z^5 + 400 z^4 - 1200 z^3 + 600 z^2 + 150 z + 45) \operatorname{erfi}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.8607.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16 z^4 + 192 z^3 + 512 z^2 + 120 z - 45)}{1024 z^2} + \frac{\sqrt{\pi} (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45) \operatorname{erf}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.8608.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^5 - 216 z^4 + 692 z^3 - 300 z^2 - 135 z - 60) I_1\left(\frac{z}{2}\right)}{3465 z^2} - \frac{4 e^{z/2} (16 z^4 - 232 z^3 + 900 z^2 - 900 z - 15) I_0\left(\frac{z}{2}\right)}{3465 z}$$

07.25.03.8609.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (32 z^5 - 464 z^4 + 1584 z^3 - 600 z^2 - 390 z - 225)}{24 576 z^3} - \frac{7 \sqrt{\pi} (64 z^6 - 960 z^5 + 3600 z^4 - 2400 z^3 - 900 z^2 - 540 z - 225) \operatorname{erfi}(\sqrt{z})}{49 152 z^{7/2}}$$

07.25.03.8610.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (32 z^5 + 464 z^4 + 1584 z^3 + 600 z^2 - 390 z + 225)}{24 576 z^3} + \frac{7 \sqrt{\pi} (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225) \operatorname{erf}(\sqrt{z})}{49 152 z^{7/2}}$$

07.25.03.8611.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^6 - 256 z^5 + 1012 z^4 - 600 z^3 - 375 z^2 - 300 z - 180) I_1\left(\frac{z}{2}\right)}{45 045 z^3} - \frac{32 e^{z/2} (16 z^5 - 272 z^4 + 1260 z^3 - 1500 z^2 - 75 z - 45) I_0\left(\frac{z}{2}\right)}{45 045 z^2}$$

07.25.03.8612.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (64 z^6 - 1088 z^5 + 4528 z^4 - 2400 z^3 - 2100 z^2 - 2100 z - 1575)}{32 768 z^4} - \frac{3 \sqrt{\pi} (128 z^7 - 2240 z^6 + 10080 z^5 - 8400 z^4 - 4200 z^3 - 3780 z^2 - 3150 z - 1575) \operatorname{erfi}(\sqrt{z})}{65 536 z^{9/2}}$$

$$\begin{aligned}
 &07.25.03.8613.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) &= \frac{3 e^{-z} (64 z^6 + 1088 z^5 + 4528 z^4 + 2400 z^3 - 2100 z^2 + 2100 z - 1575)}{32\,768 z^4} + \\
 &\frac{3 \sqrt{\pi} (128 z^7 + 2240 z^6 + 10\,080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575) \operatorname{erf}(\sqrt{z})}{65\,536 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8614.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{5}{2}; -\frac{5}{2}, 6; z\right) &= \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right)}{135\,135 z^4} - \\
 &\frac{32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135\,135 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{3}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 &07.25.03.8615.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) &= -\frac{e^z (128 z^7 - 1088 z^6 + 8544 z^5 - 53\,232 z^4 + 256\,920 z^3 - 908\,460 z^2 + 2\,103\,570 z - 2\,401\,245)}{2\,401\,245}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8616.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) &= \frac{e^z (64 z^6 - 576 z^5 + 3984 z^4 - 20\,640 z^3 + 76\,860 z^2 - 185\,220 z + 218\,295)}{218\,295}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8617.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) &= -\frac{e^z (32 z^5 - 304 z^4 + 1840 z^3 - 7560 z^2 + 19\,530 z - 24\,255)}{24\,255}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8618.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) &= \frac{e^z (16 z^4 - 160 z^3 + 840 z^2 - 2520 z + 3465)}{3465}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8619.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) &= -\frac{1}{693} e^z (8 z^3 - 84 z^2 + 378 z - 693)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8620.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) &= \frac{1}{231} e^z (4 z^2 + 84 z + 231) - \frac{128}{231} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8621.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) &= \frac{1}{231} e^{-z} (4 z^2 - 84 z + 231) - \frac{128}{231} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8622.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) &= \frac{1}{7} e^z (7 - 2z) + \frac{16}{231} \sqrt{\pi} (4 z^{3/2} - 15 \sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.8623.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{7} e^{-z} (2z + 7) + \frac{16}{231} \sqrt{\pi} (4z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8624.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{693} e^{z/2} (128z^2 - 819z + 693) I_0\left(\frac{z}{2}\right) + \frac{1}{693} e^{z/2} (685z - 128z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.8625.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{231} e^z (111 - 16z) + \frac{4\sqrt{\pi} (4z^2 - 30z + 15) \operatorname{erfi}(\sqrt{z})}{231\sqrt{z}}$$

07.25.03.8626.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{231} e^{-z} (16z + 111) + \frac{4\sqrt{\pi} (4z^2 + 30z + 15) \operatorname{erf}(\sqrt{z})}{231\sqrt{z}}$$

07.25.03.8627.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (256z^2 - 2592z + 3465) I_0\left(\frac{z}{2}\right)}{3465} + \frac{e^{z/2} (-256z^2 + 2336z - 1287) I_1\left(\frac{z}{2}\right)}{3465}$$

07.25.03.8628.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16z^2 + 172z - 105)}{462z} + \frac{\sqrt{\pi} (32z^3 - 360z^2 + 360z + 105) \operatorname{erfi}(\sqrt{z})}{924z^{3/2}}$$

07.25.03.8629.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (16z^2 + 172z + 105)}{462z} + \frac{\sqrt{\pi} (32z^3 + 360z^2 + 360z - 105) \operatorname{erf}(\sqrt{z})}{924z^{3/2}}$$

07.25.03.8630.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, 3; z\right) = \frac{32 e^{z/2} (32z^2 - 444z + 825) I_0\left(\frac{z}{2}\right)}{24255} - \frac{4 e^{z/2} (256z^3 - 3296z^2 + 3432z + 2145) I_1\left(\frac{z}{2}\right)}{24255z}$$

07.25.03.8631.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (8z^4 - 120z^3 + 180z^2 + 105z + 63) \operatorname{erfi}(\sqrt{z})}{1848z^{5/2}} - \frac{5e^z (4z^3 - 58z^2 + 63z + 63)}{924z^2}$$

07.25.03.8632.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} (4z^3 + 58z^2 + 63z - 63)}{924z^2} + \frac{5\sqrt{\pi} (8z^4 + 120z^3 + 180z^2 - 105z + 63) \operatorname{erf}(\sqrt{z})}{1848z^{5/2}}$$

07.25.03.8633.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2} (512z^3 - 9024z^2 + 21360z + 3315) I_0\left(\frac{z}{2}\right)}{72765z} - \frac{4e^{z/2} (512z^4 - 8512z^3 + 13104z^2 + 12675z + 13260) I_1\left(\frac{z}{2}\right)}{72765z^2}$$

$$\begin{aligned}
 &07.25.03.8634.01 \\
 &{}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \\
 &\frac{e^z (-16z^4 + 292z^3 - 462z^2 - 630z - 945)}{1056z^3} + \frac{\sqrt{\pi} (32z^5 - 600z^4 + 1200z^3 + 1050z^2 + 1260z + 945) \operatorname{erfi}(\sqrt{z})}{2112z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8635.01 \\
 &{}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \\
 &\frac{e^{-z} (16z^4 + 292z^3 + 462z^2 - 630z + 945)}{1056z^3} + \frac{\sqrt{\pi} (32z^5 + 600z^4 + 1200z^3 - 1050z^2 + 1260z - 945) \operatorname{erf}(\sqrt{z})}{2112z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8636.01 \\
 &{}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2} (512z^4 - 10944z^3 + 31440z^2 + 10965z + 14535) I_0\left(\frac{z}{2}\right)}{800415z^2} - \\
 &\frac{32e^{z/2} (512z^5 - 10432z^4 + 21264z^3 + 27525z^2 + 43860z + 58140) I_1\left(\frac{z}{2}\right)}{800415z^3}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8637.01 \\
 &{}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (-16z^5 + 352z^4 - 732z^3 - 1260z^2 - 2520z - 4725)}{1408z^4} + \\
 &\frac{\sqrt{\pi} (32z^6 - 720z^5 + 1800z^4 + 2100z^3 + 3780z^2 + 5670z + 4725) \operatorname{erfi}(\sqrt{z})}{2816z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8638.01 \\
 &{}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (16z^5 + 352z^4 + 732z^3 - 1260z^2 + 2520z - 4725)}{1408z^4} + \\
 &\frac{\sqrt{\pi} (32z^6 + 720z^5 + 1800z^4 - 2100z^3 + 3780z^2 - 5670z + 4725) \operatorname{erf}(\sqrt{z})}{2816z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8639.01 \\
 &{}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{11}{2}, 6; z\right) = \frac{32e^{z/2} (1024z^5 - 25728z^4 + 86880z^3 + 49470z^2 + 107559z + 162792) I_0\left(\frac{z}{2}\right)}{2081079z^3} - \\
 &\frac{32e^{z/2} (1024z^6 - 24704z^5 + 62688z^4 + 100830z^3 + 218229z^2 + 430236z + 651168) I_1\left(\frac{z}{2}\right)}{2081079z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{9}{2}$

$$\begin{aligned}
 &07.25.03.8640.01 \\
 &{}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{e^z (32z^5 - 272z^4 + 1584z^3 - 6360z^2 + 16170z - 19845)}{19845}
 \end{aligned}$$

07.25.03.8641.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{e^z (16z^4 - 128z^3 + 600z^2 - 1680z + 2205)}{2205}$$

07.25.03.8642.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{1}{315} e^z (8z^3 - 60z^2 + 210z - 315)$$

07.25.03.8643.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{63} e^z (4z^2 - 28z + 63)$$

07.25.03.8644.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (2z + 3) - \frac{16}{21} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8645.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (3 - 2z) - \frac{16}{21} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.8646.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{21} e^z (21 - 8z) + \frac{8}{21} \sqrt{\pi} (z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8647.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{21} e^{-z} (8z + 21) + \frac{8}{21} \sqrt{\pi} (z^{3/2} + 3\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8648.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{63} e^{z/2} (16z^2 - 84z + 63) I_0\left(\frac{z}{2}\right) - \frac{4}{63} e^{z/2} (4z^2 - 17z) I_1\left(\frac{z}{2}\right)$$

07.25.03.8649.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{21} e^z (11 - 2z) + \frac{\sqrt{\pi} (2z^2 - 12z + 5) \operatorname{erfi}(\sqrt{z})}{21 \sqrt{z}}$$

07.25.03.8650.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{21} e^{-z} (2z + 11) + \frac{\sqrt{\pi} (2z^2 + 12z + 5) \operatorname{erf}(\sqrt{z})}{21 \sqrt{z}}$$

07.25.03.8651.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (32z^2 - 264z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-32z^2 + 232z - 99) I_1\left(\frac{z}{2}\right)$$

07.25.03.8652.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (-4z^2 + 34z - 15)}{84z} + \frac{\sqrt{\pi} (8z^3 - 72z^2 + 60z + 15) \operatorname{erfi}(\sqrt{z})}{168 z^{3/2}}$$

07.25.03.8653.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (4z^2 + 34z + 15)}{84z} + \frac{\sqrt{\pi} (8z^3 + 72z^2 + 60z - 15) \operatorname{erf}(\sqrt{z})}{168 z^{3/2}}$$

07.25.03.8654.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, 3; z\right) = \frac{4 e^{z/2} (32 z^2 - 360 z + 587) I_0\left(\frac{z}{2}\right)}{2205} - \frac{4 e^{z/2} (32 z^3 - 328 z^2 + 275 z + 143) I_1\left(\frac{z}{2}\right)}{2205 z}$$

07.25.03.8655.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5 \sqrt{\pi} (16 z^4 - 192 z^3 + 240 z^2 + 120 z + 63) \operatorname{erfi}(\sqrt{z})}{2688 z^{5/2}} - \frac{5 e^z (8 z^3 - 92 z^2 + 78 z + 63)}{1344 z^2}$$

07.25.03.8656.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (8 z^3 + 92 z^2 + 78 z - 63)}{1344 z^2} + \frac{5 \sqrt{\pi} (16 z^4 + 192 z^3 + 240 z^2 - 120 z + 63) \operatorname{erf}(\sqrt{z})}{2688 z^{5/2}}$$

07.25.03.8657.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^3 - 912 z^2 + 1878 z + 195) I_0\left(\frac{z}{2}\right)}{6615 z} - \frac{4 e^{z/2} (64 z^4 - 848 z^3 + 1062 z^2 + 897 z + 780) I_1\left(\frac{z}{2}\right)}{6615 z^2}$$

07.25.03.8658.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (-8 z^4 + 116 z^3 - 146 z^2 - 175 z - 210)}{384 z^3} + \frac{\sqrt{\pi} (16 z^5 - 240 z^4 + 400 z^3 + 300 z^2 + 315 z + 210) \operatorname{erfi}(\sqrt{z})}{768 z^{7/2}}$$

07.25.03.8659.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (8 z^4 + 116 z^3 + 146 z^2 - 175 z + 210)}{384 z^3} + \frac{\sqrt{\pi} (16 z^5 + 240 z^4 + 400 z^3 - 300 z^2 + 315 z - 210) \operatorname{erf}(\sqrt{z})}{768 z^{7/2}}$$

07.25.03.8660.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (64 z^4 - 1104 z^3 + 2742 z^2 + 690 z + 765) I_0\left(\frac{z}{2}\right)}{72765 z^2} - \frac{64 e^{z/2} (32 z^5 - 520 z^4 + 867 z^3 + 984 z^2 + 1380 z + 1530) I_1\left(\frac{z}{2}\right)}{72765 z^3}$$

07.25.03.8661.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (-8 z^5 + 140 z^4 - 234 z^3 - 357 z^2 - 630 z - 945)}{512 z^4} + \frac{\sqrt{\pi} (16 z^6 - 288 z^5 + 600 z^4 + 600 z^3 + 945 z^2 + 1260 z + 945) \operatorname{erfi}(\sqrt{z})}{1024 z^{9/2}}$$

07.25.03.8662.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (8 z^5 + 140 z^4 + 234 z^3 - 357 z^2 + 630 z - 945)}{512 z^4} + \frac{\sqrt{\pi} (16 z^6 + 288 z^5 + 600 z^4 - 600 z^3 + 945 z^2 - 1260 z + 945) \operatorname{erf}(\sqrt{z})}{1024 z^{9/2}}$$

$$\begin{aligned}
 &07.25.03.8663.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{9}{2}, 6; z\right) &= \frac{32 e^{z/2} (128 z^5 - 2592 z^4 + 7532 z^3 + 3210 z^2 + 6069 z + 7752) I_0\left(\frac{z}{2}\right)}{189 189 z^3} - \\
 &\frac{32 e^{z/2} (128 z^6 - 2464 z^5 + 5132 z^4 + 7238 z^3 + 13 809 z^2 + 24 276 z + 31 008) I_1\left(\frac{z}{2}\right)}{189 189 z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 &07.25.03.8664.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) &= -\frac{1}{245} e^z (8 z^3 - 52 z^2 + 170 z - 245)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8665.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) &= \frac{1}{35} e^z (4 z^2 - 20 z + 35)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8666.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) &= -\frac{1}{7} e^z (2 z - 7)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8667.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) &= \frac{1}{7} e^z (8 z + 7) - \frac{8}{7} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8668.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) &= \frac{1}{7} e^{-z} (7 - 8 z) - \frac{8}{7} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8669.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) &= \frac{1}{7} e^z (7 - 4 z) + \frac{1}{7} \sqrt{\pi} (4 z^{3/2} - 9 \sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8670.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) &= \frac{1}{7} e^{-z} (4 z + 7) + \frac{1}{7} \sqrt{\pi} (4 z^{3/2} + 9 \sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8671.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, 1; z\right) &= \frac{1}{21} e^{z/2} (8 z^2 - 33 z + 21) I_0\left(\frac{z}{2}\right) + \frac{1}{21} e^{z/2} (25 z - 8 z^2) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8672.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) &= \frac{1}{7} e^z (4 - z) + \frac{\sqrt{\pi} (2 z^2 - 9 z + 3) \operatorname{erfi}(\sqrt{z})}{14 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8673.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) &= \frac{1}{7} e^{-z} (z + 4) + \frac{\sqrt{\pi} (2 z^2 + 9 z + 3) \operatorname{erf}(\sqrt{z})}{14 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8674.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, 2; z\right) &= \frac{1}{105} e^{z/2} (16 z^2 - 102 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-16 z^2 + 86 z - 27) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

07.25.03.8675.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z(-8z^2 + 50z - 15)}{112z} + \frac{\sqrt{\pi}(16z^3 - 108z^2 + 72z + 15)\operatorname{erfi}(\sqrt{z})}{224z^{3/2}}$$

07.25.03.8676.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(8z^2 + 50z + 15)}{112z} + \frac{\sqrt{\pi}(16z^3 + 108z^2 + 72z - 15)\operatorname{erf}(\sqrt{z})}{224z^{3/2}}$$

07.25.03.8677.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, 3; z\right) = \frac{8}{735} e^{z/2}(8z^2 - 69z + 96)I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(16z^3 - 122z^2 + 78z + 33)I_1\left(\frac{z}{2}\right)}{735z}$$

07.25.03.8678.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi}(16z^4 - 144z^3 + 144z^2 + 60z + 27)\operatorname{erfi}(\sqrt{z})}{1792z^{5/2}} - \frac{5e^z(8z^3 - 68z^2 + 42z + 27)}{896z^2}$$

07.25.03.8679.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}(8z^3 + 68z^2 + 42z - 27)}{896z^2} + \frac{5\sqrt{\pi}(16z^4 + 144z^3 + 144z^2 - 60z + 27)\operatorname{erf}(\sqrt{z})}{1792z^{5/2}}$$

07.25.03.8680.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, 4; z\right) = \frac{4e^{z/2}(32z^3 - 348z^2 + 606z + 39)I_0\left(\frac{z}{2}\right)}{2205z} - \frac{4e^{z/2}(32z^4 - 316z^3 + 306z^2 + 219z + 156)I_1\left(\frac{z}{2}\right)}{2205z^2}$$

07.25.03.8681.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z(-32z^4 + 344z^3 - 324z^2 - 330z - 315)}{1024z^3} + \frac{\sqrt{\pi}(64z^5 - 720z^4 + 960z^3 + 600z^2 + 540z + 315)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.8682.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(32z^4 + 344z^3 + 324z^2 - 330z + 315)}{1024z^3} + \frac{\sqrt{\pi}(64z^5 + 720z^4 + 960z^3 - 600z^2 + 540z - 315)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.8683.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, 5; z\right) = \frac{32e^{z/2}(32z^4 - 420z^3 + 876z^2 + 147z + 135)I_0\left(\frac{z}{2}\right)}{24255z^2} - \frac{32e^{z/2}(32z^5 - 388z^4 + 504z^3 + 489z^2 + 588z + 540)I_1\left(\frac{z}{2}\right)}{24255z^3}$$

07.25.03.8684.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3\sqrt{\pi}(32z^6 - 432z^5 + 720z^4 + 600z^3 + 810z^2 + 945z + 630)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{3e^z(16z^5 - 208z^4 + 264z^3 + 348z^2 + 525z + 630)}{2048z^4}$$

$$\begin{aligned}
 &07.25.03.8685.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) &= \frac{3 e^{-z} (16 z^5 + 208 z^4 + 264 z^3 - 348 z^2 + 525 z - 630)}{2048 z^4} + \\
 &\frac{3 \sqrt{\pi} (32 z^6 + 432 z^5 + 720 z^4 - 600 z^3 + 810 z^2 - 945 z + 630) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8686.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{7}{2}, 6; z\right) &= \frac{32 e^{z/2} (64 z^5 - 984 z^4 + 2388 z^3 + 708 z^2 + 1143 z + 1224) I_0\left(\frac{z}{2}\right)}{63063 z^3} - \\
 &\frac{32 e^{z/2} (64 z^6 - 920 z^5 + 1500 z^4 + 1812 z^3 + 2985 z^2 + 4572 z + 4896) I_1\left(\frac{z}{2}\right)}{63063 z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 &07.25.03.8687.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) &= -\frac{1}{5} e^z (2z - 5)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8688.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) &= e^z
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8689.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) &= e^z (2z + 1) - 2 \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8690.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) &= e^{-z} (1 - 2z) - 2 \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8691.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) &= e^z (1 - z) + \frac{1}{2} \sqrt{\pi} (2 z^{3/2} - 3 \sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8692.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) &= e^{-z} (z + 1) + \frac{1}{2} \sqrt{\pi} (2 z^{3/2} + 3 \sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8693.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, 1; z\right) &= \frac{1}{3} e^{z/2} (2 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z - 2) z I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8694.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) &= \frac{1}{8} e^z (5 - 2z) + \frac{\sqrt{\pi} (4 z^2 - 12 z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8695.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) &= \frac{1}{8} e^{-z} (2z + 5) + \frac{\sqrt{\pi} (4 z^2 + 12 z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}
 \end{aligned}$$

07.25.03.8696.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4z^2 - 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4z^2 + 14z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.8697.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-4z^2 + 16z - 3)}{32z} + \frac{\sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.8698.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (4z^2 + 16z + 3)}{32z} + \frac{\sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.8699.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 - 24z + 27) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4z^3 - 20z^2 + 9z + 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.8700.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5e^z (8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.8701.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} (8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5\sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.8702.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 - 60z^2 + 84z + 3) I_0\left(\frac{z}{2}\right)}{315z} - \frac{4 e^{z/2} (8z^4 - 52z^3 + 36z^2 + 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.8703.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7e^z (16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.8704.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} (16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7\sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.8705.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (8z^4 - 72z^3 + 120z^2 + 12z + 9) I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{128 e^{z/2} (2z^5 - 16z^4 + 15z^3 + 12z^2 + 12z + 9) I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.8706.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi}(64z^6 - 576z^5 + 720z^4 + 480z^3 + 540z^2 + 540z + 315)\operatorname{erfi}(\sqrt{z})}{32768z^{9/2}} - \frac{21e^z(32z^5 - 272z^4 + 240z^3 + 264z^2 + 330z + 315)}{16384z^4}$$

07.25.03.8707.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z}(32z^5 + 272z^4 + 240z^3 - 264z^2 + 330z - 315)}{16384z^4} + \frac{21\sqrt{\pi}(64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)\operatorname{erf}(\sqrt{z})}{32768z^{9/2}}$$

07.25.03.8708.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{5}{2}, 6; z\right) = \frac{32e^{z/2}(16z^5 - 168z^4 + 324z^3 + 60z^2 + 81z + 72)I_0\left(\frac{z}{2}\right)}{9009z^3} - \frac{32e^{z/2}(16z^6 - 152z^5 + 180z^4 + 180z^3 + 249z^2 + 324z + 288)I_1\left(\frac{z}{2}\right)}{9009z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.8709.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{3}e^z(4z^2 + 2z + 3) - \frac{4}{3}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.8710.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{4}{3}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{3}e^{-z}(4z^2 - 2z + 3)$$

07.25.03.8711.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = e^z(-2z^2 + 4z + 1) + \sqrt{\pi}(2z^{5/2} - 5z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.8712.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = e^{-z}(-2z^2 - 4z + 1) + \sqrt{\pi}(-2z^{5/2} - 5z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.8713.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{4}e^z(2z^2 - 9z + 4) + \frac{1}{8}\sqrt{\pi}(-4z^{5/2} + 20z^{3/2} - 15\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.8714.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{4}e^{-z}(2z^2 + 9z + 4) + \frac{1}{8}\sqrt{\pi}(4z^{5/2} + 20z^{3/2} + 15\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.8715.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{15}e^{z/2}(-4z^3 + 28z^2 - 45z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}(4z^3 - 24z^2 + 23z)I_1\left(\frac{z}{2}\right)$$

07.25.03.8716.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{48} e^z (4z^2 - 28z + 33) + \frac{\sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.8717.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{48} e^{-z} (4z^2 + 28z + 33) + \frac{\sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.8718.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-8z^3 + 76z^2 - 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 - 68z^2 + 116z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.8719.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^3 - 76z^2 + 146z - 15)}{256z} + \frac{\sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.8720.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^3 + 76z^2 + 146z + 15)}{256z} + \frac{\sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.8721.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (8z^4 - 88z^3 + 216z^2 - 60z - 15) I_1\left(\frac{z}{2}\right)}{945z} - \frac{16}{945} e^{z/2} (2z^3 - 24z^2 + 75z - 60) I_0\left(\frac{z}{2}\right)$$

07.25.03.8722.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (16z^4 - 192z^3 + 512z^2 - 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.8723.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16z^4 + 192z^3 + 512z^2 + 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.8724.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (16z^5 - 216z^4 + 692z^3 - 300z^2 - 135z - 60) I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4 e^{z/2} (16z^4 - 232z^3 + 900z^2 - 900z - 15) I_0\left(\frac{z}{2}\right)}{3465z}$$

07.25.03.8725.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (32z^5 - 464z^4 + 1584z^3 - 600z^2 - 390z - 225)}{24576z^3} - \frac{7\sqrt{\pi} (64z^6 - 960z^5 + 3600z^4 - 2400z^3 - 900z^2 - 540z - 225) \operatorname{erfi}(\sqrt{z})}{49152z^{7/2}}$$

$$\begin{aligned}
 & \text{07.25.03.8726.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) &= \frac{7 e^{-z} (32 z^5 + 464 z^4 + 1584 z^3 + 600 z^2 - 390 z + 225)}{24\,576 z^3} + \\
 & \frac{7 \sqrt{\pi} (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225) \operatorname{erf}(\sqrt{z})}{49\,152 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8727.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, 5; z\right) &= \frac{32 e^{z/2} (16 z^6 - 256 z^5 + 1012 z^4 - 600 z^3 - 375 z^2 - 300 z - 180) I_1\left(\frac{z}{2}\right)}{45\,045 z^3} - \\
 & \frac{32 e^{z/2} (16 z^5 - 272 z^4 + 1260 z^3 - 1500 z^2 - 75 z - 45) I_0\left(\frac{z}{2}\right)}{45\,045 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8728.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) &= \frac{3 e^z (64 z^6 - 1088 z^5 + 4528 z^4 - 2400 z^3 - 2100 z^2 - 2100 z - 1575)}{32\,768 z^4} - \\
 & \frac{3 \sqrt{\pi} (128 z^7 - 2240 z^6 + 10\,080 z^5 - 8400 z^4 - 4200 z^3 - 3780 z^2 - 3150 z - 1575) \operatorname{erfi}(\sqrt{z})}{65\,536 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8729.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) &= \frac{3 e^{-z} (64 z^6 + 1088 z^5 + 4528 z^4 + 2400 z^3 - 2100 z^2 + 2100 z - 1575)}{32\,768 z^4} + \\
 & \frac{3 \sqrt{\pi} (128 z^7 + 2240 z^6 + 10\,080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575) \operatorname{erf}(\sqrt{z})}{65\,536 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8730.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{3}{2}; -\frac{3}{2}, 6; z\right) &= \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right)}{135\,135 z^4} - \\
 & \frac{32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135\,135 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{1}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.8731.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) &= \\
 & \frac{1}{7\,203\,735} e^z (256 z^8 - 768 z^7 + 7296 z^6 - 46\,656 z^5 + 247\,680 z^4 - 1\,046\,160 z^3 + 3\,298\,680 z^2 - 6\,906\,060 z + 7\,203\,735)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8732.01} \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) &= -\frac{e^z (128 z^7 - 576 z^6 + 3936 z^5 - 21\,360 z^4 + 91\,800 z^3 - 293\,580 z^2 + 621\,810 z - 654\,885)}{654\,885}
 \end{aligned}$$

07.25.03.8733.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{e^z (64 z^6 - 384 z^5 + 2160 z^4 - 9600 z^3 + 31500 z^2 - 68040 z + 72765)}{72765}$$

07.25.03.8734.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (32 z^5 - 240 z^4 + 1200 z^3 - 4200 z^2 + 9450 z - 10395)}{10395}$$

07.25.03.8735.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{e^z (16 z^4 - 144 z^3 + 672 z^2 - 1764 z + 2079)}{2079}$$

07.25.03.8736.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{693} e^z (8 z^3 - 84 z^2 + 378 z - 693)$$

07.25.03.8737.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{693} e^z (4 z^2 - 48 z + 693) - \frac{160}{231} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8738.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{693} e^{-z} (4 z^2 + 48 z + 693) + \frac{160}{231} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.8739.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{693} e^{z/2} (2 z^2 - 504 z + 693) I_0\left(\frac{z}{2}\right) + \frac{2}{693} e^{z/2} (z^2 + 227 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.8740.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{693} e^z (2 z + 213) - \frac{80 \sqrt{\pi} (z - 1) \operatorname{erfi}(\sqrt{z})}{231 \sqrt{z}}$$

07.25.03.8741.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{693} e^{-z} (213 - 2 z) + \frac{80 \sqrt{\pi} (z + 1) \operatorname{erf}(\sqrt{z})}{231 \sqrt{z}}$$

07.25.03.8742.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{231} e^{z/2} (231 - 106 z) I_0\left(\frac{z}{2}\right) + \frac{1}{693} e^{z/2} (322 z - 429) I_1\left(\frac{z}{2}\right)$$

07.25.03.8743.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (61 z - 105)}{231 z} - \frac{5 \sqrt{\pi} (8 z^2 - 16 z - 7) \operatorname{erfi}(\sqrt{z})}{154 z^{3/2}}$$

07.25.03.8744.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (61 z + 105)}{231 z} + \frac{5 \sqrt{\pi} (8 z^2 + 16 z - 7) \operatorname{erf}(\sqrt{z})}{154 z^{3/2}}$$

07.25.03.8745.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^2 - 143 z - 143) I_1\left(\frac{z}{2}\right)}{693 z} - \frac{4}{693} e^{z/2} (64 z - 209) I_0\left(\frac{z}{2}\right)$$

07.25.03.8746.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (20 z^2 - 49 z - 84)}{462 z^2} - \frac{5 \sqrt{\pi} (40 z^3 - 120 z^2 - 105 z - 84) \operatorname{erfi}(\sqrt{z})}{924 z^{5/2}}$$

07.25.03.8747.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (20 z^2 + 49 z - 84)}{462 z^2} + \frac{5 \sqrt{\pi} (40 z^3 + 120 z^2 - 105 z + 84) \operatorname{erf}(\sqrt{z})}{924 z^{5/2}}$$

07.25.03.8748.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (128 z^3 - 416 z^2 - 559 z - 884) I_1\left(\frac{z}{2}\right)}{1617 z^2} - \frac{4 e^{z/2} (128 z^2 - 544 z - 221) I_0\left(\frac{z}{2}\right)}{1617 z}$$

07.25.03.8749.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{5 e^z (20 z^3 - 70 z^2 - 126 z - 315)}{528 z^3} - \frac{5 \sqrt{\pi} (40 z^4 - 160 z^3 - 210 z^2 - 336 z - 315) \operatorname{erfi}(\sqrt{z})}{1056 z^{7/2}}$$

07.25.03.8750.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{5 e^{-z} (20 z^3 + 70 z^2 - 126 z + 315)}{528 z^3} + \frac{5 \sqrt{\pi} (40 z^4 + 160 z^3 - 210 z^2 + 336 z - 315) \operatorname{erf}(\sqrt{z})}{1056 z^{7/2}}$$

07.25.03.8751.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, 5; z\right) = \frac{64 e^{z/2} (64 z^4 - 272 z^3 - 495 z^2 - 1020 z - 1938) I_1\left(\frac{z}{2}\right)}{14553 z^3} - \frac{32 e^{z/2} (128 z^3 - 672 z^2 - 510 z - 969) I_0\left(\frac{z}{2}\right)}{14553 z^2}$$

07.25.03.8752.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{15 e^z (4 z^4 - 18 z^3 - 42 z^2 - 105 z - 315)}{352 z^4} - \frac{15 \sqrt{\pi} (8 z^5 - 40 z^4 - 70 z^3 - 168 z^2 - 315 z - 315) \operatorname{erfi}(\sqrt{z})}{704 z^{9/2}}$$

07.25.03.8753.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{15 e^{-z} (4 z^4 + 18 z^3 - 42 z^2 + 105 z - 315)}{352 z^4} + \frac{15 \sqrt{\pi} (8 z^5 + 40 z^4 - 70 z^3 + 168 z^2 - 315 z + 315) \operatorname{erf}(\sqrt{z})}{704 z^{9/2}}$$

07.25.03.8754.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (1280 z^5 - 6720 z^4 - 15260 z^3 - 43503 z^2 - 104652 z - 217056) I_1\left(\frac{z}{2}\right)}{160083 z^4} - \frac{32 e^{z/2} (1280 z^4 - 8000 z^3 - 9180 z^2 - 26163 z - 54264) I_0\left(\frac{z}{2}\right)}{160083 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.8755.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{e^z (64 z^6 - 320 z^5 + 1808 z^4 - 7968 z^3 + 25980 z^2 - 55860 z + 59535)}{59535}$$

07.25.03.8756.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{e^z (32 z^5 - 176 z^4 + 816 z^3 - 2760 z^2 + 6090 z - 6615)}{6615}$$

07.25.03.8757.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{945} e^z (16 z^4 - 96 z^3 + 360 z^2 - 840 z + 945)$$

07.25.03.8758.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{189} e^z (8 z^3 - 52 z^2 + 154 z - 189)$$

07.25.03.8759.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{63} e^z (4 z^2 - 28 z + 63)$$

07.25.03.8760.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{63} e^z (63 - 2z) - \frac{16}{21} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8761.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{63} e^{-z} (2z + 63) + \frac{16}{21} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.8762.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{9} e^{z/2} (9 - 7z) I_0\left(\frac{z}{2}\right) + \frac{47}{63} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.8763.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{23 e^z}{63} - \frac{4 \sqrt{\pi} (6z - 5) \operatorname{erfi}(\sqrt{z})}{63 \sqrt{z}}$$

07.25.03.8764.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{4 \sqrt{\pi} (6z + 5) \operatorname{erf}(\sqrt{z})}{63 \sqrt{z}} + \frac{23 e^{-z}}{63}$$

07.25.03.8765.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{63} e^{z/2} (63 - 32z) I_0\left(\frac{z}{2}\right) + \frac{1}{63} e^{z/2} (32z - 33) I_1\left(\frac{z}{2}\right)$$

07.25.03.8766.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (4z - 5)}{14z} + \frac{\sqrt{\pi} (-24z^2 + 40z + 15) \operatorname{erfi}(\sqrt{z})}{84 z^{3/2}}$$

07.25.03.8767.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (4z + 5)}{14z} + \frac{\sqrt{\pi} (24z^2 + 40z - 15) \operatorname{erf}(\sqrt{z})}{84 z^{3/2}}$$

07.25.03.8768.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, 3; z\right) = \frac{4 e^{z/2} (96 z^2 - 176 z - 143) I_1\left(\frac{z}{2}\right)}{945 z} - \frac{64}{945} e^{z/2} (6 z - 17) I_0\left(\frac{z}{2}\right)$$

07.25.03.8769.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (8 z^2 - 16 z - 21)}{168 z^2} - \frac{5 \sqrt{\pi} (16 z^3 - 40 z^2 - 30 z - 21) \operatorname{erfi}(\sqrt{z})}{336 z^{5/2}}$$

07.25.03.8770.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (8 z^2 + 16 z - 21)}{168 z^2} + \frac{5 \sqrt{\pi} (16 z^3 + 40 z^2 - 30 z + 21) \operatorname{erf}(\sqrt{z})}{336 z^{5/2}}$$

07.25.03.8771.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (192 z^3 - 512 z^2 - 611 z - 780) I_1\left(\frac{z}{2}\right)}{2205 z^2} - \frac{4 e^{z/2} (192 z^2 - 704 z - 195) I_0\left(\frac{z}{2}\right)}{2205 z}$$

07.25.03.8772.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{5 e^z (12 z^3 - 34 z^2 - 56 z - 105)}{288 z^3} - \frac{5 \sqrt{\pi} (24 z^4 - 80 z^3 - 90 z^2 - 126 z - 105) \operatorname{erfi}(\sqrt{z})}{576 z^{7/2}}$$

07.25.03.8773.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{5 e^{-z} (12 z^3 + 34 z^2 - 56 z + 105)}{288 z^3} + \frac{5 \sqrt{\pi} (24 z^4 + 80 z^3 - 90 z^2 + 126 z - 105) \operatorname{erf}(\sqrt{z})}{576 z^{7/2}}$$

07.25.03.8774.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (64 z^4 - 224 z^3 - 357 z^2 - 660 z - 1020) I_1\left(\frac{z}{2}\right)}{6615 z^3} - \frac{32 e^{z/2} (64 z^3 - 288 z^2 - 165 z - 255) I_0\left(\frac{z}{2}\right)}{6615 z^2}$$

07.25.03.8775.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (24 z^4 - 88 z^3 - 182 z^2 - 420 z - 945)}{128 z^4} + \frac{\sqrt{\pi} (-48 z^5 + 200 z^4 + 300 z^3 + 630 z^2 + 1050 z + 945) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.8776.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (24 z^4 + 88 z^3 - 182 z^2 + 420 z - 945)}{128 z^4} + \frac{\sqrt{\pi} (48 z^5 + 200 z^4 - 300 z^3 + 630 z^2 - 1050 z + 945) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.8777.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (384 z^5 - 1664 z^4 - 3302 z^3 - 8289 z^2 - 18156 z - 31008) I_1\left(\frac{z}{2}\right)}{43659 z^4} - \frac{32 e^{z/2} (384 z^4 - 2048 z^3 - 1830 z^2 - 4539 z - 7752) I_0\left(\frac{z}{2}\right)}{43659 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.8778.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{735} e^z (16z^4 - 80z^3 + 288z^2 - 660z + 735)$$

07.25.03.8779.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{105} e^z (8z^3 - 36z^2 + 90z - 105)$$

07.25.03.8780.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{21} e^z (4z^2 - 16z + 21)$$

07.25.03.8781.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{7} e^z (2z - 7)$$

07.25.03.8782.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = e^z - \frac{6}{7} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8783.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{6}{7} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.8784.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{7} e^{z/2} (7 - 6z) I_0\left(\frac{z}{2}\right) + \frac{6}{7} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.8785.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (2 - 3z) \operatorname{erfi}(\sqrt{z})}{7 \sqrt{z}} + \frac{3 e^z}{7}$$

07.25.03.8786.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} (3z + 2) \operatorname{erf}(\sqrt{z})}{7 \sqrt{z}} + \frac{3 e^{-z}}{7}$$

07.25.03.8787.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{7} e^{z/2} (7 - 4z) I_0\left(\frac{z}{2}\right) + \frac{1}{7} e^{z/2} (4z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.8788.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{3 e^z (6z - 5)}{56z} - \frac{3 \sqrt{\pi} (12z^2 - 16z - 5) \operatorname{erfi}(\sqrt{z})}{112 z^{3/2}}$$

07.25.03.8789.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (6z + 5)}{56z} + \frac{3 \sqrt{\pi} (12z^2 + 16z - 5) \operatorname{erf}(\sqrt{z})}{112 z^{3/2}}$$

07.25.03.8790.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (12 z^2 - 17 z - 11) I_1\left(\frac{z}{2}\right)}{105 z} - \frac{4}{105} e^{z/2} (12 z - 29) I_0\left(\frac{z}{2}\right)$$

07.25.03.8791.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{15 e^z (2 z^2 - 3 z - 3)}{112 z^2} - \frac{15 \sqrt{\pi} (4 z^3 - 8 z^2 - 5 z - 3) \operatorname{erfi}(\sqrt{z})}{224 z^{5/2}}$$

07.25.03.8792.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15 e^{-z} (2 z^2 + 3 z - 3)}{112 z^2} + \frac{15 \sqrt{\pi} (4 z^3 + 8 z^2 - 5 z + 3) \operatorname{erf}(\sqrt{z})}{224 z^{5/2}}$$

07.25.03.8793.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (24 z^3 - 50 z^2 - 51 z - 52) I_1\left(\frac{z}{2}\right)}{245 z^2} - \frac{4 e^{z/2} (24 z^2 - 74 z - 13) I_0\left(\frac{z}{2}\right)}{245 z}$$

07.25.03.8794.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{5 e^z (24 z^3 - 52 z^2 - 74 z - 105)}{512 z^3} - \frac{5 \sqrt{\pi} (48 z^4 - 128 z^3 - 120 z^2 - 144 z - 105) \operatorname{erfi}(\sqrt{z})}{1024 z^{7/2}}$$

07.25.03.8795.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5 e^{-z} (24 z^3 + 52 z^2 - 74 z + 105)}{512 z^3} + \frac{5 \sqrt{\pi} (48 z^4 + 128 z^3 - 120 z^2 + 144 z - 105) \operatorname{erf}(\sqrt{z})}{1024 z^{7/2}}$$

07.25.03.8796.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, 5; z\right) = \frac{64 e^{z/2} (4 z^4 - 11 z^3 - 15 z^2 - 24 z - 30) I_1\left(\frac{z}{2}\right)}{735 z^3} - \frac{32 e^{z/2} (8 z^3 - 30 z^2 - 12 z - 15) I_0\left(\frac{z}{2}\right)}{735 z^2}$$

07.25.03.8797.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (24 z^4 - 68 z^3 - 122 z^2 - 245 z - 420)}{1024 z^4} - \frac{9 \sqrt{\pi} (48 z^5 - 160 z^4 - 200 z^3 - 360 z^2 - 525 z - 420) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.8798.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (24 z^4 + 68 z^3 - 122 z^2 + 245 z - 420)}{1024 z^4} + \frac{9 \sqrt{\pi} (48 z^5 + 160 z^4 - 200 z^3 + 360 z^2 - 525 z + 420) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.8799.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (48 z^5 - 164 z^4 - 278 z^3 - 603 z^2 - 1164 z - 1632) I_1\left(\frac{z}{2}\right)}{4851 z^4} - \frac{32 e^{z/2} (48 z^4 - 212 z^3 - 138 z^2 - 291 z - 408) I_0\left(\frac{z}{2}\right)}{4851 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.8800.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{15} e^z (4z^2 - 12z + 15)$$

07.25.03.8801.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{3} e^z (2z - 3)$$

07.25.03.8802.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = e^z$$

07.25.03.8803.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8804.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.8805.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, 1; z\right) = e^{z/2} (1 - z) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.8806.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{e^z}{2}$$

07.25.03.8807.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.8808.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, 2; z\right) = e^{z/2} \left(1 - \frac{2z}{3}\right) I_0\left(\frac{z}{2}\right) + e^{z/2} \left(\frac{2z}{3} - \frac{1}{3}\right) I_1\left(\frac{z}{2}\right)$$

07.25.03.8809.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{3e^z (2z - 1)}{16z} - \frac{3\sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.8810.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3e^{-z} (2z + 1)}{16z} + \frac{3\sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.8811.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, 3; z\right) = \frac{4e^{z/2} (2z^2 - 2z - 1) I_1\left(\frac{z}{2}\right)}{15z} - \frac{8}{15} e^{z/2} (z - 2) I_0\left(\frac{z}{2}\right)$$

07.25.03.8812.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{5e^z (4z^2 - 4z - 3)}{64z^2} - \frac{5\sqrt{\pi} (8z^3 - 12z^2 - 6z - 3) \operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.8813.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (4 z^2 + 4 z - 3)}{64 z^2} + \frac{5 \sqrt{\pi} (8 z^3 + 12 z^2 - 6 z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.8814.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (4 z^3 - 6 z^2 - 5 z - 4) I_1\left(\frac{z}{2}\right)}{35 z^2} - \frac{4 e^{z/2} (4 z^2 - 10 z - 1) I_0\left(\frac{z}{2}\right)}{35 z}$$

07.25.03.8815.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (8 z^3 - 12 z^2 - 14 z - 15)}{1024 z^3} - \frac{35 \sqrt{\pi} (16 z^4 - 32 z^3 - 24 z^2 - 24 z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.8816.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.8817.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (4 z^4 - 8 z^3 - 9 z^2 - 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3} - \frac{32 e^{z/2} (4 z^3 - 12 z^2 - 3 z - 3) I_0\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.8818.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (16 z^4 - 32 z^3 - 48 z^2 - 80 z - 105)}{4096 z^4} - \frac{63 \sqrt{\pi} (32 z^5 - 80 z^4 - 80 z^3 - 120 z^2 - 150 z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.8819.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16 z^4 + 32 z^3 - 48 z^2 + 80 z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.8820.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^5 - 20 z^4 - 28 z^3 - 51 z^2 - 84 z - 96) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (8 z^4 - 28 z^3 - 12 z^2 - 21 z - 24) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.8821.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{8}{9} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{9} e^z (-8 z^2 - 4 z + 9)$$

07.25.03.8822.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9} e^{-z} (-8 z^2 + 4 z + 9) - \frac{8}{9} \sqrt{\pi} z^{5/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.8823.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (4z^2 + 2z + 3) - \frac{4}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8824.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{4}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4z^2 - 2z + 3)$$

07.25.03.8825.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{6} e^z (-2z^2 - z + 6) + \frac{1}{12} \sqrt{\pi} (4z^{5/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8826.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{6} e^{-z} (-2z^2 + z + 6) + \frac{1}{12} \sqrt{\pi} (15\sqrt{z} - 4z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8827.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{45} e^{z/2} (8z^3 - 6z^2 - 60z + 45) I_0\left(\frac{z}{2}\right) - \frac{2}{45} e^{z/2} (4z^3 + z^2 - 27z) I_1\left(\frac{z}{2}\right)$$

07.25.03.8828.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{36} e^z (-2z^2 - z + 21) + \frac{\sqrt{\pi} (4z^3 - 45z + 15) \operatorname{erfi}(\sqrt{z})}{72\sqrt{z}}$$

07.25.03.8829.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{36} e^{-z} (-2z^2 + z + 21) + \frac{\sqrt{\pi} (-4z^3 + 45z + 15) \operatorname{erf}(\sqrt{z})}{72\sqrt{z}}$$

07.25.03.8830.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (16z^3 - 12z^2 - 270z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-16z^3 - 4z^2 + 258z - 75) I_1\left(\frac{z}{2}\right)$$

07.25.03.8831.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (-8z^3 - 4z^2 + 174z - 45)}{384z} + \frac{\sqrt{\pi} (16z^4 - 360z^2 + 240z + 45) \operatorname{erfi}(\sqrt{z})}{768z^{3/2}}$$

07.25.03.8832.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-8z^3 + 4z^2 + 174z + 45)}{384z} + \frac{\sqrt{\pi} (-16z^4 + 360z^2 + 240z - 45) \operatorname{erf}(\sqrt{z})}{768z^{3/2}}$$

07.25.03.8833.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, 3; z\right) = \frac{4e^{z/2} (16z^3 - 12z^2 - 480z + 735) I_0\left(\frac{z}{2}\right)}{2835} - \frac{4e^{z/2} (16z^4 + 4z^3 - 468z^2 + 285z + 105) I_1\left(\frac{z}{2}\right)}{2835z}$$

07.25.03.8834.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (-8z^4 - 4z^3 + 294z^2 - 165z - 90)}{768z^2} + \frac{\sqrt{\pi} (16z^5 - 600z^3 + 600z^2 + 225z + 90) \operatorname{erfi}(\sqrt{z})}{1536z^{5/2}}$$

07.25.03.8835.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-8z^4 + 4z^3 + 294z^2 + 165z - 90)}{768z^2} + \frac{\sqrt{\pi} (-16z^5 + 600z^3 + 600z^2 - 225z + 90) \operatorname{erf}(\sqrt{z})}{1536z^{5/2}}$$

07.25.03.8836.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^4 - 24 z^3 - 1500 z^2 + 2820 z + 135) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (32 z^5 + 8 z^4 - 1476 z^3 + 1380 z^2 + 885 z + 540) I_1\left(\frac{z}{2}\right)}{10395 z - 10395 z^2}$$

07.25.03.8837.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 \sqrt{\pi} (64 z^6 - 3600 z^4 + 4800 z^3 + 2700 z^2 + 2160 z + 1125) \operatorname{erfi}(\sqrt{z})}{73728 z^{7/2}} - \frac{7 e^z (32 z^5 + 16 z^4 - 1776 z^3 + 1560 z^2 + 1410 z + 1125)}{36864 z^3}$$

07.25.03.8838.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = -\frac{7 e^{-z} (32 z^5 - 16 z^4 - 1776 z^3 - 1560 z^2 + 1410 z - 1125)}{36864 z^3} - \frac{7 \sqrt{\pi} (64 z^6 - 3600 z^4 - 4800 z^3 + 2700 z^2 - 2160 z + 1125) \operatorname{erf}(\sqrt{z})}{73728 z^{7/2}}$$

07.25.03.8839.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^5 - 24 z^4 - 2160 z^3 + 4800 z^2 + 630 z + 495) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (16 z^6 + 4 z^5 - 1068 z^4 + 1350 z^3 + 1185 z^2 + 1260 z + 990) I_1\left(\frac{z}{2}\right)}{135135 z^2 - 135135 z^3}$$

07.25.03.8840.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z (-32 z^6 - 16 z^5 + 2496 z^4 - 3000 z^3 - 3570 z^2 - 4725 z - 4725)}{8192 z^4} + \frac{\sqrt{\pi} (64 z^7 - 5040 z^5 + 8400 z^4 + 6300 z^3 + 7560 z^2 + 7875 z + 4725) \operatorname{erfi}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.8841.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-32 z^6 + 16 z^5 + 2496 z^4 + 3000 z^3 - 3570 z^2 + 4725 z - 4725)}{8192 z^4} + \frac{\sqrt{\pi} (-64 z^7 + 5040 z^5 + 8400 z^4 - 6300 z^3 + 7560 z^2 - 7875 z + 4725) \operatorname{erf}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.8842.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^6 - 48 z^5 - 5880 z^4 + 15060 z^3 + 3600 z^2 + 5085 z + 4680) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^7 + 16 z^6 - 5832 z^5 + 9300 z^4 + 10200 z^3 + 14985 z^2 + 20340 z + 18720) I_1\left(\frac{z}{2}\right)}{405405 z^3 - 405405 z^4}$$

For fixed z and $a_1 = -\frac{5}{2}, a_2 = -\frac{1}{2}, b_1 = -\frac{1}{2}$

07.25.03.8843.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = e^z (-2z^2 + 4z + 1) + \sqrt{\pi} (2z^{5/2} - 5z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8844.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = e^{-z} (-2z^2 - 4z + 1) + \sqrt{\pi} (-2z^{5/2} - 5z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8845.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{4} e^z (2z^2 - 9z + 4) + \frac{1}{8} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.8846.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{4} e^{-z} (2z^2 + 9z + 4) + \frac{1}{8} \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.8847.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-4z^3 + 28z^2 - 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^3 - 24z^2 + 23z) I_1\left(\frac{z}{2}\right)$$

07.25.03.8848.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{48} e^z (4z^2 - 28z + 33) + \frac{\sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.8849.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{48} e^{-z} (4z^2 + 28z + 33) + \frac{\sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.8850.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-8z^3 + 76z^2 - 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 - 68z^2 + 116z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.8851.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^3 - 76z^2 + 146z - 15)}{256z} + \frac{\sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.8852.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^3 + 76z^2 + 146z + 15)}{256z} + \frac{\sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.8853.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, 3; z\right) = \frac{4e^{z/2} (8z^4 - 88z^3 + 216z^2 - 60z - 15) I_1\left(\frac{z}{2}\right)}{945z} - \frac{16}{945} e^{z/2} (2z^3 - 24z^2 + 75z - 60) I_0\left(\frac{z}{2}\right)$$

07.25.03.8854.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (16z^4 - 192z^3 + 512z^2 - 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.8855.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16z^4 + 192z^3 + 512z^2 + 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.8856.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, 4; z\right) = \frac{4e^{z/2} (16z^5 - 216z^4 + 692z^3 - 300z^2 - 135z - 60) I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4e^{z/2} (16z^4 - 232z^3 + 900z^2 - 900z - 15) I_0\left(\frac{z}{2}\right)}{3465z}$$

07.25.03.8857.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{7e^z (32z^5 - 464z^4 + 1584z^3 - 600z^2 - 390z - 225)}{24576z^3} - \frac{7\sqrt{\pi} (64z^6 - 960z^5 + 3600z^4 - 2400z^3 - 900z^2 - 540z - 225) \operatorname{erfi}(\sqrt{z})}{49152z^{7/2}}$$

07.25.03.8858.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} (32z^5 + 464z^4 + 1584z^3 + 600z^2 - 390z + 225)}{24576z^3} + \frac{7\sqrt{\pi} (64z^6 + 960z^5 + 3600z^4 + 2400z^3 - 900z^2 + 540z - 225) \operatorname{erf}(\sqrt{z})}{49152z^{7/2}}$$

07.25.03.8859.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, 5; z\right) = \frac{32e^{z/2} (16z^6 - 256z^5 + 1012z^4 - 600z^3 - 375z^2 - 300z - 180) I_1\left(\frac{z}{2}\right)}{45045z^3} - \frac{32e^{z/2} (16z^5 - 272z^4 + 1260z^3 - 1500z^2 - 75z - 45) I_0\left(\frac{z}{2}\right)}{45045z^2}$$

07.25.03.8860.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{3e^z (64z^6 - 1088z^5 + 4528z^4 - 2400z^3 - 2100z^2 - 2100z - 1575)}{32768z^4} - \frac{3\sqrt{\pi} (128z^7 - 2240z^6 + 10080z^5 - 8400z^4 - 4200z^3 - 3780z^2 - 3150z - 1575) \operatorname{erfi}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.8861.01

$${}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z} (64z^6 + 1088z^5 + 4528z^4 + 2400z^3 - 2100z^2 + 2100z - 1575)}{32768z^4} + \frac{3\sqrt{\pi} (128z^7 + 2240z^6 + 10080z^5 + 8400z^4 - 4200z^3 + 3780z^2 - 3150z + 1575) \operatorname{erf}(\sqrt{z})}{65536z^{9/2}}$$

$$\begin{aligned}
 &07.25.03.8862.01 \\
 {}_2F_2\left(-\frac{5}{2}, -\frac{1}{2}; -\frac{1}{2}, 6; z\right) &= \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right)}{135 135 z^4} \\
 &\quad - \frac{32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135 135 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{1}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 &07.25.03.8863.01 \\
 {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) &= -\frac{1}{7 203 735} \\
 &\quad (e^z (512 z^9 + 2304 z^8 + 4608 z^7 - 13 056 z^6 + 75 456 z^5 - 358 560 z^4 + 1 366 560 z^3 - 3 916 080 z^2 + 7 501 410 z - 7 203 735))
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8864.01 \\
 {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) &= \\
 &\quad \frac{e^z (256 z^8 + 512 z^7 + 1536 z^6 - 7296 z^5 + 34 080 z^4 - 128 160 z^3 + 362 880 z^2 - 687 960 z + 654 885)}{654 885}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8865.01 \\
 {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) &= -\frac{e^z (128 z^7 - 64 z^6 + 864 z^5 - 4080 z^4 + 15 000 z^3 - 41 580 z^2 + 77 490 z - 72 765)}{72 765}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8866.01 \\
 {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) &= \frac{e^z (64 z^6 - 192 z^5 + 720 z^4 - 2400 z^3 + 6300 z^2 - 11 340 z + 10 395)}{10 395}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8867.01 \\
 {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) &= -\frac{e^z (32 z^5 - 176 z^4 + 624 z^3 - 1512 z^2 + 2394 z - 2079)}{2079}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8868.01 \\
 {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) &= \frac{1}{693} e^z (16 z^4 - 128 z^3 + 504 z^2 - 1008 z + 693)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8869.01 \\
 {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) &= -\frac{1}{693} e^z (8 z^3 - 84 z^2 + 378 z - 693)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8870.01 \\
 {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, 1; z\right) &= \frac{1}{693} e^{z/2} (-4 z^3 + 44 z^2 - 189 z + 693) I_0\left(\frac{z}{2}\right) + \frac{1}{693} e^{z/2} (-4 z^3 + 48 z^2 - 239 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8871.01 \\
 {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) &= \frac{1}{693} e^z (-4 z^2 + 52 z - 267) + \frac{160 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{231 \sqrt{z}}
 \end{aligned}$$

07.25.03.8872.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{693} e^{-z} (-4z^2 - 52z - 267) + \frac{160\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{231\sqrt{z}}$$

07.25.03.8873.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{693} e^{z/2} (-4z^2 + 54z + 693) I_0\left(\frac{z}{2}\right) + \frac{1}{693} e^{z/2} (-4z^2 + 58z - 1287) I_1\left(\frac{z}{2}\right)$$

07.25.03.8874.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (-2z^2 + 31z - 420)}{231z} + \frac{10\sqrt{\pi} (8z + 7) \operatorname{erfi}(\sqrt{z})}{77z^{3/2}}$$

07.25.03.8875.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (2z^2 + 31z + 420)}{231z} + \frac{10\sqrt{\pi} (8z - 7) \operatorname{erf}(\sqrt{z})}{77z^{3/2}}$$

07.25.03.8876.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, 3; z\right) = -\frac{8}{693} e^{z/2} (z - 176) I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2} (2z^2 + 286z + 715) I_1\left(\frac{z}{2}\right)}{693z}$$

07.25.03.8877.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (20z^2 + 35z + 42) \operatorname{erfi}(\sqrt{z})}{77z^{5/2}} - \frac{5e^z (z^2 + 42z + 252)}{231z^2}$$

07.25.03.8878.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5\sqrt{\pi} (20z^2 - 35z + 42) \operatorname{erf}(\sqrt{z})}{77z^{5/2}} - \frac{5e^{-z} (z^2 - 42z + 252)}{231z^2}$$

07.25.03.8879.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2} (126z + 221) I_0\left(\frac{z}{2}\right)}{231z} - \frac{52e^{z/2} (10z^2 + 21z + 68) I_1\left(\frac{z}{2}\right)}{231z^2}$$

07.25.03.8880.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{5\sqrt{\pi} (40z^3 + 105z^2 + 252z + 315) \operatorname{erfi}(\sqrt{z})}{132z^{7/2}} - \frac{35e^z (z^2 + 2z + 15)}{22z^3}$$

07.25.03.8881.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} (z^2 - 2z + 15)}{22z^3} + \frac{5\sqrt{\pi} (40z^3 - 105z^2 + 252z - 315) \operatorname{erf}(\sqrt{z})}{132z^{7/2}}$$

07.25.03.8882.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2} (128z^2 + 289z + 969) I_0\left(\frac{z}{2}\right)}{1617z^2} - \frac{32e^{z/2} (128z^3 + 431z^2 + 1156z + 3876) I_1\left(\frac{z}{2}\right)}{1617z^3}$$

07.25.03.8883.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{15\sqrt{\pi} (40z^4 + 140z^3 + 504z^2 + 1260z + 1575) \operatorname{erfi}(\sqrt{z})}{352z^{9/2}} - \frac{15e^z (20z^3 + 84z^2 + 210z + 1575)}{176z^4}$$

07.25.03.8884.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{15 e^{-z} (20 z^3 - 84 z^2 + 210 z - 1575)}{176 z^4} + \frac{15 \sqrt{\pi} (40 z^4 - 140 z^3 + 504 z^2 - 1260 z + 1575) \operatorname{erf}(\sqrt{z})}{352 z^{9/2}}$$

07.25.03.8885.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (1280 z^3 + 4080 z^2 + 16473 z + 54264) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (1280 z^4 + 5360 z^3 + 23103 z^2 + 65892 z + 217056) I_1\left(\frac{z}{2}\right)}{14553 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.8886.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{e^z (128 z^7 + 64 z^6 + 736 z^5 - 3280 z^4 + 12120 z^3 - 33780 z^2 + 63210 z - 59535)}{59535}$$

07.25.03.8887.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{e^z (64 z^6 - 64 z^5 + 400 z^4 - 1440 z^3 + 3900 z^2 - 7140 z + 6615)}{6615}$$

07.25.03.8888.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{1}{945} e^z (32 z^5 - 80 z^4 + 240 z^3 - 600 z^2 + 1050 z - 945)$$

07.25.03.8889.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{189} e^z (16 z^4 - 64 z^3 + 152 z^2 - 224 z + 189)$$

07.25.03.8890.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -\frac{1}{63} e^z (8 z^3 - 44 z^2 + 98 z - 63)$$

07.25.03.8891.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{63} e^z (4 z^2 - 28 z + 63)$$

07.25.03.8892.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{63} e^{z/2} (2 z^2 - 14 z + 63) I_0\left(\frac{z}{2}\right) + \frac{2}{63} e^{z/2} (z^2 - 8 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.8893.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{63} e^z (2 z - 17) + \frac{40 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{63 \sqrt{z}}$$

07.25.03.8894.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{63} e^{-z} (-2 z - 17) + \frac{40 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{63 \sqrt{z}}$$

07.25.03.8895.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{63} e^{z/2} (2z + 63) I_0\left(\frac{z}{2}\right) + \frac{1}{63} e^{z/2} (2z - 99) I_1\left(\frac{z}{2}\right)$$

07.25.03.8896.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (z - 30)}{21z} + \frac{5\sqrt{\pi} (4z + 3) \operatorname{erfi}(\sqrt{z})}{21z^{3/2}}$$

07.25.03.8897.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (z + 30)}{21z} + \frac{5\sqrt{\pi} (4z - 3) \operatorname{erf}(\sqrt{z})}{21z^{3/2}}$$

07.25.03.8898.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, 3; z\right) = \frac{332}{189} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{44 e^{z/2} (7z + 13) I_1\left(\frac{z}{2}\right)}{189z}$$

07.25.03.8899.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (40z^2 + 60z + 63) \operatorname{erfi}(\sqrt{z})}{168z^{5/2}} - \frac{15 e^z (2z + 7)}{28z^2}$$

07.25.03.8900.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{15 e^{-z} (2z - 7)}{28z^2} + \frac{5\sqrt{\pi} (40z^2 - 60z + 63) \operatorname{erf}(\sqrt{z})}{168z^{5/2}}$$

07.25.03.8901.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (32z + 39) I_0\left(\frac{z}{2}\right)}{63z} - \frac{4 e^{z/2} (32z^2 + 65z + 156) I_1\left(\frac{z}{2}\right)}{63z^2}$$

07.25.03.8902.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{5\sqrt{\pi} (40z^3 + 90z^2 + 189z + 210) \operatorname{erfi}(\sqrt{z})}{144z^{7/2}} - \frac{5 e^z (20z^2 + 49z + 210)}{72z^3}$$

07.25.03.8903.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{5 e^{-z} (20z^2 - 49z + 210)}{72z^3} + \frac{5\sqrt{\pi} (40z^3 - 90z^2 + 189z - 210) \operatorname{erf}(\sqrt{z})}{144z^{7/2}}$$

07.25.03.8904.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (32z^2 + 60z + 153) I_0\left(\frac{z}{2}\right)}{441z^2} - \frac{128 e^{z/2} (8z^3 + 23z^2 + 60z + 153) I_1\left(\frac{z}{2}\right)}{441z^3}$$

07.25.03.8905.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{5\sqrt{\pi} (40z^4 + 120z^3 + 378z^2 + 840z + 945) \operatorname{erfi}(\sqrt{z})}{128z^{9/2}} - \frac{25 e^z (4z^3 + 14z^2 + 42z + 189)}{64z^4}$$

07.25.03.8906.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{25 e^{-z} (4z^3 - 14z^2 + 42z - 189)}{64z^4} + \frac{5\sqrt{\pi} (40z^4 - 120z^3 + 378z^2 - 840z + 945) \operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.8907.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{9}{2}, 6; z\right) = \\
 & \frac{32 e^{z/2} (320 z^3 + 840 z^2 + 3009 z + 7752) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (320 z^4 + 1160 z^3 + 4329 z^2 + 12036 z + 31008) I_1\left(\frac{z}{2}\right)}{3969 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.8908.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = -\frac{1}{735} e^z (32 z^5 - 48 z^4 + 176 z^3 - 456 z^2 + 810 z - 735)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8909.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{105} e^z (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8910.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = -\frac{1}{21} e^z (8 z^3 - 20 z^2 + 26 z - 21)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8911.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{7} e^z (4 z^2 - 12 z + 7)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8912.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = -\frac{1}{7} e^z (2 z - 7)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8913.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{7} e^{z/2} (7 - z) I_0\left(\frac{z}{2}\right) - \frac{1}{7} e^{z/2} z I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8914.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{4 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7 \sqrt{z}} - \frac{e^z}{7}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8915.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{4 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7 \sqrt{z}} - \frac{e^{-z}}{7}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8916.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{9}{7} e^{z/2} I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.8917.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{3 \sqrt{\pi} (8 z + 5) \operatorname{erfi}(\sqrt{z})}{28 z^{3/2}} - \frac{15 e^z}{14 z}
 \end{aligned}$$

07.25.03.8918.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi}(8z-5)\operatorname{erf}(\sqrt{z})}{28z^{3/2}} + \frac{15e^{-z}}{14z}$$

07.25.03.8919.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, 3; z\right) = \frac{32}{21}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(8z+11)I_1\left(\frac{z}{2}\right)}{21z}$$

07.25.03.8920.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi}(8z^2+10z+9)\operatorname{erfi}(\sqrt{z})}{112z^{5/2}} - \frac{15e^{-z}(4z+9)}{56z^2}$$

07.25.03.8921.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z}(4z-9)}{56z^2} + \frac{15\sqrt{\pi}(8z^2-10z+9)\operatorname{erf}(\sqrt{z})}{112z^{5/2}}$$

07.25.03.8922.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, 4; z\right) = \frac{4e^{z/2}(16z+13)I_0\left(\frac{z}{2}\right)}{35z} - \frac{4e^{z/2}(16z^2+29z+52)I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.8923.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{5\sqrt{\pi}(32z^3+60z^2+108z+105)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}} - \frac{5e^{-z}(16z^2+38z+105)}{64z^3}$$

07.25.03.8924.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5e^{-z}(16z^2-38z+105)}{64z^3} + \frac{5\sqrt{\pi}(32z^3-60z^2+108z-105)\operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.8925.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, 5; z\right) = \frac{32e^{z/2}(16z^2+23z+45)I_0\left(\frac{z}{2}\right)}{245z^2} - \frac{32e^{z/2}(16z^3+39z^2+92z+180)I_1\left(\frac{z}{2}\right)}{245z^3}$$

07.25.03.8926.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{45\sqrt{\pi}(8z^4+20z^3+54z^2+105z+105)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}} - \frac{45e^{-z}(4z^3+12z^2+35z+105)}{128z^4}$$

07.25.03.8927.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{45e^{-z}(4z^3-12z^2+35z-105)}{128z^4} + \frac{45\sqrt{\pi}(8z^4-20z^3+54z^2-105z+105)\operatorname{erf}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.8928.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{7}{2}, 6; z\right) = \frac{32e^{z/2}(32z^3+66z^2+201z+408)I_0\left(\frac{z}{2}\right)}{441z^3} - \frac{32e^{z/2}(32z^4+98z^3+315z^2+804z+1632)I_1\left(\frac{z}{2}\right)}{441z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.8929.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = -\frac{1}{15} e^z (8z^3 - 12z^2 + 18z - 15)$$

07.25.03.8930.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (4z^2 - 4z + 3)$$

07.25.03.8931.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = -e^z (2z - 1)$$

07.25.03.8932.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = e^z$$

07.25.03.8933.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, 1; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

07.25.03.8934.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.8935.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.8936.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.8937.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3e^z}{4z}$$

07.25.03.8938.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.8939.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2} (z + 1) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.8940.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi} (4z^2 + 4z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15e^z (2z + 3)}{32z^2}$$

07.25.03.8941.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} (2z - 3)}{32z^2} + \frac{15\sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.8942.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (2z+1) I_0\left(\frac{z}{2}\right)}{5z} - \frac{4 e^{z/2} (2z^2+3z+4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.8943.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{35 \sqrt{\pi} (8z^3+12z^2+18z+15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{35 e^z (4z^2+8z+15)}{128 z^3}$$

07.25.03.8944.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z^2-8z+15)}{128 z^3} + \frac{35 \sqrt{\pi} (8z^3-12z^2+18z-15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.8945.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2+2z+3) I_0\left(\frac{z}{2}\right)}{35 z^2} - \frac{64 e^{z/2} (z^3+2z^2+4z+6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.8946.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (16z^4+32z^3+72z^2+120z+105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315 e^z (8z^3+20z^2+50z+105)}{2048 z^4}$$

07.25.03.8947.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (8z^3-20z^2+50z-105)}{2048 z^4} + \frac{315 \sqrt{\pi} (16z^4-32z^3+72z^2-120z+105) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.8948.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3+6z^2+15z+24) I_0\left(\frac{z}{2}\right)}{63 z^3} - \frac{32 e^{z/2} (4z^4+10z^3+27z^2+60z+96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.8949.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} e^z (32z^2-14z+9) - \frac{32}{9} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8950.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{32}{9} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{9} e^{-z} (32z^2+14z+9)$$

07.25.03.8951.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{16}{3} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^z (-16z^2-8z+3)$$

07.25.03.8952.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-16z^2+8z+3) - \frac{16}{3} \sqrt{\pi} z^{5/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.8953.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (4z^2+2z+3) - \frac{4}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.8954.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{4}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4z^2 - 2z + 3)$$

07.25.03.8955.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{45} e^{z/2} (-32z^3 + 24z^2 + 15z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (32z^3 + 8z^2 + 9z) I_1\left(\frac{z}{2}\right)$$

07.25.03.8956.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{18} e^z (4z^2 + 2z + 3) + \frac{\sqrt{\pi} (15 - 8z^3) \operatorname{erfi}(\sqrt{z})}{36 \sqrt{z}}$$

07.25.03.8957.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{18} e^{-z} (4z^2 - 2z + 3) + \frac{\sqrt{\pi} (8z^3 + 15) \operatorname{erf}(\sqrt{z})}{36 \sqrt{z}}$$

07.25.03.8958.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (-64z^3 + 48z^2 + 30z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (64z^3 + 16z^2 + 18z - 225) I_1\left(\frac{z}{2}\right)$$

07.25.03.8959.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^3 + 4z^2 + 6z - 45)}{96z} + \frac{\sqrt{\pi} (-16z^4 + 120z + 45) \operatorname{erfi}(\sqrt{z})}{192z^{3/2}}$$

07.25.03.8960.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^3 - 4z^2 + 6z + 45)}{96z} + \frac{\sqrt{\pi} (16z^4 + 120z - 45) \operatorname{erf}(\sqrt{z})}{192z^{3/2}}$$

07.25.03.8961.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (64z^4 + 16z^3 + 18z^2 - 750z - 525) I_1\left(\frac{z}{2}\right)}{2835z} - \frac{8 e^{z/2} (32z^3 - 24z^2 - 15z - 420) I_0\left(\frac{z}{2}\right)}{2835}$$

07.25.03.8962.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (8z^4 + 4z^3 + 6z^2 - 135z - 135)}{192z^2} + \frac{\sqrt{\pi} (-16z^5 + 300z^2 + 225z + 135) \operatorname{erfi}(\sqrt{z})}{384z^{5/2}}$$

07.25.03.8963.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (8z^4 - 4z^3 + 6z^2 + 135z - 135)}{192z^2} + \frac{\sqrt{\pi} (16z^5 + 300z^2 - 225z + 135) \operatorname{erf}(\sqrt{z})}{384z^{5/2}}$$

07.25.03.8964.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (128z^5 + 32z^4 + 36z^3 - 3390z^2 - 3885z - 3780) I_1\left(\frac{z}{2}\right)}{10395z^2} - \frac{4 e^{z/2} (128z^4 - 96z^3 - 60z^2 - 3570z - 945) I_0\left(\frac{z}{2}\right)}{10395z}$$

$$\begin{aligned}
 &07.25.03.8965.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \\
 &\frac{7 e^z (16 z^5 + 8 z^4 + 12 z^3 - 570 z^2 - 870 z - 1125)}{4608 z^3} - \frac{7 \sqrt{\pi} (32 z^6 - 1200 z^3 - 1350 z^2 - 1620 z - 1125) \operatorname{erfi}(\sqrt{z})}{9216 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8966.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \\
 &\frac{7 e^{-z} (16 z^5 - 8 z^4 + 12 z^3 + 570 z^2 - 870 z + 1125)}{4608 z^3} + \frac{7 \sqrt{\pi} (32 z^6 + 1200 z^3 - 1350 z^2 + 1620 z - 1125) \operatorname{erf}(\sqrt{z})}{9216 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8967.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (128 z^6 + 32 z^5 + 36 z^4 - 6360 z^3 - 9825 z^2 - 15 660 z - 17 820) I_1\left(\frac{z}{2}\right)}{135 135 z^3} - \\
 &\frac{32 e^{z/2} (128 z^5 - 96 z^4 - 60 z^3 - 6540 z^2 - 3915 z - 4455) I_0\left(\frac{z}{2}\right)}{135 135 z^2}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8968.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z (64 z^6 + 32 z^5 + 48 z^4 - 4080 z^3 - 7980 z^2 - 15 750 z - 23 625)}{4096 z^4} + \\
 &\frac{\sqrt{\pi} (-128 z^7 + 8400 z^4 + 12 600 z^3 + 22 680 z^2 + 31 500 z + 23 625) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8969.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (64 z^6 - 32 z^5 + 48 z^4 + 4080 z^3 - 7980 z^2 + 15 750 z - 23 625)}{4096 z^4} + \\
 &\frac{\sqrt{\pi} (128 z^7 + 8400 z^4 - 12 600 z^3 + 22 680 z^2 - 31 500 z + 23 625) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8970.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (256 z^7 + 64 z^6 + 72 z^5 - 21 300 z^4 - 41 100 z^3 - 89 235 z^2 - 164 340 z - 205 920) I_1\left(\frac{z}{2}\right)}{405 405 z^4} - \\
 &\frac{32 e^{z/2} (256 z^6 - 192 z^5 - 120 z^4 - 21 660 z^3 - 20 700 z^2 - 41 085 z - 51 480) I_0\left(\frac{z}{2}\right)}{405 405 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 &07.25.03.8971.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = e^z (8 z^2 - 6 z + 1) - 2 \sqrt{\pi} (4 z^{5/2} - 5 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8972.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = e^{-z} (8 z^2 + 6 z + 1) + 2 \sqrt{\pi} (4 z^{5/2} + 5 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.8973.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = e^{-z}(-2z^2 + 4z + 1) + \sqrt{\pi}(2z^{5/2} - 5z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.8974.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z}(-2z^2 - 4z + 1) + \sqrt{\pi}(-2z^{5/2} - 5z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.8975.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{15}e^{z/2}(16z^3 - 62z^2 + 30z + 15)I_0\left(\frac{z}{2}\right) - \frac{2}{15}e^{z/2}(8z^3 - 23z^2 - 4z)I_1\left(\frac{z}{2}\right)$$

07.25.03.8976.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{24}e^z(-8z^2 + 26z + 9) + \frac{\sqrt{\pi}(16z^3 - 60z^2 + 15)\operatorname{erfi}(\sqrt{z})}{48\sqrt{z}}$$

07.25.03.8977.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{24}e^{-z}(-8z^2 - 26z + 9) + \frac{\sqrt{\pi}(-16z^3 - 60z^2 + 15)\operatorname{erf}(\sqrt{z})}{48\sqrt{z}}$$

07.25.03.8978.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{105}e^{z/2}(32z^3 - 164z^2 + 90z + 105)I_0\left(\frac{z}{2}\right) + \frac{1}{105}e^{z/2}(-32z^3 + 132z^2 + 26z - 45)I_1\left(\frac{z}{2}\right)$$

07.25.03.8979.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z(-8z^3 + 36z^2 + 14z - 15)}{64z} + \frac{\sqrt{\pi}(16z^4 - 80z^3 + 60z + 15)\operatorname{erfi}(\sqrt{z})}{128z^{3/2}}$$

07.25.03.8980.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(-8z^3 - 36z^2 + 14z + 15)}{64z} + \frac{\sqrt{\pi}(-16z^4 - 80z^3 + 60z - 15)\operatorname{erf}(\sqrt{z})}{128z^{3/2}}$$

07.25.03.8981.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, 3; z\right) = \frac{4}{945}e^{z/2}(32z^3 - 204z^2 + 120z + 255)I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(32z^4 - 172z^3 - 36z^2 + 165z + 75)I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.8982.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z(-32z^4 + 184z^3 + 76z^2 - 210z - 135)}{512z^2} + \frac{\sqrt{\pi}(64z^5 - 400z^4 + 600z^2 + 300z + 135)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.8983.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(-32z^4 - 184z^3 + 76z^2 + 210z - 135)}{512z^2} + \frac{\sqrt{\pi}(-64z^5 - 400z^4 + 600z^2 - 300z + 135)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.8984.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, 4; z\right) = \frac{4e^{z/2}(64z^4 - 488z^3 + 300z^2 + 1020z + 105)I_0\left(\frac{z}{2}\right)}{3465z} - \frac{4e^{z/2}(64z^5 - 424z^4 - 92z^3 + 780z^2 + 615z + 420)I_1\left(\frac{z}{2}\right)}{3465z^2}$$

$$\begin{aligned}
 &07.25.03.8985.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \\
 &\frac{7\sqrt{\pi} (32z^6 - 240z^5 + 600z^3 + 450z^2 + 405z + 225) \operatorname{erfi}(\sqrt{z})}{6144z^{7/2}} - \frac{7e^z (16z^5 - 112z^4 - 48z^3 + 240z^2 + 255z + 225)}{3072z^3}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8986.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \\
 &\frac{7e^{-z} (16z^5 + 112z^4 - 48z^3 - 240z^2 + 255z - 225)}{3072z^3} - \frac{7\sqrt{\pi} (32z^6 + 240z^5 - 600z^3 + 450z^2 - 405z + 225) \operatorname{erf}(\sqrt{z})}{6144z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8987.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, 5; z\right) = \frac{32e^{z/2} (64z^5 - 568z^4 + 360z^3 + 1800z^2 + 480z + 405) I_0\left(\frac{z}{2}\right)}{45045z^2} - \\
 &\frac{128e^{z/2} (16z^6 - 126z^5 - 28z^4 + 375z^3 + 405z^2 + 480z + 405) I_1\left(\frac{z}{2}\right)}{45045z^3}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8988.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{3\sqrt{\pi} (256z^7 - 2240z^6 + 8400z^4 + 8400z^3 + 11340z^2 + 12600z + 7875) \operatorname{erfi}(\sqrt{z})}{32768z^{9/2}} - \\
 &\frac{3e^z (128z^6 - 1056z^5 - 464z^4 + 3600z^3 + 5040z^2 + 7350z + 7875)}{16384z^4}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8989.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{3e^{-z} (128z^6 + 1056z^5 - 464z^4 - 3600z^3 + 5040z^2 - 7350z + 7875)}{16384z^4} - \\
 &\frac{3\sqrt{\pi} (256z^7 + 2240z^6 - 8400z^4 + 8400z^3 - 11340z^2 + 12600z - 7875) \operatorname{erf}(\sqrt{z})}{32768z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8990.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; -\frac{1}{2}, 6; z\right) = \frac{32e^{z/2} (128z^6 - 1296z^5 + 840z^4 + 5820z^3 + 2700z^2 + 4095z + 3960) I_0\left(\frac{z}{2}\right)}{135135z^3} - \\
 &\frac{32e^{z/2} (128z^7 - 1168z^6 - 264z^5 + 5100z^4 + 6900z^3 + 11295z^2 + 16380z + 15840) I_1\left(\frac{z}{2}\right)}{135135z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{1}{2}$, $b_1 = \frac{1}{2}$

$$\begin{aligned}
 &07.25.03.8991.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{4}e^z (2z^2 - 9z + 4) + \frac{1}{8}\sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.8992.01 \\
 &{}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{4}e^{-z} (2z^2 + 9z + 4) + \frac{1}{8}\sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.8993.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-4z^3 + 28z^2 - 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^3 - 24z^2 + 23z) I_1\left(\frac{z}{2}\right)$$

07.25.03.8994.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{48} e^z (4z^2 - 28z + 33) + \frac{\sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.8995.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{48} e^{-z} (4z^2 + 28z + 33) + \frac{\sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.8996.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-8z^3 + 76z^2 - 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 - 68z^2 + 116z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.8997.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^3 - 76z^2 + 146z - 15)}{256z} + \frac{\sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.8998.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^3 + 76z^2 + 146z + 15)}{256z} + \frac{\sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.8999.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (8z^4 - 88z^3 + 216z^2 - 60z - 15) I_1\left(\frac{z}{2}\right)}{945z} - \frac{16}{945} e^{z/2} (2z^3 - 24z^2 + 75z - 60) I_0\left(\frac{z}{2}\right)$$

07.25.03.9000.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (16z^4 - 192z^3 + 512z^2 - 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.9001.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16z^4 + 192z^3 + 512z^2 + 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.9002.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (16z^5 - 216z^4 + 692z^3 - 300z^2 - 135z - 60) I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4 e^{z/2} (16z^4 - 232z^3 + 900z^2 - 900z - 15) I_0\left(\frac{z}{2}\right)}{3465z}$$

07.25.03.9003.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (32 z^5 - 464 z^4 + 1584 z^3 - 600 z^2 - 390 z - 225)}{24 576 z^3} - \frac{7 \sqrt{\pi} (64 z^6 - 960 z^5 + 3600 z^4 - 2400 z^3 - 900 z^2 - 540 z - 225) \operatorname{erfi}(\sqrt{z})}{49 152 z^{7/2}}$$

07.25.03.9004.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (32 z^5 + 464 z^4 + 1584 z^3 + 600 z^2 - 390 z + 225)}{24 576 z^3} + \frac{7 \sqrt{\pi} (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225) \operatorname{erf}(\sqrt{z})}{49 152 z^{7/2}}$$

07.25.03.9005.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^6 - 256 z^5 + 1012 z^4 - 600 z^3 - 375 z^2 - 300 z - 180) I_1\left(\frac{z}{2}\right)}{45 045 z^3} - \frac{32 e^{z/2} (16 z^5 - 272 z^4 + 1260 z^3 - 1500 z^2 - 75 z - 45) I_0\left(\frac{z}{2}\right)}{45 045 z^2}$$

07.25.03.9006.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (64 z^6 - 1088 z^5 + 4528 z^4 - 2400 z^3 - 2100 z^2 - 2100 z - 1575)}{32 768 z^4} - \frac{3 \sqrt{\pi} (128 z^7 - 2240 z^6 + 10080 z^5 - 8400 z^4 - 4200 z^3 - 3780 z^2 - 3150 z - 1575) \operatorname{erfi}(\sqrt{z})}{65 536 z^{9/2}}$$

07.25.03.9007.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 + 1088 z^5 + 4528 z^4 + 2400 z^3 - 2100 z^2 + 2100 z - 1575)}{32 768 z^4} + \frac{3 \sqrt{\pi} (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575) \operatorname{erf}(\sqrt{z})}{65 536 z^{9/2}}$$

07.25.03.9008.01

$${}_2F_2\left(-\frac{5}{2}, \frac{1}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right)}{135 135 z^4} - \frac{32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135 135 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = -\frac{11}{2}$

07.25.03.9009.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{-512 z^9 - 4352 z^8 - 7296 z^7 - 960 z^6 - 96 z^5 - 144 z^4 - 1800 z^3 + 44\,100 z^2 - 595\,350 z + 7\,203\,735}{7\,203\,735} - \frac{512 e^z \sqrt{\pi} (z^{19/2} + 9 z^{17/2} + 18 z^{15/2} + 6 z^{13/2}) \operatorname{erf}(\sqrt{z})}{7\,203\,735}$$

07.25.03.9010.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{512 z^9 - 4352 z^8 + 7296 z^7 - 960 z^6 + 96 z^5 - 144 z^4 + 1800 z^3 + 44\,100 z^2 + 595\,350 z + 7\,203\,735}{7\,203\,735} - \frac{512 e^{-z} \sqrt{\pi} (z^{19/2} - 9 z^{17/2} + 18 z^{15/2} - 6 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{7\,203\,735}$$

07.25.03.9011.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{256 z^8 + 1408 z^7 + 960 z^6 - 96 z^5 - 48 z^4 - 360 z^3 + 6300 z^2 - 66\,150 z + 654\,885}{654\,885} + \frac{256 e^z \sqrt{\pi} (z^{17/2} + 6 z^{15/2} + 6 z^{13/2}) \operatorname{erf}(\sqrt{z})}{654\,885}$$

07.25.03.9012.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{256 z^8 - 1408 z^7 + 960 z^6 + 96 z^5 - 48 z^4 + 360 z^3 + 6300 z^2 + 66\,150 z + 654\,885}{654\,885} - \frac{256 e^{-z} \sqrt{\pi} (z^{17/2} - 6 z^{15/2} + 6 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{654\,885}$$

07.25.03.9013.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{-128 z^7 - 320 z^6 + 96 z^5 - 48 z^4 - 120 z^3 + 1260 z^2 - 9450 z + 72\,765}{72\,765} - \frac{128 e^z \sqrt{\pi} (z^{15/2} + 3 z^{13/2}) \operatorname{erf}(\sqrt{z})}{72\,765}$$

07.25.03.9014.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{128 z^7 - 320 z^6 - 96 z^5 - 48 z^4 + 120 z^3 + 1260 z^2 + 9450 z + 72\,765}{72\,765} - \frac{128 e^{-z} \sqrt{\pi} (z^{15/2} - 3 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{72\,765}$$

07.25.03.9015.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{64 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{13/2}}{10\,395} + \frac{64 z^6 - 32 z^5 + 48 z^4 - 120 z^3 + 420 z^2 - 1890 z + 10\,395}{10\,395}$$

07.25.03.9016.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 + 1890 z + 10395}{10395} - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.9017.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{-32 z^5 + 112 z^4 - 264 z^3 + 420 z^2 - 630 z + 2079}{2079} - \frac{32 e^z \sqrt{\pi} (z^{11/2} - 3 z^{9/2} + 6 z^{7/2} - 6 z^{5/2}) \operatorname{erf}(\sqrt{z})}{2079}$$

07.25.03.9018.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{32 z^5 + 112 z^4 + 264 z^3 + 420 z^2 + 630 z + 2079}{2079} - \frac{32 e^{-z} \sqrt{\pi} (z^{11/2} + 3 z^{9/2} + 6 z^{7/2} + 6 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{2079}$$

07.25.03.9019.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{693} (16 z^4 - 104 z^3 + 348 z^2 - 630 z + 693) + \frac{16}{693} e^z \sqrt{\pi} (z^{9/2} - 6 z^{7/2} + 18 z^{5/2} - 24 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9020.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{693} (16 z^4 + 104 z^3 + 348 z^2 + 630 z + 693) - \frac{16}{693} e^{-z} \sqrt{\pi} (z^{9/2} + 6 z^{7/2} + 18 z^{5/2} + 24 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9021.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{693} (-8 z^3 + 76 z^2 - 330 z + 693) - \frac{8}{693} e^z \sqrt{\pi} (z^{7/2} - 9 z^{5/2} + 36 z^{3/2} - 60 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9022.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{693} (8 z^3 + 76 z^2 + 330 z + 693) - \frac{8}{693} e^{-z} \sqrt{\pi} (z^{7/2} + 9 z^{5/2} + 36 z^{3/2} + 60 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9023.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, 1; z\right) = -\frac{1}{693} e^z (8 z^3 - 84 z^2 + 378 z - 693)$$

07.25.03.9024.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{693} (-4 z^2 + 50 z - 267) - \frac{4 e^z \sqrt{\pi} (z^3 - 12 z^2 + 60 z - 120) \operatorname{erf}(\sqrt{z})}{693 \sqrt{z}}$$

07.25.03.9025.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{693} (-4 z^2 - 50 z - 267) + \frac{4 e^{-z} \sqrt{\pi} (z^3 + 12 z^2 + 60 z + 120) \operatorname{erfi}(\sqrt{z})}{693 \sqrt{z}}$$

07.25.03.9026.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, 2; z\right) = \frac{e^z (-8 z^3 + 108 z^2 - 594 z + 1287)}{693 z} - \frac{13}{7 z}$$

07.25.03.9027.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{-2z^2 + 31z - 840}{231z} - \frac{2e^z \sqrt{\pi} (z^3 - 15z^2 + 90z - 210) \operatorname{erf}(\sqrt{z})}{231z^{3/2}}$$

07.25.03.9028.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{2z^2 + 31z + 840}{231z} - \frac{2e^{-z} \sqrt{\pi} (z^3 + 15z^2 + 90z + 210) \operatorname{erfi}(\sqrt{z})}{231z^{3/2}}$$

07.25.03.9029.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, 3; z\right) = -\frac{26(3z + 5)}{21z^2} - \frac{2e^z (8z^3 - 132z^2 + 858z - 2145)}{693z^2}$$

07.25.03.9030.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{5(z^2 + 196z + 672)}{231z^2} - \frac{5e^z \sqrt{\pi} (z^3 - 18z^2 + 126z - 336) \operatorname{erf}(\sqrt{z})}{231z^{5/2}}$$

07.25.03.9031.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (z^3 + 18z^2 + 126z + 336) \operatorname{erfi}(\sqrt{z})}{231z^{5/2}} - \frac{5(z^2 - 196z + 672)}{231z^2}$$

07.25.03.9032.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, 4; z\right) = -\frac{13(33z^2 + 110z + 170)}{77z^3} - \frac{2e^z (8z^3 - 156z^2 + 1170z - 3315)}{231z^3}$$

07.25.03.9033.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{7(31z^2 + 120z + 360)}{33z^3} - \frac{5e^z \sqrt{\pi} (z^3 - 21z^2 + 168z - 504) \operatorname{erf}(\sqrt{z})}{66z^{7/2}}$$

07.25.03.9034.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{7(31z^2 - 120z + 360)}{33z^3} - \frac{5e^{-z} \sqrt{\pi} (z^3 + 21z^2 + 168z + 504) \operatorname{erfi}(\sqrt{z})}{66z^{7/2}}$$

07.25.03.9035.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, 5; z\right) = -\frac{8e^z (8z^3 - 180z^2 + 1530z - 4845)}{231z^4} - \frac{4(143z^3 + 715z^2 + 2210z + 3230)}{77z^4}$$

07.25.03.9036.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, \frac{11}{2}; z\right) = -\frac{9(143z^3 + 840z^2 + 3080z + 8400)}{154z^4} - \frac{15e^z \sqrt{\pi} (z^3 - 24z^2 + 216z - 720) \operatorname{erf}(\sqrt{z})}{44z^{9/2}}$$

07.25.03.9037.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{9(143z^3 - 840z^2 + 3080z - 8400)}{154z^4} + \frac{15e^{-z} \sqrt{\pi} (z^3 + 24z^2 + 216z + 720) \operatorname{erfi}(\sqrt{z})}{44z^{9/2}}$$

07.25.03.9038.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{11}{2}, 6; z\right) = -\frac{40e^z (8z^3 - 204z^2 + 1938z - 6783)}{231z^5} - \frac{5(429z^4 + 2860z^3 + 13260z^2 + 38760z + 54264)}{231z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = -\frac{9}{2}$

$$\begin{aligned}
 &07.25.03.9039.01 \\
 &{}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, -\frac{9}{2}; z\right) = \\
 &\frac{-128 z^7 - 448 z^6 - 96 z^5 - 16 z^4 - 72 z^3 + 900 z^2 - 7350 z + 59535}{59535} - \frac{128 e^z \sqrt{\pi} (z^{15/2} + 4 z^{13/2} + 2 z^{11/2}) \operatorname{erf}(\sqrt{z})}{59535}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.9040.01 \\
 &{}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \\
 &\frac{128 z^7 - 448 z^6 + 96 z^5 - 16 z^4 + 72 z^3 + 900 z^2 + 7350 z + 59535}{59535} - \frac{128 e^{-z} \sqrt{\pi} (z^{15/2} - 4 z^{13/2} + 2 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{59535}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.9041.01 \\
 &{}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{64 z^6 + 96 z^5 - 16 z^4 - 24 z^3 + 180 z^2 - 1050 z + 6615}{6615} + \frac{64 e^z \sqrt{\pi} (z^{13/2} + 2 z^{11/2}) \operatorname{erf}(\sqrt{z})}{6615}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.9042.01 \\
 &{}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{64 z^6 - 96 z^5 - 16 z^4 + 24 z^3 + 180 z^2 + 1050 z + 6615}{6615} - \frac{64 e^{-z} \sqrt{\pi} (z^{13/2} - 2 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{6615}
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.9043.01 \\
 &{}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{945} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.9044.01 \\
 &{}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{945} (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.9045.01 \\
 &{}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{189} (16 z^4 - 40 z^3 + 60 z^2 - 70 z + 189) + \frac{16}{189} e^z \sqrt{\pi} (z^{9/2} - 2 z^{7/2} + 2 z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.9046.01 \\
 &{}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{189} (16 z^4 + 40 z^3 + 60 z^2 + 70 z + 189) - \frac{16}{189} e^{-z} \sqrt{\pi} (z^{9/2} + 2 z^{7/2} + 2 z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.9047.01 \\
 &{}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{63} (-8 z^3 + 36 z^2 - 70 z + 63) - \frac{8}{63} e^z \sqrt{\pi} (z^{7/2} - 4 z^{5/2} + 6 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.9048.01 \\
 &{}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{63} (8 z^3 + 36 z^2 + 70 z + 63) - \frac{8}{63} e^{-z} \sqrt{\pi} (z^{7/2} + 4 z^{5/2} + 6 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 &07.25.03.9049.01 \\
 &{}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{63} (4 z^2 - 26 z + 63) + \frac{4}{63} e^z \sqrt{\pi} (z^{5/2} - 6 z^{3/2} + 12 \sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.9050.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{63} (4z^2 + 26z + 63) - \frac{4}{63} e^{-z} \sqrt{\pi} (z^{5/2} + 6z^{3/2} + 12\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9051.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, 1; z\right) = \frac{1}{63} e^z (4z^2 - 28z + 63)$$

07.25.03.9052.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{63} (2z - 17) + \frac{2 e^z \sqrt{\pi} (z^2 - 8z + 20) \operatorname{erf}(\sqrt{z})}{63 \sqrt{z}}$$

07.25.03.9053.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{63} (-2z - 17) + \frac{2 e^{-z} \sqrt{\pi} (z^2 + 8z + 20) \operatorname{erfi}(\sqrt{z})}{63 \sqrt{z}}$$

07.25.03.9054.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, 2; z\right) = \frac{e^z (4z^2 - 36z + 99)}{63z} - \frac{11}{7z}$$

07.25.03.9055.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{z - 60}{21z} + \frac{e^z \sqrt{\pi} (z^2 - 10z + 30) \operatorname{erf}(\sqrt{z})}{21z^{3/2}}$$

07.25.03.9056.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{z + 60}{21z} + \frac{e^{-z} \sqrt{\pi} (-z^2 - 10z - 30) \operatorname{erfi}(\sqrt{z})}{21z^{3/2}}$$

07.25.03.9057.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, 3; z\right) = \frac{2 e^z (4z^2 - 44z + 143)}{63z^2} - \frac{22(9z + 13)}{63z^2}$$

07.25.03.9058.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5 e^z \sqrt{\pi} (z^2 - 12z + 42) \operatorname{erf}(\sqrt{z})}{42z^{5/2}} - \frac{10(8z + 21)}{21z^2}$$

07.25.03.9059.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{10(8z - 21)}{21z^2} + \frac{5 e^{-z} \sqrt{\pi} (z^2 + 12z + 42) \operatorname{erfi}(\sqrt{z})}{42z^{5/2}}$$

07.25.03.9060.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, 4; z\right) = \frac{-99z^2 - 286z - 390}{21z^3} + \frac{2 e^z (4z^2 - 52z + 195)}{21z^3}$$

07.25.03.9061.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-99z^2 - 350z - 840}{18z^3} + \frac{5 e^z \sqrt{\pi} (z^2 - 14z + 56) \operatorname{erf}(\sqrt{z})}{12z^{7/2}}$$

07.25.03.9062.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{99z^2 - 350z + 840}{18z^3} - \frac{5e^{-z}\sqrt{\pi}(z^2 + 14z + 56)\operatorname{erfi}(\sqrt{z})}{12z^{7/2}}$$

07.25.03.9063.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, 5; z\right) = \frac{8e^z(4z^2 - 60z + 255)}{21z^4} - \frac{4(33z^3 + 143z^2 + 390z + 510)}{21z^4}$$

07.25.03.9064.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-198z^3 - 1001z^2 - 3360z - 7560}{28z^4} + \frac{15e^z\sqrt{\pi}(z^2 - 16z + 72)\operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.9065.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{198z^3 - 1001z^2 + 3360z - 7560}{28z^4} + \frac{15e^{-z}\sqrt{\pi}(z^2 + 16z + 72)\operatorname{erfi}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.9066.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{9}{2}, 6; z\right) = \frac{40e^z(4z^2 - 68z + 323)}{21z^5} - \frac{5(99z^4 + 572z^3 + 2340z^2 + 6120z + 7752)}{63z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = -\frac{7}{2}$

07.25.03.9067.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{735}(-32z^5 - 16z^4 - 8z^3 + 36z^2 - 150z + 735) - \frac{32}{735}e^z\sqrt{\pi}(z^{11/2} + z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9068.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{735}(32z^5 - 16z^4 + 8z^3 + 36z^2 + 150z + 735) - \frac{32}{735}e^{-z}\sqrt{\pi}(z^{11/2} - z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9069.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{16}{105}e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2} + \frac{1}{105}(16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

07.25.03.9070.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{105}(16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105}e^{-z}\sqrt{\pi}z^{9/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.9071.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{21}(-8z^3 + 12z^2 - 10z + 21) - \frac{8}{21}e^z\sqrt{\pi}(z^{7/2} - z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9072.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{21}(8z^3 + 12z^2 + 10z + 21) - \frac{8}{21}e^{-z}\sqrt{\pi}(z^{7/2} + z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9073.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{7}(4z^2 - 10z + 7) + \frac{4}{7}e^z\sqrt{\pi}(z^{5/2} - 2z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9074.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{7}(4z^2 + 10z + 7) - \frac{4}{7}e^{-z}\sqrt{\pi}(z^{5/2} + 2z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9075.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{7}(7 - 2z) - \frac{2}{7}e^z\sqrt{\pi}(z^{3/2} - 3\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.9076.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{7}(2z + 7) - \frac{2}{7}e^{-z}\sqrt{\pi}(z^{3/2} + 3\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9077.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, 1; z\right) = -\frac{1}{7}e^z(2z - 7)$$

07.25.03.9078.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z\sqrt{\pi}(4 - z)\operatorname{erf}(\sqrt{z})}{7\sqrt{z}} - \frac{1}{7}$$

07.25.03.9079.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}\sqrt{\pi}(z + 4)\operatorname{erfi}(\sqrt{z})}{7\sqrt{z}} - \frac{1}{7}$$

07.25.03.9080.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, 2; z\right) = \frac{e^z(9 - 2z)}{7z} - \frac{9}{7z}$$

07.25.03.9081.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, \frac{5}{2}; z\right) = -\frac{3e^z\sqrt{\pi}(z - 5)\operatorname{erf}(\sqrt{z})}{14z^{3/2}} - \frac{15}{7z}$$

07.25.03.9082.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{15}{7z} - \frac{3e^{-z}\sqrt{\pi}(z + 5)\operatorname{erfi}(\sqrt{z})}{14z^{3/2}}$$

07.25.03.9083.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, 3; z\right) = -\frac{2e^z(2z - 11)}{7z^2} - \frac{2(9z + 11)}{7z^2}$$

07.25.03.9084.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, \frac{7}{2}; z\right) = -\frac{45(z + 2)}{14z^2} - \frac{15e^z\sqrt{\pi}(z - 6)\operatorname{erf}(\sqrt{z})}{28z^{5/2}}$$

07.25.03.9085.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{45(z - 2)}{14z^2} + \frac{15e^{-z}\sqrt{\pi}(z + 6)\operatorname{erfi}(\sqrt{z})}{28z^{5/2}}$$

07.25.03.9086.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, 4; z\right) = -\frac{6e^z(2z - 13)}{7z^3} - \frac{3(9z^2 + 22z + 26)}{7z^3}$$

07.25.03.9087.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{-18z^2 - 55z - 105}{4z^3} - \frac{15e^z \sqrt{\pi} (z-7) \operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.9088.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{18z^2 - 55z + 105}{4z^3} - \frac{15e^{-z} \sqrt{\pi} (z+7) \operatorname{erfi}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.9089.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, 5; z\right) = -\frac{24e^z (2z-15)}{7z^4} - \frac{12(3z^3 + 11z^2 + 26z + 30)}{7z^4}$$

07.25.03.9090.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, \frac{11}{2}; z\right) = -\frac{9(36z^3 + 154z^2 + 455z + 840)}{56z^4} - \frac{135e^z \sqrt{\pi} (z-8) \operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.9091.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(36z^3 - 154z^2 + 455z - 840)}{56z^4} + \frac{135e^{-z} \sqrt{\pi} (z+8) \operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.9092.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{7}{2}, 6; z\right) = -\frac{120e^z (2z-17)}{7z^5} - \frac{5(9z^4 + 44z^3 + 156z^2 + 360z + 408)}{7z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = -\frac{5}{2}$

07.25.03.9093.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{15}(-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15}e^z \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.9094.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15}(8z^3 + 4z^2 + 6z + 15) - \frac{8}{15}e^{-z} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.9095.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{4}{3}e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3}(4z^2 - 2z + 3)$$

07.25.03.9096.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3}(4z^2 + 2z + 3) - \frac{4}{3}e^{-z} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.9097.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, -\frac{1}{2}; z\right) = -2e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} - 2z + 1$$

07.25.03.9098.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, -\frac{1}{2}; -z\right) = -2e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + 2z + 1$$

07.25.03.9099.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, \frac{1}{2}; z\right) = e^z \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.9100.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, \frac{1}{2}; -z\right) = 1 - e^{-z} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.9101.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, 1; z\right) = e^z$$

07.25.03.9102.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.9103.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.9104.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, 2; z\right) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.9105.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3}{2z}$$

07.25.03.9106.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3}{2z} - \frac{3 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.9107.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, 3; z\right) = \frac{2 e^z}{z^2} - \frac{2(z+1)}{z^2}$$

07.25.03.9108.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5(2z+3)}{4 z^2}$$

07.25.03.9109.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{5(2z-3)}{4 z^2} + \frac{15 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.9110.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, 4; z\right) = \frac{6 e^z}{z^3} - \frac{3(z^2 + 2z + 2)}{z^3}$$

07.25.03.9111.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{105 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7(4z^2 + 10z + 15)}{8z^3}$$

07.25.03.9112.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(4z^2 - 10z + 15)}{8z^3} - \frac{105 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.9113.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, 5; z\right) = \frac{24 e^z}{z^4} - \frac{4(z^3 + 3z^2 + 6z + 6)}{z^4}$$

07.25.03.9114.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9(8z^3 + 28z^2 + 70z + 105)}{16z^4}$$

07.25.03.9115.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{9(8z^3 - 28z^2 + 70z - 105)}{16z^4} + \frac{945 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.9116.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{5}{2}, 6; z\right) = \frac{120 e^z}{z^5} - \frac{5(z^4 + 4z^3 + 12z^2 + 24z + 24)}{z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = -\frac{3}{2}$

07.25.03.9117.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{3}{2}, 1; z\right) = \frac{1}{3} e^z (4z^2 + 2z + 3) - \frac{4}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.9118.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{3}{2}, 1; -z\right) = \frac{4}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4z^2 - 2z + 3)$$

07.25.03.9119.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{3}{2}, 2; z\right) = -\frac{8}{21} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{e^z (8z^3 + 4z^2 + 6z + 15)}{21z} - \frac{5}{7z}$$

07.25.03.9120.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{3}{2}, 2; -z\right) = \frac{8}{21} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{e^{-z} (8z^3 - 4z^2 + 6z - 15)}{21z} + \frac{5}{7z}$$

07.25.03.9121.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{3}{2}, 3; z\right) = -\frac{32}{189} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2} - \frac{10(9z + 7)}{63z^2} + \frac{2 e^z (16z^4 + 8z^3 + 12z^2 + 30z + 105)}{189z^2}$$

07.25.03.9122.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{3}{2}, 3; -z\right) = \frac{32}{189} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{10(9z - 7)}{63z^2} + \frac{2 e^{-z} (16z^4 - 8z^3 + 12z^2 - 30z + 105)}{189z^2}$$

07.25.03.9123.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{3}{2}, 4; z\right) = -\frac{64}{693} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2} - \frac{5(99z^2 + 154z + 126)}{231z^3} + \frac{2e^z(32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945)}{693z^3}$$

07.25.03.9124.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{3}{2}, 4; -z\right) = \frac{64}{693} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{5(99z^2 - 154z + 126)}{231z^3} + \frac{2e^{-z}(32z^5 - 16z^4 + 24z^3 - 60z^2 + 210z - 945)}{693z^3}$$

07.25.03.9125.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{3}{2}, 5; z\right) = -\frac{512\sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2}}{9009} - \frac{20(429z^3 + 1001z^2 + 1638z + 1386)}{3003z^4} + \frac{8e^z(64z^6 + 32z^5 + 48z^4 + 120z^3 + 420z^2 + 1890z + 10395)}{9009z^4}$$

07.25.03.9126.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{3}{2}, 5; -z\right) = \frac{512\sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2}}{9009} + \frac{20(429z^3 - 1001z^2 + 1638z - 1386)}{3003z^4} + \frac{8e^{-z}(64z^6 - 32z^5 + 48z^4 - 120z^3 + 420z^2 - 1890z + 10395)}{9009z^4}$$

07.25.03.9127.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{3}{2}, 6; z\right) = -\frac{1024\sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2}}{27027} - \frac{5(6435z^4 + 20020z^3 + 49140z^2 + 83160z + 72072)}{9009z^5} + \frac{8e^z(128z^7 + 64z^6 + 96z^5 + 240z^4 + 840z^3 + 3780z^2 + 20790z + 135135)}{27027z^5}$$

07.25.03.9128.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{3}{2}, 6; -z\right) = \frac{1024\sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2}}{27027} + \frac{5(6435z^4 - 20020z^3 + 49140z^2 - 83160z + 72072)}{9009z^5} + \frac{8e^{-z}(128z^7 - 64z^6 + 96z^5 - 240z^4 + 840z^3 - 3780z^2 + 20790z - 135135)}{27027z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = -\frac{1}{2}$

07.25.03.9129.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{1}{2}, 1; z\right) = e^z(-2z^2 + 4z + 1) + \sqrt{\pi}(2z^{5/2} - 5z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9130.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{1}{2}, 1; -z\right) = e^{-z}(-2z^2 - 4z + 1) + \sqrt{\pi}(-2z^{5/2} - 5z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9131.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{1}{2}, 2; z\right) = \frac{e^z(-4z^3 + 12z^2 + 4z + 3)}{7z} + \frac{2}{7} \sqrt{\pi}(2z^{5/2} - 7z^{3/2}) \operatorname{erfi}(\sqrt{z}) - \frac{3}{7z}$$

07.25.03.9132.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{1}{2}, 2; -z\right) = \frac{e^{-z}(-4z^3 - 12z^2 + 4z - 3)}{7z} - \frac{2}{7}\sqrt{\pi}(2z^{5/2} + 7z^{3/2})\operatorname{erf}(\sqrt{z}) + \frac{3}{7z}$$

07.25.03.9133.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{1}{2}, 3; z\right) = -\frac{2(9z+5)}{21z^2} - \frac{2e^z(8z^4 - 32z^3 - 12z^2 - 12z - 15)}{63z^2} + \frac{8}{63}\sqrt{\pi}(2z^{5/2} - 9z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9134.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{1}{2}, 3; -z\right) = \frac{2(9z-5)}{21z^2} - \frac{2e^{-z}(8z^4 + 32z^3 - 12z^2 + 12z - 15)}{63z^2} - \frac{8}{63}\sqrt{\pi}(2z^{5/2} + 9z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9135.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{1}{2}, 4; z\right) = \frac{-99z^2 - 110z - 70}{77z^3} - \frac{2e^z(16z^5 - 80z^4 - 32z^3 - 36z^2 - 60z - 105)}{231z^3} + \frac{16}{231}\sqrt{\pi}(2z^{5/2} - 11z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9136.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{1}{2}, 4; -z\right) = \frac{99z^2 - 110z + 70}{77z^3} - \frac{2e^{-z}(16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105)}{231z^3} - \frac{16}{231}\sqrt{\pi}(2z^{5/2} + 11z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9137.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{1}{2}, 5; z\right) = -\frac{4(429z^3 + 715z^2 + 910z + 630)}{1001z^4} - \frac{8e^z(32z^6 - 192z^5 - 80z^4 - 96z^3 - 180z^2 - 420z - 945)}{3003z^4} + \frac{128\sqrt{\pi}(2z^{5/2} - 13z^{3/2})\operatorname{erfi}(\sqrt{z})}{3003}$$

07.25.03.9138.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{1}{2}, 5; -z\right) = \frac{4(429z^3 - 715z^2 + 910z - 630)}{1001z^4} - \frac{8e^{-z}(32z^6 + 192z^5 - 80z^4 + 96z^3 - 180z^2 + 420z - 945)}{3003z^4} - \frac{128\sqrt{\pi}(2z^{5/2} + 13z^{3/2})\operatorname{erf}(\sqrt{z})}{3003}$$

07.25.03.9139.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{1}{2}, 6; z\right) = -\frac{5(1287z^4 + 2860z^3 + 5460z^2 + 7560z + 5544)}{3003z^5} - \frac{8e^z(64z^7 - 448z^6 - 192z^5 - 240z^4 - 480z^3 - 1260z^2 - 3780z - 10395)}{9009z^5} + \frac{256\sqrt{\pi}(2z^{5/2} - 15z^{3/2})\operatorname{erfi}(\sqrt{z})}{9009}$$

07.25.03.9140.01

$${}_2F_2\left(-\frac{5}{2}, 1; -\frac{1}{2}, 6; -z\right) = \frac{5(1287z^4 - 2860z^3 + 5460z^2 - 7560z + 5544)}{3003z^5} - \frac{8e^{-z}(64z^7 + 448z^6 - 192z^5 + 240z^4 - 480z^3 + 1260z^2 - 3780z + 10395)}{9009z^5} - \frac{256\sqrt{\pi}(2z^{5/2} + 15z^{3/2})\operatorname{erf}(\sqrt{z})}{9009}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = \frac{1}{2}$

07.25.03.9141.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{1}{2}, 1; z\right) = \frac{1}{4}e^z(2z^2 - 9z + 4) + \frac{1}{8}\sqrt{\pi}(-4z^{5/2} + 20z^{3/2} - 15\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9142.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{1}{2}, 1; -z\right) = \frac{1}{4}e^{-z}(2z^2 + 9z + 4) + \frac{1}{8}\sqrt{\pi}(4z^{5/2} + 20z^{3/2} + 15\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.9143.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{1}{2}, 2; z\right) = \frac{e^z(2z^3 - 13z^2 + 12z + 2)}{14z} + \frac{1}{28}\sqrt{\pi}(-4z^{5/2} + 28z^{3/2} - 35\sqrt{z})\operatorname{erfi}(\sqrt{z}) - \frac{1}{7z}$$

07.25.03.9144.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{1}{2}, 2; -z\right) = \frac{e^{-z}(2z^3 + 13z^2 + 12z - 2)}{14z} + \frac{1}{28}\sqrt{\pi}(4z^{5/2} + 28z^{3/2} + 35\sqrt{z})\operatorname{erf}(\sqrt{z}) + \frac{1}{7z}$$

07.25.03.9145.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{1}{2}, 3; z\right) = -\frac{2(3z + 1)}{21z^2} + \frac{2e^z(2z^4 - 17z^3 + 24z^2 + 6z + 3)}{63z^2} + \frac{1}{63}\sqrt{\pi}(-4z^{5/2} + 36z^{3/2} - 63\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9146.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{1}{2}, 3; -z\right) = \frac{2(3z - 1)}{21z^2} + \frac{2e^{-z}(2z^4 + 17z^3 + 24z^2 - 6z + 3)}{63z^2} + \frac{1}{63}\sqrt{\pi}(4z^{5/2} + 36z^{3/2} + 63\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.9147.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{1}{2}, 4; z\right) = \frac{-33z^2 - 22z - 10}{77z^3} + \frac{2e^z(4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15)}{231z^3} - \frac{2}{231}\sqrt{\pi}(4z^{5/2} - 44z^{3/2} + 99\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9148.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{1}{2}, 4; -z\right) = \frac{33z^2 - 22z + 10}{77z^3} + \frac{2e^{-z}(4z^5 + 42z^4 + 80z^3 - 24z^2 + 18z - 15)}{231z^3} + \frac{2}{231}\sqrt{\pi}(4z^{5/2} + 44z^{3/2} + 99\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.9149.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{1}{2}, 5; z\right) = -\frac{4(143z^3 + 143z^2 + 130z + 70)}{1001z^4} + \frac{8e^z(8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105)}{3003z^4} - \frac{16\sqrt{\pi}(4z^{5/2} - 52z^{3/2} + 143\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3003}$$

07.25.03.9150.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{1}{2}, 5; -z\right) = \frac{4(143z^3 - 143z^2 + 130z - 70)}{1001z^4} + \frac{8e^{-z}(8z^6 + 100z^5 + 240z^4 - 80z^3 + 72z^2 - 90z + 105)}{3003z^4} + \frac{16\sqrt{\pi}(4z^{5/2} + 52z^{3/2} + 143\sqrt{z})\operatorname{erf}(\sqrt{z})}{3003}$$

07.25.03.9151.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{1}{2}, 6; z\right) = -\frac{5(429z^4 + 572z^3 + 780z^2 + 840z + 504)}{3003z^5} + \frac{8e^z(16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945)}{9009z^5} - \frac{32\sqrt{\pi}(4z^{5/2} - 60z^{3/2} + 195\sqrt{z})\operatorname{erfi}(\sqrt{z})}{9009}$$

07.25.03.9152.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{1}{2}, 6; -z\right) = \frac{5(429z^4 - 572z^3 + 780z^2 - 840z + 504)}{3003z^5} + \frac{8e^{-z}(16z^7 + 232z^6 + 672z^5 - 240z^4 + 240z^3 - 360z^2 + 630z - 945)}{9009z^5} + \frac{32\sqrt{\pi}(4z^{5/2} + 60z^{3/2} + 195\sqrt{z})\operatorname{erf}(\sqrt{z})}{9009}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = 1$

07.25.03.9153.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, 1; z\right) = \frac{1}{15}e^{z/2}(-4z^3 + 28z^2 - 45z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}(4z^3 - 24z^2 + 23z)I_1\left(\frac{z}{2}\right)$$

07.25.03.9154.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, \frac{3}{2}; z\right) = \frac{1}{48}e^z(4z^2 - 28z + 33) + \frac{\sqrt{\pi}(-8z^3 + 60z^2 - 90z + 15)\operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.9155.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, \frac{3}{2}; -z\right) = \frac{1}{48}e^{-z}(4z^2 + 28z + 33) + \frac{\sqrt{\pi}(8z^3 + 60z^2 + 90z + 15)\operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.9156.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, 2; z\right) = \frac{1}{105}e^{z/2}(-8z^3 + 76z^2 - 180z + 105)I_0\left(\frac{z}{2}\right) + \frac{1}{105}e^{z/2}(8z^3 - 68z^2 + 116z - 15)I_1\left(\frac{z}{2}\right)$$

07.25.03.9157.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, \frac{5}{2}; z\right) = \frac{e^z(8z^3 - 76z^2 + 146z - 15)}{256z} + \frac{\sqrt{\pi}(-16z^4 + 160z^3 - 360z^2 + 120z + 15)\operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.9158.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, \frac{5}{2}; -z\right) = \frac{e^{-z}(8z^3 + 76z^2 + 146z + 15)}{256z} + \frac{\sqrt{\pi}(16z^4 + 160z^3 + 360z^2 + 120z - 15)\operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.9159.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, 3; z\right) = \frac{4e^{z/2}(8z^4 - 88z^3 + 216z^2 - 60z - 15)I_1\left(\frac{z}{2}\right)}{945z} - \frac{16}{945}e^{z/2}(2z^3 - 24z^2 + 75z - 60)I_0\left(\frac{z}{2}\right)$$

07.25.03.9160.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, \frac{7}{2}; z\right) = \frac{e^z(16z^4 - 192z^3 + 512z^2 - 120z - 45)}{1024z^2} + \frac{\sqrt{\pi}(-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45)\operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.9161.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, \frac{7}{2}; -z\right) = \frac{e^{-z}(16z^4 + 192z^3 + 512z^2 + 120z - 45)}{1024z^2} + \frac{\sqrt{\pi}(32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45)\operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.9162.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, 4; z\right) = \frac{4e^{z/2}(16z^5 - 216z^4 + 692z^3 - 300z^2 - 135z - 60)I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4e^{z/2}(16z^4 - 232z^3 + 900z^2 - 900z - 15)I_0\left(\frac{z}{2}\right)}{3465z}$$

07.25.03.9163.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, \frac{9}{2}; z\right) = \frac{7e^z(32z^5 - 464z^4 + 1584z^3 - 600z^2 - 390z - 225)}{24576z^3} - \frac{7\sqrt{\pi}(64z^6 - 960z^5 + 3600z^4 - 2400z^3 - 900z^2 - 540z - 225)\operatorname{erfi}(\sqrt{z})}{49152z^{7/2}}$$

07.25.03.9164.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, \frac{9}{2}; -z\right) = \frac{7e^{-z}(32z^5 + 464z^4 + 1584z^3 + 600z^2 - 390z + 225)}{24576z^3} + \frac{7\sqrt{\pi}(64z^6 + 960z^5 + 3600z^4 + 2400z^3 - 900z^2 + 540z - 225)\operatorname{erf}(\sqrt{z})}{49152z^{7/2}}$$

07.25.03.9165.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, 5; z\right) = \frac{32e^{z/2}(16z^6 - 256z^5 + 1012z^4 - 600z^3 - 375z^2 - 300z - 180)I_1\left(\frac{z}{2}\right)}{45045z^3} - \frac{32e^{z/2}(16z^5 - 272z^4 + 1260z^3 - 1500z^2 - 75z - 45)I_0\left(\frac{z}{2}\right)}{45045z^2}$$

07.25.03.9166.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, \frac{11}{2}; z\right) = \frac{3 e^z (64 z^6 - 1088 z^5 + 4528 z^4 - 2400 z^3 - 2100 z^2 - 2100 z - 1575)}{32 768 z^4} - \frac{3 \sqrt{\pi} (128 z^7 - 2240 z^6 + 10 080 z^5 - 8400 z^4 - 4200 z^3 - 3780 z^2 - 3150 z - 1575) \operatorname{erfi}(\sqrt{z})}{65 536 z^{9/2}}$$

07.25.03.9167.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 + 1088 z^5 + 4528 z^4 + 2400 z^3 - 2100 z^2 + 2100 z - 1575)}{32 768 z^4} + \frac{3 \sqrt{\pi} (128 z^7 + 2240 z^6 + 10 080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575) \operatorname{erf}(\sqrt{z})}{65 536 z^{9/2}}$$

07.25.03.9168.01

$${}_2F_2\left(-\frac{5}{2}, 1; 1, 6; z\right) = \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right)}{135 135 z^4} - \frac{32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135 135 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = \frac{3}{2}$

07.25.03.9169.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{3}{2}, 2; z\right) = \frac{e^z (4 z^3 - 40 z^2 + 87 z - 24)}{168 z} + \frac{\sqrt{\pi} (-8 z^3 + 84 z^2 - 210 z + 105) \operatorname{erfi}(\sqrt{z})}{336 \sqrt{z}} + \frac{1}{7 z}$$

07.25.03.9170.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (4 z^3 + 40 z^2 + 87 z + 24)}{168 z} + \frac{\sqrt{\pi} (8 z^3 + 84 z^2 + 210 z + 105) \operatorname{erf}(\sqrt{z})}{336 \sqrt{z}} - \frac{1}{7 z}$$

07.25.03.9171.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{3}{2}, 3; z\right) = \frac{2(9z+1)}{63z^2} + \frac{e^z (4z^4 - 52z^3 + 165z^2 - 96z - 12)}{378z^2} + \frac{\sqrt{\pi} (-8z^3 + 108z^2 - 378z + 315) \operatorname{erfi}(\sqrt{z})}{756\sqrt{z}}$$

07.25.03.9172.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{3}{2}, 3; -z\right) = -\frac{2(9z-1)}{63z^2} + \frac{e^{-z} (4z^4 + 52z^3 + 165z^2 + 96z - 12)}{378z^2} + \frac{\sqrt{\pi} (8z^3 + 108z^2 + 378z + 315) \operatorname{erf}(\sqrt{z})}{756\sqrt{z}}$$

07.25.03.9173.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{3}{2}, 4; z\right) = \frac{99z^2 + 22z + 6}{231z^3} + \frac{e^z (4z^5 - 64z^4 + 267z^3 - 240z^2 - 48z - 18)}{693z^3} + \frac{\sqrt{\pi} (-8z^3 + 132z^2 - 594z + 693) \operatorname{erfi}(\sqrt{z})}{1386\sqrt{z}}$$

07.25.03.9174.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{3}{2}, 4; -z\right) = \frac{-99z^2 + 22z - 6}{231z^3} + \frac{e^{-z}(4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18)}{693z^3} + \frac{\sqrt{\pi}(8z^3 + 132z^2 + 594z + 693)\operatorname{erf}(\sqrt{z})}{1386\sqrt{z}}$$

07.25.03.9175.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{3}{2}, 5; z\right) = \frac{4(429z^3 + 143z^2 + 78z + 30)}{3003z^4} + \frac{8e^z(4z^6 - 76z^5 + 393z^4 - 480z^3 - 120z^2 - 72z - 45)}{9009z^4} - \frac{4\sqrt{\pi}(8z^3 - 156z^2 + 858z - 1287)\operatorname{erfi}(\sqrt{z})}{9009\sqrt{z}}$$

07.25.03.9176.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{3}{2}, 5; -z\right) = -\frac{4(429z^3 - 143z^2 + 78z - 30)}{3003z^4} + \frac{8e^{-z}(4z^6 + 76z^5 + 393z^4 + 480z^3 - 120z^2 + 72z - 45)}{9009z^4} + \frac{4\sqrt{\pi}(8z^3 + 156z^2 + 858z + 1287)\operatorname{erf}(\sqrt{z})}{9009\sqrt{z}}$$

07.25.03.9177.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{3}{2}, 6; z\right) = \frac{5(1287z^4 + 572z^3 + 468z^2 + 360z + 168)}{9009z^5} + \frac{8e^z(8z^7 - 176z^6 + 1086z^5 - 1680z^4 - 480z^3 - 360z^2 - 360z - 315)}{27027z^5} - \frac{8\sqrt{\pi}(8z^3 - 180z^2 + 1170z - 2145)\operatorname{erfi}(\sqrt{z})}{27027\sqrt{z}}$$

07.25.03.9178.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{3}{2}, 6; -z\right) = -\frac{5(1287z^4 - 572z^3 + 468z^2 - 360z + 168)}{9009z^5} + \frac{8e^{-z}(8z^7 + 176z^6 + 1086z^5 + 1680z^4 - 480z^3 + 360z^2 - 360z + 315)}{27027z^5} + \frac{8\sqrt{\pi}(8z^3 + 180z^2 + 1170z + 2145)\operatorname{erf}(\sqrt{z})}{27027\sqrt{z}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = 2$

07.25.03.9179.01

$${}_2F_2\left(-\frac{5}{2}, 1; 2, 2; z\right) = -\frac{2e^{z/2}(8z^4 - 104z^3 + 376z^2 - 420z + 105)I_0\left(\frac{z}{2}\right)}{735z} + \frac{8}{735}e^{z/2}(2z^3 - 24z^2 + 71z - 44)I_1\left(\frac{z}{2}\right) + \frac{2}{7z}$$

07.25.03.9180.01

$${}_2F_2\left(-\frac{5}{2}, 1; 2, \frac{5}{2}; z\right) = \frac{e^z(8z^3 - 108z^2 + 370z - 279)}{896z} + \frac{\sqrt{\pi}(-16z^4 + 224z^3 - 840z^2 + 840z - 105)\operatorname{erfi}(\sqrt{z})}{1792z^{3/2}} + \frac{3}{7z}$$

07.25.03.9181.01

$${}_2F_2\left(-\frac{5}{2}, 1; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(8z^3 + 108z^2 + 370z + 279)}{896z} + \frac{\sqrt{\pi}(16z^4 + 224z^3 + 840z^2 + 840z + 105)\operatorname{erf}(\sqrt{z})}{1792z^{3/2}} - \frac{3}{7z}$$

07.25.03.9182.01

$${}_2F_2\left(-\frac{5}{2}, 1; 2, 3; z\right) = -\frac{4 e^{z/2} (16 z^4 - 264 z^3 + 1284 z^2 - 2100 z + 945) I_0\left(\frac{z}{2}\right)}{6615 z} + \frac{4 e^{z/2} (16 z^4 - 248 z^3 + 1044 z^2 - 1164 z + 105) I_1\left(\frac{z}{2}\right)}{6615 z} + \frac{4}{7 z}$$

07.25.03.9183.01

$${}_2F_2\left(-\frac{5}{2}, 1; 2, \frac{7}{2}; z\right) = \frac{e^z (16 z^4 - 272 z^3 + 1272 z^2 - 1580 z + 105)}{3584 z^2} + \frac{\sqrt{\pi} (-32 z^5 + 560 z^4 - 2800 z^3 + 4200 z^2 - 1050 z - 105) \operatorname{erfi}(\sqrt{z})}{7168 z^{5/2}} + \frac{5}{7 z}$$

07.25.03.9184.01

$${}_2F_2\left(-\frac{5}{2}, 1; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (16 z^4 + 272 z^3 + 1272 z^2 + 1580 z + 105)}{3584 z^2} + \frac{\sqrt{\pi} (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105) \operatorname{erf}(\sqrt{z})}{7168 z^{5/2}} - \frac{5}{7 z}$$

07.25.03.9185.01

$${}_2F_2\left(-\frac{5}{2}, 1; 2, 4; z\right) = -\frac{8 e^{z/2} (16 z^4 - 320 z^3 + 1956 z^2 - 4200 z + 2625) I_0\left(\frac{z}{2}\right)}{24 255 z} + \frac{8 e^{z/2} (16 z^5 - 304 z^4 + 1660 z^3 - 2676 z^2 + 525 z + 105) I_1\left(\frac{z}{2}\right)}{24 255 z^2} + \frac{6}{7 z}$$

07.25.03.9186.01

$${}_2F_2\left(-\frac{5}{2}, 1; 2, \frac{9}{2}; z\right) = \frac{e^z (32 z^5 - 656 z^4 + 3888 z^3 - 6744 z^2 + 1050 z + 315)}{12 288 z^3} + \frac{\sqrt{\pi} (-64 z^6 + 1344 z^5 - 8400 z^4 + 16 800 z^3 - 6300 z^2 - 1260 z - 315) \operatorname{erfi}(\sqrt{z})}{24 576 z^{7/2}} + \frac{1}{z}$$

07.25.03.9187.01

$${}_2F_2\left(-\frac{5}{2}, 1; 2, \frac{9}{2}; -z\right) = \frac{e^{-z} (32 z^5 + 656 z^4 + 3888 z^3 + 6744 z^2 + 1050 z - 315)}{12 288 z^3} + \frac{\sqrt{\pi} (64 z^6 + 1344 z^5 + 8400 z^4 + 16 800 z^3 + 6300 z^2 - 1260 z + 315) \operatorname{erf}(\sqrt{z})}{24 576 z^{7/2}} - \frac{1}{z}$$

07.25.03.9188.01

$${}_2F_2\left(-\frac{5}{2}, 1; 2, 5; z\right) = -\frac{32 e^{z/2} (32 z^5 - 752 z^4 + 5536 z^3 - 14 700 z^2 + 11 550 z + 105) I_0\left(\frac{z}{2}\right)}{315 315 z^2} + \frac{32 e^{z/2} (32 z^6 - 720 z^5 + 4832 z^4 - 10 196 z^3 + 3150 z^2 + 1155 z + 420) I_1\left(\frac{z}{2}\right)}{315 315 z^3} + \frac{8}{7 z}$$

07.25.03.9189.01

$${}_2F_2\left(-\frac{5}{2}, 1; 2, \frac{11}{2}; z\right) = \frac{3 e^z (64 z^6 - 1536 z^5 + 11024 z^4 - 24576 z^3 + 6300 z^2 + 3360 z + 1575)}{114688 z^4} - \frac{3 \sqrt{\pi} (128 z^7 - 3136 z^6 + 23520 z^5 - 58800 z^4 + 29400 z^3 + 8820 z^2 + 4410 z + 1575) \operatorname{erfi}(\sqrt{z})}{229376 z^{9/2}} + \frac{9}{7z}$$

07.25.03.9190.01

$${}_2F_2\left(-\frac{5}{2}, 1; 2, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 + 1536 z^5 + 11024 z^4 + 24576 z^3 + 6300 z^2 - 3360 z + 1575)}{114688 z^4} + \frac{3 \sqrt{\pi} (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575) \operatorname{erf}(\sqrt{z})}{229376 z^{9/2}} - \frac{9}{7z}$$

07.25.03.9191.01

$${}_2F_2\left(-\frac{5}{2}, 1; 2, 6; z\right) = -\frac{64 e^{z/2} (32 z^6 - 864 z^5 + 7440 z^4 - 23520 z^3 + 22050 z^2 + 630 z + 315) I_0\left(\frac{z}{2}\right)}{945945 z^3} + \frac{128 e^{z/2} (16 z^7 - 416 z^6 + 3312 z^5 - 8640 z^4 + 3675 z^3 + 1890 z^2 + 1260 z + 630) I_1\left(\frac{z}{2}\right)}{945945 z^4} + \frac{10}{7z}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = \frac{5}{2}$

07.25.03.9192.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{5}{2}, 3; z\right) = \frac{2(9z-1)}{21z^2} + \frac{e^z(8z^4 - 140z^3 + 690z^2 - 975z + 192)}{2016z^2} + \frac{\sqrt{\pi}(-16z^4 + 288z^3 - 1512z^2 + 2520z - 945) \operatorname{erfi}(\sqrt{z})}{4032z^{3/2}}$$

07.25.03.9193.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{5}{2}, 3; -z\right) = -\frac{2(9z+1)}{21z^2} + \frac{e^{-z}(8z^4 + 140z^3 + 690z^2 + 975z + 192)}{2016z^2} + \frac{\sqrt{\pi}(16z^4 + 288z^3 + 1512z^2 + 2520z + 945) \operatorname{erf}(\sqrt{z})}{4032z^{3/2}}$$

07.25.03.9194.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{5}{2}, 4; z\right) = \frac{99z^2 - 22z - 2}{77z^3} + \frac{e^z(8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96)}{3696z^3} + \frac{\sqrt{\pi}(-16z^4 + 352z^3 - 2376z^2 + 5544z - 3465) \operatorname{erfi}(\sqrt{z})}{7392z^{3/2}}$$

07.25.03.9195.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{5}{2}, 4; -z\right) = \frac{-99z^2 - 22z + 2}{77z^3} + \frac{e^{-z}(8z^5 + 172z^4 + 1106z^3 + 2295z^2 + 960z - 96)}{3696z^3} + \frac{\sqrt{\pi}(16z^4 + 352z^3 + 2376z^2 + 5544z + 3465) \operatorname{erf}(\sqrt{z})}{7392z^{3/2}}$$

07.25.03.9196.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{5}{2}, 5; z\right) = \frac{4(429z^3 - 143z^2 - 26z - 6)}{1001z^4} + \frac{e^z(8z^6 - 204z^5 + 1618z^4 - 4431z^3 + 2880z^2 + 480z + 144)}{6006z^4} + \frac{\sqrt{\pi}(-16z^4 + 416z^3 - 3432z^2 + 10296z - 9009)\operatorname{erfi}(\sqrt{z})}{12012z^{3/2}}$$

07.25.03.9197.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{5}{2}, 5; -z\right) = -\frac{4(429z^3 + 143z^2 - 26z + 6)}{1001z^4} + \frac{e^{-z}(8z^6 + 204z^5 + 1618z^4 + 4431z^3 + 2880z^2 - 480z + 144)}{6006z^4} + \frac{\sqrt{\pi}(16z^4 + 416z^3 + 3432z^2 + 10296z + 9009)\operatorname{erf}(\sqrt{z})}{12012z^{3/2}}$$

07.25.03.9198.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{5}{2}, 6; z\right) = \frac{5(1287z^4 - 572z^3 - 156z^2 - 72z - 24)}{3003z^5} + \frac{e^z(8z^7 - 236z^6 + 2226z^5 - 7575z^4 + 6720z^3 + 1440z^2 + 720z + 360)}{9009z^5} + \frac{\sqrt{\pi}(-16z^4 + 480z^3 - 4680z^2 + 17160z - 19305)\operatorname{erfi}(\sqrt{z})}{18018z^{3/2}}$$

07.25.03.9199.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{5}{2}, 6; -z\right) = -\frac{5(1287z^4 + 572z^3 - 156z^2 + 72z - 24)}{3003z^5} + \frac{e^{-z}(8z^7 + 236z^6 + 2226z^5 + 7575z^4 + 6720z^3 - 1440z^2 + 720z - 360)}{9009z^5} + \frac{\sqrt{\pi}(16z^4 + 480z^3 + 4680z^2 + 17160z + 19305)\operatorname{erf}(\sqrt{z})}{18018z^{3/2}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = 3$

07.25.03.9200.01

$${}_2F_2\left(-\frac{5}{2}, 1; 3, 3; z\right) = \frac{8(9z - 2)}{63z^2} - \frac{16e^{z/2}(16z^5 - 336z^4 + 2220z^3 - 5484z^2 + 4725z - 945)I_0\left(\frac{z}{2}\right)}{59535z^2} + \frac{16e^{z/2}(16z^4 - 320z^3 + 1908z^2 - 3720z + 1689)I_1\left(\frac{z}{2}\right)}{59535z}$$

07.25.03.9201.01

$${}_2F_2\left(-\frac{5}{2}, 1; 3, \frac{7}{2}; z\right) = \frac{10(3z - 1)}{21z^2} + \frac{e^z(16z^4 - 352z^3 + 2352z^2 - 5280z + 2895)}{8064z^2} + \frac{\sqrt{\pi}(-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945)\operatorname{erfi}(\sqrt{z})}{16128z^{5/2}}$$

07.25.03.9202.01

$${}_2F_2\left(-\frac{5}{2}, 1; 3, \frac{7}{2}; -z\right) = -\frac{10(3z+1)}{21z^2} + \frac{e^{-z}(16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{8064z^2} + \frac{\sqrt{\pi}(32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945)\operatorname{erf}(\sqrt{z})}{16128z^{5/2}}$$

07.25.03.9203.01

$${}_2F_2\left(-\frac{5}{2}, 1; 3, 4; z\right) = \frac{4(9z-4)}{21z^2} - \frac{16e^{z/2}(32z^5 - 816z^4 + 6816z^3 - 22524z^2 + 28350z - 10395)I_0\left(\frac{z}{2}\right)}{218295z^2} + \frac{16e^{z/2}(32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945)I_1\left(\frac{z}{2}\right)}{218295z^2}$$

07.25.03.9204.01

$${}_2F_2\left(-\frac{5}{2}, 1; 3, \frac{9}{2}; z\right) = \frac{2(9z-5)}{9z^2} + \frac{e^z(32z^5 - 848z^4 + 7152z^3 - 22008z^2 + 20010z - 945)}{27648z^3} + \frac{\sqrt{\pi}(-64z^6 + 1728z^5 - 15120z^4 + 50400z^3 - 56700z^2 + 11340z + 945)\operatorname{erfi}(\sqrt{z})}{55296z^{7/2}}$$

07.25.03.9205.01

$${}_2F_2\left(-\frac{5}{2}, 1; 3, \frac{9}{2}; -z\right) = -\frac{2(9z+5)}{9z^2} + \frac{e^{-z}(32z^5 + 848z^4 + 7152z^3 + 22008z^2 + 20010z + 945)}{27648z^3} + \frac{\sqrt{\pi}(64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945)\operatorname{erf}(\sqrt{z})}{55296z^{7/2}}$$

07.25.03.9206.01

$${}_2F_2\left(-\frac{5}{2}, 1; 3, 5; z\right) = \frac{16(3z-2)}{21z^2} - \frac{256e^{z/2}(16z^5 - 480z^4 + 4848z^3 - 20064z^2 + 33075z - 17010)I_0\left(\frac{z}{2}\right)}{2837835z^2} + \frac{128e^{z/2}(32z^6 - 928z^5 + 8784z^4 - 31776z^3 + 37938z^2 - 5670z - 945)I_1\left(\frac{z}{2}\right)}{2837835z^3}$$

07.25.03.9207.01

$${}_2F_2\left(-\frac{5}{2}, 1; 3, \frac{11}{2}; z\right) = \frac{2(9z-7)}{7z^2} + \frac{e^z(64z^6 - 1984z^5 + 20208z^4 - 79008z^3 + 100716z^2 - 11340z - 2835)}{86016z^4} + \frac{1}{172032z^{9/2}}\sqrt{\pi}(-128z^7 + 4032z^6 - 42336z^5 + 176400z^4 - 264600z^3 + 79380z^2 + 13230z + 2835)\operatorname{erfi}(\sqrt{z})$$

07.25.03.9208.01

$${}_2F_2\left(-\frac{5}{2}, 1; 3, \frac{11}{2}; -z\right) = -\frac{2(9z+7)}{7z^2} + \frac{e^{-z}(64z^6 + 1984z^5 + 20208z^4 + 79008z^3 + 100716z^2 + 11340z - 2835)}{86016z^4} + \frac{1}{172032z^{9/2}}\sqrt{\pi}(128z^7 + 4032z^6 + 42336z^5 + 176400z^4 + 264600z^3 + 79380z^2 - 13230z + 2835)\operatorname{erf}(\sqrt{z})$$

07.25.03.9209.01

$${}_2F_2\left(-\frac{5}{2}, 1; 3, 6; z\right) = \frac{20(9z-8)}{63z^2} - \frac{128e^{z/2}(64z^6 - 2208z^5 + 26160z^4 - 130080z^3 + 264600z^2 - 171990z - 945)I_0\left(\frac{z}{2}\right)}{8513505z^3} +$$

$$\frac{1}{8513505z^4} 128e^{z/2}(64z^7 - 2144z^6 + 24048z^5 - 107040z^4 + 167640z^3 - 39690z^2 - 12285z - 3780)I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = \frac{7}{2}$

07.25.03.9210.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{7}{2}, 4; z\right) = \frac{5(33z^2 - 22z + 2)}{77z^3} + \frac{e^z(16z^5 - 432z^4 + 3752z^3 - 12180z^2 + 12645z - 1920)}{14784z^3} +$$

$$\frac{\sqrt{\pi}(-32z^5 + 880z^4 - 7920z^3 + 27720z^2 - 34650z + 10395)\operatorname{erfi}(\sqrt{z})}{29568z^{5/2}}$$

07.25.03.9211.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{7}{2}, 4; -z\right) = -\frac{5(33z^2 + 22z + 2)}{77z^3} + \frac{e^{-z}(16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{14784z^3} +$$

$$\frac{\sqrt{\pi}(32z^5 + 880z^4 + 7920z^3 + 27720z^2 + 34650z + 10395)\operatorname{erf}(\sqrt{-z})}{29568z^{5/2}}$$

07.25.03.9212.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{7}{2}, 5; z\right) = \frac{20(143z^3 - 143z^2 + 26z + 2)}{1001z^4} + \frac{e^z(16z^6 - 512z^5 + 5472z^4 - 23240z^3 + 35595z^2 - 11520z - 960)}{24024z^4} +$$

$$\frac{\sqrt{\pi}(-32z^5 + 1040z^4 - 11440z^3 + 51480z^2 - 90090z + 45045)\operatorname{erfi}(\sqrt{z})}{48048z^{5/2}}$$

07.25.03.9213.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{7}{2}, 5; -z\right) =$$

$$-\frac{20(143z^3 + 143z^2 + 26z - 2)}{1001z^4} + \frac{e^{-z}(16z^6 + 512z^5 + 5472z^4 + 23240z^3 + 35595z^2 + 11520z - 960)}{24024z^4} +$$

$$\frac{\sqrt{\pi}(32z^5 + 1040z^4 + 11440z^3 + 51480z^2 + 90090z + 45045)\operatorname{erf}(\sqrt{-z})}{48048z^{5/2}}$$

07.25.03.9214.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{7}{2}, 6; z\right) = \frac{5(2145z^4 - 2860z^3 + 780z^2 + 120z + 24)}{3003z^5} +$$

$$\frac{e^z(16z^7 - 592z^6 + 7512z^5 - 39420z^4 + 79905z^3 - 40320z^2 - 5760z - 1440)}{36036z^5} +$$

$$\frac{\sqrt{\pi}(-32z^5 + 1200z^4 - 15600z^3 + 85800z^2 - 193050z + 135135)\operatorname{erfi}(\sqrt{z})}{72072z^{5/2}}$$

07.25.03.9215.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{7}{2}, 6; -z\right) = -\frac{5(2145z^4 + 2860z^3 + 780z^2 - 120z + 24)}{3003z^5} + \frac{e^{-z}(16z^7 + 592z^6 + 7512z^5 + 39420z^4 + 79905z^3 + 40320z^2 - 5760z + 1440)}{36036z^5} + \frac{\sqrt{\pi}(32z^5 + 1200z^4 + 15600z^3 + 85800z^2 + 193050z + 135135)\operatorname{erf}(\sqrt{z})}{72072z^{5/2}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = 4$

07.25.03.9216.01

$${}_2F_2\left(-\frac{5}{2}, 1; 4, 4; z\right) = \frac{2(99z^2 - 88z + 16)}{77z^3} - \frac{32e^{z/2}(32z^6 - 992z^5 + 10512z^4 - 46944z^3 + 88674z^2 - 62370z + 10395)I_0\left(\frac{z}{2}\right)}{800415z^3} + \frac{64e^{z/2}(16z^5 - 480z^4 + 4784z^3 - 18912z^2 + 27387z - 9762)I_1\left(\frac{z}{2}\right)}{800415z^2}$$

07.25.03.9217.01

$${}_2F_2\left(-\frac{5}{2}, 1; 4, \frac{9}{2}; z\right) = \frac{99z^2 - 110z + 30}{33z^3} + \frac{e^z(32z^5 - 1040z^4 + 11376z^3 - 50232z^2 + 83370z - 35685)}{50688z^3} + \frac{\sqrt{\pi}(-64z^6 + 2112z^5 - 23760z^4 + 110880z^3 - 207900z^2 + 124740z - 10395)\operatorname{erfi}(\sqrt{z})}{101376z^{7/2}}$$

07.25.03.9218.01

$${}_2F_2\left(-\frac{5}{2}, 1; 4, \frac{9}{2}; -z\right) = \frac{-99z^2 - 110z - 30}{33z^3} + \frac{e^{-z}(32z^5 + 1040z^4 + 11376z^3 + 50232z^2 + 83370z + 35685)}{50688z^3} + \frac{\sqrt{\pi}(64z^6 + 2112z^5 + 23760z^4 + 110880z^3 + 207900z^2 + 124740z + 10395)\operatorname{erf}(\sqrt{z})}{101376z^{7/2}}$$

07.25.03.9219.01

$${}_2F_2\left(-\frac{5}{2}, 1; 4, 5; z\right) = \frac{8(33z^2 - 44z + 16)}{77z^3} - \frac{128e^{z/2}(64z^6 - 2336z^5 + 30000z^4 - 168864z^3 + 425112z^2 - 436590z + 135135)I_0\left(\frac{z}{2}\right)}{10405395z^3} + \frac{128e^{z/2}(64z^6 - 2272z^5 + 27760z^4 - 142176z^3 + 294744z^2 - 191442z + 10395)I_1\left(\frac{z}{2}\right)}{10405395z^3}$$

07.25.03.9220.01

$${}_2F_2\left(-\frac{5}{2}, 1; 4, \frac{11}{2}; z\right) = \frac{3(99z^2 - 154z + 70)}{77z^3} + \frac{e^z(64z^6 - 2432z^5 + 32080z^4 - 179136z^3 + 408828z^2 - 291480z + 10395)}{157696z^4} + \frac{1}{315392z^{9/2}} \sqrt{\pi} (-128z^7 + 4928z^6 - 66528z^5 + 388080z^4 - 970200z^3 + 873180z^2 - 145530z - 10395) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9221.01

$${}_2F_2\left(-\frac{5}{2}, 1; 4, \frac{11}{2}; -z\right) = -\frac{3(99z^2 + 154z + 70)}{77z^3} + \frac{e^{-z}(64z^6 + 2432z^5 + 32080z^4 + 179136z^3 + 408828z^2 + 291480z + 10395)}{157696z^4} + \frac{1}{315392z^{9/2}} \sqrt{\pi} (128z^7 + 4928z^6 + 66528z^5 + 388080z^4 + 970200z^3 + 873180z^2 + 145530z - 10395) \operatorname{erf}(\sqrt{z})$$

07.25.03.9222.01

$${}_2F_2\left(-\frac{5}{2}, 1; 4, 6; z\right) = \frac{10(99z^2 - 176z + 96)}{231z^3} - \frac{256e^{z/2}(64z^6 - 2688z^5 + 40560z^4 - 275520z^3 + 866520z^2 - 1164240z + 509355)I_0\left(\frac{z}{2}\right)}{31216185z^3} + \frac{1}{31216185z^4} 256e^{z/2}(64z^7 - 2624z^6 + 37968z^5 - 238800z^4 + 644280z^3 - 608760z^2 + 72765z + 10395)I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = \frac{9}{2}$

07.25.03.9223.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{9}{2}, 5; z\right) = \frac{4(429z^3 - 715z^2 + 390z - 30)}{429z^4} + \frac{e^z(32z^6 - 1232z^5 + 16560z^4 - 95256z^3 + 229530z^2 - 187425z + 23040)}{82368z^4} + \frac{\sqrt{\pi}(-64z^6 + 2496z^5 - 34320z^4 + 205920z^3 - 540540z^2 + 540540z - 135135) \operatorname{erfi}(\sqrt{z})}{164736z^{7/2}}$$

07.25.03.9224.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{9}{2}, 5; -z\right) = -\frac{4(429z^3 + 715z^2 + 390z + 30)}{429z^4} + \frac{e^{-z}(32z^6 + 1232z^5 + 16560z^4 + 95256z^3 + 229530z^2 + 187425z + 23040)}{82368z^4} + \frac{\sqrt{\pi}(64z^6 + 2496z^5 + 34320z^4 + 205920z^3 + 540540z^2 + 540540z + 135135) \operatorname{erf}(\sqrt{z})}{164736z^{7/2}}$$

07.25.03.9225.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{9}{2}, 6; z\right) = \frac{5(1287z^4 - 2860z^3 + 2340z^2 - 360z - 24)}{1287z^5} + \frac{e^z(32z^7 - 1424z^6 + 22704z^5 - 160920z^4 + 508410z^3 - 614565z^2 + 161280z + 11520)}{123552z^5} + \frac{\sqrt{\pi}(-64z^6 + 2880z^5 - 46800z^4 + 343200z^3 - 1158300z^2 + 1621620z - 675675)\operatorname{erfi}(\sqrt{z})}{247104z^{7/2}}$$

07.25.03.9226.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{9}{2}, 6; -z\right) = -\frac{5(1287z^4 + 2860z^3 + 2340z^2 + 360z - 24)}{1287z^5} + \frac{e^{-z}(32z^7 + 1424z^6 + 22704z^5 + 160920z^4 + 508410z^3 + 614565z^2 + 161280z - 11520)}{123552z^5} + \frac{\sqrt{\pi}(64z^6 + 2880z^5 + 46800z^4 + 343200z^3 + 1158300z^2 + 1621620z + 675675)\operatorname{erf}(\sqrt{z})}{247104z^{7/2}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = 5$

07.25.03.9227.01

$${}_2F_2\left(-\frac{5}{2}, 1; 5, 5; z\right) = \frac{32(143z^3 - 286z^2 + 208z - 32)}{1001z^4} - \frac{1}{135270135z^4} + \frac{1024e^{z/2}(64z^7 - 2752z^6 + 42896z^5 - 305520z^4 + 1035384z^3 - 1589352z^2 + 945945z - 135135)I_0\left(\frac{z}{2}\right) + 1024e^{z/2}(64z^6 - 2688z^5 + 40240z^4 - 266560z^3 + 786456z^2 - 903504z + 264207)I_1\left(\frac{z}{2}\right)}{135270135z^3}$$

07.25.03.9228.01

$${}_2F_2\left(-\frac{5}{2}, 1; 5, \frac{11}{2}; z\right) = \frac{12(429z^3 - 1001z^2 + 910z - 210)}{1001z^4} + \frac{e^z(64z^6 - 2880z^5 + 46640z^4 - 338400z^3 + 1112076z^2 - 1458660z + 509985)}{256256z^4} + \frac{1}{512512z^{9/2}}\sqrt{\pi}(-128z^7 + 5824z^6 - 96096z^5 + 720720z^4 - 2522520z^3 + 3783780z^2 - 1891890z + 135135)\operatorname{erfi}(\sqrt{z})$$

07.25.03.9229.01

$${}_2F_2\left(-\frac{5}{2}, 1; 5, \frac{11}{2}; -z\right) = -\frac{12(429z^3 + 1001z^2 + 910z + 210)}{1001z^4} + \frac{e^{-z}(64z^6 + 2880z^5 + 46640z^4 + 338400z^3 + 1112076z^2 + 1458660z + 509985)}{256256z^4} + \frac{1}{512512z^{9/2}}\sqrt{\pi}(128z^7 + 5824z^6 + 96096z^5 + 720720z^4 + 2522520z^3 + 3783780z^2 + 1891890z + 135135)\operatorname{erf}(\sqrt{z})$$

07.25.03.9230.01

$${}_2F_2\left(-\frac{5}{2}, 1; 5, 6; z\right) = \frac{40(429z^3 - 1144z^2 + 1248z - 384)}{3003z^4} - \frac{1}{405810405z^4} 1024e^{z/2}(128z^7 - 6336z^6 + 116160z^5 - 1001040z^4 + 4266000z^3 - 8705160z^2 + 7567560z - 2027025)I_0\left(\frac{z}{2}\right) + \frac{1}{405810405z^4} 1024e^{z/2}(128z^7 - 6208z^6 + 110016z^5 - 894000z^4 + 3421200z^3 - 5638680z^2 + 3017160z - 135135)I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = \frac{11}{2}$

07.25.03.9231.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{11}{2}, 6; z\right) = \frac{5(1287z^4 - 4004z^3 + 5460z^2 - 2520z + 168)}{1001z^5} + \frac{e^z(64z^7 - 3328z^6 + 63888z^5 - 570240z^4 + 2445660z^3 - 4672080z^2 + 3133935z - 322560)}{384384z^5} + \frac{1}{768768z^{9/2}} \sqrt{\pi}(-128z^7 + 6720z^6 - 131040z^5 + 1201200z^4 - 5405400z^3 + 11351340z^2 - 9459450z + 2027025)\operatorname{erfi}(\sqrt{z})$$

07.25.03.9232.01

$${}_2F_2\left(-\frac{5}{2}, 1; \frac{11}{2}, 6; -z\right) = -\frac{5(1287z^4 + 4004z^3 + 5460z^2 + 2520z + 168)}{1001z^5} + \frac{1}{384384z^5} e^{-z}(64z^7 + 3328z^6 + 63888z^5 + 570240z^4 + 2445660z^3 + 4672080z^2 + 3133935z + 322560) + \frac{1}{768768z^{9/2}} \sqrt{\pi}(128z^7 + 6720z^6 + 131040z^5 + 1201200z^4 + 5405400z^3 + 11351340z^2 + 9459450z + 2027025)\operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 1$, $b_1 = 6$

07.25.03.9233.01

$${}_2F_2\left(-\frac{5}{2}, 1; 6, 6; z\right) = \frac{10(6435z^4 - 22880z^3 + 37440z^2 - 23040z + 3072)}{9009z^5} - \frac{1}{1217431215z^5} \left(2048e^{z/2}(128z^8 - 7296z^7 + 157440z^6 - 1644480z^5 + 8848800z^4 - 24235920z^3 + 31407840z^2 - 16216200z + 2027025)I_0\left(\frac{z}{2}\right) + \frac{1}{1217431215z^4} 16384e^{z/2}(16z^7 - 896z^6 + 18792z^5 - 187200z^4 + 927450z^3 - 2179440z^2 + 2071215z - 512280)I_1\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{3}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.9234.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & -\frac{1}{7203735} \left(e^z (1024 z^{10} + 14336 z^9 + 48384 z^8 + 43008 z^7 - 18816 z^6 + 112896 z^5 - 493920 z^4 + \right. \\
 & \left. 1733760 z^3 - 4577580 z^2 + 8096760 z - 7203735) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9235.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & \frac{1}{654885} e^z (512 z^9 + 5376 z^8 + 10752 z^7 + 5376 z^6 - 12096 z^5 + 50400 z^4 - 171360 z^3 + 438480 z^2 - 754110 z + 654885)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9236.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{e^z (256 z^8 + 1792 z^7 + 896 z^6 + 1344 z^5 - 6720 z^4 + 21840 z^3 - 52920 z^2 + 86940 z - 72765)}{72765}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9237.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13230 z + 10395)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9238.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = -\frac{e^z (64 z^6 - 336 z^4 + 1344 z^3 - 2772 z^2 + 3024 z - 2079)}{2079}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9239.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{693} e^z (32 z^5 - 112 z^4 + 112 z^3 + 504 z^2 - 1638 z + 693)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9240.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = -\frac{1}{693} e^z (16 z^4 - 112 z^3 + 336 z^2 - 252 z - 693)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9241.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{693} e^{z/2} (-8 z^4 + 64 z^3 - 208 z^2 + 126 z + 693) I_0\left(\frac{z}{2}\right) - \frac{2}{693} e^{z/2} (4 z^4 - 36 z^3 + 142 z^2 - 227 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9242.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{1}{693} e^z (8 z^3 - 84 z^2 + 378 z - 693)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9243.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{693} e^{z/2} (-8 z^3 + 92 z^2 - 432 z + 693) I_0\left(\frac{z}{2}\right) + \frac{1}{693} e^{z/2} (-8 z^3 + 100 z^2 - 536 z + 1287) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9244.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (-4 z^3 + 56 z^2 - 329 z + 840)}{231 z} - \frac{20 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9245.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-4 z^3 - 56 z^2 - 329 z - 840)}{231 z} + \frac{20 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{3/2}}
 \end{aligned}$$

07.25.03.9246.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, 3; z\right) = -\frac{4}{693} e^{z/2} (4z^2 - 60z + 363) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4z^3 - 64z^2 + 429z - 2145) I_1\left(\frac{z}{2}\right)}{693z}$$

07.25.03.9247.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{5 e^z (2z^3 - 35z^2 + 252z - 1008)}{231z^2} - \frac{10\sqrt{\pi} (5z + 12) \operatorname{erfi}(\sqrt{z})}{11z^{5/2}}$$

07.25.03.9248.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (2z^3 + 35z^2 + 252z + 1008)}{231z^2} + \frac{10\sqrt{\pi} (5z - 12) \operatorname{erf}(\sqrt{z})}{11z^{5/2}}$$

07.25.03.9249.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, 4; z\right) = -\frac{4 e^{z/2} (4z^2 - 74z + 1105) I_0\left(\frac{z}{2}\right)}{231z} - \frac{4 e^{z/2} (4z^3 - 78z^2 + 65z - 4420) I_1\left(\frac{z}{2}\right)}{231z^2}$$

07.25.03.9250.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{5 e^z (z^3 - 21z^2 + 126z - 945)}{33z^3} - \frac{35\sqrt{\pi} (5z^2 + 24z + 45) \operatorname{erfi}(\sqrt{z})}{22z^{7/2}}$$

07.25.03.9251.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{35\sqrt{\pi} (5z^2 - 24z + 45) \operatorname{erf}(\sqrt{z})}{22z^{7/2}} - \frac{5 e^{-z} (z^3 + 21z^2 + 126z + 945)}{33z^3}$$

07.25.03.9252.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, 5; z\right) = -\frac{32 e^{z/2} (2z^2 + 68z + 969) I_0\left(\frac{z}{2}\right)}{231z^2} - \frac{64 e^{z/2} (z^3 - 79z^2 - 136z - 1938) I_1\left(\frac{z}{2}\right)}{231z^3}$$

07.25.03.9253.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = -\frac{15 e^z (z^3 - 42z^2 + 105z - 1575)}{22z^4} - \frac{105\sqrt{\pi} (5z^3 + 36z^2 + 135z + 225) \operatorname{erfi}(\sqrt{z})}{44z^{9/2}}$$

07.25.03.9254.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{15 e^{-z} (z^3 + 42z^2 + 105z + 1575)}{22z^4} + \frac{105\sqrt{\pi} (5z^3 - 36z^2 + 135z - 225) \operatorname{erf}(\sqrt{z})}{44z^{9/2}}$$

07.25.03.9255.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (150z^3 + 1649z^2 + 3876z + 31008) I_0\left(\frac{z}{2}\right)}{231z^4} - \frac{544 e^{z/2} (10z^2 + 57z + 456) I_1\left(\frac{z}{2}\right)}{231z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.9256.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{e^z (256z^8 + 2048z^7 + 2304z^6 + 1536z^5 - 5280z^4 + 17280z^3 - 42480z^2 + 70560z - 59535)}{59535}$$

07.25.03.9257.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{e^z (128 z^7 + 704 z^6 + 96 z^5 + 720 z^4 - 2280 z^3 + 5220 z^2 - 8190 z + 6615)}{6615}$$

07.25.03.9258.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)$$

07.25.03.9259.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{189} e^z (32 z^5 + 16 z^4 - 144 z^3 + 312 z^2 - 294 z + 189)$$

07.25.03.9260.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -\frac{1}{63} e^z (16 z^4 - 32 z^3 - 24 z^2 + 168 z - 63)$$

07.25.03.9261.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{63} e^z (8 z^3 - 36 z^2 + 42 z + 63)$$

07.25.03.9262.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{63} e^{z/2} (4 z^3 - 20 z^2 + 21 z + 63) I_0\left(\frac{z}{2}\right) + \frac{1}{63} e^{z/2} (4 z^3 - 24 z^2 + 47 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.9263.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{63} e^z (4 z^2 - 28 z + 63)$$

07.25.03.9264.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{63} e^{z/2} (4 z^2 - 30 z + 63) I_0\left(\frac{z}{2}\right) + \frac{1}{63} e^{z/2} (4 z^2 - 34 z + 99) I_1\left(\frac{z}{2}\right)$$

07.25.03.9265.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (2 z^2 - 19 z + 60)}{21 z} - \frac{10 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.9266.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-2 z^2 - 19 z - 60)}{21 z} + \frac{10 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.9267.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, 3; z\right) = \frac{8}{63} e^{z/2} (z - 10) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2 z^2 - 22 z + 143) I_1\left(\frac{z}{2}\right)}{63 z}$$

07.25.03.9268.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (z^2 - 12 z + 63)}{21 z^2} - \frac{5 \sqrt{\pi} (10 z + 21) \operatorname{erfi}(\sqrt{z})}{14 z^{5/2}}$$

07.25.03.9269.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (z^2 + 12 z + 63)}{21 z^2} + \frac{5 \sqrt{\pi} (10 z - 21) \operatorname{erf}(\sqrt{z})}{14 z^{5/2}}$$

07.25.03.9270.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (2z - 65) I_0\left(\frac{z}{2}\right)}{21z} + \frac{4 e^{z/2} (2z^2 + 13z + 260) I_1\left(\frac{z}{2}\right)}{21z^2}$$

07.25.03.9271.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{5 e^z (z^2 - 7z + 105)}{6z^3} - \frac{5 \sqrt{\pi} (5z^2 + 21z + 35) \operatorname{erfi}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.9272.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{5 \sqrt{\pi} (5z^2 - 21z + 35) \operatorname{erf}(\sqrt{z})}{4z^{7/2}} - \frac{5 e^{-z} (z^2 + 7z + 105)}{6z^3}$$

07.25.03.9273.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (9z^2 + 28z + 204) I_1\left(\frac{z}{2}\right)}{21z^3} - \frac{32 e^{z/2} (7z + 51) I_0\left(\frac{z}{2}\right)}{21z^2}$$

07.25.03.9274.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{105 e^z (z^2 + 45)}{8z^4} - \frac{15 \sqrt{\pi} (10z^3 + 63z^2 + 210z + 315) \operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.9275.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{105 e^{-z} (z^2 + 45)}{8z^4} + \frac{15 \sqrt{\pi} (10z^3 - 63z^2 + 210z - 315) \operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.9276.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (80z^3 + 643z^2 + 1972z + 10336) I_1\left(\frac{z}{2}\right)}{147z^4} - \frac{32 e^{z/2} (80z^2 + 493z + 2584) I_0\left(\frac{z}{2}\right)}{147z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.9277.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = -\frac{1}{735} e^z (64z^6 + 256z^5 - 80z^4 + 320z^3 - 660z^2 + 960z - 735)$$

07.25.03.9278.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{105} e^z (32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)$$

07.25.03.9279.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = -\frac{1}{21} e^z (16z^4 + 16z^3 - 48z^2 + 36z - 21)$$

07.25.03.9280.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{7} e^z (8z^3 - 4z^2 - 22z + 7)$$

07.25.03.9281.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = -\frac{1}{7} e^z (4z^2 - 8z - 7)$$

07.25.03.9282.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{7} e^{z/2} (-2z^2 + 4z + 7) I_0\left(\frac{z}{2}\right) - \frac{2}{7} e^{z/2} (z^2 - 3z) I_1\left(\frac{z}{2}\right)$$

07.25.03.9283.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = -\frac{1}{7} e^z (2z - 7)$$

07.25.03.9284.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{7} e^{z/2} (7 - 2z) I_0\left(\frac{z}{2}\right) + \frac{1}{7} e^{z/2} (9 - 2z) I_1\left(\frac{z}{2}\right)$$

07.25.03.9285.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = -\frac{3 e^z (z - 5)}{7z} - \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{14 z^{3/2}}$$

07.25.03.9286.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{14 z^{3/2}} - \frac{3 e^{-z} (z + 5)}{7z}$$

07.25.03.9287.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, 3; z\right) = -\frac{4}{7} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (z - 11) I_1\left(\frac{z}{2}\right)}{7z}$$

07.25.03.9288.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = -\frac{15 e^z (z - 9)}{14 z^2} - \frac{15 \sqrt{\pi} (5z + 9) \operatorname{erfi}(\sqrt{z})}{28 z^{5/2}}$$

07.25.03.9289.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15 e^{-z} (z + 9)}{14 z^2} + \frac{15 \sqrt{\pi} (5z - 9) \operatorname{erf}(\sqrt{z})}{28 z^{5/2}}$$

07.25.03.9290.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (7z + 52) I_1\left(\frac{z}{2}\right)}{7z^2} - \frac{52 e^{z/2} I_0\left(\frac{z}{2}\right)}{7z}$$

07.25.03.9291.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{15 e^z (2z + 105)}{32 z^3} - \frac{15 \sqrt{\pi} (20z^2 + 72z + 105) \operatorname{erfi}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.9292.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{15 e^{-z} (2z - 105)}{32 z^3} + \frac{15 \sqrt{\pi} (20z^2 - 72z + 105) \operatorname{erf}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.9293.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, 5; z\right) = \frac{64 e^{z/2} (z^2 + 4z + 18) I_1\left(\frac{z}{2}\right)}{7z^3} - \frac{32 e^{z/2} (2z + 9) I_0\left(\frac{z}{2}\right)}{7z^2}$$

07.25.03.9294.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{225 e^z (2z^2 + 7z + 84)}{64 z^4} - \frac{45 \sqrt{\pi} (20z^3 + 108z^2 + 315z + 420) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.9295.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{225 e^{-z} (2z^2 - 7z + 84)}{64 z^4} + \frac{45 \sqrt{\pi} (20z^3 - 108z^2 + 315z - 420) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.9296.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (20z^3 + 131z^2 + 444z + 1632) I_1\left(\frac{z}{2}\right)}{49 z^4} - \frac{32 e^{z/2} (20z^2 + 111z + 408) I_0\left(\frac{z}{2}\right)}{49 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.9297.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = -\frac{1}{15} e^z (16z^4 + 32z^3 - 24z^2 + 24z - 15)$$

07.25.03.9298.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (8z^3 + 12z^2 - 6z + 3)$$

07.25.03.9299.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = -e^z (4z^2 + 4z - 1)$$

07.25.03.9300.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = e^z (2z + 1)$$

07.25.03.9301.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, 1; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.9302.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = e^z$$

07.25.03.9303.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.9304.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{3 e^z}{2z} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.9305.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3 e^{-z}}{2z}$$

07.25.03.9306.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.9307.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{45 e^z}{8 z^2} - \frac{15 \sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.9308.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45 e^{-z}}{8 z^2}$$

07.25.03.9309.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (z+4) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.9310.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{105 e^z (2z+15)}{64 z^3} - \frac{105 \sqrt{\pi} (4z^2+12z+15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.9311.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (2z-15)}{64 z^3} + \frac{105 \sqrt{\pi} (4z^2-12z+15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.9312.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (z^2+4z+12) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{32 e^{z/2} (z+3) I_0\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.9313.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{315 e^z (4z^2+20z+105)}{256 z^4} - \frac{315 \sqrt{\pi} (8z^3+36z^2+90z+105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.9314.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2-20z+105)}{256 z^4} + \frac{315 \sqrt{\pi} (8z^3-36z^2+90z-105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.9315.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^3+11z^2+36z+96) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{32 e^{z/2} (2z^2+9z+24) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.9316.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (44z^2-8z+3) - \frac{64}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.9317.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{64}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (44z^2+8z+3)$$

07.25.03.9318.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = 32\sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2} + e^z (-32z^2 - 6z + 1)$$

07.25.03.9319.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = e^{-z} (-32z^2 + 6z + 1) - 32\sqrt{\pi} z^{5/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.9320.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = e^z (8z^2 + 4z + 1) - 8\sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.9321.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = 8\sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + e^{-z} (8z^2 - 4z + 1)$$

07.25.03.9322.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-64z^3 + 48z^2 + 30z + 15) I_0\left(\frac{z}{2}\right) + \frac{2}{15} e^{z/2} (32z^3 + 8z^2 + 9z) I_1\left(\frac{z}{2}\right)$$

07.25.03.9323.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (4z^2 + 2z + 3) - \frac{4}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.9324.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{4}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4z^2 - 2z + 3)$$

07.25.03.9325.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-128z^3 + 96z^2 + 60z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (128z^3 + 32z^2 + 36z + 75) I_1\left(\frac{z}{2}\right)$$

07.25.03.9326.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^3 + 4z^2 + 6z + 15)}{16z} + \frac{\sqrt{\pi} (-16z^4 - 15) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.9327.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^3 - 4z^2 + 6z - 15)}{16z} + \frac{\sqrt{\pi} (16z^4 + 15) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.9328.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (128z^4 + 32z^3 + 36z^2 + 75z + 525) I_1\left(\frac{z}{2}\right)}{945z} - \frac{4}{945} e^{z/2} (128z^3 - 96z^2 - 60z - 105) I_0\left(\frac{z}{2}\right)$$

07.25.03.9329.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (8z^4 + 4z^3 + 6z^2 + 15z + 90)}{32z^2} + \frac{\sqrt{\pi} (-16z^5 - 75z - 90) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.9330.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (8z^4 - 4z^3 + 6z^2 - 15z + 90)}{32z^2} + \frac{\sqrt{\pi} (16z^5 + 75z - 90) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.9331.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (256 z^5 + 64 z^4 + 72 z^3 + 150 z^2 + 2625 z + 6300) I_1\left(\frac{z}{2}\right)}{3465 z^2} - \frac{4 e^{z/2} (256 z^4 - 192 z^3 - 120 z^2 - 210 z + 1575) I_0\left(\frac{z}{2}\right)}{3465 z}$$

07.25.03.9332.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (16 z^5 + 8 z^4 + 12 z^3 + 30 z^2 + 330 z + 1125)}{768 z^3} - \frac{7 \sqrt{\pi} (32 z^6 + 450 z^2 + 1080 z + 1125) \operatorname{erfi}(\sqrt{z})}{1536 z^{7/2}}$$

07.25.03.9333.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (16 z^5 - 8 z^4 + 12 z^3 - 30 z^2 + 330 z - 1125)}{768 z^3} + \frac{7 \sqrt{\pi} (32 z^6 + 450 z^2 - 1080 z + 1125) \operatorname{erf}(\sqrt{z})}{1536 z^{7/2}}$$

07.25.03.9334.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, 5; z\right) = \frac{64 e^{z/2} (128 z^6 + 32 z^5 + 36 z^4 + 75 z^3 + 3045 z^2 + 10080 z + 20790) I_1\left(\frac{z}{2}\right)}{45045 z^3} - \frac{32 e^{z/2} (256 z^5 - 192 z^4 - 120 z^3 - 210 z^2 + 5040 z + 10395) I_0\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.9335.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (16 z^6 + 8 z^5 + 12 z^4 + 30 z^3 + 630 z^2 + 2625 z + 7875)}{512 z^4} - \frac{3 \sqrt{\pi} (32 z^7 + 1050 z^3 + 3780 z^2 + 7875 z + 7875) \operatorname{erfi}(\sqrt{z})}{1024 z^{9/2}}$$

07.25.03.9336.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (16 z^6 - 8 z^5 + 12 z^4 - 30 z^3 + 630 z^2 - 2625 z + 7875)}{512 z^4} + \frac{3 \sqrt{\pi} (32 z^7 + 1050 z^3 - 3780 z^2 + 7875 z - 7875) \operatorname{erf}(\sqrt{z})}{1024 z^{9/2}}$$

07.25.03.9337.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (512 z^7 + 128 z^6 + 144 z^5 + 300 z^4 + 25050 z^3 + 111105 z^2 + 314820 z + 617760) I_1\left(\frac{z}{2}\right)}{135135 z^4} - \frac{32 e^{z/2} (512 z^6 - 384 z^5 - 240 z^4 - 420 z^3 + 22950 z^2 + 78705 z + 154440) I_0\left(\frac{z}{2}\right)}{135135 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.9338.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = e^z (48 z^2 - 16 z + 1) - 8 \sqrt{\pi} (6 z^{5/2} - 5 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9339.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = e^{-z} (48z^2 + 16z + 1) + 8\sqrt{\pi} (6z^{5/2} + 5z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9340.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = e^z (-12z^2 + 14z + 1) + 4\sqrt{\pi} (3z^{5/2} - 5z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9341.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z} (-12z^2 - 14z + 1) - 4\sqrt{\pi} (3z^{5/2} + 5z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9342.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (96z^3 - 272z^2 + 105z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-96z^3 + 176z^2 + 23z) I_1\left(\frac{z}{2}\right)$$

07.25.03.9343.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \sqrt{\pi} (2z - 5) \operatorname{erfi}(\sqrt{z}) z^{3/2} + e^z (-2z^2 + 4z + 1)$$

07.25.03.9344.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = e^{-z} (-2z^2 - 4z + 1) - \sqrt{\pi} z^{3/2} (2z + 5) \operatorname{erf}(\sqrt{z})$$

07.25.03.9345.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (192z^3 - 704z^2 + 330z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-192z^3 + 512z^2 + 86z + 45) I_1\left(\frac{z}{2}\right)$$

07.25.03.9346.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (-24z^3 + 68z^2 + 22z + 15)}{32z} + \frac{\sqrt{\pi} (48z^4 - 160z^3 - 15) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.9347.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-24z^3 - 68z^2 + 22z - 15)}{32z} + \frac{\sqrt{\pi} (-48z^4 - 160z^3 + 15) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.9348.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, 3; z\right) = \frac{8}{315} e^{z/2} (32z^3 - 144z^2 + 75z + 30) I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2} (64z^4 - 224z^3 - 42z^2 - 30z - 75) I_1\left(\frac{z}{2}\right)}{315z}$$

07.25.03.9349.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (-48z^4 + 176z^3 + 64z^2 + 60z + 135)}{128z^2} + \frac{\sqrt{\pi} (96z^5 - 400z^4 - 150z - 135) \operatorname{erfi}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.9350.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-48z^4 - 176z^3 + 64z^2 - 60z + 135)}{128z^2} + \frac{\sqrt{\pi} (-96z^5 - 400z^4 + 150z - 135) \operatorname{erf}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.9351.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (384 z^4 - 2048 z^3 + 1140 z^2 + 510 z - 525) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (384 z^5 - 1664 z^4 - 332 z^3 - 270 z^2 - 1425 z - 2100) I_1\left(\frac{z}{2}\right)}{3465 z} - \frac{4 e^{z/2} (384 z^5 - 1664 z^4 - 332 z^3 - 270 z^2 - 1425 z - 2100) I_1\left(\frac{z}{2}\right)}{3465 z^2}$$

07.25.03.9352.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 \sqrt{\pi} (32 z^6 - 160 z^5 - 150 z^2 - 270 z - 225) \operatorname{erfi}(\sqrt{z})}{1024 z^{7/2}} - \frac{7 e^z (16 z^5 - 72 z^4 - 28 z^3 - 30 z^2 - 120 z - 225)}{512 z^3}$$

07.25.03.9353.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (16 z^5 + 72 z^4 - 28 z^3 + 30 z^2 - 120 z + 225)}{512 z^3} - \frac{7 \sqrt{\pi} (32 z^6 + 160 z^5 - 150 z^2 + 270 z - 225) \operatorname{erf}(\sqrt{z})}{1024 z^{7/2}}$$

07.25.03.9354.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (384 z^5 - 2368 z^4 + 1380 z^3 + 660 z^2 - 1995 z - 2835) I_0\left(\frac{z}{2}\right) - 45 045 z^2}{45 045 z^2} - \frac{32 e^{z/2} (384 z^6 - 1984 z^5 - 412 z^4 - 360 z^3 - 3345 z^2 - 7980 z - 11 340) I_1\left(\frac{z}{2}\right)}{45 045 z^3}$$

07.25.03.9355.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 \sqrt{\pi} (192 z^7 - 1120 z^6 - 2100 z^3 - 5670 z^2 - 9450 z - 7875) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{3 e^z (96 z^6 - 512 z^5 - 208 z^4 - 240 z^3 - 1470 z^2 - 4200 z - 7875)}{2048 z^4}$$

07.25.03.9356.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{3 e^{-z} (96 z^6 + 512 z^5 - 208 z^4 + 240 z^3 - 1470 z^2 + 4200 z - 7875)}{2048 z^4} - \frac{3 \sqrt{\pi} (192 z^7 + 1120 z^6 - 2100 z^3 + 5670 z^2 - 9450 z + 7875) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.9357.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (256 z^6 - 1792 z^5 + 1080 z^4 + 540 z^3 - 3300 z^2 - 8235 z - 11 880) I_0\left(\frac{z}{2}\right) - 45 045 z^3}{45 045 z^3} - \frac{32 e^{z/2} (256 z^7 - 1536 z^6 - 328 z^5 - 300 z^4 - 4500 z^3 - 14 685 z^2 - 32 940 z - 47 520) I_1\left(\frac{z}{2}\right)}{45 045 z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{1}{2}$

07.25.03.9358.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{2} e^z (6z^2 - 17z + 2) + \frac{1}{4} \sqrt{\pi} (-12z^{5/2} + 40z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9359.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{2} e^{-z} (6z^2 + 17z + 2) + \frac{1}{4} \sqrt{\pi} (12z^{5/2} + 40z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9360.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-24z^3 + 118z^2 - 120z + 15) I_0\left(\frac{z}{2}\right) + \frac{2}{15} e^{z/2} (12z^3 - 47z^2 + 19z) I_1\left(\frac{z}{2}\right)$$

07.25.03.9361.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{4} e^z (2z^2 - 9z + 4) - \frac{1}{8} \sqrt{\pi} \sqrt{z} (4z^2 - 20z + 15) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9362.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{4} e^{-z} (2z^2 + 9z + 4) + \frac{1}{8} \sqrt{\pi} \sqrt{z} (4z^2 + 20z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.9363.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-48z^3 + 316z^2 - 450z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (48z^3 - 268z^2 + 206z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.9364.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (24z^3 - 148z^2 + 118z + 15)}{128z} + \frac{\sqrt{\pi} (-48z^4 + 320z^3 - 360z^2 - 15) \operatorname{erfi}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.9365.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (24z^3 + 148z^2 + 118z - 15)}{128z} + \frac{\sqrt{\pi} (48z^4 + 320z^3 + 360z^2 + 15) \operatorname{erf}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.9366.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, 3; z\right) = \frac{4e^{z/2} (16z^4 - 116z^3 + 132z^2 + 15z + 15) I_1\left(\frac{z}{2}\right)}{315z} - \frac{4}{315} e^{z/2} (16z^3 - 132z^2 + 240z - 75) I_0\left(\frac{z}{2}\right)$$

07.25.03.9367.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (24z^4 - 188z^3 + 218z^2 + 45z + 45)}{256z^2} + \frac{\sqrt{\pi} (-48z^5 + 400z^4 - 600z^3 - 75z - 45) \operatorname{erfi}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.9368.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (24z^4 + 188z^3 + 218z^2 - 45z + 45)}{256z^2} + \frac{\sqrt{\pi} (48z^5 + 400z^4 + 600z^3 + 75z - 45) \operatorname{erf}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.9369.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, 4; z\right) = \frac{4e^{z/2} (96z^5 - 856z^4 + 1292z^3 + 180z^2 + 345z + 300) I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4e^{z/2} (96z^4 - 952z^3 + 2100z^2 - 780z + 75) I_0\left(\frac{z}{2}\right)}{3465z}$$

07.25.03.9370.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (32 z^5 - 304 z^4 + 464 z^3 + 120 z^2 + 210 z + 225)}{4096 z^3} - \frac{7 \sqrt{\pi} (64 z^6 - 640 z^5 + 1200 z^4 + 300 z^2 + 360 z + 225) \operatorname{erfi}(\sqrt{z})}{8192 z^{7/2}}$$

07.25.03.9371.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (32 z^5 + 304 z^4 + 464 z^3 - 120 z^2 + 210 z - 225)}{4096 z^3} + \frac{7 \sqrt{\pi} (64 z^6 + 640 z^5 + 1200 z^4 + 300 z^2 - 360 z + 225) \operatorname{erf}(\sqrt{z})}{8192 z^{7/2}}$$

07.25.03.9372.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, 5; z\right) = \frac{64 e^{z/2} (48 z^6 - 508 z^5 + 956 z^4 + 150 z^3 + 435 z^2 + 660 z + 630) I_1\left(\frac{z}{2}\right)}{45045 z^3} - \frac{32 e^{z/2} (96 z^5 - 1112 z^4 + 2880 z^3 - 1200 z^2 + 330 z + 315) I_0\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.9373.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (96 z^6 - 1072 z^5 + 2032 z^4 + 600 z^3 + 1470 z^2 + 2625 z + 3150)}{8192 z^4} - \frac{3 \sqrt{\pi} (192 z^7 - 2240 z^6 + 5040 z^5 + 2100 z^3 + 3780 z^2 + 4725 z + 3150) \operatorname{erfi}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.9374.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (96 z^6 + 1072 z^5 + 2032 z^4 - 600 z^3 + 1470 z^2 - 2625 z + 3150)}{8192 z^4} + \frac{3 \sqrt{\pi} (192 z^7 + 2240 z^6 + 5040 z^5 + 2100 z^3 - 3780 z^2 + 4725 z - 3150) \operatorname{erf}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.9375.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 784 z^6 + 1768 z^5 + 300 z^4 + 1200 z^3 + 2535 z^2 + 4140 z + 4320) I_1\left(\frac{z}{2}\right)}{45045 z^4} - \frac{32 e^{z/2} (64 z^6 - 848 z^5 + 2520 z^4 - 1140 z^3 + 600 z^2 + 1035 z + 1080) I_0\left(\frac{z}{2}\right)}{45045 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{3}{2}$, $b_1 = 1$

07.25.03.9376.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{15} e^{z/2} (-4 z^3 + 28 z^2 - 45 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4 z^3 - 24 z^2 + 23 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{3}{2}$

07.25.03.9377.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{48} e^z (4z^2 - 28z + 33) + \frac{\sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.9378.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{48} e^{-z} (4z^2 + 28z + 33) + \frac{\sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.9379.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-8z^3 + 76z^2 - 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 - 68z^2 + 116z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.9380.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^3 - 76z^2 + 146z - 15)}{256z} + \frac{\sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.9381.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^3 + 76z^2 + 146z + 15)}{256z} + \frac{\sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.9382.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (8z^4 - 88z^3 + 216z^2 - 60z - 15) I_1\left(\frac{z}{2}\right)}{945z} - \frac{16}{945} e^{z/2} (2z^3 - 24z^2 + 75z - 60) I_0\left(\frac{z}{2}\right)$$

07.25.03.9383.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (16z^4 - 192z^3 + 512z^2 - 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.9384.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16z^4 + 192z^3 + 512z^2 + 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.9385.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (16z^5 - 216z^4 + 692z^3 - 300z^2 - 135z - 60) I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4 e^{z/2} (16z^4 - 232z^3 + 900z^2 - 900z - 15) I_0\left(\frac{z}{2}\right)}{3465z}$$

07.25.03.9386.01

$${}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (32z^5 - 464z^4 + 1584z^3 - 600z^2 - 390z - 225)}{24576z^3} - \frac{7\sqrt{\pi} (64z^6 - 960z^5 + 3600z^4 - 2400z^3 - 900z^2 - 540z - 225) \operatorname{erfi}(\sqrt{z})}{49152z^{7/2}}$$

$$\begin{aligned}
 & \text{07.25.03.9387.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) &= \frac{7 e^{-z} (32 z^5 + 464 z^4 + 1584 z^3 + 600 z^2 - 390 z + 225)}{24\,576 z^3} + \\
 & \frac{7 \sqrt{\pi} (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225) \operatorname{erf}(\sqrt{z})}{49\,152 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9388.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{3}{2}, 5; z\right) &= \frac{32 e^{z/2} (16 z^6 - 256 z^5 + 1012 z^4 - 600 z^3 - 375 z^2 - 300 z - 180) I_1\left(\frac{z}{2}\right)}{45\,045 z^3} - \\
 & \frac{32 e^{z/2} (16 z^5 - 272 z^4 + 1260 z^3 - 1500 z^2 - 75 z - 45) I_0\left(\frac{z}{2}\right)}{45\,045 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9389.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; z\right) &= \frac{3 e^z (64 z^6 - 1088 z^5 + 4528 z^4 - 2400 z^3 - 2100 z^2 - 2100 z - 1575)}{32\,768 z^4} - \\
 & \frac{3 \sqrt{\pi} (128 z^7 - 2240 z^6 + 10\,080 z^5 - 8400 z^4 - 4200 z^3 - 3780 z^2 - 3150 z - 1575) \operatorname{erfi}(\sqrt{z})}{65\,536 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9390.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) &= \frac{3 e^{-z} (64 z^6 + 1088 z^5 + 4528 z^4 + 2400 z^3 - 2100 z^2 + 2100 z - 1575)}{32\,768 z^4} + \\
 & \frac{3 \sqrt{\pi} (128 z^7 + 2240 z^6 + 10\,080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575) \operatorname{erf}(\sqrt{z})}{65\,536 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9391.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{3}{2}; \frac{3}{2}, 6; z\right) &= \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right)}{135\,135 z^4} - \\
 & \frac{32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135\,135 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.9392.01} \\
 {}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; z\right) &= \frac{1}{7\,203\,735} \\
 & \frac{(-512 z^{10} - 9728 z^9 - 48\,384 z^8 - 61\,440 z^7 - 6720 z^6 - 576 z^5 - 720 z^4 - 7200 z^3 + 132\,300 z^2 - 1\,190\,700 z + 7\,203\,735) -}{7\,203\,735} \\
 & \frac{256 e^z \sqrt{\pi} (2 z^{21/2} + 39 z^{19/2} + 207 z^{17/2} + 318 z^{15/2} + 90 z^{13/2}) \operatorname{erf}(\sqrt{z})}{7\,203\,735}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9393.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{7203735} \\
 & \quad \frac{(-512z^{10} + 9728z^9 - 48384z^8 + 61440z^7 - 6720z^6 + 576z^5 - 720z^4 + 7200z^3 + 132300z^2 + 1190700z + 7203735) +}{7203735} \\
 & \quad \frac{256e^{-z}\sqrt{\pi}(2z^{21/2} - 39z^{19/2} + 207z^{17/2} - 318z^{15/2} + 90z^{13/2})\operatorname{erfi}(\sqrt{z})}{7203735}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9394.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & \quad \frac{256z^9 + 3840z^8 + 12800z^7 + 6720z^6 - 576z^5 - 240z^4 - 1440z^3 + 18900z^2 - 132300z + 654885}{654885} + \\
 & \quad \frac{128e^z\sqrt{\pi}(2z^{19/2} + 31z^{17/2} + 114z^{15/2} + 90z^{13/2})\operatorname{erf}(\sqrt{z})}{654885}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9395.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \\
 & \quad \frac{1}{654885}(-256z^9 + 3840z^8 - 12800z^7 + 6720z^6 + 576z^5 - 240z^4 + 1440z^3 + 18900z^2 + 132300z + 654885) + \\
 & \quad \frac{128e^{-z}\sqrt{\pi}(2z^{19/2} - 31z^{17/2} + 114z^{15/2} - 90z^{13/2})\operatorname{erfi}(\sqrt{z})}{654885}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9396.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{-128z^8 - 1408z^7 - 2240z^6 + 576z^5 - 240z^4 - 480z^3 + 3780z^2 - 18900z + 72765}{72765} - \\
 & \quad \frac{64e^z\sqrt{\pi}(2z^{17/2} + 23z^{15/2} + 45z^{13/2})\operatorname{erf}(\sqrt{z})}{72765}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9397.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{-128z^8 + 1408z^7 - 2240z^6 - 576z^5 - 240z^4 + 480z^3 + 3780z^2 + 18900z + 72765}{72765} + \\
 & \quad \frac{64e^{-z}\sqrt{\pi}(2z^{17/2} - 23z^{15/2} + 45z^{13/2})\operatorname{erfi}(\sqrt{z})}{72765}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9398.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, -\frac{5}{2}; z\right) = \\
 & \quad \frac{64z^7 + 448z^6 - 192z^5 + 240z^4 - 480z^3 + 1260z^2 - 3780z + 10395}{10395} + \frac{32e^z\sqrt{\pi}(2z^{15/2} + 15z^{13/2})\operatorname{erf}(\sqrt{z})}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9399.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \\
 & \frac{-64z^7 + 448z^6 + 192z^5 + 240z^4 + 480z^3 + 1260z^2 + 3780z + 10395}{10395} + \frac{32e^{-z}\sqrt{\pi}(2z^{15/2} - 15z^{13/2})\operatorname{erfi}(\sqrt{z})}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9400.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{-32z^6 - 96z^5 + 368z^4 - 864z^3 + 1260z^2 - 1260z + 2079}{2079} - \frac{16e^z\sqrt{\pi}(2z^{13/2} + 7z^{11/2} - 21z^{9/2} + 42z^{7/2} - 42z^{5/2})\operatorname{erf}(\sqrt{z})}{2079}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9401.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{-32z^6 + 96z^5 + 368z^4 + 864z^3 + 1260z^2 + 1260z + 2079}{2079} + \\
 & \frac{16e^{-z}\sqrt{\pi}(2z^{13/2} - 7z^{11/2} - 21z^{9/2} - 42z^{7/2} - 42z^{5/2})\operatorname{erfi}(\sqrt{z})}{2079}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9402.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{693}(16z^5 - 16z^4 - 128z^3 + 660z^2 - 1260z + 693) + \frac{8}{693}e^z\sqrt{\pi}(2z^{11/2} - z^{9/2} - 18z^{7/2} + 78z^{5/2} - 120z^{3/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9403.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \\
 & \frac{1}{693}(-16z^5 - 16z^4 + 128z^3 + 660z^2 + 1260z + 693) + \frac{8}{693}e^{-z}\sqrt{\pi}(2z^{11/2} + z^{9/2} - 18z^{7/2} - 78z^{5/2} - 120z^{3/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9404.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, \frac{1}{2}; z\right) = \\
 & \frac{1}{693}(-8z^4 + 40z^3 - 60z^2 - 180z + 693) - \frac{4}{693}e^z\sqrt{\pi}(2z^{9/2} - 9z^{7/2} + 9z^{5/2} + 60z^{3/2} - 180\sqrt{z})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9405.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, \frac{1}{2}; -z\right) = \\
 & \frac{1}{693}(-8z^4 - 40z^3 - 60z^2 + 180z + 693) + \frac{4}{693}e^{-z}\sqrt{\pi}(2z^{9/2} + 9z^{7/2} + 9z^{5/2} - 60z^{3/2} - 180\sqrt{z})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9406.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, 1; z\right) = -\frac{1}{693}e^z(8z^4 - 52z^3 + 126z^2 + 63z - 693)
 \end{aligned}$$

07.25.03.9407.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{693} (-4z^3 + 36z^2 - 140z + 213) - \frac{2e^z \sqrt{\pi} (2z^4 - 17z^3 + 60z^2 - 60z - 120) \operatorname{erf}(\sqrt{z})}{693 \sqrt{z}}$$

07.25.03.9408.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{693} (4z^3 + 36z^2 + 140z + 213) - \frac{2e^{-z} \sqrt{\pi} (2z^4 + 17z^3 + 60z^2 + 60z - 120) \operatorname{erfi}(\sqrt{z})}{693 \sqrt{z}}$$

07.25.03.9409.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, 2; z\right) = -\frac{1}{693} e^z (8z^3 - 84z^2 + 378z - 693)$$

07.25.03.9410.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{-2z^3 + 26z^2 - 149z + 420}{231z} + \frac{e^z \sqrt{\pi} (-2z^4 + 25z^3 - 135z^2 + 330z - 210) \operatorname{erf}(\sqrt{z})}{231z^{3/2}}$$

07.25.03.9411.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-2z^3 - 26z^2 - 149z - 420}{231z} + \frac{e^{-z} \sqrt{\pi} (2z^4 + 25z^3 + 135z^2 + 330z + 210) \operatorname{erfi}(\sqrt{z})}{231z^{3/2}}$$

07.25.03.9412.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, 3; z\right) = \frac{130}{21z^2} - \frac{2e^z (8z^4 - 116z^3 + 726z^2 - 2145z + 2145)}{693z^2}$$

07.25.03.9413.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{5(z^3 - 17z^2 + 126z - 1008)}{231z^2} - \frac{5e^z \sqrt{\pi} (2z^4 - 33z^3 + 234z^2 - 798z + 1008) \operatorname{erf}(\sqrt{z})}{462z^{5/2}}$$

07.25.03.9414.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5(z^3 + 17z^2 + 126z + 1008)}{231z^2} - \frac{5e^{-z} \sqrt{\pi} (2z^4 + 33z^3 + 234z^2 + 798z + 1008) \operatorname{erfi}(\sqrt{z})}{462z^{5/2}}$$

07.25.03.9415.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, 4; z\right) = \frac{130(11z + 34)}{77z^3} - \frac{2e^z (8z^4 - 148z^3 + 1170z^2 - 4485z + 6630)}{231z^3}$$

07.25.03.9416.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{5(z^3 - 21z^2 - 168z - 2520)}{66z^3} - \frac{5e^z \sqrt{\pi} (2z^4 - 41z^3 + 357z^2 - 1512z + 2520) \operatorname{erf}(\sqrt{z})}{132z^{7/2}}$$

07.25.03.9417.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (2z^4 + 41z^3 + 357z^2 + 1512z + 2520) \operatorname{erfi}(\sqrt{z})}{132z^{7/2}} - \frac{5(z^3 + 21z^2 - 168z + 2520)}{66z^3}$$

07.25.03.9418.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, 5; z\right) = \frac{20(143z^2 + 884z + 1938)}{77z^4} - \frac{8e^z (8z^4 - 180z^3 + 1710z^2 - 7905z + 14535)}{231z^4}$$

07.25.03.9419.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, \frac{11}{2}; z\right) = -\frac{15(z^3 - 168z^2 - 840z - 5040)}{44z^4} - \frac{15e^z\sqrt{\pi}(2z^4 - 49z^3 + 504z^2 - 2520z + 5040)\operatorname{erf}(\sqrt{z})}{88z^{9/2}}$$

07.25.03.9420.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{15(z^3 + 168z^2 - 840z + 5040)}{44z^4} - \frac{15e^{-z}\sqrt{\pi}(2z^4 + 49z^3 + 504z^2 + 2520z + 5040)\operatorname{erfi}(\sqrt{z})}{88z^{9/2}}$$

07.25.03.9421.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{11}{2}, 6; z\right) = \frac{20(715z^3 + 6630z^2 + 29070z + 54264)}{231z^5} - \frac{40e^z(8z^4 - 212z^3 + 2346z^2 - 12597z + 27132)}{231z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = -\frac{9}{2}$

07.25.03.9422.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{-128z^8 - 1536z^7 - 3392z^6 - 576z^5 - 80z^4 - 288z^3 + 2700z^2 - 14700z + 59535}{59535} - \frac{64e^z\sqrt{\pi}(2z^{17/2} + 25z^{15/2} + 64z^{13/2} + 26z^{11/2})\operatorname{erf}(\sqrt{z})}{59535}$$

07.25.03.9423.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{-128z^8 + 1536z^7 - 3392z^6 + 576z^5 - 80z^4 + 288z^3 + 2700z^2 + 14700z + 59535}{59535} + \frac{64e^{-z}\sqrt{\pi}(2z^{17/2} - 25z^{15/2} + 64z^{13/2} - 26z^{11/2})\operatorname{erfi}(\sqrt{z})}{59535}$$

07.25.03.9424.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{64z^7 + 576z^6 + 576z^5 - 80z^4 - 96z^3 + 540z^2 - 2100z + 6615}{6615} + \frac{32e^z\sqrt{\pi}(2z^{15/2} + 19z^{13/2} + 26z^{11/2})\operatorname{erf}(\sqrt{z})}{6615}$$

07.25.03.9425.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{-64z^7 + 576z^6 - 576z^5 - 80z^4 + 96z^3 + 540z^2 + 2100z + 6615}{6615} + \frac{32e^{-z}\sqrt{\pi}(2z^{15/2} - 19z^{13/2} + 26z^{11/2})\operatorname{erfi}(\sqrt{z})}{6615}$$

07.25.03.9426.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{945}(-32z^6 - 192z^5 + 80z^4 - 96z^3 + 180z^2 - 420z + 945) - \frac{16}{945}e^z\sqrt{\pi}(2z^{13/2} + 13z^{11/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9427.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{945}(-32z^6 + 192z^5 + 80z^4 + 96z^3 + 180z^2 + 420z + 945) + \frac{16}{945}e^{-z}\sqrt{\pi}(2z^{13/2} - 13z^{11/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9428.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{189}(16z^5 + 48z^4 - 128z^3 + 180z^2 - 140z + 189) + \frac{8}{189}e^z\sqrt{\pi}(2z^{11/2} + 7z^{9/2} - 14z^{7/2} + 14z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9429.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{189}(-16z^5 + 48z^4 + 128z^3 + 180z^2 + 140z + 189) + \frac{8}{189}e^{-z}\sqrt{\pi}(2z^{11/2} - 7z^{9/2} - 14z^{7/2} - 14z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9430.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{63}(-8z^4 + 60z^2 - 140z + 63) - \frac{4}{63}e^z\sqrt{\pi}(2z^{9/2} + z^{7/2} - 16z^{5/2} + 30z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9431.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{63}(-8z^4 + 60z^2 + 140z + 63) + \frac{4}{63}e^{-z}\sqrt{\pi}(2z^{9/2} - z^{7/2} - 16z^{5/2} - 30z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9432.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{63}(4z^3 - 12z^2 - 4z + 63) + \frac{2}{63}e^z\sqrt{\pi}(2z^{7/2} - 5z^{5/2} - 6z^{3/2} + 36\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.9433.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{63}(-4z^3 - 12z^2 + 4z + 63) + \frac{2}{63}e^{-z}\sqrt{\pi}(2z^{7/2} + 5z^{5/2} - 6z^{3/2} - 36\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9434.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, 1; z\right) = \frac{1}{63}e^z(4z^3 - 16z^2 + 7z + 63)$$

07.25.03.9435.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{63}(2z^2 - 12z + 23) + \frac{e^z\sqrt{\pi}(2z^3 - 11z^2 + 16z + 20)\operatorname{erf}(\sqrt{z})}{63\sqrt{z}}$$

07.25.03.9436.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{63}(2z^2 + 12z + 23) + \frac{e^{-z}\sqrt{\pi}(-2z^3 - 11z^2 - 16z + 20)\operatorname{erfi}(\sqrt{z})}{63\sqrt{z}}$$

07.25.03.9437.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, 2; z\right) = \frac{1}{63}e^z(4z^2 - 28z + 63)$$

07.25.03.9438.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{z^2 - 9z + 30}{21z} + \frac{e^z \sqrt{\pi} (2z^3 - 17z^2 + 50z - 30) \operatorname{erf}(\sqrt{z})}{42z^{3/2}}$$

07.25.03.9439.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-z^2 - 9z - 30}{21z} + \frac{e^{-z} \sqrt{\pi} (2z^3 + 17z^2 + 50z + 30) \operatorname{erfi}(\sqrt{z})}{42z^{3/2}}$$

07.25.03.9440.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, 3; z\right) = \frac{2e^z(4z^3 - 40z^2 + 143z - 143)}{63z^2} + \frac{286}{63z^2}$$

07.25.03.9441.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5(z^2 - 12z + 126)}{42z^2} + \frac{5e^z \sqrt{\pi} (2z^3 - 23z^2 + 96z - 126) \operatorname{erf}(\sqrt{z})}{84z^{5/2}}$$

07.25.03.9442.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5(z^2 + 12z + 126)}{42z^2} - \frac{5e^{-z} \sqrt{\pi} (2z^3 + 23z^2 + 96z + 126) \operatorname{erfi}(\sqrt{z})}{84z^{5/2}}$$

07.25.03.9443.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, 4; z\right) = \frac{26(11z + 30)}{21z^3} + \frac{2e^z(4z^3 - 52z^2 + 247z - 390)}{21z^3}$$

07.25.03.9444.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{5(3z^2 + 98z + 840)}{36z^3} + \frac{5e^z \sqrt{\pi} (2z^3 - 29z^2 + 154z - 280) \operatorname{erf}(\sqrt{z})}{24z^{7/2}}$$

07.25.03.9445.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (2z^3 + 29z^2 + 154z + 280) \operatorname{erfi}(\sqrt{z})}{24z^{7/2}} - \frac{5(3z^2 - 98z + 840)}{36z^3}$$

07.25.03.9446.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, 5; z\right) = \frac{4(143z^2 + 780z + 1530)}{21z^4} + \frac{8e^z(4z^3 - 64z^2 + 375z - 765)}{21z^4}$$

07.25.03.9447.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{7(43z^2 + 240z + 1080)}{8z^4} + \frac{15e^z \sqrt{\pi} (2z^3 - 35z^2 + 224z - 504) \operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.9448.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{7(43z^2 - 240z + 1080)}{8z^4} - \frac{15e^{-z} \sqrt{\pi} (2z^3 + 35z^2 + 224z + 504) \operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.9449.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{9}{2}, 6; z\right) = \frac{40e^z(4z^3 - 76z^2 + 527z - 1292)}{21z^5} + \frac{20(143z^3 + 1170z^2 + 4590z + 7752)}{63z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = -\frac{7}{2}$

07.25.03.9450.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{735}(-32z^6 - 224z^5 - 80z^4 - 32z^3 + 108z^2 - 300z + 735) - \frac{16}{735}e^{-z}\sqrt{\pi}(2z^{13/2} + 15z^{11/2} + 11z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9451.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{735}(-32z^6 + 224z^5 - 80z^4 + 32z^3 + 108z^2 + 300z + 735) + \frac{16}{735}e^{-z}\sqrt{\pi}(2z^{13/2} - 15z^{11/2} + 11z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9452.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{105}(16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105) + \frac{8}{105}e^{-z}\sqrt{\pi}(2z^{11/2} + 11z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9453.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{105}(-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105) + \frac{8}{105}e^{-z}\sqrt{\pi}(2z^{11/2} - 11z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9454.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{21}(-8z^4 - 24z^3 + 36z^2 - 20z + 21) - \frac{4}{21}e^{-z}\sqrt{\pi}(2z^{9/2} + 7z^{7/2} - 7z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9455.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{21}(-8z^4 + 24z^3 + 36z^2 + 20z + 21) + \frac{4}{21}e^{-z}\sqrt{\pi}(2z^{9/2} - 7z^{7/2} - 7z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9456.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{7}(4z^3 + 4z^2 - 20z + 7) + \frac{2}{7}e^{-z}\sqrt{\pi}(2z^{7/2} + 3z^{5/2} - 10z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9457.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{7}(-4z^3 + 4z^2 + 20z + 7) + \frac{2}{7}e^{-z}\sqrt{\pi}(2z^{7/2} - 3z^{5/2} - 10z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9458.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{7}(-2z^2 + 2z + 7) + \frac{1}{7}e^{-z}\sqrt{\pi}(-2z^{5/2} + z^{3/2} + 9\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.9459.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{7}(-2z^2 - 2z + 7) + \frac{1}{7}e^{-z}\sqrt{\pi}(2z^{5/2} + z^{3/2} - 9\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9460.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, 1; z\right) = -\frac{1}{7}e^{-z}(2z^2 - 3z - 7)$$

07.25.03.9461.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{3-z}{7} + \frac{e^z \sqrt{\pi} (-2z^2 + 5z + 4) \operatorname{erf}(\sqrt{z})}{14 \sqrt{z}}$$

07.25.03.9462.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{z+3}{7} + \frac{e^{-z} \sqrt{\pi} (-2z^2 - 5z + 4) \operatorname{erfi}(\sqrt{z})}{14 \sqrt{z}}$$

07.25.03.9463.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, 2; z\right) = -\frac{1}{7} e^z (2z - 7)$$

07.25.03.9464.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, \frac{5}{2}; z\right) = -\frac{3(z-5)}{14z} - \frac{3 e^z \sqrt{\pi} (2z^2 - 9z + 5) \operatorname{erf}(\sqrt{z})}{28 z^{3/2}}$$

07.25.03.9465.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z^2 + 9z + 5) \operatorname{erfi}(\sqrt{z})}{28 z^{3/2}} - \frac{3(z+5)}{14z}$$

07.25.03.9466.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, 3; z\right) = \frac{22}{7z^2} - \frac{2 e^z (2z^2 - 11z + 11)}{7z^2}$$

07.25.03.9467.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, \frac{7}{2}; z\right) = -\frac{15(z-18)}{28z^2} - \frac{15 e^z \sqrt{\pi} (2z^2 - 13z + 18) \operatorname{erf}(\sqrt{z})}{56 z^{5/2}}$$

07.25.03.9468.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15(z+18)}{28z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z^2 + 13z + 18) \operatorname{erfi}(\sqrt{z})}{56 z^{5/2}}$$

07.25.03.9469.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, 4; z\right) = \frac{6(11z+26)}{7z^3} - \frac{6 e^z (2z^2 - 15z + 26)}{7z^3}$$

07.25.03.9470.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{5(19z+105)}{8z^3} - \frac{15 e^z \sqrt{\pi} (2z^2 - 17z + 35) \operatorname{erf}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.9471.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5(19z-105)}{8z^3} + \frac{15 e^{-z} \sqrt{\pi} (2z^2 + 17z + 35) \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.9472.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, 5; z\right) = \frac{12(11z^2 + 52z + 90)}{7z^4} - \frac{24 e^z (2z^2 - 19z + 45)}{7z^4}$$

07.25.03.9473.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9(44z^2 + 245z + 840)}{16z^4} - \frac{135e^z\sqrt{\pi}(2z^2 - 21z + 56)\operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.9474.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(44z^2 - 245z + 840)}{16z^4} - \frac{135e^{-z}\sqrt{\pi}(2z^2 + 21z + 56)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.9475.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{7}{2}, 6; z\right) = \frac{20(11z^3 + 78z^2 + 270z + 408)}{7z^5} - \frac{120e^z(2z^2 - 23z + 68)}{7z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = -\frac{5}{2}$

07.25.03.9476.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{15}(-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15}e^z\sqrt{\pi}(2z^{9/2} + 9z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9477.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15}(-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15}e^{-z}\sqrt{\pi}(2z^{9/2} - 9z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9478.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{3}(4z^3 + 12z^2 - 4z + 3) + \frac{2}{3}e^z\sqrt{\pi}(2z^{7/2} + 7z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9479.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3}(-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3}e^{-z}\sqrt{\pi}(2z^{7/2} - 7z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9480.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, -\frac{1}{2}; z\right) = -2z^2 - 4z + e^z\sqrt{\pi}(-2z^{5/2} - 5z^{3/2})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.9481.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, -\frac{1}{2}; -z\right) = -2z^2 + 4z + e^{-z}\sqrt{\pi}(2z^{5/2} - 5z^{3/2})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.9482.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, \frac{1}{2}; z\right) = z + \frac{1}{2}e^z\sqrt{\pi}(2z^{3/2} + 3\sqrt{z})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.9483.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, \frac{1}{2}; -z\right) = -z + \frac{1}{2}e^{-z}\sqrt{\pi}(2z^{3/2} - 3\sqrt{z})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.9484.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, 1; z\right) = e^z(z + 1)$$

07.25.03.9485.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.9486.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (1-2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.9487.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, 2; z\right) = e^z$$

07.25.03.9488.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (2z-1) \operatorname{erf}(\sqrt{z})}{8 z^{3/2}} + \frac{3}{4z}$$

07.25.03.9489.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z+1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3}{4z}$$

07.25.03.9490.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, 3; z\right) = \frac{2 e^z (z-1)}{z^2} + \frac{2}{z^2}$$

07.25.03.9491.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45}{8z^2}$$

07.25.03.9492.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{45}{8z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.9493.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, 4; z\right) = \frac{6 e^z (z-2)}{z^3} + \frac{6(z+2)}{z^3}$$

07.25.03.9494.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{35(4z+15)}{16 z^3} + \frac{105 e^z \sqrt{\pi} (2z-5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.9495.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{35(4z-15)}{16 z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z+5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.9496.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, 5; z\right) = \frac{24 e^z (z-3)}{z^4} + \frac{12(z^2+4z+6)}{z^4}$$

07.25.03.9497.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63(8z^2 + 40z + 105)}{32z^4} + \frac{945e^z\sqrt{\pi}(2z-7)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.9498.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63(8z^2 - 40z + 105)}{32z^4} - \frac{945e^{-z}\sqrt{\pi}(2z+7)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.9499.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{5}{2}, 6; z\right) = \frac{120e^z(z-4)}{z^5} + \frac{20(z^3 + 6z^2 + 18z + 24)}{z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = -\frac{3}{2}$

07.25.03.9500.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{3}{2}, 1; z\right) = \frac{1}{3}e^z(14z^2 + 7z + 3) - \frac{14}{3}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.9501.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{3}{2}, 1; -z\right) = \frac{14}{3}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{3}e^{-z}(14z^2 - 7z + 3)$$

07.25.03.9502.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{3}{2}, 2; z\right) = \frac{1}{3}e^z(4z^2 + 2z + 3) - \frac{4}{3}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.9503.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{3}{2}, 2; -z\right) = \frac{4}{3}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{3}e^{-z}(4z^2 - 2z + 3)$$

07.25.03.9504.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{3}{2}, 3; z\right) = -\frac{16}{27}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{5/2} + \frac{2e^z(8z^4 + 4z^3 + 6z^2 + 15z - 15)}{27z^2} + \frac{10}{9z^2}$$

07.25.03.9505.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{3}{2}, 3; -z\right) = \frac{16}{27}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{2e^{-z}(8z^4 - 4z^3 + 6z^2 - 15z - 15)}{27z^2} + \frac{10}{9z^2}$$

07.25.03.9506.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{3}{2}, 4; z\right) = -\frac{32}{99}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{5/2} + \frac{10(11z + 18)}{33z^3} + \frac{2e^z(16z^5 + 8z^4 + 12z^3 + 30z^2 + 105z - 270)}{99z^3}$$

07.25.03.9507.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{3}{2}, 4; -z\right) = \frac{32}{99}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{10(11z - 18)}{33z^3} + \frac{2e^{-z}(16z^5 - 8z^4 + 12z^3 - 30z^2 + 105z + 270)}{99z^3}$$

07.25.03.9508.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{3}{2}, 5; z\right) = \frac{256\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{5/2}}{1287} + \frac{20(143z^2 + 468z + 594)}{429z^4} + \frac{8e^z(32z^6 + 16z^5 + 24z^4 + 60z^3 + 210z^2 + 945z - 4455)}{1287z^4}$$

07.25.03.9509.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{3}{2}, 5; -z\right) = \frac{256\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2}}{1287} + \frac{20(143z^2 - 468z + 594)}{429z^4} + \frac{8e^{-z}(32z^6 - 16z^5 + 24z^4 - 60z^3 + 210z^2 - 945z - 4455)}{1287z^4}$$

07.25.03.9510.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{3}{2}, 6; z\right) = -\frac{512\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{5/2}}{3861} + \frac{20(715z^3 + 3510z^2 + 8910z + 10296)}{1287z^5} + \frac{8e^z(64z^7 + 32z^6 + 48z^5 + 120z^4 + 420z^3 + 1890z^2 + 10395z - 77220)}{3861z^5}$$

07.25.03.9511.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{3}{2}, 6; -z\right) = \frac{512\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2}}{3861} + \frac{20(715z^3 - 3510z^2 + 8910z - 10296)}{1287z^5} + \frac{8e^{-z}(64z^7 - 32z^6 + 48z^5 - 120z^4 + 420z^3 - 1890z^2 + 10395z + 77220)}{3861z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = -\frac{1}{2}$

07.25.03.9512.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{1}{2}, 1; z\right) = e^z(-7z^2 + 9z + 1) + \frac{1}{2}\sqrt{\pi}(14z^{5/2} - 25z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9513.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{1}{2}, 1; -z\right) = e^{-z}(-7z^2 - 9z + 1) + \frac{1}{2}\sqrt{\pi}(-14z^{5/2} - 25z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9514.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{1}{2}, 2; z\right) = e^z(-2z^2 + 4z + 1) + \sqrt{\pi}(2z^{5/2} - 5z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9515.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{1}{2}, 2; -z\right) = e^{-z}(-2z^2 - 4z + 1) + \sqrt{\pi}(-2z^{5/2} - 5z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9516.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{1}{2}, 3; z\right) = -\frac{2e^z(28z^4 - 76z^3 - 24z^2 - 15z + 15)}{63z^2} + \frac{4}{63}\sqrt{\pi}(14z^{5/2} - 45z^{3/2})\operatorname{erfi}(\sqrt{z}) + \frac{10}{21z^2}$$

07.25.03.9517.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{1}{2}, 3; -z\right) = -\frac{2e^{-z}(28z^4 + 76z^3 - 24z^2 + 15z + 15)}{63z^2} - \frac{4}{63}\sqrt{\pi}(14z^{5/2} + 45z^{3/2})\operatorname{erf}(\sqrt{z}) + \frac{10}{21z^2}$$

07.25.03.9518.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{1}{2}, 4; z\right) = \frac{10(11z + 14)}{77z^3} - \frac{2e^z(56z^5 - 192z^4 - 68z^3 - 60z^2 - 45z + 210)}{231z^3} + \frac{8}{231}\sqrt{\pi}(14z^{5/2} - 55z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9519.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{1}{2}, 4; -z\right) = \frac{10(11z - 14)}{77z^3} - \frac{2e^{-z}(56z^5 + 192z^4 - 68z^3 + 60z^2 - 45z - 210)}{231z^3} - \frac{8}{231}\sqrt{\pi}(14z^{5/2} + 55z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9520.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{1}{2}, 5; z\right) = \frac{20(143z^2 + 364z + 378)}{1001z^4} - \frac{8e^z(112z^6 - 464z^5 - 176z^4 - 180z^3 - 240z^2 - 105z + 2835)}{3003z^4} + \frac{64\sqrt{\pi}(14z^{5/2} - 65z^{3/2})\operatorname{erfi}(\sqrt{z})}{3003}$$

07.25.03.9521.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{1}{2}, 5; -z\right) = \frac{20(143z^2 - 364z + 378)}{1001z^4} - \frac{8e^{-z}(112z^6 + 464z^5 - 176z^4 + 180z^3 - 240z^2 + 105z + 2835)}{3003z^4} - \frac{64\sqrt{\pi}(14z^{5/2} + 65z^{3/2})\operatorname{erf}(\sqrt{z})}{3003}$$

07.25.03.9522.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{1}{2}, 6; z\right) = \frac{20(715z^3 + 2730z^2 + 5670z + 5544)}{3003z^5} - \frac{8e^z(224z^7 - 1088z^6 - 432z^5 - 480z^4 - 780z^3 - 1260z^2 + 945z + 41580)}{9009z^5} + \frac{128\sqrt{\pi}(14z^{5/2} - 75z^{3/2})\operatorname{erfi}(\sqrt{z})}{9009}$$

07.25.03.9523.01

$${}_2F_2\left(-\frac{5}{2}, 2; -\frac{1}{2}, 6; -z\right) = \frac{20(715z^3 - 2730z^2 + 5670z - 5544)}{3003z^5} - \frac{8e^{-z}(224z^7 + 1088z^6 - 432z^5 + 480z^4 - 780z^3 + 1260z^2 + 945z - 41580)}{9009z^5} - \frac{128\sqrt{\pi}(14z^{5/2} + 75z^{3/2})\operatorname{erf}(\sqrt{z})}{9009}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = \frac{1}{2}$

07.25.03.9524.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{1}{2}, 1; z\right) = \frac{1}{8}e^z(14z^2 - 43z + 8) + \frac{1}{16}\sqrt{\pi}(-28z^{5/2} + 100z^{3/2} - 45\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9525.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{1}{2}, 1; -z\right) = \frac{1}{8} e^{-z} (14z^2 + 43z + 8) + \frac{1}{16} \sqrt{\pi} (28z^{5/2} + 100z^{3/2} + 45\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9526.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{1}{2}, 2; z\right) = \frac{1}{4} e^z (2z^2 - 9z + 4) + \frac{1}{8} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9527.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{1}{2}, 2; -z\right) = \frac{1}{4} e^{-z} (2z^2 + 9z + 4) + \frac{1}{8} \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9528.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{1}{2}, 3; z\right) = \frac{e^z (14z^4 - 83z^3 + 60z^2 + 6z - 6)}{63z^2} + \frac{1}{126} \sqrt{\pi} (-28z^{5/2} + 180z^{3/2} - 189\sqrt{z}) \operatorname{erfi}(\sqrt{z}) + \frac{2}{21z^2}$$

07.25.03.9529.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{1}{2}, 3; -z\right) = \frac{e^{-z} (14z^4 + 83z^3 + 60z^2 - 6z - 6)}{63z^2} + \frac{1}{126} \sqrt{\pi} (28z^{5/2} + 180z^{3/2} + 189\sqrt{z}) \operatorname{erf}(\sqrt{z}) + \frac{2}{21z^2}$$

07.25.03.9530.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{1}{2}, 4; z\right) = \frac{2(11z + 10)}{77z^3} + \frac{2e^z (14z^5 - 103z^4 + 104z^3 + 18z^2 - 3z - 30)}{231z^3} + \frac{1}{231} \sqrt{\pi} (-28z^{5/2} + 220z^{3/2} - 297\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9531.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{1}{2}, 4; -z\right) = \frac{2(11z - 10)}{77z^3} + \frac{2e^{-z} (14z^5 + 103z^4 + 104z^3 - 18z^2 - 3z + 30)}{231z^3} + \frac{1}{231} \sqrt{\pi} (28z^{5/2} + 220z^{3/2} + 297\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9532.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{1}{2}, 5; z\right) = \frac{4(143z^2 + 260z + 210)}{1001z^4} + \frac{8e^z (28z^6 - 246z^5 + 320z^4 + 72z^3 + 18z^2 - 75z - 315)}{3003z^4} - \frac{8\sqrt{\pi} (28z^{5/2} - 260z^{3/2} + 429\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3003}$$

07.25.03.9533.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{1}{2}, 5; -z\right) = \frac{4(143z^2 - 260z + 210)}{1001z^4} + \frac{8e^{-z} (28z^6 + 246z^5 + 320z^4 - 72z^3 + 18z^2 + 75z - 315)}{3003z^4} + \frac{8\sqrt{\pi} (28z^{5/2} + 260z^{3/2} + 429\sqrt{z}) \operatorname{erf}(\sqrt{z})}{3003}$$

07.25.03.9534.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{1}{2}, 6; z\right) = \frac{20(143z^3 + 390z^2 + 630z + 504)}{3003z^5} + \frac{8e^z(56z^7 - 572z^6 + 912z^5 + 240z^4 + 120z^3 - 90z^2 - 945z - 3780)}{9009z^5} - \frac{16\sqrt{\pi}(28z^{5/2} - 300z^{3/2} + 585\sqrt{z})\operatorname{erfi}(\sqrt{z})}{9009}$$

07.25.03.9535.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{1}{2}, 6; -z\right) = \frac{20(143z^3 - 390z^2 + 630z - 504)}{3003z^5} + \frac{8e^{-z}(56z^7 + 572z^6 + 912z^5 - 240z^4 + 120z^3 + 90z^2 - 945z + 3780)}{9009z^5} + \frac{16\sqrt{\pi}(28z^{5/2} + 300z^{3/2} + 585\sqrt{z})\operatorname{erf}(\sqrt{z})}{9009}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = 1$

07.25.03.9536.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, 1; z\right) = \frac{1}{30}e^{z/2}(-28z^3 + 146z^2 - 165z + 30)I_0\left(\frac{z}{2}\right) + \frac{1}{30}e^{z/2}(28z^3 - 118z^2 + 61z)I_1\left(\frac{z}{2}\right)$$

07.25.03.9537.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, \frac{3}{2}; z\right) = \frac{1}{96}e^z(28z^2 - 136z + 81) + \frac{\sqrt{\pi}(-56z^3 + 300z^2 - 270z + 15)\operatorname{erfi}(\sqrt{z})}{192\sqrt{z}}$$

07.25.03.9538.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, \frac{3}{2}; -z\right) = \frac{1}{96}e^{-z}(28z^2 + 136z + 81) + \frac{\sqrt{\pi}(56z^3 + 300z^2 + 270z + 15)\operatorname{erf}(\sqrt{z})}{192\sqrt{z}}$$

07.25.03.9539.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, 2; z\right) = \frac{1}{15}e^{z/2}(-4z^3 + 28z^2 - 45z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}(4z^3 - 24z^2 + 23z)I_1\left(\frac{z}{2}\right)$$

07.25.03.9540.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, \frac{5}{2}; z\right) = \frac{e^z(56z^3 - 372z^2 + 382z + 15)}{512z} + \frac{\sqrt{\pi}(-112z^4 + 800z^3 - 1080z^2 + 120z - 15)\operatorname{erfi}(\sqrt{z})}{1024z^{3/2}}$$

07.25.03.9541.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, \frac{5}{2}; -z\right) = \frac{e^{-z}(56z^3 + 372z^2 + 382z - 15)}{512z} + \frac{\sqrt{\pi}(112z^4 + 800z^3 + 1080z^2 + 120z + 15)\operatorname{erf}(\sqrt{z})}{1024z^{3/2}}$$

07.25.03.9542.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, 3; z\right) = \frac{2e^{z/2}(56z^4 - 436z^3 + 612z^2 - 15z + 30)I_1\left(\frac{z}{2}\right)}{945z} - \frac{2}{945}e^{z/2}(56z^3 - 492z^2 + 1020z - 465)I_0\left(\frac{z}{2}\right)$$

07.25.03.9543.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, \frac{7}{2}; z\right) = \frac{e^z (112 z^4 - 944 z^3 + 1384 z^2 + 60 z + 135)}{2048 z^2} + \frac{\sqrt{\pi} (-224 z^5 + 2000 z^4 - 3600 z^3 + 600 z^2 - 150 z - 135) \operatorname{erfi}(\sqrt{z})}{4096 z^{5/2}}$$

07.25.03.9544.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, \frac{7}{2}; -z\right) = \frac{e^{-z} (112 z^4 + 944 z^3 + 1384 z^2 - 60 z + 135)}{2048 z^2} + \frac{\sqrt{\pi} (224 z^5 + 2000 z^4 + 3600 z^3 + 600 z^2 + 150 z - 135) \operatorname{erf}(\sqrt{z})}{4096 z^{5/2}}$$

07.25.03.9545.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, 4; z\right) = \frac{4 e^{z/2} (56 z^5 - 536 z^4 + 992 z^3 - 60 z^2 + 105 z + 120) I_1\left(\frac{z}{2}\right)}{3465 z^2} - \frac{8 e^{z/2} (28 z^4 - 296 z^3 + 750 z^2 - 420 z + 15) I_0\left(\frac{z}{2}\right)}{3465 z}$$

07.25.03.9546.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, \frac{9}{2}; z\right) = \frac{7 e^z (224 z^5 - 2288 z^4 + 4368 z^3 + 120 z^2 + 870 z + 1125)}{49 152 z^3} - \frac{7 \sqrt{\pi} (448 z^6 - 4800 z^5 + 10 800 z^4 - 2400 z^3 + 900 z^2 + 1620 z + 1125) \operatorname{erfi}(\sqrt{z})}{98 304 z^{7/2}}$$

07.25.03.9547.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (224 z^5 + 2288 z^4 + 4368 z^3 - 120 z^2 + 870 z - 1125)}{49 152 z^3} + \frac{7 \sqrt{\pi} (448 z^6 + 4800 z^5 + 10 800 z^4 + 2400 z^3 + 900 z^2 - 1620 z + 1125) \operatorname{erf}(\sqrt{z})}{98 304 z^{7/2}}$$

07.25.03.9548.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, 5; z\right) = \frac{16 e^{z/2} (112 z^6 - 1272 z^5 + 2924 z^4 - 300 z^3 + 495 z^2 + 1020 z + 1080) I_1\left(\frac{z}{2}\right)}{45 045 z^3} - \frac{16 e^{z/2} (112 z^5 - 1384 z^4 + 4140 z^3 - 2700 z^2 + 255 z + 270) I_0\left(\frac{z}{2}\right)}{45 045 z^2}$$

07.25.03.9549.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, \frac{11}{2}; z\right) = \frac{21 e^z (64 z^6 - 768 z^5 + 1808 z^4 + 540 z^2 + 1200 z + 1575)}{65 536 z^4} - \frac{21 \sqrt{\pi} (128 z^7 - 1600 z^6 + 4320 z^5 - 1200 z^4 + 600 z^3 + 1620 z^2 + 2250 z + 1575) \operatorname{erfi}(\sqrt{z})}{131 072 z^{9/2}}$$

07.25.03.9550.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (64 z^6 + 768 z^5 + 1808 z^4 + 540 z^2 - 1200 z + 1575)}{65\,536 z^4} + \frac{21 \sqrt{\pi} (128 z^7 + 1600 z^6 + 4320 z^5 + 1200 z^4 + 600 z^3 - 1620 z^2 + 2250 z - 1575) \operatorname{erf}(\sqrt{z})}{131\,072 z^{9/2}}$$

07.25.03.9551.01

$${}_2F_2\left(-\frac{5}{2}, 2; 1, 6; z\right) = \frac{32 e^{z/2} (112 z^7 - 1472 z^6 + 4044 z^5 - 600 z^4 + 975 z^3 + 2880 z^2 + 5220 z + 5760) I_1\left(\frac{z}{2}\right)}{135\,135 z^4} - \frac{32 e^{z/2} (112 z^6 - 1584 z^5 + 5460 z^4 - 4020 z^3 + 675 z^2 + 1305 z + 1440) I_0\left(\frac{z}{2}\right)}{135\,135 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = \frac{3}{2}$

07.25.03.9552.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{3}{2}, 2; z\right) = \frac{1}{48} e^z (4 z^2 - 28 z + 33) + \frac{\sqrt{\pi} (-8 z^3 + 60 z^2 - 90 z + 15) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.9553.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{3}{2}, 2; -z\right) = \frac{1}{48} e^{-z} (4 z^2 + 28 z + 33) + \frac{\sqrt{\pi} (8 z^3 + 60 z^2 + 90 z + 15) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.9554.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{3}{2}, 3; z\right) = \frac{e^z (28 z^4 - 256 z^3 + 453 z^2 - 24 z + 24)}{756 z^2} + \frac{\sqrt{\pi} (-56 z^3 + 540 z^2 - 1134 z + 315) \operatorname{erfi}(\sqrt{z})}{1512 \sqrt{z}} - \frac{2}{63 z^2}$$

07.25.03.9555.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{3}{2}, 3; -z\right) = \frac{e^{-z} (28 z^4 + 256 z^3 + 453 z^2 + 24 z + 24)}{756 z^2} + \frac{\sqrt{\pi} (56 z^3 + 540 z^2 + 1134 z + 315) \operatorname{erf}(\sqrt{z})}{1512 \sqrt{z}} - \frac{2}{63 z^2}$$

07.25.03.9556.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{3}{2}, 4; z\right) = -\frac{2(11z+6)}{231z^3} + \frac{e^z (28z^5 - 316z^4 + 747z^3 - 96z^2 + 60z + 72)}{1386z^3} + \frac{\sqrt{\pi} (-56z^3 + 660z^2 - 1782z + 693) \operatorname{erfi}(\sqrt{z})}{2772\sqrt{z}}$$

07.25.03.9557.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{3}{2}, 4; -z\right) = -\frac{2(11z-6)}{231z^3} + \frac{e^{-z} (28z^5 + 316z^4 + 747z^3 + 96z^2 + 60z - 72)}{1386z^3} + \frac{\sqrt{\pi} (56z^3 + 660z^2 + 1782z + 693) \operatorname{erf}(\sqrt{z})}{2772\sqrt{z}}$$

07.25.03.9558.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{3}{2}, 5; z\right) = -\frac{4(143z^2 + 156z + 90)}{3003z^4} + \frac{4e^z(28z^6 - 376z^5 + 1113z^4 - 240z^3 + 96z^2 + 198z + 270)}{9009z^4} - \frac{2\sqrt{\pi}(56z^3 - 780z^2 + 2574z - 1287)\operatorname{erfi}(\sqrt{z})}{9009\sqrt{z}}$$

07.25.03.9559.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{3}{2}, 5; -z\right) = -\frac{4(143z^2 - 156z + 90)}{3003z^4} + \frac{4e^{-z}(28z^6 + 376z^5 + 1113z^4 + 240z^3 + 96z^2 - 198z + 270)}{9009z^4} + \frac{2\sqrt{\pi}(56z^3 + 780z^2 + 2574z + 1287)\operatorname{erf}(\sqrt{z})}{9009\sqrt{z}}$$

07.25.03.9560.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{3}{2}, 6; z\right) = -\frac{20(143z^3 + 234z^2 + 270z + 168)}{9009z^5} + \frac{8e^z(28z^7 - 436z^6 + 1551z^5 - 480z^4 + 120z^3 + 360z^2 + 765z + 1260)}{27027z^5} - \frac{4\sqrt{\pi}(56z^3 - 900z^2 + 3510z - 2145)\operatorname{erfi}(\sqrt{z})}{27027\sqrt{z}}$$

07.25.03.9561.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{3}{2}, 6; -z\right) = -\frac{20(143z^3 - 234z^2 + 270z - 168)}{9009z^5} + \frac{8e^{-z}(28z^7 + 436z^6 + 1551z^5 + 480z^4 + 120z^3 - 360z^2 + 765z - 1260)}{27027z^5} + \frac{4\sqrt{\pi}(56z^3 + 900z^2 + 3510z + 2145)\operatorname{erf}(\sqrt{z})}{27027\sqrt{z}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = 2$

07.25.03.9562.01

$${}_2F_2\left(-\frac{5}{2}, 2; 2, 2; z\right) = \frac{1}{105}e^{z/2}(-8z^3 + 76z^2 - 180z + 105)I_0\left(\frac{z}{2}\right) + \frac{1}{105}e^{z/2}(8z^3 - 68z^2 + 116z - 15)I_1\left(\frac{z}{2}\right)$$

07.25.03.9563.01

$${}_2F_2\left(-\frac{5}{2}, 2; 2, \frac{5}{2}; z\right) = \frac{e^z(8z^3 - 76z^2 + 146z - 15)}{256z} + \frac{\sqrt{\pi}(-16z^4 + 160z^3 - 360z^2 + 120z + 15)\operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.9564.01

$${}_2F_2\left(-\frac{5}{2}, 2; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(8z^3 + 76z^2 + 146z + 15)}{256z} + \frac{\sqrt{\pi}(16z^4 + 160z^3 + 360z^2 + 120z - 15)\operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.9565.01

$${}_2F_2\left(-\frac{5}{2}, 2; 2, 3; z\right) = \frac{4e^{z/2}(8z^4 - 88z^3 + 216z^2 - 60z - 15)I_1\left(\frac{z}{2}\right)}{945z} - \frac{16}{945}e^{z/2}(2z^3 - 24z^2 + 75z - 60)I_0\left(\frac{z}{2}\right)$$

07.25.03.9566.01

$${}_2F_2\left(-\frac{5}{2}, 2; 2, \frac{7}{2}; z\right) = \frac{e^z (16z^4 - 192z^3 + 512z^2 - 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.9567.01

$${}_2F_2\left(-\frac{5}{2}, 2; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (16z^4 + 192z^3 + 512z^2 + 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.9568.01

$${}_2F_2\left(-\frac{5}{2}, 2; 2, 4; z\right) = \frac{4e^{z/2} (16z^5 - 216z^4 + 692z^3 - 300z^2 - 135z - 60) I_1\left(\frac{z}{2}\right) - 4e^{z/2} (16z^4 - 232z^3 + 900z^2 - 900z - 15) I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{4e^{z/2} (16z^4 - 232z^3 + 900z^2 - 900z - 15) I_0\left(\frac{z}{2}\right)}{3465z}$$

07.25.03.9569.01

$${}_2F_2\left(-\frac{5}{2}, 2; 2, \frac{9}{2}; z\right) = \frac{7e^z (32z^5 - 464z^4 + 1584z^3 - 600z^2 - 390z - 225)}{24576z^3} - \frac{7\sqrt{\pi} (64z^6 - 960z^5 + 3600z^4 - 2400z^3 - 900z^2 - 540z - 225) \operatorname{erfi}(\sqrt{z})}{49152z^{7/2}}$$

07.25.03.9570.01

$${}_2F_2\left(-\frac{5}{2}, 2; 2, \frac{9}{2}; -z\right) = \frac{7e^{-z} (32z^5 + 464z^4 + 1584z^3 + 600z^2 - 390z + 225)}{24576z^3} + \frac{7\sqrt{\pi} (64z^6 + 960z^5 + 3600z^4 + 2400z^3 - 900z^2 + 540z - 225) \operatorname{erf}(\sqrt{z})}{49152z^{7/2}}$$

07.25.03.9571.01

$${}_2F_2\left(-\frac{5}{2}, 2; 2, 5; z\right) = \frac{32e^{z/2} (16z^6 - 256z^5 + 1012z^4 - 600z^3 - 375z^2 - 300z - 180) I_1\left(\frac{z}{2}\right) - 32e^{z/2} (16z^5 - 272z^4 + 1260z^3 - 1500z^2 - 75z - 45) I_0\left(\frac{z}{2}\right)}{45045z^2}$$

07.25.03.9572.01

$${}_2F_2\left(-\frac{5}{2}, 2; 2, \frac{11}{2}; z\right) = \frac{3e^z (64z^6 - 1088z^5 + 4528z^4 - 2400z^3 - 2100z^2 - 2100z - 1575)}{32768z^4} - \frac{3\sqrt{\pi} (128z^7 - 2240z^6 + 10080z^5 - 8400z^4 - 4200z^3 - 3780z^2 - 3150z - 1575) \operatorname{erfi}(\sqrt{z})}{65536z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.9573.01} \\
 {}_2F_2\left(-\frac{5}{2}, 2; 2, \frac{11}{2}; -z\right) &= \frac{3 e^{-z} (64 z^6 + 1088 z^5 + 4528 z^4 + 2400 z^3 - 2100 z^2 + 2100 z - 1575)}{32\,768 z^4} + \\
 & \frac{3 \sqrt{\pi} (128 z^7 + 2240 z^6 + 10\,080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575) \operatorname{erf}(\sqrt{z})}{65\,536 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9574.01} \\
 {}_2F_2\left(-\frac{5}{2}, 2; 2, 6; z\right) &= \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right)}{135\,135 z^4} - \\
 & \frac{32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135\,135 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = \frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.9575.01} \\
 {}_2F_2\left(-\frac{5}{2}, 2; \frac{5}{2}, 3; z\right) &= \\
 & \frac{e^z (56 z^4 - 692 z^3 + 1950 z^2 - 561 z - 384)}{4032 z^2} + \frac{\sqrt{\pi} (-112 z^4 + 1440 z^3 - 4536 z^2 + 2520 z + 945) \operatorname{erfi}(\sqrt{z})}{8064 z^{3/2}} + \frac{2}{21 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9576.01} \\
 {}_2F_2\left(-\frac{5}{2}, 2; \frac{5}{2}, 3; -z\right) &= \\
 & \frac{e^{-z} (56 z^4 + 692 z^3 + 1950 z^2 + 561 z - 384)}{4032 z^2} + \frac{\sqrt{\pi} (112 z^4 + 1440 z^3 + 4536 z^2 + 2520 z - 945) \operatorname{erf}(\sqrt{z})}{8064 z^{3/2}} + \frac{2}{21 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9577.01} \\
 {}_2F_2\left(-\frac{5}{2}, 2; \frac{5}{2}, 4; z\right) &= \frac{2(11z+2)}{77 z^3} + \frac{e^z (56 z^5 - 852 z^4 + 3166 z^3 - 1545 z^2 - 1728 z - 384)}{7392 z^3} + \\
 & \frac{\sqrt{\pi} (-112 z^4 + 1760 z^3 - 7128 z^2 + 5544 z + 3465) \operatorname{erfi}(\sqrt{z})}{14\,784 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9578.01} \\
 {}_2F_2\left(-\frac{5}{2}, 2; \frac{5}{2}, 4; -z\right) &= \frac{2(11z-2)}{77 z^3} + \frac{e^{-z} (56 z^5 + 852 z^4 + 3166 z^3 + 1545 z^2 - 1728 z + 384)}{7392 z^3} + \\
 & \frac{\sqrt{\pi} (112 z^4 + 1760 z^3 + 7128 z^2 + 5544 z - 3465) \operatorname{erf}(\sqrt{z})}{14\,784 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9579.01} \\
 {}_2F_2\left(-\frac{5}{2}, 2; \frac{5}{2}, 5; z\right) &= \frac{4(143 z^2 + 52 z + 18)}{1001 z^4} + \frac{e^z (56 z^6 - 1012 z^5 + 4670 z^4 - 3249 z^3 - 4800 z^2 - 1632 z - 864)}{12\,012 z^4} + \\
 & \frac{\sqrt{\pi} (-112 z^4 + 2080 z^3 - 10\,296 z^2 + 10\,296 z + 9009) \operatorname{erfi}(\sqrt{z})}{24\,024 z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9580.01} \\
 {}_2F_2\left(-\frac{5}{2}, 2; \frac{5}{2}, 5; -z\right) &= \frac{4(143z^2 - 52z + 18)}{1001z^4} + \frac{e^{-z}(56z^6 + 1012z^5 + 4670z^4 + 3249z^3 - 4800z^2 + 1632z - 864)}{12012z^4} + \\
 & \frac{\sqrt{\pi}(112z^4 + 2080z^3 + 10296z^2 + 10296z - 9009)\operatorname{erf}(\sqrt{z})}{24024z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9581.01} \\
 {}_2F_2\left(-\frac{5}{2}, 2; \frac{5}{2}, 6; z\right) &= \\
 & \frac{20(143z^3 + 78z^2 + 54z + 24)}{3003z^5} + \frac{e^z(56z^7 - 1172z^6 + 6462z^5 - 5865z^4 - 10560z^3 - 4320z^2 - 3600z - 2880)}{18018z^5} + \\
 & \frac{\sqrt{\pi}(-112z^4 + 2400z^3 - 14040z^2 + 17160z + 19305)\operatorname{erfi}(\sqrt{z})}{36036z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9582.01} \\
 {}_2F_2\left(-\frac{5}{2}, 2; \frac{5}{2}, 6; -z\right) &= \\
 & \frac{20(143z^3 - 78z^2 + 54z - 24)}{3003z^5} + \frac{e^{-z}(56z^7 + 1172z^6 + 6462z^5 + 5865z^4 - 10560z^3 + 4320z^2 - 3600z + 2880)}{18018z^5} + \\
 & \frac{\sqrt{\pi}(112z^4 + 2400z^3 + 14040z^2 + 17160z - 19305)\operatorname{erf}(\sqrt{z})}{36036z^{3/2}}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = 3$

$$\begin{aligned}
 & \text{07.25.03.9583.01} \\
 {}_2F_2\left(-\frac{5}{2}, 2; 3, 3; z\right) &= -\frac{8e^{z/2}(112z^5 - 1704z^4 + 7116z^3 - 7932z^2 - 945z + 1890)I_0\left(\frac{z}{2}\right)}{59535z^2} + \\
 & \frac{8e^{z/2}(112z^4 - 1592z^3 + 5580z^2 - 3036z - 2433)I_1\left(\frac{z}{2}\right)}{59535z} + \frac{16}{63z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9584.01} \\
 {}_2F_2\left(-\frac{5}{2}, 2; 3, \frac{7}{2}; z\right) &= \frac{e^z(112z^4 - 1744z^3 + 6744z^2 - 3660z - 4845)}{16128z^2} + \\
 & \frac{\sqrt{\pi}(-224z^5 + 3600z^4 - 15120z^3 + 12600z^2 + 9450z - 2835)\operatorname{erfi}(\sqrt{z})}{32256z^{5/2}} + \frac{10}{21z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9585.01} \\
 {}_2F_2\left(-\frac{5}{2}, 2; 3, \frac{7}{2}; -z\right) &= \frac{e^{-z}(112z^4 + 1744z^3 + 6744z^2 + 3660z - 4845)}{16128z^2} + \\
 & \frac{\sqrt{\pi}(224z^5 + 3600z^4 + 15120z^3 + 12600z^2 - 9450z - 2835)\operatorname{erf}(\sqrt{z})}{32256z^{5/2}} + \frac{10}{21z^2}
 \end{aligned}$$

07.25.03.9586.01

$${}_2F_2\left(-\frac{5}{2}, 2; 3, 4; z\right) = -\frac{16 e^{z/2} (112 z^5 - 2064 z^4 + 10788 z^3 - 15276 z^2 - 4725 z + 10395) I_0\left(\frac{z}{2}\right)}{218295 z^2} + \frac{16 e^{z/2} (112 z^5 - 1952 z^4 + 8892 z^3 - 7248 z^2 - 9129 z + 1890) I_1\left(\frac{z}{2}\right)}{218295 z^2} + \frac{16}{21 z^2}$$

07.25.03.9587.01

$${}_2F_2\left(-\frac{5}{2}, 2; 3, \frac{9}{2}; z\right) = \frac{e^z (224 z^5 - 4208 z^4 + 20688 z^3 - 16680 z^2 - 30570 z + 4725)}{55296 z^3} + \frac{\sqrt{\pi} (-448 z^6 + 8640 z^5 - 45360 z^4 + 50400 z^3 + 56700 z^2 - 34020 z - 4725) \operatorname{erfi}(\sqrt{z})}{110592 z^{7/2}} + \frac{10}{9 z^2}$$

07.25.03.9588.01

$${}_2F_2\left(-\frac{5}{2}, 2; 3, \frac{9}{2}; -z\right) = \frac{e^{-z} (224 z^5 + 4208 z^4 + 20688 z^3 + 16680 z^2 - 30570 z - 4725)}{55296 z^3} + \frac{\sqrt{\pi} (448 z^6 + 8640 z^5 + 45360 z^4 + 50400 z^3 - 56700 z^2 - 34020 z + 4725) \operatorname{erf}(\sqrt{z})}{110592 z^{7/2}} + \frac{10}{9 z^2}$$

07.25.03.9589.01

$${}_2F_2\left(-\frac{5}{2}, 2; 3, 5; z\right) = -\frac{64 e^{z/2} (224 z^5 - 4848 z^4 + 30432 z^3 - 52044 z^2 - 28350 z + 68985) I_0\left(\frac{z}{2}\right)}{2837835 z^2} + \frac{64 e^{z/2} (224 z^6 - 4624 z^5 + 25920 z^4 - 28212 z^3 - 47526 z^2 + 21735 z + 5670) I_1\left(\frac{z}{2}\right)}{2837835 z^3} + \frac{32}{21 z^2}$$

07.25.03.9590.01

$${}_2F_2\left(-\frac{5}{2}, 2; 3, \frac{11}{2}; z\right) = \frac{e^z (64 z^6 - 1408 z^5 + 8400 z^4 - 9024 z^3 - 20676 z^2 + 7560 z + 2835)}{24576 z^4} + \frac{\sqrt{\pi} (-128 z^7 + 2880 z^6 - 18144 z^5 + 25200 z^4 + 37800 z^3 - 34020 z^2 - 9450 z - 2835) \operatorname{erfi}(\sqrt{z})}{49152 z^{9/2}} + \frac{2}{z^2}$$

07.25.03.9591.01

$${}_2F_2\left(-\frac{5}{2}, 2; 3, \frac{11}{2}; -z\right) = \frac{e^{-z} (64 z^6 + 1408 z^5 + 8400 z^4 + 9024 z^3 - 20676 z^2 - 7560 z + 2835)}{24576 z^4} + \frac{\sqrt{\pi} (128 z^7 + 2880 z^6 + 18144 z^5 + 25200 z^4 - 37800 z^3 - 34020 z^2 + 9450 z - 2835) \operatorname{erf}(\sqrt{z})}{49152 z^{9/2}} + \frac{2}{z^2}$$

07.25.03.9592.01

$${}_2F_2\left(-\frac{5}{2}, 2; 3, 6; z\right) = -\frac{256 e^{z/2} (112 z^6 - 2784 z^5 + 20400 z^4 - 40800 z^3 - 33075 z^2 + 88830 z + 1890) I_0\left(\frac{z}{2}\right)}{8513505 z^3} + \frac{1}{8513505 z^4} - \frac{128 e^{z/2} (224 z^7 - 5344 z^6 + 35568 z^5 - 48480 z^4 - 101490 z^3 + 73710 z^2 + 34965 z + 15120) I_1\left(\frac{z}{2}\right)}{8513505 z^4} + \frac{160}{63 z^2}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = \frac{7}{2}$

07.25.03.9593.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{7}{2}, 4; z\right) = \frac{10(11z-2)}{77z^3} + \frac{e^z(112z^5 - 2144z^4 + 10864z^3 - 9360z^2 - 18735z + 7680)}{29568z^3} + \frac{\sqrt{\pi}(-224z^5 + 4400z^4 - 23760z^3 + 27720z^2 + 34650z - 31185)\operatorname{erfi}(\sqrt{z})}{59136z^{5/2}}$$

07.25.03.9594.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{7}{2}, 4; -z\right) = \frac{10(11z+2)}{77z^3} + \frac{e^{-z}(112z^5 + 2144z^4 + 10864z^3 + 9360z^2 - 18735z - 7680)}{29568z^3} + \frac{\sqrt{\pi}(224z^5 + 4400z^4 + 23760z^3 + 27720z^2 - 34650z - 31185)\operatorname{erf}(\sqrt{z})}{59136z^{5/2}}$$

07.25.03.9595.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{7}{2}, 5; z\right) = \frac{20(143z^2 - 52z - 6)}{1001z^4} + \frac{e^z(112z^6 - 2544z^5 + 15944z^4 - 18900z^3 - 49185z^2 + 44160z + 5760)}{48048z^4} + \frac{\sqrt{\pi}(-224z^5 + 5200z^4 - 34320z^3 + 51480z^2 + 90090z - 135135)\operatorname{erfi}(\sqrt{z})}{96096z^{5/2}}$$

07.25.03.9596.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{7}{2}, 5; -z\right) = \frac{20(143z^2 + 52z - 6)}{1001z^4} + \frac{e^{-z}(112z^6 + 2544z^5 + 15944z^4 + 18900z^3 - 49185z^2 - 44160z + 5760)}{48048z^4} + \frac{\sqrt{\pi}(224z^5 + 5200z^4 + 34320z^3 + 51480z^2 - 90090z - 135135)\operatorname{erf}(\sqrt{z})}{96096z^{5/2}}$$

07.25.03.9597.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{7}{2}, 6; z\right) = \frac{20(715z^3 - 390z^2 - 90z - 24)}{3003z^5} + \frac{e^z(112z^7 - 2944z^6 + 21984z^5 - 33240z^4 - 105315z^3 + 149760z^2 + 31680z + 11520)}{72072z^5} + \frac{\sqrt{\pi}(-224z^5 + 6000z^4 - 46800z^3 + 85800z^2 + 193050z - 405405)\operatorname{erfi}(\sqrt{z})}{144144z^{5/2}}$$

07.25.03.9598.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{7}{2}, 6; -z\right) = \frac{20(715z^3 + 390z^2 - 90z + 24)}{3003z^5} + \frac{e^{-z}(112z^7 + 2944z^6 + 21984z^5 + 33240z^4 - 105315z^3 - 149760z^2 + 31680z - 11520)}{72072z^5} + \frac{\sqrt{\pi}(224z^5 + 6000z^4 + 46800z^3 + 85800z^2 - 193050z - 405405)\operatorname{erf}(\sqrt{z})}{144144z^{5/2}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = 4$

07.25.03.9599.01

$${}_2F_2\left(-\frac{5}{2}, 2; 4, 4; z\right) = \frac{16(11z-4)}{77z^3} - \frac{16e^{z/2}(224z^6 - 5008z^5 + 32928z^4 - 59988z^3 - 42846z^2 + 135135z - 41580)I_0\left(\frac{z}{2}\right)}{800415z^3} + \frac{16e^{z/2}(224z^5 - 4784z^4 + 28256z^3 - 33900z^2 - 66702z + 67701)I_1\left(\frac{z}{2}\right)}{800415z^2}$$

07.25.03.9600.01

$${}_2F_2\left(-\frac{5}{2}, 2; 4, \frac{9}{2}; z\right) = \frac{10(11z-6)}{33z^3} + \frac{e^z(224z^5 - 5168z^4 + 33168z^3 - 41160z^2 - 113370z + 132345)}{101376z^3} + \frac{\sqrt{\pi}(-448z^6 + 10560z^5 - 71280z^4 + 110880z^3 + 207900z^2 - 374220z + 51975)\operatorname{erfi}(\sqrt{z})}{202752z^{7/2}}$$

07.25.03.9601.01

$${}_2F_2\left(-\frac{5}{2}, 2; 4, \frac{9}{2}; -z\right) = \frac{10(11z+6)}{33z^3} + \frac{e^{-z}(224z^5 + 5168z^4 + 33168z^3 + 41160z^2 - 113370z - 132345)}{101376z^3} + \frac{\sqrt{\pi}(448z^6 + 10560z^5 + 71280z^4 + 110880z^3 - 207900z^2 - 374220z - 51975)\operatorname{erf}(\sqrt{z})}{202752z^{7/2}}$$

07.25.03.9602.01

$${}_2F_2\left(-\frac{5}{2}, 2; 4, 5; z\right) = \frac{32(11z-8)}{77z^3} - \frac{256e^{z/2}(112z^6 - 2944z^5 + 23328z^4 - 51840z^3 - 61287z^2 + 249480z - 135135)I_0\left(\frac{z}{2}\right)}{10405395z^3} + \frac{128e^{z/2}(224z^6 - 5664z^5 + 41104z^4 - 65184z^3 - 172170z^2 + 320514z - 31185)I_1\left(\frac{z}{2}\right)}{10405395z^3}$$

07.25.03.9603.01

$${}_2F_2\left(-\frac{5}{2}, 2; 4, \frac{11}{2}; z\right) = \frac{6(11z-10)}{11z^3} + \frac{e^z(64z^6 - 1728z^5 + 13424z^4 - 21792z^3 - 75348z^2 + 148740z - 10395)}{45056z^4} + \frac{1}{90112z^{9/2}}\sqrt{\pi}(-128z^7 + 3520z^6 - 28512z^5 + 55440z^4 + 138600z^3 - 374220z^2 + 103950z + 10395)\operatorname{erfi}(\sqrt{z})$$

07.25.03.9604.01

$${}_2F_2\left(-\frac{5}{2}, 2; 4, \frac{11}{2}; -z\right) = \frac{6(11z+10)}{11z^3} + \frac{e^{-z}(64z^6 + 1728z^5 + 13424z^4 + 21792z^3 - 75348z^2 - 148740z - 10395)}{45056z^4} + \frac{1}{90112z^{9/2}}\sqrt{\pi}(128z^7 + 3520z^6 + 28512z^5 + 55440z^4 - 138600z^3 - 374220z^2 - 103950z + 10395)\operatorname{erf}(\sqrt{z})$$

07.25.03.9605.01

$${}_2F_2\left(-\frac{5}{2}, 2; 4, 6; z\right) = \frac{160(11z - 12)}{231z^3} - \frac{128e^{z/2}(448z^6 - 13536z^5 + 125520z^4 - 328800z^3 - 555480z^2 + 2765070z - 2047815)I_0\left(\frac{z}{2}\right)}{31216185z^3} + \frac{1}{31216185z^4} 128e^{z/2}(448z^7 - 13088z^6 + 112656z^5 - 222240z^4 - 733080z^3 + 1998450z^2 - 426195z - 83160)I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = \frac{9}{2}$

07.25.03.9606.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{9}{2}, 5; z\right) = \frac{20(143z^2 - 156z + 18)}{429z^4} + \frac{e^z(224z^6 - 6128z^5 + 48528z^4 - 81480z^3 - 293370z^2 + 660645z - 138240)}{164736z^4} + \frac{1}{329472z^{7/2}} \sqrt{\pi}(-448z^6 + 12480z^5 - 102960z^4 + 205920z^3 + 540540z^2 - 1621620z + 675675) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9607.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{9}{2}, 5; -z\right) = \frac{20(143z^2 + 156z + 18)}{429z^4} + \frac{e^{-z}(224z^6 + 6128z^5 + 48528z^4 + 81480z^3 - 293370z^2 - 660645z - 138240)}{164736z^4} + \frac{\sqrt{\pi}(448z^6 + 12480z^5 + 102960z^4 + 205920z^3 - 540540z^2 - 1621620z - 675675) \operatorname{erf}(\sqrt{z})}{329472z^{7/2}}$$

07.25.03.9608.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{9}{2}, 6; z\right) = \frac{20(715z^3 - 1170z^2 + 270z + 24)}{1287z^5} + \frac{e^z(224z^7 - 7088z^6 + 66768z^5 - 141480z^4 - 624330z^3 + 2105145z^2 - 944640z - 92160)}{247104z^5} + \frac{1}{494208z^{7/2}} \sqrt{\pi}(-448z^6 + 14400z^5 - 140400z^4 + 343200z^3 + 1158300z^2 - 4864860z + 3378375) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9609.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{9}{2}, 6; -z\right) = \frac{20(715z^3 + 1170z^2 + 270z - 24)}{1287z^5} + \frac{e^{-z}(224z^7 + 7088z^6 + 66768z^5 + 141480z^4 - 624330z^3 - 2105145z^2 - 944640z + 92160)}{247104z^5} + \frac{1}{494208z^{7/2}} \sqrt{\pi}(448z^6 + 14400z^5 + 140400z^4 + 343200z^3 - 1158300z^2 - 4864860z - 3378375) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = 5$

07.25.03.9610.01

$${}_2F_2\left(-\frac{5}{2}, 2; 5, 5; z\right) = \frac{64(143z^2 - 208z + 48)}{1001z^4} - \frac{1}{135270135z^4} \\ + \frac{512e^{z/2}(448z^7 - 13856z^6 + 132624z^5 - 362112z^4 - 685848z^3 + 3860442z^2 - 3918915z + 810810)J_0\left(\frac{z}{2}\right) + 512e^{z/2}(448z^6 - 13408z^5 + 119440z^4 - 248928z^3 - 887064z^2 + 2932278z - 1450107)I_1\left(\frac{z}{2}\right)}{135270135z^3}$$

07.25.03.9611.01

$${}_2F_2\left(-\frac{5}{2}, 2; 5, \frac{11}{2}; z\right) = \frac{12(143z^2 - 260z + 90)}{143z^4} + \frac{e^z(64z^6 - 2048z^5 + 19600z^4 - 42624z^3 - 193956z^2 + 708960z - 417825)}{73216z^4} + \frac{1}{146432z^{9/2}}\sqrt{\pi}(-128z^7 + 4160z^6 - 41184z^5 + 102960z^4 + 360360z^3 - 1621620z^2 + 1351350z - 135135)\operatorname{erfi}(\sqrt{z})$$

07.25.03.9612.01

$${}_2F_2\left(-\frac{5}{2}, 2; 5, \frac{11}{2}; -z\right) = \frac{12(143z^2 + 260z + 90)}{143z^4} + \frac{e^{-z}(64z^6 + 2048z^5 + 19600z^4 + 42624z^3 - 193956z^2 - 708960z - 417825)}{73216z^4} + \frac{1}{146432z^{9/2}}\sqrt{\pi}(128z^7 + 4160z^6 + 41184z^5 + 102960z^4 - 360360z^3 - 1621620z^2 - 1351350z - 135135)\operatorname{erf}(\sqrt{z})$$

07.25.03.9613.01

$${}_2F_2\left(-\frac{5}{2}, 2; 5, 6; z\right) = \frac{320(143z^2 - 312z + 144)}{3003z^4} - \frac{1}{405810405z^4}1024e^{z/2}(448z^7 - 15936z^6 + 178800z^5 - 578640z^4 - 1533240z^3 + 10980360z^2 - 16081065z + 6081075)J_0\left(\frac{z}{2}\right) + \frac{1}{405810405z^4}1024e^{z/2}(448z^7 - 15488z^6 + 163536z^5 - 422400z^4 - 1887960z^3 + 9002160z^2 - 8105535z + 540540)I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = \frac{11}{2}$

07.25.03.9614.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{11}{2}, 6; z\right) = \frac{20(143z^3 - 390z^2 + 270z - 24)}{143z^5} + \frac{e^z(64z^7 - 2368z^6 + 26928z^5 - 73440z^4 - 412020z^3 + 2213820z^2 - 2488815z + 368640)}{109824z^5} + \frac{1}{219648z^{9/2}} \sqrt{\pi} (-128z^7 + 4800z^6 - 56160z^5 + 171600z^4 + 772200z^3 - 4864860z^2 + 6756750z - 2027025) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9615.01

$${}_2F_2\left(-\frac{5}{2}, 2; \frac{11}{2}, 6; -z\right) = \frac{20(143z^3 + 390z^2 + 270z + 24)}{143z^5} + \frac{e^{-z}(64z^7 + 2368z^6 + 26928z^5 + 73440z^4 - 412020z^3 - 2213820z^2 - 2488815z - 368640)}{109824z^5} + \frac{1}{219648z^{9/2}} \sqrt{\pi} (128z^7 + 4800z^6 + 56160z^5 + 171600z^4 - 772200z^3 - 4864860z^2 - 6756750z - 2027025) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 2$, $b_1 = 6$

07.25.03.9616.01

$${}_2F_2\left(-\frac{5}{2}, 2; 6, 6; z\right) = \frac{320(715z^3 - 2340z^2 + 2160z - 384)}{9009z^5} - \frac{1}{1217431215z^5} \left(1024e^{z/2}(896z^8 - 36672z^7 + 482880z^6 - 1859760z^5 - 6800400z^4 + 63309960z^3 - 137749320z^2 + 99324225z - 16216200) I_0\left(\frac{z}{2}\right) + \frac{1}{1217431215z^4} (1024e^{z/2}(896z^7 - 35776z^6 + 447552z^5 - 1429200z^4 - 8038800z^3 + 54903960z^2 - 87300360z + 30758895) I_1\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.9617.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{1}{21611205} (e^z(2048z^{11} + 52224z^{10} + 397824z^9 + 1005312z^8 + 693504z^7 - 56448z^6 + 479808z^5 - 1965600z^4 + 6448680z^3 - 15849540z^2 + 26076330z - 21611205))$$

07.25.03.9618.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{1964655} (e^z (1024 z^{10} + 21504 z^9 + 123648 z^8 + 193536 z^7 + 56448 z^6 - 56448 z^5 + 211680 z^4 - 665280 z^3 + 1561140 z^2 - 2460780 z + 1964655))$$

07.25.03.9619.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{1}{218295} e^z (512 z^9 + 8448 z^8 + 32256 z^7 + 16128 z^6 + 4032 z^5 - 30240 z^4 + 90720 z^3 - 196560 z^2 + 289170 z - 218295)$$

07.25.03.9620.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{e^z (256 z^8 + 3072 z^7 + 5376 z^6 - 5376 z^5 + 10080 z^4 - 20160 z^3 + 35280 z^2 - 45360 z + 31185)}{31185}$$

07.25.03.9621.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = -\frac{e^z (128 z^7 + 960 z^6 - 672 z^5 - 1008 z^4 + 6552 z^3 - 13356 z^2 + 10962 z - 6237)}{6237}$$

07.25.03.9622.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{e^z (64 z^6 + 192 z^5 - 1008 z^4 + 2016 z^3 + 252 z^2 - 6804 z + 2079)}{2079}$$

07.25.03.9623.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = -\frac{e^z (32 z^5 - 48 z^4 - 336 z^3 + 1848 z^2 - 2646 z - 2079)}{2079}$$

07.25.03.9624.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (-16 z^5 + 48 z^4 + 84 z^3 - 876 z^2 + 1323 z + 2079) I_0\left(\frac{z}{2}\right) + e^{z/2} (-16 z^5 + 64 z^4 + 12 z^3 - 840 z^2 + 2055 z) I_1\left(\frac{z}{2}\right)}{2079}$$

07.25.03.9625.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{e^z (16 z^4 - 96 z^3 + 168 z^2 + 504 z - 2079)}{2079}$$

07.25.03.9626.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (-16 z^4 + 120 z^3 - 324 z^2 - 180 z + 2079) I_0\left(\frac{z}{2}\right) + e^{z/2} (-16 z^4 + 136 z^3 - 468 z^2 + 372 z + 1287) I_1\left(\frac{z}{2}\right)}{2079}$$

07.25.03.9627.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = -\frac{1}{693} e^z (8 z^3 - 84 z^2 + 378 z - 693)$$

07.25.03.9628.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, 3; z\right) = -\frac{16 e^{z/2} (2 z^3 - 24 z^2 + 123 z - 264) I_0\left(\frac{z}{2}\right)}{2079} - \frac{4 e^{z/2} (8 z^4 - 104 z^3 + 600 z^2 - 1716 z + 2145) I_1\left(\frac{z}{2}\right)}{2079 z}$$

07.25.03.9629.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{80 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{5/2}} - \frac{5 e^z (4 z^4 - 60 z^3 + 399 z^2 - 1344 z + 2016)}{693 z^2}$$

07.25.03.9630.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{80 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{5/2}} - \frac{5 e^{-z} (4 z^4 + 60 z^3 + 399 z^2 + 1344 z + 2016)}{693 z^2}$$

07.25.03.9631.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, 4; z\right) = -\frac{4 e^{z/2} (8 z^3 - 132 z^2 + 948 z - 3315) I_0\left(\frac{z}{2}\right)}{693 z} - \frac{4 e^{z/2} (8 z^4 - 140 z^3 + 1092 z^2 - 4485 z + 13260) I_1\left(\frac{z}{2}\right)}{693 z^2}$$

07.25.03.9632.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{70 \sqrt{\pi} (4 z + 15) \operatorname{erfi}(\sqrt{z})}{11 z^{7/2}} - \frac{5 e^z (2 z^4 - 39 z^3 + 336 z^2 - 1512 z + 3780)}{99 z^3}$$

07.25.03.9633.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{5 e^{-z} (2 z^4 + 39 z^3 + 336 z^2 + 1512 z + 3780)}{99 z^3} + \frac{70 \sqrt{\pi} (4 z - 15) \operatorname{erf}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.9634.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, 5; z\right) = -\frac{32 e^{z/2} (4 z^3 - 84 z^2 + 765 z - 4845) I_0\left(\frac{z}{2}\right)}{693 z^2} - \frac{32 e^{z/2} (4 z^4 - 88 z^3 + 855 z^2 - 3060 z + 19380) I_1\left(\frac{z}{2}\right)}{693 z^3}$$

07.25.03.9635.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (4 z^2 + 30 z + 75) \operatorname{erfi}(\sqrt{z})}{22 z^{9/2}} - \frac{5 e^z (z^4 - 24 z^3 + 252 z^2 - 1260 z + 4725)}{11 z^4}$$

07.25.03.9636.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{315 \sqrt{\pi} (4 z^2 - 30 z + 75) \operatorname{erf}(\sqrt{z})}{22 z^{9/2}} - \frac{5 e^{-z} (z^4 + 24 z^3 + 252 z^2 + 1260 z + 4725)}{11 z^4}$$

07.25.03.9637.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (20 z^3 - 510 z^2 + 2907 z - 54264) I_0\left(\frac{z}{2}\right)}{693 z^3} - \frac{32 e^{z/2} (20 z^4 - 530 z^3 + 8823 z^2 - 11628 z + 217056) I_1\left(\frac{z}{2}\right)}{693 z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.9638.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = & \\
 & -\frac{1}{178605} e^z (512 z^9 + 8960 z^8 + 39424 z^7 + 37632 z^6 + 9408 z^5 - 23520 z^4 + 70560 z^3 - 156240 z^2 + 233730 z - 178605)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9639.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = & \frac{e^z (256 z^8 + 3584 z^7 + 10752 z^6 + 2688 z^5 + 3360 z^4 - 10080 z^3 + 20160 z^2 - 27720 z + 19845)}{19845}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9640.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = & -\frac{e^z (128 z^7 + 1344 z^6 + 2016 z^5 - 1680 z^4 + 2520 z^3 - 3780 z^2 + 4410 z - 2835)}{2835}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9641.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = & \frac{1}{567} e^z (64 z^6 + 448 z^5 - 112 z^4 - 672 z^3 + 1596 z^2 - 1092 z + 567)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9642.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = & -\frac{1}{189} e^z (32 z^5 + 112 z^4 - 336 z^3 + 168 z^2 + 714 z - 189)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9643.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = & \frac{1}{189} e^z (16 z^4 - 168 z^2 + 336 z + 189)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9644.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, 1; z\right) = & \frac{1}{189} e^{z/2} (8 z^4 - 8 z^3 - 72 z^2 + 168 z + 189) I_0\left(\frac{z}{2}\right) + \frac{4}{189} e^{z/2} (2 z^4 - 4 z^3 - 13 z^2 + 51 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9645.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = & \frac{1}{189} e^z (8 z^3 - 28 z^2 - 14 z + 189)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9646.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, 2; z\right) = & \frac{1}{189} e^{z/2} (8 z^3 - 36 z^2 + 12 z + 189) I_0\left(\frac{z}{2}\right) + \frac{1}{189} e^{z/2} (8 z^3 - 44 z^2 + 60 z + 99) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9647.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = & \frac{1}{63} e^z (4 z^2 - 28 z + 63)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9648.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, 3; z\right) = & \frac{4}{189} e^{z/2} (4 z^2 - 32 z + 83) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4 z^3 - 36 z^2 + 121 z - 143) I_1\left(\frac{z}{2}\right)}{189 z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9649.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = & \frac{5 e^z (2 z^3 - 21 z^2 + 84 z - 126)}{63 z^2} + \frac{5 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}
 \end{aligned}$$

07.25.03.9650.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}} - \frac{5e^{-z}(2z^3 + 21z^2 + 84z + 126)}{63z^2}$$

07.25.03.9651.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, 4; z\right) = \frac{4e^{z/2}(4z^2 - 46z + 195)I_0\left(\frac{z}{2}\right)}{63z} + \frac{4e^{z/2}(4z^3 - 50z^2 + 247z - 780)I_1\left(\frac{z}{2}\right)}{63z^2}$$

07.25.03.9652.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{5e^z(z^3 - 14z^2 + 77z - 210)}{9z^3} + \frac{35\sqrt{\pi}(3z + 10)\operatorname{erfi}(\sqrt{z})}{6z^{7/2}}$$

07.25.03.9653.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{5e^{-z}(z^3 + 14z^2 + 77z + 210)}{9z^3} + \frac{35\sqrt{\pi}(3z - 10)\operatorname{erf}(\sqrt{z})}{6z^{7/2}}$$

07.25.03.9654.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, 5; z\right) = \frac{32e^{z/2}(2z^2 - 30z + 255)I_0\left(\frac{z}{2}\right)}{63z^2} + \frac{64e^{z/2}(z^3 - 16z^2 + 60z - 510)I_1\left(\frac{z}{2}\right)}{63z^3}$$

07.25.03.9655.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{5e^z(2z^3 - 35z^2 + 210z - 945)}{4z^4} + \frac{105\sqrt{\pi}(3z^2 + 20z + 45)\operatorname{erfi}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.9656.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{105\sqrt{\pi}(3z^2 - 20z + 45)\operatorname{erf}(\sqrt{z})}{8z^{9/2}} - \frac{5e^{-z}(2z^3 + 35z^2 + 210z + 945)}{4z^4}$$

07.25.03.9657.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, 6; z\right) = \frac{32e^{z/2}(10z^2 - 17z + 2584)I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{32e^{z/2}(10z^3 - 363z^2 + 68z - 10336)I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.9658.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = -\frac{e^z(128z^7 + 1472z^6 + 3168z^5 - 240z^4 + 1560z^3 - 2700z^2 + 3330z - 2205)}{2205}$$

07.25.03.9659.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{315}e^z(64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)$$

07.25.03.9660.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = -\frac{1}{63}e^z(32z^5 + 208z^4 + 48z^3 - 264z^2 + 138z - 63)$$

07.25.03.9661.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{21}e^z(16z^4 + 64z^3 - 72z^2 - 96z + 21)$$

07.25.03.9662.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = -\frac{1}{21} e^z (8z^3 + 12z^2 - 54z - 21)$$

07.25.03.9663.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{21} e^{z/2} (-4z^3 - 4z^2 + 27z + 21) I_0\left(\frac{z}{2}\right) + \frac{1}{21} e^{z/2} (25z - 4z^3) I_1\left(\frac{z}{2}\right)$$

07.25.03.9664.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = -\frac{1}{21} e^z (4z^2 - 4z - 21)$$

07.25.03.9665.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{21} e^{z/2} (-4z^2 + 6z + 21) I_0\left(\frac{z}{2}\right) + \frac{1}{21} e^{z/2} (-4z^2 + 10z + 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.9666.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = -\frac{1}{7} e^z (2z - 7)$$

07.25.03.9667.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, 3; z\right) = -\frac{8}{21} e^{z/2} (z - 4) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (2z^2 - 10z + 11) I_1\left(\frac{z}{2}\right)}{21z}$$

07.25.03.9668.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{45 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{14 z^{5/2}} - \frac{5 e^z (z^2 - 6z + 9)}{7 z^2}$$

07.25.03.9669.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{45 \sqrt{\pi} \operatorname{erf}(\sqrt{-z})}{14 z^{5/2}} - \frac{5 e^{-z} (z^2 + 6z + 9)}{7 z^2}$$

07.25.03.9670.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, 4; z\right) = -\frac{4 e^{z/2} (2z - 13) I_0\left(\frac{z}{2}\right)}{7z} - \frac{4 e^{z/2} (2z^2 - 15z + 52) I_1\left(\frac{z}{2}\right)}{7z^2}$$

07.25.03.9671.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{15 \sqrt{\pi} (12z + 35) \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}} - \frac{5 e^z (4z^2 - 34z + 105)}{8 z^3}$$

07.25.03.9672.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5 e^{-z} (4z^2 + 34z + 105)}{8 z^3} + \frac{15 \sqrt{\pi} (12z - 35) \operatorname{erf}(\sqrt{-z})}{16 z^{7/2}}$$

07.25.03.9673.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, 5; z\right) = -\frac{32 e^{z/2} (z - 15) I_0\left(\frac{z}{2}\right)}{7z^2} - \frac{32 e^{z/2} (z^2 - 4z + 60) I_1\left(\frac{z}{2}\right)}{7z^3}$$

07.25.03.9674.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{135 \sqrt{\pi} (6z^2 + 35z + 70) \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}} - \frac{45 e^z (4z^2 - 35z + 210)}{16 z^4}$$

07.25.03.9675.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{135\sqrt{\pi}(6z^2 - 35z + 70)\operatorname{erf}(\sqrt{z})}{32z^{9/2}} - \frac{45e^{-z}(4z^2 + 35z + 210)}{16z^4}$$

07.25.03.9676.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, 6; z\right) = \frac{32e^{z/2}(7z + 136)I_0\left(\frac{z}{2}\right)}{7z^3} - \frac{32e^{z/2}(17z^2 + 28z + 544)I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.9677.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = -\frac{1}{45}e^z(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)$$

07.25.03.9678.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{9}e^z(16z^4 + 96z^3 + 72z^2 - 24z + 9)$$

07.25.03.9679.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = -\frac{1}{3}e^z(8z^3 + 36z^2 + 18z - 3)$$

07.25.03.9680.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{3}e^z(4z^2 + 12z + 3)$$

07.25.03.9681.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{3}e^{z/2}(2z^2 + 6z + 3)I_0\left(\frac{z}{2}\right) + \frac{2}{3}e^{z/2}(z^2 + 2z)I_1\left(\frac{z}{2}\right)$$

07.25.03.9682.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{3}e^z(2z + 3)$$

07.25.03.9683.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{3}e^{z/2}(2z + 3)I_0\left(\frac{z}{2}\right) + \frac{1}{3}e^{z/2}(2z + 1)I_1\left(\frac{z}{2}\right)$$

07.25.03.9684.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = e^z$$

07.25.03.9685.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, 3; z\right) = \frac{4}{3}e^{z/2}I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2}(z-1)I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.9686.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{5e^z(2z-3)}{4z^2} + \frac{15\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.9687.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{15\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5e^{-z}(2z+3)}{4z^2}$$

07.25.03.9688.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, 4; z\right) = \frac{4e^{z/2}I_0\left(\frac{z}{2}\right)}{z} + \frac{4e^{z/2}(z-4)I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.9689.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{35e^z(4z-15)}{16z^3} + \frac{105\sqrt{\pi}(2z+5)\operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.9690.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}(4z+15)}{16z^3} + \frac{105\sqrt{\pi}(2z-5)\operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.9691.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, 5; z\right) = \frac{32e^{z/2}I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128e^{z/2}I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.9692.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1575e^z(2z-21)}{128z^4} + \frac{945\sqrt{\pi}(4z^2+20z+35)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.9693.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{945\sqrt{\pi}(4z^2-20z+35)\operatorname{erf}(\sqrt{z})}{256z^{9/2}} - \frac{1575e^{-z}(2z+21)}{128z^4}$$

07.25.03.9694.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, 6; z\right) = \frac{32e^{z/2}(z+8)I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32e^{z/2}(z^2+4z+32)I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.9695.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9}e^z(-40z^3+292z^2-34z+9) - \frac{512}{9}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.9696.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{512}{9}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{9}e^{-z}(40z^3+292z^2+34z+9)$$

07.25.03.9697.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{256}{3}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{5/2} + \frac{1}{3}e^z(-236z^2-28z+3)$$

07.25.03.9698.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3}e^{-z}(-236z^2+28z+3) - \frac{256}{3}\sqrt{\pi}z^{5/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.9699.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (64 z^2 + 22 z + 3) - \frac{64}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.9700.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{64}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (64 z^2 - 22 z + 3)$$

07.25.03.9701.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{45} e^{z/2} (-512 z^3 + 384 z^2 + 165 z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (512 z^3 + 128 z^2 + 69 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.9702.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{9} e^z (32 z^2 + 16 z + 9) - \frac{32}{9} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.9703.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{32}{9} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{9} e^{-z} (32 z^2 - 16 z + 9)$$

07.25.03.9704.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (-1024 z^3 + 768 z^2 + 480 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (1024 z^3 + 256 z^2 + 288 z + 75) I_1\left(\frac{z}{2}\right)$$

07.25.03.9705.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{3} e^z (4 z^2 + 2 z + 3) - \frac{4}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.9706.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{4}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4 z^2 - 2 z + 3)$$

07.25.03.9707.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (1024 z^4 + 256 z^3 + 288 z^2 + 600 z - 525) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (128 z^3 - 96 z^2 - 60 z - 105) I_0\left(\frac{z}{2}\right)}{2835 z}$$

07.25.03.9708.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (16 z^4 + 8 z^3 + 12 z^2 + 30 z - 45)}{24 z^2} + \frac{\sqrt{\pi} (45 - 32 z^5) \operatorname{erfi}(\sqrt{z})}{48 z^{5/2}}$$

07.25.03.9709.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16 z^4 - 8 z^3 + 12 z^2 - 30 z - 45)}{24 z^2} + \frac{\sqrt{\pi} (32 z^5 + 45) \operatorname{erf}(\sqrt{z})}{48 z^{5/2}}$$

07.25.03.9710.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (2048 z^5 + 512 z^4 + 576 z^3 + 1200 z^2 + 3675 z - 18900) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (2048 z^4 - 1536 z^3 - 960 z^2 - 1680 z - 4725) I_0\left(\frac{z}{2}\right)}{10395 z^2}$$

07.25.03.9711.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z - 1125)}{576 z^3} - \frac{7 \sqrt{\pi} (64 z^6 - 540 z - 1125) \operatorname{erfi}(\sqrt{z})}{1152 z^{7/2}}$$

07.25.03.9712.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (32 z^5 - 16 z^4 + 24 z^3 - 60 z^2 + 210 z + 1125)}{576 z^3} + \frac{7 \sqrt{\pi} (64 z^6 + 540 z - 1125) \operatorname{erf}(\sqrt{z})}{1152 z^{7/2}}$$

07.25.03.9713.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (2048 z^6 + 512 z^5 + 576 z^4 + 1200 z^3 + 3675 z^2 - 18900 z - 207900) I_1\left(\frac{z}{2}\right)}{135 135 z^3} - \frac{32 e^{z/2} (2048 z^5 - 1536 z^4 - 960 z^3 - 1680 z^2 - 4725 z - 51975) I_0\left(\frac{z}{2}\right)}{135 135 z^2}$$

07.25.03.9714.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z (64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 - 23625)}{256 z^4} + \frac{\sqrt{\pi} (-128 z^7 + 3780 z^2 + 15750 z + 23625) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.9715.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (64 z^6 - 32 z^5 + 48 z^4 - 120 z^3 + 420 z^2 - 23625)}{256 z^4} + \frac{\sqrt{\pi} (128 z^7 + 3780 z^2 - 15750 z + 23625) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.9716.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (4096 z^7 + 1024 z^6 + 1152 z^5 + 2400 z^4 + 7350 z^3 - 172935 z^2 - 956340 z - 4324320) I_1\left(\frac{z}{2}\right)}{405 405 z^4} - \frac{32 e^{z/2} (4096 z^6 - 3072 z^5 - 1920 z^4 - 3360 z^3 - 9450 z^2 - 239085 z - 1081080) I_0\left(\frac{z}{2}\right)}{405 405 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.9717.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = e^z (128 z^2 - 26 z + 1) - 16 \sqrt{\pi} (8 z^{5/2} - 5 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9718.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = e^{-z} (128 z^2 + 26 z + 1) + 16 \sqrt{\pi} (8 z^{5/2} + 5 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9719.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = e^z (-32 z^2 + 24 z + 1) + 8 \sqrt{\pi} (4 z^{5/2} - 5 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9720.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z}(-32z^2 - 24z + 1) - 8\sqrt{\pi}(4z^{5/2} + 5z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9721.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{15}e^{z/2}(256z^3 - 592z^2 + 180z + 15)I_0\left(\frac{z}{2}\right) - \frac{4}{15}e^{z/2}(64z^3 - 84z^2 - 7z)I_1\left(\frac{z}{2}\right)$$

07.25.03.9722.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3}e^z(-16z^2 + 22z + 3) + \frac{2}{3}\sqrt{\pi}(8z^{5/2} - 15z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9723.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{3}e^{-z}(-16z^2 - 22z + 3) - \frac{2}{3}\sqrt{\pi}(8z^{5/2} + 15z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9724.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{105}e^{z/2}(512z^3 - 1504z^2 + 600z + 105)I_0\left(\frac{z}{2}\right) + \frac{1}{105}e^{z/2}(-512z^3 + 992z^2 + 136z + 15)I_1\left(\frac{z}{2}\right)$$

07.25.03.9725.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \sqrt{\pi}(2z - 5)\operatorname{erfi}(\sqrt{z})z^{3/2} + e^z(-2z^2 + 4z + 1)$$

07.25.03.9726.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = e^{-z}(-2z^2 - 4z + 1) - \sqrt{\pi}z^{3/2}(2z + 5)\operatorname{erf}(\sqrt{z})$$

07.25.03.9727.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, 3; z\right) = \frac{4}{945}e^{z/2}(512z^3 - 1824z^2 + 840z + 255)I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(512z^4 - 1312z^3 - 216z^2 - 105z + 75)I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.9728.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z(-64z^4 + 168z^3 + 52z^2 + 30z - 45)}{64z^2} + \frac{\sqrt{\pi}(128z^5 - 400z^4 + 45)\operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.9729.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(-64z^4 - 168z^3 + 52z^2 - 30z - 45)}{64z^2} + \frac{\sqrt{\pi}(-128z^5 - 400z^4 + 45)\operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.9730.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, 4; z\right) = \frac{4e^{z/2}(1024z^4 - 4288z^3 + 2160z^2 + 810z + 525)I_0\left(\frac{z}{2}\right) - 4e^{z/2}(1024z^5 - 3264z^4 - 592z^3 - 390z^2 - 225z + 2100)I_1\left(\frac{z}{2}\right)}{3465z} - \frac{4e^{z/2}(1024z^5 - 3264z^4 - 592z^3 - 390z^2 - 225z + 2100)I_1\left(\frac{z}{2}\right)}{3465z^2}$$

07.25.03.9731.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(64z^6 - 240z^5 + 135z + 225)\operatorname{erfi}(\sqrt{z})}{768z^{7/2}} - \frac{7e^z(32z^5 - 104z^4 - 36z^3 - 30z^2 - 15z + 225)}{384z^3}$$

07.25.03.9732.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = -\frac{7 e^{-z} (32 z^5 + 104 z^4 - 36 z^3 + 30 z^2 - 15 z - 225)}{384 z^3} - \frac{7 \sqrt{\pi} (64 z^6 + 240 z^5 - 135 z + 225) \operatorname{erf}(\sqrt{z})}{768 z^{7/2}}$$

07.25.03.9733.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (1024 z^5 - 4928 z^4 + 2640 z^3 + 1110 z^2 + 1050 z + 4725) I_0\left(\frac{z}{2}\right)}{45 045 z^2} - \frac{64 e^{z/2} (512 z^6 - 1952 z^5 - 376 z^4 - 285 z^3 - 300 z^2 + 2100 z + 9450) I_1\left(\frac{z}{2}\right)}{45 045 z^3}$$

07.25.03.9734.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 \sqrt{\pi} (256 z^7 - 1120 z^6 + 1890 z^2 + 6300 z + 7875) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}} - \frac{3 e^z (128 z^6 - 496 z^5 - 184 z^4 - 180 z^3 - 210 z^2 + 1050 z + 7875)}{1024 z^4}$$

07.25.03.9735.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{3 e^{-z} (128 z^6 + 496 z^5 - 184 z^4 + 180 z^3 - 210 z^2 - 1050 z + 7875)}{1024 z^4} - \frac{3 \sqrt{\pi} (256 z^7 + 1120 z^6 - 1890 z^2 + 6300 z - 7875) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.9736.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (2048 z^6 - 11 136 z^5 + 6240 z^4 + 2820 z^3 + 3150 z^2 + 29 295 z + 83 160) I_0\left(\frac{z}{2}\right)}{135 135 z^3} - \frac{32 e^{z/2} (2048 z^7 - 9088 z^6 - 1824 z^5 - 1500 z^4 - 1950 z^3 + 22 995 z^2 + 117 180 z + 332 640) I_1\left(\frac{z}{2}\right)}{135 135 z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{1}{2}$

07.25.03.9737.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = e^z (8 z^2 - 16 z + 1) + \sqrt{\pi} (-8 z^{5/2} + 20 z^{3/2} - 5 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9738.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z} (8 z^2 + 16 z + 1) + \sqrt{\pi} (8 z^{5/2} + 20 z^{3/2} + 5 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9739.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-64 z^3 + 248 z^2 - 195 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (64 z^3 - 184 z^2 + 43 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.9740.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (4 z^2 - 13 z + 3) - \frac{1}{6} \sqrt{\pi} \sqrt{z} (8 z^2 - 30 z + 15) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9741.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (4z^2 + 13z + 3) + \frac{1}{6} \sqrt{\pi} \sqrt{z} (8z^2 + 30z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.9742.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-128z^3 + 656z^2 - 710z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (128z^3 - 528z^2 + 246z + 5) I_1\left(\frac{z}{2}\right)$$

07.25.03.9743.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{4} e^z (2z^2 - 9z + 4) - \frac{1}{8} \sqrt{\pi} \sqrt{z} (4z^2 - 20z + 15) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9744.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{4} e^{-z} (2z^2 + 9z + 4) + \frac{1}{8} \sqrt{\pi} \sqrt{z} (4z^2 + 20z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.9745.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (128z^4 - 688z^3 + 486z^2 + 30z - 15) I_1\left(\frac{z}{2}\right)}{945z} - \frac{8}{945} e^{z/2} (64z^3 - 408z^2 + 555z - 120) I_0\left(\frac{z}{2}\right)$$

07.25.03.9746.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (32z^4 - 184z^3 + 124z^2 + 10z - 15)}{128z^2} + \frac{\sqrt{\pi} (-64z^5 + 400z^4 - 400z^3 + 15) \operatorname{erfi}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.9747.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32z^4 + 184z^3 + 124z^2 - 10z - 15)}{128z^2} + \frac{\sqrt{\pi} (64z^5 + 400z^4 + 400z^3 + 15) \operatorname{erf}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.9748.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (256z^5 - 1696z^4 + 1612z^3 + 150z^2 - 15z - 300) I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4 e^{z/2} (256z^4 - 1952z^3 + 3180z^2 - 870z - 75) I_0\left(\frac{z}{2}\right)}{3465z}$$

07.25.03.9749.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (64z^5 - 448z^4 + 408z^3 + 60z^2 - 30z - 225)}{3072z^3} - \frac{7 \sqrt{\pi} (128z^6 - 960z^5 + 1200z^4 - 180z - 225) \operatorname{erfi}(\sqrt{z})}{6144z^{7/2}}$$

07.25.03.9750.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (64z^5 + 448z^4 + 408z^3 - 60z^2 - 30z + 225)}{3072z^3} + \frac{7 \sqrt{\pi} (128z^6 + 960z^5 + 1200z^4 + 180z - 225) \operatorname{erf}(\sqrt{z})}{6144z^{7/2}}$$

07.25.03.9751.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (256 z^6 - 2016 z^5 + 2412 z^4 + 280 z^3 + 45 z^2 - 900 z - 2100) I_1\left(\frac{z}{2}\right)}{45 045 z^3} - \frac{32 e^{z/2} (256 z^5 - 2272 z^4 + 4300 z^3 - 1380 z^2 - 225 z - 525) I_0\left(\frac{z}{2}\right)}{45 045 z^2}$$

07.25.03.9752.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (64 z^6 - 528 z^5 + 608 z^4 + 120 z^3 - 525 z - 1575)}{2048 z^4} - \frac{3 \sqrt{\pi} (128 z^7 - 1120 z^6 + 1680 z^5 - 630 z^2 - 1575 z - 1575) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.9753.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 + 528 z^5 + 608 z^4 - 120 z^3 + 525 z - 1575)}{2048 z^4} + \frac{3 \sqrt{\pi} (128 z^7 + 1120 z^6 + 1680 z^5 + 630 z^2 - 1575 z + 1575) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.9754.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (512 z^7 - 4672 z^6 + 6744 z^5 + 900 z^4 + 300 z^3 - 4545 z^2 - 16 380 z - 30 240) I_1\left(\frac{z}{2}\right)}{135 135 z^4} - \frac{32 e^{z/2} (512 z^6 - 5184 z^5 + 11 160 z^4 - 4020 z^3 - 900 z^2 - 4095 z - 7560) I_0\left(\frac{z}{2}\right)}{135 135 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 1$

07.25.03.9755.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{45} e^{z/2} (-32 z^3 + 174 z^2 - 210 z + 45) I_0\left(\frac{z}{2}\right) + \frac{2}{45} e^{z/2} (16 z^3 - 71 z^2 + 42 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.9756.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{15} e^{z/2} (-4 z^3 + 28 z^2 - 45 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4 z^3 - 24 z^2 + 23 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{3}{2}$

07.25.03.9757.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{72} e^z (16 z^2 - 82 z + 57) + \frac{\sqrt{\pi} (-32 z^3 + 180 z^2 - 180 z + 15) \operatorname{erfi}(\sqrt{z})}{144 \sqrt{z}}$$

07.25.03.9758.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{72} e^{-z} (16 z^2 + 82 z + 57) + \frac{\sqrt{\pi} (32 z^3 + 180 z^2 + 180 z + 15) \operatorname{erf}(\sqrt{z})}{144 \sqrt{z}}$$

07.25.03.9759.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (-64 z^3 + 468 z^2 - 810 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (64 z^3 - 404 z^2 + 438 z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.9760.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{48} e^z (4 z^2 - 28 z + 33) + \frac{\sqrt{\pi} (-8 z^3 + 60 z^2 - 90 z + 15) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.9761.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{48} e^{-z} (4 z^2 + 28 z + 33) + \frac{\sqrt{\pi} (8 z^3 + 60 z^2 + 90 z + 15) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.9762.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^4 - 524 z^3 + 828 z^2 - 75 z + 15) I_1\left(\frac{z}{2}\right)}{2835 z} - \frac{4 e^{z/2} (64 z^3 - 588 z^2 + 1320 z - 705) I_0\left(\frac{z}{2}\right)}{2835}$$

07.25.03.9763.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (64 z^4 - 568 z^3 + 948 z^2 - 30 z + 45)}{1536 z^2} + \frac{\sqrt{\pi} (-128 z^5 + 1200 z^4 - 2400 z^3 + 600 z^2 - 45) \operatorname{erfi}(\sqrt{z})}{3072 z^{5/2}}$$

07.25.03.9764.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (64 z^4 + 568 z^3 + 948 z^2 + 30 z + 45)}{1536 z^2} + \frac{\sqrt{\pi} (128 z^5 + 1200 z^4 + 2400 z^3 + 600 z^2 - 45) \operatorname{erf}(\sqrt{z})}{3072 z^{5/2}}$$

07.25.03.9765.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (128 z^5 - 1288 z^4 + 2676 z^3 - 420 z^2 + 75 z + 180) I_1\left(\frac{z}{2}\right)}{10395 z^2} - \frac{4 e^{z/2} (128 z^4 - 1416 z^3 + 3900 z^2 - 2580 z + 45) I_0\left(\frac{z}{2}\right)}{10395 z}$$

07.25.03.9766.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (64 z^5 - 688 z^4 + 1488 z^3 - 120 z^2 + 120 z + 225)}{18432 z^3} - \frac{7 \sqrt{\pi} (128 z^6 - 1440 z^5 + 3600 z^4 - 1200 z^3 + 270 z + 225) \operatorname{erfi}(\sqrt{z})}{36864 z^{7/2}}$$

07.25.03.9767.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (64 z^5 + 688 z^4 + 1488 z^3 + 120 z^2 + 120 z - 225)}{18432 z^3} + \frac{7 \sqrt{\pi} (128 z^6 + 1440 z^5 + 3600 z^4 + 1200 z^3 - 270 z + 225) \operatorname{erf}(\sqrt{z})}{36864 z^{7/2}}$$

07.25.03.9768.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, 5; z\right) = \frac{128 e^{z/2} (32 z^6 - 382 z^5 + 984 z^4 - 225 z^3 + 30 z^2 + 180 z + 225) I_1\left(\frac{z}{2}\right)}{135 135 z^3} - \frac{32 e^{z/2} (128 z^5 - 1656 z^4 + 5400 z^3 - 4200 z^2 + 180 z + 225) I_0\left(\frac{z}{2}\right)}{135 135 z^2}$$

07.25.03.9769.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z (256 z^6 - 3232 z^5 + 8592 z^4 - 1200 z^3 + 840 z^2 + 3150 z + 4725)}{16384 z^4} + \frac{\sqrt{\pi} (-512 z^7 + 6720 z^6 - 20160 z^5 + 8400 z^4 - 3780 z^2 - 6300 z - 4725) \operatorname{erfi}(\sqrt{z})}{32768 z^{9/2}}$$

07.25.03.9770.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (256 z^6 + 3232 z^5 + 8592 z^4 + 1200 z^3 + 840 z^2 - 3150 z + 4725)}{16384 z^4} + \frac{\sqrt{\pi} (512 z^7 + 6720 z^6 + 20160 z^5 + 8400 z^4 - 3780 z^2 + 6300 z - 4725) \operatorname{erf}(\sqrt{z})}{32768 z^{9/2}}$$

07.25.03.9771.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (256 z^7 - 3536 z^6 + 10872 z^5 - 3300 z^4 + 300 z^3 + 3915 z^2 + 8460 z + 10080) I_1\left(\frac{z}{2}\right)}{405405 z^4} - \frac{32 e^{z/2} (256 z^6 - 3792 z^5 + 14280 z^4 - 12660 z^3 + 900 z^2 + 2115 z + 2520) I_0\left(\frac{z}{2}\right)}{405405 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 2$

07.25.03.9772.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{105} e^{z/2} (-8 z^3 + 76 z^2 - 180 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8 z^3 - 68 z^2 + 116 z - 15) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{5}{2}$

07.25.03.9773.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (8 z^3 - 76 z^2 + 146 z - 15)}{256 z} + \frac{\sqrt{\pi} (-16 z^4 + 160 z^3 - 360 z^2 + 120 z + 15) \operatorname{erfi}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.9774.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8 z^3 + 76 z^2 + 146 z + 15)}{256 z} + \frac{\sqrt{\pi} (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15) \operatorname{erf}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.9775.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (8 z^4 - 88 z^3 + 216 z^2 - 60 z - 15) I_1\left(\frac{z}{2}\right)}{945 z} - \frac{16}{945} e^{z/2} (2 z^3 - 24 z^2 + 75 z - 60) I_0\left(\frac{z}{2}\right)$$

07.25.03.9776.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (16 z^4 - 192 z^3 + 512 z^2 - 120 z - 45)}{1024 z^2} + \frac{\sqrt{\pi} (-32 z^5 + 400 z^4 - 1200 z^3 + 600 z^2 + 150 z + 45) \operatorname{erfi}(\sqrt{z})}{2048 z^{5/2}}$$

$$\begin{aligned}
 & 07.25.03.9777.01 \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \\
 & \frac{e^{-z} (16z^4 + 192z^3 + 512z^2 + 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.9778.01 \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, 4; z\right) = \\
 & \frac{4e^{z/2} (16z^5 - 216z^4 + 692z^3 - 300z^2 - 135z - 60) I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4e^{z/2} (16z^4 - 232z^3 + 900z^2 - 900z - 15) I_0\left(\frac{z}{2}\right)}{3465z}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.9779.01 \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{7e^z (32z^5 - 464z^4 + 1584z^3 - 600z^2 - 390z - 225)}{24576z^3} - \\
 & \frac{7\sqrt{\pi} (64z^6 - 960z^5 + 3600z^4 - 2400z^3 - 900z^2 - 540z - 225) \operatorname{erfi}(\sqrt{z})}{49152z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.9780.01 \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} (32z^5 + 464z^4 + 1584z^3 + 600z^2 - 390z + 225)}{24576z^3} + \\
 & \frac{7\sqrt{\pi} (64z^6 + 960z^5 + 3600z^4 + 2400z^3 - 900z^2 + 540z - 225) \operatorname{erf}(\sqrt{z})}{49152z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.9781.01 \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, 5; z\right) = \frac{32e^{z/2} (16z^6 - 256z^5 + 1012z^4 - 600z^3 - 375z^2 - 300z - 180) I_1\left(\frac{z}{2}\right)}{45045z^3} - \\
 & \frac{32e^{z/2} (16z^5 - 272z^4 + 1260z^3 - 1500z^2 - 75z - 45) I_0\left(\frac{z}{2}\right)}{45045z^2}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.9782.01 \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{3e^z (64z^6 - 1088z^5 + 4528z^4 - 2400z^3 - 2100z^2 - 2100z - 1575)}{32768z^4} - \\
 & \frac{3\sqrt{\pi} (128z^7 - 2240z^6 + 10080z^5 - 8400z^4 - 4200z^3 - 3780z^2 - 3150z - 1575) \operatorname{erfi}(\sqrt{z})}{65536z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.9783.01 \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z} (64z^6 + 1088z^5 + 4528z^4 + 2400z^3 - 2100z^2 + 2100z - 1575)}{32768z^4} + \\
 & \frac{3\sqrt{\pi} (128z^7 + 2240z^6 + 10080z^5 + 8400z^4 - 4200z^3 + 3780z^2 - 3150z + 1575) \operatorname{erf}(\sqrt{z})}{65536z^{9/2}}
 \end{aligned}$$

07.25.03.9784.01

$${}_2F_2\left(-\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135 135 z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = -\frac{11}{2}$

07.25.03.9785.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{7203735} (-256 z^{11} - 8064 z^{10} - 80000 z^9 - 282624 z^8 - 288000 z^7 - 26880 z^6 - 2016 z^5 - 2160 z^4 - 18000 z^3 + 264600 z^2 - 1786050 z + 7203735) - \frac{64 e^z \sqrt{\pi} (4 z^{23/2} + 128 z^{21/2} + 1311 z^{19/2} + 4983 z^{17/2} + 6222 z^{15/2} + 1530 z^{13/2}) \operatorname{erf}(\sqrt{z})}{7203735}$$

07.25.03.9786.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{7203735} (256 z^{11} - 8064 z^{10} + 80000 z^9 - 282624 z^8 + 288000 z^7 - 26880 z^6 + 2016 z^5 - 2160 z^4 + 18000 z^3 + 264600 z^2 + 1786050 z + 7203735) - \frac{64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 128 z^{21/2} + 1311 z^{19/2} - 4983 z^{17/2} + 6222 z^{15/2} - 1530 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{7203735}$$

07.25.03.9787.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{654885} (128 z^{10} + 3392 z^9 + 26496 z^8 + 63360 z^7 + 26880 z^6 - 2016 z^5 - 720 z^4 - 3600 z^3 + 37800 z^2 - 198450 z + 654885) + \frac{32 e^z \sqrt{\pi} (4 z^{21/2} + 108 z^{19/2} + 879 z^{17/2} + 2346 z^{15/2} + 1530 z^{13/2}) \operatorname{erf}(\sqrt{z})}{654885}$$

07.25.03.9788.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{654885} (128 z^{10} - 3392 z^9 + 26496 z^8 - 63360 z^7 + 26880 z^6 + 2016 z^5 - 720 z^4 + 3600 z^3 + 37800 z^2 + 198450 z + 654885) - \frac{32 e^{-z} \sqrt{\pi} (4 z^{21/2} - 108 z^{19/2} + 879 z^{17/2} - 2346 z^{15/2} + 1530 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{654885}$$

07.25.03.9789.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{-64z^9 - 1376z^8 - 7776z^7 - 8960z^6 + 2016z^5 - 720z^4 - 1200z^3 + 7560z^2 - 28350z + 72765}{72765} - \frac{16e^z\sqrt{\pi}(4z^{19/2} + 88z^{17/2} + 527z^{15/2} + 765z^{13/2})\operatorname{erf}(\sqrt{z})}{72765}$$

07.25.03.9790.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{64z^9 - 1376z^8 + 7776z^7 - 8960z^6 - 2016z^5 - 720z^4 + 1200z^3 + 7560z^2 + 28350z + 72765}{72765} - \frac{16e^{-z}\sqrt{\pi}(4z^{19/2} - 88z^{17/2} + 527z^{15/2} - 765z^{13/2})\operatorname{erfi}(\sqrt{z})}{72765}$$

07.25.03.9791.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{32z^8 + 528z^7 + 1792z^6 - 672z^5 + 720z^4 - 1200z^3 + 2520z^2 - 5670z + 10395}{10395} + \frac{8e^z\sqrt{\pi}(4z^{17/2} + 68z^{15/2} + 255z^{13/2})\operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.9792.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{32z^8 - 528z^7 + 1792z^6 + 672z^5 + 720z^4 + 1200z^3 + 2520z^2 + 5670z + 10395}{10395} - \frac{8e^{-z}\sqrt{\pi}(4z^{17/2} - 68z^{15/2} + 255z^{13/2})\operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.9793.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{-16z^7 - 184z^6 - 168z^5 + 768z^4 - 1824z^3 + 2520z^2 - 1890z + 2079}{2079} - \frac{4e^z\sqrt{\pi}(4z^{15/2} + 48z^{13/2} + 63z^{11/2} - 189z^{9/2} + 378z^{7/2} - 378z^{5/2})\operatorname{erf}(\sqrt{z})}{2079}$$

07.25.03.9794.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{16z^7 - 184z^6 + 168z^5 + 768z^4 + 1824z^3 + 2520z^2 + 1890z + 2079}{2079} - \frac{4e^{-z}\sqrt{\pi}(4z^{15/2} - 48z^{13/2} + 63z^{11/2} + 189z^{9/2} + 378z^{7/2} + 378z^{5/2})\operatorname{erfi}(\sqrt{z})}{2079}$$

07.25.03.9795.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{693}(8z^6 + 52z^5 - 120z^4 - 8z^3 + 840z^2 - 1890z + 693) + \frac{2}{693}e^z\sqrt{\pi}(4z^{13/2} + 28z^{11/2} - 49z^{9/2} - 42z^{7/2} + 462z^{5/2} - 840z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9796.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{693} (8z^6 - 52z^5 - 120z^4 + 8z^3 + 840z^2 + 1890z + 693) - \frac{2}{693} e^{-z} \sqrt{\pi} (4z^{13/2} - 28z^{11/2} - 49z^{9/2} + 42z^{7/2} + 462z^{5/2} + 840z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9797.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{693} (-4z^5 - 6z^4 + 82z^3 - 240z^2 + 90z + 693) + \frac{1}{693} e^z \sqrt{\pi} (-4z^{11/2} - 8z^{9/2} + 81z^{7/2} - 201z^{5/2} - 60z^{3/2} + 900\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9798.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{693} (4z^5 - 6z^4 - 82z^3 - 240z^2 - 90z + 693) + \frac{1}{693} e^{-z} \sqrt{\pi} (-4z^{11/2} + 8z^{9/2} + 81z^{7/2} + 201z^{5/2} - 60z^{3/2} - 900\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9799.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, 1; z\right) = -\frac{e^z (8z^5 - 4z^4 - 134z^3 + 567z^2 - 504z - 1386)}{1386}$$

07.25.03.9800.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{693} (-2z^4 + 7z^3 + 12z^2 - 150z + 333) + \frac{e^z \sqrt{\pi} (-4z^5 + 12z^4 + 33z^3 - 300z^2 + 540z + 360) \operatorname{erf}(\sqrt{z})}{1386 \sqrt{z}}$$

07.25.03.9801.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{693} (-2z^4 - 7z^3 + 12z^2 + 150z + 333) + \frac{e^{-z} \sqrt{\pi} (4z^5 + 12z^4 - 33z^3 - 300z^2 - 540z + 360) \operatorname{erfi}(\sqrt{z})}{1386 \sqrt{z}}$$

07.25.03.9802.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, 2; z\right) = -\frac{e^z (8z^4 - 44z^3 + 42z^2 + 441z - 1386)}{1386}$$

07.25.03.9803.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{-2z^4 + 17z^3 - 57z^2 + 32z + 210}{462z} + \frac{e^z \sqrt{\pi} (-4z^5 + 32z^4 - 95z^3 - 15z^2 + 570z - 210) \operatorname{erf}(\sqrt{z})}{924z^{3/2}}$$

07.25.03.9804.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{2z^4 + 17z^3 + 57z^2 + 32z - 210}{462z} + \frac{e^{-z} \sqrt{\pi} (-4z^5 - 32z^4 - 95z^3 + 15z^2 + 570z + 210) \operatorname{erfi}(\sqrt{z})}{924z^{3/2}}$$

07.25.03.9805.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, 3; z\right) = -\frac{1}{693} e^z (8z^3 - 84z^2 + 378z - 693)$$

$$\begin{aligned}
 & 07.25.03.9806.01 \\
 & {}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, \frac{7}{2}; z\right) = \\
 & \frac{5(2z^4 - 27z^3 + 166z^2 - 546z + 1008)}{924z^2} - \frac{5e^z\sqrt{\pi}(4z^5 - 52z^4 + 303z^3 - 894z^2 + 1218z - 1008)\operatorname{erf}(\sqrt{z})}{1848z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.9807.01 \\
 & {}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, \frac{7}{2}; -z\right) = \\
 & \frac{5e^{-z}\sqrt{\pi}(4z^5 + 52z^4 + 303z^3 + 894z^2 + 1218z + 1008)\operatorname{erfi}(\sqrt{z})}{1848z^{5/2}} - \frac{5(2z^4 + 27z^3 + 166z^2 + 546z + 1008)}{924z^2}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.9808.01 \\
 & {}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, 4; z\right) = \frac{e^z(-8z^5 + 124z^4 - 874z^3 + 3315z^2 - 6630z + 6630)}{231z^3} - \frac{2210}{77z^3}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.9809.01 \\
 & {}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, \frac{9}{2}; z\right) = \\
 & \frac{5(2z^4 - 37z^3 + 315z^2 - 1512z + 7560)}{264z^3} - \frac{5e^z\sqrt{\pi}(4z^5 - 72z^4 + 591z^3 - 2667z^2 + 6552z - 7560)\operatorname{erf}(\sqrt{z})}{528z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.9810.01 \\
 & {}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{5(2z^4 + 37z^3 + 315z^2 + 1512z + 7560)}{264z^3} - \frac{5e^{-z}\sqrt{\pi}(4z^5 + 72z^4 + 591z^3 + 2667z^2 + 6552z + 7560)\operatorname{erfi}(\sqrt{z})}{528z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.9811.01 \\
 & {}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, 5; z\right) = -\frac{680(13z + 57)}{77z^4} - \frac{4e^z(8z^5 - 164z^4 + 1530z^3 - 7905z^2 + 22440z - 29070)}{231z^4}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.9812.01 \\
 & {}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, \frac{11}{2}; z\right) = \\
 & \frac{15(2z^4 - 47z^3 + 504z^2 - 840z + 25200)}{176z^4} - \frac{15e^z\sqrt{\pi}(4z^5 - 92z^4 + 959z^3 - 5544z^2 + 17640z - 25200)\operatorname{erf}(\sqrt{z})}{352z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & 07.25.03.9813.01 \\
 & {}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{15e^{-z}\sqrt{\pi}(4z^5 + 92z^4 + 959z^3 + 5544z^2 + 17640z + 25200)\operatorname{erfi}(\sqrt{z})}{352z^{9/2}} - \frac{15(2z^4 + 47z^3 + 504z^2 + 840z + 25200)}{176z^4}
 \end{aligned}$$

07.25.03.9814.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{11}{2}, 6; z\right) = -\frac{340(65z^2 + 570z + 1596)}{77z^5} - \frac{20e^z(8z^5 - 204z^4 + 2346z^3 - 14943z^2 + 52326z - 81396)}{231z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = -\frac{9}{2}$

07.25.03.9815.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{-64z^9 - 1440z^8 - 8960z^7 - 14400z^6 - 2016z^5 - 240z^4 - 720z^3 + 5400z^2 - 22050z + 59535}{59535} - \frac{16e^z\sqrt{\pi}(4z^{19/2} + 92z^{17/2} + 603z^{15/2} + 1140z^{13/2} + 390z^{11/2})\operatorname{erf}(\sqrt{z})}{59535}$$

07.25.03.9816.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{64z^9 - 1440z^8 + 8960z^7 - 14400z^6 + 2016z^5 - 240z^4 + 720z^3 + 5400z^2 + 22050z + 59535}{59535} - \frac{16e^{-z}\sqrt{\pi}(4z^{19/2} - 92z^{17/2} + 603z^{15/2} - 1140z^{13/2} + 390z^{11/2})\operatorname{erfi}(\sqrt{z})}{59535}$$

07.25.03.9817.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{32z^8 + 592z^7 + 2720z^6 + 2016z^5 - 240z^4 - 240z^3 + 1080z^2 - 3150z + 6615}{6615} + \frac{8e^z\sqrt{\pi}(4z^{17/2} + 76z^{15/2} + 375z^{13/2} + 390z^{11/2})\operatorname{erf}(\sqrt{z})}{6615}$$

07.25.03.9818.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{32z^8 - 592z^7 + 2720z^6 - 2016z^5 - 240z^4 + 240z^3 + 1080z^2 + 3150z + 6615}{6615} - \frac{8e^{-z}\sqrt{\pi}(4z^{17/2} - 76z^{15/2} + 375z^{13/2} - 390z^{11/2})\operatorname{erfi}(\sqrt{z})}{6615}$$

07.25.03.9819.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{945}(-16z^7 - 232z^6 - 672z^5 + 240z^4 - 240z^3 + 360z^2 - 630z + 945) - \frac{4}{945}e^z\sqrt{\pi}(4z^{15/2} + 60z^{13/2} + 195z^{11/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9820.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{945}(16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945) - \frac{4}{945}e^{-z}\sqrt{\pi}(4z^{15/2} - 60z^{13/2} + 195z^{11/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9821.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{189} (8z^6 + 84z^5 + 88z^4 - 264z^3 + 360z^2 - 210z + 189) + \frac{2}{189} e^z \sqrt{\pi} (4z^{13/2} + 44z^{11/2} + 63z^{9/2} - 126z^{7/2} + 126z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9822.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{189} (8z^6 - 84z^5 + 88z^4 + 264z^3 + 360z^2 + 210z + 189) - \frac{2}{189} e^{-z} \sqrt{\pi} (4z^{13/2} - 44z^{11/2} + 63z^{9/2} + 126z^{7/2} + 126z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9823.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{63} (-4z^5 - 26z^4 + 32z^3 + 60z^2 - 210z + 63) + \frac{1}{63} e^z \sqrt{\pi} (-4z^{11/2} - 28z^{9/2} + 21z^{7/2} + 84z^{5/2} - 210z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9824.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{63} (4z^5 - 26z^4 - 32z^3 + 60z^2 + 210z + 63) + \frac{1}{63} e^{-z} \sqrt{\pi} (-4z^{11/2} + 28z^{9/2} + 21z^{7/2} - 84z^{5/2} - 210z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9825.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{63} (2z^4 + 5z^3 - 30z^2 + 30z + 63) + \frac{1}{126} e^z \sqrt{\pi} (4z^{9/2} + 12z^{7/2} - 57z^{5/2} + 30z^{3/2} + 180\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9826.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{63} (2z^4 - 5z^3 - 30z^2 - 30z + 63) + \frac{1}{126} e^{-z} \sqrt{\pi} (-4z^{9/2} + 12z^{7/2} + 57z^{5/2} + 30z^{3/2} - 180\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9827.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, 1; z\right) = \frac{1}{126} e^z (4z^4 + 4z^3 - 57z^2 + 84z + 126)$$

07.25.03.9828.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{126} (2z^3 - 3z^2 - 20z + 66) + \frac{e^z \sqrt{\pi} (4z^4 - 4z^3 - 45z^2 + 120z + 60) \operatorname{erf}(\sqrt{z})}{252\sqrt{z}}$$

07.25.03.9829.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{126} (-2z^3 - 3z^2 + 20z + 66) + \frac{e^{-z} \sqrt{\pi} (4z^4 + 4z^3 - 45z^2 - 120z + 60) \operatorname{erfi}(\sqrt{z})}{252\sqrt{z}}$$

07.25.03.9830.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, 2; z\right) = \frac{1}{126} e^z (4z^3 - 12z^2 - 21z + 126)$$

07.25.03.9831.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{2z^3 - 11z^2 + 14z + 30}{84z} + \frac{e^z \sqrt{\pi} (4z^4 - 20z^3 + 15z^2 + 90z - 30) \operatorname{erf}(\sqrt{z})}{168z^{3/2}}$$

07.25.03.9832.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{2z^3 + 11z^2 + 14z - 30}{84z} + \frac{e^{-z} \sqrt{\pi} (-4z^4 - 20z^3 - 15z^2 + 90z + 30) \operatorname{erfi}(\sqrt{z})}{168z^{3/2}}$$

07.25.03.9833.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, 3; z\right) = \frac{1}{63} e^z (4z^2 - 28z + 63)$$

07.25.03.9834.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5(2z^3 - 19z^2 + 72z - 126)}{168z^2} + \frac{5e^z \sqrt{\pi} (4z^4 - 36z^3 + 123z^2 - 156z + 126) \operatorname{erf}(\sqrt{z})}{336z^{5/2}}$$

07.25.03.9835.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (4z^4 + 36z^3 + 123z^2 + 156z + 126) \operatorname{erfi}(\sqrt{z})}{336z^{5/2}} - \frac{5(2z^3 + 19z^2 + 72z + 126)}{168z^2}$$

07.25.03.9836.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, 4; z\right) = \frac{e^z (4z^4 - 44z^3 + 195z^2 - 390z + 390)}{21z^3} - \frac{130}{7z^3}$$

07.25.03.9837.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{5(2z^3 - 27z^2 + 154z - 840)}{48z^3} + \frac{5e^z \sqrt{\pi} (4z^4 - 52z^3 + 279z^2 - 714z + 840) \operatorname{erf}(\sqrt{z})}{96z^{7/2}}$$

07.25.03.9838.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{5(2z^3 + 27z^2 + 154z + 840)}{48z^3} - \frac{5e^{-z} \sqrt{\pi} (4z^4 + 52z^3 + 279z^2 + 714z + 840) \operatorname{erfi}(\sqrt{z})}{96z^{7/2}}$$

07.25.03.9839.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, 5; z\right) = \frac{4e^z (4z^4 - 60z^3 + 375z^2 - 1140z + 1530)}{21z^4} - \frac{40(13z + 51)}{7z^4}$$

07.25.03.9840.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{15(2z^3 - 35z^2 - 2520)}{32z^4} + \frac{15e^z \sqrt{\pi} (4z^4 - 68z^3 + 483z^2 - 1680z + 2520) \operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.9841.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{15e^{-z} \sqrt{\pi} (4z^4 + 68z^3 + 483z^2 + 1680z + 2520) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}} - \frac{15(2z^3 + 35z^2 + 2520)}{32z^4}$$

07.25.03.9842.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{9}{2}, 6; z\right) = \frac{20 e^z (4 z^4 - 76 z^3 + 603 z^2 - 2346 z + 3876)}{21 z^5} - \frac{20 (65 z^2 + 510 z + 1292)}{7 z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = -\frac{7}{2}$

07.25.03.9843.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{735} (-16 z^7 - 248 z^6 - 872 z^5 - 240 z^4 - 80 z^3 + 216 z^2 - 450 z + 735) - \frac{4}{735} e^z \sqrt{\pi} (4 z^{15/2} + 64 z^{13/2} + 247 z^{11/2} + 143 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9844.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{735} (16 z^7 - 248 z^6 + 872 z^5 - 240 z^4 + 80 z^3 + 216 z^2 + 450 z + 735) - \frac{4}{735} e^{-z} \sqrt{\pi} (4 z^{15/2} - 64 z^{13/2} + 247 z^{11/2} - 143 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9845.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{105} (8 z^6 + 100 z^5 + 240 z^4 - 80 z^3 + 72 z^2 - 90 z + 105) + \frac{2}{105} e^z \sqrt{\pi} (4 z^{13/2} + 52 z^{11/2} + 143 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9846.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{105} (8 z^6 - 100 z^5 + 240 z^4 + 80 z^3 + 72 z^2 + 90 z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} (4 z^{13/2} - 52 z^{11/2} + 143 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9847.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{21} (-4 z^5 - 38 z^4 - 46 z^3 + 72 z^2 - 30 z + 21) + \frac{1}{21} e^z \sqrt{\pi} (-4 z^{11/2} - 40 z^{9/2} - 63 z^{7/2} + 63 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9848.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{21} (4 z^5 - 38 z^4 + 46 z^3 + 72 z^2 + 30 z + 21) + \frac{1}{21} e^{-z} \sqrt{\pi} (-4 z^{11/2} + 40 z^{9/2} - 63 z^{7/2} - 63 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9849.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{7} (2 z^4 + 13 z^3 - 2 z^2 - 30 z + 7) + \frac{1}{14} e^z \sqrt{\pi} (4 z^{9/2} + 28 z^{7/2} + 7 z^{5/2} - 70 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9850.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{7} (2 z^4 - 13 z^3 - 2 z^2 + 30 z + 7) + \frac{1}{14} e^{-z} \sqrt{\pi} (-4 z^{9/2} + 28 z^{7/2} - 7 z^{5/2} - 70 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9851.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{14}(-2z^3 - 7z^2 + 15z + 14) + \frac{1}{28}e^z \sqrt{\pi}(-4z^{7/2} - 16z^{5/2} + 25z^{3/2} + 45\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9852.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{14}(2z^3 - 7z^2 - 15z + 14) + \frac{1}{28}e^{-z} \sqrt{\pi}(-4z^{7/2} + 16z^{5/2} + 25z^{3/2} - 45\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9853.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, 1; z\right) = -\frac{1}{14}e^z(2z^3 + 5z^2 - 16z - 14)$$

07.25.03.9854.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{28}(-2z^2 - z + 16) + \frac{e^z \sqrt{\pi}(-4z^3 - 4z^2 + 33z + 12) \operatorname{erf}(\sqrt{z})}{56\sqrt{z}}$$

07.25.03.9855.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{28}(-2z^2 + z + 16) + \frac{e^{-z} \sqrt{\pi}(4z^3 - 4z^2 - 33z + 12) \operatorname{erfi}(\sqrt{z})}{56\sqrt{z}}$$

07.25.03.9856.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, 2; z\right) = -\frac{1}{14}e^z(2z^2 - z - 14)$$

07.25.03.9857.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, \frac{5}{2}; z\right) = -\frac{3(2z^2 - 5z - 5)}{56z} - \frac{3e^z \sqrt{\pi}(4z^3 - 8z^2 - 17z + 5) \operatorname{erf}(\sqrt{z})}{112z^{3/2}}$$

07.25.03.9858.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{3(2z^2 + 5z - 5)}{56z} - \frac{3e^{-z} \sqrt{\pi}(4z^3 + 8z^2 - 17z - 5) \operatorname{erfi}(\sqrt{z})}{112z^{3/2}}$$

07.25.03.9859.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, 3; z\right) = -\frac{1}{7}e^z(2z - 7)$$

07.25.03.9860.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, \frac{7}{2}; z\right) = -\frac{15(2z^2 - 11z + 18)}{112z^2} - \frac{15e^z \sqrt{\pi}(4z^3 - 20z^2 + 23z - 18) \operatorname{erf}(\sqrt{z})}{224z^{5/2}}$$

07.25.03.9861.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} \sqrt{\pi}(4z^3 + 20z^2 + 23z + 18) \operatorname{erfi}(\sqrt{z})}{224z^{5/2}} - \frac{15(2z^2 + 11z + 18)}{112z^2}$$

07.25.03.9862.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, 4; z\right) = -\frac{3e^z(2z^3 - 13z^2 + 26z - 26)}{7z^3} - \frac{78}{7z^3}$$

07.25.03.9863.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, \frac{9}{2}; z\right) = -\frac{15(2z^2 - 17z + 105)}{32z^3} - \frac{15e^z\sqrt{\pi}(4z^3 - 32z^2 + 87z - 105)\operatorname{erf}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.9864.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{15(2z^2 + 17z + 105)}{32z^3} - \frac{15e^{-z}\sqrt{\pi}(4z^3 + 32z^2 + 87z + 105)\operatorname{erfi}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.9865.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, 5; z\right) = -\frac{24(13z + 45)}{7z^4} - \frac{12e^z(2z^3 - 19z^2 + 64z - 90)}{7z^4}$$

07.25.03.9866.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, \frac{11}{2}; z\right) = -\frac{45(6z^2 + 35z + 840)}{64z^4} - \frac{135e^z\sqrt{\pi}(4z^3 - 44z^2 + 175z - 280)\operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.9867.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{135e^{-z}\sqrt{\pi}(4z^3 + 44z^2 + 175z + 280)\operatorname{erfi}(\sqrt{z})}{128z^{9/2}} - \frac{45(6z^2 - 35z + 840)}{64z^4}$$

07.25.03.9868.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{7}{2}, 6; z\right) = -\frac{60(13z^2 + 90z + 204)}{7z^5} - \frac{60e^z(2z^3 - 25z^2 + 114z - 204)}{7z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = -\frac{5}{2}$

07.25.03.9869.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{15}(-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) + \frac{1}{15}e^z\sqrt{\pi}(-4z^{11/2} - 44z^{9/2} - 99z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9870.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{15}(4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) + \frac{1}{15}e^{-z}\sqrt{\pi}(-4z^{11/2} + 44z^{9/2} - 99z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9871.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{3}(2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6}e^z\sqrt{\pi}(4z^{9/2} + 36z^{7/2} + 63z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9872.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3}(2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6}e^{-z}\sqrt{\pi}(-4z^{9/2} + 36z^{7/2} - 63z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9873.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{2}(-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4}e^z\sqrt{\pi}(-4z^{7/2} - 28z^{5/2} - 35z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9874.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2}(2z^3 - 13z^2 + 12z + 2) + \frac{1}{4}e^{-z}\sqrt{\pi}(-4z^{7/2} + 28z^{5/2} - 35z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9875.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{4}(2z^2 + 9z + 4) + \frac{1}{8}e^z \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9876.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{4}(2z^2 - 9z + 4) + \frac{1}{8}e^{-z} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9877.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, 1; z\right) = \frac{1}{2}e^z(z^2 + 4z + 2)$$

07.25.03.9878.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{8}(2z + 5) + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.9879.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{8}(5 - 2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.9880.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, 2; z\right) = \frac{1}{2}e^z(z + 2)$$

07.25.03.9881.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{3(2z + 1)}{16z} + \frac{3e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.9882.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3(2z - 1)}{16z} - \frac{3e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.9883.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, 3; z\right) = e^z$$

07.25.03.9884.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{15(2z - 3)}{32z^2} + \frac{15e^z \sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.9885.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} \sqrt{\pi} (4z^2 + 4z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15(2z + 3)}{32z^2}$$

07.25.03.9886.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, 4; z\right) = \frac{3e^z(z^2 - 2z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.9887.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{105(2z-15)}{64z^3} + \frac{105e^z\sqrt{\pi}(4z^2-12z+15)\operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.9888.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{105(2z+15)}{64z^3} - \frac{105e^{-z}\sqrt{\pi}(4z^2+12z+15)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.9889.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, 5; z\right) = \frac{12e^z(z^2-4z+6)}{z^4} - \frac{24(z+3)}{z^4}$$

07.25.03.9890.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{945e^z\sqrt{\pi}(4z^2-20z+35)\operatorname{erf}(\sqrt{z})}{256z^{9/2}} - \frac{1575(2z+21)}{128z^4}$$

07.25.03.9891.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1575(2z-21)}{128z^4} + \frac{945e^{-z}\sqrt{\pi}(4z^2+20z+35)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.9892.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{5}{2}, 6; z\right) = \frac{60e^z(z^2-6z+12)}{z^5} - \frac{60(z^2+6z+12)}{z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = -\frac{3}{2}$

07.25.03.9893.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{3}{2}, 1; z\right) = \frac{1}{2}e^z(21z^2+8z+2) - \frac{21}{2}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.9894.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{3}{2}, 1; -z\right) = \frac{21}{2}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{2}e^{-z}(21z^2-8z+2)$$

07.25.03.9895.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{3}{2}, 2; z\right) = \frac{1}{2}e^z(6z^2+3z+2) - 3\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.9896.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{3}{2}, 2; -z\right) = 3\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{2}e^{-z}(6z^2-3z+2)$$

07.25.03.9897.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{3}{2}, 3; z\right) = \frac{1}{3}e^z(4z^2+2z+3) - \frac{4}{3}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.9898.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{3}{2}, 3; -z\right) = \frac{4}{3}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{3}e^{-z}(4z^2-2z+3)$$

07.25.03.9899.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{3}{2}, 4; z\right) = -\frac{8}{11} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{e^z (8z^5 + 4z^4 + 6z^3 + 15z^2 - 30z + 30)}{11z^3} - \frac{30}{11z^3}$$

07.25.03.9900.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{3}{2}, 4; -z\right) = \frac{8}{11} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{e^{-z} (8z^5 - 4z^4 + 6z^3 - 15z^2 - 30z - 30)}{11z^3} + \frac{30}{11z^3}$$

07.25.03.9901.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{3}{2}, 5; z\right) = -\frac{64}{143} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2} - \frac{120(13z + 33)}{143z^4} + \frac{4e^z (16z^6 + 8z^5 + 12z^4 + 30z^3 + 105z^2 - 600z + 990)}{143z^4}$$

07.25.03.9902.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{3}{2}, 5; -z\right) = \frac{64}{143} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{120(13z - 33)}{143z^4} + \frac{4e^{-z} (16z^6 - 8z^5 + 12z^4 - 30z^3 + 105z^2 + 600z + 990)}{143z^4}$$

07.25.03.9903.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{3}{2}, 6; z\right) = -\frac{128}{429} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2} - \frac{60(65z^2 + 330z + 572)}{143z^5} + \frac{4e^z (32z^7 + 16z^6 + 24z^5 + 60z^4 + 210z^3 + 945z^2 - 10890z + 25740)}{429z^5}$$

07.25.03.9904.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{3}{2}, 6; -z\right) = \frac{128}{429} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{60(65z^2 - 330z + 572)}{143z^5} + \frac{4e^{-z} (32z^7 - 16z^6 + 24z^5 - 60z^4 + 210z^3 - 945z^2 - 10890z - 25740)}{429z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = -\frac{1}{2}$

07.25.03.9905.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{1}{2}, 1; z\right) = \frac{1}{4} e^z (-63z^2 + 56z + 4) + \frac{7}{8} \sqrt{\pi} (18z^{5/2} - 25z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9906.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{1}{2}, 1; -z\right) = \frac{1}{4} e^{-z} (-63z^2 - 56z + 4) - \frac{7}{8} \sqrt{\pi} (18z^{5/2} + 25z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9907.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{1}{2}, 2; z\right) = \frac{1}{2} e^z (-9z^2 + 13z + 2) + \frac{1}{4} \sqrt{\pi} (18z^{5/2} - 35z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9908.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{1}{2}, 2; -z\right) = \frac{1}{2} e^{-z} (-9z^2 - 13z + 2) + \frac{1}{4} \sqrt{\pi} (-18z^{5/2} - 35z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9909.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{1}{2}, 3; z\right) = e^z (-2z^2 + 4z + 1) + \sqrt{\pi} (2z^{5/2} - 5z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9910.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{1}{2}, 3; -z\right) = e^{-z}(-2z^2 - 4z + 1) + \sqrt{\pi}(-2z^{5/2} - 5z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9911.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{1}{2}, 4; z\right) = \frac{e^z(-36z^5 + 92z^4 + 28z^3 + 15z^2 - 30z + 30)}{33z^3} + \frac{2}{33}\sqrt{\pi}(18z^{5/2} - 55z^{3/2})\operatorname{erfi}(\sqrt{z}) - \frac{10}{11z^3}$$

07.25.03.9912.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{1}{2}, 4; -z\right) = \frac{e^{-z}(-36z^5 - 92z^4 + 28z^3 - 15z^2 - 30z - 30)}{33z^3} - \frac{2}{33}\sqrt{\pi}(18z^{5/2} + 55z^{3/2})\operatorname{erf}(\sqrt{z}) + \frac{10}{11z^3}$$

07.25.03.9913.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{1}{2}, 5; z\right) = \frac{40(13z + 27)}{143z^4} - \frac{4e^z(72z^6 - 224z^5 - 76z^4 - 60z^3 - 15z^2 + 420z - 810)}{429z^4} + \frac{16}{429}\sqrt{\pi}(18z^{5/2} - 65z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9914.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{1}{2}, 5; -z\right) = \frac{40(13z - 27)}{143z^4} - \frac{4e^{-z}(72z^6 + 224z^5 - 76z^4 + 60z^3 - 15z^2 - 420z - 810)}{429z^4} - \frac{16}{429}\sqrt{\pi}(18z^{5/2} + 65z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.9915.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{1}{2}, 6; z\right) = -\frac{20(65z^2 + 270z + 396)}{143z^5} - \frac{4e^z(48z^7 - 176z^6 - 64z^5 - 60z^4 - 60z^3 + 105z^2 + 1890z - 5940)}{429z^5} + \frac{32}{429}\sqrt{\pi}(6z^{5/2} - 25z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9916.01

$${}_2F_2\left(-\frac{5}{2}, 3; -\frac{1}{2}, 6; -z\right) = \frac{20(65z^2 - 270z + 396)}{143z^5} - \frac{4e^{-z}(48z^7 + 176z^6 - 64z^5 + 60z^4 - 60z^3 - 105z^2 + 1890z + 5940)}{429z^5} - \frac{32}{429}\sqrt{\pi}(6z^{5/2} + 25z^{3/2})\operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = \frac{1}{2}$

07.25.03.9917.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{1}{2}, 1; z\right) = \frac{1}{32}e^z(126z^2 - 287z + 32) + \frac{1}{64}\sqrt{\pi}(-252z^{5/2} + 700z^{3/2} - 225\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.9918.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{1}{2}, 1; -z\right) = \frac{1}{32}e^{-z}(126z^2 + 287z + 32) + \frac{1}{64}\sqrt{\pi}(252z^{5/2} + 700z^{3/2} + 225\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.9919.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{1}{2}, 2; z\right) = \frac{1}{16} e^z (18z^2 - 61z + 16) + \frac{1}{32} \sqrt{\pi} (-36z^{5/2} + 140z^{3/2} - 75\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9920.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{1}{2}, 2; -z\right) = \frac{1}{16} e^{-z} (18z^2 + 61z + 16) + \frac{1}{32} \sqrt{\pi} (36z^{5/2} + 140z^{3/2} + 75\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9921.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{1}{2}, 3; z\right) = \frac{1}{4} e^z (2z^2 - 9z + 4) + \frac{1}{8} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.9922.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{1}{2}, 3; -z\right) = \frac{1}{4} e^{-z} (2z^2 + 9z + 4) + \frac{1}{8} \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.9923.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{1}{2}, 4; z\right) = \frac{e^z (126z^5 - 707z^4 + 452z^3 + 30z^2 - 60z + 60)}{462z^3} + \frac{1}{924} \sqrt{\pi} (-252z^{5/2} + 1540z^{3/2} - 1485\sqrt{z}) \operatorname{erfi}(\sqrt{z}) - \frac{10}{77z^3}$$

07.25.03.9924.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{1}{2}, 4; -z\right) = \frac{e^{-z} (126z^5 + 707z^4 + 452z^3 - 30z^2 - 60z - 60)}{462z^3} + \frac{1}{924} \sqrt{\pi} (252z^{5/2} + 1540z^{3/2} + 1485\sqrt{z}) \operatorname{erf}(\sqrt{z}) + \frac{10}{77z^3}$$

07.25.03.9925.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{1}{2}, 5; z\right) = -\frac{40(13z + 21)}{1001z^4} + \frac{4e^z (126z^6 - 847z^5 + 712z^4 + 90z^3 - 75z^2 - 240z + 630)}{3003z^4} - \frac{2\sqrt{\pi} (252z^{5/2} - 1820z^{3/2} + 2145\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3003}$$

07.25.03.9926.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{1}{2}, 5; -z\right) = \frac{40(13z - 21)}{1001z^4} + \frac{4e^{-z} (126z^6 + 847z^5 + 712z^4 - 90z^3 - 75z^2 + 240z + 630)}{3003z^4} + \frac{2\sqrt{\pi} (252z^{5/2} + 1820z^{3/2} + 2145\sqrt{z}) \operatorname{erf}(\sqrt{z})}{3003}$$

07.25.03.9927.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{1}{2}, 6; z\right) = -\frac{20(65z^2 + 210z + 252)}{1001z^5} + \frac{4e^z (84z^7 - 658z^6 + 688z^5 + 120z^4 - 30z^3 - 285z^2 - 630z + 3780)}{3003z^5} - \frac{4\sqrt{\pi} (84z^{5/2} - 700z^{3/2} + 975\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3003}$$

07.25.03.9928.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{1}{2}, 6; -z\right) = \frac{20(65z^2 - 210z + 252)}{1001z^5} + \frac{4e^{-z}(84z^7 + 658z^6 + 688z^5 - 120z^4 - 30z^3 + 285z^2 - 630z - 3780)}{3003z^5} + \frac{4\sqrt{\pi}(84z^{5/2} + 700z^{3/2} + 975\sqrt{z})\operatorname{erf}(\sqrt{z})}{3003}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = 1$

07.25.03.9929.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, 1; z\right) = \frac{1}{30}e^{z/2}(-63z^3 + 266z^2 - 240z + 30)I_0\left(\frac{z}{2}\right) + \frac{1}{60}e^{z/2}(126z^3 - 406z^2 + 137z)I_1\left(\frac{z}{2}\right)$$

07.25.03.9930.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, \frac{3}{2}; z\right) = \frac{1}{128}e^z(84z^2 - 308z + 113) + \frac{\sqrt{\pi}(-168z^3 + 700z^2 - 450z + 15)\operatorname{erfi}(\sqrt{z})}{256\sqrt{z}}$$

07.25.03.9931.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, \frac{3}{2}; -z\right) = \frac{1}{128}e^{-z}(84z^2 + 308z + 113) + \frac{\sqrt{\pi}(168z^3 + 700z^2 + 450z + 15)\operatorname{erf}(\sqrt{z})}{256\sqrt{z}}$$

07.25.03.9932.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, 2; z\right) = \frac{1}{60}e^{z/2}(-36z^3 + 202z^2 - 255z + 60)I_0\left(\frac{z}{2}\right) + \frac{1}{60}e^{z/2}(36z^3 - 166z^2 + 107z)I_1\left(\frac{z}{2}\right)$$

07.25.03.9933.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, \frac{5}{2}; z\right) = \frac{e^z(504z^3 - 2548z^2 + 1678z + 15)}{2048z} + \frac{\sqrt{\pi}(-1008z^4 + 5600z^3 - 5400z^2 + 360z - 15)\operatorname{erfi}(\sqrt{z})}{4096z^{3/2}}$$

07.25.03.9934.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, \frac{5}{2}; -z\right) = \frac{e^{-z}(504z^3 + 2548z^2 + 1678z - 15)}{2048z} + \frac{\sqrt{\pi}(1008z^4 + 5600z^3 + 5400z^2 + 360z + 15)\operatorname{erf}(\sqrt{z})}{4096z^{3/2}}$$

07.25.03.9935.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, 3; z\right) = \frac{1}{15}e^{z/2}(-4z^3 + 28z^2 - 45z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}z(4z^2 - 24z + 23)I_1\left(\frac{z}{2}\right)$$

07.25.03.9936.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, \frac{7}{2}; z\right) = \frac{e^z(1008z^4 - 6496z^3 + 6256z^2 + 240z - 135)}{8192z^2} + \frac{\sqrt{\pi}(-2016z^5 + 14000z^4 - 18000z^3 + 1800z^2 - 150z + 135)\operatorname{erfi}(\sqrt{z})}{16384z^{5/2}}$$

07.25.03.9937.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, \frac{7}{2}; -z\right) = \frac{e^{-z}(1008z^4 + 6496z^3 + 6256z^2 - 240z - 135)}{8192z^2} + \frac{\sqrt{\pi}(2016z^5 + 14000z^4 + 18000z^3 + 1800z^2 + 150z + 135)\operatorname{erf}(\sqrt{z})}{16384z^{5/2}}$$

07.25.03.9938.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, 4; z\right) = \frac{e^{z/2}(-504z^4 + 4228z^3 - 8220z^2 + 3435z + 60)I_0\left(\frac{z}{2}\right) + e^{z/2}(504z^5 - 3724z^4 + 4748z^3 - 45z^2 + 120z - 240)I_1\left(\frac{z}{2}\right)}{3465z + 3465z^2}$$

07.25.03.9939.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, \frac{9}{2}; z\right) = \frac{7e^z(672z^5 - 5264z^4 + 6704z^3 + 360z^2 + 210z - 1125)}{65536z^3} - \frac{7\sqrt{\pi}(1344z^6 - 11200z^5 + 18000z^4 - 2400z^3 + 300z^2 - 540z - 1125)\operatorname{erfi}(\sqrt{z})}{131072z^{7/2}}$$

07.25.03.9940.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, \frac{9}{2}; -z\right) = \frac{7e^{-z}(672z^5 + 5264z^4 + 6704z^3 - 360z^2 + 210z + 1125)}{65536z^3} + \frac{7\sqrt{\pi}(1344z^6 + 11200z^5 + 18000z^4 + 2400z^3 + 300z^2 + 540z - 1125)\operatorname{erf}(\sqrt{z})}{131072z^{7/2}}$$

07.25.03.9941.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, 5; z\right) = \frac{8e^{z/2}(504z^6 - 4424z^5 + 7048z^4 - 180z^3 + 375z^2 - 480z - 2160)I_1\left(\frac{z}{2}\right)}{45045z^3} - \frac{32e^{z/2}(126z^5 - 1232z^4 + 2805z^3 - 1380z^2 - 30z - 135)I_0\left(\frac{z}{2}\right)}{45045z^2}$$

07.25.03.9942.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, \frac{11}{2}; z\right) = \frac{21e^z(576z^6 - 5312z^5 + 8432z^4 + 480z^3 + 780z^2 - 1500z - 7875)}{262144z^4} - \frac{21\sqrt{\pi}(1152z^7 - 11200z^6 + 21600z^5 - 3600z^4 + 600z^3 - 1620z^2 - 6750z - 7875)\operatorname{erfi}(\sqrt{z})}{524288z^{9/2}}$$

07.25.03.9943.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, \frac{11}{2}; -z\right) = \frac{21e^{-z}(576z^6 + 5312z^5 + 8432z^4 - 480z^3 + 780z^2 + 1500z - 7875)}{262144z^4} + \frac{21\sqrt{\pi}(1152z^7 + 11200z^6 + 21600z^5 + 3600z^4 + 600z^3 + 1620z^2 - 6750z + 7875)\operatorname{erf}(\sqrt{z})}{524288z^{9/2}}$$

07.25.03.9944.01

$${}_2F_2\left(-\frac{5}{2}, 3; 1, 6; z\right) = \frac{8e^{z/2}(336z^7 - 3416z^6 + 6532z^5 - 300z^4 + 525z^3 - 660z^2 - 5040z - 11520)I_1\left(\frac{z}{2}\right)}{45045z^4} - \frac{8e^{z/2}(336z^6 - 3752z^5 + 9780z^4 - 5460z^3 - 75z^2 - 1260z - 2880)I_0\left(\frac{z}{2}\right)}{45045z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = \frac{3}{2}$

07.25.03.9945.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{3}{2}, 2; z\right) = \frac{1}{64} e^z (12z^2 - 64z + 49) + \frac{\sqrt{\pi} (-24z^3 + 140z^2 - 150z + 15) \operatorname{erfi}(\sqrt{z})}{128\sqrt{z}}$$

07.25.03.9946.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{3}{2}, 2; -z\right) = \frac{1}{64} e^{-z} (12z^2 + 64z + 49) + \frac{\sqrt{\pi} (24z^3 + 140z^2 + 150z + 15) \operatorname{erf}(\sqrt{z})}{128\sqrt{z}}$$

07.25.03.9947.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{3}{2}, 3; z\right) = \frac{1}{48} e^z (4z^2 - 28z + 33) + \frac{\sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.9948.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{3}{2}, 3; -z\right) = \frac{1}{48} e^{-z} (4z^2 + 28z + 33) + \frac{\sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.9949.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{3}{2}, 4; z\right) = \frac{e^z (84z^5 - 728z^4 + 1163z^3 - 24z^2 + 48z - 48)}{1848z^3} + \frac{\sqrt{\pi} (-168z^3 + 1540z^2 - 2970z + 693) \operatorname{erfi}(\sqrt{z})}{3696\sqrt{z}} + \frac{2}{77z^3}$$

07.25.03.9950.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{3}{2}, 4; -z\right) = \frac{e^{-z} (84z^5 + 728z^4 + 1163z^3 + 24z^2 + 48z + 48)}{1848z^3} + \frac{\sqrt{\pi} (168z^3 + 1540z^2 + 2970z + 693) \operatorname{erf}(\sqrt{z})}{3696\sqrt{z}} - \frac{2}{77z^3}$$

07.25.03.9951.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{3}{2}, 5; z\right) = \frac{8(13z + 15)}{1001z^4} + \frac{e^z (84z^6 - 868z^5 + 1753z^4 - 96z^3 + 132z^2 + 48z - 360)}{3003z^4} + \frac{\sqrt{\pi} (-168z^3 + 1820z^2 - 4290z + 1287) \operatorname{erfi}(\sqrt{z})}{6006\sqrt{z}}$$

07.25.03.9952.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{3}{2}, 5; -z\right) = -\frac{8(13z - 15)}{1001z^4} + \frac{e^{-z} (84z^6 + 868z^5 + 1753z^4 + 96z^3 + 132z^2 - 48z - 360)}{3003z^4} + \frac{\sqrt{\pi} (168z^3 + 1820z^2 + 4290z + 1287) \operatorname{erf}(\sqrt{z})}{6006\sqrt{z}}$$

07.25.03.9953.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{3}{2}, 6; z\right) = \frac{20(13z^2 + 30z + 28)}{1001z^5} + \frac{2e^z(28z^7 - 336z^6 + 821z^5 - 80z^4 + 80z^3 + 90z^2 - 60z - 840)}{3003z^5} + \frac{\sqrt{\pi}(-56z^3 + 700z^2 - 1950z + 715)\operatorname{erfi}(\sqrt{z})}{3003\sqrt{z}}$$

07.25.03.9954.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{3}{2}, 6; -z\right) = -\frac{20(13z^2 - 30z + 28)}{1001z^5} + \frac{2e^{-z}(28z^7 + 336z^6 + 821z^5 + 80z^4 + 80z^3 - 90z^2 - 60z + 840)}{3003z^5} + \frac{\sqrt{\pi}(56z^3 + 700z^2 + 1950z + 715)\operatorname{erf}(\sqrt{z})}{3003\sqrt{z}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = 2$

07.25.03.9955.01

$${}_2F_2\left(-\frac{5}{2}, 3; 2, 2; z\right) = \frac{1}{210}e^{z/2}(-36z^3 + 272z^2 - 495z + 210)I_0\left(\frac{z}{2}\right) + \frac{1}{210}e^{z/2}(36z^3 - 236z^2 + 277z - 15)I_1\left(\frac{z}{2}\right)$$

07.25.03.9956.01

$${}_2F_2\left(-\frac{5}{2}, 3; 2, \frac{5}{2}; z\right) = \frac{e^z(72z^3 - 524z^2 + 674z - 15)}{1024z} + \frac{\sqrt{\pi}(-144z^4 + 1120z^3 - 1800z^2 + 360z + 15)\operatorname{erfi}(\sqrt{z})}{2048z^{3/2}}$$

07.25.03.9957.01

$${}_2F_2\left(-\frac{5}{2}, 3; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(72z^3 + 524z^2 + 674z + 15)}{1024z} + \frac{\sqrt{\pi}(144z^4 + 1120z^3 + 1800z^2 + 360z - 15)\operatorname{erf}(\sqrt{z})}{2048z^{3/2}}$$

07.25.03.9958.01

$${}_2F_2\left(-\frac{5}{2}, 3; 2, 3; z\right) = \frac{1}{105}e^{z/2}(-8z^3 + 76z^2 - 180z + 105)I_0\left(\frac{z}{2}\right) + \frac{1}{105}e^{z/2}(8z^3 - 68z^2 + 116z - 15)I_1\left(\frac{z}{2}\right)$$

07.25.03.9959.01

$${}_2F_2\left(-\frac{5}{2}, 3; 2, \frac{7}{2}; z\right) = \frac{e^z(144z^4 - 1328z^3 + 2408z^2 - 180z + 45)}{4096z^2} + \frac{\sqrt{\pi}(-288z^5 + 2800z^4 - 6000z^3 + 1800z^2 + 150z - 45)\operatorname{erfi}(\sqrt{z})}{8192z^{5/2}}$$

07.25.03.9960.01

$${}_2F_2\left(-\frac{5}{2}, 3; 2, \frac{7}{2}; -z\right) = \frac{e^{-z}(144z^4 + 1328z^3 + 2408z^2 + 180z + 45)}{4096z^2} + \frac{\sqrt{\pi}(288z^5 + 2800z^4 + 6000z^3 + 1800z^2 - 150z - 45)\operatorname{erf}(\sqrt{z})}{8192z^{5/2}}$$

07.25.03.9961.01

$${}_2F_2\left(-\frac{5}{2}, 3; 2, 4; z\right) = \frac{4 e^{z/2} (36 z^5 - 376 z^4 + 842 z^3 - 180 z^2 - 15 z + 30) I_1\left(\frac{z}{2}\right) - 2 e^{z/2} (72 z^4 - 824 z^3 + 2400 z^2 - 1740 z + 15) I_0\left(\frac{z}{2}\right)}{3465 z^2 - 3465 z}$$

07.25.03.9962.01

$${}_2F_2\left(-\frac{5}{2}, 3; 2, \frac{9}{2}; z\right) = \frac{7 e^z (96 z^5 - 1072 z^4 + 2512 z^3 - 360 z^2 + 30 z + 225)}{32768 z^3} - \frac{7 \sqrt{\pi} (192 z^6 - 2240 z^5 + 6000 z^4 - 2400 z^3 - 300 z^2 + 180 z + 225) \operatorname{erfi}(\sqrt{z})}{65536 z^{7/2}}$$

07.25.03.9963.01

$${}_2F_2\left(-\frac{5}{2}, 3; 2, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (96 z^5 + 1072 z^4 + 2512 z^3 + 360 z^2 + 30 z - 225)}{32768 z^3} + \frac{7 \sqrt{\pi} (192 z^6 + 2240 z^5 + 6000 z^4 + 2400 z^3 - 300 z^2 - 180 z + 225) \operatorname{erf}(\sqrt{z})}{65536 z^{7/2}}$$

07.25.03.9964.01

$${}_2F_2\left(-\frac{5}{2}, 3; 2, 5; z\right) = \frac{8 e^{z/2} (144 z^6 - 1784 z^5 + 4948 z^4 - 1500 z^3 - 255 z^2 + 420 z + 720) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (144 z^5 - 1928 z^4 + 6660 z^3 - 5700 z^2 + 105 z + 180) I_0\left(\frac{z}{2}\right)}{45045 z^3 - 45045 z^2}$$

07.25.03.9965.01

$${}_2F_2\left(-\frac{5}{2}, 3; 2, \frac{11}{2}; z\right) = \frac{3 e^z (576 z^6 - 7552 z^5 + 21712 z^4 - 4800 z^3 - 420 z^2 + 4200 z + 7875)}{131072 z^4} - \frac{3 \sqrt{\pi} (1152 z^7 - 15680 z^6 + 50400 z^5 - 25200 z^4 - 4200 z^3 + 3780 z^2 + 9450 z + 7875) \operatorname{erfi}(\sqrt{z})}{262144 z^{9/2}}$$

07.25.03.9966.01

$${}_2F_2\left(-\frac{5}{2}, 3; 2, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (576 z^6 + 7552 z^5 + 21712 z^4 + 4800 z^3 - 420 z^2 - 4200 z + 7875)}{131072 z^4} + \frac{3 \sqrt{\pi} (1152 z^7 + 15680 z^6 + 50400 z^5 + 25200 z^4 - 4200 z^3 - 3780 z^2 + 9450 z - 7875) \operatorname{erf}(\sqrt{z})}{262144 z^{9/2}}$$

07.25.03.9967.01

$${}_2F_2\left(-\frac{5}{2}, 3; 2, 6; z\right) = \frac{16 e^{z/2} (48 z^7 - 688 z^6 + 2276 z^5 - 900 z^4 - 225 z^3 + 345 z^2 + 1080 z + 1440) I_1\left(\frac{z}{2}\right) - 16 e^{z/2} (48 z^6 - 736 z^5 + 2940 z^4 - 2880 z^3 + 75 z^2 + 270 z + 360) I_0\left(\frac{z}{2}\right)}{45045 z^3 - 45045 z^2}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = \frac{5}{2}$

07.25.03.9968.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{5}{2}, 3; z\right) = \frac{e^z (8z^3 - 76z^2 + 146z - 15)}{256z} + \frac{\sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.9969.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (8z^3 + 76z^2 + 146z + 15)}{256z} + \frac{\sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.9970.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{5}{2}, 4; z\right) = \frac{e^z (504z^5 - 5908z^4 + 15118z^3 - 3081z^2 - 768z + 768)}{29568z^3} + \frac{\sqrt{\pi} (-1008z^4 + 12320z^3 - 35640z^2 + 16632z + 3465) \operatorname{erfi}(\sqrt{z})}{59136z^{3/2}} - \frac{2}{77z^3}$$

07.25.03.9971.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{5}{2}, 4; -z\right) = \frac{e^{-z} (504z^5 + 5908z^4 + 15118z^3 + 3081z^2 - 768z - 768)}{29568z^3} + \frac{\sqrt{\pi} (1008z^4 + 12320z^3 + 35640z^2 + 16632z - 3465) \operatorname{erf}(\sqrt{z})}{59136z^{3/2}} + \frac{2}{77z^3}$$

07.25.03.9972.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{5}{2}, 5; z\right) = -\frac{8(13z + 9)}{1001z^4} + \frac{e^z (504z^6 - 7028z^5 + 22478z^4 - 7089z^3 - 3264z^2 + 1536z + 3456)}{48048z^4} + \frac{\sqrt{\pi} (-1008z^4 + 14560z^3 - 51480z^2 + 30888z + 9009) \operatorname{erfi}(\sqrt{z})}{96096z^{3/2}}$$

07.25.03.9973.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{5}{2}, 5; -z\right) = \frac{8(13z - 9)}{1001z^4} + \frac{e^{-z} (504z^6 + 7028z^5 + 22478z^4 + 7089z^3 - 3264z^2 - 1536z + 3456)}{48048z^4} + \frac{\sqrt{\pi} (1008z^4 + 14560z^3 + 51480z^2 + 30888z - 9009) \operatorname{erf}(\sqrt{z})}{96096z^{3/2}}$$

07.25.03.9974.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{5}{2}, 6; z\right) = -\frac{20(13z^2 + 18z + 12)}{1001z^5} + \frac{e^z (168z^7 - 2716z^6 + 10426z^5 - 4515z^4 - 2880z^3 + 480z^2 + 2880z + 5760)}{24024z^5} + \frac{\sqrt{\pi} (-336z^4 + 5600z^3 - 23400z^2 + 17160z + 6435) \operatorname{erfi}(\sqrt{z})}{48048z^{3/2}}$$

$$\begin{aligned}
 & \text{07.25.03.9975.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 3; \frac{5}{2}, 6; -z\right) = \\
 & \frac{20(13z^2 - 18z + 12)}{1001z^5} + \frac{e^{-z}(168z^7 + 2716z^6 + 10426z^5 + 4515z^4 - 2880z^3 - 480z^2 + 2880z - 5760)}{24024z^5} + \\
 & \frac{\sqrt{\pi}(336z^4 + 5600z^3 + 23400z^2 + 17160z - 6435)\operatorname{erf}(\sqrt{z})}{48048z^{3/2}}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = 3$

$$\begin{aligned}
 & \text{07.25.03.9976.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 3; 3, 3; z\right) = \frac{4e^{z/2}(8z^4 - 88z^3 + 216z^2 - 60z - 15)I_1\left(\frac{z}{2}\right)}{945z} - \frac{16}{945}e^{z/2}(2z^3 - 24z^2 + 75z - 60)I_0\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9977.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 3; 3, \frac{7}{2}; z\right) = \\
 & \frac{e^z(16z^4 - 192z^3 + 512z^2 - 120z - 45)}{1024z^2} + \frac{\sqrt{\pi}(-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45)\operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9978.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 3; 3, \frac{7}{2}; -z\right) = \\
 & \frac{e^{-z}(16z^4 + 192z^3 + 512z^2 + 120z - 45)}{1024z^2} + \frac{\sqrt{\pi}(32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45)\operatorname{erf}(\sqrt{z})}{2048z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9979.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 3; 3, 4; z\right) = \\
 & \frac{4e^{z/2}(16z^5 - 216z^4 + 692z^3 - 300z^2 - 135z - 60)I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4e^{z/2}(16z^4 - 232z^3 + 900z^2 - 900z - 15)I_0\left(\frac{z}{2}\right)}{3465z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9980.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 3; 3, \frac{9}{2}; z\right) = \frac{7e^z(32z^5 - 464z^4 + 1584z^3 - 600z^2 - 390z - 225)}{24576z^3} - \\
 & \frac{7\sqrt{\pi}(64z^6 - 960z^5 + 3600z^4 - 2400z^3 - 900z^2 - 540z - 225)\operatorname{erfi}(\sqrt{z})}{49152z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.9981.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 3; 3, \frac{9}{2}; -z\right) = \frac{7e^{-z}(32z^5 + 464z^4 + 1584z^3 + 600z^2 - 390z + 225)}{24576z^3} + \\
 & \frac{7\sqrt{\pi}(64z^6 + 960z^5 + 3600z^4 + 2400z^3 - 900z^2 + 540z - 225)\operatorname{erf}(\sqrt{z})}{49152z^{7/2}}
 \end{aligned}$$

07.25.03.9982.01

$${}_2F_2\left(-\frac{5}{2}, 3; 3, 5; z\right) = \frac{32 e^{z/2} (16 z^6 - 256 z^5 + 1012 z^4 - 600 z^3 - 375 z^2 - 300 z - 180) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (16 z^5 - 272 z^4 + 1260 z^3 - 1500 z^2 - 75 z - 45) I_0\left(\frac{z}{2}\right)}{45 045 z^3} - \frac{32 e^{z/2} (16 z^5 - 272 z^4 + 1260 z^3 - 1500 z^2 - 75 z - 45) I_0\left(\frac{z}{2}\right)}{45 045 z^2}$$

07.25.03.9983.01

$${}_2F_2\left(-\frac{5}{2}, 3; 3, \frac{11}{2}; z\right) = \frac{3 e^{z^2} (64 z^6 - 1088 z^5 + 4528 z^4 - 2400 z^3 - 2100 z^2 - 2100 z - 1575)}{32 768 z^4} - \frac{3 \sqrt{\pi} (128 z^7 - 2240 z^6 + 10 080 z^5 - 8400 z^4 - 4200 z^3 - 3780 z^2 - 3150 z - 1575) \operatorname{erfi}(\sqrt{z})}{65 536 z^{9/2}}$$

07.25.03.9984.01

$${}_2F_2\left(-\frac{5}{2}, 3; 3, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 + 1088 z^5 + 4528 z^4 + 2400 z^3 - 2100 z^2 + 2100 z - 1575)}{32 768 z^4} + \frac{3 \sqrt{\pi} (128 z^7 + 2240 z^6 + 10 080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575) \operatorname{erf}(\sqrt{z})}{65 536 z^{9/2}}$$

07.25.03.9985.01

$${}_2F_2\left(-\frac{5}{2}, 3; 3, 6; z\right) = \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135 135 z^4} - \frac{32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135 135 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = \frac{7}{2}$

07.25.03.9986.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{7}{2}, 4; z\right) = \frac{e^z (1008 z^5 - 14 896 z^4 + 52 456 z^3 - 21 540 z^2 - 15 825 z - 15 360)}{118 272 z^3} + \frac{\sqrt{\pi} (-2016 z^5 + 30 800 z^4 - 118 800 z^3 + 83 160 z^2 + 34 650 z + 31 185) \operatorname{erfi}(\sqrt{z})}{236 544 z^{5/2}} + \frac{10}{77 z^3}$$

07.25.03.9987.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{7}{2}, 4; -z\right) = \frac{e^{-z} (1008 z^5 + 14 896 z^4 + 52 456 z^3 + 21 540 z^2 - 15 825 z + 15 360)}{118 272 z^3} + \frac{\sqrt{\pi} (2016 z^5 + 30 800 z^4 + 118 800 z^3 + 83 160 z^2 - 34 650 z + 31 185) \operatorname{erf}(\sqrt{z})}{236 544 z^{5/2}} - \frac{10}{77 z^3}$$

07.25.03.9988.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{7}{2}, 5; z\right) = \frac{40(13z+3)}{1001z^4} + \frac{e^z(1008z^6 - 17696z^5 + 77456z^4 - 46080z^3 - 46815z^2 - 76800z - 23040)}{192192z^4} + \frac{\sqrt{\pi}(-2016z^5 + 36400z^4 - 171600z^3 + 154440z^2 + 90090z + 135135)\operatorname{erfi}(\sqrt{z})}{384384z^{5/2}}$$

07.25.03.9989.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{7}{2}, 5; -z\right) = -\frac{40(13z-3)}{1001z^4} + \frac{e^{-z}(1008z^6 + 17696z^5 + 77456z^4 + 46080z^3 - 46815z^2 + 76800z - 23040)}{192192z^4} + \frac{\sqrt{\pi}(2016z^5 + 36400z^4 + 171600z^3 + 154440z^2 - 90090z + 135135)\operatorname{erf}(\sqrt{z})}{384384z^{5/2}}$$

07.25.03.9990.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{7}{2}, 6; z\right) = \frac{20(65z^2 + 30z + 12)}{1001z^5} + \frac{e^z(336z^7 - 6832z^6 + 35752z^5 - 28020z^4 - 35295z^3 - 78720z^2 - 34560z - 23040)}{96096z^5} + \frac{\sqrt{\pi}(-672z^5 + 14000z^4 - 78000z^3 + 85800z^2 + 64350z + 135135)\operatorname{erfi}(\sqrt{z})}{192192z^{5/2}}$$

07.25.03.9991.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{7}{2}, 6; -z\right) = -\frac{20(65z^2 - 30z + 12)}{1001z^5} + \frac{e^{-z}(336z^7 + 6832z^6 + 35752z^5 + 28020z^4 - 35295z^3 + 78720z^2 - 34560z + 23040)}{96096z^5} + \frac{\sqrt{\pi}(672z^5 + 14000z^4 + 78000z^3 + 85800z^2 - 64350z + 135135)\operatorname{erf}(\sqrt{z})}{192192z^{5/2}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = 4$

07.25.03.9992.01

$${}_2F_2\left(-\frac{5}{2}, 3; 4, 4; z\right) = -\frac{8e^{z/2}(1008z^6 - 17696z^5 + 85740z^4 - 108048z^3 - 9129z^2 - 20790z + 41580)I_0\left(\frac{z}{2}\right)}{800415z^3} + \frac{8e^{z/2}(1008z^5 - 16688z^4 + 69556z^3 - 45828z^2 - 33717z - 46911)I_1\left(\frac{z}{2}\right)}{800415z^2} + \frac{32}{77z^3}$$

07.25.03.9993.01

$${}_2F_2\left(-\frac{5}{2}, 3; 4, \frac{9}{2}; z\right) = \frac{e^z(672z^5 - 11984z^4 + 53744z^3 - 33720z^2 - 36510z - 70905)}{135168z^3} + \frac{\sqrt{\pi}(-1344z^6 + 24640z^5 - 118800z^4 + 110880z^3 + 69300z^2 + 124740z - 51975)\operatorname{erfi}(\sqrt{z})}{270336z^{7/2}} + \frac{10}{11z^3}$$

07.25.03.9994.01

$${}_2F_2\left(-\frac{5}{2}, 3; 4, \frac{9}{2}; -z\right) = \frac{e^{-z} (672 z^5 + 11984 z^4 + 53744 z^3 + 33720 z^2 - 36510 z + 70905)}{135168 z^3} + \frac{\sqrt{\pi} (1344 z^6 + 24640 z^5 + 118800 z^4 + 110880 z^3 - 69300 z^2 + 124740 z + 51975) \operatorname{erf}(\sqrt{z})}{270336 z^{7/2}} - \frac{10}{11 z^3}$$

07.25.03.9995.01

$${}_2F_2\left(-\frac{5}{2}, 3; 4, 5; z\right) = -\frac{32 e^{z/2} (2016 z^6 - 41552 z^5 + 241440 z^4 - 365124 z^3 - 66702 z^2 - 239085 z + 540540) I_0\left(\frac{z}{2}\right)}{10405395 z^3} + \frac{32 e^{z/2} (2016 z^6 - 39536 z^5 + 202912 z^4 - 179964 z^3 - 178446 z^2 - 401943 z + 124740) I_1\left(\frac{z}{2}\right)}{10405395 z^3} + \frac{128}{77 z^3}$$

07.25.03.9996.01

$${}_2F_2\left(-\frac{5}{2}, 3; 4, \frac{11}{2}; z\right) = \frac{e^z (576 z^6 - 12032 z^5 + 65552 z^4 - 55680 z^3 - 76740 z^2 - 214320 z + 51975)}{180224 z^4} + \frac{1}{360448 z^{9/2}} + \frac{\sqrt{\pi} (-1152 z^7 + 24640 z^6 - 142560 z^5 + 166320 z^4 + 138600 z^3 + 374220 z^2 - 311850 z - 51975) \operatorname{erfi}(\sqrt{z})}{11 z^3} + \frac{30}{11 z^3}$$

07.25.03.9997.01

$${}_2F_2\left(-\frac{5}{2}, 3; 4, \frac{11}{2}; -z\right) = \frac{e^{-z} (576 z^6 + 12032 z^5 + 65552 z^4 + 55680 z^3 - 76740 z^2 + 214320 z + 51975)}{180224 z^4} + \frac{1}{360448 z^{9/2}} + \frac{\sqrt{\pi} (1152 z^7 + 24640 z^6 + 142560 z^5 + 166320 z^4 - 138600 z^3 + 374220 z^2 + 311850 z - 51975) \operatorname{erf}(\sqrt{z})}{11 z^3} - \frac{30}{11 z^3}$$

07.25.03.9998.01

$${}_2F_2\left(-\frac{5}{2}, 3; 4, 6; z\right) = -\frac{64 e^{z/2} (672 z^6 - 15904 z^5 + 107760 z^4 - 189600 z^3 - 57390 z^2 - 270270 z + 696465) I_0\left(\frac{z}{2}\right)}{10405395 z^3} + \frac{1}{10405395 z^4} - \frac{128 e^{z/2} (336 z^7 - 7616 z^6 + 46432 z^5 - 51840 z^4 - 63885 z^3 - 197940 z^2 + 135135 z + 41580) I_1\left(\frac{z}{2}\right)}{10405395 z^4} + \frac{320}{77 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = \frac{9}{2}$

07.25.03.9999.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{9}{2}, 5; z\right) = \frac{40 (13 z - 3)}{143 z^4} + \frac{e^z (672 z^6 - 14224 z^5 + 79024 z^4 - 69720 z^3 - 100110 z^2 - 307365 z + 184320)}{219648 z^4} + \frac{\sqrt{\pi} (-1344 z^6 + 29120 z^5 - 171600 z^4 + 205920 z^3 + 180180 z^2 + 540540 z - 675675) \operatorname{erfi}(\sqrt{z})}{439296 z^{7/2}}$$

07.25.03.a7ps.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{9}{2}, 5; -z\right) = -\frac{40 (13 z + 3)}{143 z^4} + \frac{e^{-z} (672 z^6 + 14224 z^5 + 79024 z^4 + 69720 z^3 - 100110 z^2 + 307365 z + 184320)}{219648 z^4} + \frac{\sqrt{\pi} (1344 z^6 + 29120 z^5 + 171600 z^4 + 205920 z^3 - 180180 z^2 + 540540 z + 675675) \operatorname{erf}(\sqrt{z})}{439296 z^{7/2}}$$

07.25.03.a7pt.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{9}{2}, 6; z\right) = \frac{20(65z^2 - 30z - 4)}{143z^5} + \frac{e^z(224z^7 - 5488z^6 + 36368z^5 - 41480z^4 - 72730z^3 - 302355z^2 + 399360z + 61440)}{109824z^5} + \frac{\sqrt{\pi}(-448z^6 + 11200z^5 - 78000z^4 + 114400z^3 + 128700z^2 + 540540z - 1126125)\operatorname{erfi}(\sqrt{z})}{219648z^{7/2}}$$

07.25.03.a7pu.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{9}{2}, 6; -z\right) = -\frac{20(65z^2 + 30z - 4)}{143z^5} + \frac{e^{-z}(224z^7 + 5488z^6 + 36368z^5 + 41480z^4 - 72730z^3 + 302355z^2 + 399360z - 61440)}{109824z^5} + \frac{\sqrt{\pi}(448z^6 + 11200z^5 + 78000z^4 + 114400z^3 - 128700z^2 + 540540z + 1126125)\operatorname{erf}(\sqrt{z})}{219648z^{7/2}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = 5$

07.25.03.a7pv.01

$${}_2F_2\left(-\frac{5}{2}, 3; 5, 5; z\right) = \frac{512(13z - 6)}{1001z^4} - \frac{1}{135270135z^4} + \frac{512e^{z/2}(1008z^7 - 24416z^6 + 170640z^5 - 311808z^4 - 110883z^3 - 617202z^2 + 2162160z - 810810)I_0\left(\frac{z}{2}\right) + \frac{1}{135270135z^3}256e^{z/2}(2016z^6 - 46816z^5 + 295472z^4 - 349536z^3 - 464082z^2 - 1697874z + 2494809)I_1\left(\frac{z}{2}\right)}{135270135z^3}$$

07.25.03.a7pw.01

$${}_2F_2\left(-\frac{5}{2}, 3; 5, \frac{11}{2}; z\right) = \frac{120(13z - 9)}{143z^4} + \frac{e^z(576z^6 - 14272z^5 + 96112z^4 - 112800z^3 - 203700z^2 - 902220z + 1536165)}{292864z^4} + \frac{1}{585728z^{9/2}} + \frac{\sqrt{\pi}(-1152z^7 + 29120z^6 - 205920z^5 + 308880z^4 + 360360z^3 + 1621620z^2 - 4054050z + 675675)\operatorname{erfi}(\sqrt{z})}{219648z^{7/2}}$$

07.25.03.a7px.01

$${}_2F_2\left(-\frac{5}{2}, 3; 5, \frac{11}{2}; -z\right) = -\frac{120(13z + 9)}{143z^4} + \frac{e^{-z}(576z^6 + 14272z^5 + 96112z^4 + 112800z^3 - 203700z^2 + 902220z + 1536165)}{292864z^4} + \frac{1}{585728z^{9/2}} + \frac{\sqrt{\pi}(1152z^7 + 29120z^6 + 205920z^5 + 308880z^4 - 360360z^3 + 1621620z^2 + 4054050z + 675675)\operatorname{erf}(\sqrt{z})}{219648z^{7/2}}$$

07.25.03.a7py.01

$${}_2F_2\left(-\frac{5}{2}, 3; 5, 6; z\right) = \frac{1280(13z-12)}{1001z^4} - \frac{1}{135270135z^4}$$

$$256e^{z/2}(1344z^7 - 37408z^6 + 305520z^5 - 653280z^4 - 362760z^3 - 2658510z^2 + 12567555z - 8108100)$$

$$I_0\left(\frac{z}{2}\right) + \frac{1}{135270135z^4}$$

$$256e^{z/2}(1344z^7 - 36064z^6 + 270128z^5 - 399840z^4 - 659400z^3 - 3342930z^2 + 8960535z - 1081080)I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = \frac{11}{2}$

07.25.03.a7pz.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{11}{2}, 6; z\right) = \frac{60(65z^2 - 90z + 12)}{143z^5} +$$

$$\frac{e^z(192z^7 - 5504z^6 + 44144z^5 - 66240z^4 - 145740z^3 - 882840z^2 + 2888505z - 737280)}{146432z^5} + \frac{1}{292864z^{9/2}}$$

$$\sqrt{\pi}(-384z^7 + 11200z^6 - 93600z^5 + 171600z^4 + 257400z^3 + 1621620z^2 - 6756750z + 3378375)\operatorname{erfi}(\sqrt{z})$$

07.25.03.a7q0.01

$${}_2F_2\left(-\frac{5}{2}, 3; \frac{11}{2}, 6; -z\right) =$$

$$-\frac{60(65z^2 + 90z + 12)}{143z^5} + \frac{e^{-z}(192z^7 + 5504z^6 + 44144z^5 + 66240z^4 - 145740z^3 + 882840z^2 + 2888505z + 737280)}{146432z^5} +$$

$$\frac{1}{292864z^{9/2}}\sqrt{\pi}(384z^7 + 11200z^6 + 93600z^5 + 171600z^4 - 257400z^3 + 1621620z^2 + 6756750z + 3378375)\operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 3$, $b_1 = 6$

07.25.03.a7q1.01

$${}_2F_2\left(-\frac{5}{2}, 3; 6, 6; z\right) =$$

$$\frac{640(65z^2 - 120z + 32)}{1001z^5} - \frac{1}{135270135z^5}\left(512e^{z/2}(448z^8 - 14336z^7 + 137040z^6 - 344480z^5 - 288600z^4 -$$

$$2802720z^3 + 19114665z^2 - 22972950z + 5405400)I_0\left(\frac{z}{2}\right) + \frac{1}{135270135z^4}$$

$$512e^{z/2}(448z^7 - 13888z^6 + 123376z^5 - 227600z^4 - 467000z^3 - 3297720z^2 + 15590895z - 9352065)I_1\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.a7q2.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & -\frac{1}{108056025} \left(e^z (4096 z^{12} + 159744 z^{11} + 2101248 z^{10} + 11160576 z^9 + 22498560 z^8 + 13063680 z^7 + \right. \\
 & \quad \left. 3265920 z^5 - 12655440 z^4 + 39236400 z^3 - 90493200 z^2 + 139311900 z - 108056025) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a7q3.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & \frac{1}{9823275} \left(e^z (2048 z^{11} + 68608 z^{10} + 741888 z^9 + 2983680 z^8 + 3790080 z^7 + 846720 z^6 - 423360 z^5 + \right. \\
 & \quad \left. 1421280 z^4 - 4195800 z^3 + 9128700 z^2 - 13296150 z + 9823275) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a7q4.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & -\frac{1}{1091475} \left(e^z (1024 z^{10} + 28672 z^9 + 241920 z^8 + 645120 z^7 + 282240 z^6 - 211680 z^4 + 604800 z^3 - \right. \\
 & \quad \left. 1190700 z^2 + 1587600 z - 1091475) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a7q5.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{155925} e^z (512 z^9 + 11520 z^8 + 69120 z^7 + 80640 z^6 - 60480 z^5 + 90720 z^4 - 151200 z^3 + 226800 z^2 - 255150 z + 155925)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a7q6.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = -\frac{e^z (256 z^8 + 4352 z^7 + 14976 z^6 - 12096 z^5 + 45360 z^3 - 98280 z^2 + 64260 z - 31185)}{31185}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a7q7.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 1472 z^6 + 864 z^5 - 9072 z^4 + 22680 z^3 - 11340 z^2 - 43470 z + 10395)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a7q8.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = -\frac{e^z (64 z^6 + 384 z^5 - 1296 z^4 + 11340 z^2 - 22680 z - 10395)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a7q9.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (-32 z^6 - 128 z^5 + 720 z^4 - 792 z^3 - 4506 z^2 + 11340 z + 10395) I_0\left(\frac{z}{2}\right)}{10395} - \\
 & \quad \frac{2 e^{z/2} (16 z^6 + 48 z^5 - 400 z^4 + 804 z^3 + 1251 z^2 - 6177 z) I_1\left(\frac{z}{2}\right)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a7qa.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{e^z (32 z^5 + 16 z^4 - 720 z^3 + 2520 z^2 - 630 z - 10395)}{10395}
 \end{aligned}$$

07.25.03.a7qb.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2}(-32z^5 + 48z^4 + 528z^3 - 2724z^2 + 2106z + 10395)I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2}(-32z^5 + 80z^4 + 432z^3 - 3084z^2 + 5226z + 3861)I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.a7qc.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = -\frac{e^z(16z^4 - 80z^3 + 1260z - 3465)}{3465}$$

07.25.03.a7qd.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, 3; z\right) = \frac{4e^{z/2}(16z^4 - 112z^3 + 228z^2 + 672z - 3135)I_0\left(\frac{z}{2}\right)}{10395} - \frac{4e^{z/2}(16z^5 - 128z^4 + 364z^3 + 228z^2 - 3003z + 2145)I_1\left(\frac{z}{2}\right)}{10395z}$$

07.25.03.a7qe.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{1}{693}e^z(8z^3 - 84z^2 + 378z - 693)$$

07.25.03.a7qf.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2}(16z^4 - 200z^3 + 1116z^2 - 3060z + 3315)I_0\left(\frac{z}{2}\right)}{3465z} - \frac{4e^{z/2}(16z^5 - 216z^4 + 1340z^3 - 4524z^2 + 8775z - 13260)I_1\left(\frac{z}{2}\right)}{3465z^2}$$

07.25.03.a7qg.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z(-4z^5 + 64z^4 - 477z^3 + 2016z^2 - 5040z + 7560)}{99z^3} - \frac{420\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{11z^{7/2}}$$

07.25.03.a7qh.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(-4z^5 - 64z^4 - 477z^3 - 2016z^2 - 5040z - 7560)}{99z^3} + \frac{420\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{11z^{7/2}}$$

07.25.03.a7qi.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2}(8z^4 - 144z^3 + 1200z^2 - 5610z + 14535)I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{64e^{z/2}(4z^5 - 76z^4 + 678z^3 - 3525z^2 + 11220z - 29070)I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.a7qj.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z(-2z^5 + 43z^4 - 432z^3 + 2520z^2 - 8820z + 18900)}{11z^4} - \frac{1890\sqrt{\pi}(z+5)\operatorname{erfi}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.a7qk.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z}(2z^5 + 43z^4 + 432z^3 + 2520z^2 + 8820z + 18900)}{11z^4} + \frac{1890\sqrt{\pi}(z-5)\operatorname{erf}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.a7ql.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, 6; z\right) = -\frac{32 e^{z/2} (8 z^4 - 188 z^3 + 2040 z^2 - 12597 z + 54264) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (8 z^5 - 196 z^4 + 2240 z^3 - 14943 z^2 + 50388 z - 217056) I_1\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.a7qm.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{1}{893025} (e^z (1024 z^{10} + 29696 z^9 + 267008 z^8 + 824320 z^7 + 658560 z^6 + 94080 z^5 - 164640 z^4 + 463680 z^3 - 938700 z^2 + 1278900 z - 893025))$$

07.25.03.a7qn.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{99225} e^z (512 z^9 + 12544 z^8 + 89600 z^7 + 188160 z^6 + 47040 z^5 + 23520 z^4 - 70560 z^3 + 126000 z^2 - 154350 z + 99225)$$

07.25.03.a7qo.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{1}{14175} e^z (256 z^8 + 5120 z^7 + 26880 z^6 + 26880 z^5 - 16800 z^4 + 20160 z^3 - 25200 z^2 + 25200 z - 14175)$$

07.25.03.a7qp.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 1984 z^6 + 6496 z^5 - 2800 z^4 - 4200 z^3 + 12180 z^2 - 6510 z + 2835)}{2835}$$

07.25.03.a7qq.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 704 z^5 + 784 z^4 - 3360 z^3 + 2940 z^2 + 4620 z - 945)$$

07.25.03.a7qr.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 208 z^4 - 336 z^3 - 840 z^2 + 2730 z + 945)$$

07.25.03.a7qs.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (16 z^5 + 80 z^4 - 212 z^3 - 276 z^2 + 1365 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^5 + 64 z^4 - 268 z^3 + 8 z^2 + 1209 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7qt.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (16 z^4 + 32 z^3 - 280 z^2 + 280 z + 945)$$

07.25.03.a7qu.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (16z^4 + 8z^3 - 252z^2 + 372z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^4 - 8z^3 - 236z^2 + 588z + 297) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7qv.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (8z^3 - 20z^2 - 70z + 315)$$

07.25.03.a7qw.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, 3; z\right) = \frac{16}{945} e^{z/2} (2z^3 - 8z^2 - 5z + 68) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8z^4 - 40z^3 + 24z^2 + 220z - 143) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.a7qx.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (4z^2 - 28z + 63)$$

07.25.03.a7qy.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 - 68z^2 + 212z - 195) I_0\left(\frac{z}{2}\right)}{315z} + \frac{4 e^{z/2} (8z^4 - 76z^3 + 292z^2 - 533z + 780) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.a7qz.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (2z^4 - 23z^3 + 112z^2 - 280z + 420)}{9z^3} - \frac{70\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{3z^{7/2}}$$

07.25.03.a7r0.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-2z^4 - 23z^3 - 112z^2 - 280z - 420)}{9z^3} + \frac{70\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{3z^{7/2}}$$

07.25.03.a7r1.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^3 - 52z^2 + 285z - 765) I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{32 e^{z/2} (4z^4 - 56z^3 + 343z^2 - 1140z + 3060) I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.a7r2.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (z^4 - 16z^3 + 112z^2 - 420z + 945)}{z^4} - \frac{105\sqrt{\pi} (2z + 9) \operatorname{erfi}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.a7r3.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (z^4 + 16z^3 + 112z^2 + 420z + 945)}{z^4} + \frac{105\sqrt{\pi} (2z - 9) \operatorname{erf}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.a7r4.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 - 70z^2 + 527z - 2584) I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{32 e^{z/2} (4z^4 - 74z^3 + 603z^2 - 2108z + 10336) I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.a7r5.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = -\frac{e^z (256 z^8 + 5376 z^7 + 31360 z^6 + 47040 z^5 + 11760 z^3 - 17640 z^2 + 18900 z - 11025)}{11025}$$

07.25.03.a7r6.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575)}{1575}$$

07.25.03.a7r7.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = -\frac{1}{315} e^z (64 z^6 + 896 z^5 + 2800 z^4 - 2100 z^2 + 840 z - 315)$$

07.25.03.a7r8.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} e^z (32 z^5 + 336 z^4 + 560 z^3 - 840 z^2 - 630 z + 105)$$

07.25.03.a7r9.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = -\frac{1}{105} e^z (16 z^4 + 112 z^3 - 420 z - 105)$$

07.25.03.a7ra.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (-8 z^4 - 48 z^3 + 16 z^2 + 210 z + 105) I_0\left(\frac{z}{2}\right) - \frac{2}{105} e^{z/2} (4 z^4 + 20 z^3 - 26 z^2 - 73 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7rb.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = -\frac{1}{105} e^z (8 z^3 + 28 z^2 - 70 z - 105)$$

07.25.03.a7rc.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-8 z^3 - 20 z^2 + 72 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-8 z^3 - 12 z^2 + 80 z + 27) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7rd.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = -\frac{1}{35} e^z (4 z^2 - 35)$$

07.25.03.a7re.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, 3; z\right) = -\frac{4}{105} e^{z/2} (4 z^2 - 4 z - 29) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4 z^3 - 8 z^2 - 19 z + 11) I_1\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.a7rf.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = -\frac{1}{7} e^z (2 z - 7)$$

07.25.03.a7rg.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, 4; z\right) = -\frac{4 e^{z/2} (4 z^2 - 18 z + 13) I_0\left(\frac{z}{2}\right)}{35 z} - \frac{4 e^{z/2} (4 z^3 - 22 z^2 + 37 z - 52) I_1\left(\frac{z}{2}\right)}{35 z^2}$$

07.25.03.a7rh.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (-4 z^3 + 28 z^2 - 70 z + 105)}{4 z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.a7ri.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(-4z^3 - 28z^2 - 70z - 105)}{4z^3} + \frac{105\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.a7rj.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, 5; z\right) = -\frac{32e^{z/2}(2z^2 - 16z + 45)I_0\left(\frac{z}{2}\right)}{35z^2} - \frac{64e^{z/2}(z^3 - 9z^2 + 32z - 90)I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.a7rk.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = -\frac{9e^z(4z^3 - 42z^2 + 175z - 420)}{8z^4} - \frac{945\sqrt{\pi}(z+4)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.a7rl.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9e^{-z}(4z^3 + 42z^2 + 175z + 420)}{8z^4} + \frac{945\sqrt{\pi}(z-4)\operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.a7rm.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, 6; z\right) = -\frac{32e^{z/2}(2z^2 - 23z + 136)I_0\left(\frac{z}{2}\right)}{7z^3} - \frac{32e^{z/2}(2z^3 - 25z^2 + 92z - 544)I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.a7rn.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = -\frac{1}{225}e^z(64z^6 + 960z^5 + 3600z^4 + 2400z^3 - 900z^2 + 540z - 225)$$

07.25.03.a7ro.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45}e^z(32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45)$$

07.25.03.a7rp.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = -\frac{1}{15}e^z(16z^4 + 160z^3 + 360z^2 + 120z - 15)$$

07.25.03.a7rq.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15}e^z(8z^3 + 60z^2 + 90z + 15)$$

07.25.03.a7rr.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{15}e^{z/2}(4z^3 + 28z^2 + 45z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}(4z^3 + 24z^2 + 23z)I_1\left(\frac{z}{2}\right)$$

07.25.03.a7rs.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15}e^z(4z^2 + 20z + 15)$$

07.25.03.a7rt.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{15}e^{z/2}(4z^2 + 18z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}(4z^2 + 14z + 3)I_1\left(\frac{z}{2}\right)$$

07.25.03.a7ru.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{5} e^z (2z + 5)$$

07.25.03.a7rv.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, 3; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2z^2 + 2z - 1) I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.a7rw.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = e^z$$

07.25.03.a7rx.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (2z - 1) I_0\left(\frac{z}{2}\right)}{5z} + \frac{4 e^{z/2} (2z^2 - 3z + 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.a7ry.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4z^2 - 10z + 15)}{8z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.a7rz.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{7 e^{-z} (4z^2 + 10z + 15)}{8z^3}$$

07.25.03.a7s0.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (z - 3) I_0\left(\frac{z}{2}\right)}{5z^2} + \frac{32 e^{z/2} (z^2 - 4z + 12) I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.a7s1.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (8z^2 - 40z + 105)}{32z^4} - \frac{945 \sqrt{\pi} (2z + 7) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.a7s2.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8z^2 + 40z + 105)}{32z^4} + \frac{945 \sqrt{\pi} (2z - 7) \operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.a7s3.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (z - 8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.a7s4.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} e^z (-16z^4 - 176z^3 + 512z^2 - 44z + 9) - \frac{1024}{9} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7s5.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1024}{9} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{9} e^{-z} (-16z^4 + 176z^3 + 512z^2 + 44z + 9)$$

07.25.03.a7s6.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{512}{3} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^z (8z^3 - 436z^2 - 38z + 3)$$

07.25.03.a7s7.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (-8z^3 - 436z^2 + 38z + 3) - \frac{512}{3} \sqrt{\pi} z^{5/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a7s8.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (124z^2 + 32z + 3) - \frac{128}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7s9.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{128}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (124z^2 - 32z + 3)$$

07.25.03.a7sa.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{45} e^{z/2} (-1024z^3 + 738z^2 + 240z + 45) I_0\left(\frac{z}{2}\right) + \frac{2}{45} e^{z/2} (512z^3 + 113z^2 + 39z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7sb.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{9} e^z (64z^2 + 26z + 9) - \frac{64}{9} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7sc.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{64}{9} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{9} e^{-z} (64z^2 - 26z + 9)$$

07.25.03.a7sd.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (-2048z^3 + 1536z^2 + 750z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (2048z^3 + 512z^2 + 366z + 45) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7se.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{3} e^z (8z^2 + 4z + 3) - \frac{8}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7sf.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{8}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (8z^2 - 4z + 3)$$

07.25.03.a7sg.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (2048z^4 + 512z^3 + 576z^2 + 255z - 105) I_1\left(\frac{z}{2}\right)}{2835z} - \frac{4 e^{z/2} (2048z^3 - 1536z^2 - 960z - 735) I_0\left(\frac{z}{2}\right)}{2835}$$

07.25.03.a7sh.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{3} e^z (4z^2 + 2z + 3) - \frac{4}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7si.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{4}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4z^2 - 2z + 3)$$

07.25.03.a7sj.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (4096 z^5 + 1024 z^4 + 1152 z^3 + 2400 z^2 - 3045 z + 3780) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (4096 z^4 - 3072 z^3 - 1920 z^2 - 3360 z + 945) I_0\left(\frac{z}{2}\right)}{10395 z^2}$$

07.25.03.a7sk.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 - 150 z + 225)}{288 z^3} - \frac{7 \sqrt{\pi} (64 z^6 + 225) \operatorname{erfi}(\sqrt{z})}{576 z^{7/2}}$$

07.25.03.a7sl.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (32 z^5 - 16 z^4 + 24 z^3 - 60 z^2 - 150 z - 225)}{288 z^3} + \frac{7 \sqrt{\pi} (64 z^6 + 225) \operatorname{erf}(\sqrt{z})}{576 z^{7/2}}$$

07.25.03.a7sm.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, 5; z\right) = \frac{64 e^{z/2} (2048 z^6 + 512 z^5 + 576 z^4 + 1200 z^3 + 3675 z^2 - 18900 z + 62370) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (4096 z^5 - 3072 z^4 - 1920 z^3 - 3360 z^2 - 9450 z + 31185) I_0\left(\frac{z}{2}\right)}{135135 z^2}$$

07.25.03.a7sn.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z (32 z^6 + 16 z^5 + 24 z^4 + 60 z^3 + 210 z^2 - 1575 z + 4725)}{64 z^4} + \frac{\sqrt{\pi} (-64 z^7 - 1575 z - 4725) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.a7so.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (32 z^6 - 16 z^5 + 24 z^4 - 60 z^3 + 210 z^2 + 1575 z + 4725)}{64 z^4} + \frac{\sqrt{\pi} (64 z^7 + 1575 z - 4725) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.a7sp.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (8192 z^7 + 2048 z^6 + 2304 z^5 + 4800 z^4 + 14700 z^3 + 59535 z^2 - 291060 z + 4324320) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (8192 z^6 - 6144 z^5 - 3840 z^4 - 6720 z^3 - 18900 z^2 - 72765 z + 1081080) I_0\left(\frac{z}{2}\right)}{405405 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.a7sq.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = e^z (252 z^2 - 36 z + 1) - 128 \sqrt{\pi} (2 z^{5/2} - z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7sr.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = e^{-z} (252 z^2 + 36 z + 1) + 128 \sqrt{\pi} (2 z^{5/2} + z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7ss.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = e^z (-64 z^2 + 34 z + 1) + 64 \sqrt{\pi} (z^{5/2} - z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7st.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z} (-64 z^2 - 34 z + 1) - 64 \sqrt{\pi} (z^{5/2} + z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7su.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (512 z^3 - 1024 z^2 + 255 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-512 z^3 + 512 z^2 + 31 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7sv.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{16}{3} \sqrt{\pi} (2z - 3) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{3} e^z (-32 z^2 + 32 z + 3)$$

07.25.03.a7sw.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (-32 z^2 - 32 z + 3) - \frac{16}{3} \sqrt{\pi} z^{3/2} (2z + 3) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7sx.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (1024 z^3 - 2560 z^2 + 864 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-1024 z^3 + 1536 z^2 + 160 z + 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7sy.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = 4 \sqrt{\pi} (z - 2) \operatorname{erfi}(\sqrt{z}) z^{3/2} + e^z (-4 z^2 + 6 z + 1)$$

07.25.03.a7sz.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = e^{-z} (-4 z^2 - 6 z + 1) - 4 \sqrt{\pi} z^{3/2} (z + 2) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7t0.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, 3; z\right) = \frac{64}{945} e^{z/2} (64 z^3 - 192 z^2 + 78 z + 15) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (1024 z^4 - 2048 z^3 - 288 z^2 - 48 z + 15) I_1\left(\frac{z}{2}\right)}{945 z}$$

07.25.03.a7t1.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \sqrt{\pi} (2z - 5) \operatorname{erfi}(\sqrt{z}) z^{3/2} + e^z (-2 z^2 + 4 z + 1)$$

07.25.03.a7t2.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = e^{-z} (-2 z^2 - 4 z + 1) - \sqrt{\pi} z^{3/2} (2z + 5) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7t3.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (2048 z^4 - 7168 z^3 + 3264 z^2 + 960 z - 105) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (2048 z^5 - 5120 z^4 - 832 z^3 - 384 z^2 + 375 z - 420) I_1\left(\frac{z}{2}\right)}{3465 z} - \frac{4 e^{z/2} (2048 z^5 - 5120 z^4 - 832 z^3 - 384 z^2 + 375 z - 420) I_1\left(\frac{z}{2}\right)}{3465 z^2}$$

07.25.03.a7t4.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 \sqrt{\pi} (64 z^6 - 192 z^5 - 45) \operatorname{erfi}(\sqrt{z})}{384 z^{7/2}} - \frac{7 e^z (32 z^5 - 80 z^4 - 24 z^3 - 12 z^2 + 30 z - 45)}{192 z^3}$$

07.25.03.a7t5.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = -\frac{7 e^{-z} (32 z^5 + 80 z^4 - 24 z^3 + 12 z^2 + 30 z + 45)}{192 z^3} - \frac{7 \sqrt{\pi} (64 z^6 + 192 z^5 - 45) \operatorname{erf}(\sqrt{z})}{384 z^{7/2}}$$

07.25.03.a7t6.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (2048 z^5 - 8192 z^4 + 4032 z^3 + 1440 z^2 + 735 z - 2835) I_0\left(\frac{z}{2}\right)}{45 045 z^2} - \frac{32 e^{z/2} (2048 z^6 - 6144 z^5 - 1088 z^4 - 672 z^3 - 225 z^2 + 2940 z - 11 340) I_1\left(\frac{z}{2}\right)}{45 045 z^3}$$

07.25.03.a7t7.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 \sqrt{\pi} (128 z^7 - 448 z^6 - 630 z - 1575) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}} - \frac{3 e^z (64 z^6 - 192 z^5 - 64 z^4 - 48 z^3 + 420 z - 1575)}{256 z^4}$$

07.25.03.a7t8.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 + 192 z^5 - 64 z^4 + 48 z^3 - 420 z - 1575)}{256 z^4} - \frac{3 \sqrt{\pi} (128 z^7 + 448 z^6 - 630 z + 1575) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.a7t9.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (4096 z^6 - 18 432 z^5 + 9600 z^4 + 3840 z^3 + 3150 z^2 - 945 z - 83 160) I_0\left(\frac{z}{2}\right)}{135 135 z^3} - \frac{32 e^{z/2} (4096 z^7 - 14 336 z^6 - 2688 z^5 - 1920 z^4 - 1650 z^3 + 2205 z^2 - 3780 z - 332 640) I_1\left(\frac{z}{2}\right)}{135 135 z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{1}{2}$

07.25.03.a7ta.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = e^z (16 z^2 - 24 z + 1) - 2 \sqrt{\pi} (8 z^{5/2} - 16 z^{3/2} + 3 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7tb.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z} (16 z^2 + 24 z + 1) + 2 \sqrt{\pi} (8 z^{5/2} + 16 z^{3/2} + 3 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7tc.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-128 z^3 + 416 z^2 - 270 z + 15) I_0\left(\frac{z}{2}\right) + \frac{2}{15} e^{z/2} (64 z^3 - 144 z^2 + 23 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7td.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (8 z^2 - 20 z + 3) - \frac{1}{3} \sqrt{\pi} \sqrt{z} (8 z^2 - 24 z + 9) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7te.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (8z^2 + 20z + 3) + \frac{1}{3} \sqrt{\pi} \sqrt{z} (8z^2 + 24z + 9) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7tf.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-256z^3 + 1088z^2 - 972z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (256z^3 - 832z^2 + 268z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7tg.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{2} e^z (2z^2 - 7z + 2) - \frac{1}{4} \sqrt{\pi} \sqrt{z} (4z^2 - 16z + 9) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7th.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{2} e^{-z} (2z^2 + 7z + 2) + \frac{1}{4} \sqrt{\pi} \sqrt{z} (4z^2 + 16z + 9) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7ti.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (256z^4 - 1088z^3 + 540z^2 + 15z - 3) I_1\left(\frac{z}{2}\right)}{945z} - \frac{4 e^{z/2} (256z^3 - 1344z^2 + 1500z - 237) I_0\left(\frac{z}{2}\right)}{945}$$

07.25.03.a7tj.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{4} e^z (2z^2 - 9z + 4) - \frac{1}{8} \sqrt{\pi} \sqrt{z} (4z^2 - 20z + 15) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7tk.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{4} e^{-z} (2z^2 + 9z + 4) + \frac{1}{8} \sqrt{\pi} \sqrt{z} (4z^2 + 20z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7tl.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (512z^5 - 2688z^4 + 1816z^3 + 102z^2 - 63z + 60) I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4 e^{z/2} (512z^4 - 3200z^3 + 4248z^2 - 882z + 15) I_0\left(\frac{z}{2}\right)}{3465z}$$

07.25.03.a7tm.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (64z^5 - 352z^4 + 216z^3 + 12z^2 - 30z + 45)}{1536z^3} - \frac{7 \sqrt{\pi} (128z^6 - 768z^5 + 720z^4 + 45) \operatorname{erfi}(\sqrt{z})}{3072z^{7/2}}$$

07.25.03.a7tn.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (64z^5 + 352z^4 + 216z^3 - 12z^2 - 30z - 45)}{1536z^3} + \frac{7 \sqrt{\pi} (128z^6 + 768z^5 + 720z^4 + 45) \operatorname{erf}(\sqrt{z})}{3072z^{7/2}}$$

07.25.03.a7to.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, 5; z\right) = \frac{64 e^{z/2} (256z^6 - 1600z^5 + 1372z^4 + 111z^3 - 33z^2 - 120z + 630) I_1\left(\frac{z}{2}\right)}{45045z^3} - \frac{32 e^{z/2} (512z^5 - 3712z^4 + 5688z^3 - 1434z^2 - 60z + 315) I_0\left(\frac{z}{2}\right)}{45045z^2}$$

07.25.03.a7tp.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (64 z^6 - 416 z^5 + 328 z^4 + 36 z^3 - 42 z^2 - 105 z + 630)}{1024 z^4} - \frac{3 \sqrt{\pi} (128 z^7 - 896 z^6 + 1008 z^5 + 315 z + 630) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.a7tq.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 + 416 z^5 + 328 z^4 - 36 z^3 - 42 z^2 + 105 z + 630)}{1024 z^4} + \frac{3 \sqrt{\pi} (128 z^7 + 896 z^6 + 1008 z^5 + 315 z - 630) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.a7tr.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (1024 z^7 - 7424 z^6 + 7728 z^5 + 780 z^4 - 30 z^3 - 855 z^2 + 3780 z + 30240) I_1\left(\frac{z}{2}\right)}{135 135 z^4} - \frac{32 e^{z/2} (1024 z^6 - 8448 z^5 + 14640 z^4 - 4260 z^3 - 450 z^2 + 945 z + 7560) I_0\left(\frac{z}{2}\right)}{135 135 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 1$

07.25.03.a7ts.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{45} e^{z/2} (-64 z^3 + 288 z^2 - 285 z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (64 z^3 - 224 z^2 + 93 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7tt.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{15} e^{z/2} (-8 z^3 + 46 z^2 - 60 z + 15) I_0\left(\frac{z}{2}\right) + \frac{2}{15} e^{z/2} (4 z^3 - 19 z^2 + 13 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7tu.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{15} e^{z/2} (-4 z^3 + 28 z^2 - 45 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4 z^3 - 24 z^2 + 23 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{3}{2}$

07.25.03.a7tv.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{18} e^z (8 z^2 - 32 z + 15) + \frac{\sqrt{\pi} (-16 z^3 + 72 z^2 - 54 z + 3) \operatorname{erfi}(\sqrt{z})}{36 \sqrt{z}}$$

07.25.03.a7tw.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{18} e^{-z} (8 z^2 + 32 z + 15) + \frac{\sqrt{\pi} (16 z^3 + 72 z^2 + 54 z + 3) \operatorname{erf}(\sqrt{z})}{36 \sqrt{z}}$$

07.25.03.a7tx.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (-128 z^3 + 768 z^2 - 1074 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (128 z^3 - 640 z^2 + 498 z - 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7ty.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{12} e^z (2z^2 - 11z + 9) + \frac{\sqrt{\pi} (-4z^3 + 24z^2 - 27z + 3) \operatorname{erfi}(\sqrt{z})}{24\sqrt{z}}$$

07.25.03.a7tz.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{12} e^{-z} (2z^2 + 11z + 9) + \frac{\sqrt{\pi} (4z^3 + 24z^2 + 27z + 3) \operatorname{erf}(\sqrt{z})}{24\sqrt{z}}$$

07.25.03.a7u0.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (128z^4 - 832z^3 + 954z^2 - 42z + 3) I_1\left(\frac{z}{2}\right)}{2835z} - \frac{8 e^{z/2} (64z^3 - 480z^2 + 861z - 354) I_0\left(\frac{z}{2}\right)}{2835}$$

07.25.03.a7u1.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{48} e^z (4z^2 - 28z + 33) + \frac{\sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.a7u2.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{48} e^{-z} (4z^2 + 28z + 33) + \frac{\sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.a7u3.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (256z^5 - 2048z^4 + 3108z^3 - 246z^2 + 51z - 36) I_1\left(\frac{z}{2}\right)}{10395z^2} - \frac{4 e^{z/2} (256z^4 - 2304z^3 + 5028z^2 - 2586z - 9) I_0\left(\frac{z}{2}\right)}{10395z}$$

07.25.03.a7u4.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (64z^5 - 544z^4 + 840z^3 - 12z^2 + 30z - 45)}{9216z^3} - \frac{7\sqrt{\pi} (128z^6 - 1152z^5 + 2160z^4 - 480z^3 - 45) \operatorname{erfi}(\sqrt{z})}{18432z^{7/2}}$$

07.25.03.a7u5.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (64z^5 + 544z^4 + 840z^3 + 12z^2 + 30z + 45)}{9216z^3} + \frac{7\sqrt{\pi} (128z^6 + 1152z^5 + 2160z^4 + 480z^3 - 45) \operatorname{erf}(\sqrt{z})}{18432z^{7/2}}$$

07.25.03.a7u6.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (256z^6 - 2432z^5 + 4596z^4 - 552z^3 + 123z^2 + 36z - 540) I_1\left(\frac{z}{2}\right)}{135135z^3} - \frac{32 e^{z/2} (256z^5 - 2688z^4 + 6900z^3 - 4188z^2 + 9z - 135) I_0\left(\frac{z}{2}\right)}{135135z^2}$$

07.25.03.a7u7.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z (128 z^6 - 1280 z^5 + 2448 z^4 - 96 z^3 + 168 z^2 - 945)}{4096 z^4} + \frac{\sqrt{\pi} (-256 z^7 + 2688 z^6 - 6048 z^5 + 1680 z^4 + 630 z + 945) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.a7u8.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (128 z^6 + 1280 z^5 + 2448 z^4 + 96 z^3 + 168 z^2 - 945)}{4096 z^4} + \frac{\sqrt{\pi} (256 z^7 + 2688 z^6 + 6048 z^5 + 1680 z^4 - 630 z + 945) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.a7u9.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (512 z^7 - 5632 z^6 + 12744 z^5 - 2100 z^4 + 420 z^3 + 405 z^2 - 3060 z - 10080) I_1\left(\frac{z}{2}\right)}{405405 z^4} - \frac{32 e^{z/2} (512 z^6 - 6144 z^5 + 18120 z^4 - 12540 z^3 + 180 z^2 - 765 z - 2520) I_0\left(\frac{z}{2}\right)}{405405 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 2$

07.25.03.a7ua.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{105} e^{z/2} (-16 z^3 + 124 z^2 - 234 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (16 z^3 - 108 z^2 + 134 z - 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7ub.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{105} e^{z/2} (-8 z^3 + 76 z^2 - 180 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8 z^3 - 68 z^2 + 116 z - 15) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{5}{2}$

07.25.03.a7uc.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (8 z^3 - 60 z^2 + 82 z - 3)}{128 z} + \frac{\sqrt{\pi} (-16 z^4 + 128 z^3 - 216 z^2 + 48 z + 3) \operatorname{erfi}(\sqrt{z})}{256 z^{3/2}}$$

07.25.03.a7ud.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8 z^3 + 60 z^2 + 82 z + 3)}{128 z} + \frac{\sqrt{\pi} (16 z^4 + 128 z^3 + 216 z^2 + 48 z - 3) \operatorname{erf}(\sqrt{z})}{256 z^{3/2}}$$

07.25.03.a7ue.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (16 z^4 - 140 z^3 + 252 z^2 - 39 z - 3) I_1\left(\frac{z}{2}\right)}{945 z} - \frac{4}{945} e^{z/2} (16 z^3 - 156 z^2 + 384 z - 237) I_0\left(\frac{z}{2}\right)$$

07.25.03.a7uf.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (8 z^3 - 76 z^2 + 146 z - 15)}{256 z} + \frac{\sqrt{\pi} (-16 z^4 + 160 z^3 - 360 z^2 + 120 z + 15) \operatorname{erfi}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.a7ug.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(8z^3 + 76z^2 + 146z + 15)}{256z} + \frac{\sqrt{\pi}(16z^4 + 160z^3 + 360z^2 + 120z - 15)\operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.a7uh.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, 4; z\right) = \frac{4e^{z/2}(32z^5 - 344z^4 + 812z^3 - 204z^2 - 39z + 12)I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4e^{z/2}(32z^4 - 376z^3 + 1140z^2 - 876z + 3)I_0\left(\frac{z}{2}\right)}{3465z}$$

07.25.03.a7ui.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{7e^z(32z^5 - 368z^4 + 912z^3 - 168z^2 - 30z + 45)}{12288z^3} - \frac{7\sqrt{\pi}(64z^6 - 768z^5 + 2160z^4 - 960z^3 - 180z^2 + 45)\operatorname{erfi}(\sqrt{z})}{24576z^{7/2}}$$

07.25.03.a7uj.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}(32z^5 + 368z^4 + 912z^3 + 168z^2 - 30z - 45)}{12288z^3} + \frac{7\sqrt{\pi}(64z^6 + 768z^5 + 2160z^4 + 960z^3 - 180z^2 + 45)\operatorname{erf}(\sqrt{z})}{24576z^{7/2}}$$

07.25.03.a7uk.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, 5; z\right) = \frac{64e^{z/2}(16z^6 - 204z^5 + 596z^4 - 210z^3 - 63z^2 + 12z + 54)I_1\left(\frac{z}{2}\right)}{45045z^3} - \frac{32e^{z/2}(32z^5 - 440z^4 + 1584z^3 - 1440z^2 + 6z + 27)I_0\left(\frac{z}{2}\right)}{45045z^2}$$

07.25.03.a7ul.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{3e^z(32z^6 - 432z^5 + 1312z^4 - 360z^3 - 126z^2 + 105z + 315)}{8192z^4} - \frac{3\sqrt{\pi}(64z^7 - 896z^6 + 3024z^5 - 1680z^4 - 420z^3 + 315z + 315)\operatorname{erfi}(\sqrt{z})}{16384z^{9/2}}$$

07.25.03.a7um.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z}(32z^6 + 432z^5 + 1312z^4 + 360z^3 - 126z^2 - 105z + 315)}{8192z^4} + \frac{3\sqrt{\pi}(64z^7 + 896z^6 + 3024z^5 + 1680z^4 - 420z^3 + 315z - 315)\operatorname{erf}(\sqrt{z})}{16384z^{9/2}}$$

07.25.03.a7un.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 944 z^6 + 3288 z^5 - 1500 z^4 - 600 z^3 + 45 z^2 + 900 z + 1440) I_1\left(\frac{z}{2}\right)}{135 135 z^4} - \frac{32 e^{z/2} (64 z^6 - 1008 z^5 + 4200 z^4 - 4380 z^3 + 225 z + 360) I_0\left(\frac{z}{2}\right)}{135 135 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 3$

07.25.03.a7uo.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; 3, \frac{7}{2}; z\right) = \frac{4 e^{z/2} (8 z^4 - 88 z^3 + 216 z^2 - 60 z - 15) I_1\left(\frac{z}{2}\right)}{945 z} - \frac{16}{945} e^{z/2} (2 z^3 - 24 z^2 + 75 z - 60) I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{7}{2}$

07.25.03.a7up.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (16 z^4 - 192 z^3 + 512 z^2 - 120 z - 45)}{1024 z^2} + \frac{\sqrt{\pi} (-32 z^5 + 400 z^4 - 1200 z^3 + 600 z^2 + 150 z + 45) \operatorname{erfi}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.a7uq.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16 z^4 + 192 z^3 + 512 z^2 + 120 z - 45)}{1024 z^2} + \frac{\sqrt{\pi} (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45) \operatorname{erf}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.a7ur.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^5 - 216 z^4 + 692 z^3 - 300 z^2 - 135 z - 60) I_1\left(\frac{z}{2}\right)}{3465 z^2} - \frac{4 e^{z/2} (16 z^4 - 232 z^3 + 900 z^2 - 900 z - 15) I_0\left(\frac{z}{2}\right)}{3465 z}$$

07.25.03.a7us.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (32 z^5 - 464 z^4 + 1584 z^3 - 600 z^2 - 390 z - 225)}{24 576 z^3} - \frac{7 \sqrt{\pi} (64 z^6 - 960 z^5 + 3600 z^4 - 2400 z^3 - 900 z^2 - 540 z - 225) \operatorname{erfi}(\sqrt{z})}{49 152 z^{7/2}}$$

07.25.03.a7ut.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (32 z^5 + 464 z^4 + 1584 z^3 + 600 z^2 - 390 z + 225)}{24 576 z^3} + \frac{7 \sqrt{\pi} (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225) \operatorname{erf}(\sqrt{z})}{49 152 z^{7/2}}$$

07.25.03.a7uu.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^6 - 256 z^5 + 1012 z^4 - 600 z^3 - 375 z^2 - 300 z - 180) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (16 z^5 - 272 z^4 + 1260 z^3 - 1500 z^2 - 75 z - 45) I_0\left(\frac{z}{2}\right)}{45\,045 z^3}$$

07.25.03.a7uv.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (64 z^6 - 1088 z^5 + 4528 z^4 - 2400 z^3 - 2100 z^2 - 2100 z - 1575)}{32\,768 z^4} - \frac{3 \sqrt{\pi} (128 z^7 - 2240 z^6 + 10\,080 z^5 - 8400 z^4 - 4200 z^3 - 3780 z^2 - 3150 z - 1575) \operatorname{erfi}(\sqrt{z})}{65\,536 z^{9/2}}$$

07.25.03.a7uw.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 + 1088 z^5 + 4528 z^4 + 2400 z^3 - 2100 z^2 + 2100 z - 1575)}{32\,768 z^4} + \frac{3 \sqrt{\pi} (128 z^7 + 2240 z^6 + 10\,080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575) \operatorname{erf}(\sqrt{z})}{65\,536 z^{9/2}}$$

07.25.03.a7ux.01

$${}_2F_2\left(-\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135\,135 z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = -\frac{11}{2}$

07.25.03.a7uy.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{21\,611\,205} (-256 z^{12} - 11\,776 z^{11} - 188\,736 z^{10} - 1\,278\,912 z^9 - 3\,507\,072 z^8 - 2\,977\,920 z^7 - 241\,920 z^6 - 16\,128 z^5 - 15\,120 z^4 - 108\,000 z^3 + 1\,323\,000 z^2 - 7\,144\,200 z + 21\,611\,205) - \frac{1}{21\,611\,205} 32 e^z \sqrt{\pi} (8 z^{25/2} + 372 z^{23/2} + 6078 z^{21/2} + 42\,741 z^{19/2} + 127\,053 z^{17/2} + 133\,722 z^{15/2} + 29\,070 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7uz.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{21\,611\,205} \left(-256 z^{12} + 11\,776 z^{11} - 188\,736 z^{10} + 1\,278\,912 z^9 - 3\,507\,072 z^8 + 2\,977\,920 z^7 - 241\,920 z^6 + 16\,128 z^5 - 15\,120 z^4 + 108\,000 z^3 + 1\,323\,000 z^2 + 7\,144\,200 z + 21\,611\,205 \right) + \frac{1}{21\,611\,205} 32 e^{-z} \sqrt{\pi} \left(8 z^{25/2} - 372 z^{23/2} + 6078 z^{21/2} - 42\,741 z^{19/2} + 127\,053 z^{17/2} - 133\,722 z^{15/2} + 29\,070 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7v0.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{1\,964\,655} \left(128 z^{11} + 5\,120 z^{10} + 68\,832 z^9 + 366\,528 z^8 + 682\,560 z^7 + 241\,920 z^6 - 16\,128 z^5 - 5\,040 z^4 - 21\,600 z^3 + 189\,000 z^2 - 793\,800 z + 1\,964\,655 \right) + \frac{16 e^z \sqrt{\pi} \left(8 z^{23/2} + 324 z^{21/2} + 4458 z^{19/2} + 24\,909 z^{17/2} + 52\,326 z^{15/2} + 29\,070 z^{13/2} \right) \operatorname{erf}(\sqrt{z})}{1\,964\,655}$$

07.25.03.a7v1.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{1\,964\,655} \left(-128 z^{11} + 5\,120 z^{10} - 68\,832 z^9 + 366\,528 z^8 - 682\,560 z^7 + 241\,920 z^6 + 16\,128 z^5 - 5\,040 z^4 + 21\,600 z^3 + 189\,000 z^2 + 793\,800 z + 1\,964\,655 \right) + \frac{16 e^{-z} \sqrt{\pi} \left(8 z^{23/2} - 324 z^{21/2} + 4458 z^{19/2} - 24\,909 z^{17/2} + 52\,326 z^{15/2} - 29\,070 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})}{1\,964\,655}$$

07.25.03.a7v2.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{218\,295} \left(-64 z^{10} - 2176 z^9 - 23\,568 z^8 - 90\,000 z^7 - 80\,640 z^6 + 16\,128 z^5 - 5\,040 z^4 - 7200 z^3 + 37\,800 z^2 - 113\,400 z + 218\,295 \right) - \frac{8 e^z \sqrt{\pi} \left(8 z^{21/2} + 276 z^{19/2} + 3078 z^{17/2} + 12\,597 z^{15/2} + 14\,535 z^{13/2} \right) \operatorname{erf}(\sqrt{z})}{218\,295}$$

07.25.03.a7v3.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{218\,295} \left(-64 z^{10} + 2176 z^9 - 23\,568 z^8 + 90\,000 z^7 - 80\,640 z^6 - 16\,128 z^5 - 5\,040 z^4 + 7200 z^3 + 37\,800 z^2 + 113\,400 z + 218\,295 \right) + \frac{8 e^{-z} \sqrt{\pi} \left(8 z^{21/2} - 276 z^{19/2} + 3078 z^{17/2} - 12\,597 z^{15/2} + 14\,535 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})}{218\,295}$$

07.25.03.a7v4.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{32z^9 + 896z^8 + 7320z^7 + 16128z^6 - 5376z^5 + 5040z^4 - 7200z^3 + 12600z^2 - 22680z + 31185}{31185} + \frac{4e^z\sqrt{\pi}(8z^{19/2} + 228z^{17/2} + 1938z^{15/2} + 4845z^{13/2})\operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.a7v5.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{-32z^9 + 896z^8 - 7320z^7 + 16128z^6 + 5376z^5 + 5040z^4 + 7200z^3 + 12600z^2 + 22680z + 31185}{31185} + \frac{4e^{-z}\sqrt{\pi}(8z^{19/2} - 228z^{17/2} + 1938z^{15/2} - 4845z^{13/2})\operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.a7v6.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{-16z^8 - 352z^7 - 1908z^6 - 588z^5 + 3864z^4 - 9432z^3 + 12600z^2 - 7560z + 6237}{6237} - \frac{2e^z\sqrt{\pi}(8z^{17/2} + 180z^{15/2} + 1038z^{13/2} + 693z^{11/2} - 2079z^{9/2} + 4158z^{7/2} - 4158z^{5/2})\operatorname{erfi}(\sqrt{z})}{6237}$$

07.25.03.a7v7.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{-16z^8 + 352z^7 - 1908z^6 + 588z^5 + 3864z^4 + 9432z^3 + 12600z^2 + 7560z + 6237}{6237} + \frac{2e^{-z}\sqrt{\pi}(8z^{17/2} - 180z^{15/2} + 1038z^{13/2} - 693z^{11/2} - 2079z^{9/2} - 4158z^{7/2} - 4158z^{5/2})\operatorname{erfi}(\sqrt{z})}{6237}$$

07.25.03.a7v8.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{8z^7 + 128z^6 + 318z^5 - 924z^4 + 876z^3 + 2520z^2 - 7560z + 2079}{2079} + \frac{e^z\sqrt{\pi}(8z^{15/2} + 132z^{13/2} + 378z^{11/2} - 819z^{9/2} + 378z^{7/2} + 3402z^{5/2} - 7560z^{3/2})\operatorname{erfi}(\sqrt{z})}{2079}$$

07.25.03.a7v9.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{-8z^7 + 128z^6 - 318z^5 - 924z^4 - 876z^3 + 2520z^2 + 7560z + 2079}{2079} + \frac{e^{-z}\sqrt{\pi}(8z^{15/2} - 132z^{13/2} + 378z^{11/2} + 819z^{9/2} + 378z^{7/2} - 3402z^{5/2} - 7560z^{3/2})\operatorname{erfi}(\sqrt{z})}{2079}$$

07.25.03.a7va.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{-4z^6 - 40z^5 + 39z^4 + 291z^3 - 1260z^2 + 1260z + 2079}{2079} + \frac{e^z\sqrt{\pi}(-8z^{13/2} - 84z^{11/2} + 42z^{9/2} + 651z^{7/2} - 2331z^{5/2} + 1260z^{3/2} + 6300\sqrt{z})\operatorname{erfi}(\sqrt{z})}{4158}$$

07.25.03.a7vb.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{-4z^6 + 40z^5 + 39z^4 - 291z^3 - 1260z^2 - 1260z + 2079}{2079} + \frac{e^{-z}\sqrt{\pi}\left(8z^{13/2} - 84z^{11/2} - 42z^{9/2} + 651z^{7/2} + 2331z^{5/2} + 1260z^{3/2} - 6300\sqrt{z}\right)\operatorname{erfi}(\sqrt{z})}{4158}$$

07.25.03.a7vc.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, 1; z\right) = -\frac{e^z\left(8z^6 + 60z^5 - 162z^4 - 237z^3 + 2331z^2 - 3402z - 4158\right)}{4158}$$

07.25.03.a7vd.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{-4z^5 - 16z^4 + 117z^3 - 180z^2 - 660z + 2358}{4158} + \frac{e^z\sqrt{\pi}\left(-8z^6 - 36z^5 + 222z^4 - 237z^3 - 1620z^2 + 4500z + 1800\right)\operatorname{erf}(\sqrt{z})}{8316\sqrt{z}}$$

07.25.03.a7ve.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{4z^5 - 16z^4 - 117z^3 - 180z^2 + 660z + 2358}{4158} + \frac{e^{-z}\sqrt{\pi}\left(-8z^6 + 36z^5 + 222z^4 + 237z^3 - 1620z^2 - 4500z + 1800\right)\operatorname{erfi}(\sqrt{z})}{8316\sqrt{z}}$$

07.25.03.a7vf.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, 2; z\right) = -\frac{e^z\left(8z^5 + 12z^4 - 222z^3 + 651z^2 + 378z - 4158\right)}{4158}$$

07.25.03.a7vg.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{-4z^5 + 8z^4 + 75z^3 - 471z^2 + 762z + 630}{2772z} + \frac{e^z\sqrt{\pi}\left(-8z^6 + 12z^5 + 162z^4 - 885z^3 + 1035z^2 + 2430z - 630\right)\operatorname{erf}(\sqrt{z})}{5544z^{3/2}}$$

07.25.03.a7vh.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-4z^5 - 8z^4 + 75z^3 + 471z^2 + 762z - 630}{2772z} + \frac{e^{-z}\sqrt{\pi}\left(8z^6 + 12z^5 - 162z^4 - 885z^3 - 1035z^2 + 2430z + 630\right)\operatorname{erfi}(\sqrt{z})}{5544z^{3/2}}$$

07.25.03.a7vi.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, 3; z\right) = -\frac{e^z\left(8z^4 - 36z^3 - 42z^2 + 819z - 2079\right)}{2079}$$

07.25.03.a7vj.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{5(4z^5 - 32z^4 + 87z^3 + 102z^2 - 966z + 1008)}{5544z^2} - \frac{5e^z\sqrt{\pi}(8z^6 - 60z^5 + 138z^4 + 333z^3 - 2034z^2 + 1638z - 1008)\operatorname{erf}(\sqrt{z})}{11088z^{5/2}}$$

07.25.03.a7vk.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^5 + 32z^4 + 87z^3 - 102z^2 - 966z - 1008)}{5544z^2} - \frac{5e^{-z}\sqrt{\pi}(8z^6 + 60z^5 + 138z^4 - 333z^3 - 2034z^2 - 1638z - 1008)\operatorname{erfi}(\sqrt{z})}{11088z^{5/2}}$$

07.25.03.a7vl.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, 4; z\right) = -\frac{1}{693}e^z(8z^3 - 84z^2 + 378z - 693)$$

07.25.03.a7vm.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{5(4z^5 - 56z^4 + 369z^3 - 1407z^2 + 3528z - 7560)}{1584z^3} - \frac{5e^z\sqrt{\pi}(8z^6 - 108z^5 + 678z^4 - 2379z^3 + 5103z^2 - 8568z + 7560)\operatorname{erf}(\sqrt{z})}{3168z^{7/2}}$$

07.25.03.a7vn.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{5e^{-z}\sqrt{\pi}(8z^6 + 108z^5 + 678z^4 + 2379z^3 + 5103z^2 + 8568z + 7560)\operatorname{erfi}(\sqrt{z})}{3168z^{7/2}} - \frac{5(4z^5 + 56z^4 + 369z^3 + 1407z^2 + 3528z + 7560)}{1584z^3}$$

07.25.03.a7vo.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, 5; z\right) = \frac{12920}{77z^4} - \frac{4e^z(8z^6 - 132z^5 + 1038z^4 - 4845z^3 + 14535z^2 - 29070z + 29070)}{693z^4}$$

07.25.03.a7vp.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, \frac{11}{2}; z\right) = -\frac{5(4z^5 - 80z^4 + 771z^3 - 4536z^2 + 17640z - 75600)}{352z^4} - \frac{5e^z\sqrt{\pi}(8z^6 - 156z^5 + 1458z^4 - 8211z^3 + 29736z^2 - 68040z + 75600)\operatorname{erf}(\sqrt{z})}{704z^{9/2}}$$

07.25.03.a7vq.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{5(4z^5 + 80z^4 + 771z^3 + 4536z^2 + 17640z + 75600)}{352z^4} - \frac{5e^{-z}\sqrt{\pi}(8z^6 + 156z^5 + 1458z^4 + 8211z^3 + 29736z^2 + 68040z + 75600)\operatorname{erfi}(\sqrt{z})}{704z^{9/2}}$$

07.25.03.a7vr.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{11}{2}, 6; z\right) = \frac{12920(5z+28)}{77z^5} - \frac{20e^z(8z^6 - 180z^5 + 1938z^4 - 12597z^3 + 52326z^2 - 133722z + 162792)}{693z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = -\frac{9}{2}$

07.25.03.a7vs.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{178605}(-64z^{10} - 2240z^9 - 25488z^8 - 107840z^7 - 135840z^6 - 16128z^5 - 1680z^4 - 4320z^3 + 27000z^2 - 88200z + 8e^z\sqrt{\pi}(8z^{21/2} + 284z^{19/2} + 3322z^{17/2} + 14943z^{15/2} + 22440z^{13/2} + 6630z^{11/2})\operatorname{erf}(\sqrt{z})) - \frac{178605}{178605}$$

07.25.03.a7vt.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{178605}(-64z^{10} + 2240z^9 - 25488z^8 + 107840z^7 - 135840z^6 + 16128z^5 - 1680z^4 + 4320z^3 + 27000z^2 + 88200z + 8e^{-z}\sqrt{\pi}(8z^{21/2} - 284z^{19/2} + 3322z^{17/2} - 14943z^{15/2} + 22440z^{13/2} - 6630z^{11/2})\operatorname{erfi}(\sqrt{z})) + \frac{178605}{178605}$$

07.25.03.a7vu.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{32z^9 + 960z^8 + 8920z^7 + 27600z^6 + 16128z^5 - 1680z^4 - 1440z^3 + 5400z^2 - 12600z + 19845}{19845} + \frac{4e^z\sqrt{\pi}(8z^{19/2} + 244z^{17/2} + 2346z^{15/2} + 7905z^{13/2} + 6630z^{11/2})\operatorname{erf}(\sqrt{z})}{19845}$$

07.25.03.a7vv.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{-32z^9 + 960z^8 - 8920z^7 + 27600z^6 - 16128z^5 - 1680z^4 + 1440z^3 + 5400z^2 + 12600z + 19845}{19845} + \frac{4e^{-z}\sqrt{\pi}(8z^{19/2} - 244z^{17/2} + 2346z^{15/2} - 7905z^{13/2} + 6630z^{11/2})\operatorname{erfi}(\sqrt{z})}{19845}$$

07.25.03.a7vw.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{-16z^8 - 400z^7 - 2868z^6 - 5376z^5 + 1680z^4 - 1440z^3 + 1800z^2 - 2520z + 2835}{2835} - \frac{2e^z\sqrt{\pi}(8z^{17/2} + 204z^{15/2} + 1530z^{13/2} + 3315z^{11/2})\operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.a7vx.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{-16z^8 + 400z^7 - 2868z^6 + 5376z^5 + 1680z^4 + 1440z^3 + 1800z^2 + 2520z + 2835}{2835} + \frac{2e^{-z}\sqrt{\pi}(8z^{17/2} - 204z^{15/2} + 1530z^{13/2} - 3315z^{11/2})\operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.a7vy.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{567}(8z^7 + 160z^6 + 798z^5 + 364z^4 - 1332z^3 + 1800z^2 - 840z + 567) + \frac{1}{567}e^z\sqrt{\pi}(8z^{15/2} + 164z^{13/2} + 874z^{11/2} + 693z^{9/2} - 1386z^{7/2} + 1386z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a7vz.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{567}(-8z^7 + 160z^6 - 798z^5 + 364z^4 + 1332z^3 + 1800z^2 + 840z + 567) + \frac{1}{567}e^{-z}\sqrt{\pi}(8z^{15/2} - 164z^{13/2} + 874z^{11/2} - 693z^{9/2} - 1386z^{7/2} - 1386z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a7w0.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{189}(-4z^6 - 60z^5 - 161z^4 + 276z^3 + 90z^2 - 840z + 189) + \frac{1}{378}e^z\sqrt{\pi}(-8z^{13/2} - 124z^{11/2} - 378z^{9/2} + 441z^{7/2} + 504z^{5/2} - 1890z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a7w1.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{189}(-4z^6 + 60z^5 - 161z^4 - 276z^3 + 90z^2 + 840z + 189) + \frac{1}{378}e^{-z}\sqrt{\pi}(8z^{13/2} - 124z^{11/2} + 378z^{9/2} + 441z^{7/2} - 504z^{5/2} - 1890z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a7w2.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{378}(4z^5 + 40z^4 + 3z^3 - 270z^2 + 420z + 378) + \frac{1}{756}e^z\sqrt{\pi}(8z^{11/2} + 84z^{9/2} + 42z^{7/2} - 567z^{5/2} + 630z^{3/2} + 1260\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.a7w3.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{378}(-4z^5 + 40z^4 - 3z^3 - 270z^2 - 420z + 378) + \frac{1}{756}e^{-z}\sqrt{\pi}(8z^{11/2} - 84z^{9/2} + 42z^{7/2} + 567z^{5/2} + 630z^{3/2} - 1260\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a7w4.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, 1; z\right) = \frac{1}{378}e^z(4z^5 + 32z^4 - 33z^3 - 201z^2 + 462z + 378)$$

07.25.03.a7w5.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{756}(4z^4 + 20z^3 - 75z^2 - 40z + 456) + \frac{e^z\sqrt{\pi}(8z^5 + 44z^4 - 134z^3 - 165z^2 + 960z + 300)\operatorname{erf}(\sqrt{z})}{1512\sqrt{z}}$$

07.25.03.a7w6.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{756} (4z^4 - 20z^3 - 75z^2 + 40z + 456) + \frac{e^{-z} \sqrt{\pi} (-8z^5 + 44z^4 + 134z^3 - 165z^2 - 960z + 300) \operatorname{erfi}(\sqrt{z})}{1512 \sqrt{z}}$$

07.25.03.a7w7.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, 2; z\right) = \frac{1}{378} e^z (4z^4 + 12z^3 - 81z^2 + 42z + 378)$$

07.25.03.a7w8.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{4z^4 - 73z^2 + 174z + 90}{504z} + \frac{e^z \sqrt{\pi} (8z^5 + 4z^4 - 150z^3 + 285z^2 + 390z - 90) \operatorname{erf}(\sqrt{z})}{1008 z^{3/2}}$$

07.25.03.a7w9.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-4z^4 + 73z^2 + 174z - 90}{504z} + \frac{e^{-z} \sqrt{\pi} (8z^5 - 4z^4 - 150z^3 - 285z^2 + 390z + 90) \operatorname{erfi}(\sqrt{z})}{1008 z^{3/2}}$$

07.25.03.a7wa.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, 3; z\right) = \frac{1}{189} e^z (4z^3 - 8z^2 - 49z + 189)$$

07.25.03.a7wb.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5(4z^4 - 20z^3 + 9z^2 + 132z - 126)}{1008z^2} + \frac{5e^z \sqrt{\pi} (8z^5 - 36z^4 - 6z^3 + 303z^2 - 216z + 126) \operatorname{erf}(\sqrt{z})}{2016 z^{5/2}}$$

07.25.03.a7wc.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^4 + 20z^3 + 9z^2 - 132z - 126)}{1008z^2} - \frac{5e^{-z} \sqrt{\pi} (8z^5 + 36z^4 - 6z^3 - 303z^2 - 216z - 126) \operatorname{erfi}(\sqrt{z})}{2016 z^{5/2}}$$

07.25.03.a7wd.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, 4; z\right) = \frac{1}{63} e^z (4z^2 - 28z + 63)$$

07.25.03.a7we.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{5(4z^4 - 40z^3 + 171z^2 - 406z + 840)}{288z^3} + \frac{5e^z \sqrt{\pi} (8z^5 - 76z^4 + 298z^3 - 591z^2 + 966z - 840) \operatorname{erf}(\sqrt{z})}{576 z^{7/2}}$$

07.25.03.a7wf.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (8z^5 + 76z^4 + 298z^3 + 591z^2 + 966z + 840) \operatorname{erfi}(\sqrt{z})}{576 z^{7/2}} - \frac{5(4z^4 + 40z^3 + 171z^2 + 406z + 840)}{288z^3}$$

07.25.03.a7wg.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, 5; z\right) = \frac{4 e^z (4 z^5 - 48 z^4 + 255 z^3 - 765 z^2 + 1530 z - 1530)}{63 z^4} + \frac{680}{7 z^4}$$

07.25.03.a7wh.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{5(4 z^4 - 60 z^3 + 413 z^2 - 1680 z + 7560)}{64 z^4} + \frac{5 e^z \sqrt{\pi} (8 z^5 - 116 z^4 + 762 z^3 - 2877 z^2 + 6720 z - 7560) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.a7wi.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{5(4 z^4 + 60 z^3 + 413 z^2 + 1680 z + 7560)}{64 z^4} - \frac{5 e^{-z} \sqrt{\pi} (8 z^5 + 116 z^4 + 762 z^3 + 2877 z^2 + 6720 z + 7560) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.a7wj.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{9}{2}, 6; z\right) = \frac{680(15 z + 76)}{21 z^5} + \frac{20 e^z (4 z^5 - 68 z^4 + 527 z^3 - 2346 z^2 + 6222 z - 7752)}{63 z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = -\frac{7}{2}$

07.25.03.a7wk.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{-16 z^8 - 416 z^7 - 3220 z^6 - 7548 z^5 - 1680 z^4 - 480 z^3 + 1080 z^2 - 1800 z + 2205}{2205} - \frac{2 e^z \sqrt{\pi} (8 z^{17/2} + 212 z^{15/2} + 1710 z^{13/2} + 4485 z^{11/2} + 2145 z^{9/2}) \operatorname{erf}(\sqrt{z})}{2205}$$

07.25.03.a7wl.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{-16 z^8 + 416 z^7 - 3220 z^6 + 7548 z^5 - 1680 z^4 + 480 z^3 + 1080 z^2 + 1800 z + 2205}{2205} + \frac{2 e^{-z} \sqrt{\pi} (8 z^{17/2} - 212 z^{15/2} + 1710 z^{13/2} - 4485 z^{11/2} + 2145 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{2205}$$

07.25.03.a7wm.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{315} (8 z^7 + 176 z^6 + 1086 z^5 + 1680 z^4 - 480 z^3 + 360 z^2 - 360 z + 315) + \frac{1}{315} e^z \sqrt{\pi} (8 z^{15/2} + 180 z^{13/2} + 1170 z^{11/2} + 2145 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7wn.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{315} (-8 z^7 + 176 z^6 - 1086 z^5 + 1680 z^4 + 480 z^3 + 360 z^2 + 360 z + 315) + \frac{1}{315} e^{-z} \sqrt{\pi} (8 z^{15/2} - 180 z^{13/2} + 1170 z^{11/2} - 2145 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7wo.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{63}(-4z^6 - 72z^5 - 329z^4 - 213z^3 + 360z^2 - 120z + 63) + \frac{1}{126}e^z\sqrt{\pi}(-8z^{13/2} - 148z^{11/2} - 726z^{9/2} - 693z^{7/2} + 693z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a7wp.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{63}(-4z^6 + 72z^5 - 329z^4 + 213z^3 + 360z^2 + 120z + 63) + \frac{1}{126}e^{-z}\sqrt{\pi}(8z^{13/2} - 148z^{11/2} + 726z^{9/2} - 693z^{7/2} - 693z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a7wq.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{42}(4z^5 + 56z^4 + 163z^3 - 90z^2 - 240z + 42) + \frac{1}{84}e^z\sqrt{\pi}(8z^{11/2} + 116z^{9/2} + 378z^{7/2} - 63z^{5/2} - 630z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a7wr.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{42}(-4z^5 + 56z^4 - 163z^3 - 90z^2 + 240z + 42) + \frac{1}{84}e^{-z}\sqrt{\pi}(8z^{11/2} - 116z^{9/2} + 378z^{7/2} + 63z^{5/2} - 630z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a7ws.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{84}(-4z^4 - 40z^3 - 45z^2 + 165z + 84) + \frac{1}{168}e^z\sqrt{\pi}(-8z^{9/2} - 84z^{7/2} - 126z^{5/2} + 315z^{3/2} + 315\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.a7wt.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{84}(-4z^4 + 40z^3 - 45z^2 - 165z + 84) + \frac{1}{168}e^{-z}\sqrt{\pi}(8z^{9/2} - 84z^{7/2} + 126z^{5/2} + 315z^{3/2} - 315\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a7wu.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, 1; z\right) = -\frac{1}{42}e^z(2z^4 + 17z^3 + 9z^2 - 78z - 42)$$

07.25.03.a7wv.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{168}(-4z^3 - 24z^2 + 25z + 108) + \frac{e^z\sqrt{\pi}(-8z^4 - 52z^3 + 30z^2 + 255z + 60)\operatorname{erf}(\sqrt{z})}{336\sqrt{z}}$$

07.25.03.a7ww.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{168}(4z^3 - 24z^2 - 25z + 108) + \frac{e^{-z}\sqrt{\pi}(-8z^4 + 52z^3 + 30z^2 - 255z + 60)\operatorname{erfi}(\sqrt{z})}{336\sqrt{z}}$$

07.25.03.a7wx.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, 2; z\right) = -\frac{1}{42} e^z (2z^3 + 9z^2 - 18z - 42)$$

07.25.03.a7wy.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{-4z^3 - 8z^2 + 47z + 15}{112z} + \frac{e^z \sqrt{\pi} (-8z^4 - 20z^3 + 90z^2 + 75z - 15) \operatorname{erf}(\sqrt{z})}{224z^{3/2}}$$

07.25.03.a7wz.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{-4z^3 + 8z^2 + 47z - 15}{112z} + \frac{e^{-z} \sqrt{\pi} (8z^4 - 20z^3 - 90z^2 + 75z + 15) \operatorname{erfi}(\sqrt{z})}{224z^{3/2}}$$

07.25.03.a7x0.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, 3; z\right) = -\frac{1}{21} e^z (2z^2 + z - 21)$$

07.25.03.a7x1.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, \frac{7}{2}; z\right) = -\frac{5(4z^3 - 8z^2 - 21z + 18)}{224z^2} - \frac{5e^z \sqrt{\pi} (8z^4 - 12z^3 - 54z^2 + 33z - 18) \operatorname{erf}(\sqrt{z})}{448z^{5/2}}$$

07.25.03.a7x2.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^3 + 8z^2 - 21z - 18)}{224z^2} - \frac{5e^{-z} \sqrt{\pi} (8z^4 + 12z^3 - 54z^2 - 33z - 18) \operatorname{erfi}(\sqrt{z})}{448z^{5/2}}$$

07.25.03.a7x3.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, 4; z\right) = -\frac{1}{7} e^z (2z - 7)$$

07.25.03.a7x4.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, \frac{9}{2}; z\right) = -\frac{5(4z^3 - 24z^2 + 53z - 105)}{64z^3} - \frac{5e^z \sqrt{\pi} (8z^4 - 44z^3 + 78z^2 - 123z + 105) \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.a7x5.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (8z^4 + 44z^3 + 78z^2 + 123z + 105) \operatorname{erfi}(\sqrt{z})}{128z^{7/2}} - \frac{5(4z^3 + 24z^2 + 53z + 105)}{64z^3}$$

07.25.03.a7x6.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, 5; z\right) = \frac{360}{7z^4} - \frac{4e^z (2z^4 - 15z^3 + 45z^2 - 90z + 90)}{7z^4}$$

07.25.03.a7x7.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, \frac{11}{2}; z\right) = -\frac{45(4z^3 - 40z^2 + 175z - 840)}{128z^4} - \frac{45e^z \sqrt{\pi} (8z^4 - 76z^3 + 306z^2 - 735z + 840) \operatorname{erf}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.a7x8.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{45(4z^3 + 40z^2 + 175z + 840)}{128z^4} - \frac{45e^{-z} \sqrt{\pi} (8z^4 + 76z^3 + 306z^2 + 735z + 840) \operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.a7x9.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{7}{2}, 6; z\right) = \frac{120(15z + 68)}{7z^5} - \frac{20e^z(2z^4 - 23z^3 + 114z^2 - 318z + 408)}{7z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = -\frac{5}{2}$

07.25.03.a7xa.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{45}(-4z^6 - 76z^5 - 393z^4 - 480z^3 + 120z^2 - 72z + 45) + \frac{1}{90}e^z\sqrt{\pi}(-8z^{13/2} - 156z^{11/2} - 858z^{9/2} - 1287z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a7xb.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{45}(-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45) + \frac{1}{90}e^{-z}\sqrt{\pi}(8z^{13/2} - 156z^{11/2} + 858z^{9/2} - 1287z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a7xc.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{18}(4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36}e^z\sqrt{\pi}(8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a7xd.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{18}(-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36}e^{-z}\sqrt{\pi}(8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a7xe.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{12}(-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24}e^z\sqrt{\pi}(-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a7xf.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{12}(-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24}e^{-z}\sqrt{\pi}(8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a7xg.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{24}(4z^3 + 40z^2 + 87z + 24) + \frac{1}{48}e^z\sqrt{\pi}(8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.a7xh.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{24}(-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48}e^{-z}\sqrt{\pi}(8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a7xi.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, 1; z\right) = \frac{1}{6}e^z(z^3 + 9z^2 + 18z + 6)$$

07.25.03.a7xj.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{48} (4z^2 + 28z + 33) + \frac{e^z \sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.a7xk.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{48} (4z^2 - 28z + 33) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.a7xl.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, 2; z\right) = \frac{1}{6} e^z (z^2 + 6z + 6)$$

07.25.03.a7xm.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{4z^2 + 16z + 3}{32z} + \frac{e^z \sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.a7xn.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-4z^2 + 16z - 3}{32z} + \frac{e^{-z} \sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.a7xo.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, 3; z\right) = \frac{1}{3} e^z (z + 3)$$

07.25.03.a7xp.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{5(4z^2 + 4z - 3)}{64z^2} + \frac{5e^z \sqrt{\pi} (8z^3 + 12z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.a7xq.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^2 - 4z - 3)}{64z^2} - \frac{5e^{-z} \sqrt{\pi} (8z^3 - 12z^2 - 6z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.a7xr.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, 4; z\right) = e^z$$

07.25.03.a7xs.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{35(4z^2 - 8z + 15)}{128z^3} + \frac{35e^z \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.a7xt.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (8z^3 + 12z^2 + 18z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{35(4z^2 + 8z + 15)}{128 z^3}$$

07.25.03.a7xu.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, 5; z\right) = \frac{4e^z (z^3 - 3z^2 + 6z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.a7xv.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{315(4z^2 - 20z + 105)}{256z^4} + \frac{315e^z\sqrt{\pi}(8z^3 - 36z^2 + 90z - 105)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.a7xw.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{315(4z^2 + 20z + 105)}{256z^4} - \frac{315e^{-z}\sqrt{\pi}(8z^3 + 36z^2 + 90z + 105)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.a7xx.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{5}{2}, 6; z\right) = \frac{120(z+4)}{z^5} + \frac{20e^z(z^3 - 6z^2 + 18z - 24)}{z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = -\frac{3}{2}$

07.25.03.a7xy.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{3}{2}, 1; z\right) = \frac{1}{6}e^z(113z^2 + 34z + 6) - \frac{77}{4}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a7xz.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{3}{2}, 1; -z\right) = \frac{77}{4}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{6}e^{-z}(113z^2 - 34z + 6)$$

07.25.03.a7y0.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{3}{2}, 2; z\right) = \frac{1}{6}e^z(33z^2 + 14z + 6) - \frac{11}{2}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a7y1.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{3}{2}, 2; -z\right) = \frac{11}{2}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{6}e^{-z}(33z^2 - 14z + 6)$$

07.25.03.a7y2.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{3}{2}, 3; z\right) = \frac{1}{9}e^z(22z^2 + 11z + 9) - \frac{22}{9}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a7y3.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{3}{2}, 3; -z\right) = \frac{22}{9}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{9}e^{-z}(22z^2 - 11z + 9)$$

07.25.03.a7y4.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{3}{2}, 4; z\right) = \frac{1}{3}e^z(4z^2 + 2z + 3) - \frac{4}{3}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a7y5.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{3}{2}, 4; -z\right) = \frac{4}{3}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{3}e^{-z}(4z^2 - 2z + 3)$$

07.25.03.a7y6.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{3}{2}, 5; z\right) = -\frac{32}{39}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{5/2} + \frac{4e^z(8z^6 + 4z^5 + 6z^4 + 15z^3 - 45z^2 + 90z - 90)}{39z^4} + \frac{120}{13z^4}$$

07.25.03.a7y7.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{3}{2}, 5; -z\right) = \frac{32}{39} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{4 e^{-z} (8 z^6 - 4 z^5 + 6 z^4 - 15 z^3 - 45 z^2 - 90 z - 90)}{39 z^4} + \frac{120}{13 z^4}$$

07.25.03.a7y8.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{3}{2}, 6; z\right) = -\frac{64}{117} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{40(15z+52)}{13z^5} + \frac{4 e^z (16 z^7 + 8 z^6 + 12 z^5 + 30 z^4 + 105 z^3 - 990 z^2 + 3330 z - 4680)}{117 z^5}$$

07.25.03.a7y9.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{3}{2}, 6; -z\right) = \frac{64}{117} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{40(15z-52)}{13z^5} + \frac{4 e^{-z} (16 z^7 - 8 z^6 + 12 z^5 - 30 z^4 + 105 z^3 + 990 z^2 + 3330 z + 4680)}{117 z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = -\frac{1}{2}$

07.25.03.a7ya.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{1}{2}, 1; z\right) = \frac{1}{8} e^z (-231 z^2 + 152 z + 8) + \frac{21}{16} \sqrt{\pi} (22 z^{5/2} - 25 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7yb.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{1}{2}, 1; -z\right) = \frac{1}{8} e^{-z} (-231 z^2 - 152 z + 8) - \frac{21}{16} \sqrt{\pi} (22 z^{5/2} + 25 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7yc.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{1}{2}, 2; z\right) = \frac{1}{4} e^z (-33 z^2 + 36 z + 4) + \frac{3}{8} \sqrt{\pi} (22 z^{5/2} - 35 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7yd.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{1}{2}, 2; -z\right) = \frac{1}{4} e^{-z} (-33 z^2 - 36 z + 4) - \frac{3}{8} \sqrt{\pi} (22 z^{5/2} + 35 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7ye.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{1}{2}, 3; z\right) = \frac{1}{3} e^z (-11 z^2 + 17 z + 3) + \frac{1}{6} \sqrt{\pi} (22 z^{5/2} - 45 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7yf.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{1}{2}, 3; -z\right) = \frac{1}{3} e^{-z} (-11 z^2 - 17 z + 3) + \frac{1}{6} \sqrt{\pi} (-22 z^{5/2} - 45 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7yg.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{1}{2}, 4; z\right) = e^z (-2 z^2 + 4 z + 1) + \sqrt{\pi} (2 z^{5/2} - 5 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7yh.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{1}{2}, 4; -z\right) = e^{-z} (-2 z^2 - 4 z + 1) + \sqrt{\pi} (-2 z^{5/2} - 5 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7yi.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{1}{2}, 5; z\right) = \frac{4 e^z (44 z^6 - 108 z^5 - 32 z^4 - 15 z^3 + 45 z^2 - 90 z + 90)}{143 z^4} + \frac{8}{143} \sqrt{\pi} (22 z^{5/2} - 65 z^{3/2}) \operatorname{erfi}(\sqrt{z}) + \frac{360}{143 z^4}$$

07.25.03.a7yj.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{1}{2}, 5; -z\right) = \frac{4 e^{-z} (44 z^6 + 108 z^5 - 32 z^4 + 15 z^3 + 45 z^2 + 90 z + 90)}{143 z^4} - \frac{8}{143} \sqrt{\pi} (22 z^{5/2} + 65 z^{3/2}) \operatorname{erf}(\sqrt{z}) + \frac{360}{143 z^4}$$

07.25.03.a7yk.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{1}{2}, 6; z\right) = \frac{120 (15 z + 44)}{143 z^5} - \frac{4 e^z (88 z^7 - 256 z^6 - 84 z^5 - 60 z^4 + 15 z^3 + 630 z^2 - 2610 z + 3960)}{429 z^5} + \frac{16}{429} \sqrt{\pi} (22 z^{5/2} - 75 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7yl.01

$${}_2F_2\left(-\frac{5}{2}, 4; -\frac{1}{2}, 6; -z\right) = \frac{120 (15 z - 44)}{143 z^5} - \frac{4 e^{-z} (88 z^7 + 256 z^6 - 84 z^5 + 60 z^4 + 15 z^3 - 630 z^2 - 2610 z - 3960)}{429 z^5} - \frac{16}{429} \sqrt{\pi} (22 z^{5/2} + 75 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = \frac{1}{2}$

07.25.03.a7ym.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{1}{2}, 1; z\right) = \frac{1}{64} e^z (462 z^2 - 819 z + 64) - \frac{21}{128} \sqrt{\pi} (44 z^{5/2} - 100 z^{3/2} + 25 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7yn.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{1}{2}, 1; -z\right) = \frac{1}{64} e^{-z} (462 z^2 + 819 z + 64) + \frac{21}{128} \sqrt{\pi} (44 z^{5/2} + 100 z^{3/2} + 25 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7yo.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{1}{2}, 2; z\right) = \frac{1}{32} e^z (66 z^2 - 177 z + 32) + \frac{1}{64} \sqrt{\pi} (-132 z^{5/2} + 420 z^{3/2} - 175 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7yp.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{1}{2}, 2; -z\right) = \frac{1}{32} e^{-z} (66 z^2 + 177 z + 32) + \frac{1}{64} \sqrt{\pi} (132 z^{5/2} + 420 z^{3/2} + 175 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7yq.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{1}{2}, 3; z\right) = \frac{1}{24} e^z (22 z^2 - 79 z + 24) + \frac{1}{48} \sqrt{\pi} (-44 z^{5/2} + 180 z^{3/2} - 105 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7yr.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{1}{2}, 3; -z\right) = \frac{1}{24} e^{-z} (22 z^2 + 79 z + 24) + \frac{1}{48} \sqrt{\pi} (44 z^{5/2} + 180 z^{3/2} + 105 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7ys.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{1}{2}, 4; z\right) = \frac{1}{4} e^z (2z^2 - 9z + 4) + \frac{1}{8} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7yt.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{1}{2}, 4; -z\right) = \frac{1}{4} e^{-z} (2z^2 + 9z + 4) + \frac{1}{8} \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a7yu.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{1}{2}, 5; z\right) = \frac{2e^z (66z^6 - 357z^5 + 212z^4 + 10z^3 - 30z^2 + 60z - 60)}{429z^4} + \frac{1}{429} \sqrt{\pi} (-132z^{5/2} + 780z^{3/2} - 715\sqrt{z}) \operatorname{erfi}(\sqrt{z}) + \frac{40}{143z^4}$$

07.25.03.a7yv.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{1}{2}, 5; -z\right) = \frac{2e^{-z} (66z^6 + 357z^5 + 212z^4 - 10z^3 - 30z^2 - 60z - 60)}{429z^4} + \frac{1}{429} \sqrt{\pi} (132z^{5/2} + 780z^{3/2} + 715\sqrt{z}) \operatorname{erf}(\sqrt{z}) + \frac{40}{143z^4}$$

07.25.03.a7yw.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{1}{2}, 6; z\right) = \frac{40(5z + 12)}{143z^5} + \frac{4e^z (22z^7 - 139z^6 + 104z^5 + 10z^4 - 15z^3 - 30z^2 + 210z - 360)}{429z^5} - \frac{2}{429} \sqrt{\pi} (44z^{5/2} - 300z^{3/2} + 325\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a7yx.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{1}{2}, 6; -z\right) = \frac{40(5z - 12)}{143z^5} + \frac{4e^{-z} (22z^7 + 139z^6 + 104z^5 - 10z^4 - 15z^3 + 30z^2 + 210z + 360)}{429z^5} + \frac{2}{429} \sqrt{\pi} (44z^{5/2} + 300z^{3/2} + 325\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = 1$

07.25.03.a7yy.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, 1; z\right) = \frac{1}{40} e^{z/2} (-154z^3 + 553z^2 - 420z + 40) I_0\left(\frac{z}{2}\right) + \frac{7}{40} e^{z/2} (22z^3 - 57z^2 + 14z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7yz.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, \frac{3}{2}; z\right) = \frac{7}{256} e^z (44z^2 - 128z + 33) + \frac{\sqrt{\pi} (-616z^3 + 2100z^2 - 1050z + 25) \operatorname{erfi}(\sqrt{z})}{512\sqrt{z}}$$

07.25.03.a7z0.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, \frac{3}{2}; -z\right) = \frac{7}{256} e^{-z} (44z^2 + 128z + 33) + \frac{\sqrt{\pi} (616z^3 + 2100z^2 + 1050z + 25) \operatorname{erf}(\sqrt{z})}{512\sqrt{z}}$$

07.25.03.a7z1.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, 2; z\right) = \frac{1}{10} e^{z/2} (-11 z^3 + 52 z^2 - 55 z + 10) I_0\left(\frac{z}{2}\right) + \frac{1}{20} e^{z/2} (22 z^3 - 82 z^2 + 39 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7z2.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, \frac{5}{2}; z\right) = \frac{3 e^z (616 z^3 - 2492 z^2 + 1162 z + 5)}{4096 z} - \frac{3 \sqrt{\pi} (1232 z^4 - 5600 z^3 + 4200 z^2 - 200 z + 5) \operatorname{erfi}(\sqrt{z})}{8192 z^{3/2}}$$

07.25.03.a7z3.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (616 z^3 + 2492 z^2 + 1162 z - 5)}{4096 z} + \frac{3 \sqrt{\pi} (1232 z^4 + 5600 z^3 + 4200 z^2 + 200 z + 5) \operatorname{erf}(\sqrt{-z})}{8192 z^{3/2}}$$

07.25.03.a7z4.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, 3; z\right) = \frac{1}{90} e^{z/2} (-44 z^3 + 258 z^2 - 345 z + 90) I_0\left(\frac{z}{2}\right) + \frac{1}{90} e^{z/2} z (44 z^2 - 214 z + 153) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7z5.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, \frac{7}{2}; z\right) = \frac{3 e^z (1232 z^4 - 6384 z^3 + 4424 z^2 + 60 z - 15)}{16384 z^2} - \frac{3 \sqrt{\pi} (2464 z^5 - 14000 z^4 + 14000 z^3 - 1000 z^2 + 50 z - 15) \operatorname{erfi}(\sqrt{z})}{32768 z^{5/2}}$$

07.25.03.a7z6.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, \frac{7}{2}; -z\right) = \frac{3 e^{-z} (1232 z^4 + 6384 z^3 + 4424 z^2 - 60 z - 15)}{16384 z^2} + \frac{3 \sqrt{\pi} (2464 z^5 + 14000 z^4 + 14000 z^3 + 1000 z^2 + 50 z + 15) \operatorname{erf}(\sqrt{-z})}{32768 z^{5/2}}$$

07.25.03.a7z7.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, 4; z\right) = \frac{1}{15} e^{z/2} (-4 z^3 + 28 z^2 - 45 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} z (4 z^2 - 24 z + 23) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7z8.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, \frac{9}{2}; z\right) = \frac{7 e^z (2464 z^5 - 15568 z^4 + 14448 z^3 + 520 z^2 - 430 z + 375)}{131072 z^3} - \frac{7 \sqrt{\pi} (4928 z^6 - 33600 z^5 + 42000 z^4 - 4000 z^3 + 300 z^2 - 180 z + 375) \operatorname{erfi}(\sqrt{z})}{262144 z^{7/2}}$$

07.25.03.a7z9.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (2464 z^5 + 15568 z^4 + 14448 z^3 - 520 z^2 - 430 z - 375)}{131072 z^3} + \frac{7 \sqrt{\pi} (4928 z^6 + 33600 z^5 + 42000 z^4 + 4000 z^3 + 300 z^2 + 180 z + 375) \operatorname{erf}(\sqrt{-z})}{262144 z^{7/2}}$$

07.25.03.a7za.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, 5; z\right) = \frac{4 e^{z/2} (616 z^6 - 4396 z^5 + 5292 z^4 - 25 z^3 + 90 z^2 - 240 z + 480) I_1\left(\frac{z}{2}\right)}{15015 z^3} - \frac{4 e^{z/2} (616 z^5 - 5012 z^4 + 9380 z^3 - 3735 z^2 - 60 z + 120) I_0\left(\frac{z}{2}\right)}{15015 z^2}$$

07.25.03.a7zb.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, \frac{11}{2}; z\right) = \frac{63 e^z (704 z^6 - 5248 z^5 + 6128 z^4 + 320 z^3 + 20 z^2 - 1000 z + 2625)}{524288 z^4} - \frac{63 \sqrt{\pi} (1408 z^7 - 11200 z^6 + 16800 z^5 - 2000 z^4 + 200 z^3 - 180 z^2 + 750 z + 2625) \operatorname{erfi}(\sqrt{z})}{1048576 z^{9/2}}$$

07.25.03.a7zc.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (704 z^6 + 5248 z^5 + 6128 z^4 - 320 z^3 + 20 z^2 + 1000 z + 2625)}{524288 z^4} + \frac{63 \sqrt{\pi} (1408 z^7 + 11200 z^6 + 16800 z^5 + 2000 z^4 + 200 z^3 + 180 z^2 + 750 z - 2625) \operatorname{erf}(\sqrt{z})}{1048576 z^{9/2}}$$

07.25.03.a7zd.01

$${}_2F_2\left(-\frac{5}{2}, 4; 1, 6; z\right) = \frac{8 e^{z/2} (616 z^7 - 5096 z^6 + 7392 z^5 - 100 z^4 + 275 z^3 - 360 z^2 - 240 z + 7680) I_1\left(\frac{z}{2}\right)}{45045 z^4} - \frac{16 e^{z/2} (308 z^6 - 2856 z^5 + 6090 z^4 - 2780 z^3 - 75 z^2 - 30 z + 960) I_0\left(\frac{z}{2}\right)}{45045 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = \frac{3}{2}$

07.25.03.a7ze.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{3}{2}, 2; z\right) = \frac{1}{128} e^z (44 z^2 - 188 z + 103) + \frac{\sqrt{\pi} (-88 z^3 + 420 z^2 - 350 z + 25) \operatorname{erfi}(\sqrt{z})}{256 \sqrt{z}}$$

07.25.03.a7zf.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{3}{2}, 2; -z\right) = \frac{1}{128} e^{-z} (44 z^2 + 188 z + 103) + \frac{\sqrt{\pi} (88 z^3 + 420 z^2 + 350 z + 25) \operatorname{erf}(\sqrt{z})}{256 \sqrt{z}}$$

07.25.03.a7zg.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{3}{2}, 3; z\right) = \frac{1}{288} e^z (44 z^2 - 248 z + 213) + \frac{\sqrt{\pi} (-88 z^3 + 540 z^2 - 630 z + 75) \operatorname{erfi}(\sqrt{z})}{576 \sqrt{z}}$$

07.25.03.a7zh.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{3}{2}, 3; -z\right) = \frac{1}{288} e^{-z} (44 z^2 + 248 z + 213) + \frac{\sqrt{\pi} (88 z^3 + 540 z^2 + 630 z + 75) \operatorname{erf}(\sqrt{z})}{576 \sqrt{z}}$$

07.25.03.a7zi.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{3}{2}, 4; z\right) = \frac{1}{48} e^z (4z^2 - 28z + 33) + \frac{\sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.a7zj.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{3}{2}, 4; -z\right) = \frac{1}{48} e^{-z} (4z^2 + 28z + 33) + \frac{\sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.a7zk.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{3}{2}, 5; z\right) = \frac{e^z (308z^6 - 2576z^5 + 3871z^4 - 40z^3 + 120z^2 - 240z + 240)}{6006z^4} + \frac{\sqrt{\pi} (-616z^3 + 5460z^2 - 10010z + 2145) \operatorname{erfi}(\sqrt{z})}{12012\sqrt{z}} - \frac{40}{1001z^4}$$

07.25.03.a7zl.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{3}{2}, 5; -z\right) = \frac{e^{-z} (308z^6 + 2576z^5 + 3871z^4 + 40z^3 + 120z^2 + 240z + 240)}{6006z^4} + \frac{\sqrt{\pi} (616z^3 + 5460z^2 + 10010z + 2145) \operatorname{erf}(\sqrt{z})}{12012\sqrt{z}} - \frac{40}{1001z^4}$$

07.25.03.a7zm.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{3}{2}, 6; z\right) = -\frac{40(15z + 28)}{3003z^5} + \frac{e^z (308z^7 - 2996z^6 + 5481z^5 - 160z^4 + 340z^3 - 120z^2 - 1560z + 3360)}{9009z^5} + \frac{\sqrt{\pi} (-616z^3 + 6300z^2 - 13650z + 3575) \operatorname{erfi}(\sqrt{z})}{18018\sqrt{z}}$$

07.25.03.a7zn.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{3}{2}, 6; -z\right) = -\frac{40(15z - 28)}{3003z^5} + \frac{e^{-z} (308z^7 + 2996z^6 + 5481z^5 + 160z^4 + 340z^3 + 120z^2 - 1560z - 3360)}{9009z^5} + \frac{\sqrt{\pi} (616z^3 + 6300z^2 + 13650z + 3575) \operatorname{erf}(\sqrt{z})}{18018\sqrt{z}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = 2$

07.25.03.a7zo.01

$${}_2F_2\left(-\frac{5}{2}, 4; 2, 2; z\right) = \frac{1}{420} e^{z/2} (-132z^3 + 834z^2 - 1255z + 420) I_0\left(\frac{z}{2}\right) + \frac{1}{420} e^{z/2} (132z^3 - 702z^2 + 619z - 20) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7zp.01

$${}_2F_2\left(-\frac{5}{2}, 4; 2, \frac{5}{2}; z\right) = \frac{3e^z (88z^3 - 516z^2 + 486z - 5)}{2048z} - \frac{3\sqrt{\pi} (176z^4 - 1120z^3 + 1400z^2 - 200z - 5) \operatorname{erfi}(\sqrt{z})}{4096z^{3/2}}$$

07.25.03.a7zq.01

$${}_2F_2\left(-\frac{5}{2}, 4; 2, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (88 z^3 + 516 z^2 + 486 z + 5)}{2048 z} + \frac{3 \sqrt{\pi} (176 z^4 + 1120 z^3 + 1400 z^2 + 200 z - 5) \operatorname{erf}(\sqrt{z})}{4096 z^{3/2}}$$

07.25.03.a7zr.01

$${}_2F_2\left(-\frac{5}{2}, 4; 2, 3; z\right) = \frac{1}{315} e^{z/2} (-44 z^3 + 348 z^2 - 675 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (44 z^3 - 304 z^2 + 393 z - 30) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7zs.01

$${}_2F_2\left(-\frac{5}{2}, 4; 2, \frac{7}{2}; z\right) = \frac{e^z (528 z^4 - 3936 z^3 + 5296 z^2 - 160 z + 15)}{8192 z^2} + \frac{\sqrt{\pi} (-1056 z^5 + 8400 z^4 - 14000 z^3 + 3000 z^2 + 150 z - 15) \operatorname{erfi}(\sqrt{z})}{16384 z^{5/2}}$$

07.25.03.a7zt.01

$${}_2F_2\left(-\frac{5}{2}, 4; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (528 z^4 + 3936 z^3 + 5296 z^2 + 160 z + 15)}{8192 z^2} + \frac{\sqrt{\pi} (1056 z^5 + 8400 z^4 + 14000 z^3 + 3000 z^2 - 150 z - 15) \operatorname{erf}(\sqrt{z})}{16384 z^{5/2}}$$

07.25.03.a7zu.01

$${}_2F_2\left(-\frac{5}{2}, 4; 2, 4; z\right) = \frac{1}{105} e^{z/2} (-8 z^3 + 76 z^2 - 180 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8 z^3 - 68 z^2 + 116 z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.a7zv.01

$${}_2F_2\left(-\frac{5}{2}, 4; 2, \frac{9}{2}; z\right) = \frac{7 e^z (352 z^5 - 3184 z^4 + 5584 z^3 - 360 z^2 + 110 z - 75)}{65536 z^3} - \frac{7 \sqrt{\pi} (704 z^6 - 6720 z^5 + 14000 z^4 - 4000 z^3 - 300 z^2 + 60 z - 75) \operatorname{erfi}(\sqrt{z})}{131072 z^{7/2}}$$

07.25.03.a7zw.01

$${}_2F_2\left(-\frac{5}{2}, 4; 2, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (352 z^5 + 3184 z^4 + 5584 z^3 + 360 z^2 + 110 z + 75)}{65536 z^3} + \frac{7 \sqrt{\pi} (704 z^6 + 6720 z^5 + 14000 z^4 + 4000 z^3 - 300 z^2 - 60 z - 75) \operatorname{erf}(\sqrt{z})}{131072 z^{7/2}}$$

07.25.03.a7zx.01

$${}_2F_2\left(-\frac{5}{2}, 4; 2, 5; z\right) = \frac{8 e^{z/2} (264 z^6 - 2664 z^5 + 5648 z^4 - 1060 z^3 - 45 z^2 + 120 z - 240) I_1\left(\frac{z}{2}\right)}{45045 z^3} - \frac{16 e^{z/2} (132 z^5 - 1464 z^4 + 4090 z^3 - 2820 z^2 + 15 z - 30) I_0\left(\frac{z}{2}\right)}{45045 z^2}$$

07.25.03.a7zy.01

$${}_2F_2\left(-\frac{5}{2}, 4; 2, \frac{11}{2}; z\right) = \frac{9 e^z (704 z^6 - 7488 z^5 + 16208 z^4 - 1760 z^3 + 420 z^2 + 700 z - 2625)}{262144 z^4} - \frac{9 \sqrt{\pi} (1408 z^7 - 15680 z^6 + 39200 z^5 - 14000 z^4 - 1400 z^3 + 420 z^2 - 1050 z - 2625) \operatorname{erfi}(\sqrt{z})}{524288 z^{9/2}}$$

07.25.03.a7zz.01

$${}_2F_2\left(-\frac{5}{2}, 4; 2, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (704 z^6 + 7488 z^5 + 16208 z^4 + 1760 z^3 + 420 z^2 - 700 z - 2625)}{262144 z^4} + \frac{9 \sqrt{\pi} (1408 z^7 + 15680 z^6 + 39200 z^5 + 14000 z^4 - 1400 z^3 - 420 z^2 - 1050 z + 2625) \operatorname{erf}(\sqrt{z})}{524288 z^{9/2}}$$

07.25.03.a800.01

$${}_2F_2\left(-\frac{5}{2}, 4; 2, 6; z\right) = \frac{8 e^{z/2} (176 z^7 - 2056 z^6 + 5212 z^5 - 1300 z^4 - 125 z^3 + 240 z^2 - 240 z - 1920) I_1\left(\frac{z}{2}\right)}{45045 z^4} - \frac{8 e^{z/2} (176 z^6 - 2232 z^5 + 7180 z^4 - 5660 z^3 + 75 z^2 - 60 z - 480) I_0\left(\frac{z}{2}\right)}{45045 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = \frac{5}{2}$

07.25.03.a801.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{5}{2}, 3; z\right) = \frac{e^z (88 z^3 - 676 z^2 + 966 z - 45)}{1536 z} + \frac{\sqrt{\pi} (-176 z^4 + 1440 z^3 - 2520 z^2 + 600 z + 45) \operatorname{erfi}(\sqrt{z})}{3072 z^{3/2}}$$

07.25.03.a802.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (88 z^3 + 676 z^2 + 966 z + 45)}{1536 z} + \frac{\sqrt{\pi} (176 z^4 + 1440 z^3 + 2520 z^2 + 600 z - 45) \operatorname{erf}(\sqrt{z})}{3072 z^{3/2}}$$

07.25.03.a803.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{5}{2}, 4; z\right) = \frac{e^z (8 z^3 - 76 z^2 + 146 z - 15)}{256 z} + \frac{\sqrt{\pi} (-16 z^4 + 160 z^3 - 360 z^2 + 120 z + 15) \operatorname{erfi}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.a804.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{5}{2}, 4; -z\right) = \frac{e^{-z} (8 z^3 + 76 z^2 + 146 z + 15)}{256 z} + \frac{\sqrt{\pi} (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15) \operatorname{erf}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.a805.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{5}{2}, 5; z\right) = \frac{e^z (616 z^6 - 6972 z^5 + 16842 z^4 - 2875 z^3 - 384 z^2 + 768 z - 768)}{32032 z^4} + \frac{\sqrt{\pi} (-1232 z^4 + 14560 z^3 - 40040 z^2 + 17160 z + 3003) \operatorname{erfi}(\sqrt{z})}{64064 z^{3/2}} + \frac{24}{1001 z^4}$$

07.25.03.a806.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{5}{2}, 5; -z\right) = \frac{e^{-z}(616z^6 + 6972z^5 + 16842z^4 + 2875z^3 - 384z^2 - 768z - 768)}{32032z^4} + \frac{\sqrt{\pi}(1232z^4 + 14560z^3 + 40040z^2 + 17160z - 3003)\operatorname{erf}(\sqrt{z})}{64064z^{3/2}} + \frac{24}{1001z^4}$$

07.25.03.a807.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{5}{2}, 6; z\right) = \frac{40(3z+4)}{1001z^5} + \frac{e^z(616z^7 - 8092z^6 + 23562z^5 - 5795z^4 - 1600z^3 + 1920z^2 + 1920z - 7680)}{48048z^5} + \frac{\sqrt{\pi}(-1232z^4 + 16800z^3 - 54600z^2 + 28600z + 6435)\operatorname{erfi}(\sqrt{z})}{96096z^{3/2}}$$

07.25.03.a808.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{5}{2}, 6; -z\right) = \frac{40(3z-4)}{1001z^5} + \frac{e^{-z}(616z^7 + 8092z^6 + 23562z^5 + 5795z^4 - 1600z^3 - 1920z^2 + 1920z + 7680)}{48048z^5} + \frac{\sqrt{\pi}(1232z^4 + 16800z^3 + 54600z^2 + 28600z - 6435)\operatorname{erf}(\sqrt{z})}{96096z^{3/2}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = 3$

07.25.03.a809.01

$${}_2F_2\left(-\frac{5}{2}, 4; 3, 3; z\right) = \frac{2e^{z/2}(88z^4 - 788z^3 + 1476z^2 - 255z - 30)I_1\left(\frac{z}{2}\right)}{2835z} - \frac{2e^{z/2}(88z^3 - 876z^2 + 2220z - 1425)I_0\left(\frac{z}{2}\right)}{2835}$$

07.25.03.a80a.01

$${}_2F_2\left(-\frac{5}{2}, 4; 3, \frac{7}{2}; z\right) = \frac{e^z(176z^4 - 1712z^3 + 3432z^2 - 420z - 45)}{6144z^2} + \frac{\sqrt{\pi}(-352z^5 + 3600z^4 - 8400z^3 + 3000z^2 + 450z + 45)\operatorname{erfi}(\sqrt{z})}{12288z^{5/2}}$$

07.25.03.a80b.01

$${}_2F_2\left(-\frac{5}{2}, 4; 3, \frac{7}{2}; -z\right) = \frac{e^{-z}(176z^4 + 1712z^3 + 3432z^2 + 420z - 45)}{6144z^2} + \frac{\sqrt{\pi}(352z^5 + 3600z^4 + 8400z^3 + 3000z^2 - 450z + 45)\operatorname{erf}(\sqrt{z})}{12288z^{5/2}}$$

07.25.03.a80c.01

$${}_2F_2\left(-\frac{5}{2}, 4; 3, 4; z\right) = \frac{4e^{z/2}(8z^4 - 88z^3 + 216z^2 - 60z - 15)I_1\left(\frac{z}{2}\right)}{945z} - \frac{16}{945}e^{z/2}(2z^3 - 24z^2 + 75z - 60)I_0\left(\frac{z}{2}\right)$$

07.25.03.a80d.01

$${}_2F_2\left(-\frac{5}{2}, 4; 3, \frac{9}{2}; z\right) = \frac{7 e^z (352 z^5 - 4144 z^4 + 10704 z^3 - 2280 z^2 - 690 z + 225)}{147456 z^3} - \frac{7 \sqrt{\pi} (704 z^6 - 8640 z^5 + 25200 z^4 - 12000 z^3 - 2700 z^2 - 540 z + 225) \operatorname{erfi}(\sqrt{z})}{294912 z^{7/2}}$$

07.25.03.a80e.01

$${}_2F_2\left(-\frac{5}{2}, 4; 3, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (352 z^5 + 4144 z^4 + 10704 z^3 + 2280 z^2 - 690 z - 225)}{147456 z^3} + \frac{7 \sqrt{\pi} (704 z^6 + 8640 z^5 + 25200 z^4 + 12000 z^3 - 2700 z^2 + 540 z + 225) \operatorname{erf}(\sqrt{z})}{294912 z^{7/2}}$$

07.25.03.a80f.01

$${}_2F_2\left(-\frac{5}{2}, 4; 3, 5; z\right) = \frac{16 e^{z/2} (176 z^6 - 2296 z^5 + 6972 z^4 - 2700 z^3 - 1005 z^2 - 180 z + 360) I_1\left(\frac{z}{2}\right)}{135135 z^3} - \frac{16 e^{z/2} (176 z^5 - 2472 z^4 + 9180 z^3 - 8700 z^2 - 45 z + 90) I_0\left(\frac{z}{2}\right)}{135135 z^2}$$

07.25.03.a80g.01

$${}_2F_2\left(-\frac{5}{2}, 4; 3, \frac{11}{2}; z\right) = \frac{e^z (704 z^6 - 9728 z^5 + 30768 z^4 - 9600 z^3 - 4620 z^2 + 4725)}{65536 z^4} + \frac{1}{131072 z^{9/2}} \sqrt{\pi} (-1408 z^7 + 20160 z^6 - 70560 z^5 + 42000 z^4 + 12600 z^3 + 3780 z^2 - 3150 z - 4725) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a80h.01

$${}_2F_2\left(-\frac{5}{2}, 4; 3, \frac{11}{2}; -z\right) = \frac{e^{-z} (704 z^6 + 9728 z^5 + 30768 z^4 + 9600 z^3 - 4620 z^2 + 4725)}{65536 z^4} + \frac{\sqrt{\pi} (1408 z^7 + 20160 z^6 + 70560 z^5 + 42000 z^4 - 12600 z^3 + 3780 z^2 + 3150 z - 4725) \operatorname{erf}(\sqrt{z})}{131072 z^{9/2}}$$

07.25.03.a80i.01

$${}_2F_2\left(-\frac{5}{2}, 4; 3, 6; z\right) = \frac{32 e^{z/2} (176 z^7 - 2656 z^6 + 9612 z^5 - 4800 z^4 - 2325 z^3 - 810 z^2 + 1260 z + 2880) I_1\left(\frac{z}{2}\right)}{405405 z^4} - \frac{32 e^{z/2} (176 z^6 - 2832 z^5 + 12180 z^4 - 13260 z^3 - 225 z^2 + 315 z + 720) I_0\left(\frac{z}{2}\right)}{405405 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = \frac{7}{2}$

07.25.03.a80j.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{7}{2}, 4; z\right) = \frac{e^z (16 z^4 - 192 z^3 + 512 z^2 - 120 z - 45)}{1024 z^2} + \frac{\sqrt{\pi} (-32 z^5 + 400 z^4 - 1200 z^3 + 600 z^2 + 150 z + 45) \operatorname{erfi}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.a80k.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{7}{2}, 4; -z\right) = \frac{e^{-z} (16z^4 + 192z^3 + 512z^2 + 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.a80l.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{7}{2}, 5; z\right) = \frac{e^{-z} (3696z^6 - 52752z^5 + 175672z^4 - 62620z^3 - 37365z^2 - 15360z + 15360)}{384384z^4} + \frac{\sqrt{\pi} (-7392z^5 + 109200z^4 - 400400z^3 + 257400z^2 + 90090z + 45045) \operatorname{erfi}(\sqrt{z})}{768768z^{5/2}} - \frac{40}{1001z^4}$$

07.25.03.a80m.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{7}{2}, 5; -z\right) = \frac{e^{-z} (3696z^6 + 52752z^5 + 175672z^4 + 62620z^3 - 37365z^2 + 15360z + 15360)}{384384z^4} + \frac{\sqrt{\pi} (7392z^5 + 109200z^4 + 400400z^3 + 257400z^2 - 90090z + 45045) \operatorname{erf}(\sqrt{z})}{768768z^{5/2}} - \frac{40}{1001z^4}$$

07.25.03.a80n.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{7}{2}, 6; z\right) = -\frac{40(5z+4)}{1001z^5} + \frac{e^{-z} (1232z^7 - 20384z^6 + 81424z^5 - 39440z^4 - 30965z^3 - 23040z^2 + 7680z + 30720)}{192192z^5} + \frac{\sqrt{\pi} (-2464z^5 + 42000z^4 - 182000z^3 + 143000z^2 + 64350z + 45045) \operatorname{erfi}(\sqrt{z})}{384384z^{5/2}}$$

07.25.03.a80o.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{7}{2}, 6; -z\right) = -\frac{40(5z-4)}{1001z^5} + \frac{e^{-z} (1232z^7 + 20384z^6 + 81424z^5 + 39440z^4 - 30965z^3 + 23040z^2 + 7680z - 30720)}{192192z^5} + \frac{\sqrt{\pi} (2464z^5 + 42000z^4 + 182000z^3 + 143000z^2 - 64350z + 45045) \operatorname{erf}(\sqrt{z})}{384384z^{5/2}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = 4$

07.25.03.a80p.01

$${}_2F_2\left(-\frac{5}{2}, 4; 4, 4; z\right) = \frac{4e^{z/2} (16z^5 - 216z^4 + 692z^3 - 300z^2 - 135z - 60) I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4e^{z/2} (16z^4 - 232z^3 + 900z^2 - 900z - 15) I_0\left(\frac{z}{2}\right)}{3465z}$$

07.25.03.a80q.01

$${}_2F_2\left(-\frac{5}{2}, 4; 4, \frac{9}{2}; z\right) = \frac{7 e^z (32 z^5 - 464 z^4 + 1584 z^3 - 600 z^2 - 390 z - 225)}{24 576 z^3} - \frac{7 \sqrt{\pi} (64 z^6 - 960 z^5 + 3600 z^4 - 2400 z^3 - 900 z^2 - 540 z - 225) \operatorname{erfi}(\sqrt{z})}{49 152 z^{7/2}}$$

07.25.03.a80r.01

$${}_2F_2\left(-\frac{5}{2}, 4; 4, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (32 z^5 + 464 z^4 + 1584 z^3 + 600 z^2 - 390 z + 225)}{24 576 z^3} + \frac{7 \sqrt{\pi} (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225) \operatorname{erf}(\sqrt{z})}{49 152 z^{7/2}}$$

07.25.03.a80s.01

$${}_2F_2\left(-\frac{5}{2}, 4; 4, 5; z\right) = \frac{32 e^{z/2} (16 z^6 - 256 z^5 + 1012 z^4 - 600 z^3 - 375 z^2 - 300 z - 180) I_1\left(\frac{z}{2}\right)}{45 045 z^3} - \frac{32 e^{z/2} (16 z^5 - 272 z^4 + 1260 z^3 - 1500 z^2 - 75 z - 45) I_0\left(\frac{z}{2}\right)}{45 045 z^2}$$

07.25.03.a80t.01

$${}_2F_2\left(-\frac{5}{2}, 4; 4, \frac{11}{2}; z\right) = \frac{3 e^z (64 z^6 - 1088 z^5 + 4528 z^4 - 2400 z^3 - 2100 z^2 - 2100 z - 1575)}{32 768 z^4} - \frac{3 \sqrt{\pi} (128 z^7 - 2240 z^6 + 10080 z^5 - 8400 z^4 - 4200 z^3 - 3780 z^2 - 3150 z - 1575) \operatorname{erfi}(\sqrt{z})}{65 536 z^{9/2}}$$

07.25.03.a80u.01

$${}_2F_2\left(-\frac{5}{2}, 4; 4, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 + 1088 z^5 + 4528 z^4 + 2400 z^3 - 2100 z^2 + 2100 z - 1575)}{32 768 z^4} + \frac{3 \sqrt{\pi} (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575) \operatorname{erf}(\sqrt{z})}{65 536 z^{9/2}}$$

07.25.03.a80v.01

$${}_2F_2\left(-\frac{5}{2}, 4; 4, 6; z\right) = \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right)}{135 135 z^4} - \frac{32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135 135 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = \frac{9}{2}$

07.25.03.a80w.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{9}{2}, 5; z\right) = \frac{e^z (2464 z^6 - 42448 z^5 + 180208 z^4 - 99640 z^3 - 91470 z^2 - 102345 z - 122880)}{439296 z^4} + \frac{\sqrt{\pi} (-4928 z^6 + 87360 z^5 - 400400 z^4 + 343200 z^3 + 180180 z^2 + 180180 z + 225225) \operatorname{erfi}(\sqrt{z})}{878592 z^{7/2}} + \frac{40}{143 z^4}$$

07.25.03.a80x.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{9}{2}, 5; -z\right) = \frac{e^{-z} (2464 z^6 + 42448 z^5 + 180208 z^4 + 99640 z^3 - 91470 z^2 + 102345 z - 122880)}{439296 z^4} + \frac{\sqrt{\pi} (4928 z^6 + 87360 z^5 + 400400 z^4 + 343200 z^3 - 180180 z^2 + 180180 z - 225225) \operatorname{erf}(\sqrt{z})}{878592 z^{7/2}} + \frac{40}{143 z^4}$$

07.25.03.a80y.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{9}{2}, 6; z\right) = \frac{40(15z+4)}{429 z^5} + \frac{e^z (2464 z^7 - 49168 z^6 + 249648 z^5 - 182680 z^4 - 209630 z^3 - 327405 z^2 - 675840 z - 245760)}{658944 z^5} + \frac{1}{1317888 z^{7/2}} \sqrt{\pi} (-4928 z^6 + 100800 z^5 - 546000 z^4 + 572000 z^3 + 386100 z^2 + 540540 z + 1126125) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a80z.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{9}{2}, 6; -z\right) = \frac{40(15z-4)}{429 z^5} + \frac{1}{658944 z^5} e^{-z} (2464 z^7 + 49168 z^6 + 249648 z^5 + 182680 z^4 - 209630 z^3 + 327405 z^2 - 675840 z + 245760) + \frac{1}{1317888 z^{7/2}} \sqrt{\pi} (4928 z^6 + 100800 z^5 + 546000 z^4 + 572000 z^3 - 386100 z^2 + 540540 z - 1126125) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = 5$

07.25.03.a810.01

$${}_2F_2\left(-\frac{5}{2}, 4; 5, 5; z\right) = -\frac{1}{135270135 z^4} + \frac{128 e^{z/2} (7392 z^7 - 147504 z^6 + 818720 z^5 - 1166460 z^4 - 141198 z^3 - 213099 z^2 - 540540 z + 1081080) I_0\left(\frac{z}{2}\right)}{135270135 z^3} + \frac{1024}{1001 z^4} + \frac{1}{135270135 z^3} 128 e^{z/2} (7392 z^6 - 140112 z^5 + 682304 z^4 - 546820 z^3 - 463878 z^2 - 609837 z - 1122666) I_1\left(\frac{z}{2}\right)$$

07.25.03.a811.01

$${}_2F_2\left(-\frac{5}{2}, 4; 5, \frac{11}{2}; z\right) = \frac{3 e^z (704 z^6 - 14208 z^5 + 73328 z^4 - 55360 z^3 - 65580 z^2 - 109080 z - 266295)}{585728 z^4} - \frac{1}{1171456 z^{9/2}} + \frac{3 \sqrt{\pi} (1408 z^7 - 29120 z^6 + 160160 z^5 - 171600 z^4 - 120120 z^3 - 180180 z^2 - 450450 z + 225225) \operatorname{erfi}(\sqrt{z})}{143 z^4}$$

07.25.03.a812.01

$${}_2F_2\left(-\frac{5}{2}, 4; 5, \frac{11}{2}; -z\right) = \frac{3e^{-z}(704z^6 + 14208z^5 + 73328z^4 + 55360z^3 - 65580z^2 + 109080z - 266295)}{585728z^4} + \frac{1}{1171456z^{9/2}}$$

$$3\sqrt{\pi}(1408z^7 + 29120z^6 + 160160z^5 + 171600z^4 - 120120z^3 + 180180z^2 - 450450z - 225225)\operatorname{erf}(\sqrt{z}) + \frac{360}{143z^4}$$

07.25.03.a813.01

$${}_2F_2\left(-\frac{5}{2}, 4; 5, 6; z\right) =$$

$$-\frac{1}{135270135z^4} 512e^{z/2}(1232z^7 - 28224z^6 + 182560z^5 - 301920z^4 - 63885z^3 - 142500z^2 - 585585z + 1351350)$$

$$I_0\left(\frac{z}{2}\right) + \frac{1}{135270135z^4}$$

$$256e^{z/2}(2464z^7 - 53984z^6 + 312368z^5 - 316000z^4 - 333870z^3 - 601170z^2 - 1815675z + 720720)I_1\left(\frac{z}{2}\right) + \frac{5120}{1001z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = \frac{11}{2}$

07.25.03.a814.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{11}{2}, 6; z\right) = \frac{120(15z - 4)}{143z^5} +$$

$$\frac{e^z(704z^7 - 16448z^6 + 101328z^5 - 99680z^4 - 145180z^3 - 326580z^2 - 1291065z + 983040)}{292864z^5} + \frac{1}{585728z^{9/2}}$$

$$\sqrt{\pi}(-1408z^7 + 33600z^6 - 218400z^5 + 286000z^4 + 257400z^3 + 540540z^2 + 2252250z - 3378375)\operatorname{erfi}(\sqrt{z})$$

07.25.03.a815.01

$${}_2F_2\left(-\frac{5}{2}, 4; \frac{11}{2}, 6; -z\right) = \frac{120(15z + 4)}{143z^5} +$$

$$\frac{e^{-z}(704z^7 + 16448z^6 + 101328z^5 + 99680z^4 - 145180z^3 + 326580z^2 - 1291065z - 983040)}{292864z^5} + \frac{1}{585728z^{9/2}}$$

$$\sqrt{\pi}(1408z^7 + 33600z^6 + 218400z^5 + 286000z^4 - 257400z^3 + 540540z^2 - 2252250z - 3378375)\operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 4$, $b_1 = 6$

07.25.03.a816.01

$${}_2F_2\left(-\frac{5}{2}, 4; 6, 6; z\right) =$$

$$\frac{5120(15z - 8)}{3003z^5} - \frac{1}{405810405z^5} \left(256e^{z/2}(4928z^8 - 129696z^7 + 979440z^6 - 1888480z^5 - 659400z^4 -$$

$$2081670z^3 - 13620885z^2 + 51351300z - 21621600)I_0\left(\frac{z}{2}\right) + \frac{1}{405810405z^4}$$

$$\left(256e^{z/2}(4928z^7 - 124768z^6 + 857136z^5 - 1088800z^4 - 1429000z^3 - 3523770z^2 - 17560905z + 32002860)I_1\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.a817.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & -\frac{1}{756392175} \left(e^z (8192 z^{13} + 446464 z^{12} + 8835072 z^{11} + 79054848 z^{10} + 324011520 z^9 + 543594240 z^8 + 274337280 z^7 + \right. \\
 & \left. 6531840 z^6 + 30209760 z^5 - 111358800 z^4 + 329086800 z^3 - 716801400 z^2 + 1037695050 z - 756392175) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a818.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & \frac{1}{68762925} \left(e^z (4096 z^{12} + 196608 z^{11} + 3336192 z^{10} + 24514560 z^9 + 76204800 z^8 + 81285120 z^7 + \right. \\
 & \left. 15240960 z^6 - 4354560 z^5 + 12927600 z^4 - 36288000 z^3 + 73823400 z^2 - 100018800 z + 68762925) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a819.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & -\frac{1}{7640325} \left(e^z (2048 z^{11} + 84992 z^{10} + 1200640 z^9 + 6854400 z^8 + 14112000 z^7 + 5362560 z^6 - 423360 z^5 - \right. \\
 & \left. 1965600 z^4 + 5481000 z^3 - 9922500 z^2 + 12105450 z - 7640325) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a81a.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{1091475} \left(e^z (1024 z^{10} + 35840 z^9 + 403200 z^8 + 1612800 z^7 + 1411200 z^6 - 846720 z^5 + 1058400 z^4 - \right. \\
 & \left. 1512000 z^3 + 1984500 z^2 - 1984500 z + 1091475) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a81b.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = -\frac{1}{218295} \\
 & \left(e^z (512 z^9 + 14592 z^8 + 121344 z^7 + 260352 z^6 - 205632 z^5 + 90720 z^4 + 393120 z^3 - 952560 z^2 + 515970 z - 218295) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a81c.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{72765} e^z (256 z^8 + 5632 z^7 + 29696 z^6 - 3456 z^5 - 90720 z^4 + 272160 z^3 - 211680 z^2 - 370440 z + 72765)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a81d.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = -\frac{e^z (128 z^7 + 1984 z^6 + 3936 z^5 - 19440 z^4 + 22680 z^3 + 79380 z^2 - 224910 z - 72765)}{72765}
 \end{aligned}$$

07.25.03.a81e.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2}(-64z^7 - 832z^6 - 656z^5 + 8400z^4 - 17304z^3 - 25872z^2 + 112455z + 72765)I_0\left(\frac{z}{2}\right) + e^{z/2}(-64z^7 - 768z^6 + 80z^5 + 8000z^4 - 24696z^3 + 1176z^2 + 96873z)I_1\left(\frac{z}{2}\right)}{72765}$$

07.25.03.a81f.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{e^z(64z^6 + 576z^5 - 1200z^4 - 4320z^3 + 26460z^2 - 26460z - 72765)}{72765}$$

07.25.03.a81g.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2}(-64z^6 - 416z^5 + 1680z^4 + 1056z^3 - 22632z^2 + 33210z + 72765)I_0\left(\frac{z}{2}\right) + e^{z/2}(-64z^6 - 352z^5 + 2000z^4 - 1056z^3 - 20424z^2 + 50838z + 19305)I_1\left(\frac{z}{2}\right)}{72765}$$

07.25.03.a81h.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = -\frac{e^z(32z^5 + 80z^4 - 1040z^3 + 2520z^2 + 4410z - 24255)}{24255}$$

07.25.03.a81i.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, 3; z\right) = -\frac{8e^{z/2}(16z^5 - 432z^3 + 1704z^2 - 45z - 990)I_0\left(\frac{z}{2}\right) - 4e^{z/2}(32z^6 - 32z^5 - 816z^4 + 4176z^3 - 4542z^2 - 12870z + 6435)I_1\left(\frac{z}{2}\right)}{72765z}$$

07.25.03.a81j.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{e^z(16z^4 - 64z^3 - 168z^2 + 2016z - 4851)}{4851}$$

07.25.03.a81k.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, 4; z\right) = -\frac{4e^{z/2}(32z^5 - 208z^4 + 256z^3 + 2460z^2 - 9330z + 3315)I_0\left(\frac{z}{2}\right) - 4e^{z/2}(32z^6 - 240z^5 + 512z^4 + 1796z^3 - 10530z^2 + 13065z - 13260)I_1\left(\frac{z}{2}\right)}{24255z^2}$$

07.25.03.a81l.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{1}{693}e^z(8z^3 - 84z^2 + 378z - 693)$$

07.25.03.a81m.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, 5; z\right) = -\frac{32e^{z/2}(16z^5 - 208z^4 + 1260z^3 - 4260z^2 + 8925z - 14535)I_0\left(\frac{z}{2}\right) - 32e^{z/2}(16z^6 - 224z^5 + 1492z^4 - 5880z^3 + 15825z^2 - 35700z + 58140)I_1\left(\frac{z}{2}\right)}{24255z^3}$$

07.25.03.a81n.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z(-4z^6 + 68z^5 - 563z^4 + 2880z^3 - 10080z^2 + 25200z - 37800)}{77z^4} + \frac{2700\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.a81o.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z}(-4z^6 - 68z^5 - 563z^4 - 2880z^3 - 10080z^2 - 25200z - 37800)}{77z^4} + \frac{2700\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.a81p.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, 6; z\right) = -\frac{32e^{z/2}(16z^5 - 312z^4 + 2964z^3 - 17340z^2 + 66861z - 162792)I_0\left(\frac{z}{2}\right)}{4851z^3} - \frac{32e^{z/2}(16z^6 - 328z^5 + 3300z^4 - 20820z^3 + 89709z^2 - 267444z + 651168)I_1\left(\frac{z}{2}\right)}{4851z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.a81q.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{1}{6251175} (e^z(2048z^{11} + 87040z^{10} + 1276416z^9 + 7789824z^8 + 18627840z^7 + 12700800z^6 + 1270080z^5 - 1542240z^4 + 4150440z^3 - 7767900z^2 + 9724050z - 6251175))$$

07.25.03.a81r.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{694575} (e^z(1024z^{10} + 37888z^9 + 467712z^8 + 2257920z^7 + 3669120z^6 + 846720z^5 + 211680z^4 - 665280z^3 + 1077300z^2 - 1190700z + 694575))$$

07.25.03.a81s.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{1}{99225} (e^z(512z^9 + 16128z^8 + 161280z^7 + 564480z^6 + 423360z^5 - 211680z^4 + 211680z^3 - 226800z^2 + 198450z - 99225))$$

07.25.03.a81t.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{19845} e^z(256z^8 + 6656z^7 + 50688z^6 + 104832z^5 - 50400z^4 - 30240z^3 + 120960z^2 - 52920z + 19845)$$

07.25.03.a81u.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -\frac{e^z(128z^7 + 2624z^6 + 13536z^5 + 5040z^4 - 37800z^3 + 41580z^2 + 39690z - 6615)}{6615}$$

07.25.03.a81v.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{e^z(64z^6 + 960z^5 + 2448z^4 - 6048z^3 - 3780z^2 + 26460z + 6615)}{6615}$$

07.25.03.a81w.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (32 z^6 + 416 z^5 + 720 z^4 - 3024 z^3 - 462 z^2 + 13230 z + 6615) I_0\left(\frac{z}{2}\right)}{6615} + \frac{2 e^{z/2} (16 z^6 + 192 z^5 + 176 z^4 - 1608 z^3 + 1323 z^2 + 4704 z) I_1\left(\frac{z}{2}\right)}{6615}$$

07.25.03.a81x.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z (32 z^5 + 304 z^4 - 144 z^3 - 2520 z^2 + 4410 z + 6615)}{6615}$$

07.25.03.a81y.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (32 z^5 + 240 z^4 - 384 z^3 - 1812 z^2 + 4590 z + 6615) I_0\left(\frac{z}{2}\right)}{6615} + \frac{e^{z/2} (32 z^5 + 208 z^4 - 576 z^3 - 1164 z^2 + 5358 z + 1485) I_1\left(\frac{z}{2}\right)}{6615}$$

07.25.03.a81z.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (16 z^4 + 64 z^3 - 360 z^2 + 2205)}{2205}$$

07.25.03.a820.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, 3; z\right) = \frac{4 e^{z/2} (16 z^4 + 32 z^3 - 348 z^2 + 312 z + 1761) I_0\left(\frac{z}{2}\right)}{6615} + \frac{4 e^{z/2} (16 z^5 + 16 z^4 - 356 z^3 + 660 z^2 + 957 z - 429) I_1\left(\frac{z}{2}\right)}{6615 z}$$

07.25.03.a821.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{441} e^z (8 z^3 - 12 z^2 - 126 z + 441)$$

07.25.03.a822.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 - 56 z^3 - 108 z^2 + 756 z - 195) I_0\left(\frac{z}{2}\right)}{2205 z} + \frac{4 e^{z/2} (16 z^5 - 72 z^4 - 28 z^3 + 732 z^2 - 819 z + 780) I_1\left(\frac{z}{2}\right)}{2205 z^2}$$

07.25.03.a823.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{63} e^z (4 z^2 - 28 z + 63)$$

07.25.03.a824.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 - 72 z^3 + 264 z^2 - 480 z + 765) I_0\left(\frac{z}{2}\right)}{2205 z^2} + \frac{128 e^{z/2} (2 z^5 - 20 z^4 + 87 z^3 - 219 z^2 + 480 z - 765) I_1\left(\frac{z}{2}\right)}{2205 z^3}$$

07.25.03.a825.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (2 z^5 - 25 z^4 + 144 z^3 - 504 z^2 + 1260 z - 1890)}{7 z^4} + \frac{135 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.a826.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z}(-2z^5 - 25z^4 - 144z^3 - 504z^2 - 1260z - 1890)}{7z^4} + \frac{135\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.a827.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, 6; z\right) = \frac{32e^{z/2}(8z^4 - 116z^3 + 780z^2 - 3111z + 7752)I_0\left(\frac{z}{2}\right)}{441z^3} + \frac{32e^{z/2}(8z^5 - 124z^4 + 908z^3 - 4089z^2 + 12444z - 31008)I_1\left(\frac{z}{2}\right)}{441z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.a828.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = -\frac{1}{77175} (e^z(512z^9 + 16640z^8 + 175616z^7 + 689920z^6 + 799680z^5 + 23520z^4 + 117600z^3 - 156240z^2 + 148050z - 77175))$$

07.25.03.a829.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{11025} e^z(256z^8 + 7168z^7 + 62720z^6 + 188160z^5 + 117600z^4 - 47040z^3 + 35280z^2 - 25200z + 11025)$$

07.25.03.a82a.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = -\frac{e^z(128z^7 + 3008z^6 + 20832z^5 + 42000z^4 - 4200z^3 - 21420z^2 + 6930z - 2205)}{2205}$$

07.25.03.a82b.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{735} e^z(64z^6 + 1216z^5 + 6160z^4 + 5600z^3 - 10500z^2 - 5460z + 735)$$

07.25.03.a82c.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = -\frac{1}{735} e^z(32z^5 + 464z^4 + 1456z^3 - 840z^2 - 3990z - 735)$$

07.25.03.a82d.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{735} e^{z/2}(-16z^5 - 208z^4 - 556z^3 + 532z^2 + 1995z + 735)I_0\left(\frac{z}{2}\right) + \frac{1}{735} e^{z/2}(-16z^5 - 192z^4 - 372z^3 + 824z^2 + 1127z)I_1\left(\frac{z}{2}\right)$$

07.25.03.a82e.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = -\frac{1}{735} e^z(16z^4 + 160z^3 + 168z^2 - 840z - 735)$$

07.25.03.a82f.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{735} e^{z/2} (-16z^4 - 136z^3 - 68z^2 + 780z + 735) I_0\left(\frac{z}{2}\right) + \frac{1}{735} e^{z/2} (-16z^4 - 120z^3 + 44z^2 + 692z + 135) I_1\left(\frac{z}{2}\right)$$

07.25.03.a82g.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = -\frac{1}{245} e^z (8z^3 + 44z^2 - 70z - 245)$$

07.25.03.a82h.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, 3; z\right) = -\frac{16}{735} e^{z/2} (2z^3 + 8z^2 - 21z - 48) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8z^4 + 24z^3 - 104z^2 - 84z + 33) I_1\left(\frac{z}{2}\right)}{735z}$$

07.25.03.a82i.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = -\frac{1}{49} e^z (4z^2 + 4z - 49)$$

07.25.03.a82j.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, 4; z\right) = -\frac{4 e^{z/2} (8z^3 - 4z^2 - 76z + 13) I_0\left(\frac{z}{2}\right)}{245z} - \frac{4 e^{z/2} (8z^4 - 12z^3 - 60z^2 + 59z - 52) I_1\left(\frac{z}{2}\right)}{245z^2}$$

07.25.03.a82k.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = -\frac{1}{7} e^z (2z - 7)$$

07.25.03.a82l.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, 5; z\right) = -\frac{32 e^{z/2} (4z^3 - 20z^2 + 29z - 45) I_0\left(\frac{z}{2}\right)}{245z^2} - \frac{32 e^{z/2} (4z^4 - 24z^3 + 55z^2 - 116z + 180) I_1\left(\frac{z}{2}\right)}{245z^3}$$

07.25.03.a82m.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{135 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2z^{9/2}} - \frac{9 e^z (z^4 - 8z^3 + 28z^2 - 70z + 105)}{7z^4}$$

07.25.03.a82n.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{135 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2z^{9/2}} - \frac{9 e^{-z} (z^4 + 8z^3 + 28z^2 + 70z + 105)}{7z^4}$$

07.25.03.a82o.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, 6; z\right) = -\frac{32 e^{z/2} (4z^3 - 38z^2 + 159z - 408) I_0\left(\frac{z}{2}\right)}{49z^3} - \frac{32 e^{z/2} (4z^4 - 42z^3 + 203z^2 - 636z + 1632) I_1\left(\frac{z}{2}\right)}{49z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.a82p.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (128z^7 + 3136z^6 + 23520z^5 + 58800z^4 + 29400z^3 - 8820z^2 + 4410z - 1575)}{1575}$$

07.25.03.a82q.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315)$$

07.25.03.a82r.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = -\frac{1}{105} e^z (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105)$$

07.25.03.a82s.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105)$$

07.25.03.a82t.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8 z^4 + 104 z^3 + 376 z^2 + 420 z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} (2 z^4 + 24 z^3 + 71 z^2 + 44 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a82u.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (8 z^3 + 84 z^2 + 210 z + 105)$$

07.25.03.a82v.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (8 z^3 + 76 z^2 + 180 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8 z^3 + 68 z^2 + 116 z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.a82w.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{35} e^z (4 z^2 + 28 z + 35)$$

07.25.03.a82x.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4 z^2 + 24 z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4 z^3 + 20 z^2 + 9 z - 3) I_1\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.a82y.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (2 z + 7)$$

07.25.03.a82z.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (4 z^2 + 10 z - 1) I_0\left(\frac{z}{2}\right)}{35 z} + \frac{4 e^{z/2} (4 z^3 + 6 z^2 - 5 z + 4) I_1\left(\frac{z}{2}\right)}{35 z^2}$$

07.25.03.a830.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = e^z$$

07.25.03.a831.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (2 z^2 - 2 z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} + \frac{64 e^{z/2} (z^3 - 2 z^2 + 4 z - 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.a832.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (8 z^3 - 28 z^2 + 70 z - 105)}{16 z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.a833.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9 e^{-z} (8 z^3 + 28 z^2 + 70 z + 105)}{16 z^4}$$

07.25.03.a834.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (2 z^2 - 9 z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{32 e^{z/2} (2 z^3 - 11 z^2 + 36 z - 96) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.a835.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{63} e^z (-32 z^5 - 592 z^4 - 3312 z^3 + 5544 z^2 - 378 z + 63) - \frac{4096}{21} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a836.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{4096}{21} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{63} e^{-z} (32 z^5 - 592 z^4 + 3312 z^3 + 5544 z^2 + 378 z + 63)$$

07.25.03.a837.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{2048}{7} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{21} e^z (16 z^4 + 256 z^3 - 4872 z^2 - 336 z + 21)$$

07.25.03.a838.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{21} e^{-z} (16 z^4 - 256 z^3 - 4872 z^2 + 336 z + 21) - \frac{2048}{7} \sqrt{\pi} z^{5/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a839.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{21} e^z (-8 z^3 + 1428 z^2 + 294 z + 21) - \frac{512}{7} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a83a.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{512}{7} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{21} e^{-z} (8 z^3 + 1428 z^2 - 294 z + 21)$$

07.25.03.a83b.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (-4116 z^3 + 2812 z^2 + 735 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (4076 z^3 + 784 z^2 + 197 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a83c.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = e^z (12 z^2 + 4 z + 1) - \frac{256}{21} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a83d.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{256}{21} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + e^{-z} (12 z^2 - 4 z + 1)$$

07.25.03.a83e.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{735} e^{z/2} (-8192 z^3 + 6004 z^2 + 2370 z + 735) I_0\left(\frac{z}{2}\right) + \frac{1}{735} e^{z/2} (8192 z^3 + 1908 z^2 + 974 z + 75) I_1\left(\frac{z}{2}\right)$$

07.25.03.a83f.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{7} e^z (32 z^2 + 14 z + 7) - \frac{32}{7} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a83g.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{32}{7} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{7} e^{-z} (32 z^2 - 14 z + 7)$$

07.25.03.a83h.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (8192 z^4 + 2048 z^3 + 1674 z^2 + 390 z - 105) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (4096 z^3 - 3072 z^2 - 1605 z - 840) I_0\left(\frac{z}{2}\right)}{6615 z}$$

07.25.03.a83i.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (16 z^2 + 8 z + 7) - \frac{16}{7} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a83j.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{16}{7} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{7} e^{-z} (16 z^2 - 8 z + 7)$$

07.25.03.a83k.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (16384 z^5 + 4096 z^4 + 4608 z^3 + 2670 z^2 - 1785 z + 1260) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (16384 z^4 - 12288 z^3 - 7680 z^2 - 6510 z + 315) I_0\left(\frac{z}{2}\right)}{24255 z^2}$$

07.25.03.a83l.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{3} e^z (4 z^2 + 2 z + 3) - \frac{4}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a83m.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{4}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4 z^2 - 2 z + 3)$$

07.25.03.a83n.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (16384 z^6 + 4096 z^5 + 4608 z^4 + 9600 z^3 - 15645 z^2 + 28980 z - 41580) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (16384 z^5 - 12288 z^4 - 7680 z^3 - 13440 z^2 + 7245 z - 10395) I_0\left(\frac{z}{2}\right)}{315315 z^3}$$

07.25.03.a83o.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 - 420 z^2 + 1050 z - 1575)}{224 z^4} - \frac{3 \sqrt{\pi} (128 z^7 - 1575) \operatorname{erfi}(\sqrt{z})}{448 z^{9/2}}$$

07.25.03.a83p.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 - 32 z^5 + 48 z^4 - 120 z^3 - 420 z^2 - 1050 z - 1575)}{224 z^4} + \frac{3 \sqrt{\pi} (128 z^7 + 1575) \operatorname{erf}(\sqrt{z})}{448 z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.a83q.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, 6; z\right) = \\
 & \frac{1}{945945 z^4} 32 e^{z/2} (32768 z^7 + 8192 z^6 + 9216 z^5 + 19200 z^4 + 58800 z^3 - 437535 z^2 + 1538460 z - 4324320) I_1\left(\frac{z}{2}\right) - \\
 & \frac{32 e^{z/2} (32768 z^6 - 24576 z^5 - 15360 z^4 - 26880 z^3 - 75600 z^2 + 384615 z - 1081080) I_0\left(\frac{z}{2}\right)}{945945 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{1}{2}$

$$\text{07.25.03.a83r.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{7} e^z (-8 z^3 + 2956 z^2 - 322 z + 7) - \frac{256}{7} \sqrt{\pi} (12 z^{5/2} - 5 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.a83s.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{7} e^{-z} (8 z^3 + 2956 z^2 + 322 z + 7) + \frac{256}{7} \sqrt{\pi} (12 z^{5/2} + 5 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.a83t.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{7} e^z (-764 z^2 + 308 z + 7) + \frac{128}{7} \sqrt{\pi} (6 z^{5/2} - 5 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.a83u.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{7} e^{-z} (-764 z^2 - 308 z + 7) - \frac{128}{7} \sqrt{\pi} (6 z^{5/2} + 5 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.a83v.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (6144 z^3 - 10978 z^2 + 2310 z + 105) I_0\left(\frac{z}{2}\right) - \frac{2}{105} e^{z/2} (3072 z^3 - 2447 z^2 - 116 z) I_1\left(\frac{z}{2}\right)$$

$$\text{07.25.03.a83w.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{32}{7} \sqrt{\pi} (4 z - 5) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{7} e^z (-128 z^2 + 98 z + 7)$$

$$\text{07.25.03.a83x.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{7} e^{-z} (-128 z^2 - 98 z + 7) - \frac{32}{7} \sqrt{\pi} z^{3/2} (4 z + 5) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.a83y.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, 2; z\right) = \\
 \frac{1}{735} e^{z/2} (12288 z^3 - 27136 z^2 + 7890 z + 735) I_0\left(\frac{z}{2}\right) + \frac{1}{735} e^{z/2} (-12288 z^3 + 14848 z^2 + 1234 z + 45) I_1\left(\frac{z}{2}\right)$$

$$\text{07.25.03.a83z.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{16}{7} \sqrt{\pi} (3 z - 5) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{7} e^z (-48 z^2 + 56 z + 7)$$

$$\text{07.25.03.a840.01} \\
 {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{7} e^{-z} (-48 z^2 - 56 z + 7) - \frac{16}{7} \sqrt{\pi} z^{3/2} (3 z + 5) \operatorname{erf}(\sqrt{z})$$

07.25.03.a841.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (4096 z^3 - 10752 z^2 + 3840 z + 555) I_0\left(\frac{z}{2}\right)}{2205} - \frac{4 e^{z/2} (4096 z^4 - 6656 z^3 - 768 z^2 - 75 z + 15) I_1\left(\frac{z}{2}\right)}{2205 z}$$

07.25.03.a842.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{2}{7} \sqrt{\pi} (12 z - 25) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{7} e^z (-24 z^2 + 38 z + 7)$$

07.25.03.a843.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{7} e^{-z} (-24 z^2 - 38 z + 7) - \frac{2}{7} \sqrt{\pi} z^{3/2} (12 z + 25) \operatorname{erf}(\sqrt{z})$$

07.25.03.a844.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (24576 z^4 - 74752 z^3 + 30720 z^2 + 6240 z - 105) I_0\left(\frac{z}{2}\right)}{24255 z} - \frac{4 e^{z/2} (24576 z^5 - 50176 z^4 - 7168 z^3 - 1440 z^2 + 705 z - 420) I_1\left(\frac{z}{2}\right)}{24255 z^2}$$

07.25.03.a845.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \sqrt{\pi} (2 z - 5) \operatorname{erfi}(\sqrt{z}) z^{3/2} + e^z (-2 z^2 + 4 z + 1)$$

07.25.03.a846.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = e^{-z} (-2 z^2 - 4 z + 1) - \sqrt{\pi} z^{3/2} (2 z + 5) \operatorname{erf}(\sqrt{z})$$

07.25.03.a847.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (24576 z^5 - 84992 z^4 + 38400 z^3 + 11040 z^2 - 2100 z + 2835) I_0\left(\frac{z}{2}\right)}{315315 z^2} - \frac{128 e^{z/2} (6144 z^6 - 15104 z^5 - 2432 z^4 - 1080 z^3 + 1275 z^2 - 2100 z + 2835) I_1\left(\frac{z}{2}\right)}{315315 z^3}$$

07.25.03.a848.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 \sqrt{\pi} (768 z^7 - 2240 z^6 + 1575) \operatorname{erfi}(\sqrt{z})}{1792 z^{9/2}} - \frac{3 e^z (384 z^6 - 928 z^5 - 272 z^4 - 120 z^3 + 420 z^2 - 1050 z + 1575)}{896 z^4}$$

07.25.03.a849.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (384 z^6 + 928 z^5 - 272 z^4 + 120 z^3 + 420 z^2 + 1050 z + 1575)}{896 z^4} - \frac{3 \sqrt{\pi} (768 z^7 + 2240 z^6 - 1575) \operatorname{erf}(\sqrt{z})}{1792 z^{9/2}}$$

07.25.03.a84a.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (16384 z^6 - 63488 z^5 + 30720 z^4 + 10560 z^3 + 4200 z^2 - 27405 z + 83160) I_0\left(\frac{z}{2}\right)}{315315 z^3} - \frac{1}{315315 z^4} 32 e^{z/2} (16384 z^7 - 47104 z^6 - 8192 z^5 - 4800 z^4 - 600 z^3 + 27195 z^2 - 109620 z + 332640) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{1}{2}$

07.25.03.a84b.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{7} e^z (192 z^2 - 226 z + 7) - \frac{16}{7} \sqrt{\pi} (12 z^{5/2} - 20 z^{3/2} + 3 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a84c.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{7} e^{-z} (192 z^2 + 226 z + 7) + \frac{16}{7} \sqrt{\pi} (12 z^{5/2} + 20 z^{3/2} + 3 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a84d.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (-1536 z^3 + 4352 z^2 - 2415 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (1536 z^3 - 2816 z^2 + 337 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a84e.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{7} e^z (32 z^2 - 64 z + 7) - \frac{8}{7} \sqrt{\pi} \sqrt{z} (4 z^2 - 10 z + 3) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a84f.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{7} e^{-z} (32 z^2 + 64 z + 7) + \frac{8}{7} \sqrt{\pi} \sqrt{z} (4 z^2 + 10 z + 3) \operatorname{erf}(\sqrt{z})$$

07.25.03.a84g.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{735} e^{z/2} (-3072 z^3 + 11264 z^2 - 8640 z + 735) I_0\left(\frac{z}{2}\right) + \frac{1}{735} e^{z/2} (3072 z^3 - 8192 z^2 + 1984 z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.a84h.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{7} e^z (12 z^2 - 34 z + 7) - \frac{2}{7} \sqrt{\pi} \sqrt{z} (6 z^2 - 20 z + 9) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a84i.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{7} e^{-z} (12 z^2 + 34 z + 7) + \frac{2}{7} \sqrt{\pi} \sqrt{z} (6 z^2 + 20 z + 9) \operatorname{erf}(\sqrt{z})$$

07.25.03.a84j.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (1024 z^4 - 3584 z^3 + 1344 z^2 + 24 z - 3) I_1\left(\frac{z}{2}\right)}{2205 z} - \frac{32 e^{z/2} (128 z^3 - 576 z^2 + 552 z - 69) I_0\left(\frac{z}{2}\right)}{2205}$$

07.25.03.a84k.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (6 z^2 - 22 z + 7) - \frac{1}{7} \sqrt{\pi} \sqrt{z} (6 z^2 - 25 z + 15) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a84l.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{7} e^{-z} (6 z^2 + 22 z + 7) + \frac{1}{7} \sqrt{\pi} \sqrt{z} (6 z^2 + 25 z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.a84m.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (6144 z^5 - 26624 z^4 + 13696 z^3 + 432 z^2 - 129 z + 60) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (6144 z^4 - 32768 z^3 + 37248 z^2 - 6096 z + 15) I_0\left(\frac{z}{2}\right)}{24255 z^2}$$

07.25.03.a84n.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{4} e^z (2 z^2 - 9 z + 4) - \frac{1}{8} \sqrt{\pi} \sqrt{z} (4 z^2 - 20 z + 15) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a84o.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{4} e^{-z} (2 z^2 + 9 z + 4) + \frac{1}{8} \sqrt{\pi} \sqrt{z} (4 z^2 + 20 z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.a84p.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (6144 z^6 - 31744 z^5 + 20864 z^4 + 1104 z^3 - 753 z^2 + 1020 z - 1260) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (6144 z^5 - 37888 z^4 + 49536 z^3 - 10032 z^2 + 255 z - 315) I_0\left(\frac{z}{2}\right)}{315315 z^3}$$

07.25.03.a84q.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (192 z^6 - 1024 z^5 + 592 z^4 + 24 z^3 - 84 z^2 + 210 z - 315)}{1792 z^4} - \frac{3 \sqrt{\pi} (384 z^7 - 2240 z^6 + 2016 z^5 - 315) \operatorname{erfi}(\sqrt{z})}{3584 z^{9/2}}$$

07.25.03.a84r.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (192 z^6 + 1024 z^5 + 592 z^4 - 24 z^3 - 84 z^2 - 210 z - 315)}{1792 z^4} + \frac{3 \sqrt{\pi} (384 z^7 + 2240 z^6 + 2016 z^5 + 315) \operatorname{erf}(\sqrt{z})}{3584 z^{9/2}}$$

07.25.03.a84s.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (4096 z^7 - 24576 z^6 + 19712 z^5 + 1440 z^4 - 630 z^3 - 1545 z^2 + 8820 z - 30240) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (4096 z^6 - 28672 z^5 + 42240 z^4 - 10080 z^3 - 150 z^2 + 2205 z - 7560) I_0\left(\frac{z}{2}\right)}{315315 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 1$

07.25.03.a84t.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{105} e^{z/2} (-256 z^3 + 992 z^2 - 840 z + 105) I_0\left(\frac{z}{2}\right) + \frac{8}{105} e^{z/2} (32 z^3 - 92 z^2 + 29 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a84u.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{105} e^{z/2} (-96 z^3 + 472 z^2 - 525 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (96 z^3 - 376 z^2 + 197 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a84v.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{105} e^{z/2} (-48z^3 + 286z^2 - 390z + 105) I_0\left(\frac{z}{2}\right) + \frac{2}{105} e^{z/2} (24z^3 - 119z^2 + 88z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a84w.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{15} e^{z/2} (-4z^3 + 28z^2 - 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^3 - 24z^2 + 23z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{3}{2}$

07.25.03.a84x.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{2}{21} e^z (8z^2 - 26z + 9) + \frac{\sqrt{\pi} (-32z^3 + 120z^2 - 72z + 3) \operatorname{erfi}(\sqrt{z})}{42\sqrt{z}}$$

07.25.03.a84y.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{2}{21} e^{-z} (8z^2 + 26z + 9) + \frac{\sqrt{\pi} (32z^3 + 120z^2 + 72z + 3) \operatorname{erf}(\sqrt{z})}{42\sqrt{z}}$$

07.25.03.a84z.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{735} e^{z/2} (-512z^3 + 2624z^2 - 3120z + 735) I_0\left(\frac{z}{2}\right) + \frac{1}{735} e^{z/2} (512z^3 - 2112z^2 + 1264z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.a850.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{14} e^z (4z^2 - 18z + 11) + \frac{\sqrt{\pi} (-8z^3 + 40z^2 - 36z + 3) \operatorname{erfi}(\sqrt{z})}{28\sqrt{z}}$$

07.25.03.a851.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{14} e^{-z} (4z^2 + 18z + 11) + \frac{\sqrt{\pi} (8z^3 + 40z^2 + 36z + 3) \operatorname{erf}(\sqrt{z})}{28\sqrt{z}}$$

07.25.03.a852.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (512z^4 - 2752z^3 + 2448z^2 - 69z + 3) I_1\left(\frac{z}{2}\right)}{6615z} - \frac{4 e^{z/2} (512z^3 - 3264z^2 + 4944z - 1653) I_0\left(\frac{z}{2}\right)}{6615}$$

07.25.03.a853.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{56} e^z (8z^2 - 46z + 41) + \frac{\sqrt{\pi} (-16z^3 + 100z^2 - 120z + 15) \operatorname{erfi}(\sqrt{z})}{112\sqrt{z}}$$

07.25.03.a854.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{56} e^{-z} (8z^2 + 46z + 41) + \frac{\sqrt{\pi} (16z^3 + 100z^2 + 120z + 15) \operatorname{erf}(\sqrt{z})}{112\sqrt{z}}$$

07.25.03.a855.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (1024z^5 - 6784z^4 + 8032z^3 - 390z^2 + 39z - 12) I_1\left(\frac{z}{2}\right)}{24255z^2} - \frac{4 e^{z/2} (1024z^4 - 7808z^3 + 14304z^2 - 6054z - 3) I_0\left(\frac{z}{2}\right)}{24255z}$$

07.25.03.a856.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{48} e^z (4z^2 - 28z + 33) + \frac{\sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.a857.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{48} e^{-z} (4z^2 + 28z + 33) + \frac{\sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.a858.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, 5; z\right) = \frac{64 e^{z/2} (512z^6 - 4032z^5 + 5968z^4 - 441z^3 + 90z^2 - 84z + 90) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (1024z^5 - 9088z^4 + 19488z^3 - 9810z^2 - 42z + 45) I_0\left(\frac{z}{2}\right)}{315 \cdot 315 z^3}$$

07.25.03.a859.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (256z^6 - 2112z^5 + 3104z^4 - 24z^3 + 84z^2 - 210z + 315)}{14336 z^4} - \frac{3 \sqrt{\pi} (512z^7 - 4480z^6 + 8064z^5 - 1680z^4 + 315) \operatorname{erfi}(\sqrt{z})}{28672 z^{9/2}}$$

07.25.03.a85a.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (256z^6 + 2112z^5 + 3104z^4 + 24z^3 + 84z^2 + 210z + 315)}{14336 z^4} + \frac{3 \sqrt{\pi} (512z^7 + 4480z^6 + 8064z^5 + 1680z^4 - 315) \operatorname{erf}(\sqrt{z})}{28672 z^{9/2}}$$

07.25.03.a85b.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (2048z^7 - 18688z^6 + 33216z^5 - 3420z^4 + 810z^3 - 45z^2 - 2340z + 10080) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (2048z^6 - 20736z^5 + 50880z^4 - 29340z^3 - 90z^2 - 585z + 2520) I_0\left(\frac{z}{2}\right)}{945 \cdot 945 z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 2$

07.25.03.a85c.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{735} e^{z/2} (-192z^3 + 1264z^2 - 2010z + 735) I_0\left(\frac{z}{2}\right) + \frac{1}{735} e^{z/2} (192z^3 - 1072z^2 + 1034z - 45) I_1\left(\frac{z}{2}\right)$$

07.25.03.a85d.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{735} e^{z/2} (-96z^3 + 772z^2 - 1530z + 735) I_0\left(\frac{z}{2}\right) + \frac{1}{735} e^{z/2} (96z^3 - 676z^2 + 902z - 75) I_1\left(\frac{z}{2}\right)$$

07.25.03.a85e.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{105} e^{z/2} (-8z^3 + 76z^2 - 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 - 68z^2 + 116z - 15) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{5}{2}$

07.25.03.a85f.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (24z^3 - 148z^2 + 154z - 3)}{224z} + \frac{\sqrt{\pi} (-48z^4 + 320z^3 - 432z^2 + 72z + 3) \operatorname{erfi}(\sqrt{z})}{448z^{3/2}}$$

07.25.03.a85g.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (24z^3 + 148z^2 + 154z + 3)}{224z} + \frac{\sqrt{\pi} (48z^4 + 320z^3 + 432z^2 + 72z - 3) \operatorname{erf}(\sqrt{z})}{448z^{3/2}}$$

07.25.03.a85h.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, 3; z\right) = \frac{4e^{z/2} (64z^4 - 464z^3 + 654z^2 - 66z - 3) I_1\left(\frac{z}{2}\right)}{2205z} - \frac{8e^{z/2} (32z^3 - 264z^2 + 543z - 276) I_0\left(\frac{z}{2}\right)}{2205}$$

07.25.03.a85i.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (24z^3 - 188z^2 + 278z - 15)}{448z} + \frac{\sqrt{\pi} (-48z^4 + 400z^3 - 720z^2 + 180z + 15) \operatorname{erfi}(\sqrt{z})}{896z^{3/2}}$$

07.25.03.a85j.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (24z^3 + 188z^2 + 278z + 15)}{448z} + \frac{\sqrt{\pi} (48z^4 + 400z^3 + 720z^2 + 180z - 15) \operatorname{erf}(\sqrt{z})}{896z^{3/2}}$$

07.25.03.a85k.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, 4; z\right) = \frac{4e^{z/2} (384z^5 - 3424z^4 + 6356z^3 - 1062z^2 - 105z + 12) I_1\left(\frac{z}{2}\right)}{24255z^2} - \frac{4e^{z/2} (384z^4 - 3808z^3 + 9588z^2 - 6090z + 3) I_0\left(\frac{z}{2}\right)}{24255z}$$

07.25.03.a85l.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (8z^3 - 76z^2 + 146z - 15)}{256z} + \frac{\sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.a85m.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (8z^3 + 76z^2 + 146z + 15)}{256z} + \frac{\sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.a85n.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, 5; z\right) = \frac{32e^{z/2} (384z^6 - 4064z^5 + 9364z^4 - 2232z^3 - 381z^2 + 132z - 108) I_1\left(\frac{z}{2}\right)}{315315z^3} - \frac{32e^{z/2} (384z^5 - 4448z^4 + 13236z^3 - 9948z^2 + 33z - 27) I_0\left(\frac{z}{2}\right)}{315315z^2}$$

07.25.03.a85o.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (192 z^6 - 2144 z^5 + 5072 z^4 - 816 z^3 - 84 z^2 + 210 z - 315)}{28 672 z^4} - \frac{3 \sqrt{\pi} (384 z^7 - 4480 z^6 + 12 096 z^5 - 5040 z^4 - 840 z^3 - 315) \operatorname{erfi}(\sqrt{z})}{57 344 z^{9/2}}$$

07.25.03.a85p.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (192 z^6 + 2144 z^5 + 5072 z^4 + 816 z^3 - 84 z^2 - 210 z - 315)}{28 672 z^4} + \frac{3 \sqrt{\pi} (384 z^7 + 4480 z^6 + 12 096 z^5 + 5040 z^4 - 840 z^3 + 315) \operatorname{erf}(\sqrt{z})}{57 344 z^{9/2}}$$

07.25.03.a85q.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (256 z^7 - 3136 z^6 + 8632 z^5 - 2700 z^4 - 660 z^3 + 195 z^2 + 180 z - 1440) I_1\left(\frac{z}{2}\right)}{315 315 z^4} - \frac{32 e^{z/2} (256 z^6 - 3392 z^5 + 11 640 z^4 - 10 020 z^3 + 60 z^2 + 45 z - 360) I_0\left(\frac{z}{2}\right)}{315 315 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 3$

07.25.03.a85r.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; 3, \frac{7}{2}; z\right) = \frac{4 e^{z/2} (32 z^4 - 292 z^3 + 564 z^2 - 105 z - 15) I_1\left(\frac{z}{2}\right)}{2205 z} - \frac{4 e^{z/2} (32 z^3 - 324 z^2 + 840 z - 555) I_0\left(\frac{z}{2}\right)}{2205}$$

07.25.03.a85s.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; 3, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (8 z^4 - 88 z^3 + 216 z^2 - 60 z - 15) I_1\left(\frac{z}{2}\right)}{945 z} - \frac{16}{945} e^{z/2} (2 z^3 - 24 z^2 + 75 z - 60) I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{7}{2}$

07.25.03.a85t.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (96 z^4 - 952 z^3 + 1972 z^2 - 270 z - 45)}{3584 z^2} + \frac{\sqrt{\pi} (-192 z^5 + 2000 z^4 - 4800 z^3 + 1800 z^2 + 300 z + 45) \operatorname{erfi}(\sqrt{z})}{7168 z^{5/2}}$$

07.25.03.a85u.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (96 z^4 + 952 z^3 + 1972 z^2 + 270 z - 45)}{3584 z^2} + \frac{\sqrt{\pi} (192 z^5 + 2000 z^4 + 4800 z^3 + 1800 z^2 - 300 z + 45) \operatorname{erf}(\sqrt{z})}{7168 z^{5/2}}$$

07.25.03.a85v.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (192 z^5 - 2152 z^4 + 5444 z^3 - 1620 z^2 - 465 z - 60) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (192 z^4 - 2344 z^3 + 7500 z^2 - 6180 z - 15) I_0\left(\frac{z}{2}\right)}{24255 z^2}$$

07.25.03.a85w.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (16 z^4 - 192 z^3 + 512 z^2 - 120 z - 45)}{1024 z^2} + \frac{\sqrt{\pi} (-32 z^5 + 400 z^4 - 1200 z^3 + 600 z^2 + 150 z + 45) \operatorname{erfi}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.a85x.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (16 z^4 + 192 z^3 + 512 z^2 + 120 z - 45)}{1024 z^2} + \frac{\sqrt{\pi} (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45) \operatorname{erf}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.a85y.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, 5; z\right) = \frac{128 e^{z/2} (48 z^6 - 638 z^5 + 1996 z^4 - 825 z^3 - 345 z^2 - 120 z + 45) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (192 z^5 - 2744 z^4 + 10440 z^3 - 10200 z^2 - 120 z + 45) I_0\left(\frac{z}{2}\right)}{315315 z^3}$$

07.25.03.a85z.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (384 z^6 - 5408 z^5 + 17648 z^4 - 6000 z^3 - 3360 z^2 - 1050 z + 1575)}{114688 z^4} - \frac{3 \sqrt{\pi} (768 z^7 - 11200 z^6 + 40320 z^5 - 25200 z^4 - 8400 z^3 - 3780 z^2 + 1575) \operatorname{erfi}(\sqrt{z})}{229376 z^{9/2}}$$

07.25.03.a860.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (384 z^6 + 5408 z^5 + 17648 z^4 + 6000 z^3 - 3360 z^2 + 1050 z + 1575)}{114688 z^4} + \frac{3 \sqrt{\pi} (768 z^7 + 11200 z^6 + 40320 z^5 + 25200 z^4 - 8400 z^3 + 3780 z^2 - 1575) \operatorname{erf}(\sqrt{z})}{229376 z^{9/2}}$$

07.25.03.a861.01

$${}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (128 z^7 - 1968 z^6 + 7336 z^5 - 3900 z^4 - 2100 z^3 - 1155 z^2 + 180 z + 1440) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (128 z^6 - 2096 z^5 + 9240 z^4 - 10380 z^3 - 300 z^2 + 45 z + 360) I_0\left(\frac{z}{2}\right)}{315315 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 4$

$$\begin{aligned}
 & \text{07.25.03.a862.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; 4, \frac{9}{2}; z\right) = \\
 & \frac{4 e^{z/2} (16 z^5 - 216 z^4 + 692 z^3 - 300 z^2 - 135 z - 60) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (16 z^4 - 232 z^3 + 900 z^2 - 900 z - 15) I_0\left(\frac{z}{2}\right)}{3465 z^2} - \frac{4 e^{z/2} (16 z^4 - 232 z^3 + 900 z^2 - 900 z - 15) I_0\left(\frac{z}{2}\right)}{3465 z}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.a863.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (32 z^5 - 464 z^4 + 1584 z^3 - 600 z^2 - 390 z - 225)}{24 576 z^3} - \\
 & \frac{7 \sqrt{\pi} (64 z^6 - 960 z^5 + 3600 z^4 - 2400 z^3 - 900 z^2 - 540 z - 225) \operatorname{erfi}(\sqrt{z})}{49 152 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a864.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (32 z^5 + 464 z^4 + 1584 z^3 + 600 z^2 - 390 z + 225)}{24 576 z^3} + \\
 & \frac{7 \sqrt{\pi} (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225) \operatorname{erf}(\sqrt{z})}{49 152 z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a865.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^6 - 256 z^5 + 1012 z^4 - 600 z^3 - 375 z^2 - 300 z - 180) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (16 z^5 - 272 z^4 + 1260 z^3 - 1500 z^2 - 75 z - 45) I_0\left(\frac{z}{2}\right)}{45 045 z^3} - \\
 & \frac{32 e^{z/2} (16 z^5 - 272 z^4 + 1260 z^3 - 1500 z^2 - 75 z - 45) I_0\left(\frac{z}{2}\right)}{45 045 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a866.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (64 z^6 - 1088 z^5 + 4528 z^4 - 2400 z^3 - 2100 z^2 - 2100 z - 1575)}{32 768 z^4} - \\
 & \frac{3 \sqrt{\pi} (128 z^7 - 2240 z^6 + 10080 z^5 - 8400 z^4 - 4200 z^3 - 3780 z^2 - 3150 z - 1575) \operatorname{erfi}(\sqrt{z})}{65 536 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a867.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 + 1088 z^5 + 4528 z^4 + 2400 z^3 - 2100 z^2 + 2100 z - 1575)}{32 768 z^4} + \\
 & \frac{3 \sqrt{\pi} (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575) \operatorname{erf}(\sqrt{z})}{65 536 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a868.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{9}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135 135 z^4} - \\
 & \frac{32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135 135 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = -\frac{11}{2}$

07.25.03.a869.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{21\,611\,205} (-64 z^{13} - 4000 z^{12} - 92\,784 z^{11} - 1\,002\,504 z^{10} - 5\,172\,888 z^9 - 11\,590\,992 z^8 - 8\,421\,840 z^7 - 604\,800 z^6 - 36\,288 z^5 - 30\,240 z^4 - 189\,000 z^3 + 1\,984\,500 z^2 - 8\,930\,250 z + 21\,611\,205) - \frac{1}{21\,611\,205} (4 e^z \sqrt{\pi} (16 z^{27/2} + 1008 z^{25/2} + 23\,688 z^{23/2} + 261\,744 z^{21/2} + 1\,408\,113 z^{19/2} + 3\,443\,769 z^{17/2} + 3\,133\,746 z^{15/2} + 610\,470 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.a86a.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{21\,611\,205} (64 z^{13} - 4000 z^{12} + 92\,784 z^{11} - 1\,002\,504 z^{10} + 5\,172\,888 z^9 - 11\,590\,992 z^8 + 8\,421\,840 z^7 - 604\,800 z^6 + 36\,288 z^5 - 30\,240 z^4 + 189\,000 z^3 + 1\,984\,500 z^2 + 8\,930\,250 z + 21\,611\,205) - \frac{1}{21\,611\,205} (4 e^{-z} \sqrt{\pi} (16 z^{27/2} - 1008 z^{25/2} + 23\,688 z^{23/2} - 261\,744 z^{21/2} + 1\,408\,113 z^{19/2} - 3\,443\,769 z^{17/2} + 3\,133\,746 z^{15/2} - 610\,470 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.a86b.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{1\,964\,655} (32 z^{12} + 1776 z^{11} + 35\,752 z^{10} + 323\,340 z^9 + 1\,308\,888 z^8 + 1\,993\,320 z^7 + 604\,800 z^6 - 36\,288 z^5 - 10\,080 z^4 - 37\,800 z^3 + 283\,500 z^2 - 992\,250 z + 1\,964\,655) + \frac{1}{1\,964\,655} 2 e^z \sqrt{\pi} (16 z^{25/2} + 896 z^{23/2} + 18\,312 z^{21/2} + 170\,184 z^{19/2} + 727\,377 z^{17/2} + 1\,261\,638 z^{15/2} + 610\,470 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a86c.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{1\,964\,655} (32 z^{12} - 1776 z^{11} + 35\,752 z^{10} - 323\,340 z^9 + 1\,308\,888 z^8 - 1\,993\,320 z^7 + 604\,800 z^6 + 36\,288 z^5 - 10\,080 z^4 + 37\,800 z^3 + 283\,500 z^2 + 992\,250 z + 1\,964\,655) - \frac{1}{1\,964\,655} (2 e^{-z} \sqrt{\pi} (16 z^{25/2} - 896 z^{23/2} + 18\,312 z^{21/2} - 170\,184 z^{19/2} + 727\,377 z^{17/2} - 1\,261\,638 z^{15/2} + 610\,470 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.a86d.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{218295} (-16z^{11} - 776z^{10} - 13228z^9 - 95898z^8 - 276570z^7 - 201600z^6 + 36288z^5 - 10080z^4 - 12600z^3 + 56700z^2 - 141750z + 218295) + \frac{1}{218295} e^z \sqrt{\pi} (-16z^{23/2} - 784z^{21/2} - 13608z^{19/2} - 102144z^{17/2} - 318801z^{15/2} - 305235z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a86e.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{218295} (16z^{11} - 776z^{10} + 13228z^9 - 95898z^8 + 276570z^7 - 201600z^6 - 36288z^5 - 10080z^4 + 12600z^3 + 56700z^2 + 141750z + 218295) + \frac{1}{218295} e^{-z} \sqrt{\pi} (-16z^{23/2} + 784z^{21/2} - 13608z^{19/2} + 102144z^{17/2} - 318801z^{15/2} + 305235z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a86f.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{31185} (8z^{10} + 332z^9 + 4626z^8 + 24975z^7 + 40320z^6 - 12096z^5 + 10080z^4 - 12600z^3 + 18900z^2 - 28350z + 31185) + \frac{e^z \sqrt{\pi} (16z^{21/2} + 672z^{19/2} + 9576z^{17/2} + 54264z^{15/2} + 101745z^{13/2}) \operatorname{erf}(\sqrt{z})}{62370}$$

07.25.03.a86g.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{31185} (8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185) + \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 672z^{19/2} - 9576z^{17/2} + 54264z^{15/2} - 101745z^{13/2}) \operatorname{erfi}(\sqrt{z})}{62370}$$

07.25.03.a86h.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{-8z^9 - 276z^8 - 2974z^7 - 10233z^6 - 567z^5 + 11298z^4 - 28854z^3 + 37800z^2 - 18900z + 12474}{12474} + \frac{1}{24948} (e^z \sqrt{\pi} (-16z^{19/2} - 560z^{17/2} - 6216z^{15/2} - 23184z^{13/2} - 9009z^{11/2} + 27027z^{9/2} - 54054z^{7/2} + 54054z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.a86i.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{8z^9 - 276z^8 + 2974z^7 - 10233z^6 + 567z^5 + 11298z^4 + 28854z^3 + 37800z^2 + 18900z + 12474}{12474} + \frac{1}{24948} \left(e^{-z} \sqrt{\pi} (-16z^{19/2} + 560z^{17/2} - 6216z^{15/2} + 23184z^{13/2} - 9009z^{11/2} - 27027z^{9/2} - 54054z^{7/2} - 54054z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.a86j.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{8z^8 + 220z^7 + 1658z^6 + 2043z^5 - 7014z^4 + 9534z^3 + 7560z^2 - 37800z + 8316}{8316} + \frac{1}{16632} e^z \sqrt{\pi} (16z^{17/2} + 448z^{15/2} + 3528z^{13/2} + 5544z^{11/2} - 13167z^{9/2} + 12474z^{7/2} + 29106z^{5/2} - 83160z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a86k.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{8z^8 - 220z^7 + 1658z^6 - 2043z^5 - 7014z^4 - 9534z^3 + 7560z^2 + 37800z + 8316}{8316} + \frac{1}{16632} \left(e^{-z} \sqrt{\pi} (-16z^{17/2} + 448z^{15/2} - 3528z^{13/2} + 5544z^{11/2} + 13167z^{9/2} + 12474z^{7/2} - 29106z^{5/2} - 83160z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.a86l.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{-8z^7 - 164z^6 - 678z^5 + 1275z^4 + 1743z^3 - 13860z^2 + 18900z + 16632}{16632} + \frac{1}{33264} e^z \sqrt{\pi} (-16z^{15/2} - 336z^{13/2} - 1512z^{11/2} + 2016z^{9/2} + 5103z^{7/2} - 27783z^{5/2} + 26460z^{3/2} + 56700\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a86m.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{8z^7 - 164z^6 + 678z^5 + 1275z^4 - 1743z^3 - 13860z^2 - 18900z + 16632}{16632} + \frac{1}{33264} \left(e^{-z} \sqrt{\pi} (-16z^{15/2} + 336z^{13/2} - 1512z^{11/2} - 2016z^{9/2} + 5103z^{7/2} + 27783z^{5/2} + 26460z^{3/2} - 56700\sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.a86n.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, 1; z\right) = -\frac{e^z (8z^7 + 140z^6 + 378z^5 - 1533z^4 + 672z^3 + 10584z^2 - 21168z - 16632)}{16632}$$

07.25.03.a86o.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{-8z^6 - 108z^5 - 34z^4 + 1401z^3 - 3780z^2 - 2100z + 20664}{33264} + \frac{e^z \sqrt{\pi} (-16z^7 - 224z^6 - 168z^5 + 2856z^4 - 6321z^3 - 8820z^2 + 44100z + 12600) \operatorname{erf}(\sqrt{z})}{66528\sqrt{z}}$$

07.25.03.a86p.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{-8z^6 + 108z^5 - 34z^4 - 1401z^3 - 3780z^2 + 2100z + 20664}{33264} + \frac{e^{-z} \sqrt{\pi} (16z^7 - 224z^6 + 168z^5 + 2856z^4 + 6321z^3 - 8820z^2 - 44100z + 12600) \operatorname{erfi}(\sqrt{z})}{66528\sqrt{z}}$$

07.25.03.a86q.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, 2; z\right) = -\frac{e^z (8z^6 + 84z^5 - 126z^4 - 903z^3 + 4284z^2 - 2268z - 16632)}{16632}$$

07.25.03.a86r.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{-8z^6 - 52z^5 + 274z^4 + 15z^3 - 3675z^2 + 8526z + 3150}{22176z} + \frac{e^z \sqrt{\pi} (-16z^7 - 112z^6 + 504z^5 + 336z^4 - 7665z^3 + 14175z^2 + 15750z - 3150) \operatorname{erf}(\sqrt{z})}{44352z^{3/2}}$$

07.25.03.a86s.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{8z^6 - 52z^5 - 274z^4 + 15z^3 + 3675z^2 + 8526z - 3150}{22176z} + \frac{e^{-z} \sqrt{\pi} (-16z^7 + 112z^6 + 504z^5 - 336z^4 - 7665z^3 - 14175z^2 + 15750z + 3150) \operatorname{erfi}(\sqrt{z})}{44352z^{3/2}}$$

07.25.03.a86t.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, 3; z\right) = -\frac{e^z (8z^5 + 28z^4 - 294z^3 + 567z^2 + 2016z - 8316)}{8316}$$

07.25.03.a86u.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{5(8z^6 - 4z^5 - 246z^4 + 1203z^3 - 1218z^2 - 4158z + 3024)}{44352z^2} - \frac{5e^z \sqrt{\pi} (16z^7 - 504z^5 + 2184z^4 - 1071z^3 - 10962z^2 + 6174z - 3024) \operatorname{erf}(\sqrt{z})}{88704z^{5/2}}$$

07.25.03.a86v.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^7 - 504z^5 - 2184z^4 - 1071z^3 + 10962z^2 + 6174z + 3024) \operatorname{erfi}(\sqrt{z})}{88704z^{5/2}} - \frac{5(8z^6 + 4z^5 - 246z^4 - 1203z^3 - 1218z^2 + 4158z + 3024)}{44352z^2}$$

07.25.03.a86w.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, 4; z\right) = -\frac{e^z (8z^4 - 28z^3 - 126z^2 + 1197z - 2772)}{2772}$$

07.25.03.a86x.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{5(8z^6 - 60z^5 + 118z^4 + 573z^3 - 3339z^2 + 5544z - 7560)}{12672z^3} - \frac{5e^z \sqrt{\pi} (16z^7 - 112z^6 + 168z^5 + 1344z^4 - 6447z^3 + 8379z^2 - 10584z + 7560) \operatorname{erf}(\sqrt{z})}{25344z^{7/2}}$$

07.25.03.a86y.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{5(8z^6 + 60z^5 + 118z^4 - 573z^3 - 3339z^2 - 5544z - 7560)}{12672z^3} - \frac{5e^{-z}\sqrt{\pi}(16z^7 + 112z^6 + 168z^5 - 1344z^4 - 6447z^3 - 8379z^2 - 10584z - 7560)\operatorname{erfi}(\sqrt{z})}{25344z^{7/2}}$$

07.25.03.a86z.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, 5; z\right) = -\frac{1}{693}e^z(8z^3 - 84z^2 + 378z - 693)$$

07.25.03.a870.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, \frac{11}{2}; z\right) = -\frac{5(8z^6 - 116z^5 + 818z^4 - 3585z^3 + 11592z^2 - 32760z + 75600)}{2816z^4} - \frac{5e^z\sqrt{\pi}(16z^7 - 224z^6 + 1512z^5 - 6216z^4 + 18417z^3 - 46872z^2 + 83160z - 75600)\operatorname{erf}(\sqrt{z})}{5632z^{9/2}}$$

07.25.03.a871.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{5e^{-z}\sqrt{\pi}(16z^7 + 224z^6 + 1512z^5 + 6216z^4 + 18417z^3 + 46872z^2 + 83160z + 75600)\operatorname{erfi}(\sqrt{z})}{5632z^{9/2}} - \frac{5(8z^6 + 116z^5 + 818z^4 + 3585z^3 + 11592z^2 + 32760z + 75600)}{2816z^4}$$

07.25.03.a872.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{11}{2}, 6; z\right) = -\frac{5e^z(8z^7 - 140z^6 + 1218z^5 - 6783z^4 + 27132z^3 - 81396z^2 + 162792z - 162792)}{693z^5} - \frac{12920}{11z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = -\frac{9}{2}$

07.25.03.a873.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{178605}(-16z^{11} - 792z^{10} - 13924z^9 - 106350z^8 - 341440z^7 - 352860z^6 - 36288z^5 - 3360z^4 - 7560z^3 + 40500z^2 - 110250z + 178605) + \frac{1}{178605}e^z\sqrt{\pi}(-16z^{23/2} - 800z^{21/2} - 14312z^{19/2} - 112936z^{17/2} - 388569z^{15/2} - 484500z^{13/2} - 125970z^{11/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a874.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{178605}(16z^{11} - 792z^{10} + 13924z^9 - 106350z^8 + 341440z^7 - 352860z^6 + 36288z^5 - 3360z^4 + 7560z^3 + 40500z^2 + 110250z + 178605) + \frac{1}{178605}e^{-z}\sqrt{\pi}(-16z^{23/2} + 800z^{21/2} - 14312z^{19/2} + 112936z^{17/2} - 388569z^{15/2} + 484500z^{13/2} - 125970z^{11/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a875.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{19845} (8z^{10} + 348z^9 + 5226z^8 + 32435z^7 + 75630z^6 + 36288z^5 - 3360z^4 - 2520z^3 + 8100z^2 - 15750z + 19845) + \frac{e^z \sqrt{\pi} (16z^{21/2} + 704z^{19/2} + 10792z^{17/2} + 69768z^{15/2} + 179265z^{13/2} + 125970z^{11/2}) \operatorname{erf}(\sqrt{z})}{39690}$$

07.25.03.a876.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{19845} (8z^{10} - 348z^9 + 5226z^8 - 32435z^7 + 75630z^6 - 36288z^5 - 3360z^4 + 2520z^3 + 8100z^2 + 15750z + 19845) + \frac{1}{39690} e^{-z} \sqrt{\pi} (-16z^{21/2} + 704z^{19/2} - 10792z^{17/2} + 69768z^{15/2} - 179265z^{13/2} + 125970z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a877.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{-8z^9 - 300z^8 - 3730z^7 - 17655z^6 - 24192z^5 + 6720z^4 - 5040z^3 + 5400z^2 - 6300z + 5670}{5670} + \frac{e^z \sqrt{\pi} (-16z^{19/2} - 608z^{17/2} - 7752z^{15/2} - 38760z^{13/2} - 62985z^{11/2}) \operatorname{erf}(\sqrt{z})}{11340}$$

07.25.03.a878.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670}{5670} + \frac{e^{-z} \sqrt{\pi} (-16z^{19/2} + 608z^{17/2} - 7752z^{15/2} + 38760z^{13/2} - 62985z^{11/2}) \operatorname{erfi}(\sqrt{z})}{11340}$$

07.25.03.a879.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{8z^8 + 252z^7 + 2474z^6 + 7875z^5 + 1526z^4 - 7938z^3 + 10800z^2 - 4200z + 2268}{2268} + \frac{1}{4536} e^z \sqrt{\pi} (16z^{17/2} + 512z^{15/2} + 5192z^{13/2} + 17992z^{11/2} + 9009z^{9/2} - 18018z^{7/2} + 18018z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a87a.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{8z^8 - 252z^7 + 2474z^6 - 7875z^5 + 1526z^4 + 7938z^3 + 10800z^2 + 4200z + 2268}{2268} + \frac{1}{4536} e^{-z} \sqrt{\pi} (-16z^{17/2} + 512z^{15/2} - 5192z^{13/2} + 17992z^{11/2} - 9009z^{9/2} - 18018z^{7/2} - 18018z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a87b.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{-8z^7 - 204z^6 - 1458z^5 - 2135z^4 + 4368z^3 - 810z^2 - 8400z + 1512}{1512} + \frac{1}{3024} e^z \sqrt{\pi} (-16z^{15/2} - 416z^{13/2} - 3112z^{11/2} - 5544z^{9/2} + 7623z^{7/2} + 2772z^{5/2} - 20790z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a87c.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{8z^7 - 204z^6 + 1458z^5 - 2135z^4 - 4368z^3 - 810z^2 + 8400z + 1512}{1512} + \frac{1}{3024} e^{-z} \sqrt{\pi} (-16z^{15/2} + 416z^{13/2} - 3112z^{11/2} + 5544z^{9/2} + 7623z^{7/2} - 2772z^{5/2} - 20790z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a87d.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{8z^6 + 156z^5 + 682z^4 - 525z^3 - 2610z^2 + 5460z + 3024}{3024} + \frac{e^z \sqrt{\pi} (16z^{13/2} + 320z^{11/2} + 1512z^{9/2} - 504z^{7/2} - 6111z^{5/2} + 9450z^{3/2} + 11340\sqrt{z}) \operatorname{erf}(\sqrt{z})}{6048}$$

07.25.03.a87e.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{8z^6 - 156z^5 + 682z^4 + 525z^3 - 2610z^2 - 5460z + 3024}{3024} + \frac{1}{6048} e^{-z} \sqrt{\pi} (-16z^{13/2} + 320z^{11/2} - 1512z^{9/2} - 504z^{7/2} + 6111z^{5/2} + 9450z^{3/2} - 11340\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a87f.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, 1; z\right) = \frac{e^z (4z^6 + 68z^5 + 223z^4 - 432z^3 - 744z^2 + 2688z + 1512)}{1512}$$

07.25.03.a87g.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{8z^5 + 108z^4 + 146z^3 - 1065z^2 + 560z + 3948}{6048} + \frac{e^z \sqrt{\pi} (16z^6 + 224z^5 + 392z^4 - 2072z^3 + 105z^2 + 9240z + 2100) \operatorname{erf}(\sqrt{z})}{12096\sqrt{z}}$$

07.25.03.a87h.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{-8z^5 + 108z^4 - 146z^3 - 1065z^2 - 560z + 3948}{6048} + \frac{e^{-z} \sqrt{\pi} (16z^6 - 224z^5 + 392z^4 + 2072z^3 + 105z^2 - 9240z + 2100) \operatorname{erfi}(\sqrt{z})}{12096\sqrt{z}}$$

07.25.03.a87i.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, 2; z\right) = \frac{e^z (4z^5 + 44z^4 + 3z^3 - 444z^2 + 588z + 1512)}{1512}$$

07.25.03.a87j.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{8z^5 + 60z^4 - 150z^3 - 445z^2 + 1782z + 450}{4032z} + \frac{e^z \sqrt{\pi} (16z^6 + 128z^5 - 248z^4 - 1080z^3 + 3345z^2 + 2550z - 450) \operatorname{erf}(\sqrt{z})}{8064z^{3/2}}$$

07.25.03.a87k.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{8z^5 - 60z^4 - 150z^3 + 445z^2 + 1782z - 450}{4032z} + \frac{e^{-z}\sqrt{\pi}(-16z^6 + 128z^5 + 248z^4 - 1080z^3 - 3345z^2 + 2550z + 450)\operatorname{erfi}(\sqrt{z})}{8064z^{3/2}}$$

07.25.03.a87l.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, 3; z\right) = \frac{1}{756} e^z (4z^4 + 20z^3 - 97z^2 - 56z + 756)$$

07.25.03.a87m.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{5(8z^5 + 12z^4 - 206z^3 + 375z^2 + 576z - 378)}{8064z^2} + \frac{5e^z\sqrt{\pi}(16z^6 + 32z^5 - 408z^4 + 552z^3 + 1689z^2 - 828z + 378)\operatorname{erf}(\sqrt{z})}{16128z^{5/2}}$$

07.25.03.a87n.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}\sqrt{\pi}(16z^6 - 32z^5 - 408z^4 - 552z^3 + 1689z^2 + 828z + 378)\operatorname{erfi}(\sqrt{z})}{16128z^{5/2}} - \frac{5(8z^5 - 12z^4 - 206z^3 - 375z^2 + 576z + 378)}{8064z^2}$$

07.25.03.a87o.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, 4; z\right) = \frac{1}{252} e^z (4z^3 - 4z^2 - 77z + 252)$$

07.25.03.a87p.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{5(8z^5 - 36z^4 - 22z^3 + 435z^2 - 658z + 840)}{2304z^3} + \frac{5e^z\sqrt{\pi}(16z^6 - 64z^5 - 88z^4 + 904z^3 - 1023z^2 + 1218z - 840)\operatorname{erf}(\sqrt{z})}{4608z^{7/2}}$$

07.25.03.a87q.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{5(8z^5 + 36z^4 - 22z^3 - 435z^2 - 658z - 840)}{2304z^3} - \frac{5e^{-z}\sqrt{\pi}(16z^6 + 64z^5 - 88z^4 - 904z^3 - 1023z^2 - 1218z - 840)\operatorname{erfi}(\sqrt{z})}{4608z^{7/2}}$$

07.25.03.a87r.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, 5; z\right) = \frac{1}{63} e^z (4z^2 - 28z + 63)$$

07.25.03.a87s.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{5(8z^5 - 84z^4 + 402z^3 - 1225z^2 + 3360z - 7560)}{512z^4} + \frac{5e^z\sqrt{\pi}(16z^6 - 160z^5 + 712z^4 - 1944z^3 + 4809z^2 - 8400z + 7560)\operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.a87t.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{5e^{-z}\sqrt{\pi}(16z^6 + 160z^5 + 712z^4 + 1944z^3 + 4809z^2 + 8400z + 7560)\operatorname{erfi}(\sqrt{z})}{1024z^{9/2}} - \frac{5(8z^5 + 84z^4 + 402z^3 + 1225z^2 + 3360z + 7560)}{512z^4}$$

07.25.03.a87u.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{9}{2}, 6; z\right) = \frac{5e^z(4z^6 - 52z^5 + 323z^4 - 1292z^3 + 3876z^2 - 7752z + 7752)}{63z^5} - \frac{12920}{21z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = -\frac{7}{2}$

07.25.03.a87v.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{-8z^9 - 308z^8 - 3998z^7 - 20585z^6 - 36111z^5 - 6720z^4 - 1680z^3 + 3240z^2 - 4500z + 4410}{4410} + \frac{e^z\sqrt{\pi}(-16z^{19/2} - 624z^{17/2} - 8296z^{15/2} - 44880z^{13/2} - 89505z^{11/2} - 36465z^{9/2})\operatorname{erf}(\sqrt{z})}{8820}$$

07.25.03.a87w.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{8z^9 - 308z^8 + 3998z^7 - 20585z^6 + 36111z^5 - 6720z^4 + 1680z^3 + 3240z^2 + 4500z + 4410}{4410} + \frac{e^{-z}\sqrt{\pi}(-16z^{19/2} + 624z^{17/2} - 8296z^{15/2} + 44880z^{13/2} - 89505z^{11/2} + 36465z^{9/2})\operatorname{erfi}(\sqrt{z})}{8820}$$

07.25.03.a87x.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{8z^8 + 268z^7 + 2930z^6 + 11919z^5 + 13440z^4 - 3360z^3 + 2160z^2 - 1800z + 1260}{1260} + \frac{e^z\sqrt{\pi}(16z^{17/2} + 544z^{15/2} + 6120z^{13/2} + 26520z^{11/2} + 36465z^{9/2})\operatorname{erf}(\sqrt{z})}{2520}$$

07.25.03.a87y.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260}{1260} + \frac{e^{-z}\sqrt{\pi}(-16z^{17/2} + 544z^{15/2} - 6120z^{13/2} + 26520z^{11/2} - 36465z^{9/2})\operatorname{erfi}(\sqrt{z})}{2520}$$

07.25.03.a87z.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{504} (-8z^7 - 228z^6 - 2022z^5 - 5957z^4 - 2289z^3 + 4320z^2 - 1200z + 504) + \frac{e^z \sqrt{\pi} (-16z^{15/2} - 464z^{13/2} - 4264z^{11/2} - 13728z^{9/2} - 9009z^{7/2} + 9009z^{5/2}) \operatorname{erf}(\sqrt{z})}{1008}$$

07.25.03.a880.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{504} (8z^7 - 228z^6 + 2022z^5 - 5957z^4 + 2289z^3 + 4320z^2 + 1200z + 504) + \frac{e^{-z} \sqrt{\pi} (-16z^{15/2} + 464z^{13/2} - 4264z^{11/2} + 13728z^{9/2} - 9009z^{7/2} - 9009z^{5/2}) \operatorname{erfi}(\sqrt{z})}{1008}$$

07.25.03.a881.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{336} (8z^6 + 188z^5 + 1274z^4 + 2219z^3 - 1710z^2 - 2400z + 336) + \frac{1}{672} e^z \sqrt{\pi} (16z^{13/2} + 384z^{11/2} + 2728z^{9/2} + 5544z^{7/2} - 2079z^{5/2} - 6930z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a882.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{336} (8z^6 - 188z^5 + 1274z^4 - 2219z^3 - 1710z^2 + 2400z + 336) + \frac{1}{672} e^{-z} \sqrt{\pi} (-16z^{13/2} + 384z^{11/2} - 2728z^{9/2} + 5544z^{7/2} + 2079z^{5/2} - 6930z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a883.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{672} (-8z^5 - 148z^4 - 686z^3 - 225z^2 + 1965z + 672) + \frac{e^z \sqrt{\pi} (-16z^{11/2} - 304z^{9/2} - 1512z^{7/2} - 1008z^{5/2} + 4095z^{3/2} + 2835\sqrt{z}) \operatorname{erf}(\sqrt{z})}{1344}$$

07.25.03.a884.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{672} (8z^5 - 148z^4 + 686z^3 - 225z^2 - 1965z + 672) + \frac{e^{-z} \sqrt{\pi} (-16z^{11/2} + 304z^{9/2} - 1512z^{7/2} + 1008z^{5/2} + 4095z^{3/2} - 2835\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1344}$$

07.25.03.a885.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, 1; z\right) = -\frac{1}{168} e^z (2z^5 + 33z^4 + 128z^3 - 24z^2 - 432z - 168)$$

07.25.03.a886.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{-8z^4 - 108z^3 - 258z^2 + 505z + 924}{1344} + \frac{e^z \sqrt{\pi} (-16z^5 - 224z^4 - 616z^3 + 840z^2 + 2415z + 420) \operatorname{erf}(\sqrt{z})}{2688\sqrt{z}}$$

07.25.03.a887.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{-8z^4 + 108z^3 - 258z^2 - 505z + 924}{1344} + \frac{e^{-z}\sqrt{\pi}(16z^5 - 224z^4 + 616z^3 + 840z^2 - 2415z + 420)\operatorname{erfi}(\sqrt{z})}{2688\sqrt{z}}$$

07.25.03.a888.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, 2; z\right) = -\frac{1}{168}e^z(2z^4 + 23z^3 + 36z^2 - 132z - 168)$$

07.25.03.a889.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{-8z^4 - 68z^3 + 10z^2 + 451z + 75}{896z} + \frac{e^z\sqrt{\pi}(-16z^5 - 144z^4 - 40z^3 + 960z^2 + 495z - 75)\operatorname{erf}(\sqrt{z})}{1792z^{3/2}}$$

07.25.03.a88a.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{8z^4 - 68z^3 - 10z^2 + 451z - 75}{896z} + \frac{e^{-z}\sqrt{\pi}(-16z^5 + 144z^4 - 40z^3 - 960z^2 + 495z + 75)\operatorname{erfi}(\sqrt{z})}{1792z^{3/2}}$$

07.25.03.a88b.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, 3; z\right) = -\frac{1}{84}e^z(2z^3 + 13z^2 - 16z - 84)$$

07.25.03.a88c.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{5(8z^4 + 28z^3 - 118z^2 - 93z + 54)}{1792z^2} - \frac{5e^z\sqrt{\pi}(16z^5 + 64z^4 - 216z^3 - 312z^2 + 129z - 54)\operatorname{erf}(\sqrt{z})}{3584z^{5/2}}$$

07.25.03.a88d.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}\sqrt{\pi}(16z^5 - 64z^4 - 216z^3 + 312z^2 + 129z + 54)\operatorname{erfi}(\sqrt{z})}{3584z^{5/2}} - \frac{5(8z^4 - 28z^3 - 118z^2 + 93z + 54)}{1792z^2}$$

07.25.03.a88e.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, 4; z\right) = -\frac{1}{28}e^z(2z^2 + 3z - 28)$$

07.25.03.a88f.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{5(8z^4 - 12z^3 - 66z^2 + 89z - 105)}{512z^3} - \frac{5e^z\sqrt{\pi}(16z^5 - 16z^4 - 152z^3 + 144z^2 - 159z + 105)\operatorname{erf}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.a88g.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5(8z^4 + 12z^3 - 66z^2 - 89z - 105)}{512z^3} - \frac{5e^{-z}\sqrt{\pi}(16z^5 + 16z^4 - 152z^3 - 144z^2 - 159z - 105)\operatorname{erfi}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.a88h.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, 5; z\right) = -\frac{1}{7}e^z(2z - 7)$$

07.25.03.a88i.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{45(8z^4 - 52z^3 + 146z^2 - 385z + 840)}{1024z^4} - \frac{45e^z\sqrt{\pi}(16z^5 - 96z^4 + 232z^3 - 552z^2 + 945z - 840)\operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.a88j.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{45e^{-z}\sqrt{\pi}(16z^5 + 96z^4 + 232z^3 + 552z^2 + 945z + 840)\operatorname{erfi}(\sqrt{z})}{2048z^{9/2}} - \frac{45(8z^4 + 52z^3 + 146z^2 + 385z + 840)}{1024z^4}$$

07.25.03.a88k.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{7}{2}, 6; z\right) = -\frac{5e^z(2z^5 - 17z^4 + 68z^3 - 204z^2 + 408z - 408)}{7z^5} - \frac{2040}{7z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = -\frac{5}{2}$

07.25.03.a88l.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{360}(-8z^7 - 236z^6 - 2226z^5 - 7575z^4 - 6720z^3 + 1440z^2 - 720z + 360) + \frac{1}{720}e^z\sqrt{\pi}(-16z^{15/2} - 480z^{13/2} - 4680z^{11/2} - 17160z^{9/2} - 19305z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a88m.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{360}(8z^7 - 236z^6 + 2226z^5 - 7575z^4 + 6720z^3 + 1440z^2 + 720z + 360) + \frac{1}{720}e^{-z}\sqrt{\pi}(-16z^{15/2} + 480z^{13/2} - 4680z^{11/2} + 17160z^{9/2} - 19305z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a88n.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{144}(8z^6 + 204z^5 + 1618z^4 + 4431z^3 + 2880z^2 - 480z + 144) + \frac{1}{288}e^z\sqrt{\pi}(16z^{13/2} + 416z^{11/2} + 3432z^{9/2} + 10296z^{7/2} + 9009z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a88o.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{144} (8z^6 - 204z^5 + 1618z^4 - 4431z^3 + 2880z^2 + 480z + 144) + \frac{1}{288} e^{-z} \sqrt{\pi} (-16z^{13/2} + 416z^{11/2} - 3432z^{9/2} + 10296z^{7/2} - 9009z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a88p.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{96} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) + \frac{1}{192} e^z \sqrt{\pi} (-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a88q.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{96} (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) + \frac{1}{192} e^{-z} \sqrt{\pi} (-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a88r.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{192} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} e^z \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a88s.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{192} (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a88t.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, 1; z\right) = \frac{1}{24} e^z (z^4 + 16z^3 + 72z^2 + 96z + 24)$$

07.25.03.a88u.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{384} (8z^3 + 108z^2 + 370z + 279) + \frac{e^z \sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.a88v.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} (-8z^3 + 108z^2 - 370z + 279) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.a88w.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, 2; z\right) = \frac{1}{24} e^z (z^3 + 12z^2 + 36z + 24)$$

07.25.03.a88x.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.a88y.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z}\sqrt{\pi}(-16z^4 + 160z^3 - 360z^2 + 120z + 15)\operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.a88z.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, 3; z\right) = \frac{1}{12}e^z(z^2 + 8z + 12)$$

07.25.03.a890.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5e^z\sqrt{\pi}(16z^4 + 96z^3 + 72z^2 - 24z + 9)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.a891.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}\sqrt{\pi}(16z^4 - 96z^3 + 72z^2 + 24z + 9)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.a892.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, 4; z\right) = \frac{1}{4}e^z(z + 4)$$

07.25.03.a893.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{35(8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35e^z\sqrt{\pi}(16z^4 + 32z^3 - 24z^2 + 24z - 15)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.a894.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35e^{-z}\sqrt{\pi}(16z^4 - 32z^3 - 24z^2 - 24z - 15)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.a895.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, 5; z\right) = e^z$$

07.25.03.a896.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{315(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315e^z\sqrt{\pi}(16z^4 - 32z^3 + 72z^2 - 120z + 105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.a897.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(16z^4 + 32z^3 + 72z^2 + 120z + 105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315(8z^3 + 20z^2 + 50z + 105)}{2048z^4}$$

07.25.03.a898.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{5}{2}, 6; z\right) = \frac{5e^z(z^4 - 4z^3 + 12z^2 - 24z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = -\frac{3}{2}$

07.25.03.a899.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{3}{2}, 1; z\right) = \frac{1}{48}e^z(-5z^3 + 1424z^2 + 352z + 48) - \frac{1001}{32}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a89a.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{3}{2}, 1; -z\right) = \frac{1001}{32} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{48} e^{-z} (5z^3 + 1424z^2 - 352z + 48)$$

07.25.03.a89b.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{3}{2}, 2; z\right) = \frac{1}{6} e^z (53z^2 + 19z + 6) - \frac{143}{16} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a89c.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{3}{2}, 2; -z\right) = \frac{143}{16} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{6} e^{-z} (53z^2 - 19z + 6)$$

07.25.03.a89d.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{3}{2}, 3; z\right) = \frac{1}{36} e^z (143z^2 + 64z + 36) - \frac{143}{36} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a89e.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{3}{2}, 3; -z\right) = \frac{143}{36} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{36} e^{-z} (143z^2 - 64z + 36)$$

07.25.03.a89f.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{3}{2}, 4; z\right) = \frac{1}{12} e^z (26z^2 + 13z + 12) - \frac{13}{6} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a89g.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{3}{2}, 4; -z\right) = \frac{13}{6} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{12} e^{-z} (26z^2 - 13z + 12)$$

07.25.03.a89h.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{3}{2}, 5; z\right) = \frac{1}{3} e^z (4z^2 + 2z + 3) - \frac{4}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a89i.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{3}{2}, 5; -z\right) = \frac{4}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4z^2 - 2z + 3)$$

07.25.03.a89j.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{3}{2}, 6; z\right) = -\frac{8}{9} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{e^z (8z^7 + 4z^6 + 6z^5 + 15z^4 - 60z^3 + 180z^2 - 360z + 360)}{9z^5} - \frac{40}{z^5}$$

07.25.03.a89k.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{3}{2}, 6; -z\right) = \frac{8}{9} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{e^{-z} (8z^7 - 4z^6 + 6z^5 - 15z^4 - 60z^3 - 180z^2 - 360z - 360)}{9z^5} + \frac{40}{z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = -\frac{1}{2}$

07.25.03.a89l.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{1}{2}, 1; z\right) = \frac{1}{64} e^z (-2993z^2 + 1536z + 64) + \frac{231}{128} \sqrt{\pi} (26z^{5/2} - 25z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a89m.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{1}{2}, 1; -z\right) = \frac{1}{64} e^{-z} (-2993z^2 - 1536z + 64) - \frac{231}{128} \sqrt{\pi} (26z^{5/2} + 25z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a89n.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{1}{2}, 2; z\right) = \frac{1}{32} e^z (-429 z^2 + 368 z + 32) + \frac{33}{64} \sqrt{\pi} (26 z^{5/2} - 35 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a89o.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{1}{2}, 2; -z\right) = \frac{1}{32} e^{-z} (-429 z^2 - 368 z + 32) - \frac{33}{64} \sqrt{\pi} (26 z^{5/2} + 35 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a89p.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{1}{2}, 3; z\right) = \frac{1}{24} e^z (-143 z^2 + 176 z + 24) + \frac{11}{48} \sqrt{\pi} (26 z^{5/2} - 45 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a89q.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{1}{2}, 3; -z\right) = \frac{1}{24} e^{-z} (-143 z^2 - 176 z + 24) - \frac{11}{48} \sqrt{\pi} (26 z^{5/2} + 45 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a89r.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{1}{2}, 4; z\right) = \frac{1}{4} e^z (-13 z^2 + 21 z + 4) + \frac{1}{8} \sqrt{\pi} (26 z^{5/2} - 55 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a89s.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{1}{2}, 4; -z\right) = \frac{1}{4} e^{-z} (-13 z^2 - 21 z + 4) + \frac{1}{8} \sqrt{\pi} (-26 z^{5/2} - 55 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a89t.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{1}{2}, 5; z\right) = e^z (-2 z^2 + 4 z + 1) + \sqrt{\pi} (2 z^{5/2} - 5 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a89u.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{1}{2}, 5; -z\right) = e^{-z} (-2 z^2 - 4 z + 1) + \sqrt{\pi} (-2 z^{5/2} - 5 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a89v.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{1}{2}, 6; z\right) = \frac{e^z (-52 z^7 + 124 z^6 + 36 z^5 + 15 z^4 - 60 z^3 + 180 z^2 - 360 z + 360)}{39 z^5} + \frac{2}{39} \sqrt{\pi} (26 z^{5/2} - 75 z^{3/2}) \operatorname{erfi}(\sqrt{z}) - \frac{120}{13 z^5}$$

07.25.03.a89w.01

$${}_2F_2\left(-\frac{5}{2}, 5; -\frac{1}{2}, 6; -z\right) = \frac{e^{-z} (-52 z^7 - 124 z^6 + 36 z^5 - 15 z^4 - 60 z^3 - 180 z^2 - 360 z - 360)}{39 z^5} - \frac{2}{39} \sqrt{\pi} (26 z^{5/2} + 75 z^{3/2}) \operatorname{erf}(\sqrt{z}) + \frac{120}{13 z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = \frac{1}{2}$

07.25.03.a89x.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{1}{2}, 1; z\right) = \frac{1}{512} e^z (6006 z^2 - 8587 z + 512) - \frac{21 \sqrt{\pi} (572 z^{5/2} - 1100 z^{3/2} + 225 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1024}$$

07.25.03.a89y.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{1}{2}, 1; -z\right) = \frac{1}{512} e^{-z} (6006 z^2 + 8587 z + 512) + \frac{21 \sqrt{\pi} (572 z^{5/2} + 1100 z^{3/2} + 225 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{1024}$$

07.25.03.a89z.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{1}{2}, 2; z\right) = \frac{1}{256} e^z (858 z^2 - 1881 z + 256) - \frac{3}{512} \sqrt{\pi} (572 z^{5/2} - 1540 z^{3/2} + 525 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8a0.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{1}{2}, 2; -z\right) = \frac{1}{256} e^{-z} (858 z^2 + 1881 z + 256) + \frac{3}{512} \sqrt{\pi} (572 z^{5/2} + 1540 z^{3/2} + 525 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8a1.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{1}{2}, 3; z\right) = \frac{1}{192} e^z (286 z^2 - 847 z + 192) + \frac{1}{384} \sqrt{\pi} (-572 z^{5/2} + 1980 z^{3/2} - 945 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8a2.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{1}{2}, 3; -z\right) = \frac{1}{192} e^{-z} (286 z^2 + 847 z + 192) + \frac{1}{384} \sqrt{\pi} (572 z^{5/2} + 1980 z^{3/2} + 945 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8a3.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{1}{2}, 4; z\right) = \frac{1}{32} e^z (26 z^2 - 97 z + 32) + \frac{1}{64} \sqrt{\pi} (-52 z^{5/2} + 220 z^{3/2} - 135 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8a4.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{1}{2}, 4; -z\right) = \frac{1}{32} e^{-z} (26 z^2 + 97 z + 32) + \frac{1}{64} \sqrt{\pi} (52 z^{5/2} + 220 z^{3/2} + 135 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8a5.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{1}{2}, 5; z\right) = \frac{1}{4} e^z (2 z^2 - 9 z + 4) + \frac{1}{8} \sqrt{\pi} (-4 z^{5/2} + 20 z^{3/2} - 15 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8a6.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{1}{2}, 5; -z\right) = \frac{1}{4} e^{-z} (2 z^2 + 9 z + 4) + \frac{1}{8} \sqrt{\pi} (4 z^{5/2} + 20 z^{3/2} + 15 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8a7.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{1}{2}, 6; z\right) = \frac{e^z (286 z^7 - 1507 z^6 + 852 z^5 + 30 z^4 - 120 z^3 + 360 z^2 - 720 z + 720)}{858 z^5} + \frac{\sqrt{\pi} (-572 z^{5/2} + 3300 z^{3/2} - 2925 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1716} - \frac{120}{143 z^5}$$

07.25.03.a8a8.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{1}{2}, 6; -z\right) = \frac{e^{-z} (286 z^7 + 1507 z^6 + 852 z^5 - 30 z^4 - 120 z^3 - 360 z^2 - 720 z - 720)}{858 z^5} + \frac{\sqrt{\pi} (572 z^{5/2} + 3300 z^{3/2} + 2925 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{1716} + \frac{120}{143 z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = 1$

07.25.03.a8a9.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, 1; z\right) = \frac{1}{160} e^{z/2} (-1001 z^3 + 3157 z^2 - 2080 z + 160) I_0\left(\frac{z}{2}\right) + \frac{1}{160} e^{z/2} (1001 z^3 - 2156 z^2 + 412 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8aa.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, \frac{3}{2}; z\right) = \frac{e^z (4004 z^2 - 9548 z + 1873)}{2048} - \frac{7 \sqrt{\pi} (1144 z^3 - 3300 z^2 + 1350 z - 25) \operatorname{erfi}(\sqrt{z})}{4096 \sqrt{z}}$$

07.25.03.a8ab.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, \frac{3}{2}; -z\right) = \frac{e^{-z} (4004 z^2 + 9548 z + 1873)}{2048} + \frac{7 \sqrt{\pi} (1144 z^3 + 3300 z^2 + 1350 z + 25) \operatorname{erf}(\sqrt{z})}{4096 \sqrt{z}}$$

07.25.03.a8ac.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, 2; z\right) = \frac{1}{160} e^{z/2} (-286 z^3 + 1177 z^2 - 1080 z + 160) I_0\left(\frac{z}{2}\right) + \frac{1}{160} e^{z/2} (286 z^3 - 891 z^2 + 332 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8ad.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, \frac{5}{2}; z\right) = \frac{3 e^z (8008 z^3 - 26796 z^2 + 9506 z + 25)}{32768 z} - \frac{3 \sqrt{\pi} (16016 z^4 - 61600 z^3 + 37800 z^2 - 1400 z + 25) \operatorname{erfi}(\sqrt{z})}{65536 z^{3/2}}$$

07.25.03.a8ae.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (8008 z^3 + 26796 z^2 + 9506 z - 25)}{32768 z} + \frac{3 \sqrt{\pi} (16016 z^4 + 61600 z^3 + 37800 z^2 + 1400 z + 25) \operatorname{erf}(\sqrt{z})}{65536 z^{3/2}}$$

07.25.03.a8af.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, 3; z\right) = \frac{1}{180} e^{z/2} (-143 z^3 + 726 z^2 - 840 z + 180) I_0\left(\frac{z}{2}\right) + \frac{1}{360} e^{z/2} z (286 z^2 - 1166 z + 657) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8ag.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, \frac{7}{2}; z\right) = \frac{3 e^z (16016 z^4 - 68992 z^3 + 36512 z^2 + 280 z - 45)}{131072 z^2} - \frac{3 \sqrt{\pi} (32032 z^5 - 154000 z^4 + 126000 z^3 - 7000 z^2 + 250 z - 45) \operatorname{erfi}(\sqrt{z})}{262144 z^{5/2}}$$

07.25.03.a8ah.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, \frac{7}{2}; -z\right) = \frac{3 e^{-z} (16016 z^4 + 68992 z^3 + 36512 z^2 - 280 z - 45)}{131072 z^2} + \frac{3 \sqrt{\pi} (32032 z^5 + 154000 z^4 + 126000 z^3 + 7000 z^2 + 250 z + 45) \operatorname{erf}(\sqrt{z})}{262144 z^{5/2}}$$

07.25.03.a8ai.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, 4; z\right) = \frac{1}{120} e^{z/2} (-52 z^3 + 314 z^2 - 435 z + 120) I_0\left(\frac{z}{2}\right) + \frac{1}{120} e^{z/2} z (52 z^2 - 262 z + 199) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8aj.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, \frac{9}{2}; z\right) = \frac{7 e^z (32\,032 z^5 - 168\,784 z^4 + 120\,624 z^3 + 1960 z^2 - 790 z + 375)}{1\,048\,576 z^3} - \frac{7 \sqrt{\pi} (64\,064 z^6 - 369\,600 z^5 + 378\,000 z^4 - 28\,000 z^3 + 1500 z^2 - 540 z + 375) \operatorname{erfi}(\sqrt{z})}{2\,097\,152 z^{7/2}}$$

07.25.03.a8ak.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (32\,032 z^5 + 168\,784 z^4 + 120\,624 z^3 - 1960 z^2 - 790 z - 375)}{1\,048\,576 z^3} + \frac{7 \sqrt{\pi} (64\,064 z^6 + 369\,600 z^5 + 378\,000 z^4 + 28\,000 z^3 + 1500 z^2 + 540 z + 375) \operatorname{erf}(\sqrt{z})}{2\,097\,152 z^{7/2}}$$

07.25.03.a8al.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, 5; z\right) = \frac{1}{15} e^{z/2} (-4 z^3 + 28 z^2 - 45 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} z (4 z^2 - 24 z + 23) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8am.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, \frac{11}{2}; z\right) = \frac{63 e^z (9152 z^6 - 57\,024 z^5 + 51\,664 z^4 + 1760 z^3 - 1740 z^2 + 2500 z - 2625)}{4\,194\,304 z^4} - \frac{1}{8\,388\,608 z^{9/2}} 63 \sqrt{\pi} (18\,304 z^7 - 123\,200 z^6 + 151\,200 z^5 - 14\,000 z^4 + 1000 z^3 - 540 z^2 + 750 z - 2625) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8an.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (9152 z^6 + 57\,024 z^5 + 51\,664 z^4 - 1760 z^3 - 1740 z^2 - 2500 z - 2625)}{4\,194\,304 z^4} + \frac{1}{8\,388\,608 z^{9/2}} 63 \sqrt{\pi} (18\,304 z^7 + 123\,200 z^6 + 151\,200 z^5 + 14\,000 z^4 + 1000 z^3 + 540 z^2 + 750 z + 2625) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8ao.01

$${}_2F_2\left(-\frac{5}{2}, 5; 1, 6; z\right) = \frac{e^{z/2} (-8008 z^6 + 63\,756 z^5 - 116\,340 z^4 + 44\,905 z^3 + 600 z^2 - 1920 z + 3840) I_0\left(\frac{z}{2}\right)}{45\,045 z^3} + \frac{e^{z/2} (8008 z^7 - 55\,748 z^6 + 64\,596 z^5 - 175 z^4 + 800 z^3 - 2880 z^2 + 7680 z - 15\,360) I_1\left(\frac{z}{2}\right)}{45\,045 z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = \frac{3}{2}$

07.25.03.a8ap.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{3}{2}, 2; z\right) = \frac{e^z (572 z^2 - 2024 z + 849)}{1024} + \frac{\sqrt{\pi} (-1144 z^3 + 4620 z^2 - 3150 z + 175) \operatorname{erfi}(\sqrt{z})}{2048 \sqrt{z}}$$

07.25.03.a8aq.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (572 z^2 + 2024 z + 849)}{1024} + \frac{\sqrt{\pi} (1144 z^3 + 4620 z^2 + 3150 z + 175) \operatorname{erf}(\sqrt{z})}{2048 \sqrt{z}}$$

07.25.03.a8ar.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{3}{2}, 3; z\right) = \frac{e^z (572 z^2 - 2684 z + 1779)}{2304} + \frac{\sqrt{\pi} (-1144 z^3 + 5940 z^2 - 5670 z + 525) \operatorname{erfi}(\sqrt{z})}{4608 \sqrt{z}}$$

07.25.03.a8as.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{3}{2}, 3; -z\right) = \frac{e^{-z} (572 z^2 + 2684 z + 1779)}{2304} + \frac{\sqrt{\pi} (1144 z^3 + 5940 z^2 + 5670 z + 525) \operatorname{erf}(\sqrt{z})}{4608 \sqrt{z}}$$

07.25.03.a8at.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{3}{2}, 4; z\right) = \frac{1}{384} e^z (52 z^2 - 304 z + 279) + \frac{\sqrt{\pi} (-104 z^3 + 660 z^2 - 810 z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.a8au.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{3}{2}, 4; -z\right) = \frac{1}{384} e^{-z} (52 z^2 + 304 z + 279) + \frac{\sqrt{\pi} (104 z^3 + 660 z^2 + 810 z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.a8av.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{3}{2}, 5; z\right) = \frac{1}{48} e^z (4 z^2 - 28 z + 33) + \frac{\sqrt{\pi} (-8 z^3 + 60 z^2 - 90 z + 15) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.a8aw.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{3}{2}, 5; -z\right) = \frac{1}{48} e^{-z} (4 z^2 + 28 z + 33) + \frac{\sqrt{\pi} (8 z^3 + 60 z^2 + 90 z + 15) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.a8ax.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{3}{2}, 6; z\right) = \frac{e^z (572 z^7 - 4664 z^6 + 6729 z^5 - 40 z^4 + 160 z^3 - 480 z^2 + 960 z - 960)}{10296 z^5} + \frac{\sqrt{\pi} (-1144 z^3 + 9900 z^2 - 17550 z + 3575) \operatorname{erfi}(\sqrt{z})}{20592 \sqrt{z}} + \frac{40}{429 z^5}$$

07.25.03.a8ay.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{3}{2}, 6; -z\right) = \frac{e^{-z} (572 z^7 + 4664 z^6 + 6729 z^5 + 40 z^4 + 160 z^3 + 480 z^2 + 960 z + 960)}{10296 z^5} + \frac{\sqrt{\pi} (1144 z^3 + 9900 z^2 + 17550 z + 3575) \operatorname{erf}(\sqrt{z})}{20592 \sqrt{z}} - \frac{40}{429 z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = 2$

07.25.03.a8az.01

$${}_2F_2\left(-\frac{5}{2}, 5; 2, 2; z\right) = \frac{1}{560} e^{z/2} (-286 z^3 + 1562 z^2 - 2025 z + 560) I_0\left(\frac{z}{2}\right) + \frac{1}{280} e^{z/2} (143 z^3 - 638 z^2 + 446 z - 10) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8b0.01

$${}_2F_2\left(-\frac{5}{2}, 5; 2, \frac{5}{2}; z\right) = \frac{3 e^z (1144 z^3 - 5588 z^2 + 4078 z - 25)}{16384 z} - \frac{3 \sqrt{\pi} (2288 z^4 - 12320 z^3 + 12600 z^2 - 1400 z - 25) \operatorname{erfi}(\sqrt{z})}{32768 z^{3/2}}$$

07.25.03.a8b1.01

$${}_2F_2\left(-\frac{5}{2}, 5; 2, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (1144 z^3 + 5588 z^2 + 4078 z + 25)}{16384 z} + \frac{3 \sqrt{\pi} (2288 z^4 + 12320 z^3 + 12600 z^2 + 1400 z - 25) \operatorname{erf}(\sqrt{z})}{32768 z^{3/2}}$$

07.25.03.a8b2.01

$${}_2F_2\left(-\frac{5}{2}, 5; 2, 3; z\right) = \frac{e^{z/2} (-572 z^3 + 3894 z^2 - 6465 z + 2520) I_0\left(\frac{z}{2}\right)}{2520} + \frac{e^{z/2} (572 z^3 - 3322 z^2 + 3429 z - 180) I_1\left(\frac{z}{2}\right)}{2520}$$

07.25.03.a8b3.01

$${}_2F_2\left(-\frac{5}{2}, 5; 2, \frac{7}{2}; z\right) = \frac{3 e^z (2288 z^4 - 14256 z^3 + 15016 z^2 - 260 z + 15)}{65536 z^2} - \frac{3 \sqrt{\pi} (4576 z^5 - 30800 z^4 + 42000 z^3 - 7000 z^2 - 250 z + 15) \operatorname{erfi}(\sqrt{z})}{131072 z^{5/2}}$$

07.25.03.a8b4.01

$${}_2F_2\left(-\frac{5}{2}, 5; 2, \frac{7}{2}; -z\right) = \frac{3 e^{-z} (2288 z^4 + 14256 z^3 + 15016 z^2 + 260 z + 15)}{65536 z^2} + \frac{3 \sqrt{\pi} (4576 z^5 + 30800 z^4 + 42000 z^3 + 7000 z^2 - 250 z - 15) \operatorname{erf}(\sqrt{z})}{131072 z^{5/2}}$$

07.25.03.a8b5.01

$${}_2F_2\left(-\frac{5}{2}, 5; 2, 4; z\right) = \frac{1}{420} e^{z/2} (-52 z^3 + 424 z^2 - 855 z + 420) I_0\left(\frac{z}{2}\right) + \frac{1}{420} e^{z/2} (52 z^3 - 372 z^2 + 509 z - 45) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8b6.01

$${}_2F_2\left(-\frac{5}{2}, 5; 2, \frac{9}{2}; z\right) = \frac{7 e^z (4576 z^5 - 34672 z^4 + 47952 z^3 - 1640 z^2 + 230 z - 75)}{524288 z^3} - \frac{7 \sqrt{\pi} (9152 z^6 - 73920 z^5 + 126000 z^4 - 28000 z^3 - 1500 z^2 + 180 z - 75) \operatorname{erfi}(\sqrt{z})}{1048576 z^{7/2}}$$

07.25.03.a8b7.01

$${}_2F_2\left(-\frac{5}{2}, 5; 2, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (4576 z^5 + 34672 z^4 + 47952 z^3 + 1640 z^2 + 230 z + 75)}{524288 z^3} + \frac{7 \sqrt{\pi} (9152 z^6 + 73920 z^5 + 126000 z^4 + 28000 z^3 - 1500 z^2 - 180 z - 75) \operatorname{erf}(\sqrt{z})}{1048576 z^{7/2}}$$

07.25.03.a8b8.01

$${}_2F_2\left(-\frac{5}{2}, 5; 2, 5; z\right) = \frac{1}{105} e^{z/2} (-8 z^3 + 76 z^2 - 180 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8 z^3 - 68 z^2 + 116 z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8b9.01

$${}_2F_2\left(-\frac{5}{2}, 5; 2, \frac{11}{2}; z\right) = \frac{9 e^z (9152 z^6 - 81 664 z^5 + 140 144 z^4 - 8320 z^3 + 2660 z^2 - 2800 z + 2625)}{2 097 152 z^4} - \frac{1}{4 194 304 z^{9/2}} 9 \sqrt{\pi} (18 304 z^7 - 172 480 z^6 + 352 800 z^5 - 98 000 z^4 - 7000 z^3 + 1260 z^2 - 1050 z + 2625) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8ba.01

$${}_2F_2\left(-\frac{5}{2}, 5; 2, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (9152 z^6 + 81 664 z^5 + 140 144 z^4 + 8320 z^3 + 2660 z^2 + 2800 z + 2625)}{2 097 152 z^4} + \frac{1}{4 194 304 z^{9/2}} 9 \sqrt{\pi} (18 304 z^7 + 172 480 z^6 + 352 800 z^5 + 98 000 z^4 - 7000 z^3 - 1260 z^2 - 1050 z - 2625) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8bb.01

$${}_2F_2\left(-\frac{5}{2}, 5; 2, 6; z\right) = \frac{8 e^{z/2} (286 z^7 - 2816 z^6 + 5757 z^5 - 1000 z^4 - 25 z^3 + 90 z^2 - 240 z + 480) I_1\left(\frac{z}{2}\right)}{45 045 z^4} - \frac{2 e^{z/2} (1144 z^6 - 12 408 z^5 + 33 720 z^4 - 22 540 z^3 + 75 z^2 - 240 z + 480) I_0\left(\frac{z}{2}\right)}{45 045 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = \frac{5}{2}$

07.25.03.a8bc.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{5}{2}, 3; z\right) = \frac{e^z (1144 z^3 - 7348 z^2 + 8238 z - 225)}{12 288 z} + \frac{\sqrt{\pi} (-2288 z^4 + 15 840 z^3 - 22 680 z^2 + 4200 z + 225) \operatorname{erfi}(\sqrt{z})}{24 576 z^{3/2}}$$

07.25.03.a8bd.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (1144 z^3 + 7348 z^2 + 8238 z + 225)}{12 288 z} + \frac{\sqrt{\pi} (2288 z^4 + 15 840 z^3 + 22 680 z^2 + 4200 z - 225) \operatorname{erf}(\sqrt{z})}{24 576 z^{3/2}}$$

07.25.03.a8be.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{5}{2}, 4; z\right) = \frac{e^z (104 z^3 - 828 z^2 + 1258 z - 75)}{2048 z} + \frac{\sqrt{\pi} (-208 z^4 + 1760 z^3 - 3240 z^2 + 840 z + 75) \operatorname{erfi}(\sqrt{z})}{4096 z^{3/2}}$$

07.25.03.a8bf.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{5}{2}, 4; -z\right) = \frac{e^{-z} (104 z^3 + 828 z^2 + 1258 z + 75)}{2048 z} + \frac{\sqrt{\pi} (208 z^4 + 1760 z^3 + 3240 z^2 + 840 z - 75) \operatorname{erf}(\sqrt{z})}{4096 z^{3/2}}$$

07.25.03.a8bg.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{5}{2}, 5; z\right) = \frac{e^z (8 z^3 - 76 z^2 + 146 z - 15)}{256 z} + \frac{\sqrt{\pi} (-16 z^4 + 160 z^3 - 360 z^2 + 120 z + 15) \operatorname{erfi}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.a8bh.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{5}{2}, 5; -z\right) = \frac{e^{-z} (8 z^3 + 76 z^2 + 146 z + 15)}{256 z} + \frac{\sqrt{\pi} (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15) \operatorname{erf}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.a8bi.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{5}{2}, 6; z\right) = \frac{e^z (8008 z^7 - 88396 z^6 + 205506 z^5 - 31535 z^4 - 2560 z^3 + 7680 z^2 - 15360 z + 15360)}{384384 z^5} + \frac{\sqrt{\pi} (-16016 z^4 + 184800 z^3 - 491400 z^2 + 200200 z + 32175) \operatorname{erfi}(\sqrt{z})}{768768 z^{3/2}} - \frac{40}{1001 z^5}$$

07.25.03.a8bj.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{5}{2}, 6; -z\right) = \frac{e^{-z} (8008 z^7 + 88396 z^6 + 205506 z^5 + 31535 z^4 - 2560 z^3 - 7680 z^2 - 15360 z - 15360)}{384384 z^5} + \frac{\sqrt{\pi} (16016 z^4 + 184800 z^3 + 491400 z^2 + 200200 z - 32175) \operatorname{erf}(\sqrt{z})}{768768 z^{3/2}} + \frac{40}{1001 z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = 3$

07.25.03.a8bk.01

$${}_2F_2\left(-\frac{5}{2}, 5; 3, 3; z\right) = \frac{e^{z/2} (-572 z^3 + 4884 z^2 - 10515 z + 5685) I_0\left(\frac{z}{2}\right)}{5670} + \frac{e^{z/2} (572 z^4 - 4312 z^3 + 6489 z^2 - 780 z - 60) I_1\left(\frac{z}{2}\right)}{5670 z}$$

07.25.03.a8bl.01

$${}_2F_2\left(-\frac{5}{2}, 5; 3, \frac{7}{2}; z\right) = \frac{e^z (2288 z^4 - 18656 z^3 + 29616 z^2 - 2160 z - 135)}{49152 z^2} + \frac{\sqrt{\pi} (-4576 z^5 + 39600 z^4 - 75600 z^3 + 21000 z^2 + 2250 z + 135) \operatorname{erfi}(\sqrt{z})}{98304 z^{5/2}}$$

07.25.03.a8bm.01

$${}_2F_2\left(-\frac{5}{2}, 5; 3, \frac{7}{2}; -z\right) = \frac{e^{-z} (2288 z^4 + 18656 z^3 + 29616 z^2 + 2160 z - 135)}{49152 z^2} + \frac{\sqrt{\pi} (4576 z^5 + 39600 z^4 + 75600 z^3 + 21000 z^2 - 2250 z + 135) \operatorname{erf}(\sqrt{z})}{98304 z^{5/2}}$$

07.25.03.a8bn.01

$${}_2F_2\left(-\frac{5}{2}, 5; 3, 4; z\right) = \frac{e^{z/2} (-104 z^3 + 1068 z^2 - 2820 z + 1905) I_0\left(\frac{z}{2}\right)}{1890} + \frac{e^{z/2} (104 z^4 - 964 z^3 + 1908 z^2 - 375 z - 60) I_1\left(\frac{z}{2}\right)}{1890 z}$$

07.25.03.a8bo.01

$${}_2F_2\left(-\frac{5}{2}, 5; 3, \frac{9}{2}; z\right) = \frac{7 e^z (4576 z^5 - 45232 z^4 + 93072 z^3 - 12360 z^2 - 1770 z + 225)}{1179648 z^3} - \frac{7 \sqrt{\pi} (9152 z^6 - 95040 z^5 + 226800 z^4 - 84000 z^3 - 13500 z^2 - 1620 z + 225) \operatorname{erfi}(\sqrt{z})}{2359296 z^{7/2}}$$

07.25.03.a8bp.01

$${}_2F_2\left(-\frac{5}{2}, 5; 3, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (4576 z^5 + 45232 z^4 + 93072 z^3 + 12360 z^2 - 1770 z - 225)}{1179648 z^3} + \frac{7 \sqrt{\pi} (9152 z^6 + 95040 z^5 + 226800 z^4 + 84000 z^3 - 13500 z^2 + 1620 z + 225) \operatorname{erf}(\sqrt{z})}{2359296 z^{7/2}}$$

07.25.03.a8bq.01

$${}_2F_2\left(-\frac{5}{2}, 5; 3, 5; z\right) = \frac{4 e^{z/2} (8 z^4 - 88 z^3 + 216 z^2 - 60 z - 15) I_1\left(\frac{z}{2}\right)}{945 z} - \frac{16}{945} e^{z/2} (2 z^3 - 24 z^2 + 75 z - 60) I_0\left(\frac{z}{2}\right)$$

07.25.03.a8br.01

$${}_2F_2\left(-\frac{5}{2}, 5; 3, \frac{11}{2}; z\right) = \frac{e^{-z} (9152 z^6 - 106304 z^5 + 268944 z^4 - 54240 z^3 - 14700 z^2 + 6300 z - 4725)}{524288 z^4} + \frac{1}{1048576 z^{9/2}} \sqrt{\pi} (-18304 z^7 + 221760 z^6 - 635040 z^5 + 294000 z^4 + 63000 z^3 + 11340 z^2 - 3150 z + 4725) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8bs.01

$${}_2F_2\left(-\frac{5}{2}, 5; 3, \frac{11}{2}; -z\right) = \frac{e^{-z} (9152 z^6 + 106304 z^5 + 268944 z^4 + 54240 z^3 - 14700 z^2 - 6300 z - 4725)}{524288 z^4} + \frac{1}{1048576 z^{9/2}} \sqrt{\pi} (18304 z^7 + 221760 z^6 + 635040 z^5 + 294000 z^4 - 63000 z^3 + 11340 z^2 + 3150 z + 4725) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8bt.01

$${}_2F_2\left(-\frac{5}{2}, 5; 3, 6; z\right) = \frac{4 e^{z/2} (2288 z^7 - 29128 z^6 + 85356 z^5 - 30900 z^4 - 10425 z^3 - 1080 z^2 + 2880 z - 5760) I_1\left(\frac{z}{2}\right)}{405405 z^4} - \frac{4 e^{z/2} (2288 z^6 - 31416 z^5 + 113340 z^4 - 103980 z^3 - 225 z^2 + 720 z - 1440) I_0\left(\frac{z}{2}\right)}{405405 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = \frac{7}{2}$

07.25.03.a8bu.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{7}{2}, 4; z\right) = \frac{e^{-z} (208 z^4 - 2096 z^3 + 4456 z^2 - 660 z - 135)}{8192 z^2} + \frac{\sqrt{\pi} (-416 z^5 + 4400 z^4 - 10800 z^3 + 4200 z^2 + 750 z + 135) \operatorname{erfi}(\sqrt{z})}{16384 z^{5/2}}$$

07.25.03.a8bv.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{7}{2}, 4; -z\right) = \frac{e^{-z} (208 z^4 + 2096 z^3 + 4456 z^2 + 660 z - 135)}{8192 z^2} + \frac{\sqrt{\pi} (416 z^5 + 4400 z^4 + 10800 z^3 + 4200 z^2 - 750 z + 135) \operatorname{erf}(\sqrt{z})}{16384 z^{5/2}}$$

07.25.03.a8bw.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{7}{2}, 5; z\right) = \frac{e^z (16z^4 - 192z^3 + 512z^2 - 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.a8bx.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{7}{2}, 5; -z\right) = \frac{e^{-z} (16z^4 + 192z^3 + 512z^2 + 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.a8by.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{7}{2}, 6; z\right) = \frac{e^z (16016z^7 - 222992z^6 + 715512z^5 - 234220z^4 - 124895z^3 - 30720z^2 + 61440z - 61440)}{1537536z^5} + \frac{\sqrt{\pi} (-32032z^5 + 462000z^4 - 1638000z^3 + 1001000z^2 + 321750z + 135135) \operatorname{erfi}(\sqrt{z})}{3075072z^{5/2}} + \frac{40}{1001z^5}$$

07.25.03.a8bz.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{7}{2}, 6; -z\right) = \frac{e^{-z} (16016z^7 + 222992z^6 + 715512z^5 + 234220z^4 - 124895z^3 + 30720z^2 + 61440z + 61440)}{1537536z^5} + \frac{\sqrt{\pi} (32032z^5 + 462000z^4 + 1638000z^3 + 1001000z^2 - 321750z + 135135) \operatorname{erf}(\sqrt{z})}{3075072z^{5/2}} - \frac{40}{1001z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = 4$

07.25.03.a8c0.01

$${}_2F_2\left(-\frac{5}{2}, 5; 4, 4; z\right) = \frac{e^{z/2} (-104z^4 + 1288z^3 - 4200z^2 + 3540z + 15) I_0\left(\frac{z}{2}\right)}{3465z} + \frac{4e^{z/2} (26z^5 - 296z^4 + 767z^3 - 240z^2 - 75z - 15) I_1\left(\frac{z}{2}\right)}{3465z^2}$$

07.25.03.a8c1.01

$${}_2F_2\left(-\frac{5}{2}, 5; 4, \frac{9}{2}; z\right) = \frac{7e^z (416z^5 - 5072z^4 + 13872z^3 - 3480z^2 - 1470z - 225)}{196608z^3} - \frac{7\sqrt{\pi} (832z^6 - 10560z^5 + 32400z^4 - 16800z^3 - 4500z^2 - 1620z - 225) \operatorname{erfi}(\sqrt{z})}{393216z^{7/2}}$$

07.25.03.a8c2.01

$${}_2F_2\left(-\frac{5}{2}, 5; 4, \frac{9}{2}; -z\right) = \frac{7e^{-z} (416z^5 + 5072z^4 + 13872z^3 + 3480z^2 - 1470z + 225)}{196608z^3} + \frac{7\sqrt{\pi} (832z^6 + 10560z^5 + 32400z^4 + 16800z^3 - 4500z^2 + 1620z - 225) \operatorname{erf}(\sqrt{z})}{393216z^{7/2}}$$

07.25.03.a8c3.01

$${}_2F_2\left(-\frac{5}{2}, 5; 4, 5; z\right) = \frac{4 e^{z/2} (16 z^5 - 216 z^4 + 692 z^3 - 300 z^2 - 135 z - 60) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (16 z^4 - 232 z^3 + 900 z^2 - 900 z - 15) I_0\left(\frac{z}{2}\right)}{3465 z^2 - 3465 z}$$

07.25.03.a8c4.01

$${}_2F_2\left(-\frac{5}{2}, 5; 4, \frac{11}{2}; z\right) = \frac{3 e^z (832 z^6 - 11904 z^5 + 39824 z^4 - 14400 z^3 - 8820 z^2 - 4200 z + 1575)}{262144 z^4} - \frac{1}{524288 z^{9/2}} 3 \sqrt{\pi} (1664 z^7 - 24640 z^6 + 90720 z^5 - 58800 z^4 - 21000 z^3 - 11340 z^2 - 3150 z + 1575) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8c5.01

$${}_2F_2\left(-\frac{5}{2}, 5; 4, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (832 z^6 + 11904 z^5 + 39824 z^4 + 14400 z^3 - 8820 z^2 + 4200 z + 1575)}{262144 z^4} + \frac{1}{524288 z^{9/2}} 3 \sqrt{\pi} (1664 z^7 + 24640 z^6 + 90720 z^5 + 58800 z^4 - 21000 z^3 + 11340 z^2 - 3150 z - 1575) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8c6.01

$${}_2F_2\left(-\frac{5}{2}, 5; 4, 6; z\right) = \frac{8 e^{z/2} (208 z^7 - 3248 z^6 + 12396 z^5 - 6900 z^4 - 3975 z^3 - 2655 z^2 - 720 z + 1440) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (208 z^6 - 3456 z^5 + 15540 z^4 - 17880 z^3 - 675 z^2 - 180 z + 360) I_0\left(\frac{z}{2}\right)}{135135 z^4 - 135135 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = \frac{9}{2}$

07.25.03.a8c7.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{9}{2}, 5; z\right) = \frac{7 e^z (32 z^5 - 464 z^4 + 1584 z^3 - 600 z^2 - 390 z - 225)}{24576 z^3} - \frac{7 \sqrt{\pi} (64 z^6 - 960 z^5 + 3600 z^4 - 2400 z^3 - 900 z^2 - 540 z - 225) \operatorname{erfi}(\sqrt{z})}{49152 z^{7/2}}$$

07.25.03.a8c8.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{9}{2}, 5; -z\right) = \frac{7 e^{-z} (32 z^5 + 464 z^4 + 1584 z^3 + 600 z^2 - 390 z + 225)}{24576 z^3} + \frac{7 \sqrt{\pi} (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225) \operatorname{erf}(\sqrt{z})}{49152 z^{7/2}}$$

07.25.03.a8c9.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{9}{2}, 6; z\right) = \frac{1}{5271552z^5}$$

$$e^z (32032z^7 - 538384z^6 + 2203824z^5 - 1129240z^4 - 952790z^3 - 880365z^2 - 491520z + 491520) + \frac{1}{10543104z^{7/2}}$$

$$\sqrt{\pi} (-64064z^6 + 1108800z^5 - 4914000z^4 + 4004000z^3 + 1930500z^2 + 1621620z + 1126125) \operatorname{erfi}(\sqrt{z}) - \frac{40}{429z^5}$$

07.25.03.a8ca.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{9}{2}, 6; -z\right) = \frac{1}{5271552z^5}$$

$$e^{-z} (32032z^7 + 538384z^6 + 2203824z^5 + 1129240z^4 - 952790z^3 + 880365z^2 - 491520z - 491520) + \frac{1}{10543104z^{7/2}}$$

$$\sqrt{\pi} (64064z^6 + 1108800z^5 + 4914000z^4 + 4004000z^3 - 1930500z^2 + 1621620z - 1126125) \operatorname{erf}(\sqrt{z}) + \frac{40}{429z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = 5$

07.25.03.a8cb.01

$${}_2F_2\left(-\frac{5}{2}, 5; 5, 5; z\right) = \frac{32e^{z/2}(16z^6 - 256z^5 + 1012z^4 - 600z^3 - 375z^2 - 300z - 180)I_1\left(\frac{z}{2}\right)}{45045z^3} -$$

$$\frac{32e^{z/2}(16z^5 - 272z^4 + 1260z^3 - 1500z^2 - 75z - 45)I_0\left(\frac{z}{2}\right)}{45045z^2}$$

07.25.03.a8cc.01

$${}_2F_2\left(-\frac{5}{2}, 5; 5, \frac{11}{2}; z\right) = \frac{3e^z(64z^6 - 1088z^5 + 4528z^4 - 2400z^3 - 2100z^2 - 2100z - 1575)}{32768z^4} -$$

$$\frac{3\sqrt{\pi}(128z^7 - 2240z^6 + 10080z^5 - 8400z^4 - 4200z^3 - 3780z^2 - 3150z - 1575)\operatorname{erfi}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.a8cd.01

$${}_2F_2\left(-\frac{5}{2}, 5; 5, \frac{11}{2}; -z\right) = \frac{3e^{-z}(64z^6 + 1088z^5 + 4528z^4 + 2400z^3 - 2100z^2 + 2100z - 1575)}{32768z^4} +$$

$$\frac{3\sqrt{\pi}(128z^7 + 2240z^6 + 10080z^5 + 8400z^4 - 4200z^3 + 3780z^2 - 3150z + 1575)\operatorname{erf}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.a8ce.01

$${}_2F_2\left(-\frac{5}{2}, 5; 5, 6; z\right) = \frac{32e^{z/2}(32z^7 - 592z^6 + 2784z^5 - 2100z^4 - 1650z^3 - 1845z^2 - 1980z - 1440)I_1\left(\frac{z}{2}\right)}{135135z^4} -$$

$$\frac{32e^{z/2}(32z^6 - 624z^5 + 3360z^4 - 4620z^3 - 450z^2 - 495z - 360)I_0\left(\frac{z}{2}\right)}{135135z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = \frac{11}{2}$

07.25.03.a8cf.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{11}{2}, 6; z\right) = \frac{1}{2342912z^5} e^z (9152z^7 - 180224z^6 + 897264z^5 - 631040z^4 - 693340z^3 - 983040z^2 - 1412295z - 1966080) + \frac{1}{4685824z^{9/2}} (\sqrt{\pi} (-18304z^7 + 369600z^6 - 1965600z^5 + 2002000z^4 + 1287000z^3 + 1621620z^2 + 2252250z + 3378375) \operatorname{erfi}(\sqrt{z})) + \frac{120}{143z^5}$$

07.25.03.a8cg.01

$${}_2F_2\left(-\frac{5}{2}, 5; \frac{11}{2}, 6; -z\right) = \frac{1}{2342912z^5} e^{-z} (9152z^7 + 180224z^6 + 897264z^5 + 631040z^4 - 693340z^3 + 983040z^2 - 1412295z + 1966080) + \frac{1}{4685824z^{9/2}} (\sqrt{\pi} (18304z^7 + 369600z^6 + 1965600z^5 + 2002000z^4 - 1287000z^3 + 1621620z^2 - 2252250z + 3378375) \operatorname{erf}(\sqrt{z})) - \frac{120}{143z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 5$, $b_1 = 6$

07.25.03.a8ch.01

$${}_2F_2\left(-\frac{5}{2}, 5; 6, 6; z\right) = -\frac{1}{405810405z^5} (64e^{z/2} (32032z^8 - 717024z^7 + 4497360z^6 - 7169120z^5 - 1257150z^4 - 2193330z^3 - 3946665z^2 - 10810800z + 21621600) I_0\left(\frac{z}{2}\right)) + \frac{1}{405810405z^4} (128e^{z/2} (16016z^7 - 342496z^6 + 1914192z^5 - 1825600z^4 - 1789525z^3 - 2746890z^2 - 4837110z - 10596030) I_1\left(\frac{z}{2}\right)) + \frac{10240}{3003z^5}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.a8ci.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{6807529575} \left(e^z (16384 z^{14} + 1179648 z^{13} + 32403456 z^{12} + 431996928 z^{11} + 2940613632 z^{10} + 9835499520 z^9 + 14138530560 z^8 + 6322821120 z^7 + 197588160 z^6 + 351267840 z^5 - 1234926000 z^4 + 3502699200 z^3 - 7243028100 z^2 + 9901861200 z - 6807529575) \right)$$

07.25.03.a8cj.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{618866325} \left(e^z (8192 z^{13} + 528384 z^{12} + 12767232 z^{11} + 145778688 z^{10} + 814302720 z^9 + 2067690240 z^8 + 1900039680 z^7 + 311351040 z^6 - 56881440 z^5 + 147193200 z^4 - 396673200 z^3 + 759666600 z^2 - 962680950 z + 618866325) \right)$$

07.25.03.a8ck.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{68762925} \left(e^z (4096 z^{12} + 233472 z^{11} + 4866048 z^{10} + 46126080 z^9 + 199584000 z^8 + 335301120 z^7 + 111767040 z^6 - 11975040 z^5 - 22453200 z^4 + 62370000 z^3 - 104781600 z^2 + 117879300 z - 68762925) \right)$$

07.25.03.a8cl.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{9823275} \left(e^z (2048 z^{11} + 101376 z^{10} + 1774080 z^9 + 13305600 z^8 + 39916800 z^7 + 27941760 z^6 - 13970880 z^5 + 14968800 z^4 - 18711000 z^3 + 21829500 z^2 - 19646550 z + 9823275) \right)$$

07.25.03.a8cm.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{1964655} \left(e^z (1024 z^{10} + 43008 z^9 + 607488 z^8 + 3311616 z^7 + 5056128 z^6 - 3725568 z^5 + 2328480 z^4 + 3991680 z^3 - 11351340 z^2 + 5239080 z - 1964655) \right)$$

07.25.03.a8cn.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{654885} \left(e^z (512 z^9 + 17664 z^8 + 188928 z^7 + 616704 z^6 - 247104 z^5 - 997920 z^4 + 3659040 z^3 - 3492720 z^2 - 3929310 z + 654885) \right)$$

07.25.03.a8co.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{654885} e^z (256 z^8 + 6912 z^7 + 49536 z^6 + 35904 z^5 - 285120 z^4 + 498960 z^3 + 582120 z^2 - 2619540 z - 654885)$$

07.25.03.a8cp.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{654885} e^{z/2} (-128 z^8 - 3072 z^7 - 18048 z^6 + 3936 z^5 + 100800 z^4 - 284256 z^3 - 127008 z^2 + 1309770 z + 654885) I_0\left(\frac{z}{2}\right) - \frac{2 e^{z/2} (64 z^8 + 1472 z^7 + 7584 z^6 - 8880 z^5 - 39000 z^4 + 172872 z^3 - 111132 z^2 - 472311 z) I_1\left(\frac{z}{2}\right)}{654885}$$

07.25.03.a8cq.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{e^z (128 z^7 + 2496 z^6 + 8544 z^5 - 29040 z^4 - 11880 z^3 + 291060 z^2 - 436590 z - 654885)}{654885}$$

07.25.03.a8cr.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (-128 z^7 - 2112 z^6 - 4224 z^5 + 28560 z^4 - 27216 z^3 - 210168 z^2 + 457380 z + 654885) I_0\left(\frac{z}{2}\right)}{654885} + \frac{1}{654885} e^{z/2} (-128 z^7 - 1984 z^6 - 2304 z^5 + 30000 z^4 - 56784 z^3 - 140616 z^2 + 549612 z + 135135) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8cs.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = -\frac{e^z (64 z^6 + 768 z^5 - 720 z^4 - 10560 z^3 + 41580 z^2 - 218295)}{218295}$$

07.25.03.a8ct.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, 3; z\right) = -\frac{4 e^{z/2} (64 z^6 + 576 z^5 - 1680 z^4 - 5376 z^3 + 39672 z^2 - 33660 z - 171765) I_0\left(\frac{z}{2}\right)}{654885} - \frac{4 e^{z/2} (64 z^7 + 512 z^6 - 2160 z^5 - 3024 z^4 + 41304 z^3 - 73548 z^2 - 83655 z + 32175) I_1\left(\frac{z}{2}\right)}{654885 z}$$

07.25.03.a8cu.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{e^z (32 z^5 + 144 z^4 - 1296 z^3 + 1848 z^2 + 12474 z - 43659)}{43659}$$

07.25.03.a8cv.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, 4; z\right) = -\frac{4 e^{z/2} (64 z^6 + 96 z^5 - 2352 z^4 + 7584 z^3 + 7200 z^2 - 67590 z + 9945) I_0\left(\frac{z}{2}\right)}{218295 z} - \frac{4 e^{z/2} (64 z^7 + 32 z^6 - 2352 z^5 + 9888 z^4 - 3696 z^3 - 57330 z^2 + 52065 z - 39780) I_1\left(\frac{z}{2}\right)}{218295 z^2}$$

07.25.03.a8cw.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{e^z (16 z^4 - 48 z^3 - 336 z^2 + 2772 z - 6237)}{6237}$$

07.25.03.a8cx.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = -\frac{32 e^{z/2} (32 z^6 - 192 z^5 + 48 z^4 + 3720 z^3 - 13590 z^2 + 12240 z - 14535) I_0\left(\frac{z}{2}\right)}{218295 z^2} - \frac{64 e^{z/2} (16 z^7 - 112 z^6 + 144 z^5 + 1644 z^4 - 8205 z^3 + 14445 z^2 - 24480 z + 29070) I_1\left(\frac{z}{2}\right)}{218295 z^3}$$

07.25.03.a8cy.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = -\frac{1}{693} e^z (8z^3 - 84z^2 + 378z - 693)$$

07.25.03.a8cz.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = -\frac{32 e^{z/2} (32z^6 - 432z^5 + 2832z^4 - 11484z^3 + 35190z^2 - 95931z + 162792) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (32z^7 - 464z^6 + 3312z^5 - 15060z^4 + 52470z^3 - 161109z^2 + 383724z - 651168) I_1\left(\frac{z}{2}\right)}{43659 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.a8d0.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{1}{56260575} (e^z (4096z^{12} + 237568z^{11} + 5076992z^{10} + 50042880z^9 + 232001280z^8 + 453841920z^7 + 269256960z^6 + 21047040z^5 - 17917200z^4 + 46720800z^3 - 81534600z^2 + 94462200z - 56260575))$$

07.25.03.a8d1.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{6251175} (e^z (2048z^{11} + 105472z^{10} + 1958400z^9 + 16208640z^8 + 59270400z^7 + 78744960z^6 + 16511040z^5 + 2268000z^4 - 7824600z^3 + 11623500z^2 - 11708550z + 6251175))$$

07.25.03.a8d2.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{1}{893025} (e^z (1024z^{10} + 46080z^9 + 725760z^8 + 4838400z^7 + 12700800z^6 + 7620480z^5 - 3175200z^4 + 2721600z^3 - 2551500z^2 + 1984500z - 893025))$$

07.25.03.a8d3.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{178605} (e^z (512z^9 + 19712z^8 + 254464z^7 + 1274112z^6 + 1891008z^5 - 917280z^4 - 211680z^3 + 1466640z^2 - 542430z + 178605))$$

07.25.03.a8d4.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -\frac{1}{59535} e^z (256z^8 + 8192z^7 + 82176z^6 + 267264z^5 + 10080z^4 - 483840z^3 + 619920z^2 + 423360z - 59535)$$

07.25.03.a8d5.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 3264 z^6 + 23136 z^5 + 29520 z^4 - 98280 z^3 + 3780 z^2 + 304290 z + 59535)}{59535}$$

07.25.03.a8d6.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (64 z^7 + 1472 z^6 + 8976 z^5 + 6000 z^4 - 43176 z^3 + 16632 z^2 + 152145 z + 59535) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^7 + 1408 z^6 + 7600 z^5 - 960 z^4 - 39624 z^3 + 51744 z^2 + 91287 z) I_1\left(\frac{z}{2}\right)}{59535}$$

07.25.03.a8d7.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z (64 z^6 + 1216 z^5 + 4880 z^4 - 7200 z^3 - 23940 z^2 + 61740 z + 59535)}{59535}$$

07.25.03.a8d8.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 + 1056 z^5 + 3120 z^4 - 8736 z^3 - 13608 z^2 + 58590 z + 59535) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^6 + 992 z^5 + 2160 z^4 - 10464 z^3 - 2856 z^2 + 56322 z + 10395) I_1\left(\frac{z}{2}\right)}{59535}$$

07.25.03.a8d9.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (32 z^5 + 400 z^4 + 240 z^3 - 4680 z^2 + 4410 z + 19845)}{19845}$$

07.25.03.a8da.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, 3; z\right) = \frac{8 e^{z/2} (16 z^5 + 160 z^4 - 112 z^3 - 1776 z^2 + 3075 z + 7710) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (32 z^6 + 288 z^5 - 496 z^4 - 2944 z^3 + 8658 z^2 + 6270 z - 2145) I_1\left(\frac{z}{2}\right)}{59535 z}$$

07.25.03.a8db.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (16 z^4 + 96 z^3 - 408 z^2 - 504 z + 3969)}{3969}$$

07.25.03.a8dc.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 + 112 z^4 - 864 z^3 + 300 z^2 + 5790 z - 585) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (32 z^6 + 80 z^5 - 928 z^4 + 1236 z^3 + 4110 z^2 - 3315 z + 2340) I_1\left(\frac{z}{2}\right)}{19845 z^2}$$

07.25.03.a8dd.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{567} e^z (8 z^3 - 4 z^2 - 182 z + 567)$$

07.25.03.a8de.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^5 - 48 z^4 - 180 z^3 + 1020 z^2 - 675 z + 765) I_0\left(\frac{z}{2}\right)}{19845 z^2} + \frac{32 e^{z/2} (16 z^6 - 64 z^5 - 108 z^4 + 1080 z^3 - 1695 z^2 + 2700 z - 3060) I_1\left(\frac{z}{2}\right)}{19845 z^3}$$

07.25.03.a8df.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{63} e^z (4 z^2 - 28 z + 63)$$

07.25.03.a8dg.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 152 z^4 + 644 z^3 - 1740 z^2 + 4641 z - 7752) I_0\left(\frac{z}{2}\right)}{3969 z^3} + \frac{32 e^{z/2} (16 z^6 - 168 z^5 + 820 z^4 - 2660 z^3 + 7929 z^2 - 18564 z + 31008) I_1\left(\frac{z}{2}\right)}{3969 z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.a8dh.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = -\frac{1}{694575} (e^z (1024 z^{10} + 47104 z^9 + 767232 z^8 + 5419008 z^7 + 16087680 z^6 + 15240960 z^5 + 635040 z^4 + 1451520 z^3 - 1735020 z^2 + 1474200 z - 694575))$$

07.25.03.a8di.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{99225} (e^z (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + 408240 z^2 - 255150 z + 99225))$$

07.25.03.a8dj.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = -\frac{1}{19845} e^z (256 z^8 + 8960 z^7 + 104832 z^6 + 479808 z^5 + 705600 z^4 - 105840 z^3 - 264600 z^2 + 71820 z - 19845)$$

07.25.03.a8dk.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 3776 z^6 + 35424 z^5 + 115920 z^4 + 63000 z^3 - 147420 z^2 - 58590 z + 6615)}{6615}$$

07.25.03.a8dl.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = -\frac{e^z (64 z^6 + 1536 z^5 + 10800 z^4 + 20160 z^3 - 18900 z^2 - 45360 z - 6615)}{6615}$$

07.25.03.a8dm.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2}(-32z^6 - 704z^5 - 4464z^4 - 6984z^3 + 10038z^2 + 22680z + 6615)I_0\left(\frac{z}{2}\right) - 2e^{z/2}(16z^6 + 336z^5 + 1904z^4 + 1740z^3 - 6093z^2 - 5439z)I_1\left(\frac{z}{2}\right)}{6615}$$

07.25.03.a8dn.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = -\frac{e^z(32z^5 + 592z^4 + 2736z^3 + 504z^2 - 10710z - 6615)}{6615}$$

07.25.03.a8do.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2}(-32z^5 - 528z^4 - 2064z^3 + 588z^2 + 9450z + 6615)I_0\left(\frac{z}{2}\right) + e^{z/2}(-32z^5 - 496z^4 - 1584z^3 + 1956z^2 + 7098z + 945)I_1\left(\frac{z}{2}\right)}{6615}$$

07.25.03.a8dp.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = -\frac{e^z(16z^4 + 208z^3 + 432z^2 - 1260z - 2205)}{2205}$$

07.25.03.a8dq.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, 3; z\right) = \frac{4e^{z/2}(16z^4 + 176z^3 + 228z^2 - 1200z - 1695)I_0\left(\frac{z}{2}\right) - 4e^{z/2}(16z^5 + 160z^4 + 76z^3 - 1212z^2 - 555z + 165)I_1\left(\frac{z}{2}\right)}{6615z}$$

07.25.03.a8dr.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = -\frac{1}{441}e^z(8z^3 + 60z^2 - 54z - 441)$$

07.25.03.a8ds.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = \frac{4e^{z/2}(16z^4 + 88z^3 - 180z^2 - 612z + 39)I_0\left(\frac{z}{2}\right) - 4e^{z/2}(16z^5 + 72z^4 - 244z^3 - 348z^2 + 243z - 156)I_1\left(\frac{z}{2}\right)}{2205z^2}$$

07.25.03.a8dt.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = -\frac{1}{63}e^z(4z^2 + 8z - 63)$$

07.25.03.a8du.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = -\frac{32e^{z/2}(8z^4 - 96z^2 + 42z - 45)I_0\left(\frac{z}{2}\right) - 64e^{z/2}(4z^5 - 4z^4 - 42z^3 + 57z^2 - 84z + 90)I_1\left(\frac{z}{2}\right)}{2205z^3}$$

07.25.03.a8dv.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = -\frac{1}{7}e^z(2z - 7)$$

$$\begin{aligned}
 & \text{07.25.03.a8dw.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, 6; z\right) = \\
 & \frac{32 e^{z/2} (8 z^4 - 44 z^3 + 96 z^2 - 249 z + 408) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (8 z^5 - 52 z^4 + 152 z^3 - 435 z^2 + 996 z - 1632) I_1\left(\frac{z}{2}\right)}{441 z^3} - \frac{32 e^{z/2} (8 z^5 - 52 z^4 + 152 z^3 - 435 z^2 + 996 z - 1632) I_1\left(\frac{z}{2}\right)}{441 z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.a8dx.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \\
 & -\frac{1}{14175} e^z (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8dy.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835)}{2835}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8dz.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 1728 z^5 + 15120 z^4 + 50400 z^3 + 56700 z^2 + 11340 z - 945)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8e0.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8e1.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (16 z^5 + 336 z^4 + 2220 z^3 + 5484 z^2 + 4725 z + 945) I_0\left(\frac{z}{2}\right) + \\
 & \frac{1}{945} e^{z/2} (16 z^5 + 320 z^4 + 1908 z^3 + 3720 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8e2.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (16 z^4 + 288 z^3 + 1512 z^2 + 2520 z + 945)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8e3.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, 2; z\right) = \\
 & \frac{1}{945} e^{z/2} (16 z^4 + 264 z^3 + 1284 z^2 + 2100 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^4 + 248 z^3 + 1044 z^2 + 1164 z + 105) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8e4.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (8 z^3 + 108 z^2 + 378 z + 315)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8e5.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = \frac{16}{945} e^{z/2} (2 z^3 + 24 z^2 + 75 z + 60) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8 z^4 + 88 z^3 + 216 z^2 + 60 z - 15) I_1\left(\frac{z}{2}\right)}{945 z}
 \end{aligned}$$

07.25.03.a8e6.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (4z^2 + 36z + 63)$$

07.25.03.a8e7.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 + 60z^2 + 84z - 3) I_0\left(\frac{z}{2}\right)}{315z} + \frac{4 e^{z/2} (8z^4 + 52z^3 + 36z^2 - 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.a8e8.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2z + 9)$$

07.25.03.a8e9.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^3 + 12z^2 - 3z + 3) I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{32 e^{z/2} (4z^4 + 8z^3 - 9z^2 + 12z - 12) I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.a8ea.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = e^z$$

07.25.03.a8eb.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 - 6z^2 + 15z - 24) I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{32 e^{z/2} (4z^4 - 10z^3 + 27z^2 - 60z + 96) I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.a8ec.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{567} e^z (-64z^6 - 1792z^5 - 16688z^4 - 63168z^3 + 71316z^2 - 4032z + 567) - \frac{8192}{27} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8ed.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{8192}{27} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{567} e^{-z} (-64z^6 + 1792z^5 - 16688z^4 + 63168z^3 + 71316z^2 + 4032z + 567)$$

07.25.03.a8ee.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{4096}{9} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{189} e^z (32z^5 + 784z^4 + 6384z^3 - 64008z^2 - 3654z + 189)$$

07.25.03.a8ef.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{189} e^{-z} (-32z^5 + 784z^4 - 6384z^3 - 64008z^2 + 3654z + 189) - \frac{4096}{9} \sqrt{\pi} z^{5/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a8eg.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{189} e^z (-16z^4 - 336z^3 + 19152z^2 + 3276z + 189) - \frac{1024}{9} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8eh.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1024}{9} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{189} e^{-z} (-16z^4 + 336z^3 + 19152z^2 - 3276z + 189)$$

07.25.03.a8ei.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-40z^4 - 58144z^3 + 37488z^2 + 8190z + 945) I_0\left(\frac{z}{2}\right) - \frac{2}{945} e^{z/2} (20z^4 - 28292z^3 - 4778z^2 - 939z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8ej.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{189} e^{-z} (-8z^3 + 3444z^2 + 966z + 189) - \frac{512}{27} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8ek.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{512}{27} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{189} e^{-z} (8z^3 + 3444z^2 - 966z + 189)$$

07.25.03.a8el.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (-16424z^3 + 11628z^2 + 3840z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16344z^3 + 3476z^2 + 1368z + 75) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8em.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{21} e^z (148z^2 + 56z + 21) - \frac{64}{9} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8en.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{64}{9} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{21} e^{-z} (148z^2 - 56z + 21)$$

07.25.03.a8eo.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (16384z^4 + 3916z^3 + 2448z^2 + 375z - 75) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (16384z^3 - 12108z^2 - 5340z - 2145) I_0\left(\frac{z}{2}\right)}{8505z}$$

07.25.03.a8ep.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (224z^2 + 102z + 63) - \frac{32}{9} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8eq.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{32}{9} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{63} e^{-z} (224z^2 - 102z + 63)$$

07.25.03.a8er.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (32768z^5 + 8192z^4 + 7236z^3 + 2370z^2 - 1095z + 540) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (32768z^4 - 24576z^3 - 13380z^2 - 8070z + 135) I_0\left(\frac{z}{2}\right)}{31185z^2}$$

07.25.03.a8es.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{27} e^z (56 z^2 + 28 z + 27) - \frac{56}{27} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8et.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{56}{27} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{27} e^{-z} (56 z^2 - 28 z + 27)$$

07.25.03.a8eu.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = \frac{64 e^{z/2} (16384 z^6 + 4096 z^5 + 4608 z^4 + 3165 z^3 - 2775 z^2 + 3240 z - 2970) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (32768 z^5 - 24576 z^4 - 15360 z^3 - 14010 z^2 + 1620 z - 1485) I_0\left(\frac{z}{2}\right)}{405405 z^3}$$

07.25.03.a8ev.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{3} e^z (4 z^2 + 2 z + 3) - \frac{4}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8ew.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{4}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4 z^2 - 2 z + 3)$$

07.25.03.a8ex.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{1216215 z^4} 32 e^{z/2} (65536 z^7 + 16384 z^6 + 18432 z^5 + 38400 z^4 - 75450 z^3 + 186705 z^2 - 397980 z + 617760) I_1\left(\frac{z}{2}\right) - \frac{32 e^{z/2} (65536 z^6 - 49152 z^5 - 30720 z^4 - 53760 z^3 + 41850 z^2 - 99495 z + 154440) I_0\left(\frac{z}{2}\right)}{1216215 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.a8ey.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{63} e^z (-16 z^4 - 352 z^3 + 40344 z^2 - 3528 z + 63) - \frac{1024}{21} \sqrt{\pi} (14 z^{5/2} - 5 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8ez.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{63} e^{-z} (-16 z^4 + 352 z^3 + 40344 z^2 + 3528 z + 63) + \frac{1024}{21} \sqrt{\pi} (14 z^{5/2} + 5 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8f0.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{63} e^z (8 z^3 - 10596 z^2 + 3402 z + 63) + \frac{512}{21} \sqrt{\pi} (7 z^{5/2} - 5 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8f1.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{63} e^{-z} (-8 z^3 - 10596 z^2 - 3402 z + 63) - \frac{512}{21} \sqrt{\pi} (7 z^{5/2} + 5 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8f2.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (28\,692 z^3 - 46\,724 z^2 + 8505 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-28\,652 z^3 + 18\,792 z^2 + 731 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8f3.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{128}{63} \sqrt{\pi} (14 z - 15) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{21} e^z (-596 z^2 + 364 z + 21)$$

07.25.03.a8f4.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{21} e^{-z} (-596 z^2 - 364 z + 21) - \frac{128}{63} \sqrt{\pi} z^{3/2} (14 z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8f5.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (8192 z^3 - 16\,364 z^2 + 4170 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-8192 z^3 + 8212 z^2 + 566 z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8f6.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{32}{21} \sqrt{\pi} (7 z - 10) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{3} e^z (-32 z^2 + 30 z + 3)$$

07.25.03.a8f7.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{3} e^{-z} (-32 z^2 - 30 z + 3) - \frac{32}{21} \sqrt{\pi} z^{3/2} (7 z + 10) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8f8.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = \frac{8 e^{z/2} (28\,672 z^3 - 67\,584 z^2 + 21\,435 z + 2490) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (57\,344 z^4 - 77\,824 z^3 - 7542 z^2 - 510 z + 75) I_1\left(\frac{z}{2}\right)}{19\,845 z}$$

07.25.03.a8f9.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{8}{21} \sqrt{\pi} (14 z - 25) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{21} e^z (-112 z^2 + 144 z + 21)$$

07.25.03.a8fa.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{21} e^{-z} (-112 z^2 - 144 z + 21) - \frac{8}{21} \sqrt{\pi} z^{3/2} (14 z + 25) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8fb.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (114\,688 z^4 - 311\,296 z^3 + 115\,200 z^2 + 18\,450 z - 105) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (114\,688 z^5 - 196\,608 z^4 - 24\,064 z^3 - 3090 z^2 + 1035 z - 420) I_1\left(\frac{z}{2}\right)}{72\,765 z^2}$$

07.25.03.a8fc.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{4}{9} \sqrt{\pi} (7 z - 15) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{9} e^z (-28 z^2 + 46 z + 9)$$

07.25.03.a8fd.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{9} e^{-z} (-28z^2 - 46z + 9) - \frac{4}{9} \sqrt{\pi} z^{3/2} (7z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8fe.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (114688z^5 - 352256z^4 + 145920z^3 + 30720z^2 - 1155z + 945) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (114688z^6 - 237568z^5 - 34304z^4 - 7680z^3 + 4755z^2 - 4620z + 3780) I_1\left(\frac{z}{2}\right)}{945945z^3}$$

07.25.03.a8ff.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \sqrt{\pi} (2z - 5) \operatorname{erfi}(\sqrt{z}) z^{3/2} + e^z (-2z^2 + 4z + 1)$$

07.25.03.a8fg.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = e^{-z} (-2z^2 - 4z + 1) - \sqrt{\pi} z^{3/2} (2z + 5) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8fh.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (229376z^6 - 786432z^5 + 353280z^4 + 99840z^3 - 25200z^2 + 55755z - 83160) I_0\left(\frac{z}{2}\right) - \frac{1}{2837835z^4} 32 e^{z/2} (229376z^7 - 557056z^6 - 89088z^5 - 38400z^4 + 51600z^3 - 111195z^2 + 223020z - 332640) I_1\left(\frac{z}{2}\right)}{2837835z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{1}{2}$

07.25.03.a8fi.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{63} e^z (2684z^2 - 2568z + 63) - \frac{32}{21} \sqrt{\pi} (28z^{5/2} - 40z^{3/2} + 5\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8fj.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{63} e^{-z} (2684z^2 + 2568z + 63) + \frac{32}{21} \sqrt{\pi} (28z^{5/2} + 40z^{3/2} + 5\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8fk.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (-7168z^3 + 18166z^2 - 8820z + 315) I_0\left(\frac{z}{2}\right) + \frac{2}{315} e^{z/2} (3584z^3 - 5509z^2 + 523z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8fl.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{63} e^z (448z^2 - 738z + 63) - \frac{16}{63} \sqrt{\pi} \sqrt{z} (28z^2 - 60z + 15) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8fm.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{63} e^{-z} (448z^2 + 738z + 63) + \frac{16}{63} \sqrt{\pi} \sqrt{z} (28z^2 + 60z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8fn.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (-2048z^3 + 6656z^2 - 4490z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (2048z^3 - 4608z^2 + 886z + 5) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8fo.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{21} e^z (56 z^2 - 132 z + 21) - \frac{4}{21} \sqrt{\pi} \sqrt{z} (14 z^2 - 40 z + 15) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8fp.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{21} e^{-z} (56 z^2 + 132 z + 21) + \frac{4}{21} \sqrt{\pi} \sqrt{z} (14 z^2 + 40 z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8fq.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (14336 z^4 - 42496 z^3 + 12672 z^2 + 165 z - 15) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (14336 z^3 - 56832 z^2 + 48000 z - 4965) I_0\left(\frac{z}{2}\right)}{19845 z} - \frac{4 e^{z/2} (14336 z^3 - 56832 z^2 + 48000 z - 4965) I_0\left(\frac{z}{2}\right)}{19845}$$

07.25.03.a8fr.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{21} e^z (28 z^2 - 86 z + 21) - \frac{2}{21} \sqrt{\pi} \sqrt{z} (14 z^2 - 50 z + 25) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8fs.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{21} e^{-z} (28 z^2 + 86 z + 21) + \frac{2}{21} \sqrt{\pi} \sqrt{z} (14 z^2 + 50 z + 25) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8ft.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (28672 z^5 - 105472 z^4 + 43264 z^3 + 960 z^2 - 195 z + 60) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (28672 z^4 - 134144 z^3 + 134400 z^2 - 18240 z + 15) I_0\left(\frac{z}{2}\right)}{72765 z^2} - \frac{4 e^{z/2} (28672 z^4 - 134144 z^3 + 134400 z^2 - 18240 z + 15) I_0\left(\frac{z}{2}\right)}{72765 z}$$

07.25.03.a8fu.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{18} e^z (14 z^2 - 53 z + 18) - \frac{1}{36} \sqrt{\pi} \sqrt{z} (28 z^2 - 120 z + 75) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8fv.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{18} e^{-z} (14 z^2 + 53 z + 18) + \frac{1}{36} \sqrt{\pi} \sqrt{z} (28 z^2 + 120 z + 75) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8fw.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{64 e^{z/2} (14336 z^6 - 62976 z^5 + 33152 z^4 + 1120 z^3 - 405 z^2 + 300 z - 210) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (28672 z^5 - 154624 z^4 + 177920 z^3 - 29760 z^2 + 150 z - 105) I_0\left(\frac{z}{2}\right)}{945945 z^3} - \frac{32 e^{z/2} (28672 z^5 - 154624 z^4 + 177920 z^3 - 29760 z^2 + 150 z - 105) I_0\left(\frac{z}{2}\right)}{945945 z^2}$$

07.25.03.a8fx.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{4} e^z (2 z^2 - 9 z + 4) - \frac{1}{8} \sqrt{\pi} \sqrt{z} (4 z^2 - 20 z + 15) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8fy.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{4} e^{-z} (2 z^2 + 9 z + 4) + \frac{1}{8} \sqrt{\pi} \sqrt{z} (4 z^2 + 20 z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8fz.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \frac{1}{2837835z^4} 32 e^{z/2} (57344z^7 - 292864z^6 + 188928z^5 + 9600z^4 - 6900z^3 + 11745z^2 - 21420z + 30240) I_1\left(\frac{z}{2}\right) - \frac{32 e^{z/2} (57344z^6 - 350208z^5 + 453120z^4 - 90240z^3 + 2700z^2 - 5355z + 7560) I_0\left(\frac{z}{2}\right)}{2837835z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 1$

07.25.03.a8g0.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{945} e^{z/2} (-3584z^3 + 12288z^2 - 9135z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (3584z^3 - 8704z^2 + 2193z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8g1.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{315} e^{z/2} (-448z^3 + 1936z^2 - 1890z + 315) I_0\left(\frac{z}{2}\right) + \frac{2}{315} e^{z/2} (224z^3 - 744z^2 + 313z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8g2.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{315} e^{z/2} (-224z^3 + 1168z^2 - 1395z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (224z^3 - 944z^2 + 563z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8g3.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{135} e^{z/2} (-56z^3 + 342z^2 - 480z + 135) I_0\left(\frac{z}{2}\right) + \frac{2}{135} e^{z/2} (28z^3 - 143z^2 + 111z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8g4.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; 1, \frac{11}{2}; z\right) = \frac{1}{15} e^{z/2} (-4z^3 + 28z^2 - 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^3 - 24z^2 + 23z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{3}{2}$

07.25.03.a8g5.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{189} e^z (224z^2 - 608z + 165) - \frac{4\sqrt{\pi} (56z^3 - 180z^2 + 90z - 3) \operatorname{erfi}(\sqrt{z})}{189\sqrt{z}}$$

07.25.03.a8g6.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{189} e^{-z} (224z^2 + 608z + 165) + \frac{4\sqrt{\pi} (56z^3 + 180z^2 + 90z + 3) \operatorname{erf}(\sqrt{z})}{189\sqrt{z}}$$

07.25.03.a8g7.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (-1024z^3 + 4608z^2 - 4800z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (1024z^3 - 3584z^2 + 1728z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8g8.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{63} e^z (28z^2 - 106z + 51) - \frac{2\sqrt{\pi} (14z^3 - 60z^2 + 45z - 3) \operatorname{erfi}(\sqrt{z})}{63\sqrt{z}}$$

07.25.03.a8g9.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{63} e^{-z} (28z^2 + 106z + 51) + \frac{2\sqrt{\pi} (14z^3 + 60z^2 + 45z + 3) \operatorname{erf}(\sqrt{z})}{63\sqrt{z}}$$

07.25.03.a8ga.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{4e^{z/2} (7168z^4 - 32768z^3 + 23616z^2 - 480z + 15) I_1\left(\frac{z}{2}\right)}{59535z} - \frac{128e^{z/2} (224z^3 - 1248z^2 + 1650z - 465) I_0\left(\frac{z}{2}\right)}{59535}$$

07.25.03.a8gb.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{2}{63} e^z (7z^2 - 34z + 24) + \frac{\sqrt{\pi} (-28z^3 + 150z^2 - 150z + 15) \operatorname{erfi}(\sqrt{z})}{126\sqrt{z}}$$

07.25.03.a8gc.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{2}{63} e^{-z} (7z^2 + 34z + 24) + \frac{\sqrt{\pi} (28z^3 + 150z^2 + 150z + 15) \operatorname{erf}(\sqrt{z})}{126\sqrt{z}}$$

07.25.03.a8gd.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{4e^{z/2} (14336z^5 - 80896z^4 + 77952z^3 - 2688z^2 + 183z - 36) I_1\left(\frac{z}{2}\right)}{218295z^2} - \frac{4e^{z/2} (14336z^4 - 95232z^3 + 151680z^2 - 54528z - 9) I_0\left(\frac{z}{2}\right)}{218295z}$$

07.25.03.a8ge.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{108} e^z (14z^2 - 83z + 78) + \frac{\sqrt{\pi} (-28z^3 + 180z^2 - 225z + 30) \operatorname{erfi}(\sqrt{z})}{216\sqrt{z}}$$

07.25.03.a8gf.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{108} e^{-z} (14z^2 + 83z + 78) + \frac{\sqrt{\pi} (28z^3 + 180z^2 + 225z + 30) \operatorname{erf}(\sqrt{z})}{216\sqrt{z}}$$

07.25.03.a8gg.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \frac{32e^{z/2} (14336z^6 - 96256z^5 + 116352z^4 - 5952z^3 + 687z^2 - 324z + 180) I_1\left(\frac{z}{2}\right)}{2837835z^3} - \frac{32e^{z/2} (14336z^5 - 110592z^4 + 205440z^3 - 88512z^2 - 81z + 45) I_0\left(\frac{z}{2}\right)}{2837835z^2}$$

07.25.03.a8gh.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{48} e^z (4z^2 - 28z + 33) + \frac{\sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.a8gi.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{48} e^{-z} (4z^2 + 28z + 33) + \frac{\sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.a8gj.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (28\,672 z^7 - 223\,232 z^6 + 324\,864 z^5 - 23\,040 z^4 + 4590 z^3 - 4995 z^2 + 7740 z - 10\,080) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (28\,672 z^6 - 251\,904 z^5 + 533\,760 z^4 - 264\,960 z^3 - 1170 z^2 + 1935 z - 2520) I_0\left(\frac{z}{2}\right)}{8\,513\,505 z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 2$

07.25.03.a8gk.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{315} e^{z/2} (-128 z^3 + 736 z^2 - 1020 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (128 z^3 - 608 z^2 + 476 z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8gl.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{315} e^{z/2} (-64 z^3 + 448 z^2 - 770 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (64 z^3 - 384 z^2 + 418 z - 25) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8gm.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{135} e^{z/2} (-16 z^3 + 132 z^2 - 270 z + 135) I_0\left(\frac{z}{2}\right) + \frac{1}{135} e^{z/2} (16 z^3 - 116 z^2 + 162 z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8gn.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; 2, \frac{11}{2}; z\right) = \frac{1}{105} e^{z/2} (-8 z^3 + 76 z^2 - 180 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8 z^3 - 68 z^2 + 116 z - 15) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{5}{2}$

07.25.03.a8go.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (56 z^3 - 292 z^2 + 242 z - 3)}{336 z} + \frac{\sqrt{\pi} (-112 z^4 + 640 z^3 - 720 z^2 + 96 z + 3) \operatorname{erfi}(\sqrt{z})}{672 z^{3/2}}$$

07.25.03.a8gp.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (56 z^3 + 292 z^2 + 242 z + 3)}{336 z} + \frac{\sqrt{\pi} (112 z^4 + 640 z^3 + 720 z^2 + 96 z - 3) \operatorname{erf}(\sqrt{z})}{672 z^{3/2}}$$

07.25.03.a8gq.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (896 z^4 - 5536 z^3 + 6372 z^2 - 465 z - 15) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (896 z^3 - 6432 z^2 + 11\,460 z - 4965) I_0\left(\frac{z}{2}\right)}{19\,845 z}$$

07.25.03.a8gr.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (56 z^3 - 372 z^2 + 442 z - 15)}{672 z} + \frac{\sqrt{\pi} (-112 z^4 + 800 z^3 - 1200 z^2 + 240 z + 15) \operatorname{erfi}(\sqrt{z})}{1344 z^{3/2}}$$

07.25.03.a8gs.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (56 z^3 + 372 z^2 + 442 z + 15)}{672 z} + \frac{\sqrt{\pi} (112 z^4 + 800 z^3 + 1200 z^2 + 240 z - 15) \operatorname{erf}(\sqrt{z})}{1344 z^{3/2}}$$

07.25.03.a8gt.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (1792 z^5 - 13632 z^4 + 20744 z^3 - 2514 z^2 - 171 z + 12) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (1792 z^4 - 15424 z^3 + 33480 z^2 - 18234 z + 3) I_0\left(\frac{z}{2}\right)}{72765 z^2}$$

07.25.03.a8gu.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (56 z^3 - 452 z^2 + 702 z - 45)}{1152 z} + \frac{\sqrt{\pi} (-112 z^4 + 960 z^3 - 1800 z^2 + 480 z + 45) \operatorname{erfi}(\sqrt{z})}{2304 z^{3/2}}$$

07.25.03.a8gv.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (56 z^3 + 452 z^2 + 702 z + 45)}{1152 z} + \frac{\sqrt{\pi} (112 z^4 + 960 z^3 + 1800 z^2 + 480 z - 45) \operatorname{erf}(\sqrt{z})}{2304 z^{3/2}}$$

07.25.03.a8gw.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{64 e^{z/2} (896 z^6 - 8096 z^5 + 15332 z^4 - 2673 z^3 - 291 z^2 + 48 z - 18) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (1792 z^5 - 17984 z^4 + 45960 z^3 - 29706 z^2 + 24 z - 9) I_0\left(\frac{z}{2}\right)}{945945 z^3}$$

07.25.03.a8gx.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{e^z (8 z^3 - 76 z^2 + 146 z - 15)}{256 z} + \frac{\sqrt{\pi} (-16 z^4 + 160 z^3 - 360 z^2 + 120 z + 15) \operatorname{erfi}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.a8gy.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (8 z^3 + 76 z^2 + 146 z + 15)}{256 z} + \frac{\sqrt{\pi} (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15) \operatorname{erf}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.a8gz.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (3584 z^7 - 37504 z^6 + 85008 z^5 - 19620 z^4 - 3150 z^3 + 1125 z^2 - 1260 z + 1440) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (3584 z^6 - 41088 z^5 + 120720 z^4 - 89460 z^3 + 270 z^2 - 315 z + 360) I_0\left(\frac{z}{2}\right)}{2837835 z^4}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 3$

07.25.03.a8h0.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{4 e^{z/2} (448 z^4 - 3488 z^3 + 5526 z^2 - 750 z - 75) I_1\left(\frac{z}{2}\right) - 8 e^{z/2} (224 z^3 - 1968 z^2 + 4395 z - 2490) I_0\left(\frac{z}{2}\right)}{19845 z}$$

07.25.03.a8h1.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (112 z^4 - 1052 z^3 + 2124 z^2 - 435 z - 75) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (112 z^3 - 1164 z^2 + 3120 z - 2145) I_0\left(\frac{z}{2}\right)}{8505 z}$$

07.25.03.a8h2.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; 3, \frac{11}{2}; z\right) = \frac{4 e^{z/2} (8 z^4 - 88 z^3 + 216 z^2 - 60 z - 15) I_1\left(\frac{z}{2}\right)}{945 z} - \frac{16}{945} e^{z/2} (2 z^3 - 24 z^2 + 75 z - 60) I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{7}{2}$

07.25.03.a8h3.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (112 z^4 - 944 z^3 + 1584 z^2 - 140 z - 15)}{2688 z^2} + \frac{\sqrt{\pi} (-224 z^5 + 2000 z^4 - 4000 z^3 + 1200 z^2 + 150 z + 15) \operatorname{erfi}(\sqrt{z})}{5376 z^{5/2}}$$

07.25.03.a8h4.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (112 z^4 + 944 z^3 + 1584 z^2 + 140 z - 15)}{2688 z^2} + \frac{\sqrt{\pi} (224 z^5 + 2000 z^4 + 4000 z^3 + 1200 z^2 - 150 z + 15) \operatorname{erf}(\sqrt{z})}{5376 z^{5/2}}$$

07.25.03.a8h5.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (896 z^5 - 8576 z^4 + 17852 z^3 - 3930 z^2 - 795 z - 60) I_1\left(\frac{z}{2}\right)}{72765 z^2} - \frac{4 e^{z/2} (896 z^4 - 9472 z^3 + 25980 z^2 - 18390 z - 15) I_0\left(\frac{z}{2}\right)}{72765 z}$$

07.25.03.a8h6.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (56 z^4 - 572 z^3 + 1242 z^2 - 195 z - 45)}{2304 z^2} + \frac{\sqrt{\pi} (-112 z^5 + 1200 z^4 - 3000 z^3 + 1200 z^2 + 225 z + 45) \operatorname{erfi}(\sqrt{z})}{4608 z^{5/2}}$$

07.25.03.a8h7.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (56 z^4 + 572 z^3 + 1242 z^2 + 195 z - 45)}{2304 z^2} + \frac{\sqrt{\pi} (112 z^5 + 1200 z^4 + 3000 z^3 + 1200 z^2 - 225 z + 45) \operatorname{erf}(\sqrt{z})}{4608 z^{5/2}}$$

07.25.03.a8h8.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (896 z^6 - 10176 z^5 + 26252 z^4 - 8120 z^3 - 2475 z^2 - 420 z + 60) I_1\left(\frac{z}{2}\right)}{945945 z^3} - \frac{32 e^{z/2} (896 z^5 - 11072 z^4 + 35980 z^3 - 30180 z^2 - 105 z + 15) I_0\left(\frac{z}{2}\right)}{945945 z^2}$$

$$\begin{aligned}
 & \text{07.25.03.a8h9.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \\
 & \frac{e^z (16z^4 - 192z^3 + 512z^2 - 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8ha.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{e^{-z} (16z^4 + 192z^3 + 512z^2 + 120z - 45)}{1024z^2} + \frac{\sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8hb.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \frac{32e^{z/2} (1792z^7 - 23552z^6 + 72504z^5 - 29100z^4 - 11700z^3 - 3645z^2 + 1620z - 1440) I_1\left(\frac{z}{2}\right)}{2837835z^4} - \\
 & \frac{32e^{z/2} (1792z^6 - 25344z^5 + 95160z^4 - 91620z^3 - 900z^2 + 405z - 360) I_0\left(\frac{z}{2}\right)}{2837835z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 4$

$$\begin{aligned}
 & \text{07.25.03.a8hc.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; 4, \frac{9}{2}; z\right) = \\
 & \frac{4e^{z/2} (224z^5 - 2584z^4 + 6828z^3 - 2220z^2 - 735z - 180) I_1\left(\frac{z}{2}\right)}{31185z^2} - \frac{4e^{z/2} (224z^4 - 2808z^3 + 9300z^2 - 7980z - 45) I_0\left(\frac{z}{2}\right)}{31185z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8hd.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; 4, \frac{11}{2}; z\right) = \\
 & \frac{4e^{z/2} (16z^5 - 216z^4 + 692z^3 - 300z^2 - 135z - 60) I_1\left(\frac{z}{2}\right)}{3465z^2} - \frac{4e^{z/2} (16z^4 - 232z^3 + 900z^2 - 900z - 15) I_0\left(\frac{z}{2}\right)}{3465z}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.a8he.01} \\
 & {}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{7e^z (224z^5 - 2768z^4 + 7728z^3 - 2040z^2 - 930z - 225)}{110592z^3} - \\
 & \frac{7\sqrt{\pi} (448z^6 - 5760z^5 + 18000z^4 - 9600z^3 - 2700z^2 - 1080z - 225) \operatorname{erfi}(\sqrt{z})}{221184z^{7/2}}
 \end{aligned}$$

07.25.03.a8hf.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (224 z^5 + 2768 z^4 + 7728 z^3 + 2040 z^2 - 930 z + 225)}{110\,592 z^3} + \frac{7 \sqrt{\pi} (448 z^6 + 5760 z^5 + 18\,000 z^4 + 9600 z^3 - 2700 z^2 + 1080 z - 225) \operatorname{erf}(\sqrt{z})}{221\,184 z^{7/2}}$$

07.25.03.a8hg.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{64 e^{z/2} (112 z^6 - 1532 z^5 + 5004 z^4 - 2250 z^3 - 1065 z^2 - 540 z - 90) I_1\left(\frac{z}{2}\right)}{405\,405 z^3} - \frac{32 e^{z/2} (224 z^5 - 3288 z^4 + 12\,960 z^3 - 13\,200 z^2 - 270 z - 45) I_0\left(\frac{z}{2}\right)}{405\,405 z^2}$$

07.25.03.a8hh.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{7 e^z (32 z^5 - 464 z^4 + 1584 z^3 - 600 z^2 - 390 z - 225)}{24\,576 z^3} - \frac{7 \sqrt{\pi} (64 z^6 - 960 z^5 + 3600 z^4 - 2400 z^3 - 900 z^2 - 540 z - 225) \operatorname{erfi}(\sqrt{z})}{49\,152 z^{7/2}}$$

07.25.03.a8hi.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{7 e^{-z} (32 z^5 + 464 z^4 + 1584 z^3 + 600 z^2 - 390 z + 225)}{24\,576 z^3} + \frac{7 \sqrt{\pi} (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225) \operatorname{erf}(\sqrt{z})}{49\,152 z^{7/2}}$$

07.25.03.a8hj.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (448 z^7 - 7088 z^6 + 27\,576 z^5 - 15\,900 z^4 - 9600 z^3 - 7155 z^2 - 3420 z + 1440) I_1\left(\frac{z}{2}\right)}{1216\,215 z^4} - \frac{32 e^{z/2} (448 z^6 - 7536 z^5 + 34\,440 z^4 - 40\,380 z^3 - 1800 z^2 - 855 z + 360) I_0\left(\frac{z}{2}\right)}{1216\,215 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 5$

07.25.03.a8hk.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; 5, \frac{11}{2}; z\right) = \frac{32 e^{z/2} (16 z^6 - 256 z^5 + 1012 z^4 - 600 z^3 - 375 z^2 - 300 z - 180) I_1\left(\frac{z}{2}\right)}{45\,045 z^3} - \frac{32 e^{z/2} (16 z^5 - 272 z^4 + 1260 z^3 - 1500 z^2 - 75 z - 45) I_0\left(\frac{z}{2}\right)}{45\,045 z^2}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{11}{2}$

07.25.03.a8hl.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (64 z^6 - 1088 z^5 + 4528 z^4 - 2400 z^3 - 2100 z^2 - 2100 z - 1575)}{32 768 z^4} - \frac{3 \sqrt{\pi} (128 z^7 - 2240 z^6 + 10 080 z^5 - 8400 z^4 - 4200 z^3 - 3780 z^2 - 3150 z - 1575) \operatorname{erfi}(\sqrt{z})}{65 536 z^{9/2}}$$

07.25.03.a8hm.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 + 1088 z^5 + 4528 z^4 + 2400 z^3 - 2100 z^2 + 2100 z - 1575)}{32 768 z^4} + \frac{3 \sqrt{\pi} (128 z^7 + 2240 z^6 + 10 080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575) \operatorname{erf}(\sqrt{z})}{65 536 z^{9/2}}$$

07.25.03.a8hn.01

$${}_2F_2\left(-\frac{5}{2}, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right)}{135 135 z^4} - \frac{32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135 135 z^3}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = -\frac{11}{2}$

07.25.03.a8ho.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{108 056 025} (-64 z^{14} - 5184 z^{13} - 162 752 z^{12} - 2 531 520 z^{11} - 20 670 012 z^{10} - 86 195 508 z^9 - 163 217 880 z^8 - 103 503 960 z^7 - 6 652 800 z^6 - 362 880 z^5 - 272 160 z^4 - 1 512 000 z^3 + 13 891 500 z^2 - 53 581 500 z + 108 056 025) - \frac{1}{108 056 025} (2 e^z \sqrt{\pi} (32 z^{29/2} + 2608 z^{27/2} + 82 656 z^{25/2} + 1 305 192 z^{23/2} + 10 930 290 z^{21/2} + 47 722 815 z^{19/2} + 99 249 255 z^{17/2} + 79 564 590 z^{15/2} + 14 040 810 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.a8hp.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{108 056 025} (-64 z^{14} + 5184 z^{13} - 162 752 z^{12} + 2 531 520 z^{11} - 20 670 012 z^{10} + 86 195 508 z^9 - 163 217 880 z^8 + 103 503 960 z^7 - 6 652 800 z^6 + 362 880 z^5 - 272 160 z^4 + 1 512 000 z^3 + 13 891 500 z^2 + 53 581 500 z + 108 056 025) + \frac{1}{108 056 025} (2 e^{-z} \sqrt{\pi} (32 z^{29/2} - 2608 z^{27/2} + 82 656 z^{25/2} - 1 305 192 z^{23/2} + 10 930 290 z^{21/2} - 47 722 815 z^{19/2} + 99 249 255 z^{17/2} - 79 564 590 z^{15/2} + 14 040 810 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.a8hq.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9823275} (32 z^{13} + 2336 z^{12} + 65040 z^{11} + 876648 z^{10} + 5981514 z^9 + 19538820 z^8 + 25140780 z^7 + 6652800 z^6 - 362880 z^5 - 90720 z^4 - 302400 z^3 + 1984500 z^2 - 5953500 z + 9823275) + \frac{1}{9823275} \left(e^z \sqrt{\pi} (32 z^{27/2} + 2352 z^{25/2} + 66192 z^{23/2} + 908040 z^{21/2} + 6390090 z^{19/2} + 22162455 z^{17/2} + 32761890 z^{15/2} + 14040810 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.a8hr.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{9823275} (-32 z^{13} + 2336 z^{12} - 65040 z^{11} + 876648 z^{10} - 5981514 z^9 + 19538820 z^8 - 25140780 z^7 + 6652800 z^6 + 362880 z^5 - 90720 z^4 + 302400 z^3 + 1984500 z^2 + 5953500 z + 9823275) + \frac{1}{9823275} \left(e^{-z} \sqrt{\pi} (32 z^{27/2} - 2352 z^{25/2} + 66192 z^{23/2} - 908040 z^{21/2} + 6390090 z^{19/2} - 22162455 z^{17/2} + 32761890 z^{15/2} - 14040810 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.a8hs.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1091475} (-16 z^{12} - 1040 z^{11} - 25248 z^{10} - 287336 z^9 - 1565475 z^8 - 3624075 z^7 - 2217600 z^6 + 362880 z^5 - 90720 z^4 - 100800 z^3 + 396900 z^2 - 850500 z + 1091475) + \frac{1}{2182950} \left(e^z \sqrt{\pi} (-32 z^{25/2} - 2096 z^{23/2} - 51520 z^{21/2} - 598920 z^{19/2} - 3395490 z^{17/2} - 8580495 z^{15/2} - 7020405 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.a8ht.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1091475} (-16 z^{12} + 1040 z^{11} - 25248 z^{10} + 287336 z^9 - 1565475 z^8 + 3624075 z^7 - 2217600 z^6 - 362880 z^5 - 90720 z^4 + 100800 z^3 + 396900 z^2 + 850500 z + 1091475) + \frac{1}{2182950} \left(e^{-z} \sqrt{\pi} (32 z^{25/2} - 2096 z^{23/2} + 51520 z^{21/2} - 598920 z^{19/2} + 3395490 z^{17/2} - 8580495 z^{15/2} + 7020405 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.a8hu.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{311850} (16 z^{11} + 912 z^{10} + 18872 z^9 + 174540 z^8 + 701145 z^7 + 887040 z^6 - 241920 z^5 + 181440 z^4 - 201600 z^3 + 264600 z^2 - 340200 z + 311850) + \frac{1}{623700} e^z \sqrt{\pi} (32 z^{23/2} + 1840 z^{21/2} + 38640 z^{19/2} + 367080 z^{17/2} + 1560090 z^{15/2} + 2340135 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8hv.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{311850} (-16z^{11} + 912z^{10} - 18872z^9 + 174540z^8 - 701145z^7 + 887040z^6 + 241920z^5 + 181440z^4 + 201600z^3 + 264600z^2 + 340200z + 311850) + \frac{1}{623700} e^{-z} \sqrt{\pi} (32z^{23/2} - 1840z^{21/2} + 38640z^{19/2} - 367080z^{17/2} + 1560090z^{15/2} - 2340135z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8hw.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{124740} (-16z^{10} - 784z^9 - 13392z^8 - 94560z^7 - 234135z^6 + 15687z^5 + 149310z^4 - 407610z^3 + 529200z^2 - 226800z + 124740) + \frac{1}{249480} (e^z \sqrt{\pi} (-32z^{21/2} - 1584z^{19/2} - 27552z^{17/2} - 201768z^{15/2} - 551250z^{13/2} - 135135z^{11/2} + 405405z^{9/2} - 810810z^{7/2} + 810810z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.a8hx.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{124740} (-16z^{10} + 784z^9 - 13392z^8 + 94560z^7 - 234135z^6 - 15687z^5 + 149310z^4 + 407610z^3 + 529200z^2 + 226800z + 124740) + \frac{1}{249480} (e^{-z} \sqrt{\pi} (32z^{21/2} - 1584z^{19/2} + 27552z^{17/2} - 201768z^{15/2} + 551250z^{13/2} - 135135z^{11/2} - 405405z^{9/2} - 810810z^{7/2} - 810810z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.a8hy.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{83160} (16z^9 + 656z^8 + 8808z^7 + 42020z^6 + 27693z^5 - 113778z^4 + 181650z^3 + 22680z^2 - 453600z + 83160) + \frac{1}{166320} (e^z \sqrt{\pi} (32z^{19/2} + 1328z^{17/2} + 18256z^{15/2} + 92232z^{13/2} + 90090z^{11/2} - 225225z^{9/2} + 270270z^{7/2} + 270270z^{5/2} - 1081080z^{3/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.a8hz.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{83160} (-16z^9 + 656z^8 - 8808z^7 + 42020z^6 - 27693z^5 - 113778z^4 - 181650z^3 + 22680z^2 + 453600z + 83160) + \frac{1}{166320} (e^{-z} \sqrt{\pi} (32z^{19/2} - 1328z^{17/2} + 18256z^{15/2} - 92232z^{13/2} + 90090z^{11/2} + 225225z^{9/2} + 270270z^{7/2} - 270270z^{5/2} - 1081080z^{3/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.a8i0.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{-16z^8 - 528z^7 - 5120z^6 - 11544z^5 + 28053z^4 + 105z^3 - 167580z^2 + 283500z + 166320}{166320} + \frac{1}{332640} \left(e^z \sqrt{\pi} (-32z^{17/2} - 1072z^{15/2} - 10752z^{13/2} - 27720z^{11/2} + 48510z^{9/2} + 31185z^{7/2} - 363825z^{5/2} + 457380z^{3/2} + 623700\sqrt{z}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.a8i1.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{-16z^8 + 528z^7 - 5120z^6 + 11544z^5 + 28053z^4 - 105z^3 - 167580z^2 - 283500z + 166320}{166320} + \frac{1}{332640} \left(e^{-z} \sqrt{\pi} (32z^{17/2} - 1072z^{15/2} + 10752z^{13/2} - 27720z^{11/2} - 48510z^{9/2} + 31185z^{7/2} + 363825z^{5/2} + 457380z^{3/2} - 623700\sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.a8i2.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, 1; z\right) = -\frac{e^z (8z^8 + 236z^7 + 1918z^6 + 2247z^5 - 13125z^4 + 15960z^3 + 52920z^2 - 143640z - 83160)}{83160}$$

07.25.03.a8i3.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{-16z^7 - 400z^6 - 2328z^5 + 2244z^4 + 16095z^3 - 61740z^2 + 18900z + 219240}{332640} + \frac{1}{665280\sqrt{z}} e^z \sqrt{\pi} (-32z^8 - 816z^7 - 5040z^6 + 2520z^5 + 35910z^4 - 112455z^3 - 26460z^2 + 510300z + 113400) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8i4.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{16z^7 - 400z^6 + 2328z^5 + 2244z^4 - 16095z^3 - 61740z^2 - 18900z + 219240}{332640} + \frac{1}{665280\sqrt{z}} e^{-z} \sqrt{\pi} (-32z^8 + 816z^7 - 5040z^6 - 2520z^5 + 35910z^4 + 112455z^3 - 26460z^2 - 510300z + 113400) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8i5.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, 2; z\right) = -\frac{e^z (8z^7 + 172z^6 + 714z^5 - 2037z^4 - 2940z^3 + 27720z^2 - 30240z - 83160)}{83160}$$

07.25.03.a8i6.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{-16z^7 - 272z^6 - 432z^5 + 4720z^4 - 7455z^3 - 29925z^2 + 101010z + 22050}{221760z} + \frac{1}{443520z^{3/2}} e^z \sqrt{\pi} (-32z^8 - 560z^7 - 1120z^6 + 9240z^5 - 10290z^4 - 71295z^3 + 187425z^2 + 135450z - 22050) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8i7.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-16z^7 + 272z^6 - 432z^5 - 4720z^4 - 7455z^3 + 29925z^2 + 101010z - 22050}{221760z} + \frac{1}{443520z^{3/2}} e^{-z} \sqrt{\pi} (32z^8 - 560z^7 + 1120z^6 + 9240z^5 + 10290z^4 - 71295z^3 - 187425z^2 + 135450z + 22050) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8i8.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, 3; z\right) = -\frac{e^z (8z^6 + 108z^5 - 42z^4 - 1785z^3 + 5985z^2 + 3780z - 41580)}{41580}$$

07.25.03.a8i9.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{-16z^7 - 144z^6 + 568z^5 + 1260z^4 - 13365z^3 + 23142z^2 + 27090z - 15120}{88704z^2} + \frac{1}{177408z^{5/2}} e^z \sqrt{\pi} (-32z^8 - 304z^7 + 1008z^6 + 3192z^5 - 26250z^4 + 33705z^3 + 86310z^2 - 37170z + 15120) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8ia.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{16z^7 - 144z^6 - 568z^5 + 1260z^4 + 13365z^3 + 23142z^2 - 27090z - 15120}{88704z^2} + \frac{1}{177408z^{5/2}} e^{-z} \sqrt{\pi} (-32z^8 + 304z^7 + 1008z^6 - 3192z^5 - 26250z^4 - 33705z^3 + 86310z^2 + 37170z + 15120) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8ib.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, 4; z\right) = -\frac{e^z (8z^5 + 44z^4 - 350z^3 + 315z^2 + 4410z - 13860)}{13860}$$

07.25.03.a8ic.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{-16z^7 - 16z^6 + 672z^5 - 2760z^4 + 717z^3 + 18333z^2 - 22680z + 22680}{25344z^3} + \frac{1}{50688z^{7/2}} e^z \sqrt{\pi} (-32z^8 - 48z^7 + 1344z^6 - 4872z^5 - 1890z^4 + 41265z^3 - 37485z^2 + 37800z - 22680) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8id.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{-16z^7 + 16z^6 + 672z^5 + 2760z^4 + 717z^3 - 18333z^2 - 22680z - 22680}{25344z^3} + \frac{1}{50688z^{7/2}} e^{-z} \sqrt{\pi} (32z^8 - 48z^7 - 1344z^6 - 4872z^5 + 1890z^4 + 41265z^3 + 37485z^2 + 37800z + 22680) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8ie.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, 5; z\right) = -\frac{e^z (8z^4 - 20z^3 - 210z^2 + 1575z - 3465)}{3465}$$

07.25.03.a8if.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{-16z^7 + 112z^6 - 120z^5 - 1964z^4 + 10263z^3 - 22680z^2 + 47880z - 75600}{5632z^4} + \frac{1}{11264z^{9/2}} e^z \sqrt{\pi} (-32z^8 + 208z^7 - 112z^6 - 4200z^5 + 19110z^4 - 35175z^3 + 68040z^2 - 98280z + 75600) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8ig.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{16z^7 + 112z^6 + 120z^5 - 1964z^4 - 10263z^3 - 22680z^2 - 47880z - 75600}{5632z^4} + \frac{1}{11264z^{9/2}} e^{-z} \sqrt{\pi} (-32z^8 - 208z^7 - 112z^6 + 4200z^5 + 19110z^4 + 35175z^3 + 68040z^2 + 98280z + 75600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8ih.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{11}{2}, 6; z\right) = -\frac{1}{693} e^z (8z^3 - 84z^2 + 378z - 693)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = -\frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.a8ii.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; z\right) = \\
 & \frac{1}{893025} \left(-16z^{12} - 1056z^{11} - 26192z^{10} - 307872z^9 - 1771119z^8 - 4581780z^7 - 4007430z^6 - 362880z^5 - \right. \\
 & \quad \left. 30240z^4 - 60480z^3 + 283500z^2 - 661500z + 893025\right) + \\
 & \frac{1}{1786050} \left(e^z \sqrt{\pi} \left(-32z^{25/2} - 2128z^{23/2} - 53424z^{21/2} - 640920z^{19/2} - 3826410z^{17/2} - \right. \right. \\
 & \quad \left. \left. 10683225z^{15/2} - 11395440z^{13/2} - 2645370z^{11/2}\right) \operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8ij.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \\
 & \frac{1}{893025} \left(-16z^{12} + 1056z^{11} - 26192z^{10} + 307872z^9 - 1771119z^8 + 4581780z^7 - 4007430z^6 + 362880z^5 - \right. \\
 & \quad \left. 30240z^4 + 60480z^3 + 283500z^2 + 661500z + 893025\right) + \\
 & \frac{1}{1786050} \left(e^{-z} \sqrt{\pi} \left(32z^{25/2} - 2128z^{23/2} + 53424z^{21/2} - 640920z^{19/2} + 3826410z^{17/2} - \right. \right. \\
 & \quad \left. \left. 10683225z^{15/2} + 11395440z^{13/2} - 2645370z^{11/2}\right) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8ik.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{198450} \left(16z^{11} + 944z^{10} + 20536z^9 + 205644z^8 + 957705z^7 + 1789830z^6 + 725760z^5 - 60480z^4 - \right. \\
 & \quad \left. 40320z^3 + 113400z^2 - 189000z + 198450\right) + \frac{1}{396900} \\
 & \left(e^z \sqrt{\pi} \left(32z^{23/2} + 1904z^{21/2} + 42000z^{19/2} + 430920z^{17/2} + 2102730z^{15/2} + 4375035z^{13/2} + 2645370z^{11/2}\right) \operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8il.01} \\
 & {}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \\
 & \frac{1}{198450} \left(-16z^{11} + 944z^{10} - 20536z^9 + 205644z^8 - 957705z^7 + 1789830z^6 - 725760z^5 - 60480z^4 + \right. \\
 & \quad \left. 40320z^3 + 113400z^2 + 189000z + 198450\right) + \frac{1}{396900} \\
 & \left(e^{-z} \sqrt{\pi} \left(32z^{23/2} - 1904z^{21/2} + 42000z^{19/2} - 430920z^{17/2} + 2102730z^{15/2} - 4375035z^{13/2} + 2645370z^{11/2}\right) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

07.25.03.a8im.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{56700} (-16 z^{10} - 832 z^9 - 15552 z^8 - 128280 z^7 - 451395 z^6 - 483840 z^5 + 120960 z^4 - 80640 z^3 + 75600 z^2 - 75600 z + 56700) + \frac{1}{113400} e^z \sqrt{\pi} (-32 z^{21/2} - 1680 z^{19/2} - 31920 z^{17/2} - 271320 z^{15/2} - 1017450 z^{13/2} - 1322685 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8in.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{56700} (-16 z^{10} + 832 z^9 - 15552 z^8 + 128280 z^7 - 451395 z^6 + 483840 z^5 + 120960 z^4 + 80640 z^3 + 75600 z^2 + 75600 z + 56700) + \frac{1}{113400} e^{-z} \sqrt{\pi} (32 z^{21/2} - 1680 z^{19/2} + 31920 z^{17/2} - 271320 z^{15/2} + 1017450 z^{13/2} - 1322685 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8io.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{22680} (16 z^9 + 720 z^8 + 11240 z^7 + 72420 z^6 + 166509 z^5 + 9450 z^4 - 108990 z^3 + 151200 z^2 - 50400 z + 22680) + \frac{1}{45360} (e^z \sqrt{\pi} (32 z^{19/2} + 1456 z^{17/2} + 23184 z^{15/2} + 155400 z^{13/2} + 395850 z^{11/2} + 135135 z^{9/2} - 270270 z^{7/2} + 270270 z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.a8ip.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{22680} (-16 z^9 + 720 z^8 - 11240 z^7 + 72420 z^6 - 166509 z^5 + 9450 z^4 + 108990 z^3 + 151200 z^2 + 50400 z + 22680) + \frac{1}{45360} (e^{-z} \sqrt{\pi} (32 z^{19/2} - 1456 z^{17/2} + 23184 z^{15/2} - 155400 z^{13/2} + 395850 z^{11/2} - 135135 z^{9/2} - 270270 z^{7/2} - 270270 z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.a8iq.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{-16 z^8 - 608 z^7 - 7600 z^6 - 34704 z^5 - 30807 z^4 + 72660 z^3 - 32130 z^2 - 100800 z + 15120}{15120} + \frac{1}{30240} e^z \sqrt{\pi} (-32 z^{17/2} - 1232 z^{15/2} - 15792 z^{13/2} - 76440 z^{11/2} - 90090 z^{9/2} + 135135 z^{7/2} - 270270 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8ir.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{-16 z^8 + 608 z^7 - 7600 z^6 + 34704 z^5 - 30807 z^4 - 72660 z^3 - 32130 z^2 + 100800 z + 15120}{15120} + \frac{1}{30240} e^{-z} \sqrt{\pi} (32 z^{17/2} - 1232 z^{15/2} + 15792 z^{13/2} - 76440 z^{11/2} + 90090 z^{9/2} + 135135 z^{7/2} - 270270 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8is.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{16z^7 + 496z^6 + 4632z^5 + 11772z^4 - 14511z^3 - 27090z^2 + 76860z + 30240}{30240} + \frac{1}{60480} \\ \left(e^z \sqrt{\pi} (32z^{15/2} + 1008z^{13/2} + 9744z^{11/2} + 27720z^{9/2} - 20790z^{7/2} - 72765z^{5/2} + 145530z^{3/2} + 124740\sqrt{z}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.a8it.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{-16z^7 + 496z^6 - 4632z^5 + 11772z^4 + 14511z^3 - 27090z^2 - 76860z + 30240}{30240} + \frac{1}{60480} \\ \left(e^{-z} \sqrt{\pi} (32z^{15/2} - 1008z^{13/2} + 9744z^{11/2} - 27720z^{9/2} - 20790z^{7/2} + 72765z^{5/2} + 145530z^{3/2} - 124740\sqrt{z}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.a8iu.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, 1; z\right) = \frac{e^z (4z^7 + 112z^6 + 903z^5 + 1575z^4 - 4200z^3 - 2520z^2 + 17640z + 7560)}{7560}$$

07.25.03.a8iv.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{16z^6 + 384z^5 + 2336z^4 + 264z^3 - 14805z^2 + 15960z + 41580}{60480} + \\ \frac{e^z \sqrt{\pi} (32z^7 + 784z^6 + 5040z^5 + 2520z^4 - 30870z^3 + 19845z^2 + 105840z + 18900) \operatorname{erf}(\sqrt{z})}{120960\sqrt{z}}$$

07.25.03.a8iw.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{16z^6 - 384z^5 + 2336z^4 - 264z^3 - 14805z^2 - 15960z + 41580}{60480} + \\ \frac{1}{120960\sqrt{z}} e^{-z} \sqrt{\pi} (-32z^7 + 784z^6 - 5040z^5 + 2520z^4 + 30870z^3 + 19845z^2 - 105840z + 18900) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8ix.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, 2; z\right) = \frac{e^z (4z^6 + 84z^5 + 399z^4 - 420z^3 - 2520z^2 + 5040z + 7560)}{7560}$$

07.25.03.a8iy.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{16z^6 + 272z^5 + 712z^4 - 3180z^3 - 1995z^2 + 20370z + 3150}{40320z} + \\ \frac{e^z \sqrt{\pi} (32z^7 + 560z^6 + 1680z^5 - 5880z^4 - 7350z^3 + 41895z^2 + 22050z - 3150) \operatorname{erf}(\sqrt{z})}{80640z^{3/2}}$$

07.25.03.a8iz.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-16z^6 + 272z^5 - 712z^4 - 3180z^3 + 1995z^2 + 20370z - 3150}{40320z} + \\ \frac{e^{-z} \sqrt{\pi} (32z^7 - 560z^6 + 1680z^5 + 5880z^4 - 7350z^3 - 41895z^2 + 22050z + 3150) \operatorname{erfi}(\sqrt{z})}{80640z^{3/2}}$$

07.25.03.a8j0.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, 3; z\right) = \frac{e^z (4z^5 + 56z^4 + 63z^3 - 735z^2 + 420z + 3780)}{3780}$$

07.25.03.a8j1.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{16z^6 + 160z^5 - 240z^4 - 1920z^3 + 5439z^2 + 3780z - 1890}{16128z^2} + \frac{e^z \sqrt{\pi} (32z^7 + 336z^6 - 336z^5 - 4200z^4 + 9450z^3 + 13545z^2 - 5040z + 1890) \operatorname{erf}(\sqrt{z})}{32256z^{5/2}}$$

07.25.03.a8j2.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{16z^6 - 160z^5 - 240z^4 + 1920z^3 + 5439z^2 - 3780z - 1890}{16128z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^7 + 336z^6 + 336z^5 - 4200z^4 - 9450z^3 + 13545z^2 + 5040z + 1890) \operatorname{erfi}(\sqrt{z})}{32256z^{5/2}}$$

07.25.03.a8j3.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, 4; z\right) = \frac{e^z (4z^4 + 28z^3 - 105z^2 - 210z + 1260)}{1260}$$

07.25.03.a8j4.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{16z^6 + 48z^5 - 520z^4 + 684z^3 + 2457z^2 - 2730z + 2520}{4608z^3} + \frac{e^z \sqrt{\pi} (32z^7 + 112z^6 - 1008z^5 + 840z^4 + 6090z^3 - 4725z^2 + 4410z - 2520) \operatorname{erf}(\sqrt{z})}{9216z^{7/2}}$$

07.25.03.a8j5.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{-16z^6 + 48z^5 + 520z^4 + 684z^3 - 2457z^2 - 2730z - 2520}{4608z^3} + \frac{e^{-z} \sqrt{\pi} (32z^7 - 112z^6 - 1008z^5 - 840z^4 + 6090z^3 + 4725z^2 + 4410z + 2520) \operatorname{erfi}(\sqrt{z})}{9216z^{7/2}}$$

07.25.03.a8j6.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, 5; z\right) = \frac{1}{315} e^z (4z^3 - 105z + 315)$$

07.25.03.a8j7.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{16z^6 - 64z^5 - 128z^4 + 1272z^3 - 2541z^2 + 5040z - 7560}{1024z^4} + \frac{e^z \sqrt{\pi} (32z^7 - 112z^6 - 336z^5 + 2520z^4 - 3990z^3 + 7245z^2 - 10080z + 7560) \operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.a8j8.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{16z^6 + 64z^5 - 128z^4 - 1272z^3 - 2541z^2 - 5040z - 7560}{1024z^4} + \frac{e^{-z} \sqrt{\pi} (-32z^7 - 112z^6 + 336z^5 + 2520z^4 + 3990z^3 + 7245z^2 + 10080z + 7560) \operatorname{erfi}(\sqrt{z})}{2048z^{9/2}}$$

$$07.25.03.a8j9.01$$

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{9}{2}, 6; z\right) = \frac{1}{63} e^z (4z^2 - 28z + 63)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = -\frac{7}{2}$

$$07.25.03.a8ja.01$$

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{44100} (-16z^{10} - 848z^9 - 16304z^8 - 140832z^7 - 542375z^6 - 758685z^5 - 120960z^4 - 26880z^3 + 45360z^2 - 54000z + 44100) + \frac{1}{88200} (e^z \sqrt{\pi} (-32z^{21/2} - 1712z^{19/2} - 33440z^{17/2} - 297160z^{15/2} - 1211250z^{13/2} - 1952535z^{11/2} - 692835z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

$$07.25.03.a8jb.01$$

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{44100} (-16z^{10} + 848z^9 - 16304z^8 + 140832z^7 - 542375z^6 + 758685z^5 - 120960z^4 + 26880z^3 + 45360z^2 + 54000z + 44100) + \frac{1}{88200} (e^{-z} \sqrt{\pi} (32z^{21/2} - 1712z^{19/2} + 33440z^{17/2} - 297160z^{15/2} + 1211250z^{13/2} - 1952535z^{11/2} + 692835z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

$$07.25.03.a8jc.01$$

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{12600} (16z^9 + 752z^8 + 12552z^7 + 90980z^6 + 274845z^5 + 241920z^4 - 53760z^3 + 30240z^2 - 21600z + 12600) + \frac{e^z \sqrt{\pi} (32z^{19/2} + 1520z^{17/2} + 25840z^{15/2} + 193800z^{13/2} + 629850z^{11/2} + 692835z^{9/2}) \operatorname{erf}(\sqrt{z})}{25200}$$

$$07.25.03.a8jd.01$$

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{12600} (-16z^9 + 752z^8 - 12552z^7 + 90980z^6 - 274845z^5 + 241920z^4 + 53760z^3 + 30240z^2 + 21600z + 12600) + \frac{1}{25200} e^{-z} \sqrt{\pi} (32z^{19/2} - 1520z^{17/2} + 25840z^{15/2} - 193800z^{13/2} + 629850z^{11/2} - 692835z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.a8je.01$$

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{-16z^8 - 656z^7 - 9280z^6 - 54168z^5 - 116235z^4 - 27615z^3 + 60480z^2 - 14400z + 5040}{5040} + \frac{1}{10080} e^z \sqrt{\pi} (-32z^{17/2} - 1328z^{15/2} - 19200z^{13/2} - 117000z^{11/2} - 278850z^{9/2} - 135135z^{7/2} + 135135z^{5/2}) \operatorname{erf}(\sqrt{z})$$

$$07.25.03.a8jf.01$$

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{-16z^8 + 656z^7 - 9280z^6 + 54168z^5 - 116235z^4 + 27615z^3 + 60480z^2 + 14400z + 5040}{5040} + \frac{1}{10080} e^{-z} \sqrt{\pi} (32z^{17/2} - 1328z^{15/2} + 19200z^{13/2} - 117000z^{11/2} + 278850z^{9/2} - 135135z^{7/2} - 135135z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8jg.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{16z^7 + 560z^6 + 6488z^5 + 28476z^4 + 33425z^3 - 30870z^2 - 28800z + 3360}{3360} + \frac{1}{6720} e^z \sqrt{\pi} (32z^{15/2} + 1136z^{13/2} + 13520z^{11/2} + 62920z^{9/2} + 90090z^{7/2} - 45045z^{5/2} - 90090z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8jh.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{-16z^7 + 560z^6 - 6488z^5 + 28476z^4 - 33425z^3 - 30870z^2 + 28800z + 3360}{3360} + \frac{1}{6720} e^{-z} \sqrt{\pi} (32z^{15/2} - 1136z^{13/2} + 13520z^{11/2} - 62920z^{9/2} + 90090z^{7/2} + 45045z^{5/2} - 90090z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8ji.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{-16z^6 - 464z^5 - 4176z^4 - 11984z^3 + 945z^2 + 26415z + 6720}{6720} + \frac{1}{13440} e^z \sqrt{\pi} (-32z^{13/2} - 944z^{11/2} - 8800z^{9/2} - 27720z^{7/2} - 6930z^{5/2} + 58905z^{3/2} + 31185\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8jj.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{-16z^6 + 464z^5 - 4176z^4 + 11984z^3 + 945z^2 - 26415z + 6720}{6720} + \frac{1}{13440} e^{-z} \sqrt{\pi} (32z^{13/2} - 944z^{11/2} + 8800z^{9/2} - 27720z^{7/2} + 6930z^{5/2} + 58905z^{3/2} - 31185\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8jk.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{7}{2}, 1; z\right) = -\frac{1}{840} e^z (2z^6 + 53z^5 + 425z^4 + 1000z^3 - 600z^2 - 2760z - 840)$$

07.25.03.a8jl.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{-16z^5 - 368z^4 - 2344z^3 - 2772z^2 + 8475z + 9660}{13440} + \frac{e^z \sqrt{\pi} (-32z^6 - 752z^5 - 5040z^4 - 7560z^3 + 15750z^2 + 27405z + 3780) \operatorname{erf}(\sqrt{z})}{26880\sqrt{z}}$$

07.25.03.a8jm.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{16z^5 - 368z^4 + 2344z^3 - 2772z^2 - 8475z + 9660}{13440} + \frac{e^{-z} \sqrt{\pi} (-32z^6 + 752z^5 - 5040z^4 + 7560z^3 + 15750z^2 - 27405z + 3780) \operatorname{erfi}(\sqrt{z})}{26880\sqrt{z}}$$

07.25.03.a8jn.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, 2; z\right) = -\frac{1}{840} e^z (2z^5 + 41z^4 + 220z^3 + 120z^2 - 960z - 840)$$

07.25.03.a8jo.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{-16z^5 - 272z^4 - 992z^3 + 1080z^2 + 5005z + 525}{8960z} + \frac{e^z \sqrt{\pi} (-32z^6 - 560z^5 - 2240z^4 + 1400z^3 + 11550z^2 + 4305z - 525) \operatorname{erf}(\sqrt{z})}{17920z^{3/2}}$$

07.25.03.a8jp.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{-16z^5 + 272z^4 - 992z^3 - 1080z^2 + 5005z - 525}{8960z} + \frac{e^{-z} \sqrt{\pi} (32z^6 - 560z^5 + 2240z^4 + 1400z^3 - 11550z^2 + 4305z + 525) \operatorname{erfi}(\sqrt{z})}{17920z^{3/2}}$$

07.25.03.a8jq.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{7}{2}, 3; z\right) = -\frac{1}{420} e^z (2z^4 + 29z^3 + 75z^2 - 180z - 420)$$

07.25.03.a8jr.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{-16z^5 - 176z^4 - 120z^3 + 1492z^2 + 615z - 270}{3584z^2} + \frac{e^z \sqrt{\pi} (-32z^6 - 368z^5 - 400z^4 + 3000z^3 + 2550z^2 - 795z + 270) \operatorname{erf}(\sqrt{z})}{7168z^{5/2}}$$

07.25.03.a8js.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{16z^5 - 176z^4 + 120z^3 + 1492z^2 - 615z - 270}{3584z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^6 + 368z^5 - 400z^4 - 3000z^3 + 2550z^2 + 795z + 270) \operatorname{erfi}(\sqrt{z})}{7168z^{5/2}}$$

07.25.03.a8jt.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{7}{2}, 4; z\right) = -\frac{1}{140} e^z (2z^3 + 17z^2 - 10z - 140)$$

07.25.03.a8ju.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{-16z^5 - 80z^4 + 272z^3 + 384z^2 - 375z + 315}{1024z^3} + \frac{e^z \sqrt{\pi} (-32z^6 - 176z^5 + 480z^4 + 1080z^3 - 690z^2 + 585z - 315) \operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.a8jv.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-16z^5 + 80z^4 + 272z^3 - 384z^2 - 375z - 315}{1024z^3} + \frac{e^{-z} \sqrt{\pi} (32z^6 - 176z^5 - 480z^4 + 1080z^3 + 690z^2 + 585z + 315) \operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.a8jw.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, 5; z\right) = -\frac{1}{35} e^z (2z^2 + 5z - 35)$$

07.25.03.a8jx.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, \frac{11}{2}; z\right) = -\frac{9(16z^5 - 16z^4 - 184z^3 + 324z^2 - 595z + 840)}{2048z^4} - \frac{9e^z \sqrt{\pi} (32z^6 - 16z^5 - 400z^4 + 520z^3 - 870z^2 + 1155z - 840) \operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.a8jy.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(16z^5 + 16z^4 - 184z^3 - 324z^2 - 595z - 840)}{2048z^4} - \frac{9e^{-z} \sqrt{\pi} (32z^6 + 16z^5 - 400z^4 - 520z^3 - 870z^2 - 1155z - 840) \operatorname{erfi}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.a8jz.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{7}{2}, 6; z\right) = -\frac{1}{7} e^z (2z - 7)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = -\frac{5}{2}$

07.25.03.a8k0.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{-16z^8 - 672z^7 - 9872z^6 - 61680z^5 - 155655z^4 - 107520z^3 + 20160z^2 - 8640z + 3600}{3600} + \frac{e^z \sqrt{\pi} (-32z^{17/2} - 1360z^{15/2} - 20400z^{13/2} - 132600z^{11/2} - 364650z^{9/2} - 328185z^{7/2}) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.a8k1.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{-16z^8 + 672z^7 - 9872z^6 + 61680z^5 - 155655z^4 + 107520z^3 + 20160z^2 + 8640z + 3600}{3600} + \frac{e^{-z} \sqrt{\pi} (32z^{17/2} - 1360z^{15/2} + 20400z^{13/2} - 132600z^{11/2} + 364650z^{9/2} - 328185z^{7/2}) \operatorname{erfi}(\sqrt{z})}{7200}$$

07.25.03.a8k2.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{16z^7 + 592z^6 + 7512z^5 + 39420z^4 + 79905z^3 + 40320z^2 - 5760z + 1440}{1440} + \frac{e^z \sqrt{\pi} (32z^{15/2} + 1200z^{13/2} + 15600z^{11/2} + 85800z^{9/2} + 193050z^{7/2} + 135135z^{5/2}) \operatorname{erf}(\sqrt{z})}{2880}$$

07.25.03.a8k3.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{-16z^7 + 592z^6 - 7512z^5 + 39420z^4 - 79905z^3 + 40320z^2 + 5760z + 1440}{1440} + \frac{e^{-z} \sqrt{\pi} (32z^{15/2} - 1200z^{13/2} + 15600z^{11/2} - 85800z^{9/2} + 193050z^{7/2} - 135135z^{5/2}) \operatorname{erfi}(\sqrt{z})}{2880}$$

07.25.03.a8k4.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{960} (-16 z^6 - 512 z^5 - 5472 z^4 - 23\,240 z^3 - 35\,595 z^2 - 11\,520 z + 960) + \frac{e^z \sqrt{\pi} (-32 z^{13/2} - 1040 z^{11/2} - 11\,440 z^{9/2} - 51\,480 z^{7/2} - 90\,090 z^{5/2} - 45\,045 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.a8k5.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{960} (-16 z^6 + 512 z^5 - 5472 z^4 + 23\,240 z^3 - 35\,595 z^2 + 11\,520 z + 960) + \frac{e^{-z} \sqrt{\pi} (32 z^{13/2} - 1040 z^{11/2} + 11\,440 z^{9/2} - 51\,480 z^{7/2} + 90\,090 z^{5/2} - 45\,045 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.a8k6.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{16 z^5 + 432 z^4 + 3752 z^3 + 12\,180 z^2 + 12\,645 z + 1920}{1920} + \frac{e^z \sqrt{\pi} (32 z^{11/2} + 880 z^{9/2} + 7920 z^{7/2} + 27\,720 z^{5/2} + 34\,650 z^{3/2} + 10\,395 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.a8k7.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{-16 z^5 + 432 z^4 - 3752 z^3 + 12\,180 z^2 - 12\,645 z + 1920}{1920} + \frac{e^{-z} \sqrt{\pi} (32 z^{11/2} - 880 z^{9/2} + 7920 z^{7/2} - 27\,720 z^{5/2} + 34\,650 z^{3/2} - 10\,395 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.a8k8.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, 1; z\right) = \frac{1}{120} e^z (z^5 + 25 z^4 + 200 z^3 + 600 z^2 + 600 z + 120)$$

07.25.03.a8k9.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{16 z^4 + 352 z^3 + 2352 z^2 + 5280 z + 2895}{3840} + \frac{e^z \sqrt{\pi} (32 z^5 + 720 z^4 + 5040 z^3 + 12\,600 z^2 + 9450 z + 945) \operatorname{erfi}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.a8ka.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{16 z^4 - 352 z^3 + 2352 z^2 - 5280 z + 2895}{3840} + \frac{e^{-z} \sqrt{\pi} (-32 z^5 + 720 z^4 - 5040 z^3 + 12\,600 z^2 - 9450 z + 945) \operatorname{erfi}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.a8kb.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, 2; z\right) = \frac{1}{120} e^z (z^4 + 20 z^3 + 120 z^2 + 240 z + 120)$$

07.25.03.a8kc.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z \sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.a8kd.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z} \sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.a8ke.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, 3; z\right) = \frac{1}{60} e^z (z^3 + 15z^2 + 60z + 60)$$

07.25.03.a8kf.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{16z^4 + 192z^3 + 512z^2 + 120z - 45}{1024z^2} + \frac{e^z \sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.a8kg.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.a8kh.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, 4; z\right) = \frac{1}{20} e^z (z^2 + 10z + 20)$$

07.25.03.a8ki.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z \sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.a8kj.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.a8kk.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, 5; z\right) = \frac{1}{5} e^z (z + 5)$$

07.25.03.a8kl.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z\sqrt{\pi}(32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.a8km.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z}\sqrt{\pi}(32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.a8kn.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{5}{2}, 6; z\right) = e^z$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = -\frac{3}{2}$

07.25.03.a8ko.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{3}{2}, 1; z\right) = \frac{1}{96}e^z(-2z^4 - 47z^3 + 4128z^2 + 864z + 96) - \frac{3003}{64}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a8kp.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{3}{2}, 1; -z\right) = \frac{3003}{64}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{96}e^{-z}(-2z^4 + 47z^3 + 4128z^2 - 864z + 96)$$

07.25.03.a8kq.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{3}{2}, 2; z\right) = \frac{1}{48}e^z(-z^3 + 624z^2 + 192z + 48) - \frac{429}{32}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a8kr.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{3}{2}, 2; -z\right) = \frac{429}{32}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{48}e^{-z}(z^3 + 624z^2 - 192z + 48)$$

07.25.03.a8ks.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{3}{2}, 3; z\right) = \frac{1}{12}e^z(71z^2 + 28z + 12) - \frac{143}{24}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a8kt.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{3}{2}, 3; -z\right) = \frac{143}{24}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{12}e^{-z}(71z^2 - 28z + 12)$$

07.25.03.a8ku.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{3}{2}, 4; z\right) = \frac{1}{4}e^z(13z^2 + 6z + 4) - \frac{13}{4}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a8kv.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{3}{2}, 4; -z\right) = \frac{13}{4}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{4}e^{-z}(13z^2 - 6z + 4)$$

07.25.03.a8kw.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{3}{2}, 5; z\right) = e^z (2z^2 + z + 1) - 2\sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8kx.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{3}{2}, 5; -z\right) = 2\sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + e^{-z} (2z^2 - z + 1)$$

07.25.03.a8ky.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{3}{2}, 6; z\right) = \frac{1}{3} e^z (4z^2 + 2z + 3) - \frac{4}{3} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8kz.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{3}{2}, 6; -z\right) = \frac{4}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} e^{-z} (4z^2 - 2z + 3)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = -\frac{1}{2}$

07.25.03.a8l0.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{1}{2}, 1; z\right) = \frac{1}{128} e^z (4z^3 - 8921z^2 + 3712z + 128) + \frac{3003}{256} \sqrt{\pi} (6z^{5/2} - 5z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8l1.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{1}{2}, 1; -z\right) = \frac{1}{128} e^{-z} (-4z^3 - 8921z^2 - 3712z + 128) - \frac{3003}{256} \sqrt{\pi} (6z^{5/2} + 5z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8l2.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{1}{2}, 2; z\right) = \frac{1}{64} e^z (-1285z^2 + 896z + 64) + \frac{429}{128} \sqrt{\pi} (6z^{5/2} - 7z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8l3.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{1}{2}, 2; -z\right) = \frac{1}{64} e^{-z} (-1285z^2 - 896z + 64) - \frac{429}{128} \sqrt{\pi} (6z^{5/2} + 7z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8l4.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{1}{2}, 3; z\right) = \frac{1}{16} e^z (-143z^2 + 144z + 16) + \frac{143}{32} \sqrt{\pi} (2z^{5/2} - 3z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8l5.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{1}{2}, 3; -z\right) = \frac{1}{16} e^{-z} (-143z^2 - 144z + 16) - \frac{143}{32} \sqrt{\pi} (2z^{5/2} + 3z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8l6.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{1}{2}, 4; z\right) = \frac{1}{8} e^z (-39z^2 + 52z + 8) + \frac{13}{16} \sqrt{\pi} (6z^{5/2} - 11z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8l7.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{1}{2}, 4; -z\right) = \frac{1}{8} e^{-z} (-39z^2 - 52z + 8) - \frac{13}{16} \sqrt{\pi} (6z^{5/2} + 11z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8l8.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{1}{2}, 5; z\right) = e^z (-3z^2 + 5z + 1) + \frac{1}{2} \sqrt{\pi} (6z^{5/2} - 13z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8l9.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{1}{2}, 5; -z\right) = e^{-z}(-3z^2 - 5z + 1) + \frac{1}{2}\sqrt{\pi}(-6z^{5/2} - 13z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a8la.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{1}{2}, 6; z\right) = e^z(-2z^2 + 4z + 1) + \sqrt{\pi}(2z^{5/2} - 5z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a8lb.01

$${}_2F_2\left(-\frac{5}{2}, 6; -\frac{1}{2}, 6; -z\right) = e^{-z}(-2z^2 - 4z + 1) + \sqrt{\pi}(-2z^{5/2} - 5z^{3/2})\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = \frac{1}{2}$

07.25.03.a8lc.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{1}{2}, 1; z\right) = \frac{e^z(18002z^2 - 21349z + 1024)}{1024} - \frac{231\sqrt{\pi}(156z^{5/2} - 260z^{3/2} + 45\sqrt{z})\operatorname{erfi}(\sqrt{z})}{2048}$$

07.25.03.a8ld.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{1}{2}, 1; -z\right) = \frac{e^{-z}(18002z^2 + 21349z + 1024)}{1024} + \frac{231\sqrt{\pi}(156z^{5/2} + 260z^{3/2} + 45\sqrt{z})\operatorname{erfi}(\sqrt{z})}{2048}$$

07.25.03.a8le.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{1}{2}, 2; z\right) = \frac{1}{512}e^z(2574z^2 - 4727z + 512) - \frac{33\sqrt{\pi}(156z^{5/2} - 364z^{3/2} + 105\sqrt{z})\operatorname{erfi}(\sqrt{z})}{1024}$$

07.25.03.a8lf.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{1}{2}, 2; -z\right) = \frac{1}{512}e^{-z}(2574z^2 + 4727z + 512) + \frac{33\sqrt{\pi}(156z^{5/2} + 364z^{3/2} + 105\sqrt{z})\operatorname{erfi}(\sqrt{z})}{1024}$$

07.25.03.a8lg.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{1}{2}, 3; z\right) = \frac{1}{128}e^z(286z^2 - 715z + 128) - \frac{11}{256}\sqrt{\pi}(52z^{5/2} - 156z^{3/2} + 63\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a8lh.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{1}{2}, 3; -z\right) = \frac{1}{128}e^{-z}(286z^2 + 715z + 128) + \frac{11}{256}\sqrt{\pi}(52z^{5/2} + 156z^{3/2} + 63\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a8li.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{1}{2}, 4; z\right) = \frac{1}{64}e^z(78z^2 - 247z + 64) + \frac{1}{128}\sqrt{\pi}(-156z^{5/2} + 572z^{3/2} - 297\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a8lj.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{1}{2}, 4; -z\right) = \frac{1}{64}e^{-z}(78z^2 + 247z + 64) + \frac{1}{128}\sqrt{\pi}(156z^{5/2} + 572z^{3/2} + 297\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a8lk.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{1}{2}, 5; z\right) = \frac{1}{8}e^z(6z^2 - 23z + 8) + \frac{1}{16}\sqrt{\pi}(-12z^{5/2} + 52z^{3/2} - 33\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a8ll.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{1}{2}, 5; -z\right) = \frac{1}{8} e^{-z} (6z^2 + 23z + 8) + \frac{1}{16} \sqrt{\pi} (12z^{5/2} + 52z^{3/2} + 33\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8lm.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{1}{2}, 6; z\right) = \frac{1}{4} e^z (2z^2 - 9z + 4) + \frac{1}{8} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8ln.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{1}{2}, 6; -z\right) = \frac{1}{4} e^{-z} (2z^2 + 9z + 4) + \frac{1}{8} \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = 1$

07.25.03.a8lo.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, 1; z\right) = \frac{1}{320} e^{z/2} (-3003z^3 + 8506z^2 - 4960z + 320) I_0\left(\frac{z}{2}\right) + \frac{1}{320} e^{z/2} (3003z^3 - 5508z^2 + 856z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8lp.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, \frac{3}{2}; z\right) = \frac{e^z (12012z^2 - 24056z + 3781)}{4096} - \frac{21\sqrt{\pi} (1144z^3 - 2860z^2 + 990z - 15) \operatorname{erfi}(\sqrt{z})}{8192\sqrt{z}}$$

07.25.03.a8lq.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, \frac{3}{2}; -z\right) = \frac{e^{-z} (12012z^2 + 24056z + 3781)}{4096} + \frac{21\sqrt{\pi} (1144z^3 + 2860z^2 + 990z + 15) \operatorname{erf}(\sqrt{z})}{8192\sqrt{z}}$$

07.25.03.a8lr.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, 2; z\right) = \frac{1}{160} e^{z/2} (-429z^3 + 1573z^2 - 1280z + 160) I_0\left(\frac{z}{2}\right) + \frac{1}{160} e^{z/2} (429z^3 - 1144z^2 + 348z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8ls.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, \frac{5}{2}; z\right) = \frac{3e^z (24024z^3 - 68068z^2 + 19302z + 35)}{65536z} - \frac{21\sqrt{\pi} (6864z^4 - 22880z^3 + 11880z^2 - 360z + 5) \operatorname{erfi}(\sqrt{z})}{131072z^{3/2}}$$

07.25.03.a8lt.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, \frac{5}{2}; -z\right) = \frac{3e^{-z} (24024z^3 + 68068z^2 + 19302z - 35)}{65536z} + \frac{21\sqrt{\pi} (6864z^4 + 22880z^3 + 11880z^2 + 360z + 5) \operatorname{erf}(\sqrt{z})}{131072z^{3/2}}$$

07.25.03.a8lu.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, 3; z\right) = \frac{1}{240} e^{z/2} (-286z^3 + 1287z^2 - 1320z + 240) I_0\left(\frac{z}{2}\right) + \frac{11}{240} e^{z/2} z (26z^2 - 91z + 42) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8lv.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, \frac{7}{2}; z\right) = \frac{3 e^z (48\,048 z^4 - 176\,176 z^3 + 74\,536 z^2 + 380 z - 45)}{262\,144 z^2} - \frac{3 \sqrt{\pi} (96\,096 z^5 - 400\,400 z^4 + 277\,200 z^3 - 12\,600 z^2 + 350 z - 45) \operatorname{erfi}(\sqrt{z})}{524\,288 z^{5/2}}$$

07.25.03.a8lw.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, \frac{7}{2}; -z\right) = \frac{3 e^{-z} (48\,048 z^4 + 176\,176 z^3 + 74\,536 z^2 - 380 z - 45)}{262\,144 z^2} + \frac{3 \sqrt{\pi} (96\,096 z^5 + 400\,400 z^4 + 277\,200 z^3 + 12\,600 z^2 + 350 z + 45) \operatorname{erf}(\sqrt{z})}{524\,288 z^{5/2}}$$

07.25.03.a8lx.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, 4; z\right) = \frac{1}{60} e^{z/2} (-39 z^3 + 208 z^2 - 255 z + 60) I_0\left(\frac{z}{2}\right) + \frac{1}{120} e^{z/2} z (78 z^2 - 338 z + 211) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8ly.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, \frac{9}{2}; z\right) = \frac{21 e^z (32\,032 z^5 - 144\,144 z^4 + 82\,544 z^3 + 840 z^2 - 230 z + 75)}{2\,097\,152 z^3} - \frac{21 \sqrt{\pi} (64\,064 z^6 - 320\,320 z^5 + 277\,200 z^4 - 16\,800 z^3 + 700 z^2 - 180 z + 75) \operatorname{erfi}(\sqrt{z})}{4\,194\,304 z^{7/2}}$$

07.25.03.a8lz.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, \frac{9}{2}; -z\right) = \frac{21 e^{-z} (32\,032 z^5 + 144\,144 z^4 + 82\,544 z^3 - 840 z^2 - 230 z - 75)}{2\,097\,152 z^3} + \frac{21 \sqrt{\pi} (64\,064 z^6 + 320\,320 z^5 + 277\,200 z^4 + 16\,800 z^3 + 700 z^2 + 180 z + 75) \operatorname{erf}(\sqrt{z})}{4\,194\,304 z^{7/2}}$$

07.25.03.a8m0.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, 5; z\right) = \frac{1}{30} e^{z/2} (-12 z^3 + 74 z^2 - 105 z + 30) I_0\left(\frac{z}{2}\right) + \frac{1}{30} e^{z/2} z (12 z^2 - 62 z + 49) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8m1.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, \frac{11}{2}; z\right) = \frac{63 e^z (27\,456 z^6 - 146\,432 z^5 + 106\,832 z^4 + 1920 z^3 - 980 z^2 + 800 z - 525)}{8\,388\,608 z^4} - \frac{1}{16\,777\,216 z^{9/2}} 63 \sqrt{\pi} (54\,912 z^7 - 320\,320 z^6 + 332\,640 z^5 - 25\,200 z^4 + 1400 z^3 - 540 z^2 + 450 z - 525) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8m2.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (27\,456 z^6 + 146\,432 z^5 + 106\,832 z^4 - 1920 z^3 - 980 z^2 - 800 z - 525)}{8\,388\,608 z^4} + \frac{1}{16\,777\,216 z^{9/2}} 63 \sqrt{\pi} (54\,912 z^7 + 320\,320 z^6 + 332\,640 z^5 + 25\,200 z^4 + 1400 z^3 + 540 z^2 + 450 z + 525) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8m3.01

$${}_2F_2\left(-\frac{5}{2}, 6; 1, 6; z\right) = \frac{1}{15} e^{z/2} (-4z^3 + 28z^2 - 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} z (4z^2 - 24z + 23) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = \frac{3}{2}$

07.25.03.a8m4.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{3}{2}, 2; z\right) = \frac{e^{-z} (1716z^2 - 5148z + 1733)}{2048} - \frac{3\sqrt{\pi} (1144z^3 - 4004z^2 + 2310z - 105) \operatorname{erfi}(\sqrt{z})}{4096\sqrt{z}}$$

07.25.03.a8m5.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (1716z^2 + 5148z + 1733)}{2048} + \frac{3\sqrt{\pi} (1144z^3 + 4004z^2 + 2310z + 105) \operatorname{erf}(\sqrt{z})}{4096\sqrt{z}}$$

07.25.03.a8m6.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{3}{2}, 3; z\right) = \frac{11e^{-z} (52z^2 - 208z + 111)}{1536} + \frac{\sqrt{\pi} (-1144z^3 + 5148z^2 - 4158z + 315) \operatorname{erfi}(\sqrt{z})}{3072\sqrt{z}}$$

07.25.03.a8m7.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{3}{2}, 3; -z\right) = \frac{11e^{-z} (52z^2 + 208z + 111)}{1536} + \frac{\sqrt{\pi} (1144z^3 + 5148z^2 + 4158z + 315) \operatorname{erf}(\sqrt{z})}{3072\sqrt{z}}$$

07.25.03.a8m8.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{3}{2}, 4; z\right) = \frac{1}{256} e^{-z} (52z^2 - 260z + 193) + \frac{\sqrt{\pi} (-104z^3 + 572z^2 - 594z + 63) \operatorname{erfi}(\sqrt{z})}{512\sqrt{z}}$$

07.25.03.a8m9.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{3}{2}, 4; -z\right) = \frac{1}{256} e^{-z} (52z^2 + 260z + 193) + \frac{\sqrt{\pi} (104z^3 + 572z^2 + 594z + 63) \operatorname{erf}(\sqrt{z})}{512\sqrt{z}}$$

07.25.03.a8ma.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{3}{2}, 5; z\right) = \frac{1}{32} e^{-z} (4z^2 - 24z + 23) + \frac{\sqrt{\pi} (-8z^3 + 52z^2 - 66z + 9) \operatorname{erfi}(\sqrt{z})}{64\sqrt{z}}$$

07.25.03.a8mb.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{3}{2}, 5; -z\right) = \frac{1}{32} e^{-z} (4z^2 + 24z + 23) + \frac{\sqrt{\pi} (8z^3 + 52z^2 + 66z + 9) \operatorname{erf}(\sqrt{z})}{64\sqrt{z}}$$

07.25.03.a8mc.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{3}{2}, 6; z\right) = \frac{1}{48} e^{-z} (4z^2 - 28z + 33) + \frac{\sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.a8md.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{3}{2}, 6; -z\right) = \frac{1}{48} e^{-z} (4z^2 + 28z + 33) + \frac{\sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = 2$

07.25.03.a8me.01

$${}_2F_2\left(-\frac{5}{2}, 6; 2, 2; z\right) = \frac{e^{z/2}(-858z^3 + 4147z^2 - 4752z + 1120)I_0\left(\frac{z}{2}\right) + e^{z/2}(858z^3 - 3289z^2 + 1892z - 32)I_1\left(\frac{z}{2}\right)}{1120}$$

07.25.03.a8mf.01

$${}_2F_2\left(-\frac{5}{2}, 6; 2, \frac{5}{2}; z\right) = \frac{3e^z(3432z^3 - 14300z^2 + 8426z - 35)}{32768z} - \frac{3\sqrt{\pi}(6864z^4 - 32032z^3 + 27720z^2 - 2520z - 35)\operatorname{erfi}(\sqrt{z})}{65536z^{3/2}}$$

07.25.03.a8mg.01

$${}_2F_2\left(-\frac{5}{2}, 6; 2, \frac{5}{2}; -z\right) = \frac{3e^{-z}(3432z^3 + 14300z^2 + 8426z + 35)}{32768z} + \frac{3\sqrt{\pi}(6864z^4 + 32032z^3 + 27720z^2 + 2520z - 35)\operatorname{erf}(\sqrt{z})}{65536z^{3/2}}$$

07.25.03.a8mh.01

$${}_2F_2\left(-\frac{5}{2}, 6; 2, 3; z\right) = \frac{1}{420}e^{z/2}(-143z^3 + 858z^2 - 1254z + 420)I_0\left(\frac{z}{2}\right) + \frac{1}{840}e^{z/2}(286z^3 - 1430z^2 + 1221z - 48)I_1\left(\frac{z}{2}\right)$$

07.25.03.a8mi.01

$${}_2F_2\left(-\frac{5}{2}, 6; 2, \frac{7}{2}; z\right) = \frac{3e^z(6864z^4 - 36608z^3 + 31328z^2 - 360z + 15)}{131072z^2} - \frac{3\sqrt{\pi}(13728z^5 - 80080z^4 + 92400z^3 - 12600z^2 - 350z + 15)\operatorname{erfi}(\sqrt{z})}{262144z^{5/2}}$$

07.25.03.a8mj.01

$${}_2F_2\left(-\frac{5}{2}, 6; 2, \frac{7}{2}; -z\right) = \frac{3e^{-z}(6864z^4 + 36608z^3 + 31328z^2 + 360z + 15)}{131072z^2} + \frac{3\sqrt{\pi}(13728z^5 + 80080z^4 + 92400z^3 + 12600z^2 - 350z - 15)\operatorname{erf}(\sqrt{z})}{262144z^{5/2}}$$

07.25.03.a8mk.01

$${}_2F_2\left(-\frac{5}{2}, 6; 2, 4; z\right) = \frac{1}{840}e^{z/2}(-156z^3 + 1118z^2 - 1977z + 840)I_0\left(\frac{z}{2}\right) + \frac{1}{840}e^{z/2}(156z^3 - 962z^2 + 1093z - 72)I_1\left(\frac{z}{2}\right)$$

07.25.03.a8ml.01

$${}_2F_2\left(-\frac{5}{2}, 6; 2, \frac{9}{2}; z\right) = \frac{21e^z(4576z^5 - 29744z^4 + 33616z^3 - 744z^2 + 70z - 15)}{1048576z^3} - \frac{21\sqrt{\pi}(9152z^6 - 64064z^5 + 92400z^4 - 16800z^3 - 700z^2 + 60z - 15)\operatorname{erfi}(\sqrt{z})}{2097152z^{7/2}}$$

07.25.03.a8mm.01

$${}_2F_2\left(-\frac{5}{2}, 6; 2, \frac{9}{2}; -z\right) = \frac{21 e^{-z} (4576 z^5 + 29744 z^4 + 33616 z^3 + 744 z^2 + 70 z + 15)}{1048576 z^3} + \frac{21 \sqrt{\pi} (9152 z^6 + 64064 z^5 + 92400 z^4 + 16800 z^3 - 700 z^2 - 60 z - 15) \operatorname{erf}(\sqrt{z})}{2097152 z^{7/2}}$$

07.25.03.a8mn.01

$${}_2F_2\left(-\frac{5}{2}, 6; 2, 5; z\right) = \frac{1}{105} e^{z/2} (-12 z^3 + 100 z^2 - 207 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (12 z^3 - 88 z^2 + 125 z - 12) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8mo.01

$${}_2F_2\left(-\frac{5}{2}, 6; 2, \frac{11}{2}; z\right) = \frac{9 e^z (27456 z^6 - 210496 z^5 + 296560 z^4 - 10848 z^3 + 1820 z^2 - 980 z + 525)}{4194304 z^4} - \frac{1}{8388608 z^{9/2}} 9 \sqrt{\pi} (54912 z^7 - 448448 z^6 + 776160 z^5 - 176400 z^4 - 9800 z^3 + 1260 z^2 - 630 z + 525) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8mp.01

$${}_2F_2\left(-\frac{5}{2}, 6; 2, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (27456 z^6 + 210496 z^5 + 296560 z^4 + 10848 z^3 + 1820 z^2 + 980 z + 525)}{4194304 z^4} + \frac{1}{8388608 z^{9/2}} 9 \sqrt{\pi} (54912 z^7 + 448448 z^6 + 776160 z^5 + 176400 z^4 - 9800 z^3 - 1260 z^2 - 630 z - 525) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8mq.01

$${}_2F_2\left(-\frac{5}{2}, 6; 2, 6; z\right) = \frac{1}{105} e^{z/2} (-8 z^3 + 76 z^2 - 180 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8 z^3 - 68 z^2 + 116 z - 15) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = \frac{5}{2}$

07.25.03.a8mr.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{5}{2}, 3; z\right) = \frac{e^z (1144 z^3 - 6292 z^2 + 5742 z - 105)}{8192 z} + \frac{\sqrt{\pi} (-2288 z^4 + 13728 z^3 - 16632 z^2 + 2520 z + 105) \operatorname{erfi}(\sqrt{z})}{16384 z^{3/2}}$$

07.25.03.a8ms.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (1144 z^3 + 6292 z^2 + 5742 z + 105)}{8192 z} + \frac{\sqrt{\pi} (2288 z^4 + 13728 z^3 + 16632 z^2 + 2520 z - 105) \operatorname{erf}(\sqrt{z})}{16384 z^{3/2}}$$

07.25.03.a8mt.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{5}{2}, 4; z\right) = \frac{e^z (312 z^3 - 2132 z^2 + 2654 z - 105)}{4096 z} + \frac{\sqrt{\pi} (-624 z^4 + 4576 z^3 - 7128 z^2 + 1512 z + 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{3/2}}$$

07.25.03.a8mu.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{5}{2}, 4; -z\right) = \frac{e^{-z} (312 z^3 + 2132 z^2 + 2654 z + 105)}{4096 z} + \frac{\sqrt{\pi} (624 z^4 + 4576 z^3 + 7128 z^2 + 1512 z - 105) \operatorname{erf}(\sqrt{z})}{8192 z^{3/2}}$$

07.25.03.a8mv.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{5}{2}, 5; z\right) = \frac{e^z (24z^3 - 196z^2 + 310z - 21)}{512z} + \frac{\sqrt{\pi} (-48z^4 + 416z^3 - 792z^2 + 216z + 21) \operatorname{erfi}(\sqrt{z})}{1024z^{3/2}}$$

07.25.03.a8mw.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{5}{2}, 5; -z\right) = \frac{e^{-z} (24z^3 + 196z^2 + 310z + 21)}{512z} + \frac{\sqrt{\pi} (48z^4 + 416z^3 + 792z^2 + 216z - 21) \operatorname{erf}(\sqrt{z})}{1024z^{3/2}}$$

07.25.03.a8mx.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{5}{2}, 6; z\right) = \frac{e^z (8z^3 - 76z^2 + 146z - 15)}{256z} + \frac{\sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.a8my.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{5}{2}, 6; -z\right) = \frac{e^{-z} (8z^3 + 76z^2 + 146z + 15)}{256z} + \frac{\sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = 3$

07.25.03.a8mz.01

$${}_2F_2\left(-\frac{5}{2}, 6; 3, 3; z\right) = \frac{e^{z/2} (-572z^3 + 4290z^2 - 8085z + 3786) I_0\left(\frac{z}{2}\right)}{3780} + \frac{e^{z/2} (572z^4 - 3718z^3 + 4653z^2 - 420z - 24) I_1\left(\frac{z}{2}\right)}{3780z}$$

07.25.03.a8n0.01

$${}_2F_2\left(-\frac{5}{2}, 6; 3, \frac{7}{2}; z\right) = \frac{e^z (2288z^4 - 16016z^3 + 20856z^2 - 1020z - 45)}{32768z^2} + \frac{\sqrt{\pi} (-4576z^5 + 34320z^4 - 55440z^3 + 12600z^2 + 1050z + 45) \operatorname{erfi}(\sqrt{z})}{65536z^{5/2}}$$

07.25.03.a8n1.01

$${}_2F_2\left(-\frac{5}{2}, 6; 3, \frac{7}{2}; -z\right) = \frac{e^{-z} (2288z^4 + 16016z^3 + 20856z^2 + 1020z - 45)}{32768z^2} + \frac{\sqrt{\pi} (4576z^5 + 34320z^4 + 55440z^3 + 12600z^2 - 1050z + 45) \operatorname{erf}(\sqrt{z})}{65536z^{5/2}}$$

07.25.03.a8n2.01

$${}_2F_2\left(-\frac{5}{2}, 6; 3, 4; z\right) = \frac{1}{630} e^{z/2} (-52z^3 + 468z^2 - 1077z + 633) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (52z^4 - 416z^3 + 687z^2 - 102z - 12) I_1\left(\frac{z}{2}\right)}{630z}$$

07.25.03.a8n3.01

$${}_2F_2\left(-\frac{5}{2}, 6; 3, \frac{9}{2}; z\right) = \frac{7e^z (4576z^5 - 38896z^4 + 66000z^3 - 5928z^2 - 570z + 45)}{786432z^3} - \frac{7\sqrt{\pi} (9152z^6 - 82368z^5 + 166320z^4 - 50400z^3 - 6300z^2 - 540z + 45) \operatorname{erfi}(\sqrt{z})}{1572864z^{7/2}}$$

07.25.03.a8n4.01

$${}_2F_2\left(-\frac{5}{2}, 6; 3, \frac{9}{2}; -z\right) = \frac{7e^{-z}(4576z^5 + 38896z^4 + 66000z^3 + 5928z^2 - 570z - 45)}{786432z^3} + \frac{7\sqrt{\pi}(9152z^6 + 82368z^5 + 166320z^4 + 50400z^3 - 6300z^2 + 540z + 45)\operatorname{erf}(\sqrt{z})}{1572864z^{7/2}}$$

07.25.03.a8n5.01

$${}_2F_2\left(-\frac{5}{2}, 6; 3, 5; z\right) = \frac{2e^{z/2}(8z^4 - 76z^3 + 156z^2 - 33z - 6)I_1\left(\frac{z}{2}\right)}{315z} - \frac{2}{315}e^{z/2}(8z^3 - 84z^2 + 228z - 159)I_0\left(\frac{z}{2}\right)$$

07.25.03.a8n6.01

$${}_2F_2\left(-\frac{5}{2}, 6; 3, \frac{11}{2}; z\right) = \frac{3e^z(9152z^6 - 91520z^5 + 191664z^4 - 26688z^3 - 4284z^2 + 840z - 315)}{1048576z^4} - \frac{1}{2097152z^{9/2}}3\sqrt{\pi}(18304z^7 - 192192z^6 + 465696z^5 - 176400z^4 - 29400z^3 - 3780z^2 + 630z - 315)\operatorname{erfi}(\sqrt{z})$$

07.25.03.a8n7.01

$${}_2F_2\left(-\frac{5}{2}, 6; 3, \frac{11}{2}; -z\right) = \frac{3e^{-z}(9152z^6 + 91520z^5 + 191664z^4 + 26688z^3 - 4284z^2 - 840z - 315)}{1048576z^4} + \frac{1}{2097152z^{9/2}}3\sqrt{\pi}(18304z^7 + 192192z^6 + 465696z^5 + 176400z^4 - 29400z^3 + 3780z^2 + 630z + 315)\operatorname{erf}(\sqrt{z})$$

07.25.03.a8n8.01

$${}_2F_2\left(-\frac{5}{2}, 6; 3, 6; z\right) = \frac{4e^{z/2}(8z^4 - 88z^3 + 216z^2 - 60z - 15)I_1\left(\frac{z}{2}\right)}{945z} - \frac{16}{945}e^{z/2}(2z^3 - 24z^2 + 75z - 60)I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = \frac{7}{2}$

07.25.03.a8n9.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{7}{2}, 4; z\right) = \frac{e^z(624z^4 - 5408z^3 + 9488z^2 - 960z - 135)}{16384z^2} + \frac{\sqrt{\pi}(-1248z^5 + 11440z^4 - 23760z^3 + 7560z^2 + 1050z + 135)\operatorname{erfi}(\sqrt{z})}{32768z^{5/2}}$$

07.25.03.a8na.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{7}{2}, 4; -z\right) = \frac{e^{-z}(624z^4 + 5408z^3 + 9488z^2 + 960z - 135)}{16384z^2} + \frac{\sqrt{\pi}(1248z^5 + 11440z^4 + 23760z^3 + 7560z^2 - 1050z + 135)\operatorname{erf}(\sqrt{z})}{32768z^{5/2}}$$

07.25.03.a8nb.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{7}{2}, 5; z\right) = \frac{e^z(48z^4 - 496z^3 + 1096z^2 - 180z - 45)}{2048z^2} + \frac{\sqrt{\pi}(-96z^5 + 1040z^4 - 2640z^3 + 1080z^2 + 210z + 45)\operatorname{erfi}(\sqrt{z})}{4096z^{5/2}}$$

07.25.03.a8nc.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{7}{2}, 5; -z\right) = \frac{e^{-z} (48 z^4 + 496 z^3 + 1096 z^2 + 180 z - 45)}{2048 z^2} + \frac{\sqrt{\pi} (96 z^5 + 1040 z^4 + 2640 z^3 + 1080 z^2 - 210 z + 45) \operatorname{erf}(\sqrt{z})}{4096 z^{5/2}}$$

07.25.03.a8nd.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{7}{2}, 6; z\right) = \frac{e^z (16 z^4 - 192 z^3 + 512 z^2 - 120 z - 45)}{1024 z^2} + \frac{\sqrt{\pi} (-32 z^5 + 400 z^4 - 1200 z^3 + 600 z^2 + 150 z + 45) \operatorname{erfi}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.a8ne.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{7}{2}, 6; -z\right) = \frac{e^{-z} (16 z^4 + 192 z^3 + 512 z^2 + 120 z - 45)}{1024 z^2} + \frac{\sqrt{\pi} (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45) \operatorname{erf}(\sqrt{z})}{2048 z^{5/2}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = 4$

07.25.03.a8nf.01

$${}_2F_2\left(-\frac{5}{2}, 6; 4, 4; z\right) = \frac{e^{z/2} (-312 z^4 + 3380 z^3 - 9564 z^2 + 7023 z + 12) I_0\left(\frac{z}{2}\right)}{6930 z} + \frac{e^{z/2} (312 z^5 - 3068 z^4 + 6652 z^3 - 1593 z^2 - 372 z - 48) I_1\left(\frac{z}{2}\right)}{6930 z^2}$$

07.25.03.a8ng.01

$${}_2F_2\left(-\frac{5}{2}, 6; 4, \frac{9}{2}; z\right) = \frac{7 e^z (416 z^5 - 4368 z^4 + 9904 z^3 - 1752 z^2 - 510 z - 45)}{131072 z^3} - \frac{7 \sqrt{\pi} (832 z^6 - 9152 z^5 + 23760 z^4 - 10080 z^3 - 2100 z^2 - 540 z - 45) \operatorname{erfi}(\sqrt{z})}{262144 z^{7/2}}$$

07.25.03.a8nh.01

$${}_2F_2\left(-\frac{5}{2}, 6; 4, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (416 z^5 + 4368 z^4 + 9904 z^3 + 1752 z^2 - 510 z + 45)}{131072 z^3} + \frac{7 \sqrt{\pi} (832 z^6 + 9152 z^5 + 23760 z^4 + 10080 z^3 - 2100 z^2 + 540 z - 45) \operatorname{erf}(\sqrt{z})}{262144 z^{7/2}}$$

07.25.03.a8ni.01

$${}_2F_2\left(-\frac{5}{2}, 6; 4, 5; z\right) = \frac{4 e^{z/2} (24 z^5 - 280 z^4 + 752 z^3 - 252 z^2 - 87 z - 24) I_1\left(\frac{z}{2}\right)}{3465 z^2} - \frac{8 e^{z/2} (12 z^4 - 152 z^3 + 510 z^2 - 444 z - 3) I_0\left(\frac{z}{2}\right)}{3465 z}$$

07.25.03.a8nj.01

$${}_2F_2\left(-\frac{5}{2}, 6; 4, \frac{11}{2}; z\right) = \frac{3 e^z (2496 z^6 - 30784 z^5 + 85648 z^4 - 22368 z^3 - 9996 z^2 - 2100 z + 315)}{524288 z^4} - \frac{1}{1048576 z^{9/2}} 3 \sqrt{\pi} (4992 z^7 - 64064 z^6 + 199584 z^5 - 105840 z^4 - 29400 z^3 - 11340 z^2 - 1890 z + 315) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8nk.01

$${}_2F_2\left(-\frac{5}{2}, 6; 4, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (2496 z^6 + 30784 z^5 + 85648 z^4 + 22368 z^3 - 9996 z^2 + 2100 z + 315)}{524288 z^4} + \frac{1}{1048576 z^{9/2}} 3 \sqrt{\pi} (4992 z^7 + 64064 z^6 + 199584 z^5 + 105840 z^4 - 29400 z^3 + 11340 z^2 - 1890 z - 315) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8nl.01

$${}_2F_2\left(-\frac{5}{2}, 6; 4, 6; z\right) = \frac{4 e^{z/2} (16 z^5 - 216 z^4 + 692 z^3 - 300 z^2 - 135 z - 60) I_1\left(\frac{z}{2}\right)}{3465 z^2} - \frac{4 e^{z/2} (16 z^4 - 232 z^3 + 900 z^2 - 900 z - 15) I_0\left(\frac{z}{2}\right)}{3465 z}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = \frac{9}{2}$

07.25.03.a8nm.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{9}{2}, 5; z\right) = \frac{7 e^z (32 z^5 - 400 z^4 + 1136 z^3 - 312 z^2 - 150 z - 45)}{16384 z^3} - \frac{7 \sqrt{\pi} (64 z^6 - 832 z^5 + 2640 z^4 - 1440 z^3 - 420 z^2 - 180 z - 45) \operatorname{erfi}(\sqrt{z})}{32768 z^{7/2}}$$

07.25.03.a8nn.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{9}{2}, 5; -z\right) = \frac{7 e^{-z} (32 z^5 + 400 z^4 + 1136 z^3 + 312 z^2 - 150 z + 45)}{16384 z^3} + \frac{7 \sqrt{\pi} (64 z^6 + 832 z^5 + 2640 z^4 + 1440 z^3 - 420 z^2 + 180 z - 45) \operatorname{erf}(\sqrt{z})}{32768 z^{7/2}}$$

07.25.03.a8no.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{9}{2}, 6; z\right) = \frac{7 e^z (32 z^5 - 464 z^4 + 1584 z^3 - 600 z^2 - 390 z - 225)}{24576 z^3} - \frac{7 \sqrt{\pi} (64 z^6 - 960 z^5 + 3600 z^4 - 2400 z^3 - 900 z^2 - 540 z - 225) \operatorname{erfi}(\sqrt{z})}{49152 z^{7/2}}$$

07.25.03.a8np.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{9}{2}, 6; -z\right) = \frac{7 e^{-z} (32 z^5 + 464 z^4 + 1584 z^3 + 600 z^2 - 390 z + 225)}{24576 z^3} + \frac{7 \sqrt{\pi} (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225) \operatorname{erf}(\sqrt{z})}{49152 z^{7/2}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = 5$

07.25.03.a8nq.01

$${}_2F_2\left(-\frac{5}{2}, 6; 5, 5; z\right) = \frac{16 e^{z/2} (48 z^6 - 664 z^5 + 2204 z^4 - 1020 z^3 - 501 z^2 - 276 z - 72) I_1\left(\frac{z}{2}\right)}{45\,045 z^3} - \frac{16 e^{z/2} (48 z^5 - 712 z^4 + 2844 z^3 - 2940 z^2 - 69 z - 18) I_0\left(\frac{z}{2}\right)}{45\,045 z^2}$$

07.25.03.a8nr.01

$${}_2F_2\left(-\frac{5}{2}, 6; 5, \frac{11}{2}; z\right) = \frac{3 e^z (192 z^6 - 2816 z^5 + 9776 z^4 - 3840 z^3 - 2604 z^2 - 1680 z - 315)}{65\,536 z^4} - \frac{3 \sqrt{\pi} (384 z^7 - 5824 z^6 + 22\,176 z^5 - 15\,120 z^4 - 5880 z^3 - 3780 z^2 - 1890 z - 315) \operatorname{erfi}(\sqrt{z})}{131\,072 z^{9/2}}$$

07.25.03.a8ns.01

$${}_2F_2\left(-\frac{5}{2}, 6; 5, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (192 z^6 + 2816 z^5 + 9776 z^4 + 3840 z^3 - 2604 z^2 + 1680 z - 315)}{65\,536 z^4} + \frac{3 \sqrt{\pi} (384 z^7 + 5824 z^6 + 22\,176 z^5 + 15\,120 z^4 - 5880 z^3 + 3780 z^2 - 1890 z + 315) \operatorname{erf}(\sqrt{-z})}{131\,072 z^{9/2}}$$

07.25.03.a8nt.01

$${}_2F_2\left(-\frac{5}{2}, 6; 5, 6; z\right) = \frac{32 e^{z/2} (16 z^6 - 256 z^5 + 1012 z^4 - 600 z^3 - 375 z^2 - 300 z - 180) I_1\left(\frac{z}{2}\right)}{45\,045 z^3} - \frac{32 e^{z/2} (16 z^5 - 272 z^4 + 1260 z^3 - 1500 z^2 - 75 z - 45) I_0\left(\frac{z}{2}\right)}{45\,045 z^2}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = \frac{11}{2}$

07.25.03.a8nu.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{11}{2}, 6; z\right) = \frac{3 e^z (64 z^6 - 1088 z^5 + 4528 z^4 - 2400 z^3 - 2100 z^2 - 2100 z - 1575)}{32\,768 z^4} - \frac{3 \sqrt{\pi} (128 z^7 - 2240 z^6 + 10\,080 z^5 - 8400 z^4 - 4200 z^3 - 3780 z^2 - 3150 z - 1575) \operatorname{erfi}(\sqrt{z})}{65\,536 z^{9/2}}$$

07.25.03.a8nv.01

$${}_2F_2\left(-\frac{5}{2}, 6; \frac{11}{2}, 6; -z\right) = \frac{3 e^{-z} (64 z^6 + 1088 z^5 + 4528 z^4 + 2400 z^3 - 2100 z^2 + 2100 z - 1575)}{32\,768 z^4} + \frac{3 \sqrt{\pi} (128 z^7 + 2240 z^6 + 10\,080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575) \operatorname{erf}(\sqrt{-z})}{65\,536 z^{9/2}}$$

For fixed z and $a_1 = -\frac{5}{2}$, $a_2 = 6$, $b_1 = 6$

07.25.03.a8nw.01

$${}_2F_2\left(-\frac{5}{2}, 6; 6, 6; z\right) = \frac{32 e^{z/2} (32 z^7 - 592 z^6 + 2784 z^5 - 2100 z^4 - 1650 z^3 - 1845 z^2 - 1980 z - 1440) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (32 z^6 - 624 z^5 + 3360 z^4 - 4620 z^3 - 450 z^2 - 495 z - 360) I_0\left(\frac{z}{2}\right)}{135 135 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 \geq -\frac{3}{2}$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = -\frac{3}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.a8nx.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{12006225} e^z (256 z^8 - 1024 z^7 + 9472 z^6 - 63744 z^5 + 354144 z^4 - 1560000 z^3 + 5115600 z^2 - 11113200 z + 12006225)$$

07.25.03.a8ny.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{e^z (128 z^7 - 704 z^6 + 5088 z^5 - 29328 z^4 + 133080 z^3 - 447300 z^2 + 992250 z - 1091475)}{1091475}$$

07.25.03.a8nz.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{e^z (64 z^6 - 448 z^5 + 2768 z^4 - 13280 z^3 + 46620 z^2 - 107100 z + 121275)}{121275}$$

07.25.03.a8o0.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (32 z^5 - 272 z^4 + 1520 z^3 - 5880 z^2 + 14490 z - 17325)}{17325}$$

07.25.03.a8o1.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{e^z (16 z^4 - 160 z^3 + 840 z^2 - 2520 z + 3465)}{3465}$$

07.25.03.a8o2.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (-8 z^3 + 92 z^2 - 210 z + 1155)}{1155} - \frac{256 \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})}{1155}$$

07.25.03.a8o3.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (8 z^3 + 92 z^2 + 210 z + 1155)}{1155} - \frac{256 \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})}{1155}$$

07.25.03.a8o4.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (4 z^2 - 180 z + 1155)}{1155} + \frac{64 \sqrt{\pi} (2 z^{3/2} - 15 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1155}$$

07.25.03.a8o5.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z}(4z^2 + 180z + 1155)}{1155} + \frac{64\sqrt{\pi}(2z^{3/2} + 15\sqrt{z})\operatorname{erf}(\sqrt{z})}{1155}$$

07.25.03.a8o6.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2}(262z^2 - 3150z + 3465)I_0\left(\frac{z}{2}\right)}{3465} - \frac{2e^{z/2}(125z^2 - 1366z)I_1\left(\frac{z}{2}\right)}{3465}$$

07.25.03.a8o7.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{77}e^{-z}(29 - 2z) + \frac{8\sqrt{\pi}(4z^2 - 60z + 45)\operatorname{erfi}(\sqrt{z})}{1155\sqrt{z}}$$

07.25.03.a8o8.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{77}e^{-z}(2z + 29) + \frac{8\sqrt{\pi}(4z^2 + 60z + 45)\operatorname{erf}(\sqrt{z})}{1155\sqrt{z}}$$

07.25.03.a8o9.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2}(512z^2 - 9954z + 17325)I_0\left(\frac{z}{2}\right)}{17325} + \frac{e^{z/2}(-512z^2 + 9502z - 9009)I_1\left(\frac{z}{2}\right)}{17325}$$

07.25.03.a8oa.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z(-16z^2 + 355z - 420)}{1155z} + \frac{2\sqrt{\pi}(8z^3 - 180z^2 + 270z + 105)\operatorname{erfi}(\sqrt{z})}{1155z^{3/2}}$$

07.25.03.a8ob.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(16z^2 + 355z + 420)}{1155z} + \frac{2\sqrt{\pi}(8z^3 + 180z^2 + 270z - 105)\operatorname{erf}(\sqrt{z})}{1155z^{3/2}}$$

07.25.03.a8oc.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, 3; z\right) = \frac{4e^{z/2}(512z^2 - 13824z + 35145)I_0\left(\frac{z}{2}\right)}{121275} - \frac{4e^{z/2}(512z^3 - 13312z^2 + 21879z + 19305)I_1\left(\frac{z}{2}\right)}{121275z}$$

07.25.03.a8od.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z(-4z^3 + 118z^2 - 210z - 315)}{462z^2} + \frac{\sqrt{\pi}(8z^4 - 240z^3 + 540z^2 + 420z + 315)\operatorname{erfi}(\sqrt{z})}{924z^{5/2}}$$

07.25.03.a8oe.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(4z^3 + 118z^2 + 210z - 315)}{462z^2} + \frac{\sqrt{\pi}(8z^4 + 240z^3 + 540z^2 - 420z + 315)\operatorname{erf}(\sqrt{z})}{924z^{5/2}}$$

07.25.03.a8of.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2}(1024z^3 - 35328z^2 + 116160z + 36465)I_0\left(\frac{z}{2}\right)}{363825z} - \frac{4e^{z/2}(1024z^4 - 34304z^3 + 82368z^2 + 100815z + 145860)I_1\left(\frac{z}{2}\right)}{363825z^2}$$

07.25.03.a8og.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z(-8z^4 + 296z^3 - 756z^2 - 1260z - 2835)}{1320z^3} + \frac{\sqrt{\pi}(16z^5 - 600z^4 + 1800z^3 + 2100z^2 + 3150z + 2835)\operatorname{erfi}(\sqrt{z})}{2640z^{7/2}}$$

07.25.03.a8oh.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(8z^4 + 296z^3 + 756z^2 - 1260z + 2835)}{1320z^3} + \frac{\sqrt{\pi}(16z^5 + 600z^4 + 1800z^3 - 2100z^2 + 3150z - 2835)\operatorname{erf}(\sqrt{-z})}{2640z^{7/2}}$$

07.25.03.a8oi.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2}(1024z^4 - 43008z^3 + 173760z^2 + 106080z + 188955)I_0\left(\frac{z}{2}\right)}{4002075z^2} - \frac{128e^{z/2}(256z^5 - 10496z^4 + 33072z^3 + 54600z^2 + 106080z + 188955)I_1\left(\frac{z}{2}\right)}{4002075z^3}$$

07.25.03.a8oj.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z(-16z^5 + 712z^4 - 2352z^3 - 5040z^2 - 11970z - 33075)}{3520z^4} + \frac{\sqrt{\pi}(32z^6 - 1440z^5 + 5400z^4 + 8400z^3 + 18900z^2 + 34020z + 33075)\operatorname{erfi}(\sqrt{z})}{7040z^{9/2}}$$

07.25.03.a8ok.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z}(16z^5 + 712z^4 + 2352z^3 - 5040z^2 + 11970z - 33075)}{3520z^4} + \frac{\sqrt{\pi}(32z^6 + 1440z^5 + 5400z^4 - 8400z^3 + 18900z^2 - 34020z + 33075)\operatorname{erf}(\sqrt{-z})}{7040z^{9/2}}$$

07.25.03.a8ol.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{11}{2}, 6; z\right) = \frac{32e^{z/2}(2048z^5 - 101376z^4 + 485760z^3 + 456960z^2 + 1235475z + 2441880)I_0\left(\frac{z}{2}\right)}{10405395z^3} - \frac{1}{10405395z^4} 32e^{z/2}(2048z^6 - 99328z^5 + 387456z^4 + 796800z^3 + 2133075z^2 + 4941900z + 9767520)I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.a8om.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z(64z^6 - 384z^5 + 2352z^4 - 11136z^3 + 38700z^2 - 88200z + 99225)}{99225}$$

07.25.03.a8on.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{e^z(32z^5 - 208z^4 + 1072z^3 - 3960z^2 + 9450z - 11025)}{11025}$$

07.25.03.a8oo.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{e^z (16z^4 - 112z^3 + 480z^2 - 1260z + 1575)}{1575}$$

07.25.03.a8op.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{315} e^z (8z^3 - 60z^2 + 210z - 315)$$

07.25.03.a8oq.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} e^z (4z^2 + 105) - \frac{32}{105} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8or.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} e^{-z} (4z^2 + 105) - \frac{32}{105} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a8os.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{35} e^z (35 - 6z) + \frac{16}{105} \sqrt{\pi} (z^{3/2} - 6\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8ot.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{35} e^{-z} (6z + 35) + \frac{16}{105} \sqrt{\pi} (z^{3/2} + 6\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8ou.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (32z^2 - 315z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (277z - 32z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8ov.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (45 - 4z) + \frac{2\sqrt{\pi} (2z^2 - 24z + 15) \operatorname{erfi}(\sqrt{z})}{105\sqrt{z}}$$

07.25.03.a8ow.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} e^{-z} (4z + 45) + \frac{2\sqrt{\pi} (2z^2 + 24z + 15) \operatorname{erf}(\sqrt{z})}{105\sqrt{z}}$$

07.25.03.a8ox.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (64z^2 - 1008z + 1575) I_0\left(\frac{z}{2}\right) - e^{z/2} (-64z^2 + 944z - 693) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.a8oy.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (-2z^2 + 35z - 30)}{105z} + \frac{\sqrt{\pi} (2z^3 - 36z^2 + 45z + 15) \operatorname{erfi}(\sqrt{z})}{105z^{3/2}}$$

07.25.03.a8oz.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (2z^2 + 35z + 30)}{105z} + \frac{\sqrt{\pi} (2z^3 + 36z^2 + 45z - 15) \operatorname{erf}(\sqrt{z})}{105z^{3/2}}$$

07.25.03.a8p0.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, 3; z\right) = \frac{8e^{z/2} (32z^2 - 696z + 1539) I_0\left(\frac{z}{2}\right) - 4e^{z/2} (64z^3 - 1328z^2 + 1782z + 1287) I_1\left(\frac{z}{2}\right)}{11025z}$$

07.25.03.a8p1.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (-8z^3 + 188z^2 - 270z - 315)}{672z^2} + \frac{\sqrt{\pi} (16z^4 - 384z^3 + 720z^2 + 480z + 315) \operatorname{erfi}(\sqrt{z})}{1344z^{5/2}}$$

07.25.03.a8p2.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (8z^3 + 188z^2 + 270z - 315)}{672z^2} + \frac{\sqrt{\pi} (16z^4 + 384z^3 + 720z^2 - 480z + 315) \operatorname{erf}(\sqrt{z})}{1344z^{5/2}}$$

07.25.03.a8p3.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, 4; z\right) = \frac{4e^{z/2} (128z^3 - 3552z^2 + 10092z + 2145) I_0\left(\frac{z}{2}\right)}{33075z} - \frac{4e^{z/2} (128z^4 - 3424z^3 + 6732z^2 + 7293z + 8580) I_1\left(\frac{z}{2}\right)}{33075z^2}$$

07.25.03.a8p4.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (-8z^4 + 236z^3 - 486z^2 - 735z - 1260)}{960z^3} + \frac{\sqrt{\pi} (16z^5 - 480z^4 + 1200z^3 + 1200z^2 + 1575z + 1260) \operatorname{erfi}(\sqrt{z})}{1920z^{7/2}}$$

07.25.03.a8p5.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (8z^4 + 236z^3 + 486z^2 - 735z + 1260)}{960z^3} + \frac{\sqrt{\pi} (16z^5 + 480z^4 + 1200z^3 - 1200z^2 + 1575z - 1260) \operatorname{erf}(\sqrt{z})}{1920z^{7/2}}$$

07.25.03.a8p6.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, 5; z\right) = \frac{32e^{z/2} (128z^4 - 4320z^3 + 14988z^2 + 6825z + 9945) I_0\left(\frac{z}{2}\right)}{363825z^2} - \frac{32e^{z/2} (128z^5 - 4192z^4 + 10860z^3 + 15717z^2 + 27300z + 39780) I_1\left(\frac{z}{2}\right)}{363825z^3}$$

07.25.03.a8p7.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (-8z^5 + 284z^4 - 762z^3 - 1449z^2 - 3150z - 6615)}{1280z^4} + \frac{\sqrt{\pi} (16z^6 - 576z^5 + 1800z^4 + 2400z^3 + 4725z^2 + 7560z + 6615) \operatorname{erfi}(\sqrt{z})}{2560z^{9/2}}$$

07.25.03.a8p8.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (8z^5 + 284z^4 + 762z^3 - 1449z^2 + 3150z - 6615)}{1280z^4} + \frac{\sqrt{\pi} (16z^6 + 576z^5 + 1800z^4 - 2400z^3 + 4725z^2 - 7560z + 6615) \operatorname{erf}(\sqrt{z})}{2560z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.a8p9.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{9}{2}, 6; z\right) &= \frac{32 e^{z/2} (256 z^5 - 10176 z^4 + 41688 z^3 + 30210 z^2 + 71145 z + 116280) I_0\left(\frac{z}{2}\right)}{945945 z^3} - \\
 & \frac{32 e^{z/2} (256 z^6 - 9920 z^5 + 31896 z^4 + 57402 z^3 + 135375 z^2 + 284580 z + 465120) I_1\left(\frac{z}{2}\right)}{945945 z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{7}{2}$

$$\text{07.25.03.a8pa.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{e^z (16 z^4 - 96 z^3 + 392 z^2 - 1000 z + 1225)}{1225}$$

$$\text{07.25.03.a8pb.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{175} e^z (8 z^3 - 44 z^2 + 130 z - 175)$$

$$\text{07.25.03.a8pc.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{35} e^z (4 z^2 - 20 z + 35)$$

$$\text{07.25.03.a8pd.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{7} e^z (2 z + 7) - \frac{16}{35} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.a8pe.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{7} e^{-z} (7 - 2 z) - \frac{16}{35} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.a8pf.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{35} e^z (35 - 8 z) + \frac{4}{35} \sqrt{\pi} (2 z^{3/2} - 9 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.a8pg.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{35} e^{-z} (8 z + 35) + \frac{4}{35} \sqrt{\pi} (2 z^{3/2} + 9 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.a8ph.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (16 z^2 - 120 z + 105) I_0\left(\frac{z}{2}\right) - \frac{8}{105} e^{z/2} (2 z^2 - 13 z) I_1\left(\frac{z}{2}\right)$$

$$\text{07.25.03.a8pi.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{35} e^z (17 - 2 z) + \frac{\sqrt{\pi} (2 z^2 - 18 z + 9) \operatorname{erfi}(\sqrt{z})}{35 \sqrt{z}}$$

$$\text{07.25.03.a8pj.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{35} e^{-z} (2 z + 17) + \frac{\sqrt{\pi} (2 z^2 + 18 z + 9) \operatorname{erf}(\sqrt{z})}{35 \sqrt{z}}$$

$$\text{07.25.03.a8pk.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{525} e^{z/2} (32 z^2 - 384 z + 525) I_0\left(\frac{z}{2}\right) + \frac{1}{525} e^{z/2} (-32 z^2 + 352 z - 189) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8pl.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z(-2z^2 + 26z - 15)}{70z} + \frac{\sqrt{\pi}(4z^3 - 54z^2 + 54z + 15)\operatorname{erfi}(\sqrt{z})}{140z^{3/2}}$$

07.25.03.a8pm.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(2z^2 + 26z + 15)}{70z} + \frac{\sqrt{\pi}(4z^3 + 54z^2 + 54z - 15)\operatorname{erf}(\sqrt{z})}{140z^{3/2}}$$

07.25.03.a8pn.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, 3; z\right) = \frac{4e^{z/2}(32z^2 - 528z + 993)I_0\left(\frac{z}{2}\right)}{3675} - \frac{4e^{z/2}(32z^3 - 496z^2 + 513z + 297)I_1\left(\frac{z}{2}\right)}{3675z}$$

07.25.03.a8po.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z(-8z^3 + 140z^2 - 150z - 135)}{448z^2} + \frac{\sqrt{\pi}(16z^4 - 288z^3 + 432z^2 + 240z + 135)\operatorname{erfi}(\sqrt{z})}{896z^{5/2}}$$

07.25.03.a8pp.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(8z^3 + 140z^2 + 150z - 135)}{448z^2} + \frac{\sqrt{\pi}(16z^4 + 288z^3 + 432z^2 - 240z + 135)\operatorname{erf}(\sqrt{z})}{896z^{5/2}}$$

07.25.03.a8pq.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, 4; z\right) = \frac{4e^{z/2}(64z^3 - 1344z^2 + 3210z + 429)I_0\left(\frac{z}{2}\right)}{11025z} - \frac{4e^{z/2}(64z^4 - 1280z^3 + 1962z^2 + 1815z + 1716)I_1\left(\frac{z}{2}\right)}{11025z^2}$$

07.25.03.a8pr.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z(-16z^4 + 352z^3 - 552z^2 - 720z - 945)}{1280z^3} + \frac{\sqrt{\pi}(32z^5 - 720z^4 + 1440z^3 + 1200z^2 + 1350z + 945)\operatorname{erfi}(\sqrt{z})}{2560z^{7/2}}$$

07.25.03.a8ps.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(16z^4 + 352z^3 + 552z^2 - 720z + 945)}{1280z^3} + \frac{\sqrt{\pi}(32z^5 + 720z^4 + 1440z^3 - 1200z^2 + 1350z - 945)\operatorname{erf}(\sqrt{z})}{2560z^{7/2}}$$

07.25.03.a8pt.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, 5; z\right) = \frac{32e^{z/2}(64z^4 - 1632z^3 + 4722z^2 + 1482z + 1755)I_0\left(\frac{z}{2}\right)}{121275z^2} - \frac{64e^{z/2}(32z^5 - 784z^4 + 1593z^3 + 1974z^2 + 2964z + 3510)I_1\left(\frac{z}{2}\right)}{121275z^3}$$

07.25.03.a8pu.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3\sqrt{\pi} (16z^6 - 432z^5 + 1080z^4 + 1200z^3 + 2025z^2 + 2835z + 2205) \operatorname{erfi}(\sqrt{z})}{5120z^{9/2}} - \frac{3e^z (8z^5 - 212z^4 + 438z^3 + 723z^2 + 1365z + 2205)}{2560z^4}$$

07.25.03.a8pv.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z} (8z^5 + 212z^4 + 438z^3 - 723z^2 + 1365z - 2205)}{2560z^4} + \frac{3\sqrt{\pi} (16z^6 + 432z^5 + 1080z^4 - 1200z^3 + 2025z^2 - 2835z + 2205) \operatorname{erf}(\sqrt{z})}{5120z^{9/2}}$$

07.25.03.a8pw.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{7}{2}, 6; z\right) = \frac{32e^{z/2} (128z^5 - 3840z^4 + 13044z^3 + 6798z^2 + 13635z + 18360) I_0\left(\frac{z}{2}\right)}{315315z^3} - \frac{32e^{z/2} (128z^6 - 3712z^5 + 9396z^4 + 14466z^3 + 29487z^2 + 54540z + 73440) I_1\left(\frac{z}{2}\right)}{315315z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.a8px.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{25} e^z (4z^2 - 16z + 25)$$

07.25.03.a8py.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{5} e^z (2z - 5)$$

07.25.03.a8pz.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{5} e^z (4z + 5) - \frac{4}{5} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8q0.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{5} e^{-z} (5 - 4z) - \frac{4}{5} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a8q1.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{5} e^z (5 - 2z) + \frac{2}{5} \sqrt{\pi} (z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8q2.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{5} e^{-z} (2z + 5) + \frac{2}{5} \sqrt{\pi} (z^{3/2} + 3\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8q3.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (4z^2 - 21z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (17z - 4z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8q4.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{20} e^z (11 - 2z) + \frac{\sqrt{\pi} (4z^2 - 24z + 9) \operatorname{erfi}(\sqrt{z})}{40\sqrt{z}}$$

07.25.03.a8q5.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{20} e^{-z} (2z + 11) + \frac{\sqrt{\pi} (4z^2 + 24z + 9) \operatorname{erf}(\sqrt{z})}{40\sqrt{z}}$$

07.25.03.a8q6.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{75} e^{z/2} (8z^2 - 66z + 75) I_0\left(\frac{z}{2}\right) + \frac{1}{75} e^{z/2} (-8z^2 + 58z - 21) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8q7.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-2z^2 + 17z - 6)}{40z} + \frac{\sqrt{\pi} (4z^3 - 36z^2 + 27z + 6) \operatorname{erfi}(\sqrt{z})}{80z^{3/2}}$$

07.25.03.a8q8.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (2z^2 + 17z + 6)}{40z} + \frac{\sqrt{\pi} (4z^3 + 36z^2 + 27z - 6) \operatorname{erf}(\sqrt{z})}{80z^{3/2}}$$

07.25.03.a8q9.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, 3; z\right) = \frac{8}{525} e^{z/2} (4z^2 - 45z + 69) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8z^3 - 82z^2 + 60z + 27) I_1\left(\frac{z}{2}\right)}{525z}$$

07.25.03.a8qa.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-8z^3 + 92z^2 - 66z - 45)}{256z^2} + \frac{\sqrt{\pi} (16z^4 - 192z^3 + 216z^2 + 96z + 45) \operatorname{erfi}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.a8qb.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (8z^3 + 92z^2 + 66z - 45)}{256z^2} + \frac{\sqrt{\pi} (16z^4 + 192z^3 + 216z^2 - 96z + 45) \operatorname{erf}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.a8qc.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (16z^3 - 228z^2 + 438z + 33) I_0\left(\frac{z}{2}\right)}{1575z} - \frac{4 e^{z/2} (16z^4 - 212z^3 + 234z^2 + 177z + 132) I_1\left(\frac{z}{2}\right)}{1575z^2}$$

07.25.03.a8qd.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi} (16z^5 - 240z^4 + 360z^3 + 240z^2 + 225z + 135) \operatorname{erfi}(\sqrt{z})}{5120z^{7/2}} - \frac{7e^z (8z^4 - 116z^3 + 126z^2 + 135z + 135)}{2560z^3}$$

07.25.03.a8qe.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} (8z^4 + 116z^3 + 126z^2 - 135z + 135)}{2560z^3} + \frac{7\sqrt{\pi} (16z^5 + 240z^4 + 360z^3 - 240z^2 + 225z - 135) \operatorname{erf}(\sqrt{z})}{5120z^{7/2}}$$

$$\begin{aligned}
 & \text{07.25.03.a8qf.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, 5; z\right) &= \\
 & \frac{32 e^{z/2} (16 z^4 - 276 z^3 + 636 z^2 + 123 z + 117) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (16 z^5 - 260 z^4 + 384 z^3 + 393 z^2 + 492 z + 468) I_1\left(\frac{z}{2}\right)}{17325 z^2} - \frac{32 e^{z/2} (16 z^5 - 260 z^4 + 384 z^3 + 393 z^2 + 492 z + 468) I_1\left(\frac{z}{2}\right)}{17325 z^3}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8qg.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) &= \frac{21 \sqrt{\pi} (64 z^6 - 1152 z^5 + 2160 z^4 + 1920 z^3 + 2700 z^2 + 3240 z + 2205) \operatorname{erfi}(\sqrt{z})}{81920 z^{9/2}} - \\
 & \frac{21 e^z (32 z^5 - 560 z^4 + 816 z^3 + 1128 z^2 + 1770 z + 2205)}{40960 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8qh.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) &= \frac{21 e^{-z} (32 z^5 + 560 z^4 + 816 z^3 - 1128 z^2 + 1770 z - 2205)}{40960 z^4} + \\
 & \frac{21 \sqrt{\pi} (64 z^6 + 1152 z^5 + 2160 z^4 - 1920 z^3 + 2700 z^2 - 3240 z + 2205) \operatorname{erf}(\sqrt{z})}{81920 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a8qi.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{5}{2}, 6; z\right) &= \frac{32 e^{z/2} (32 z^5 - 648 z^4 + 1740 z^3 + 588 z^2 + 981 z + 1080) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (32 z^6 - 616 z^5 + 1140 z^4 + 1452 z^3 + 2487 z^2 + 3924 z + 4320) I_1\left(\frac{z}{2}\right)}{45045 z^3} - \\
 & \frac{32 e^{z/2} (32 z^6 - 616 z^5 + 1140 z^4 + 1452 z^3 + 2487 z^2 + 3924 z + 4320) I_1\left(\frac{z}{2}\right)}{45045 z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = -\frac{3}{2}$, $b_1 = -\frac{3}{2}$

$$\text{07.25.03.a8qj.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = e^z$$

$$\text{07.25.03.a8qk.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = e^z (2z + 1) - 2 \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.a8ql.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = e^{-z} (1 - 2z) - 2 \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.a8qm.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = e^z (1 - z) + \frac{1}{2} \sqrt{\pi} (2 z^{3/2} - 3 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.a8qn.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = e^{-z} (z + 1) + \frac{1}{2} \sqrt{\pi} (2 z^{3/2} + 3 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.a8qo.01} \\
 {}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (2 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z - 2) z I_1\left(\frac{z}{2}\right)$$

07.25.03.a8qp.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{8} e^z (5 - 2z) + \frac{\sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.a8qq.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{8} e^{-z} (2z + 5) + \frac{\sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.a8qr.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4z^2 - 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4z^2 + 14z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8qs.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (-4z^2 + 16z - 3)}{32z} + \frac{\sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.a8qt.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (4z^2 + 16z + 3)}{32z} + \frac{\sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.a8qu.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 - 24z + 27) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4z^3 - 20z^2 + 9z + 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.a8qv.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5 e^z (8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.a8qw.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5\sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.a8qx.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 - 60z^2 + 84z + 3) I_0\left(\frac{z}{2}\right)}{315z} - \frac{4 e^{z/2} (8z^4 - 52z^3 + 36z^2 + 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.a8qy.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7 e^z (16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.a8qz.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7\sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.a8r0.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 - 72 z^3 + 120 z^2 + 12 z + 9) I_0\left(\frac{z}{2}\right) - 128 e^{z/2} (2 z^5 - 16 z^4 + 15 z^3 + 12 z^2 + 12 z + 9) I_1\left(\frac{z}{2}\right)}{3465 z^2} - \frac{128 e^{z/2} (2 z^5 - 16 z^4 + 15 z^3 + 12 z^2 + 12 z + 9) I_1\left(\frac{z}{2}\right)}{3465 z^3}$$

07.25.03.a8r1.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{21 \sqrt{\pi} (64 z^6 - 576 z^5 + 720 z^4 + 480 z^3 + 540 z^2 + 540 z + 315) \operatorname{erfi}(\sqrt{z})}{32 768 z^{9/2}} - \frac{21 e^z (32 z^5 - 272 z^4 + 240 z^3 + 264 z^2 + 330 z + 315)}{16384 z^4}$$

07.25.03.a8r2.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (32 z^5 + 272 z^4 + 240 z^3 - 264 z^2 + 330 z - 315)}{16384 z^4} + \frac{21 \sqrt{\pi} (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315) \operatorname{erf}(\sqrt{z})}{32 768 z^{9/2}}$$

07.25.03.a8r3.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{3}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 168 z^4 + 324 z^3 + 60 z^2 + 81 z + 72) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (16 z^6 - 152 z^5 + 180 z^4 + 180 z^3 + 249 z^2 + 324 z + 288) I_1\left(\frac{z}{2}\right)}{9009 z^3} - \frac{32 e^{z/2} (16 z^6 - 152 z^5 + 180 z^4 + 180 z^3 + 249 z^2 + 324 z + 288) I_1\left(\frac{z}{2}\right)}{9009 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = -\frac{1}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.a8r4.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{1}{36018675} (e^z (512 z^9 + 1280 z^8 + 7680 z^7 - 42240 z^6 + 262080 z^5 - 1349280 z^4 + 5551200 z^3 - 17110800 z^2 + 35125650 z - 36018675))$$

07.25.03.a8r5.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{e^z (256 z^8 + 3840 z^6 - 23040 z^5 + 119520 z^4 - 495360 z^3 + 1537200 z^2 - 3175200 z + 3274425)}{3274425}$$

07.25.03.a8r6.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{e^z (128 z^7 - 320 z^6 + 2400 z^5 - 12720 z^4 + 53400 z^3 - 167580 z^2 + 349650 z - 363825)}{363825}$$

07.25.03.a8r7.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{e^z (64 z^6 - 320 z^5 + 1680 z^4 - 7200 z^3 + 23100 z^2 - 49140 z + 51975)}{51975}$$

07.25.03.a8r8.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{e^z (32 z^5 - 240 z^4 + 1200 z^3 - 4200 z^2 + 9450 z - 10395)}{10395}$$

07.25.03.a8r9.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{e^z (16 z^4 - 160 z^3 + 840 z^2 - 2520 z + 3465)}{3465}$$

07.25.03.a8ra.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (-8 z^3 + 100 z^2 - 570 z + 3465)}{3465} - \frac{128}{231} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8rb.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (8 z^3 + 100 z^2 + 570 z + 3465)}{3465} + \frac{128}{231} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.a8rc.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (-4 z^3 + 52 z^2 - 2205 z + 3465) I_0\left(\frac{z}{2}\right)}{3465} + \frac{e^{z/2} (-4 z^3 + 56 z^2 + 1577 z) I_1\left(\frac{z}{2}\right)}{3465}$$

07.25.03.a8rd.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (-4 z^2 + 60 z + 585)}{3465} - \frac{32 \sqrt{\pi} (2 z - 3) \operatorname{erfi}(\sqrt{z})}{231 \sqrt{z}}$$

07.25.03.a8re.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-4 z^2 - 60 z + 585)}{3465} + \frac{32 \sqrt{\pi} (2 z + 3) \operatorname{erf}(\sqrt{z})}{231 \sqrt{z}}$$

07.25.03.a8rf.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (-4 z^2 - 1218 z + 3465) I_0\left(\frac{z}{2}\right)}{3465} + \frac{e^{z/2} (-4 z^2 + 1346 z - 3003) I_1\left(\frac{z}{2}\right)}{3465}$$

07.25.03.a8rg.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (-2 z^2 + 275 z - 840)}{1155 z} - \frac{4 \sqrt{\pi} (4 z^2 - 12 z - 7) \operatorname{erfi}(\sqrt{z})}{77 z^{3/2}}$$

07.25.03.a8rh.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (2 z^2 + 275 z + 840)}{1155 z} + \frac{4 \sqrt{\pi} (4 z^2 + 12 z - 7) \operatorname{erf}(\sqrt{z})}{77 z^{3/2}}$$

07.25.03.a8ri.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (254 z^2 - 858 z - 1287) I_1\left(\frac{z}{2}\right)}{3465 z} - \frac{8 e^{z/2} (43 z - 198) I_0\left(\frac{z}{2}\right)}{1155}$$

07.25.03.a8rj.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (39 z^2 - 140 z - 420)}{231 z^2} - \frac{10 \sqrt{\pi} (4 z^3 - 18 z^2 - 21 z - 21) \operatorname{erfi}(\sqrt{z})}{231 z^{5/2}}$$

07.25.03.a8rk.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (39 z^2 + 140 z - 420)}{231 z^2} + \frac{10 \sqrt{\pi} (4 z^3 + 18 z^2 - 21 z + 21) \operatorname{erf}(\sqrt{z})}{231 z^{5/2}}$$

07.25.03.a8rl.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (512 z^3 - 2574 z^2 - 4147 z - 9724) I_1\left(\frac{z}{2}\right)}{8085 z^2} - \frac{4 e^{z/2} (512 z^2 - 3058 z - 2431) I_0\left(\frac{z}{2}\right)}{8085 z}$$

07.25.03.a8rm.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (20 z^3 - 112 z^2 - 210 z - 945)}{132 z^3} - \frac{5 \sqrt{\pi} (8 z^4 - 48 z^3 - 84 z^2 - 168 z - 189) \operatorname{erfi}(\sqrt{z})}{264 z^{7/2}}$$

07.25.03.a8rn.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (20 z^3 + 112 z^2 - 210 z + 945)}{132 z^3} + \frac{5 \sqrt{\pi} (8 z^4 + 48 z^3 - 84 z^2 + 168 z - 189) \operatorname{erf}(\sqrt{z})}{264 z^{7/2}}$$

07.25.03.a8ro.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (512 z^4 - 3328 z^3 - 7839 z^2 - 18564 z - 50388) I_1\left(\frac{z}{2}\right)}{72765 z^3} - \frac{32 e^{z/2} (512 z^3 - 3840 z^2 - 4641 z - 12597) I_0\left(\frac{z}{2}\right)}{72765 z^2}$$

07.25.03.a8rp.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (8 z^4 - 56 z^3 - 168 z^2 - 420 z - 2205)}{176 z^4} - \frac{3 \sqrt{\pi} (16 z^5 - 120 z^4 - 280 z^3 - 840 z^2 - 1890 z - 2205) \operatorname{erfi}(\sqrt{z})}{352 z^{9/2}}$$

07.25.03.a8rq.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (8 z^4 + 56 z^3 - 168 z^2 + 420 z - 2205)}{176 z^4} + \frac{3 \sqrt{\pi} (16 z^5 + 120 z^4 - 280 z^3 + 840 z^2 - 1890 z + 2205) \operatorname{erf}(\sqrt{z})}{352 z^{9/2}}$$

07.25.03.a8rr.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (1024 z^5 - 8192 z^4 - 24000 z^3 - 85629 z^2 - 228684 z - 651168) I_1\left(\frac{z}{2}\right)}{160083 z^4} - \frac{32 e^{z/2} (1024 z^4 - 9216 z^3 - 16320 z^2 - 57171 z - 162792) I_0\left(\frac{z}{2}\right)}{160083 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.a8rs.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{e^z (128 z^7 - 192 z^6 + 2016 z^5 - 10512 z^4 + 43992 z^3 - 137700 z^2 + 286650 z - 297675)}{297675}$$

07.25.03.a8rt.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{e^z (64 z^6 - 192 z^5 + 1104 z^4 - 4704 z^3 + 14940 z^2 - 31500 z + 33075)}{33075}$$

07.25.03.a8ru.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (32 z^5 - 144 z^4 + 624 z^3 - 2040 z^2 + 4410 z - 4725)}{4725}$$

07.25.03.a8rv.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} e^z (16 z^4 - 96 z^3 + 360 z^2 - 840 z + 945)$$

07.25.03.a8rw.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -\frac{1}{315} e^z (8 z^3 - 60 z^2 + 210 z - 315)$$

07.25.03.a8rx.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{315} e^z (4 z^2 - 36 z + 315) - \frac{64}{105} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8ry.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} e^{-z} (4 z^2 + 36 z + 315) + \frac{64}{105} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.a8rz.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (2 z^2 - 210 z + 315) I_0\left(\frac{z}{2}\right) + \frac{2}{315} e^{z/2} (z^2 + 86 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8s0.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{315} e^z (2 z + 75) - \frac{8 \sqrt{\pi} (4 z - 5) \operatorname{erfi}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.a8s1.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{315} e^{-z} (75 - 2 z) + \frac{8 \sqrt{\pi} (4 z + 5) \operatorname{erf}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.a8s2.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{5} e^{z/2} (5 - 2 z) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (130 z - 231) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8s3.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (5 z - 12)}{21 z} - \frac{2 \sqrt{\pi} (4 z^2 - 10 z - 5) \operatorname{erfi}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.a8s4.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (5 z + 12)}{21 z} + \frac{2 \sqrt{\pi} (4 z^2 + 10 z - 5) \operatorname{erf}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.a8s5.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, 3; z\right) = \frac{4 e^{z/2} (128 z^2 - 363 z - 429) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (128 z - 501) I_0\left(\frac{z}{2}\right)}{1575 z}$$

07.25.03.a8s6.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (16 z^2 - 50 z - 105)}{84 z^2} + \frac{\sqrt{\pi} (-32 z^3 + 120 z^2 + 120 z + 105) \operatorname{erfi}(\sqrt{z})}{168 z^{5/2}}$$

07.25.03.a8s7.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16 z^2 + 50 z - 105)}{84 z^2} + \frac{\sqrt{\pi} (32 z^3 + 120 z^2 - 120 z + 105) \operatorname{erf}(\sqrt{z})}{168 z^{5/2}}$$

07.25.03.a8s8.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (256 z^3 - 1056 z^2 - 1573 z - 2860) I_1\left(\frac{z}{2}\right) - 4 e^{z/2} (256 z^2 - 1312 z - 715) I_0\left(\frac{z}{2}\right)}{3675 z^2}$$

07.25.03.a8s9.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (4 z^3 - 18 z^2 - 35 z - 105)}{24 z^3} + \frac{\sqrt{\pi} (-8 z^4 + 40 z^3 + 60 z^2 + 105 z + 105) \operatorname{erfi}(\sqrt{z})}{48 z^{7/2}}$$

07.25.03.a8sa.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (4 z^3 + 18 z^2 - 35 z + 105)}{24 z^3} + \frac{\sqrt{\pi} (8 z^4 + 40 z^3 - 60 z^2 + 105 z - 105) \operatorname{erf}(\sqrt{z})}{48 z^{7/2}}$$

07.25.03.a8sb.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, 5; z\right) = \frac{128 e^{z/2} (64 z^4 - 344 z^3 - 702 z^2 - 1560 z - 3315) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (256 z^3 - 1632 z^2 - 1560 z - 3315) I_0\left(\frac{z}{2}\right)}{33075 z^3}$$

07.25.03.a8sc.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (16 z^4 - 92 z^3 - 238 z^2 - 630 z - 2205)}{320 z^4} - \frac{3 \sqrt{\pi} (32 z^5 - 200 z^4 - 400 z^3 - 1050 z^2 - 2100 z - 2205) \operatorname{erfi}(\sqrt{z})}{640 z^{9/2}}$$

07.25.03.a8sd.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (16 z^4 + 92 z^3 - 238 z^2 + 630 z - 2205)}{320 z^4} + \frac{3 \sqrt{\pi} (32 z^5 + 200 z^4 - 400 z^3 + 1050 z^2 - 2100 z + 2205) \operatorname{erf}(\sqrt{z})}{640 z^{9/2}}$$

07.25.03.a8se.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (512 z^5 - 3392 z^4 - 8656 z^3 - 26925 z^2 - 68340 z - 155040) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (512 z^4 - 3904 z^3 - 5520 z^2 - 17085 z - 38760) I_0\left(\frac{z}{2}\right)}{72765 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.a8sf.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = -\frac{e^z (32 z^5 - 112 z^4 + 496 z^3 - 1608 z^2 + 3450 z - 3675)}{3675}$$

07.25.03.a8sg.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{525} e^z (16 z^4 - 64 z^3 + 216 z^2 - 480 z + 525)$$

07.25.03.a8sh.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = -\frac{1}{105} e^z (8 z^3 - 36 z^2 + 90 z - 105)$$

07.25.03.a8si.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{35} e^z (4 z^2 - 20 z + 35)$$

07.25.03.a8sj.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{35} e^z (35 - 2z) - \frac{24}{35} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8sk.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{35} e^{-z} (2z + 35) + \frac{24}{35} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.a8sl.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{7} e^{z/2} (7 - 5z) I_0\left(\frac{z}{2}\right) + \frac{23}{35} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.a8sm.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{11 e^z}{35} - \frac{12 \sqrt{\pi} (z-1) \operatorname{erfi}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.a8sn.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{12 \sqrt{\pi} (z+1) \operatorname{erf}(\sqrt{z})}{35 \sqrt{z}} + \frac{11 e^{-z}}{35}$$

07.25.03.a8so.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{35} e^{z/2} (35 - 16z) I_0\left(\frac{z}{2}\right) + \frac{1}{35} e^{z/2} (16z - 21) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8sp.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{3 e^z (3z - 5)}{35 z} - \frac{3 \sqrt{\pi} (6z^2 - 12z - 5) \operatorname{erfi}(\sqrt{z})}{70 z^{3/2}}$$

07.25.03.a8sq.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (3z + 5)}{35 z} + \frac{3 \sqrt{\pi} (6z^2 + 12z - 5) \operatorname{erf}(\sqrt{z})}{70 z^{3/2}}$$

07.25.03.a8sr.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (16 z^2 - 36 z - 33) I_1\left(\frac{z}{2}\right)}{175 z} - \frac{16}{175} e^{z/2} (4 z - 13) I_0\left(\frac{z}{2}\right)$$

07.25.03.a8ss.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{3 e^z (4 z^2 - 10 z - 15)}{56 z^2} - \frac{3 \sqrt{\pi} (8 z^3 - 24 z^2 - 20 z - 15) \operatorname{erfi}(\sqrt{z})}{112 z^{5/2}}$$

07.25.03.a8st.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{3 e^{-z} (4 z^2 + 10 z - 15)}{56 z^2} + \frac{3 \sqrt{\pi} (8 z^3 + 24 z^2 - 20 z + 15) \operatorname{erf}(\sqrt{z})}{112 z^{5/2}}$$

07.25.03.a8su.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (96 z^3 - 312 z^2 - 407 z - 572) I_1\left(\frac{z}{2}\right)}{1225 z^2} - \frac{4 e^{z/2} (96 z^2 - 408 z - 143) I_0\left(\frac{z}{2}\right)}{1225 z}$$

07.25.03.a8sv.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{3 e^z (8 z^3 - 28 z^2 - 50 z - 105)}{128 z^3} - \frac{3 \sqrt{\pi} (16 z^4 - 64 z^3 - 80 z^2 - 120 z - 105) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.a8sw.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{3 e^{-z} (8 z^3 + 28 z^2 - 50 z + 105)}{128 z^3} + \frac{3 \sqrt{\pi} (16 z^4 + 64 z^3 - 80 z^2 + 120 z - 105) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.a8sx.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^4 - 136 z^3 - 237 z^2 - 468 z - 780) I_1\left(\frac{z}{2}\right)}{3675 z^3} - \frac{32 e^{z/2} (32 z^3 - 168 z^2 - 117 z - 195) I_0\left(\frac{z}{2}\right)}{3675 z^2}$$

07.25.03.a8sy.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (24 z^4 - 108 z^3 - 242 z^2 - 595 z - 1470)}{1280 z^4} - \frac{9 \sqrt{\pi} (48 z^5 - 240 z^4 - 400 z^3 - 900 z^2 - 1575 z - 1470) \operatorname{erfi}(\sqrt{z})}{2560 z^{9/2}}$$

07.25.03.a8sz.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (24 z^4 + 108 z^3 - 242 z^2 + 595 z - 1470)}{1280 z^4} + \frac{9 \sqrt{\pi} (48 z^5 + 240 z^4 - 400 z^3 + 900 z^2 - 1575 z + 1470) \operatorname{erf}(\sqrt{z})}{2560 z^{9/2}}$$

07.25.03.a8t0.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^5 - 336 z^4 - 730 z^3 - 1959 z^2 - 4500 z - 8160) I_1\left(\frac{z}{2}\right)}{8085 z^4} - \frac{32 e^{z/2} (64 z^4 - 400 z^3 - 426 z^2 - 1125 z - 2040) I_0\left(\frac{z}{2}\right)}{8085 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.a8t1.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = -\frac{1}{75} e^z (8z^3 - 28z^2 + 66z - 75)$$

07.25.03.a8t2.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{15} e^z (4z^2 - 12z + 15)$$

07.25.03.a8t3.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = -\frac{1}{5} e^z (2z - 5)$$

07.25.03.a8t4.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = e^z - \frac{4}{5} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8t5.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{4}{5} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.a8t6.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{5} e^{z/2} (5 - 4z) I_0\left(\frac{z}{2}\right) + \frac{4}{5} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.a8t7.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (3 - 4z) \operatorname{erfi}(\sqrt{z})}{10 \sqrt{z}} + \frac{2 e^z}{5}$$

07.25.03.a8t8.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} (4z + 3) \operatorname{erf}(\sqrt{z})}{10 \sqrt{z}} + \frac{2 e^{-z}}{5}$$

07.25.03.a8t9.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (15 - 8z) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (8z - 7) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8ta.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{3 e^z (z - 1)}{10 z} - \frac{3 \sqrt{\pi} (2z^2 - 3z - 1) \operatorname{erfi}(\sqrt{z})}{20 z^{3/2}}$$

07.25.03.a8tb.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (z + 1)}{10 z} + \frac{3 \sqrt{\pi} (2z^2 + 3z - 1) \operatorname{erf}(\sqrt{z})}{20 z^{3/2}}$$

07.25.03.a8tc.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (8z^2 - 13z - 9) I_1\left(\frac{z}{2}\right)}{75 z} - \frac{4}{75} e^{z/2} (8z - 21) I_0\left(\frac{z}{2}\right)$$

07.25.03.a8td.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (8z^2 - 14z - 15)}{32 z^2} + \frac{\sqrt{\pi} (-16z^3 + 36z^2 + 24z + 15) \operatorname{erfi}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.a8te.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(8z^2 + 14z - 15)}{32z^2} + \frac{\sqrt{\pi}(16z^3 + 36z^2 - 24z + 15)\operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.a8tf.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, 4; z\right) = \frac{4e^{z/2}(16z^3 - 38z^2 - 41z - 44)I_1\left(\frac{z}{2}\right)}{175z^2} - \frac{4e^{z/2}(16z^2 - 54z - 11)I_0\left(\frac{z}{2}\right)}{175z}$$

07.25.03.a8tg.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7e^z(8z^3 - 20z^2 - 30z - 45)}{256z^3} - \frac{7\sqrt{\pi}(16z^4 - 48z^3 - 48z^2 - 60z - 45)\operatorname{erfi}(\sqrt{z})}{512z^{7/2}}$$

07.25.03.a8th.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}(8z^3 + 20z^2 - 30z + 45)}{256z^3} + \frac{7\sqrt{\pi}(16z^4 + 48z^3 - 48z^2 + 60z - 45)\operatorname{erf}(\sqrt{z})}{512z^{7/2}}$$

07.25.03.a8ti.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, 5; z\right) = \frac{64e^{z/2}(8z^4 - 25z^3 - 36z^2 - 60z - 78)I_1\left(\frac{z}{2}\right)}{1575z^3} - \frac{32e^{z/2}(16z^3 - 66z^2 - 30z - 39)I_0\left(\frac{z}{2}\right)}{1575z^2}$$

07.25.03.a8tj.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63e^z(32z^4 - 104z^3 - 196z^2 - 410z - 735)}{10240z^4} - \frac{63\sqrt{\pi}(64z^5 - 240z^4 - 320z^3 - 600z^2 - 900z - 735)\operatorname{erfi}(\sqrt{z})}{20480z^{9/2}}$$

07.25.03.a8tk.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63e^{-z}(32z^4 + 104z^3 - 196z^2 + 410z - 735)}{10240z^4} + \frac{63\sqrt{\pi}(64z^5 + 240z^4 - 320z^3 + 600z^2 - 900z + 735)\operatorname{erf}(\sqrt{z})}{20480z^{9/2}}$$

07.25.03.a8tl.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{5}{2}, 6; z\right) = \frac{32e^{z/2}(32z^5 - 124z^4 - 222z^3 - 501z^2 - 996z - 1440)I_1\left(\frac{z}{2}\right)}{3465z^4} - \frac{32e^{z/2}(32z^4 - 156z^3 - 114z^2 - 249z - 360)I_0\left(\frac{z}{2}\right)}{3465z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.a8tm.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = -\frac{1}{3}e^z(2z - 3)$$

07.25.03.a8tn.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = e^z$$

07.25.03.a8to.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8tp.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.a8tq.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, 1; z\right) = e^{z/2} (1-z) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.a8tr.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (1-2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{e^z}{2}$$

07.25.03.a8ts.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.a8tt.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, 2; z\right) = e^{z/2} \left(1 - \frac{2z}{3}\right) I_0\left(\frac{z}{2}\right) + e^{z/2} \left(\frac{2z}{3} - \frac{1}{3}\right) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8tu.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{3e^z(2z-1)}{16z} - \frac{3\sqrt{\pi}(4z^2-4z-1)\operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.a8tv.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{3e^{-z}(2z+1)}{16z} + \frac{3\sqrt{\pi}(4z^2+4z-1)\operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.a8tw.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, 3; z\right) = \frac{4e^{z/2}(2z^2-2z-1)I_1\left(\frac{z}{2}\right)}{15z} - \frac{8}{15}e^{z/2}(z-2)I_0\left(\frac{z}{2}\right)$$

07.25.03.a8tx.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5e^z(4z^2-4z-3)}{64z^2} - \frac{5\sqrt{\pi}(8z^3-12z^2-6z-3)\operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.a8ty.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}(4z^2+4z-3)}{64z^2} + \frac{5\sqrt{\pi}(8z^3+12z^2-6z+3)\operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.a8tz.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, 4; z\right) = \frac{4e^{z/2}(4z^3-6z^2-5z-4)I_1\left(\frac{z}{2}\right)}{35z^2} - \frac{4e^{z/2}(4z^2-10z-1)I_0\left(\frac{z}{2}\right)}{35z}$$

07.25.03.a8u0.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35e^z(8z^3-12z^2-14z-15)}{1024z^3} - \frac{35\sqrt{\pi}(16z^4-32z^3-24z^2-24z-15)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.a8u1.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.a8u2.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (4 z^4 - 8 z^3 - 9 z^2 - 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3} - \frac{32 e^{z/2} (4 z^3 - 12 z^2 - 3 z - 3) I_0\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.a8u3.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (16 z^4 - 32 z^3 - 48 z^2 - 80 z - 105)}{4096 z^4} - \frac{63 \sqrt{\pi} (32 z^5 - 80 z^4 - 80 z^3 - 120 z^2 - 150 z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.a8u4.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16 z^4 + 32 z^3 - 48 z^2 + 80 z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.a8u5.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^5 - 20 z^4 - 28 z^3 - 51 z^2 - 84 z - 96) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (8 z^4 - 28 z^3 - 12 z^2 - 21 z - 24) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.a8u6.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = e^z (2z + 1) - 2 \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8u7.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = e^{-z} (1 - 2z) - 2 \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a8u8.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = e^z (1 - z) + \frac{1}{2} \sqrt{\pi} (2 z^{3/2} - 3 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8u9.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z} (z + 1) + \frac{1}{2} \sqrt{\pi} (2 z^{3/2} + 3 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8ua.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (2 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z - 2) z I_1\left(\frac{z}{2}\right)$$

07.25.03.a8ub.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{8} e^z (5 - 2z) + \frac{\sqrt{\pi} (4 z^2 - 12 z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.a8uc.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{8} e^{-z} (2z + 5) + \frac{\sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.a8ud.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4z^2 - 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4z^2 + 14z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8ue.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (-4z^2 + 16z - 3)}{32z} + \frac{\sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.a8uf.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (4z^2 + 16z + 3)}{32z} + \frac{\sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.a8ug.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 - 24z + 27) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4z^3 - 20z^2 + 9z + 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.a8uh.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5e^z (8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.a8ui.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} (8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5\sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.a8uj.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 - 60z^2 + 84z + 3) I_0\left(\frac{z}{2}\right)}{315z} - \frac{4 e^{z/2} (8z^4 - 52z^3 + 36z^2 + 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.a8uk.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7e^z (16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.a8ul.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} (16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7\sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.a8um.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (8z^4 - 72z^3 + 120z^2 + 12z + 9) I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{128 e^{z/2} (2z^5 - 16z^4 + 15z^3 + 12z^2 + 12z + 9) I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.a8un.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi}(64z^6 - 576z^5 + 720z^4 + 480z^3 + 540z^2 + 540z + 315)\operatorname{erfi}(\sqrt{z})}{32768z^{9/2}} - \frac{21e^z(32z^5 - 272z^4 + 240z^3 + 264z^2 + 330z + 315)}{16384z^4}$$

07.25.03.a8uo.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z}(32z^5 + 272z^4 + 240z^3 - 264z^2 + 330z - 315)}{16384z^4} + \frac{21\sqrt{\pi}(64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)\operatorname{erf}(\sqrt{z})}{32768z^{9/2}}$$

07.25.03.a8up.01

$${}_2F_2\left(-\frac{3}{2}, -\frac{1}{2}; -\frac{1}{2}, 6; z\right) = \frac{32e^{z/2}(16z^5 - 168z^4 + 324z^3 + 60z^2 + 81z + 72)I_0\left(\frac{z}{2}\right)}{9009z^3} - \frac{32e^{z/2}(16z^6 - 152z^5 + 180z^4 + 180z^3 + 249z^2 + 324z + 288)I_1\left(\frac{z}{2}\right)}{9009z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{1}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.a8uq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{36018675}(e^z(1024z^{10} + 11264z^9 + 34560z^8 + 15360z^7 + 59520z^6 - 339840z^5 + 1657440z^4 - 6465600z^3 + 18918900z^2 - 36911700z + 36018675))$$

07.25.03.a8ur.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{3274425}(e^z(512z^9 + 3840z^8 + 7680z^7 - 3840z^6 + 31680z^5 - 154080z^4 + 597600z^3 - 1738800z^2 + 3373650z - 3274425))$$

07.25.03.a8us.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{e^z(256z^8 + 1024z^7 + 1280z^6 - 3840z^5 + 17760z^4 - 68160z^3 + 196560z^2 - 378000z + 363825)}{363825}$$

07.25.03.a8ut.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{e^z(128z^7 + 64z^6 + 480z^5 - 2640z^4 + 10200z^3 - 28980z^2 + 54810z - 51975)}{51975}$$

07.25.03.a8uu.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{e^z (64 z^6 - 192 z^5 + 720 z^4 - 2400 z^3 + 6300 z^2 - 11340 z + 10395)}{10395}$$

07.25.03.a8uv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{e^z (32 z^5 - 208 z^4 + 880 z^3 - 2520 z^2 + 4410 z - 3465)}{3465}$$

07.25.03.a8uw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (16 z^4 - 160 z^3 + 840 z^2 - 2520 z + 3465)}{3465}$$

07.25.03.a8ux.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (8 z^4 - 88 z^3 + 472 z^2 - 1260 z + 3465) I_0\left(\frac{z}{2}\right)}{3465} + \frac{4 e^{z/2} (2 z^4 - 24 z^3 + 143 z^2 - 472 z) I_1\left(\frac{z}{2}\right)}{3465}$$

07.25.03.a8uy.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (8 z^3 - 108 z^2 + 690 z - 2295)}{3465} + \frac{64 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{77 \sqrt{z}}$$

07.25.03.a8uz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-8 z^3 - 108 z^2 - 690 z - 2295)}{3465} + \frac{64 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{77 \sqrt{z}}$$

07.25.03.a8v0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (8 z^3 - 116 z^2 + 756 z + 3465) I_0\left(\frac{z}{2}\right)}{3465} + \frac{e^{z/2} (8 z^3 - 124 z^2 + 884 z - 9009) I_1\left(\frac{z}{2}\right)}{3465}$$

07.25.03.a8v1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (4 z^3 - 68 z^2 + 515 z - 3360)}{1155 z} + \frac{16 \sqrt{\pi} (6 z + 7) \operatorname{erfi}(\sqrt{z})}{77 z^{3/2}}$$

07.25.03.a8v2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (4 z^3 + 68 z^2 + 515 z + 3360)}{1155 z} + \frac{16 \sqrt{\pi} (6 z - 7) \operatorname{erf}(\sqrt{z})}{77 z^{3/2}}$$

07.25.03.a8v3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (4 z^2 - 72 z + 2475) I_0\left(\frac{z}{2}\right)}{3465} + \frac{4 e^{z/2} (4 z^3 - 76 z^2 - 1287 z - 6435) I_1\left(\frac{z}{2}\right)}{3465 z}$$

07.25.03.a8v4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (2 z^3 - 41 z^2 - 2520)}{231 z^2} + \frac{20 \sqrt{\pi} (6 z^2 + 14 z + 21) \operatorname{erfi}(\sqrt{z})}{77 z^{5/2}}$$

07.25.03.a8v5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-2 z^3 - 41 z^2 - 2520)}{231 z^2} + \frac{20 \sqrt{\pi} (6 z^2 - 14 z + 21) \operatorname{erf}(\sqrt{z})}{77 z^{5/2}}$$

07.25.03.a8v6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (4 z^2 + 682 z + 2431) I_0\left(\frac{z}{2}\right)}{1155 z} + \frac{4 e^{z/2} (4 z^3 - 858 z^2 - 1573 z - 9724) I_1\left(\frac{z}{2}\right)}{1155 z^2}$$

07.25.03.a8v7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (z^3 - 84 z^2 - 1890)}{33 z^3} + \frac{5 \sqrt{\pi} (4 z^3 + 14 z^2 + 42 z + 63) \operatorname{erfi}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.a8v8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (z^3 + 84 z^2 + 1890)}{33 z^3} + \frac{5 \sqrt{\pi} (4 z^3 - 14 z^2 + 42 z - 63) \operatorname{erf}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.a8v9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, 5; z\right) = \frac{544 e^{z/2} (46 z^2 + 130 z + 741) I_0\left(\frac{z}{2}\right)}{8085 z^2} - \frac{832 e^{z/2} (29 z^3 + 142 z^2 + 340 z + 1938) I_1\left(\frac{z}{2}\right)}{8085 z^3}$$

07.25.03.a8va.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{15 \sqrt{\pi} (24 z^4 + 112 z^3 + 504 z^2 + 1512 z + 2205) \operatorname{erfi}(\sqrt{z})}{176 z^{9/2}} - \frac{21 e^z (8 z^3 + 60 z^2 + 30 z + 1575)}{88 z^4}$$

07.25.03.a8vb.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (8 z^3 - 60 z^2 + 30 z - 1575)}{88 z^4} + \frac{15 \sqrt{\pi} (24 z^4 - 112 z^3 + 504 z^2 - 1512 z + 2205) \operatorname{erf}(\sqrt{z})}{176 z^{9/2}}$$

07.25.03.a8vc.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (512 z^3 + 2346 z^2 + 10659 z + 54264) I_0\left(\frac{z}{2}\right)}{4851 z^3} - \frac{32 e^{z/2} (512 z^4 + 2774 z^3 + 16167 z^2 + 42636 z + 217056) I_1\left(\frac{z}{2}\right)}{4851 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.a8vd.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{e^z (256 z^8 + 1280 z^7 + 1920 z^6 - 2880 z^5 + 14400 z^4 - 55440 z^3 + 160200 z^2 - 308700 z + 297675)}{297675}$$

07.25.03.a8ve.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{e^z (128 z^7 + 320 z^6 + 480 z^5 - 1680 z^4 + 6360 z^3 - 18180 z^2 + 34650 z - 33075)}{33075}$$

07.25.03.a8vf.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{e^z (64 z^6 + 240 z^4 - 960 z^3 + 2700 z^2 - 5040 z + 4725)}{4725}$$

07.25.03.a8vg.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{945} e^z (32 z^5 - 80 z^4 + 240 z^3 - 600 z^2 + 1050 z - 945)$$

07.25.03.a8vh.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} e^z (16z^4 - 80z^3 + 240z^2 - 420z + 315)$$

07.25.03.a8vi.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{315} e^z (8z^3 - 60z^2 + 210z - 315)$$

07.25.03.a8vj.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (-4z^3 + 32z^2 - 105z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-4z^3 + 36z^2 - 143z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8vk.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{315} e^z (-4z^2 + 40z - 165) + \frac{16\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{21\sqrt{z}}$$

07.25.03.a8vl.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{315} e^{-z} (-4z^2 - 40z - 165) + \frac{16\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{21\sqrt{z}}$$

07.25.03.a8vm.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (-4z^2 + 42z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-4z^2 + 46z - 693) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8vn.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (-2z^2 + 25z - 240)}{105z} + \frac{8\sqrt{\pi} (z+1) \operatorname{erfi}(\sqrt{z})}{7z^{3/2}}$$

07.25.03.a8vo.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (2z^2 + 25z + 240)}{105z} + \frac{8\sqrt{\pi} (z-1) \operatorname{erf}(\sqrt{z})}{7z^{3/2}}$$

07.25.03.a8vp.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, 3; z\right) = -\frac{8}{315} e^{z/2} (z-93) I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2} (2z^2 + 132z + 429) I_1\left(\frac{z}{2}\right)}{315z}$$

07.25.03.a8vq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (-2z^2 - 30z - 315)}{42z^2} + \frac{5\sqrt{\pi} (8z^2 + 16z + 21) \operatorname{erfi}(\sqrt{z})}{28z^{5/2}}$$

07.25.03.a8vr.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-2z^2 + 30z - 315)}{42z^2} + \frac{5\sqrt{\pi} (8z^2 - 16z + 21) \operatorname{erf}(\sqrt{z})}{28z^{5/2}}$$

07.25.03.a8vs.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, 4; z\right) = \frac{4e^{z/2} (62z + 143) I_0\left(\frac{z}{2}\right)}{105z} - \frac{44e^{z/2} (6z^2 + 13z + 52) I_1\left(\frac{z}{2}\right)}{105z^2}$$

07.25.03.a8vt.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (-22z^2 - 35z - 420)}{12z^3} + \frac{5\sqrt{\pi} (8z^3 + 24z^2 + 63z + 84) \operatorname{erfi}(\sqrt{z})}{24z^{7/2}}$$

07.25.03.a8vu.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(22z^2 - 35z + 420)}{12z^3} + \frac{5\sqrt{\pi}(8z^3 - 24z^2 + 63z - 84)\operatorname{erf}(\sqrt{z})}{24z^{7/2}}$$

07.25.03.a8vv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, 5; z\right) = \frac{32e^{z/2}(64z^2 + 169z + 663)I_0\left(\frac{z}{2}\right)}{735z^2} - \frac{32e^{z/2}(64z^3 + 247z^2 + 676z + 2652)I_1\left(\frac{z}{2}\right)}{735z^3}$$

07.25.03.a8vw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{15\sqrt{\pi}(8z^4 + 32z^3 + 126z^2 + 336z + 441)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}} - \frac{3e^z(20z^3 + 98z^2 + 210z + 2205)}{32z^4}$$

07.25.03.a8vx.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z}(20z^3 - 98z^2 + 210z - 2205)}{32z^4} + \frac{15\sqrt{\pi}(8z^4 - 32z^3 + 126z^2 - 336z + 441)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.a8vy.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{9}{2}, 6; z\right) = \frac{32e^{z/2}(128z^3 + 480z^2 + 2091z + 7752)I_0\left(\frac{z}{2}\right)}{1323z^3} - \frac{32e^{z/2}(128z^4 + 608z^3 + 2889z^2 + 8364z + 31008)I_1\left(\frac{z}{2}\right)}{1323z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.a8vz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{e^z(64z^6 + 64z^5 + 208z^4 - 736z^3 + 2076z^2 - 3900z + 3675)}{3675}$$

07.25.03.a8w0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{525}e^z(32z^5 - 16z^4 + 112z^3 - 312z^2 + 570z - 525)$$

07.25.03.a8w1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{105}e^z(16z^4 - 32z^3 + 72z^2 - 120z + 105)$$

07.25.03.a8w2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{35}e^z(8z^3 - 28z^2 + 50z - 35)$$

07.25.03.a8w3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{35}e^z(4z^2 - 20z + 35)$$

07.25.03.a8w4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{35}e^{z/2}(2z^2 - 10z + 35)I_0\left(\frac{z}{2}\right) + \frac{2}{35}e^{z/2}(z^2 - 6z)I_1\left(\frac{z}{2}\right)$$

07.25.03.a8w5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{35} e^z (2z - 13) + \frac{24 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.a8w6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{35} e^{-z} (-2z - 13) + \frac{24 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.a8w7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{35} e^{z/2} (2z + 35) I_0\left(\frac{z}{2}\right) + \frac{1}{35} e^{z/2} (2z - 63) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8w8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{3 e^z (z - 20)}{35 z} + \frac{6 \sqrt{\pi} (6z + 5) \operatorname{erfi}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.a8w9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (z + 20)}{35 z} + \frac{6 \sqrt{\pi} (6z - 5) \operatorname{erf}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.a8wa.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, 3; z\right) = \frac{68}{35} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{12 e^{z/2} (5z + 11) I_1\left(\frac{z}{2}\right)}{35 z}$$

07.25.03.a8wb.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{3 \sqrt{\pi} (24z^2 + 40z + 45) \operatorname{erfi}(\sqrt{z})}{56 z^{5/2}} - \frac{15 e^z (2z + 9)}{28 z^2}$$

07.25.03.a8wc.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15 e^{-z} (2z - 9)}{28 z^2} + \frac{3 \sqrt{\pi} (24z^2 - 40z + 45) \operatorname{erf}(\sqrt{z})}{56 z^{5/2}}$$

07.25.03.a8wd.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (96z + 143) I_0\left(\frac{z}{2}\right)}{175 z} - \frac{4 e^{z/2} (96z^2 + 209z + 572) I_1\left(\frac{z}{2}\right)}{175 z^2}$$

07.25.03.a8we.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{3 \sqrt{\pi} (16z^3 + 40z^2 + 90z + 105) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}} - \frac{3 e^z (8z^2 + 20z + 105)}{16 z^3}$$

07.25.03.a8wf.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{3 e^{-z} (8z^2 - 20z + 105)}{16 z^3} + \frac{3 \sqrt{\pi} (16z^3 - 40z^2 + 90z - 105) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.a8wg.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (96z^2 + 208z + 585) I_0\left(\frac{z}{2}\right)}{1225 z^2} - \frac{128 e^{z/2} (24z^3 + 76z^2 + 208z + 585) I_1\left(\frac{z}{2}\right)}{1225 z^3}$$

07.25.03.a8wh.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9\sqrt{\pi} (24z^4 + 80z^3 + 270z^2 + 630z + 735) \operatorname{erfi}(\sqrt{z})}{128z^{9/2}} - \frac{9e^z (12z^3 + 46z^2 + 140z + 735)}{64z^4}$$

07.25.03.a8wi.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9e^{-z} (12z^3 - 46z^2 + 140z - 735)}{64z^4} + \frac{9\sqrt{\pi} (24z^4 - 80z^3 + 270z^2 - 630z + 735) \operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.a8wj.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{7}{2}, 6; z\right) = \frac{32e^{z/2} (64z^3 + 192z^2 + 735z + 2040) I_0\left(\frac{z}{2}\right)}{735z^3} - \frac{32e^{z/2} (64z^4 + 256z^3 + 1023z^2 + 2940z + 8160) I_1\left(\frac{z}{2}\right)}{735z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.a8wk.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{75} e^z (16z^4 - 16z^3 + 48z^2 - 84z + 75)$$

07.25.03.a8wl.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{15} e^z (8z^3 - 12z^2 + 18z - 15)$$

07.25.03.a8wm.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{5} e^z (4z^2 - 8z + 5)$$

07.25.03.a8wn.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{5} e^z (2z - 5)$$

07.25.03.a8wo.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{5} e^{z/2} (5 - z) I_0\left(\frac{z}{2}\right) - \frac{1}{5} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.a8wp.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{3\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{5\sqrt{z}} - \frac{e^z}{5}$$

07.25.03.a8wq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{5\sqrt{z}} - \frac{e^{-z}}{5}$$

07.25.03.a8wr.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{7}{5} e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.a8ws.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi} (3z + 2) \operatorname{erfi}(\sqrt{z})}{10z^{3/2}} - \frac{6e^z}{5z}$$

07.25.03.a8wt.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi}(3z-2)\operatorname{erf}(\sqrt{z})}{10z^{3/2}} + \frac{6e^{-z}}{5z}$$

07.25.03.a8wu.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, 3; z\right) = \frac{8}{5}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(2z+3)I_1\left(\frac{z}{2}\right)}{5z}$$

07.25.03.a8wv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{3\sqrt{\pi}(12z^2+16z+15)\operatorname{erfi}(\sqrt{z})}{32z^{5/2}} - \frac{9e^z(2z+5)}{16z^2}$$

07.25.03.a8ww.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{9e^{-z}(2z-5)}{16z^2} + \frac{3\sqrt{\pi}(12z^2-16z+15)\operatorname{erf}(\sqrt{z})}{32z^{5/2}}$$

07.25.03.a8wx.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, 4; z\right) = \frac{4e^{z/2}(12z+11)I_0\left(\frac{z}{2}\right)}{25z} - \frac{4e^{z/2}(12z^2+23z+44)I_1\left(\frac{z}{2}\right)}{25z^2}$$

07.25.03.a8wy.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{21\sqrt{\pi}(4z^3+8z^2+15z+15)\operatorname{erfi}(\sqrt{z})}{64z^{7/2}} - \frac{21e^z(2z^2+5z+15)}{32z^3}$$

07.25.03.a8wz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{21e^{-z}(2z^2-5z+15)}{32z^3} + \frac{21\sqrt{\pi}(4z^3-8z^2+15z-15)\operatorname{erf}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.a8x0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, 5; z\right) = \frac{32e^{z/2}(12z^2+19z+39)I_0\left(\frac{z}{2}\right)}{175z^2} - \frac{32e^{z/2}(12z^3+31z^2+76z+156)I_1\left(\frac{z}{2}\right)}{175z^3}$$

07.25.03.a8x1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63\sqrt{\pi}(48z^4+128z^3+360z^2+720z+735)\operatorname{erfi}(\sqrt{z})}{2048z^{9/2}} - \frac{63e^z(24z^3+76z^2+230z+735)}{1024z^4}$$

07.25.03.a8x2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63e^{-z}(24z^3-76z^2+230z-735)}{1024z^4} + \frac{63\sqrt{\pi}(48z^4-128z^3+360z^2-720z+735)\operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.a8x3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{5}{2}, 6; z\right) = \frac{32e^{z/2}(8z^3+18z^2+57z+120)I_0\left(\frac{z}{2}\right)}{105z^3} - \frac{32e^{z/2}(8z^4+26z^3+87z^2+228z+480)I_1\left(\frac{z}{2}\right)}{105z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.a8x4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (4z^2 - 4z + 3)$$

07.25.03.a8x5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -e^z (2z - 1)$$

07.25.03.a8x6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = e^z$$

07.25.03.a8x7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, 1; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

07.25.03.a8x8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.a8x9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.a8xa.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.a8xb.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3e^z}{4z}$$

07.25.03.a8xc.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.a8xd.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2} (z + 1) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.a8xe.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi} (4z^2 + 4z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15e^z (2z + 3)}{32z^2}$$

07.25.03.a8xf.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} (2z - 3)}{32z^2} + \frac{15\sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.a8xg.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, 4; z\right) = \frac{4e^{z/2} (2z + 1) I_0\left(\frac{z}{2}\right)}{5z} - \frac{4e^{z/2} (2z^2 + 3z + 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.a8xh.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi}(8z^3 + 12z^2 + 18z + 15)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35e^z(4z^2 + 8z + 15)}{128z^3}$$

07.25.03.a8xi.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}(4z^2 - 8z + 15)}{128z^3} + \frac{35\sqrt{\pi}(8z^3 - 12z^2 + 18z - 15)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.a8xj.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, 5; z\right) = \frac{32e^{z/2}(2z^2 + 2z + 3)I_0\left(\frac{z}{2}\right)}{35z^2} - \frac{64e^{z/2}(z^3 + 2z^2 + 4z + 6)I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.a8xk.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi}(16z^4 + 32z^3 + 72z^2 + 120z + 105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315e^z(8z^3 + 20z^2 + 50z + 105)}{2048z^4}$$

07.25.03.a8xl.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315\sqrt{\pi}(16z^4 - 32z^3 + 72z^2 - 120z + 105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.a8xm.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{3}{2}, 6; z\right) = \frac{32e^{z/2}(4z^3 + 6z^2 + 15z + 24)I_0\left(\frac{z}{2}\right)}{63z^3} - \frac{32e^{z/2}(4z^4 + 10z^3 + 27z^2 + 60z + 96)I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.a8xn.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = 4\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{3/2} + e^z(1 - 4z)$$

07.25.03.a8xo.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = 4\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{3/2} + e^{-z}(4z + 1)$$

07.25.03.a8xp.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = e^z(2z + 1) - 2\sqrt{\pi}z^{3/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a8xq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z}(1 - 2z) - 2\sqrt{\pi}z^{3/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.a8xr.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{3}e^{z/2}(-4z^2 + 3z + 3)I_0\left(\frac{z}{2}\right) + \frac{1}{3}e^{z/2}(4z^2 + z)I_1\left(\frac{z}{2}\right)$$

07.25.03.a8xs.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{4}e^z(2z + 1) + \frac{\sqrt{\pi}(3 - 4z^2)\operatorname{erfi}(\sqrt{z})}{8\sqrt{z}}$$

07.25.03.a8xt.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{4} e^{-z} (1-2z) + \frac{\sqrt{\pi} (3-4z^2) \operatorname{erf}(\sqrt{z})}{8\sqrt{z}}$$

07.25.03.a8xu.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (-8z^2 + 6z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (8z^2 + 2z - 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8xv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (2z^2 + z - 3)}{8z} + \frac{\sqrt{\pi} (-4z^3 + 9z + 3) \operatorname{erfi}(\sqrt{z})}{16z^{3/2}}$$

07.25.03.a8xw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-2z^2 + z + 3)}{8z} + \frac{\sqrt{\pi} (-4z^3 + 9z - 3) \operatorname{erf}(\sqrt{z})}{16z^{3/2}}$$

07.25.03.a8xx.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (8z^3 + 2z^2 - 24z - 15) I_1\left(\frac{z}{2}\right)}{105z} - \frac{8}{105} e^{z/2} (4z^2 - 3z - 15) I_0\left(\frac{z}{2}\right)$$

07.25.03.a8xy.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (8z^3 + 4z^2 - 30z - 27)}{256z^2} - \frac{5\sqrt{\pi} (16z^4 - 72z^2 - 48z - 27) \operatorname{erfi}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.a8xz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = -\frac{5 e^{-z} (8z^3 - 4z^2 - 30z + 27)}{256z^2} - \frac{5\sqrt{\pi} (16z^4 - 72z^2 + 48z - 27) \operatorname{erf}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.a8y0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (16z^4 + 4z^3 - 90z^2 - 93z - 84) I_1\left(\frac{z}{2}\right)}{315z^2} - \frac{4 e^{z/2} (16z^3 - 12z^2 - 102z - 21) I_0\left(\frac{z}{2}\right)}{315z}$$

07.25.03.a8y1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (8z^4 + 4z^3 - 54z^2 - 75z - 90)}{512z^3} - \frac{7\sqrt{\pi} (16z^5 - 120z^3 - 120z^2 - 135z - 90) \operatorname{erfi}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.a8y2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = -\frac{7 e^{-z} (8z^4 - 4z^3 - 54z^2 + 75z - 90)}{512z^3} - \frac{7\sqrt{\pi} (16z^5 - 120z^3 + 120z^2 - 135z + 90) \operatorname{erf}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.a8y3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (16z^5 + 4z^4 - 144z^3 - 201z^2 - 300z - 324) I_1\left(\frac{z}{2}\right)}{3465z^3} - \frac{32 e^{z/2} (16z^4 - 12z^3 - 156z^2 - 75z - 81) I_0\left(\frac{z}{2}\right)}{3465z^2}$$

07.25.03.a8y4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{21 e^z (32 z^5 + 16 z^4 - 336 z^3 - 600 z^2 - 1110 z - 1575)}{8192 z^4} - \frac{21 \sqrt{\pi} (64 z^6 - 720 z^4 - 960 z^3 - 1620 z^2 - 2160 z - 1575) \operatorname{erfi}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.a8y5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{21 e^{-z} (32 z^5 - 16 z^4 - 336 z^3 + 600 z^2 - 1110 z + 1575)}{8192 z^4} - \frac{21 \sqrt{\pi} (64 z^6 - 720 z^4 + 960 z^3 - 1620 z^2 + 2160 z - 1575) \operatorname{erf}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.a8y6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^6 + 8 z^5 - 420 z^4 - 732 z^3 - 1491 z^2 - 2628 z - 3168) I_1\left(\frac{z}{2}\right)}{9009 z^4} - \frac{32 e^{z/2} (32 z^5 - 24 z^4 - 444 z^3 - 348 z^2 - 657 z - 792) I_0\left(\frac{z}{2}\right)}{9009 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{1}{2}$, $b_1 = \frac{1}{2}$

07.25.03.a8y7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = e^z (1 - z) + \frac{1}{2} \sqrt{\pi} (2 z^{3/2} - 3 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8y8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z} (z + 1) + \frac{1}{2} \sqrt{\pi} (2 z^{3/2} + 3 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a8y9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (2 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z - 2) z I_1\left(\frac{z}{2}\right)$$

07.25.03.a8ya.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{8} e^z (5 - 2z) + \frac{\sqrt{\pi} (4 z^2 - 12 z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.a8yb.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{8} e^{-z} (2z + 5) + \frac{\sqrt{\pi} (4 z^2 + 12 z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.a8yc.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4 z^2 - 18 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4 z^2 + 14 z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.a8yd.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (-4 z^2 + 16 z - 3)}{32 z} + \frac{\sqrt{\pi} (8 z^3 - 36 z^2 + 18 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.a8ye.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(4z^2 + 16z + 3)}{32z} + \frac{\sqrt{\pi}(8z^3 + 36z^2 + 18z - 3)\operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.a8yf.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, 3; z\right) = \frac{4}{105} e^{z/2}(4z^2 - 24z + 27)I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(4z^3 - 20z^2 + 9z + 3)I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.a8yg.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi}(16z^4 - 96z^3 + 72z^2 + 24z + 9)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5e^z(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.a8yh.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5\sqrt{\pi}(16z^4 + 96z^3 + 72z^2 - 24z + 9)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.a8yi.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, 4; z\right) = \frac{4e^{z/2}(8z^3 - 60z^2 + 84z + 3)I_0\left(\frac{z}{2}\right)}{315z} - \frac{4e^{z/2}(8z^4 - 52z^3 + 36z^2 + 21z + 12)I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.a8yj.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45)\operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7e^z(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.a8yk.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7\sqrt{\pi}(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)\operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.a8yl.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, 5; z\right) = \frac{32e^{z/2}(8z^4 - 72z^3 + 120z^2 + 12z + 9)I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{128e^{z/2}(2z^5 - 16z^4 + 15z^3 + 12z^2 + 12z + 9)I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.a8ym.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi}(64z^6 - 576z^5 + 720z^4 + 480z^3 + 540z^2 + 540z + 315)\operatorname{erfi}(\sqrt{z})}{32768z^{9/2}} - \frac{21e^z(32z^5 - 272z^4 + 240z^3 + 264z^2 + 330z + 315)}{16384z^4}$$

07.25.03.a8yn.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z}(32z^5 + 272z^4 + 240z^3 - 264z^2 + 330z - 315)}{16384z^4} + \frac{21\sqrt{\pi}(64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)\operatorname{erf}(\sqrt{z})}{32768z^{9/2}}$$

07.25.03.a8yo.01

$${}_2F_2\left(-\frac{3}{2}, \frac{1}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 168 z^4 + 324 z^3 + 60 z^2 + 81 z + 72) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (16 z^6 - 152 z^5 + 180 z^4 + 180 z^3 + 249 z^2 + 324 z + 288) I_1\left(\frac{z}{2}\right)}{9009 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = -\frac{11}{2}$

07.25.03.a8yp.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{36018675} (1024 z^{10} + 15872 z^9 + 66304 z^8 + 71808 z^7 + 6720 z^6 + 480 z^5 + 432 z^4 + 1800 z^3 + 44100 z^2 - 1786050 z + 36018675) + \frac{1024 e^z \sqrt{\pi} (z^{21/2} + 16 z^{19/2} + 72 z^{17/2} + 96 z^{15/2} + 24 z^{13/2}) \operatorname{erf}(\sqrt{z})}{36018675}$$

07.25.03.a8yq.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{36018675} (1024 z^{10} - 15872 z^9 + 66304 z^8 - 71808 z^7 + 6720 z^6 - 480 z^5 + 432 z^4 - 1800 z^3 + 44100 z^2 + 1786050 z + 36018675) - \frac{1024 e^{-z} \sqrt{\pi} (z^{21/2} - 16 z^{19/2} + 72 z^{17/2} - 96 z^{15/2} + 24 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{36018675}$$

07.25.03.a8yr.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{3274425} (-512 z^9 - 5888 z^8 - 15744 z^7 - 6720 z^6 + 480 z^5 + 144 z^4 + 360 z^3 + 6300 z^2 - 198450 z + 3274425) - \frac{512 e^z \sqrt{\pi} (z^{19/2} + 12 z^{17/2} + 36 z^{15/2} + 24 z^{13/2}) \operatorname{erf}(\sqrt{z})}{3274425}$$

07.25.03.a8ys.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{512 z^9 - 5888 z^8 + 15744 z^7 - 6720 z^6 - 480 z^5 + 144 z^4 - 360 z^3 + 6300 z^2 + 198450 z + 3274425}{3274425} - \frac{512 e^{-z} \sqrt{\pi} (z^{19/2} - 12 z^{17/2} + 36 z^{15/2} - 24 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{3274425}$$

07.25.03.a8yt.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{256 z^8 + 1920 z^7 + 2240 z^6 - 480 z^5 + 144 z^4 + 120 z^3 + 1260 z^2 - 28350 z + 363825}{363825} + \frac{256 e^z \sqrt{\pi} (z^{17/2} + 8 z^{15/2} + 12 z^{13/2}) \operatorname{erf}(\sqrt{z})}{363825}$$

07.25.03.a8yu.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{256 z^8 - 1920 z^7 + 2240 z^6 + 480 z^5 + 144 z^4 - 120 z^3 + 1260 z^2 + 28350 z + 363825}{363825} - \frac{256 e^{-z} \sqrt{\pi} (z^{17/2} - 8 z^{15/2} + 12 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{363825}$$

07.25.03.a8yv.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{-128 z^7 - 448 z^6 + 160 z^5 - 144 z^4 + 120 z^3 + 420 z^2 - 5670 z + 51975}{51975} - \frac{128 e^z \sqrt{\pi} (z^{15/2} + 4 z^{13/2}) \operatorname{erf}(\sqrt{z})}{51975}$$

07.25.03.a8yw.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{128 z^7 - 448 z^6 - 160 z^5 - 144 z^4 - 120 z^3 + 420 z^2 + 5670 z + 51975}{51975} - \frac{128 e^{-z} \sqrt{\pi} (z^{15/2} - 4 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{51975}$$

07.25.03.a8yx.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{64 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{64 z^6 - 32 z^5 + 48 z^4 - 120 z^3 + 420 z^2 - 1890 z + 10395}{10395}$$

07.25.03.a8yy.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 + 1890 z + 10395}{10395} - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.a8yz.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{-32 z^5 + 144 z^4 - 472 z^3 + 1116 z^2 - 1890 z + 3465}{3465} - \frac{32 e^z \sqrt{\pi} (z^{11/2} - 4 z^{9/2} + 12 z^{7/2} - 24 z^{5/2} + 24 z^{3/2}) \operatorname{erf}(\sqrt{z})}{3465}$$

07.25.03.a8z0.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{32 z^5 + 144 z^4 + 472 z^3 + 1116 z^2 + 1890 z + 3465}{3465} - \frac{32 e^{-z} \sqrt{\pi} (z^{11/2} + 4 z^{9/2} + 12 z^{7/2} + 24 z^{5/2} + 24 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{3465}$$

07.25.03.a8z1.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{16z^4 - 136z^3 + 652z^2 - 1950z + 3465}{3465} + \frac{16e^z\sqrt{\pi}(z^{9/2} - 8z^{7/2} + 36z^{5/2} - 96z^{3/2} + 120\sqrt{z})\operatorname{erf}(\sqrt{z})}{3465}$$

07.25.03.a8z2.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{16z^4 + 136z^3 + 652z^2 + 1950z + 3465}{3465} - \frac{16e^{-z}\sqrt{\pi}(z^{9/2} + 8z^{7/2} + 36z^{5/2} + 96z^{3/2} + 120\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3465}$$

07.25.03.a8z3.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, 1; z\right) = \frac{e^z(16z^4 - 160z^3 + 840z^2 - 2520z + 3465)}{3465}$$

07.25.03.a8z4.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{8z^3 - 100z^2 + 630z - 2295}{3465} + \frac{8e^z\sqrt{\pi}(z^4 - 12z^3 + 72z^2 - 240z + 360)\operatorname{erf}(\sqrt{z})}{3465\sqrt{z}}$$

07.25.03.a8z5.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{-8z^3 - 100z^2 - 630z - 2295}{3465} + \frac{8e^{-z}\sqrt{\pi}(z^4 + 12z^3 + 72z^2 + 240z + 360)\operatorname{erfi}(\sqrt{z})}{3465\sqrt{z}}$$

07.25.03.a8z6.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, 2; z\right) = \frac{e^z(16z^4 - 224z^3 + 1512z^2 - 5544z + 9009)}{3465z} - \frac{13}{5z}$$

07.25.03.a8z7.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{4z^3 - 66z^2 + 515z - 6720}{1155z} + \frac{4e^z\sqrt{\pi}(z^4 - 16z^3 + 120z^2 - 480z + 840)\operatorname{erf}(\sqrt{z})}{1155z^{3/2}}$$

07.25.03.a8z8.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{4z^3 + 66z^2 + 515z + 6720}{1155z} - \frac{4e^{-z}\sqrt{\pi}(z^4 + 16z^3 + 120z^2 + 480z + 840)\operatorname{erfi}(\sqrt{z})}{1155z^{3/2}}$$

07.25.03.a8z9.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, 3; z\right) = \frac{2e^z(16z^4 - 288z^3 + 2376z^2 - 10296z + 19305)}{3465z^2} - \frac{26(7z + 15)}{35z^2}$$

07.25.03.a8za.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{2z^3 - 41z^2 - 1120z - 6720}{231z^2} + \frac{2e^z\sqrt{\pi}(z^4 - 20z^3 + 180z^2 - 840z + 1680)\operatorname{erf}(\sqrt{z})}{231z^{5/2}}$$

07.25.03.a8zb.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{-2z^3 - 41z^2 + 1120z - 6720}{231z^2} + \frac{2e^{-z}\sqrt{\pi}(z^4 + 20z^3 + 180z^2 + 840z + 1680)\operatorname{erfi}(\sqrt{z})}{231z^{5/2}}$$

07.25.03.a8zc.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, 4; z\right) = \frac{2 e^z (16 z^4 - 352 z^3 + 3432 z^2 - 17160 z + 36465)}{1155 z^3} - \frac{13 (21 z^2 + 90 z + 170)}{35 z^3}$$

07.25.03.a8zd.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{5 z^3 - 1624 z^2 - 6720 z - 30240}{165 z^3} + \frac{e^z \sqrt{\pi} (z^4 - 24 z^3 + 252 z^2 - 1344 z + 3024) \operatorname{erf}(\sqrt{z})}{33 z^{7/2}}$$

07.25.03.a8ze.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{5 z^3 + 1624 z^2 - 6720 z + 30240}{165 z^3} + \frac{e^{-z} \sqrt{\pi} (-z^4 - 24 z^3 - 252 z^2 - 1344 z - 3024) \operatorname{erfi}(\sqrt{z})}{33 z^{7/2}}$$

07.25.03.a8zf.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, 5; z\right) = \frac{8 e^z (16 z^4 - 416 z^3 + 4680 z^2 - 26520 z + 62985)}{1155 z^4} - \frac{52 (77 z^3 + 495 z^2 + 1870 z + 3230)}{385 z^4}$$

07.25.03.a8zg.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (z^4 - 28 z^3 + 336 z^2 - 2016 z + 5040) \operatorname{erf}(\sqrt{z})}{22 z^{9/2}} - \frac{12 (53 z^3 + 420 z^2 + 1680 z + 6300)}{55 z^4}$$

07.25.03.a8zh.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{12 (53 z^3 - 420 z^2 + 1680 z - 6300)}{55 z^4} + \frac{3 e^{-z} \sqrt{\pi} (z^4 + 28 z^3 + 336 z^2 + 2016 z + 5040) \operatorname{erfi}(\sqrt{z})}{22 z^{9/2}}$$

07.25.03.a8zi.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{11}{2}, 6; z\right) = \frac{-1001 z^4 - 8580 z^3 - 48620 z^2 - 167960 z - 271320}{77 z^5} + \frac{8 e^z (16 z^4 - 480 z^3 + 6120 z^2 - 38760 z + 101745)}{231 z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = -\frac{9}{2}$

07.25.03.a8zj.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{256 z^8 + 2176 z^7 + 3648 z^6 + 480 z^5 + 48 z^4 + 72 z^3 + 900 z^2 - 22050 z + 297675}{297675} + \frac{256 e^z \sqrt{\pi} (z^{17/2} + 9 z^{15/2} + 18 z^{13/2} + 6 z^{11/2}) \operatorname{erf}(\sqrt{z})}{297675}$$

07.25.03.a8zk.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{256 z^8 - 2176 z^7 + 3648 z^6 - 480 z^5 + 48 z^4 - 72 z^3 + 900 z^2 + 22050 z + 297675}{297675} - \frac{256 e^{-z} \sqrt{\pi} (z^{17/2} - 9 z^{15/2} + 18 z^{13/2} - 6 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{297675}$$

07.25.03.a8zl.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{-128 z^7 - 704 z^6 - 480 z^5 + 48 z^4 + 24 z^3 + 180 z^2 - 3150 z + 33075}{33075} - \frac{128 e^z \sqrt{\pi} (z^{15/2} + 6 z^{13/2} + 6 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{33075}$$

07.25.03.a8zm.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{128 z^7 - 704 z^6 + 480 z^5 + 48 z^4 - 24 z^3 + 180 z^2 + 3150 z + 33075}{33075} - \frac{128 e^{-z} \sqrt{\pi} (z^{15/2} - 6 z^{13/2} + 6 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{33075}$$

07.25.03.a8zn.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{64 z^6 + 160 z^5 - 48 z^4 + 24 z^3 + 60 z^2 - 630 z + 4725}{4725} + \frac{64 e^z \sqrt{\pi} (z^{13/2} + 3 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.a8zo.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{64 z^6 - 160 z^5 - 48 z^4 - 24 z^3 + 60 z^2 + 630 z + 4725}{4725} - \frac{64 e^{-z} \sqrt{\pi} (z^{13/2} - 3 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.a8zp.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8zq.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{945} (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8zr.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} (16 z^4 - 56 z^3 + 132 z^2 - 210 z + 315) + \frac{16}{315} e^z \sqrt{\pi} (z^{9/2} - 3 z^{7/2} + 6 z^{5/2} - 6 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8zs.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{315} (16 z^4 + 56 z^3 + 132 z^2 + 210 z + 315) - \frac{16}{315} e^{-z} \sqrt{\pi} (z^{9/2} + 3 z^{7/2} + 6 z^{5/2} + 6 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8zt.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{315} (-8 z^3 + 52 z^2 - 174 z + 315) - \frac{8}{315} e^z \sqrt{\pi} (z^{7/2} - 6 z^{5/2} + 18 z^{3/2} - 24 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8zu.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} (8 z^3 + 52 z^2 + 174 z + 315) - \frac{8}{315} e^{-z} \sqrt{\pi} (z^{7/2} + 6 z^{5/2} + 18 z^{3/2} + 24 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a8zv.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, 1; z\right) = -\frac{1}{315} e^z (8 z^3 - 60 z^2 + 210 z - 315)$$

07.25.03.a8zw.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{315} (-4 z^2 + 38 z - 165) - \frac{4 e^z \sqrt{\pi} (z^3 - 9 z^2 + 36 z - 60) \operatorname{erfi}(\sqrt{z})}{315 \sqrt{z}}$$

07.25.03.a8zx.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{315} (-4z^2 - 38z - 165) + \frac{4e^{-z}\sqrt{\pi}(z^3 + 9z^2 + 36z + 60)\operatorname{erfi}(\sqrt{z})}{315\sqrt{z}}$$

07.25.03.a8zy.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, 2; z\right) = \frac{e^z(-8z^3 + 84z^2 - 378z + 693)}{315z} - \frac{11}{5z}$$

07.25.03.a8zz.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-2z^2 + 25z - 480}{105z} - \frac{2e^z\sqrt{\pi}(z^3 - 12z^2 + 60z - 120)\operatorname{erf}(\sqrt{z})}{105z^{3/2}}$$

07.25.03.a900.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{2z^2 + 25z + 480}{105z} - \frac{2e^{-z}\sqrt{\pi}(z^3 + 12z^2 + 60z + 120)\operatorname{erfi}(\sqrt{z})}{105z^{3/2}}$$

07.25.03.a901.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, 3; z\right) = -\frac{22(7z + 13)}{35z^2} - \frac{2e^z(8z^3 - 108z^2 + 594z - 1287)}{315z^2}$$

07.25.03.a902.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-z^2 - 100z - 420}{21z^2} + \frac{e^z\sqrt{\pi}(-z^3 + 15z^2 - 90z + 210)\operatorname{erf}(\sqrt{z})}{21z^{5/2}}$$

07.25.03.a903.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{-z^2 + 100z - 420}{21z^2} + \frac{e^{-z}\sqrt{\pi}(z^3 + 15z^2 + 90z + 210)\operatorname{erfi}(\sqrt{z})}{21z^{5/2}}$$

07.25.03.a904.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, 4; z\right) = -\frac{11(21z^2 + 78z + 130)}{35z^3} - \frac{2e^z(8z^3 - 132z^2 + 858z - 2145)}{105z^3}$$

07.25.03.a905.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z\sqrt{\pi}(-z^3 + 18z^2 - 126z + 336)\operatorname{erf}(\sqrt{z})}{6z^{7/2}} - \frac{2(59z^2 + 245z + 840)}{15z^3}$$

07.25.03.a906.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{2(59z^2 - 245z + 840)}{15z^3} + \frac{e^{-z}\sqrt{\pi}(-z^3 - 18z^2 - 126z - 336)\operatorname{erfi}(\sqrt{z})}{6z^{7/2}}$$

07.25.03.a907.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, 5; z\right) = -\frac{8e^z(8z^3 - 156z^2 + 1170z - 3315)}{105z^4} - \frac{4(77z^3 + 429z^2 + 1430z + 2210)}{35z^4}$$

07.25.03.a908.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, \frac{11}{2}; z\right) = -\frac{3(33z^3 + 217z^2 + 840z + 2520)}{10z^4} - \frac{3e^z\sqrt{\pi}(z^3 - 21z^2 + 168z - 504)\operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.a909.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{3(33z^3 - 217z^2 + 840z - 2520)}{10z^4} + \frac{3e^{-z}\sqrt{\pi}(z^3 + 21z^2 + 168z + 504)\operatorname{erfi}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.a90a.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{9}{2}, 6; z\right) = \frac{-77z^4 - 572z^3 - 2860z^2 - 8840z - 12920}{7z^5} - \frac{8e^z(8z^3 - 180z^2 + 1530z - 4845)}{21z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = -\frac{7}{2}$

07.25.03.a90b.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{64z^6 + 224z^5 + 48z^4 + 8z^3 + 36z^2 - 450z + 3675}{3675} + \frac{64e^z\sqrt{\pi}(z^{13/2} + 4z^{11/2} + 2z^{9/2})\operatorname{erf}(\sqrt{z})}{3675}$$

07.25.03.a90c.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{64z^6 - 224z^5 + 48z^4 - 8z^3 + 36z^2 + 450z + 3675}{3675} - \frac{64e^{-z}\sqrt{\pi}(z^{13/2} - 4z^{11/2} + 2z^{9/2})\operatorname{erfi}(\sqrt{z})}{3675}$$

07.25.03.a90d.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{525}(-32z^5 - 48z^4 + 8z^3 + 12z^2 - 90z + 525) - \frac{32}{525}e^z\sqrt{\pi}(z^{11/2} + 2z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a90e.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{525}(32z^5 - 48z^4 - 8z^3 + 12z^2 + 90z + 525) - \frac{32}{525}e^{-z}\sqrt{\pi}(z^{11/2} - 2z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a90f.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{16}{105}e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2} + \frac{1}{105}(16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

07.25.03.a90g.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{105}(16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105}e^{-z}\sqrt{\pi}z^{9/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a90h.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{35}(-8z^3 + 20z^2 - 30z + 35) - \frac{8}{35}e^z\sqrt{\pi}(z^{7/2} - 2z^{5/2} + 2z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a90i.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{35}(8z^3 + 20z^2 + 30z + 35) - \frac{8}{35}e^{-z}\sqrt{\pi}(z^{7/2} + 2z^{5/2} + 2z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a90j.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{35}(4z^2 - 18z + 35) + \frac{4}{35}e^z\sqrt{\pi}(z^{5/2} - 4z^{3/2} + 6\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.a90k.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{35}(4z^2 + 18z + 35) - \frac{4}{35}e^{-z}\sqrt{\pi}(z^{5/2} + 4z^{3/2} + 6\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a90l.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, 1; z\right) = \frac{1}{35}e^z(4z^2 - 20z + 35)$$

07.25.03.a90m.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{35} (2z - 13) + \frac{2 e^z \sqrt{\pi} (z^2 - 6z + 12) \operatorname{erf}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.a90n.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{35} (-2z - 13) + \frac{2 e^{-z} \sqrt{\pi} (z^2 + 6z + 12) \operatorname{erfi}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.a90o.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, 2; z\right) = \frac{e^z (4z^2 - 28z + 63)}{35z} - \frac{9}{5z}$$

07.25.03.a90p.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{3(z - 40)}{35z} + \frac{3 e^z \sqrt{\pi} (z^2 - 8z + 20) \operatorname{erf}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.a90q.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{3(z + 40)}{35z} - \frac{3 e^{-z} \sqrt{\pi} (z^2 + 8z + 20) \operatorname{erfi}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.a90r.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, 3; z\right) = \frac{2 e^z (4z^2 - 36z + 99)}{35z^2} - \frac{18(7z + 11)}{35z^2}$$

07.25.03.a90s.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (z^2 - 10z + 30) \operatorname{erf}(\sqrt{z})}{14 z^{5/2}} - \frac{30(z + 3)}{7z^2}$$

07.25.03.a90t.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{30(z - 3)}{7z^2} + \frac{3 e^{-z} \sqrt{\pi} (z^2 + 10z + 30) \operatorname{erfi}(\sqrt{z})}{14 z^{5/2}}$$

07.25.03.a90u.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, 4; z\right) = \frac{6 e^z (4z^2 - 44z + 143)}{35z^3} - \frac{3(63z^2 + 198z + 286)}{35z^3}$$

07.25.03.a90v.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (z^2 - 12z + 42) \operatorname{erf}(\sqrt{z})}{4 z^{7/2}} - \frac{3(21z^2 + 80z + 210)}{10z^3}$$

07.25.03.a90w.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{3(21z^2 - 80z + 210)}{10z^3} - \frac{3 e^{-z} \sqrt{\pi} (z^2 + 12z + 42) \operatorname{erfi}(\sqrt{z})}{4 z^{7/2}}$$

07.25.03.a90x.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, 5; z\right) = \frac{24 e^z (4z^2 - 52z + 195)}{35z^4} - \frac{12(21z^3 + 99z^2 + 286z + 390)}{35z^4}$$

07.25.03.a90y.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{27 e^z \sqrt{\pi} (z^2 - 14z + 56) \operatorname{erf}(\sqrt{z})}{8 z^{9/2}} - \frac{9(18z^3 + 99z^2 + 350z + 840)}{20 z^4}$$

07.25.03.a90z.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(18z^3 - 99z^2 + 350z - 840)}{20 z^4} + \frac{27 e^{-z} \sqrt{\pi} (z^2 + 14z + 56) \operatorname{erfi}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.a910.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{7}{2}, 6; z\right) = \frac{24 e^z (4z^2 - 60z + 255)}{7 z^5} - \frac{3(21z^4 + 132z^3 + 572z^2 + 1560z + 2040)}{7 z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = -\frac{5}{2}$

07.25.03.a911.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{75} (16z^4 + 8z^3 + 4z^2 - 18z + 75) + \frac{16}{75} e^z \sqrt{\pi} (z^{9/2} + z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a912.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{75} (16z^4 - 8z^3 + 4z^2 + 18z + 75) - \frac{16}{75} e^{-z} \sqrt{\pi} (z^{9/2} - z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a913.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{15} (-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15} e^z \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a914.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{15} (8z^3 + 4z^2 + 6z + 15) - \frac{8}{15} e^{-z} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a915.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{5} (4z^2 - 6z + 5) + \frac{4}{5} e^z \sqrt{\pi} (z^{5/2} - z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a916.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{5} (4z^2 + 6z + 5) - \frac{4}{5} e^{-z} \sqrt{\pi} (z^{5/2} + z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a917.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{5} (5 - 2z) - \frac{2}{5} e^z \sqrt{\pi} (z^{3/2} - 2\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a918.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{5} (2z + 5) - \frac{2}{5} e^{-z} \sqrt{\pi} (z^{3/2} + 2\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a919.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, 1; z\right) = -\frac{1}{5} e^z (2z - 5)$$

07.25.03.a91a.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (3-z) \operatorname{erf}(\sqrt{z})}{5 \sqrt{z}} - \frac{1}{5}$$

07.25.03.a91b.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (z+3) \operatorname{erfi}(\sqrt{z})}{5 \sqrt{z}} - \frac{1}{5}$$

07.25.03.a91c.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, 2; z\right) = \frac{e^z (7-2z)}{5z} - \frac{7}{5z}$$

07.25.03.a91d.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{3 e^z \sqrt{\pi} (z-4) \operatorname{erf}(\sqrt{z})}{10 z^{3/2}} - \frac{12}{5z}$$

07.25.03.a91e.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{12}{5z} - \frac{3 e^{-z} \sqrt{\pi} (z+4) \operatorname{erfi}(\sqrt{z})}{10 z^{3/2}}$$

07.25.03.a91f.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, 3; z\right) = -\frac{2 e^z (2z-9)}{5 z^2} - \frac{2(7z+9)}{5 z^2}$$

07.25.03.a91g.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-7z-15}{2 z^2} - \frac{3 e^z \sqrt{\pi} (z-5) \operatorname{erf}(\sqrt{z})}{4 z^{5/2}}$$

07.25.03.a91h.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{7z-15}{2 z^2} + \frac{3 e^{-z} \sqrt{\pi} (z+5) \operatorname{erfi}(\sqrt{z})}{4 z^{5/2}}$$

07.25.03.a91i.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, 4; z\right) = -\frac{6 e^z (2z-11)}{5 z^3} - \frac{3(7z^2+18z+22)}{5 z^3}$$

07.25.03.a91j.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(14z^2+45z+90)}{20 z^3} - \frac{21 e^z \sqrt{\pi} (z-6) \operatorname{erf}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.a91k.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(14z^2-45z+90)}{20 z^3} - \frac{21 e^{-z} \sqrt{\pi} (z+6) \operatorname{erfi}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.a91l.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, 5; z\right) = -\frac{24 e^z (2z-13)}{5 z^4} - \frac{4(7z^3+27z^2+66z+78)}{5 z^4}$$

07.25.03.a91m.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{63(4z^3 + 18z^2 + 55z + 105)}{40z^4} - \frac{189e^z\sqrt{\pi}(z-7)\operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.a91n.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63(4z^3 - 18z^2 + 55z - 105)}{40z^4} + \frac{189e^{-z}\sqrt{\pi}(z+7)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.a91o.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{5}{2}, 6; z\right) = \frac{-7z^4 - 36z^3 - 132z^2 - 312z - 360}{z^5} - \frac{24e^z(2z - 15)}{z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = -\frac{3}{2}$

07.25.03.a91p.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{4}{3}e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{3}(4z^2 - 2z + 3)$$

07.25.03.a91q.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3}(4z^2 + 2z + 3) - \frac{4}{3}e^{-z}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a91r.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, -\frac{1}{2}; z\right) = -2e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{3/2} - 2z + 1$$

07.25.03.a91s.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, -\frac{1}{2}; -z\right) = -2e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{3/2} + 2z + 1$$

07.25.03.a91t.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, \frac{1}{2}; z\right) = e^z\sqrt{\pi}\sqrt{z}\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.a91u.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, \frac{1}{2}; -z\right) = 1 - e^{-z}\sqrt{\pi}\sqrt{z}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a91v.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, 1; z\right) = e^z$$

07.25.03.a91w.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.a91x.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.a91y.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, 2; z\right) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.a91z.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3}{2z}$$

07.25.03.a920.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{3}{2z} - \frac{3 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.a921.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, 3; z\right) = \frac{2 e^z}{z^2} - \frac{2(z+1)}{z^2}$$

07.25.03.a922.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5(2z+3)}{4 z^2}$$

07.25.03.a923.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(2z-3)}{4 z^2} + \frac{15 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.a924.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, 4; z\right) = \frac{6 e^z}{z^3} - \frac{3(z^2+2z+2)}{z^3}$$

07.25.03.a925.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{105 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7(4z^2+10z+15)}{8 z^3}$$

07.25.03.a926.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7(4z^2-10z+15)}{8 z^3} - \frac{105 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.a927.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, 5; z\right) = \frac{24 e^z}{z^4} - \frac{4(z^3+3z^2+6z+6)}{z^4}$$

07.25.03.a928.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9(8z^3+28z^2+70z+105)}{16 z^4}$$

07.25.03.a929.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{9(8z^3-28z^2+70z-105)}{16 z^4} + \frac{945 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.a92a.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{3}{2}, 6; z\right) = \frac{120 e^z}{z^5} - \frac{5(z^4+4z^3+12z^2+24z+24)}{z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = -\frac{1}{2}$

07.25.03.a92b.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{1}{2}, 1; z\right) = e^z (2z + 1) - 2\sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a92c.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{1}{2}, 1; -z\right) = e^{-z} (1 - 2z) - 2\sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a92d.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{1}{2}, 2; z\right) = -\frac{4}{5}\sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{e^z (4z^2 + 2z + 3)}{5z} - \frac{3}{5z}$$

07.25.03.a92e.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{1}{2}, 2; -z\right) = -\frac{4}{5}\sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} + \frac{e^{-z} (-4z^2 + 2z - 3)}{5z} + \frac{3}{5z}$$

07.25.03.a92f.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{1}{2}, 3; z\right) = -\frac{16}{35}\sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} - \frac{6(7z + 5)}{35z^2} + \frac{2e^z (8z^3 + 4z^2 + 6z + 15)}{35z^2}$$

07.25.03.a92g.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{1}{2}, 3; -z\right) = -\frac{16}{35}\sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} + \frac{6(7z - 5)}{35z^2} - \frac{2e^{-z} (8z^3 - 4z^2 + 6z - 15)}{35z^2}$$

07.25.03.a92h.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{1}{2}, 4; z\right) = -\frac{32}{105}\sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{-63z^2 - 90z - 70}{35z^3} + \frac{2e^z (16z^4 + 8z^3 + 12z^2 + 30z + 105)}{105z^3}$$

07.25.03.a92i.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{1}{2}, 4; -z\right) = -\frac{32}{105}\sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} + \frac{63z^2 - 90z + 70}{35z^3} - \frac{2e^{-z} (16z^4 - 8z^3 + 12z^2 - 30z + 105)}{105z^3}$$

07.25.03.a92j.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{1}{2}, 5; z\right) = -\frac{256\sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2}}{1155} - \frac{4(231z^3 + 495z^2 + 770z + 630)}{385z^4} + \frac{8e^z (32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945)}{1155z^4}$$

07.25.03.a92k.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{1}{2}, 5; -z\right) = -\frac{256\sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2}}{1155} + \frac{4(231z^3 - 495z^2 + 770z - 630)}{385z^4} - \frac{8e^{-z} (32z^5 - 16z^4 + 24z^3 - 60z^2 + 210z - 945)}{1155z^4}$$

07.25.03.a92l.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{1}{2}, 6; z\right) = -\frac{512\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{3/2}}{3003} + \frac{-3003z^4 - 8580z^3 - 20020z^2 - 32760z - 27720}{1001z^5} + \frac{8e^z(64z^6 + 32z^5 + 48z^4 + 120z^3 + 420z^2 + 1890z + 10395)}{3003z^5}$$

07.25.03.a92m.01

$${}_2F_2\left(-\frac{3}{2}, 1; -\frac{1}{2}, 6; -z\right) = -\frac{512\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{3/2}}{3003} + \frac{3003z^4 - 8580z^3 + 20020z^2 - 32760z + 27720}{1001z^5} - \frac{8e^{-z}(64z^6 - 32z^5 + 48z^4 - 120z^3 + 420z^2 - 1890z + 10395)}{3003z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = \frac{1}{2}$

07.25.03.a92n.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{1}{2}, 1; z\right) = e^z(1-z) + \frac{1}{2}\sqrt{\pi}(2z^{3/2} - 3\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a92o.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{1}{2}, 1; -z\right) = e^{-z}(z+1) + \frac{1}{2}\sqrt{\pi}(2z^{3/2} + 3\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.a92p.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{1}{2}, 2; z\right) = \frac{e^z(-2z^2 + 4z + 1)}{5z} + \frac{1}{5}\sqrt{\pi}(2z^{3/2} - 5\sqrt{z})\operatorname{erfi}(\sqrt{z}) - \frac{1}{5z}$$

07.25.03.a92q.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{1}{2}, 2; -z\right) = \frac{e^{-z}(2z^2 + 4z - 1)}{5z} + \frac{1}{5}\sqrt{\pi}(2z^{3/2} + 5\sqrt{z})\operatorname{erf}(\sqrt{z}) + \frac{1}{5z}$$

07.25.03.a92r.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{1}{2}, 3; z\right) = -\frac{2(7z+3)}{35z^2} - \frac{2e^z(4z^3 - 12z^2 - 4z - 3)}{35z^2} + \frac{4}{35}\sqrt{\pi}(2z^{3/2} - 7\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a92s.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{1}{2}, 3; -z\right) = \frac{2(7z-3)}{35z^2} + \frac{2e^{-z}(4z^3 + 12z^2 - 4z + 3)}{35z^2} + \frac{4}{35}\sqrt{\pi}(2z^{3/2} + 7\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.a92t.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{1}{2}, 4; z\right) = \frac{-21z^2 - 18z - 10}{35z^3} - \frac{2e^z(8z^4 - 32z^3 - 12z^2 - 12z - 15)}{105z^3} + \frac{8}{105}\sqrt{\pi}(2z^{3/2} - 9\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a92u.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{1}{2}, 4; -z\right) = \frac{21z^2 - 18z + 10}{35z^3} + \frac{2e^{-z}(8z^4 + 32z^3 - 12z^2 + 12z - 15)}{105z^3} + \frac{8}{105}\sqrt{\pi}(2z^{3/2} + 9\sqrt{z})\operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.a92v.01} \\
 {}_2F_2\left(-\frac{3}{2}, 1; \frac{1}{2}, 5; z\right) = & \\
 & -\frac{4(77z^3 + 99z^2 + 110z + 70)}{385z^4} - \frac{8e^z(16z^5 - 80z^4 - 32z^3 - 36z^2 - 60z - 105)}{1155z^4} + \frac{64\sqrt{\pi}(2z^{3/2} - 11\sqrt{z})\operatorname{erfi}(\sqrt{z})}{1155}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a92w.01} \\
 {}_2F_2\left(-\frac{3}{2}, 1; \frac{1}{2}, 5; -z\right) = & \\
 & \frac{4(77z^3 - 99z^2 + 110z - 70)}{385z^4} + \frac{8e^{-z}(16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105)}{1155z^4} + \frac{64\sqrt{\pi}(2z^{3/2} + 11\sqrt{z})\operatorname{erf}(\sqrt{z})}{1155}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a92x.01} \\
 {}_2F_2\left(-\frac{3}{2}, 1; \frac{1}{2}, 6; z\right) = & \frac{-1001z^4 - 1716z^3 - 2860z^2 - 3640z - 2520}{1001z^5} - \\
 & \frac{8e^z(32z^6 - 192z^5 - 80z^4 - 96z^3 - 180z^2 - 420z - 945)}{3003z^5} + \frac{128\sqrt{\pi}(2z^{3/2} - 13\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3003}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a92y.01} \\
 {}_2F_2\left(-\frac{3}{2}, 1; \frac{1}{2}, 6; -z\right) = & \frac{1001z^4 - 1716z^3 + 2860z^2 - 3640z + 2520}{1001z^5} + \\
 & \frac{8e^{-z}(32z^6 + 192z^5 - 80z^4 + 96z^3 - 180z^2 + 420z - 945)}{3003z^5} + \frac{128\sqrt{\pi}(2z^{3/2} + 13\sqrt{z})\operatorname{erf}(\sqrt{z})}{3003}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = 1$

$$\text{07.25.03.a92z.01} \\
 {}_2F_2\left(-\frac{3}{2}, 1; 1, 1; z\right) = \frac{1}{3}e^{z/2}(2z^2 - 6z + 3)I_0\left(\frac{z}{2}\right) - \frac{2}{3}e^{z/2}(z - 2)zI_1\left(\frac{z}{2}\right)$$

$$\text{07.25.03.a930.01} \\
 {}_2F_2\left(-\frac{3}{2}, 1; 1, \frac{3}{2}; z\right) = \frac{1}{8}e^z(5 - 2z) + \frac{\sqrt{\pi}(4z^2 - 12z + 3)\operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

$$\text{07.25.03.a931.01} \\
 {}_2F_2\left(-\frac{3}{2}, 1; 1, \frac{3}{2}; -z\right) = \frac{1}{8}e^{-z}(2z + 5) + \frac{\sqrt{\pi}(4z^2 + 12z + 3)\operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

$$\text{07.25.03.a932.01} \\
 {}_2F_2\left(-\frac{3}{2}, 1; 1, 2; z\right) = \frac{1}{15}e^{z/2}(4z^2 - 18z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}(-4z^2 + 14z - 3)I_1\left(\frac{z}{2}\right)$$

$$\text{07.25.03.a933.01} \\
 {}_2F_2\left(-\frac{3}{2}, 1; 1, \frac{5}{2}; z\right) = \frac{e^z(-4z^2 + 16z - 3)}{32z} + \frac{\sqrt{\pi}(8z^3 - 36z^2 + 18z + 3)\operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.a934.01

$${}_2F_2\left(-\frac{3}{2}, 1; 1, \frac{5}{2}; -z\right) = \frac{e^{-z}(4z^2 + 16z + 3)}{32z} + \frac{\sqrt{\pi}(8z^3 + 36z^2 + 18z - 3)\operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.a935.01

$${}_2F_2\left(-\frac{3}{2}, 1; 1, 3; z\right) = \frac{4}{105} e^{z/2}(4z^2 - 24z + 27)I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(4z^3 - 20z^2 + 9z + 3)I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.a936.01

$${}_2F_2\left(-\frac{3}{2}, 1; 1, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi}(16z^4 - 96z^3 + 72z^2 + 24z + 9)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5e^z(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.a937.01

$${}_2F_2\left(-\frac{3}{2}, 1; 1, \frac{7}{2}; -z\right) = \frac{5e^{-z}(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5\sqrt{\pi}(16z^4 + 96z^3 + 72z^2 - 24z + 9)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.a938.01

$${}_2F_2\left(-\frac{3}{2}, 1; 1, 4; z\right) = \frac{4e^{z/2}(8z^3 - 60z^2 + 84z + 3)I_0\left(\frac{z}{2}\right)}{315z} - \frac{4e^{z/2}(8z^4 - 52z^3 + 36z^2 + 21z + 12)I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.a939.01

$${}_2F_2\left(-\frac{3}{2}, 1; 1, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45)\operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7e^z(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.a93a.01

$${}_2F_2\left(-\frac{3}{2}, 1; 1, \frac{9}{2}; -z\right) = \frac{7e^{-z}(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7\sqrt{\pi}(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)\operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.a93b.01

$${}_2F_2\left(-\frac{3}{2}, 1; 1, 5; z\right) = \frac{32e^{z/2}(8z^4 - 72z^3 + 120z^2 + 12z + 9)I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{128e^{z/2}(2z^5 - 16z^4 + 15z^3 + 12z^2 + 12z + 9)I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.a93c.01

$${}_2F_2\left(-\frac{3}{2}, 1; 1, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi}(64z^6 - 576z^5 + 720z^4 + 480z^3 + 540z^2 + 540z + 315)\operatorname{erfi}(\sqrt{z})}{32768z^{9/2}} - \frac{21e^z(32z^5 - 272z^4 + 240z^3 + 264z^2 + 330z + 315)}{16384z^4}$$

07.25.03.a93d.01

$${}_2F_2\left(-\frac{3}{2}, 1; 1, \frac{11}{2}; -z\right) = \frac{21e^{-z}(32z^5 + 272z^4 + 240z^3 - 264z^2 + 330z - 315)}{16384z^4} + \frac{21\sqrt{\pi}(64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)\operatorname{erf}(\sqrt{z})}{32768z^{9/2}}$$

07.25.03.a93e.01

$${}_2F_2\left(-\frac{3}{2}, 1; 1, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 168 z^4 + 324 z^3 + 60 z^2 + 81 z + 72) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (16 z^6 - 152 z^5 + 180 z^4 + 180 z^3 + 249 z^2 + 324 z + 288) I_1\left(\frac{z}{2}\right)}{9009 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = \frac{3}{2}$

07.25.03.a93f.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{3}{2}, 2; z\right) = \frac{e^{-z} (-2 z^2 + 9 z - 4)}{20 z} + \frac{\sqrt{\pi} (4 z^2 - 20 z + 15) \operatorname{erfi}(\sqrt{z})}{40 \sqrt{z}} + \frac{1}{5 z}$$

07.25.03.a93g.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (2 z^2 + 9 z + 4)}{20 z} + \frac{\sqrt{\pi} (4 z^2 + 20 z + 15) \operatorname{erf}(\sqrt{z})}{40 \sqrt{z}} - \frac{1}{5 z}$$

07.25.03.a93h.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{3}{2}, 3; z\right) = \frac{2(7 z + 1)}{35 z^2} + \frac{e^{-z} (-2 z^3 + 13 z^2 - 12 z - 2)}{35 z^2} + \frac{\sqrt{\pi} (4 z^2 - 28 z + 35) \operatorname{erfi}(\sqrt{z})}{70 \sqrt{z}}$$

07.25.03.a93i.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{3}{2}, 3; -z\right) = -\frac{2(7 z - 1)}{35 z^2} + \frac{e^{-z} (2 z^3 + 13 z^2 + 12 z - 2)}{35 z^2} + \frac{\sqrt{\pi} (4 z^2 + 28 z + 35) \operatorname{erf}(\sqrt{z})}{70 \sqrt{z}}$$

07.25.03.a93j.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{3}{2}, 4; z\right) = \frac{21 z^2 + 6 z + 2}{35 z^3} - \frac{2 e^{-z} (2 z^4 - 17 z^3 + 24 z^2 + 6 z + 3)}{105 z^3} + \frac{\sqrt{\pi} (4 z^2 - 36 z + 63) \operatorname{erfi}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.a93k.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{3}{2}, 4; -z\right) = \frac{-21 z^2 + 6 z - 2}{35 z^3} + \frac{2 e^{-z} (2 z^4 + 17 z^3 + 24 z^2 - 6 z + 3)}{105 z^3} + \frac{\sqrt{\pi} (4 z^2 + 36 z + 63) \operatorname{erf}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.a93l.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{3}{2}, 5; z\right) = \frac{4(77 z^3 + 33 z^2 + 22 z + 10)}{385 z^4} - \frac{8 e^{-z} (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15)}{1155 z^4} + \frac{8 \sqrt{\pi} (4 z^2 - 44 z + 99) \operatorname{erfi}(\sqrt{z})}{1155 \sqrt{z}}$$

07.25.03.a93m.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{3}{2}, 5; -z\right) = \frac{4(77 z^3 - 33 z^2 + 22 z - 10)}{385 z^4} + \frac{8 e^{-z} (4 z^5 + 42 z^4 + 80 z^3 - 24 z^2 + 18 z - 15)}{1155 z^4} + \frac{8 \sqrt{\pi} (4 z^2 + 44 z + 99) \operatorname{erf}(\sqrt{z})}{1155 \sqrt{z}}$$

07.25.03.a93n.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{3}{2}, 6; z\right) = \frac{1001 z^4 + 572 z^3 + 572 z^2 + 520 z + 280}{1001 z^5} - \frac{8 e^z (8 z^6 - 100 z^5 + 240 z^4 + 80 z^3 + 72 z^2 + 90 z + 105)}{3003 z^5} + \frac{16 \sqrt{\pi} (4 z^2 - 52 z + 143) \operatorname{erfi}(\sqrt{z})}{3003 \sqrt{z}}$$

07.25.03.a93o.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{3}{2}, 6; -z\right) = \frac{-1001 z^4 + 572 z^3 - 572 z^2 + 520 z - 280}{1001 z^5} + \frac{8 e^{-z} (8 z^6 + 100 z^5 + 240 z^4 - 80 z^3 + 72 z^2 - 90 z + 105)}{3003 z^5} + \frac{16 \sqrt{\pi} (4 z^2 + 52 z + 143) \operatorname{erf}(\sqrt{z})}{3003 \sqrt{z}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = 2$

07.25.03.a93p.01

$${}_2F_2\left(-\frac{3}{2}, 1; 2, 2; z\right) = \frac{2 e^{z/2} (4 z^3 - 28 z^2 + 45 z - 15) I_0\left(\frac{z}{2}\right)}{75 z} - \frac{2}{75} e^{z/2} (4 z^2 - 24 z + 23) I_1\left(\frac{z}{2}\right) + \frac{2}{5 z}$$

07.25.03.a93q.01

$${}_2F_2\left(-\frac{3}{2}, 1; 2, \frac{5}{2}; z\right) = \frac{e^z (-4 z^2 + 28 z - 33)}{80 z} + \frac{\sqrt{\pi} (8 z^3 - 60 z^2 + 90 z - 15) \operatorname{erfi}(\sqrt{z})}{160 z^{3/2}} + \frac{3}{5 z}$$

07.25.03.a93r.01

$${}_2F_2\left(-\frac{3}{2}, 1; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (4 z^2 + 28 z + 33)}{80 z} + \frac{\sqrt{\pi} (8 z^3 + 60 z^2 + 90 z + 15) \operatorname{erf}(\sqrt{z})}{160 z^{3/2}} - \frac{3}{5 z}$$

07.25.03.a93s.01

$${}_2F_2\left(-\frac{3}{2}, 1; 2, 3; z\right) = \frac{4 e^{z/2} (8 z^3 - 76 z^2 + 180 z - 105) I_0\left(\frac{z}{2}\right)}{525 z} - \frac{4 e^{z/2} (8 z^3 - 68 z^2 + 116 z - 15) I_1\left(\frac{z}{2}\right)}{525 z} + \frac{4}{5 z}$$

07.25.03.a93t.01

$${}_2F_2\left(-\frac{3}{2}, 1; 2, \frac{7}{2}; z\right) = \frac{e^z (-8 z^3 + 76 z^2 - 146 z + 15)}{256 z^2} + \frac{\sqrt{\pi} (16 z^4 - 160 z^3 + 360 z^2 - 120 z - 15) \operatorname{erfi}(\sqrt{z})}{512 z^{5/2}} + \frac{1}{z}$$

07.25.03.a93u.01

$${}_2F_2\left(-\frac{3}{2}, 1; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (8 z^3 + 76 z^2 + 146 z + 15)}{256 z^2} + \frac{\sqrt{\pi} (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15) \operatorname{erf}(\sqrt{z})}{512 z^{5/2}} - \frac{1}{z}$$

07.25.03.a93v.01

$${}_2F_2\left(-\frac{3}{2}, 1; 2, 4; z\right) = \frac{32 e^{z/2} (2 z^3 - 24 z^2 + 75 z - 60) I_0\left(\frac{z}{2}\right)}{1575 z} - \frac{8 e^{z/2} (8 z^4 - 88 z^3 + 216 z^2 - 60 z - 15) I_1\left(\frac{z}{2}\right)}{1575 z^2} + \frac{6}{5 z}$$

07.25.03.a93w.01

$${}_2F_2\left(-\frac{3}{2}, 1; 2, \frac{9}{2}; z\right) = -\frac{7 e^z (16 z^4 - 192 z^3 + 512 z^2 - 120 z - 45)}{5120 z^3} + \frac{7 \sqrt{\pi} (32 z^5 - 400 z^4 + 1200 z^3 - 600 z^2 - 150 z - 45) \operatorname{erfi}(\sqrt{z})}{10240 z^{7/2}} + \frac{7}{5 z}$$

07.25.03.a93x.01

$${}_2F_2\left(-\frac{3}{2}, 1; 2, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (16 z^4 + 192 z^3 + 512 z^2 + 120 z - 45)}{5120 z^3} + \frac{7 \sqrt{\pi} (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45) \operatorname{erf}(\sqrt{z})}{10240 z^{7/2}} - \frac{7}{5 z}$$

07.25.03.a93y.01

$${}_2F_2\left(-\frac{3}{2}, 1; 2, 5; z\right) = \frac{32 e^{z/2} (16 z^4 - 232 z^3 + 900 z^2 - 900 z - 15) I_0\left(\frac{z}{2}\right)}{17325 z^2} - \frac{32 e^{z/2} (16 z^5 - 216 z^4 + 692 z^3 - 300 z^2 - 135 z - 60) I_1\left(\frac{z}{2}\right)}{17325 z^3} + \frac{8}{5 z}$$

07.25.03.a93z.01

$${}_2F_2\left(-\frac{3}{2}, 1; 2, \frac{11}{2}; z\right) = -\frac{21 e^z (32 z^5 - 464 z^4 + 1584 z^3 - 600 z^2 - 390 z - 225)}{40960 z^4} + \frac{21 \sqrt{\pi} (64 z^6 - 960 z^5 + 3600 z^4 - 2400 z^3 - 900 z^2 - 540 z - 225) \operatorname{erfi}(\sqrt{z})}{81920 z^{9/2}} + \frac{9}{5 z}$$

07.25.03.a940.01

$${}_2F_2\left(-\frac{3}{2}, 1; 2, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (32 z^5 + 464 z^4 + 1584 z^3 + 600 z^2 - 390 z + 225)}{40960 z^4} + \frac{21 \sqrt{\pi} (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225) \operatorname{erf}(\sqrt{z})}{81920 z^{9/2}} - \frac{9}{5 z}$$

07.25.03.a941.01

$${}_2F_2\left(-\frac{3}{2}, 1; 2, 6; z\right) = \frac{64 e^{z/2} (16 z^5 - 272 z^4 + 1260 z^3 - 1500 z^2 - 75 z - 45) I_0\left(\frac{z}{2}\right)}{45045 z^3} - \frac{64 e^{z/2} (16 z^6 - 256 z^5 + 1012 z^4 - 600 z^3 - 375 z^2 - 300 z - 180) I_1\left(\frac{z}{2}\right)}{45045 z^4} + \frac{2}{z}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = \frac{5}{2}$

07.25.03.a942.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{5}{2}, 3; z\right) = \frac{6(7z-1)}{35z^2} + \frac{e^z(-4z^3+40z^2-87z+24)}{140z^2} + \frac{\sqrt{\pi}(8z^3-84z^2+210z-105)\operatorname{erfi}(\sqrt{z})}{280z^{3/2}}$$

07.25.03.a943.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{5}{2}, 3; -z\right) = -\frac{6(7z+1)}{35z^2} + \frac{e^{-z}(4z^3+40z^2+87z+24)}{140z^2} + \frac{\sqrt{\pi}(8z^3+84z^2+210z+105)\operatorname{erf}(\sqrt{z})}{280z^{3/2}}$$

07.25.03.a944.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{5}{2}, 4; z\right) = \frac{63z^2 - 18z - 2}{35z^3} + \frac{e^z(-4z^4 + 52z^3 - 165z^2 + 96z + 12)}{210z^3} + \frac{\sqrt{\pi}(8z^3 - 108z^2 + 378z - 315)\operatorname{erfi}(\sqrt{z})}{420z^{3/2}}$$

07.25.03.a945.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{5}{2}, 4; -z\right) = \frac{-63z^2 - 18z + 2}{35z^3} + \frac{e^{-z}(4z^4 + 52z^3 + 165z^2 + 96z - 12)}{210z^3} + \frac{\sqrt{\pi}(8z^3 + 108z^2 + 378z + 315)\operatorname{erf}(\sqrt{-z})}{420z^{3/2}}$$

07.25.03.a946.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{5}{2}, 5; z\right) = \frac{4(231z^3 - 99z^2 - 22z - 6)}{385z^4} - \frac{4e^z(4z^5 - 64z^4 + 267z^3 - 240z^2 - 48z - 18)}{1155z^4} + \frac{2\sqrt{\pi}(8z^3 - 132z^2 + 594z - 693)\operatorname{erfi}(\sqrt{z})}{1155z^{3/2}}$$

07.25.03.a947.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{5}{2}, 5; -z\right) = -\frac{4(231z^3 + 99z^2 - 22z + 6)}{385z^4} + \frac{4e^{-z}(4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18)}{1155z^4} + \frac{2\sqrt{\pi}(8z^3 + 132z^2 + 594z + 693)\operatorname{erf}(\sqrt{-z})}{1155z^{3/2}}$$

07.25.03.a948.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{5}{2}, 6; z\right) = \frac{3003z^4 - 1716z^3 - 572z^2 - 312z - 120}{1001z^5} - \frac{8e^z(4z^6 - 76z^5 + 393z^4 - 480z^3 - 120z^2 - 72z - 45)}{3003z^5} + \frac{4\sqrt{\pi}(8z^3 - 156z^2 + 858z - 1287)\operatorname{erfi}(\sqrt{z})}{3003z^{3/2}}$$

07.25.03.a949.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{5}{2}, 6; -z\right) = \frac{-3003z^4 - 1716z^3 + 572z^2 - 312z + 120}{1001z^5} + \frac{8e^{-z}(4z^6 + 76z^5 + 393z^4 + 480z^3 - 120z^2 + 72z - 45)}{3003z^5} + \frac{4\sqrt{\pi}(8z^3 + 156z^2 + 858z + 1287)\operatorname{erf}(\sqrt{-z})}{3003z^{3/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = 3$

07.25.03.a94a.01

$${}_2F_2\left(-\frac{3}{2}, 1; 3, 3; z\right) = \frac{8(7z - 2)}{35z^2} + \frac{16e^{z/2}(8z^4 - 104z^3 + 376z^2 - 420z + 105)I_0\left(\frac{z}{2}\right)}{3675z^2} - \frac{64e^{z/2}(2z^3 - 24z^2 + 71z - 44)I_1\left(\frac{z}{2}\right)}{3675z}$$

07.25.03.a94b.01

$${}_2F_2\left(-\frac{3}{2}, 1; 3, \frac{7}{2}; z\right) = \frac{2(7z - 3)}{7z^2} + \frac{e^z(-8z^3 + 108z^2 - 370z + 279)}{448z^2} + \frac{\sqrt{\pi}(16z^4 - 224z^3 + 840z^2 - 840z + 105)\operatorname{erfi}(\sqrt{z})}{896z^{5/2}}$$

07.25.03.a94c.01

$${}_2F_2\left(-\frac{3}{2}, 1; 3, \frac{7}{2}; -z\right) = -\frac{2(7z + 3)}{7z^2} + \frac{e^{-z}(8z^3 + 108z^2 + 370z + 279)}{448z^2} + \frac{\sqrt{\pi}(16z^4 + 224z^3 + 840z^2 + 840z + 105)\operatorname{erf}(\sqrt{-z})}{896z^{5/2}}$$

07.25.03.a94d.01

$${}_2F_2\left(-\frac{3}{2}, 1; 3, 4; z\right) = \frac{12(7z-4)}{35z^2} + \frac{16e^{z/2}(16z^4 - 264z^3 + 1284z^2 - 2100z + 945)I_0\left(\frac{z}{2}\right)}{11025z^2} - \frac{16e^{z/2}(16z^4 - 248z^3 + 1044z^2 - 1164z + 105)I_1\left(\frac{z}{2}\right)}{11025z^2}$$

07.25.03.a94e.01

$${}_2F_2\left(-\frac{3}{2}, 1; 3, \frac{9}{2}; z\right) = \frac{2(7z-5)}{5z^2} + \frac{e^z(-16z^4 + 272z^3 - 1272z^2 + 1580z - 105)}{1280z^3} + \frac{\sqrt{\pi}(32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105)\operatorname{erfi}(\sqrt{z})}{2560z^{7/2}}$$

07.25.03.a94f.01

$${}_2F_2\left(-\frac{3}{2}, 1; 3, \frac{9}{2}; -z\right) = -\frac{2(7z+5)}{5z^2} + \frac{e^{-z}(16z^4 + 272z^3 + 1272z^2 + 1580z + 105)}{1280z^3} + \frac{\sqrt{\pi}(32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105)\operatorname{erf}(\sqrt{z})}{2560z^{7/2}}$$

07.25.03.a94g.01

$${}_2F_2\left(-\frac{3}{2}, 1; 3, 5; z\right) = \frac{16(7z-6)}{35z^2} + \frac{128e^{z/2}(16z^4 - 320z^3 + 1956z^2 - 4200z + 2625)I_0\left(\frac{z}{2}\right)}{121275z^2} - \frac{128e^{z/2}(16z^5 - 304z^4 + 1660z^3 - 2676z^2 + 525z + 105)I_1\left(\frac{z}{2}\right)}{121275z^3}$$

07.25.03.a94h.01

$${}_2F_2\left(-\frac{3}{2}, 1; 3, \frac{11}{2}; z\right) = \frac{18(z-1)}{5z^2} - \frac{3e^z(32z^5 - 656z^4 + 3888z^3 - 6744z^2 + 1050z + 315)}{10240z^4} + \frac{3\sqrt{\pi}(64z^6 - 1344z^5 + 8400z^4 - 16800z^3 + 6300z^2 + 1260z + 315)\operatorname{erfi}(\sqrt{z})}{20480z^{9/2}}$$

07.25.03.a94i.01

$${}_2F_2\left(-\frac{3}{2}, 1; 3, \frac{11}{2}; -z\right) = -\frac{18(z+1)}{5z^2} + \frac{3e^{-z}(32z^5 + 656z^4 + 3888z^3 + 6744z^2 + 1050z - 315)}{10240z^4} + \frac{3\sqrt{\pi}(64z^6 + 1344z^5 + 8400z^4 + 16800z^3 + 6300z^2 - 1260z + 315)\operatorname{erf}(\sqrt{z})}{20480z^{9/2}}$$

07.25.03.a94j.01

$${}_2F_2\left(-\frac{3}{2}, 1; 3, 6; z\right) = \frac{4(7z-8)}{7z^2} + \frac{128e^{z/2}(32z^5 - 752z^4 + 5536z^3 - 14700z^2 + 11550z + 105)I_0\left(\frac{z}{2}\right)}{315315z^3} - \frac{128e^{z/2}(32z^6 - 720z^5 + 4832z^4 - 10196z^3 + 3150z^2 + 1155z + 420)I_1\left(\frac{z}{2}\right)}{315315z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = \frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.a94k.01} \\
 {}_2F_2\left(-\frac{3}{2}, 1; \frac{7}{2}, 4; z\right) = & \frac{21z^2 - 18z + 2}{7z^3} + \frac{e^z(-8z^4 + 140z^3 - 690z^2 + 975z - 192)}{672z^3} + \frac{\sqrt{\pi}(16z^4 - 288z^3 + 1512z^2 - 2520z + 945)\operatorname{erfi}(\sqrt{z})}{1344z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a94l.01} \\
 {}_2F_2\left(-\frac{3}{2}, 1; \frac{7}{2}, 4; -z\right) = & \frac{-21z^2 - 18z - 2}{7z^3} + \frac{e^{-z}(8z^4 + 140z^3 + 690z^2 + 975z + 192)}{672z^3} + \frac{\sqrt{\pi}(16z^4 + 288z^3 + 1512z^2 + 2520z + 945)\operatorname{erf}(\sqrt{z})}{1344z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a94m.01} \\
 {}_2F_2\left(-\frac{3}{2}, 1; \frac{7}{2}, 5; z\right) = & \frac{4(77z^3 - 99z^2 + 22z + 2)}{77z^4} + \frac{e^z(-8z^5 + 172z^4 - 1106z^3 + 2295z^2 - 960z - 96)}{924z^4} + \frac{\sqrt{\pi}(16z^4 - 352z^3 + 2376z^2 - 5544z + 3465)\operatorname{erfi}(\sqrt{z})}{1848z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a94n.01} \\
 {}_2F_2\left(-\frac{3}{2}, 1; \frac{7}{2}, 5; -z\right) = & -\frac{4(77z^3 + 99z^2 + 22z - 2)}{77z^4} + \frac{e^{-z}(8z^5 + 172z^4 + 1106z^3 + 2295z^2 + 960z - 96)}{924z^4} + \frac{\sqrt{\pi}(16z^4 + 352z^3 + 2376z^2 + 5544z + 3465)\operatorname{erf}(\sqrt{z})}{1848z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a94o.01} \\
 {}_2F_2\left(-\frac{3}{2}, 1; \frac{7}{2}, 6; z\right) = & \frac{5(1001z^4 - 1716z^3 + 572z^2 + 104z + 24)}{1001z^5} - \frac{5e^z(8z^6 - 204z^5 + 1618z^4 - 4431z^3 + 2880z^2 + 480z + 144)}{6006z^5} + \frac{5\sqrt{\pi}(16z^4 - 416z^3 + 3432z^2 - 10296z + 9009)\operatorname{erfi}(\sqrt{z})}{12012z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a94p.01} \\
 {}_2F_2\left(-\frac{3}{2}, 1; \frac{7}{2}, 6; -z\right) = & -\frac{5(1001z^4 + 1716z^3 + 572z^2 - 104z + 24)}{1001z^5} + \frac{5e^{-z}(8z^6 + 204z^5 + 1618z^4 + 4431z^3 + 2880z^2 - 480z + 144)}{6006z^5} + \frac{5\sqrt{\pi}(16z^4 + 416z^3 + 3432z^2 + 10296z + 9009)\operatorname{erf}(\sqrt{z})}{12012z^{5/2}}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = 4$

07.25.03.a94q.01

$${}_2F_2\left(-\frac{3}{2}, 1; 4, 4; z\right) = \frac{2(63z^2 - 72z + 16)}{35z^3} + \frac{32e^{z/2}(16z^5 - 336z^4 + 2220z^3 - 5484z^2 + 4725z - 945)I_0\left(\frac{z}{2}\right) - 32e^{z/2}(16z^4 - 320z^3 + 1908z^2 - 3720z + 1689)I_1\left(\frac{z}{2}\right)}{33075z^3}$$

07.25.03.a94r.01

$${}_2F_2\left(-\frac{3}{2}, 1; 4, \frac{9}{2}; z\right) = \frac{21z^2 - 30z + 10}{5z^3} + \frac{e^{-z}(-16z^4 + 352z^3 - 2352z^2 + 5280z - 2895)}{1920z^3} + \frac{\sqrt{\pi}(32z^5 - 720z^4 + 5040z^3 - 12600z^2 + 9450z - 945)\operatorname{erfi}(\sqrt{z})}{3840z^{7/2}}$$

07.25.03.a94s.01

$${}_2F_2\left(-\frac{3}{2}, 1; 4, \frac{9}{2}; -z\right) = \frac{-21z^2 - 30z - 10}{5z^3} + \frac{e^{-z}(16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{1920z^3} + \frac{\sqrt{\pi}(32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945)\operatorname{erf}(\sqrt{z})}{3840z^{7/2}}$$

07.25.03.a94t.01

$${}_2F_2\left(-\frac{3}{2}, 1; 4, 5; z\right) = \frac{8(21z^2 - 36z + 16)}{35z^3} + \frac{128e^{z/2}(32z^5 - 816z^4 + 6816z^3 - 22524z^2 + 28350z - 10395)I_0\left(\frac{z}{2}\right) - 128e^{z/2}(32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945)I_1\left(\frac{z}{2}\right)}{363825z^3}$$

07.25.03.a94u.01

$${}_2F_2\left(-\frac{3}{2}, 1; 4, \frac{11}{2}; z\right) = \frac{3(9z^2 - 18z + 10)}{5z^3} + \frac{e^{-z}(-32z^5 + 848z^4 - 7152z^3 + 22008z^2 - 20010z + 945)}{5120z^4} + \frac{\sqrt{\pi}(64z^6 - 1728z^5 + 15120z^4 - 50400z^3 + 56700z^2 - 11340z - 945)\operatorname{erfi}(\sqrt{z})}{10240z^{9/2}}$$

07.25.03.a94v.01

$${}_2F_2\left(-\frac{3}{2}, 1; 4, \frac{11}{2}; -z\right) = -\frac{3(9z^2 + 18z + 10)}{5z^3} + \frac{e^{-z}(32z^5 + 848z^4 + 7152z^3 + 22008z^2 + 20010z + 945)}{5120z^4} + \frac{\sqrt{\pi}(64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945)\operatorname{erf}(\sqrt{z})}{10240z^{9/2}}$$

07.25.03.a94w.01

$${}_2F_2\left(-\frac{3}{2}, 1; 4, 6; z\right) = \frac{2(21z^2 - 48z + 32)}{7z^3} + \frac{512e^{z/2}(16z^5 - 480z^4 + 4848z^3 - 20064z^2 + 33075z - 17010)I_0\left(\frac{z}{2}\right) - 256e^{z/2}(32z^6 - 928z^5 + 8784z^4 - 31776z^3 + 37938z^2 - 5670z - 945)I_1\left(\frac{z}{2}\right)}{945945z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = \frac{9}{2}$

07.25.03.a94x.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{9}{2}, 5; z\right) = \frac{4(77z^3 - 165z^2 + 110z - 10)}{55z^4} + \frac{e^z(-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920)}{2640z^4} + \frac{\sqrt{\pi}(32z^5 - 880z^4 + 7920z^3 - 27720z^2 + 34650z - 10395)\operatorname{erfi}(\sqrt{z})}{5280z^{7/2}}$$

07.25.03.a94y.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{9}{2}, 5; -z\right) = -\frac{4(77z^3 + 165z^2 + 110z + 10)}{55z^4} + \frac{e^{-z}(16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{2640z^4} + \frac{\sqrt{\pi}(32z^5 + 880z^4 + 7920z^3 + 27720z^2 + 34650z + 10395)\operatorname{erf}(\sqrt{z})}{5280z^{7/2}}$$

07.25.03.a94z.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{9}{2}, 6; z\right) = \frac{1001z^4 - 2860z^3 + 2860z^2 - 520z - 40}{143z^5} + \frac{e^z(-16z^6 + 512z^5 - 5472z^4 + 23240z^3 - 35595z^2 + 11520z + 960)}{3432z^5} + \frac{\sqrt{\pi}(32z^5 - 1040z^4 + 11440z^3 - 51480z^2 + 90090z - 45045)\operatorname{erfi}(\sqrt{z})}{6864z^{7/2}}$$

07.25.03.a950.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{9}{2}, 6; -z\right) = \frac{-1001z^4 - 2860z^3 - 2860z^2 - 520z + 40}{143z^5} + \frac{e^{-z}(16z^6 + 512z^5 + 5472z^4 + 23240z^3 + 35595z^2 + 11520z - 960)}{3432z^5} + \frac{\sqrt{\pi}(32z^5 + 1040z^4 + 11440z^3 + 51480z^2 + 90090z + 45045)\operatorname{erf}(\sqrt{z})}{6864z^{7/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = 5$

07.25.03.a951.01

$${}_2F_2\left(-\frac{3}{2}, 1; 5, 5; z\right) = \frac{32(77z^3 - 198z^2 + 176z - 32)}{385z^4} + \frac{1024e^{z/2}(32z^6 - 992z^5 + 10512z^4 - 46944z^3 + 88674z^2 - 62370z + 10395)I_0\left(\frac{z}{2}\right)}{4002075z^4} + \frac{2048e^{z/2}(16z^5 - 480z^4 + 4784z^3 - 18912z^2 + 27387z - 9762)I_1\left(\frac{z}{2}\right)}{4002075z^3}$$

07.25.03.a952.01

$${}_2F_2\left(-\frac{3}{2}, 1; 5, \frac{11}{2}; z\right) = \frac{12(33z^3 - 99z^2 + 110z - 30)}{55z^4} + \frac{e^z(-32z^5 + 1040z^4 - 11376z^3 + 50232z^2 - 83370z + 35685)}{7040z^4} + \frac{\sqrt{\pi}(64z^6 - 2112z^5 + 23760z^4 - 110880z^3 + 207900z^2 - 124740z + 10395)\operatorname{erfi}(\sqrt{z})}{14080z^{9/2}}$$

07.25.03.a953.01

$${}_2F_2\left(-\frac{3}{2}, 1; 5, \frac{11}{2}; -z\right) = -\frac{12(33z^3 + 99z^2 + 110z + 30)}{55z^4} + \frac{e^{-z}(32z^5 + 1040z^4 + 11376z^3 + 50232z^2 + 83370z + 35685)}{7040z^4} + \frac{\sqrt{\pi}(64z^6 + 2112z^5 + 23760z^4 + 110880z^3 + 207900z^2 + 124740z + 10395)\operatorname{erf}(\sqrt{z})}{14080z^{9/2}}$$

07.25.03.a954.01

$${}_2F_2\left(-\frac{3}{2}, 1; 5, 6; z\right) = \frac{8(77z^3 - 264z^2 + 352z - 128)}{77z^4} + \frac{1024e^{z/2}(64z^6 - 2336z^5 + 30000z^4 - 168864z^3 + 425112z^2 - 436590z + 135135)I_0\left(\frac{z}{2}\right)}{10405395z^4} - \frac{1024e^{z/2}(64z^6 - 2272z^5 + 27760z^4 - 142176z^3 + 294744z^2 - 191442z + 10395)I_1\left(\frac{z}{2}\right)}{10405395z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = \frac{11}{2}$

07.25.03.a955.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{11}{2}, 6; z\right) = \frac{3(429z^4 - 1716z^3 + 2860z^2 - 1560z + 120)}{143z^5} + \frac{e^z(-32z^6 + 1232z^5 - 16560z^4 + 95256z^3 - 229530z^2 + 187425z - 23040)}{9152z^5} + \frac{\sqrt{\pi}(64z^6 - 2496z^5 + 34320z^4 - 205920z^3 + 540540z^2 - 540540z + 135135)\operatorname{erfi}(\sqrt{z})}{18304z^{9/2}}$$

07.25.03.a956.01

$${}_2F_2\left(-\frac{3}{2}, 1; \frac{11}{2}, 6; -z\right) = -\frac{3(429z^4 + 1716z^3 + 2860z^2 + 1560z + 120)}{143z^5} + \frac{e^{-z}(32z^6 + 1232z^5 + 16560z^4 + 95256z^3 + 229530z^2 + 187425z + 23040)}{9152z^5} + \frac{\sqrt{\pi}(64z^6 + 2496z^5 + 34320z^4 + 205920z^3 + 540540z^2 + 540540z + 135135)\operatorname{erf}(\sqrt{z})}{18304z^{9/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 1$, $b_1 = 6$

07.25.03.a957.01

$${}_2F_2\left(-\frac{3}{2}, 1; 6, 6; z\right) = \frac{10(1001z^4 - 4576z^3 + 9152z^2 - 6656z + 1024)}{1001z^5} + \frac{1}{27054027z^5} 2048e^{z/2}(64z^7 - 2752z^6 + 42896z^5 - 305520z^4 + 1035384z^3 - 1589352z^2 + 945945z - 135135)I_0\left(\frac{z}{2}\right) - \frac{2048e^{z/2}(64z^6 - 2688z^5 + 40240z^4 - 266560z^3 + 786456z^2 - 903504z + 264207)I_1\left(\frac{z}{2}\right)}{27054027z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.a958.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \frac{1}{36018675} \left(e^z (2048 z^{11} + 44032 z^{10} + 283136 z^9 + 618240 z^8 + 349440 z^7 + 94080 z^6 - 423360 z^5 + \right. \\
 & \quad \left. 1985760 z^4 - 7421400 z^3 + 20771100 z^2 - 38697750 z + 36018675) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a959.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & -\frac{1}{3274425} \left(e^z (1024 z^{10} + 17408 z^9 + 80640 z^8 + 107520 z^7 + 13440 z^6 + 40320 z^5 - 191520 z^4 + \right. \\
 & \quad \left. 705600 z^3 - 1946700 z^2 + 3572100 z - 3274425) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a95a.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{363825} e^z (512 z^9 + 6400 z^8 + 17920 z^7 + 8960 z^6 - 6720 z^5 + 23520 z^4 - 84000 z^3 + 226800 z^2 - 406350 z + 363825)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a95b.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (256 z^8 + 2048 z^7 + 1792 z^6 - 3360 z^4 + 13440 z^3 - 35280 z^2 + 60480 z - 51975)}{51975}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a95c.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13230 z + 10395)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a95d.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{e^z (64 z^6 - 64 z^5 - 112 z^4 + 1120 z^3 - 3780 z^2 + 6300 z - 3465)}{3465}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a95e.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (32 z^5 - 176 z^4 + 560 z^3 - 840 z^2 - 630 z + 3465)}{3465}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a95f.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, 1; z\right) = \\
 & \frac{e^{z/2} (16 z^5 - 112 z^4 + 428 z^3 - 788 z^2 - 315 z + 3465) I_0\left(\frac{z}{2}\right) + e^{z/2} (16 z^5 - 128 z^4 + 564 z^3 - 1432 z^2 + 1577 z) I_1\left(\frac{z}{2}\right)}{3465}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a95g.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (16 z^4 - 160 z^3 + 840 z^2 - 2520 z + 3465)}{3465}
 \end{aligned}$$

07.25.03.a95h.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (16z^4 - 184z^3 + 1060z^2 - 3276z + 3465) I_0\left(\frac{z}{2}\right)}{3465} + \frac{e^{z/2} (16z^4 - 200z^3 + 1268z^2 - 4660z + 9009) I_1\left(\frac{z}{2}\right)}{3465}$$

07.25.03.a95i.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (8z^4 - 116z^3 + 826z^2 - 3325z + 6720)}{1155z} - \frac{32\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11z^{3/2}}$$

07.25.03.a95j.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-8z^4 - 116z^3 - 826z^2 - 3325z - 6720)}{1155z} + \frac{32\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11z^{3/2}}$$

07.25.03.a95k.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, 3; z\right) = \frac{16e^{z/2} (2z^3 - 32z^2 + 243z - 990) I_0\left(\frac{z}{2}\right)}{3465} + \frac{4e^{z/2} (8z^4 - 136z^3 + 1112z^2 - 5148z + 19305) I_1\left(\frac{z}{2}\right)}{3465z}$$

07.25.03.a95l.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (4z^4 - 76z^3 + 679z^2 - 3360z + 10080)}{231z^2} - \frac{80\sqrt{\pi} (z+3) \operatorname{erfi}(\sqrt{z})}{11z^{5/2}}$$

07.25.03.a95m.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (4z^4 + 76z^3 + 679z^2 + 3360z + 10080)}{231z^2} + \frac{80\sqrt{\pi} (z-3) \operatorname{erf}(\sqrt{z})}{11z^{5/2}}$$

07.25.03.a95n.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2} (8z^3 - 164z^2 + 1540z - 12155) I_0\left(\frac{z}{2}\right)}{1155z} + \frac{4e^{z/2} (8z^4 - 172z^3 + 1716z^2 - 5005z + 48620) I_1\left(\frac{z}{2}\right)}{1155z^2}$$

07.25.03.a95o.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (2z^4 - 47z^3 + 504z^2 - 2520z + 11340)}{33z^3} - \frac{70\sqrt{\pi} (2z^2 + 12z + 27) \operatorname{erfi}(\sqrt{z})}{11z^{7/2}}$$

07.25.03.a95p.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-2z^4 - 47z^3 - 504z^2 - 2520z - 11340)}{33z^3} + \frac{70\sqrt{\pi} (2z^2 - 12z + 27) \operatorname{erf}(\sqrt{z})}{11z^{7/2}}$$

07.25.03.a95q.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2} (4z^3 - 100z^2 + 221z - 12597) I_0\left(\frac{z}{2}\right)}{1155z^2} + \frac{32e^{z/2} (4z^4 - 104z^3 + 2119z^2 - 884z + 50388) I_1\left(\frac{z}{2}\right)}{1155z^3}$$

07.25.03.a95r.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{3e^z (z^4 - 28z^3 + 420z^2 - 1680z + 11025)}{11z^4} - \frac{105\sqrt{\pi} (4z^3 + 36z^2 + 162z + 315) \operatorname{erfi}(\sqrt{z})}{22z^{9/2}}$$

07.25.03.a95s.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z} (z^4 + 28z^3 + 420z^2 + 1680z + 11025)}{11z^4} + \frac{105\sqrt{\pi} (4z^3 - 36z^2 + 162z - 315) \operatorname{erf}(\sqrt{z})}{22z^{9/2}}$$

07.25.03.a95t.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (4 z^3 - 374 z^2 - 969 z - 23 256) I_0\left(\frac{z}{2}\right)}{231 z^3} + \frac{32 e^{z/2} (4 z^4 + 134 z^3 + 4403 z^2 + 3876 z + 93 024) I_1\left(\frac{z}{2}\right)}{231 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.a95u.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{297 675} e^z (512 z^9 + 6912 z^8 + 23 040 z^7 + 19 200 z^6 - 2880 z^5 + 18 720 z^4 - 67 680 z^3 + 183 600 z^2 - 330 750 z + 297 675)$$

07.25.03.a95v.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{e^z (256 z^8 + 2560 z^7 + 5120 z^6 + 1920 z^5 - 2400 z^4 + 8160 z^3 - 21 600 z^2 + 37 800 z - 33 075)}{33 075}$$

07.25.03.a95w.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 832 z^6 + 480 z^5 + 240 z^4 - 1320 z^3 + 3420 z^2 - 5670 z + 4725)}{4725}$$

07.25.03.a95x.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)$$

07.25.03.a95y.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} e^z (32 z^5 - 16 z^4 - 80 z^3 + 360 z^2 - 630 z + 315)$$

07.25.03.a95z.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{315} e^z (16 z^4 - 64 z^3 + 120 z^2 - 315)$$

07.25.03.a960.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (-8 z^4 + 40 z^3 - 88 z^2 + 315) I_0\left(\frac{z}{2}\right) - \frac{4}{315} e^{z/2} (2 z^4 - 12 z^3 + 35 z^2 - 43 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a961.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{315} e^z (8 z^3 - 60 z^2 + 210 z - 315)$$

07.25.03.a962.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (-8 z^3 + 68 z^2 - 252 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-8 z^3 + 76 z^2 - 332 z + 693) I_1\left(\frac{z}{2}\right)$$

07.25.03.a963.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (-4 z^3 + 44 z^2 - 215 z + 480)}{105 z} - \frac{16 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.a964.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(-4z^3 - 44z^2 - 215z - 480)}{105z} + \frac{16\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7z^{3/2}}$$

07.25.03.a965.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, 3; z\right) = -\frac{4}{315} e^{z/2} (4z^2 - 48z + 243) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4z^3 - 52z^2 + 297z - 1287) I_1\left(\frac{z}{2}\right)}{315z}$$

07.25.03.a966.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z(-2z^3 + 29z^2 - 180z + 630)}{21z^2} - \frac{5\sqrt{\pi} (8z + 21) \operatorname{erfi}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.a967.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(2z^3 + 29z^2 + 180z + 630)}{21z^2} + \frac{5\sqrt{\pi} (8z - 21) \operatorname{erf}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.a968.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, 4; z\right) = -\frac{4 e^{z/2} (4z^2 - 62z + 715) I_0\left(\frac{z}{2}\right)}{105z} - \frac{4 e^{z/2} (4z^3 - 66z^2 + 143z - 2860) I_1\left(\frac{z}{2}\right)}{105z^2}$$

07.25.03.a969.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z(-z^3 + 18z^2 - 105z + 630)}{3z^3} - \frac{5\sqrt{\pi} (4z^2 + 21z + 42) \operatorname{erfi}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.a96a.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(-z^3 - 18z^2 - 105z - 630)}{3z^3} + \frac{5\sqrt{\pi} (4z^2 - 21z + 42) \operatorname{erf}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.a96b.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, 5; z\right) = -\frac{32 e^{z/2} (2z^2 + 26z + 663) I_0\left(\frac{z}{2}\right)}{105z^2} - \frac{64 e^{z/2} (z^3 - 52z^2 - 52z - 1326) I_1\left(\frac{z}{2}\right)}{105z^3}$$

07.25.03.a96c.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = -\frac{3 e^z (2z^3 - 63z^2 + 210z - 2205)}{4z^4} - \frac{15\sqrt{\pi} (8z^3 + 63z^2 + 252z + 441) \operatorname{erfi}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.a96d.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (2z^3 + 63z^2 + 210z + 2205)}{4z^4} + \frac{15\sqrt{\pi} (8z^3 - 63z^2 + 252z - 441) \operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.a96e.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (114z^3 + 1537z^2 + 3060z + 31008) I_1\left(\frac{z}{2}\right)}{147z^4} - \frac{32 e^{z/2} (142z^2 + 765z + 7752) I_0\left(\frac{z}{2}\right)}{147z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.a96f.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{e^z (128 z^7 + 960 z^6 + 1120 z^5 + 400 z^4 - 1000 z^3 + 2580 z^2 - 4350 z + 3675)}{3675}$$

07.25.03.a96g.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{525} e^z (64 z^6 + 320 z^5 + 80 z^4 + 160 z^3 - 420 z^2 + 660 z - 525)$$

07.25.03.a96h.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{105} e^z (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105)$$

07.25.03.a96i.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{35} e^z (16 z^4 - 40 z^2 + 80 z - 35)$$

07.25.03.a96j.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{35} e^z (8 z^3 - 20 z^2 + 10 z + 35)$$

07.25.03.a96k.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{35} e^{z/2} (4 z^3 - 12 z^2 + 5 z + 35) I_0\left(\frac{z}{2}\right) + \frac{1}{35} e^{z/2} (4 z^3 - 16 z^2 + 23 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a96l.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{35} e^z (4 z^2 - 20 z + 35)$$

07.25.03.a96m.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{35} e^{z/2} (4 z^2 - 22 z + 35) I_0\left(\frac{z}{2}\right) + \frac{1}{35} e^{z/2} (4 z^2 - 26 z + 63) I_1\left(\frac{z}{2}\right)$$

07.25.03.a96n.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{3 e^z (2 z^2 - 15 z + 40)}{35 z} - \frac{12 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.a96o.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{12 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7 z^{3/2}} - \frac{3 e^{-z} (2 z^2 + 15 z + 40)}{35 z}$$

07.25.03.a96p.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, 3; z\right) = \frac{8}{35} e^{z/2} (z - 8) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2 z^2 - 18 z + 99) I_1\left(\frac{z}{2}\right)}{35 z}$$

07.25.03.a96q.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{3 e^z (z^2 - 10 z + 45)}{7 z^2} - \frac{15 \sqrt{\pi} (4 z + 9) \operatorname{erfi}(\sqrt{z})}{14 z^{5/2}}$$

07.25.03.a96r.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{3 e^{-z} (z^2 + 10 z + 45)}{7 z^2} + \frac{15 \sqrt{\pi} (4 z - 9) \operatorname{erf}(\sqrt{z})}{14 z^{5/2}}$$

07.25.03.a96s.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (6z - 143) I_0\left(\frac{z}{2}\right)}{35z} + \frac{4 e^{z/2} (6z^2 + 11z + 572) I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.a96t.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{3 e^z (4z^2 - 30z + 315)}{8z^3} - \frac{15 \sqrt{\pi} (8z^2 + 36z + 63) \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.a96u.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{15 \sqrt{\pi} (8z^2 - 36z + 63) \operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{3 e^{-z} (4z^2 + 30z + 315)}{8z^3}$$

07.25.03.a96v.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (19z^2 + 52z + 468) I_1\left(\frac{z}{2}\right)}{35z^3} - \frac{416 e^{z/2} (z + 9) I_0\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.a96w.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (32z^2 - 35z + 1470)}{16z^4} - \frac{45 \sqrt{\pi} (8z^3 + 54z^2 + 189z + 294) \operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.a96x.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (32z^2 + 35z + 1470)}{16z^4} + \frac{45 \sqrt{\pi} (8z^3 - 54z^2 + 189z - 294) \operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.a96y.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (32z^3 + 281z^2 + 828z + 4896) I_1\left(\frac{z}{2}\right)}{49z^4} - \frac{32 e^{z/2} (32z^2 + 207z + 1224) I_0\left(\frac{z}{2}\right)}{49z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.a96z.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{75} e^z (32z^5 + 112z^4 - 16z^3 + 72z^2 - 102z + 75)$$

07.25.03.a970.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{15} e^z (16z^4 + 32z^3 - 24z^2 + 24z - 15)$$

07.25.03.a971.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{5} e^z (8z^3 + 4z^2 - 14z + 5)$$

07.25.03.a972.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{5} e^z (4z^2 - 4z - 5)$$

07.25.03.a973.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{5} e^{z/2} (-2z^2 + 2z + 5) I_0\left(\frac{z}{2}\right) - \frac{2}{5} e^{z/2} (z^2 - 2z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a974.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{5} e^z (2z - 5)$$

07.25.03.a975.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{5} e^{z/2} (5 - 2z) I_0\left(\frac{z}{2}\right) + \frac{1}{5} e^{z/2} (7 - 2z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a976.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{3 e^z (z - 4)}{5z} - \frac{6 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{5 z^{3/2}}$$

07.25.03.a977.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{6 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{5 z^{3/2}} - \frac{3 e^{-z} (z + 4)}{5z}$$

07.25.03.a978.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, 3; z\right) = -\frac{4}{5} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (z - 9) I_1\left(\frac{z}{2}\right)}{5z}$$

07.25.03.a979.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{3 e^z (2z - 15)}{4 z^2} - \frac{3 \sqrt{\pi} (8z + 15) \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.a97a.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{3 e^{-z} (2z + 15)}{4 z^2} + \frac{3 \sqrt{\pi} (8z - 15) \operatorname{erf}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.a97b.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (5z + 44) I_1\left(\frac{z}{2}\right)}{5 z^2} - \frac{44 e^{z/2} I_0\left(\frac{z}{2}\right)}{5z}$$

07.25.03.a97c.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{945 e^z}{16 z^3} - \frac{21 \sqrt{\pi} (8z^2 + 30z + 45) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.a97d.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{21 \sqrt{\pi} (8z^2 - 30z + 45) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}} - \frac{945 e^{-z}}{16 z^3}$$

07.25.03.a97e.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, 5; z\right) = \frac{128 e^{z/2} (2z^2 + 8z + 39) I_1\left(\frac{z}{2}\right)}{25 z^3} - \frac{32 e^{z/2} (8z + 39) I_0\left(\frac{z}{2}\right)}{25 z^2}$$

07.25.03.a97f.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (16z^2 + 50z + 735)}{128 z^4} - \frac{63 \sqrt{\pi} (32z^3 + 180z^2 + 540z + 735) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.a97g.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16z^2 - 50z + 735)}{128 z^4} + \frac{63 \sqrt{\pi} (32z^3 - 180z^2 + 540z - 735) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.a97h.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (16z^3 + 109z^2 + 372z + 1440) I_1\left(\frac{z}{2}\right)}{35 z^4} - \frac{32 e^{z/2} (16z^2 + 93z + 360) I_0\left(\frac{z}{2}\right)}{35 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.a97i.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{3} e^z (8z^3 + 12z^2 - 6z + 3)$$

07.25.03.a97j.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -e^z (4z^2 + 4z - 1)$$

07.25.03.a97k.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = e^z (2z + 1)$$

07.25.03.a97l.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, 1; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.a97m.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = e^z$$

07.25.03.a97n.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.a97o.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{3 e^z}{2z} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.a97p.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3 e^{-z}}{2z}$$

07.25.03.a97q.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.a97r.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{45 e^z}{8 z^2} - \frac{15 \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.a97s.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{15\sqrt{\pi}(2z-3)\operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45e^{-z}}{8z^2}$$

07.25.03.a97t.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, 4; z\right) = \frac{4e^{z/2}(z+4)I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4e^{z/2}I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.a97u.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{105e^z(2z+15)}{64z^3} - \frac{105\sqrt{\pi}(4z^2+12z+15)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.a97v.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{105e^{-z}(2z-15)}{64z^3} + \frac{105\sqrt{\pi}(4z^2-12z+15)\operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.a97w.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, 5; z\right) = \frac{32e^{z/2}(z^2+4z+12)I_1\left(\frac{z}{2}\right)}{5z^3} - \frac{32e^{z/2}(z+3)I_0\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.a97x.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{315e^z(4z^2+20z+105)}{256z^4} - \frac{315\sqrt{\pi}(8z^3+36z^2+90z+105)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.a97y.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}(4z^2-20z+105)}{256z^4} + \frac{315\sqrt{\pi}(8z^3-36z^2+90z-105)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.a97z.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, 6; z\right) = \frac{32e^{z/2}(2z^3+11z^2+36z+96)I_1\left(\frac{z}{2}\right)}{7z^4} - \frac{32e^{z/2}(2z^2+9z+24)I_0\left(\frac{z}{2}\right)}{7z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.a980.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = 16\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{3/2} + e^z(1-10z)$$

07.25.03.a981.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = 16\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{3/2} + e^{-z}(10z+1)$$

07.25.03.a982.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = e^z(8z+1) - 8\sqrt{\pi}z^{3/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a983.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z}(1-8z) - 8\sqrt{\pi}z^{3/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.a984.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (-16z^2 + 12z + 3) I_0\left(\frac{z}{2}\right) + \frac{4}{3} e^{z/2} (4z^2 + z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a985.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = e^z (2z + 1) - 2\sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a986.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = e^{-z} (1 - 2z) - 2\sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a987.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (-32z^2 + 24z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (32z^2 + 8z + 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.a988.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (4z^2 + 2z + 3)}{4z} + \frac{\sqrt{\pi} (-8z^3 - 3) \operatorname{erfi}(\sqrt{z})}{8z^{3/2}}$$

07.25.03.a989.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-4z^2 + 2z - 3)}{4z} + \frac{\sqrt{\pi} (3 - 8z^3) \operatorname{erf}(\sqrt{z})}{8z^{3/2}}$$

07.25.03.a98a.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (32z^3 + 8z^2 + 9z + 45) I_1\left(\frac{z}{2}\right)}{105z} - \frac{4}{105} e^{z/2} (32z^2 - 24z - 15) I_0\left(\frac{z}{2}\right)$$

07.25.03.a98b.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (8z^3 + 4z^2 + 6z + 27)}{64z^2} - \frac{5\sqrt{\pi} (16z^4 + 24z + 27) \operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.a98c.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = -\frac{5 e^{-z} (8z^3 - 4z^2 + 6z - 27)}{64z^2} - \frac{5\sqrt{\pi} (16z^4 - 24z + 27) \operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.a98d.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (64z^4 + 16z^3 + 18z^2 + 195z + 420) I_1\left(\frac{z}{2}\right)}{315z^2} - \frac{4 e^{z/2} (64z^3 - 48z^2 - 30z + 105) I_0\left(\frac{z}{2}\right)}{315z}$$

07.25.03.a98e.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (8z^4 + 4z^3 + 6z^2 + 45z + 135)}{128z^3} - \frac{7\sqrt{\pi} (16z^5 + 60z^2 + 135z + 135) \operatorname{erfi}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.a98f.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = -\frac{7 e^{-z} (8z^4 - 4z^3 + 6z^2 - 45z + 135)}{128z^3} - \frac{7\sqrt{\pi} (16z^5 - 60z^2 + 135z - 135) \operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

$$\begin{aligned}
 & \text{07.25.03.a98g.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, 5; z\right) = \\
 & \frac{64 e^{z/2} (32 z^5 + 8 z^4 + 9 z^3 + 192 z^2 + 588 z + 1134) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^4 - 48 z^3 - 30 z^2 + 294 z + 567) I_0\left(\frac{z}{2}\right)}{3465 z^3} - \frac{32 e^{z/2} (64 z^4 - 48 z^3 - 30 z^2 + 294 z + 567) I_0\left(\frac{z}{2}\right)}{3465 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a98h.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \\
 & \frac{21 e^z (16 z^5 + 8 z^4 + 12 z^3 + 150 z^2 + 570 z + 1575)}{1024 z^4} - \frac{21 \sqrt{\pi} (32 z^6 + 240 z^3 + 810 z^2 + 1620 z + 1575) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a98i.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{21 e^{-z} (16 z^5 - 8 z^4 + 12 z^3 - 150 z^2 + 570 z - 1575)}{1024 z^4} - \frac{21 \sqrt{\pi} (32 z^6 - 240 z^3 + 810 z^2 - 1620 z + 1575) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a98j.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (128 z^6 + 32 z^5 + 36 z^4 + 1362 z^3 + 5619 z^2 + 15228 z + 28512) I_1\left(\frac{z}{2}\right)}{9009 z^4} - \\
 & \frac{32 e^{z/2} (128 z^5 - 96 z^4 - 60 z^3 + 1182 z^2 + 3807 z + 7128) I_0\left(\frac{z}{2}\right)}{9009 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{1}{2}$

$$\text{07.25.03.a98k.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = e^z (1 - 4z) + \sqrt{\pi} (4 z^{3/2} - 3 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.a98l.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z} (4z + 1) + \sqrt{\pi} (4 z^{3/2} + 3 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.a98m.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (8 z^2 - 15 z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (7 z - 8 z^2) I_1\left(\frac{z}{2}\right)$$

$$\text{07.25.03.a98n.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = e^z (1 - z) + \frac{1}{2} \sqrt{\pi} \sqrt{z} (2z - 3) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.a98o.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = e^{-z} (z + 1) + \frac{1}{2} \sqrt{\pi} \sqrt{z} (2z + 3) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.a98p.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (16 z^2 - 42 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-16 z^2 + 26 z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.a98q.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z(-8z^2 + 14z + 3)}{16z} + \frac{\sqrt{\pi}(16z^3 - 36z^2 - 3)\operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.a98r.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(8z^2 + 14z - 3)}{16z} + \frac{\sqrt{\pi}(16z^3 + 36z^2 + 3)\operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.a98s.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, 3; z\right) = \frac{8}{105} e^{z/2}(8z^2 - 27z + 12)I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(16z^3 - 38z^2 - 6z - 9)I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.a98t.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi}(16z^4 - 48z^3 - 12z - 9)\operatorname{erfi}(\sqrt{z})}{256z^{5/2}} - \frac{5e^z(8z^3 - 20z^2 - 6z - 9)}{128z^2}$$

07.25.03.a98u.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}(8z^3 + 20z^2 - 6z + 9)}{128z^2} + \frac{5\sqrt{\pi}(16z^4 + 48z^3 + 12z - 9)\operatorname{erf}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.a98v.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, 4; z\right) = \frac{4e^{z/2}(32z^3 - 132z^2 + 66z - 15)I_0\left(\frac{z}{2}\right)}{315z} - \frac{4e^{z/2}(32z^4 - 100z^3 - 18z^2 - 51z - 60)I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.a98w.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(64z^5 - 240z^4 - 120z^2 - 180z - 135)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}} - \frac{7e^z(32z^4 - 104z^3 - 36z^2 - 90z - 135)}{1024z^3}$$

07.25.03.a98x.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}(32z^4 + 104z^3 - 36z^2 + 90z - 135)}{1024z^3} + \frac{7\sqrt{\pi}(64z^5 + 240z^4 + 120z^2 - 180z + 135)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.a98y.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, 5; z\right) = \frac{32e^{z/2}(32z^4 - 156z^3 + 84z^2 - 51z - 63)I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{32e^{z/2}(32z^5 - 124z^4 - 24z^3 - 105z^2 - 204z - 252)I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.a98z.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi}(32z^6 - 144z^5 - 120z^3 - 270z^2 - 405z - 315)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{21e^z(16z^5 - 64z^4 - 24z^3 - 84z^2 - 195z - 315)}{2048z^4}$$

07.25.03.a990.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}, \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (16 z^5 + 64 z^4 - 24 z^3 + 84 z^2 - 195 z + 315)}{2048 z^4} + \frac{21 \sqrt{\pi} (32 z^6 + 144 z^5 + 120 z^3 - 270 z^2 + 405 z - 315) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.a991.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}, \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^5 - 360 z^4 + 204 z^3 - 228 z^2 - 495 z - 648) I_0\left(\frac{z}{2}\right)}{9009 z^3} - \frac{32 e^{z/2} (64 z^6 - 296 z^5 - 60 z^4 - 372 z^3 - 993 z^2 - 1980 z - 2592) I_1\left(\frac{z}{2}\right)}{9009 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = 1$

07.25.03.a992.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}, 1, \frac{3}{2}; z\right) = \frac{1}{3} e^{z/2} (2 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z - 2) z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{3}{2}$

07.25.03.a993.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}, \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{8} e^z (5 - 2 z) + \frac{\sqrt{\pi} (4 z^2 - 12 z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.a994.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}, \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{8} e^{-z} (2 z + 5) + \frac{\sqrt{\pi} (4 z^2 + 12 z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.a995.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}, \frac{3}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4 z^2 - 18 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4 z^2 + 14 z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.a996.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}, \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (-4 z^2 + 16 z - 3)}{32 z} + \frac{\sqrt{\pi} (8 z^3 - 36 z^2 + 18 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.a997.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}, \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (4 z^2 + 16 z + 3)}{32 z} + \frac{\sqrt{\pi} (8 z^3 + 36 z^2 + 18 z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.a998.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}, \frac{3}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4 z^2 - 24 z + 27) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4 z^3 - 20 z^2 + 9 z + 3) I_1\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.a999.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}, \frac{3}{2}, \frac{7}{2}; z\right) = \frac{5 \sqrt{\pi} (16 z^4 - 96 z^3 + 72 z^2 + 24 z + 9) \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}} - \frac{5 e^z (8 z^3 - 44 z^2 + 18 z + 9)}{512 z^2}$$

07.25.03.a99a.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (8 z^3 + 44 z^2 + 18 z - 9)}{512 z^2} + \frac{5 \sqrt{\pi} (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.a99b.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (8 z^3 - 60 z^2 + 84 z + 3) I_0\left(\frac{z}{2}\right)}{315 z} - \frac{4 e^{z/2} (8 z^4 - 52 z^3 + 36 z^2 + 21 z + 12) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.a99c.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 \sqrt{\pi} (32 z^5 - 240 z^4 + 240 z^3 + 120 z^2 + 90 z + 45) \operatorname{erfi}(\sqrt{z})}{4096 z^{7/2}} - \frac{7 e^z (16 z^4 - 112 z^3 + 72 z^2 + 60 z + 45)}{2048 z^3}$$

07.25.03.a99d.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (16 z^4 + 112 z^3 + 72 z^2 - 60 z + 45)}{2048 z^3} + \frac{7 \sqrt{\pi} (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45) \operatorname{erf}(\sqrt{z})}{4096 z^{7/2}}$$

07.25.03.a99e.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 - 72 z^3 + 120 z^2 + 12 z + 9) I_0\left(\frac{z}{2}\right)}{3465 z^2} - \frac{128 e^{z/2} (2 z^5 - 16 z^4 + 15 z^3 + 12 z^2 + 12 z + 9) I_1\left(\frac{z}{2}\right)}{3465 z^3}$$

07.25.03.a99f.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{21 \sqrt{\pi} (64 z^6 - 576 z^5 + 720 z^4 + 480 z^3 + 540 z^2 + 540 z + 315) \operatorname{erfi}(\sqrt{z})}{32768 z^{9/2}} - \frac{21 e^z (32 z^5 - 272 z^4 + 240 z^3 + 264 z^2 + 330 z + 315)}{16384 z^4}$$

07.25.03.a99g.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (32 z^5 + 272 z^4 + 240 z^3 - 264 z^2 + 330 z - 315)}{16384 z^4} + \frac{21 \sqrt{\pi} (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315) \operatorname{erf}(\sqrt{z})}{32768 z^{9/2}}$$

07.25.03.a99h.01

$${}_2F_2\left(-\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 168 z^4 + 324 z^3 + 60 z^2 + 81 z + 72) I_0\left(\frac{z}{2}\right)}{9009 z^3} - \frac{32 e^{z/2} (16 z^6 - 152 z^5 + 180 z^4 + 180 z^3 + 249 z^2 + 324 z + 288) I_1\left(\frac{z}{2}\right)}{9009 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.a99i.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \frac{1}{36018675} (1024 z^{11} + 27648 z^{10} + 232448 z^9 + 695040 z^8 + 599040 z^7 + 47040 z^6 + 2880 z^5 + 2160 z^4 + \\
 & \quad 7200 z^3 + 132300 z^2 - 3572100 z + 36018675) + \\
 & \frac{512 e^z \sqrt{\pi} (2 z^{23/2} + 55 z^{21/2} + 480 z^{19/2} + 1560 z^{17/2} + 1680 z^{15/2} + 360 z^{13/2}) \operatorname{erf}(\sqrt{z})}{36018675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a99j.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \\
 & \frac{1}{36018675} (-1024 z^{11} + 27648 z^{10} - 232448 z^9 + 695040 z^8 - 599040 z^7 + 47040 z^6 - 2880 z^5 + \\
 & \quad 2160 z^4 - 7200 z^3 + 132300 z^2 + 3572100 z + 36018675) + \\
 & \frac{512 e^{-z} \sqrt{\pi} (2 z^{23/2} - 55 z^{21/2} + 480 z^{19/2} - 1560 z^{17/2} + 1680 z^{15/2} - 360 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{36018675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a99k.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & \frac{1}{3274425} (-512 z^{10} - 11264 z^9 - 71424 z^8 - 138240 z^7 - 47040 z^6 + 2880 z^5 + 720 z^4 + 1440 z^3 + 18900 z^2 - \\
 & \quad 396900 z + 3274425) - \frac{256 e^z \sqrt{\pi} (2 z^{21/2} + 45 z^{19/2} + 300 z^{17/2} + 660 z^{15/2} + 360 z^{13/2}) \operatorname{erf}(\sqrt{z})}{3274425}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a99l.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \\
 & \frac{1}{3274425} (-512 z^{10} + 11264 z^9 - 71424 z^8 + 138240 z^7 - 47040 z^6 - 2880 z^5 + 720 z^4 - 1440 z^3 + 18900 z^2 + \\
 & \quad 396900 z + 3274425) + \frac{256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 45 z^{19/2} + 300 z^{17/2} - 660 z^{15/2} + 360 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{3274425}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a99m.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{256 z^9 + 4352 z^8 + 18432 z^7 + 15680 z^6 - 2880 z^5 + 720 z^4 + 480 z^3 + 3780 z^2 - 56700 z + 363825}{363825} + \\
 & \frac{128 e^z \sqrt{\pi} (2 z^{19/2} + 35 z^{17/2} + 160 z^{15/2} + 180 z^{13/2}) \operatorname{erf}(\sqrt{z})}{363825}
 \end{aligned}$$

07.25.03.a99n.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{363825} (-256z^9 + 4352z^8 - 18432z^7 + 15680z^6 + 2880z^5 + 720z^4 - 480z^3 + 3780z^2 + 56700z + 363825) + \frac{128e^{-z}\sqrt{\pi}(2z^{19/2} - 35z^{17/2} + 160z^{15/2} - 180z^{13/2})\operatorname{erfi}(\sqrt{z})}{363825}$$

07.25.03.a99o.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{-128z^8 - 1536z^7 - 3136z^6 + 960z^5 - 720z^4 + 480z^3 + 1260z^2 - 11340z + 51975}{51975} - \frac{64e^z\sqrt{\pi}(2z^{17/2} + 25z^{15/2} + 60z^{13/2})\operatorname{erf}(\sqrt{z})}{51975}$$

07.25.03.a99p.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{-128z^8 + 1536z^7 - 3136z^6 - 960z^5 - 720z^4 - 480z^3 + 1260z^2 + 11340z + 51975}{51975} + \frac{64e^{-z}\sqrt{\pi}(2z^{17/2} - 25z^{15/2} + 60z^{13/2})\operatorname{erfi}(\sqrt{z})}{51975}$$

07.25.03.a99q.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{64z^7 + 448z^6 - 192z^5 + 240z^4 - 480z^3 + 1260z^2 - 3780z + 10395}{10395} + \frac{32e^z\sqrt{\pi}(2z^{15/2} + 15z^{13/2})\operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.a99r.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{-64z^7 + 448z^6 + 192z^5 + 240z^4 + 480z^3 + 1260z^2 + 3780z + 10395}{10395} + \frac{32e^{-z}\sqrt{\pi}(2z^{15/2} - 15z^{13/2})\operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.a99s.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{-32z^6 - 64z^5 + 336z^4 - 1120z^3 + 2580z^2 - 3780z + 3465}{3465} - \frac{16e^z\sqrt{\pi}(2z^{13/2} + 5z^{11/2} - 20z^{9/2} + 60z^{7/2} - 120z^{5/2} + 120z^{3/2})\operatorname{erf}(\sqrt{z})}{3465}$$

07.25.03.a99t.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{-32z^6 + 64z^5 + 336z^4 + 1120z^3 + 2580z^2 + 3780z + 3465}{3465} + \frac{16e^{-z}\sqrt{\pi}(2z^{13/2} - 5z^{11/2} - 20z^{9/2} - 60z^{7/2} - 120z^{5/2} - 120z^{3/2})\operatorname{erfi}(\sqrt{z})}{3465}$$

07.25.03.a99u.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{16z^5 - 48z^4 + 32z^3 + 420z^2 - 1980z + 3465}{3465} + \frac{8e^z\sqrt{\pi}(2z^{11/2} - 5z^{9/2} + 60z^{5/2} - 240z^{3/2} + 360\sqrt{z})\operatorname{erf}(\sqrt{z})}{3465}$$

07.25.03.a99v.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{-16z^5 - 48z^4 - 32z^3 + 420z^2 + 1980z + 3465}{3465} + \frac{8e^{-z}\sqrt{\pi}(2z^{11/2} + 5z^{9/2} - 60z^{5/2} - 240z^{3/2} - 360\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3465}$$

07.25.03.a99w.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, 1; z\right) = \frac{e^z(16z^5 - 80z^4 + 200z^3 - 1575z + 3465)}{3465}$$

07.25.03.a99x.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{8z^4 - 64z^3 + 276z^2 - 660z + 585}{3465} + \frac{4e^z\sqrt{\pi}(2z^5 - 15z^4 + 60z^3 - 120z^2 + 360)\operatorname{erf}(\sqrt{z})}{3465\sqrt{z}}$$

07.25.03.a99y.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{8z^4 + 64z^3 + 276z^2 + 660z + 585}{3465} - \frac{4e^{-z}\sqrt{\pi}(2z^5 + 15z^4 + 60z^3 + 120z^2 - 360)\operatorname{erfi}(\sqrt{z})}{3465\sqrt{z}}$$

07.25.03.a99z.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, 2; z\right) = \frac{e^z(16z^4 - 160z^3 + 840z^2 - 2520z + 3465)}{3465}$$

07.25.03.a9a0.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{4z^4 - 52z^3 + 348z^2 - 1405z + 3360}{1155z} + \frac{2e^z\sqrt{\pi}(2z^5 - 25z^4 + 160z^3 - 600z^2 + 1200z - 840)\operatorname{erf}(\sqrt{z})}{1155z^{3/2}}$$

07.25.03.a9a1.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-4z^4 - 52z^3 - 348z^2 - 1405z - 3360}{1155z} + \frac{2e^{-z}\sqrt{\pi}(2z^5 + 25z^4 + 160z^3 + 600z^2 + 1200z + 840)\operatorname{erfi}(\sqrt{z})}{1155z^{3/2}}$$

07.25.03.a9a2.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, 3; z\right) = \frac{2e^z(16z^5 - 240z^4 + 1800z^3 - 7920z^2 + 19305z - 19305)}{3465z^2} + \frac{78}{7z^2}$$

07.25.03.a9a3.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{2z^4 - 36z^3 + 319z^2 - 1680z + 10080}{231z^2} + \frac{e^z \sqrt{\pi} (2z^5 - 35z^4 + 300z^3 - 1500z^2 + 4200z - 5040) \operatorname{erf}(\sqrt{z})}{231z^{5/2}}$$

07.25.03.a9a4.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{2z^4 + 36z^3 + 319z^2 + 1680z + 10080}{231z^2} + \frac{e^{-z} \sqrt{\pi} (-2z^5 - 35z^4 - 300z^3 - 1500z^2 - 4200z - 5040) \operatorname{erfi}(\sqrt{z})}{231z^{5/2}}$$

07.25.03.a9a5.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, 4; z\right) = \frac{26(9z + 34)}{7z^3} + \frac{2e^z (16z^5 - 320z^4 + 3080z^3 - 17160z^2 + 53625z - 72930)}{1155z^3}$$

07.25.03.a9a6.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{z^4 - 23z^3 + 252z^2 + 15120}{33z^3} + \frac{e^z \sqrt{\pi} (2z^5 - 45z^4 + 480z^3 - 2940z^2 + 10080z - 15120) \operatorname{erf}(\sqrt{z})}{66z^{7/2}}$$

07.25.03.a9a7.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{-z^4 - 23z^3 - 252z^2 - 15120}{33z^3} + \frac{e^{-z} \sqrt{\pi} (2z^5 + 45z^4 + 480z^3 + 2940z^2 + 10080z + 15120) \operatorname{erfi}(\sqrt{z})}{66z^{7/2}}$$

07.25.03.a9a8.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, 5; z\right) = \frac{52(99z^2 + 748z + 1938)}{77z^4} + \frac{8e^z (16z^5 - 400z^4 + 4680z^3 - 31200z^2 + 116025z - 188955)}{1155z^4}$$

07.25.03.a9a9.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{3(z^4 - 28z^3 + 1008z^2 + 3360z + 35280)}{22z^4} + \frac{3e^z \sqrt{\pi} (2z^5 - 55z^4 + 700z^3 - 5040z^2 + 20160z - 35280) \operatorname{erf}(\sqrt{z})}{44z^{9/2}}$$

07.25.03.a9aa.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{3(z^4 + 28z^3 + 1008z^2 - 3360z + 35280)}{22z^4} - \frac{3e^{-z} \sqrt{\pi} (2z^5 + 55z^4 + 700z^3 + 5040z^2 + 20160z + 35280) \operatorname{erfi}(\sqrt{z})}{44z^{9/2}}$$

07.25.03.a9ab.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{11}{2}, 6; z\right) = \frac{20(429z^3 + 4862z^2 + 25194z + 54264)}{77z^5} + \frac{8e^z (16z^5 - 480z^4 + 6600z^3 - 51000z^2 + 218025z - 406980)}{231z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = -\frac{9}{2}$

07.25.03.a9ac.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{256 z^9 + 4608 z^8 + 22016 z^7 + 27072 z^6 + 2880 z^5 + 240 z^4 + 288 z^3 + 2700 z^2 - 44100 z + 297675}{297675} + \frac{128 e^z \sqrt{\pi} (2 z^{19/2} + 37 z^{17/2} + 189 z^{15/2} + 282 z^{13/2} + 78 z^{11/2}) \operatorname{erf}(\sqrt{z})}{297675}$$

07.25.03.a9ad.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{297675} (-256 z^9 + 4608 z^8 - 22016 z^7 + 27072 z^6 - 2880 z^5 + 240 z^4 - 288 z^3 + 2700 z^2 + 44100 z + 297675) + \frac{128 e^{-z} \sqrt{\pi} (2 z^{19/2} - 37 z^{17/2} + 189 z^{15/2} - 282 z^{13/2} + 78 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{297675}$$

07.25.03.a9ae.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{-128 z^8 - 1792 z^7 - 5696 z^6 - 2880 z^5 + 240 z^4 + 96 z^3 + 540 z^2 - 6300 z + 33075}{33075} - \frac{64 e^z \sqrt{\pi} (2 z^{17/2} + 29 z^{15/2} + 102 z^{13/2} + 78 z^{11/2}) \operatorname{erf}(\sqrt{z})}{33075}$$

07.25.03.a9af.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{-128 z^8 + 1792 z^7 - 5696 z^6 + 2880 z^5 + 240 z^4 - 96 z^3 + 540 z^2 + 6300 z + 33075}{33075} + \frac{64 e^{-z} \sqrt{\pi} (2 z^{17/2} - 29 z^{15/2} + 102 z^{13/2} - 78 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{33075}$$

07.25.03.a9ag.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{64 z^7 + 640 z^6 + 960 z^5 - 240 z^4 + 96 z^3 + 180 z^2 - 1260 z + 4725}{4725} + \frac{32 e^z \sqrt{\pi} (2 z^{15/2} + 21 z^{13/2} + 39 z^{11/2}) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.a9ah.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{-64 z^7 + 640 z^6 - 960 z^5 - 240 z^4 - 96 z^3 + 180 z^2 + 1260 z + 4725}{4725} + \frac{32 e^{-z} \sqrt{\pi} (2 z^{15/2} - 21 z^{13/2} + 39 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.a9ai.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} (-32 z^6 - 192 z^5 + 80 z^4 - 96 z^3 + 180 z^2 - 420 z + 945) - \frac{16}{945} e^z \sqrt{\pi} (2 z^{13/2} + 13 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9aj.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{945}(-32z^6 + 192z^5 + 80z^4 + 96z^3 + 180z^2 + 420z + 945) + \frac{16}{945}e^{-z}\sqrt{\pi}(2z^{13/2} - 13z^{11/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9ak.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{315}(16z^5 + 32z^4 - 128z^3 + 300z^2 - 420z + 315) + \frac{8}{315}e^z\sqrt{\pi}(2z^{11/2} + 5z^{9/2} - 15z^{7/2} + 30z^{5/2} - 30z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9al.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{315}(-16z^5 + 32z^4 + 128z^3 + 300z^2 + 420z + 315) + \frac{8}{315}e^{-z}\sqrt{\pi}(2z^{11/2} - 5z^{9/2} - 15z^{7/2} - 30z^{5/2} - 30z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9am.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{315}(-8z^4 + 16z^3 + 12z^2 - 156z + 315) - \frac{4}{315}e^z\sqrt{\pi}(2z^{9/2} - 3z^{7/2} - 6z^{5/2} + 42z^{3/2} - 72\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9an.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{315}(-8z^4 - 16z^3 + 12z^2 + 156z + 315) + \frac{4}{315}e^{-z}\sqrt{\pi}(2z^{9/2} + 3z^{7/2} - 6z^{5/2} - 42z^{3/2} - 72\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9ao.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, 1; z\right) = -\frac{1}{315}e^z(8z^4 - 28z^3 + 30z^2 + 105z - 315)$$

07.25.03.a9ap.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{315}(-4z^3 + 24z^2 - 68z + 75) - \frac{2e^z\sqrt{\pi}(2z^4 - 11z^3 + 27z^2 - 12z - 60)\operatorname{erf}(\sqrt{z})}{315\sqrt{z}}$$

07.25.03.a9aq.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{315}(4z^3 + 24z^2 + 68z + 75) - \frac{2e^{-z}\sqrt{\pi}(2z^4 + 11z^3 + 27z^2 + 12z - 60)\operatorname{erfi}(\sqrt{z})}{315\sqrt{z}}$$

07.25.03.a9ar.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, 2; z\right) = -\frac{1}{315}e^z(8z^3 - 60z^2 + 210z - 315)$$

07.25.03.a9as.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-2z^3 + 20z^2 - 95z + 240}{105z} + \frac{e^z\sqrt{\pi}(-2z^4 + 19z^3 - 84z^2 + 180z - 120)\operatorname{erf}(\sqrt{z})}{105z^{3/2}}$$

07.25.03.a9at.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-2z^3 - 20z^2 - 95z - 240}{105z} + \frac{e^{-z}\sqrt{\pi}(2z^4 + 19z^3 + 84z^2 + 180z + 120)\operatorname{erfi}(\sqrt{z})}{105z^{3/2}}$$

07.25.03.a9au.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, 3; z\right) = \frac{286}{35z^2} - \frac{2e^z(8z^4 - 92z^3 + 486z^2 - 1287z + 1287)}{315z^2}$$

07.25.03.a9av.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-z^3 + 14z^2 - 90z + 630}{21z^2} + \frac{e^z\sqrt{\pi}(-2z^4 + 27z^3 - 165z^2 + 510z - 630)\operatorname{erf}(\sqrt{z})}{42z^{5/2}}$$

07.25.03.a9aw.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{z^3 + 14z^2 + 90z + 630}{21z^2} + \frac{e^{-z}\sqrt{\pi}(-2z^4 - 27z^3 - 165z^2 - 510z - 630)\operatorname{erfi}(\sqrt{z})}{42z^{5/2}}$$

07.25.03.a9ax.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, 4; z\right) = \frac{286(3z + 10)}{35z^3} - \frac{2e^z(8z^4 - 124z^3 + 858z^2 - 3003z + 4290)}{105z^3}$$

07.25.03.a9ay.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-z^3 + 18z^2 + 70z + 1680}{6z^3} + \frac{e^z\sqrt{\pi}(-2z^4 + 35z^3 - 270z^2 + 1050z - 1680)\operatorname{erf}(\sqrt{z})}{12z^{7/2}}$$

07.25.03.a9az.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{-z^3 - 18z^2 + 70z - 1680}{6z^3} + \frac{e^{-z}\sqrt{\pi}(2z^4 + 35z^3 + 270z^2 + 1050z + 1680)\operatorname{erfi}(\sqrt{z})}{12z^{7/2}}$$

07.25.03.a9b0.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, 5; z\right) = \frac{52(33z^2 + 220z + 510)}{35z^4} - \frac{8e^z(8z^4 - 156z^3 + 1326z^2 - 5655z + 9945)}{105z^4}$$

07.25.03.a9b1.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, \frac{11}{2}; z\right) = -\frac{3(5z^3 - 539z^2 - 2520z - 17640)}{20z^4} - \frac{3e^z\sqrt{\pi}(2z^4 - 43z^3 + 399z^2 - 1848z + 3528)\operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.a9b2.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{3(5z^3 + 539z^2 - 2520z + 17640)}{20z^4} - \frac{3e^{-z}\sqrt{\pi}(2z^4 + 43z^3 + 399z^2 + 1848z + 3528)\operatorname{erfi}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.a9b3.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{9}{2}, 6; z\right) = \frac{4(143z^3 + 1430z^2 + 6630z + 12920)}{7z^5} - \frac{8e^z(8z^4 - 188z^3 + 1890z^2 - 9435z + 19380)}{21z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = -\frac{7}{2}$

07.25.03.a9b4.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{64 z^7 + 704 z^6 + 1472 z^5 + 240 z^4 + 32 z^3 + 108 z^2 - 900 z + 3675}{3675} + \frac{32 e^z \sqrt{\pi} (2 z^{15/2} + 23 z^{13/2} + 56 z^{11/2} + 22 z^{9/2}) \operatorname{erf}(\sqrt{z})}{3675}$$

07.25.03.a9b5.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{-64 z^7 + 704 z^6 - 1472 z^5 + 240 z^4 - 32 z^3 + 108 z^2 + 900 z + 3675}{3675} + \frac{32 e^{-z} \sqrt{\pi} (2 z^{15/2} - 23 z^{13/2} + 56 z^{11/2} - 22 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{3675}$$

07.25.03.a9b6.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{525} (-32 z^6 - 256 z^5 - 240 z^4 + 32 z^3 + 36 z^2 - 180 z + 525) - \frac{16}{525} e^z \sqrt{\pi} (2 z^{13/2} + 17 z^{11/2} + 22 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9b7.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{525} (-32 z^6 + 256 z^5 - 240 z^4 - 32 z^3 + 36 z^2 + 180 z + 525) + \frac{16}{525} e^{-z} \sqrt{\pi} (2 z^{13/2} - 17 z^{11/2} + 22 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9b8.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{105} (16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105) + \frac{8}{105} e^z \sqrt{\pi} (2 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9b9.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{105} (-16 z^5 + 80 z^4 + 32 z^3 + 36 z^2 + 60 z + 105) + \frac{8}{105} e^{-z} \sqrt{\pi} (2 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9ba.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{35} (-8 z^4 - 16 z^3 + 44 z^2 - 60 z + 35) - \frac{4}{35} e^z \sqrt{\pi} (2 z^{9/2} + 5 z^{7/2} - 10 z^{5/2} + 10 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9bb.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{35} (-8 z^4 + 16 z^3 + 44 z^2 + 60 z + 35) + \frac{4}{35} e^{-z} \sqrt{\pi} (2 z^{9/2} - 5 z^{7/2} - 10 z^{5/2} - 10 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9bc.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{35} (4 z^3 - 4 z^2 - 12 z + 35) + \frac{2}{35} e^z \sqrt{\pi} (2 z^{7/2} - z^{5/2} - 8 z^{3/2} + 18 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9bd.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{35} (-4 z^3 - 4 z^2 + 12 z + 35) + \frac{2}{35} e^{-z} \sqrt{\pi} (2 z^{7/2} + z^{5/2} - 8 z^{3/2} - 18 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9be.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, 1; z\right) = \frac{1}{35} e^z (4 z^3 - 8 z^2 - 5 z + 35)$$

07.25.03.a9bf.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{35} (2z^2 - 8z + 11) + \frac{e^z \sqrt{\pi} (2z^3 - 7z^2 + 6z + 12) \operatorname{erf}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.a9bg.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{35} (2z^2 + 8z + 11) + \frac{e^{-z} \sqrt{\pi} (-2z^3 - 7z^2 - 6z + 12) \operatorname{erfi}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.a9bh.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, 2; z\right) = \frac{1}{35} e^z (4z^2 - 20z + 35)$$

07.25.03.a9bi.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{3(z^2 - 7z + 20)}{35z} + \frac{3e^z \sqrt{\pi} (2z^3 - 13z^2 + 32z - 20) \operatorname{erf}(\sqrt{z})}{70z^{3/2}}$$

07.25.03.a9bj.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{3e^{-z} \sqrt{\pi} (2z^3 + 13z^2 + 32z + 20) \operatorname{erfi}(\sqrt{z})}{70z^{3/2}} - \frac{3(z^2 + 7z + 20)}{35z}$$

07.25.03.a9bk.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, 3; z\right) = \frac{2e^z (4z^3 - 32z^2 + 99z - 99)}{35z^2} + \frac{198}{35z^2}$$

07.25.03.a9bl.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{3(z^2 - 10z + 90)}{14z^2} + \frac{3e^z \sqrt{\pi} (2z^3 - 19z^2 + 70z - 90) \operatorname{erf}(\sqrt{z})}{28z^{5/2}}$$

07.25.03.a9bm.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{3(z^2 + 10z + 90)}{14z^2} - \frac{3e^{-z} \sqrt{\pi} (2z^3 + 19z^2 + 70z + 90) \operatorname{erfi}(\sqrt{z})}{28z^{5/2}}$$

07.25.03.a9bn.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, 4; z\right) = \frac{66(9z + 26)}{35z^3} + \frac{6e^z (4z^3 - 44z^2 + 187z - 286)}{35z^3}$$

07.25.03.a9bo.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{3(z^2 + 20z + 210)}{4z^3} + \frac{3e^z \sqrt{\pi} (2z^3 - 25z^2 + 120z - 210) \operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.a9bp.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{3e^{-z} \sqrt{\pi} (2z^3 + 25z^2 + 120z + 210) \operatorname{erfi}(\sqrt{z})}{8z^{7/2}} - \frac{3(z^2 - 20z + 210)}{4z^3}$$

07.25.03.a9bq.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, 5; z\right) = \frac{12(99z^2 + 572z + 1170)}{35z^4} + \frac{24e^z (4z^3 - 56z^2 + 299z - 585)}{35z^4}$$

07.25.03.a9br.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9(213z^2 + 1190z + 5880)}{40z^4} + \frac{27e^z\sqrt{\pi}(2z^3 - 31z^2 + 182z - 392)\operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.a9bs.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(213z^2 - 1190z + 5880)}{40z^4} - \frac{27e^{-z}\sqrt{\pi}(2z^3 + 31z^2 + 182z + 392)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.a9bt.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{7}{2}, 6; z\right) = \frac{24e^z(4z^3 - 68z^2 + 435z - 1020)}{7z^5} + \frac{12(33z^3 + 286z^2 + 1170z + 2040)}{7z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = -\frac{5}{2}$

07.25.03.a9bu.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{75}(16z^5 + 96z^4 + 32z^3 + 12z^2 - 36z + 75) + \frac{8}{75}e^z\sqrt{\pi}(2z^{11/2} + 13z^{9/2} + 9z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9bv.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{75}(-16z^5 + 96z^4 - 32z^3 + 12z^2 + 36z + 75) + \frac{8}{75}e^{-z}\sqrt{\pi}(2z^{11/2} - 13z^{9/2} + 9z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9bw.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{15}(-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15}e^z\sqrt{\pi}(2z^{9/2} + 9z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9bx.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{15}(-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15}e^{-z}\sqrt{\pi}(2z^{9/2} - 9z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9by.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{5}(4z^3 + 8z^2 - 12z + 5) + \frac{2}{5}e^z\sqrt{\pi}(2z^{7/2} + 5z^{5/2} - 5z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9bz.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{5}(-4z^3 + 8z^2 + 12z + 5) + \frac{2}{5}e^{-z}\sqrt{\pi}(2z^{7/2} - 5z^{5/2} - 5z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9c0.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{5}(5 - 2z^2) + \frac{1}{5}e^z\sqrt{\pi}(-2z^{5/2} - z^{3/2} + 6\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9c1.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{5}(5 - 2z^2) + \frac{1}{5}e^{-z}\sqrt{\pi}(2z^{5/2} - z^{3/2} - 6\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9c2.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, 1; z\right) = -\frac{1}{5}e^z(2z^2 - z - 5)$$

07.25.03.a9c3.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{2-z}{5} + \frac{e^z \sqrt{\pi} (-2z^2 + 3z + 3) \operatorname{erf}(\sqrt{z})}{10 \sqrt{z}}$$

07.25.03.a9c4.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{z+2}{5} + \frac{e^{-z} \sqrt{\pi} (-2z^2 - 3z + 3) \operatorname{erfi}(\sqrt{z})}{10 \sqrt{z}}$$

07.25.03.a9c5.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, 2; z\right) = -\frac{1}{5} e^z (2z - 5)$$

07.25.03.a9c6.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{3(z-4)}{10z} - \frac{3 e^z \sqrt{\pi} (2z^2 - 7z + 4) \operatorname{erf}(\sqrt{z})}{20 z^{3/2}}$$

07.25.03.a9c7.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z^2 + 7z + 4) \operatorname{erfi}(\sqrt{z})}{20 z^{3/2}} - \frac{3(z+4)}{10z}$$

07.25.03.a9c8.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, 3; z\right) = \frac{18}{5z^2} - \frac{2 e^z (2z^2 - 9z + 9)}{5z^2}$$

07.25.03.a9c9.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{3(z-15)}{4z^2} - \frac{3 e^z \sqrt{\pi} (2z^2 - 11z + 15) \operatorname{erf}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.a9ca.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{3(z+15)}{4z^2} - \frac{3 e^{-z} \sqrt{\pi} (2z^2 + 11z + 15) \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.a9cb.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, 4; z\right) = \frac{6(9z+22)}{5z^3} - \frac{6 e^z (2z^2 - 13z + 22)}{5z^3}$$

07.25.03.a9cc.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{105(z+6)}{8z^3} - \frac{21 e^z \sqrt{\pi} (2z^2 - 15z + 30) \operatorname{erf}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.a9cd.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{105(z-6)}{8z^3} + \frac{21 e^{-z} \sqrt{\pi} (2z^2 + 15z + 30) \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.a9ce.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, 5; z\right) = \frac{12(9z^2 + 44z + 78)}{5z^4} - \frac{24 e^z (2z^2 - 17z + 39)}{5z^4}$$

07.25.03.a9cf.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63(36z^2 + 205z + 735)}{80z^4} - \frac{189e^z\sqrt{\pi}(2z^2 - 19z + 49)\operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.a9cg.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63(36z^2 - 205z + 735)}{80z^4} - \frac{189e^{-z}\sqrt{\pi}(2z^2 + 19z + 49)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.a9ch.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{5}{2}, 6; z\right) = \frac{12(3z^3 + 22z^2 + 78z + 120)}{z^5} - \frac{24e^z(2z^2 - 21z + 60)}{z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = -\frac{3}{2}$

07.25.03.a9ci.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{3}(4z^3 + 12z^2 - 4z + 3) + \frac{2}{3}e^z\sqrt{\pi}(2z^{7/2} + 7z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9cj.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3}(-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3}e^{-z}\sqrt{\pi}(2z^{7/2} - 7z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9ck.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, -\frac{1}{2}; z\right) = -2z^2 - 4z + e^z\sqrt{\pi}(-2z^{5/2} - 5z^{3/2})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.a9cl.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, -\frac{1}{2}; -z\right) = -2z^2 + 4z + e^{-z}\sqrt{\pi}(2z^{5/2} - 5z^{3/2})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.a9cm.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, \frac{1}{2}; z\right) = z + \frac{1}{2}e^z\sqrt{\pi}(2z^{3/2} + 3\sqrt{z})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.a9cn.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, \frac{1}{2}; -z\right) = -z + \frac{1}{2}e^{-z}\sqrt{\pi}(2z^{3/2} - 3\sqrt{z})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.a9co.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, 1; z\right) = e^z(z + 1)$$

07.25.03.a9cp.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z\sqrt{\pi}(2z + 1)\operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.a9cq.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}\sqrt{\pi}(1 - 2z)\operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.a9cr.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, 2; z\right) = e^z$$

07.25.03.a9cs.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (2z-1) \operatorname{erf}(\sqrt{z})}{8 z^{3/2}} + \frac{3}{4z}$$

07.25.03.a9ct.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z+1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3}{4z}$$

07.25.03.a9cu.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, 3; z\right) = \frac{2 e^z (z-1)}{z^2} + \frac{2}{z^2}$$

07.25.03.a9cv.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45}{8z^2}$$

07.25.03.a9cw.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{45}{8z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.a9cx.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, 4; z\right) = \frac{6 e^z (z-2)}{z^3} + \frac{6(z+2)}{z^3}$$

07.25.03.a9cy.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(4z+15)}{16 z^3} + \frac{105 e^z \sqrt{\pi} (2z-5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.a9cz.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(4z-15)}{16 z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z+5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.a9d0.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, 5; z\right) = \frac{24 e^z (z-3)}{z^4} + \frac{12(z^2+4z+6)}{z^4}$$

07.25.03.a9d1.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{63(8z^2+40z+105)}{32 z^4} + \frac{945 e^z \sqrt{\pi} (2z-7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.a9d2.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{63(8z^2-40z+105)}{32 z^4} - \frac{945 e^{-z} \sqrt{\pi} (2z+7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.a9d3.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{3}{2}, 6; z\right) = \frac{120 e^z (z-4)}{z^5} + \frac{20(z^3+6z^2+18z+24)}{z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = -\frac{1}{2}$

07.25.03.a9d4.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{1}{2}, 1; z\right) = e^z (5z + 1) - 5\sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9d5.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{1}{2}, 1; -z\right) = e^{-z} (1 - 5z) - 5\sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a9d6.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{1}{2}, 2; z\right) = e^z (2z + 1) - 2\sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9d7.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{1}{2}, 2; -z\right) = e^{-z} (1 - 2z) - 2\sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a9d8.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{1}{2}, 3; z\right) = -\frac{8}{7}\sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{2e^z (4z^3 + 2z^2 + 3z - 3)}{7z^2} + \frac{6}{7z^2}$$

07.25.03.a9d9.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{1}{2}, 3; -z\right) = -\frac{8}{7}\sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} - \frac{2e^{-z} (4z^3 - 2z^2 + 3z + 3)}{7z^2} + \frac{6}{7z^2}$$

07.25.03.a9da.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{1}{2}, 4; z\right) = -\frac{16}{21}\sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{2(9z + 14)}{7z^3} + \frac{2e^z (8z^4 + 4z^3 + 6z^2 + 15z - 42)}{21z^3}$$

07.25.03.a9db.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{1}{2}, 4; -z\right) = -\frac{16}{21}\sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} + \frac{2(9z - 14)}{7z^3} - \frac{2e^{-z} (8z^4 - 4z^3 + 6z^2 - 15z - 42)}{21z^3}$$

07.25.03.a9dc.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{1}{2}, 5; z\right) = -\frac{128}{231}\sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{4(99z^2 + 308z + 378)}{77z^4} + \frac{8e^z (16z^5 + 8z^4 + 12z^3 + 30z^2 + 105z - 567)}{231z^4}$$

07.25.03.a9dd.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{1}{2}, 5; -z\right) = -\frac{128}{231}\sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} + \frac{4(99z^2 - 308z + 378)}{77z^4} - \frac{8e^{-z} (16z^5 - 8z^4 + 12z^3 - 30z^2 + 105z + 567)}{231z^4}$$

07.25.03.a9de.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{1}{2}, 6; z\right) = -\frac{1280\sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2}}{3003} + \frac{20(429z^3 + 2002z^2 + 4914z + 5544)}{1001z^5} + \frac{40e^z (32z^6 + 16z^5 + 24z^4 + 60z^3 + 210z^2 + 945z - 8316)}{3003z^5}$$

07.25.03.a9df.01

$${}_2F_2\left(-\frac{3}{2}, 2; -\frac{1}{2}, 6; -z\right) = -\frac{1280\sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2}}{3003} + \frac{20(429z^3 - 2002z^2 + 4914z - 5544)}{1001z^5} - \frac{40e^{-z} (32z^6 - 16z^5 + 24z^4 - 60z^3 + 210z^2 - 945z - 8316)}{3003z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = \frac{1}{2}$

07.25.03.a9dg.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{1}{2}, 1; z\right) = \frac{1}{2} e^z (2 - 5z) + \frac{1}{4} \sqrt{\pi} (10z^{3/2} - 9\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9dh.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{1}{2}, 1; -z\right) = \frac{1}{2} e^{-z} (5z + 2) + \frac{1}{4} \sqrt{\pi} (10z^{3/2} + 9\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9di.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{1}{2}, 2; z\right) = e^z (1 - z) + \frac{1}{2} \sqrt{\pi} (2z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9dj.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{1}{2}, 2; -z\right) = e^{-z} (z + 1) + \frac{1}{2} \sqrt{\pi} (2z^{3/2} + 3\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9dk.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{1}{2}, 3; z\right) = -\frac{2e^z(10z^3 - 16z^2 - 3z + 3)}{35z^2} + \frac{2}{35} \sqrt{\pi} (10z^{3/2} - 21\sqrt{z}) \operatorname{erfi}(\sqrt{z}) + \frac{6}{35z^2}$$

07.25.03.a9dl.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{1}{2}, 3; -z\right) = \frac{2e^{-z}(10z^3 + 16z^2 - 3z - 3)}{35z^2} + \frac{2}{35} \sqrt{\pi} (10z^{3/2} + 21\sqrt{z}) \operatorname{erf}(\sqrt{z}) + \frac{6}{35z^2}$$

07.25.03.a9dm.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{1}{2}, 4; z\right) = \frac{2(9z + 10)}{35z^3} - \frac{2e^z(20z^4 - 44z^3 - 12z^2 - 3z + 30)}{105z^3} + \frac{4}{105} \sqrt{\pi} (10z^{3/2} - 27\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9dn.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{1}{2}, 4; -z\right) = \frac{2(9z - 10)}{35z^3} + \frac{2e^{-z}(20z^4 + 44z^3 - 12z^2 + 3z + 30)}{105z^3} + \frac{4}{105} \sqrt{\pi} (10z^{3/2} + 27\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9do.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{1}{2}, 5; z\right) = \frac{4(99z^2 + 220z + 210)}{385z^4} - \frac{8e^z(40z^5 - 112z^4 - 36z^3 - 24z^2 + 15z + 315)}{1155z^4} + \frac{32\sqrt{\pi}(10z^{3/2} - 33\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1155}$$

07.25.03.a9dp.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{1}{2}, 5; -z\right) = \frac{4(99z^2 - 220z + 210)}{385z^4} + \frac{8e^{-z}(40z^5 + 112z^4 - 36z^3 + 24z^2 + 15z - 315)}{1155z^4} + \frac{32\sqrt{\pi}(10z^{3/2} + 33\sqrt{z}) \operatorname{erf}(\sqrt{z})}{1155}$$

07.25.03.a9dq.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{1}{2}, 6; z\right) = \frac{4(429z^3 + 1430z^2 + 2730z + 2520)}{1001z^5} - \frac{8e^z(80z^6 - 272z^5 - 96z^4 - 84z^3 - 60z^2 + 315z + 3780)}{3003z^5} + \frac{64\sqrt{\pi}(10z^{3/2} - 39\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3003}$$

07.25.03.a9dr.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{1}{2}, 6; -z\right) = \frac{4(429z^3 - 1430z^2 + 2730z - 2520)}{1001z^5} + \frac{8e^{-z}(80z^6 + 272z^5 - 96z^4 + 84z^3 - 60z^2 - 315z + 3780)}{3003z^5} + \frac{64\sqrt{\pi}(10z^{3/2} + 39\sqrt{z})\operatorname{erf}(\sqrt{z})}{3003}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = 1$

07.25.03.a9ds.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, 1; z\right) = \frac{1}{6}e^{z/2}(10z^2 - 21z + 6)I_0\left(\frac{z}{2}\right) + \frac{1}{6}e^{z/2}(11z - 10z^2)I_1\left(\frac{z}{2}\right)$$

07.25.03.a9dt.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, \frac{3}{2}; z\right) = \frac{1}{16}e^z(13 - 10z) + \frac{\sqrt{\pi}(20z^2 - 36z + 3)\operatorname{erfi}(\sqrt{z})}{32\sqrt{z}}$$

07.25.03.a9du.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, \frac{3}{2}; -z\right) = \frac{1}{16}e^{-z}(10z + 13) + \frac{\sqrt{\pi}(20z^2 + 36z + 3)\operatorname{erf}(\sqrt{z})}{32\sqrt{z}}$$

07.25.03.a9dv.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, 2; z\right) = \frac{1}{3}e^{z/2}(2z^2 - 6z + 3)I_0\left(\frac{z}{2}\right) - \frac{2}{3}e^{z/2}(z^2 - 2z)I_1\left(\frac{z}{2}\right)$$

07.25.03.a9dw.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, \frac{5}{2}; z\right) = \frac{e^z(-20z^2 + 44z + 3)}{64z} + \frac{\sqrt{\pi}(40z^3 - 108z^2 + 18z - 3)\operatorname{erfi}(\sqrt{z})}{128z^{3/2}}$$

07.25.03.a9dx.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, \frac{5}{2}; -z\right) = \frac{e^{-z}(20z^2 + 44z - 3)}{64z} + \frac{\sqrt{\pi}(40z^3 + 108z^2 + 18z + 3)\operatorname{erf}(\sqrt{z})}{128z^{3/2}}$$

07.25.03.a9dy.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, 3; z\right) = \frac{2}{105}e^{z/2}(20z^2 - 78z + 51)I_0\left(\frac{z}{2}\right) - \frac{2e^{z/2}(20z^3 - 58z^2 + 3z - 6)I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.a9dz.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi}(80z^4 - 288z^3 + 72z^2 - 24z - 27)\operatorname{erfi}(\sqrt{z})}{2048z^{5/2}} - \frac{5e^z(40z^3 - 124z^2 - 6z - 27)}{1024z^2}$$

07.25.03.a9e0.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (40 z^3 + 124 z^2 - 6 z + 27)}{1024 z^2} + \frac{5 \sqrt{\pi} (80 z^4 + 288 z^3 + 72 z^2 + 24 z - 27) \operatorname{erf}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.a9e1.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, 4; z\right) = \frac{4 e^{z/2} (20 z^3 - 96 z^2 + 75 z - 6) I_0\left(\frac{z}{2}\right)}{315 z} - \frac{4 e^{z/2} (20 z^4 - 76 z^3 + 9 z^2 - 15 z - 24) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.a9e2.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, \frac{9}{2}; z\right) = \frac{35 \sqrt{\pi} (32 z^5 - 144 z^4 + 48 z^3 - 24 z^2 - 54 z - 45) \operatorname{erfi}(\sqrt{z})}{8192 z^{7/2}} - \frac{35 e^z (16 z^4 - 64 z^3 - 24 z - 45)}{4096 z^3}$$

07.25.03.a9e3.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (16 z^4 + 64 z^3 + 24 z - 45)}{4096 z^3} + \frac{35 \sqrt{\pi} (32 z^5 + 144 z^4 + 48 z^3 + 24 z^2 - 54 z + 45) \operatorname{erf}(\sqrt{z})}{8192 z^{7/2}}$$

07.25.03.a9e4.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, 5; z\right) = \frac{16 e^{z/2} (40 z^4 - 228 z^3 + 204 z^2 - 39 z - 54) I_0\left(\frac{z}{2}\right)}{3465 z^2} - \frac{16 e^{z/2} (40 z^5 - 188 z^4 + 36 z^3 - 57 z^2 - 156 z - 216) I_1\left(\frac{z}{2}\right)}{3465 z^3}$$

07.25.03.a9e5.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, \frac{11}{2}; z\right) = \frac{21 \sqrt{\pi} (320 z^6 - 1728 z^5 + 720 z^4 - 480 z^3 - 1620 z^2 - 2700 z - 2205) \operatorname{erfi}(\sqrt{z})}{65 536 z^{9/2}} - \frac{21 e^z (160 z^5 - 784 z^4 + 48 z^3 - 408 z^2 - 1230 z - 2205)}{32 768 z^4}$$

07.25.03.a9e6.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (160 z^5 + 784 z^4 + 48 z^3 + 408 z^2 - 1230 z + 2205)}{32 768 z^4} + \frac{21 \sqrt{\pi} (320 z^6 + 1728 z^5 + 720 z^4 + 480 z^3 - 1620 z^2 + 2700 z - 2205) \operatorname{erf}(\sqrt{z})}{65 536 z^{9/2}}$$

07.25.03.a9e7.01

$${}_2F_2\left(-\frac{3}{2}, 2; 1, 6; z\right) = \frac{32 e^{z/2} (40 z^5 - 264 z^4 + 264 z^3 - 84 z^2 - 207 z - 288) I_0\left(\frac{z}{2}\right)}{9009 z^3} - \frac{128 e^{z/2} (10 z^6 - 56 z^5 + 15 z^4 - 24 z^3 - 93 z^2 - 207 z - 288) I_1\left(\frac{z}{2}\right)}{9009 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = \frac{3}{2}$

07.25.03.a9e8.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{3}{2}, 2; z\right) = \frac{1}{8} e^z (5 - 2z) + \frac{\sqrt{\pi} (4 z^2 - 12 z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.a9e9.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{3}{2}, 2; -z\right) = \frac{1}{8} e^{-z} (2z + 5) + \frac{\sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.a9ea.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{3}{2}, 3; z\right) = \frac{e^z (-10z^3 + 37z^2 - 4z + 4)}{70z^2} + \frac{\sqrt{\pi} (20z^2 - 84z + 35) \operatorname{erfi}(\sqrt{z})}{140\sqrt{z}} - \frac{2}{35z^2}$$

07.25.03.a9eb.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{3}{2}, 3; -z\right) = \frac{e^{-z} (10z^3 + 37z^2 + 4z + 4)}{70z^2} + \frac{\sqrt{\pi} (20z^2 + 84z + 35) \operatorname{erf}(\sqrt{z})}{140\sqrt{z}} - \frac{2}{35z^2}$$

07.25.03.a9ec.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{3}{2}, 4; z\right) = -\frac{2(3z + 2)}{35z^3} + \frac{e^z (-10z^4 + 49z^3 - 12z^2 + 6z + 12)}{105z^3} + \frac{\sqrt{\pi} (20z^2 - 108z + 63) \operatorname{erfi}(\sqrt{z})}{210\sqrt{z}}$$

07.25.03.a9ed.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{3}{2}, 4; -z\right) = -\frac{2(3z - 2)}{35z^3} + \frac{e^{-z} (10z^4 + 49z^3 + 12z^2 + 6z - 12)}{105z^3} + \frac{\sqrt{\pi} (20z^2 + 108z + 63) \operatorname{erf}(\sqrt{z})}{210\sqrt{z}}$$

07.25.03.a9ee.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{3}{2}, 5; z\right) = -\frac{4(33z^2 + 44z + 30)}{385z^4} - \frac{8e^z (10z^5 - 61z^4 + 24z^3 - 6z^2 - 21z - 45)}{1155z^4} + \frac{4\sqrt{\pi} (20z^2 - 132z + 99) \operatorname{erfi}(\sqrt{z})}{1155\sqrt{z}}$$

07.25.03.a9ef.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{3}{2}, 5; -z\right) = -\frac{4(33z^2 - 44z + 30)}{385z^4} + \frac{8e^{-z} (10z^5 + 61z^4 + 24z^3 + 6z^2 - 21z + 45)}{1155z^4} + \frac{4\sqrt{\pi} (20z^2 + 132z + 99) \operatorname{erf}(\sqrt{z})}{1155\sqrt{z}}$$

07.25.03.a9eg.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{3}{2}, 6; z\right) = -\frac{4(143z^3 + 286z^2 + 390z + 280)}{1001z^5} - \frac{8e^z (20z^6 - 146z^5 + 80z^4 - 8z^3 - 54z^2 - 165z - 420)}{3003z^5} + \frac{8\sqrt{\pi} (20z^2 - 156z + 143) \operatorname{erfi}(\sqrt{z})}{3003\sqrt{z}}$$

07.25.03.a9eh.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{3}{2}, 6; -z\right) = -\frac{4(143z^3 - 286z^2 + 390z - 280)}{1001z^5} + \frac{8e^{-z} (20z^6 + 146z^5 + 80z^4 + 8z^3 - 54z^2 + 165z - 420)}{3003z^5} + \frac{8\sqrt{\pi} (20z^2 + 156z + 143) \operatorname{erf}(\sqrt{z})}{3003\sqrt{z}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = 2$

07.25.03.a9ei.01

$${}_2F_2\left(-\frac{3}{2}, 2; 2, 2; z\right) = \frac{1}{15} e^{z/2} (4z^2 - 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4z^2 + 14z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9ej.01

$${}_2F_2\left(-\frac{3}{2}, 2; 2, \frac{5}{2}; z\right) = \frac{e^z (-4z^2 + 16z - 3)}{32z} + \frac{\sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.a9ek.01

$${}_2F_2\left(-\frac{3}{2}, 2; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (4z^2 + 16z + 3)}{32z} + \frac{\sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.a9el.01

$${}_2F_2\left(-\frac{3}{2}, 2; 2, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 - 24z + 27) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4z^3 - 20z^2 + 9z + 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.a9em.01

$${}_2F_2\left(-\frac{3}{2}, 2; 2, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5e^z (8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.a9en.01

$${}_2F_2\left(-\frac{3}{2}, 2; 2, \frac{7}{2}; -z\right) = \frac{5e^{-z} (8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5\sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.a9eo.01

$${}_2F_2\left(-\frac{3}{2}, 2; 2, 4; z\right) = \frac{4 e^{z/2} (8z^3 - 60z^2 + 84z + 3) I_0\left(\frac{z}{2}\right)}{315z} - \frac{4 e^{z/2} (8z^4 - 52z^3 + 36z^2 + 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.a9ep.01

$${}_2F_2\left(-\frac{3}{2}, 2; 2, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7e^z (16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.a9eq.01

$${}_2F_2\left(-\frac{3}{2}, 2; 2, \frac{9}{2}; -z\right) = \frac{7e^{-z} (16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7\sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.a9er.01

$${}_2F_2\left(-\frac{3}{2}, 2; 2, 5; z\right) = \frac{32 e^{z/2} (8z^4 - 72z^3 + 120z^2 + 12z + 9) I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{128 e^{z/2} (2z^5 - 16z^4 + 15z^3 + 12z^2 + 12z + 9) I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.a9es.01

$${}_2F_2\left(-\frac{3}{2}, 2; 2, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi} (64z^6 - 576z^5 + 720z^4 + 480z^3 + 540z^2 + 540z + 315) \operatorname{erfi}(\sqrt{z})}{32768z^{9/2}} - \frac{21e^z (32z^5 - 272z^4 + 240z^3 + 264z^2 + 330z + 315)}{16384z^4}$$

07.25.03.a9et.01

$${}_2F_2\left(-\frac{3}{2}, 2; 2, \frac{11}{2}; -z\right) = \frac{21e^{-z} (32z^5 + 272z^4 + 240z^3 - 264z^2 + 330z - 315)}{16384z^4} + \frac{21\sqrt{\pi} (64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315) \operatorname{erf}(\sqrt{z})}{32768z^{9/2}}$$

07.25.03.a9eu.01

$${}_2F_2\left(-\frac{3}{2}, 2; 2, 6; z\right) = \frac{32e^{z/2} (16z^5 - 168z^4 + 324z^3 + 60z^2 + 81z + 72) I_0\left(\frac{z}{2}\right)}{9009z^3} - \frac{32e^{z/2} (16z^6 - 152z^5 + 180z^4 + 180z^3 + 249z^2 + 324z + 288) I_1\left(\frac{z}{2}\right)}{9009z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = \frac{5}{2}$

07.25.03.a9ev.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{5}{2}, 3; z\right) = \frac{e^z (-20z^3 + 116z^2 - 57z - 48)}{280z^2} + \frac{\sqrt{\pi} (40z^3 - 252z^2 + 210z + 105) \operatorname{erfi}(\sqrt{z})}{560z^{3/2}} + \frac{6}{35z^2}$$

07.25.03.a9ew.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (20z^3 + 116z^2 + 57z - 48)}{280z^2} + \frac{\sqrt{\pi} (40z^3 + 252z^2 + 210z - 105) \operatorname{erf}(\sqrt{z})}{560z^{3/2}} + \frac{6}{35z^2}$$

07.25.03.a9ex.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{5}{2}, 4; z\right) = \frac{2(9z + 2)}{35z^3} + \frac{e^z (-20z^4 + 152z^3 - 123z^2 - 168z - 48)}{420z^3} + \frac{\sqrt{\pi} (40z^3 - 324z^2 + 378z + 315) \operatorname{erfi}(\sqrt{z})}{840z^{3/2}}$$

07.25.03.a9ey.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{5}{2}, 4; -z\right) = \frac{2(9z - 2)}{35z^3} + \frac{e^{-z} (20z^4 + 152z^3 + 123z^2 - 168z + 48)}{420z^3} + \frac{\sqrt{\pi} (40z^3 + 324z^2 + 378z - 315) \operatorname{erf}(\sqrt{z})}{840z^{3/2}}$$

07.25.03.a9ez.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{5}{2}, 5; z\right) = \frac{4(99z^2 + 44z + 18)}{385z^4} - \frac{2e^z (20z^5 - 188z^4 + 213z^3 + 384z^2 + 156z + 108)}{1155z^4} + \frac{\sqrt{\pi} (40z^3 - 396z^2 + 594z + 693) \operatorname{erfi}(\sqrt{z})}{1155z^{3/2}}$$

07.25.03.a9f0.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{5}{2}, 5; -z\right) = \frac{4(99z^2 - 44z + 18)}{385z^4} + \frac{2e^{-z}(20z^5 + 188z^4 + 213z^3 - 384z^2 + 156z - 108)}{1155z^4} + \frac{\sqrt{\pi}(40z^3 + 396z^2 + 594z - 693)\operatorname{erf}(\sqrt{z})}{1155z^{3/2}}$$

07.25.03.a9f1.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{5}{2}, 6; z\right) = \frac{4(429z^3 + 286z^2 + 234z + 120)}{1001z^5} - \frac{4e^z(20z^6 - 224z^5 + 327z^4 + 720z^3 + 336z^2 + 342z + 360)}{3003z^5} + \frac{2\sqrt{\pi}(40z^3 - 468z^2 + 858z + 1287)\operatorname{erfi}(\sqrt{z})}{3003z^{3/2}}$$

07.25.03.a9f2.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{5}{2}, 6; -z\right) = \frac{4(429z^3 - 286z^2 + 234z - 120)}{1001z^5} + \frac{4e^{-z}(20z^6 + 224z^5 + 327z^4 - 720z^3 + 336z^2 - 342z + 360)}{3003z^5} + \frac{2\sqrt{\pi}(40z^3 + 468z^2 + 858z - 1287)\operatorname{erf}(\sqrt{z})}{3003z^{3/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = 3$

07.25.03.a9f3.01

$${}_2F_2\left(-\frac{3}{2}, 2; 3, 3; z\right) = \frac{8e^{z/2}(40z^4 - 324z^3 + 508z^2 + 105z - 210)I_0\left(\frac{z}{2}\right)}{3675z^2} - \frac{8e^{z/2}(40z^3 - 284z^2 + 244z + 247)I_1\left(\frac{z}{2}\right)}{3675z} + \frac{16}{35z^2}$$

07.25.03.a9f4.01

$${}_2F_2\left(-\frac{3}{2}, 2; 3, \frac{7}{2}; z\right) = \frac{e^z(-40z^3 + 316z^2 - 282z - 453)}{896z^2} + \frac{\sqrt{\pi}(80z^4 - 672z^3 + 840z^2 + 840z - 315)\operatorname{erfi}(\sqrt{z})}{1792z^{5/2}} + \frac{6}{7z^2}$$

07.25.03.a9f5.01

$${}_2F_2\left(-\frac{3}{2}, 2; 3, \frac{7}{2}; -z\right) = \frac{e^{-z}(40z^3 + 316z^2 + 282z - 453)}{896z^2} + \frac{\sqrt{\pi}(80z^4 + 672z^3 + 840z^2 - 840z - 315)\operatorname{erf}(\sqrt{z})}{1792z^{5/2}} + \frac{6}{7z^2}$$

07.25.03.a9f6.01

$${}_2F_2\left(-\frac{3}{2}, 2; 3, 4; z\right) = \frac{16e^{z/2}(40z^4 - 408z^3 + 816z^2 + 420z - 945)I_0\left(\frac{z}{2}\right)}{11025z^2} - \frac{32e^{z/2}(20z^4 - 184z^3 + 234z^2 + 372z - 105)I_1\left(\frac{z}{2}\right)}{11025z^2} + \frac{48}{35z^2}$$

07.25.03.a9f7.01

$${}_2F_2\left(-\frac{3}{2}, 2; 3, \frac{9}{2}; z\right) = \frac{e^z(-16z^4 + 160z^3 - 208z^2 - 464z + 105)}{512z^3} + \frac{\sqrt{\pi}(32z^5 - 336z^4 + 560z^3 + 840z^2 - 630z - 105)\operatorname{erfi}(\sqrt{z})}{1024z^{7/2}} + \frac{2}{z^2}$$

07.25.03.a9f8.01

$${}_2F_2\left(-\frac{3}{2}, 2; 3, \frac{9}{2}; -z\right) = \frac{e^{-z} (16z^4 + 160z^3 + 208z^2 - 464z - 105)}{512z^3} + \frac{\sqrt{\pi} (32z^5 + 336z^4 + 560z^3 - 840z^2 - 630z + 105) \operatorname{erf}(\sqrt{z})}{1024z^{7/2}} + \frac{2}{z^2}$$

07.25.03.a9f9.01

$${}_2F_2\left(-\frac{3}{2}, 2; 3, 5; z\right) = \frac{64 e^{z/2} (80z^4 - 984z^3 + 2388z^2 + 2100z - 5355) I_0\left(\frac{z}{2}\right)}{121275z^2} - \frac{64 e^{z/2} (80z^5 - 904z^4 + 1524z^3 + 3252z^2 - 1995z - 630) I_1\left(\frac{z}{2}\right)}{121275z^3} + \frac{96}{35z^2}$$

07.25.03.a9fa.01

$${}_2F_2\left(-\frac{3}{2}, 2; 3, \frac{11}{2}; z\right) = -\frac{3 e^z (160z^5 - 1936z^4 + 3312z^3 + 9288z^2 - 4830z - 2205)}{20480z^4} + \frac{3\sqrt{\pi} (320z^6 - 4032z^5 + 8400z^4 + 16800z^3 - 18900z^2 - 6300z - 2205) \operatorname{erfi}(\sqrt{z})}{40960z^{9/2}} + \frac{18}{5z^2}$$

07.25.03.a9fb.01

$${}_2F_2\left(-\frac{3}{2}, 2; 3, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (160z^5 + 1936z^4 + 3312z^3 - 9288z^2 - 4830z + 2205)}{20480z^4} + \frac{3\sqrt{\pi} (320z^6 + 4032z^5 + 8400z^4 - 16800z^3 - 18900z^2 + 6300z - 2205) \operatorname{erf}(\sqrt{z})}{40960z^{9/2}} + \frac{18}{5z^2}$$

07.25.03.a9fc.01

$${}_2F_2\left(-\frac{3}{2}, 2; 3, 6; z\right) = \frac{128 e^{z/2} (80z^5 - 1152z^4 + 3284z^3 + 4200z^2 - 12075z - 420) I_0\left(\frac{z}{2}\right)}{315315z^3} - \frac{128 e^{z/2} (80z^6 - 1072z^5 + 2252z^4 + 5996z^3 - 5775z^2 - 3255z - 1680) I_1\left(\frac{z}{2}\right)}{315315z^4} + \frac{32}{7z^2}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = \frac{7}{2}$

07.25.03.a9fd.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{7}{2}, 4; z\right) = \frac{2(9z-2)}{7z^3} + \frac{e^z (-40z^4 + 412z^3 - 570z^2 - 1389z + 768)}{1344z^3} + \frac{\sqrt{\pi} (80z^4 - 864z^3 + 1512z^2 + 2520z - 2835) \operatorname{erfi}(\sqrt{z})}{2688z^{5/2}}$$

07.25.03.a9fe.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{7}{2}, 4; -z\right) = \frac{2(9z+2)}{7z^3} + \frac{e^{-z} (40z^4 + 412z^3 + 570z^2 - 1389z - 768)}{1344z^3} + \frac{\sqrt{\pi} (80z^4 + 864z^3 + 1512z^2 - 2520z - 2835) \operatorname{erf}(\sqrt{z})}{2688z^{5/2}}$$

07.25.03.a9ff.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{7}{2}, 5; z\right) = \frac{4(99z^2 - 44z - 6)}{77z^4} + \frac{e^z(-40z^5 + 508z^4 - 954z^3 - 3045z^2 + 3648z + 576)}{1848z^4} + \frac{\sqrt{\pi}(80z^4 - 1056z^3 + 2376z^2 + 5544z - 10395)\operatorname{erfi}(\sqrt{z})}{3696z^{5/2}}$$

07.25.03.a9fg.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{7}{2}, 5; -z\right) = \frac{4(99z^2 + 44z - 6)}{77z^4} + \frac{e^{-z}(40z^5 + 508z^4 + 954z^3 - 3045z^2 - 3648z + 576)}{1848z^4} + \frac{\sqrt{\pi}(80z^4 + 1056z^3 + 2376z^2 - 5544z - 10395)\operatorname{erf}(\sqrt{z})}{3696z^{5/2}}$$

07.25.03.a9fh.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{7}{2}, 6; z\right) = \frac{20(429z^3 - 286z^2 - 78z - 24)}{1001z^5} - \frac{5e^z(40z^6 - 604z^5 + 1434z^4 + 5613z^3 - 10560z^2 - 2592z - 1152)}{12012z^5} + \frac{5\sqrt{\pi}(80z^4 - 1248z^3 + 3432z^2 + 10296z - 27027)\operatorname{erfi}(\sqrt{z})}{24024z^{5/2}}$$

07.25.03.a9fi.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{7}{2}, 6; -z\right) = \frac{20(429z^3 + 286z^2 - 78z + 24)}{1001z^5} + \frac{5e^{-z}(40z^6 + 604z^5 + 1434z^4 - 5613z^3 - 10560z^2 + 2592z - 1152)}{12012z^5} + \frac{5\sqrt{\pi}(80z^4 + 1248z^3 + 3432z^2 - 10296z - 27027)\operatorname{erf}(\sqrt{z})}{24024z^{5/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = 4$

07.25.03.a9fj.01

$${}_2F_2\left(-\frac{3}{2}, 2; 4, 4; z\right) = \frac{16(9z - 4)}{35z^3} + \frac{16e^{z/2}(80z^5 - 1032z^4 + 2676z^3 + 3036z^2 - 10395z + 3780)I_0\left(\frac{z}{2}\right)}{33075z^3} - \frac{16e^{z/2}(80z^4 - 952z^3 + 1764z^2 + 4404z - 5811)I_1\left(\frac{z}{2}\right)}{33075z^2}$$

07.25.03.a9fk.01

$${}_2F_2\left(-\frac{3}{2}, 2; 4, \frac{9}{2}; z\right) = \frac{2(3z - 2)}{z^3} + \frac{e^z(-16z^4 + 208z^3 - 408z^2 - 1380z + 2127)}{768z^3} + \frac{\sqrt{\pi}(32z^5 - 432z^4 + 1008z^3 + 2520z^2 - 5670z + 945)\operatorname{erfi}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.a9fl.01

$${}_2F_2\left(-\frac{3}{2}, 2; 4, \frac{9}{2}; -z\right) = \frac{2(3z+2)}{z^3} + \frac{e^{-z}(16z^4 + 208z^3 + 408z^2 - 1380z - 2127)}{768z^3} + \frac{\sqrt{\pi}(32z^5 + 432z^4 + 1008z^3 - 2520z^2 - 5670z - 945)\operatorname{erf}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.a9fm.01

$${}_2F_2\left(-\frac{3}{2}, 2; 4, 5; z\right) = \frac{32(9z-8)}{35z^3} + \frac{128e^{z/2}(80z^5 - 1248z^4 + 3972z^3 + 7248z^2 - 33075z + 20790)I_0\left(\frac{z}{2}\right)}{363825z^3} - \frac{128e^{z/2}(80z^5 - 1168z^4 + 2844z^3 + 9588z^2 - 22983z + 2835)I_1\left(\frac{z}{2}\right)}{363825z^3}$$

07.25.03.a9fn.01

$${}_2F_2\left(-\frac{3}{2}, 2; 4, \frac{11}{2}; z\right) = \frac{6(9z-10)}{5z^3} + \frac{e^z(-160z^5 + 2512z^4 - 6384z^3 - 27336z^2 + 70590z - 6615)}{10240z^4} + \frac{\sqrt{\pi}(320z^6 - 5184z^5 + 15120z^4 + 50400z^3 - 170100z^2 + 56700z + 6615)\operatorname{erfi}(\sqrt{z})}{20480z^{9/2}}$$

07.25.03.a9fo.01

$${}_2F_2\left(-\frac{3}{2}, 2; 4, \frac{11}{2}; -z\right) = \frac{6(9z+10)}{5z^3} + \frac{e^{-z}(160z^5 + 2512z^4 + 6384z^3 - 27336z^2 - 70590z - 6615)}{10240z^4} + \frac{\sqrt{\pi}(320z^6 + 5184z^5 + 15120z^4 - 50400z^3 - 170100z^2 - 56700z + 6615)\operatorname{erf}(\sqrt{z})}{20480z^{9/2}}$$

07.25.03.a9fp.01

$${}_2F_2\left(-\frac{3}{2}, 2; 4, 6; z\right) = \frac{32(3z-4)}{7z^3} + \frac{128e^{z/2}(160z^5 - 2928z^4 + 11040z^3 + 28212z^2 - 160650z + 137025)I_0\left(\frac{z}{2}\right)}{945945z^3} - \frac{128e^{z/2}(160z^6 - 2768z^5 + 8352z^4 + 35340z^3 - 123402z^2 + 33075z + 7560)I_1\left(\frac{z}{2}\right)}{945945z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = \frac{9}{2}$

07.25.03.a9fq.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{9}{2}, 5; z\right) = \frac{4(33z^2 - 44z + 6)}{11z^4} + \frac{e^z(-16z^5 + 256z^4 - 672z^3 - 3000z^2 + 8805z - 2304)}{1056z^4} + \frac{\sqrt{\pi}(32z^5 - 528z^4 + 1584z^3 + 5544z^2 - 20790z + 10395)\operatorname{erfi}(\sqrt{z})}{2112z^{7/2}}$$

07.25.03.a9fr.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{9}{2}, 5; -z\right) = \frac{4(33z^2 + 44z + 6)}{11z^4} + \frac{e^{-z}(16z^5 + 256z^4 + 672z^3 - 3000z^2 - 8805z - 2304)}{1056z^4} + \frac{\sqrt{\pi}(32z^5 + 528z^4 + 1584z^3 - 5544z^2 - 20790z - 10395)\operatorname{erf}(\sqrt{z})}{2112z^{7/2}}$$

07.25.03.a9fs.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{9}{2}, 6; z\right) = \frac{20(143z^3 - 286z^2 + 78z + 8)}{143z^5} - \frac{5e^z(16z^6 - 304z^5 + 1000z^4 + 5516z^3 - 24075z^2 + 13440z + 1536)}{6864z^5} + \frac{5\sqrt{\pi}(32z^5 - 624z^4 + 2288z^3 + 10296z^2 - 54054z + 45045)\operatorname{erfi}(\sqrt{z})}{13728z^{7/2}}$$

07.25.03.a9ft.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{9}{2}, 6; -z\right) = \frac{20(143z^3 + 286z^2 + 78z - 8)}{143z^5} + \frac{5e^{-z}(16z^6 + 304z^5 + 1000z^4 - 5516z^3 - 24075z^2 - 13440z + 1536)}{6864z^5} + \frac{5\sqrt{\pi}(32z^5 + 624z^4 + 2288z^3 - 10296z^2 - 54054z - 45045)\operatorname{erf}(\sqrt{z})}{13728z^{7/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = 5$

07.25.03.a9fu.01

$${}_2F_2\left(-\frac{3}{2}, 2; 5, 5; z\right) = \frac{64(99z^2 - 176z + 48)}{385z^4} + \frac{512e^{z/2}(160z^6 - 3024z^5 + 11904z^4 + 33900z^3 - 220194z^2 + 259875z - 62370)I_0\left(\frac{z}{2}\right)}{4002075z^4} - \frac{512e^{z/2}(160z^5 - 2864z^4 + 9120z^3 + 41748z^2 - 176250z + 106749)I_1\left(\frac{z}{2}\right)}{4002075z^3}$$

07.25.03.a9fv.01

$${}_2F_2\left(-\frac{3}{2}, 2; 5, \frac{11}{2}; z\right) = \frac{12(99z^2 - 220z + 90)}{55z^4} + \frac{e^z(-160z^5 + 3088z^4 - 10416z^3 - 59304z^2 + 280110z - 203715)}{14080z^4} + \frac{\sqrt{\pi}(320z^6 - 6336z^5 + 23760z^4 + 110880z^3 - 623700z^2 + 623700z - 72765)\operatorname{erfi}(\sqrt{z})}{28160z^{9/2}}$$

07.25.03.a9fw.01

$${}_2F_2\left(-\frac{3}{2}, 2; 5, \frac{11}{2}; -z\right) = \frac{12(99z^2 + 220z + 90)}{55z^4} + \frac{e^{-z}(160z^5 + 3088z^4 + 10416z^3 - 59304z^2 - 280110z - 203715)}{14080z^4} + \frac{\sqrt{\pi}(320z^6 + 6336z^5 + 23760z^4 - 110880z^3 - 623700z^2 - 623700z - 72765)\operatorname{erf}(\sqrt{z})}{28160z^{9/2}}$$

07.25.03.a9fx.01

$${}_2F_2\left(-\frac{3}{2}, 2; 5, 6; z\right) = \frac{64(33z^2 - 88z + 48)}{77z^4} + \frac{1024e^{z/2}(160z^6 - 3552z^5 + 16656z^4 + 65184z^3 - 547686z^2 + 935550z - 405405)I_0\left(\frac{z}{2}\right)}{10405395z^4} - \frac{2048e^{z/2}(80z^6 - 1696z^5 + 6672z^4 + 38496z^3 - 233457z^2 + 255978z - 20790)I_1\left(\frac{z}{2}\right)}{10405395z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = \frac{11}{2}$

07.25.03.a9fy.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{11}{2}, 6; z\right) = \frac{12(429z^3 - 1430z^2 + 1170z - 120)}{143z^5} + \frac{e^z(-160z^6 + 3664z^5 - 15408z^4 - 109032z^3 + 752430z^2 - 1035495z + 184320)}{18304z^5} + \frac{\sqrt{\pi}(320z^6 - 7488z^5 + 34320z^4 + 205920z^3 - 1621620z^2 + 2702700z - 945945)\operatorname{erfi}(\sqrt{z})}{36608z^{9/2}}$$

07.25.03.a9fz.01

$${}_2F_2\left(-\frac{3}{2}, 2; \frac{11}{2}, 6; -z\right) = \frac{12(429z^3 + 1430z^2 + 1170z + 120)}{143z^5} + \frac{e^{-z}(160z^6 + 3664z^5 + 15408z^4 - 109032z^3 - 752430z^2 - 1035495z - 184320)}{18304z^5} + \frac{\sqrt{\pi}(320z^6 + 7488z^5 + 34320z^4 - 205920z^3 - 1621620z^2 - 2702700z - 945945)\operatorname{erf}(\sqrt{z})}{36608z^{9/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 2$, $b_1 = 6$

07.25.03.a9g0.01

$${}_2F_2\left(-\frac{3}{2}, 2; 6, 6; z\right) = \frac{320(143z^3 - 572z^2 + 624z - 128)}{1001z^5} + \frac{1}{27054027z^5} - \frac{1024e^{z/2}(320z^7 - 8352z^6 + 46832z^5 + 248928z^4 - 2756616z^3 + 7039146z^2 - 5810805z + 1081080)I_0\left(\frac{z}{2}\right)}{27054027z^4} - \frac{1024e^{z/2}(320z^6 - 8032z^5 + 38960z^4 + 284192z^3 - 2459976z^2 + 4739286z - 1978521)I_1\left(\frac{z}{2}\right)}{27054027z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.a9g1.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \frac{1}{108056025} \left(e^z (4096 z^{12} + 139264 z^{11} + 1579008 z^{10} + 7182336 z^9 + 12445440 z^8 + 6128640 z^7 + \right. \\
 & \quad \left. 564480 z^6 - 1532160 z^5 + 7000560 z^4 - 25250400 z^3 + 68002200 z^2 - 121451400 z + 108056025) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9g2.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & -\frac{1}{9823275} \left(e^z (2048 z^{11} + 58368 z^{10} + 526848 z^9 + 1747200 z^8 + 1854720 z^7 + 282240 z^6 + 141120 z^5 - \right. \\
 & \quad \left. 695520 z^4 + 2457000 z^3 - 6482700 z^2 + 11311650 z - 9823275) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9g3.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{1091475} \left(e^z (1024 z^{10} + 23552 z^9 + 157440 z^8 + 322560 z^7 + 120960 z^6 - 40320 z^5 + 90720 z^4 - 302400 z^3 + \right. \\
 & \quad \left. 774900 z^2 - 1304100 z + 1091475) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9g4.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \\
 & -\frac{1}{155925} e^z (512 z^9 + 8960 z^8 + 38400 z^7 + 26880 z^6 - 6720 z^5 - 10080 z^4 + 50400 z^3 - 126000 z^2 + 198450 z - 155925)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9g5.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{e^z (256 z^8 + 3072 z^7 + 5376 z^6 - 5376 z^5 + 10080 z^4 - 20160 z^3 + 35280 z^2 - 45360 z + 31185)}{31185}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9g6.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{e^z (128 z^7 + 832 z^6 - 1056 z^5 + 1008 z^4 + 2520 z^3 - 13860 z^2 + 24570 z - 10395)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9g7.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (64 z^6 + 64 z^5 - 816 z^4 + 3360 z^3 - 7140 z^2 + 3780 z + 10395)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9g8.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (32 z^6 - 32 z^5 - 240 z^4 + 1632 z^3 - 4254 z^2 + 1890 z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \\
 & \quad \frac{2 e^{z/2} (16 z^6 - 32 z^5 - 80 z^4 + 864 z^3 - 2949 z^2 + 4098 z) I_1\left(\frac{z}{2}\right)}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9g9.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (32 z^5 - 144 z^4 + 240 z^3 + 840 z^2 - 5670 z + 10395)}{10395}
 \end{aligned}$$

07.25.03.a9ga.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (32 z^5 - 208 z^4 + 672 z^3 - 516 z^2 - 3906 z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2} (32 z^5 - 240 z^4 + 928 z^3 - 1596 z^2 - 1506 z + 9009) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.a9gb.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (16 z^4 - 160 z^3 + 840 z^2 - 2520 z + 3465)}{3465}$$

07.25.03.a9gc.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (16 z^4 - 192 z^3 + 1188 z^2 - 4248 z + 7425) I_0\left(\frac{z}{2}\right)}{10395} + \frac{4 e^{z/2} (16 z^5 - 208 z^4 + 1404 z^3 - 5772 z^2 + 14157 z - 19305) I_1\left(\frac{z}{2}\right)}{10395 z}$$

07.25.03.a9gd.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (8 z^5 - 124 z^4 + 978 z^3 - 4683 z^2 + 13440 z - 20160)}{693 z^2} + \frac{160 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{5/2}}$$

07.25.03.a9ge.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-8 z^5 - 124 z^4 - 978 z^3 - 4683 z^2 - 13440 z - 20160)}{693 z^2} + \frac{160 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{5/2}}$$

07.25.03.a9gf.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 - 280 z^3 + 2436 z^2 - 12540 z + 36465) I_0\left(\frac{z}{2}\right)}{3465 z} + \frac{4 e^{z/2} (16 z^5 - 296 z^4 + 2740 z^3 - 15444 z^2 + 53625 z - 145860) I_1\left(\frac{z}{2}\right)}{3465 z^2}$$

07.25.03.a9gg.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (4 z^5 - 84 z^4 + 867 z^3 - 5376 z^2 + 20160 z - 45360)}{99 z^3} + \frac{280 \sqrt{\pi} (2z + 9) \operatorname{erfi}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.a9gh.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (4 z^5 + 84 z^4 + 867 z^3 + 5376 z^2 + 20160 z + 45360)}{99 z^3} + \frac{280 \sqrt{\pi} (2z - 9) \operatorname{erf}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.a9gi.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 - 184 z^3 + 2040 z^2 - 13260 z + 62985) I_0\left(\frac{z}{2}\right)}{3465 z^2} + \frac{128 e^{z/2} (2 z^5 - 48 z^4 + 559 z^3 - 3900 z^2 + 13260 z - 62985) I_1\left(\frac{z}{2}\right)}{3465 z^3}$$

07.25.03.a9gj.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (2 z^5 - 53 z^4 + 672 z^3 - 5040 z^2 + 21420 z - 66150)}{11 z^4} + \frac{315 \sqrt{\pi} (4 z^2 + 36 z + 105) \operatorname{erfi}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.a9gk.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z}(-2z^5 - 53z^4 - 672z^3 - 5040z^2 - 21420z - 66150)}{11z^4} + \frac{315\sqrt{\pi}(4z^2 - 36z + 105)\operatorname{erf}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.a9gl.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, 6; z\right) = \frac{32e^{z/2}(8z^4 - 228z^3 + 3060z^2 - 18411z + 162792)I_0\left(\frac{z}{2}\right)}{693z^3} + \frac{32e^{z/2}(8z^5 - 236z^4 + 3300z^3 - 32589z^2 + 73644z - 651168)I_1\left(\frac{z}{2}\right)}{693z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.a9gm.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{893025}(e^z(1024z^{10} + 24576z^9 + 177408z^8 + 430080z^7 + 282240z^6 + 70560z^4 - 241920z^3 + 623700z^2 - 1058400z + 893025))$$

07.25.03.a9gn.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{99225}e^z(512z^9 + 9984z^8 + 53760z^7 + 80640z^6 + 20160z^5 - 10080z^4 + 30240z^3 - 75600z^2 + 122850z - 99225)$$

07.25.03.a9go.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{e^z(256z^8 + 3840z^7 + 13440z^6 + 6720z^5 - 5040z^3 + 12600z^2 - 18900z + 14175)}{14175}$$

07.25.03.a9gp.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{e^z(128z^7 + 1344z^6 + 2016z^5 - 1680z^4 + 2520z^3 - 3780z^2 + 4410z - 2835)}{2835}$$

07.25.03.a9gq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945}e^z(64z^6 + 384z^5 - 336z^4 + 1260z^2 - 2520z + 945)$$

07.25.03.a9gr.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{945}e^z(32z^5 + 48z^4 - 336z^3 + 840z^2 - 630z - 945)$$

07.25.03.a9gs.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{945}e^{z/2}(-16z^5 + 132z^3 - 444z^2 + 315z + 945)I_0\left(\frac{z}{2}\right) + \frac{1}{945}e^{z/2}(-16z^5 + 16z^4 + 108z^3 - 528z^2 + 831z)I_1\left(\frac{z}{2}\right)$$

07.25.03.a9gt.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{945}e^z(16z^4 - 48z^3 + 420z - 945)$$

07.25.03.a9gu.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (-16z^4 + 72z^3 - 108z^2 - 252z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16z^4 + 88z^3 - 204z^2 + 12z + 693) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9gv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{315} e^z (8z^3 - 60z^2 + 210z - 315)$$

07.25.03.a9gw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, 3; z\right) = -\frac{8}{945} e^{z/2} (4z^3 - 36z^2 + 150z - 279) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8z^4 - 80z^3 + 384z^2 - 990z + 1287) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.a9gx.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (-4z^4 + 48z^3 - 273z^2 + 840z - 1260)}{63z^2} + \frac{10\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.a9gy.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-4z^4 - 48z^3 - 273z^2 - 840z - 1260)}{63z^2} + \frac{10\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.a9gz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, 4; z\right) = -\frac{4 e^{z/2} (8z^3 - 108z^2 + 672z - 2145) I_0\left(\frac{z}{2}\right)}{315z} - \frac{4 e^{z/2} (8z^4 - 116z^3 + 792z^2 - 3003z + 8580) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.a9h0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (-2z^4 + 33z^3 - 252z^2 + 1050z - 2520)}{9z^3} + \frac{35\sqrt{\pi} (z+4) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.a9h1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (2z^4 + 33z^3 + 252z^2 + 1050z + 2520)}{9z^3} + \frac{35\sqrt{\pi} (z-4) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.a9h2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, 5; z\right) = -\frac{32 e^{z/2} (4z^3 - 72z^2 + 585z - 3315) I_0\left(\frac{z}{2}\right)}{315z^2} - \frac{32 e^{z/2} (4z^4 - 76z^3 + 663z^2 - 2340z + 13260) I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.a9h3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (-2z^4 + 42z^3 - 399z^2 + 1890z - 6615)}{2z^4} + \frac{315\sqrt{\pi} (z^2 + 8z + 21) \operatorname{erfi}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.a9h4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-2z^4 - 42z^3 - 399z^2 - 1890z - 6615)}{2z^4} + \frac{315\sqrt{\pi} (z^2 - 8z + 21) \operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.a9h5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, 6; z\right) = -\frac{32 e^{z/2} (4z^3 - 90z^2 + 561z - 7752) I_0\left(\frac{z}{2}\right)}{63z^3} - \frac{32 e^{z/2} (4z^4 - 94z^3 + 1329z^2 - 2244z + 31008) I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.a9h6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{e^z (256 z^8 + 4096 z^7 + 16640 z^6 + 15360 z^5 + 2400 z^4 - 3840 z^3 + 9360 z^2 - 14400 z + 11025)}{11025}$$

07.25.03.a9h7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (128 z^7 + 1600 z^6 + 4320 z^5 + 1200 z^4 + 600 z^3 - 1620 z^2 + 2250 z - 1575)}{1575}$$

07.25.03.a9h8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315)$$

07.25.03.a9h9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{105} e^z (32 z^5 + 176 z^4 - 80 z^3 - 120 z^2 + 330 z - 105)$$

07.25.03.a9ha.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (16 z^4 + 32 z^3 - 120 z^2 + 120 z + 105)$$

07.25.03.a9hb.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8 z^4 + 8 z^3 - 56 z^2 + 60 z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} (2 z^4 - 13 z^2 + 26 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9hc.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (8 z^3 - 12 z^2 - 30 z + 105)$$

07.25.03.a9hd.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (8 z^3 - 20 z^2 - 12 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8 z^3 - 28 z^2 + 20 z + 63) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9he.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{35} e^z (4 z^2 - 20 z + 35)$$

07.25.03.a9hf.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4 z^2 - 24 z + 51) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4 z^3 - 28 z^2 + 81 z - 99) I_1\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.a9hg.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (2 z^3 - 17 z^2 + 60 z - 90)}{7 z^2} + \frac{45 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.a9hh.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-2 z^3 - 17 z^2 - 60 z - 90)}{7 z^2} + \frac{45 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.a9hi.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (4 z^2 - 38 z + 143) I_0\left(\frac{z}{2}\right)}{35 z} + \frac{4 e^{z/2} (4 z^3 - 42 z^2 + 187 z - 572) I_1\left(\frac{z}{2}\right)}{35 z^2}$$

07.25.03.a9hj.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (2 z^3 - 24 z^2 + 120 z - 315)}{2 z^3} + \frac{45 \sqrt{\pi} (2 z + 7) \operatorname{erfi}(\sqrt{z})}{4 z^{7/2}}$$

07.25.03.a9hk.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (2 z^3 + 24 z^2 + 120 z + 315)}{2 z^3} + \frac{45 \sqrt{\pi} (2 z - 7) \operatorname{erf}(\sqrt{z})}{4 z^{7/2}}$$

07.25.03.a9hl.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (2 z^2 - 26 z + 195) I_0\left(\frac{z}{2}\right)}{35 z^2} + \frac{64 e^{z/2} (z^3 - 14 z^2 + 52 z - 390) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.a9hm.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (2 z^3 - 31 z^2 + 175 z - 735)}{4 z^4} + \frac{135 \sqrt{\pi} (3 z^2 + 21 z + 49) \operatorname{erfi}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.a9hn.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{135 \sqrt{\pi} (3 z^2 - 21 z + 49) \operatorname{erf}(\sqrt{z})}{8 z^{9/2}} - \frac{9 e^{-z} (2 z^3 + 31 z^2 + 175 z + 735)}{4 z^4}$$

07.25.03.a9ho.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (2 z^2 - 9 z + 408) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{32 e^{z/2} (2 z^3 - 59 z^2 + 36 z - 1632) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.a9hp.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225} e^z (64 z^6 + 640 z^5 + 1200 z^4 + 300 z^2 - 360 z + 225)$$

07.25.03.a9hq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{45} e^z (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45)$$

07.25.03.a9hr.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (16 z^4 + 80 z^3 - 60 z + 15)$$

07.25.03.a9hs.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{15} e^z (8 z^3 + 20 z^2 - 30 z - 15)$$

07.25.03.a9ht.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-4 z^3 - 8 z^2 + 15 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4 z^3 - 4 z^2 + 17 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9hu.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{15} e^z (4z^2 - 15)$$

07.25.03.a9hv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (-4z^2 + 2z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4z^2 + 6z + 7) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9hw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{1}{5} e^z (2z - 5)$$

07.25.03.a9hx.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, 3; z\right) = -\frac{8}{15} e^{z/2} (z - 3) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (2z^2 - 8z + 9) I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.a9hy.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-2z^2 + 10z - 15)}{2z^2} + \frac{15\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.a9hz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-2z^2 - 10z - 15)}{2z^2} + \frac{15\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.a9i0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, 4; z\right) = -\frac{4 e^{z/2} (2z - 11) I_0\left(\frac{z}{2}\right)}{5z} - \frac{4 e^{z/2} (2z^2 - 13z + 44) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.a9i1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{105\sqrt{\pi} (z + 3) \operatorname{erfi}(\sqrt{z})}{8z^{7/2}} - \frac{7 e^z (2z^2 - 15z + 45)}{4z^3}$$

07.25.03.a9i2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (2z^2 + 15z + 45)}{4z^3} + \frac{105\sqrt{\pi} (z - 3) \operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.a9i3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, 5; z\right) = -\frac{32 e^{z/2} (z - 13) I_0\left(\frac{z}{2}\right)}{5z^2} - \frac{32 e^{z/2} (z^2 - 4z + 52) I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.a9i4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{945\sqrt{\pi} (4z^2 + 24z + 49) \operatorname{erfi}(\sqrt{z})}{128z^{9/2}} - \frac{63 e^z (16z^2 - 130z + 735)}{64z^4}$$

07.25.03.a9i5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{945\sqrt{\pi} (4z^2 - 24z + 49) \operatorname{erf}(\sqrt{z})}{128z^{9/2}} - \frac{63 e^{-z} (16z^2 + 130z + 735)}{64z^4}$$

07.25.03.a9i6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (z+24) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (3z^2+4z+96) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.a9i7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} e^z (16z^4 + 96z^3 + 72z^2 - 24z + 9)$$

07.25.03.a9i8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{3} e^z (8z^3 + 36z^2 + 18z - 3)$$

07.25.03.a9i9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (4z^2 + 12z + 3)$$

07.25.03.a9ia.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (2z^2 + 6z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} (z^2 + 2z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9ib.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (2z + 3)$$

07.25.03.a9ic.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{3} e^{z/2} (2z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z + 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9id.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = e^z$$

07.25.03.a9ie.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (z-1) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.a9if.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2z-3)}{4z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.a9ig.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{-z})}{8z^{5/2}} - \frac{5 e^{-z} (2z+3)}{4z^2}$$

07.25.03.a9ih.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z-4) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.a9ii.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (4z - 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.a9ij.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z + 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.a9ik.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.a9il.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1575 e^z (2z - 21)}{128 z^4} + \frac{945 \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.a9im.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 e^{-z} (2z + 21)}{128 z^4}$$

07.25.03.a9in.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (z + 8) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (z^2 + 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.a9io.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = 32 \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + e^z (4z^2 - 16z + 1)$$

07.25.03.a9ip.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = 32 \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} + e^{-z} (4z^2 + 16z + 1)$$

07.25.03.a9iq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = e^z (14z + 1) - 16 \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9ir.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z} (1 - 14z) - 16 \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a9is.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (-32z^2 + 21z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (32z^2 + 5z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9it.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = e^z (4z + 1) - 4 \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9iu.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = e^{-z} (1 - 4z) - 4\sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a9iv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (-64z^2 + 48z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (64z^2 + 16z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9iw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = e^z (2z + 1) - 2\sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9ix.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = e^{-z} (1 - 2z) - 2\sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a9iy.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (64z^3 + 16z^2 + 18z - 15) I_1\left(\frac{z}{2}\right)}{105z} - \frac{8}{105} e^{z/2} (32z^2 - 24z - 15) I_0\left(\frac{z}{2}\right)$$

07.25.03.a9iz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (8z^3 + 4z^2 + 6z - 9)}{32z^2} - \frac{5\sqrt{\pi} (16z^4 - 9) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.a9j0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = -\frac{5 e^{-z} (8z^3 - 4z^2 + 6z + 9)}{32z^2} - \frac{5\sqrt{\pi} (16z^4 - 9) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.a9j1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (128z^4 + 32z^3 + 36z^2 + 75z - 420) I_1\left(\frac{z}{2}\right)}{315z^2} - \frac{4 e^{z/2} (128z^3 - 96z^2 - 60z - 105) I_0\left(\frac{z}{2}\right)}{315z}$$

07.25.03.a9j2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (8z^4 + 4z^3 + 6z^2 + 15z - 90)}{64z^3} - \frac{7\sqrt{\pi} (16z^5 - 45z - 90) \operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.a9j3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = -\frac{7 e^{-z} (8z^4 - 4z^3 + 6z^2 - 15z - 90)}{64z^3} - \frac{7\sqrt{\pi} (16z^5 - 45z + 90) \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.a9j4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (128z^5 + 32z^4 + 36z^3 + 75z^2 - 420z - 3780) I_1\left(\frac{z}{2}\right)}{3465z^3} - \frac{32 e^{z/2} (128z^4 - 96z^3 - 60z^2 - 105z - 945) I_0\left(\frac{z}{2}\right)}{3465z^2}$$

$$\begin{aligned}
 & \text{07.25.03.a9j5.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \\
 & \frac{21 e^z (16 z^5 + 8 z^4 + 12 z^3 + 30 z^2 - 30 z - 1575)}{512 z^4} - \frac{21 \sqrt{\pi} (32 z^6 - 270 z^2 - 1080 z - 1575) \operatorname{erfi}(\sqrt{z})}{1024 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9j6.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{21 e^{-z} (16 z^5 - 8 z^4 + 12 z^3 - 30 z^2 - 30 z + 1575)}{512 z^4} - \frac{21 \sqrt{\pi} (32 z^6 - 270 z^2 + 1080 z - 1575) \operatorname{erf}(\sqrt{z})}{1024 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9j7.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (256 z^6 + 64 z^5 + 72 z^4 + 150 z^3 - 2919 z^2 - 15876 z - 66528) I_1\left(\frac{z}{2}\right)}{9009 z^4} - \\
 & \frac{32 e^{z/2} (256 z^5 - 192 z^4 - 120 z^3 - 210 z^2 - 3969 z - 16632) I_0\left(\frac{z}{2}\right)}{9009 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{1}{2}$

$$\text{07.25.03.a9j8.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = e^z (1 - 8z) + 4 \sqrt{\pi} (2 z^{3/2} - \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.a9j9.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = e^{-z} (8z + 1) + 4 \sqrt{\pi} (2 z^{3/2} + \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.a9ja.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (16 z^2 - 24 z + 3) I_0\left(\frac{z}{2}\right) - \frac{8}{3} e^{z/2} (2 z^2 - z) I_1\left(\frac{z}{2}\right)$$

$$\text{07.25.03.a9jb.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = e^z (1 - 2z) + 2 \sqrt{\pi} (z - 1) \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.a9jc.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = e^{-z} (2z + 1) + 2 \sqrt{\pi} \sqrt{z} (z + 1) \operatorname{erf}(\sqrt{z})$$

$$\text{07.25.03.a9jd.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (32 z^2 - 64 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-32 z^2 + 32 z + 1) I_1\left(\frac{z}{2}\right)$$

$$\text{07.25.03.a9je.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = e^z (1 - z) + \frac{1}{2} \sqrt{\pi} \sqrt{z} (2z - 3) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9jf.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = e^{-z}(z+1) + \frac{1}{2} \sqrt{\pi} \sqrt{z} (2z+3) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9jg.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (32z^2 - 80z + 27) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (32z^3 - 48z^2 - 5z + 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.a9jh.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5 \sqrt{\pi} (16z^4 - 32z^3 + 3) \operatorname{erfi}(\sqrt{z})}{128z^{5/2}} - \frac{5 e^z (8z^3 - 12z^2 - 2z + 3)}{64z^2}$$

07.25.03.a9ji.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (8z^3 + 12z^2 - 2z - 3)}{64z^2} + \frac{5 \sqrt{\pi} (16z^4 + 32z^3 + 3) \operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.a9jj.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (64z^3 - 192z^2 + 78z + 15) I_0\left(\frac{z}{2}\right)}{315z} - \frac{4 e^{z/2} (64z^4 - 128z^3 - 18z^2 - 3z + 60) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.a9jk.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 \sqrt{\pi} (32z^5 - 80z^4 + 30z + 45) \operatorname{erfi}(\sqrt{z})}{512z^{7/2}} - \frac{7 e^z (16z^4 - 32z^3 - 8z^2 + 45)}{256z^3}$$

07.25.03.a9jl.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (16z^4 + 32z^3 - 8z^2 + 45)}{256z^3} + \frac{7 \sqrt{\pi} (32z^5 + 80z^4 + 30z - 45) \operatorname{erf}(\sqrt{z})}{512z^{7/2}}$$

07.25.03.a9jm.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (64z^4 - 224z^3 + 102z^2 + 30z + 105) I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{64 e^{z/2} (32z^5 - 80z^4 - 13z^3 - 6z^2 + 60z + 210) I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.a9jn.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{21 \sqrt{\pi} (32z^6 - 96z^5 + 90z^2 + 270z + 315) \operatorname{erfi}(\sqrt{z})}{2048z^{9/2}} - \frac{21 e^z (16z^5 - 40z^4 - 12z^3 - 6z^2 + 60z + 315)}{1024z^4}$$

07.25.03.a9jo.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (16z^5 + 40z^4 - 12z^3 + 6z^2 + 60z - 315)}{1024z^4} + \frac{21 \sqrt{\pi} (32z^6 + 96z^5 + 90z^2 - 270z + 315) \operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.a9jp.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (128 z^5 - 512 z^4 + 252 z^3 + 90 z^2 + 609 z + 1512) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (128 z^6 - 384 z^5 - 68 z^4 - 42 z^3 + 549 z^2 + 2436 z + 6048) I_1\left(\frac{z}{2}\right)}{9009 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 1$

07.25.03.a9jq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{3} e^{z/2} (4 z^2 - 9 z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (5 z - 4 z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9jr.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{3} e^{z/2} (2 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z - 2) z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{3}{2}$

07.25.03.a9js.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{4} e^z (3 - 2 z) + \frac{\sqrt{\pi} (4 z^2 - 8 z + 1) \operatorname{erfi}(\sqrt{z})}{8 \sqrt{z}}$$

07.25.03.a9jt.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{4} e^{-z} (2 z + 3) + \frac{\sqrt{\pi} (4 z^2 + 8 z + 1) \operatorname{erf}(\sqrt{z})}{8 \sqrt{z}}$$

07.25.03.a9ju.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (8 z^2 - 26 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-8 z^2 + 18 z - 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9jv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{8} e^z (5 - 2 z) + \frac{\sqrt{\pi} (4 z^2 - 12 z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.a9jw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{8} e^{-z} (2 z + 5) + \frac{\sqrt{\pi} (4 z^2 + 12 z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.a9jx.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, 3; z\right) = \frac{8}{105} e^{z/2} (4 z^2 - 17 z + 13) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8 z^3 - 26 z^2 + 4 z - 1) I_1\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.a9jy.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{5 \sqrt{\pi} (16 z^4 - 64 z^3 + 24 z^2 - 3) \operatorname{erfi}(\sqrt{z})}{512 z^{5/2}} - \frac{5 e^z (8 z^3 - 28 z^2 + 2 z - 3)}{256 z^2}$$

07.25.03.a9jz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (8 z^3 + 28 z^2 + 2 z + 3)}{256 z^2} + \frac{5 \sqrt{\pi} (16 z^4 + 64 z^3 + 24 z^2 - 3) \operatorname{erf}(\sqrt{z})}{512 z^{5/2}}$$

07.25.03.a9k0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^3 - 84 z^2 + 78 z - 3) I_0\left(\frac{z}{2}\right)}{315 z} - \frac{4 e^{z/2} (16 z^4 - 68 z^3 + 18 z^2 - 3 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.a9k1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 \sqrt{\pi} (16 z^5 - 80 z^4 + 40 z^3 - 15 z - 15) \operatorname{erfi}(\sqrt{z})}{1024 z^{7/2}} - \frac{7 e^z (8 z^4 - 36 z^3 + 6 z^2 - 5 z - 15)}{512 z^3}$$

07.25.03.a9k2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (8 z^4 + 36 z^3 + 6 z^2 + 5 z - 15)}{512 z^3} + \frac{7 \sqrt{\pi} (16 z^5 + 80 z^4 + 40 z^3 - 15 z + 15) \operatorname{erf}(\sqrt{z})}{1024 z^{7/2}}$$

07.25.03.a9k3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^4 - 100 z^3 + 108 z^2 - 9 z - 15) I_0\left(\frac{z}{2}\right)}{3465 z^2} - \frac{32 e^{z/2} (16 z^5 - 84 z^4 + 32 z^3 - 3 z^2 - 36 z - 60) I_1\left(\frac{z}{2}\right)}{3465 z^3}$$

07.25.03.a9k4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{21 \sqrt{\pi} (64 z^6 - 384 z^5 + 240 z^4 - 180 z^2 - 360 z - 315) \operatorname{erfi}(\sqrt{z})}{16384 z^{9/2}} - \frac{21 e^z (32 z^5 - 176 z^4 + 48 z^3 - 24 z^2 - 150 z - 315)}{8192 z^4}$$

07.25.03.a9k5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (32 z^5 + 176 z^4 + 48 z^3 + 24 z^2 - 150 z + 315)}{8192 z^4} + \frac{21 \sqrt{\pi} (64 z^6 + 384 z^5 + 240 z^4 - 180 z^2 + 360 z - 315) \operatorname{erf}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.a9k6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^5 - 232 z^4 + 284 z^3 - 36 z^2 - 111 z - 168) I_0\left(\frac{z}{2}\right)}{9009 z^3} - \frac{32 e^{z/2} (32 z^6 - 200 z^5 + 100 z^4 - 4 z^3 - 165 z^2 - 444 z - 672) I_1\left(\frac{z}{2}\right)}{9009 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 2$

07.25.03.a9k7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{15} e^{z/2} (4 z^2 - 18 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4 z^2 + 14 z - 3) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{5}{2}$

07.25.03.a9k8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z(-4z^2 + 16z - 3)}{32z} + \frac{\sqrt{\pi}(8z^3 - 36z^2 + 18z + 3)\operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.a9k9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(4z^2 + 16z + 3)}{32z} + \frac{\sqrt{\pi}(8z^3 + 36z^2 + 18z - 3)\operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.a9ka.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, 3; z\right) = \frac{4}{105} e^{z/2}(4z^2 - 24z + 27)I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(4z^3 - 20z^2 + 9z + 3)I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.a9kb.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi}(16z^4 - 96z^3 + 72z^2 + 24z + 9)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5e^z(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.a9kc.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5\sqrt{\pi}(16z^4 + 96z^3 + 72z^2 - 24z + 9)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.a9kd.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, 4; z\right) = \frac{4e^{z/2}(8z^3 - 60z^2 + 84z + 3)I_0\left(\frac{z}{2}\right)}{315z} - \frac{4e^{z/2}(8z^4 - 52z^3 + 36z^2 + 21z + 12)I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.a9ke.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45)\operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7e^z(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.a9kf.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7\sqrt{\pi}(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)\operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.a9kg.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, 5; z\right) = \frac{32e^{z/2}(8z^4 - 72z^3 + 120z^2 + 12z + 9)I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{128e^{z/2}(2z^5 - 16z^4 + 15z^3 + 12z^2 + 12z + 9)I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.a9kh.01

$${}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi}(64z^6 - 576z^5 + 720z^4 + 480z^3 + 540z^2 + 540z + 315)\operatorname{erfi}(\sqrt{z})}{32768z^{9/2}} - \frac{21e^z(32z^5 - 272z^4 + 240z^3 + 264z^2 + 330z + 315)}{16384z^4}$$

$$\begin{aligned}
 & \text{07.25.03.a9ki.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) &= \frac{21 e^{-z} (32 z^5 + 272 z^4 + 240 z^3 - 264 z^2 + 330 z - 315)}{16384 z^4} + \\
 & \frac{21 \sqrt{\pi} (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315) \operatorname{erf}(\sqrt{z})}{32768 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9kj.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, 6; z\right) &= \frac{32 e^{z/2} (16 z^5 - 168 z^4 + 324 z^3 + 60 z^2 + 81 z + 72) I_0\left(\frac{z}{2}\right)}{9009 z^3} - \\
 & \frac{32 e^{z/2} (16 z^6 - 152 z^5 + 180 z^4 + 180 z^3 + 249 z^2 + 324 z + 288) I_1\left(\frac{z}{2}\right)}{9009 z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.a9kk.01} \\
 {}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; z\right) &= \\
 & \frac{1}{36018675} (512 z^{12} + 20736 z^{11} + 288768 z^{10} + 1677824 z^9 + 3905280 z^8 + 2787840 z^7 + 188160 z^6 + \\
 & 10080 z^5 + 6480 z^4 + 18000 z^3 + 264600 z^2 - 5358150 z + 36018675) + \\
 & \frac{1}{36018675} 128 e^z \sqrt{\pi} (4 z^{25/2} + 164 z^{23/2} + 2335 z^{21/2} + 14160 z^{19/2} + 36120 z^{17/2} + 32640 z^{15/2} + 6120 z^{13/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9kl.01} \\
 {}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; -z\right) &= \\
 & \frac{1}{36018675} (512 z^{12} - 20736 z^{11} + 288768 z^{10} - 1677824 z^9 + 3905280 z^8 - 2787840 z^7 + 188160 z^6 - \\
 & 10080 z^5 + 6480 z^4 - 18000 z^3 + 264600 z^2 + 5358150 z + 36018675) - \\
 & \frac{1}{36018675} 128 e^{-z} \sqrt{\pi} (4 z^{25/2} - 164 z^{23/2} + 2335 z^{21/2} - 14160 z^{19/2} + 36120 z^{17/2} - 32640 z^{15/2} + 6120 z^{13/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9km.01} \\
 {}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; z\right) &= \\
 & \frac{1}{3274425} (-256 z^{11} - 8832 z^{10} - 100352 z^9 - 441600 z^8 - 668160 z^7 - 188160 z^6 + 10080 z^5 + 2160 z^4 + \\
 & 3600 z^3 + 37800 z^2 - 595350 z + 3274425) - \\
 & \frac{64 e^z \sqrt{\pi} (4 z^{23/2} + 140 z^{21/2} + 1635 z^{19/2} + 7620 z^{17/2} + 13260 z^{15/2} + 6120 z^{13/2}) \operatorname{erf}(\sqrt{z})}{3274425}
 \end{aligned}$$

07.25.03.a9kn.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{3274425} (256 z^{11} - 8832 z^{10} + 100352 z^9 - 441600 z^8 + 668160 z^7 - 188160 z^6 - 10080 z^5 + 2160 z^4 - 3600 z^3 + 37800 z^2 + 595350 z + 3274425) - \frac{64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 140 z^{21/2} + 1635 z^{19/2} - 7620 z^{17/2} + 13260 z^{15/2} - 6120 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{3274425}$$

07.25.03.a9ko.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{363825} (128 z^{10} + 3648 z^9 + 32000 z^8 + 94464 z^7 + 62720 z^6 - 10080 z^5 + 2160 z^4 + 1200 z^3 + 7560 z^2 - 85050 z + 363825) + \frac{32 e^z \sqrt{\pi} (4 z^{21/2} + 116 z^{19/2} + 1055 z^{17/2} + 3400 z^{15/2} + 3060 z^{13/2}) \operatorname{erf}(\sqrt{z})}{363825}$$

07.25.03.a9kp.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{363825} (128 z^{10} - 3648 z^9 + 32000 z^8 - 94464 z^7 + 62720 z^6 + 10080 z^5 + 2160 z^4 - 1200 z^3 + 7560 z^2 + 85050 z + 363825) - \frac{32 e^{-z} \sqrt{\pi} (4 z^{21/2} - 116 z^{19/2} + 1055 z^{17/2} - 3400 z^{15/2} + 3060 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{363825}$$

07.25.03.a9kq.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{-64 z^9 - 1440 z^8 - 8832 z^7 - 12544 z^6 + 3360 z^5 - 2160 z^4 + 1200 z^3 + 2520 z^2 - 17010 z + 51975}{51975} - \frac{16 e^z \sqrt{\pi} (4 z^{19/2} + 92 z^{17/2} + 595 z^{15/2} + 1020 z^{13/2}) \operatorname{erf}(\sqrt{z})}{51975}$$

07.25.03.a9kr.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{64 z^9 - 1440 z^8 + 8832 z^7 - 12544 z^6 - 3360 z^5 - 2160 z^4 - 1200 z^3 + 2520 z^2 + 17010 z + 51975}{51975} - \frac{16 e^{-z} \sqrt{\pi} (4 z^{19/2} - 92 z^{17/2} + 595 z^{15/2} - 1020 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{51975}$$

07.25.03.a9ks.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{32 z^8 + 528 z^7 + 1792 z^6 - 672 z^5 + 720 z^4 - 1200 z^3 + 2520 z^2 - 5670 z + 10395}{10395} + \frac{8 e^z \sqrt{\pi} (4 z^{17/2} + 68 z^{15/2} + 255 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.a9kt.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{32z^8 - 528z^7 + 1792z^6 + 672z^5 + 720z^4 + 1200z^3 + 2520z^2 + 5670z + 10395}{10395} - \frac{8e^{-z}\sqrt{\pi}(4z^{17/2} - 68z^{15/2} + 255z^{13/2})\operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.a9ku.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{-16z^7 - 168z^6 - 64z^5 + 528z^4 - 1840z^3 + 4200z^2 - 5670z + 3465}{3465} - \frac{4e^z\sqrt{\pi}(4z^{15/2} + 44z^{13/2} + 35z^{11/2} - 140z^{9/2} + 420z^{7/2} - 840z^{5/2} + 840z^{3/2})\operatorname{erf}(\sqrt{z})}{3465}$$

07.25.03.a9kv.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{16z^7 - 168z^6 + 64z^5 + 528z^4 + 1840z^3 + 4200z^2 + 5670z + 3465}{3465} - \frac{4e^{-z}\sqrt{\pi}(4z^{15/2} - 44z^{13/2} + 35z^{11/2} + 140z^{9/2} + 420z^{7/2} + 840z^{5/2} + 840z^{3/2})\operatorname{erfi}(\sqrt{z})}{3465}$$

07.25.03.a9kw.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{8z^6 + 36z^5 - 144z^4 + 320z^3 - 120z^2 - 1530z + 3465}{3465} + \frac{2e^z\sqrt{\pi}(4z^{13/2} + 20z^{11/2} - 65z^{9/2} + 120z^{7/2} + 60z^{5/2} - 960z^{3/2} + 1800\sqrt{z})\operatorname{erf}(\sqrt{z})}{3465}$$

07.25.03.a9kx.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{8z^6 - 36z^5 - 144z^4 - 320z^3 - 120z^2 + 1530z + 3465}{3465} - \frac{2e^{-z}\sqrt{\pi}(4z^{13/2} - 20z^{11/2} - 65z^{9/2} - 120z^{7/2} + 60z^{5/2} + 960z^{3/2} + 1800\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3465}$$

07.25.03.a9ky.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, 1; z\right) = \frac{e^z(16z^6 + 32z^5 - 280z^4 + 1000z^3 - 1575z^2 - 1260z + 6930)}{6930}$$

07.25.03.a9kz.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{4z^5 - 6z^4 - 40z^3 + 312z^2 - 990z + 1305}{3465} + \frac{e^z\sqrt{\pi}(4z^6 - 4z^5 - 45z^4 + 300z^3 - 840z^2 + 720z + 1080)\operatorname{erf}(\sqrt{z})}{3465\sqrt{z}}$$

07.25.03.a9l0.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{-4z^5 - 6z^4 + 40z^3 + 312z^2 + 990z + 1305}{3465} + \frac{e^{-z}\sqrt{\pi}(4z^6 + 4z^5 - 45z^4 - 300z^3 - 840z^2 - 720z + 1080)\operatorname{erfi}(\sqrt{z})}{3465\sqrt{z}}$$

07.25.03.a9l1.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, 2; z\right) = \frac{e^z (16z^5 - 64z^4 + 40z^3 + 840z^2 - 4095z + 6930)}{6930}$$

07.25.03.a9l2.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{2z^5 - 15z^4 + 56z^3 - 78z^2 - 205z + 840}{1155z} + \frac{e^z \sqrt{\pi} (4z^6 - 28z^5 + 95z^4 - 80z^3 - 600z^2 + 1920z - 840) \operatorname{erf}(\sqrt{z})}{2310z^{3/2}}$$

07.25.03.a9l3.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{2z^5 + 15z^4 + 56z^3 + 78z^2 - 205z - 840}{1155z} + \frac{e^{-z} \sqrt{\pi} (-4z^6 - 28z^5 - 95z^4 - 80z^3 + 600z^2 + 1920z + 840) \operatorname{erfi}(\sqrt{z})}{2310z^{3/2}}$$

07.25.03.a9l4.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, 3; z\right) = \frac{e^z (16z^4 - 160z^3 + 840z^2 - 2520z + 3465)}{3465}$$

07.25.03.a9l5.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{2z^5 - 27z^4 + 192z^3 - 862z^2 + 2520z - 5040}{462z^2} + \frac{e^z \sqrt{\pi} (4z^6 - 52z^5 + 355z^4 - 1500z^3 + 3900z^2 - 5880z + 5040) \operatorname{erf}(\sqrt{z})}{924z^{5/2}}$$

07.25.03.a9l6.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{-2z^5 - 27z^4 - 192z^3 - 862z^2 - 2520z - 5040}{462z^2} + \frac{e^{-z} \sqrt{\pi} (4z^6 + 52z^5 + 355z^4 + 1500z^3 + 3900z^2 + 5880z + 5040) \operatorname{erfi}(\sqrt{z})}{924z^{5/2}}$$

07.25.03.a9l7.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, 4; z\right) = \frac{e^z (16z^6 - 256z^5 + 2120z^4 - 11000z^3 + 36465z^2 - 72930z + 72930)}{1155z^3} - \frac{442}{7z^3}$$

07.25.03.a9l8.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{2z^5 - 39z^4 + 388z^3 - 2436z^2 + 10080z - 45360}{132z^3} + \frac{e^z \sqrt{\pi} (4z^6 - 76z^5 + 735z^4 - 4440z^3 + 17220z^2 - 40320z + 45360) \operatorname{erf}(\sqrt{z})}{264z^{7/2}}$$

07.25.03.a9I9.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{2z^5 + 39z^4 + 388z^3 + 2436z^2 + 10080z + 45360}{132z^3} + \frac{e^{-z}\sqrt{\pi}(-4z^6 - 76z^5 - 735z^4 - 4440z^3 - 17220z^2 - 40320z - 45360)\operatorname{erfi}(\sqrt{z})}{264z^{7/2}}$$

07.25.03.a9Ia.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, 5; z\right) = \frac{4e^z(16z^6 - 352z^5 + 3880z^4 - 26520z^3 + 116025z^2 - 304980z + 377910)}{1155z^4} - \frac{1768(11z + 57)}{77z^4}$$

07.25.03.a9Ib.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{3(2z^5 - 51z^4 + 644z^3 - 5040z^2 + 13440z - 176400)}{88z^4} + \frac{3e^z\sqrt{\pi}(4z^6 - 100z^5 + 1235z^4 - 9380z^3 + 45360z^2 - 131040z + 176400)\operatorname{erf}(\sqrt{z})}{176z^{9/2}}$$

07.25.03.a9Ic.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z}\sqrt{\pi}(4z^6 + 100z^5 + 1235z^4 + 9380z^3 + 45360z^2 + 131040z + 176400)\operatorname{erfi}(\sqrt{-z})}{176z^{9/2}} - \frac{3(2z^5 + 51z^4 + 644z^3 + 5040z^2 + 13440z + 176400)}{88z^4}$$

07.25.03.a9Id.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{11}{2}, 6; z\right) = \frac{4e^z(16z^6 - 448z^5 + 6120z^4 - 51000z^3 + 269025z^2 - 843030z + 1220940)}{231z^5} - \frac{340(143z^2 + 1482z + 4788)}{77z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = -\frac{9}{2}$

07.25.03.a9Ie.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{297675} \frac{(128z^{10} + 3776z^9 + 35136z^8 + 117120z^7 + 113280z^6 + 10080z^5 + 720z^4 + 720z^3 + 5400z^2 - 66150z + 297675) + 32e^z\sqrt{\pi}(4z^{21/2} + 120z^{19/2} + 1155z^{17/2} + 4155z^{15/2} + 4950z^{13/2} + 1170z^{11/2})\operatorname{erf}(\sqrt{z})}{297675}$$

07.25.03.a9If.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{297675} \frac{(128z^{10} - 3776z^9 + 35136z^8 - 117120z^7 + 113280z^6 - 10080z^5 + 720z^4 - 720z^3 + 5400z^2 + 66150z + 297675) - 32e^{-z}\sqrt{\pi}(4z^{21/2} - 120z^{19/2} + 1155z^{17/2} - 4155z^{15/2} + 4950z^{13/2} - 1170z^{11/2})\operatorname{erfi}(\sqrt{-z})}{297675}$$

07.25.03.a9lg.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{-64 z^9 - 1568 z^8 - 11328 z^7 - 25280 z^6 - 10080 z^5 + 720 z^4 + 240 z^3 + 1080 z^2 - 9450 z + 33075}{33075} - \frac{16 e^z \sqrt{\pi} (4 z^{19/2} + 100 z^{17/2} + 755 z^{15/2} + 1890 z^{13/2} + 1170 z^{11/2}) \operatorname{erf}(\sqrt{z})}{33075}$$

07.25.03.a9lh.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{64 z^9 - 1568 z^8 + 11328 z^7 - 25280 z^6 + 10080 z^5 + 720 z^4 - 240 z^3 + 1080 z^2 + 9450 z + 33075}{33075} - \frac{16 e^{-z} \sqrt{\pi} (4 z^{19/2} - 100 z^{17/2} + 755 z^{15/2} - 1890 z^{13/2} + 1170 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{33075}$$

07.25.03.a9li.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{32 z^8 + 624 z^7 + 3184 z^6 + 3360 z^5 - 720 z^4 + 240 z^3 + 360 z^2 - 1890 z + 4725}{4725} + \frac{8 e^z \sqrt{\pi} (4 z^{17/2} + 80 z^{15/2} + 435 z^{13/2} + 585 z^{11/2}) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.a9lj.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{32 z^8 - 624 z^7 + 3184 z^6 - 3360 z^5 - 720 z^4 - 240 z^3 + 360 z^2 + 1890 z + 4725}{4725} - \frac{8 e^{-z} \sqrt{\pi} (4 z^{17/2} - 80 z^{15/2} + 435 z^{13/2} - 585 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.a9lk.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} (-16 z^7 - 232 z^6 - 672 z^5 + 240 z^4 - 240 z^3 + 360 z^2 - 630 z + 945) - \frac{4}{945} e^z \sqrt{\pi} (4 z^{15/2} + 60 z^{13/2} + 195 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9ll.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{945} (16 z^7 - 232 z^6 + 672 z^5 + 240 z^4 + 240 z^3 + 360 z^2 + 630 z + 945) - \frac{4}{945} e^{-z} \sqrt{\pi} (4 z^{15/2} - 60 z^{13/2} + 195 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9lm.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} (8 z^6 + 76 z^5 + 36 z^4 - 200 z^3 + 480 z^2 - 630 z + 315) + \frac{2}{315} e^z \sqrt{\pi} (4 z^{13/2} + 40 z^{11/2} + 35 z^{9/2} - 105 z^{7/2} + 210 z^{5/2} - 210 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9ln.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{315} (8 z^6 - 76 z^5 + 36 z^4 + 200 z^3 + 480 z^2 + 630 z + 315) - \frac{2}{315} e^{-z} \sqrt{\pi} (4 z^{13/2} - 40 z^{11/2} + 35 z^{9/2} + 105 z^{7/2} + 210 z^{5/2} + 210 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9lo.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{315} (-4z^5 - 18z^4 + 52z^3 - 60z^2 - 90z + 315) + \frac{1}{315} e^z \sqrt{\pi} (-4z^{11/2} - 20z^{9/2} + 45z^{7/2} - 30z^{5/2} - 150z^{3/2} + 360\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9lp.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} (4z^5 - 18z^4 - 52z^3 - 60z^2 + 90z + 315) + \frac{1}{315} e^{-z} \sqrt{\pi} (-4z^{11/2} + 20z^{9/2} + 45z^{7/2} + 30z^{5/2} - 150z^{3/2} - 360\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9lq.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, 1; z\right) = -\frac{1}{630} e^z (8z^5 + 20z^4 - 110z^3 + 225z^2 - 630)$$

07.25.03.a9lr.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{315} (-2z^4 + z^3 + 21z^2 - 90z + 135) + \frac{e^z \sqrt{\pi} (-4z^5 + 45z^3 - 165z^2 + 180z + 180) \operatorname{erf}(\sqrt{z})}{630\sqrt{z}}$$

07.25.03.a9ls.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{315} (-2z^4 - z^3 + 21z^2 + 90z + 135) + \frac{e^{-z} \sqrt{\pi} (4z^5 - 45z^3 - 165z^2 - 180z + 180) \operatorname{erfi}(\sqrt{z})}{630\sqrt{z}}$$

07.25.03.a9lt.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, 2; z\right) = -\frac{1}{630} e^z (8z^4 - 20z^3 - 30z^2 + 315z - 630)$$

07.25.03.a9lu.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-2z^4 + 11z^3 - 24z^2 - 10z + 120}{210z} + \frac{e^z \sqrt{\pi} (-4z^5 + 20z^4 - 35z^3 - 60z^2 + 300z - 120) \operatorname{erf}(\sqrt{z})}{420z^{3/2}}$$

07.25.03.a9lv.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{2z^4 + 11z^3 + 24z^2 - 10z - 120}{210z} + \frac{e^{-z} \sqrt{\pi} (-4z^5 - 20z^4 - 35z^3 + 60z^2 + 300z + 120) \operatorname{erfi}(\sqrt{z})}{420z^{3/2}}$$

07.25.03.a9lw.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, 3; z\right) = -\frac{1}{315} e^z (8z^3 - 60z^2 + 210z - 315)$$

07.25.03.a9lx.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-2z^4 + 21z^3 - 109z^2 + 330z - 630}{84z^2} + \frac{e^z \sqrt{\pi} (-4z^5 + 40z^4 - 195z^3 + 525z^2 - 750z + 630) \operatorname{erf}(\sqrt{z})}{168z^{5/2}}$$

07.25.03.a9ly.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{-2z^4 - 21z^3 - 109z^2 - 330z - 630}{84z^2} + \frac{e^{-z} \sqrt{\pi} (4z^5 + 40z^4 + 195z^3 + 525z^2 + 750z + 630) \operatorname{erfi}(\sqrt{z})}{168z^{5/2}}$$

07.25.03.a9l2.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, 4; z\right) = \frac{e^z (-8z^5 + 100z^4 - 610z^3 + 2145z^2 - 4290z + 4290)}{105z^3} - \frac{286}{7z^3}$$

07.25.03.a9m0.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-2z^4 + 31z^3 - 234z^2 + 1050z - 5040}{24z^3} + \frac{e^z \sqrt{\pi} (-4z^5 + 60z^4 - 435z^3 + 1830z^2 - 4410z + 5040) \operatorname{erf}(\sqrt{z})}{48z^{7/2}}$$

07.25.03.a9m1.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{2z^4 + 31z^3 + 234z^2 + 1050z + 5040}{24z^3} + \frac{e^{-z} \sqrt{\pi} (-4z^5 - 60z^4 - 435z^3 - 1830z^2 - 4410z - 5040) \operatorname{erfi}(\sqrt{z})}{48z^{7/2}}$$

07.25.03.a9m2.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, 5; z\right) = -\frac{104(11z + 51)}{7z^4} - \frac{4e^z (8z^5 - 140z^4 + 1170z^3 - 5655z^2 + 15600z - 19890)}{105z^4}$$

07.25.03.a9m3.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{3(2z^4 - 41z^3 + 399z^2 - 840z + 17640)}{16z^4} - \frac{3e^z \sqrt{\pi} (4z^5 - 80z^4 + 755z^3 - 4095z^2 + 12600z - 17640) \operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.a9m4.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z} \sqrt{\pi} (4z^5 + 80z^4 + 755z^3 + 4095z^2 + 12600z + 17640) \operatorname{erfi}(\sqrt{z})}{32z^{9/2}} - \frac{3(2z^4 + 41z^3 + 399z^2 + 840z + 17640)}{16z^4}$$

07.25.03.a9m5.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{9}{2}, 6; z\right) = -\frac{20(143z^2 + 1326z + 3876)}{7z^5} - \frac{4e^z (8z^5 - 180z^4 + 1890z^3 - 11325z^2 + 38250z - 58140)}{21z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = -\frac{7}{2}$

07.25.03.a9m6.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{32z^8 + 656z^7 + 3712z^6 + 5504z^5 + 720z^4 + 80z^3 + 216z^2 - 1350z + 3675}{3675} + \frac{8e^z \sqrt{\pi} (4z^{17/2} + 84z^{15/2} + 503z^{13/2} + 884z^{11/2} + 286z^{9/2}) \operatorname{erf}(\sqrt{z})}{3675}$$

07.25.03.a9m7.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{32z^8 - 656z^7 + 3712z^6 - 5504z^5 + 720z^4 - 80z^3 + 216z^2 + 1350z + 3675}{3675} - \frac{8e^{-z}\sqrt{\pi}\left(4z^{17/2} - 84z^{15/2} + 503z^{13/2} - 884z^{11/2} + 286z^{9/2}\right)\operatorname{erfi}(\sqrt{z})}{3675}$$

07.25.03.a9m8.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{525}\left(-16z^7 - 264z^6 - 1072z^5 - 720z^4 + 80z^3 + 72z^2 - 270z + 525\right) - \frac{4}{525}e^z\sqrt{\pi}\left(4z^{15/2} + 68z^{13/2} + 299z^{11/2} + 286z^{9/2}\right)\operatorname{erf}(\sqrt{z})$$

07.25.03.a9m9.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{525}\left(16z^7 - 264z^6 + 1072z^5 - 720z^4 - 80z^3 + 72z^2 + 270z + 525\right) - \frac{4}{525}e^{-z}\sqrt{\pi}\left(4z^{15/2} - 68z^{13/2} + 299z^{11/2} - 286z^{9/2}\right)\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9ma.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{105}\left(8z^6 + 100z^5 + 240z^4 - 80z^3 + 72z^2 - 90z + 105\right) + \frac{2}{105}e^z\sqrt{\pi}\left(4z^{13/2} + 52z^{11/2} + 143z^{9/2}\right)\operatorname{erf}(\sqrt{z})$$

07.25.03.a9mb.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{105}\left(8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105\right) - \frac{2}{105}e^{-z}\sqrt{\pi}\left(4z^{13/2} - 52z^{11/2} + 143z^{9/2}\right)\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9mc.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{35}\left(-4z^5 - 34z^4 - 20z^3 + 68z^2 - 90z + 35\right) + \frac{1}{35}e^z\sqrt{\pi}\left(-4z^{11/2} - 36z^{9/2} - 35z^{7/2} + 70z^{5/2} - 70z^{3/2}\right)\operatorname{erf}(\sqrt{z})$$

07.25.03.a9md.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{35}\left(4z^5 - 34z^4 + 20z^3 + 68z^2 + 90z + 35\right) + \frac{1}{35}e^{-z}\sqrt{\pi}\left(-4z^{11/2} + 36z^{9/2} - 35z^{7/2} - 70z^{5/2} - 70z^{3/2}\right)\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9me.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{35}\left(2z^4 + 9z^3 - 16z^2 + 35\right) + \frac{1}{70}e^z\sqrt{\pi}\left(4z^{9/2} + 20z^{7/2} - 25z^{5/2} - 20z^{3/2} + 90\sqrt{z}\right)\operatorname{erf}(\sqrt{z})$$

07.25.03.a9mf.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{35}\left(2z^4 - 9z^3 - 16z^2 + 35\right) + \frac{1}{70}e^{-z}\sqrt{\pi}\left(-4z^{9/2} + 20z^{7/2} + 25z^{5/2} - 20z^{3/2} - 90\sqrt{z}\right)\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9mg.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, 1; z\right) = \frac{1}{70} e^z (4z^4 + 12z^3 - 37z^2 + 20z + 70)$$

07.25.03.a9mh.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{70} (2z^3 + z^2 - 18z + 34) + \frac{e^z \sqrt{\pi} (4z^4 + 4z^3 - 37z^2 + 54z + 36) \operatorname{erf}(\sqrt{z})}{140 \sqrt{z}}$$

07.25.03.a9mi.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{70} (-2z^3 + z^2 + 18z + 34) + \frac{e^{-z} \sqrt{\pi} (4z^4 - 4z^3 - 37z^2 - 54z + 36) \operatorname{erfi}(\sqrt{z})}{140 \sqrt{z}}$$

07.25.03.a9mj.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, 2; z\right) = \frac{1}{70} e^z (4z^3 - 4z^2 - 25z + 70)$$

07.25.03.a9mk.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{3(2z^3 - 7z^2 + 4z + 20)}{140z} + \frac{3e^z \sqrt{\pi} (4z^4 - 12z^3 - z^2 + 56z - 20) \operatorname{erf}(\sqrt{z})}{280z^{3/2}}$$

07.25.03.a9ml.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{3(2z^3 + 7z^2 + 4z - 20)}{140z} - \frac{3e^{-z} \sqrt{\pi} (4z^4 + 12z^3 - z^2 - 56z - 20) \operatorname{erfi}(\sqrt{z})}{280z^{3/2}}$$

07.25.03.a9mm.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, 3; z\right) = \frac{1}{35} e^z (4z^2 - 20z + 35)$$

07.25.03.a9mn.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{3(2z^3 - 15z^2 + 50z - 90)}{56z^2} + \frac{3e^z \sqrt{\pi} (4z^4 - 28z^3 + 83z^2 - 110z + 90) \operatorname{erf}(\sqrt{z})}{112z^{5/2}}$$

07.25.03.a9mo.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{3e^{-z} \sqrt{\pi} (4z^4 + 28z^3 + 83z^2 + 110z + 90) \operatorname{erfi}(\sqrt{z})}{112z^{5/2}} - \frac{3(2z^3 + 15z^2 + 50z + 90)}{56z^2}$$

07.25.03.a9mp.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, 4; z\right) = \frac{3e^z (4z^4 - 36z^3 + 143z^2 - 286z + 286)}{35z^3} - \frac{858}{35z^3}$$

07.25.03.a9mq.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{3(2z^3 - 23z^2 + 120z - 630)}{16z^3} + \frac{3e^z \sqrt{\pi} (4z^4 - 44z^3 + 215z^2 - 540z + 630) \operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.a9mr.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{3(2z^3 + 23z^2 + 120z + 630)}{16z^3} - \frac{3e^{-z} \sqrt{\pi} (4z^4 + 44z^3 + 215z^2 + 540z + 630) \operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.a9ms.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, 5; z\right) = \frac{12 e^z (4 z^4 - 52 z^3 + 299 z^2 - 884 z + 1170)}{35 z^4} - \frac{312 (11 z + 45)}{35 z^4}$$

07.25.03.a9mt.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9 (6 z^3 - 93 z^2 + 70 z - 5880)}{32 z^4} + \frac{27 e^z \sqrt{\pi} (4 z^4 - 60 z^3 + 395 z^2 - 1330 z + 1960) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.a9mu.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{27 e^{-z} \sqrt{\pi} (4 z^4 + 60 z^3 + 395 z^2 + 1330 z + 1960) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}} - \frac{9 (6 z^3 + 93 z^2 + 70 z + 5880)}{32 z^4}$$

07.25.03.a9mv.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{7}{2}, 6; z\right) = \frac{12 e^z (4 z^4 - 68 z^3 + 503 z^2 - 1890 z + 3060)}{7 z^5} - \frac{12 (143 z^2 + 1170 z + 3060)}{7 z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = -\frac{5}{2}$

07.25.03.a9mw.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{75} (8 z^6 + 108 z^5 + 324 z^4 + 80 z^3 + 24 z^2 - 54 z + 75) + \frac{2}{75} e^z \sqrt{\pi} (4 z^{13/2} + 56 z^{11/2} + 187 z^{9/2} + 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9mx.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{75} (8 z^6 - 108 z^5 + 324 z^4 - 80 z^3 + 24 z^2 + 54 z + 75) - \frac{2}{75} e^{-z} \sqrt{\pi} (4 z^{13/2} - 56 z^{11/2} + 187 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9my.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{15} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) + \frac{1}{15} e^z \sqrt{\pi} (-4 z^{11/2} - 44 z^{9/2} - 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9mz.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{15} (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) + \frac{1}{15} e^{-z} \sqrt{\pi} (-4 z^{11/2} + 44 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9n0.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{5} (2 z^4 + 15 z^3 + 11 z^2 - 18 z + 5) + \frac{1}{10} e^z \sqrt{\pi} (4 z^{9/2} + 32 z^{7/2} + 35 z^{5/2} - 35 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9n1.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{5} (2 z^4 - 15 z^3 + 11 z^2 + 18 z + 5) + \frac{1}{10} e^{-z} \sqrt{\pi} (-4 z^{9/2} + 32 z^{7/2} - 35 z^{5/2} - 35 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9n2.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{10} (-2 z^3 - 9 z^2 + 6 z + 10) + \frac{1}{20} e^z \sqrt{\pi} (-4 z^{7/2} - 20 z^{5/2} + 5 z^{3/2} + 30 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9n3.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{10} (2z^3 - 9z^2 - 6z + 10) + \frac{1}{20} e^{-z} \sqrt{\pi} (-4z^{7/2} + 20z^{5/2} + 5z^{3/2} - 30\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9n4.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, 1; z\right) = -\frac{1}{10} e^z (2z^3 + 7z^2 - 8z - 10)$$

07.25.03.a9n5.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{20} (-2z^2 - 3z + 11) + \frac{e^z \sqrt{\pi} (-4z^3 - 8z^2 + 21z + 9) \operatorname{erf}(\sqrt{z})}{40\sqrt{z}}$$

07.25.03.a9n6.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{20} (-2z^2 + 3z + 11) + \frac{e^{-z} \sqrt{\pi} (4z^3 - 8z^2 - 21z + 9) \operatorname{erfi}(\sqrt{z})}{40\sqrt{z}}$$

07.25.03.a9n7.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, 2; z\right) = -\frac{1}{10} e^z (2z^2 + z - 10)$$

07.25.03.a9n8.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{3(2z^2 - 3z - 4)}{40z} - \frac{3e^z \sqrt{\pi} (4z^3 - 4z^2 - 13z + 4) \operatorname{erf}(\sqrt{z})}{80z^{3/2}}$$

07.25.03.a9n9.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3(2z^2 + 3z - 4)}{40z} - \frac{3e^{-z} \sqrt{\pi} (4z^3 + 4z^2 - 13z - 4) \operatorname{erfi}(\sqrt{z})}{80z^{3/2}}$$

07.25.03.a9na.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, 3; z\right) = -\frac{1}{5} e^z (2z - 5)$$

07.25.03.a9nb.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{3(2z^2 - 9z + 15)}{16z^2} - \frac{3e^z \sqrt{\pi} (4z^3 - 16z^2 + 19z - 15) \operatorname{erf}(\sqrt{z})}{32z^{5/2}}$$

07.25.03.a9nc.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{3e^{-z} \sqrt{\pi} (4z^3 + 16z^2 + 19z + 15) \operatorname{erfi}(\sqrt{z})}{32z^{5/2}} - \frac{3(2z^2 + 9z + 15)}{16z^2}$$

07.25.03.a9nd.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, 4; z\right) = -\frac{3e^z (2z^3 - 11z^2 + 22z - 22)}{5z^3} - \frac{66}{5z^3}$$

07.25.03.a9ne.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{21(2z^2 - 15z + 90)}{32z^3} - \frac{21e^z \sqrt{\pi} (4z^3 - 28z^2 + 75z - 90) \operatorname{erf}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.a9nf.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{21(2z^2 + 15z + 90)}{32z^3} - \frac{21e^{-z}\sqrt{\pi}(4z^3 + 28z^2 + 75z + 90)\operatorname{erfi}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.a9ng.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, 5; z\right) = -\frac{24(11z + 39)}{5z^4} - \frac{12e^z(2z^3 - 17z^2 + 56z - 78)}{5z^4}$$

07.25.03.a9nh.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{63(6z^2 + 25z + 735)}{64z^4} - \frac{189e^z\sqrt{\pi}(4z^3 - 40z^2 + 155z - 245)\operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.a9ni.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{189e^{-z}\sqrt{\pi}(4z^3 + 40z^2 + 155z + 245)\operatorname{erfi}(\sqrt{z})}{128z^{9/2}} - \frac{63(6z^2 - 25z + 735)}{64z^4}$$

07.25.03.a9nj.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{5}{2}, 6; z\right) = -\frac{12(11z^2 + 78z + 180)}{z^5} - \frac{12e^z(2z^3 - 23z^2 + 102z - 180)}{z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = -\frac{3}{2}$

07.25.03.a9nk.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{3}(2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6}e^z\sqrt{\pi}(4z^{9/2} + 36z^{7/2} + 63z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9nl.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3}(2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6}e^{-z}\sqrt{\pi}(-4z^{9/2} + 36z^{7/2} - 63z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9nm.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{2}(-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4}e^z\sqrt{\pi}(-4z^{7/2} - 28z^{5/2} - 35z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9nn.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2}(2z^3 - 13z^2 + 12z + 2) + \frac{1}{4}e^{-z}\sqrt{\pi}(-4z^{7/2} + 28z^{5/2} - 35z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9no.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{4}(2z^2 + 9z + 4) + \frac{1}{8}e^z\sqrt{\pi}(4z^{5/2} + 20z^{3/2} + 15\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9np.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{4}(2z^2 - 9z + 4) + \frac{1}{8}e^{-z}\sqrt{\pi}(-4z^{5/2} + 20z^{3/2} - 15\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9nq.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, 1; z\right) = \frac{1}{2}e^z(z^2 + 4z + 2)$$

07.25.03.a9nr.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{8}(2z+5) + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.a9ns.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{8}(5-2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.a9nt.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, 2; z\right) = \frac{1}{2}e^z(z+2)$$

07.25.03.a9nu.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{3(2z+1)}{16z} + \frac{3e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.a9nv.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{3(2z-1)}{16z} - \frac{3e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.a9nw.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, 3; z\right) = e^z$$

07.25.03.a9nx.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{15(2z-3)}{32z^2} + \frac{15e^z \sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.a9ny.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} \sqrt{\pi} (4z^2 + 4z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15(2z+3)}{32z^2}$$

07.25.03.a9nz.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, 4; z\right) = \frac{3e^z(z^2 - 2z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.a9o0.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{105(2z-15)}{64z^3} + \frac{105e^z \sqrt{\pi} (4z^2 - 12z + 15) \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.a9o1.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{105(2z+15)}{64z^3} - \frac{105e^{-z} \sqrt{\pi} (4z^2 + 12z + 15) \operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.a9o2.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, 5; z\right) = \frac{12e^z(z^2 - 4z + 6)}{z^4} - \frac{24(z+3)}{z^4}$$

07.25.03.a9o3.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 (2z + 21)}{128 z^4}$$

07.25.03.a9o4.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1575 (2z - 21)}{128 z^4} + \frac{945 e^{-z} \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.a9o5.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{3}{2}, 6; z\right) = \frac{60 e^z (z^2 - 6z + 12)}{z^5} - \frac{60 (z^2 + 6z + 12)}{z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = -\frac{1}{2}$

07.25.03.a9o6.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{1}{2}, 1; z\right) = e^z (8z + 1) - \frac{35}{4} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9o7.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{1}{2}, 1; -z\right) = e^{-z} (1 - 8z) - \frac{35}{4} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a9o8.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{1}{2}, 2; z\right) = \frac{1}{2} e^z (7z + 2) - \frac{7}{2} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9o9.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{1}{2}, 2; -z\right) = \frac{1}{2} e^{-z} (2 - 7z) - \frac{7}{2} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a9oa.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{1}{2}, 3; z\right) = e^z (2z + 1) - 2 \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9ob.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{1}{2}, 3; -z\right) = e^{-z} (1 - 2z) - 2 \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a9oc.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{1}{2}, 4; z\right) = -\frac{4}{3} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{e^z (4z^4 + 2z^3 + 3z^2 - 6z + 6)}{3z^3} - \frac{2}{z^3}$$

07.25.03.a9od.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{1}{2}, 4; -z\right) = -\frac{4}{3} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} + \frac{e^{-z} (-4z^4 + 2z^3 - 3z^2 - 6z - 6)}{3z^3} + \frac{2}{z^3}$$

07.25.03.a9oe.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{1}{2}, 5; z\right) = -\frac{32}{33} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} - \frac{8(11z + 27)}{11z^4} + \frac{4e^z (8z^5 + 4z^4 + 6z^3 + 15z^2 - 96z + 162)}{33z^4}$$

07.25.03.a9of.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{1}{2}, 5; -z\right) = -\frac{32}{33} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} + \frac{8(11z - 27)}{11z^4} - \frac{4e^{-z}(8z^5 - 4z^4 + 6z^3 - 15z^2 - 96z - 162)}{33z^4}$$

07.25.03.a9og.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{1}{2}, 6; z\right) = -\frac{320}{429} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} - \frac{20(143z^2 + 702z + 1188)}{143z^5} + \frac{20e^z(16z^6 + 8z^5 + 12z^4 + 30z^3 + 105z^2 - 1458z + 3564)}{429z^5}$$

07.25.03.a9oh.01

$${}_2F_2\left(-\frac{3}{2}, 3; -\frac{1}{2}, 6; -z\right) = -\frac{320}{429} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} + \frac{20(143z^2 - 702z + 1188)}{143z^5} - \frac{20e^{-z}(16z^6 - 8z^5 + 12z^4 - 30z^3 + 105z^2 + 1458z + 3564)}{429z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = \frac{1}{2}$

07.25.03.a9oi.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{1}{2}, 1; z\right) = \frac{1}{8} e^z (8 - 35z) + \frac{5}{16} \sqrt{\pi} (14z^{3/2} - 9\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9oj.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{1}{2}, 1; -z\right) = \frac{1}{8} e^{-z} (35z + 8) + \frac{5}{16} \sqrt{\pi} (14z^{3/2} + 9\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9ok.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{1}{2}, 2; z\right) = \frac{1}{4} e^z (4 - 7z) + \frac{1}{8} \sqrt{\pi} (14z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9ol.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{1}{2}, 2; -z\right) = \frac{1}{4} e^{-z} (7z + 4) + \frac{1}{8} \sqrt{\pi} (14z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9om.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{1}{2}, 3; z\right) = e^z (1 - z) + \frac{1}{2} \sqrt{\pi} (2z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9on.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{1}{2}, 3; -z\right) = e^{-z} (z + 1) + \frac{1}{2} \sqrt{\pi} (2z^{3/2} + 3\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9oo.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{1}{2}, 4; z\right) = \frac{e^z(-14z^4 + 20z^3 + 3z^2 - 6z + 6)}{21z^3} + \frac{1}{21} \sqrt{\pi} (14z^{3/2} - 27\sqrt{z}) \operatorname{erfi}(\sqrt{z}) - \frac{2}{7z^3}$$

07.25.03.a9op.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{1}{2}, 4; -z\right) = \frac{e^{-z}(14z^4 + 20z^3 - 3z^2 - 6z - 6)}{21z^3} + \frac{1}{21} \sqrt{\pi} (14z^{3/2} + 27\sqrt{z}) \operatorname{erf}(\sqrt{z}) + \frac{2}{7z^3}$$

07.25.03.a9oq.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{1}{2}, 5; z\right) = -\frac{8(11z+21)}{77z^4} - \frac{4e^z(28z^5 - 52z^4 - 12z^3 + 3z^2 + 60z - 126)}{231z^4} + \frac{8}{231}\sqrt{\pi}(14z^{3/2} - 33\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9or.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{1}{2}, 5; -z\right) = \frac{8(11z-21)}{77z^4} + \frac{4e^{-z}(28z^5 + 52z^4 - 12z^3 - 3z^2 + 60z + 126)}{231z^4} + \frac{8}{231}\sqrt{\pi}(14z^{3/2} + 33\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9os.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{1}{2}, 6; z\right) = -\frac{20(143z^2 + 546z + 756)}{1001z^5} - \frac{20e^z(56z^6 - 128z^5 - 36z^4 - 12z^3 + 75z^2 + 630z - 2268)}{3003z^5} + \frac{80\sqrt{\pi}(14z^{3/2} - 39\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3003}$$

07.25.03.a9ot.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{1}{2}, 6; -z\right) = \frac{20(143z^2 - 546z + 756)}{1001z^5} + \frac{20e^{-z}(56z^6 + 128z^5 - 36z^4 + 12z^3 + 75z^2 - 630z - 2268)}{3003z^5} + \frac{80\sqrt{\pi}(14z^{3/2} + 39\sqrt{z})\operatorname{erf}(\sqrt{z})}{3003}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = 1$

07.25.03.a9ou.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, 1; z\right) = \frac{1}{12}e^{z/2}(35z^2 - 60z + 12)I_0\left(\frac{z}{2}\right) - \frac{5}{12}e^{z/2}(7z^2 - 5z)I_1\left(\frac{z}{2}\right)$$

07.25.03.a9ov.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, \frac{3}{2}; z\right) = \frac{\sqrt{\pi}(140z^2 - 180z + 9)\operatorname{erfi}(\sqrt{z})}{128\sqrt{z}} - \frac{5}{64}e^z(14z - 11)$$

07.25.03.a9ow.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, \frac{3}{2}; -z\right) = \frac{5}{64}e^{-z}(14z + 11) + \frac{\sqrt{\pi}(140z^2 + 180z + 9)\operatorname{erf}(\sqrt{z})}{128\sqrt{z}}$$

07.25.03.a9ox.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, 2; z\right) = \frac{1}{12}e^{z/2}(14z^2 - 33z + 12)I_0\left(\frac{z}{2}\right) + \frac{1}{12}e^{z/2}(19z - 14z^2)I_1\left(\frac{z}{2}\right)$$

07.25.03.a9oy.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, \frac{5}{2}; z\right) = \frac{e^z(-140z^2 + 200z + 3)}{256z} + \frac{\sqrt{\pi}(280z^3 - 540z^2 + 54z - 3)\operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.a9oz.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, \frac{5}{2}; -z\right) = \frac{e^{-z}(140z^2 + 200z - 3)}{256z} + \frac{\sqrt{\pi}(280z^3 + 540z^2 + 54z + 3)\operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.a9p0.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, 3; z\right) = \frac{1}{3} e^{z/2} (2z^2 - 6z + 3) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z - 2) z I_1\left(\frac{z}{2}\right)$$

07.25.03.a9p1.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (560z^4 - 1440z^3 + 216z^2 - 24z + 27) \operatorname{erfi}(\sqrt{z})}{8192z^{5/2}} - \frac{5e^z (280z^3 - 580z^2 - 42z + 27)}{4096z^2}$$

07.25.03.a9p2.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, \frac{7}{2}; -z\right) = \frac{5e^{-z} (280z^3 + 580z^2 - 42z - 27)}{4096z^2} + \frac{5\sqrt{\pi} (560z^4 + 1440z^3 + 216z^2 + 24z + 27) \operatorname{erf}(\sqrt{z})}{8192z^{5/2}}$$

07.25.03.a9p3.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, 4; z\right) = \frac{e^{z/2} (140z^3 - 510z^2 + 309z + 12) I_0\left(\frac{z}{2}\right)}{315z} + \frac{e^{z/2} (-140z^4 + 370z^3 - 9z^2 + 24z - 48) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.a9p4.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi} (224z^5 - 720z^4 + 144z^3 - 24z^2 + 54z + 135) \operatorname{erfi}(\sqrt{z})}{32768z^{7/2}} - \frac{35e^z (112z^4 - 304z^3 - 24z^2 - 36z + 135)}{16384z^3}$$

07.25.03.a9p5.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, \frac{9}{2}; -z\right) = \frac{35e^{-z} (112z^4 + 304z^3 - 24z^2 + 36z + 135)}{16384z^3} + \frac{35\sqrt{\pi} (224z^5 + 720z^4 + 144z^3 + 24z^2 + 54z - 135) \operatorname{erf}(\sqrt{z})}{32768z^{7/2}}$$

07.25.03.a9p6.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, 5; z\right) = \frac{8e^{z/2} (140z^4 - 600z^3 + 417z^2 + 12z + 108) I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{8e^{z/2} (140z^5 - 460z^4 + 27z^3 - 51z^2 + 48z + 432) I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.a9p7.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, \frac{11}{2}; z\right) = \frac{105\sqrt{\pi} (448z^6 - 1728z^5 + 432z^4 - 96z^3 + 324z^2 + 1620z + 2205) \operatorname{erfi}(\sqrt{z})}{262144z^{9/2}} - \frac{105e^z (224z^5 - 752z^4 - 48z^3 - 168z^2 + 150z + 2205)}{131072z^4}$$

07.25.03.a9p8.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, \frac{11}{2}; -z\right) = \frac{105e^{-z} (224z^5 + 752z^4 - 48z^3 + 168z^2 + 150z - 2205)}{131072z^4} + \frac{105\sqrt{\pi} (448z^6 + 1728z^5 + 432z^4 + 96z^3 + 324z^2 - 1620z + 2205) \operatorname{erf}(\sqrt{z})}{262144z^{9/2}}$$

07.25.03.a9p9.01

$${}_2F_2\left(-\frac{3}{2}, 3; 1, 6; z\right) = \frac{8 e^{z/2} (280 z^5 - 1380 z^4 + 1068 z^3 - 3 z^2 + 540 z + 1728) I_0\left(\frac{z}{2}\right) - 8 e^{z/2} (280 z^6 - 1100 z^5 + 108 z^4 - 165 z^3 + 204 z^2 + 2160 z + 6912) I_1\left(\frac{z}{2}\right)}{9009 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = \frac{3}{2}$

07.25.03.a9pa.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{3}{2}, 2; z\right) = \frac{1}{32} e^z (23 - 14 z) + \frac{\sqrt{\pi} (28 z^2 - 60 z + 9) \operatorname{erfi}(\sqrt{z})}{64 \sqrt{z}}$$

07.25.03.a9pb.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{3}{2}, 2; -z\right) = \frac{1}{32} e^{-z} (14 z + 23) + \frac{\sqrt{\pi} (28 z^2 + 60 z + 9) \operatorname{erf}(\sqrt{z})}{64 \sqrt{z}}$$

07.25.03.a9pc.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{3}{2}, 3; z\right) = \frac{1}{8} e^z (5 - 2 z) + \frac{\sqrt{\pi} (4 z^2 - 12 z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.a9pd.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{3}{2}, 3; -z\right) = \frac{1}{8} e^{-z} (2 z + 5) + \frac{\sqrt{\pi} (4 z^2 + 12 z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.a9pe.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{3}{2}, 4; z\right) = \frac{e^z (-70 z^4 + 235 z^3 - 12 z^2 + 24 z - 24)}{420 z^3} + \frac{\sqrt{\pi} (140 z^2 - 540 z + 189) \operatorname{erfi}(\sqrt{z})}{840 \sqrt{z}} + \frac{2}{35 z^3}$$

07.25.03.a9pf.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{3}{2}, 4; -z\right) = \frac{e^{-z} (70 z^4 + 235 z^3 + 12 z^2 + 24 z + 24)}{420 z^3} + \frac{\sqrt{\pi} (140 z^2 + 540 z + 189) \operatorname{erf}(\sqrt{z})}{840 \sqrt{z}} - \frac{2}{35 z^3}$$

07.25.03.a9pg.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{3}{2}, 5; z\right) = \frac{8 (11 z + 15)}{385 z^4} - \frac{2 e^z (70 z^5 - 295 z^4 + 36 z^3 - 42 z^2 - 48 z + 180)}{1155 z^4} + \frac{\sqrt{\pi} (140 z^2 - 660 z + 297) \operatorname{erfi}(\sqrt{z})}{1155 \sqrt{z}}$$

07.25.03.a9ph.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{3}{2}, 5; -z\right) = -\frac{8 (11 z - 15)}{385 z^4} + \frac{2 e^{-z} (70 z^5 + 295 z^4 + 36 z^3 + 42 z^2 - 48 z - 180)}{1155 z^4} + \frac{\sqrt{\pi} (140 z^2 + 660 z + 297) \operatorname{erf}(\sqrt{z})}{1155 \sqrt{z}}$$

07.25.03.a9pi.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{3}{2}, 6; z\right) = \frac{4(143z^2 + 390z + 420)}{1001z^5} - \frac{4e^z(70z^6 - 355z^5 + 72z^4 - 54z^3 - 111z^2 - 90z + 1260)}{3003z^5} + \frac{2\sqrt{\pi}(140z^2 - 780z + 429)\operatorname{erfi}(\sqrt{z})}{3003\sqrt{z}}$$

07.25.03.a9pj.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{3}{2}, 6; -z\right) = -\frac{4(143z^2 - 390z + 420)}{1001z^5} + \frac{4e^{-z}(70z^6 + 355z^5 + 72z^4 + 54z^3 - 111z^2 + 90z + 1260)}{3003z^5} + \frac{2\sqrt{\pi}(140z^2 + 780z + 429)\operatorname{erf}(\sqrt{z})}{3003\sqrt{z}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = 2$

07.25.03.a9pk.01

$${}_2F_2\left(-\frac{3}{2}, 3; 2, 2; z\right) = \frac{1}{15}e^{z/2}(7z^2 - 24z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{30}e^{z/2}(-14z^2 + 34z - 3)I_1\left(\frac{z}{2}\right)$$

07.25.03.a9pl.01

$${}_2F_2\left(-\frac{3}{2}, 3; 2, \frac{5}{2}; z\right) = \frac{e^{-z}(-28z^2 + 76z - 3)}{128z} + \frac{\sqrt{\pi}(56z^3 - 180z^2 + 54z + 3)\operatorname{erfi}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.a9pm.01

$${}_2F_2\left(-\frac{3}{2}, 3; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(28z^2 + 76z + 3)}{128z} + \frac{\sqrt{\pi}(56z^3 + 180z^2 + 54z - 3)\operatorname{erf}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.a9pn.01

$${}_2F_2\left(-\frac{3}{2}, 3; 2, 3; z\right) = \frac{1}{15}e^{z/2}(4z^2 - 18z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}(-4z^2 + 14z - 3)I_1\left(\frac{z}{2}\right)$$

07.25.03.a9po.01

$${}_2F_2\left(-\frac{3}{2}, 3; 2, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi}(112z^4 - 480z^3 + 216z^2 + 24z - 9)\operatorname{erfi}(\sqrt{z})}{4096z^{5/2}} - \frac{5e^z(56z^3 - 212z^2 + 30z - 9)}{2048z^2}$$

07.25.03.a9pp.01

$${}_2F_2\left(-\frac{3}{2}, 3; 2, \frac{7}{2}; -z\right) = \frac{5e^{-z}(56z^3 + 212z^2 + 30z + 9)}{2048z^2} + \frac{5\sqrt{\pi}(112z^4 + 480z^3 + 216z^2 - 24z - 9)\operatorname{erf}(\sqrt{z})}{4096z^{5/2}}$$

07.25.03.a9pq.01

$${}_2F_2\left(-\frac{3}{2}, 3; 2, 4; z\right) = \frac{2e^{z/2}(28z^3 - 156z^2 + 159z - 3)I_0\left(\frac{z}{2}\right)}{315z} - \frac{2e^{z/2}(28z^4 - 128z^3 + 45z^2 + 6z - 12)I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.a9pr.01

$${}_2F_2\left(-\frac{3}{2}, 3; 2, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(224z^5 - 1200z^4 + 720z^3 + 120z^2 - 90z - 135)\operatorname{erfi}(\sqrt{z})}{16384z^{7/2}} - \frac{7e^z(112z^4 - 544z^3 + 144z^2 - 135)}{8192z^3}$$

07.25.03.a9ps.01

$${}_2F_2\left(-\frac{3}{2}, 3; 2, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (112 z^4 + 544 z^3 + 144 z^2 - 135)}{8192 z^3} + \frac{7 \sqrt{\pi} (224 z^5 + 1200 z^4 + 720 z^3 - 120 z^2 - 90 z + 135) \operatorname{erfi}(\sqrt{z})}{16384 z^{7/2}}$$

07.25.03.a9pt.01

$${}_2F_2\left(-\frac{3}{2}, 3; 2, 5; z\right) = \frac{8 e^{z/2} (56 z^4 - 372 z^3 + 444 z^2 - 15 z - 36) I_0\left(\frac{z}{2}\right)}{3465 z^2} - \frac{8 e^{z/2} (56 z^5 - 316 z^4 + 156 z^3 + 39 z^2 - 60 z - 144) I_1\left(\frac{z}{2}\right)}{3465 z^3}$$

07.25.03.a9pu.01

$${}_2F_2\left(-\frac{3}{2}, 3; 2, \frac{11}{2}; z\right) = \frac{21 \sqrt{\pi} (448 z^6 - 2880 z^5 + 2160 z^4 + 480 z^3 - 540 z^2 - 1620 z - 1575) \operatorname{erfi}(\sqrt{z})}{131072 z^{9/2}} - \frac{21 e^z (224 z^5 - 1328 z^4 + 528 z^3 + 120 z^2 - 570 z - 1575)}{65536 z^4}$$

07.25.03.a9pv.01

$${}_2F_2\left(-\frac{3}{2}, 3; 2, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (224 z^5 + 1328 z^4 + 528 z^3 - 120 z^2 - 570 z + 1575)}{65536 z^4} + \frac{21 \sqrt{\pi} (448 z^6 + 2880 z^5 + 2160 z^4 - 480 z^3 - 540 z^2 + 1620 z - 1575) \operatorname{erf}(\sqrt{z})}{131072 z^{9/2}}$$

07.25.03.a9pw.01

$${}_2F_2\left(-\frac{3}{2}, 3; 2, 6; z\right) = \frac{32 e^{z/2} (28 z^5 - 216 z^4 + 294 z^3 - 12 z^2 - 63 z - 108) I_0\left(\frac{z}{2}\right)}{9009 z^3} - \frac{16 e^{z/2} (56 z^6 - 376 z^5 + 240 z^4 + 84 z^3 - 123 z^2 - 504 z - 864) I_1\left(\frac{z}{2}\right)}{9009 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = \frac{5}{2}$

07.25.03.a9px.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{5}{2}, 3; z\right) = \frac{e^z (-4 z^2 + 16 z - 3)}{32 z} + \frac{\sqrt{\pi} (8 z^3 - 36 z^2 + 18 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.a9py.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (4 z^2 + 16 z + 3)}{32 z} + \frac{\sqrt{\pi} (8 z^3 + 36 z^2 + 18 z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.a9pz.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{5}{2}, 4; z\right) = \frac{e^z (-140 z^4 + 740 z^3 - 267 z^2 - 96 z + 96)}{1680 z^3} + \frac{\sqrt{\pi} (280 z^3 - 1620 z^2 + 1134 z + 315) \operatorname{erfi}(\sqrt{z})}{3360 z^{3/2}} - \frac{2}{35 z^3}$$

07.25.03.a9q0.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{5}{2}, 4; -z\right) = \frac{e^{-z}(140z^4 + 740z^3 + 267z^2 - 96z - 96)}{1680z^3} + \frac{\sqrt{\pi}(280z^3 + 1620z^2 + 1134z - 315)\operatorname{erf}(\sqrt{z})}{3360z^{3/2}} + \frac{2}{35z^3}$$

07.25.03.a9q1.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{5}{2}, 5; z\right) = -\frac{8(11z + 9)}{385z^4} + \frac{e^z(-140z^5 + 920z^4 - 501z^3 - 312z^2 + 96z + 432)}{2310z^4} + \frac{\sqrt{\pi}(280z^3 - 1980z^2 + 1782z + 693)\operatorname{erfi}(\sqrt{z})}{4620z^{3/2}}$$

07.25.03.a9q2.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{5}{2}, 5; -z\right) = \frac{8(11z - 9)}{385z^4} + \frac{e^{-z}(140z^5 + 920z^4 + 501z^3 - 312z^2 - 96z + 432)}{2310z^4} + \frac{\sqrt{\pi}(280z^3 + 1980z^2 + 1782z - 693)\operatorname{erf}(\sqrt{z})}{4620z^{3/2}}$$

07.25.03.a9q3.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{5}{2}, 6; z\right) = -\frac{4(143z^2 + 234z + 180)}{1001z^5} + \frac{e^z(-140z^6 + 1100z^5 - 807z^4 - 672z^3 - 12z^2 + 648z + 2160)}{3003z^5} + \frac{\sqrt{\pi}(280z^3 - 2340z^2 + 2574z + 1287)\operatorname{erfi}(\sqrt{z})}{6006z^{3/2}}$$

07.25.03.a9q4.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{5}{2}, 6; -z\right) = \frac{4(143z^2 - 234z + 180)}{1001z^5} + \frac{e^{-z}(140z^6 + 1100z^5 + 807z^4 - 672z^3 + 12z^2 + 648z - 2160)}{3003z^5} + \frac{\sqrt{\pi}(280z^3 + 2340z^2 + 2574z - 1287)\operatorname{erf}(\sqrt{z})}{6006z^{3/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = 3$

07.25.03.a9q5.01

$${}_2F_2\left(-\frac{3}{2}, 3; 3, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 - 24z + 27) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4z^3 - 20z^2 + 9z + 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.a9q6.01

$${}_2F_2\left(-\frac{3}{2}, 3; 3, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi}(16z^4 - 96z^3 + 72z^2 + 24z + 9)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5e^z(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.a9q7.01

$${}_2F_2\left(-\frac{3}{2}, 3; 3, \frac{7}{2}; -z\right) = \frac{5e^{-z}(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5\sqrt{\pi}(16z^4 + 96z^3 + 72z^2 - 24z + 9)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.a9q8.01

$${}_2F_2\left(-\frac{3}{2}, 3; 3, 4; z\right) = \frac{4 e^{z/2} (8z^3 - 60z^2 + 84z + 3) I_0\left(\frac{z}{2}\right)}{315z} - \frac{4 e^{z/2} (8z^4 - 52z^3 + 36z^2 + 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.a9q9.01

$${}_2F_2\left(-\frac{3}{2}, 3; 3, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45)\operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7e^z(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.a9qa.01

$${}_2F_2\left(-\frac{3}{2}, 3; 3, \frac{9}{2}; -z\right) = \frac{7e^{-z}(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7\sqrt{\pi}(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)\operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.a9qb.01

$${}_2F_2\left(-\frac{3}{2}, 3; 3, 5; z\right) = \frac{32e^{z/2}(8z^4 - 72z^3 + 120z^2 + 12z + 9)I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{128e^{z/2}(2z^5 - 16z^4 + 15z^3 + 12z^2 + 12z + 9)I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.a9qc.01

$${}_2F_2\left(-\frac{3}{2}, 3; 3, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi}(64z^6 - 576z^5 + 720z^4 + 480z^3 + 540z^2 + 540z + 315)\operatorname{erfi}(\sqrt{z})}{32768z^{9/2}} - \frac{21e^z(32z^5 - 272z^4 + 240z^3 + 264z^2 + 330z + 315)}{16384z^4}$$

07.25.03.a9qd.01

$${}_2F_2\left(-\frac{3}{2}, 3; 3, \frac{11}{2}; -z\right) = \frac{21e^{-z}(32z^5 + 272z^4 + 240z^3 - 264z^2 + 330z - 315)}{16384z^4} + \frac{21\sqrt{\pi}(64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)\operatorname{erf}(\sqrt{z})}{32768z^{9/2}}$$

07.25.03.a9qe.01

$${}_2F_2\left(-\frac{3}{2}, 3; 3, 6; z\right) = \frac{32e^{z/2}(16z^5 - 168z^4 + 324z^3 + 60z^2 + 81z + 72)I_0\left(\frac{z}{2}\right)}{9009z^3} - \frac{32e^{z/2}(16z^6 - 152z^5 + 180z^4 + 180z^3 + 249z^2 + 324z + 288)I_1\left(\frac{z}{2}\right)}{9009z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = \frac{7}{2}$

07.25.03.a9qf.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{7}{2}, 4; z\right) = \frac{e^z(-280z^4 + 2020z^3 - 1398z^2 - 1299z - 1536)}{5376z^3} + \frac{\sqrt{\pi}(560z^4 - 4320z^3 + 4536z^2 + 2520z + 2835)\operatorname{erfi}(\sqrt{z})}{10752z^{5/2}} + \frac{2}{7z^3}$$

07.25.03.a9qg.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{7}{2}, 4; -z\right) = \frac{e^{-z}(280z^4 + 2020z^3 + 1398z^2 - 1299z + 1536)}{5376z^3} + \frac{\sqrt{\pi}(560z^4 + 4320z^3 + 4536z^2 - 2520z + 2835)\operatorname{erf}(\sqrt{z})}{10752z^{5/2}} - \frac{2}{7z^3}$$

07.25.03.a9qh.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{7}{2}, 5; z\right) = \frac{8(11z+3)}{77z^4} + \frac{e^z(-280z^5+2500z^4-2454z^3-3099z^2-6144z-2304)}{7392z^4} + \frac{\sqrt{\pi}(560z^4-5280z^3+7128z^2+5544z+10395)\operatorname{erfi}(\sqrt{z})}{14784z^{5/2}}$$

07.25.03.a9qi.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{7}{2}, 5; -z\right) = -\frac{8(11z-3)}{77z^4} + \frac{e^{-z}(280z^5+2500z^4+2454z^3-3099z^2+6144z-2304)}{7392z^4} + \frac{\sqrt{\pi}(560z^4+5280z^3+7128z^2-5544z+10395)\operatorname{erf}(\sqrt{z})}{14784z^{5/2}}$$

07.25.03.a9qj.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{7}{2}, 6; z\right) = \frac{20(143z^2+78z+36)}{1001z^5} - \frac{5e^z(280z^6-2980z^5+3798z^4+5907z^3+15936z^2+8064z+6912)}{48048z^5} + \frac{5\sqrt{\pi}(560z^4-6240z^3+10296z^2+10296z+27027)\operatorname{erfi}(\sqrt{z})}{96096z^{5/2}}$$

07.25.03.a9qk.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{7}{2}, 6; -z\right) = -\frac{20(143z^2-78z+36)}{1001z^5} + \frac{5e^{-z}(280z^6+2980z^5+3798z^4-5907z^3+15936z^2-8064z+6912)}{48048z^5} + \frac{5\sqrt{\pi}(560z^4+6240z^3+10296z^2-10296z+27027)\operatorname{erf}(\sqrt{z})}{96096z^{5/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = 4$

07.25.03.a9ql.01

$${}_2F_2\left(-\frac{3}{2}, 3; 4, 4; z\right) = \frac{16e^{z/2}(140z^5-1320z^4+2334z^3+372z^2+945z-1890)I_0\left(\frac{z}{2}\right)}{33075z^3} - \frac{8e^{z/2}(280z^4-2360z^3+2448z^2+2292z+3921)I_1\left(\frac{z}{2}\right)}{33075z^2} + \frac{32}{35z^3}$$

07.25.03.a9qm.01

$${}_2F_2\left(-\frac{3}{2}, 3; 4, \frac{9}{2}; z\right) = \frac{e^z(-112z^4+1024z^3-1056z^2-1416z-3309)}{3072z^3} + \frac{\sqrt{\pi}(224z^5-2160z^4+3024z^3+2520z^2+5670z-2835)\operatorname{erfi}(\sqrt{z})}{6144z^{7/2}} + \frac{2}{z^3}$$

07.25.03.a9qn.01

$${}_2F_2\left(-\frac{3}{2}, 3; 4, \frac{9}{2}; -z\right) = \frac{e^{-z}(112z^4+1024z^3+1056z^2-1416z+3309)}{3072z^3} + \frac{\sqrt{\pi}(224z^5+2160z^4+3024z^3-2520z^2+5670z+2835)\operatorname{erf}(\sqrt{z})}{6144z^{7/2}} - \frac{2}{z^3}$$

07.25.03.a9qp.01

$${}_2F_2\left(-\frac{3}{2}, 3; 4, 5; z\right) = \frac{32 e^{z/2} (560 z^5 - 6360 z^4 + 13\,548 z^3 + 4404 z^2 + 17\,955 z - 41\,580) I_0\left(\frac{z}{2}\right)}{363\,825 z^3} - \frac{32 e^{z/2} (560 z^5 - 5800 z^4 + 8028 z^3 + 10\,092 z^2 + 28\,011 z - 11\,340) I_1\left(\frac{z}{2}\right)}{363\,825 z^3} + \frac{128}{35 z^3}$$

07.25.03.a9qp.01

$${}_2F_2\left(-\frac{3}{2}, 3; 4, \frac{11}{2}; z\right) = \frac{e^z (-224 z^5 + 2480 z^4 - 3408 z^3 - 5784 z^2 - 19\,542 z + 6615)}{8192 z^4} + \frac{\sqrt{\pi} (448 z^6 - 5184 z^5 + 9072 z^4 + 10\,080 z^3 + 34\,020 z^2 - 34\,020 z - 6615) \operatorname{erfi}(\sqrt{z})}{16\,384 z^{9/2}} + \frac{6}{z^3}$$

07.25.03.a9qq.01

$${}_2F_2\left(-\frac{3}{2}, 3; 4, \frac{11}{2}; -z\right) = \frac{e^{-z} (224 z^5 + 2480 z^4 + 3408 z^3 - 5784 z^2 + 19\,542 z + 6615)}{8192 z^4} + \frac{\sqrt{\pi} (448 z^6 + 5184 z^5 + 9072 z^4 - 10\,080 z^3 + 34\,020 z^2 + 34\,020 z - 6615) \operatorname{erf}(\sqrt{z})}{16\,384 z^{9/2}} - \frac{6}{z^3}$$

07.25.03.a9qr.01

$${}_2F_2\left(-\frac{3}{2}, 3; 4, 6; z\right) = \frac{64 e^{z/2} (560 z^5 - 7440 z^4 + 18\,516 z^3 + 9588 z^2 + 51\,975 z - 140\,805) I_0\left(\frac{z}{2}\right)}{945\,945 z^3} - \frac{64 e^{z/2} (560 z^6 - 6880 z^5 + 11\,916 z^4 + 18\,624 z^3 + 71\,427 z^2 - 62\,370 z - 22\,680) I_1\left(\frac{z}{2}\right)}{945\,945 z^4} + \frac{64}{7 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = \frac{9}{2}$

07.25.03.a9qs.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{9}{2}, 5; z\right) = \frac{8(11z-3)}{11z^4} + \frac{e^z (-112 z^5 + 1264 z^4 - 1800 z^3 - 3180 z^2 - 11\,823 z + 9216)}{4224 z^4} + \frac{\sqrt{\pi} (224 z^5 - 2640 z^4 + 4752 z^3 + 5544 z^2 + 20\,790 z - 31\,185) \operatorname{erfi}(\sqrt{z})}{8448 z^{7/2}}$$

07.25.03.a9qt.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{9}{2}, 5; -z\right) = -\frac{8(11z+3)}{11z^4} + \frac{e^{-z} (112 z^5 + 1264 z^4 + 1800 z^3 - 3180 z^2 + 11\,823 z + 9216)}{4224 z^4} + \frac{\sqrt{\pi} (224 z^5 + 2640 z^4 + 4752 z^3 - 5544 z^2 + 20\,790 z + 31\,185) \operatorname{erf}(\sqrt{z})}{8448 z^{7/2}}$$

07.25.03.a9qu.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{9}{2}, 6; z\right) = \frac{20(143z^2 - 78z - 12)}{143z^5} - \frac{5e^z(112z^6 - 1504z^5 + 2736z^4 + 5904z^3 + 29985z^2 - 50688z - 9216)}{27456z^5} + \frac{5\sqrt{\pi}(224z^5 - 3120z^4 + 6864z^3 + 10296z^2 + 54054z - 135135)\operatorname{erfi}(\sqrt{z})}{54912z^{7/2}}$$

07.25.03.a9qv.01

$${}_2F_2\left(-\frac{3}{2}, 3; \frac{9}{2}, 6; -z\right) = -\frac{20(143z^2 + 78z - 12)}{143z^5} + \frac{5e^{-z}(112z^6 + 1504z^5 + 2736z^4 - 5904z^3 + 29985z^2 + 50688z - 9216)}{27456z^5} + \frac{5\sqrt{\pi}(224z^5 + 3120z^4 + 6864z^3 - 10296z^2 + 54054z + 135135)\operatorname{erf}(\sqrt{z})}{54912z^{7/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = 5$

07.25.03.a9qw.01

$${}_2F_2\left(-\frac{3}{2}, 3; 5, 5; z\right) = \frac{512(11z - 6)}{385z^4} + \frac{256e^{z/2}(560z^6 - 7680z^5 + 19884z^4 + 11928z^3 + 76563z^2 - 291060z + 124740)I_0\left(\frac{z}{2}\right)}{4002075z^4} - \frac{256e^{z/2}(560z^5 - 7120z^4 + 13044z^3 + 21972z^2 + 99687z - 182313)I_1\left(\frac{z}{2}\right)}{4002075z^3}$$

07.25.03.a9qx.01

$${}_2F_2\left(-\frac{3}{2}, 3; 5, \frac{11}{2}; z\right) = \frac{24(11z - 9)}{11z^4} + \frac{e^z(-224z^5 + 3056z^4 - 5712z^3 - 12696z^2 - 68790z + 148419)}{11264z^4} + \frac{\sqrt{\pi}(448z^6 - 6336z^5 + 14256z^4 + 22176z^3 + 124740z^2 - 374220z + 72765)\operatorname{erfi}(\sqrt{z})}{22528z^{9/2}}$$

07.25.03.a9qy.01

$${}_2F_2\left(-\frac{3}{2}, 3; 5, \frac{11}{2}; -z\right) = -\frac{24(11z + 9)}{11z^4} + \frac{e^{-z}(224z^5 + 3056z^4 + 5712z^3 - 12696z^2 + 68790z + 148419)}{11264z^4} + \frac{\sqrt{\pi}(448z^6 + 6336z^5 + 14256z^4 - 22176z^3 + 124740z^2 + 374220z + 72765)\operatorname{erf}(\sqrt{z})}{22528z^{9/2}}$$

07.25.03.a9qz.01

$${}_2F_2\left(-\frac{3}{2}, 3; 5, 6; z\right) = \frac{256(11z - 12)}{77z^4} + \frac{256e^{z/2}(1120z^6 - 18000z^5 + 54816z^4 + 49596z^3 + 423594z^2 - 2234925z + 1621620)I_0\left(\frac{z}{2}\right)}{10405395z^4} - \frac{256e^{z/2}(1120z^6 - 16880z^5 + 38496z^4 + 80772z^3 + 510234z^2 - 1683999z + 249480)I_1\left(\frac{z}{2}\right)}{10405395z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = \frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.a9r0.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 3; \frac{11}{2}, 6; z\right) = \\
 & \frac{60(143z^2 - 234z + 36)}{143z^5} - \frac{5e^z(224z^6 - 3632z^5 + 8592z^4 + 23352z^3 + 174630z^2 - 712935z + 221184)}{73216z^5} + \\
 & \frac{5\sqrt{\pi}(448z^6 - 7488z^5 + 20592z^4 + 41184z^3 + 324324z^2 - 1621620z + 945945)\operatorname{erfi}(\sqrt{z})}{146432z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9r1.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 3; \frac{11}{2}, 6; -z\right) = \\
 & -\frac{60(143z^2 + 234z + 36)}{143z^5} + \frac{5e^{-z}(224z^6 + 3632z^5 + 8592z^4 - 23352z^3 + 174630z^2 + 712935z + 221184)}{73216z^5} + \\
 & \frac{5\sqrt{\pi}(448z^6 + 7488z^5 + 20592z^4 - 41184z^3 + 324324z^2 + 1621620z + 945945)\operatorname{erf}(\sqrt{-z})}{146432z^{9/2}}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 3$, $b_1 = 6$

$$\begin{aligned}
 & \text{07.25.03.a9r2.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 3; 6, 6; z\right) = \frac{640(143z^2 - 312z + 96)}{1001z^5} + \frac{1}{27054027z^5} \\
 & \frac{1024e^{z/2}(560z^7 - 10560z^6 + 38016z^5 + 50304z^4 + 574965z^3 - 4477644z^2 + 6081075z - 1621620)I_0\left(\frac{z}{2}\right) -}{27054027z^4} \\
 & \frac{1}{27054027z^4} 512e^{z/2}(1120z^6 - 20000z^5 + 56592z^4 + 148320z^3 + 1310046z^2 - 7562430z + 5395023)I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.a9r3.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \frac{1}{540280125} \left(e^z (8192z^{13} + 397312z^{12} + 6918144z^{11} + 53839872z^{10} + 190084608z^9 + 273611520z^8 + 117573120z^7 + \right. \\
 & \left. 6531840z^6 - 8981280z^5 + 40506480z^4 - 141750000z^3 + 369117000z^2 - 634047750z + 540280125) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9r4.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & -\frac{1}{49\,116\,375} \left(e^z (4096 z^{12} + 172\,032 z^{11} + 2\,512\,896 z^{10} + 15\,611\,904 z^9 + 40\,400\,640 z^8 + 35\,804\,160 z^7 + \right. \\
 & \quad \left. 5\,080\,320 z^6 + 725\,760 z^5 - 4\,127\,760 z^4 + 14\,061\,600 z^3 - 35\,721\,000 z^2 + 59\,535\,000 z - 49\,116\,375) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9r5.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{5\,457\,375} \left(e^z (2048 z^{11} + 72\,704 z^{10} + 856\,576 z^9 + 3\,951\,360 z^8 + 6\,370\,560 z^7 + 1\,975\,680 z^6 - 423\,360 z^5 + \right. \\
 & \quad \left. 574\,560 z^4 - 1\,776\,600 z^3 + 4\,365\,900 z^2 - 6\,945\,750 z + 5\,457\,375) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9r6.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \\
 & -\frac{1}{779\,625} \left(e^z (1024 z^{10} + 29\,696 z^9 + 264\,960 z^8 + 783\,360 z^7 + 443\,520 z^6 - 120\,960 z^5 - 30\,240 z^4 + \right. \\
 & \quad \left. 302\,400 z^3 - 737\,100 z^2 + 1\,077\,300 z - 779\,625) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9r7.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{155\,925} e^z (512 z^9 + 11\,520 z^8 + 69\,120 z^7 + 80\,640 z^6 - 60\,480 z^5 + 90\,720 z^4 - 151\,200 z^3 + 226\,800 z^2 - 255\,150 z + 155\,925)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9r8.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{e^z (256 z^8 + 4096 z^7 + 12\,032 z^6 - 13\,824 z^5 + 18\,144 z^4 - 75\,600 z^2 + 151\,200 z - 51\,975)}{51\,975}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9r9.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 1216 z^6 - 672 z^5 - 3888 z^4 + 22\,680 z^3 - 56\,700 z^2 + 47\,250 z + 51\,975)}{51\,975}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9ra.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (64 z^7 + 448 z^6 - 880 z^5 + 240 z^4 + 7800 z^3 - 28\,200 z^2 + 23\,625 z + 51\,975) I_0\left(\frac{z}{2}\right)}{51\,975} + \\
 & \frac{e^{z/2} (64 z^7 + 384 z^6 - 1232 z^5 + 1600 z^4 + 5400 z^3 - 31\,200 z^2 + 51\,375 z) I_1\left(\frac{z}{2}\right)}{51\,975}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9rb.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (64 z^6 + 192 z^5 - 1392 z^4 + 4320 z^3 - 3780 z^2 - 18\,900 z + 51\,975)}{51\,975}
 \end{aligned}$$

07.25.03.a9rc.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 + 32 z^5 - 1104 z^4 + 5280 z^3 - 10056 z^2 - 7938 z + 51975) I_0\left(\frac{z}{2}\right)}{51975} + \frac{e^{z/2} (64 z^6 - 32 z^5 - 1040 z^4 + 6240 z^3 - 16584 z^2 + 11874 z + 27027) I_1\left(\frac{z}{2}\right)}{51975}$$

07.25.03.a9rd.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (32 z^5 - 112 z^4 - 80 z^3 + 2520 z^2 - 10710 z + 17325)}{17325}$$

07.25.03.a9re.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, 3; z\right) = \frac{8 e^{z/2} (16 z^5 - 96 z^4 + 240 z^3 + 336 z^2 - 4077 z + 8910) I_0\left(\frac{z}{2}\right)}{51975} + \frac{4 e^{z/2} (32 z^6 - 224 z^5 + 720 z^4 - 192 z^3 - 7278 z^2 + 23166 z - 19305) I_1\left(\frac{z}{2}\right)}{51975 z}$$

07.25.03.a9rf.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (16 z^4 - 160 z^3 + 840 z^2 - 2520 z + 3465)}{3465}$$

07.25.03.a9rg.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 - 400 z^4 + 2656 z^3 - 10932 z^2 + 27390 z - 36465) I_0\left(\frac{z}{2}\right)}{17325 z} + \frac{4 e^{z/2} (32 z^6 - 432 z^5 + 3104 z^4 - 14284 z^3 + 43758 z^2 - 92235 z + 145860) I_1\left(\frac{z}{2}\right)}{17325 z^2}$$

07.25.03.a9rh.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (8 z^6 - 132 z^5 + 1146 z^4 - 6417 z^3 + 24192 z^2 - 60480 z + 90720)}{495 z^3} - \frac{1008 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.a9ri.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-8 z^6 - 132 z^5 - 1146 z^4 - 6417 z^3 - 24192 z^2 - 60480 z - 90720)}{495 z^3} + \frac{1008 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.a9rj.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^5 - 304 z^4 + 2988 z^3 - 18660 z^2 + 76245 z - 188955) I_0\left(\frac{z}{2}\right)}{17325 z^2} + \frac{32 e^{z/2} (16 z^6 - 320 z^5 + 3316 z^4 - 22152 z^3 + 100425 z^2 - 304980 z + 755820) I_1\left(\frac{z}{2}\right)}{17325 z^3}$$

07.25.03.a9rk.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (4 z^6 - 92 z^5 + 1079 z^4 - 8064 z^3 + 40320 z^2 - 131040 z + 264600)}{55 z^4} - \frac{756 \sqrt{\pi} (6 z + 35) \operatorname{erfi}(\sqrt{z})}{11 z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.a9rl.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = & \frac{e^{-z} (4z^6 + 92z^5 + 1079z^4 + 8064z^3 + 40320z^2 + 131040z + 264600)}{55z^4} + \frac{756\sqrt{\pi} (6z - 35) \operatorname{erf}(\sqrt{z})}{11z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9rm.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, 6; z\right) = & \frac{32e^{z/2} (16z^5 - 408z^4 + 5220z^3 - 41820z^2 + 218025z - 813960) I_0\left(\frac{z}{2}\right)}{3465z^3} + \\
 & \frac{32e^{z/2} (16z^6 - 424z^5 + 5652z^4 - 47700z^3 + 269025z^2 - 872100z + 3255840) I_1\left(\frac{z}{2}\right)}{3465z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.a9rn.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = & \frac{1}{4465125} (e^z (2048z^{11} + 74752z^{10} + 920064z^9 + 4585728z^8 + 8736000z^7 + 4798080z^6 + 141120z^5 + \\
 & 433440z^4 - 1413720z^3 + 3496500z^2 - 5622750z + 4465125))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9ro.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = & -\frac{1}{496125} (e^z (1024z^{10} + 31744z^9 + 317184z^8 + 1182720z^7 + 1411200z^6 + 282240z^5 - 70560z^4 + \\
 & 181440z^3 - 434700z^2 + 661500z - 496125))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9rp.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = & \frac{1}{70875} e^z (512z^9 + 13056z^8 + 99840z^7 + 241920z^6 + 100800z^5 - 10080z^4 - 30240z^3 + 75600z^2 - 103950z + 70875)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9rq.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = & -\frac{1}{14175} e^z (256z^8 + 5120z^7 + 26880z^6 + 26880z^5 - 16800z^4 + 20160z^3 - 25200z^2 + 25200z - 14175)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9rr.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = & \frac{e^z (128z^7 + 1856z^6 + 5088z^5 - 4368z^4 + 2520z^3 + 6300z^2 - 15750z + 4725)}{4725}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.a9rs.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = & -\frac{e^z (64z^6 + 576z^5 - 48z^4 - 2016z^3 + 6300z^2 - 6300z - 4725)}{4725}
 \end{aligned}$$

07.25.03.a9rt.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2}(-32z^6 - 224z^5 + 240z^4 + 480z^3 - 2850z^2 + 3150z + 4725)I_0\left(\frac{z}{2}\right) - 2e^{z/2}(16z^6 + 96z^5 - 208z^4 + 1275z^2 - 2550z)I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.a9ru.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{e^z(32z^5 + 112z^4 - 528z^3 + 840z^2 + 1050z - 4725)}{4725}$$

07.25.03.a9rv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2}(-32z^5 - 48z^4 + 480z^3 - 1212z^2 - 126z + 4725)I_0\left(\frac{z}{2}\right) + e^{z/2}(-32z^5 - 16z^4 + 480z^3 - 1668z^2 + 1698z + 2079)I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.a9rw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{e^z(16z^4 - 32z^3 - 120z^2 + 840z - 1575)}{1575}$$

07.25.03.a9rx.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, 3; z\right) = \frac{4e^{z/2}(16z^4 - 64z^3 + 36z^2 + 552z - 1503)I_0\left(\frac{z}{2}\right) - 4e^{z/2}(16z^5 - 80z^4 + 124z^3 + 372z^2 - 1683z + 1287)I_1\left(\frac{z}{2}\right)}{4725z}$$

07.25.03.a9ry.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{1}{315}e^z(8z^3 - 60z^2 + 210z - 315)$$

07.25.03.a9rz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, 4; z\right) = \frac{4e^{z/2}(16z^4 - 152z^3 + 708z^2 - 1788z + 2145)I_0\left(\frac{z}{2}\right) - 4e^{z/2}(16z^5 - 168z^4 + 884z^3 - 2772z^2 + 5577z - 8580)I_1\left(\frac{z}{2}\right)}{1575z^2}$$

07.25.03.a9s0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z(-4z^5 + 52z^4 - 339z^3 + 1344z^2 - 3360z + 5040)}{45z^3} - \frac{56\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.a9s1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(-4z^5 - 52z^4 - 339z^3 - 1344z^2 - 3360z - 5040)}{45z^3} + \frac{56\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.a9s2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, 5; z\right) = \frac{32e^{z/2}(8z^4 - 120z^3 + 888z^2 - 3900z + 9945)I_0\left(\frac{z}{2}\right) - 128e^{z/2}(2z^5 - 32z^4 + 255z^3 - 1248z^2 + 3900z - 9945)I_1\left(\frac{z}{2}\right)}{1575z^2}$$

07.25.03.a9s3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (-2z^5 + 37z^4 - 336z^3 + 1848z^2 - 6300z + 13230)}{5z^4} - \frac{63\sqrt{\pi} (4z + 21) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.a9s4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (2z^5 + 37z^4 + 336z^3 + 1848z^2 + 6300z + 13230)}{5z^4} + \frac{63\sqrt{\pi} (4z - 21) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.a9s5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, 6; z\right) = -\frac{32 e^{z/2} (8z^4 - 164z^3 + 1620z^2 - 9435z + 38760) I_0\left(\frac{z}{2}\right)}{315z^3} - \frac{32 e^{z/2} (8z^5 - 172z^4 + 1796z^3 - 11325z^2 + 37740z - 155040) I_1\left(\frac{z}{2}\right)}{315z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.a9s6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{55125} e^z (512z^9 + 13568z^8 + 111104z^7 + 313600z^6 + 235200z^5 + 23520z^4 - 23520z^3 + 55440z^2 - 78750z + 55125)$$

07.25.03.a9s7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (256z^8 + 5632z^7 + 35840z^6 + 67200z^5 + 16800z^4 + 3360z^3 - 10080z^2 + 12600z - 7875)}{7875}$$

07.25.03.a9s8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{e^z (128z^7 + 2240z^6 + 10080z^5 + 8400z^4 - 4200z^3 + 3780z^2 - 3150z + 1575)}{1575}$$

07.25.03.a9s9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{525} e^z (64z^6 + 832z^5 + 2128z^4 - 1120z^3 - 420z^2 + 2100z - 525)$$

07.25.03.a9sa.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{525} e^z (32z^5 + 272z^4 + 112z^3 - 840z^2 + 1050z + 525)$$

07.25.03.a9sb.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{525} e^{z/2} (16z^5 + 112z^4 - 20z^3 - 340z^2 + 525z + 525) I_0\left(\frac{z}{2}\right) + \frac{1}{525} e^{z/2} (16z^5 + 96z^4 - 108z^3 - 200z^2 + 625z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9sc.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{525} e^z (16z^4 + 64z^3 - 168z^2 + 525)$$

$$\begin{aligned}
 & \text{07.25.03.a9sd.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, 2; z\right) &= \frac{1}{525} e^{z/2} (16z^4 + 40z^3 - 172z^2 + 84z + 525) I_0\left(\frac{z}{2}\right) + \frac{1}{525} e^{z/2} (16z^4 + 24z^3 - 188z^2 + 268z + 189) I_1\left(\frac{z}{2}\right) \\
 & \text{07.25.03.a9se.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) &= \frac{1}{175} e^z (8z^3 - 4z^2 - 70z + 175) \\
 & \text{07.25.03.a9sf.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, 3; z\right) &= \frac{16}{525} e^{z/2} (2z^3 - 4z^2 - 9z + 39) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8z^4 - 24z^3 - 8z^2 + 144z - 99) I_1\left(\frac{z}{2}\right)}{525z} \\
 & \text{07.25.03.a9sg.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) &= \frac{1}{35} e^z (4z^2 - 20z + 35) \\
 & \text{07.25.03.a9sh.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, 4; z\right) &= \frac{4 e^{z/2} (8z^3 - 52z^2 + 140z - 143) I_0\left(\frac{z}{2}\right)}{175z} + \frac{4 e^{z/2} (8z^4 - 60z^3 + 204z^2 - 385z + 572) I_1\left(\frac{z}{2}\right)}{175z^2} \\
 & \text{07.25.03.a9si.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) &= \frac{e^z (2z^4 - 19z^3 + 84z^2 - 210z + 315)}{5z^3} - \frac{63\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2z^{7/2}} \\
 & \text{07.25.03.a9sj.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) &= \frac{e^{-z} (-2z^4 - 19z^3 - 84z^2 - 210z - 315)}{5z^3} + \frac{63\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2z^{7/2}} \\
 & \text{07.25.03.a9sk.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, 5; z\right) &= \frac{32 e^{z/2} (4z^3 - 44z^2 + 221z - 585) I_0\left(\frac{z}{2}\right)}{175z^2} + \frac{32 e^{z/2} (4z^4 - 48z^3 + 271z^2 - 884z + 2340) I_1\left(\frac{z}{2}\right)}{175z^3} \\
 & \text{07.25.03.a9sl.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) &= \frac{9 e^z (2z^4 - 28z^3 + 182z^2 - 665z + 1470)}{10z^4} - \frac{189\sqrt{\pi} (3z + 14) \operatorname{erfi}(\sqrt{z})}{4z^{9/2}} \\
 & \text{07.25.03.a9sm.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) &= \frac{9 e^{-z} (2z^4 + 28z^3 + 182z^2 + 665z + 1470)}{10z^4} + \frac{189\sqrt{\pi} (3z - 14) \operatorname{erf}(\sqrt{z})}{4z^{9/2}} \\
 & \text{07.25.03.a9sn.01} \\
 {}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, 6; z\right) &= \frac{32 e^{z/2} (4z^3 - 62z^2 + 435z - 2040) I_0\left(\frac{z}{2}\right)}{35z^3} + \frac{32 e^{z/2} (4z^4 - 66z^3 + 503z^2 - 1740z + 8160) I_1\left(\frac{z}{2}\right)}{35z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.a9so.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 2368 z^6 + 12000 z^5 + 15600 z^4 + 600 z^3 + 1980 z^2 - 2070 z + 1125)}{1125}$$

07.25.03.a9sp.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{225} e^z (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225)$$

07.25.03.a9sq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{75} e^z (32 z^5 + 368 z^4 + 880 z^3 - 120 z^2 - 390 z + 75)$$

07.25.03.a9sr.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{75} e^z (16 z^4 + 128 z^3 + 120 z^2 - 240 z - 75)$$

07.25.03.a9ss.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{75} e^{z/2} (-8 z^4 - 56 z^3 - 40 z^2 + 120 z + 75) I_0\left(\frac{z}{2}\right) - \frac{4}{75} e^{z/2} (2 z^4 + 12 z^3 - z^2 - 25 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9st.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{75} e^z (8 z^3 + 36 z^2 - 30 z - 75)$$

07.25.03.a9su.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{75} e^{z/2} (-8 z^3 - 28 z^2 + 36 z + 75) I_0\left(\frac{z}{2}\right) + \frac{1}{75} e^{z/2} (-8 z^3 - 20 z^2 + 52 z + 21) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9sv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{1}{25} e^z (4 z^2 + 4 z - 25)$$

07.25.03.a9sw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, 3; z\right) = -\frac{4}{75} e^{z/2} (4 z^2 - 21) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4 z^3 - 4 z^2 - 15 z + 9) I_1\left(\frac{z}{2}\right)}{75 z}$$

07.25.03.a9sx.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{1}{5} e^z (2 z - 5)$$

07.25.03.a9sy.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, 4; z\right) = -\frac{4 e^{z/2} (4 z^2 - 14 z + 11) I_0\left(\frac{z}{2}\right)}{25 z} - \frac{4 e^{z/2} (4 z^3 - 18 z^2 + 31 z - 44) I_1\left(\frac{z}{2}\right)}{25 z^2}$$

07.25.03.a9sz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7 e^z (2 z^3 - 12 z^2 + 30 z - 45)}{10 z^3} - \frac{63 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{7/2}}$$

07.25.03.a9t0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{63 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{7/2}} - \frac{7 e^{-z} (2 z^3 + 12 z^2 + 30 z + 45)}{10 z^3}$$

07.25.03.a9t1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, 5; z\right) = -\frac{32 e^{z/2} (2z^2 - 14z + 39) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (z^3 - 8z^2 + 28z - 78) I_1\left(\frac{z}{2}\right)}{25 z^2}$$

07.25.03.a9t2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{63 e^z (8z^3 - 76z^2 + 310z - 735)}{80 z^4} - \frac{189 \sqrt{\pi} (12z + 49) \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.a9t3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8z^3 + 76z^2 + 310z + 735)}{80 z^4} + \frac{189 \sqrt{\pi} (12z - 49) \operatorname{erf}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.a9t4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, 6; z\right) = -\frac{32 e^{z/2} (2z^2 - 21z + 120) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (2z^3 - 23z^2 + 84z - 480) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.a9t5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} e^z (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45)$$

07.25.03.a9t6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{15} e^z (16z^4 + 160z^3 + 360z^2 + 120z - 15)$$

07.25.03.a9t7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (8z^3 + 60z^2 + 90z + 15)$$

07.25.03.a9t8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (4z^3 + 28z^2 + 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^3 + 24z^2 + 23z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9t9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (4z^2 + 20z + 15)$$

07.25.03.a9ta.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4z^2 + 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^2 + 14z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9tb.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{5} e^z (2z + 5)$$

07.25.03.a9tc.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, 3; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2z^2 + 2z - 1) I_1\left(\frac{z}{2}\right)}{15 z}$$

07.25.03.a9td.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = e^z$$

07.25.03.a9te.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (2z-1) I_0\left(\frac{z}{2}\right)}{5z} + \frac{4 e^{z/2} (2z^2-3z+4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.a9tf.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4z^2-10z+15)}{8z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.a9tg.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{7 e^{-z} (4z^2+10z+15)}{8z^3}$$

07.25.03.a9th.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (z-3) I_0\left(\frac{z}{2}\right)}{5z^2} + \frac{32 e^{z/2} (z^2-4z+12) I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.a9ti.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (8z^2-40z+105)}{32z^4} - \frac{945 \sqrt{\pi} (2z+7) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.a9tj.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8z^2+40z+105)}{32z^4} + \frac{945 \sqrt{\pi} (2z-7) \operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.a9tk.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (z-8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2-4z+32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.a9tl.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{256}{5} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{5} e^z (8z^3+68z^2-110z+5)$$

07.25.03.a9tm.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{256}{5} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} + \frac{1}{5} e^{-z} (-8z^3+68z^2+110z+5)$$

07.25.03.a9tn.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{5} e^z (-4z^2+100z+5) - \frac{128}{5} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9to.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{5} e^{-z} (-4z^2-100z+5) - \frac{128}{5} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a9tp.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-262z^2+150z+15) I_0\left(\frac{z}{2}\right) + \frac{2}{15} e^{z/2} (125z^2+14z) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9tq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = e^z (6z + 1) - \frac{32}{5} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9tr.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = e^{-z} (1 - 6z) - \frac{32}{5} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a9ts.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{75} e^{z/2} (-512z^2 + 354z + 75) I_0\left(\frac{z}{2}\right) + \frac{1}{75} e^{z/2} (512z^2 + 98z + 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9tt.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{5} e^z (16z + 5) - \frac{16}{5} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9tu.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{5} e^{-z} (5 - 16z) - \frac{16}{5} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a9tv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (512z^3 + 128z^2 + 39z - 15) I_1\left(\frac{z}{2}\right)}{525z} - \frac{4}{525} e^{z/2} (512z^2 - 384z - 135) I_0\left(\frac{z}{2}\right)$$

07.25.03.a9tw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = e^z (2z + 1) - 2\sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9tx.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = e^{-z} (1 - 2z) - 2\sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.a9ty.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (1024z^4 + 256z^3 + 288z^2 - 345z + 420) I_1\left(\frac{z}{2}\right)}{1575z^2} - \frac{4 e^{z/2} (1024z^3 - 768z^2 - 480z + 105) I_0\left(\frac{z}{2}\right)}{1575z}$$

07.25.03.a9tz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (16z^4 + 8z^3 + 12z^2 - 30z + 45)}{80z^3} - \frac{7\sqrt{\pi} (32z^5 + 45) \operatorname{erfi}(\sqrt{z})}{160z^{7/2}}$$

07.25.03.a9u0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = -\frac{7 e^{-z} (16z^4 - 8z^3 + 12z^2 + 30z + 45)}{80z^3} - \frac{7\sqrt{\pi} (32z^5 - 45) \operatorname{erf}(\sqrt{z})}{160z^{7/2}}$$

07.25.03.a9u1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, 5; z\right) = \frac{128 e^{z/2} (256z^5 + 64z^4 + 72z^3 + 150z^2 - 840z + 2835) I_1\left(\frac{z}{2}\right)}{17325z^3} - \frac{32 e^{z/2} (1024z^4 - 768z^3 - 480z^2 - 840z + 2835) I_0\left(\frac{z}{2}\right)}{17325z^2}$$

07.25.03.a9u2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{21 e^z (32z^5 + 16z^4 + 24z^3 + 60z^2 - 510z + 1575)}{640z^4} - \frac{21\sqrt{\pi} (64z^6 + 540z + 1575) \operatorname{erfi}(\sqrt{z})}{1280z^{9/2}}$$

07.25.03.a9u3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{21 e^{-z} (32 z^5 - 16 z^4 + 24 z^3 - 60 z^2 - 510 z - 1575)}{640 z^4} - \frac{21 \sqrt{\pi} (64 z^6 - 540 z + 1575) \operatorname{erf}(\sqrt{z})}{1280 z^{9/2}}$$

07.25.03.a9u4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (2048 z^6 + 512 z^5 + 576 z^4 + 1200 z^3 + 3675 z^2 - 18900 z + 332640) I_1\left(\frac{z}{2}\right)}{45045 z^4} - \frac{32 e^{z/2} (2048 z^5 - 1536 z^4 - 960 z^3 - 1680 z^2 - 4725 z + 83160) I_0\left(\frac{z}{2}\right)}{45045 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{1}{2}$

07.25.03.a9u5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{5} e^z (5 - 62z) + \frac{8}{5} \sqrt{\pi} (8 z^{3/2} - 3 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9u6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{5} e^{-z} (62z + 5) + \frac{8}{5} \sqrt{\pi} (8 z^{3/2} + 3 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9u7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (128 z^2 - 165 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (43 z - 128 z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9u8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{5} e^z (5 - 16z) + \frac{4}{5} \sqrt{\pi} \sqrt{z} (4z - 3) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9u9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{5} e^{-z} (16z + 5) + \frac{4}{5} \sqrt{\pi} \sqrt{z} (4z + 3) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9ua.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{75} e^{z/2} (256 z^2 - 432 z + 75) I_0\left(\frac{z}{2}\right) + \frac{1}{75} e^{z/2} (-256 z^2 + 176 z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9ub.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{5} e^z (5 - 8z) + \frac{1}{5} \sqrt{\pi} \sqrt{z} (8z - 9) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9uc.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{5} e^{-z} (8z + 5) + \frac{1}{5} \sqrt{\pi} \sqrt{z} (8z + 9) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9ud.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, 3; z\right) = \frac{16}{525} e^{z/2} (64 z^2 - 132 z + 33) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (256 z^3 - 272 z^2 - 12 z + 3) I_1\left(\frac{z}{2}\right)}{525 z}$$

07.25.03.a9ue.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = e^z (1 - z) + \frac{1}{2} \sqrt{\pi} \sqrt{z} (2z - 3) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9uf.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = e^{-z}(z+1) + \frac{1}{2}\sqrt{\pi}\sqrt{z}(2z+3)\operatorname{erf}(\sqrt{z})$$

07.25.03.a9ug.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, 4; z\right) = \frac{4e^{z/2}(512z^3 - 1248z^2 + 408z - 15)I_0\left(\frac{z}{2}\right)}{1575z} - \frac{4e^{z/2}(512z^4 - 736z^3 - 72z^2 + 57z - 60)I_1\left(\frac{z}{2}\right)}{1575z^2}$$

07.25.03.a9uh.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(128z^5 - 240z^4 - 45)\operatorname{erfi}(\sqrt{z})}{1280z^{7/2}} - \frac{7e^z(64z^4 - 88z^3 - 12z^2 + 30z - 45)}{640z^3}$$

07.25.03.a9ui.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}(64z^4 + 88z^3 - 12z^2 - 30z - 45)}{640z^3} + \frac{7\sqrt{\pi}(128z^5 + 240z^4 + 45)\operatorname{erf}(\sqrt{z})}{1280z^{7/2}}$$

07.25.03.a9uj.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, 5; z\right) = \frac{32e^{z/2}(512z^4 - 1440z^3 + 552z^2 + 75z - 315)I_0\left(\frac{z}{2}\right)}{17325z^2} - \frac{32e^{z/2}(512z^5 - 928z^4 - 120z^3 + 3z^2 + 300z - 1260)I_1\left(\frac{z}{2}\right)}{17325z^3}$$

07.25.03.a9uk.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi}(64z^6 - 144z^5 - 135z - 315)\operatorname{erfi}(\sqrt{z})}{2560z^{9/2}} - \frac{21e^z(32z^5 - 56z^4 - 12z^3 + 6z^2 + 75z - 315)}{1280z^4}$$

07.25.03.a9ul.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z}(32z^5 + 56z^4 - 12z^3 - 6z^2 + 75z + 315)}{1280z^4} + \frac{21\sqrt{\pi}(64z^6 + 144z^5 + 135z - 315)\operatorname{erf}(\sqrt{z})}{2560z^{9/2}}$$

07.25.03.a9um.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, 6; z\right) = \frac{32e^{z/2}(1024z^5 - 3264z^4 + 1392z^3 + 330z^2 - 315z - 7560)I_0\left(\frac{z}{2}\right)}{45045z^3} - \frac{32e^{z/2}(1024z^6 - 2240z^5 - 336z^4 - 102z^3 + 375z^2 - 1260z - 30240)I_1\left(\frac{z}{2}\right)}{45045z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 1$

07.25.03.a9un.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{15}e^{z/2}(32z^2 - 60z + 15)I_0\left(\frac{z}{2}\right) - \frac{4}{15}e^{z/2}(8z^2 - 7z)I_1\left(\frac{z}{2}\right)$$

07.25.03.a9uo.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{15}e^{z/2}(16z^2 - 39z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}(23z - 16z^2)I_1\left(\frac{z}{2}\right)$$

07.25.03.a9up.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{3}e^{z/2}(2z^2 - 6z + 3)I_0\left(\frac{z}{2}\right) - \frac{2}{3}e^{z/2}(z - 2)zI_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{3}{2}$

07.25.03.a9uq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (8z^2 - 12z + 1) \operatorname{erfi}(\sqrt{z})}{10\sqrt{z}} - \frac{4}{5} e^z (z - 1)$$

07.25.03.a9ur.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{4}{5} e^{-z} (z + 1) + \frac{\sqrt{\pi} (8z^2 + 12z + 1) \operatorname{erf}(\sqrt{z})}{10\sqrt{z}}$$

07.25.03.a9us.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{75} e^{z/2} (64z^2 - 168z + 75) I_0\left(\frac{z}{2}\right) + \frac{1}{75} e^{z/2} (-64z^2 + 104z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9ut.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{10} e^z (7 - 4z) + \frac{\sqrt{\pi} (8z^2 - 18z + 3) \operatorname{erfi}(\sqrt{z})}{20\sqrt{z}}$$

07.25.03.a9uu.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{10} e^{-z} (4z + 7) + \frac{\sqrt{\pi} (8z^2 + 18z + 3) \operatorname{erf}(\sqrt{z})}{20\sqrt{z}}$$

07.25.03.a9uv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, 3; z\right) = \frac{4}{525} e^{z/2} (64z^2 - 216z + 131) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (64z^3 - 152z^2 + 11z - 1) I_1\left(\frac{z}{2}\right)}{525z}$$

07.25.03.a9uw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{8} e^z (5 - 2z) + \frac{\sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.a9ux.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{8} e^{-z} (2z + 5) + \frac{\sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.a9uy.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (128z^3 - 528z^2 + 390z + 3) I_0\left(\frac{z}{2}\right)}{1575z} - \frac{4 e^{z/2} (128z^4 - 400z^3 + 54z^2 - 15z + 12) I_1\left(\frac{z}{2}\right)}{1575z^2}$$

07.25.03.a9uz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi} (64z^5 - 240z^4 + 80z^3 + 15) \operatorname{erfi}(\sqrt{z})}{2560z^{7/2}} - \frac{7 e^z (32z^4 - 104z^3 + 4z^2 - 10z + 15)}{1280z^3}$$

07.25.03.a9v0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (32z^4 + 104z^3 + 4z^2 + 10z + 15)}{1280z^3} + \frac{7\sqrt{\pi} (64z^5 + 240z^4 + 80z^3 - 15) \operatorname{erf}(\sqrt{z})}{2560z^{7/2}}$$

07.25.03.a9v1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (128 z^4 - 624 z^3 + 534 z^2 - 6 z + 45) I_0\left(\frac{z}{2}\right)}{17325 z^2} - \frac{64 e^{z/2} (64 z^5 - 248 z^4 + 51 z^3 - 12 z^2 - 12 z + 90) I_1\left(\frac{z}{2}\right)}{17325 z^3}$$

07.25.03.a9v2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{21 \sqrt{\pi} (128 z^6 - 576 z^5 + 240 z^4 + 180 z + 315) \operatorname{erfi}(\sqrt{z})}{20480 z^{9/2}} - \frac{21 e^z (64 z^5 - 256 z^4 + 24 z^3 - 36 z^2 - 30 z + 315)}{10240 z^4}$$

07.25.03.a9v3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (64 z^5 + 256 z^4 + 24 z^3 + 36 z^2 - 30 z - 315)}{10240 z^4} + \frac{21 \sqrt{\pi} (128 z^6 + 576 z^5 + 240 z^4 - 180 z + 315) \operatorname{erf}(\sqrt{z})}{20480 z^{9/2}}$$

07.25.03.a9v4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (256 z^5 - 1440 z^4 + 1388 z^3 - 54 z^2 + 165 z + 840) I_0\left(\frac{z}{2}\right)}{45045 z^3} - \frac{32 e^{z/2} (256 z^6 - 1184 z^5 + 332 z^4 - 58 z^3 - 111 z^2 + 660 z + 3360) I_1\left(\frac{z}{2}\right)}{45045 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 2$

07.25.03.a9v5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{75} e^{z/2} (32 z^2 - 114 z + 75) I_0\left(\frac{z}{2}\right) + \frac{1}{75} e^{z/2} (-32 z^2 + 82 z - 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.a9v6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{15} e^{z/2} (4 z^2 - 18 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4 z^2 + 14 z - 3) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{5}{2}$

07.25.03.a9v7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16 z^2 + 46 z - 3)}{80 z} + \frac{\sqrt{\pi} (32 z^3 - 108 z^2 + 36 z + 3) \operatorname{erfi}(\sqrt{z})}{160 z^{3/2}}$$

07.25.03.a9v8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (16 z^2 + 46 z + 3)}{80 z} + \frac{\sqrt{\pi} (32 z^3 + 108 z^2 + 36 z - 3) \operatorname{erf}(\sqrt{z})}{160 z^{3/2}}$$

07.25.03.a9v9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, 3; z\right) = \frac{8}{525} e^{z/2} (16z^2 - 75z + 66) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (32z^3 - 118z^2 + 30z + 3) I_1\left(\frac{z}{2}\right)}{525z}$$

07.25.03.a9va.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-4z^2 + 16z - 3)}{32z} + \frac{\sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.a9vb.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (4z^2 + 16z + 3)}{32z} + \frac{\sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.a9vc.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (64z^3 - 372z^2 + 402z - 3) I_0\left(\frac{z}{2}\right)}{1575z} - \frac{4 e^{z/2} (64z^4 - 308z^3 + 126z^2 + 33z - 12) I_1\left(\frac{z}{2}\right)}{1575z^2}$$

07.25.03.a9vd.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi} (128z^5 - 720z^4 + 480z^3 + 120z^2 - 45) \operatorname{erfi}(\sqrt{z})}{10240z^{7/2}} - \frac{7e^z (64z^4 - 328z^3 + 108z^2 + 30z - 45)}{5120z^3}$$

07.25.03.a9ve.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} (64z^4 + 328z^3 + 108z^2 - 30z - 45)}{5120z^3} + \frac{7\sqrt{\pi} (128z^5 + 720z^4 + 480z^3 - 120z^2 + 45) \operatorname{erf}(\sqrt{z})}{10240z^{7/2}}$$

07.25.03.a9vf.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (64z^4 - 444z^3 + 564z^2 - 3z - 27) I_0\left(\frac{z}{2}\right)}{17325z^2} - \frac{32 e^{z/2} (64z^5 - 380z^4 + 216z^3 + 87z^2 - 12z - 108) I_1\left(\frac{z}{2}\right)}{17325z^3}$$

07.25.03.a9vg.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi} (128z^6 - 864z^5 + 720z^4 + 240z^3 - 270z - 315) \operatorname{erfi}(\sqrt{z})}{40960z^{9/2}} - \frac{21e^z (64z^5 - 400z^4 + 192z^3 + 96z^2 - 60z - 315)}{20480z^4}$$

07.25.03.a9vh.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z} (64z^5 + 400z^4 + 192z^3 - 96z^2 - 60z + 315)}{20480z^4} + \frac{21\sqrt{\pi} (128z^6 + 864z^5 + 720z^4 - 240z^3 + 270z - 315) \operatorname{erf}(\sqrt{z})}{40960z^{9/2}}$$

07.25.03.a9vi.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (128z^5 - 1032z^4 + 1500z^3 + 12z^2 - 171z - 360) I_0\left(\frac{z}{2}\right)}{45045z^3} - \frac{32 e^{z/2} (128z^6 - 904z^5 + 660z^4 + 348z^3 + 3z^2 - 684z - 1440) I_1\left(\frac{z}{2}\right)}{45045z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 3$

07.25.03.a9vj.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; 3, \frac{7}{2}; z\right) = \frac{4}{105} e^{z/2} (4z^2 - 24z + 27) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4z^3 - 20z^2 + 9z + 3) I_1\left(\frac{z}{2}\right)}{105z}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{7}{2}$

07.25.03.a9vk.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5e^{-z} (8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.a9vl.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} (8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5\sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.a9vm.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 - 60z^2 + 84z + 3) I_0\left(\frac{z}{2}\right)}{315z} - \frac{4 e^{z/2} (8z^4 - 52z^3 + 36z^2 + 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.a9vn.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7e^{-z} (16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.a9vo.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} (16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7\sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.a9vp.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (8z^4 - 72z^3 + 120z^2 + 12z + 9) I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{128 e^{z/2} (2z^5 - 16z^4 + 15z^3 + 12z^2 + 12z + 9) I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.a9vq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi} (64z^6 - 576z^5 + 720z^4 + 480z^3 + 540z^2 + 540z + 315) \operatorname{erfi}(\sqrt{z})}{32768z^{9/2}} - \frac{21e^{-z} (32z^5 - 272z^4 + 240z^3 + 264z^2 + 330z + 315)}{16384z^4}$$

07.25.03.a9vr.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z} (32z^5 + 272z^4 + 240z^3 - 264z^2 + 330z - 315)}{16384z^4} + \frac{21\sqrt{\pi} (64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315) \operatorname{erf}(\sqrt{z})}{32768z^{9/2}}$$

07.25.03.a9vs.01

$${}_2F_2\left(-\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 168 z^4 + 324 z^3 + 60 z^2 + 81 z + 72) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (16 z^6 - 152 z^5 + 180 z^4 + 180 z^3 + 249 z^2 + 324 z + 288) I_1\left(\frac{z}{2}\right)}{9009 z^3 - 9009 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = -\frac{11}{2}$

07.25.03.a9vt.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{108056025} (512 z^{13} + 28672 z^{12} + 589184 z^{11} + 5566464 z^{10} + 24757248 z^9 + 47136000 z^8 + 28661760 z^7 + 1693440 z^6 + 80640 z^5 + 45360 z^4 + 108000 z^3 + 1323000 z^2 - 21432600 z + 108056025) + \frac{1}{108056025} (64 e^z \sqrt{\pi} (8 z^{27/2} + 452 z^{25/2} + 9426 z^{23/2} + 91365 z^{21/2} + 426240 z^{19/2} + 896040 z^{17/2} + 697680 z^{15/2} + 116280 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.a9vu.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{108056025} (-512 z^{13} + 28672 z^{12} - 589184 z^{11} + 5566464 z^{10} - 24757248 z^9 + 47136000 z^8 - 28661760 z^7 + 1693440 z^6 - 80640 z^5 + 45360 z^4 - 108000 z^3 + 1323000 z^2 + 21432600 z + 108056025) + \frac{1}{108056025} (64 e^{-z} \sqrt{\pi} (8 z^{27/2} - 452 z^{25/2} + 9426 z^{23/2} - 91365 z^{21/2} + 426240 z^{19/2} - 896040 z^{17/2} + 697680 z^{15/2} - 116280 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.a9vv.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{9823275} (-256 z^{12} - 12544 z^{11} - 219456 z^{10} - 1691904 z^9 - 5706240 z^8 - 7073280 z^7 - 1693440 z^6 + 80640 z^5 + 15120 z^4 + 21600 z^3 + 189000 z^2 - 2381400 z + 9823275) - \frac{1}{9823275} 32 e^z \sqrt{\pi} (8 z^{25/2} + 396 z^{23/2} + 7050 z^{21/2} + 56115 z^{19/2} + 201780 z^{17/2} + 290700 z^{15/2} + 116280 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9vw.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{9823275} (-256 z^{12} + 12544 z^{11} - 219456 z^{10} + 1691904 z^9 - 5706240 z^8 + 7073280 z^7 - 1693440 z^6 - 80640 z^5 + 15120 z^4 - 21600 z^3 + 189000 z^2 + 2381400 z + 9823275) + \frac{1}{9823275} 32 e^{-z} \sqrt{\pi} (8 z^{25/2} - 396 z^{23/2} + 7050 z^{21/2} - 56115 z^{19/2} + 201780 z^{17/2} - 290700 z^{15/2} + 116280 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9vx.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1091475} (128 z^{11} + 5376 z^{10} + 77536 z^9 + 460800 z^8 + 1042560 z^7 + 564480 z^6 - 80640 z^5 + 15120 z^4 + 7200 z^3 + 37800 z^2 - 340200 z + 1091475) + \frac{16 e^z \sqrt{\pi} (8 z^{23/2} + 340 z^{21/2} + 5010 z^{19/2} + 31065 z^{17/2} + 77520 z^{15/2} + 58140 z^{13/2}) \operatorname{erf}(\sqrt{z})}{1091475}$$

07.25.03.a9vy.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1091475} (-128 z^{11} + 5376 z^{10} - 77536 z^9 + 460800 z^8 - 1042560 z^7 + 564480 z^6 + 80640 z^5 + 15120 z^4 - 7200 z^3 + 37800 z^2 + 340200 z + 1091475) + \frac{16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 340 z^{21/2} + 5010 z^{19/2} - 31065 z^{17/2} + 77520 z^{15/2} - 58140 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{1091475}$$

07.25.03.a9vz.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{155925} (-64 z^{10} - 2240 z^9 - 25360 z^8 - 104640 z^7 - 112896 z^6 + 26880 z^5 - 15120 z^4 + 7200 z^3 + 12600 z^2 - 68040 z + 155925) - \frac{8 e^z \sqrt{\pi} (8 z^{21/2} + 284 z^{19/2} + 3306 z^{17/2} + 14535 z^{15/2} + 19380 z^{13/2}) \operatorname{erf}(\sqrt{z})}{155925}$$

07.25.03.a9w0.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{155925} (-64 z^{10} + 2240 z^9 - 25360 z^8 + 104640 z^7 - 112896 z^6 - 26880 z^5 - 15120 z^4 - 7200 z^3 + 12600 z^2 + 68040 z + 155925) + \frac{8 e^{-z} \sqrt{\pi} (8 z^{21/2} - 284 z^{19/2} + 3306 z^{17/2} - 14535 z^{15/2} + 19380 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.a9w1.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{32 z^9 + 896 z^8 + 7320 z^7 + 16128 z^6 - 5376 z^5 + 5040 z^4 - 7200 z^3 + 12600 z^2 - 22680 z + 31185}{31185} + \frac{4 e^z \sqrt{\pi} (8 z^{19/2} + 228 z^{17/2} + 1938 z^{15/2} + 4845 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.a9w2.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{-32 z^9 + 896 z^8 - 7320 z^7 + 16128 z^6 + 5376 z^5 + 5040 z^4 + 7200 z^3 + 12600 z^2 + 22680 z + 31185}{31185} + \frac{4 e^{-z} \sqrt{\pi} (8 z^{19/2} - 228 z^{17/2} + 1938 z^{15/2} - 4845 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.a9w3.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{-16 z^8 - 336 z^7 - 1652 z^6 + 48 z^5 + 2016 z^4 - 7680 z^3 + 17640 z^2 - 22680 z + 10395}{10395} - \frac{1}{10395} 2 e^z \sqrt{\pi} (8 z^{17/2} + 172 z^{15/2} + 906 z^{13/2} + 315 z^{11/2} - 1260 z^{9/2} + 3780 z^{7/2} - 7560 z^{5/2} + 7560 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9w4.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{-16 z^8 + 336 z^7 - 1652 z^6 - 48 z^5 + 2016 z^4 + 7680 z^3 + 17640 z^2 + 22680 z + 10395}{10395} + \frac{1}{10395} 2 e^{-z} \sqrt{\pi} (8 z^{17/2} - 172 z^{15/2} + 906 z^{13/2} - 315 z^{11/2} - 1260 z^{9/2} - 3780 z^{7/2} - 7560 z^{5/2} - 7560 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9w5.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{8 z^7 + 112 z^6 + 158 z^5 - 768 z^4 + 2040 z^3 - 2520 z^2 - 2520 z + 10395}{10395} + \frac{1}{10395} e^z \sqrt{\pi} (8 z^{15/2} + 116 z^{13/2} + 210 z^{11/2} - 735 z^{9/2} + 1680 z^{7/2} - 1260 z^{5/2} - 5040 z^{3/2} + 12600 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9w6.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{-8 z^7 + 112 z^6 - 158 z^5 - 768 z^4 - 2040 z^3 - 2520 z^2 + 2520 z + 10395}{10395} + \frac{1}{10395} e^{-z} \sqrt{\pi} (8 z^{15/2} - 116 z^{13/2} + 210 z^{11/2} + 735 z^{9/2} + 1680 z^{7/2} + 1260 z^{5/2} - 5040 z^{3/2} - 12600 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9w7.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, 1; z\right) = \frac{e^z (16 z^7 + 176 z^6 - 24 z^5 - 960 z^4 + 4425 z^3 - 9135 z^2 + 1890 z + 20790)}{20790}$$

07.25.03.a9w8.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{4 z^6 + 28 z^5 - 87 z^4 + 60 z^3 + 720 z^2 - 3240 z + 4995}{10395} + \frac{e^z \sqrt{\pi} (8 z^7 + 60 z^6 - 150 z^5 + 15 z^4 + 1620 z^3 - 6120 z^2 + 7200 z + 5400) \operatorname{erf}(\sqrt{z})}{20790 \sqrt{z}}$$

07.25.03.a9w9.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{4 z^6 - 28 z^5 - 87 z^4 - 60 z^3 + 720 z^2 + 3240 z + 4995}{10395} + \frac{e^{-z} \sqrt{\pi} (-8 z^7 + 60 z^6 + 150 z^5 + 15 z^4 - 1620 z^3 - 6120 z^2 - 7200 z + 5400) \operatorname{erfi}(\sqrt{z})}{20790 \sqrt{z}}$$

07.25.03.a9wa.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, 2; z\right) = \frac{e^z (16 z^6 + 64 z^5 - 408 z^4 + 1080 z^3 + 105 z^2 - 9450 z + 20790)}{20790}$$

07.25.03.a9wb.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{4 z^6 - 85 z^4 + 480 z^3 - 1224 z^2 + 690 z + 2520}{6930 z} + \frac{e^z \sqrt{\pi} (8 z^7 + 4 z^6 - 174 z^5 + 885 z^4 - 1920 z^3 - 360 z^2 + 7920 z - 2520) \operatorname{erf}(\sqrt{z})}{13860 z^{3/2}}$$

07.25.03.a9wc.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-4 z^6 + 85 z^4 + 480 z^3 + 1224 z^2 + 690 z - 2520}{6930 z} + \frac{e^{-z} \sqrt{\pi} (8 z^7 - 4 z^6 - 174 z^5 - 885 z^4 - 1920 z^3 + 360 z^2 + 7920 z + 2520) \operatorname{erfi}(\sqrt{z})}{13860 z^{3/2}}$$

07.25.03.a9wd.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, 3; z\right) = \frac{e^z (16 z^5 - 48 z^4 - 120 z^3 + 1680 z^2 - 6615 z + 10395)}{10395}$$

07.25.03.a9we.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{4 z^6 - 28 z^5 + 85 z^4 + 36 z^3 - 1272 z^2 + 4200 z - 5040}{2772 z^2} + \frac{e^z \sqrt{\pi} (8 z^7 - 52 z^6 + 138 z^5 + 195 z^4 - 2700 z^3 + 7740 z^2 - 7560 z + 5040) \operatorname{erf}(\sqrt{z})}{5544 z^{5/2}}$$

07.25.03.a9wf.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{4 z^6 + 28 z^5 + 85 z^4 - 36 z^3 - 1272 z^2 - 4200 z - 5040}{2772 z^2} + \frac{e^{-z} \sqrt{\pi} (-8 z^7 - 52 z^6 - 138 z^5 + 195 z^4 + 2700 z^3 + 7740 z^2 + 7560 z + 5040) \operatorname{erfi}(\sqrt{z})}{5544 z^{5/2}}$$

07.25.03.a9wg.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, 4; z\right) = \frac{e^z (16 z^4 - 160 z^3 + 840 z^2 - 2520 z + 3465)}{3465}$$

07.25.03.a9wh.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{4 z^6 - 56 z^5 + 423 z^4 - 2112 z^3 + 7476 z^2 - 20160 z + 45360}{792 z^3} + \frac{e^z \sqrt{\pi} (8 z^7 - 108 z^6 + 786 z^5 - 3735 z^4 + 12240 z^3 - 28980 z^2 + 50400 z - 45360) \operatorname{erf}(\sqrt{z})}{1584 z^{7/2}}$$

07.25.03.a9wi.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{-4z^6 - 56z^5 - 423z^4 - 2112z^3 - 7476z^2 - 20160z - 45360}{792z^3} + \frac{e^{-z}\sqrt{\pi}(8z^7 + 108z^6 + 786z^5 + 3735z^4 + 12240z^3 + 28980z^2 + 50400z + 45360)\operatorname{erfi}(\sqrt{z})}{1584z^{7/2}}$$

07.25.03.a9wj.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, 5; z\right) = \frac{4e^z(16z^7 - 272z^6 + 2472z^5 - 14880z^4 + 62985z^3 - 188955z^2 + 377910z - 377910)}{3465z^4} + \frac{33592}{77z^4}$$

07.25.03.a9wk.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{4z^6 - 84z^5 + 929z^4 - 6804z^3 + 35280z^2 - 131040z + 529200}{176z^4} + \frac{1}{352z^{9/2}}e^z\sqrt{\pi}(8z^7 - 164z^6 + 1770z^5 - 12585z^4 + 62580z^3 - 216720z^2 + 483840z - 529200)\operatorname{erf}(\sqrt{z})$$

07.25.03.a9wl.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{4z^6 + 84z^5 + 929z^4 + 6804z^3 + 35280z^2 + 131040z + 529200}{176z^4} + \frac{1}{352z^{9/2}}e^{-z}\sqrt{\pi}(-8z^7 - 164z^6 - 1770z^5 - 12585z^4 - 62580z^3 - 216720z^2 - 483840z - 529200)\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9wm.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{11}{2}, 6; z\right) = \frac{12920(13z + 84)}{77z^5} + \frac{4e^z(16z^7 - 384z^6 + 4776z^5 - 38760z^4 + 218025z^3 - 843030z^2 + 2063970z - 2441880)}{693z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = -\frac{9}{2}$

07.25.03.a9wn.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{893025}(128z^{11} + 5504z^{10} + 82272z^9 + 519456z^8 + 1329600z^7 + 1056960z^6 + 80640z^5 + 5040z^4 + 4320z^3 + 27000z^2 - 264600z + 893025) + \frac{1}{893025}16e^z\sqrt{\pi}(8z^{23/2} + 348z^{21/2} + 5310z^{19/2} + 34875z^{17/2} + 97155z^{15/2} + 96390z^{13/2} + 19890z^{11/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9wo.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{893025}(-128z^{11} + 5504z^{10} - 82272z^9 + 519456z^8 - 1329600z^7 + 1056960z^6 - 80640z^5 + 5040z^4 - 4320z^3 + 27000z^2 + 264600z + 893025) + \frac{1}{893025}16e^{-z}\sqrt{\pi}(8z^{23/2} - 348z^{21/2} + 5310z^{19/2} - 34875z^{17/2} + 97155z^{15/2} - 96390z^{13/2} + 19890z^{11/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9wp.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{99225} \frac{(-64 z^{10} - 2368 z^9 - 29328 z^8 - 143520 z^7 - 246240 z^6 - 80640 z^5 + 5040 z^4 + 1440 z^3 + 5400 z^2 - 37800 z + 99225) - 8 e^z \sqrt{\pi} (8 z^{21/2} + 300 z^{19/2} + 3810 z^{17/2} + 19635 z^{15/2} + 38250 z^{13/2} + 19890 z^{11/2}) \operatorname{erf}(\sqrt{z})}{99225}$$

07.25.03.a9wq.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{99225} \frac{(-64 z^{10} + 2368 z^9 - 29328 z^8 + 143520 z^7 - 246240 z^6 + 80640 z^5 + 5040 z^4 - 1440 z^3 + 5400 z^2 + 37800 z + 99225) + 8 e^{-z} \sqrt{\pi} (8 z^{21/2} - 300 z^{19/2} + 3810 z^{17/2} - 19635 z^{15/2} + 38250 z^{13/2} - 19890 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{99225}$$

07.25.03.a9wr.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{32 z^9 + 992 z^8 + 9720 z^7 + 33336 z^6 + 26880 z^5 - 5040 z^4 + 1440 z^3 + 1800 z^2 - 7560 z + 14175}{14175} + \frac{4 e^z \sqrt{\pi} (8 z^{19/2} + 252 z^{17/2} + 2550 z^{15/2} + 9435 z^{13/2} + 9945 z^{11/2}) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.a9ws.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{-32 z^9 + 992 z^8 - 9720 z^7 + 33336 z^6 - 26880 z^5 - 5040 z^4 - 1440 z^3 + 1800 z^2 + 7560 z + 14175}{14175} + \frac{4 e^{-z} \sqrt{\pi} (8 z^{19/2} - 252 z^{17/2} + 2550 z^{15/2} - 9435 z^{13/2} + 9945 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.a9wt.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{-16 z^8 - 400 z^7 - 2868 z^6 - 5376 z^5 + 1680 z^4 - 1440 z^3 + 1800 z^2 - 2520 z + 2835}{2835} - \frac{2 e^z \sqrt{\pi} (8 z^{17/2} + 204 z^{15/2} + 1530 z^{13/2} + 3315 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.a9wu.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{-16 z^8 + 400 z^7 - 2868 z^6 + 5376 z^5 + 1680 z^4 + 1440 z^3 + 1800 z^2 + 2520 z + 2835}{2835} + \frac{2 e^{-z} \sqrt{\pi} (8 z^{17/2} - 204 z^{15/2} + 1530 z^{13/2} - 3315 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.a9wv.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} (8 z^7 + 152 z^6 + 678 z^5 + 42 z^4 - 780 z^3 + 1980 z^2 - 2520 z + 945) + \frac{1}{945} e^z \sqrt{\pi} (8 z^{15/2} + 156 z^{13/2} + 750 z^{11/2} + 315 z^{9/2} - 945 z^{7/2} + 1890 z^{5/2} - 1890 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9ww.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945} (-8z^7 + 152z^6 - 678z^5 + 42z^4 + 780z^3 + 1980z^2 + 2520z + 945) + \frac{1}{945} e^{-z} \sqrt{\pi} (8z^{15/2} - 156z^{13/2} + 750z^{11/2} - 315z^{9/2} - 945z^{7/2} - 1890z^{5/2} - 1890z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9wx.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945} (-4z^6 - 52z^5 - 81z^4 + 282z^3 - 450z^2 + 945) + \frac{e^z \sqrt{\pi} (-8z^{13/2} - 108z^{11/2} - 210z^{9/2} + 525z^{7/2} - 630z^{5/2} - 630z^{3/2} + 2520\sqrt{z}) \operatorname{erf}(\sqrt{z})}{1890}$$

07.25.03.a9wy.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} (-4z^6 + 52z^5 - 81z^4 - 282z^3 - 450z^2 + 945) + \frac{e^{-z} \sqrt{\pi} (8z^{13/2} - 108z^{11/2} + 210z^{9/2} + 525z^{7/2} + 630z^{5/2} - 630z^{3/2} - 2520\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1890}$$

07.25.03.a9wz.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, 1; z\right) = -\frac{e^z (8z^6 + 84z^5 + 30z^4 - 435z^3 + 1125z^2 - 630z - 1890)}{1890}$$

07.25.03.a9x0.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{-4z^5 - 28z^4 + 57z^3 + 45z^2 - 540z + 990}{1890} + \frac{e^z \sqrt{\pi} (-8z^6 - 60z^5 + 90z^4 + 165z^3 - 1125z^2 + 1620z + 900) \operatorname{erf}(\sqrt{z})}{3780\sqrt{z}}$$

07.25.03.a9x1.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{4z^5 - 28z^4 - 57z^3 + 45z^2 + 540z + 990}{1890} + \frac{e^{-z} \sqrt{\pi} (-8z^6 + 60z^5 + 90z^4 - 165z^3 - 1125z^2 - 1620z + 900) \operatorname{erfi}(\sqrt{z})}{3780\sqrt{z}}$$

07.25.03.a9x2.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, 2; z\right) = -\frac{e^z (8z^5 + 36z^4 - 150z^3 + 165z^2 + 630z - 1890)}{1890}$$

07.25.03.a9x3.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-4z^5 - 4z^4 + 75z^3 - 252z^2 + 240z + 360}{1260z} + \frac{e^z \sqrt{\pi} (-8z^6 - 12z^5 + 150z^4 - 435z^3 + 180z^2 + 1260z - 360) \operatorname{erf}(\sqrt{z})}{2520z^{3/2}}$$

07.25.03.a9x4.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-4z^5 + 4z^4 + 75z^3 + 252z^2 + 240z - 360}{1260z} + \frac{e^{-z}\sqrt{\pi}(8z^6 - 12z^5 - 150z^4 - 435z^3 - 180z^2 + 1260z + 360)\operatorname{erfi}(\sqrt{z})}{2520z^{3/2}}$$

07.25.03.a9x5.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, 3; z\right) = -\frac{1}{945}e^z(8z^4 - 12z^3 - 90z^2 + 525z - 945)$$

07.25.03.a9x6.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-4z^5 + 20z^4 - 27z^3 - 129z^2 + 570z - 630}{504z^2} + \frac{e^z\sqrt{\pi}(-8z^6 + 36z^5 - 30z^4 - 315z^3 + 1125z^2 - 990z + 630)\operatorname{erf}(\sqrt{z})}{1008z^{5/2}}$$

07.25.03.a9x7.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{4z^5 + 20z^4 + 27z^3 - 129z^2 - 570z - 630}{504z^2} + \frac{e^{-z}\sqrt{\pi}(-8z^6 - 36z^5 - 30z^4 + 315z^3 + 1125z^2 + 990z + 630)\operatorname{erfi}(\sqrt{z})}{1008z^{5/2}}$$

07.25.03.a9x8.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, 4; z\right) = -\frac{1}{315}e^z(8z^3 - 60z^2 + 210z - 315)$$

07.25.03.a9x9.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-4z^5 + 44z^4 - 249z^3 + 894z^2 - 2310z + 5040}{144z^3} + \frac{e^z\sqrt{\pi}(-8z^6 + 84z^5 - 450z^4 + 1485z^3 - 3330z^2 + 5670z - 5040)\operatorname{erf}(\sqrt{z})}{288z^{7/2}}$$

07.25.03.a9xa.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{-4z^5 - 44z^4 - 249z^3 - 894z^2 - 2310z - 5040}{144z^3} + \frac{e^{-z}\sqrt{\pi}(8z^6 + 84z^5 + 450z^4 + 1485z^3 + 3330z^2 + 5670z + 5040)\operatorname{erfi}(\sqrt{z})}{288z^{7/2}}$$

07.25.03.a9xb.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, 5; z\right) = \frac{1768}{7z^4} - \frac{4e^z(8z^6 - 108z^5 + 750z^4 - 3315z^3 + 9945z^2 - 19890z + 19890)}{315z^4}$$

07.25.03.a9xc.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-4z^5 + 68z^4 - 591z^3 + 3297z^2 - 12600z + 52920}{32z^4} + \frac{e^z\sqrt{\pi}(-8z^6 + 132z^5 - 1110z^4 + 5925z^3 - 21105z^2 + 47880z - 52920)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.a9xd.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{4z^5 + 68z^4 + 591z^3 + 3297z^2 + 12600z + 52920}{32z^4} + \frac{e^{-z}\sqrt{\pi}(-8z^6 - 132z^5 - 1110z^4 - 5925z^3 - 21105z^2 - 47880z - 52920)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.a9xe.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{9}{2}, 6; z\right) = \frac{680(13z + 76)}{7z^5} - \frac{4e^z(8z^6 - 156z^5 + 1530z^4 - 9435z^3 + 38250z^2 - 96390z + 116280)}{63z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = -\frac{7}{2}$

07.25.03.a9xf.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{32z^9 + 1024z^8 + 10584z^7 + 40480z^6 + 46320z^5 + 5040z^4 + 480z^3 + 1080z^2 - 5400z + 11025}{11025} + \frac{4e^z\sqrt{\pi}(8z^{19/2} + 260z^{17/2} + 2770z^{15/2} + 11325z^{13/2} + 15600z^{11/2} + 4290z^{9/2})\operatorname{erf}(\sqrt{z})}{11025}$$

07.25.03.a9xg.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{-32z^9 + 1024z^8 - 10584z^7 + 40480z^6 - 46320z^5 + 5040z^4 - 480z^3 + 1080z^2 + 5400z + 11025}{11025} + \frac{4e^{-z}\sqrt{\pi}(8z^{19/2} - 260z^{17/2} + 2770z^{15/2} - 11325z^{13/2} + 15600z^{11/2} - 4290z^{9/2})\operatorname{erfi}(\sqrt{z})}{11025}$$

07.25.03.a9xh.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{-16z^8 - 432z^7 - 3572z^6 - 9720z^5 - 5040z^4 + 480z^3 + 360z^2 - 1080z + 1575}{1575} - \frac{2e^z\sqrt{\pi}(8z^{17/2} + 220z^{15/2} + 1890z^{13/2} + 5655z^{11/2} + 4290z^{9/2})\operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.a9xi.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{-16z^8 + 432z^7 - 3572z^6 + 9720z^5 - 5040z^4 - 480z^3 + 360z^2 + 1080z + 1575}{1575} + \frac{2e^{-z}\sqrt{\pi}(8z^{17/2} - 220z^{15/2} + 1890z^{13/2} - 5655z^{11/2} + 4290z^{9/2})\operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.a9xj.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315}(8z^7 + 176z^6 + 1086z^5 + 1680z^4 - 480z^3 + 360z^2 - 360z + 315) + \frac{1}{315}e^z\sqrt{\pi}(8z^{15/2} + 180z^{13/2} + 1170z^{11/2} + 2145z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9xk.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{315} (-8z^7 + 176z^6 - 1086z^5 + 1680z^4 + 480z^3 + 360z^2 + 360z + 315) + \frac{1}{315} e^{-z} \sqrt{\pi} (8z^{15/2} - 180z^{13/2} + 1170z^{11/2} - 2145z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9xl.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} (-4z^6 - 68z^5 - 273z^4 - 50z^3 + 270z^2 - 360z + 105) + \frac{1}{210} e^z \sqrt{\pi} (-8z^{13/2} - 140z^{11/2} - 610z^{9/2} - 315z^{7/2} + 630z^{5/2} - 630z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9xm.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} (-4z^6 + 68z^5 - 273z^4 + 50z^3 + 270z^2 + 360z + 105) + \frac{1}{210} e^{-z} \sqrt{\pi} (8z^{13/2} - 140z^{11/2} + 610z^{9/2} - 315z^{7/2} - 630z^{5/2} - 630z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9xn.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{210} (4z^5 + 48z^4 + 83z^3 - 180z^2 + 90z + 210) + \frac{1}{420} e^z \sqrt{\pi} (8z^{11/2} + 100z^{9/2} + 210z^{7/2} - 315z^{5/2} + 630\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9xo.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{210} (-4z^5 + 48z^4 - 83z^3 - 180z^2 - 90z + 210) + \frac{1}{420} e^{-z} \sqrt{\pi} (8z^{11/2} - 100z^{9/2} + 210z^{7/2} + 315z^{5/2} - 630\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9xp.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, 1; z\right) = \frac{1}{210} e^z (4z^5 + 40z^4 + 35z^3 - 165z^2 + 150z + 210)$$

07.25.03.a9xq.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{420} (4z^4 + 28z^3 - 27z^2 - 90z + 240) + \frac{e^z \sqrt{\pi} (8z^5 + 60z^4 - 30z^3 - 225z^2 + 450z + 180) \operatorname{erf}(\sqrt{z})}{840\sqrt{z}}$$

07.25.03.a9xr.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{420} (4z^4 - 28z^3 - 27z^2 + 90z + 240) + \frac{e^{-z} \sqrt{\pi} (-8z^5 + 60z^4 + 30z^3 - 225z^2 - 450z + 180) \operatorname{erfi}(\sqrt{z})}{840\sqrt{z}}$$

07.25.03.a9xs.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, 2; z\right) = \frac{1}{210} e^z (4z^4 + 20z^3 - 45z^2 - 30z + 210)$$

07.25.03.a9xt.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{4z^4 + 8z^3 - 57z^2 + 80z + 60}{280z} + \frac{e^z \sqrt{\pi} (8z^5 + 20z^4 - 110z^3 + 105z^2 + 240z - 60) \operatorname{erf}(\sqrt{z})}{560z^{3/2}}$$

07.25.03.a9xu.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{-4z^4 + 8z^3 + 57z^2 + 80z - 60}{280z} + \frac{e^{-z}\sqrt{\pi}(8z^5 - 20z^4 - 110z^3 - 105z^2 + 240z + 60)\operatorname{erfi}(\sqrt{z})}{560z^{3/2}}$$

07.25.03.a9xv.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, 3; z\right) = \frac{1}{105} e^z (4z^3 - 45z + 105)$$

07.25.03.a9xw.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{4z^4 - 12z^3 - 7z^2 + 90z - 90}{112z^2} + \frac{e^z\sqrt{\pi}(8z^5 - 20z^4 - 30z^3 + 195z^2 - 150z + 90)\operatorname{erf}(\sqrt{z})}{224z^{5/2}}$$

07.25.03.a9xx.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{4z^4 + 12z^3 - 7z^2 - 90z - 90}{112z^2} + \frac{e^{-z}\sqrt{\pi}(-8z^5 - 20z^4 + 30z^3 + 195z^2 + 150z + 90)\operatorname{erfi}(\sqrt{z})}{224z^{5/2}}$$

07.25.03.a9xy.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, 4; z\right) = \frac{1}{35} e^z (4z^2 - 20z + 35)$$

07.25.03.a9xz.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{4z^4 - 32z^3 + 123z^2 - 300z + 630}{32z^3} + \frac{e^z\sqrt{\pi}(8z^5 - 60z^4 + 210z^3 - 435z^2 + 720z - 630)\operatorname{erf}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.a9y0.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-4z^4 - 32z^3 - 123z^2 - 300z - 630}{32z^3} + \frac{e^{-z}\sqrt{\pi}(8z^5 + 60z^4 + 210z^3 + 435z^2 + 720z + 630)\operatorname{erfi}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.a9y1.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, 5; z\right) = \frac{4e^z(4z^5 - 40z^4 + 195z^3 - 585z^2 + 1170z - 1170)}{35z^4} + \frac{936}{7z^4}$$

07.25.03.a9y2.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9(4z^4 - 52z^3 + 333z^2 - 1330z + 5880)}{64z^4} + \frac{9e^z\sqrt{\pi}(8z^5 - 100z^4 + 610z^3 - 2265z^2 + 5250z - 5880)\operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.a9y3.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(4z^4 + 52z^3 + 333z^2 + 1330z + 5880)}{64z^4} - \frac{9e^{-z}\sqrt{\pi}(8z^5 + 100z^4 + 610z^3 + 2265z^2 + 5250z + 5880)\operatorname{erfi}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.a9y4.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{7}{2}, 6; z\right) = \frac{360(13z + 68)}{7z^5} + \frac{4e^z(4z^5 - 60z^4 + 435z^3 - 1890z^2 + 4950z - 6120)}{7z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = -\frac{5}{2}$

07.25.03.a9y5.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225} (8z^7 + 184z^6 + 1238z^5 + 2466z^4 + 480z^3 + 120z^2 - 216z + 225) + \frac{1}{225} e^z \sqrt{\pi} (8z^{15/2} + 188z^{13/2} + 1326z^{11/2} + 3003z^{9/2} + 1287z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9y6.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{225} (-8z^7 + 184z^6 - 1238z^5 + 2466z^4 - 480z^3 + 120z^2 + 216z + 225) + \frac{1}{225} e^{-z} \sqrt{\pi} (8z^{15/2} - 188z^{13/2} + 1326z^{11/2} - 3003z^{9/2} + 1287z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9y7.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} (-4z^6 - 76z^5 - 393z^4 - 480z^3 + 120z^2 - 72z + 45) + \frac{1}{90} e^z \sqrt{\pi} (-8z^{13/2} - 156z^{11/2} - 858z^{9/2} - 1287z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9y8.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{45} (-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45) + \frac{1}{90} e^{-z} \sqrt{\pi} (8z^{13/2} - 156z^{11/2} + 858z^{9/2} - 1287z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9y9.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{30} (4z^5 + 60z^4 + 215z^3 + 75z^2 - 144z + 30) + \frac{1}{60} e^z \sqrt{\pi} (8z^{11/2} + 124z^{9/2} + 486z^{7/2} + 315z^{5/2} - 315z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9ya.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{30} (-4z^5 + 60z^4 - 215z^3 + 75z^2 + 144z + 30) + \frac{1}{60} e^{-z} \sqrt{\pi} (8z^{11/2} - 124z^{9/2} + 486z^{7/2} - 315z^{5/2} - 315z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9yb.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{60} (-4z^4 - 44z^3 - 85z^2 + 78z + 60) + \frac{1}{120} e^z \sqrt{\pi} (-8z^{9/2} - 92z^{7/2} - 210z^{5/2} + 105z^{3/2} + 210\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9yc.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{60} (-4z^4 + 44z^3 - 85z^2 - 78z + 60) + \frac{1}{120} e^{-z} \sqrt{\pi} (8z^{9/2} - 92z^{7/2} + 210z^{5/2} + 105z^{3/2} - 210\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9yd.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, 1; z\right) = -\frac{1}{30} e^z (2z^4 + 19z^3 + 27z^2 - 42z - 30)$$

07.25.03.a9ye.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{120} (-4z^3 - 28z^2 - 3z + 75) + \frac{e^z \sqrt{\pi} (-8z^4 - 60z^3 - 30z^2 + 165z + 45) \operatorname{erf}(\sqrt{z})}{240 \sqrt{z}}$$

07.25.03.a9yf.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{120} (4z^3 - 28z^2 + 3z + 75) + \frac{e^{-z} \sqrt{\pi} (-8z^4 + 60z^3 - 30z^2 - 165z + 45) \operatorname{erfi}(\sqrt{z})}{240 \sqrt{z}}$$

07.25.03.a9yg.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, 2; z\right) = -\frac{1}{30} e^z (2z^3 + 11z^2 - 6z - 30)$$

07.25.03.a9yh.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-4z^3 - 12z^2 + 31z + 12}{80z} + \frac{e^z \sqrt{\pi} (-8z^4 - 28z^3 + 54z^2 + 57z - 12) \operatorname{erf}(\sqrt{z})}{160 z^{3/2}}$$

07.25.03.a9yi.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-4z^3 + 12z^2 + 31z - 12}{80z} + \frac{e^{-z} \sqrt{\pi} (8z^4 - 28z^3 - 54z^2 + 57z + 12) \operatorname{erfi}(\sqrt{z})}{160 z^{3/2}}$$

07.25.03.a9yj.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, 3; z\right) = -\frac{1}{15} e^z (2z^2 + 3z - 15)$$

07.25.03.a9yk.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-4z^3 + 4z^2 + 17z - 15}{32z^2} + \frac{e^z \sqrt{\pi} (-8z^4 + 4z^3 + 42z^2 - 27z + 15) \operatorname{erf}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.a9yl.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{4z^3 + 4z^2 - 17z - 15}{32z^2} + \frac{e^{-z} \sqrt{\pi} (-8z^4 - 4z^3 + 42z^2 + 27z + 15) \operatorname{erfi}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.a9ym.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, 4; z\right) = -\frac{1}{5} e^z (2z - 5)$$

07.25.03.a9yn.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(4z^3 - 20z^2 + 45z - 90)}{64z^3} - \frac{7e^z \sqrt{\pi} (8z^4 - 36z^3 + 66z^2 - 105z + 90) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.a9yo.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (8z^4 + 36z^3 + 66z^2 + 105z + 90) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}} - \frac{7(4z^3 + 20z^2 + 45z + 90)}{64z^3}$$

07.25.03.a9yp.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, 5; z\right) = \frac{312}{5z^4} - \frac{4e^z(2z^4 - 13z^3 + 39z^2 - 78z + 78)}{5z^4}$$

07.25.03.a9yq.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{63(4z^3 - 36z^2 + 155z - 735)}{128z^4} - \frac{63e^z\sqrt{\pi}(8z^4 - 68z^3 + 270z^2 - 645z + 735)\operatorname{erf}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.a9yr.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63(4z^3 + 36z^2 + 155z + 735)}{128z^4} - \frac{63e^{-z}\sqrt{\pi}(8z^4 + 68z^3 + 270z^2 + 645z + 735)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.a9ys.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{5}{2}, 6; z\right) = \frac{24(13z + 60)}{z^5} - \frac{4e^z(2z^4 - 21z^3 + 102z^2 - 282z + 360)}{z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = -\frac{3}{2}$

07.25.03.a9yt.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{18}(4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36}e^z\sqrt{\pi}(8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9yu.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{18}(-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36}e^{-z}\sqrt{\pi}(8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9yv.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{12}(-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24}e^z\sqrt{\pi}(-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9yw.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{12}(-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24}e^{-z}\sqrt{\pi}(8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9yx.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{24}(4z^3 + 40z^2 + 87z + 24) + \frac{1}{48}e^z\sqrt{\pi}(8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.a9yy.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{24}(-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48}e^{-z}\sqrt{\pi}(8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9yz.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, 1; z\right) = \frac{1}{6}e^z(z^3 + 9z^2 + 18z + 6)$$

07.25.03.a9z0.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{48}(4z^2 + 28z + 33) + \frac{e^z \sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.a9z1.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{48}(4z^2 - 28z + 33) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.a9z2.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, 2; z\right) = \frac{1}{6} e^z (z^2 + 6z + 6)$$

07.25.03.a9z3.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{4z^2 + 16z + 3}{32z} + \frac{e^z \sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.a9z4.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-4z^2 + 16z - 3}{32z} + \frac{e^{-z} \sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.a9z5.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, 3; z\right) = \frac{1}{3} e^z (z + 3)$$

07.25.03.a9z6.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(4z^2 + 4z - 3)}{64z^2} + \frac{5e^z \sqrt{\pi} (8z^3 + 12z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.a9z7.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^2 - 4z - 3)}{64z^2} - \frac{5e^{-z} \sqrt{\pi} (8z^3 - 12z^2 - 6z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.a9z8.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, 4; z\right) = e^z$$

07.25.03.a9z9.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(4z^2 - 8z + 15)}{128z^3} + \frac{35e^z \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.a9za.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (8z^3 + 12z^2 + 18z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{35(4z^2 + 8z + 15)}{128 z^3}$$

07.25.03.a9zb.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, 5; z\right) = \frac{4e^z (z^3 - 3z^2 + 6z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.a9zc.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{315(4z^2 - 20z + 105)}{256z^4} + \frac{315e^z\sqrt{\pi}(8z^3 - 36z^2 + 90z - 105)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.a9zd.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315(4z^2 + 20z + 105)}{256z^4} - \frac{315e^{-z}\sqrt{\pi}(8z^3 + 36z^2 + 90z + 105)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.a9ze.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{3}{2}, 6; z\right) = \frac{120(z+4)}{z^5} + \frac{20e^z(z^3 - 6z^2 + 18z - 24)}{z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = -\frac{1}{2}$

07.25.03.a9zf.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{1}{2}, 1; z\right) = \frac{1}{4}e^z(-z^2 + 44z + 4) - \frac{105}{8}\sqrt{\pi}z^{3/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9zg.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{1}{2}, 1; -z\right) = \frac{1}{4}e^{-z}(-z^2 - 44z + 4) - \frac{105}{8}\sqrt{\pi}z^{3/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.a9zh.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{1}{2}, 2; z\right) = e^z(5z + 1) - \frac{21}{4}\sqrt{\pi}z^{3/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9zi.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{1}{2}, 2; -z\right) = e^{-z}(1 - 5z) - \frac{21}{4}\sqrt{\pi}z^{3/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.a9zj.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{1}{2}, 3; z\right) = e^z(3z + 1) - 3\sqrt{\pi}z^{3/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9zk.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{1}{2}, 3; -z\right) = e^{-z}(1 - 3z) - 3\sqrt{\pi}z^{3/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.a9zl.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{1}{2}, 4; z\right) = e^z(2z + 1) - 2\sqrt{\pi}z^{3/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.a9zm.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{1}{2}, 4; -z\right) = e^{-z}(1 - 2z) - 2\sqrt{\pi}z^{3/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.a9zn.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{1}{2}, 5; z\right) = -\frac{16}{11}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{3/2} + \frac{4e^z(4z^5 + 2z^4 + 3z^3 - 9z^2 + 18z - 18)}{11z^4} + \frac{72}{11z^4}$$

07.25.03.a9zo.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{1}{2}, 5; -z\right) = -\frac{16}{11}\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{3/2} - \frac{4e^{-z}(4z^5 - 2z^4 + 3z^3 + 9z^2 + 18z + 18)}{11z^4} + \frac{72}{11z^4}$$

07.25.03.a9zp.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{1}{2}, 6; z\right) = -\frac{160}{143} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{360(13z+44)}{143z^5} + \frac{20e^z(8z^6+4z^5+6z^4+15z^3-162z^2+558z-792)}{143z^5}$$

07.25.03.a9zq.01

$${}_2F_2\left(-\frac{3}{2}, 4; -\frac{1}{2}, 6; -z\right) = -\frac{160}{143} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} + \frac{360(13z-44)}{143z^5} - \frac{20e^{-z}(8z^6-4z^5+6z^4-15z^3-162z^2-558z-792)}{143z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = \frac{1}{2}$

07.25.03.a9zr.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{1}{2}, 1; z\right) = \frac{1}{16} e^z (16 - 103z) + \frac{105}{32} \sqrt{\pi} (2z^{3/2} - \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9zs.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{1}{2}, 1; -z\right) = \frac{1}{16} e^{-z} (103z + 16) + \frac{105}{32} \sqrt{\pi} (2z^{3/2} + \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9zt.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{1}{2}, 2; z\right) = \frac{1}{8} e^z (8 - 21z) + \frac{7}{16} \sqrt{\pi} (6z^{3/2} - 5\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9zu.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{1}{2}, 2; -z\right) = \frac{1}{8} e^{-z} (21z + 8) + \frac{7}{16} \sqrt{\pi} (6z^{3/2} + 5\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9zv.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{1}{2}, 3; z\right) = \frac{1}{2} e^z (2 - 3z) + \frac{1}{4} \sqrt{\pi} (6z^{3/2} - 7\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9zw.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{1}{2}, 3; -z\right) = \frac{1}{2} e^{-z} (3z + 2) + \frac{1}{4} \sqrt{\pi} (6z^{3/2} + 7\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9zx.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{1}{2}, 4; z\right) = e^z (1 - z) + \frac{1}{2} \sqrt{\pi} (2z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a9zy.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{1}{2}, 4; -z\right) = e^{-z} (z + 1) + \frac{1}{2} \sqrt{\pi} (2z^{3/2} + 3\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.a9zz.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{1}{2}, 5; z\right) = -\frac{4e^z(6z^5 - 8z^4 - z^3 + 3z^2 - 6z + 6)}{33z^4} + \frac{4}{33} \sqrt{\pi} (6z^{3/2} - 11\sqrt{z}) \operatorname{erfi}(\sqrt{z}) + \frac{8}{11z^4}$$

07.25.03.aa00.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{1}{2}, 5; -z\right) = \frac{4e^{-z}(6z^5 + 8z^4 - z^3 - 3z^2 - 6z - 6)}{33z^4} + \frac{4}{33} \sqrt{\pi} (6z^{3/2} + 11\sqrt{z}) \operatorname{erf}(\sqrt{z}) + \frac{8}{11z^4}$$

07.25.03.aa01.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{1}{2}, 6; z\right) = \frac{40(13z+36)}{143z^5} - \frac{20e^z(12z^6-20z^5-4z^4+3z^3+30z^2-138z+216)}{429z^5} + \frac{40}{429}\sqrt{\pi}(6z^{3/2}-13\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aa02.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{1}{2}, 6; -z\right) = \frac{40(13z-36)}{143z^5} + \frac{20e^{-z}(12z^6+20z^5-4z^4-3z^3+30z^2+138z+216)}{429z^5} + \frac{40}{429}\sqrt{\pi}(6z^{3/2}+13\sqrt{z})\operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = 1$

07.25.03.aa03.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, 1; z\right) = \frac{1}{8}e^{z/2}(35z^2-52z+8)I_0\left(\frac{z}{2}\right) + \frac{1}{8}e^{z/2}(18z-35z^2)I_1\left(\frac{z}{2}\right)$$

07.25.03.aa04.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, \frac{3}{2}; z\right) = \frac{1}{128}e^z(113-210z) + \frac{15\sqrt{\pi}(28z^2-28z+1)\operatorname{erfi}(\sqrt{z})}{256\sqrt{z}}$$

07.25.03.aa05.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, \frac{3}{2}; -z\right) = \frac{1}{128}e^{-z}(210z+113) + \frac{15\sqrt{\pi}(28z^2+28z+1)\operatorname{erf}(\sqrt{z})}{256\sqrt{z}}$$

07.25.03.aa06.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, 2; z\right) = \frac{1}{4}e^{z/2}(7z^2-14z+4)I_0\left(\frac{z}{2}\right) - \frac{7}{4}e^{z/2}(z^2-z)I_1\left(\frac{z}{2}\right)$$

07.25.03.aa07.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi}(280z^3-420z^2+30z-1)\operatorname{erfi}(\sqrt{z})}{1024z^{3/2}} - \frac{3e^z(140z^2-140z-1)}{512z}$$

07.25.03.aa08.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, \frac{5}{2}; -z\right) = \frac{3e^{-z}(140z^2+140z-1)}{512z} + \frac{3\sqrt{\pi}(280z^3+420z^2+30z+1)\operatorname{erf}(\sqrt{z})}{1024z^{3/2}}$$

07.25.03.aa09.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, 3; z\right) = \frac{1}{2}e^{z/2}(2z^2-5z+2)I_0\left(\frac{z}{2}\right) - \frac{1}{2}e^{z/2}z(2z-3)I_1\left(\frac{z}{2}\right)$$

07.25.03.aa0a.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi}(560z^4-1120z^3+120z^2-8z+3)\operatorname{erfi}(\sqrt{z})}{16384z^{5/2}} - \frac{15e^z(280z^3-420z^2-10z+3)}{8192z^2}$$

07.25.03.aa0b.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, \frac{7}{2}; -z\right) = \frac{15e^{-z}(280z^3+420z^2-10z-3)}{8192z^2} + \frac{15\sqrt{\pi}(560z^4+1120z^3+120z^2+8z+3)\operatorname{erf}(\sqrt{z})}{16384z^{5/2}}$$

07.25.03.aa0c.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, 4; z\right) = \frac{1}{3} e^{z/2} (2z^2 - 6z + 3) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z - 2) z I_1\left(\frac{z}{2}\right)$$

07.25.03.aa0d.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, \frac{9}{2}; z\right) = \frac{105 \sqrt{\pi} (224 z^5 - 560 z^4 + 80 z^3 - 8 z^2 + 6 z - 15) \operatorname{erfi}(\sqrt{z})}{65536 z^{7/2}} - \frac{105 e^z (112 z^4 - 224 z^3 - 16 z^2 + 16 z - 15)}{32768 z^3}$$

07.25.03.aa0e.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (112 z^4 + 224 z^3 - 16 z^2 - 16 z - 15)}{32768 z^3} + \frac{105 \sqrt{\pi} (224 z^5 + 560 z^4 + 80 z^3 + 8 z^2 + 6 z + 15) \operatorname{erf}(\sqrt{z})}{65536 z^{7/2}}$$

07.25.03.aa0f.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, 5; z\right) = \frac{4 e^{z/2} (140 z^4 - 490 z^3 + 285 z^2 + 12 z - 24) I_0\left(\frac{z}{2}\right)}{1155 z^2} - \frac{4 e^{z/2} (140 z^5 - 350 z^4 + 5 z^3 - 18 z^2 + 48 z - 96) I_1\left(\frac{z}{2}\right)}{1155 z^3}$$

07.25.03.aa0g.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (448 z^6 - 1344 z^5 + 240 z^4 - 32 z^3 + 36 z^2 - 180 z - 735) \operatorname{erfi}(\sqrt{z})}{524288 z^{9/2}} - \frac{315 e^z (224 z^5 - 560 z^4 - 48 z^3 - 40 z^2 + 310 z - 735)}{262144 z^4}$$

07.25.03.aa0h.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (224 z^5 + 560 z^4 - 48 z^3 + 40 z^2 + 310 z + 735)}{262144 z^4} + \frac{315 \sqrt{\pi} (448 z^6 + 1344 z^5 + 240 z^4 + 32 z^3 + 36 z^2 + 180 z - 735) \operatorname{erf}(\sqrt{z})}{524288 z^{9/2}}$$

07.25.03.aa0i.01

$${}_2F_2\left(-\frac{3}{2}, 4; 1, 6; z\right) = \frac{8 e^{z/2} (140 z^5 - 560 z^4 + 365 z^3 + 18 z^2 + 36 z - 384) I_0\left(\frac{z}{2}\right)}{3003 z^3} - \frac{8 e^{z/2} (140 z^6 - 420 z^5 + 15 z^4 - 37 z^3 + 24 z^2 + 144 z - 1536) I_1\left(\frac{z}{2}\right)}{3003 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = \frac{3}{2}$

07.25.03.aa0j.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{3}{2}, 2; z\right) = \frac{\sqrt{\pi} (84 z^2 - 140 z + 15) \operatorname{erfi}(\sqrt{z})}{128 \sqrt{z}} - \frac{7}{64} e^z (6z - 7)$$

07.25.03.aa0k.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{3}{2}, 2; -z\right) = \frac{7}{64} e^{-z} (6z + 7) + \frac{\sqrt{\pi} (84z^2 + 140z + 15) \operatorname{erf}(\sqrt{z})}{128 \sqrt{z}}$$

07.25.03.aa0l.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{3}{2}, 3; z\right) = \frac{1}{16} e^z (11 - 6z) + \frac{\sqrt{\pi} (12z^2 - 28z + 5) \operatorname{erfi}(\sqrt{z})}{32 \sqrt{z}}$$

07.25.03.aa0m.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{3}{2}, 3; -z\right) = \frac{1}{16} e^{-z} (6z + 11) + \frac{\sqrt{\pi} (12z^2 + 28z + 5) \operatorname{erf}(\sqrt{z})}{32 \sqrt{z}}$$

07.25.03.aa0n.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{3}{2}, 4; z\right) = \frac{1}{8} e^z (5 - 2z) + \frac{\sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.aa0o.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{3}{2}, 4; -z\right) = \frac{1}{8} e^{-z} (2z + 5) + \frac{\sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.aa0p.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{3}{2}, 5; z\right) = \frac{e^z (-42z^5 + 133z^4 - 4z^3 + 12z^2 - 24z + 24)}{231z^4} + \frac{\sqrt{\pi} (84z^2 - 308z + 99) \operatorname{erfi}(\sqrt{z})}{462 \sqrt{z}} - \frac{8}{77z^4}$$

07.25.03.aa0q.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{3}{2}, 5; -z\right) = \frac{e^{-z} (42z^5 + 133z^4 + 4z^3 + 12z^2 + 24z + 24)}{231z^4} + \frac{\sqrt{\pi} (84z^2 + 308z + 99) \operatorname{erf}(\sqrt{z})}{462 \sqrt{z}} - \frac{8}{77z^4}$$

07.25.03.aa0r.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{3}{2}, 6; z\right) = -\frac{40(13z + 28)}{1001z^5} - \frac{10e^z(42z^6 - 161z^5 + 12z^4 - 22z^3 - 12z^2 + 180z - 336)}{3003z^5} + \frac{5\sqrt{\pi}(84z^2 - 364z + 143)\operatorname{erfi}(\sqrt{z})}{3003\sqrt{z}}$$

07.25.03.aa0s.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{3}{2}, 6; -z\right) = -\frac{40(13z - 28)}{1001z^5} + \frac{10e^{-z}(42z^6 + 161z^5 + 12z^4 + 22z^3 - 12z^2 - 180z - 336)}{3003z^5} + \frac{5\sqrt{\pi}(84z^2 + 364z + 143)\operatorname{erf}(\sqrt{z})}{3003\sqrt{z}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = 2$

07.25.03.aa0t.01

$${}_2F_2\left(-\frac{3}{2}, 4; 2, 2; z\right) = \frac{1}{60} e^{z/2} (42z^2 - 119z + 60) I_0\left(\frac{z}{2}\right) + \frac{1}{60} e^{z/2} (-42z^2 + 77z - 4) I_1\left(\frac{z}{2}\right)$$

07.25.03.aa0u.01

$${}_2F_2\left(-\frac{3}{2}, 4; 2, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi}(56z^3 - 140z^2 + 30z + 1)\operatorname{erfi}(\sqrt{z})}{512z^{3/2}} - \frac{3e^z(28z^2 - 56z + 1)}{256z}$$

07.25.03.aa0v.01

$${}_2F_2\left(-\frac{3}{2}, 4; 2, \frac{5}{2}; -z\right) = \frac{3e^{-z}(28z^2 + 56z + 1)}{256z} + \frac{3\sqrt{\pi}(56z^3 + 140z^2 + 30z - 1)\operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.aa0w.01

$${}_2F_2\left(-\frac{3}{2}, 4; 2, 3; z\right) = \frac{1}{15}e^{z/2}(6z^2 - 22z + 15)I_0\left(\frac{z}{2}\right) - \frac{2}{15}e^{z/2}(3z^2 - 8z + 1)I_1\left(\frac{z}{2}\right)$$

07.25.03.aa0x.01

$${}_2F_2\left(-\frac{3}{2}, 4; 2, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi}(336z^4 - 1120z^3 + 360z^2 + 24z - 3)\operatorname{erfi}(\sqrt{z})}{8192z^{5/2}} - \frac{5e^z(168z^3 - 476z^2 + 26z - 3)}{4096z^2}$$

07.25.03.aa0y.01

$${}_2F_2\left(-\frac{3}{2}, 4; 2, \frac{7}{2}; -z\right) = \frac{5e^{-z}(168z^3 + 476z^2 + 26z + 3)}{4096z^2} + \frac{5\sqrt{\pi}(336z^4 + 1120z^3 + 360z^2 - 24z - 3)\operatorname{erf}(\sqrt{z})}{8192z^{5/2}}$$

07.25.03.aa0z.01

$${}_2F_2\left(-\frac{3}{2}, 4; 2, 4; z\right) = \frac{1}{15}e^{z/2}(4z^2 - 18z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}(-4z^2 + 14z - 3)I_1\left(\frac{z}{2}\right)$$

07.25.03.aa10.01

$${}_2F_2\left(-\frac{3}{2}, 4; 2, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(672z^5 - 2800z^4 + 1200z^3 + 120z^2 - 30z + 45)\operatorname{erfi}(\sqrt{z})}{32768z^{7/2}} - \frac{7e^z(336z^4 - 1232z^3 + 152z^2 - 60z + 45)}{16384z^3}$$

07.25.03.aa11.01

$${}_2F_2\left(-\frac{3}{2}, 4; 2, \frac{9}{2}; -z\right) = \frac{7e^{-z}(336z^4 + 1232z^3 + 152z^2 + 60z + 45)}{16384z^3} + \frac{7\sqrt{\pi}(672z^5 + 2800z^4 + 1200z^3 - 120z^2 - 30z - 45)\operatorname{erf}(\sqrt{z})}{32768z^{7/2}}$$

07.25.03.aa12.01

$${}_2F_2\left(-\frac{3}{2}, 4; 2, 5; z\right) = \frac{8e^{z/2}(84z^4 - 448z^3 + 435z^2 - 6z + 12)I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{8e^{z/2}(84z^5 - 364z^4 + 113z^3 + 9z^2 - 24z + 48)I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.aa13.01

$${}_2F_2\left(-\frac{3}{2}, 4; 2, \frac{11}{2}; z\right) = \frac{63\sqrt{\pi}(448z^6 - 2240z^5 + 1200z^4 + 160z^3 - 60z^2 + 180z + 525)\operatorname{erfi}(\sqrt{z})}{262144z^{9/2}} - \frac{63e^z(224z^5 - 1008z^4 + 208z^3 - 40z^2 - 170z + 525)}{131072z^4}$$

07.25.03.aa14.01

$${}_2F_2\left(-\frac{3}{2}, 4; 2, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (224 z^5 + 1008 z^4 + 208 z^3 + 40 z^2 - 170 z - 525)}{131\,072 z^4} + \frac{63 \sqrt{\pi} (448 z^6 + 2240 z^5 + 1200 z^4 - 160 z^3 - 60 z^2 - 180 z + 525) \operatorname{erf}(\sqrt{z})}{262\,144 z^{9/2}}$$

07.25.03.aa15.01

$${}_2F_2\left(-\frac{3}{2}, 4; 2, 6; z\right) = \frac{8 e^{z/2} (168 z^5 - 1036 z^4 + 1140 z^3 - 33 z^2 + 12 z + 288) I_0\left(\frac{z}{2}\right)}{9009 z^3} - \frac{8 e^{z/2} (168 z^6 - 868 z^5 + 356 z^4 + 57 z^3 - 96 z^2 + 48 z + 1152) I_1\left(\frac{z}{2}\right)}{9009 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = \frac{5}{2}$

07.25.03.aa16.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{5}{2}, 3; z\right) = \frac{3 \sqrt{\pi} (8 z^3 - 28 z^2 + 10 z + 1) \operatorname{erfi}(\sqrt{z})}{128 z^{3/2}} - \frac{3 e^z (4 z^2 - 12 z + 1)}{64 z}$$

07.25.03.aa17.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{5}{2}, 3; -z\right) = \frac{3 e^{-z} (4 z^2 + 12 z + 1)}{64 z} + \frac{3 \sqrt{\pi} (8 z^3 + 28 z^2 + 10 z - 1) \operatorname{erf}(\sqrt{z})}{128 z^{3/2}}$$

07.25.03.aa18.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{5}{2}, 4; z\right) = \frac{e^z (-4 z^2 + 16 z - 3)}{32 z} + \frac{\sqrt{\pi} (8 z^3 - 36 z^2 + 18 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.aa19.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{5}{2}, 4; -z\right) = \frac{e^{-z} (4 z^2 + 16 z + 3)}{32 z} + \frac{\sqrt{\pi} (8 z^3 + 36 z^2 + 18 z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.aa1a.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{5}{2}, 5; z\right) = \frac{e^z (-140 z^5 + 700 z^4 - 215 z^3 - 48 z^2 + 96 z - 96)}{1540 z^4} + \frac{\sqrt{\pi} (280 z^3 - 1540 z^2 + 990 z + 231) \operatorname{erfi}(\sqrt{z})}{3080 z^{3/2}} + \frac{24}{385 z^4}$$

07.25.03.aa1b.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{5}{2}, 5; -z\right) = \frac{e^{-z} (140 z^5 + 700 z^4 + 215 z^3 - 48 z^2 - 96 z - 96)}{1540 z^4} + \frac{\sqrt{\pi} (280 z^3 + 1540 z^2 + 990 z - 231) \operatorname{erf}(\sqrt{z})}{3080 z^{3/2}} + \frac{24}{385 z^4}$$

07.25.03.aa1c.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{5}{2}, 6; z\right) = \frac{24(13z+20)}{1001z^5} + \frac{e^z(-140z^6+840z^5-365z^4-152z^3+144z^2+336z-960)}{2002z^5} + \frac{\sqrt{\pi}(280z^3-1820z^2+1430z+429)\operatorname{erfi}(\sqrt{z})}{4004z^{3/2}}$$

07.25.03.aa1d.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{5}{2}, 6; -z\right) = \frac{24(13z-20)}{1001z^5} + \frac{e^{-z}(140z^6+840z^5+365z^4-152z^3-144z^2+336z+960)}{2002z^5} + \frac{\sqrt{\pi}(280z^3+1820z^2+1430z-429)\operatorname{erf}(\sqrt{z})}{4004z^{3/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = 3$

07.25.03.aa1e.01

$${}_2F_2\left(-\frac{3}{2}, 4; 3, 3; z\right) = \frac{2}{105} e^{z/2}(12z^2-58z+53)I_0\left(\frac{z}{2}\right) - \frac{2e^{z/2}(12z^3-46z^2+13z+2)I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.aa1f.01

$${}_2F_2\left(-\frac{3}{2}, 4; 3, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi}(48z^4-224z^3+120z^2+24z+3)\operatorname{erfi}(\sqrt{z})}{2048z^{5/2}} - \frac{5e^z(24z^3-100z^2+22z+3)}{1024z^2}$$

07.25.03.aa1g.01

$${}_2F_2\left(-\frac{3}{2}, 4; 3, \frac{7}{2}; -z\right) = \frac{5e^{-z}(24z^3+100z^2+22z-3)}{1024z^2} + \frac{5\sqrt{\pi}(48z^4+224z^3+120z^2-24z+3)\operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.aa1h.01

$${}_2F_2\left(-\frac{3}{2}, 4; 3, 4; z\right) = \frac{4}{105} e^{z/2}(4z^2-24z+27)I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(4z^3-20z^2+9z+3)I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.aa1i.01

$${}_2F_2\left(-\frac{3}{2}, 4; 3, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(96z^5-560z^4+400z^3+120z^2+30z-15)\operatorname{erfi}(\sqrt{z})}{8192z^{7/2}} - \frac{7e^z(48z^4-256z^3+96z^2+40z-15)}{4096z^3}$$

07.25.03.aa1j.01

$${}_2F_2\left(-\frac{3}{2}, 4; 3, \frac{9}{2}; -z\right) = \frac{7e^{-z}(48z^4+256z^3+96z^2-40z-15)}{4096z^3} + \frac{7\sqrt{\pi}(96z^5+560z^4+400z^3-120z^2+30z+15)\operatorname{erf}(\sqrt{z})}{8192z^{7/2}}$$

07.25.03.aa1k.01

$${}_2F_2\left(-\frac{3}{2}, 4; 3, 5; z\right) = \frac{16e^{z/2}(24z^4-172z^3+228z^2+3z-6)I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{16e^{z/2}(24z^5-148z^4+92z^3+45z^2+12z-24)I_1\left(\frac{z}{2}\right)}{3465z^3}$$

$$\begin{aligned}
 & \text{07.25.03.aa1l.01} \\
 {}_2F_2\left(-\frac{3}{2}, 4; 3, \frac{11}{2}; z\right) = & \frac{63 \sqrt{\pi} (64 z^6 - 448 z^5 + 400 z^4 + 160 z^3 + 60 z^2 - 60 z - 105) \operatorname{erfi}(\sqrt{z})}{65\,536 z^{9/2}} - \frac{63 e^z (32 z^5 - 208 z^4 + 112 z^3 + 72 z^2 + 10 z - 105)}{32\,768 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa1m.01} \\
 {}_2F_2\left(-\frac{3}{2}, 4; 3, \frac{11}{2}; -z\right) = & \frac{63 e^{-z} (32 z^5 + 208 z^4 + 112 z^3 - 72 z^2 + 10 z + 105)}{32\,768 z^4} + \frac{63 \sqrt{\pi} (64 z^6 + 448 z^5 + 400 z^4 - 160 z^3 + 60 z^2 + 60 z - 105) \operatorname{erf}(\sqrt{z})}{65\,536 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa1n.01} \\
 {}_2F_2\left(-\frac{3}{2}, 4; 3, 6; z\right) = & \frac{32 e^{z/2} (24 z^5 - 200 z^4 + 304 z^3 + 12 z^2 - 15 z - 48) I_0\left(\frac{z}{2}\right)}{9009 z^3} - \frac{64 e^{z/2} (12 z^6 - 88 z^5 + 70 z^4 + 44 z^3 + 21 z^2 - 30 z - 96) I_1\left(\frac{z}{2}\right)}{9009 z^4}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = \frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.aa1o.01} \\
 {}_2F_2\left(-\frac{3}{2}, 4; \frac{7}{2}, 4; z\right) = & \frac{5 \sqrt{\pi} (16 z^4 - 96 z^3 + 72 z^2 + 24 z + 9) \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}} - \frac{5 e^z (8 z^3 - 44 z^2 + 18 z + 9)}{512 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa1p.01} \\
 {}_2F_2\left(-\frac{3}{2}, 4; \frac{7}{2}, 4; -z\right) = & \frac{5 e^{-z} (8 z^3 + 44 z^2 + 18 z - 9)}{512 z^2} + \frac{5 \sqrt{\pi} (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa1q.01} \\
 {}_2F_2\left(-\frac{3}{2}, 4; \frac{7}{2}, 5; z\right) = & \frac{e^z (-840 z^5 + 5740 z^4 - 3490 z^3 - 2697 z^2 - 1536 z + 1536)}{14\,784 z^4} + \\
 & \frac{\sqrt{\pi} (1680 z^4 - 12\,320 z^3 + 11\,880 z^2 + 5544 z + 3465) \operatorname{erfi}(\sqrt{z})}{29\,568 z^{5/2}} - \frac{8}{77 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa1r.01} \\
 {}_2F_2\left(-\frac{3}{2}, 4; \frac{7}{2}, 5; -z\right) = & \frac{e^{-z} (840 z^5 + 5740 z^4 + 3490 z^3 - 2697 z^2 + 1536 z + 1536)}{14\,784 z^4} + \\
 & \frac{\sqrt{\pi} (1680 z^4 + 12\,320 z^3 + 11\,880 z^2 - 5544 z + 3465) \operatorname{erf}(\sqrt{z})}{29\,568 z^{5/2}} - \frac{8}{77 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa1s.01} \\
 {}_2F_2\left(-\frac{3}{2}, 4; \frac{7}{2}, 6; z\right) = & -\frac{40 (13 z + 12)}{1001 z^5} - \frac{5 e^z (840 z^6 - 6860 z^5 + 5570 z^4 + 5553 z^3 + 5376 z^2 - 768 z - 9216)}{96\,096 z^5} + \\
 & \frac{5 \sqrt{\pi} (1680 z^4 - 14\,560 z^3 + 17\,160 z^2 + 10\,296 z + 9009) \operatorname{erfi}(\sqrt{z})}{192\,192 z^{5/2}}
 \end{aligned}$$

07.25.03.aa1t.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{7}{2}, 6; -z\right) = -\frac{40(13z-12)}{1001z^5} + \frac{5e^{-z}(840z^6 + 6860z^5 + 5570z^4 - 5553z^3 + 5376z^2 + 768z - 9216)}{96096z^5} + \frac{5\sqrt{\pi}(1680z^4 + 14560z^3 + 17160z^2 - 10296z + 9009)\operatorname{erf}(\sqrt{z})}{192192z^{5/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = 4$

07.25.03.aa1u.01

$${}_2F_2\left(-\frac{3}{2}, 4; 4, 4; z\right) = \frac{4e^{z/2}(8z^3 - 60z^2 + 84z + 3)I_0\left(\frac{z}{2}\right)}{315z} - \frac{4e^{z/2}(8z^4 - 52z^3 + 36z^2 + 21z + 12)I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.aa1v.01

$${}_2F_2\left(-\frac{3}{2}, 4; 4, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45)\operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7e^z(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.aa1w.01

$${}_2F_2\left(-\frac{3}{2}, 4; 4, \frac{9}{2}; -z\right) = \frac{7e^{-z}(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7\sqrt{\pi}(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)\operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.aa1x.01

$${}_2F_2\left(-\frac{3}{2}, 4; 4, 5; z\right) = \frac{32e^{z/2}(8z^4 - 72z^3 + 120z^2 + 12z + 9)I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{128e^{z/2}(2z^5 - 16z^4 + 15z^3 + 12z^2 + 12z + 9)I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.aa1y.01

$${}_2F_2\left(-\frac{3}{2}, 4; 4, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi}(64z^6 - 576z^5 + 720z^4 + 480z^3 + 540z^2 + 540z + 315)\operatorname{erfi}(\sqrt{z})}{32768z^{9/2}} - \frac{21e^z(32z^5 - 272z^4 + 240z^3 + 264z^2 + 330z + 315)}{16384z^4}$$

07.25.03.aa1z.01

$${}_2F_2\left(-\frac{3}{2}, 4; 4, \frac{11}{2}; -z\right) = \frac{21e^{-z}(32z^5 + 272z^4 + 240z^3 - 264z^2 + 330z - 315)}{16384z^4} + \frac{21\sqrt{\pi}(64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)\operatorname{erf}(\sqrt{z})}{32768z^{9/2}}$$

07.25.03.aa20.01

$${}_2F_2\left(-\frac{3}{2}, 4; 4, 6; z\right) = \frac{32e^{z/2}(16z^5 - 168z^4 + 324z^3 + 60z^2 + 81z + 72)I_0\left(\frac{z}{2}\right)}{9009z^3} - \frac{32e^{z/2}(16z^6 - 152z^5 + 180z^4 + 180z^3 + 249z^2 + 324z + 288)I_1\left(\frac{z}{2}\right)}{9009z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = \frac{9}{2}$

07.25.03.aa21.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{9}{2}, 5; z\right) = \frac{e^z (-336 z^5 + 2912 z^4 - 2672 z^3 - 3072 z^2 - 4251 z - 6144)}{8448 z^4} + \frac{\sqrt{\pi} (672 z^5 - 6160 z^4 + 7920 z^3 + 5544 z^2 + 6930 z + 10395) \operatorname{erfi}(\sqrt{z})}{16896 z^{7/2}} + \frac{8}{11 z^4}$$

07.25.03.aa22.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{9}{2}, 5; -z\right) = \frac{e^{-z} (336 z^5 + 2912 z^4 + 2672 z^3 - 3072 z^2 + 4251 z - 6144)}{8448 z^4} + \frac{\sqrt{\pi} (672 z^5 + 6160 z^4 + 7920 z^3 - 5544 z^2 + 6930 z - 10395) \operatorname{erf}(\sqrt{z})}{16896 z^{7/2}} + \frac{8}{11 z^4}$$

07.25.03.aa23.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{9}{2}, 6; z\right) = \frac{40(13z+4)}{143 z^5} - \frac{5 e^z (336 z^6 - 3472 z^5 + 4152 z^4 + 5908 z^3 + 11253 z^2 + 27648 z + 12288)}{54912 z^5} + \frac{5 \sqrt{\pi} (672 z^5 - 7280 z^4 + 11440 z^3 + 10296 z^2 + 18018 z + 45045) \operatorname{erfi}(\sqrt{z})}{109824 z^{7/2}}$$

07.25.03.aa24.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{9}{2}, 6; -z\right) = \frac{40(13z-4)}{143 z^5} + \frac{5 e^{-z} (336 z^6 + 3472 z^5 + 4152 z^4 - 5908 z^3 + 11253 z^2 - 27648 z + 12288)}{54912 z^5} + \frac{5 \sqrt{\pi} (672 z^5 + 7280 z^4 + 11440 z^3 - 10296 z^2 + 18018 z - 45045) \operatorname{erf}(\sqrt{z})}{109824 z^{7/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = 5$

07.25.03.aa25.01

$${}_2F_2\left(-\frac{3}{2}, 4; 5, 5; z\right) = \frac{128 e^{z/2} (1680 z^6 - 18200 z^5 + 36420 z^4 + 8196 z^3 + 14793 z^2 + 41580 z - 83160) I_0\left(\frac{z}{2}\right)}{4002075 z^4} - \frac{128 e^{z/2} (1680 z^5 - 16520 z^4 + 20740 z^3 + 22356 z^2 + 36249 z + 79962) I_1\left(\frac{z}{2}\right)}{4002075 z^3} + \frac{1024}{385 z^4}$$

07.25.03.aa26.01

$${}_2F_2\left(-\frac{3}{2}, 4; 5, \frac{11}{2}; z\right) = -\frac{3 e^z (224 z^5 - 2352 z^4 + 2896 z^3 + 4248 z^2 + 8598 z + 24897)}{22528 z^4} + \frac{3 \sqrt{\pi} (448 z^6 - 4928 z^5 + 7920 z^4 + 7392 z^3 + 13860 z^2 + 41580 z - 24255) \operatorname{erfi}(\sqrt{z})}{45056 z^{9/2}} + \frac{72}{11 z^4}$$

07.25.03.aa27.01

$${}_2F_2\left(-\frac{3}{2}, 4; 5, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (224 z^5 + 2352 z^4 + 2896 z^3 - 4248 z^2 + 8598 z - 24897)}{22528 z^4} + \frac{3 \sqrt{\pi} (448 z^6 + 4928 z^5 + 7920 z^4 - 7392 z^3 + 13860 z^2 - 41580 z - 24255) \operatorname{erf}(\sqrt{z})}{45056 z^{9/2}} + \frac{72}{11 z^4}$$

07.25.03.aa28.01

$${}_2F_2\left(-\frac{3}{2}, 4; 5, 6; z\right) = \frac{256 e^{z/2} (1680 z^6 - 21280 z^5 + 49620 z^4 + 18624 z^3 + 49377 z^2 + 228690 z - 540540) I_0\left(\frac{z}{2}\right)}{10405395 z^4} - \frac{256 e^{z/2} (1680 z^6 - 19600 z^5 + 30860 z^4 + 41364 z^3 + 91821 z^2 + 332643 z - 166320) I_1\left(\frac{z}{2}\right)}{10405395 z^4} + \frac{1024}{77 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = \frac{11}{2}$

07.25.03.aa29.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{11}{2}, 6; z\right) = \frac{360 (13 z - 4)}{143 z^5} - \frac{15 e^{-z} (224 z^6 - 2800 z^5 + 4432 z^4 + 7960 z^3 + 21750 z^2 + 102477 z - 98304)}{146432 z^5} + \frac{15 \sqrt{\pi} (448 z^6 - 5824 z^5 + 11440 z^4 + 13728 z^3 + 36036 z^2 + 180180 z - 315315) \operatorname{erfi}(\sqrt{z})}{292864 z^{9/2}}$$

07.25.03.aa2a.01

$${}_2F_2\left(-\frac{3}{2}, 4; \frac{11}{2}, 6; -z\right) = \frac{360 (13 z + 4)}{143 z^5} + \frac{15 e^{-z} (224 z^6 + 2800 z^5 + 4432 z^4 - 7960 z^3 + 21750 z^2 - 102477 z - 98304)}{146432 z^5} + \frac{15 \sqrt{\pi} (448 z^6 + 5824 z^5 + 11440 z^4 - 13728 z^3 + 36036 z^2 - 180180 z - 315315) \operatorname{erf}(\sqrt{z})}{292864 z^{9/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 4$, $b_1 = 6$

07.25.03.aa2b.01

$${}_2F_2\left(-\frac{3}{2}, 4; 6, 6; z\right) = \frac{5120 (13 z - 8)}{1001 z^5} + \frac{1}{27054027 z^5} - \frac{256 e^{z/2} (3360 z^7 - 49840 z^6 + 136160 z^5 + 80772 z^4 + 302334 z^3 + 2255709 z^2 - 9189180 z + 4324320) I_0\left(\frac{z}{2}\right)}{27054027 z^4} - \frac{256 e^{z/2} (3360 z^6 - 46480 z^5 + 91360 z^4 + 152252 z^3 + 464286 z^2 + 2785911 z - 6112284) I_1\left(\frac{z}{2}\right)}{27054027 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.aa2c.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \frac{1}{3781960875} \left(e^z (16384 z^{14} + 1064960 z^{13} + 26152960 z^{12} + 308305920 z^{11} + 1833845760 z^{10} + \right. \\
 & \quad \left. 5299338240 z^9 + 6528211200 z^8 + 2482099200 z^7 + 106142400 z^6 - 71668800 z^5 + \right. \\
 & \quad \left. 324097200 z^4 - 1104516000 z^3 + 2792191500 z^2 - 4625869500 z + 3781960875) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa2d.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{343814625} \\
 & \left(e^z (8192 z^{13} + 471040 z^{12} + 10014720 z^{11} + 99072000 z^{10} + 471098880 z^9 + 1000823040 z^8 + 762048000 z^7 + \right. \\
 & \quad \left. 97977600 z^6 + 4082400 z^5 - 33793200 z^4 + 111358800 z^3 - 273861000 z^2 + 437582250 z - 343814625) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa2e.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{38201625} \left(e^z (4096 z^{12} + 204800 z^{11} + 3676160 z^{10} + 29317120 z^9 + 103622400 z^8 + 137733120 z^7 + \right. \\
 & \quad \left. 36691200 z^6 - 6048000 z^5 + 5065200 z^4 - 14364000 z^3 + 34133400 z^2 - 51597000 z + 38201625) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa2f.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \\
 & -\frac{1}{5457375} \left(e^z (2048 z^{11} + 87040 z^{10} + 1272320 z^9 + 7660800 z^8 + 17337600 z^7 + 8184960 z^6 - 2116800 z^5 + \right. \\
 & \quad \left. 151200 z^4 + 2457000 z^3 - 5953500 z^2 + 8136450 z - 5457375) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa2g.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{1091475} \left(e^z (1024 z^{10} + 35840 z^9 + 403200 z^8 + 1612800 z^7 + 1411200 z^6 - 846720 z^5 + 1058400 z^4 - \right. \\
 & \quad \left. 1512000 z^3 + 1984500 z^2 - 1984500 z + 1091475) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa2h.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \\
 & -\frac{1}{363825} \left(e^z (512 z^9 + 14080 z^8 + 110080 z^7 + 200960 z^6 - 198720 z^5 + 272160 z^4 - 151200 z^3 - \right. \\
 & \quad \left. 529200 z^2 + 1256850 z - 363825) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa2i.01} \\
 & {}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \\
 & \frac{1}{363825} e^z (256 z^8 + 5120 z^7 + 21760 z^6 - 19200 z^5 - 12960 z^4 + 181440 z^3 - 529200 z^2 + 529200 z + 363825)
 \end{aligned}$$

07.25.03.aa2j.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{363825} e^{z/2} (128 z^8 + 2176 z^7 + 6400 z^6 - 13120 z^5 + 16800 z^4 + 42000 z^3 - 235200 z^2 + 264600 z + 363825) I_0\left(\frac{z}{2}\right) + \frac{8 e^{z/2} (16 z^8 + 256 z^7 + 552 z^6 - 2080 z^5 + 4250 z^4 - 25725 z^2 + 51450 z) I_1\left(\frac{z}{2}\right)}{363825}$$

07.25.03.aa2k.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 1600 z^6 + 480 z^5 - 12240 z^4 + 48600 z^3 - 79380 z^2 - 66150 z + 363825)}{363825}$$

07.25.03.aa2l.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (128 z^7 + 1216 z^6 - 1600 z^5 - 5040 z^4 + 42000 z^3 - 106680 z^2 + 7560 z + 363825) I_0\left(\frac{z}{2}\right) + e^{z/2} (128 z^7 + 1088 z^6 - 2624 z^5 - 2000 z^4 + 42000 z^3 - 145320 z^2 + 162120 z + 135135) I_1\left(\frac{z}{2}\right)}{363825}$$

07.25.03.aa2m.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (64 z^6 + 320 z^5 - 1840 z^4 + 4000 z^3 + 6300 z^2 - 61740 z + 121275)}{121275}$$

07.25.03.aa2n.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 + 128 z^5 - 1680 z^4 + 6720 z^3 - 8040 z^2 - 32400 z + 105435) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 + 64 z^6 - 1712 z^5 + 8400 z^4 - 17160 z^3 - 9960 z^2 + 96525 z - 57915) I_1\left(\frac{z}{2}\right)}{363825 z}$$

07.25.03.aa2o.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (32 z^5 - 80 z^4 - 400 z^3 + 4200 z^2 - 15750 z + 24255)}{24255}$$

07.25.03.aa2p.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^6 - 352 z^5 + 560 z^4 + 4000 z^3 - 27240 z^2 + 63030 z - 36465) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 - 416 z^6 + 1008 z^5 + 2720 z^4 - 28840 z^3 + 90090 z^2 - 130845 z + 145860) I_1\left(\frac{z}{2}\right)}{121275 z^2}$$

07.25.03.aa2q.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (16 z^4 - 160 z^3 + 840 z^2 - 2520 z + 3465)}{3465}$$

07.25.03.aa2r.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 - 416 z^5 + 2960 z^4 - 13920 z^3 + 46050 z^2 - 112710 z + 188955) I_0\left(\frac{z}{2}\right) + 64 e^{z/2} (16 z^7 - 224 z^6 + 1712 z^5 - 8800 z^4 + 32955 z^3 - 96330 z^2 + 225420 z - 377910) I_1\left(\frac{z}{2}\right)}{121275 z^2}$$

07.25.03.aa2s.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (8z^7 - 140z^6 + 1330z^5 - 8575z^4 + 40320z^3 - 141120z^2 + 352800z - 529200)}{385z^4} + \frac{7560\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.aa2t.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-8z^7 - 140z^6 - 1330z^5 - 8575z^4 - 40320z^3 - 141120z^2 - 352800z - 529200)}{385z^4} + \frac{7560\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.aa2u.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, 6; z\right) = \frac{32e^{z/2} (32z^6 - 656z^5 + 7200z^4 - 52980z^3 + 277950z^2 - 1031985z + 2441880) I_0\left(\frac{z}{2}\right)}{24255z^3} + \frac{1}{24255z^4} 32e^{z/2} (32z^7 - 688z^6 + 7904z^5 - 61260z^4 + 343950z^3 - 1417035z^2 + 4127940z - 9767520) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{3}{2}, a_2 = \frac{9}{2}, b_1 = -\frac{9}{2}$

07.25.03.aa2v.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{31255875} (e^z (4096z^{12} + 208896z^{11} + 3858432z^{10} + 32173056z^9 + 122943744z^8 + 193052160z^7 + 91445760z^6 + 3265920z^5 + 3674160z^4 - 11385360z^3 + 27216000z^2 - 41674500z + 31255875))$$

07.25.03.aa2w.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{3472875} (e^z (2048z^{11} + 91136z^{10} + 1427968z^9 + 9660672z^8 + 27659520z^7 + 27377280z^6 + 4656960z^5 - 69520z^4 + 1489320z^3 - 3458700z^2 + 4961250z - 3472875))$$

07.25.03.aa2x.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{496125} (e^z (1024z^{10} + 38912z^9 + 499968z^8 + 2580480z^7 + 4798080z^6 + 1693440z^5 - 211680z^4 - 241920z^3 + 623700z^2 - 793800z + 496125))$$

07.25.03.aa2y.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{99225} (e^z (512z^9 + 16128z^8 + 161280z^7 + 564480z^6 + 423360z^5 - 211680z^4 + 211680z^3 - 226800z^2 + 198450z - 99225))$$

07.25.03.aa2z.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{33075} e^z (256 z^8 + 6400 z^7 + 45440 z^6 + 77760 z^5 - 60480 z^4 + 45360 z^3 + 37800 z^2 - 132300 z + 33075)$$

07.25.03.aa30.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{e^z (128 z^7 + 2368 z^6 + 9696 z^5 - 4752 z^4 - 13608 z^3 + 56700 z^2 - 66150 z - 33075)}{33075}$$

07.25.03.aa31.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (-64 z^7 - 1024 z^6 - 3152 z^5 + 4080 z^4 + 840 z^3 - 23100 z^2 + 33075 z + 33075) I_0\left(\frac{z}{2}\right)}{33075} + \frac{e^{z/2} (-64 z^7 - 960 z^6 - 2224 z^5 + 5888 z^4 - 5400 z^3 - 14700 z^2 + 40425 z) I_1\left(\frac{z}{2}\right)}{33075}$$

07.25.03.aa32.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{e^z (64 z^6 + 768 z^5 + 624 z^4 - 5184 z^3 + 11340 z^2 - 33075)}{33075}$$

07.25.03.aa33.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (-64 z^6 - 608 z^5 + 240 z^4 + 3360 z^3 - 11760 z^2 + 5670 z + 33075) I_0\left(\frac{z}{2}\right)}{33075} + \frac{e^{z/2} (-64 z^6 - 544 z^5 + 752 z^4 + 2400 z^3 - 13440 z^2 + 18690 z + 10395) I_1\left(\frac{z}{2}\right)}{33075}$$

07.25.03.aa34.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{e^z (32 z^5 + 176 z^4 - 656 z^3 + 360 z^2 + 4410 z - 11025)}{11025}$$

07.25.03.aa35.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, 3; z\right) = -\frac{8 e^{z/2} (16 z^5 + 48 z^4 - 336 z^3 + 660 z^2 + 891 z - 4617) I_0\left(\frac{z}{2}\right)}{33075} - \frac{4 e^{z/2} (32 z^6 + 64 z^5 - 720 z^4 + 2040 z^3 - 582 z^2 - 7128 z + 3861) I_1\left(\frac{z}{2}\right)}{33075 z}$$

07.25.03.aa36.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{e^z (16 z^4 - 16 z^3 - 240 z^2 + 1260 z - 2205)}{2205}$$

07.25.03.aa37.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, 4; z\right) = -\frac{4 e^{z/2} (32 z^5 - 112 z^4 - 80 z^3 + 1812 z^2 - 4794 z + 2145) I_0\left(\frac{z}{2}\right)}{11025 z} - \frac{4 e^{z/2} (32 z^6 - 144 z^5 + 80 z^4 + 1628 z^3 - 6138 z^2 + 8151 z - 8580) I_1\left(\frac{z}{2}\right)}{11025 z^2}$$

07.25.03.aa38.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{1}{315} e^z (8 z^3 - 60 z^2 + 210 z - 315)$$

07.25.03.aa39.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, 5; z\right) = -\frac{32 e^{z/2} (16 z^5 - 160 z^4 + 828 z^3 - 2676 z^2 + 6045 z - 9945) I_0\left(\frac{z}{2}\right)}{11025 z^2} - \frac{32 e^{z/2} (16 z^6 - 176 z^5 + 1012 z^4 - 3792 z^3 + 10569 z^2 - 24180 z + 39780) I_1\left(\frac{z}{2}\right)}{11025 z^3}$$

07.25.03.aa3a.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (-4 z^6 + 56 z^5 - 413 z^4 + 2016 z^3 - 7056 z^2 + 17640 z - 26460)}{35 z^4} + \frac{378 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.aa3b.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-4 z^6 - 56 z^5 - 413 z^4 - 2016 z^3 - 7056 z^2 - 17640 z - 26460)}{35 z^4} + \frac{378 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.aa3c.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, 6; z\right) = -\frac{32 e^{z/2} (16 z^5 - 264 z^4 + 2268 z^3 - 12660 z^2 + 48195 z - 116280) I_0\left(\frac{z}{2}\right)}{2205 z^3} - \frac{32 e^{z/2} (16 z^6 - 280 z^5 + 2556 z^4 - 15372 z^3 + 65175 z^2 - 192780 z + 465120) I_1\left(\frac{z}{2}\right)}{2205 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.aa3d.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{385875} (e^z (1024 z^{10} + 39936 z^9 + 534272 z^8 + 2960384 z^7 + 6428800 z^6 + 4045440 z^5 + 305760 z^4 - 194880 z^3 + 452340 z^2 - 598500 z + 385875))$$

07.25.03.aa3e.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{55125} (e^z (512 z^9 + 17152 z^8 + 189952 z^7 + 815360 z^6 + 1176000 z^5 + 258720 z^4 + 23520 z^3 - 85680 z^2 + 97650 z - 55125))$$

07.25.03.aa3f.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{11025} e^z (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025)$$

07.25.03.aa3g.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{e^z (128 z^7 + 2880 z^6 + 18400 z^5 + 29680 z^4 - 15400 z^3 - 420 z^2 + 17850 z - 3675)}{3675}$$

07.25.03.aa3h.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{e^z (64 z^6 + 1088 z^5 + 4304 z^4 - 224 z^3 - 7140 z^2 + 10500 z + 3675)}{3675}$$

07.25.03.aa3i.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (32 z^6 + 480 z^5 + 1552 z^4 - 800 z^3 - 2590 z^2 + 5250 z + 3675) I_0\left(\frac{z}{2}\right)}{3675} + \frac{2 e^{z/2} (16 z^6 + 224 z^5 + 560 z^4 - 864 z^3 - 325 z^2 + 2450 z) I_1\left(\frac{z}{2}\right)}{3675}$$

07.25.03.aa3j.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z (32 z^5 + 368 z^4 + 496 z^3 - 1848 z^2 + 1050 z + 3675)}{3675}$$

07.25.03.aa3k.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (32 z^5 + 304 z^4 + 160 z^3 - 1540 z^2 + 1470 z + 3675) I_0\left(\frac{z}{2}\right)}{3675} + \frac{e^{z/2} (32 z^5 + 272 z^4 - 96 z^3 - 1340 z^2 + 2590 z + 945) I_1\left(\frac{z}{2}\right)}{3675}$$

07.25.03.aa3l.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (16 z^4 + 96 z^3 - 184 z^2 - 280 z + 1225)}{1225}$$

07.25.03.aa3m.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (16 z^4 + 64 z^3 - 220 z^2 - 24 z + 993) I_0\left(\frac{z}{2}\right)}{3675} + \frac{4 e^{z/2} (16 z^5 + 48 z^4 - 260 z^3 + 244 z^2 + 621 z - 297) I_1\left(\frac{z}{2}\right)}{3675 z}$$

07.25.03.aa3n.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{245} e^z (8 z^3 + 4 z^2 - 110 z + 245)$$

07.25.03.aa3o.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 - 24 z^3 - 124 z^2 + 452 z - 143) I_0\left(\frac{z}{2}\right)}{1225 z} + \frac{4 e^{z/2} (16 z^5 - 40 z^4 - 76 z^3 + 492 z^2 - 583 z + 572) I_1\left(\frac{z}{2}\right)}{1225 z^2}$$

07.25.03.aa3p.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{35} e^z (4 z^2 - 20 z + 35)$$

07.25.03.aa3q.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 - 56 z^3 + 184 z^2 - 364 z + 585) I_0\left(\frac{z}{2}\right)}{1225 z^2} + \frac{128 e^{z/2} (2 z^5 - 16 z^4 + 63 z^3 - 164 z^2 + 364 z - 585) I_1\left(\frac{z}{2}\right)}{1225 z^3}$$

07.25.03.aa3r.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (2 z^5 - 21 z^4 + 112 z^3 - 392 z^2 + 980 z - 1470)}{35 z^4} + \frac{189 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.aa3s.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{189\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}} - \frac{9e^{-z}(2z^5 + 21z^4 + 112z^3 + 392z^2 + 980z + 1470)}{35z^4}$$

07.25.03.aa3t.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, 6; z\right) = \frac{32e^{z/2}(8z^4 - 100z^3 + 628z^2 - 2475z + 6120)I_0\left(\frac{z}{2}\right) + 32e^{z/2}(8z^5 - 108z^4 + 740z^3 - 3277z^2 + 9900z - 24480)I_1\left(\frac{z}{2}\right)}{245z^3 + 245z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.aa3u.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{e^z(256z^8 + 7424z^7 + 68992z^6 + 235200z^5 + 235200z^4 + 11760z^3 + 17640z^2 - 16380z + 7875)}{7875}$$

07.25.03.aa3v.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{e^z(128z^7 + 3136z^6 + 23520z^5 + 58800z^4 + 29400z^3 - 8820z^2 + 4410z - 1575)}{1575}$$

07.25.03.aa3w.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{525} e^z(64z^6 + 1280z^5 + 7280z^4 + 11200z^3 - 2100z^2 - 3360z + 525)$$

07.25.03.aa3x.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{525} e^z(32z^5 + 496z^4 + 1904z^3 + 840z^2 - 2310z - 525)$$

07.25.03.aa3y.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{525} e^{z/2}(-16z^5 - 224z^4 - 764z^3 - 220z^2 + 1155z + 525)I_0\left(\frac{z}{2}\right) + \frac{1}{525} e^{z/2}(-16z^5 - 208z^4 - 564z^3 + 256z^2 + 775z)I_1\left(\frac{z}{2}\right)$$

07.25.03.aa3z.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{525} e^z(16z^4 + 176z^3 + 336z^2 - 420z - 525)$$

07.25.03.aa40.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{525} e^{z/2}(-16z^4 - 152z^3 - 220z^2 + 420z + 525)I_0\left(\frac{z}{2}\right) + \frac{1}{525} e^{z/2}(-16z^4 - 136z^3 - 92z^2 + 460z + 105)I_1\left(\frac{z}{2}\right)$$

07.25.03.aa41.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{1}{175} e^z(8z^3 + 52z^2 - 14z - 175)$$

07.25.03.aa42.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, 3; z\right) = -\frac{8}{525} e^{z/2} (4z^3 + 20z^2 - 18z - 69) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8z^4 + 32z^3 - 64z^2 - 66z + 27) I_1\left(\frac{z}{2}\right)}{525z}$$

07.25.03.aa43.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{1}{35} e^z (4z^2 + 8z - 35)$$

07.25.03.aa44.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, 4; z\right) = -\frac{4 e^{z/2} (8z^3 + 4z^2 - 56z + 11) I_0\left(\frac{z}{2}\right)}{175z} - \frac{4 e^{z/2} (8z^4 - 4z^3 - 48z^2 + 49z - 44) I_1\left(\frac{z}{2}\right)}{175z^2}$$

07.25.03.aa45.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{1}{5} e^z (2z - 5)$$

07.25.03.aa46.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, 5; z\right) = -\frac{32 e^{z/2} (4z^3 - 16z^2 + 25z - 39) I_0\left(\frac{z}{2}\right)}{175z^2} - \frac{32 e^{z/2} (4z^4 - 20z^3 + 47z^2 - 100z + 156) I_1\left(\frac{z}{2}\right)}{175z^3}$$

07.25.03.aa47.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1323 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16z^{9/2}} - \frac{9 e^z (8z^4 - 56z^3 + 196z^2 - 490z + 735)}{40z^4}$$

07.25.03.aa48.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1323 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16z^{9/2}} - \frac{9 e^{-z} (8z^4 + 56z^3 + 196z^2 + 490z + 735)}{40z^4}$$

07.25.03.aa49.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, 6; z\right) = -\frac{32 e^{z/2} (4z^3 - 34z^2 + 141z - 360) I_0\left(\frac{z}{2}\right)}{35z^3} - \frac{32 e^{z/2} (4z^4 - 38z^3 + 181z^2 - 564z + 1440) I_1\left(\frac{z}{2}\right)}{35z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.aa4a.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} e^z (64z^6 + 1344z^5 + 8400z^4 + 16800z^3 + 6300z^2 - 1260z + 315)$$

07.25.03.aa4b.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{105} e^z (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105)$$

07.25.03.aa4c.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (16z^4 + 224z^3 + 840z^2 + 840z + 105)$$

07.25.03.aa4d.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8z^4 + 104z^3 + 376z^2 + 420z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} (2z^4 + 24z^3 + 71z^2 + 44z) I_1\left(\frac{z}{2}\right)$$

$$07.25.03.aa4e.01$$

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (8z^3 + 84z^2 + 210z + 105)$$

$$07.25.03.aa4f.01$$

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (8z^3 + 76z^2 + 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 + 68z^2 + 116z + 15) I_1\left(\frac{z}{2}\right)$$

$$07.25.03.aa4g.01$$

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{35} e^z (4z^2 + 28z + 35)$$

$$07.25.03.aa4h.01$$

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 + 24z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4z^3 + 20z^2 + 9z - 3) I_1\left(\frac{z}{2}\right)}{105z}$$

$$07.25.03.aa4i.01$$

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (2z + 7)$$

$$07.25.03.aa4j.01$$

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (4z^2 + 10z - 1) I_0\left(\frac{z}{2}\right)}{35z} + \frac{4 e^{z/2} (4z^3 + 6z^2 - 5z + 4) I_1\left(\frac{z}{2}\right)}{35z^2}$$

$$07.25.03.aa4k.01$$

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = e^z$$

$$07.25.03.aa4l.01$$

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 - 2z + 3) I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{64 e^{z/2} (z^3 - 2z^2 + 4z - 6) I_1\left(\frac{z}{2}\right)}{35z^3}$$

$$07.25.03.aa4m.01$$

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (8z^3 - 28z^2 + 70z - 105)}{16z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

$$07.25.03.aa4n.01$$

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32z^{9/2}} - \frac{9 e^{-z} (8z^3 + 28z^2 + 70z + 105)}{16z^4}$$

$$07.25.03.aa4o.01$$

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^2 - 9z + 24) I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{32 e^{z/2} (2z^3 - 11z^2 + 36z - 96) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{1}{2}$

$$07.25.03.aa4p.01$$

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{512}{7} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{35} e^z (16z^4 + 240z^3 + 1040z^2 - 980z + 35)$$

07.25.03.aa4q.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{512}{7} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} + \frac{1}{35} e^{-z} (16z^4 - 240z^3 + 1040z^2 + 980z + 35)$$

07.25.03.aa4r.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{35} e^z (-8z^3 - 100z^2 + 910z + 35) - \frac{256}{7} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa4s.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{35} e^{-z} (8z^3 - 100z^2 - 910z + 35) - \frac{256}{7} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aa4t.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (-12z^3 - 2704z^2 + 1365z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-12z^3 + 2428z^2 + 211z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aa4u.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{35} e^z (-4z^2 + 280z + 35) - \frac{64}{7} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa4v.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{35} e^{-z} (-4z^2 - 280z + 35) - \frac{64}{7} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aa4w.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-1036z^2 + 654z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (1012z^2 + 154z + 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.aa4x.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{5} e^z (22z + 5) - \frac{32}{7} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa4y.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{5} e^{-z} (5 - 22z) - \frac{32}{7} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aa4z.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (1024z^3 + 214z^2 + 36z - 9) I_1\left(\frac{z}{2}\right)}{735z} - \frac{8}{735} e^{z/2} (512z^2 - 363z - 93) I_0\left(\frac{z}{2}\right)$$

07.25.03.aa50.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (20z + 7) - \frac{20}{7} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa51.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{7} e^{-z} (7 - 20z) - \frac{20}{7} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aa52.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (2048z^4 + 512z^3 + 198z^2 - 123z + 84) I_1\left(\frac{z}{2}\right)}{2205z^2} - \frac{4 e^{z/2} (2048z^3 - 1536z^2 - 582z + 21) I_0\left(\frac{z}{2}\right)}{2205z}$$

07.25.03.aa53.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = e^z (2z + 1) - 2 \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa54.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = e^{-z} (1 - 2z) - 2\sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aa55.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (2048 z^5 + 512 z^4 + 576 z^3 - 879 z^2 + 1596 z - 2268) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (2048 z^4 - 1536 z^3 - 960 z^2 + 399 z - 567) I_0\left(\frac{z}{2}\right)}{24255 z^3 - 24255 z^2}$$

07.25.03.aa56.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 e^{-z} (32 z^5 + 16 z^4 + 24 z^3 - 84 z^2 + 210 z - 315)}{64 z^4} - \frac{3\sqrt{\pi} (64 z^6 - 315) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.aa57.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{3 e^{-z} (32 z^5 - 16 z^4 + 24 z^3 + 84 z^2 + 210 z + 315)}{64 z^4} - \frac{3\sqrt{\pi} (64 z^6 - 315) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.aa58.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (4096 z^6 + 1024 z^5 + 1152 z^4 + 2400 z^3 - 19677 z^2 + 70308 z - 199584) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (4096 z^5 - 3072 z^4 - 1920 z^3 - 3360 z^2 + 17577 z - 49896) I_0\left(\frac{z}{2}\right)}{63063 z^4 - 63063 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{1}{2}$

07.25.03.aa59.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{35} e^z (4z^2 - 596z + 35) + \frac{64}{35} \sqrt{\pi} (10z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa5a.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{35} e^{-z} (4z^2 + 596z + 35) + \frac{64}{35} \sqrt{\pi} (10z^{3/2} + 3\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa5b.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (1286z^2 - 1470z + 105) I_0\left(\frac{z}{2}\right) - \frac{2}{105} e^{z/2} (637z^2 - 158z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aa5c.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{35} e^z (35 - 158z) + \frac{32}{35} \sqrt{\pi} \sqrt{z} (5z - 3) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa5d.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{35} e^{-z} (158z + 35) + \frac{32}{35} \sqrt{\pi} \sqrt{z} (5z + 3) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa5e.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (512z^2 - 762z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-512z^2 + 262z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.aa5f.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{7} e^z (7 - 16z) + \frac{8}{35} \sqrt{\pi} \sqrt{z} (10z - 9) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa5g.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{7} e^{-z} (16z + 7) + \frac{8}{35} \sqrt{\pi} \sqrt{z} (10z + 9) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa5h.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (2560 z^2 - 4608 z + 921) I_0\left(\frac{z}{2}\right)}{3675} - \frac{4 e^{z/2} (2560 z^3 - 2048 z^2 - 57 z + 9) I_1\left(\frac{z}{2}\right)}{3675 z}$$

07.25.03.aa5i.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (7 - 10z) + \frac{2}{7} \sqrt{\pi} \sqrt{z} (5z - 6) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa5j.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{7} e^{-z} (10z + 7) + \frac{2}{7} \sqrt{\pi} \sqrt{z} (5z + 6) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa5k.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (5120 z^3 - 10752 z^2 + 2784 z - 15) I_0\left(\frac{z}{2}\right)}{11025 z} - \frac{4 e^{z/2} (5120 z^4 - 5632 z^3 - 288 z^2 + 111 z - 60) I_1\left(\frac{z}{2}\right)}{11025 z^2}$$

07.25.03.aa5l.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = e^z (1 - z) + \frac{1}{2} \sqrt{\pi} \sqrt{z} (2z - 3) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa5m.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = e^{-z} (z + 1) + \frac{1}{2} \sqrt{\pi} \sqrt{z} (2z + 3) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa5n.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (5120 z^4 - 12288 z^3 + 3936 z^2 - 240 z + 315) I_0\left(\frac{z}{2}\right)}{121275 z^2} - \frac{128 e^{z/2} (1280 z^5 - 1792 z^4 - 168 z^3 + 156 z^2 - 240 z + 315) I_1\left(\frac{z}{2}\right)}{121275 z^3}$$

07.25.03.aa5o.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 \sqrt{\pi} (320 z^6 - 576 z^5 + 315) \operatorname{erfi}(\sqrt{z})}{1280 z^{9/2}} - \frac{3 e^z (160 z^5 - 208 z^4 - 24 z^3 + 84 z^2 - 210 z + 315)}{640 z^4}$$

07.25.03.aa5p.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (160 z^5 + 208 z^4 - 24 z^3 - 84 z^2 - 210 z - 315)}{640 z^4} + \frac{3 \sqrt{\pi} (320 z^6 + 576 z^5 + 315) \operatorname{erf}(\sqrt{z})}{1280 z^{9/2}}$$

07.25.03.aa5q.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (10240 z^5 - 27648 z^4 + 10176 z^3 + 960 z^2 - 7245 z + 22680) I_0\left(\frac{z}{2}\right)}{315315 z^3} - \frac{32 e^{z/2} (10240 z^6 - 17408 z^5 - 2112 z^4 + 384 z^3 + 6675 z^2 - 28980 z + 90720) I_1\left(\frac{z}{2}\right)}{315315 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 1$

07.25.03.aa5r.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{21} e^{z/2} (64 z^2 - 105 z + 21) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (211 z - 320 z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.aa5s.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{105} e^{z/2} (160 z^2 - 336 z + 105) I_0\left(\frac{z}{2}\right) - \frac{16}{105} e^{z/2} (10 z^2 - 11 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aa5t.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{21} e^{z/2} (20 z^2 - 51 z + 21) I_0\left(\frac{z}{2}\right) + \frac{1}{21} e^{z/2} (31 z - 20 z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.aa5u.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{3} e^{z/2} (2 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z - 2) z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{3}{2}$

07.25.03.aa5v.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{35} e^z (29 - 40 z) + \frac{\sqrt{\pi} (40 z^2 - 48 z + 3) \operatorname{erfi}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.aa5w.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{35} e^{-z} (40 z + 29) + \frac{\sqrt{\pi} (40 z^2 + 48 z + 3) \operatorname{erf}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.aa5x.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (128 z^2 - 288 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-128 z^2 + 160 z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.aa5y.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{\sqrt{\pi} (40 z^2 - 72 z + 9) \operatorname{erfi}(\sqrt{z})}{70 \sqrt{z}} - \frac{2}{35} e^z (10 z - 13)$$

07.25.03.aa5z.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{2}{35} e^{-z} (10 z + 13) + \frac{\sqrt{\pi} (40 z^2 + 72 z + 9) \operatorname{erf}(\sqrt{z})}{70 \sqrt{z}}$$

07.25.03.aa60.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, 3; z\right) = \frac{8 e^{z/2} (320 z^2 - 912 z + 459) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (640 z^3 - 1184 z^2 + 54 z - 3) I_1\left(\frac{z}{2}\right)}{3675 z}$$

07.25.03.aa61.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{28} e^z (19 - 10 z) + \frac{\sqrt{\pi} (20 z^2 - 48 z + 9) \operatorname{erfi}(\sqrt{z})}{56 \sqrt{z}}$$

07.25.03.aa62.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{28} e^{-z} (10z + 19) + \frac{\sqrt{\pi} (20z^2 + 48z + 9) \operatorname{erf}(\sqrt{z})}{56\sqrt{z}}$$

07.25.03.aa63.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (1280z^3 - 4416z^2 + 2748z + 3) I_0\left(\frac{z}{2}\right)}{11025z} - \frac{4 e^{z/2} (1280z^4 - 3136z^3 + 252z^2 - 33z + 12) I_1\left(\frac{z}{2}\right)}{11025z^2}$$

07.25.03.aa64.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{8} e^z (5 - 2z) + \frac{\sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.aa65.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{8} e^{-z} (2z + 5) + \frac{\sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.aa66.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (1280z^4 - 5184z^3 + 3756z^2 + 39z - 45) I_0\left(\frac{z}{2}\right)}{121275z^2} - \frac{32 e^{z/2} (1280z^5 - 3904z^4 + 492z^3 - 141z^2 + 156z - 180) I_1\left(\frac{z}{2}\right)}{121275z^3}$$

07.25.03.aa67.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{3\sqrt{\pi} (640z^6 - 2304z^5 + 720z^4 - 315) \operatorname{erfi}(\sqrt{z})}{10240z^{9/2}} - \frac{3e^z (320z^5 - 992z^4 + 24z^3 - 84z^2 + 210z - 315)}{5120z^4}$$

07.25.03.aa68.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z} (320z^5 + 992z^4 + 24z^3 + 84z^2 + 210z + 315)}{5120z^4} + \frac{3\sqrt{\pi} (640z^6 + 2304z^5 + 720z^4 - 315) \operatorname{erf}(\sqrt{z})}{10240z^{9/2}}$$

07.25.03.aa69.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (2560z^5 - 11904z^4 + 9720z^3 + 6z^2 + 675z - 2520) I_0\left(\frac{z}{2}\right)}{315315z^3} - \frac{32 e^{z/2} (2560z^6 - 9344z^5 + 1656z^4 - 450z^3 - 291z^2 + 2700z - 10080) I_1\left(\frac{z}{2}\right)}{315315z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 2$

07.25.03.aa6a.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{105} e^{z/2} (64z^2 - 192z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-64z^2 + 128z - 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.aa6b.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{21} e^{z/2} (8z^2 - 30z + 21) I_0\left(\frac{z}{2}\right) + \frac{1}{21} e^{z/2} (-8z^2 + 22z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.aa6c.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{15} e^{z/2} (4z^2 - 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4z^2 + 14z - 3) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{5}{2}$

07.25.03.aa6d.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-40z^2 + 88z - 3)}{140z} + \frac{\sqrt{\pi} (80z^3 - 216z^2 + 54z + 3) \operatorname{erfi}(\sqrt{z})}{280z^{3/2}}$$

07.25.03.aa6e.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (40z^2 + 88z + 3)}{140z} + \frac{\sqrt{\pi} (80z^3 + 216z^2 + 54z - 3) \operatorname{erf}(\sqrt{z})}{280z^{3/2}}$$

07.25.03.aa6f.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (320z^2 - 1248z + 921) I_0\left(\frac{z}{2}\right)}{3675} - \frac{4 e^{z/2} (320z^3 - 928z^2 + 153z + 9) I_1\left(\frac{z}{2}\right)}{3675z}$$

07.25.03.aa6g.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-10z^2 + 31z - 3)}{56z} + \frac{\sqrt{\pi} (20z^3 - 72z^2 + 27z + 3) \operatorname{erfi}(\sqrt{z})}{112z^{3/2}}$$

07.25.03.aa6h.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (10z^2 + 31z + 3)}{56z} + \frac{\sqrt{\pi} (20z^3 + 72z^2 + 27z - 3) \operatorname{erf}(\sqrt{z})}{112z^{3/2}}$$

07.25.03.aa6i.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (640z^3 - 3072z^2 + 2778z - 3) I_0\left(\frac{z}{2}\right)}{11025z} - \frac{4 e^{z/2} (640z^4 - 2432z^3 + 666z^2 + 87z - 12) I_1\left(\frac{z}{2}\right)}{11025z^2}$$

07.25.03.aa6j.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (-4z^2 + 16z - 3)}{32z} + \frac{\sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.aa6k.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (4z^2 + 16z + 3)}{32z} + \frac{\sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.aa6l.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (640z^4 - 3648z^3 + 3858z^2 - 30z + 27) I_0\left(\frac{z}{2}\right)}{121275z^2} - \frac{64 e^{z/2} (320z^5 - 1504z^4 + 585z^3 + 138z^2 - 60z + 54) I_1\left(\frac{z}{2}\right)}{121275z^3}$$

07.25.03.aa6m.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{3\sqrt{\pi} (640z^6 - 3456z^5 + 2160z^4 + 480z^3 + 315) \operatorname{erfi}(\sqrt{z})}{20480z^{9/2}} - \frac{3e^z (320z^5 - 1568z^4 + 456z^3 + 84z^2 - 210z + 315)}{10240z^4}$$

07.25.03.aa6n.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z} (320z^5 + 1568z^4 + 456z^3 - 84z^2 - 210z - 315)}{10240z^4} + \frac{3\sqrt{\pi} (640z^6 + 3456z^5 + 2160z^4 - 480z^3 + 315) \operatorname{erf}(\sqrt{z})}{20480z^{9/2}}$$

07.25.03.aa6o.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, 6; z\right) = \frac{32e^{z/2} (1280z^5 - 8448z^4 + 10164z^3 - 114z^2 - 189z + 1080) I_0\left(\frac{z}{2}\right)}{315315z^3} - \frac{32e^{z/2} (1280z^6 - 7168z^5 + 3636z^4 + 1218z^3 - 321z^2 - 756z + 4320) I_1\left(\frac{z}{2}\right)}{315315z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 3$

07.25.03.aa6p.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; 3, \frac{7}{2}; z\right) = \frac{8}{735} e^{z/2} (20z^2 - 99z + 93) I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2} (40z^3 - 158z^2 + 48z + 9) I_1\left(\frac{z}{2}\right)}{735z}$$

07.25.03.aa6q.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; 3, \frac{9}{2}; z\right) = \frac{4}{105} e^{z/2} (4z^2 - 24z + 27) I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2} (4z^3 - 20z^2 + 9z + 3) I_1\left(\frac{z}{2}\right)}{105z}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{7}{2}$

07.25.03.aa6r.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (80z^4 - 384z^3 + 216z^2 + 48z + 9) \operatorname{erfi}(\sqrt{z})}{3584z^{5/2}} - \frac{5e^z (40z^3 - 172z^2 + 42z + 9)}{1792z^2}$$

07.25.03.aa6s.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} (40z^3 + 172z^2 + 42z - 9)}{1792z^2} + \frac{5\sqrt{\pi} (80z^4 + 384z^3 + 216z^2 - 48z + 9) \operatorname{erf}(\sqrt{z})}{3584z^{5/2}}$$

07.25.03.aa6t.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, 4; z\right) = \frac{4e^{z/2} (80z^3 - 492z^2 + 570z + 3) I_0\left(\frac{z}{2}\right)}{2205z} - \frac{4e^{z/2} (80z^4 - 412z^3 + 198z^2 + 75z + 12) I_1\left(\frac{z}{2}\right)}{2205z^2}$$

07.25.03.aa6u.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{5\sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5e^z (8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.aa6v.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5 e^{-z} (8 z^3 + 44 z^2 + 18 z - 9)}{512 z^2} + \frac{5 \sqrt{\pi} (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.aa6w.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (80 z^4 - 588 z^3 + 804 z^2 + 21 z - 9) I_0\left(\frac{z}{2}\right)}{24 255 z^2} - \frac{32 e^{z/2} (80 z^5 - 508 z^4 + 336 z^3 + 183 z^2 + 84 z - 36) I_1\left(\frac{z}{2}\right)}{24 255 z^3}$$

07.25.03.aa6x.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{3 \sqrt{\pi} (320 z^6 - 2304 z^5 + 2160 z^4 + 960 z^3 + 540 z^2 - 315) \operatorname{erfi}(\sqrt{z})}{16 384 z^{9/2}} - \frac{3 e^z (160 z^5 - 1072 z^4 + 624 z^3 + 456 z^2 + 210 z - 315)}{8192 z^4}$$

07.25.03.aa6y.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (160 z^5 + 1072 z^4 + 624 z^3 - 456 z^2 + 210 z + 315)}{8192 z^4} + \frac{3 \sqrt{\pi} (320 z^6 + 2304 z^5 + 2160 z^4 - 960 z^3 + 540 z^2 - 315) \operatorname{erf}(\sqrt{z})}{16 384 z^{9/2}}$$

07.25.03.aa6z.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (160 z^5 - 1368 z^4 + 2148 z^3 + 132 z^2 - 9 z - 216) I_0\left(\frac{z}{2}\right)}{63 063 z^3} - \frac{32 e^{z/2} (160 z^6 - 1208 z^5 + 1020 z^4 + 708 z^3 + 501 z^2 - 36 z - 864) I_1\left(\frac{z}{2}\right)}{63 063 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 4$

07.25.03.aa70.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; 4, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (8 z^3 - 60 z^2 + 84 z + 3) I_0\left(\frac{z}{2}\right)}{315 z} - \frac{4 e^{z/2} (8 z^4 - 52 z^3 + 36 z^2 + 21 z + 12) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{9}{2}$

07.25.03.aa71.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{7 \sqrt{\pi} (32 z^5 - 240 z^4 + 240 z^3 + 120 z^2 + 90 z + 45) \operatorname{erfi}(\sqrt{z})}{4096 z^{7/2}} - \frac{7 e^z (16 z^4 - 112 z^3 + 72 z^2 + 60 z + 45)}{2048 z^3}$$

07.25.03.aa72.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (16 z^4 + 112 z^3 + 72 z^2 - 60 z + 45)}{2048 z^3} + \frac{7 \sqrt{\pi} (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45) \operatorname{erf}(\sqrt{z})}{4096 z^{7/2}}$$

07.25.03.aa73.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 - 72 z^3 + 120 z^2 + 12 z + 9) I_0\left(\frac{z}{2}\right)}{3465 z^2} - \frac{128 e^{z/2} (2 z^5 - 16 z^4 + 15 z^3 + 12 z^2 + 12 z + 9) I_1\left(\frac{z}{2}\right)}{3465 z^3}$$

07.25.03.aa74.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{21 \sqrt{\pi} (64 z^6 - 576 z^5 + 720 z^4 + 480 z^3 + 540 z^2 + 540 z + 315) \operatorname{erfi}(\sqrt{z})}{32 768 z^{9/2}} - \frac{21 e^z (32 z^5 - 272 z^4 + 240 z^3 + 264 z^2 + 330 z + 315)}{16384 z^4}$$

07.25.03.aa75.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (32 z^5 + 272 z^4 + 240 z^3 - 264 z^2 + 330 z - 315)}{16384 z^4} + \frac{21 \sqrt{\pi} (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315) \operatorname{erf}(\sqrt{z})}{32 768 z^{9/2}}$$

07.25.03.aa76.01

$${}_2F_2\left(-\frac{3}{2}, \frac{9}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 168 z^4 + 324 z^3 + 60 z^2 + 81 z + 72) I_0\left(\frac{z}{2}\right)}{9009 z^3} - \frac{32 e^{z/2} (16 z^6 - 152 z^5 + 180 z^4 + 180 z^3 + 249 z^2 + 324 z + 288) I_1\left(\frac{z}{2}\right)}{9009 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = -\frac{11}{2}$

07.25.03.aa77.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{108 056 025} (128 z^{14} + 9408 z^{13} + 265 504 z^{12} + 3 671 280 z^{11} + 26 302 464 z^{10} + 94 797 696 z^9 + 152 570 880 z^8 + 80 680 320 z^7 + 4 233 600 z^6 + 181 440 z^5 + 90 720 z^4 + 189 000 z^3 + 1 984 500 z^2 - 26 790 750 z + 108 056 025) + \frac{1}{108 056 025} (8 e^z \sqrt{\pi} (16 z^{29/2} + 1184 z^{27/2} + 33 768 z^{25/2} + 474 936 z^{23/2} + 3 502 065 z^{21/2} + 13 300 560 z^{19/2} + 23 796 360 z^{17/2} + 16 279 200 z^{15/2} + 2 441 880 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aa78.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{108\,056\,025} (128 z^{14} - 9408 z^{13} + 265\,504 z^{12} - 3\,671\,280 z^{11} + 26\,302\,464 z^{10} - 94\,797\,696 z^9 + 152\,570\,880 z^8 - 80\,680\,320 z^7 + 4\,233\,600 z^6 - 181\,440 z^5 + 90\,720 z^4 - 189\,000 z^3 + 1\,984\,500 z^2 + 26\,790\,750 z + 108\,056\,025) - \frac{1}{108\,056\,025} (8 e^{-z} \sqrt{\pi} (16 z^{29/2} - 1184 z^{27/2} + 33\,768 z^{25/2} - 474\,936 z^{23/2} + 3\,502\,065 z^{21/2} - 13\,300\,560 z^{19/2} + 23\,796\,360 z^{17/2} - 16\,279\,200 z^{15/2} + 2\,441\,880 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aa79.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9\,823\,275} (-64 z^{13} - 4192 z^{12} - 103\,440 z^{11} - 1\,217\,016 z^{10} - 7\,112\,928 z^9 - 19\,444\,320 z^8 - 20\,381\,760 z^7 - 4\,233\,600 z^6 + 181\,440 z^5 + 30\,240 z^4 + 37\,800 z^3 + 283\,500 z^2 - 2\,976\,750 z + 9\,823\,275) - \frac{1}{9\,823\,275} (4 e^z \sqrt{\pi} (16 z^{27/2} + 1056 z^{25/2} + 26\,376 z^{23/2} + 316\,680 z^{21/2} + 1\,918\,665 z^{19/2} + 5\,625\,900 z^{17/2} + 6\,918\,660 z^{15/2} + 2\,441\,880 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aa7a.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{9\,823\,275} (64 z^{13} - 4192 z^{12} + 103\,440 z^{11} - 1\,217\,016 z^{10} + 7\,112\,928 z^9 - 19\,444\,320 z^8 + 20\,381\,760 z^7 - 4\,233\,600 z^6 - 181\,440 z^5 + 30\,240 z^4 - 37\,800 z^3 + 283\,500 z^2 + 2\,976\,750 z + 9\,823\,275) - \frac{1}{9\,823\,275} (4 e^{-z} \sqrt{\pi} (16 z^{27/2} - 1056 z^{25/2} + 26\,376 z^{23/2} - 316\,680 z^{21/2} + 1\,918\,665 z^{19/2} - 5\,625\,900 z^{17/2} + 6\,918\,660 z^{15/2} - 2\,441\,880 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aa7b.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1091\,475} (32 z^{12} + 1840 z^{11} + 38\,856 z^{10} + 376\,252 z^9 + 1\,692\,480 z^8 + 3\,099\,600 z^7 + 1\,411\,200 z^6 - 181\,440 z^5 + 30\,240 z^4 + 12\,600 z^3 + 56\,700 z^2 - 425\,250 z + 1091\,475) + \frac{1}{1091\,475} (2 e^z \sqrt{\pi} (16 z^{25/2} + 928 z^{23/2} + 19\,880 z^{21/2} + 197\,400 z^{19/2} + 931\,665 z^{17/2} + 1\,899\,240 z^{15/2} + 1\,220\,940 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aa7c.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1091475} (32z^{12} - 1840z^{11} + 38856z^{10} - 376252z^9 + 1692480z^8 - 3099600z^7 + 1411200z^6 + 181440z^5 + 30240z^4 - 12600z^3 + 56700z^2 + 425250z + 1091475) - \frac{1}{1091475} (2e^{-z}\sqrt{\pi} (16z^{25/2} - 928z^{23/2} + 19880z^{21/2} - 197400z^{19/2} + 931665z^{17/2} - 1899240z^{15/2} + 1220940z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aa7d.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{155925} (-16z^{11} - 792z^{10} - 13892z^9 - 105150z^8 - 326520z^7 - 282240z^6 + 60480z^5 - 30240z^4 + 12600z^3 + 18900z^2 - 85050z + 155925) + \frac{1}{155925} e^z \sqrt{\pi} (-16z^{23/2} - 800z^{21/2} - 14280z^{19/2} - 111720z^{17/2} - 373065z^{15/2} - 406980z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa7e.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{155925} (16z^{11} - 792z^{10} + 13892z^9 - 105150z^8 + 326520z^7 - 282240z^6 - 60480z^5 - 30240z^4 - 12600z^3 + 18900z^2 + 85050z + 155925) + \frac{1}{155925} e^{-z} \sqrt{\pi} (-16z^{23/2} + 800z^{21/2} - 14280z^{19/2} + 111720z^{17/2} - 373065z^{15/2} + 406980z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa7f.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{31185} (8z^{10} + 332z^9 + 4626z^8 + 24975z^7 + 40320z^6 - 12096z^5 + 10080z^4 - 12600z^3 + 18900z^2 - 28350z + 31185) + \frac{e^z \sqrt{\pi} (16z^{21/2} + 672z^{19/2} + 9576z^{17/2} + 54264z^{15/2} + 101745z^{13/2}) \operatorname{erf}(\sqrt{z})}{62370}$$

07.25.03.aa7g.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{31185} (8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185) + \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 672z^{19/2} - 9576z^{17/2} + 54264z^{15/2} - 101745z^{13/2}) \operatorname{erfi}(\sqrt{z})}{62370}$$

07.25.03.aa7h.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{-8z^9 - 268z^8 - 2754z^7 - 8575z^6 + 1476z^5 + 4284z^4 - 19320z^3 + 45360z^2 - 56700z + 20790}{20790} + \frac{1}{41580} \left(e^z \sqrt{\pi} (-16z^{19/2} - 544z^{17/2} - 5768z^{15/2} - 19656z^{13/2} - 3465z^{11/2} + 13860z^{9/2} - 41580z^{7/2} + 83160z^{5/2} - 83160z^{3/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aa7i.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{8z^9 - 268z^8 + 2754z^7 - 8575z^6 - 1476z^5 + 4284z^4 + 19320z^3 + 45360z^2 + 56700z + 20790}{20790} + \frac{1}{41580} \left(e^{-z} \sqrt{\pi} (-16z^{19/2} + 544z^{17/2} - 5768z^{15/2} + 19656z^{13/2} - 3465z^{11/2} - 13860z^{9/2} - 41580z^{7/2} - 83160z^{5/2} - 83160z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aa7j.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{8z^8 + 204z^7 + 1330z^6 + 687z^5 - 4464z^4 + 13020z^3 - 20160z^2 + 41580}{41580} + \frac{1}{83160} \left(e^z \sqrt{\pi} (16z^{17/2} + 416z^{15/2} + 2856z^{13/2} + 2520z^{11/2} - 9135z^{9/2} + 22680z^{7/2} - 26460z^{5/2} - 30240z^{3/2} + 113400\sqrt{z}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aa7k.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{8z^8 - 204z^7 + 1330z^6 - 687z^5 - 4464z^4 - 13020z^3 - 20160z^2 + 41580}{41580} + \frac{1}{83160} \left(e^{-z} \sqrt{\pi} (-16z^{17/2} + 416z^{15/2} - 2856z^{13/2} + 2520z^{11/2} + 9135z^{9/2} + 22680z^{7/2} + 26460z^{5/2} - 30240z^{3/2} - 113400\sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aa7l.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, 1; z\right) = \frac{e^z (16z^8 + 352z^7 + 1736z^6 - 1176z^5 - 3255z^4 + 21840z^3 - 52920z^2 + 30240z + 83160)}{83160}$$

07.25.03.aa7m.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{8z^7 + 140z^6 + 354z^5 - 1377z^4 + 2460z^3 + 2520z^2 - 25200z + 45360}{83160} + \frac{1}{166320\sqrt{z}} e^z \sqrt{\pi} (16z^8 + 288z^7 + 840z^6 - 2520z^5 + 3465z^4 + 8820z^3 - 52920z^2 + 75600z + 37800) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa7n.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{-8z^7 + 140z^6 - 354z^5 - 1377z^4 - 2460z^3 + 2520z^2 + 25200z + 45360}{83160} + \frac{1}{166320\sqrt{z}} e^{-z} \sqrt{\pi} (16z^8 - 288z^7 + 840z^6 + 2520z^5 + 3465z^4 - 8820z^3 - 52920z^2 - 75600z + 37800) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa7o.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, 2; z\right) = \frac{e^z (16 z^7 + 224 z^6 + 168 z^5 - 2184 z^4 + 7665 z^3 - 8820 z^2 - 26460 z + 83160)}{83160}$$

07.25.03.aa7p.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{8 z^7 + 76 z^6 - 174 z^5 - 305 z^4 + 3840 z^3 - 12600 z^2 + 13440 z + 12600}{55440 z} + \frac{1}{110880 z^{3/2}} e^z \sqrt{\pi} (16 z^8 + 160 z^7 - 280 z^6 - 840 z^5 + 7665 z^4 - 21840 z^3 + 12600 z^2 + 50400 z - 12600) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa7q.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{8 z^7 - 76 z^6 - 174 z^5 + 305 z^4 + 3840 z^3 + 12600 z^2 + 13440 z - 12600}{55440 z} + \frac{1}{110880 z^{3/2}} e^{-z} \sqrt{\pi} (-16 z^8 + 160 z^7 + 280 z^6 - 840 z^5 - 7665 z^4 - 21840 z^3 - 12600 z^2 + 50400 z + 12600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa7r.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, 3; z\right) = \frac{e^z (16 z^6 + 96 z^5 - 504 z^4 + 840 z^3 + 3465 z^2 - 22680 z + 41580)}{41580}$$

07.25.03.aa7s.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{8 z^7 + 12 z^6 - 254 z^5 + 1215 z^4 - 2340 z^3 - 2436 z^2 + 17640 z - 15120}{22176 z^2} + \frac{1}{44352 z^{5/2}} e^z \sqrt{\pi} (16 z^8 + 32 z^7 - 504 z^6 + 2184 z^5 - 3255 z^4 - 8820 z^3 + 39060 z^2 - 27720 z + 15120) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa7t.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{-8 z^7 + 12 z^6 + 254 z^5 + 1215 z^4 + 2340 z^3 - 2436 z^2 - 17640 z - 15120}{22176 z^2} + \frac{1}{44352 z^{5/2}} e^{-z} \sqrt{\pi} (16 z^8 - 32 z^7 - 504 z^6 - 2184 z^5 - 3255 z^4 + 8820 z^3 + 39060 z^2 + 27720 z + 15120) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa7u.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, 4; z\right) = \frac{e^z (16 z^5 - 32 z^4 - 280 z^3 + 2520 z^2 - 9135 z + 13860)}{13860}$$

07.25.03.aa7v.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{8 z^7 - 52 z^6 + 114 z^5 + 495 z^4 - 4656 z^3 + 15876 z^2 - 30240 z + 45360}{6336 z^3} + \frac{1}{12672 z^{7/2}} e^z \sqrt{\pi} (16 z^8 - 96 z^7 + 168 z^6 + 1176 z^5 - 9135 z^4 + 27720 z^3 - 44100 z^2 + 60480 z - 45360) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa7w.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{8 z^7 + 52 z^6 + 114 z^5 - 495 z^4 - 4656 z^3 - 15876 z^2 - 30240 z - 45360}{6336 z^3} + \frac{1}{12672 z^{7/2}} e^{-z} \sqrt{\pi} (-16 z^8 - 96 z^7 - 168 z^6 + 1176 z^5 + 9135 z^4 + 27720 z^3 + 44100 z^2 + 60480 z + 45360) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa7x.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, 5; z\right) = \frac{e^z (16 z^4 - 160 z^3 + 840 z^2 - 2520 z + 3465)}{3465}$$

07.25.03.aa7y.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{8 z^7 - 116 z^6 + 930 z^5 - 5153 z^4 + 21 756 z^3 - 75 600 z^2 + 221 760 z - 529 200}{1408 z^4} +$$

$$\frac{1}{2816 z^{9/2}} e^z \sqrt{\pi} (16 z^8 - 224 z^7 + 1736 z^6 - 9240 z^5 + 37 065 z^4 - 120 540 z^3 + 317 520 z^2 - 574 560 z + 529 200) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa7z.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{-8 z^7 - 116 z^6 - 930 z^5 - 5153 z^4 - 21 756 z^3 - 75 600 z^2 - 221 760 z - 529 200}{1408 z^4} +$$

$$\frac{1}{2816 z^{9/2}} e^{-z} \sqrt{\pi} (16 z^8 + 224 z^7 + 1736 z^6 + 9240 z^5 + 37 065 z^4 + 120 540 z^3 + 317 520 z^2 + 574 560 z + 529 200) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa80.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{11}{2}, 6; z\right) =$$

$$\frac{1}{693 z^5} e^z (16 z^8 - 288 z^7 + 2856 z^6 - 19 656 z^5 + 101 745 z^4 - 406 980 z^3 + 1 220 940 z^2 - 2 441 880 z + 2 441 880) - \frac{38 760}{11 z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = -\frac{9}{2}$

07.25.03.aa81.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{893 025} (32 z^{12} + 1872 z^{11} + 40 504 z^{10} + 406 884 z^9 + 1 946 988 z^8 + 4 041 960 z^7 + 2 721 960 z^6 + 181 440 z^5 +$$

$$10 080 z^4 + 7560 z^3 + 40 500 z^2 - 330 750 z + 893 025) +$$

$$\frac{1}{893 025} \left(2 e^z \sqrt{\pi} (16 z^{25/2} + 944 z^{23/2} + 20 712 z^{21/2} + 213 120 z^{19/2} + 1 066 185 z^{17/2} +$$

$$2 427 345 z^{15/2} + 2 063 970 z^{13/2} + 377 910 z^{11/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aa82.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{893 025} (32 z^{12} - 1872 z^{11} + 40 504 z^{10} - 406 884 z^9 + 1 946 988 z^8 - 4 041 960 z^7 + 2 721 960 z^6 - 181 440 z^5 +$$

$$10 080 z^4 - 7560 z^3 + 40 500 z^2 + 330 750 z + 893 025) -$$

$$\frac{1}{893 025} \left(2 e^{-z} \sqrt{\pi} (16 z^{25/2} - 944 z^{23/2} + 20 712 z^{21/2} - 213 120 z^{19/2} + 1 066 185 z^{17/2} -$$

$$2 427 345 z^{15/2} + 2 063 970 z^{13/2} - 377 910 z^{11/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.aa83.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{99225} (-16 z^{11} - 824 z^{10} - 15316 z^9 - 127254 z^8 - 471180 z^7 - 655380 z^6 - 181440 z^5 + 10080 z^4 + 2520 z^3 + 8100 z^2 - 47250 z + 99225) + \frac{1}{99225} e^z \sqrt{\pi} (-16 z^{23/2} - 832 z^{21/2} - 15720 z^{19/2} - 134520 z^{17/2} - 528105 z^{15/2} - 843030 z^{13/2} - 377910 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa84.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{99225} (16 z^{11} - 824 z^{10} + 15316 z^9 - 127254 z^8 + 471180 z^7 - 655380 z^6 + 181440 z^5 + 10080 z^4 - 2520 z^3 + 8100 z^2 + 47250 z + 99225) + \frac{1}{99225} e^{-z} \sqrt{\pi} (-16 z^{23/2} + 832 z^{21/2} - 15720 z^{19/2} + 134520 z^{17/2} - 528105 z^{15/2} + 843030 z^{13/2} - 377910 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa85.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{14175} (8 z^{10} + 356 z^9 + 5526 z^8 + 36165 z^7 + 93285 z^6 + 60480 z^5 - 10080 z^4 + 2520 z^3 + 2700 z^2 - 9450 z + 14175) + \frac{e^z \sqrt{\pi} (16 z^{21/2} + 720 z^{19/2} + 11400 z^{17/2} + 77520 z^{15/2} + 218025 z^{13/2} + 188955 z^{11/2}) \operatorname{erf}(\sqrt{z})}{28350}$$

07.25.03.aa86.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{14175} (8 z^{10} - 356 z^9 + 5526 z^8 - 36165 z^7 + 93285 z^6 - 60480 z^5 - 10080 z^4 - 2520 z^3 + 2700 z^2 + 9450 z + 14175) + \frac{1}{28350} e^{-z} \sqrt{\pi} (-16 z^{21/2} + 720 z^{19/2} - 11400 z^{17/2} + 77520 z^{15/2} - 218025 z^{13/2} + 188955 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa87.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{-8 z^9 - 300 z^8 - 3730 z^7 - 17655 z^6 - 24192 z^5 + 6720 z^4 - 5040 z^3 + 5400 z^2 - 6300 z + 5670}{5670} + \frac{e^z \sqrt{\pi} (-16 z^{19/2} - 608 z^{17/2} - 7752 z^{15/2} - 38760 z^{13/2} - 62985 z^{11/2}) \operatorname{erf}(\sqrt{z})}{11340}$$

07.25.03.aa88.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{8 z^9 - 300 z^8 + 3730 z^7 - 17655 z^6 + 24192 z^5 + 6720 z^4 + 5040 z^3 + 5400 z^2 + 6300 z + 5670}{5670} + \frac{e^{-z} \sqrt{\pi} (-16 z^{19/2} + 608 z^{17/2} - 7752 z^{15/2} + 38760 z^{13/2} - 62985 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{11340}$$

07.25.03.aa89.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{8 z^8 + 244 z^7 + 2270 z^6 + 6417 z^5 - 609 z^4 - 3570 z^3 + 9990 z^2 - 12600 z + 3780}{3780} + \frac{1}{7560} e^z \sqrt{\pi} (16 z^{17/2} + 496 z^{15/2} + 4776 z^{13/2} + 14880 z^{11/2} + 3465 z^{9/2} - 10395 z^{7/2} + 20790 z^{5/2} - 20790 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa8a.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{8z^8 - 244z^7 + 2270z^6 - 6417z^5 - 609z^4 + 3570z^3 + 9990z^2 + 12600z + 3780}{3780} + \frac{1}{7560} \left(e^{-z} \sqrt{\pi} (-16z^{17/2} + 496z^{15/2} - 4776z^{13/2} + 14880z^{11/2} - 3465z^{9/2} - 10395z^{7/2} - 20790z^{5/2} - 20790z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aa8b.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{-8z^7 - 188z^6 - 1146z^5 - 771z^4 + 3318z^3 - 6030z^2 + 2520z + 7560}{7560} + \frac{1}{15120} e^z \sqrt{\pi} (-16z^{15/2} - 384z^{13/2} - 2472z^{11/2} - 2520z^{9/2} + 6615z^{7/2} - 9450z^{5/2} - 1890z^{3/2} + 22680\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa8c.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{8z^7 - 188z^6 + 1146z^5 - 771z^4 - 3318z^3 - 6030z^2 - 2520z + 7560}{7560} + \frac{1}{15120} e^{-z} \sqrt{\pi} (-16z^{15/2} + 384z^{13/2} - 2472z^{11/2} + 2520z^{9/2} + 6615z^{7/2} + 9450z^{5/2} - 1890z^{3/2} - 22680\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa8d.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, 1; z\right) = -\frac{e^z (8z^7 + 164z^6 + 786z^5 - 195z^4 - 1920z^3 + 6120z^2 - 5040z - 7560)}{7560}$$

07.25.03.aa8e.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{-8z^6 - 132z^5 - 358z^4 + 963z^3 - 585z^2 - 3780z + 8820}{15120} + \frac{e^z \sqrt{\pi} (-16z^7 - 272z^6 - 840z^5 + 1680z^4 - 105z^3 - 9135z^2 + 16380z + 6300) \operatorname{erf}(\sqrt{z})}{30240\sqrt{z}}$$

07.25.03.aa8f.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{-8z^6 + 132z^5 - 358z^4 - 963z^3 - 585z^2 + 3780z + 8820}{15120} + \frac{e^{-z} \sqrt{\pi} (16z^7 - 272z^6 + 840z^5 + 1680z^4 + 105z^3 - 9135z^2 - 16380z + 6300) \operatorname{erfi}(\sqrt{z})}{30240\sqrt{z}}$$

07.25.03.aa8g.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, 2; z\right) = -\frac{e^z (8z^6 + 108z^5 + 138z^4 - 885z^3 + 1620z^2 + 1260z - 7560)}{7560}$$

07.25.03.aa8h.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-8z^6 - 76z^5 + 94z^4 + 465z^3 - 2340z^2 + 3180z + 1800}{10080z} + \frac{e^z \sqrt{\pi} (-16z^7 - 160z^6 + 120z^5 + 1080z^4 - 4425z^3 + 4140z^2 + 8100z - 1800) \operatorname{erf}(\sqrt{z})}{20160z^{3/2}}$$

07.25.03.aa8i.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{8z^6 - 76z^5 - 94z^4 + 465z^3 + 2340z^2 + 3180z - 1800}{10080z} + \frac{e^{-z}\sqrt{\pi}(-16z^7 + 160z^6 + 120z^5 - 1080z^4 - 4425z^3 - 4140z^2 + 8100z + 1800)\operatorname{erfi}(\sqrt{z})}{20160z^{3/2}}$$

07.25.03.aa8j.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, 3; z\right) = -\frac{e^z(8z^5 + 52z^4 - 174z^3 - 15z^2 + 1680z - 3780)}{3780}$$

07.25.03.aa8k.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-8z^6 - 20z^5 + 210z^4 - 585z^3 + 93z^2 + 2430z - 1890}{4032z^2} + \frac{e^z\sqrt{\pi}(-16z^7 - 48z^6 + 408z^5 - 960z^4 - 585z^3 + 5895z^2 - 3690z + 1890)\operatorname{erf}(\sqrt{z})}{8064z^{5/2}}$$

07.25.03.aa8l.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{-8z^6 + 20z^5 + 210z^4 + 585z^3 + 93z^2 - 2430z - 1890}{4032z^2} + \frac{e^{-z}\sqrt{\pi}(16z^7 - 48z^6 - 408z^5 - 960z^4 + 585z^3 + 5895z^2 + 3690z + 1890)\operatorname{erfi}(\sqrt{z})}{8064z^{5/2}}$$

07.25.03.aa8m.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, 4; z\right) = -\frac{e^z(8z^4 - 4z^3 - 150z^2 + 735z - 1260)}{1260}$$

07.25.03.aa8n.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-8z^6 + 36z^5 - 10z^4 - 507z^3 + 2034z^2 - 3570z + 5040}{1152z^3} + \frac{e^z\sqrt{\pi}(-16z^7 + 64z^6 + 24z^5 - 1080z^4 + 3735z^3 - 5310z^2 + 6930z - 5040)\operatorname{erf}(\sqrt{z})}{2304z^{7/2}}$$

07.25.03.aa8o.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{8z^6 + 36z^5 + 10z^4 - 507z^3 - 2034z^2 - 3570z - 5040}{1152z^3} + \frac{e^{-z}\sqrt{\pi}(-16z^7 - 64z^6 + 24z^5 + 1080z^4 + 3735z^3 + 5310z^2 + 6930z + 5040)\operatorname{erfi}(\sqrt{z})}{2304z^{7/2}}$$

07.25.03.aa8p.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, 5; z\right) = -\frac{1}{315}e^z(8z^3 - 60z^2 + 210z - 315)$$

07.25.03.aa8q.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-8z^6 + 92z^5 - 566z^4 + 2379z^3 - 7917z^2 + 22680z - 52920}{256z^4} + \frac{e^z \sqrt{\pi} (-16z^7 + 176z^6 - 1032z^5 + 4080z^4 - 12585z^3 + 32445z^2 - 57960z + 52920) \operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.aa8r.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{-8z^6 - 92z^5 - 566z^4 - 2379z^3 - 7917z^2 - 22680z - 52920}{256z^4} + \frac{e^{-z} \sqrt{\pi} (16z^7 + 176z^6 + 1032z^5 + 4080z^4 + 12585z^3 + 32445z^2 + 57960z + 52920) \operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.aa8s.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{9}{2}, 6; z\right) = \frac{e^z (-8z^7 + 116z^6 - 906z^5 + 4845z^4 - 19380z^3 + 58140z^2 - 116280z + 116280)}{63z^5} - \frac{12920}{7z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = -\frac{7}{2}$

07.25.03.aa8t.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{11025} (8z^{10} + 364z^9 + 5842z^8 + 40431z^7 + 116800z^6 + 108510z^5 + 10080z^4 + 840z^3 + 1620z^2 - 6750z + 11025) + \frac{1}{22050} e^z \sqrt{\pi} (16z^{21/2} + 736z^{19/2} + 12040z^{17/2} + 86360z^{15/2} + 269025z^{13/2} + 304980z^{11/2} + 72930z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa8u.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{11025} (8z^{10} - 364z^9 + 5842z^8 - 40431z^7 + 116800z^6 - 108510z^5 + 10080z^4 - 840z^3 + 1620z^2 + 6750z + 11025) + \frac{1}{22050} e^{-z} \sqrt{\pi} (-16z^{21/2} + 736z^{19/2} - 12040z^{17/2} + 86360z^{15/2} - 269025z^{13/2} + 304980z^{11/2} - 72930z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa8v.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{-8z^9 - 316z^8 - 4266z^7 - 23515z^6 - 48030z^5 - 20160z^4 + 1680z^3 + 1080z^2 - 2700z + 3150}{3150} + \frac{e^z \sqrt{\pi} (-16z^{19/2} - 640z^{17/2} - 8840z^{15/2} - 51000z^{13/2} - 116025z^{11/2} - 72930z^{9/2}) \operatorname{erf}(\sqrt{z})}{6300}$$

07.25.03.aa8w.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{8z^9 - 316z^8 + 4266z^7 - 23515z^6 + 48030z^5 - 20160z^4 - 1680z^3 + 1080z^2 + 2700z + 3150}{3150} + \frac{e^{-z} \sqrt{\pi} (-16z^{19/2} + 640z^{17/2} - 8840z^{15/2} + 51000z^{13/2} - 116025z^{11/2} + 72930z^{9/2}) \operatorname{erfi}(\sqrt{z})}{6300}$$

07.25.03.aa8x.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{8z^8 + 268z^7 + 2930z^6 + 11919z^5 + 13440z^4 - 3360z^3 + 2160z^2 - 1800z + 1260}{1260} + \frac{e^z \sqrt{\pi} (16z^{17/2} + 544z^{15/2} + 6120z^{13/2} + 26520z^{11/2} + 36465z^{9/2}) \operatorname{erf}(\sqrt{z})}{2520}$$

07.25.03.aa8y.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260}{1260} + \frac{e^{-z} \sqrt{\pi} (-16z^{17/2} + 544z^{15/2} - 6120z^{13/2} + 26520z^{11/2} - 36465z^{9/2}) \operatorname{erfi}(\sqrt{z})}{2520}$$

07.25.03.aa8z.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{840} (-8z^7 - 220z^6 - 1834z^5 - 4683z^4 - 70z^3 + 2610z^2 - 3600z + 840) + \frac{1}{1680} e^z \sqrt{\pi} (-16z^{15/2} - 448z^{13/2} - 3880z^{11/2} - 11000z^{9/2} - 3465z^{7/2} + 6930z^{5/2} - 6930z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa90.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{840} (8z^7 - 220z^6 + 1834z^5 - 4683z^4 + 70z^3 + 2610z^2 + 3600z + 840) + \frac{1}{1680} e^{-z} \sqrt{\pi} (-16z^{15/2} + 448z^{13/2} - 3880z^{11/2} + 11000z^{9/2} - 3465z^{7/2} - 6930z^{5/2} - 6930z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa91.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{8z^6 + 172z^5 + 978z^4 + 847z^3 - 2160z^2 + 1530z + 1680}{1680} + \frac{e^z \sqrt{\pi} (16z^{13/2} + 352z^{11/2} + 2120z^{9/2} + 2520z^{7/2} - 4095z^{5/2} + 1260z^{3/2} + 5670\sqrt{z}) \operatorname{erf}(\sqrt{z})}{3360}$$

07.25.03.aa92.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{8z^6 - 172z^5 + 978z^4 - 847z^3 - 2160z^2 - 1530z + 1680}{1680} + \frac{1}{3360} e^{-z} \sqrt{\pi} (-16z^{13/2} + 352z^{11/2} - 2120z^{9/2} + 2520z^{7/2} + 4095z^{5/2} + 1260z^{3/2} - 5670\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa93.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, 1; z\right) = \frac{1}{840} e^z (4z^6 + 76z^5 + 355z^4 + 80z^3 - 840z^2 + 960z + 840)$$

07.25.03.aa94.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{8z^5 + 124z^4 + 362z^3 - 549z^2 - 450z + 2100}{3360} + \frac{e^z \sqrt{\pi} (16z^6 + 256z^5 + 840z^4 - 840z^3 - 1575z^2 + 4410z + 1260) \operatorname{erf}(\sqrt{z})}{6720\sqrt{z}}$$

$$\begin{aligned}
 & \text{07.25.03.aa95.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, \frac{3}{2}; -z\right) &= \frac{-8z^5 + 124z^4 - 362z^3 - 549z^2 + 450z + 2100}{3360} + \\
 & \frac{e^{-z} \sqrt{\pi} (16z^6 - 256z^5 + 840z^4 + 840z^3 - 1575z^2 - 4410z + 1260) \operatorname{erfi}(\sqrt{z})}{6720 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa96.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, 2; z\right) &= \frac{1}{840} e^z (4z^5 + 52z^4 + 95z^3 - 300z^2 + 60z + 840)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa97.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, \frac{5}{2}; z\right) &= \\
 & \frac{8z^5 + 76z^4 - 14z^3 - 465z^2 + 880z + 300}{2240z} + \frac{e^z \sqrt{\pi} (16z^6 + 160z^5 + 40z^4 - 1000z^3 + 1425z^2 + 1560z - 300) \operatorname{erf}(\sqrt{z})}{4480z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa98.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, \frac{5}{2}; -z\right) &= \\
 & \frac{8z^5 - 76z^4 - 14z^3 + 465z^2 + 880z - 300}{2240z} + \frac{e^{-z} \sqrt{\pi} (-16z^6 + 160z^5 - 40z^4 - 1000z^3 - 1425z^2 + 1560z + 300) \operatorname{erfi}(\sqrt{z})}{4480z^{3/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa99.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, 3; z\right) &= \frac{1}{420} e^z (4z^4 + 28z^3 - 45z^2 - 120z + 420)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa9a.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, \frac{7}{2}; z\right) &= \\
 & \frac{8z^5 + 28z^4 - 150z^3 + 139z^2 + 390z - 270}{896z^2} + \frac{e^z \sqrt{\pi} (16z^6 + 64z^5 - 280z^4 + 120z^3 + 1065z^2 - 570z + 270) \operatorname{erf}(\sqrt{z})}{1792z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa9b.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, \frac{7}{2}; -z\right) &= \\
 & \frac{-8z^5 + 28z^4 + 150z^3 + 139z^2 - 390z - 270}{896z^2} + \frac{e^{-z} \sqrt{\pi} (16z^6 - 64z^5 - 280z^4 - 120z^3 + 1065z^2 + 570z + 270) \operatorname{erfi}(\sqrt{z})}{1792z^{5/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa9c.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, 4; z\right) &= \frac{1}{140} e^z (4z^3 + 4z^2 - 65z + 140)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa9d.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, \frac{9}{2}; z\right) &= \\
 & \frac{8z^5 - 20z^4 - 46z^3 + 303z^2 - 480z + 630}{256z^3} + \frac{e^z \sqrt{\pi} (16z^6 - 32z^5 - 120z^4 + 600z^3 - 735z^2 + 900z - 630) \operatorname{erf}(\sqrt{z})}{512z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa9e.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, \frac{9}{2}; -z\right) = & \frac{8z^5 + 20z^4 - 46z^3 - 303z^2 - 480z - 630}{256z^3} + \frac{e^{-z}\sqrt{\pi}(-16z^6 - 32z^5 + 120z^4 + 600z^3 + 735z^2 + 900z + 630)\operatorname{erfi}(\sqrt{z})}{512z^{7/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa9f.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, 5; z\right) = & \frac{1}{35} e^z (4z^2 - 20z + 35)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa9g.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, \frac{11}{2}; z\right) = & \frac{9(8z^5 - 68z^4 + 298z^3 - 933z^2 + 2590z - 5880)}{512z^4} + \\
 & \frac{9e^z\sqrt{\pi}(16z^6 - 128z^5 + 520z^4 - 1480z^3 + 3705z^2 - 6510z + 5880)\operatorname{erfi}(\sqrt{z})}{1024z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa9h.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, \frac{11}{2}; -z\right) = & \frac{9e^{-z}\sqrt{\pi}(16z^6 + 128z^5 + 520z^4 + 1480z^3 + 3705z^2 + 6510z + 5880)\operatorname{erfi}(\sqrt{z})}{1024z^{9/2}} - \\
 & \frac{9(8z^5 + 68z^4 + 298z^3 + 933z^2 + 2590z + 5880)}{512z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa9i.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{7}{2}, 6; z\right) = & \frac{e^z(4z^6 - 44z^5 + 255z^4 - 1020z^3 + 3060z^2 - 6120z + 6120)}{7z^5} - \frac{6120}{7z^5}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.aa9j.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; z\right) = & \frac{1}{900} (8z^8 + 276z^7 + 3166z^6 + 14145z^5 + 21015z^4 + 3360z^3 + 720z^2 - 1080z + 900) + \\
 & \frac{e^z\sqrt{\pi}(16z^{17/2} + 560z^{15/2} + 6600z^{13/2} + 31200z^{11/2} + 53625z^{9/2} + 19305z^{7/2})\operatorname{erfi}(\sqrt{z})}{1800}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa9k.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; -z\right) = & \frac{1}{900} (8z^8 - 276z^7 + 3166z^6 - 14145z^5 + 21015z^4 - 3360z^3 + 720z^2 + 1080z + 900) + \\
 & \frac{e^{-z}\sqrt{\pi}(-16z^{17/2} + 560z^{15/2} - 6600z^{13/2} + 31200z^{11/2} - 53625z^{9/2} + 19305z^{7/2})\operatorname{erfi}(\sqrt{z})}{1800}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aa9l.01} \\
 {}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; z\right) = & \frac{1}{360} (-8z^7 - 236z^6 - 2226z^5 - 7575z^4 - 6720z^3 + 1440z^2 - 720z + 360) + \\
 & \frac{1}{720} e^z\sqrt{\pi}(-16z^{15/2} - 480z^{13/2} - 4680z^{11/2} - 17160z^{9/2} - 19305z^{7/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.aa9m.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{360} (8z^7 - 236z^6 + 2226z^5 - 7575z^4 + 6720z^3 + 1440z^2 + 720z + 360) + \frac{1}{720} e^{-z} \sqrt{\pi} (-16z^{15/2} + 480z^{13/2} - 4680z^{11/2} + 17160z^{9/2} - 19305z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa9n.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{240} (8z^6 + 196z^5 + 1446z^4 + 3325z^3 + 585z^2 - 1440z + 240) + \frac{1}{480} e^z \sqrt{\pi} (16z^{13/2} + 400z^{11/2} + 3080z^{9/2} + 7920z^{7/2} + 3465z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa9o.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{240} (8z^6 - 196z^5 + 1446z^4 - 3325z^3 + 585z^2 + 1440z + 240) + \frac{1}{480} e^{-z} \sqrt{\pi} (-16z^{13/2} + 400z^{11/2} - 3080z^{9/2} + 7920z^{7/2} - 3465z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa9p.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{480} (-8z^5 - 156z^4 - 826z^3 - 915z^2 + 990z + 480) + \frac{1}{960} e^z \sqrt{\pi} (-16z^{11/2} - 320z^{9/2} - 1800z^{7/2} - 2520z^{5/2} + 1575z^{3/2} + 1890\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aa9q.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{480} (8z^5 - 156z^4 + 826z^3 - 915z^2 - 990z + 480) + \frac{1}{960} e^{-z} \sqrt{\pi} (-16z^{11/2} + 320z^{9/2} - 1800z^{7/2} + 2520z^{5/2} + 1575z^{3/2} - 1890\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aa9r.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, 1; z\right) = -\frac{1}{120} e^z (2z^5 + 35z^4 + 160z^3 + 120z^2 - 240z - 120)$$

07.25.03.aa9s.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{960} (-8z^4 - 116z^3 - 366z^2 + 135z + 645) + \frac{e^z \sqrt{\pi} (-16z^5 - 240z^4 - 840z^3 + 1575z + 315) \operatorname{erf}(\sqrt{z})}{1920\sqrt{z}}$$

07.25.03.aa9t.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{960} (-8z^4 + 116z^3 - 366z^2 - 135z + 645) + \frac{e^{-z} \sqrt{\pi} (16z^5 - 240z^4 + 840z^3 - 1575z + 315) \operatorname{erfi}(\sqrt{z})}{1920\sqrt{z}}$$

07.25.03.aa9u.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, 2; z\right) = -\frac{1}{120} e^z (2z^4 + 25z^3 + 60z^2 - 60z - 120)$$

07.25.03.aa9v.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-8z^4 - 76z^3 - 66z^2 + 305z + 60}{640z} + \frac{e^z \sqrt{\pi} (-16z^5 - 160z^4 - 200z^3 + 600z^2 + 375z - 60) \operatorname{erf}(\sqrt{z})}{1280z^{3/2}}$$

07.25.03.aa9w.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{8z^4 - 76z^3 + 66z^2 + 305z - 60}{640z} + \frac{e^{-z} \sqrt{\pi} (-16z^5 + 160z^4 - 200z^3 - 600z^2 + 375z + 60) \operatorname{erfi}(\sqrt{z})}{1280z^{3/2}}$$

07.25.03.aa9x.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, 3; z\right) = -\frac{1}{60} e^z (2z^3 + 15z^2 - 60)$$

07.25.03.aa9y.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-8z^4 - 36z^3 + 74z^2 + 75z - 45}{256z^2} + \frac{e^z \sqrt{\pi} (-16z^5 - 80z^4 + 120z^3 + 240z^2 - 105z + 45) \operatorname{erf}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.aa9z.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-8z^4 + 36z^3 + 74z^2 - 75z - 45}{256z^2} + \frac{e^{-z} \sqrt{\pi} (16z^5 - 80z^4 - 120z^3 + 240z^2 + 105z + 45) \operatorname{erfi}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.aaa0.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, 4; z\right) = -\frac{1}{20} e^z (2z^2 + 5z - 20)$$

07.25.03.aaa1.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(8z^4 - 4z^3 - 54z^2 + 75z - 90)}{512z^3} - \frac{7e^z \sqrt{\pi} (16z^5 - 120z^3 + 120z^2 - 135z + 90) \operatorname{erf}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.aaa2.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(8z^4 + 4z^3 - 54z^2 - 75z - 90)}{512z^3} - \frac{7e^{-z} \sqrt{\pi} (16z^5 - 120z^3 - 120z^2 - 135z - 90) \operatorname{erfi}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.aaa3.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, 5; z\right) = -\frac{1}{5} e^z (2z - 5)$$

07.25.03.aaa4.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63(8z^4 - 44z^3 + 126z^2 - 335z + 735)}{1024z^4} - \frac{63e^z \sqrt{\pi} (16z^5 - 80z^4 + 200z^3 - 480z^2 + 825z - 735) \operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.aaa5.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{63 e^{-z} \sqrt{\pi} (16 z^5 + 80 z^4 + 200 z^3 + 480 z^2 + 825 z + 735) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}} - \frac{63 (8 z^4 + 44 z^3 + 126 z^2 + 335 z + 735)}{1024 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aaa6.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 5; -\frac{5}{2}, 6; z\right) = \frac{e^z (-2 z^5 + 15 z^4 - 60 z^3 + 180 z^2 - 360 z + 360)}{z^5} - \frac{360}{z^5}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.aaa7.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{144} (8 z^6 + 204 z^5 + 1618 z^4 + 4431 z^3 + 2880 z^2 - 480 z + 144) + \\
 & \frac{1}{288} e^z \sqrt{\pi} (16 z^{13/2} + 416 z^{11/2} + 3432 z^{9/2} + 10296 z^{7/2} + 9009 z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aaa8.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{144} (8 z^6 - 204 z^5 + 1618 z^4 - 4431 z^3 + 2880 z^2 + 480 z + 144) + \\
 & \frac{1}{288} e^{-z} \sqrt{\pi} (-16 z^{13/2} + 416 z^{11/2} - 3432 z^{9/2} + 10296 z^{7/2} - 9009 z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aaa9.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{96} (-8 z^5 - 172 z^4 - 1106 z^3 - 2295 z^2 - 960 z + 96) + \\
 & \frac{1}{192} e^z \sqrt{\pi} (-16 z^{11/2} - 352 z^{9/2} - 2376 z^{7/2} - 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aaaa.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{96} (8 z^5 - 172 z^4 + 1106 z^3 - 2295 z^2 + 960 z + 96) + \\
 & \frac{1}{192} e^{-z} \sqrt{\pi} (-16 z^{11/2} + 352 z^{9/2} - 2376 z^{7/2} + 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aaab.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, \frac{1}{2}; z\right) = \\
 & \frac{1}{192} (8 z^4 + 140 z^3 + 690 z^2 + 975 z + 192) + \frac{1}{384} e^z \sqrt{\pi} (16 z^{9/2} + 288 z^{7/2} + 1512 z^{5/2} + 2520 z^{3/2} + 945 \sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aaac.01} \\
 & {}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, \frac{1}{2}; -z\right) = \\
 & \frac{1}{192} (8 z^4 - 140 z^3 + 690 z^2 - 975 z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (-16 z^{9/2} + 288 z^{7/2} - 1512 z^{5/2} + 2520 z^{3/2} - 945 \sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

07.25.03.aaad.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, 1; z\right) = \frac{1}{24} e^z (z^4 + 16z^3 + 72z^2 + 96z + 24)$$

07.25.03.aaae.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{384} (8z^3 + 108z^2 + 370z + 279) + \frac{e^z \sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.aaaf.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} (-8z^3 + 108z^2 - 370z + 279) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.aaag.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, 2; z\right) = \frac{1}{24} e^z (z^3 + 12z^2 + 36z + 24)$$

07.25.03.aaah.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.aaai.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.aaaj.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, 3; z\right) = \frac{1}{12} e^z (z^2 + 8z + 12)$$

07.25.03.aaak.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5e^z \sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.aaal.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}} - \frac{5(8z^3 - 44z^2 + 18z + 9)}{512 z^2}$$

07.25.03.aaam.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, 4; z\right) = \frac{1}{4} e^z (z + 4)$$

07.25.03.aaan.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35e^z \sqrt{\pi} (16z^4 + 32z^3 - 24z^2 + 24z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.aaao.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35e^{-z} \sqrt{\pi} (16z^4 - 32z^3 - 24z^2 - 24z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.aaap.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, 5; z\right) = e^z$$

07.25.03.aaaq.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{315(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315e^z\sqrt{\pi}(16z^4 - 32z^3 + 72z^2 - 120z + 105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.aaar.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(16z^4 + 32z^3 + 72z^2 + 120z + 105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315(8z^3 + 20z^2 + 50z + 105)}{2048z^4}$$

07.25.03.aaas.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{3}{2}, 6; z\right) = \frac{5e^z(z^4 - 4z^3 + 12z^2 - 24z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = -\frac{1}{2}$

07.25.03.aaat.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{1}{2}, 1; z\right) = \frac{1}{32}e^z(-2z^3 - 29z^2 + 448z + 32) - \frac{1155}{64}\sqrt{\pi}z^{3/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.aaau.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{1}{2}, 1; -z\right) = \frac{1}{32}e^{-z}(2z^3 - 29z^2 - 448z + 32) - \frac{1155}{64}\sqrt{\pi}z^{3/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.aaav.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{1}{2}, 2; z\right) = \frac{1}{16}e^z(-z^2 + 104z + 16) - \frac{231}{32}\sqrt{\pi}z^{3/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.aaaw.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{1}{2}, 2; -z\right) = \frac{1}{16}e^{-z}(-z^2 - 104z + 16) - \frac{231}{32}\sqrt{\pi}z^{3/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.aaax.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{1}{2}, 3; z\right) = e^z(4z + 1) - \frac{33}{8}\sqrt{\pi}z^{3/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.aaay.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{1}{2}, 3; -z\right) = e^{-z}(1 - 4z) - \frac{33}{8}\sqrt{\pi}z^{3/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.aaaz.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{1}{2}, 4; z\right) = \frac{1}{4}e^z(11z + 4) - \frac{11}{4}\sqrt{\pi}z^{3/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.aab0.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{1}{2}, 4; -z\right) = \frac{1}{4}e^{-z}(4 - 11z) - \frac{11}{4}\sqrt{\pi}z^{3/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.aab1.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{1}{2}, 5; z\right) = e^z(2z + 1) - 2\sqrt{\pi}z^{3/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.aab2.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{1}{2}, 5; -z\right) = e^{-z}(1 - 2z) - 2\sqrt{\pi}z^{3/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.aab3.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{1}{2}, 6; z\right) = -\frac{20}{13} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{5 e^z (4 z^6 + 2 z^5 + 3 z^4 - 12 z^3 + 36 z^2 - 72 z + 72)}{13 z^5} - \frac{360}{13 z^5}$$

07.25.03.aab4.01

$${}_2F_2\left(-\frac{3}{2}, 5; -\frac{1}{2}, 6; -z\right) = -\frac{20}{13} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} - \frac{5 e^{-z} (4 z^6 - 2 z^5 + 3 z^4 + 12 z^3 + 36 z^2 + 72 z + 72)}{13 z^5} + \frac{360}{13 z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = \frac{1}{2}$

07.25.03.aab5.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{1}{2}, 1; z\right) = \frac{1}{128} e^z (4 z^2 - 1103 z + 128) + \frac{105}{256} \sqrt{\pi} (22 z^{3/2} - 9 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aab6.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{1}{2}, 1; -z\right) = \frac{1}{128} e^{-z} (4 z^2 + 1103 z + 128) + \frac{105}{256} \sqrt{\pi} (22 z^{3/2} + 9 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aab7.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{1}{2}, 2; z\right) = \frac{1}{64} e^z (64 - 229 z) + \frac{21}{128} \sqrt{\pi} (22 z^{3/2} - 15 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aab8.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{1}{2}, 2; -z\right) = \frac{1}{64} e^{-z} (229 z + 64) + \frac{21}{128} \sqrt{\pi} (22 z^{3/2} + 15 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aab9.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{1}{2}, 3; z\right) = \frac{1}{16} e^z (16 - 33 z) + \frac{3}{32} \sqrt{\pi} (22 z^{3/2} - 21 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aaba.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{1}{2}, 3; -z\right) = \frac{1}{16} e^{-z} (33 z + 16) + \frac{3}{32} \sqrt{\pi} (22 z^{3/2} + 21 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aabb.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{1}{2}, 4; z\right) = \frac{1}{8} e^z (8 - 11 z) + \frac{1}{16} \sqrt{\pi} (22 z^{3/2} - 27 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aabc.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{1}{2}, 4; -z\right) = \frac{1}{8} e^{-z} (11 z + 8) + \frac{1}{16} \sqrt{\pi} (22 z^{3/2} + 27 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aabd.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{1}{2}, 5; z\right) = e^z (1 - z) + \frac{1}{2} \sqrt{\pi} (2 z^{3/2} - 3 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aabe.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{1}{2}, 5; -z\right) = e^{-z} (z + 1) + \frac{1}{2} \sqrt{\pi} (2 z^{3/2} + 3 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aabf.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{1}{2}, 6; z\right) = -\frac{5 e^z (22 z^6 - 28 z^5 - 3 z^4 + 12 z^3 - 36 z^2 + 72 z - 72)}{143 z^5} + \frac{5}{143} \sqrt{\pi} (22 z^{3/2} - 39 \sqrt{z}) \operatorname{erfi}(\sqrt{z}) - \frac{360}{143 z^5}$$

07.25.03.aabg.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{1}{2}, 6; -z\right) = \frac{5 e^{-z} (22 z^6 + 28 z^5 - 3 z^4 - 12 z^3 - 36 z^2 - 72 z - 72)}{143 z^5} + \frac{5}{143} \sqrt{\pi} (22 z^{3/2} + 39 \sqrt{z}) \operatorname{erf}(\sqrt{z}) + \frac{360}{143 z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = 1$

07.25.03.aabh.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, 1; z\right) = \frac{1}{32} e^{z/2} (193 z^2 - 256 z + 32) I_0\left(\frac{z}{2}\right) + \frac{1}{8} e^{z/2} (19 z - 48 z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.aabi.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, \frac{3}{2}; z\right) = \frac{e^z (919 - 2294 z)}{1024} + \frac{105 \sqrt{\pi} (44 z^2 - 36 z + 1) \operatorname{erfi}(\sqrt{z})}{2048 \sqrt{z}}$$

07.25.03.aabj.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, \frac{3}{2}; -z\right) = \frac{e^{-z} (2294 z + 919)}{1024} + \frac{105 \sqrt{\pi} (44 z^2 + 36 z + 1) \operatorname{erf}(\sqrt{z})}{2048 \sqrt{z}}$$

07.25.03.aabk.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, 2; z\right) = \frac{1}{32} e^{z/2} (77 z^2 - 136 z + 32) I_0\left(\frac{z}{2}\right) + \frac{1}{32} e^{z/2} (60 z - 77 z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.aabl.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, \frac{5}{2}; z\right) = \frac{15 \sqrt{\pi} (616 z^3 - 756 z^2 + 42 z - 1) \operatorname{erfi}(\sqrt{z})}{8192 z^{3/2}} - \frac{3 e^z (1540 z^2 - 1152 z - 5)}{4096 z}$$

07.25.03.aabm.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (1540 z^2 + 1152 z - 5)}{4096 z} + \frac{15 \sqrt{\pi} (616 z^3 + 756 z^2 + 42 z + 1) \operatorname{erf}(\sqrt{z})}{8192 z^{3/2}}$$

07.25.03.aabn.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, 3; z\right) = \frac{1}{8} e^{z/2} (11 z^2 - 24 z + 8) I_0\left(\frac{z}{2}\right) - \frac{1}{8} e^{z/2} z (11 z - 13) I_1\left(\frac{z}{2}\right)$$

07.25.03.aabo.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, \frac{7}{2}; z\right) = \frac{15 \sqrt{\pi} (6160 z^4 - 10080 z^3 + 840 z^2 - 40 z + 9) \operatorname{erfi}(\sqrt{z})}{131072 z^{5/2}} - \frac{15 e^z (3080 z^3 - 3500 z^2 - 46 z + 9)}{65536 z^2}$$

07.25.03.aabp.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, \frac{7}{2}; -z\right) = \frac{15 e^{-z} (3080 z^3 + 3500 z^2 - 46 z - 9)}{65536 z^2} + \frac{15 \sqrt{\pi} (6160 z^4 + 10080 z^3 + 840 z^2 + 40 z + 9) \operatorname{erf}(\sqrt{z})}{131072 z^{5/2}}$$

07.25.03.aabq.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, 4; z\right) = \frac{1}{24} e^{z/2} (22 z^2 - 57 z + 24) I_0\left(\frac{z}{2}\right) - \frac{1}{24} e^{z/2} z (22 z - 35) I_1\left(\frac{z}{2}\right)$$

07.25.03.aabr.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, \frac{9}{2}; z\right) = \frac{105 \sqrt{\pi} (2464 z^5 - 5040 z^4 + 560 z^3 - 40 z^2 + 18 z - 15) \operatorname{erfi}(\sqrt{z})}{524288 z^{7/2}} - \frac{105 e^z (1232 z^4 - 1904 z^3 - 56 z^2 + 28 z - 15)}{262144 z^3}$$

07.25.03.aabs.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (1232 z^4 + 1904 z^3 - 56 z^2 - 28 z - 15)}{262144 z^3} + \frac{105 \sqrt{\pi} (2464 z^5 + 5040 z^4 + 560 z^3 + 40 z^2 + 18 z + 15) \operatorname{erf}(\sqrt{z})}{524288 z^{7/2}}$$

07.25.03.aabt.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, 5; z\right) = \frac{1}{3} e^{z/2} (2 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z - 2) z I_1\left(\frac{z}{2}\right)$$

07.25.03.aabu.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (4928 z^6 - 12096 z^5 + 1680 z^4 - 160 z^3 + 108 z^2 - 180 z + 735) \operatorname{erfi}(\sqrt{z})}{4194304 z^{9/2}} - \frac{315 e^z (2464 z^5 - 4816 z^4 - 336 z^3 + 424 z^2 - 670 z + 735)}{2097152 z^4}$$

07.25.03.aabv.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (2464 z^5 + 4816 z^4 - 336 z^3 - 424 z^2 - 670 z - 735)}{2097152 z^4} + \frac{315 \sqrt{\pi} (4928 z^6 + 12096 z^5 + 1680 z^4 + 160 z^3 + 108 z^2 + 180 z + 735) \operatorname{erf}(\sqrt{z})}{4194304 z^{9/2}}$$

07.25.03.aabw.01

$${}_2F_2\left(-\frac{3}{2}, 5; 1, 6; z\right) = \frac{e^{z/2} (1540 z^5 - 5250 z^4 + 2975 z^3 + 120 z^2 - 384 z + 768) I_0\left(\frac{z}{2}\right)}{3003 z^3} + \frac{e^{z/2} (-1540 z^6 + 3710 z^5 - 35 z^4 + 160 z^3 - 576 z^2 + 1536 z - 3072) I_1\left(\frac{z}{2}\right)}{3003 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = \frac{3}{2}$

07.25.03.aabx.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{3}{2}, 2; z\right) = \frac{21 \sqrt{\pi} (44 z^2 - 60 z + 5) \operatorname{erfi}(\sqrt{z})}{1024 \sqrt{z}} - \frac{11}{512} e^z (42 z - 37)$$

07.25.03.aaby.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{3}{2}, 2; -z\right) = \frac{11}{512} e^{-z} (42 z + 37) + \frac{21 \sqrt{\pi} (44 z^2 + 60 z + 5) \operatorname{erf}(\sqrt{z})}{1024 \sqrt{z}}$$

07.25.03.aabz.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{3}{2}, 3; z\right) = \frac{\sqrt{\pi} (132 z^2 - 252 z + 35) \operatorname{erfi}(\sqrt{z})}{256 \sqrt{z}} - \frac{3}{128} e^z (22 z - 31)$$

07.25.03.aac0.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{3}{2}, 3; -z\right) = \frac{3}{128} e^{-z} (22 z + 31) + \frac{\sqrt{\pi} (132 z^2 + 252 z + 35) \operatorname{erf}(\sqrt{z})}{256 \sqrt{z}}$$

07.25.03.aac1.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{3}{2}, 4; z\right) = \frac{1}{64} e^z (43 - 22 z) + \frac{\sqrt{\pi} (44 z^2 - 108 z + 21) \operatorname{erfi}(\sqrt{z})}{128 \sqrt{z}}$$

07.25.03.aac2.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{3}{2}, 4; -z\right) = \frac{1}{64} e^{-z} (22 z + 43) + \frac{\sqrt{\pi} (44 z^2 + 108 z + 21) \operatorname{erf}(\sqrt{z})}{128 \sqrt{z}}$$

07.25.03.aac3.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{3}{2}, 5; z\right) = \frac{1}{8} e^z (5 - 2 z) + \frac{\sqrt{\pi} (4 z^2 - 12 z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.aac4.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{3}{2}, 5; -z\right) = \frac{1}{8} e^{-z} (2 z + 5) + \frac{\sqrt{\pi} (4 z^2 + 12 z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.aac5.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{3}{2}, 6; z\right) = -\frac{5 e^z (66 z^6 - 201 z^5 + 4 z^4 - 16 z^3 + 48 z^2 - 96 z + 96)}{1716 z^5} + \frac{5 \sqrt{\pi} (132 z^2 - 468 z + 143) \operatorname{erfi}(\sqrt{z})}{3432 \sqrt{z}} + \frac{40}{143 z^5}$$

07.25.03.aac6.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{3}{2}, 6; -z\right) = \frac{5 e^{-z} (66 z^6 + 201 z^5 + 4 z^4 + 16 z^3 + 48 z^2 + 96 z + 96)}{1716 z^5} + \frac{5 \sqrt{\pi} (132 z^2 + 468 z + 143) \operatorname{erf}(\sqrt{z})}{3432 \sqrt{z}} - \frac{40}{143 z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = 2$

07.25.03.aac7.01

$${}_2F_2\left(-\frac{3}{2}, 5; 2, 2; z\right) = \frac{1}{80} e^{z/2} (77 z^2 - 189 z + 80) I_0\left(\frac{z}{2}\right) + \frac{1}{80} e^{z/2} (-77 z^2 + 112 z - 4) I_1\left(\frac{z}{2}\right)$$

07.25.03.aac8.01

$${}_2F_2\left(-\frac{3}{2}, 5; 2, \frac{5}{2}; z\right) = \frac{3 \sqrt{\pi} (616 z^3 - 1260 z^2 + 210 z + 5) \operatorname{erfi}(\sqrt{z})}{4096 z^{3/2}} - \frac{3 e^z (308 z^2 - 476 z + 5)}{2048 z}$$

07.25.03.aac9.01

$${}_2F_2\left(-\frac{3}{2}, 5; 2, \frac{5}{2}; -z\right) = \frac{3e^{-z}(308z^2 + 476z + 5)}{2048z} + \frac{3\sqrt{\pi}(616z^3 + 1260z^2 + 210z - 5)\operatorname{erf}(\sqrt{z})}{4096z^{3/2}}$$

07.25.03.aaca.01

$${}_2F_2\left(-\frac{3}{2}, 5; 2, 3; z\right) = \frac{1}{40}e^{z/2}(22z^2 - 69z + 40)I_0\left(\frac{z}{2}\right) + \frac{1}{40}e^{z/2}(-22z^2 + 47z - 4)I_1\left(\frac{z}{2}\right)$$

07.25.03.aacb.01

$${}_2F_2\left(-\frac{3}{2}, 5; 2, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi}(1232z^4 - 3360z^3 + 840z^2 + 40z - 3)\operatorname{erfi}(\sqrt{z})}{65536z^{5/2}} - \frac{15e^z(616z^3 - 1372z^2 + 42z - 3)}{32768z^2}$$

07.25.03.aacc.01

$${}_2F_2\left(-\frac{3}{2}, 5; 2, \frac{7}{2}; -z\right) = \frac{15e^{-z}(616z^3 + 1372z^2 + 42z + 3)}{32768z^2} + \frac{15\sqrt{\pi}(1232z^4 + 3360z^3 + 840z^2 - 40z - 3)\operatorname{erf}(\sqrt{z})}{65536z^{5/2}}$$

07.25.03.aacd.01

$${}_2F_2\left(-\frac{3}{2}, 5; 2, 4; z\right) = \frac{1}{30}e^{z/2}(11z^2 - 42z + 30)I_0\left(\frac{z}{2}\right) + \frac{1}{60}e^{z/2}(-22z^2 + 62z - 9)I_1\left(\frac{z}{2}\right)$$

07.25.03.aace.01

$${}_2F_2\left(-\frac{3}{2}, 5; 2, \frac{9}{2}; z\right) = \frac{21\sqrt{\pi}(2464z^5 - 8400z^4 + 2800z^3 + 200z^2 - 30z + 15)\operatorname{erfi}(\sqrt{z})}{262144z^{7/2}} - \frac{21e^z(1232z^4 - 3584z^3 + 224z^2 - 40z + 15)}{131072z^3}$$

07.25.03.aacf.01

$${}_2F_2\left(-\frac{3}{2}, 5; 2, \frac{9}{2}; -z\right) = \frac{21e^{-z}(1232z^4 + 3584z^3 + 224z^2 + 40z + 15)}{131072z^3} + \frac{21\sqrt{\pi}(2464z^5 + 8400z^4 + 2800z^3 - 200z^2 - 30z - 15)\operatorname{erf}(\sqrt{z})}{262144z^{7/2}}$$

07.25.03.aacg.01

$${}_2F_2\left(-\frac{3}{2}, 5; 2, 5; z\right) = \frac{1}{15}e^{z/2}(4z^2 - 18z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}(-4z^2 + 14z - 3)I_1\left(\frac{z}{2}\right)$$

07.25.03.aach.01

$${}_2F_2\left(-\frac{3}{2}, 5; 2, \frac{11}{2}; z\right) = \frac{63\sqrt{\pi}(4928z^6 - 20160z^5 + 8400z^4 + 800z^3 - 180z^2 + 180z - 525)\operatorname{erfi}(\sqrt{z})}{2097152z^{9/2}} - \frac{63e^z(2464z^5 - 8848z^4 + 1008z^3 - 440z^2 + 530z - 525)}{1048576z^4}$$

07.25.03.aaci.01

$${}_2F_2\left(-\frac{3}{2}, 5; 2, \frac{11}{2}; -z\right) = \frac{63e^{-z}(2464z^5 + 8848z^4 + 1008z^3 + 440z^2 + 530z + 525)}{1048576z^4} + \frac{63\sqrt{\pi}(4928z^6 + 20160z^5 + 8400z^4 - 800z^3 - 180z^2 - 180z - 525)\operatorname{erf}(\sqrt{z})}{2097152z^{9/2}}$$

07.25.03.aacj.01

$${}_2F_2\left(-\frac{3}{2}, 5; 2, 6; z\right) = \frac{2 e^{z/2} (308 z^5 - 1596 z^4 + 1505 z^3 - 15 z^2 + 48 z - 96) I_0\left(\frac{z}{2}\right)}{3003 z^3} - \frac{2 e^{z/2} (308 z^6 - 1288 z^5 + 371 z^4 + 20 z^3 - 72 z^2 + 192 z - 384) I_1\left(\frac{z}{2}\right)}{3003 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = \frac{5}{2}$

07.25.03.aack.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{5}{2}, 3; z\right) = \frac{3 \sqrt{\pi} (88 z^3 - 252 z^2 + 70 z + 5) \operatorname{erfi}(\sqrt{z})}{1024 z^{3/2}} - \frac{3 e^z (44 z^2 - 104 z + 5)}{512 z}$$

07.25.03.aacl.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{5}{2}, 3; -z\right) = \frac{3 e^{-z} (44 z^2 + 104 z + 5)}{512 z} + \frac{3 \sqrt{\pi} (88 z^3 + 252 z^2 + 70 z - 5) \operatorname{erf}(\sqrt{z})}{1024 z^{3/2}}$$

07.25.03.aacm.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{5}{2}, 4; z\right) = \frac{e^z (-44 z^2 + 140 z - 15)}{256 z} + \frac{\sqrt{\pi} (88 z^3 - 324 z^2 + 126 z + 15) \operatorname{erfi}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.aacn.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{5}{2}, 4; -z\right) = \frac{e^{-z} (44 z^2 + 140 z + 15)}{256 z} + \frac{\sqrt{\pi} (88 z^3 + 324 z^2 + 126 z - 15) \operatorname{erf}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.aaco.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{5}{2}, 5; z\right) = \frac{e^z (-4 z^2 + 16 z - 3)}{32 z} + \frac{\sqrt{\pi} (8 z^3 - 36 z^2 + 18 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.aacp.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{5}{2}, 5; -z\right) = \frac{e^{-z} (4 z^2 + 16 z + 3)}{32 z} + \frac{\sqrt{\pi} (8 z^3 + 36 z^2 + 18 z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.aacq.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{5}{2}, 6; z\right) = -\frac{5 e^z (308 z^6 - 1484 z^5 + 413 z^4 + 64 z^3 - 192 z^2 + 384 z - 384)}{16016 z^5} + \frac{5 \sqrt{\pi} (616 z^3 - 3276 z^2 + 2002 z + 429) \operatorname{erfi}(\sqrt{z})}{32032 z^{3/2}} - \frac{120}{1001 z^5}$$

07.25.03.aacr.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{5}{2}, 6; -z\right) = \frac{5 e^{-z} (308 z^6 + 1484 z^5 + 413 z^4 - 64 z^3 - 192 z^2 - 384 z - 384)}{16016 z^5} + \frac{5 \sqrt{\pi} (616 z^3 + 3276 z^2 + 2002 z - 429) \operatorname{erf}(\sqrt{z})}{32032 z^{3/2}} + \frac{120}{1001 z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = 3$

07.25.03.aacs.01

$${}_2F_2\left(-\frac{3}{2}, 5; 3, 3; z\right) = \frac{1}{210} e^{z/2} (66 z^2 - 270 z + 211) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (-33 z^3 + 102 z^2 - 20 z - 2) I_1\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.aact.01

$${}_2F_2\left(-\frac{3}{2}, 5; 3, \frac{7}{2}; z\right) = \frac{15 \sqrt{\pi} (176 z^4 - 672 z^3 + 280 z^2 + 40 z + 3) \operatorname{erfi}(\sqrt{z})}{16384 z^{5/2}} - \frac{15 e^z (88 z^3 - 292 z^2 + 38 z + 3)}{8192 z^2}$$

07.25.03.aacu.01

$${}_2F_2\left(-\frac{3}{2}, 5; 3, \frac{7}{2}; -z\right) = \frac{15 e^{-z} (88 z^3 + 292 z^2 + 38 z - 3)}{8192 z^2} + \frac{15 \sqrt{\pi} (176 z^4 + 672 z^3 + 280 z^2 - 40 z + 3) \operatorname{erf}(\sqrt{z})}{16384 z^{5/2}}$$

07.25.03.aacv.01

$${}_2F_2\left(-\frac{3}{2}, 5; 3, 4; z\right) = \frac{1}{210} e^{z/2} (44 z^2 - 222 z + 213) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (-44 z^3 + 178 z^2 - 57 z - 12) I_1\left(\frac{z}{2}\right)}{210 z}$$

07.25.03.aacw.01

$${}_2F_2\left(-\frac{3}{2}, 5; 3, \frac{9}{2}; z\right) = \frac{7 \sqrt{\pi} (1056 z^5 - 5040 z^4 + 2800 z^3 + 600 z^2 + 90 z - 15) \operatorname{erfi}(\sqrt{z})}{65536 z^{7/2}} - \frac{7 e^z (528 z^4 - 2256 z^3 + 536 z^2 + 100 z - 15)}{32768 z^3}$$

07.25.03.aacx.01

$${}_2F_2\left(-\frac{3}{2}, 5; 3, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (528 z^4 + 2256 z^3 + 536 z^2 - 100 z - 15)}{32768 z^3} + \frac{7 \sqrt{\pi} (1056 z^5 + 5040 z^4 + 2800 z^3 - 600 z^2 + 90 z + 15) \operatorname{erf}(\sqrt{z})}{65536 z^{7/2}}$$

07.25.03.aacy.01

$${}_2F_2\left(-\frac{3}{2}, 5; 3, 5; z\right) = \frac{4}{105} e^{z/2} (4 z^2 - 24 z + 27) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4 z^3 - 20 z^2 + 9 z + 3) I_1\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.aacz.01

$${}_2F_2\left(-\frac{3}{2}, 5; 3, \frac{11}{2}; z\right) = \frac{63 \sqrt{\pi} (704 z^6 - 4032 z^5 + 2800 z^4 + 800 z^3 + 180 z^2 - 60 z + 105) \operatorname{erfi}(\sqrt{z})}{524288 z^{9/2}} - \frac{63 e^z (352 z^5 - 1840 z^4 + 656 z^3 + 248 z^2 - 130 z + 105)}{262144 z^4}$$

07.25.03.aad0.01

$${}_2F_2\left(-\frac{3}{2}, 5; 3, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (352 z^5 + 1840 z^4 + 656 z^3 - 248 z^2 - 130 z - 105)}{262144 z^4} + \frac{63 \sqrt{\pi} (704 z^6 + 4032 z^5 + 2800 z^4 - 800 z^3 + 180 z^2 + 60 z + 105) \operatorname{erf}(\sqrt{z})}{524288 z^{9/2}}$$

07.25.03.aad1.01

$${}_2F_2\left(-\frac{3}{2}, 5; 3, 6; z\right) = \frac{4 e^{z/2} (264 z^5 - 1836 z^4 + 2356 z^3 + 15 z^2 - 48 z + 96) I_0\left(\frac{z}{2}\right)}{9009 z^3} - \frac{4 e^{z/2} (264 z^6 - 1572 z^5 + 916 z^4 + 409 z^3 + 72 z^2 - 192 z + 384) I_1\left(\frac{z}{2}\right)}{9009 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = \frac{7}{2}$

07.25.03.aad2.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{7}{2}, 4; z\right) = \frac{5 \sqrt{\pi} (176 z^4 - 864 z^3 + 504 z^2 + 120 z + 27) \operatorname{erfi}(\sqrt{z})}{8192 z^{5/2}} - \frac{5 e^z (88 z^3 - 388 z^2 + 102 z + 27)}{4096 z^2}$$

07.25.03.aad3.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{7}{2}, 4; -z\right) = \frac{5 e^{-z} (88 z^3 + 388 z^2 + 102 z - 27)}{4096 z^2} + \frac{5 \sqrt{\pi} (176 z^4 + 864 z^3 + 504 z^2 - 120 z + 27) \operatorname{erf}(\sqrt{z})}{8192 z^{5/2}}$$

07.25.03.aad4.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{7}{2}, 5; z\right) = \frac{5 \sqrt{\pi} (16 z^4 - 96 z^3 + 72 z^2 + 24 z + 9) \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}} - \frac{5 e^z (8 z^3 - 44 z^2 + 18 z + 9)}{512 z^2}$$

07.25.03.aad5.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{7}{2}, 5; -z\right) = \frac{5 e^{-z} (8 z^3 + 44 z^2 + 18 z - 9)}{512 z^2} + \frac{5 \sqrt{\pi} (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.aad6.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{7}{2}, 6; z\right) = -\frac{5 e^z (3080 z^6 - 20300 z^5 + 11410 z^4 + 7985 z^3 + 3072 z^2 - 6144 z + 6144)}{256256 z^5} + \frac{5 \sqrt{\pi} (6160 z^4 - 43680 z^3 + 40040 z^2 + 17160 z + 9009) \operatorname{erfi}(\sqrt{z})}{512512 z^{5/2}} + \frac{120}{1001 z^5}$$

07.25.03.aad7.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{7}{2}, 6; -z\right) = \frac{5 e^{-z} (3080 z^6 + 20300 z^5 + 11410 z^4 - 7985 z^3 + 3072 z^2 + 6144 z + 6144)}{256256 z^5} + \frac{5 \sqrt{\pi} (6160 z^4 + 43680 z^3 + 40040 z^2 - 17160 z + 9009) \operatorname{erf}(\sqrt{z})}{512512 z^{5/2}} - \frac{120}{1001 z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = 4$

07.25.03.aad8.01

$${}_2F_2\left(-\frac{3}{2}, 5; 4, 4; z\right) = \frac{e^{z/2} (44 z^3 - 276 z^2 + 327 z + 3) I_0\left(\frac{z}{2}\right)}{315 z} + \frac{e^{z/2} (-44 z^4 + 232 z^3 - 117 z^2 - 48 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.aad9.01

$${}_2F_2\left(-\frac{3}{2}, 5; 4, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi} (352z^5 - 2160z^4 + 1680z^3 + 600z^2 + 270z + 45) \operatorname{erfi}(\sqrt{z})}{32768z^{7/2}} - \frac{7e^z (176z^4 - 992z^3 + 432z^2 + 240z + 45)}{16384z^3}$$

07.25.03.aada.01

$${}_2F_2\left(-\frac{3}{2}, 5; 4, \frac{9}{2}; -z\right) = \frac{7e^{-z} (176z^4 + 992z^3 + 432z^2 - 240z + 45)}{16384z^3} + \frac{7\sqrt{\pi} (352z^5 + 2160z^4 + 1680z^3 - 600z^2 + 270z - 45) \operatorname{erf}(\sqrt{z})}{32768z^{7/2}}$$

07.25.03.aadb.01

$${}_2F_2\left(-\frac{3}{2}, 5; 4, 5; z\right) = \frac{4e^{z/2} (8z^3 - 60z^2 + 84z + 3) I_0\left(\frac{z}{2}\right)}{315z} - \frac{4e^{z/2} (8z^4 - 52z^3 + 36z^2 + 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.aadc.01

$${}_2F_2\left(-\frac{3}{2}, 5; 4, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi} (704z^6 - 5184z^5 + 5040z^4 + 2400z^3 + 1620z^2 + 540z - 315) \operatorname{erfi}(\sqrt{z})}{262144z^{9/2}} - \frac{21e^z (352z^5 - 2416z^4 + 1488z^3 + 1176z^2 + 750z - 315)}{131072z^4}$$

07.25.03.aadd.01

$${}_2F_2\left(-\frac{3}{2}, 5; 4, \frac{11}{2}; -z\right) = \frac{21e^{-z} (352z^5 + 2416z^4 + 1488z^3 - 1176z^2 + 750z + 315)}{131072z^4} + \frac{21\sqrt{\pi} (704z^6 + 5184z^5 + 5040z^4 - 2400z^3 + 1620z^2 - 540z - 315) \operatorname{erf}(\sqrt{z})}{262144z^{9/2}}$$

07.25.03.aade.01

$${}_2F_2\left(-\frac{3}{2}, 5; 4, 6; z\right) = \frac{32e^{z/2} (22z^5 - 192z^4 + 309z^3 + 24z^2 + 9z - 18) I_0\left(\frac{z}{2}\right)}{9009z^3} - \frac{8e^{z/2} (88z^6 - 680z^5 + 600z^4 + 444z^3 + 375z^2 + 144z - 288) I_1\left(\frac{z}{2}\right)}{9009z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = \frac{9}{2}$

07.25.03.aadf.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{9}{2}, 5; z\right) = \frac{7\sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7e^z (16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.aadg.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{9}{2}, 5; -z\right) = \frac{7e^{-z} (16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7\sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.aadh.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{9}{2}, 6; z\right) = -\frac{5 e^z (3696 z^6 - 30912 z^5 + 26432 z^4 + 28120 z^3 + 32757 z^2 + 24576 z - 24576)}{439296 z^5} + \frac{5 \sqrt{\pi} (7392 z^5 - 65520 z^4 + 80080 z^3 + 51480 z^2 + 54054 z + 45045) \operatorname{erfi}(\sqrt{z})}{878592 z^{7/2}} - \frac{40}{143 z^5}$$

07.25.03.aadi.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{9}{2}, 6; -z\right) = \frac{5 e^{-z} (3696 z^6 + 30912 z^5 + 26432 z^4 - 28120 z^3 + 32757 z^2 - 24576 z - 24576)}{439296 z^5} + \frac{5 \sqrt{\pi} (7392 z^5 + 65520 z^4 + 80080 z^3 - 51480 z^2 + 54054 z - 45045) \operatorname{erf}(\sqrt{z})}{878592 z^{7/2}} + \frac{40}{143 z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = 5$

07.25.03.aadj.01

$${}_2F_2\left(-\frac{3}{2}, 5; 5, 5; z\right) = \frac{32 e^{z/2} (8 z^4 - 72 z^3 + 120 z^2 + 12 z + 9) I_0\left(\frac{z}{2}\right)}{3465 z^2} - \frac{128 e^{z/2} (2 z^5 - 16 z^4 + 15 z^3 + 12 z^2 + 12 z + 9) I_1\left(\frac{z}{2}\right)}{3465 z^3}$$

07.25.03.aadk.01

$${}_2F_2\left(-\frac{3}{2}, 5; 5, \frac{11}{2}; z\right) = \frac{21 \sqrt{\pi} (64 z^6 - 576 z^5 + 720 z^4 + 480 z^3 + 540 z^2 + 540 z + 315) \operatorname{erfi}(\sqrt{z})}{32768 z^{9/2}} - \frac{21 e^z (32 z^5 - 272 z^4 + 240 z^3 + 264 z^2 + 330 z + 315)}{16384 z^4}$$

07.25.03.aadi.01

$${}_2F_2\left(-\frac{3}{2}, 5; 5, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (32 z^5 + 272 z^4 + 240 z^3 - 264 z^2 + 330 z - 315)}{16384 z^4} + \frac{21 \sqrt{\pi} (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315) \operatorname{erf}(\sqrt{z})}{32768 z^{9/2}}$$

07.25.03.aadm.01

$${}_2F_2\left(-\frac{3}{2}, 5; 5, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 168 z^4 + 324 z^3 + 60 z^2 + 81 z + 72) I_0\left(\frac{z}{2}\right)}{9009 z^3} - \frac{32 e^{z/2} (16 z^6 - 152 z^5 + 180 z^4 + 180 z^3 + 249 z^2 + 324 z + 288) I_1\left(\frac{z}{2}\right)}{9009 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = \frac{11}{2}$

07.25.03.aadn.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{11}{2}, 6; z\right) = -\frac{15 e^z (2464 z^6 - 24976 z^5 + 28784 z^4 + 39304 z^3 + 68274 z^2 + 118707 z + 196608)}{1171456 z^5} + \frac{15 \sqrt{\pi} (4928 z^6 - 52416 z^5 + 80080 z^4 + 68640 z^3 + 108108 z^2 + 180180 z + 315315) \operatorname{erfi}(\sqrt{z})}{2342912 z^{9/2}} + \frac{360}{143 z^5}$$

07.25.03.aado.01

$${}_2F_2\left(-\frac{3}{2}, 5; \frac{11}{2}, 6; -z\right) = \frac{15 e^{-z} (2464 z^6 + 24976 z^5 + 28784 z^4 - 39304 z^3 + 68274 z^2 - 118707 z + 196608)}{1171456 z^5} + \frac{15 \sqrt{\pi} (4928 z^6 + 52416 z^5 + 80080 z^4 - 68640 z^3 + 108108 z^2 - 180180 z + 315315) \operatorname{erf}(\sqrt{z})}{2342912 z^{9/2}} - \frac{360}{143 z^5}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 5$, $b_1 = 6$

07.25.03.aadp.01

$${}_2F_2\left(-\frac{3}{2}, 5; 6, 6; z\right) = \frac{1}{27054027 z^5} - \frac{64 e^{z/2} (18480 z^7 - 226800 z^6 + 508900 z^5 + 161340 z^4 + 339567 z^3 + 717261 z^2 + 2162160 z - 4324320) I_0\left(\frac{z}{2}\right) - \frac{1}{27054027 z^4} 64 e^{z/2} (18480 z^6 - 208320 z^5 + 309820 z^4 + 385480 z^3 + 729387 z^2 + 1538448 z + 3950124) I_1\left(\frac{z}{2}\right) + \frac{10240}{1001 z^5}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.aadq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{34037647875} (e^z (32768 z^{15} + 2736128 z^{14} + 89579520 z^{13} + 1479659520 z^{12} + 13225175040 z^{11} + 63780203520 z^{10} + 156138554880 z^9 + 168169478400 z^8 + 57300566400 z^7 + 2085652800 z^6 - 713512800 z^5 + 3300620400 z^4 - 10983357000 z^3 + 27046750500 z^2 - 43320642750 z + 34037647875))$$

07.25.03.aadr.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{3094331625} (e^z (16384 z^{14} + 1228800 z^{13} + 35573760 z^{12} + 508600320 z^{11} + 3815285760 z^{10} + 14721315840 z^9 + 26544672000 z^8 + 17723059200 z^7 + 2065694400 z^6 + 9979200 z^5 - 351766800 z^4 + 1122660000 z^3 - 2685028500 z^2 + 4125775500 z - 3094331625))$$

07.25.03.aads.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{343814625} (e^z (8192 z^{13} + 544768 z^{12} + 13701120 z^{11} + 165242880 z^{10} + 998807040 z^9 + 2866026240 z^8 + 3241244160 z^7 + 758419200 z^6 - 104781600 z^5 + 57380400 z^4 - 147193200 z^3 + 340540200 z^2 - 491163750 z + 343814625))$$

07.25.03.aadt.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{49116375} (e^z (4096 z^{12} + 237568 z^{11} + 5068800 z^{10} + 49674240 z^9 + 226195200 z^8 + 415134720 z^7 + 167650560 z^6 - 39916800 z^5 + 7484400 z^4 + 24948000 z^3 - 61122600 z^2 + 78586200 z - 49116375))$$

07.25.03.aadu.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{9823275} (e^z (2048 z^{11} + 101376 z^{10} + 1774080 z^9 + 13305600 z^8 + 39916800 z^7 + 27941760 z^6 - 13970880 z^5 + 14968800 z^4 - 18711000 z^3 + 21829500 z^2 - 19646550 z + 9823275))$$

07.25.03.aadv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{3274425} (e^z (1024 z^{10} + 41984 z^9 + 572160 z^8 + 2933760 z^7 + 3822720 z^6 - 3231360 z^5 + 4324320 z^4 - 3326400 z^3 - 4365900 z^2 + 13097700 z - 3274425))$$

07.25.03.aadw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{3274425} (e^z (512 z^9 + 16640 z^8 + 161280 z^7 + 418560 z^6 - 390720 z^5 + 142560 z^4 + 1663200 z^3 - 5821200 z^2 + 6548850 z + 3274425))$$

07.25.03.aadx.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{3274425} (e^{z/2} (256 z^9 + 7424 z^8 + 60864 z^7 + 104640 z^6 - 198480 z^5 + 327600 z^4 + 189000 z^3 - 2381400 z^2 + 3274425 z + 3274425) I_0\left(\frac{z}{2}\right)) + \frac{1}{3274425} (e^{z/2} (256 z^9 + 7168 z^8 + 53824 z^7 + 54144 z^6 - 232080 z^5 + 552000 z^4 - 441000 z^3 - 1587600 z^2 + 4068225 z) I_1\left(\frac{z}{2}\right))$$

07.25.03.aady.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (256 z^8 + 6144 z^7 + 34560 z^6 - 15360 z^5 - 110880 z^4 + 570240 z^3 - 1164240 z^2 + 3274425)}{3274425}$$

07.25.03.aadz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{3274425} e^{z/2} (256 z^8 + 5248 z^7 + 21312 z^6 - 37440 z^5 - 1680 z^4 + 378000 z^3 - 1217160 z^2 + 582120 z + 3274425) I_0\left(\frac{z}{2}\right) + \frac{1}{3274425} e^{z/2} (256 z^8 + 4992 z^7 + 16448 z^6 - 51648 z^5 + 54000 z^4 + 294000 z^3 - 1428840 z^2 + 1958040 z + 945945) I_1\left(\frac{z}{2}\right)$$

07.25.03.aae0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 1984 z^6 + 2400 z^5 - 23280 z^4 + 72600 z^3 - 41580 z^2 - 436590 z + 1091475)}{1091475}$$

07.25.03.aae1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, 3; z\right) = \frac{32 e^{z/2} (16 z^7 + 192 z^6 - 120 z^5 - 1680 z^4 + 9450 z^3 - 18360 z^2 - 19305 z + 111375) I_0\left(\frac{z}{2}\right) + \frac{1}{3274425 z} 4 e^{z/2} (128 z^8 + 1408 z^7 - 2304 z^6 - 10560 z^5 + 84000 z^4 - 231120 z^3 + 112320 z^2 + 617760 z - 289575) I_1\left(\frac{z}{2}\right)}{3274425}$$

07.25.03.aae2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (64 z^6 + 448 z^5 - 2160 z^4 + 2400 z^3 + 23100 z^2 - 124740 z + 218295)}{218295}$$

07.25.03.aae3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (128 z^7 + 448 z^6 - 4416 z^5 + 15120 z^4 - 4080 z^3 - 146520 z^2 + 399960 z - 109395) I_0\left(\frac{z}{2}\right) + \frac{1}{1091475 z^2} 4 e^{z/2} (128 z^8 + 320 z^7 - 4672 z^6 + 19824 z^5 - 26160 z^4 - 106440 z^3 + 463320 z^2 - 508365 z + 437580) I_1\left(\frac{z}{2}\right)}{1091475 z}$$

07.25.03.aae4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (32 z^5 - 48 z^4 - 720 z^3 + 5880 z^2 - 20790 z + 31185)}{31185}$$

07.25.03.aae5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (64 z^7 - 320 z^6 + 144 z^5 + 6960 z^4 - 41160 z^3 + 109080 z^2 - 149175 z + 188955) I_0\left(\frac{z}{2}\right) + \frac{1}{1091475 z^2} 32 e^{z/2} (64 z^8 - 384 z^7 + 560 z^6 + 6144 z^5 - 46440 z^4 + 156000 z^3 - 323505 z^2 + 596700 z - 755820) I_1\left(\frac{z}{2}\right)}{1091475 z^2}$$

07.25.03.aae6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (16 z^4 - 160 z^3 + 840 z^2 - 2520 z + 3465)}{3465}$$

07.25.03.aae7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{218295z^3}$$

$$32e^{z/2} (64z^7 - 864z^6 + 6576z^5 - 35040z^4 + 145080z^3 - 503370z^2 + 1409895z - 2441880) I_0\left(\frac{z}{2}\right) + \frac{1}{218295z^4}$$

$$32e^{z/2} (64z^8 - 928z^7 + 7536z^6 - 43104z^5 + 193080z^4 - 729270z^3 + 2318715z^2 - 5639580z + 9767520) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.aae8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{281302875}$$

$$(e^z (8192z^{13} + 552960z^{12} + 14192640z^{11} + 176240640z^{10} + 1114560000z^9 + 3459697920z^8 + 4623091200z^7 + 1926892800z^6 + 69400800z^5 + 39690000z^4 - 116348400z^3 + 270459000z^2 - 395907750z + 281302875))$$

07.25.03.aae9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$-\frac{1}{31255875} (e^z (4096z^{12} + 245760z^{11} + 5498880z^{10} + 57876480z^9 + 296835840z^8 + 690923520z^7 + 584236800z^6 + 87091200z^5 - 8845200z^4 + 15422400z^3 - 35040600z^2 + 47628000z - 31255875))$$

07.25.03.aaea.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{4465125} (e^z (2048z^{11} + 107520z^{10} + 2050560z^9 + 17660160z^8 + 68947200z^7 + 104146560z^6 + 31752000z^5 - 4082400z^4 - 2381400z^3 + 6520500z^2 - 7739550z + 4465125))$$

07.25.03.aaeb.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) =$$

$$-\frac{1}{893025} (e^z (1024z^{10} + 46080z^9 + 725760z^8 + 4838400z^7 + 12700800z^6 + 7620480z^5 - 3175200z^4 + 2721600z^3 - 2551500z^2 + 1984500z - 893025))$$

07.25.03.aaec.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{297675} (e^z (512z^9 + 19200z^8 + 238080z^7 + 1109760z^6 + 1356480z^5 - 937440z^4 + 756000z^3 + 226800z^2 - 1389150z + 297675))$$

07.25.03.aaed.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) =$$

$$-\frac{1}{297675} e^z (256z^8 + 7680z^7 + 69120z^6 + 174720z^5 - 108000z^4 - 90720z^3 + 604800z^2 - 793800z - 297675)$$

07.25.03.aeee.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{297675} e^{z/2} (-128 z^8 - 3456 z^7 - 26880 z^6 - 49920 z^5 + 64800 z^4 - 25200 z^3 - 226800 z^2 + 396900 z + 297675) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (32 z^8 + 832 z^7 + 5904 z^6 + 6960 z^5 - 20940 z^4 + 27000 z^3 + 22050 z^2 - 99225 z) I_1\left(\frac{z}{2}\right)}{297675}$$

07.25.03.aeef.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{e^z (128 z^7 + 2880 z^6 + 15840 z^5 + 240 z^4 - 55080 z^3 + 147420 z^2 - 66150 z - 297675)}{297675}$$

07.25.03.aeeg.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (-128 z^7 - 2496 z^6 - 10560 z^5 + 9840 z^4 + 25200 z^3 - 128520 z^2 + 105840 z + 297675) I_0\left(\frac{z}{2}\right)}{297675} + \frac{e^{z/2} (-128 z^7 - 2368 z^6 - 8256 z^5 + 17040 z^4 + 6000 z^3 - 123480 z^2 + 211680 z + 72765) I_1\left(\frac{z}{2}\right)}{297675}$$

07.25.03.aeah.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{e^z (64 z^6 + 960 z^5 + 1680 z^4 - 9120 z^3 + 13500 z^2 + 26460 z - 99225)}{99225}$$

07.25.03.aaei.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, 3; z\right) = -\frac{4 e^{z/2} (64 z^6 + 768 z^5 + 240 z^4 - 6720 z^3 + 18360 z^2 + 3240 z - 79245) I_0\left(\frac{z}{2}\right)}{297675} - \frac{4 e^{z/2} (64 z^7 + 704 z^6 - 432 z^5 - 6000 z^4 + 23640 z^3 - 21600 z^2 - 46035 z + 19305) I_1\left(\frac{z}{2}\right)}{297675 z}$$

07.25.03.aaej.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{e^z (32 z^5 + 240 z^4 - 720 z^3 - 600 z^2 + 9450 z - 19845)}{19845}$$

07.25.03.aaek.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = -\frac{4 e^{z/2} (64 z^6 + 288 z^5 - 1680 z^4 + 2400 z^3 + 9000 z^2 - 32850 z + 6435) I_0\left(\frac{z}{2}\right)}{99225 z} - \frac{4 e^{z/2} (64 z^7 + 224 z^6 - 1872 z^5 + 4320 z^4 + 3720 z^3 - 32670 z^2 + 32175 z - 25740) I_1\left(\frac{z}{2}\right)}{99225 z^2}$$

07.25.03.aael.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{e^z (16 z^4 - 360 z^2 + 1680 z - 2835)}{2835}$$

07.25.03.aaem.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, 5; z\right) = -\frac{32 e^{z/2} (32 z^6 - 96 z^5 - 240 z^4 + 2640 z^3 - 7470 z^2 + 8190 z - 9945) I_0\left(\frac{z}{2}\right)}{99225 z^2} - \frac{64 e^{z/2} (16 z^7 - 64 z^6 - 48 z^5 + 1320 z^4 - 4965 z^3 + 9360 z^2 - 16380 z + 19890) I_1\left(\frac{z}{2}\right)}{99225 z^3}$$

07.25.03.aaen.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = -\frac{1}{315} e^z (8z^3 - 60z^2 + 210z - 315)$$

07.25.03.aaeo.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = -\frac{32 e^{z/2} (32z^6 - 336z^5 + 1920z^4 - 7620z^3 + 24750z^2 - 68085z + 116280) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (32z^7 - 368z^6 + 2304z^5 - 10140z^4 + 36510z^3 - 113535z^2 + 272340z - 465120) I_1\left(\frac{z}{2}\right)}{19845 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.aaep.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{3472875} (e^z (2048z^{11} + 109568z^{10} + 2146816z^9 + 19277568z^8 + 80946432z^7 + 143095680z^6 + 77474880z^5 + 4808160z^4 - 2018520z^3 + 4683420z^2 - 5811750z + 3472875))$$

07.25.03.aaeq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{496125} (e^z (1024z^{10} + 48128z^9 + 808704z^8 + 5999616z^7 + 19474560z^6 + 22861440z^5 + 4445280z^4 + 181440z^3 - 918540z^2 + 963900z - 496125))$$

07.25.03.aaer.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{99225} (e^z (512z^9 + 20736z^8 + 290304z^7 + 1693440z^6 + 3810240z^5 + 1905120z^4 - 635040z^3 + 408240z^2 - 255150z + 99225))$$

07.25.03.aaes.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{33075} e^z (256z^8 + 8704z^7 + 97280z^6 + 408960z^5 + 473760z^4 - 231840z^3 + 30240z^2 + 189000z - 33075)$$

07.25.03.aaet.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{e^z (128z^7 + 3520z^6 + 29280z^5 + 72720z^4 - 17640z^3 - 71820z^2 + 122850z + 33075)}{33075}$$

07.25.03.aaeu.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (64z^7 + 1600z^6 + 11792z^5 + 23856z^4 - 15240z^3 - 23520z^2 + 61425z + 33075) I_0\left(\frac{z}{2}\right) + e^{z/2} (64z^7 + 1536z^6 + 10288z^5 + 14272z^4 - 25704z^3 + 3000z^2 + 47775z) I_1\left(\frac{z}{2}\right)}{33075}$$

07.25.03.aaev.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z (64 z^6 + 1344 z^5 + 7248 z^4 + 3744 z^3 - 21924 z^2 + 18900 z + 33075)}{33075}$$

07.25.03.aaw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 + 1184 z^5 + 5232 z^4 - 480 z^3 - 15960 z^2 + 20790 z + 33075) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^6 + 1120 z^5 + 4144 z^4 - 4128 z^3 - 10680 z^2 + 27930 z + 6615) I_1\left(\frac{z}{2}\right)}{33075}$$

07.25.03.aax.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (32 z^5 + 464 z^4 + 1072 z^3 - 2952 z^2 - 630 z + 11025)}{11025}$$

07.25.03.aay.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, 3; z\right) = \frac{8 e^{z/2} (16 z^5 + 192 z^4 + 240 z^3 - 1320 z^2 + 675 z + 4320) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (32 z^6 + 352 z^5 + 144 z^4 - 2640 z^3 + 3810 z^2 + 4050 z - 1485) I_1\left(\frac{z}{2}\right)}{33075 z}$$

07.25.03.aaz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (16 z^4 + 128 z^3 - 168 z^2 - 720 z + 2205)}{2205}$$

07.25.03.aaf0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 + 176 z^4 - 512 z^3 - 420 z^2 + 3342 z - 429) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (32 z^6 + 144 z^5 - 640 z^4 + 260 z^3 + 2718 z^2 - 2343 z + 1716) I_1\left(\frac{z}{2}\right)}{11025 z^2}$$

07.25.03.aaf1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{315} e^z (8 z^3 + 12 z^2 - 150 z + 315)$$

07.25.03.aaf2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^5 - 16 z^4 - 180 z^3 + 636 z^2 - 507 z + 585) I_0\left(\frac{z}{2}\right) + 32 e^{z/2} (16 z^6 - 32 z^5 - 140 z^4 + 744 z^3 - 1239 z^2 + 2028 z - 2340) I_1\left(\frac{z}{2}\right)}{11025 z^3}$$

07.25.03.aaf3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{35} e^z (4 z^2 - 20 z + 35)$$

07.25.03.aaf4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 120 z^4 + 468 z^3 - 1356 z^2 + 3645 z - 6120) I_0\left(\frac{z}{2}\right)}{2205 z^3} + \frac{32 e^{z/2} (16 z^6 - 136 z^5 + 612 z^4 - 2052 z^3 + 6189 z^2 - 14580 z + 24480) I_1\left(\frac{z}{2}\right)}{2205 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.aaf5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{70875} (e^z (512 z^9 + 21248 z^8 + 308736 z^7 + 1919232 z^6 + 4939200 z^5 + 4021920 z^4 + 211680 z^3 + 196560 z^2 - 164430 z + 70875))$$

07.25.03.aaf6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{14175} e^z (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175)$$

07.25.03.aaf7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 3904 z^6 + 38880 z^5 + 146160 z^4 + 163800 z^3 - 34020 z^2 - 35910 z + 4725)}{4725}$$

07.25.03.aaf8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{e^z (64 z^6 + 1600 z^5 + 12240 z^4 + 30240 z^3 + 6300 z^2 - 26460 z - 4725)}{4725}$$

07.25.03.aaf9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (-32 z^6 - 736 z^5 - 5136 z^4 - 11424 z^3 - 930 z^2 + 13230 z + 4725) I_0\left(\frac{z}{2}\right)}{4725} - \frac{2 e^{z/2} (16 z^6 + 352 z^5 + 2224 z^4 + 3648 z^3 - 2373 z^2 - 3750 z) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.aafa.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{e^z (32 z^5 + 624 z^4 + 3312 z^3 + 3528 z^2 - 5670 z - 4725)}{4725}$$

07.25.03.aafb.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (-32 z^5 - 560 z^4 - 2592 z^3 - 1980 z^2 + 5250 z + 4725) I_0\left(\frac{z}{2}\right)}{4725} + \frac{e^{z/2} (-32 z^5 - 528 z^4 - 2080 z^3 - 132 z^2 + 4770 z + 735) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.aafc.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{e^z (16z^4 + 224z^3 + 648z^2 - 504z - 1575)}{1575}$$

07.25.03.aafd.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = \frac{4e^{z/2} (16z^4 + 192z^3 + 420z^2 - 600z - 1215) I_0\left(\frac{z}{2}\right) - 4e^{z/2} (16z^5 + 176z^4 + 252z^3 - 780z^2 - 435z + 135) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.aafe.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{1}{315} e^z (8z^3 + 68z^2 + 18z - 315)$$

07.25.03.aaff.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = \frac{4e^{z/2} (16z^4 + 104z^3 - 60z^2 - 444z + 33) I_0\left(\frac{z}{2}\right) - 4e^{z/2} (16z^5 + 88z^4 - 140z^3 - 276z^2 + 201z - 132) I_1\left(\frac{z}{2}\right)}{1575z}$$

07.25.03.aafg.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{1}{45} e^z (4z^2 + 12z - 45)$$

07.25.03.aafh.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, 5; z\right) = -\frac{32e^{z/2} (8z^4 + 8z^3 - 72z^2 + 36z - 39) I_0\left(\frac{z}{2}\right) - 128e^{z/2} (2z^5 - 17z^3 + 24z^2 - 36z + 39) I_1\left(\frac{z}{2}\right)}{1575z^2}$$

07.25.03.aafi.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{1}{5} e^z (2z - 5)$$

07.25.03.aafj.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, 6; z\right) = \frac{32e^{z/2} (8z^4 - 36z^3 + 84z^2 - 219z + 360) I_0\left(\frac{z}{2}\right) - 32e^{z/2} (8z^5 - 44z^4 + 132z^3 - 381z^2 + 876z - 1440) I_1\left(\frac{z}{2}\right)}{315z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.aafk.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (128z^7 + 4032z^6 + 42336z^5 + 176400z^4 + 264600z^3 + 79380z^2 - 13230z + 2835)}{2835}$$

07.25.03.aafll.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = -\frac{1}{945} e^z (64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945)$$

07.25.03.aafm.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 720 z^4 + 5040 z^3 + 12\,600 z^2 + 9450 z + 945)$$

07.25.03.aafn.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (16 z^5 + 336 z^4 + 2220 z^3 + 5484 z^2 + 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^5 + 320 z^4 + 1908 z^3 + 3720 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aafp.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (16 z^4 + 288 z^3 + 1512 z^2 + 2520 z + 945)$$

07.25.03.aafq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (16 z^4 + 264 z^3 + 1284 z^2 + 2100 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^4 + 248 z^3 + 1044 z^2 + 1164 z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.aafq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (8 z^3 + 108 z^2 + 378 z + 315)$$

07.25.03.aafr.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{16}{945} e^{z/2} (2 z^3 + 24 z^2 + 75 z + 60) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8 z^4 + 88 z^3 + 216 z^2 + 60 z - 15) I_1\left(\frac{z}{2}\right)}{945 z}$$

07.25.03.aafs.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (4 z^2 + 36 z + 63)$$

07.25.03.aaft.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (8 z^3 + 60 z^2 + 84 z - 3) I_0\left(\frac{z}{2}\right)}{315 z} + \frac{4 e^{z/2} (8 z^4 + 52 z^3 + 36 z^2 - 21 z + 12) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.aafu.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2 z + 9)$$

07.25.03.aafv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (4 z^3 + 12 z^2 - 3 z + 3) I_0\left(\frac{z}{2}\right)}{315 z^2} + \frac{32 e^{z/2} (4 z^4 + 8 z^3 - 9 z^2 + 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3}$$

07.25.03.aafw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = e^z$$

07.25.03.aafx.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (4 z^3 - 6 z^2 + 15 z - 24) I_0\left(\frac{z}{2}\right)}{63 z^3} + \frac{32 e^{z/2} (4 z^4 - 10 z^3 + 27 z^2 - 60 z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.aafy.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{2048}{21} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{315} e^z (32 z^5 + 752 z^4 + 5680 z^3 + 16680 z^2 - 10710 z + 315)$$

07.25.03.aafz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{2048}{21} \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} + \frac{1}{315} e^{-z} (-32 z^5 + 752 z^4 - 5680 z^3 + 16680 z^2 + 10710 z + 315)$$

07.25.03.aag0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{315} e^z (-16 z^4 - 320 z^3 - 2040 z^2 + 10080 z + 315) - \frac{1024}{21} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aag1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} e^{-z} (-16 z^4 + 320 z^3 - 2040 z^2 - 10080 z + 315) - \frac{1024}{21} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aag2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (-8 z^4 - 152 z^3 - 11192 z^2 + 5040 z + 315) I_0\left(\frac{z}{2}\right) - \frac{4}{315} e^{z/2} (2 z^4 + 36 z^3 - 2357 z^2 - 167 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aag3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{315} e^z (-8 z^3 - 132 z^2 + 3150 z + 315) - \frac{256}{21} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aag4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{315} e^{-z} (8 z^3 - 132 z^2 - 3150 z + 315) - \frac{256}{21} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aag5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (-8 z^3 - 4220 z^2 + 2436 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-8 z^3 + 3980 z^2 + 500 z + 21) I_1\left(\frac{z}{2}\right)$$

07.25.03.aag6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{105} e^z (-4 z^2 + 588 z + 105) - \frac{128}{21} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aag7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{105} e^{-z} (-4 z^2 - 588 z + 105) - \frac{128}{21} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aag8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (4068 z^3 + 716 z^2 + 81 z - 15) I_1\left(\frac{z}{2}\right)}{2205 z} - \frac{4 e^{z/2} (4124 z^2 - 2736 z - 555) I_0\left(\frac{z}{2}\right)}{2205}$$

07.25.03.aag9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (26 z + 7) - \frac{80}{21} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aaga.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{7} e^{-z} (7 - 26z) - \frac{80}{21} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aagb.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (8192 z^4 + 1796 z^3 + 414 z^2 - 177 z + 84) I_1\left(\frac{z}{2}\right)}{6615 z^2} - \frac{4 e^{z/2} (8192 z^3 - 5892 z^2 - 1698 z + 21) I_0\left(\frac{z}{2}\right)}{6615 z}$$

07.25.03.aagc.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{3} e^z (8z + 3) - \frac{8}{3} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aagd.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{3} e^{-z} (3 - 8z) - \frac{8}{3} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aage.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = \frac{64 e^{z/2} (4096 z^5 + 1024 z^4 + 459 z^3 - 372 z^2 + 420 z - 378) I_1\left(\frac{z}{2}\right)}{72765 z^3} - \frac{32 e^{z/2} (8192 z^4 - 6144 z^3 - 2454 z^2 + 210 z - 189) I_0\left(\frac{z}{2}\right)}{72765 z^2}$$

07.25.03.aagf.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = e^z (2z + 1) - 2 \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aagg.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = e^{-z} (1 - 2z) - 2 \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aagh.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (16384 z^6 + 4096 z^5 + 4608 z^4 - 8418 z^3 + 20391 z^2 - 43092 z + 66528) I_1\left(\frac{z}{2}\right)}{189189 z^4} - \frac{32 e^{z/2} (16384 z^5 - 12288 z^4 - 7680 z^3 + 4578 z^2 - 10773 z + 16632) I_0\left(\frac{z}{2}\right)}{189189 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{1}{2}$

07.25.03.aagi.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{315} e^z (8z^3 + 140z^2 - 6870z + 315) + \frac{128}{21} \sqrt{\pi} (4z^{3/2} - \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aagj.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} e^{-z} (-8z^3 + 140z^2 + 6870z + 315) + \frac{128}{21} \sqrt{\pi} (4z^{3/2} + \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aagk.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (4z^3 + 5188z^2 - 5355z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (4z^3 - 5056z^2 + 983z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aagl.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{315} e^z (4z^2 - 1860z + 315) + \frac{64}{21} \sqrt{\pi} \sqrt{z} (2z - 1) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aagm.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{315} e^{-z} (4z^2 + 1860z + 315) + \frac{64}{21} \sqrt{\pi} \sqrt{z} (2z + 1) \operatorname{erf}(\sqrt{z})$$

07.25.03.aagn.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (2052z^2 - 2758z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-2044z^2 + 822z + 7) I_1\left(\frac{z}{2}\right)$$

07.25.03.aago.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{35} e^z (35 - 106z) + \frac{16}{21} \sqrt{\pi} \sqrt{z} (4z - 3) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aagp.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{35} e^{-z} (106z + 35) + \frac{16}{21} \sqrt{\pi} \sqrt{z} (4z + 3) \operatorname{erf}(\sqrt{z})$$

07.25.03.aagq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, 3; z\right) = \frac{8 e^{z/2} (1024z^2 - 1657z + 276) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (2048z^3 - 1294z^2 - 26z + 3) I_1\left(\frac{z}{2}\right)}{2205}$$

07.25.03.aagr.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{21} e^z (21 - 40z) + \frac{40}{21} \sqrt{\pi} (z - 1) \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aags.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{21} e^{-z} (40z + 21) + \frac{40}{21} \sqrt{\pi} \sqrt{z} (z + 1) \operatorname{erf}(\sqrt{z})$$

07.25.03.aagt.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (4096z^3 - 7680z^2 + 1662z - 3) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (4096z^4 - 3584z^3 - 126z^2 + 33z - 12) I_1\left(\frac{z}{2}\right)}{6615z}$$

07.25.03.aagu.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{3} e^z (3 - 4z) + \frac{1}{3} \sqrt{\pi} \sqrt{z} (4z - 5) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aagv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{3} e^{-z} (4z + 3) + \frac{1}{3} \sqrt{\pi} \sqrt{z} (4z + 5) \operatorname{erf}(\sqrt{z})$$

07.25.03.aagw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (4096z^4 - 8704z^3 + 2304z^2 - 27z + 21) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (4096z^5 - 4608z^4 - 256z^3 + 123z^2 - 108z + 84) I_1\left(\frac{z}{2}\right)}{72765z^2}$$

07.25.03.aagx.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = e^z (1 - z) + \frac{1}{2} \sqrt{\pi} \sqrt{z} (2z - 3) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aagy.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = e^{-z} (z + 1) + \frac{1}{2} \sqrt{\pi} \sqrt{z} (2z + 3) \operatorname{erf}(\sqrt{z})$$

07.25.03.aagz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (8192 z^5 - 19456 z^4 + 6144 z^3 - 480 z^2 + 1029 z - 1512) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (8192 z^6 - 11264 z^5 - 1024 z^4 + 1056 z^3 - 2109 z^2 + 4116 z - 6048) I_1\left(\frac{z}{2}\right)}{189189 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 1$

07.25.03.aah0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{315} e^{z/2} (1282 z^2 - 1890 z + 315) I_0\left(\frac{z}{2}\right) - \frac{2}{315} e^{z/2} (639 z^2 - 334 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aah1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{315} e^{z/2} (640 z^2 - 1197 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (563 z - 640 z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.aah2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{63} e^{z/2} (80 z^2 - 180 z + 63) I_0\left(\frac{z}{2}\right) - \frac{20}{63} e^{z/2} (4 z^2 - 5 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aah3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{9} e^{z/2} (8 z^2 - 21 z + 9) I_0\left(\frac{z}{2}\right) + \frac{1}{9} e^{z/2} (13 z - 8 z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.aah4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; 1, \frac{11}{2}; z\right) = \frac{1}{3} e^{z/2} (2 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z - 2) z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{3}{2}$

07.25.03.aah5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{315} e^z (267 - 478 z) + \frac{8 \sqrt{\pi} (20 z^2 - 20 z + 1) \operatorname{erfi}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.aah6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{315} e^{-z} (478 z + 267) + \frac{8 \sqrt{\pi} (20 z^2 + 20 z + 1) \operatorname{erf}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.aah7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (512 z^2 - 1022 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-512 z^2 + 514 z - 7) I_1\left(\frac{z}{2}\right)$$

07.25.03.aah8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{105} e^z (81 - 80 z) + \frac{4 \sqrt{\pi} (20 z^2 - 30 z + 3) \operatorname{erfi}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.aah9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{105} e^{-z} (80 z + 81) + \frac{4 \sqrt{\pi} (20 z^2 + 30 z + 3) \operatorname{erf}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.aaha.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (512 z^2 - 1280 z + 551) I_0\left(\frac{z}{2}\right)}{2205} - \frac{4 e^{z/2} (512 z^3 - 768 z^2 + 25 z - 1) I_1\left(\frac{z}{2}\right)}{2205 z}$$

07.25.03.aahb.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{\sqrt{\pi} (10 z^2 - 20 z + 3) \operatorname{erfi}(\sqrt{z})}{21 \sqrt{z}} - \frac{5}{21} e^z (2 z - 3)$$

07.25.03.aahc.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5}{21} e^{-z} (2 z + 3) + \frac{\sqrt{\pi} (10 z^2 + 20 z + 3) \operatorname{erf}(\sqrt{z})}{21 \sqrt{z}}$$

07.25.03.aahd.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (5120 z^3 - 15360 z^2 + 8256 z + 3) I_0\left(\frac{z}{2}\right)}{33075 z} - \frac{4 e^{z/2} (5120 z^4 - 10240 z^3 + 576 z^2 - 51 z + 12) I_1\left(\frac{z}{2}\right)}{33075 z^2}$$

07.25.03.aahf.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{3} e^z (2 - z) + \frac{\sqrt{\pi} (2 z^2 - 5 z + 1) \operatorname{erfi}(\sqrt{z})}{6 \sqrt{z}}$$

07.25.03.aahg.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{3} e^{-z} (z + 2) + \frac{\sqrt{\pi} (2 z^2 + 5 z + 1) \operatorname{erf}(\sqrt{z})}{6 \sqrt{z}}$$

07.25.03.aahh.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (5120 z^4 - 17920 z^3 + 11328 z^2 + 24 z - 15) I_0\left(\frac{z}{2}\right)}{363825 z^2} - \frac{128 e^{z/2} (1280 z^5 - 3200 z^4 + 272 z^3 - 42 z^2 + 24 z - 15) I_1\left(\frac{z}{2}\right)}{363825 z^3}$$

07.25.03.aaih.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{8} e^z (5 - 2 z) + \frac{\sqrt{\pi} (4 z^2 - 12 z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.aahi.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{8} e^{-z} (2 z + 5) + \frac{\sqrt{\pi} (4 z^2 + 12 z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.aahj.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (10240 z^5 - 40960 z^4 + 29312 z^3 + 336 z^2 - 615 z + 840) I_0\left(\frac{z}{2}\right)}{945945 z^3} - \frac{32 e^{z/2} (10240 z^6 - 30720 z^5 + 3712 z^4 - 1072 z^3 + 1449 z^2 - 2460 z + 3360) I_1\left(\frac{z}{2}\right)}{945945 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 2$

07.25.03.aahk.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{315} e^{z/2} (256 z^2 - 672 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-256 z^2 + 416 z - 21) I_1\left(\frac{z}{2}\right)$$

07.25.03.aahl.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{63} e^{z/2} (32 z^2 - 104 z + 63) I_0\left(\frac{z}{2}\right) + \frac{1}{63} e^{z/2} (-32 z^2 + 72 z - 7) I_1\left(\frac{z}{2}\right)$$

07.25.03.aahm.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{45} e^{z/2} (16 z^2 - 62 z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (-16 z^2 + 46 z - 7) I_1\left(\frac{z}{2}\right)$$

07.25.03.aahn.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; 2, \frac{11}{2}; z\right) = \frac{1}{15} e^{z/2} (4 z^2 - 18 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4 z^2 + 14 z - 3) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{5}{2}$

07.25.03.aaho.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^{-z} (-80 z^2 + 140 z - 3)}{210 z} + \frac{\sqrt{\pi} (160 z^3 - 360 z^2 + 72 z + 3) \operatorname{erfi}(\sqrt{z})}{420 z^{3/2}}$$

07.25.03.aahp.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (80 z^2 + 140 z + 3)}{210 z} + \frac{\sqrt{\pi} (160 z^3 + 360 z^2 + 72 z - 3) \operatorname{erf}(\sqrt{z})}{420 z^{3/2}}$$

07.25.03.aahq.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{32 e^{z/2} (32 z^2 - 108 z + 69) I_0\left(\frac{z}{2}\right)}{2205} - \frac{4 e^{z/2} (256 z^3 - 608 z^2 + 72 z + 3) I_1\left(\frac{z}{2}\right)}{2205 z}$$

07.25.03.aahr.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^{-z} (-20 z^2 + 50 z - 3)}{84 z} + \frac{\sqrt{\pi} (40 z^3 - 120 z^2 + 36 z + 3) \operatorname{erfi}(\sqrt{z})}{168 z^{3/2}}$$

07.25.03.aahs.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (20 z^2 + 50 z + 3)}{84 z} + \frac{\sqrt{\pi} (40 z^3 + 120 z^2 + 36 z - 3) \operatorname{erf}(\sqrt{z})}{168 z^{3/2}}$$

07.25.03.aah.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (2560 z^3 - 10560 z^2 + 8304 z - 3) I_0\left(\frac{z}{2}\right)}{33075 z} - \frac{4 e^{z/2} (2560 z^4 - 8000 z^3 + 1584 z^2 + 141 z - 12) I_1\left(\frac{z}{2}\right)}{33075 z^2}$$

07.25.03.aahu.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^{-z} (-8 z^2 + 26 z - 3)}{48 z} + \frac{\sqrt{\pi} (16 z^3 - 60 z^2 + 24 z + 3) \operatorname{erfi}(\sqrt{z})}{96 z^{3/2}}$$

07.25.03.aahv.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (8 z^2 + 26 z + 3)}{48 z} + \frac{\sqrt{\pi} (16 z^3 + 60 z^2 + 24 z - 3) \operatorname{erf}(\sqrt{z})}{96 z^{3/2}}$$

07.25.03.aahw.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (2560 z^4 - 12480 z^3 + 11472 z^2 - 21 z + 9) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (2560 z^5 - 9920 z^4 + 2832 z^3 + 411 z^2 - 84 z + 36) I_1\left(\frac{z}{2}\right)}{363825 z^2}$$

07.25.03.aahx.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{e^z (-4 z^2 + 16 z - 3)}{32 z} + \frac{\sqrt{\pi} (8 z^3 - 36 z^2 + 18 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.aahy.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (4 z^2 + 16 z + 3)}{32 z} + \frac{\sqrt{\pi} (8 z^3 + 36 z^2 + 18 z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.aahz.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (5120 z^5 - 28800 z^4 + 30048 z^3 - 222 z^2 + 297 z - 360) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (5120 z^6 - 23680 z^5 + 8928 z^4 + 1986 z^3 - 933 z^2 + 1188 z - 1440) I_1\left(\frac{z}{2}\right)}{945945 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 3$

07.25.03.aai0.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{4}{441} e^{z/2} (32 z^2 - 136 z + 111) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (32 z^3 - 104 z^2 + 23 z + 3) I_1\left(\frac{z}{2}\right)}{441 z}$$

07.25.03.aai1.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{8}{315} e^{z/2} (8 z^2 - 41 z + 40) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (16 z^3 - 66 z^2 + 22 z + 5) I_1\left(\frac{z}{2}\right)}{315 z}$$

07.25.03.aai2.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; 3, \frac{11}{2}; z\right) = \frac{4}{105} e^{z/2} (4 z^2 - 24 z + 27) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4 z^3 - 20 z^2 + 9 z + 3) I_1\left(\frac{z}{2}\right)}{105 z}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{7}{2}$

07.25.03.aai3.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5 \sqrt{\pi} (80 z^4 - 320 z^3 + 144 z^2 + 24 z + 3) \operatorname{erfi}(\sqrt{z})}{2688 z^{5/2}} - \frac{5 e^z (40 z^3 - 140 z^2 + 22 z + 3)}{1344 z^2}$$

07.25.03.aai4.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (40 z^3 + 140 z^2 + 22 z - 3)}{1344 z^2} + \frac{5 \sqrt{\pi} (80 z^4 + 320 z^3 + 144 z^2 - 24 z + 3) \operatorname{erf}(\sqrt{z})}{2688 z^{5/2}}$$

07.25.03.aai5.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (320 z^3 - 1680 z^2 + 1686 z + 3) I_0\left(\frac{z}{2}\right)}{6615 z} - \frac{4 e^{z/2} (320 z^4 - 1360 z^3 + 486 z^2 + 129 z + 12) I_1\left(\frac{z}{2}\right)}{6615 z^2}$$

07.25.03.aai6.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{5 \sqrt{\pi} (16 z^4 - 80 z^3 + 48 z^2 + 12 z + 3) \operatorname{erfi}(\sqrt{z})}{768 z^{5/2}} - \frac{5 e^z (8 z^3 - 36 z^2 + 10 z + 3)}{384 z^2}$$

07.25.03.aai7.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5 e^{-z} (8 z^3 + 36 z^2 + 10 z - 3)}{384 z^2} + \frac{5 \sqrt{\pi} (16 z^4 + 80 z^3 + 48 z^2 - 12 z + 3) \operatorname{erf}(\sqrt{z})}{768 z^{5/2}}$$

07.25.03.aai8.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (320 z^4 - 2000 z^3 + 2358 z^2 + 18 z - 3) I_0\left(\frac{z}{2}\right)}{72765 z^2} - \frac{64 e^{z/2} (160 z^5 - 840 z^4 + 419 z^3 + 168 z^2 + 36 z - 6) I_1\left(\frac{z}{2}\right)}{72765 z^3}$$

07.25.03.aai9.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{5 \sqrt{\pi} (16 z^4 - 96 z^3 + 72 z^2 + 24 z + 9) \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}} - \frac{5 e^z (8 z^3 - 44 z^2 + 18 z + 9)}{512 z^2}$$

07.25.03.aai10.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{5 e^{-z} (8 z^3 + 44 z^2 + 18 z - 9)}{512 z^2} + \frac{5 \sqrt{\pi} (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.aai11.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (640 z^5 - 4640 z^4 + 6252 z^3 + 138 z^2 - 75 z + 72) I_0\left(\frac{z}{2}\right)}{189189 z^3} - \frac{32 e^{z/2} (640 z^6 - 4000 z^5 + 2572 z^4 + 1350 z^3 + 561 z^2 - 300 z + 288) I_1\left(\frac{z}{2}\right)}{189189 z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 4$

07.25.03.aai12.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; 4, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (32 z^3 - 204 z^2 + 246 z + 3) I_0\left(\frac{z}{2}\right)}{945 z} - \frac{4 e^{z/2} (32 z^4 - 172 z^3 + 90 z^2 + 39 z + 12) I_1\left(\frac{z}{2}\right)}{945 z^2}$$

07.25.03.aai13.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; 4, \frac{11}{2}; z\right) = \frac{4 e^{z/2} (8 z^3 - 60 z^2 + 84 z + 3) I_0\left(\frac{z}{2}\right)}{315 z} - \frac{4 e^{z/2} (8 z^4 - 52 z^3 + 36 z^2 + 21 z + 12) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{9}{2}$

07.25.03.aaie.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi} (64z^5 - 400z^4 + 320z^3 + 120z^2 + 60z + 15) \operatorname{erfi}(\sqrt{z})}{6144z^{7/2}} - \frac{7e^z (32z^4 - 184z^3 + 84z^2 + 50z + 15)}{3072z^3}$$

07.25.03.aaif.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} (32z^4 + 184z^3 + 84z^2 - 50z + 15)}{3072z^3} + \frac{7\sqrt{\pi} (64z^5 + 400z^4 + 320z^3 - 120z^2 + 60z - 15) \operatorname{erf}(\sqrt{z})}{6144z^{7/2}}$$

07.25.03.aaig.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{32e^{z/2} (32z^4 - 244z^3 + 348z^2 + 15z + 3) I_0\left(\frac{z}{2}\right)}{10395z^2} - \frac{32e^{z/2} (32z^5 - 212z^4 + 152z^3 + 93z^2 + 60z + 12) I_1\left(\frac{z}{2}\right)}{10395z^3}$$

07.25.03.aaih.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{7\sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7e^z (16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.aaii.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{7e^{-z} (16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7\sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.aaij.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{32e^{z/2} (64z^5 - 568z^4 + 932z^3 + 84z^2 + 51z - 24) I_0\left(\frac{z}{2}\right)}{27027z^3} - \frac{32e^{z/2} (64z^6 - 504z^5 + 460z^4 + 356z^3 + 333z^2 + 204z - 96) I_1\left(\frac{z}{2}\right)}{27027z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 5$

07.25.03.aaik.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; 5, \frac{11}{2}; z\right) = \frac{32e^{z/2} (8z^4 - 72z^3 + 120z^2 + 12z + 9) I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{128e^{z/2} (2z^5 - 16z^4 + 15z^3 + 12z^2 + 12z + 9) I_1\left(\frac{z}{2}\right)}{3465z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{11}{2}$

07.25.03.aail.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi}(64z^6 - 576z^5 + 720z^4 + 480z^3 + 540z^2 + 540z + 315)\operatorname{erfi}(\sqrt{z})}{32768z^{9/2}} - \frac{21e^z(32z^5 - 272z^4 + 240z^3 + 264z^2 + 330z + 315)}{16384z^4}$$

07.25.03.aaim.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z}(32z^5 + 272z^4 + 240z^3 - 264z^2 + 330z - 315)}{16384z^4} + \frac{21\sqrt{\pi}(64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)\operatorname{erf}(\sqrt{z})}{32768z^{9/2}}$$

07.25.03.aain.01

$${}_2F_2\left(-\frac{3}{2}, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{32e^{z/2}(16z^5 - 168z^4 + 324z^3 + 60z^2 + 81z + 72)I_0\left(\frac{z}{2}\right)}{9009z^3} - \frac{32e^{z/2}(16z^6 - 152z^5 + 180z^4 + 180z^3 + 249z^2 + 324z + 288)I_1\left(\frac{z}{2}\right)}{9009z^4}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = -\frac{11}{2}$

07.25.03.aaio.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{540280125}(128z^{15} + 11904z^{14} + 439488z^{13} + 8313056z^{12} + 86757000z^{11} + 500941440z^{10} + 1517538624z^9 + 2113655040z^8 + 987698880z^7 + 46569600z^6 + 1814400z^5 + 816480z^4 + 1512000z^3 + 13891500z^2 - 160744500z + 540280125) + \frac{1}{540280125}(4e^z\sqrt{\pi}(32z^{31/2} + 2992z^{29/2} + 111344z^{27/2} + 2131752z^{25/2} + 22677018z^{23/2} + 135165135z^{21/2} + 433308960z^{19/2} + 675060120z^{17/2} + 411863760z^{15/2} + 56163240z^{13/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.aaip.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{540280125}(-128z^{15} + 11904z^{14} - 439488z^{13} + 8313056z^{12} - 86757000z^{11} + 500941440z^{10} - 1517538624z^9 + 2113655040z^8 - 987698880z^7 + 46569600z^6 - 1814400z^5 + 816480z^4 - 1512000z^3 + 13891500z^2 + 160744500z + 540280125) + \frac{1}{540280125}(4e^{-z}\sqrt{\pi}(32z^{31/2} - 2992z^{29/2} + 111344z^{27/2} - 2131752z^{25/2} + 22677018z^{23/2} - 135165135z^{21/2} + 433308960z^{19/2} - 675060120z^{17/2} + 411863760z^{15/2} - 56163240z^{13/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aaiq.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{49116375} \left(-64 z^{14} - 5376 z^{13} - 176768 z^{12} - 2921760 z^{11} - 25929900 z^{10} - 122084592 z^9 - 280450800 z^8 - 254348640 z^7 - 46569600 z^6 + 1814400 z^5 + 272160 z^4 + 302400 z^3 + 1984500 z^2 - 17860500 z + 49116375 \right) - \frac{1}{49116375} \left(2 e^z \sqrt{\pi} \left(32 z^{29/2} + 2704 z^{27/2} + 89712 z^{25/2} + 1503768 z^{23/2} + 13654410 z^{21/2} + 66893085 z^{19/2} + 165736620 z^{17/2} + 177850260 z^{15/2} + 56163240 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aair.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{49116375} \left(-64 z^{14} + 5376 z^{13} - 176768 z^{12} + 2921760 z^{11} - 25929900 z^{10} + 122084592 z^9 - 280450800 z^8 + 254348640 z^7 - 46569600 z^6 - 1814400 z^5 + 272160 z^4 - 302400 z^3 + 1984500 z^2 + 17860500 z + 49116375 \right) + \frac{1}{49116375} \left(2 e^{-z} \sqrt{\pi} \left(32 z^{29/2} - 2704 z^{27/2} + 89712 z^{25/2} - 1503768 z^{23/2} + 13654410 z^{21/2} - 66893085 z^{19/2} + 165736620 z^{17/2} - 177850260 z^{15/2} + 56163240 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aais.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{5457375} \left(32 z^{13} + 2400 z^{12} + 69200 z^{11} + 977640 z^{10} + 7130858 z^9 + 25800720 z^8 + 39637080 z^7 + 15523200 z^6 - 1814400 z^5 + 272160 z^4 + 100800 z^3 + 396900 z^2 - 2551500 z + 5457375 \right) + \frac{1}{5457375} \left(e^z \sqrt{\pi} \left(32 z^{27/2} + 2416 z^{25/2} + 70384 z^{23/2} + 1011080 z^{21/2} + 7587930 z^{19/2} + 28953435 z^{17/2} + 49922880 z^{15/2} + 28081620 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aait.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{5457375} \left(-32 z^{13} + 2400 z^{12} - 69200 z^{11} + 977640 z^{10} - 7130858 z^9 + 25800720 z^8 - 39637080 z^7 + 15523200 z^6 + 1814400 z^5 + 272160 z^4 - 100800 z^3 + 396900 z^2 + 2551500 z + 5457375 \right) + \frac{1}{5457375} \left(e^{-z} \sqrt{\pi} \left(32 z^{27/2} - 2416 z^{25/2} + 70384 z^{23/2} - 1011080 z^{21/2} + 7587930 z^{19/2} - 28953435 z^{17/2} + 49922880 z^{15/2} - 28081620 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aaii.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{779\,625} \left(-16 z^{12} - 1056 z^{11} - 26\,160 z^{10} - 306\,208 z^9 - 1\,740\,015 z^8 - 4\,325\,220 z^7 - 3\,104\,640 z^6 + 604\,800 z^5 - 272\,160 z^4 + 100\,800 z^3 + 132\,300 z^2 - 510\,300 z + 779\,625\right) + \frac{1}{1\,559\,250} \left(e^z \sqrt{\pi} \left(-32 z^{25/2} - 2128 z^{23/2} - 53\,360 z^{21/2} - 637\,560 z^{19/2} - 3\,762\,570 z^{17/2} - 10\,140\,585 z^{15/2} - 9\,360\,540 z^{13/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aaii.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{779\,625} \left(-16 z^{12} + 1056 z^{11} - 26\,160 z^{10} + 306\,208 z^9 - 1\,740\,015 z^8 + 4\,325\,220 z^7 - 3\,104\,640 z^6 - 604\,800 z^5 - 272\,160 z^4 - 100\,800 z^3 + 132\,300 z^2 + 510\,300 z + 779\,625\right) + \frac{1}{1\,559\,250} \left(e^{-z} \sqrt{\pi} \left(32 z^{25/2} - 2128 z^{23/2} + 53\,360 z^{21/2} - 637\,560 z^{19/2} + 3\,762\,570 z^{17/2} - 10\,140\,585 z^{15/2} + 9\,360\,540 z^{13/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.aaii.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{311\,850} \left(16 z^{11} + 912 z^{10} + 18\,872 z^9 + 174\,540 z^8 + 701\,145 z^7 + 887\,040 z^6 - 241\,920 z^5 + 181\,440 z^4 - 201\,600 z^3 + 264\,600 z^2 - 340\,200 z + 311\,850\right) + \frac{1}{623\,700} e^z \sqrt{\pi} \left(32 z^{23/2} + 1840 z^{21/2} + 38\,640 z^{19/2} + 367\,080 z^{17/2} + 1\,560\,090 z^{15/2} + 2\,340\,135 z^{13/2}\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.aaii.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{311\,850} \left(-16 z^{11} + 912 z^{10} - 18\,872 z^9 + 174\,540 z^8 - 701\,145 z^7 + 887\,040 z^6 + 241\,920 z^5 + 181\,440 z^4 + 201\,600 z^3 + 264\,600 z^2 + 340\,200 z + 311\,850\right) + \frac{1}{623\,700} e^{-z} \sqrt{\pi} \left(32 z^{23/2} - 1840 z^{21/2} + 38\,640 z^{19/2} - 367\,080 z^{17/2} + 1\,560\,090 z^{15/2} - 2\,340\,135 z^{13/2}\right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aaii.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{207\,900} \left(-16 z^{10} - 768 z^9 - 12\,736 z^8 - 85\,752 z^7 - 192\,115 z^6 + 43\,380 z^5 + 35\,532 z^4 - 225\,960 z^3 + 551\,880 z^2 - 680\,400 z + 207\,900\right) + \frac{1}{415\,800} \left(e^z \sqrt{\pi} \left(-32 z^{21/2} - 1552 z^{19/2} - 26\,224 z^{17/2} - 183\,512 z^{15/2} - 459\,018 z^{13/2} - 45\,045 z^{11/2} + 180\,180 z^{9/2} - 540\,540 z^{7/2} + 1\,081\,080 z^{5/2} - 1\,081\,080 z^{3/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aaiz.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{207900} (-16z^{10} + 768z^9 - 12736z^8 + 85752z^7 - 192115z^6 - 43380z^5 + 35532z^4 + 225960z^3 + 551880z^2 + 680400z + 207900) + \frac{1}{415800} (e^{-z} \sqrt{\pi} (32z^{21/2} - 1552z^{19/2} + 26224z^{17/2} - 183512z^{15/2} + 459018z^{13/2} - 45045z^{11/2} - 180180z^{9/2} - 540540z^{7/2} - 1081080z^{5/2} - 1081080z^{3/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aj0.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{415800} (16z^9 + 624z^8 + 7752z^7 + 31780z^6 + 4605z^5 - 57672z^4 + 181860z^3 - 312480z^2 + 113400z + 415800) + \frac{1}{831600} (e^z \sqrt{\pi} (32z^{19/2} + 1264z^{17/2} + 16112z^{15/2} + 70728z^{13/2} + 34650z^{11/2} - 128205z^{9/2} + 332640z^{7/2} - 457380z^{5/2} - 166320z^{3/2} + 1247400\sqrt{z}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aj1.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{415800} (-16z^9 + 624z^8 - 7752z^7 + 31780z^6 - 4605z^5 - 57672z^4 - 181860z^3 - 312480z^2 - 113400z + 415800) + \frac{1}{831600} (e^{-z} \sqrt{\pi} (32z^{19/2} - 1264z^{17/2} + 16112z^{15/2} - 70728z^{13/2} + 34650z^{11/2} + 128205z^{9/2} + 332640z^{7/2} + 457380z^{5/2} - 166320z^{3/2} - 1247400\sqrt{z}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aj2.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, 1; z\right) = \frac{1}{415800} e^z (16z^9 + 560z^8 + 5960z^7 + 17920z^6 - 15015z^5 - 7455z^4 + 121800z^3 - 340200z^2 + 264600z + 415800)$$

07.25.03.aj3.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{16z^8 + 480z^7 + 3920z^6 + 4560z^5 - 21321z^4 + 48180z^3 - 17640z^2 - 226800z + 491400}{831600} + \frac{1}{1663200\sqrt{z}} (e^z \sqrt{\pi} (32z^9 + 976z^8 + 8304z^7 + 12600z^6 - 40950z^5 + 76545z^4 + 26460z^3 - 536760z^2 + 907200z + 340200) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aaj4.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{16z^8 - 480z^7 + 3920z^6 - 4560z^5 - 21321z^4 - 48180z^3 - 17640z^2 + 226800z + 491400}{831600} + \frac{1}{1663200\sqrt{z}}$$

$$\left(e^{-z}\sqrt{\pi}(-32z^9 + 976z^8 - 8304z^7 + 12600z^6 + 40950z^5 + 76545z^4 - 26460z^3 - 536760z^2 - 907200z + 340200)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.aaj5.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, 2; z\right) = \frac{e^z(16z^8 + 416z^7 + 2632z^6 - 504z^5 - 11991z^4 + 52500z^3 - 88200z^2 - 75600z + 415800)}{415800}$$

07.25.03.aaj6.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{16z^8 + 336z^7 + 1240z^6 - 3972z^5 + 2785z^4 + 31920z^3 - 138600z^2 + 184800z + 88200}{554400z} + \frac{1}{1108800z^{3/2}}$$

$$\left(e^z\sqrt{\pi}(32z^9 + 688z^8 + 2800z^7 - 7000z^6 + 1050z^5 + 71295z^4 - 258720z^3 + 239400z^2 + 428400z - 88200)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aaj7.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-16z^8 + 336z^7 - 1240z^6 - 3972z^5 - 2785z^4 + 31920z^3 + 138600z^2 + 184800z - 88200}{554400z} + \frac{1}{1108800z^{3/2}}\left(e^{-z}\sqrt{\pi}\right)$$

$$\left(32z^9 - 688z^8 + 2800z^7 + 7000z^6 + 1050z^5 - 71295z^4 - 258720z^3 - 239400z^2 + 428400z + 88200\right)\operatorname{erfi}(\sqrt{z})$$

07.25.03.aaj8.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, 3; z\right) = \frac{e^z(16z^7 + 272z^6 + 456z^5 - 3696z^4 + 10185z^3 + 1575z^2 - 94500z + 207900)}{207900}$$

07.25.03.aaj9.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{16z^8 + 192z^7 - 288z^6 - 1880z^5 + 13755z^4 - 36900z^3 + 14700z^2 + 113400z - 75600}{221760z^2} + \frac{1}{443520z^{5/2}}$$

$$\left(e^z\sqrt{\pi}(32z^9 + 400z^8 - 400z^7 - 4200z^6 + 26250z^5 - 59955z^4 - 18900z^3 + 296100z^2 - 163800z + 75600)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aaja.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{16z^8 - 192z^7 - 288z^6 + 1880z^5 + 13755z^4 + 36900z^3 + 14700z^2 - 113400z - 75600}{221760z^2} + \frac{1}{443520z^{5/2}}\left(e^{-z}\sqrt{\pi}\right)$$

$$\left(-32z^9 + 400z^8 + 400z^7 - 4200z^6 - 26250z^5 - 59955z^4 + 18900z^3 + 296100z^2 + 163800z + 75600\right)\operatorname{erfi}(\sqrt{z})$$

07.25.03.aajb.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, 4; z\right) = \frac{e^z (16 z^6 + 128 z^5 - 568 z^4 + 280 z^3 + 8505 z^2 - 40950 z + 69300)}{69300}$$

07.25.03.aajc.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{16 z^8 + 48 z^7 - 664 z^6 + 2772 z^5 - 3195 z^4 - 18840 z^3 + 82908 z^2 - 120960 z + 136080}{63360 z^3} + \frac{1}{126720 z^{7/2}} \left(e^z \sqrt{\pi} (32 z^9 + 112 z^8 - 1296 z^7 + 4872 z^6 - 2982 z^5 - 45045 z^4 + 161280 z^3 - 187740 z^2 + 211680 z - 136080) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aajd.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{-16 z^8 + 48 z^7 + 664 z^6 + 2772 z^5 + 3195 z^4 - 18840 z^3 - 82908 z^2 - 120960 z - 136080}{63360 z^3} + \frac{1}{126720 z^{7/2}} \left(e^{-z} \sqrt{\pi} (32 z^9 - 112 z^8 - 1296 z^7 - 4872 z^6 - 2982 z^5 + 45045 z^4 + 161280 z^3 + 187740 z^2 + 211680 z + 136080) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aaje.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, 5; z\right) = \frac{e^z (16 z^5 - 16 z^4 - 440 z^3 + 3360 z^2 - 11655 z + 17325)}{17325}$$

07.25.03.aajf.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{16 z^8 - 96 z^7 + 112 z^6 + 1920 z^5 - 14465 z^4 + 53508 z^3 - 136080 z^2 + 312480 z - 529200}{14080 z^4} + \frac{1}{28160 z^{9/2}} \left(e^z \sqrt{\pi} (32 z^9 - 176 z^8 + 112 z^7 + 4088 z^6 - 27510 z^5 + 92505 z^4 - 208740 z^3 + 438480 z^2 - 665280 z + 529200) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aajg.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{16 z^8 + 96 z^7 + 112 z^6 - 1920 z^5 - 14465 z^4 - 53508 z^3 - 136080 z^2 - 312480 z - 529200}{14080 z^4} + \frac{1}{28160 z^{9/2}} \left(e^{-z} \sqrt{\pi} (-32 z^9 - 176 z^8 - 112 z^7 + 4088 z^6 + 27510 z^5 + 92505 z^4 + 208740 z^3 + 438480 z^2 + 665280 z + 529200) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aajh.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{11}{2}, 6; z\right) = \frac{e^z (16 z^4 - 160 z^3 + 840 z^2 - 2520 z + 3465)}{3465}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = -\frac{9}{2}$

07.25.03.aaji.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{4465125} (32z^{13} + 2432z^{12} + 71376z^{11} + 1033800z^{10} + 7828746z^9 + 30165534z^8 + 52631460z^7 +$$

$$30697380z^6 + 1814400z^5 + 90720z^4 + 60480z^3 + 283500z^2 - 1984500z + 4465125) +$$

$$\frac{1}{4465125} \left(e^z \sqrt{\pi} (32z^{27/2} + 2448z^{25/2} + 72576z^{23/2} + 1068312z^{21/2} + 8312850z^{19/2} +$$

$$33641685z^{17/2} + 64811565z^{15/2} + 48227130z^{13/2} + 7936110z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aaji.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{4465125} (-32z^{13} + 2432z^{12} - 71376z^{11} + 1033800z^{10} - 7828746z^9 + 30165534z^8 - 52631460z^7 +$$

$$30697380z^6 - 1814400z^5 + 90720z^4 - 60480z^3 + 283500z^2 + 1984500z + 4465125) +$$

$$\frac{1}{4465125} \left(e^{-z} \sqrt{\pi} (32z^{27/2} - 2448z^{25/2} + 72576z^{23/2} - 1068312z^{21/2} + 8312850z^{19/2} -$$

$$33641685z^{17/2} + 64811565z^{15/2} - 48227130z^{13/2} + 7936110z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aajk.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{496125} (-16z^{12} - 1088z^{11} - 28080z^{10} - 348944z^9 - 2182407z^8 - 6497190z^7 - 7587090z^6 - 1814400z^5 +$$

$$90720z^4 + 20160z^3 + 56700z^2 - 283500z + 496125) +$$

$$\frac{1}{992250} \left(e^z \sqrt{\pi} (-32z^{25/2} - 2192z^{23/2} - 57232z^{21/2} - 724920z^{19/2} - 4688250z^{17/2} -$$

$$14888685z^{15/2} - 20145510z^{13/2} - 7936110z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aaji.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{496125} (-16z^{12} + 1088z^{11} - 28080z^{10} + 348944z^9 - 2182407z^8 + 6497190z^7 - 7587090z^6 + 1814400z^5 +$$

$$90720z^4 - 20160z^3 + 56700z^2 + 283500z + 496125) +$$

$$\frac{1}{992250} \left(e^{-z} \sqrt{\pi} (32z^{25/2} - 2192z^{23/2} + 57232z^{21/2} - 724920z^{19/2} + 4688250z^{17/2} -$$

$$14888685z^{15/2} + 20145510z^{13/2} - 7936110z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aajm.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{141750} (16z^{11} + 960z^{10} + 21368z^9 + 221196z^8 + 1085985z^7 + 2241225z^6 + 1209600z^5 - 181440z^4 + 40320z^3 + 37800z^2 - 113400z + 141750) + \frac{1}{283500} (e^z \sqrt{\pi} (32z^{23/2} + 1936z^{21/2} + 43680z^{19/2} + 462840z^{17/2} + 2374050z^{15/2} + 5392485z^{13/2} + 3968055z^{11/2})) \operatorname{erf}(\sqrt{z})$$

07.25.03.aajn.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{141750} (-16z^{11} + 960z^{10} - 21368z^9 + 221196z^8 - 1085985z^7 + 2241225z^6 - 1209600z^5 - 181440z^4 - 40320z^3 + 37800z^2 + 113400z + 141750) + \frac{1}{283500} (e^{-z} \sqrt{\pi} (32z^{23/2} - 1936z^{21/2} + 43680z^{19/2} - 462840z^{17/2} + 2374050z^{15/2} - 5392485z^{13/2} + 3968055z^{11/2})) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aajo.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{56700} (-16z^{10} - 832z^9 - 15552z^8 - 128280z^7 - 451395z^6 - 483840z^5 + 120960z^4 - 80640z^3 + 75600z^2 - 75600z + 56700) + \frac{1}{113400} e^z \sqrt{\pi} (-32z^{21/2} - 1680z^{19/2} - 31920z^{17/2} - 271320z^{15/2} - 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aajp.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{56700} (-16z^{10} + 832z^9 - 15552z^8 + 128280z^7 - 451395z^6 + 483840z^5 + 120960z^4 + 80640z^3 + 75600z^2 + 75600z + 56700) + \frac{1}{113400} e^{-z} \sqrt{\pi} (32z^{21/2} - 1680z^{19/2} + 31920z^{17/2} - 271320z^{15/2} + 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aajq.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{37800} (16z^9 + 704z^8 + 10632z^7 + 64820z^6 + 131805z^5 - 21357z^4 - 36330z^3 + 119070z^2 - 151200z + 37800) + \frac{1}{75600} (e^z \sqrt{\pi} (32z^{19/2} + 1424z^{17/2} + 21952z^{15/2} + 139608z^{13/2} + 319410z^{11/2} + 45045z^{9/2} - 135135z^{7/2} + 270270z^{5/2} - 270270z^{3/2})) \operatorname{erf}(\sqrt{z})$$

07.25.03.aajr.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{37800} (-16z^9 + 704z^8 - 10632z^7 + 64820z^6 - 131805z^5 - 21357z^4 + 36330z^3 + 119070z^2 + 151200z + 37800) + \frac{1}{75600} (e^{-z} \sqrt{\pi} (32z^{19/2} - 1424z^{17/2} + 21952z^{15/2} - 139608z^{13/2} + 319410z^{11/2} - 45045z^{9/2} - 135135z^{7/2} - 270270z^{5/2} - 270270z^{3/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aajs.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{-16z^8 - 576z^7 - 6608z^6 - 25440z^5 - 7263z^4 + 43638z^3 - 86310z^2 + 52920z + 75600}{75600} + \frac{1}{151200} (e^z \sqrt{\pi} (-32z^{17/2} - 1168z^{15/2} - 13776z^{13/2} - 56952z^{11/2} - 34650z^{9/2} + 93555z^{7/2} - 145530z^{5/2} + 20790z^{3/2} + 249480\sqrt{z}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aajt.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{-16z^8 + 576z^7 - 6608z^6 + 25440z^5 - 7263z^4 - 43638z^3 - 86310z^2 - 52920z + 75600}{75600} + \frac{1}{151200} (e^{-z} \sqrt{\pi} (32z^{17/2} - 1168z^{15/2} + 13776z^{13/2} - 56952z^{11/2} + 34650z^{9/2} + 93555z^{7/2} + 145530z^{5/2} + 20790z^{3/2} - 249480\sqrt{z}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aaju.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, 1; z\right) = -\frac{e^z (8z^8 + 260z^7 + 2590z^6 + 7665z^5 - 3675z^4 - 9240z^3 + 37800z^2 - 37800z - 37800)}{37800}$$

07.25.03.aajv.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{-16z^7 - 448z^6 - 3480z^5 - 4764z^4 + 15303z^3 - 17325z^2 - 28980z + 94500}{151200} + \frac{1}{302400\sqrt{z}} e^z \sqrt{\pi} (-32z^8 - 912z^7 - 7392z^6 - 12600z^5 + 28350z^4 - 19845z^3 - 85995z^2 + 192780z + 56700) \operatorname{erf}(\sqrt{z})$$

07.25.03.aajw.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{16z^7 - 448z^6 + 3480z^5 - 4764z^4 - 15303z^3 - 17325z^2 + 28980z + 94500}{151200} + \frac{1}{302400\sqrt{z}} e^{-z} \sqrt{\pi} (-32z^8 + 912z^7 - 7392z^6 + 12600z^5 + 28350z^4 + 19845z^3 - 85995z^2 - 192780z + 56700) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aajx.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, 2; z\right) = -\frac{e^z (8z^7 + 196z^6 + 1218z^5 + 357z^4 - 5460z^3 + 12600z^2 - 37800)}{37800}$$

07.25.03.aajy.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-16z^7 - 320z^6 - 1248z^5 + 2584z^4 + 2085z^3 - 23940z^2 + 39900z + 12600}{100800z} + \frac{1}{201600z^{3/2}} e^z \sqrt{\pi} (-32z^8 - 656z^7 - 2800z^6 + 4200z^5 + 7350z^4 - 49245z^3 + 61740z^2 + 69300z - 12600) \operatorname{erf}(\sqrt{z})$$

07.25.03.aajz.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-16z^7 + 320z^6 - 1248z^5 - 2584z^4 + 2085z^3 + 23940z^2 + 39900z - 12600}{100800z} +$$

$$\frac{1}{201600z^{3/2}} e^{-z} \sqrt{\pi} (32z^8 - 656z^7 + 2800z^6 + 4200z^5 - 7350z^4 - 49245z^3 - 61740z^2 + 69300z + 12600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aak0.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, 3; z\right) = -\frac{e^z (8z^6 + 132z^5 + 294z^4 - 1407z^3 + 1575z^2 + 6300z - 18900)}{18900}$$

07.25.03.aak1.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-16z^7 - 192z^6 + 88z^5 + 1980z^4 - 7605z^3 + 6825z^2 + 15750z - 9450}{40320z^2} +$$

$$\frac{e^z \sqrt{\pi} (-32z^8 - 400z^7 + 4200z^5 - 13650z^4 + 5355z^3 + 45675z^2 - 22050z + 9450) \operatorname{erf}(\sqrt{z})}{80640z^{5/2}}$$

07.25.03.aak2.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{16z^7 - 192z^6 - 88z^5 + 1980z^4 + 7605z^3 + 6825z^2 - 15750z - 9450}{40320z^2} +$$

$$\frac{e^{-z} \sqrt{\pi} (-32z^8 + 400z^7 - 4200z^5 - 13650z^4 - 5355z^3 + 45675z^2 + 22050z + 9450) \operatorname{erfi}(\sqrt{z})}{80640z^{5/2}}$$

07.25.03.aak3.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, 4; z\right) = -\frac{e^z (8z^5 + 68z^4 - 182z^3 - 315z^2 + 3150z - 6300)}{6300}$$

07.25.03.aak4.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-16z^7 - 64z^6 + 528z^5 - 1200z^4 - 1335z^3 + 10962z^2 - 14490z + 15120}{11520z^3} +$$

$$\frac{1}{23040z^{7/2}} e^z \sqrt{\pi} (-32z^8 - 144z^7 + 1008z^6 - 1848z^5 - 4410z^4 + 22995z^3 - 23310z^2 + 24570z - 15120) \operatorname{erf}(\sqrt{z})$$

07.25.03.aak5.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{-16z^7 + 64z^6 + 528z^5 + 1200z^4 - 1335z^3 - 10962z^2 - 14490z - 15120}{11520z^3} +$$

$$\frac{1}{23040z^{7/2}} e^{-z} \sqrt{\pi} (32z^8 - 144z^7 - 1008z^6 - 1848z^5 + 4410z^4 + 22995z^3 + 23310z^2 + 24570z + 15120) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aak6.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, 5; z\right) = -\frac{e^z (8z^4 + 4z^3 - 210z^2 + 945z - 1575)}{1575}$$

07.25.03.aak7.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-16z^7 + 64z^6 + 72z^5 - 1580z^4 + 6447z^3 - 15057z^2 + 32760z - 52920}{2560z^4} +$$

$$\frac{1}{5120z^{9/2}} e^z \sqrt{\pi} (-32z^8 + 112z^7 + 224z^6 - 3192z^5 + 11550z^4 - 23205z^3 + 46305z^2 - 68040z + 52920) \operatorname{erf}(\sqrt{z})$$

07.25.03.aak8.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{16z^7 + 64z^6 - 72z^5 - 1580z^4 - 6447z^3 - 15057z^2 - 32760z - 52920}{2560z^4} + \frac{1}{5120z^{9/2}} e^{-z} \sqrt{\pi} (-32z^8 - 112z^7 + 224z^6 + 3192z^5 + 11550z^4 + 23205z^3 + 46305z^2 + 68040z + 52920) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aak9.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{9}{2}, 6; z\right) = -\frac{1}{315} e^z (8z^3 - 60z^2 + 210z - 315)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = -\frac{7}{2}$

07.25.03.aaka.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{110250} (16z^{11} + 976z^{10} + 22232z^9 + 238252z^8 + 1239369z^7 + 2874580z^6 + 2243130z^5 + 181440z^4 + 13440z^3 + 22680z^2 - 81000z + 110250) + \frac{1}{220500} (e^z \sqrt{\pi} (32z^{23/2} + 1968z^{21/2} + 45424z^{19/2} + 497800z^{17/2} + 2697050z^{15/2} + 6797535z^{13/2} + 6550440z^{11/2} + 1385670z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aakb.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{110250} (-16z^{11} + 976z^{10} - 22232z^9 + 238252z^8 - 1239369z^7 + 2874580z^6 - 2243130z^5 + 181440z^4 - 13440z^3 + 22680z^2 + 81000z + 110250) + \frac{1}{220500} (e^{-z} \sqrt{\pi} (32z^{23/2} - 1968z^{21/2} + 45424z^{19/2} - 497800z^{17/2} + 2697050z^{15/2} - 6797535z^{13/2} + 6550440z^{11/2} - 1385670z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aakc.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{31500} (-16z^{10} - 864z^9 - 17056z^8 - 153384z^7 - 633355z^6 - 1033530z^5 - 362880z^4 + 26880z^3 + 15120z^2 - 32400z + 31500) + \frac{1}{63000} (e^z \sqrt{\pi} (-32z^{21/2} - 1744z^{19/2} - 34960z^{17/2} - 323000z^{15/2} - 1405050z^{13/2} - 2582385z^{11/2} - 1385670z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aakd.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{31500} (-16z^{10} + 864z^9 - 17056z^8 + 153384z^7 - 633355z^6 + 1033530z^5 - 362880z^4 - 26880z^3 + 15120z^2 + 32400z + 31500) + \frac{1}{63000} (e^{-z} \sqrt{\pi} (32z^{21/2} - 1744z^{19/2} + 34960z^{17/2} - 323000z^{15/2} + 1405050z^{13/2} - 2582385z^{11/2} + 1385670z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aake.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{12\,600} (16z^9 + 752z^8 + 12\,552z^7 + 90\,980z^6 + 274\,845z^5 + 241\,920z^4 - 53\,760z^3 + 30\,240z^2 - 21\,600z + 12\,600) + \frac{e^z \sqrt{\pi} (32z^{19/2} + 1520z^{17/2} + 25\,840z^{15/2} + 193\,800z^{13/2} + 629\,850z^{11/2} + 692\,835z^{9/2}) \operatorname{erf}(\sqrt{z})}{25\,200}$$

07.25.03.aakf.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{12\,600} (-16z^9 + 752z^8 - 12\,552z^7 + 90\,980z^6 - 274\,845z^5 + 241\,920z^4 + 53\,760z^3 + 30\,240z^2 + 21\,600z + 12\,600) + \frac{1}{25\,200} e^{-z} \sqrt{\pi} (32z^{19/2} - 1520z^{17/2} + 25\,840z^{15/2} - 193\,800z^{13/2} + 629\,850z^{11/2} - 692\,835z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aakg.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{-16z^8 - 640z^7 - 8720z^6 - 47\,680z^5 - 87\,759z^4 + 5810z^3 + 29\,610z^2 - 43\,200z + 8400}{8400} + \frac{1}{16\,800} (e^z \sqrt{\pi} (-32z^{17/2} - 1296z^{15/2} - 18\,064z^{13/2} - 103\,480z^{11/2} - 215\,930z^{9/2} - 45\,045z^{7/2} + 90\,090z^{5/2} - 90\,090z^{3/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aakh.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{-16z^8 + 640z^7 - 8720z^6 + 47\,680z^5 - 87\,759z^4 - 5810z^3 + 29\,610z^2 + 43\,200z + 8400}{8400} + \frac{1}{16\,800} (e^{-z} \sqrt{\pi} (32z^{17/2} - 1296z^{15/2} + 18\,064z^{13/2} - 103\,480z^{11/2} + 215\,930z^{9/2} - 45\,045z^{7/2} - 90\,090z^{5/2} - 90\,090z^{3/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aaki.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{16z^7 + 528z^6 + 5560z^5 + 20\,124z^4 + 9457z^3 - 28\,980z^2 + 24\,030z + 16\,800}{16\,800} + \frac{1}{33\,600} (e^z \sqrt{\pi} (32z^{15/2} + 1072z^{13/2} + 11\,632z^{11/2} + 45\,320z^{9/2} + 34\,650z^{7/2} - 58\,905z^{5/2} + 27\,720z^{3/2} + 62\,370\sqrt{z}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aakj.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{-16z^7 + 528z^6 - 5560z^5 + 20\,124z^4 - 9457z^3 - 28\,980z^2 - 24\,030z + 16\,800}{16\,800} + \frac{1}{33\,600} (e^{-z} \sqrt{\pi} (32z^{15/2} - 1072z^{13/2} + 11\,632z^{11/2} - 45\,320z^{9/2} + 34\,650z^{7/2} + 58\,905z^{5/2} + 27\,720z^{3/2} - 62\,370\sqrt{z}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aakk.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, 1; z\right) = \frac{e^z (4z^7 + 120z^6 + 1115z^5 + 3275z^4 - 200z^3 - 4920z^2 + 6600z + 4200)}{4200}$$

07.25.03.aakl.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{16z^6 + 416z^5 + 3072z^4 + 4952z^3 - 9261z^2 - 990z + 22260}{33600} + \frac{e^z \sqrt{\pi} (32z^7 + 848z^6 + 6544z^5 + 12600z^4 - 15750z^3 - 11655z^2 + 51030z + 11340) \operatorname{erf}(\sqrt{z})}{67200 \sqrt{z}}$$

07.25.03.aakm.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{16z^6 - 416z^5 + 3072z^4 - 4952z^3 - 9261z^2 + 990z + 22260}{33600} + \frac{1}{67200 \sqrt{z}} e^{-z} \sqrt{\pi} (-32z^7 + 848z^6 - 6544z^5 + 12600z^4 + 15750z^3 - 11655z^2 - 51030z + 11340) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aakn.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, 2; z\right) = \frac{e^z (4z^6 + 92z^5 + 563z^4 + 460z^3 - 2040z^2 + 1200z + 4200)}{4200}$$

07.25.03.aako.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{16z^6 + 304z^5 + 1256z^4 - 1196z^3 - 4155z^2 + 10360z + 2100}{22400z} + \frac{e^z \sqrt{\pi} (32z^7 + 624z^6 + 2800z^5 - 1400z^4 - 10150z^3 + 18795z^2 + 13440z - 2100) \operatorname{erf}(\sqrt{z})}{44800z^{3/2}}$$

07.25.03.aakp.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{-16z^6 + 304z^5 - 1256z^4 - 1196z^3 + 4155z^2 + 10360z - 2100}{22400z} + \frac{e^{-z} \sqrt{\pi} (32z^7 - 624z^6 + 2800z^5 + 1400z^4 - 10150z^3 - 18795z^2 + 13440z + 2100) \operatorname{erfi}(\sqrt{z})}{44800z^{3/2}}$$

07.25.03.aakq.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, 3; z\right) = \frac{e^z (4z^5 + 64z^4 + 179z^3 - 435z^2 - 300z + 2100)}{2100}$$

07.25.03.aakr.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{16z^6 + 192z^5 + 112z^4 - 1680z^3 + 2455z^2 + 2550z - 1350}{8960z^2} + \frac{e^z \sqrt{\pi} (32z^7 + 400z^6 + 400z^5 - 3400z^4 + 3450z^3 + 8445z^2 - 3450z + 1350) \operatorname{erf}(\sqrt{z})}{17920z^{5/2}}$$

07.25.03.aaks.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{16z^6 - 192z^5 + 112z^4 + 1680z^3 + 2455z^2 - 2550z - 1350}{8960z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^7 + 400z^6 - 400z^5 - 3400z^4 - 3450z^3 + 8445z^2 + 3450z + 1350) \operatorname{erfi}(\sqrt{z})}{17920z^{5/2}}$$

07.25.03.aakt.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, 4; z\right) = \frac{1}{700} e^z (4z^4 + 36z^3 - 37z^2 - 250z + 700)$$

07.25.03.aaku.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{16z^6 + 80z^5 - 360z^4 + 140z^3 + 1689z^2 - 1980z + 1890}{2560z^3} + \frac{e^z \sqrt{\pi} (32z^7 + 176z^6 - 656z^5 - 120z^4 + 3930z^3 - 3345z^2 + 3240z - 1890) \operatorname{erf}(\sqrt{z})}{5120z^{7/2}}$$

07.25.03.aakv.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-16z^6 + 80z^5 + 360z^4 + 140z^3 - 1689z^2 - 1980z - 1890}{2560z^3} + \frac{e^{-z} \sqrt{\pi} (32z^7 - 176z^6 - 656z^5 + 120z^4 + 3930z^3 + 3345z^2 + 3240z + 1890) \operatorname{erfi}(\sqrt{z})}{5120z^{7/2}}$$

07.25.03.aakw.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, 5; z\right) = \frac{1}{175} e^z (4z^3 + 8z^2 - 85z + 175)$$

07.25.03.aakx.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9(16z^6 - 32z^5 - 160z^4 + 904z^3 - 1893z^2 + 3850z - 5880)}{5120z^4} + \frac{9e^z \sqrt{\pi} (32z^7 - 48z^6 - 368z^5 + 1720z^4 - 2950z^3 + 5505z^2 - 7770z + 5880) \operatorname{erf}(\sqrt{z})}{10240z^{9/2}}$$

07.25.03.aaky.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(16z^6 + 32z^5 - 160z^4 - 904z^3 - 1893z^2 - 3850z - 5880)}{5120z^4} - \frac{9e^{-z} \sqrt{\pi} (32z^7 + 48z^6 - 368z^5 - 1720z^4 - 2950z^3 - 5505z^2 - 7770z - 5880) \operatorname{erfi}(\sqrt{z})}{10240z^{9/2}}$$

07.25.03.aakz.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{7}{2}, 6; z\right) = \frac{1}{35} e^z (4z^2 - 20z + 35)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = -\frac{5}{2}$

07.25.03.aal0.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{9000} (16z^9 + 768z^8 + 13224z^7 + 100852z^6 + 336525z^5 + 397575z^4 + 53760z^3 + 10080z^2 - 12960z + 9000) + \frac{1}{18000} e^z \sqrt{\pi} (32z^{19/2} + 1552z^{17/2} + 27200z^{15/2} + 214200z^{13/2} + 762450z^{11/2} + 1057485z^{9/2} + 328185z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aal1.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{9000} (-16z^9 + 768z^8 - 13224z^7 + 100852z^6 - 336525z^5 + 397575z^4 - 53760z^3 + 10080z^2 + 12960z + 9000) + \frac{1}{18000} e^{-z} \sqrt{\pi} (32z^{19/2} - 1552z^{17/2} + 27200z^{15/2} - 214200z^{13/2} + 762450z^{11/2} - 1057485z^{9/2} + 328185z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aal2.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{-16z^8 - 672z^7 - 9872z^6 - 61680z^5 - 155655z^4 - 107520z^3 + 20160z^2 - 8640z + 3600}{3600} + \frac{e^z \sqrt{\pi} (-32z^{17/2} - 1360z^{15/2} - 20400z^{13/2} - 132600z^{11/2} - 364650z^{9/2} - 328185z^{7/2}) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.aal3.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{-16z^8 + 672z^7 - 9872z^6 + 61680z^5 - 155655z^4 + 107520z^3 + 20160z^2 + 8640z + 3600}{3600} + \frac{e^{-z} \sqrt{\pi} (32z^{17/2} - 1360z^{15/2} + 20400z^{13/2} - 132600z^{11/2} + 364650z^{9/2} - 328185z^{7/2}) \operatorname{erfi}(\sqrt{z})}{7200}$$

07.25.03.aal4.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{16z^7 + 576z^6 + 7000z^5 + 33948z^4 + 56665z^3 + 4725z^2 - 17280z + 2400}{2400} + \frac{1}{4800} e^z \sqrt{\pi} (32z^{15/2} + 1168z^{13/2} + 14560z^{11/2} + 74360z^{9/2} + 141570z^{7/2} + 45045z^{5/2} - 45045z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aal5.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{-16z^7 + 576z^6 - 7000z^5 + 33948z^4 - 56665z^3 + 4725z^2 + 17280z + 2400}{2400} + \frac{1}{4800} e^{-z} \sqrt{\pi} (32z^{15/2} - 1168z^{13/2} + 14560z^{11/2} - 74360z^{9/2} + 141570z^{7/2} - 45045z^{5/2} - 45045z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aal6.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{-16z^6 - 480z^5 - 4608z^4 - 15736z^3 - 11235z^2 + 13770z + 4800}{4800} + \frac{1}{9600} e^z \sqrt{\pi} (-32z^{13/2} - 976z^{11/2} - 9680z^{9/2} - 35640z^{7/2} - 34650z^{5/2} + 24255z^{3/2} + 20790\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aal7.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{-16z^6 + 480z^5 - 4608z^4 + 15736z^3 - 11235z^2 - 13770z + 4800}{4800} + \frac{1}{9600} e^{-z} \sqrt{\pi} (32z^{13/2} - 976z^{11/2} + 9680z^{9/2} - 35640z^{7/2} + 34650z^{5/2} + 24255z^{3/2} - 20790\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aal8.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, 1; z\right) = -\frac{1}{600} e^z (2z^6 + 55z^5 + 475z^4 + 1400z^3 + 600z^2 - 1560z - 600)$$

07.25.03.aal9.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{-16z^5 - 384z^4 - 2696z^3 - 5124z^2 + 3195z + 6765}{9600} + \frac{e^z \sqrt{\pi} (-32z^6 - 784z^5 - 5760z^4 - 12600z^3 + 3150z^2 + 17955z + 2835) \operatorname{erf}(\sqrt{z})}{19200 \sqrt{z}}$$

07.25.03.aala.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{16z^5 - 384z^4 + 2696z^3 - 5124z^2 - 3195z + 6765}{9600} + \frac{e^{-z} \sqrt{\pi} (-32z^6 + 784z^5 - 5760z^4 + 12600z^3 + 3150z^2 - 17955z + 2835) \operatorname{erfi}(\sqrt{z})}{19200 \sqrt{z}}$$

07.25.03.aalb.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, 2; z\right) = -\frac{1}{600} e^z (2z^5 + 43z^4 + 260z^3 + 360z^2 - 480z - 600)$$

07.25.03.aalc.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-16z^5 - 288z^4 - 1264z^3 - 192z^2 + 3425z + 420}{6400z} + \frac{e^z \sqrt{\pi} (-32z^6 - 592z^5 - 2800z^4 - 1400z^3 + 7350z^2 + 3255z - 420) \operatorname{erf}(\sqrt{z})}{12800 z^{3/2}}$$

07.25.03.aald.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-16z^5 + 288z^4 - 1264z^3 + 192z^2 + 3425z - 420}{6400z} + \frac{e^{-z} \sqrt{\pi} (32z^6 - 592z^5 + 2800z^4 - 1400z^3 - 7350z^2 + 3255z + 420) \operatorname{erfi}(\sqrt{z})}{12800 z^{3/2}}$$

07.25.03.aale.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, 3; z\right) = -\frac{1}{300} e^z (2z^4 + 31z^3 + 105z^2 - 60z - 300)$$

07.25.03.aalf.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-16z^5 - 192z^4 - 312z^3 + 980z^2 + 495z - 225}{2560z^2} + \frac{e^z \sqrt{\pi} (-32z^6 - 400z^5 - 800z^4 + 1800z^3 + 1950z^2 - 645z + 225) \operatorname{erf}(\sqrt{z})}{5120 z^{5/2}}$$

07.25.03.aalg.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{16z^5 - 192z^4 + 312z^3 + 980z^2 - 495z - 225}{2560z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^6 + 400z^5 - 800z^4 - 1800z^3 + 1950z^2 + 645z + 225) \operatorname{erfi}(\sqrt{z})}{5120 z^{5/2}}$$

07.25.03.aalh.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, 4; z\right) = -\frac{1}{100} e^z (2z^3 + 19z^2 + 10z - 100)$$

07.25.03.aali.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(16z^5 + 96z^4 - 160z^3 - 312z^2 + 315z - 270)}{5120z^3} - \frac{7e^z \sqrt{\pi} (32z^6 + 208z^5 - 240z^4 - 840z^3 + 570z^2 - 495z + 270) \operatorname{erf}(\sqrt{z})}{10240z^{7/2}}$$

07.25.03.aalj.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (32z^6 - 208z^5 - 240z^4 + 840z^3 + 570z^2 + 495z + 270) \operatorname{erfi}(\sqrt{z})}{10240z^{7/2}} - \frac{7(16z^5 - 96z^4 - 160z^3 + 312z^2 + 315z + 270)}{5120z^3}$$

07.25.03.aalk.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, 5; z\right) = -\frac{1}{25} e^z (2z^2 + 7z - 25)$$

07.25.03.aall.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{63(16z^5 - 152z^3 + 276z^2 - 515z + 735)}{10240z^4} - \frac{63e^z \sqrt{\pi} (32z^6 + 16z^5 - 320z^4 + 440z^3 - 750z^2 + 1005z - 735) \operatorname{erf}(\sqrt{z})}{20480z^{9/2}}$$

07.25.03.aalm.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63(16z^5 - 152z^3 - 276z^2 - 515z - 735)}{10240z^4} - \frac{63e^{-z} \sqrt{\pi} (32z^6 - 16z^5 - 320z^4 - 440z^3 - 750z^2 - 1005z - 735) \operatorname{erfi}(\sqrt{z})}{20480z^{9/2}}$$

07.25.03.aaln.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{5}{2}, 6; z\right) = -\frac{1}{5} e^z (2z - 5)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = -\frac{3}{2}$

07.25.03.aalo.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{16z^7 + 592z^6 + 7512z^5 + 39420z^4 + 79905z^3 + 40320z^2 - 5760z + 1440}{1440} + \frac{e^z \sqrt{\pi} (32z^{15/2} + 1200z^{13/2} + 15600z^{11/2} + 85800z^{9/2} + 193050z^{7/2} + 135135z^{5/2}) \operatorname{erf}(\sqrt{z})}{2880}$$

07.25.03.aalp.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{-16z^7 + 592z^6 - 7512z^5 + 39420z^4 - 79905z^3 + 40320z^2 + 5760z + 1440}{1440} + \frac{e^{-z}\sqrt{\pi}(32z^{15/2} - 1200z^{13/2} + 15600z^{11/2} - 85800z^{9/2} + 193050z^{7/2} - 135135z^{5/2})\operatorname{erfi}(\sqrt{z})}{2880}$$

07.25.03.aalq.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{960}(-16z^6 - 512z^5 - 5472z^4 - 23240z^3 - 35595z^2 - 11520z + 960) + \frac{e^z\sqrt{\pi}(-32z^{13/2} - 1040z^{11/2} - 11440z^{9/2} - 51480z^{7/2} - 90090z^{5/2} - 45045z^{3/2})\operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.aalr.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{960}(-16z^6 + 512z^5 - 5472z^4 + 23240z^3 - 35595z^2 + 11520z + 960) + \frac{e^{-z}\sqrt{\pi}(32z^{13/2} - 1040z^{11/2} + 11440z^{9/2} - 51480z^{7/2} + 90090z^{5/2} - 45045z^{3/2})\operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.aals.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920}{1920} + \frac{e^z\sqrt{\pi}(32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z})\operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.aalt.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920}{1920} + \frac{e^{-z}\sqrt{\pi}(32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.aalu.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, 1; z\right) = \frac{1}{120}e^z(z^5 + 25z^4 + 200z^3 + 600z^2 + 600z + 120)$$

07.25.03.aalv.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{16z^4 + 352z^3 + 2352z^2 + 5280z + 2895}{3840} + \frac{e^z\sqrt{\pi}(32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945)\operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.aalw.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{16z^4 - 352z^3 + 2352z^2 - 5280z + 2895}{3840} + \frac{e^{-z}\sqrt{\pi}(-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945)\operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.aalx.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, 2; z\right) = \frac{1}{120} e^z (z^4 + 20z^3 + 120z^2 + 240z + 120)$$

07.25.03.aaly.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z \sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.aalz.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z} \sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.aam0.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, 3; z\right) = \frac{1}{60} e^z (z^3 + 15z^2 + 60z + 60)$$

07.25.03.aam1.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{16z^4 + 192z^3 + 512z^2 + 120z - 45}{1024z^2} + \frac{e^z \sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.aam2.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.aam3.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, 4; z\right) = \frac{1}{20} e^z (z^2 + 10z + 20)$$

07.25.03.aam4.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z \sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.aam5.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

$$07.25.03.aam6.01$$

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, 5; z\right) = \frac{1}{5} e^z (z + 5)$$

$$07.25.03.aam7.01$$

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, \frac{11}{2}; z\right) =$$

$$\frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z\sqrt{\pi}(32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

$$07.25.03.aam8.01$$

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z}\sqrt{\pi}(32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

$$07.25.03.aam9.01$$

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{3}{2}, 6; z\right) = e^z$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = -\frac{1}{2}$

$$07.25.03.aama.01$$

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{1}{2}, 1; z\right) = \frac{1}{320} e^z (-4z^4 - 90z^3 - 665z^2 + 5440z + 320) - \frac{3003}{128} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.aamb.01$$

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{1}{2}, 1; -z\right) = \frac{1}{320} e^{-z} (-4z^4 + 90z^3 - 665z^2 - 5440z + 320) - \frac{3003}{128} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

$$07.25.03.aamc.01$$

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{1}{2}, 2; z\right) = \frac{1}{160} e^z (-2z^3 - 37z^2 + 1280z + 160) - \frac{3003}{320} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.aamd.01$$

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{1}{2}, 2; -z\right) = \frac{1}{160} e^{-z} (2z^3 - 37z^2 - 1280z + 160) - \frac{3003}{320} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

$$07.25.03.aame.01$$

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{1}{2}, 3; z\right) = \frac{1}{40} e^z (-z^2 + 200z + 40) - \frac{429}{80} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.aamf.01$$

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{1}{2}, 3; -z\right) = \frac{1}{40} e^{-z} (-z^2 - 200z + 40) - \frac{429}{80} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

$$07.25.03.aamg.01$$

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{1}{2}, 4; z\right) = \frac{1}{2} e^z (7z + 2) - \frac{143}{40} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.aamh.01$$

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{1}{2}, 4; -z\right) = \frac{1}{2} e^{-z} (2 - 7z) - \frac{143}{40} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aami.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{1}{2}, 5; z\right) = \frac{1}{5} e^z (13z + 5) - \frac{13}{5} \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aamj.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{1}{2}, 5; -z\right) = \frac{1}{5} e^{-z} (5 - 13z) - \frac{13}{5} \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aamk.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{1}{2}, 6; z\right) = e^z (2z + 1) - 2 \sqrt{\pi} z^{3/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aaml.01

$${}_2F_2\left(-\frac{3}{2}, 6; -\frac{1}{2}, 6; -z\right) = e^{-z} (1 - 2z) - 2 \sqrt{\pi} z^{3/2} \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = \frac{1}{2}$

07.25.03.aamm.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{1}{2}, 1; z\right) = \frac{e^z (8z^3 + 160z^2 - 13925z + 1280)}{1280} + \frac{231}{512} \sqrt{\pi} (26z^{3/2} - 9\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aamn.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{1}{2}, 1; -z\right) = \frac{e^{-z} (-8z^3 + 160z^2 + 13925z + 1280)}{1280} + \frac{231}{512} \sqrt{\pi} (26z^{3/2} + 9\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aamo.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{1}{2}, 2; z\right) = \frac{1}{640} e^z (4z^2 - 2935z + 640) + \frac{231 \sqrt{\pi} (26z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1280}$$

07.25.03.aamp.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{1}{2}, 2; -z\right) = \frac{1}{640} e^{-z} (4z^2 + 2935z + 640) + \frac{231 \sqrt{\pi} (26z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})}{1280}$$

07.25.03.aamq.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{1}{2}, 3; z\right) = \frac{1}{160} e^z (160 - 427z) + \frac{33}{320} \sqrt{\pi} (26z^{3/2} - 21\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aamr.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{1}{2}, 3; -z\right) = \frac{1}{160} e^{-z} (427z + 160) + \frac{33}{320} \sqrt{\pi} (26z^{3/2} + 21\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aams.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{1}{2}, 4; z\right) = \frac{1}{80} e^z (80 - 143z) + \frac{11}{160} \sqrt{\pi} (26z^{3/2} - 27\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aamt.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{1}{2}, 4; -z\right) = \frac{1}{80} e^{-z} (143z + 80) + \frac{11}{160} \sqrt{\pi} (26z^{3/2} + 27\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aamu.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{1}{2}, 5; z\right) = \frac{1}{10} e^z (10 - 13z) + \frac{1}{20} \sqrt{\pi} (26z^{3/2} - 33\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aamv.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{1}{2}, 5; -z\right) = \frac{1}{10} e^{-z} (13z + 10) + \frac{1}{20} \sqrt{\pi} (26z^{3/2} + 33\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aamw.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{1}{2}, 6; z\right) = e^z (1 - z) + \frac{1}{2} \sqrt{\pi} (2z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aamx.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{1}{2}, 6; -z\right) = e^{-z} (z + 1) + \frac{1}{2} \sqrt{\pi} (2z^{3/2} + 3\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = 1$

07.25.03.aamy.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, 1; z\right) = \frac{1}{320} e^{z/2} (z^3 + 2522z^2 - 3040z + 320) I_0\left(\frac{z}{2}\right) + \frac{1}{320} e^{z/2} (z^3 - 2484z^2 + 792z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aamz.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, \frac{3}{2}; z\right) = \frac{e^z (32z^2 - 29470z + 9295)}{10240} + \frac{21\sqrt{\pi} (572z^2 - 396z + 9) \operatorname{erfi}(\sqrt{z})}{4096\sqrt{z}}$$

07.25.03.aan0.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, \frac{3}{2}; -z\right) = \frac{e^{-z} (32z^2 + 29470z + 9295)}{10240} + \frac{21\sqrt{\pi} (572z^2 + 396z + 9) \operatorname{erf}(\sqrt{z})}{4096\sqrt{z}}$$

07.25.03.aan1.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, 2; z\right) = \frac{1}{160} e^{z/2} (501z^2 - 800z + 160) I_0\left(\frac{z}{2}\right) + \frac{1}{40} e^{z/2} (79z - 125z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.aan2.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, \frac{5}{2}; z\right) = \frac{21\sqrt{\pi} (1144z^3 - 1188z^2 + 54z - 1) \operatorname{erfi}(\sqrt{z})}{16384z^{3/2}} - \frac{3e^z (19956z^2 - 11740z - 35)}{40960z}$$

07.25.03.aan3.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, \frac{5}{2}; -z\right) = \frac{3e^{-z} (19956z^2 + 11740z - 35)}{40960z} + \frac{21\sqrt{\pi} (1144z^3 + 1188z^2 + 54z + 1) \operatorname{erf}(\sqrt{z})}{16384z^{3/2}}$$

07.25.03.aan4.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, 3; z\right) = \frac{1}{80} e^{z/2} (143z^2 - 280z + 80) I_0\left(\frac{z}{2}\right) - \frac{1}{80} e^{z/2} z (143z - 138) I_1\left(\frac{z}{2}\right)$$

07.25.03.aan5.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi} (16016z^4 - 22176z^3 + 1512z^2 - 56z + 9) \operatorname{erfi}(\sqrt{z})}{262144z^{5/2}} - \frac{3e^z (40040z^3 - 35932z^2 - 310z + 45)}{131072z^2}$$

07.25.03.aan6.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, \frac{7}{2}; -z\right) = \frac{3e^{-z} (40040z^3 + 35932z^2 - 310z - 45)}{131072z^2} + \frac{15\sqrt{\pi} (16016z^4 + 22176z^3 + 1512z^2 + 56z + 9) \operatorname{erf}(\sqrt{z})}{262144z^{5/2}}$$

07.25.03.aan7.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, 4; z\right) = \frac{1}{120} e^{z/2} (143 z^2 - 330 z + 120) I_0\left(\frac{z}{2}\right) - \frac{11}{120} e^{z/2} z (13 z - 17) I_1\left(\frac{z}{2}\right)$$

07.25.03.aan8.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, \frac{9}{2}; z\right) = \frac{21 \sqrt{\pi} (32\,032 z^5 - 55\,440 z^4 + 5040 z^3 - 280 z^2 + 90 z - 45) \operatorname{erfi}(\sqrt{z})}{1\,048\,576 z^{7/2}} - \frac{21 e^z (16\,016 z^4 - 19\,712 z^3 - 352 z^2 + 120 z - 45)}{524\,288 z^3}$$

07.25.03.aan9.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, \frac{9}{2}; -z\right) = \frac{21 e^{-z} (16\,016 z^4 + 19\,712 z^3 - 352 z^2 - 120 z - 45)}{524\,288 z^3} + \frac{21 \sqrt{\pi} (32\,032 z^5 + 55\,440 z^4 + 5040 z^3 + 280 z^2 + 90 z + 45) \operatorname{erf}(\sqrt{z})}{1\,048\,576 z^{7/2}}$$

07.25.03.aana.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, 5; z\right) = \frac{1}{30} e^{z/2} (26 z^2 - 69 z + 30) I_0\left(\frac{z}{2}\right) - \frac{1}{30} e^{z/2} z (26 z - 43) I_1\left(\frac{z}{2}\right)$$

07.25.03.aanb.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, \frac{11}{2}; z\right) = \frac{63 \sqrt{\pi} (64\,064 z^6 - 133\,056 z^5 + 15\,120 z^4 - 1120 z^3 + 540 z^2 - 540 z + 735) \operatorname{erfi}(\sqrt{z})}{8\,388\,608 z^{9/2}} - \frac{63 e^z (32\,032 z^5 - 50\,512 z^4 - 1680 z^3 + 1096 z^2 - 1030 z + 735)}{4\,194\,304 z^4}$$

07.25.03.aanc.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (32\,032 z^5 + 50\,512 z^4 - 1680 z^3 - 1096 z^2 - 1030 z - 735)}{4\,194\,304 z^4} + \frac{63 \sqrt{\pi} (64\,064 z^6 + 133\,056 z^5 + 15\,120 z^4 + 1120 z^3 + 540 z^2 + 540 z + 735) \operatorname{erf}(\sqrt{z})}{8\,388\,608 z^{9/2}}$$

07.25.03.aand.01

$${}_2F_2\left(-\frac{3}{2}, 6; 1, 6; z\right) = \frac{1}{3} e^{z/2} (2 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z - 2) z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = \frac{3}{2}$

07.25.03.aane.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{3}{2}, 2; z\right) = \frac{e^z (835 - 1198 z)}{1024} + \frac{21 \sqrt{\pi} (572 z^2 - 660 z + 45) \operatorname{erfi}(\sqrt{z})}{10\,240 \sqrt{z}}$$

07.25.03.aanf.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (1198 z + 835)}{1024} + \frac{21 \sqrt{\pi} (572 z^2 + 660 z + 45) \operatorname{erf}(\sqrt{z})}{10\,240 \sqrt{z}}$$

07.25.03.aang.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{3}{2}, 3; z\right) = \frac{e^z (965 - 858 z)}{1280} + \frac{3 \sqrt{\pi} (572 z^2 - 924 z + 105) \operatorname{erfi}(\sqrt{z})}{2560 \sqrt{z}}$$

07.25.03.aanh.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{3}{2}, 3; -z\right) = \frac{e^{-z} (858 z + 965)}{1280} + \frac{3 \sqrt{\pi} (572 z^2 + 924 z + 105) \operatorname{erf}(\sqrt{z})}{2560 \sqrt{z}}$$

07.25.03.aani.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{3}{2}, 4; z\right) = \frac{\sqrt{\pi} (572 z^2 - 1188 z + 189) \operatorname{erfi}(\sqrt{z})}{1280 \sqrt{z}} - \frac{11}{640} e^z (26 z - 41)$$

07.25.03.aanj.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{3}{2}, 4; -z\right) = \frac{11}{640} e^{-z} (26 z + 41) + \frac{\sqrt{\pi} (572 z^2 + 1188 z + 189) \operatorname{erf}(\sqrt{z})}{1280 \sqrt{z}}$$

07.25.03.aank.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{3}{2}, 5; z\right) = \frac{1}{80} e^z (53 - 26 z) + \frac{\sqrt{\pi} (52 z^2 - 132 z + 27) \operatorname{erfi}(\sqrt{z})}{160 \sqrt{z}}$$

07.25.03.aanl.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{3}{2}, 5; -z\right) = \frac{1}{80} e^{-z} (26 z + 53) + \frac{\sqrt{\pi} (52 z^2 + 132 z + 27) \operatorname{erf}(\sqrt{z})}{160 \sqrt{z}}$$

07.25.03.aanm.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{3}{2}, 6; z\right) = \frac{1}{8} e^z (5 - 2 z) + \frac{\sqrt{\pi} (4 z^2 - 12 z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.aann.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{3}{2}, 6; -z\right) = \frac{1}{8} e^{-z} (2 z + 5) + \frac{\sqrt{\pi} (4 z^2 + 12 z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = 2$

07.25.03.aano.01

$${}_2F_2\left(-\frac{3}{2}, 6; 2, 2; z\right) = \frac{1}{800} e^{z/2} (1001 z^2 - 2192 z + 800) I_0\left(\frac{z}{2}\right) + \frac{1}{800} e^{z/2} (-1001 z^2 + 1196 z - 32) I_1\left(\frac{z}{2}\right)$$

07.25.03.aanp.01

$${}_2F_2\left(-\frac{3}{2}, 6; 2, \frac{5}{2}; z\right) = \frac{21 \sqrt{\pi} (1144 z^3 - 1980 z^2 + 270 z + 5) \operatorname{erfi}(\sqrt{z})}{40960 z^{3/2}} - \frac{3 e^z (4004 z^2 - 4960 z + 35)}{20480 z}$$

07.25.03.aanq.01

$${}_2F_2\left(-\frac{3}{2}, 6; 2, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (4004 z^2 + 4960 z + 35)}{20480 z} + \frac{21 \sqrt{\pi} (1144 z^3 + 1980 z^2 + 270 z - 5) \operatorname{erf}(\sqrt{z})}{40960 z^{3/2}}$$

07.25.03.aanr.01

$${}_2F_2\left(-\frac{3}{2}, 6; 2, 3; z\right) = \frac{1}{200} e^{z/2} (143 z^2 - 396 z + 200) I_0\left(\frac{z}{2}\right) + \frac{1}{200} e^{z/2} (-143 z^2 + 253 z - 16) I_1\left(\frac{z}{2}\right)$$

07.25.03.aans.01

$${}_2F_2\left(-\frac{3}{2}, 6; 2, \frac{7}{2}; z\right) = \frac{3 \sqrt{\pi} (16016 z^4 - 36960 z^3 + 7560 z^2 + 280 z - 15) \operatorname{erfi}(\sqrt{z})}{131072 z^{5/2}} - \frac{3 e^z (8008 z^3 - 14476 z^2 + 290 z - 15)}{65536 z^2}$$

07.25.03.aant.01

$${}_2F_2\left(-\frac{3}{2}, 6; 2, \frac{7}{2}; -z\right) = \frac{3 e^{-z} (8008 z^3 + 14476 z^2 + 290 z + 15)}{65536 z^2} + \frac{3 \sqrt{\pi} (16016 z^4 + 36960 z^3 + 7560 z^2 - 280 z - 15) \operatorname{erf}(\sqrt{z})}{131072 z^{5/2}}$$

07.25.03.aanu.01

$${}_2F_2\left(-\frac{3}{2}, 6; 2, 4; z\right) = \frac{1}{600} e^{z/2} (286 z^2 - 957 z + 600) I_0\left(\frac{z}{2}\right) + \frac{1}{600} e^{z/2} (-286 z^2 + 671 z - 72) I_1\left(\frac{z}{2}\right)$$

07.25.03.aanv.01

$${}_2F_2\left(-\frac{3}{2}, 6; 2, \frac{9}{2}; z\right) = \frac{21 \sqrt{\pi} (32032 z^5 - 92400 z^4 + 25200 z^3 + 1400 z^2 - 150 z + 45) \operatorname{erfi}(\sqrt{z})}{2621440 z^{7/2}} - \frac{21 e^z (16016 z^4 - 38192 z^3 + 1512 z^2 - 180 z + 45)}{1310720 z^3}$$

07.25.03.aanw.01

$${}_2F_2\left(-\frac{3}{2}, 6; 2, \frac{9}{2}; -z\right) = \frac{21 e^{-z} (16016 z^4 + 38192 z^3 + 1512 z^2 + 180 z + 45)}{1310720 z^3} + \frac{21 \sqrt{\pi} (32032 z^5 + 92400 z^4 + 25200 z^3 - 1400 z^2 - 150 z - 45) \operatorname{erf}(\sqrt{z})}{2621440 z^{7/2}}$$

07.25.03.aanx.01

$${}_2F_2\left(-\frac{3}{2}, 6; 2, 5; z\right) = \frac{1}{75} e^{z/2} (26 z^2 - 102 z + 75) I_0\left(\frac{z}{2}\right) - \frac{2}{75} e^{z/2} (13 z^2 - 38 z + 6) I_1\left(\frac{z}{2}\right)$$

07.25.03.aany.01

$${}_2F_2\left(-\frac{3}{2}, 6; 2, \frac{11}{2}; z\right) = \frac{63 \sqrt{\pi} (64064 z^6 - 221760 z^5 + 75600 z^4 + 5600 z^3 - 900 z^2 + 540 z - 525) \operatorname{erfi}(\sqrt{z})}{20971520 z^{9/2}} - \frac{63 e^z (32032 z^5 - 94864 z^4 + 6384 z^3 - 1400 z^2 + 890 z - 525)}{10485760 z^4}$$

07.25.03.aanz.01

$${}_2F_2\left(-\frac{3}{2}, 6; 2, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (32032 z^5 + 94864 z^4 + 6384 z^3 + 1400 z^2 + 890 z + 525)}{10485760 z^4} + \frac{63 \sqrt{\pi} (64064 z^6 + 221760 z^5 + 75600 z^4 - 5600 z^3 - 900 z^2 - 540 z - 525) \operatorname{erf}(\sqrt{z})}{20971520 z^{9/2}}$$

07.25.03.aa0.01

$${}_2F_2\left(-\frac{3}{2}, 6; 2, 6; z\right) = \frac{1}{15} e^{z/2} (4z^2 - 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4z^2 + 14z - 3) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = \frac{5}{2}$

07.25.03.aa1.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{5}{2}, 3; z\right) = \frac{3\sqrt{\pi} (1144z^3 - 2772z^2 + 630z + 35) \operatorname{erfi}(\sqrt{z})}{10240z^{3/2}} - \frac{3e^z (572z^2 - 1100z + 35)}{5120z}$$

07.25.03.aa2.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{5}{2}, 3; -z\right) = \frac{3e^{-z} (572z^2 + 1100z + 35)}{5120z} + \frac{3\sqrt{\pi} (1144z^3 + 2772z^2 + 630z - 35) \operatorname{erf}(\sqrt{z})}{10240z^{3/2}}$$

07.25.03.aa3.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{5}{2}, 4; z\right) = \frac{e^{-z} (-572z^2 + 1496z - 105)}{2560z} + \frac{\sqrt{\pi} (1144z^3 - 3564z^2 + 1134z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.aa4.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{5}{2}, 4; -z\right) = \frac{e^{-z} (572z^2 + 1496z + 105)}{2560z} + \frac{\sqrt{\pi} (1144z^3 + 3564z^2 + 1134z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.aa5.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{5}{2}, 5; z\right) = \frac{e^{-z} (-52z^2 + 172z - 21)}{320z} + \frac{\sqrt{\pi} (104z^3 - 396z^2 + 162z + 21) \operatorname{erfi}(\sqrt{z})}{640z^{3/2}}$$

07.25.03.aa6.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{5}{2}, 5; -z\right) = \frac{e^{-z} (52z^2 + 172z + 21)}{320z} + \frac{\sqrt{\pi} (104z^3 + 396z^2 + 162z - 21) \operatorname{erf}(\sqrt{z})}{640z^{3/2}}$$

07.25.03.aa7.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{5}{2}, 6; z\right) = \frac{e^{-z} (-4z^2 + 16z - 3)}{32z} + \frac{\sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.aa8.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{5}{2}, 6; -z\right) = \frac{e^{-z} (4z^2 + 16z + 3)}{32z} + \frac{\sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = 3$

07.25.03.aa9.01

$${}_2F_2\left(-\frac{3}{2}, 6; 3, 3; z\right) = \frac{1}{700} e^{z/2} (286z^2 - 1023z + 702) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (-286z^3 + 737z^2 - 108z - 8) I_1\left(\frac{z}{2}\right)}{700z}$$

07.25.03.aa0a.01

$${}_2F_2\left(-\frac{3}{2}, 6; 3, \frac{7}{2}; z\right) = \frac{3\sqrt{\pi} (2288z^4 - 7392z^3 + 2520z^2 + 280z + 15) \operatorname{erfi}(\sqrt{z})}{32768z^{5/2}} - \frac{3e^z (1144z^3 - 3124z^2 + 270z + 15)}{16384z^2}$$

07.25.03.aaob.01

$${}_2F_2\left(-\frac{3}{2}, 6; 3, \frac{7}{2}; -z\right) = \frac{3 e^{-z} (1144 z^3 + 3124 z^2 + 270 z - 15)}{16384 z^2} + \frac{3 \sqrt{\pi} (2288 z^4 + 7392 z^3 + 2520 z^2 - 280 z + 15) \operatorname{erf}(\sqrt{z})}{32768 z^{5/2}}$$

07.25.03.aaac.01

$${}_2F_2\left(-\frac{3}{2}, 6; 3, 4; z\right) = \frac{e^{z/2} (286 z^2 - 1254 z + 1059) I_0\left(\frac{z}{2}\right)}{1050} + \frac{e^{z/2} (-143 z^3 + 484 z^2 - 117 z - 18) I_1\left(\frac{z}{2}\right)}{525 z}$$

07.25.03.aaad.01

$${}_2F_2\left(-\frac{3}{2}, 6; 3, \frac{9}{2}; z\right) = \frac{21 \sqrt{\pi} (4576 z^5 - 18480 z^4 + 8400 z^3 + 1400 z^2 + 150 z - 15) \operatorname{erfi}(\sqrt{z})}{655360 z^{7/2}} - \frac{21 e^z (2288 z^4 - 8096 z^3 + 1296 z^2 + 160 z - 15)}{327680 z^3}$$

07.25.03.aaoe.01

$${}_2F_2\left(-\frac{3}{2}, 6; 3, \frac{9}{2}; -z\right) = \frac{21 e^{-z} (2288 z^4 + 8096 z^3 + 1296 z^2 - 160 z - 15)}{327680 z^3} + \frac{21 \sqrt{\pi} (4576 z^5 + 18480 z^4 + 8400 z^3 - 1400 z^2 + 150 z + 15) \operatorname{erf}(\sqrt{z})}{655360 z^{7/2}}$$

07.25.03.aaof.01

$${}_2F_2\left(-\frac{3}{2}, 6; 3, 5; z\right) = \frac{2}{525} e^{z/2} (52 z^2 - 270 z + 267) I_0\left(\frac{z}{2}\right) - \frac{2 e^{z/2} (52 z^3 - 218 z^2 + 75 z + 18) I_1\left(\frac{z}{2}\right)}{525 z}$$

07.25.03.aaog.01

$${}_2F_2\left(-\frac{3}{2}, 6; 3, \frac{11}{2}; z\right) = \frac{63 \sqrt{\pi} (9152 z^6 - 44352 z^5 + 25200 z^4 + 5600 z^3 + 900 z^2 - 180 z + 105) \operatorname{erfi}(\sqrt{z})}{5242880 z^{9/2}} - \frac{63 e^z (4576 z^5 - 19888 z^4 + 4944 z^3 + 1048 z^2 - 250 z + 105)}{2621440 z^4}$$

07.25.03.aaoh.01

$${}_2F_2\left(-\frac{3}{2}, 6; 3, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (4576 z^5 + 19888 z^4 + 4944 z^3 - 1048 z^2 - 250 z - 105)}{2621440 z^4} + \frac{63 \sqrt{\pi} (9152 z^6 + 44352 z^5 + 25200 z^4 - 5600 z^3 + 900 z^2 + 180 z + 105) \operatorname{erf}(\sqrt{z})}{5242880 z^{9/2}}$$

07.25.03.aaoi.01

$${}_2F_2\left(-\frac{3}{2}, 6; 3, 6; z\right) = \frac{4}{105} e^{z/2} (4 z^2 - 24 z + 27) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4 z^3 - 20 z^2 + 9 z + 3) I_1\left(\frac{z}{2}\right)}{105 z}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = \frac{7}{2}$

07.25.03.aaoj.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{7}{2}, 4; z\right) = \frac{e^z (-1144 z^3 + 4180 z^2 - 750 z - 135)}{8192 z^2} + \frac{\sqrt{\pi} (2288 z^4 - 9504 z^3 + 4536 z^2 + 840 z + 135) \operatorname{erfi}(\sqrt{z})}{16384 z^{5/2}}$$

07.25.03.aook.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{7}{2}, 4; -z\right) = \frac{e^{-z}(1144z^3 + 4180z^2 + 750z - 135)}{8192z^2} + \frac{\sqrt{\pi}(2288z^4 + 9504z^3 + 4536z^2 - 840z + 135)\operatorname{erf}(\sqrt{z})}{16384z^{5/2}}$$

07.25.03.aool.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{7}{2}, 5; z\right) = \frac{e^z(-104z^3 + 476z^2 - 138z - 45)}{1024z^2} + \frac{\sqrt{\pi}(208z^4 - 1056z^3 + 648z^2 + 168z + 45)\operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.aoom.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{7}{2}, 5; -z\right) = \frac{e^{-z}(104z^3 + 476z^2 + 138z - 45)}{1024z^2} + \frac{\sqrt{\pi}(208z^4 + 1056z^3 + 648z^2 - 168z + 45)\operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.aoon.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{7}{2}, 6; z\right) = \frac{5\sqrt{\pi}(16z^4 - 96z^3 + 72z^2 + 24z + 9)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5e^z(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.aooo.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{7}{2}, 6; -z\right) = \frac{5e^{-z}(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5\sqrt{\pi}(16z^4 + 96z^3 + 72z^2 - 24z + 9)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = 4$

07.25.03.aoop.01

$${}_2F_2\left(-\frac{3}{2}, 6; 4, 4; z\right) = \frac{e^{z/2}(572z^3 - 3102z^2 + 3225z + 12)I_0\left(\frac{z}{2}\right)}{3150z} + \frac{e^{z/2}(-572z^4 + 2530z^3 - 981z^2 - 300z - 48)I_1\left(\frac{z}{2}\right)}{3150z^2}$$

07.25.03.aaoq.01

$${}_2F_2\left(-\frac{3}{2}, 6; 4, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(4576z^5 - 23760z^4 + 15120z^3 + 4200z^2 + 1350z + 135)\operatorname{erfi}(\sqrt{z})}{327680z^{7/2}} - \frac{7e^z(2288z^4 - 10736z^3 + 3336z^2 + 1260z + 135)}{163840z^3}$$

07.25.03.aoor.01

$${}_2F_2\left(-\frac{3}{2}, 6; 4, \frac{9}{2}; -z\right) = \frac{7e^{-z}(2288z^4 + 10736z^3 + 3336z^2 - 1260z + 135)}{163840z^3} + \frac{7\sqrt{\pi}(4576z^5 + 23760z^4 + 15120z^3 - 4200z^2 + 1350z - 135)\operatorname{erf}(\sqrt{z})}{327680z^{7/2}}$$

07.25.03.aaos.01

$${}_2F_2\left(-\frac{3}{2}, 6; 4, 5; z\right) = \frac{4e^{z/2}(52z^3 - 336z^2 + 411z + 6)I_0\left(\frac{z}{2}\right)}{1575z} - \frac{4e^{z/2}(52z^4 - 284z^3 + 153z^2 + 69z + 24)I_1\left(\frac{z}{2}\right)}{1575z^2}$$

07.25.03.aaot.01

$${}_2F_2\left(-\frac{3}{2}, 6; 4, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi} (9152 z^6 - 57024 z^5 + 45360 z^4 + 16800 z^3 + 8100 z^2 + 1620 z - 315) \operatorname{erfi}(\sqrt{z})}{2621440 z^{9/2}} - \frac{21 e^z (4576 z^5 - 26224 z^4 + 11856 z^3 + 6936 z^2 + 1830 z - 315)}{1310720 z^4}$$

07.25.03.aaou.01

$${}_2F_2\left(-\frac{3}{2}, 6; 4, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (4576 z^5 + 26224 z^4 + 11856 z^3 - 6936 z^2 + 1830 z + 315)}{1310720 z^4} + \frac{21\sqrt{\pi} (9152 z^6 + 57024 z^5 + 45360 z^4 - 16800 z^3 + 8100 z^2 - 1620 z - 315) \operatorname{erf}(\sqrt{z})}{2621440 z^{9/2}}$$

07.25.03.aaov.01

$${}_2F_2\left(-\frac{3}{2}, 6; 4, 6; z\right) = \frac{4 e^{z/2} (8 z^3 - 60 z^2 + 84 z + 3) I_0\left(\frac{z}{2}\right)}{315 z} - \frac{4 e^{z/2} (8 z^4 - 52 z^3 + 36 z^2 + 21 z + 12) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = \frac{9}{2}$

07.25.03.aaow.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{9}{2}, 5; z\right) = \frac{7\sqrt{\pi} (416 z^5 - 2640 z^4 + 2160 z^3 + 840 z^2 + 450 z + 135) \operatorname{erfi}(\sqrt{z})}{40960 z^{7/2}} - \frac{7 e^z (208 z^4 - 1216 z^3 + 576 z^2 + 360 z + 135)}{20480 z^3}$$

07.25.03.aaox.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{9}{2}, 5; -z\right) = \frac{7 e^{-z} (208 z^4 + 1216 z^3 + 576 z^2 - 360 z + 135)}{20480 z^3} + \frac{7\sqrt{\pi} (416 z^5 + 2640 z^4 + 2160 z^3 - 840 z^2 + 450 z - 135) \operatorname{erf}(\sqrt{z})}{40960 z^{7/2}}$$

07.25.03.aaoy.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{9}{2}, 6; z\right) = \frac{7\sqrt{\pi} (32 z^5 - 240 z^4 + 240 z^3 + 120 z^2 + 90 z + 45) \operatorname{erfi}(\sqrt{z})}{4096 z^{7/2}} - \frac{7 e^z (16 z^4 - 112 z^3 + 72 z^2 + 60 z + 45)}{2048 z^3}$$

07.25.03.aaoz.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{9}{2}, 6; -z\right) = \frac{7 e^{-z} (16 z^4 + 112 z^3 + 72 z^2 - 60 z + 45)}{2048 z^3} + \frac{7\sqrt{\pi} (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45) \operatorname{erf}(\sqrt{z})}{4096 z^{7/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = 5$

07.25.03.aap0.01

$${}_2F_2\left(-\frac{3}{2}, 6; 5, 5; z\right) = \frac{16 e^{z/2} (104 z^4 - 804 z^3 + 1164 z^2 + 57 z + 18) I_0\left(\frac{z}{2}\right)}{17325 z^2} - \frac{16 e^{z/2} (104 z^5 - 700 z^4 + 516 z^3 + 327 z^2 + 228 z + 72) I_1\left(\frac{z}{2}\right)}{17325 z^3}$$

07.25.03.aap1.01

$${}_2F_2\left(-\frac{3}{2}, 6; 5, \frac{11}{2}; z\right) = \frac{21 \sqrt{\pi} (832 z^6 - 6336 z^5 + 6480 z^4 + 3360 z^3 + 2700 z^2 + 1620 z + 315) \operatorname{erfi}(\sqrt{z})}{327680 z^{9/2}} - \frac{21 e^z (416 z^5 - 2960 z^4 + 1968 z^3 + 1704 z^2 + 1410 z + 315)}{163840 z^4}$$

07.25.03.aap2.01

$${}_2F_2\left(-\frac{3}{2}, 6; 5, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (416 z^5 + 2960 z^4 + 1968 z^3 - 1704 z^2 + 1410 z - 315)}{163840 z^4} + \frac{21 \sqrt{\pi} (832 z^6 + 6336 z^5 + 6480 z^4 - 3360 z^3 + 2700 z^2 - 1620 z + 315) \operatorname{erf}(\sqrt{z})}{327680 z^{9/2}}$$

07.25.03.aap3.01

$${}_2F_2\left(-\frac{3}{2}, 6; 5, 6; z\right) = \frac{32 e^{z/2} (8 z^4 - 72 z^3 + 120 z^2 + 12 z + 9) I_0\left(\frac{z}{2}\right)}{3465 z^2} - \frac{128 e^{z/2} (2 z^5 - 16 z^4 + 15 z^3 + 12 z^2 + 12 z + 9) I_1\left(\frac{z}{2}\right)}{3465 z^3}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = \frac{11}{2}$

07.25.03.aap4.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{11}{2}, 6; z\right) = \frac{21 \sqrt{\pi} (64 z^6 - 576 z^5 + 720 z^4 + 480 z^3 + 540 z^2 + 540 z + 315) \operatorname{erfi}(\sqrt{z})}{32768 z^{9/2}} - \frac{21 e^z (32 z^5 - 272 z^4 + 240 z^3 + 264 z^2 + 330 z + 315)}{16384 z^4}$$

07.25.03.aap5.01

$${}_2F_2\left(-\frac{3}{2}, 6; \frac{11}{2}, 6; -z\right) = \frac{21 e^{-z} (32 z^5 + 272 z^4 + 240 z^3 - 264 z^2 + 330 z - 315)}{16384 z^4} + \frac{21 \sqrt{\pi} (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315) \operatorname{erf}(\sqrt{z})}{32768 z^{9/2}}$$

For fixed z and $a_1 = -\frac{3}{2}$, $a_2 = 6$, $b_1 = 6$

07.25.03.aap6.01

$${}_2F_2\left(-\frac{3}{2}, 6; 6, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 168 z^4 + 324 z^3 + 60 z^2 + 81 z + 72) I_0\left(\frac{z}{2}\right)}{9009 z^3} - \frac{32 e^{z/2} (16 z^6 - 152 z^5 + 180 z^4 + 180 z^3 + 249 z^2 + 324 z + 288) I_1\left(\frac{z}{2}\right)}{9009 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}, a_2 \geq -\frac{1}{2}$

For fixed z and $a_1 = -\frac{1}{2}, a_2 = -\frac{1}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{1}{2}, a_2 = -\frac{1}{2}, b_1 = -\frac{11}{2}$

07.25.03.aap7.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{108\,056\,025} (e^z (1024 z^{10} + 10\,240 z^9 + 32\,000 z^8 + 144\,000 z^6 - 864\,000 z^5 + 4\,356\,000 z^4 - 17\,568\,000 z^3 + 53\,140\,500 z^2 - 107\,163\,000 z + 108\,056\,025))$$

07.25.03.aap8.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{9\,823\,275} (e^z (512 z^9 + 3328 z^8 + 7680 z^7 - 11\,520 z^6 + 77\,760 z^5 - 393\,120 z^4 + 1\,588\,320 z^3 - 4\,813\,200 z^2 + 9\,724\,050 z - 9\,823\,275))$$

07.25.03.aap9.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1\,091\,475} e^z (256 z^8 + 768 z^7 + 1920 z^6 - 8640 z^5 + 43\,200 z^4 - 174\,960 z^3 + 531\,720 z^2 - 1\,077\,300 z + 1\,091\,475)$$

07.25.03.aapa.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (128 z^7 - 64 z^6 + 1120 z^5 - 6000 z^4 + 24\,600 z^3 - 75\,180 z^2 + 153\,090 z - 155\,925)}{155\,925}$$

07.25.03.aapb.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{e^z (64 z^6 - 256 z^5 + 1200 z^4 - 4800 z^3 + 14\,700 z^2 - 30\,240 z + 31\,185)}{31\,185}$$

07.25.03.aapc.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{e^z (32 z^5 - 240 z^4 + 1200 z^3 - 4200 z^2 + 9450 z - 10\,395)}{10\,395}$$

07.25.03.aapd.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (16 z^4 - 176 z^3 + 1040 z^2 - 3660 z + 10\,395)}{10\,395} - \frac{256}{693} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aape.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{e^{-z} (16 z^4 + 176 z^3 + 1040 z^2 + 3660 z + 10\,395)}{10\,395} + \frac{256}{693} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.aapf.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (8 z^4 - 96 z^3 + 576 z^2 - 5670 z + 10\,395) I_0\left(\frac{z}{2}\right)}{10\,395} + \frac{2 e^{z/2} (4 z^4 - 52 z^3 + 342 z^2 + 633 z) I_1\left(\frac{z}{2}\right)}{10\,395}$$

07.25.03.aapg.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (8z^3 - 116z^2 + 810z - 1125)}{10395} - \frac{128\sqrt{\pi} (z-3) \operatorname{erfi}(\sqrt{z})}{693\sqrt{z}}$$

07.25.03.aaph.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-8z^3 - 116z^2 - 810z - 1125)}{10395} + \frac{128\sqrt{\pi} (z+3) \operatorname{erf}(\sqrt{z})}{693\sqrt{z}}$$

07.25.03.aapi.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (8z^3 - 124z^2 - 1680z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2} (8z^3 - 132z^2 + 3576z - 15015) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.aapj.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (4z^3 - 72z^2 + 1065z - 5040)}{3465z} - \frac{8\sqrt{\pi} (4z^2 - 24z - 21) \operatorname{erfi}(\sqrt{z})}{231z^{3/2}}$$

07.25.03.aapk.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (4z^3 + 72z^2 + 1065z + 5040)}{3465z} + \frac{8\sqrt{\pi} (4z^2 + 24z - 21) \operatorname{erf}(\sqrt{z})}{231z^{3/2}}$$

07.25.03.aapl.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, 3; z\right) = \frac{4e^{z/2} (4z^2 - 588z + 4851) I_0\left(\frac{z}{2}\right)}{10395} + \frac{4e^{z/2} (4z^3 + 432z^2 - 3003z - 9009) I_1\left(\frac{z}{2}\right)}{10395z}$$

07.25.03.aapm.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (2z^3 + 37z^2 - 280z - 3360)}{693z^2} - \frac{20\sqrt{\pi} (4z^3 - 36z^2 - 63z - 84) \operatorname{erfi}(\sqrt{z})}{693z^{5/2}}$$

07.25.03.aapn.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-2z^3 + 37z^2 + 280z - 3360)}{693z^2} + \frac{20\sqrt{\pi} (4z^3 + 36z^2 - 63z + 84) \operatorname{erf}(\sqrt{z})}{693z^{5/2}}$$

07.25.03.aapo.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2} (1052z^3 - 11154z^2 - 19305z - 87516) I_1\left(\frac{z}{2}\right)}{24255z^2} - \frac{4e^{z/2} (332z^2 - 3630z - 7293) I_0\left(\frac{z}{2}\right)}{8085z}$$

07.25.03.aapp.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (22z^3 - 280z^2 - 210z - 4725)}{198z^3} - \frac{5\sqrt{\pi} (8z^4 - 96z^3 - 252z^2 - 672z - 945) \operatorname{erfi}(\sqrt{z})}{396z^{7/2}}$$

07.25.03.aapq.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (22z^3 + 280z^2 - 210z + 4725)}{198z^3} + \frac{5\sqrt{\pi} (8z^4 + 96z^3 - 252z^2 + 672z - 945) \operatorname{erf}(\sqrt{z})}{396z^{7/2}}$$

07.25.03.aapr.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, 5; z\right) = \frac{64e^{z/2} (512z^4 - 6721z^3 - 24453z^2 - 58344z - 277134) I_1\left(\frac{z}{2}\right)}{218295z^3} - \frac{32e^{z/2} (1024z^3 - 14718z^2 - 29172z - 138567) I_0\left(\frac{z}{2}\right)}{218295z^2}$$

07.25.03.aaps.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (4z^4 - 56z^3 - 294z^2 - 315z - 6615)}{44z^4} + \frac{\sqrt{\pi} (-8z^5 + 120z^4 + 420z^3 + 1680z^2 + 4725z + 6615) \operatorname{erfi}(\sqrt{z})}{88z^{9/2}}$$

07.25.03.aapt.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (4z^4 + 56z^3 - 294z^2 + 315z - 6615)}{44z^4} + \frac{\sqrt{\pi} (8z^5 + 120z^4 - 420z^3 + 1680z^2 - 4725z + 6615) \operatorname{erf}(\sqrt{z})}{88z^{9/2}}$$

07.25.03.aapu.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (2048z^5 - 33280z^4 - 139542z^3 - 704769z^2 - 1864356z - 8465184) I_1\left(\frac{z}{2}\right)}{480249z^4} - \frac{32 e^{z/2} (2048z^4 - 35328z^3 - 110058z^2 - 466089z - 2116296) I_0\left(\frac{z}{2}\right)}{480249z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.aapv.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{893025} e^z (256z^8 + 1024z^7 + 2304z^6 - 6912z^5 + 35424z^4 - 143424z^3 + 435600z^2 - 882000z + 893025)$$

07.25.03.aapw.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{e^z (128z^7 + 192z^6 + 864z^5 - 3888z^4 + 15768z^3 - 48060z^2 + 97650z - 99225)}{99225}$$

07.25.03.aapx.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (64z^6 - 64z^5 + 528z^4 - 2208z^3 + 6780z^2 - 13860z + 14175)}{14175}$$

07.25.03.aapy.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{e^z (32z^5 - 112z^4 + 432z^3 - 1320z^2 + 2730z - 2835)}{2835}$$

07.25.03.aapz.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (16z^4 - 96z^3 + 360z^2 - 840z + 945)$$

07.25.03.aaq0.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (-8z^3 + 68z^2 - 282z + 945) - \frac{128}{315} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aaq1.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} e^{-z} (8z^3 + 68z^2 + 282z + 945) + \frac{128}{315} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.aaq2.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-4z^3 + 36z^2 - 525z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-4z^3 + 40z^2 + 201z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aaq3.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (-4z^2 + 44z - 15) - \frac{32\sqrt{\pi} (2z - 5) \operatorname{erfi}(\sqrt{z})}{315\sqrt{z}}$$

07.25.03.aaq4.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} e^{-z} (-4z^2 - 44z - 15) + \frac{32\sqrt{\pi} (2z + 5) \operatorname{erf}(\sqrt{z})}{315\sqrt{z}}$$

07.25.03.aaq5.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (-4z^2 - 210z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-4z^2 + 306z - 1155) I_1\left(\frac{z}{2}\right)$$

07.25.03.aaq6.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (-2z^2 + 75z - 360)}{315z} - \frac{4\sqrt{\pi} (4z^2 - 20z - 15) \operatorname{erfi}(\sqrt{z})}{105z^{3/2}}$$

07.25.03.aaq7.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (2z^2 + 75z + 360)}{315z} + \frac{4\sqrt{\pi} (4z^2 + 20z - 15) \operatorname{erf}(\sqrt{z})}{105z^{3/2}}$$

07.25.03.aaq8.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, 3; z\right) = \frac{4e^{z/2} (82z^2 - 462z - 1001) I_1\left(\frac{z}{2}\right)}{1575z} - \frac{8}{675} e^{z/2} (19z - 138) I_0\left(\frac{z}{2}\right)$$

07.25.03.aaq9.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (7z^2 - 40z - 210)}{63z^2} + \frac{\sqrt{\pi} (-8z^3 + 60z^2 + 90z + 105) \operatorname{erfi}(\sqrt{z})}{63z^{5/2}}$$

07.25.03.aaqa.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (7z^2 + 40z - 210)}{63z^2} + \frac{\sqrt{\pi} (8z^3 + 60z^2 - 90z + 105) \operatorname{erf}(\sqrt{z})}{63z^{5/2}}$$

07.25.03.aaqb.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, 4; z\right) = \frac{4e^{z/2} (512z^3 - 4422z^2 - 8151z - 25740) I_1\left(\frac{z}{2}\right)}{11025z^2} - \frac{4e^{z/2} (512z^2 - 4794z - 6435) I_0\left(\frac{z}{2}\right)}{11025z}$$

07.25.03.aaqc.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (4z^3 - 40z^2 - 70z - 525)}{36z^3} + \frac{\sqrt{\pi} (-8z^4 + 80z^3 + 180z^2 + 420z + 525) \operatorname{erfi}(\sqrt{z})}{72z^{7/2}}$$

07.25.03.aaqd.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (4z^3 + 40z^2 - 70z + 525)}{36z^3} + \frac{\sqrt{\pi} (8z^4 + 80z^3 - 180z^2 + 420z - 525) \operatorname{erf}(\sqrt{z})}{72z^{7/2}}$$

07.25.03.aaqe.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (512 z^4 - 5632 z^3 - 16731 z^2 - 42900 z - 145860) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (512 z^3 - 6144 z^2 - 10725 z - 36465) I_0\left(\frac{z}{2}\right)}{99225 z^3}$$

07.25.03.aaqf.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (8 z^4 - 96 z^3 - 364 z^2 - 840 z - 6615)}{80 z^4} + \frac{\sqrt{\pi} (-16 z^5 + 200 z^4 + 600 z^3 + 2100 z^2 + 5250 z + 6615) \operatorname{erfi}(\sqrt{z})}{160 z^{9/2}}$$

07.25.03.aaqg.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (8 z^4 + 96 z^3 - 364 z^2 + 840 z - 6615)}{80 z^4} + \frac{\sqrt{\pi} (16 z^5 + 200 z^4 - 600 z^3 + 2100 z^2 - 5250 z + 6615) \operatorname{erf}(\sqrt{z})}{160 z^{9/2}}$$

07.25.03.aaqh.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (1024 z^5 - 13824 z^4 - 50752 z^3 - 212745 z^2 - 596700 z - 2015520) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (1024 z^4 - 14848 z^3 - 37440 z^2 - 149175 z - 503880) I_0\left(\frac{z}{2}\right)}{218295 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.aaqi.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{e^z (64 z^6 + 432 z^4 - 1728 z^3 + 5292 z^2 - 10800 z + 11025)}{11025}$$

07.25.03.aaqj.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (32 z^5 - 48 z^4 + 240 z^3 - 744 z^2 + 1530 z - 1575)}{1575}$$

07.25.03.aaqk.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} e^z (16 z^4 - 48 z^3 + 144 z^2 - 300 z + 315)$$

07.25.03.aaql.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{105} e^z (8 z^3 - 36 z^2 + 90 z - 105)$$

07.25.03.aaqm.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (4 z^2 - 24 z + 105) - \frac{16}{35} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aaqn.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} e^{-z} (4 z^2 + 24 z + 105) + \frac{16}{35} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.aaqo.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (2z^2 - 60z + 105) I_0\left(\frac{z}{2}\right) + \frac{2}{105} e^{z/2} (z^2 + 17z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aaqp.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (2z + 9) - \frac{8\sqrt{\pi} (z - 2) \operatorname{erfi}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.aaqq.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} e^{-z} (9 - 2z) + \frac{8\sqrt{\pi} (z + 2) \operatorname{erf}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.aaqr.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{7} e^{z/2} (7 - 2z) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (34z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.aaqs.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (7z - 30)}{35z} - \frac{3\sqrt{\pi} (2z^2 - 8z - 5) \operatorname{erfi}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.aaqt.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (7z + 30)}{35z} + \frac{3\sqrt{\pi} (2z^2 + 8z - 5) \operatorname{erf}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.aaqu.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (32z^2 - 147z - 231) I_1\left(\frac{z}{2}\right)}{525z} - \frac{4}{525} e^{z/2} (32z - 189) I_0\left(\frac{z}{2}\right)$$

07.25.03.aaqv.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (z^2 - 5z - 15)}{7z^2} + \frac{\sqrt{\pi} (-2z^3 + 12z^2 + 15z + 15) \operatorname{erfi}(\sqrt{z})}{14z^{5/2}}$$

07.25.03.aaqw.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (z^2 + 5z - 15)}{7z^2} + \frac{\sqrt{\pi} (2z^3 + 12z^2 - 15z + 15) \operatorname{erf}(\sqrt{z})}{14z^{5/2}}$$

07.25.03.aaqx.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (64z^3 - 432z^2 - 759z - 1716) I_1\left(\frac{z}{2}\right)}{1225z^2} - \frac{4 e^{z/2} (64z^2 - 496z - 429) I_0\left(\frac{z}{2}\right)}{1225z}$$

07.25.03.aaqy.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (8z^3 - 60z^2 - 130z - 525)}{64z^3} + \frac{\sqrt{\pi} (-16z^4 + 128z^3 + 240z^2 + 480z + 525) \operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.aaqz.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (8z^3 + 60z^2 - 130z + 525)}{64z^3} + \frac{\sqrt{\pi} (16z^4 + 128z^3 - 240z^2 + 480z - 525) \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.aar0.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, 5; z\right) = \frac{64 e^{z/2} (32 z^4 - 280 z^3 - 693 z^2 - 1716 z - 4290) I_1\left(\frac{z}{2}\right)}{11\,025 z^3} - \frac{32 e^{z/2} (64 z^3 - 624 z^2 - 858 z - 2145) I_0\left(\frac{z}{2}\right)}{11\,025 z^2}$$

07.25.03.aar1.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (8 z^4 - 76 z^3 - 234 z^2 - 665 z - 2940)}{640 z^4} - \frac{9 \sqrt{\pi} (16 z^5 - 160 z^4 - 400 z^3 - 1200 z^2 - 2625 z - 2940) \operatorname{erfi}(\sqrt{z})}{1280 z^{9/2}}$$

07.25.03.aar2.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (8 z^4 + 76 z^3 - 234 z^2 + 665 z - 2940)}{640 z^4} + \frac{9 \sqrt{\pi} (16 z^5 + 160 z^4 - 400 z^3 + 1200 z^2 - 2625 z + 2940) \operatorname{erf}(\sqrt{z})}{1280 z^{9/2}}$$

07.25.03.aar3.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (128 z^5 - 1376 z^4 - 4276 z^3 - 15\,171 z^2 - 41\,340 z - 106\,080) I_1\left(\frac{z}{2}\right)}{24\,255 z^4} - \frac{32 e^{z/2} (128 z^4 - 1504 z^3 - 2964 z^2 - 10\,335 z - 26\,520) I_0\left(\frac{z}{2}\right)}{24\,255 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.aar4.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225} e^z (16 z^4 - 32 z^3 + 104 z^2 - 216 z + 225)$$

07.25.03.aar5.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{45} e^z (8 z^3 - 20 z^2 + 42 z - 45)$$

07.25.03.aar6.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (4 z^2 - 12 z + 15)$$

07.25.03.aar7.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (15 - 2z) - \frac{8}{15} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aar8.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (2z + 15) + \frac{8}{15} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.aar9.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{5} e^{z/2} (5 - 3z) I_0\left(\frac{z}{2}\right) + \frac{7}{15} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.aara.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{e^z}{5} - \frac{2\sqrt{\pi}(2z-3)\operatorname{erfi}(\sqrt{z})}{15\sqrt{z}}$$

07.25.03.aarb.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{2\sqrt{\pi}(2z+3)\operatorname{erf}(\sqrt{z})}{15\sqrt{z}} + \frac{e^{-z}}{5}$$

07.25.03.aarc.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{45} e^{z/2} (45 - 16z) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (16z - 35) I_1\left(\frac{z}{2}\right)$$

07.25.03.aard.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z(z-3)}{5z} + \frac{\sqrt{\pi}(-2z^2+6z+3)\operatorname{erfi}(\sqrt{z})}{10z^{3/2}}$$

07.25.03.aare.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(z+3)}{5z} + \frac{\sqrt{\pi}(2z^2+6z-3)\operatorname{erf}(\sqrt{z})}{10z^{3/2}}$$

07.25.03.aarf.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, 3; z\right) = \frac{4e^{z/2}(16z^2-56z-63)I_1\left(\frac{z}{2}\right)}{225z} - \frac{32}{225} e^{z/2}(2z-9)I_0\left(\frac{z}{2}\right)$$

07.25.03.aarg.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z(2z^2-8z-15)}{12z^2} + \frac{\sqrt{\pi}(-4z^3+18z^2+18z+15)\operatorname{erfi}(\sqrt{z})}{24z^{5/2}}$$

07.25.03.aarh.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(2z^2+8z-15)}{12z^2} + \frac{\sqrt{\pi}(4z^3+18z^2-18z+15)\operatorname{erf}(\sqrt{z})}{24z^{5/2}}$$

07.25.03.aari.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, 4; z\right) = \frac{4e^{z/2}(32z^3-160z^2-243z-396)I_1\left(\frac{z}{2}\right)}{525z^2} - \frac{4e^{z/2}(32z^2-192z-99)I_0\left(\frac{z}{2}\right)}{525z}$$

07.25.03.aarj.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7e^z(8z^3-44z^2-90z-225)}{384z^3} - \frac{7\sqrt{\pi}(16z^4-96z^3-144z^2-240z-225)\operatorname{erfi}(\sqrt{z})}{768z^{7/2}}$$

07.25.03.aark.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}(8z^3+44z^2-90z+225)}{384z^3} + \frac{7\sqrt{\pi}(16z^4+96z^3-144z^2+240z-225)\operatorname{erf}(\sqrt{z})}{768z^{7/2}}$$

07.25.03.aarl.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, 5; z\right) = \frac{32e^{z/2}(32z^4-208z^3-423z^2-924z-1716)I_1\left(\frac{z}{2}\right)}{4725z^3} - \frac{32e^{z/2}(32z^3-240z^2-231z-429)I_0\left(\frac{z}{2}\right)}{4725z^2}$$

$$\begin{aligned}
 & \text{07.25.03.aarm.01} \\
 & {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \\
 & \frac{21 e^z (16 z^4 - 112 z^3 - 288 z^2 - 780 z - 2205)}{2560 z^4} - \frac{21 \sqrt{\pi} (32 z^5 - 240 z^4 - 480 z^3 - 1200 z^2 - 2250 z - 2205) \operatorname{erfi}(\sqrt{z})}{5120 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aarn.01} \\
 & {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{21 e^{-z} (16 z^4 + 112 z^3 - 288 z^2 + 780 z - 2205)}{2560 z^4} + \frac{21 \sqrt{\pi} (32 z^5 + 240 z^4 - 480 z^3 + 1200 z^2 - 2250 z + 2205) \operatorname{erf}(\sqrt{z})}{5120 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aaro.01} \\
 & {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{5}{2}, 6; z\right) = \\
 & \frac{32 e^{z/2} (64 z^5 - 512 z^4 - 1302 z^3 - 3873 z^2 - 9516 z - 18720) I_1\left(\frac{z}{2}\right)}{10395 z^4} - \frac{32 e^{z/2} (64 z^4 - 576 z^3 - 822 z^2 - 2379 z - 4680) I_0\left(\frac{z}{2}\right)}{10395 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.aarp.01} \\
 & {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} e^z (4 z^2 - 8 z + 9)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aarq.01} \\
 & {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{3} e^z (2 z - 3)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aarr.01} \\
 & {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = e^z - \frac{2}{3} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aars.01} \\
 & {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{2}{3} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aart.01} \\
 & {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (3 - 2 z) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} z I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aaru.01} \\
 & {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (1 - z) \operatorname{erfi}(\sqrt{z})}{3 \sqrt{z}} + \frac{e^z}{3}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aarv.01} \\
 & {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} (z + 1) \operatorname{erf}(\sqrt{z})}{3 \sqrt{z}} + \frac{e^{-z}}{3}
 \end{aligned}$$

07.25.03.aarw.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{9} e^{z/2} (9 - 4z) I_0\left(\frac{z}{2}\right) + \frac{1}{9} e^{z/2} (4z - 5) I_1\left(\frac{z}{2}\right)$$

07.25.03.aarx.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (2z - 3)}{8z} + \frac{\sqrt{\pi} (-4z^2 + 8z + 3) \operatorname{erfi}(\sqrt{z})}{16z^{3/2}}$$

07.25.03.aary.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (2z + 3)}{8z} + \frac{\sqrt{\pi} (4z^2 + 8z - 3) \operatorname{erf}(\sqrt{z})}{16z^{3/2}}$$

07.25.03.aarz.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (4z^2 - 9z - 7) I_1\left(\frac{z}{2}\right)}{45z} - \frac{4}{45} e^{z/2} (4z - 13) I_0\left(\frac{z}{2}\right)$$

07.25.03.aas0.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2z^2 - 5z - 6)}{48z^2} - \frac{5 \sqrt{\pi} (4z^3 - 12z^2 - 9z - 6) \operatorname{erfi}(\sqrt{z})}{96z^{5/2}}$$

07.25.03.aas1.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (2z^2 + 5z - 6)}{48z^2} + \frac{5 \sqrt{\pi} (4z^3 + 12z^2 - 9z + 6) \operatorname{erf}(\sqrt{z})}{96z^{5/2}}$$

07.25.03.aas2.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 - 26z^2 - 31z - 36) I_1\left(\frac{z}{2}\right)}{105z^2} - \frac{4 e^{z/2} (8z^2 - 34z - 9) I_0\left(\frac{z}{2}\right)}{105z}$$

07.25.03.aas3.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (8z^3 - 28z^2 - 46z - 75)}{1536z^3} - \frac{35 \sqrt{\pi} (16z^4 - 64z^3 - 72z^2 - 96z - 75) \operatorname{erfi}(\sqrt{z})}{3072z^{7/2}}$$

07.25.03.aas4.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (8z^3 + 28z^2 - 46z + 75)}{1536z^3} + \frac{35 \sqrt{\pi} (16z^4 + 64z^3 - 72z^2 + 96z - 75) \operatorname{erf}(\sqrt{z})}{3072z^{7/2}}$$

07.25.03.aas5.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, 5; z\right) = \frac{64 e^{z/2} (4z^4 - 17z^3 - 27z^2 - 48z - 66) I_1\left(\frac{z}{2}\right)}{945z^3} - \frac{32 e^{z/2} (8z^3 - 42z^2 - 24z - 33) I_0\left(\frac{z}{2}\right)}{945z^2}$$

07.25.03.aas6.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{21 e^z (8z^4 - 36z^3 - 74z^2 - 165z - 315)}{1024z^4} - \frac{21 \sqrt{\pi} (16z^5 - 80z^4 - 120z^3 - 240z^2 - 375z - 315) \operatorname{erfi}(\sqrt{z})}{2048z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.aas7.01} \\
 & {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{21 e^{-z} (8z^4 + 36z^3 - 74z^2 + 165z - 315)}{1024 z^4} + \frac{21 \sqrt{\pi} (16z^5 + 80z^4 - 120z^3 + 240z^2 - 375z + 315) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aas8.01} \\
 & {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{3}{2}, 6; z\right) = \\
 & \frac{32 e^{z/2} (16z^5 - 84z^4 - 166z^3 - 399z^2 - 828z - 1248) I_1\left(\frac{z}{2}\right)}{2079 z^4} - \frac{32 e^{z/2} (16z^4 - 100z^3 - 90z^2 - 207z - 312) I_0\left(\frac{z}{2}\right)}{2079 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = -\frac{1}{2}$, $b_1 = -\frac{1}{2}$

$$\text{07.25.03.aas9.01} \\
 {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = e^z$$

$$\text{07.25.03.aasa.01} \\
 {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

$$\text{07.25.03.aasb.01} \\
 {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

$$\text{07.25.03.aasc.01} \\
 {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, 1; z\right) = e^{z/2} (1-z) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

$$\text{07.25.03.aasd.01} \\
 {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (1-2z) \operatorname{erfi}(\sqrt{z})}{4 \sqrt{z}} + \frac{e^z}{2}$$

$$\text{07.25.03.aase.01} \\
 {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{4 \sqrt{z}} + \frac{e^{-z}}{2}$$

$$\text{07.25.03.aasf.01} \\
 {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, 2; z\right) = e^{z/2} \left(1 - \frac{2z}{3}\right) I_0\left(\frac{z}{2}\right) + e^{z/2} \left(\frac{2z}{3} - \frac{1}{3}\right) I_1\left(\frac{z}{2}\right)$$

$$\text{07.25.03.aasg.01} \\
 {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{3 e^z (2z-1)}{16 z} - \frac{3 \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32 z^{3/2}}$$

$$\text{07.25.03.aash.01} \\
 {}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (2z+1)}{16 z} + \frac{3 \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.aasi.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (2 z^2 - 2 z - 1) I_1\left(\frac{z}{2}\right)}{15 z} - \frac{8}{15} e^{z/2} (z - 2) I_0\left(\frac{z}{2}\right)$$

07.25.03.aasj.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (4 z^2 - 4 z - 3)}{64 z^2} - \frac{5 \sqrt{\pi} (8 z^3 - 12 z^2 - 6 z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.aask.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (4 z^2 + 4 z - 3)}{64 z^2} + \frac{5 \sqrt{\pi} (8 z^3 + 12 z^2 - 6 z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.aasl.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (4 z^3 - 6 z^2 - 5 z - 4) I_1\left(\frac{z}{2}\right)}{35 z^2} - \frac{4 e^{z/2} (4 z^2 - 10 z - 1) I_0\left(\frac{z}{2}\right)}{35 z}$$

07.25.03.aasm.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (8 z^3 - 12 z^2 - 14 z - 15)}{1024 z^3} - \frac{35 \sqrt{\pi} (16 z^4 - 32 z^3 - 24 z^2 - 24 z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.aasn.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.aaso.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (4 z^4 - 8 z^3 - 9 z^2 - 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3} - \frac{32 e^{z/2} (4 z^3 - 12 z^2 - 3 z - 3) I_0\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.aasp.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (16 z^4 - 32 z^3 - 48 z^2 - 80 z - 105)}{4096 z^4} - \frac{63 \sqrt{\pi} (32 z^5 - 80 z^4 - 80 z^3 - 120 z^2 - 150 z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.aasq.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16 z^4 + 32 z^3 - 48 z^2 + 80 z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.aasr.01

$${}_2F_2\left(-\frac{1}{2}, -\frac{1}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^5 - 20 z^4 - 28 z^3 - 51 z^2 - 84 z - 96) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (8 z^4 - 28 z^3 - 12 z^2 - 21 z - 24) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{1}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.aass.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \quad -\frac{1}{108\,056\,025} \left(e^z (2048 z^{11} + 39\,936 z^{10} + 238\,080 z^9 + 480\,000 z^8 + 288\,000 z^7 - 144\,000 z^6 + 936\,000 z^5 - \right. \\
 & \quad \left. 4\,644\,000 z^4 + 18\,441\,000 z^3 - 54\,904\,500 z^2 + 108\,949\,050 z - 108\,056\,025) \right) \\
 & \text{07.25.03.aast.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & \quad \frac{1}{9\,823\,275} \left(e^z (1024 z^{10} + 15\,360 z^9 + 65\,280 z^8 + 76\,800 z^7 + 28\,800 z^6 - 86\,400 z^5 + 424\,800 z^4 - 1\,684\,800 z^3 + \right. \\
 & \quad \left. 5\,008\,500 z^2 - 9\,922\,500 z + 9\,823\,275) \right) \\
 & \text{07.25.03.aasu.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{1}{1091\,475} \\
 & \quad e^z (512 z^9 + 5376 z^8 + 13\,824 z^7 + 3840 z^6 + 8640 z^5 - 47\,520 z^4 + 188\,640 z^3 - 559\,440 z^2 + 1\,105\,650 z - 1091\,475) \\
 & \text{07.25.03.aasv.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{e^z (256 z^8 + 1536 z^7 + 1536 z^6 - 1920 z^5 + 7200 z^4 - 27\,360 z^3 + 80\,640 z^2 - 158\,760 z + 155\,925)}{155\,925} \\
 & \text{07.25.03.aasw.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = -\frac{e^z (128 z^7 + 192 z^6 + 96 z^5 - 1200 z^4 + 5400 z^3 - 16\,380 z^2 + 32\,130 z - 31\,185)}{31\,185} \\
 & \text{07.25.03.aasx.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{e^z (64 z^6 - 192 z^5 + 720 z^4 - 2400 z^3 + 6300 z^2 - 11\,340 z + 10\,395)}{10\,395} \\
 & \text{07.25.03.aasy.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = -\frac{e^z (32 z^5 - 240 z^4 + 1200 z^3 - 4200 z^2 + 9450 z - 10\,395)}{10\,395} \\
 & \text{07.25.03.aasz.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, 1; z\right) = \\
 & \quad \frac{e^{z/2} (-16 z^5 + 144 z^4 - 780 z^3 + 2676 z^2 - 4725 z + 10\,395) I_0\left(\frac{z}{2}\right) + e^{z/2} (-16 z^5 + 160 z^4 - 948 z^3 + 3720 z^2 - 9129 z) I_1\left(\frac{z}{2}\right)}{10\,395} \\
 & \text{07.25.03.aat0.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (-16 z^4 + 192 z^3 - 1272 z^2 + 5280 z - 12\,645)}{10\,395} + \frac{256 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{231 \sqrt{z}}
 \end{aligned}$$

07.25.03.aat1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}(-16z^4 - 192z^3 - 1272z^2 - 5280z - 12645)}{10395} + \frac{256\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{231\sqrt{z}}$$

07.25.03.aat2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2}(-16z^4 + 216z^3 - 1524z^2 + 6300z + 10395)I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2}(-16z^4 + 232z^3 - 1764z^2 + 8196z - 45045)I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.aat3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z(-8z^4 + 132z^3 - 1098z^2 + 5385z - 20160)}{3465z} + \frac{32\sqrt{\pi}(4z + 7)\operatorname{erfi}(\sqrt{z})}{77z^{3/2}}$$

07.25.03.aat4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(8z^4 + 132z^3 + 1098z^2 + 5385z + 20160)}{3465z} + \frac{32\sqrt{\pi}(4z - 7)\operatorname{erf}(\sqrt{z})}{77z^{3/2}}$$

07.25.03.aat5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, 3; z\right) = -\frac{16e^{z/2}(2z^3 - 36z^2 + 315z - 3465)I_0\left(\frac{z}{2}\right)}{10395} - \frac{4e^{z/2}(8z^4 - 152z^3 + 1416z^2 + 45045)I_1\left(\frac{z}{2}\right)}{10395z}$$

07.25.03.aat6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z(-4z^4 + 84z^3 - 843z^2 + 3360z - 20160)}{693z^2} + \frac{80\sqrt{\pi}(2z^2 + 7z + 14)\operatorname{erfi}(\sqrt{z})}{77z^{5/2}}$$

07.25.03.aat7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(-4z^4 - 84z^3 - 843z^2 - 3360z - 20160)}{693z^2} + \frac{80\sqrt{\pi}(2z^2 - 7z + 14)\operatorname{erf}(\sqrt{z})}{77z^{5/2}}$$

07.25.03.aat8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2}(8z^3 - 180z^2 - 1188z - 21879)I_0\left(\frac{z}{2}\right)}{3465z} - \frac{4e^{z/2}(8z^4 - 188z^3 + 5148z^2 + 1287z + 87516)I_1\left(\frac{z}{2}\right)}{3465z^2}$$

07.25.03.aat9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z(-2z^4 + 51z^3 - 840z^2 + 2520z - 18900)}{99z^3} + \frac{10\sqrt{\pi}(8z^3 + 42z^2 + 168z + 315)\operatorname{erfi}(\sqrt{z})}{33z^{7/2}}$$

07.25.03.aata.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(2z^4 + 51z^3 + 840z^2 + 2520z + 18900)}{99z^3} + \frac{10\sqrt{\pi}(8z^3 - 42z^2 + 168z - 315)\operatorname{erf}(\sqrt{z})}{33z^{7/2}}$$

07.25.03.aatb.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (28 z^3 - 3828 z^2 - 7293 z - 138 567) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (28 z^4 + 2288 z^3 + 29 601 z^2 + 29 172 z + 554 268) I_1\left(\frac{z}{2}\right)}{24 255 z^2}$$

07.25.03.aatc.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (-2 z^4 - 1260 z^2 + 3150 z - 33 075)}{22 z^4} + \frac{15 \sqrt{\pi} (8 z^4 + 56 z^3 + 336 z^2 + 1260 z + 2205) \operatorname{erfi}(\sqrt{z})}{44 z^{9/2}}$$

07.25.03.aatd.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-2 z^4 - 1260 z^2 - 3150 z - 33 075)}{22 z^4} + \frac{15 \sqrt{\pi} (8 z^4 - 56 z^3 + 336 z^2 - 1260 z + 2205) \operatorname{erf}(\sqrt{z})}{44 z^{9/2}}$$

07.25.03.aate.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (1964 z^3 + 17 238 z^2 + 62 985 z + 705 432) I_0\left(\frac{z}{2}\right) - 416 e^{z/2} (164 z^4 + 1070 z^3 + 12 087 z^2 + 19 380 z + 217 056) I_1\left(\frac{z}{2}\right)}{14 553 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.aatf.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{1}{893 025} e^z (512 z^9 + 5888 z^8 + 17 920 z^7 + 11 520 z^6 + 8640 z^5 - 38 880 z^4 + 154 080 z^3 - 457 200 z^2 + 904 050 z - 893 025)$$

07.25.03.aatg.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{e^z (256 z^8 + 2048 z^7 + 3840 z^6 + 4320 z^4 - 17 280 z^3 + 51 120 z^2 - 100 800 z + 99 225)}{99 225}$$

07.25.03.aath.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (128 z^7 + 576 z^6 + 480 z^5 - 720 z^4 + 2520 z^3 - 7380 z^2 + 14 490 z - 14 175)}{14 175}$$

07.25.03.aati.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{e^z (64 z^6 + 64 z^5 + 80 z^4 - 480 z^3 + 1500 z^2 - 2940 z + 2835)}{2835}$$

07.25.03.aatj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -\frac{1}{945} e^z (32 z^5 - 80 z^4 + 240 z^3 - 600 z^2 + 1050 z - 945)$$

07.25.03.aatk.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (16 z^4 - 96 z^3 + 360 z^2 - 840 z + 945)$$

07.25.03.aatl.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (8z^4 - 56z^3 + 216z^2 - 420z + 945) I_0\left(\frac{z}{2}\right) + \frac{4}{945} e^{z/2} (2z^4 - 16z^3 + 71z^2 - 186z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aatm.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (8z^3 - 76z^2 + 370z - 975) + \frac{64\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{63\sqrt{z}}$$

07.25.03.aatn.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} e^{-z} (-8z^3 - 76z^2 - 370z - 975) + \frac{64\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{63\sqrt{z}}$$

07.25.03.aato.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (8z^3 - 84z^2 + 420z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (8z^3 - 92z^2 + 516z - 3465) I_1\left(\frac{z}{2}\right)$$

07.25.03.aatp.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (4z^3 - 52z^2 + 315z - 1440)}{315z} + \frac{16\sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{21z^{3/2}}$$

07.25.03.aatq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (4z^3 + 52z^2 + 315z + 1440)}{315z} + \frac{16\sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{21z^{3/2}}$$

07.25.03.aatr.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, 3; z\right) = \frac{4}{945} e^{z/2} (4z^2 - 56z + 987) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4z^3 - 60z^2 - 231z - 3003) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.aats.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (2z^3 - 33z^2 + 120z - 1260)}{63z^2} + \frac{10\sqrt{\pi} (4z^2 + 12z + 21) \operatorname{erfi}(\sqrt{z})}{21z^{5/2}}$$

07.25.03.aatt.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-2z^3 - 33z^2 - 120z - 1260)}{63z^2} + \frac{10\sqrt{\pi} (4z^2 - 12z + 21) \operatorname{erf}(\sqrt{z})}{21z^{5/2}}$$

07.25.03.aatu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (4z^2 + 186z + 1287) I_0\left(\frac{z}{2}\right)}{315z} + \frac{4 e^{z/2} (4z^3 - 330z^2 - 429z - 5148) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.aatv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (z^3 - 40z^2 + 70z - 1050)}{9z^3} + \frac{5\sqrt{\pi} (4z^3 + 18z^2 + 63z + 105) \operatorname{erfi}(\sqrt{z})}{9z^{7/2}}$$

07.25.03.aatw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (z^3 + 40z^2 + 70z + 1050)}{9z^3} + \frac{5\sqrt{\pi} (4z^3 - 18z^2 + 63z - 105) \operatorname{erf}(\sqrt{z})}{9z^{7/2}}$$

07.25.03.aatx.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (90 z^2 + 286 z + 2431) I_0\left(\frac{z}{2}\right) - 704 e^{z/2} (11 z^3 + 78 z^2 + 156 z + 1326) I_1\left(\frac{z}{2}\right)}{735 z^2 - 2205 z^3}$$

07.25.03.aaty.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (-16 z^3 - 224 z^2 + 210 z - 6615)}{8 z^4} + \frac{5 \sqrt{\pi} (8 z^4 + 48 z^3 + 252 z^2 + 840 z + 1323) \operatorname{erfi}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.aatz.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (16 z^3 - 224 z^2 - 210 z - 6615)}{8 z^4} + \frac{5 \sqrt{\pi} (8 z^4 - 48 z^3 + 252 z^2 - 840 z + 1323) \operatorname{erf}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.aau0.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (512 z^3 + 3198 z^2 + 15249 z + 100776) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (512 z^4 + 3458 z^3 + 25389 z^2 + 60996 z + 403104) I_1\left(\frac{z}{2}\right)}{3969 z^3 - 3969 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.aau1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = -\frac{e^z (128 z^7 + 704 z^6 + 864 z^5 - 432 z^4 + 1944 z^3 - 5724 z^2 + 11250 z - 11025)}{11025}$$

07.25.03.aau2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{e^z (64 z^6 + 192 z^5 + 144 z^4 - 288 z^3 + 828 z^2 - 1620 z + 1575)}{1575}$$

07.25.03.aau3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = -\frac{1}{315} e^z (32 z^5 + 16 z^4 + 48 z^3 - 168 z^2 + 330 z - 315)$$

07.25.03.aau4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} e^z (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105)$$

07.25.03.aau5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = -\frac{1}{105} e^z (8 z^3 - 36 z^2 + 90 z - 105)$$

07.25.03.aau6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (-4 z^3 + 20 z^2 - 45 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-4 z^3 + 24 z^2 - 71 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aau7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (-4 z^2 + 28 z - 87) + \frac{32 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.aau8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} e^{-z} (-4z^2 - 28z - 87) + \frac{32\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.aau9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-4z^2 + 30z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-4z^2 + 34z - 315) I_1\left(\frac{z}{2}\right)$$

07.25.03.aaua.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (-2z^2 + 19z - 120)}{35z} + \frac{12\sqrt{\pi} (4z + 5) \operatorname{erfi}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.aaub.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (2z^2 + 19z + 120)}{35z} + \frac{12\sqrt{\pi} (4z - 5) \operatorname{erf}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.aauc.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, 3; z\right) = -\frac{8}{105} e^{z/2} (z - 42) I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2} (2z^2 + 42z + 231) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.aaud.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (-z^2 - 90)}{7z^2} + \frac{3\sqrt{\pi} (4z^2 + 10z + 15) \operatorname{erfi}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.aauе.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-z^2 - 90)}{7z^2} + \frac{3\sqrt{\pi} (4z^2 - 10z + 15) \operatorname{erf}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.aauf.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, 4; z\right) = \frac{4e^{z/2} (118z + 429) I_0\left(\frac{z}{2}\right)}{175z} - \frac{12e^{z/2} (46z^2 + 99z + 572) I_1\left(\frac{z}{2}\right)}{175z^2}$$

07.25.03.aaug.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{\sqrt{\pi} (32z^3 + 120z^2 + 360z + 525) \operatorname{erfi}(\sqrt{z})}{16z^{7/2}} - \frac{5e^z (4z^2 + 2z + 105)}{8z^3}$$

07.25.03.aauh.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5e^{-z} (4z^2 - 2z + 105)}{8z^3} + \frac{\sqrt{\pi} (32z^3 - 120z^2 + 360z - 525) \operatorname{erf}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.aauі.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, 5; z\right) = \frac{32e^{z/2} (128z^2 + 429z + 2145) I_0\left(\frac{z}{2}\right)}{1225z^2} - \frac{32e^{z/2} (128z^3 + 627z^2 + 1716z + 8580) I_1\left(\frac{z}{2}\right)}{1225z^3}$$

07.25.03.aauj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9\sqrt{\pi} (8z^4 + 40z^3 + 180z^2 + 525z + 735) \operatorname{erfi}(\sqrt{z})}{32z^{9/2}} - \frac{9e^z (4z^3 + 26z^2 + 35z + 735)}{16z^4}$$

07.25.03.aauk.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (4 z^3 - 26 z^2 + 35 z - 735)}{16 z^4} + \frac{9 \sqrt{\pi} (8 z^4 - 40 z^3 + 180 z^2 - 525 z + 735) \operatorname{erf}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.aaul.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (256 z^3 + 1248 z^2 + 6045 z + 26520) I_0\left(\frac{z}{2}\right)}{2205 z^3} - \frac{32 e^{z/2} (256 z^4 + 1504 z^3 + 8307 z^2 + 24180 z + 106080) I_1\left(\frac{z}{2}\right)}{2205 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.aaum.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = -\frac{1}{225} e^z (32 z^5 + 48 z^4 + 48 z^3 - 120 z^2 + 234 z - 225)$$

07.25.03.aaun.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} e^z (16 z^4 + 24 z^2 - 48 z + 45)$$

07.25.03.aauo.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = -\frac{1}{15} e^z (8 z^3 - 12 z^2 + 18 z - 15)$$

07.25.03.aaup.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (4 z^2 - 12 z + 15)$$

07.25.03.aauq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (2 z^2 - 6 z + 15) I_0\left(\frac{z}{2}\right) + \frac{2}{15} e^{z/2} (z^2 - 4 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aaur.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (2 z - 9) + \frac{4 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{5 \sqrt{z}}$$

07.25.03.aaus.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-2 z - 9) + \frac{4 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{5 \sqrt{z}}$$

07.25.03.aaut.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (2 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (2 z - 35) I_1\left(\frac{z}{2}\right)$$

07.25.03.aauu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (z - 12)}{5 z} + \frac{6 \sqrt{\pi} (z + 1) \operatorname{erfi}(\sqrt{z})}{5 z^{3/2}}$$

07.25.03.aauv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(z+12)}{5z} + \frac{6\sqrt{\pi}(z-1)\operatorname{erf}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.aauw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, 3; z\right) = \frac{12}{5}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{28e^{z/2}(z+3)I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.aaux.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z(-2z-15)}{2z^2} + \frac{3\sqrt{\pi}(2z^2+4z+5)\operatorname{erfi}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.aauy.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(2z-15)}{2z^2} + \frac{3\sqrt{\pi}(2z^2-4z+5)\operatorname{erf}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.aauz.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, 4; z\right) = \frac{4e^{z/2}(16z+33)I_0\left(\frac{z}{2}\right)}{25z} - \frac{4e^{z/2}(16z^2+39z+132)I_1\left(\frac{z}{2}\right)}{25z^2}$$

07.25.03.aav0.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(8z^3+24z^2+60z+75)\operatorname{erfi}(\sqrt{z})}{32z^{7/2}} - \frac{7e^z(4z^2+10z+75)}{16z^3}$$

07.25.03.aav1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}(4z^2-10z+75)}{16z^3} + \frac{7\sqrt{\pi}(8z^3-24z^2+60z-75)\operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.aav2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, 5; z\right) = \frac{32e^{z/2}(16z^2+44z+143)I_0\left(\frac{z}{2}\right)}{175z^2} - \frac{128e^{z/2}(4z^3+15z^2+44z+143)I_1\left(\frac{z}{2}\right)}{175z^3}$$

07.25.03.aav3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63\sqrt{\pi}(16z^4+64z^3+240z^2+600z+735)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}} - \frac{63e^z(8z^3+36z^2+110z+735)}{256z^4}$$

07.25.03.aav4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63e^{-z}(8z^3-36z^2+110z-735)}{256z^4} + \frac{63\sqrt{\pi}(16z^4-64z^3+240z^2-600z+735)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.aav5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, 6; z\right) = \frac{32e^{z/2}(32z^3+120z^2+507z+1560)I_0\left(\frac{z}{2}\right)}{315z^3} - \frac{32e^{z/2}(32z^4+152z^3+675z^2+2028z+6240)I_1\left(\frac{z}{2}\right)}{315z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.aav6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = -\frac{1}{9} e^z (8z^3 - 4z^2 + 10z - 9)$$

07.25.03.aav7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (4z^2 - 4z + 3)$$

07.25.03.aav8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = -\frac{1}{3} e^z (2z - 3)$$

07.25.03.aav9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (3-z) I_0\left(\frac{z}{2}\right) - \frac{1}{3} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.aava.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{2\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{3\sqrt{z}} - \frac{e^z}{3}$$

07.25.03.aavb.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{2\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{3\sqrt{z}} - \frac{e^{-z}}{3}$$

07.25.03.aavc.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{5}{3} e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.aavd.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{\sqrt{\pi} (4z+3) \operatorname{erfi}(\sqrt{z})}{4z^{3/2}} - \frac{3e^z}{2z}$$

07.25.03.aave.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{\sqrt{\pi} (4z-3) \operatorname{erf}(\sqrt{z})}{4z^{3/2}} + \frac{3e^{-z}}{2z}$$

07.25.03.aavf.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, 3; z\right) = \frac{16}{9} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2} (4z+7) I_1\left(\frac{z}{2}\right)}{9z}$$

07.25.03.aavg.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (2z^2+3z+3) \operatorname{erfi}(\sqrt{z})}{8z^{5/2}} - \frac{5e^z (z+3)}{4z^2}$$

07.25.03.aavh.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} (z-3)}{4z^2} + \frac{5\sqrt{\pi} (2z^2-3z+3) \operatorname{erf}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.aavi.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, 4; z\right) = \frac{4e^{z/2} (8z+9) I_0\left(\frac{z}{2}\right)}{15z} - \frac{4e^{z/2} (8z^2+17z+36) I_1\left(\frac{z}{2}\right)}{15z^2}$$

07.25.03.aavj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi}(16z^3 + 36z^2 + 72z + 75)\operatorname{erfi}(\sqrt{z})}{384z^{7/2}} - \frac{35e^z(8z^2 + 22z + 75)}{192z^3}$$

07.25.03.aavk.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}(8z^2 - 22z + 75)}{192z^3} + \frac{35\sqrt{\pi}(16z^3 - 36z^2 + 72z - 75)\operatorname{erf}(\sqrt{z})}{384z^{7/2}}$$

07.25.03.aavl.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, 5; z\right) = \frac{32e^{z/2}(8z^2 + 15z + 33)I_0\left(\frac{z}{2}\right)}{105z^2} - \frac{32e^{z/2}(8z^3 + 23z^2 + 60z + 132)I_1\left(\frac{z}{2}\right)}{105z^3}$$

07.25.03.aavm.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{105\sqrt{\pi}(16z^4 + 48z^3 + 144z^2 + 300z + 315)\operatorname{erfi}(\sqrt{z})}{1024z^{9/2}} - \frac{105e^z(8z^3 + 28z^2 + 90z + 315)}{512z^4}$$

07.25.03.aavn.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{105e^{-z}(8z^3 - 28z^2 + 90z - 315)}{512z^4} + \frac{105\sqrt{\pi}(16z^4 - 48z^3 + 144z^2 - 300z + 315)\operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.aavo.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, 6; z\right) = \frac{32e^{z/2}(16z^3 + 42z^2 + 141z + 312)I_0\left(\frac{z}{2}\right)}{189z^3} - \frac{32e^{z/2}(16z^4 + 58z^3 + 207z^2 + 564z + 1248)I_1\left(\frac{z}{2}\right)}{189z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.aavp.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = -e^z(2z - 1)$$

07.25.03.aavq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = e^z$$

07.25.03.aavr.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, 1; z\right) = e^{z/2}I_0\left(\frac{z}{2}\right)$$

07.25.03.aavs.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.aavt.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.aavu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, 2; z\right) = e^{z/2}I_0\left(\frac{z}{2}\right) - e^{z/2}I_1\left(\frac{z}{2}\right)$$

07.25.03.aavv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi}(2z+1)\operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3e^z}{4z}$$

07.25.03.aavw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi}(2z-1)\operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.aavx.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, 3; z\right) = \frac{4}{3}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(z+1)I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.aavy.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi}(4z^2+4z+3)\operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15e^z(2z+3)}{32z^2}$$

07.25.03.aavz.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z}(2z-3)}{32z^2} + \frac{15\sqrt{\pi}(4z^2-4z+3)\operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.aaw0.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, 4; z\right) = \frac{4e^{z/2}(2z+1)I_0\left(\frac{z}{2}\right)}{5z} - \frac{4e^{z/2}(2z^2+3z+4)I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.aaw1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi}(8z^3+12z^2+18z+15)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35e^z(4z^2+8z+15)}{128z^3}$$

07.25.03.aaw2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}(4z^2-8z+15)}{128z^3} + \frac{35\sqrt{\pi}(8z^3-12z^2+18z-15)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.aaw3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, 5; z\right) = \frac{32e^{z/2}(2z^2+2z+3)I_0\left(\frac{z}{2}\right)}{35z^2} - \frac{64e^{z/2}(z^3+2z^2+4z+6)I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.aaw4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi}(16z^4+32z^3+72z^2+120z+105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315e^z(8z^3+20z^2+50z+105)}{2048z^4}$$

07.25.03.aaw5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}(8z^3-20z^2+50z-105)}{2048z^4} + \frac{315\sqrt{\pi}(16z^4-32z^3+72z^2-120z+105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.aaw6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, 6; z\right) = \frac{32e^{z/2}(4z^3+6z^2+15z+24)I_0\left(\frac{z}{2}\right)}{63z^3} - \frac{32e^{z/2}(4z^4+10z^3+27z^2+60z+96)I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{1}{2}$, $b_1 = \frac{1}{2}$

07.25.03.aaw7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aaw8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.aaw9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, 1; z\right) = e^{z/2} (1-z) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.aawa.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (1-2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{e^z}{2}$$

07.25.03.aawb.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.aawc.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, 2; z\right) = e^{z/2} \left(1 - \frac{2z}{3}\right) I_0\left(\frac{z}{2}\right) + e^{z/2} \left(\frac{2z}{3} - \frac{1}{3}\right) I_1\left(\frac{z}{2}\right)$$

07.25.03.aawd.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{3e^z(2z-1)}{16z} - \frac{3\sqrt{\pi}(4z^2-4z-1)\operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.aawe.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3e^{-z}(2z+1)}{16z} + \frac{3\sqrt{\pi}(4z^2+4z-1)\operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.aawf.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, 3; z\right) = \frac{4e^{z/2}(2z^2-2z-1)I_1\left(\frac{z}{2}\right)}{15z} - \frac{8}{15}e^{z/2}(z-2)I_0\left(\frac{z}{2}\right)$$

07.25.03.aawg.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5e^z(4z^2-4z-3)}{64z^2} - \frac{5\sqrt{\pi}(8z^3-12z^2-6z-3)\operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.aawh.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}(4z^2+4z-3)}{64z^2} + \frac{5\sqrt{\pi}(8z^3+12z^2-6z+3)\operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.aawi.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, 4; z\right) = \frac{4e^{z/2}(4z^3-6z^2-5z-4)I_1\left(\frac{z}{2}\right)}{35z^2} - \frac{4e^{z/2}(4z^2-10z-1)I_0\left(\frac{z}{2}\right)}{35z}$$

07.25.03.aawj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (8 z^3 - 12 z^2 - 14 z - 15)}{1024 z^3} - \frac{35 \sqrt{\pi} (16 z^4 - 32 z^3 - 24 z^2 - 24 z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.aawk.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.aawl.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (4 z^4 - 8 z^3 - 9 z^2 - 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3} - \frac{32 e^{z/2} (4 z^3 - 12 z^2 - 3 z - 3) I_0\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.aawm.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (16 z^4 - 32 z^3 - 48 z^2 - 80 z - 105)}{4096 z^4} - \frac{63 \sqrt{\pi} (32 z^5 - 80 z^4 - 80 z^3 - 120 z^2 - 150 z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.aawn.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16 z^4 + 32 z^3 - 48 z^2 + 80 z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.aawo.01

$${}_2F_2\left(-\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^5 - 20 z^4 - 28 z^3 - 51 z^2 - 84 z - 96) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (8 z^4 - 28 z^3 - 12 z^2 - 21 z - 24) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = -\frac{11}{2}$

07.25.03.aawp.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{108056025} (-2048 z^{11} - 50176 z^{10} - 385536 z^9 - 1058560 z^8 - 839040 z^7 - 60480 z^6 - 3360 z^5 - 2160 z^4 - 5400 z^3 - 44100 z^2 - 1786050 z + 108056025) - \frac{2048 e^z \sqrt{\pi} (z^{23/2} + 25 z^{21/2} + 200 z^{19/2} + 600 z^{17/2} + 600 z^{15/2} + 120 z^{13/2}) \operatorname{erf}(\sqrt{z})}{108056025}$$

07.25.03.aawq.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{108056025} (2048 z^{11} - 50176 z^{10} + 385536 z^9 - 1058560 z^8 + 839040 z^7 - 60480 z^6 + 3360 z^5 - 2160 z^4 + 5400 z^3 - 44100 z^2 + 1786050 z + 108056025) - \frac{2048 e^{-z} \sqrt{\pi} (z^{23/2} - 25 z^{21/2} + 200 z^{19/2} - 600 z^{17/2} + 600 z^{15/2} - 120 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{108056025}$$

07.25.03.aawr.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9823275} (1024 z^{10} + 19968 z^9 + 113408 z^8 + 197760 z^7 + 60480 z^6 - 3360 z^5 - 720 z^4 - 1080 z^3 - 6300 z^2 - 198450 z + 9823275) + \frac{1024 e^z \sqrt{\pi} (z^{21/2} + 20 z^{19/2} + 120 z^{17/2} + 240 z^{15/2} + 120 z^{13/2}) \operatorname{erf}(\sqrt{z})}{9823275}$$

07.25.03.aaws.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{9823275} (1024 z^{10} - 19968 z^9 + 113408 z^8 - 197760 z^7 + 60480 z^6 + 3360 z^5 - 720 z^4 + 1080 z^3 - 6300 z^2 + 198450 z + 9823275) - \frac{1024 e^{-z} \sqrt{\pi} (z^{21/2} - 20 z^{19/2} + 120 z^{17/2} - 240 z^{15/2} + 120 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{9823275}$$

07.25.03.aawt.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1091475} (-512 z^9 - 7424 z^8 - 27264 z^7 - 20160 z^6 + 3360 z^5 - 720 z^4 - 360 z^3 - 1260 z^2 - 28350 z + 1091475) - \frac{512 e^z \sqrt{\pi} (z^{19/2} + 15 z^{17/2} + 60 z^{15/2} + 60 z^{13/2}) \operatorname{erf}(\sqrt{z})}{1091475}$$

07.25.03.aawu.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1091475} (512 z^9 - 7424 z^8 + 27264 z^7 - 20160 z^6 - 3360 z^5 - 720 z^4 + 360 z^3 - 1260 z^2 + 28350 z + 1091475) - \frac{512 e^{-z} \sqrt{\pi} (z^{19/2} - 15 z^{17/2} + 60 z^{15/2} - 60 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{1091475}$$

07.25.03.aawv.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{256 z^8 + 2432 z^7 + 4032 z^6 - 1120 z^5 + 720 z^4 - 360 z^3 - 420 z^2 - 5670 z + 155925}{155925} + \frac{256 e^z \sqrt{\pi} (z^{17/2} + 10 z^{15/2} + 20 z^{13/2}) \operatorname{erf}(\sqrt{z})}{155925}$$

07.25.03.aaww.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{256 z^8 - 2432 z^7 + 4032 z^6 + 1120 z^5 + 720 z^4 + 360 z^3 - 420 z^2 + 5670 z + 155925}{155925} - \frac{256 e^{-z} \sqrt{\pi} (z^{17/2} - 10 z^{15/2} + 20 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.aawx.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{-128 z^7 - 576 z^6 + 224 z^5 - 240 z^4 + 360 z^3 - 420 z^2 - 1890 z + 31185}{31185} - \frac{128 e^z \sqrt{\pi} (z^{15/2} + 5 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.aawy.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{128 z^7 - 576 z^6 - 224 z^5 - 240 z^4 - 360 z^3 - 420 z^2 + 1890 z + 31185}{31185} - \frac{128 e^{-z} \sqrt{\pi} (z^{15/2} - 5 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.aawz.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{64 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{64 z^6 - 32 z^5 + 48 z^4 - 120 z^3 + 420 z^2 - 1890 z + 10395}{10395}$$

07.25.03.aax0.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 + 1890 z + 10395}{10395} - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.aax1.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{-32 z^5 + 176 z^4 - 744 z^3 + 2420 z^2 - 5790 z + 10395}{10395} - \frac{32 e^z \sqrt{\pi} (z^{11/2} - 5 z^{9/2} + 20 z^{7/2} - 60 z^{5/2} + 120 z^{3/2} - 120 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.aax2.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{32 z^5 + 176 z^4 + 744 z^3 + 2420 z^2 + 5790 z + 10395}{10395} - \frac{32 e^{-z} \sqrt{\pi} (z^{11/2} + 5 z^{9/2} + 20 z^{7/2} + 60 z^{5/2} + 120 z^{3/2} + 120 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.aax3.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, 1; z\right) = -\frac{e^z (32 z^5 - 240 z^4 + 1200 z^3 - 4200 z^2 + 9450 z - 10395)}{10395}$$

07.25.03.aax4.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{-16 z^4 + 168 z^3 - 1052 z^2 + 4470 z - 12645}{10395} - \frac{16 e^z \sqrt{\pi} (z^5 - 10 z^4 + 60 z^3 - 240 z^2 + 600 z - 720) \operatorname{erf}(\sqrt{z})}{10395 \sqrt{z}}$$

07.25.03.aax5.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{-16z^4 - 168z^3 - 1052z^2 - 4470z - 12645}{10395} + \frac{16e^{-z}\sqrt{\pi}(z^5 + 10z^4 + 60z^3 + 240z^2 + 600z + 720)\operatorname{erfi}(\sqrt{z})}{10395\sqrt{z}}$$

07.25.03.aax6.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, 2; z\right) = \frac{e^z(-32z^5 + 400z^4 - 2800z^3 + 12600z^2 - 34650z + 45045)}{10395z} - \frac{13}{3z}$$

07.25.03.aax7.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{-8z^4 + 124z^3 - 1026z^2 + 5385z - 40320}{3465z} - \frac{8e^z\sqrt{\pi}(z^5 - 15z^4 + 120z^3 - 600z^2 + 1800z - 2520)\operatorname{erf}(\sqrt{z})}{3465z^{3/2}}$$

07.25.03.aax8.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{8z^4 + 124z^3 + 1026z^2 + 5385z + 40320}{3465z} - \frac{8e^{-z}\sqrt{\pi}(z^5 + 15z^4 + 120z^3 + 600z^2 + 1800z + 2520)\operatorname{erfi}(\sqrt{z})}{3465z^{3/2}}$$

07.25.03.aax9.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, 3; z\right) = -\frac{26(z+3)}{3z^2} - \frac{2e^z(32z^5 - 560z^4 + 5040z^3 - 27720z^2 + 90090z - 135135)}{10395z^2}$$

07.25.03.aaxa.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{-4z^4 + 82z^3 - 843z^2 - 2240z - 53760}{693z^2} - \frac{4e^z\sqrt{\pi}(z^5 - 20z^4 + 200z^3 - 1200z^2 + 4200z - 6720)\operatorname{erf}(\sqrt{z})}{693z^{5/2}}$$

07.25.03.aaxb.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{-4z^4 - 82z^3 - 843z^2 + 2240z - 53760}{693z^2} + \frac{4e^{-z}\sqrt{\pi}(z^5 + 20z^4 + 200z^3 + 1200z^2 + 4200z + 6720)\operatorname{erfi}(\sqrt{z})}{693z^{5/2}}$$

07.25.03.aaxc.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, 4; z\right) = -\frac{13(7z^2 + 42z + 102)}{7z^3} - \frac{2e^z(32z^5 - 720z^4 + 7920z^3 - 51480z^2 + 193050z - 328185)}{3465z^3}$$

07.25.03.aaxd.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{-2z^4 + 51z^3 - 2128z^2 - 6720z - 60480}{99z^3} - \frac{2e^z\sqrt{\pi}(z^5 - 25z^4 + 300z^3 - 2100z^2 + 8400z - 15120)\operatorname{erf}(\sqrt{z})}{99z^{7/2}}$$

07.25.03.aaxe.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{2z^4 + 51z^3 + 2128z^2 - 6720z + 60480}{99z^3} - \frac{2e^{-z}\sqrt{\pi}(z^5 + 25z^4 + 300z^3 + 2100z^2 + 8400z + 15120)\operatorname{erfi}(\sqrt{z})}{99z^{7/2}}$$

07.25.03.aaxf.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, 5; z\right) = -\frac{52(7z^3 + 63z^2 + 306z + 646)}{21z^4} - \frac{8e^z(32z^5 - 880z^4 + 11440z^3 - 85800z^2 + 364650z - 692835)}{3465z^4}$$

07.25.03.aaxg.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{-z^4 - 184z^3 - 2688z^2 - 10080z - 60480}{11z^4} + \frac{e^z\sqrt{\pi}(-z^5 + 30z^4 - 420z^3 + 3360z^2 - 15120z + 30240)\operatorname{erf}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.aaxh.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{-z^4 + 184z^3 - 2688z^2 + 10080z - 60480}{11z^4} + \frac{e^{-z}\sqrt{\pi}(z^5 + 30z^4 + 420z^3 + 3360z^2 + 15120z + 30240)\operatorname{erfi}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.aaxi.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{11}{2}, 6; z\right) = -\frac{65(77z^4 + 924z^3 + 6732z^2 + 28424z + 54264)}{231z^5} - \frac{8e^z(32z^5 - 1040z^4 + 15600z^3 - 132600z^2 + 629850z - 1322685)}{693z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = -\frac{9}{2}$

07.25.03.aaxj.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{-512z^9 - 7936z^8 - 33152z^7 - 35904z^6 - 3360z^5 - 240z^4 - 216z^3 - 900z^2 - 22050z + 893025}{893025} - \frac{512e^z\sqrt{\pi}(z^{19/2} + 16z^{17/2} + 72z^{15/2} + 96z^{13/2} + 24z^{11/2})\operatorname{erf}(\sqrt{z})}{893025}$$

07.25.03.aaxk.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{512z^9 - 7936z^8 + 33152z^7 - 35904z^6 + 3360z^5 - 240z^4 + 216z^3 - 900z^2 + 22050z + 893025}{893025} - \frac{512e^{-z}\sqrt{\pi}(z^{19/2} - 16z^{17/2} + 72z^{15/2} - 96z^{13/2} + 24z^{11/2})\operatorname{erfi}(\sqrt{z})}{893025}$$

07.25.03.aaxl.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{256 z^8 + 2944 z^7 + 7872 z^6 + 3360 z^5 - 240 z^4 - 72 z^3 - 180 z^2 - 3150 z + 99\,225}{99\,225} + \frac{256 e^z \sqrt{\pi} (z^{17/2} + 12 z^{15/2} + 36 z^{13/2} + 24 z^{11/2}) \operatorname{erf}(\sqrt{z})}{99\,225}$$

07.25.03.aaxm.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{256 z^8 - 2944 z^7 + 7872 z^6 - 3360 z^5 - 240 z^4 + 72 z^3 - 180 z^2 + 3150 z + 99\,225}{99\,225} - \frac{256 e^{-z} \sqrt{\pi} (z^{17/2} - 12 z^{15/2} + 36 z^{13/2} - 24 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{99\,225}$$

07.25.03.aaxn.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{-128 z^7 - 960 z^6 - 1120 z^5 + 240 z^4 - 72 z^3 - 60 z^2 - 630 z + 14\,175}{14\,175} - \frac{128 e^z \sqrt{\pi} (z^{15/2} + 8 z^{13/2} + 12 z^{11/2}) \operatorname{erf}(\sqrt{z})}{14\,175}$$

07.25.03.aaxo.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{128 z^7 - 960 z^6 + 1120 z^5 + 240 z^4 + 72 z^3 - 60 z^2 + 630 z + 14\,175}{14\,175} - \frac{128 e^{-z} \sqrt{\pi} (z^{15/2} - 8 z^{13/2} + 12 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{14\,175}$$

07.25.03.aaxp.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{64 z^6 + 224 z^5 - 80 z^4 + 72 z^3 - 60 z^2 - 210 z + 2835}{2835} + \frac{64 e^z \sqrt{\pi} (z^{13/2} + 4 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.aaxq.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{64 z^6 - 224 z^5 - 80 z^4 - 72 z^3 - 60 z^2 + 210 z + 2835}{2835} - \frac{64 e^{-z} \sqrt{\pi} (z^{13/2} - 4 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.aaxr.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aaxs.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945} (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aaxt.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945} (16 z^4 - 72 z^3 + 236 z^2 - 558 z + 945) + \frac{16}{945} e^z \sqrt{\pi} (z^{9/2} - 4 z^{7/2} + 12 z^{5/2} - 24 z^{3/2} + 24 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aaxu.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} (16z^4 + 72z^3 + 236z^2 + 558z + 945) - \frac{16}{945} e^{-z} \sqrt{\pi} (z^{9/2} + 4z^{7/2} + 12z^{5/2} + 24z^{3/2} + 24\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aaxv.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, 1; z\right) = \frac{1}{945} e^z (16z^4 - 96z^3 + 360z^2 - 840z + 945)$$

07.25.03.aaxw.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945} (8z^3 - 68z^2 + 326z - 975) + \frac{8 e^z \sqrt{\pi} (z^4 - 8z^3 + 36z^2 - 96z + 120) \operatorname{erf}(\sqrt{z})}{945 \sqrt{z}}$$

07.25.03.aaxx.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} (-8z^3 - 68z^2 - 326z - 975) + \frac{8 e^{-z} \sqrt{\pi} (z^4 + 8z^3 + 36z^2 + 96z + 120) \operatorname{erfi}(\sqrt{z})}{945 \sqrt{z}}$$

07.25.03.aaxy.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, 2; z\right) = \frac{e^z (16z^4 - 160z^3 + 840z^2 - 2520z + 3465)}{945z} - \frac{11}{3z}$$

07.25.03.aaxz.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{4z^3 - 50z^2 + 315z - 2880}{315z} + \frac{4 e^z \sqrt{\pi} (z^4 - 12z^3 + 72z^2 - 240z + 360) \operatorname{erf}(\sqrt{z})}{315z^{3/2}}$$

07.25.03.aay0.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{4z^3 + 50z^2 + 315z + 2880}{315z} - \frac{4 e^{-z} \sqrt{\pi} (z^4 + 12z^3 + 72z^2 + 240z + 360) \operatorname{erfi}(\sqrt{z})}{315z^{3/2}}$$

07.25.03.aay1.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, 3; z\right) = \frac{2 e^z (16z^4 - 224z^3 + 1512z^2 - 5544z + 9009)}{945z^2} - \frac{22(5z + 13)}{15z^2}$$

07.25.03.aay2.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{2z^3 - 33z^2 - 320z - 3360}{63z^2} + \frac{2 e^z \sqrt{\pi} (z^4 - 16z^3 + 120z^2 - 480z + 840) \operatorname{erf}(\sqrt{z})}{63z^{5/2}}$$

07.25.03.aay3.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{-2z^3 - 33z^2 + 320z - 3360}{63z^2} + \frac{2 e^{-z} \sqrt{\pi} (z^4 + 16z^3 + 120z^2 + 480z + 840) \operatorname{erfi}(\sqrt{z})}{63z^{5/2}}$$

07.25.03.aay4.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, 4; z\right) = \frac{2 e^z (16z^4 - 288z^3 + 2376z^2 - 10296z + 19305)}{315z^3} - \frac{11(35z^2 + 182z + 390)}{35z^3}$$

07.25.03.aay5.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{z^3 - 136z^2 - 560z - 3360}{9z^3} + \frac{e^z \sqrt{\pi} (z^4 - 20z^3 + 180z^2 - 840z + 1680) \operatorname{erf}(\sqrt{z})}{9z^{7/2}}$$

07.25.03.aay6.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{z^3 + 136z^2 - 560z + 3360}{9z^3} + \frac{e^{-z}\sqrt{\pi}(-z^4 - 20z^3 - 180z^2 - 840z - 1680)\operatorname{erfi}(\sqrt{z})}{9z^{7/2}}$$

07.25.03.aay7.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, 5; z\right) = \frac{8e^z(16z^4 - 352z^3 + 3432z^2 - 17160z + 36465)}{315z^4} - \frac{44(35z^3 + 273z^2 + 1170z + 2210)}{105z^4}$$

07.25.03.aay8.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z\sqrt{\pi}(z^4 - 24z^3 + 252z^2 - 1344z + 3024)\operatorname{erf}(\sqrt{z})}{2z^{9/2}} - \frac{4(20z^3 + 203z^2 + 840z + 3780)}{5z^4}$$

07.25.03.aay9.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{4(20z^3 - 203z^2 + 840z - 3780)}{5z^4} + \frac{e^{-z}\sqrt{\pi}(z^4 + 24z^3 + 252z^2 + 1344z + 3024)\operatorname{erfi}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.aaya.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{9}{2}, 6; z\right) = \frac{-385z^4 - 4004z^3 - 25740z^2 - 97240z - 167960}{21z^5} + \frac{8e^z(16z^4 - 416z^3 + 4680z^2 - 26520z + 62985)}{63z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = -\frac{7}{2}$

07.25.03.aayb.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{-128z^7 - 1088z^6 - 1824z^5 - 240z^4 - 24z^3 - 36z^2 - 450z + 11025}{11025} - \frac{128e^z\sqrt{\pi}(z^{15/2} + 9z^{13/2} + 18z^{11/2} + 6z^{9/2})\operatorname{erf}(\sqrt{z})}{11025}$$

07.25.03.aayc.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{128z^7 - 1088z^6 + 1824z^5 - 240z^4 + 24z^3 - 36z^2 + 450z + 11025}{11025} - \frac{128e^{-z}\sqrt{\pi}(z^{15/2} - 9z^{13/2} + 18z^{11/2} - 6z^{9/2})\operatorname{erfi}(\sqrt{z})}{11025}$$

07.25.03.aayd.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{64z^6 + 352z^5 + 240z^4 - 24z^3 - 12z^2 - 90z + 1575}{1575} + \frac{64e^z\sqrt{\pi}(z^{13/2} + 6z^{11/2} + 6z^{9/2})\operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.aaye.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{64z^6 - 352z^5 + 240z^4 + 24z^3 - 12z^2 + 90z + 1575}{1575} - \frac{64e^{-z}\sqrt{\pi}(z^{13/2} - 6z^{11/2} + 6z^{9/2})\operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.aayf.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{315}(-32z^5 - 80z^4 + 24z^3 - 12z^2 - 30z + 315) - \frac{32}{315}e^z\sqrt{\pi}(z^{11/2} + 3z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aayg.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{315} (32 z^5 - 80 z^4 - 24 z^3 - 12 z^2 + 30 z + 315) - \frac{32}{315} e^{-z} \sqrt{\pi} (z^{11/2} - 3 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aayh.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{16}{105} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)$$

07.25.03.aayi.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aayj.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} (-8 z^3 + 28 z^2 - 66 z + 105) - \frac{8}{105} e^z \sqrt{\pi} (z^{7/2} - 3 z^{5/2} + 6 z^{3/2} - 6 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aayk.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} (8 z^3 + 28 z^2 + 66 z + 105) - \frac{8}{105} e^{-z} \sqrt{\pi} (z^{7/2} + 3 z^{5/2} + 6 z^{3/2} + 6 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aayl.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, 1; z\right) = -\frac{1}{105} e^z (8 z^3 - 36 z^2 + 90 z - 105)$$

07.25.03.aaym.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{105} (-4 z^2 + 26 z - 87) - \frac{4 e^z \sqrt{\pi} (z^3 - 6 z^2 + 18 z - 24) \operatorname{erf}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.aayn.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} (-4 z^2 - 26 z - 87) + \frac{4 e^{-z} \sqrt{\pi} (z^3 + 6 z^2 + 18 z + 24) \operatorname{erfi}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.aayo.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, 2; z\right) = \frac{e^z (-8 z^3 + 60 z^2 - 210 z + 315)}{105 z} - \frac{3}{z}$$

07.25.03.aayp.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{-2 z^2 + 19 z - 240}{35 z} - \frac{2 e^z \sqrt{\pi} (z^3 - 9 z^2 + 36 z - 60) \operatorname{erf}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.aayq.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{2 z^2 + 19 z + 240}{35 z} - \frac{2 e^{-z} \sqrt{\pi} (z^3 + 9 z^2 + 36 z + 60) \operatorname{erfi}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.aayr.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, 3; z\right) = -\frac{6(5 z + 11)}{5 z^2} - \frac{2 e^z (8 z^3 - 84 z^2 + 378 z - 693)}{105 z^2}$$

07.25.03.aays.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{-z^2 - 40 z - 240}{7 z^2} + \frac{e^z \sqrt{\pi} (-z^3 + 12 z^2 - 60 z + 120) \operatorname{erf}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.aayt.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{-z^2 + 40z - 240}{7z^2} + \frac{e^{-z}\sqrt{\pi}(z^3 + 12z^2 + 60z + 120)\operatorname{erfi}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.aayu.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, 4; z\right) = -\frac{9(35z^2 + 154z + 286)}{35z^3} - \frac{2e^z(8z^3 - 108z^2 + 594z - 1287)}{35z^3}$$

07.25.03.aayv.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{-11z^2 - 50z - 210}{z^3} + \frac{e^z\sqrt{\pi}(-z^3 + 15z^2 - 90z + 210)\operatorname{erf}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.aayw.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{11z^2 - 50z + 210}{z^3} + \frac{e^{-z}\sqrt{\pi}(-z^3 - 15z^2 - 90z - 210)\operatorname{erfi}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.aayx.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, 5; z\right) = -\frac{8e^z(8z^3 - 132z^2 + 858z - 2145)}{35z^4} - \frac{12(35z^3 + 231z^2 + 858z + 1430)}{35z^4}$$

07.25.03.aayy.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, \frac{11}{2}; z\right) = -\frac{9(15z^3 + 118z^2 + 490z + 1680)}{10z^4} - \frac{9e^z\sqrt{\pi}(z^3 - 18z^2 + 126z - 336)\operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.aayz.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(15z^3 - 118z^2 + 490z - 1680)}{10z^4} + \frac{9e^{-z}\sqrt{\pi}(z^3 + 18z^2 + 126z + 336)\operatorname{erfi}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.aaz0.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{7}{2}, 6; z\right) = -\frac{8e^z(8z^3 - 156z^2 + 1170z - 3315)}{7z^5} - \frac{3(35z^4 + 308z^3 + 1716z^2 + 5720z + 8840)}{7z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = -\frac{5}{2}$

07.25.03.aaz1.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225}(-32z^5 - 112z^4 - 24z^3 - 4z^2 - 18z + 225) - \frac{32}{225}e^z\sqrt{\pi}(z^{11/2} + 4z^{9/2} + 2z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aaz2.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{225}(32z^5 - 112z^4 + 24z^3 - 4z^2 + 18z + 225) - \frac{32}{225}e^{-z}\sqrt{\pi}(z^{11/2} - 4z^{9/2} + 2z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aaz3.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45}(16z^4 + 24z^3 - 4z^2 - 6z + 45) + \frac{16}{45}e^z\sqrt{\pi}(z^{9/2} + 2z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aaz4.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{45}(16z^4 - 24z^3 - 4z^2 + 6z + 45) - \frac{16}{45}e^{-z}\sqrt{\pi}(z^{9/2} - 2z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aaz5.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15}(-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15}e^z \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aaz6.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15}(8z^3 + 4z^2 + 6z + 15) - \frac{8}{15}e^{-z} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aaz7.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15}(4z^2 - 10z + 15) + \frac{4}{15}e^z \sqrt{\pi} (z^{5/2} - 2z^{3/2} + 2\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aaz8.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15}(4z^2 + 10z + 15) - \frac{4}{15}e^{-z} \sqrt{\pi} (z^{5/2} + 2z^{3/2} + 2\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aaz9.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, 1; z\right) = \frac{1}{15}e^z(4z^2 - 12z + 15)$$

07.25.03.aaza.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15}(2z - 9) + \frac{2e^z \sqrt{\pi} (z^2 - 4z + 6) \operatorname{erf}(\sqrt{z})}{15\sqrt{z}}$$

07.25.03.aazb.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15}(-2z - 9) + \frac{2e^{-z} \sqrt{\pi} (z^2 + 4z + 6) \operatorname{erfi}(\sqrt{z})}{15\sqrt{z}}$$

07.25.03.aazc.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, 2; z\right) = \frac{e^z(4z^2 - 20z + 35)}{15z} - \frac{7}{3z}$$

07.25.03.aazd.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{z - 24}{5z} + \frac{e^z \sqrt{\pi} (z^2 - 6z + 12) \operatorname{erf}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.aaze.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{z + 24}{5z} + \frac{e^{-z} \sqrt{\pi} (-z^2 - 6z - 12) \operatorname{erfi}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.aazf.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, 3; z\right) = \frac{2e^z(4z^2 - 28z + 63)}{15z^2} - \frac{14(5z + 9)}{15z^2}$$

07.25.03.aazg.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z \sqrt{\pi} (z^2 - 8z + 20) \operatorname{erf}(\sqrt{z})}{2z^{5/2}} - \frac{4(4z + 15)}{3z^2}$$

07.25.03.aazh.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{4(4z - 15)}{3z^2} + \frac{e^{-z} \sqrt{\pi} (z^2 + 8z + 20) \operatorname{erfi}(\sqrt{z})}{2z^{5/2}}$$

07.25.03.aazi.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, 4; z\right) = \frac{-35z^2 - 126z - 198}{5z^3} + \frac{2e^z(4z^2 - 36z + 99)}{5z^3}$$

07.25.03.aazj.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7e^z\sqrt{\pi}(z^2 - 10z + 30)\operatorname{erf}(\sqrt{z})}{4z^{7/2}} - \frac{7(7z^2 + 30z + 90)}{6z^3}$$

07.25.03.aazk.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(7z^2 - 30z + 90)}{6z^3} - \frac{7e^{-z}\sqrt{\pi}(z^2 + 10z + 30)\operatorname{erfi}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.aazl.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, 5; z\right) = \frac{8e^z(4z^2 - 44z + 143)}{5z^4} - \frac{4(35z^3 + 189z^2 + 594z + 858)}{15z^4}$$

07.25.03.aazm.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63e^z\sqrt{\pi}(z^2 - 12z + 42)\operatorname{erf}(\sqrt{z})}{8z^{9/2}} - \frac{21(10z^3 + 63z^2 + 240z + 630)}{20z^4}$$

07.25.03.aazn.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21(10z^3 - 63z^2 + 240z - 630)}{20z^4} + \frac{63e^{-z}\sqrt{\pi}(z^2 + 12z + 42)\operatorname{erfi}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.aazo.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{5}{2}, 6; z\right) = \frac{8e^z(4z^2 - 52z + 195)}{z^5} + \frac{-35z^4 - 252z^3 - 1188z^2 - 3432z - 4680}{3z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = -\frac{3}{2}$

07.25.03.aazp.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9}(-8z^3 - 4z^2 - 2z + 9) - \frac{8}{9}e^z\sqrt{\pi}(z^{7/2} + z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aazq.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9}(8z^3 - 4z^2 + 2z + 9) - \frac{8}{9}e^{-z}\sqrt{\pi}(z^{7/2} - z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aazr.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{4}{3}e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{3}(4z^2 - 2z + 3)$$

07.25.03.aazs.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3}(4z^2 + 2z + 3) - \frac{4}{3}e^{-z}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.aazt.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3}(3 - 2z) - \frac{2}{3}e^z\sqrt{\pi}(z^{3/2} - \sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.aazu.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3}(2z+3) - \frac{2}{3}e^{-z}\sqrt{\pi}(z^{3/2} + \sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aazv.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, 1; z\right) = -\frac{1}{3}e^z(2z-3)$$

07.25.03.aazw.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z\sqrt{\pi}(2-z)\operatorname{erf}(\sqrt{z})}{3\sqrt{z}} - \frac{1}{3}$$

07.25.03.aazx.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}\sqrt{\pi}(z+2)\operatorname{erfi}(\sqrt{z})}{3\sqrt{z}} - \frac{1}{3}$$

07.25.03.aazy.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, 2; z\right) = \frac{e^z(5-2z)}{3z} - \frac{5}{3z}$$

07.25.03.aazz.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z\sqrt{\pi}(3-z)\operatorname{erf}(\sqrt{z})}{2z^{3/2}} - \frac{3}{z}$$

07.25.03.ab00.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}\sqrt{\pi}(-z-3)\operatorname{erfi}(\sqrt{z})}{2z^{3/2}} + \frac{3}{z}$$

07.25.03.ab01.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, 3; z\right) = -\frac{2e^z(2z-7)}{3z^2} - \frac{2(5z+7)}{3z^2}$$

07.25.03.ab02.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, \frac{7}{2}; z\right) = -\frac{5(5z+12)}{6z^2} - \frac{5e^z\sqrt{\pi}(z-4)\operatorname{erf}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.ab03.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(5z-12)}{6z^2} + \frac{5e^{-z}\sqrt{\pi}(z+4)\operatorname{erfi}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.ab04.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, 4; z\right) = \frac{-5z^2 - 14z - 18}{z^3} - \frac{2e^z(2z-9)}{z^3}$$

07.25.03.ab05.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, \frac{9}{2}; z\right) = -\frac{35(2z^2 + 7z + 15)}{12z^3} - \frac{35e^z\sqrt{\pi}(z-5)\operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.ab06.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(2z^2 - 7z + 15)}{12z^3} - \frac{35e^{-z}\sqrt{\pi}(z+5)\operatorname{erfi}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.ab07.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, 5; z\right) = -\frac{8e^z(2z-11)}{z^4} - \frac{4(5z^3 + 21z^2 + 54z + 66)}{3z^4}$$

07.25.03.ab08.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, \frac{11}{2}; z\right) = -\frac{3(20z^3 + 98z^2 + 315z + 630)}{8z^4} - \frac{315e^z\sqrt{\pi}(z-6)\operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.ab09.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3(20z^3 - 98z^2 + 315z - 630)}{8z^4} + \frac{315e^{-z}\sqrt{\pi}(z+6)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.ab0a.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{3}{2}, 6; z\right) = -\frac{40e^z(2z-13)}{z^5} - \frac{5(5z^4 + 28z^3 + 108z^2 + 264z + 312)}{3z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = -\frac{1}{2}$

07.25.03.ab0b.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, -\frac{1}{2}; z\right) = -2e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{3/2} - 2z + 1$$

07.25.03.ab0c.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, -\frac{1}{2}; -z\right) = -2e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{3/2} + 2z + 1$$

07.25.03.ab0d.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, \frac{1}{2}; z\right) = e^z\sqrt{\pi}\sqrt{z}\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.ab0e.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, \frac{1}{2}; -z\right) = 1 - e^{-z}\sqrt{\pi}\sqrt{z}\operatorname{erfi}(\sqrt{z})$$

07.25.03.ab0f.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, 1; z\right) = e^z$$

07.25.03.ab0g.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.ab0h.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.ab0i.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, 2; z\right) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.ab0j.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3}{2z}$$

07.25.03.ab0k.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3}{2z} - \frac{3 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.ab0l.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, 3; z\right) = \frac{2 e^z}{z^2} - \frac{2(z+1)}{z^2}$$

07.25.03.ab0m.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5(2z+3)}{4 z^2}$$

07.25.03.ab0n.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5(2z-3)}{4 z^2} + \frac{15 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.ab0o.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, 4; z\right) = \frac{6 e^z}{z^3} - \frac{3(z^2 + 2z + 2)}{z^3}$$

07.25.03.ab0p.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{105 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7(4z^2 + 10z + 15)}{8 z^3}$$

07.25.03.ab0q.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7(4z^2 - 10z + 15)}{8 z^3} - \frac{105 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.ab0r.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, 5; z\right) = \frac{24 e^z}{z^4} - \frac{4(z^3 + 3z^2 + 6z + 6)}{z^4}$$

07.25.03.ab0s.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9(8z^3 + 28z^2 + 70z + 105)}{16 z^4}$$

07.25.03.ab0t.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{9(8z^3 - 28z^2 + 70z - 105)}{16 z^4} + \frac{945 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.ab0u.01

$${}_2F_2\left(-\frac{1}{2}, 1; -\frac{1}{2}, 6; z\right) = \frac{120 e^z}{z^5} - \frac{5(z^4 + 4z^3 + 12z^2 + 24z + 24)}{z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = \frac{1}{2}$

07.25.03.ab0v.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{1}{2}, 1; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ab0w.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{1}{2}, 1; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.0010.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{1}{2}, 2; z\right) = \frac{1}{3z} \left(e^z (2z + 1) - 2\sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} - 1 \right)$$

07.25.03.ab0x.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{1}{2}, 2; -z\right) = \frac{e^{-z} (2z - 1)}{3z} + \frac{2}{3} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + \frac{1}{3z}$$

07.25.03.0011.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{1}{2}, 3; z\right) = \frac{1}{15z^2} \left(e^z (8z^2 + 4z + 6) - 8\sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{5/2} - 2(5z + 3) \right)$$

07.25.03.ab0y.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{1}{2}, 3; -z\right) = \frac{2(5z - 3)}{15z^2} + \frac{2e^{-z}(4z^2 - 2z + 3)}{15z^2} + \frac{8}{15} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.ab0z.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{1}{2}, 4; z\right) = \frac{-35z^2 - 42z - 30}{35z^3} + \frac{2e^z(8z^3 + 4z^2 + 6z + 15)}{35z^3} - \frac{16}{35} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ab10.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{1}{2}, 4; -z\right) = \frac{35z^2 - 42z + 30}{35z^3} + \frac{2e^{-z}(8z^3 - 4z^2 + 6z - 15)}{35z^3} + \frac{16}{35} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.ab11.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{1}{2}, 5; z\right) = -\frac{4(35z^3 + 63z^2 + 90z + 70)}{105z^4} + \frac{8e^z(16z^4 + 8z^3 + 12z^2 + 30z + 105)}{315z^4} - \frac{128}{315} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ab12.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{1}{2}, 5; -z\right) = \frac{4(35z^3 - 63z^2 + 90z - 70)}{105z^4} + \frac{8e^{-z}(16z^4 - 8z^3 + 12z^2 - 30z + 105)}{315z^4} + \frac{128}{315} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.ab13.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{1}{2}, 6; z\right) = \frac{-385z^4 - 924z^3 - 1980z^2 - 3080z - 2520}{231z^5} + \frac{8e^z(32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945)}{693z^5} - \frac{256}{693} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ab14.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{1}{2}, 6; -z\right) = \frac{385 z^4 - 924 z^3 + 1980 z^2 - 3080 z + 2520}{231 z^5} + \frac{8 e^{-z} (32 z^5 - 16 z^4 + 24 z^3 - 60 z^2 + 210 z - 945)}{693 z^5} + \frac{256}{693} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = 1$

07.25.03.ab15.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, 1; z\right) = e^{z/2} (1-z) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.ab16.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (1-2z) \operatorname{erfi}(\sqrt{z})}{4 \sqrt{z}} + \frac{e^z}{2}$$

07.25.03.ab17.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{4 \sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.ab18.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, 2; z\right) = e^{z/2} \left(1 - \frac{2z}{3}\right) I_0\left(\frac{z}{2}\right) + e^{z/2} \left(\frac{2z}{3} - \frac{1}{3}\right) I_1\left(\frac{z}{2}\right)$$

07.25.03.ab19.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, \frac{5}{2}; z\right) = \frac{3 e^z (2z-1)}{16 z} - \frac{3 \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.ab1a.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (2z+1)}{16 z} + \frac{3 \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.ab1b.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, 3; z\right) = \frac{4 e^{z/2} (2z^2 - 2z - 1) I_1\left(\frac{z}{2}\right)}{15 z} - \frac{8}{15} e^{z/2} (z-2) I_0\left(\frac{z}{2}\right)$$

07.25.03.ab1c.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, \frac{7}{2}; z\right) = \frac{5 e^z (4z^2 - 4z - 3)}{64 z^2} - \frac{5 \sqrt{\pi} (8z^3 - 12z^2 - 6z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.ab1d.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (4z^2 + 4z - 3)}{64 z^2} + \frac{5 \sqrt{\pi} (8z^3 + 12z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.ab1e.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, 4; z\right) = \frac{4 e^{z/2} (4z^3 - 6z^2 - 5z - 4) I_1\left(\frac{z}{2}\right)}{35 z^2} - \frac{4 e^{z/2} (4z^2 - 10z - 1) I_0\left(\frac{z}{2}\right)}{35 z}$$

07.25.03.ab1f.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, \frac{9}{2}; z\right) = \frac{35 e^{-z} (8 z^3 - 12 z^2 - 14 z - 15)}{1024 z^3} - \frac{35 \sqrt{\pi} (16 z^4 - 32 z^3 - 24 z^2 - 24 z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.ab1g.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.ab1h.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, 5; z\right) = \frac{32 e^{z/2} (4 z^4 - 8 z^3 - 9 z^2 - 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3} - \frac{32 e^{z/2} (4 z^3 - 12 z^2 - 3 z - 3) I_0\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.ab1i.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, \frac{11}{2}; z\right) = \frac{63 e^{-z} (16 z^4 - 32 z^3 - 48 z^2 - 80 z - 105)}{4096 z^4} - \frac{63 \sqrt{\pi} (32 z^5 - 80 z^4 - 80 z^3 - 120 z^2 - 150 z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.ab1j.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16 z^4 + 32 z^3 - 48 z^2 + 80 z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.ab1k.01

$${}_2F_2\left(-\frac{1}{2}, 1; 1, 6; z\right) = \frac{32 e^{z/2} (8 z^5 - 20 z^4 - 28 z^3 - 51 z^2 - 84 z - 96) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (8 z^4 - 28 z^3 - 12 z^2 - 21 z - 24) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = \frac{3}{2}$

07.25.03.0012.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{3}{2}, 2; z\right) = \frac{1}{6z} \left(2 e^z (z - 1) + \sqrt{\pi} \sqrt{z} (3 - 2z) \operatorname{erfi}(\sqrt{z}) + 2 \right)$$

07.25.03.ab1l.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} (z + 1)}{3z} + \frac{\sqrt{\pi} (2z + 3) \operatorname{erf}(\sqrt{z})}{6 \sqrt{z}} - \frac{1}{3z}$$

07.25.03.0013.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{3}{2}, 3; z\right) = \frac{2}{15z^2} \left(\sqrt{\pi} (5 - 2z) \operatorname{erfi}(\sqrt{z}) z^{3/2} + 5z + e^z (2z^2 - 4z - 1) + 1 \right)$$

07.25.03.ab1m.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{3}{2}, 3; -z\right) = -\frac{2(5z - 1)}{15z^2} + \frac{2e^{-z}(2z^2 + 4z - 1)}{15z^2} + \frac{2\sqrt{\pi}(2z + 5)\operatorname{erf}(\sqrt{z})}{15\sqrt{z}}$$

07.25.03.ab1n.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{3}{2}, 4; z\right) = \frac{35z^2 + 14z + 6}{35z^3} + \frac{2e^z(4z^3 - 12z^2 - 4z - 3)}{35z^3} - \frac{4\sqrt{\pi}(2z - 7)\operatorname{erfi}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.ab1o.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{3}{2}, 4; -z\right) = \frac{-35z^2 + 14z - 6}{35z^3} + \frac{2e^{-z}(4z^3 + 12z^2 - 4z + 3)}{35z^3} + \frac{4\sqrt{\pi}(2z + 7)\operatorname{erf}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.ab1p.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{3}{2}, 5; z\right) = \frac{4(35z^3 + 21z^2 + 18z + 10)}{105z^4} + \frac{8e^z(8z^4 - 32z^3 - 12z^2 - 12z - 15)}{315z^4} - \frac{32\sqrt{\pi}(2z - 9)\operatorname{erfi}(\sqrt{z})}{315\sqrt{z}}$$

07.25.03.ab1q.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{3}{2}, 5; -z\right) = -\frac{4(35z^3 - 21z^2 + 18z - 10)}{105z^4} + \frac{8e^{-z}(8z^4 + 32z^3 - 12z^2 + 12z - 15)}{315z^4} + \frac{32\sqrt{\pi}(2z + 9)\operatorname{erf}(\sqrt{z})}{315\sqrt{z}}$$

07.25.03.ab1r.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{3}{2}, 6; z\right) = \frac{385z^4 + 308z^3 + 396z^2 + 440z + 280}{231z^5} + \frac{8e^z(16z^5 - 80z^4 - 32z^3 - 36z^2 - 60z - 105)}{693z^5} - \frac{64\sqrt{\pi}(2z - 11)\operatorname{erfi}(\sqrt{z})}{693\sqrt{z}}$$

07.25.03.ab1s.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{3}{2}, 6; -z\right) = \frac{-385z^4 + 308z^3 - 396z^2 + 440z - 280}{231z^5} + \frac{8e^{-z}(16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105)}{693z^5} + \frac{64\sqrt{\pi}(2z + 11)\operatorname{erf}(\sqrt{z})}{693\sqrt{z}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = 2$

07.25.03.0014.01

$${}_2F_2\left(-\frac{1}{2}, 1; 2, 2; z\right) = \frac{1}{9z} \left(4e^{z/2}(z-2)zI_1\left(\frac{z}{2}\right) - 2e^{z/2}(2z^2 - 6z + 3)I_0\left(\frac{z}{2}\right) + 6 \right)$$

07.25.03.0015.01

$${}_2F_2\left(-\frac{1}{2}, 1; 2, \frac{5}{2}; z\right) = \frac{1}{16z^{3/2}} \left(2\sqrt{z}(e^z(2z - 5) + 8) + \sqrt{\pi}(-4z^2 + 12z - 3)\operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ab1t.01

$${}_2F_2\left(-\frac{1}{2}, 1; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(2z + 5)}{8z} + \frac{\sqrt{\pi}(4z^2 + 12z + 3)\operatorname{erf}(\sqrt{z})}{16z^{3/2}} - \frac{1}{z}$$

07.25.03.0016.01

$${}_2F_2\left(-\frac{1}{2}, 1; 2, 3; z\right) = \frac{4}{45z} \left(e^{z/2}(4z^2 - 14z + 3)I_1\left(\frac{z}{2}\right) - e^{z/2}(4z^2 - 18z + 15)I_0\left(\frac{z}{2}\right) + 15 \right)$$

07.25.03.ab1u.01

$${}_2F_2\left(-\frac{1}{2}, 1; 2, \frac{7}{2}; z\right) = \frac{5 e^z (4 z^2 - 16 z + 3)}{96 z^2} - \frac{5 \sqrt{\pi} (8 z^3 - 36 z^2 + 18 z + 3) \operatorname{erfi}(\sqrt{z})}{192 z^{5/2}} + \frac{5}{3 z}$$

07.25.03.ab1v.01

$${}_2F_2\left(-\frac{1}{2}, 1; 2, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (4 z^2 + 16 z + 3)}{96 z^2} + \frac{5 \sqrt{\pi} (8 z^3 + 36 z^2 + 18 z - 3) \operatorname{erf}(\sqrt{z})}{192 z^{5/2}} - \frac{5}{3 z}$$

07.25.03.ab1w.01

$${}_2F_2\left(-\frac{1}{2}, 1; 2, 4; z\right) = -\frac{8 e^{z/2} (4 z^2 - 24 z + 27) I_0\left(\frac{z}{2}\right)}{105 z} + \frac{8 e^{z/2} (4 z^3 - 20 z^2 + 9 z + 3) I_1\left(\frac{z}{2}\right)}{105 z^2} + \frac{2}{z}$$

07.25.03.ab1x.01

$${}_2F_2\left(-\frac{1}{2}, 1; 2, \frac{9}{2}; z\right) = \frac{35 e^z (8 z^3 - 44 z^2 + 18 z + 9)}{1536 z^3} - \frac{35 \sqrt{\pi} (16 z^4 - 96 z^3 + 72 z^2 + 24 z + 9) \operatorname{erfi}(\sqrt{z})}{3072 z^{7/2}} + \frac{7}{3 z}$$

07.25.03.ab1y.01

$${}_2F_2\left(-\frac{1}{2}, 1; 2, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (8 z^3 + 44 z^2 + 18 z - 9)}{1536 z^3} + \frac{35 \sqrt{\pi} (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9) \operatorname{erf}(\sqrt{z})}{3072 z^{7/2}} - \frac{7}{3 z}$$

07.25.03.ab1z.01

$${}_2F_2\left(-\frac{1}{2}, 1; 2, 5; z\right) = -\frac{32 e^{z/2} (8 z^3 - 60 z^2 + 84 z + 3) I_0\left(\frac{z}{2}\right)}{945 z^2} + \frac{32 e^{z/2} (8 z^4 - 52 z^3 + 36 z^2 + 21 z + 12) I_1\left(\frac{z}{2}\right)}{945 z^3} + \frac{8}{3 z}$$

07.25.03.ab20.01

$${}_2F_2\left(-\frac{1}{2}, 1; 2, \frac{11}{2}; z\right) = \frac{21 e^z (16 z^4 - 112 z^3 + 72 z^2 + 60 z + 45)}{2048 z^4} - \frac{21 \sqrt{\pi} (32 z^5 - 240 z^4 + 240 z^3 + 120 z^2 + 90 z + 45) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} + \frac{3}{z}$$

07.25.03.ab21.01

$${}_2F_2\left(-\frac{1}{2}, 1; 2, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (16 z^4 + 112 z^3 + 72 z^2 - 60 z + 45)}{2048 z^4} + \frac{21 \sqrt{\pi} (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}} - \frac{3}{z}$$

07.25.03.ab22.01

$${}_2F_2\left(-\frac{1}{2}, 1; 2, 6; z\right) = -\frac{64 e^{z/2} (8 z^4 - 72 z^3 + 120 z^2 + 12 z + 9) I_0\left(\frac{z}{2}\right)}{2079 z^3} + \frac{256 e^{z/2} (2 z^5 - 16 z^4 + 15 z^3 + 12 z^2 + 12 z + 9) I_1\left(\frac{z}{2}\right)}{2079 z^4} + \frac{10}{3 z}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = \frac{5}{2}$

07.25.03.0017.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{5}{2}, 3; z\right) = \frac{1}{20 z^2} \left(40 z + \sqrt{\pi} (-4 z^2 + 20 z - 15) \sqrt{z} \operatorname{erfi}(\sqrt{z}) + 2 e^z (2 z^2 - 9 z + 4) - 8\right)$$

07.25.03.ab23.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{5}{2}, 3; -z\right) = -\frac{2(5z+1)}{5z^2} + \frac{e^{-z}(2z^2+9z+4)}{10z^2} + \frac{\sqrt{\pi}(4z^2+20z+15)\operatorname{erf}(\sqrt{z})}{20z^{3/2}}$$

07.25.03.ab24.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{5}{2}, 4; z\right) = \frac{3(35z^2-14z-2)}{35z^3} + \frac{3e^z(2z^3-13z^2+12z+2)}{35z^3} - \frac{3\sqrt{\pi}(4z^2-28z+35)\operatorname{erfi}(\sqrt{z})}{70z^{3/2}}$$

07.25.03.ab25.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{5}{2}, 4; -z\right) = -\frac{3(35z^2+14z-2)}{35z^3} + \frac{3e^{-z}(2z^3+13z^2+12z-2)}{35z^3} + \frac{3\sqrt{\pi}(4z^2+28z+35)\operatorname{erf}(\sqrt{z})}{70z^{3/2}}$$

07.25.03.ab26.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{5}{2}, 5; z\right) = \frac{4(35z^3-21z^2-6z-2)}{35z^4} + \frac{8e^z(2z^4-17z^3+24z^2+6z+3)}{105z^4} - \frac{4\sqrt{\pi}(4z^2-36z+63)\operatorname{erfi}(\sqrt{z})}{105z^{3/2}}$$

07.25.03.ab27.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{5}{2}, 5; -z\right) = -\frac{4(35z^3+21z^2-6z+2)}{35z^4} + \frac{8e^{-z}(2z^4+17z^3+24z^2-6z+3)}{105z^4} + \frac{4\sqrt{\pi}(4z^2+36z+63)\operatorname{erf}(\sqrt{z})}{105z^{3/2}}$$

07.25.03.ab28.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{5}{2}, 6; z\right) = \frac{385z^4-308z^3-132z^2-88z-40}{77z^5} + \frac{8e^z(4z^5-42z^4+80z^3+24z^2+18z+15)}{231z^5} - \frac{8\sqrt{\pi}(4z^2-44z+99)\operatorname{erfi}(\sqrt{z})}{231z^{3/2}}$$

07.25.03.ab29.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{5}{2}, 6; -z\right) = \frac{-385z^4-308z^3+132z^2-88z+40}{77z^5} + \frac{8e^{-z}(4z^5+42z^4+80z^3-24z^2+18z-15)}{231z^5} + \frac{8\sqrt{\pi}(4z^2+44z+99)\operatorname{erf}(\sqrt{z})}{231z^{3/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = 3$

07.25.03.0018.01

$${}_2F_2\left(-\frac{1}{2}, 1; 3, 3; z\right) = -\frac{8}{225z^2} \left(2e^{z/2}(4z^3-28z^2+45z-15)I_0\left(\frac{z}{2}\right) - 2e^{z/2}(4z^2-24z+23)I_1\left(\frac{z}{2}\right) - z - 75z + 30 \right)$$

07.25.03.ab2a.01

$${}_2F_2\left(-\frac{1}{2}, 1; 3, \frac{7}{2}; z\right) = \frac{2(5z-3)}{3z^2} + \frac{e^z(4z^2-28z+33)}{24z^2} + \frac{\sqrt{\pi}(-8z^3+60z^2-90z+15)\operatorname{erfi}(\sqrt{z})}{48z^{5/2}}$$

07.25.03.ab2b.01

$${}_2F_2\left(-\frac{1}{2}, 1; 3, \frac{7}{2}; -z\right) = -\frac{2(5z+3)}{3z^2} + \frac{e^{-z}(4z^2+28z+33)}{24z^2} + \frac{\sqrt{\pi}(8z^3+60z^2+90z+15)\operatorname{erf}(\sqrt{z})}{48z^{5/2}}$$

07.25.03.ab2c.01

$${}_2F_2\left(-\frac{1}{2}, 1; 3, 4; z\right) = \frac{4(5z-4)}{5z^2} - \frac{16e^{z/2}(8z^3-76z^2+180z-105)I_0\left(\frac{z}{2}\right)}{525z^2} + \frac{16e^{z/2}(8z^3-68z^2+116z-15)I_1\left(\frac{z}{2}\right)}{525z^2}$$

07.25.03.ab2d.01

$${}_2F_2\left(-\frac{1}{2}, 1; 3, \frac{9}{2}; z\right) = \frac{14(z-1)}{3z^2} + \frac{7e^z(8z^3-76z^2+146z-15)}{384z^3} - \frac{7\sqrt{\pi}(16z^4-160z^3+360z^2-120z-15)\operatorname{erfi}(\sqrt{z})}{768z^{7/2}}$$

07.25.03.ab2e.01

$${}_2F_2\left(-\frac{1}{2}, 1; 3, \frac{9}{2}; -z\right) = -\frac{14(z+1)}{3z^2} + \frac{7e^{-z}(8z^3+76z^2+146z+15)}{384z^3} + \frac{7\sqrt{\pi}(16z^4+160z^3+360z^2+120z-15)\operatorname{erf}(\sqrt{z})}{768z^{7/2}}$$

07.25.03.ab2f.01

$${}_2F_2\left(-\frac{1}{2}, 1; 3, 5; z\right) = \frac{16(5z-6)}{15z^2} - \frac{512e^{z/2}(2z^3-24z^2+75z-60)I_0\left(\frac{z}{2}\right)}{4725z^2} + \frac{128e^{z/2}(8z^4-88z^3+216z^2-60z-15)I_1\left(\frac{z}{2}\right)}{4725z^3}$$

07.25.03.ab2g.01

$${}_2F_2\left(-\frac{1}{2}, 1; 3, \frac{11}{2}; z\right) = \frac{6(5z-7)}{5z^2} + \frac{21e^z(16z^4-192z^3+512z^2-120z-45)}{2560z^4} - \frac{21\sqrt{\pi}(32z^5-400z^4+1200z^3-600z^2-150z-45)\operatorname{erfi}(\sqrt{z})}{5120z^{9/2}}$$

07.25.03.ab2h.01

$${}_2F_2\left(-\frac{1}{2}, 1; 3, \frac{11}{2}; -z\right) = -\frac{6(5z+7)}{5z^2} + \frac{21e^{-z}(16z^4+192z^3+512z^2+120z-45)}{2560z^4} + \frac{21\sqrt{\pi}(32z^5+400z^4+1200z^3+600z^2-150z+45)\operatorname{erf}(\sqrt{z})}{5120z^{9/2}}$$

07.25.03.ab2i.01

$${}_2F_2\left(-\frac{1}{2}, 1; 3, 6; z\right) = \frac{4(5z-8)}{3z^2} - \frac{128e^{z/2}(16z^4-232z^3+900z^2-900z-15)I_0\left(\frac{z}{2}\right)}{10395z^3} + \frac{128e^{z/2}(16z^5-216z^4+692z^3-300z^2-135z-60)I_1\left(\frac{z}{2}\right)}{10395z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = \frac{7}{2}$

07.25.03.ab2j.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{7}{2}, 4; z\right) = \frac{35z^2-42z+6}{7z^3} + \frac{e^z(4z^3-40z^2+87z-24)}{28z^3} + \frac{\sqrt{\pi}(-8z^3+84z^2-210z+105)\operatorname{erfi}(\sqrt{z})}{56z^{5/2}}$$

07.25.03.ab2k.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{7}{2}, 4; -z\right) = \frac{-35z^2-42z-6}{7z^3} + \frac{e^{-z}(4z^3+40z^2+87z+24)}{28z^3} + \frac{\sqrt{\pi}(8z^3+84z^2+210z+105)\operatorname{erf}(\sqrt{z})}{56z^{5/2}}$$

07.25.03.ab2l.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{7}{2}, 5; z\right) = \frac{4(35z^3 - 63z^2 + 18z + 2)}{21z^4} + \frac{2e^z(4z^4 - 52z^3 + 165z^2 - 96z - 12)}{63z^4} + \frac{\sqrt{\pi}(-8z^3 + 108z^2 - 378z + 315)\operatorname{erfi}(\sqrt{z})}{63z^{5/2}}$$

07.25.03.ab2m.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{7}{2}, 5; -z\right) = \frac{4(35z^3 + 63z^2 + 18z - 2)}{21z^4} + \frac{2e^{-z}(4z^4 + 52z^3 + 165z^2 + 96z - 12)}{63z^4} + \frac{\sqrt{\pi}(8z^3 + 108z^2 + 378z + 315)\operatorname{erf}(\sqrt{z})}{63z^{5/2}}$$

07.25.03.ab2n.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{7}{2}, 6; z\right) = \frac{5(385z^4 - 924z^3 + 396z^2 + 88z + 24)}{231z^5} + \frac{20e^z(4z^5 - 64z^4 + 267z^3 - 240z^2 - 48z - 18)}{693z^5} - \frac{10\sqrt{\pi}(8z^3 - 132z^2 + 594z - 693)\operatorname{erfi}(\sqrt{z})}{693z^{5/2}}$$

07.25.03.ab2o.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{7}{2}, 6; -z\right) = -\frac{5(385z^4 + 924z^3 + 396z^2 - 88z + 24)}{231z^5} + \frac{20e^{-z}(4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18)}{693z^5} + \frac{10\sqrt{\pi}(8z^3 + 132z^2 + 594z + 693)\operatorname{erf}(\sqrt{z})}{693z^{5/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = 4$

07.25.03.ab2p.01

$${}_2F_2\left(-\frac{1}{2}, 1; 4, 4; z\right) = \frac{6(35z^2 - 56z + 16)}{35z^3} - \frac{32e^{z/2}(8z^4 - 104z^3 + 376z^2 - 420z + 105)I_0\left(\frac{z}{2}\right)}{1225z^3} + \frac{128e^{z/2}(2z^3 - 24z^2 + 71z - 44)I_1\left(\frac{z}{2}\right)}{1225z^2}$$

07.25.03.ab2q.01

$${}_2F_2\left(-\frac{1}{2}, 1; 4, \frac{9}{2}; z\right) = \frac{7z^2 - 14z + 6}{z^3} + \frac{e^z(8z^3 - 108z^2 + 370z - 279)}{64z^3} + \frac{\sqrt{\pi}(-16z^4 + 224z^3 - 840z^2 + 840z - 105)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.ab2r.01

$${}_2F_2\left(-\frac{1}{2}, 1; 4, \frac{9}{2}; -z\right) = \frac{-7z^2 - 14z - 6}{z^3} + \frac{e^{-z}(8z^3 + 108z^2 + 370z + 279)}{64z^3} + \frac{\sqrt{\pi}(16z^4 + 224z^3 + 840z^2 + 840z + 105)\operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.ab2s.01

$${}_2F_2\left(-\frac{1}{2}, 1; 4, 5; z\right) = \frac{8(35z^2 - 84z + 48)}{35z^3} - \frac{128e^{z/2}(16z^4 - 264z^3 + 1284z^2 - 2100z + 945)I_0\left(\frac{z}{2}\right)}{11025z^3} + \frac{128e^{z/2}(16z^4 - 248z^3 + 1044z^2 - 1164z + 105)I_1\left(\frac{z}{2}\right)}{11025z^3}$$

07.25.03.ab2t.01

$${}_2F_2\left(-\frac{1}{2}, 1; 4, \frac{11}{2}; z\right) = \frac{9(5z^2 - 14z + 10)}{5z^3} + \frac{9e^z(16z^4 - 272z^3 + 1272z^2 - 1580z + 105)}{1280z^4} - \frac{9\sqrt{\pi}(32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105)\operatorname{erfi}(\sqrt{z})}{2560z^{9/2}}$$

07.25.03.ab2u.01

$${}_2F_2\left(-\frac{1}{2}, 1; 4, \frac{11}{2}; -z\right) = -\frac{9(5z^2 + 14z + 10)}{5z^3} + \frac{9e^{-z}(16z^4 + 272z^3 + 1272z^2 + 1580z + 105)}{1280z^4} + \frac{9\sqrt{\pi}(32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105)\operatorname{erf}(\sqrt{z})}{2560z^{9/2}}$$

07.25.03.ab2v.01

$${}_2F_2\left(-\frac{1}{2}, 1; 4, 6; z\right) = \frac{2(35z^2 - 112z + 96)}{7z^3} - \frac{256e^{z/2}(16z^4 - 320z^3 + 1956z^2 - 4200z + 2625)I_0\left(\frac{z}{2}\right)}{24255z^3} + \frac{256e^{z/2}(16z^5 - 304z^4 + 1660z^3 - 2676z^2 + 525z + 105)I_1\left(\frac{z}{2}\right)}{24255z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = \frac{9}{2}$

07.25.03.ab2w.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{9}{2}, 5; z\right) = \frac{4(7z^3 - 21z^2 + 18z - 2)}{3z^4} + \frac{e^z(8z^4 - 140z^3 + 690z^2 - 975z + 192)}{72z^4} + \frac{\sqrt{\pi}(-16z^4 + 288z^3 - 1512z^2 + 2520z - 945)\operatorname{erfi}(\sqrt{z})}{144z^{7/2}}$$

07.25.03.ab2x.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{9}{2}, 5; -z\right) = -\frac{4(7z^3 + 21z^2 + 18z + 2)}{3z^4} + \frac{e^{-z}(8z^4 + 140z^3 + 690z^2 + 975z + 192)}{72z^4} + \frac{\sqrt{\pi}(16z^4 + 288z^3 + 1512z^2 + 2520z + 945)\operatorname{erf}(\sqrt{z})}{144z^{7/2}}$$

07.25.03.ab2y.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{9}{2}, 6; z\right) = \frac{5(77z^4 - 308z^3 + 396z^2 - 88z - 8)}{33z^5} + \frac{5e^z(8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96)}{396z^5} - \frac{5\sqrt{\pi}(16z^4 - 352z^3 + 2376z^2 - 5544z + 3465)\operatorname{erfi}(\sqrt{z})}{792z^{7/2}}$$

07.25.03.ab2z.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{9}{2}, 6; -z\right) = -\frac{5(77z^4 + 308z^3 + 396z^2 + 88z - 8)}{33z^5} + \frac{5e^{-z}(8z^5 + 172z^4 + 1106z^3 + 2295z^2 + 960z - 96)}{396z^5} + \frac{5\sqrt{\pi}(16z^4 + 352z^3 + 2376z^2 + 5544z + 3465)\operatorname{erf}(\sqrt{z})}{792z^{7/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = 5$

07.25.03.ab30.01

$${}_2F_2\left(-\frac{1}{2}, 1; 5, 5; z\right) = \frac{32(35z^3 - 126z^2 + 144z - 32)}{105z^4} - \frac{1024e^{z/2}(16z^5 - 336z^4 + 2220z^3 - 5484z^2 + 4725z - 945)I_0\left(\frac{z}{2}\right)}{99225z^4} + \frac{1024e^{z/2}(16z^4 - 320z^3 + 1908z^2 - 3720z + 1689)I_1\left(\frac{z}{2}\right)}{99225z^3}$$

07.25.03.ab31.01

$${}_2F_2\left(-\frac{1}{2}, 1; 5, \frac{11}{2}; z\right) = \frac{12(5z^3 - 21z^2 + 30z - 10)}{5z^4} + \frac{e^z(16z^4 - 352z^3 + 2352z^2 - 5280z + 2895)}{160z^4} + \frac{\sqrt{\pi}(-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945)\operatorname{erfi}(\sqrt{z})}{320z^{9/2}}$$

07.25.03.ab32.01

$${}_2F_2\left(-\frac{1}{2}, 1; 5, \frac{11}{2}; -z\right) = -\frac{12(5z^3 + 21z^2 + 30z + 10)}{5z^4} + \frac{e^{-z}(16z^4 + 352z^3 + 2352z^2 + 5280z + 2895)}{160z^4} + \frac{\sqrt{\pi}(32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945)\operatorname{erf}(\sqrt{z})}{320z^{9/2}}$$

07.25.03.ab33.01

$${}_2F_2\left(-\frac{1}{2}, 1; 5, 6; z\right) = \frac{8(35z^3 - 168z^2 + 288z - 128)}{21z^4} - \frac{1024e^{z/2}(32z^5 - 816z^4 + 6816z^3 - 22524z^2 + 28350z - 10395)I_0\left(\frac{z}{2}\right)}{218295z^4} + \frac{1024e^{z/2}(32z^5 - 784z^4 + 6048z^3 - 16836z^2 + 13854z - 945)I_1\left(\frac{z}{2}\right)}{218295z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = \frac{11}{2}$

07.25.03.ab34.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{11}{2}, 6; z\right) = \frac{3(55z^4 - 308z^3 + 660z^2 - 440z + 40)}{11z^5} + \frac{e^z(16z^5 - 432z^4 + 3752z^3 - 12180z^2 + 12645z - 1920)}{176z^5} + \frac{\sqrt{\pi}(-32z^5 + 880z^4 - 7920z^3 + 27720z^2 - 34650z + 10395)\operatorname{erfi}(\sqrt{z})}{352z^{9/2}}$$

07.25.03.ab35.01

$${}_2F_2\left(-\frac{1}{2}, 1; \frac{11}{2}, 6; -z\right) = -\frac{3(55z^4 + 308z^3 + 660z^2 + 440z + 40)}{11z^5} + \frac{e^{-z}(16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920)}{176z^5} + \frac{\sqrt{\pi}(32z^5 + 880z^4 + 7920z^3 + 27720z^2 + 34650z + 10395)\operatorname{erf}(\sqrt{z})}{352z^{9/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 1$, $b_1 = 6$

07.25.03.ab36.01

$${}_2F_2\left(-\frac{1}{2}, 1; 6, 6; z\right) = \frac{10(385z^4 - 2464z^3 + 6336z^2 - 5632z + 1024)}{231z^5} - \frac{2048e^{z/2}(32z^6 - 992z^5 + 10512z^4 - 46944z^3 + 88674z^2 - 62370z + 10395)I_0\left(\frac{z}{2}\right)}{480249z^5} + \frac{4096e^{z/2}(16z^5 - 480z^4 + 4784z^3 - 18912z^2 + 27387z - 9762)I_1\left(\frac{z}{2}\right)}{480249z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.ab37.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{1}{108056025} (e^z(4096z^{12} + 126976z^{11} + 1314816z^{10} + 5483520z^9 + 8736000z^8 + 4032000z^7 + 1008000z^5 - 4914000z^4 + 19278000z^3 - 56624400z^2 + 110735100z - 108056025))$$

07.25.03.ab38.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9823275} (e^z(2048z^{11} + 52224z^{10} + 422400z^9 + 1263360z^8 + 1209600z^7 + 201600z^6 - 100800z^5 + 453600z^4 - 1776600z^3 + 5197500z^2 - 10120950z + 9823275))$$

07.25.03.ab39.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{1}{1091475} (e^z(1024z^{10} + 20480z^9 + 119040z^8 + 215040z^7 + 67200z^6 - 50400z^4 + 201600z^3 - 585900z^2 + 1134000z - 1091475))$$

07.25.03.ab3a.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{155\,925} e^z (512 z^9 + 7424 z^8 + 26\,112 z^7 + 16\,128 z^6 - 6720 z^5 + 10\,080 z^4 - 30\,240 z^3 + 85\,680 z^2 - 164\,430 z + 155\,925)$$

07.25.03.ab3b.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{e^z (256 z^8 + 2304 z^7 + 2688 z^6 - 1344 z^5 + 5040 z^3 - 17\,640 z^2 + 34\,020 z - 31\,185)}{31\,185}$$

07.25.03.ab3c.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13\,230 z + 10\,395)}{10\,395}$$

07.25.03.ab3d.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = -\frac{e^z (64 z^6 - 128 z^5 + 240 z^4 - 2100 z^2 + 7560 z - 10\,395)}{10\,395}$$

07.25.03.ab3e.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (-32 z^6 + 128 z^5 - 432 z^4 + 936 z^3 - 474 z^2 - 3780 z + 10\,395) I_0\left(\frac{z}{2}\right) - 2 e^{z/2} (16 z^6 - 80 z^5 + 304 z^4 - 828 z^3 + 1347 z^2 - 633 z) I_1\left(\frac{z}{2}\right)}{10\,395}$$

07.25.03.ab3f.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{e^z (32 z^5 - 240 z^4 + 1200 z^3 - 4200 z^2 + 9450 z - 10\,395)}{10\,395}$$

07.25.03.ab3g.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (-32 z^5 + 304 z^4 - 1776 z^3 + 6876 z^2 - 15\,750 z + 10\,395) I_0\left(\frac{z}{2}\right) + e^{z/2} (-32 z^5 + 336 z^4 - 2128 z^3 + 9204 z^2 - 26\,454 z + 45\,045) I_1\left(\frac{z}{2}\right)}{10\,395}$$

07.25.03.ab3h.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16 z^5 + 208 z^4 - 1536 z^3 + 7476 z^2 - 23\,415 z + 40\,320)}{3465 z} - \frac{64 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{3/2}}$$

07.25.03.ab3i.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-16 z^5 - 208 z^4 - 1536 z^3 - 7476 z^2 - 23\,415 z - 40\,320)}{3465 z} + \frac{64 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{3/2}}$$

07.25.03.ab3j.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, 3; z\right) = -\frac{4 e^{z/2} (16 z^4 - 240 z^3 + 1956 z^2 - 10\,080 z + 31\,185) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16 z^5 - 256 z^4 + 2220 z^3 - 12\,444 z^2 + 45\,045 z - 135\,135) I_1\left(\frac{z}{2}\right)}{10\,395 z}$$

07.25.03.ab3k.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (-8z^5 + 148z^4 - 1434z^3 + 8757z^2 - 33600z + 80640)}{693z^2} - \frac{160\sqrt{\pi}(z+4)\operatorname{erfi}(\sqrt{z})}{11z^{5/2}}$$

07.25.03.ab3l.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (8z^5 + 148z^4 + 1434z^3 + 8757z^2 + 33600z + 80640)}{693z^2} + \frac{160\sqrt{\pi}(z-4)\operatorname{erf}(\sqrt{z})}{11z^{5/2}}$$

07.25.03.ab3m.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, 4; z\right) = -\frac{4e^{z/2}(16z^4 - 328z^3 + 3420z^2 - 21780z + 109395)I_0\left(\frac{z}{2}\right)}{3465z} - \frac{4e^{z/2}(16z^5 - 344z^4 + 3772z^3 - 25740z^2 + 83655z - 437580)I_1\left(\frac{z}{2}\right)}{3465z^2}$$

07.25.03.ab3n.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (-4z^5 + 96z^4 - 1149z^3 + 8400z^2 - 35280z + 113400)}{99z^3} - \frac{140\sqrt{\pi}(2z^2 + 16z + 45)\operatorname{erfi}(\sqrt{z})}{11z^{7/2}}$$

07.25.03.ab3o.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-4z^5 - 96z^4 - 1149z^3 - 8400z^2 - 35280z - 113400)}{99z^3} + \frac{140\sqrt{\pi}(2z^2 - 16z + 45)\operatorname{erf}(\sqrt{z})}{11z^{7/2}}$$

07.25.03.ab3p.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, 5; z\right) = -\frac{32e^{z/2}(8z^4 - 208z^3 + 2640z^2 - 14586z + 138567)I_0\left(\frac{z}{2}\right)}{3465z^2} - \frac{64e^{z/2}(4z^5 - 108z^4 + 1430z^3 - 14157z^2 + 29172z - 277134)I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.ab3q.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (-2z^5 + 59z^4 - 840z^3 + 7560z^2 - 31500z + 132300)}{11z^4} - \frac{210\sqrt{\pi}(2z^3 + 24z^2 + 135z + 315)\operatorname{erfi}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.ab3r.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (2z^5 + 59z^4 + 840z^3 + 7560z^2 + 31500z + 132300)}{11z^4} + \frac{210\sqrt{\pi}(2z^3 - 24z^2 + 135z - 315)\operatorname{erf}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.ab3s.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, 6; z\right) = -\frac{32e^{z/2}(8z^4 - 252z^3 + 5304z^2 - 12597z + 302328)I_0\left(\frac{z}{2}\right)}{693z^3} - \frac{32e^{z/2}(8z^5 - 260z^4 + 2496z^3 - 59007z^2 + 50388z - 1209312)I_1\left(\frac{z}{2}\right)}{693z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.ab3t.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \\
 & \frac{1}{893025} \left(e^z (1024 z^{10} + 21504 z^9 + 135936 z^8 + 291840 z^7 + 167040 z^6 + 17280 z^5 - 41760 z^4 + 164160 z^3 - \right. \\
 & \left. 477900 z^2 + 926100 z - 893025) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ab3u.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{99225} e^z (512 z^9 + 8448 z^8 + 38400 z^7 + 49920 z^6 + 8640 z^5 + 4320 z^4 - 18720 z^3 + 54000 z^2 - 103950 z + 99225)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ab3v.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (256 z^8 + 3072 z^7 + 8448 z^6 + 3840 z^5 - 1440 z^4 + 2880 z^3 - 7920 z^2 + 15120 z - 14175)}{14175}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ab3w.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 960 z^6 + 864 z^5 - 240 z^4 - 360 z^3 + 1620 z^2 - 3150 z + 2835)}{2835}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ab3x.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ab3y.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (32 z^5 - 48 z^4 + 48 z^3 + 120 z^2 - 630 z + 945)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ab3z.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, 1; z\right) = \\
 & \frac{1}{945} e^{z/2} (16 z^5 - 48 z^4 + 108 z^3 - 84 z^2 - 315 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^5 - 64 z^4 + 180 z^3 - 312 z^2 + 201 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ab40.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (16 z^4 - 96 z^3 + 360 z^2 - 840 z + 945)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ab41.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, 2; z\right) = \\
 & \frac{1}{945} e^{z/2} (16 z^4 - 120 z^3 + 516 z^2 - 1260 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^4 - 136 z^3 + 660 z^2 - 2004 z + 3465) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ab42.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (8 z^4 - 84 z^3 + 474 z^2 - 1605 z + 2880)}{315 z} - \frac{32 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7 z^{3/2}}
 \end{aligned}$$

07.25.03.ab43.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(-8z^4 - 84z^3 - 474z^2 - 1605z - 2880)}{315z} + \frac{32\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7z^{3/2}}$$

07.25.03.ab44.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, 3; z\right) = \frac{16}{945} e^{z/2} (2z^3 - 24z^2 + 147z - 504) I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2} (8z^4 - 104z^3 + 696z^2 - 2772z + 9009) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.ab45.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (4z^4 - 60z^3 + 447z^2 - 1920z + 5040)}{63z^2} - \frac{40\sqrt{\pi} (2z + 7) \operatorname{erfi}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.ab46.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (4z^4 + 60z^3 + 447z^2 + 1920z + 5040)}{63z^2} + \frac{40\sqrt{\pi} (2z - 7) \operatorname{erf}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.ab47.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, 4; z\right) = \frac{4e^{z/2} (8z^3 - 132z^2 + 1044z - 6435) I_0\left(\frac{z}{2}\right)}{315z} + \frac{4e^{z/2} (8z^4 - 140z^3 + 1188z^2 - 3861z + 25740) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.ab48.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (2z^4 - 39z^3 + 360z^2 - 1680z + 6300)}{9z^3} - \frac{10\sqrt{\pi} (2z^2 + 14z + 35) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ab49.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-2z^4 - 39z^3 - 360z^2 - 1680z - 6300)}{9z^3} + \frac{10\sqrt{\pi} (2z^2 - 14z + 35) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ab4a.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, 5; z\right) = \frac{32e^{z/2} (4z^3 - 84z^2 + 429z - 7293) I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{32e^{z/2} (4z^4 - 88z^3 + 1287z^2 - 1716z + 29172) I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.ab4b.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (z^4 - 24z^3 + 294z^2 - 1260z + 6615)}{z^4} - \frac{15\sqrt{\pi} (4z^3 + 42z^2 + 210z + 441) \operatorname{erfi}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.ab4c.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (z^4 + 24z^3 + 294z^2 + 1260z + 6615)}{z^4} + \frac{15\sqrt{\pi} (4z^3 - 42z^2 + 210z - 441) \operatorname{erf}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.ab4d.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, 6; z\right) = \frac{32e^{z/2} (28z^3 - 1482z^2 - 663z - 100776) I_0\left(\frac{z}{2}\right)}{441z^3} + \frac{32e^{z/2} (28z^4 + 26z^3 + 18525z^2 + 2652z + 403104) I_1\left(\frac{z}{2}\right)}{441z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.ab4e.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = -\frac{e^z (256 z^8 + 3328 z^7 + 10880 z^6 + 8640 z^5 + 2160 z^3 - 6120 z^2 + 11700 z - 11025)}{11025}$$

07.25.03.ab4f.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 1216 z^6 + 2400 z^5 + 720 z^4 - 360 z^3 + 900 z^2 - 1710 z + 1575)}{1575}$$

07.25.03.ab4g.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = -\frac{1}{315} e^z (64 z^6 + 384 z^5 + 240 z^4 - 180 z^2 + 360 z - 315)$$

07.25.03.ab4h.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} e^z (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105)$$

07.25.03.ab4i.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = -\frac{1}{105} e^z (16 z^4 - 16 z^3 + 60 z - 105)$$

07.25.03.ab4j.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (-8 z^4 + 16 z^3 - 16 z^2 - 30 z + 105) I_0\left(\frac{z}{2}\right) - \frac{2}{105} e^{z/2} (4 z^4 - 12 z^3 + 22 z^2 - 17 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ab4k.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = -\frac{1}{105} e^z (8 z^3 - 36 z^2 + 90 z - 105)$$

07.25.03.ab4l.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-8 z^3 + 44 z^2 - 120 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-8 z^3 + 52 z^2 - 176 z + 315) I_1\left(\frac{z}{2}\right)$$

07.25.03.ab4m.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (-4 z^3 + 32 z^2 - 125 z + 240)}{35 z} - \frac{24 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.ab4n.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-4 z^3 - 32 z^2 - 125 z - 240)}{35 z} + \frac{24 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.ab4o.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, 3; z\right) = -\frac{4}{105} e^{z/2} (4 z^2 - 36 z + 147) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4 z^3 - 40 z^2 + 189 z - 693) I_1\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.ab4p.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (-2 z^3 + 23 z^2 - 120 z + 360)}{7 z^2} - \frac{60 \sqrt{\pi} (z + 3) \operatorname{erfi}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.ab4q.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (2 z^3 + 23 z^2 + 120 z + 360)}{7 z^2} + \frac{60 \sqrt{\pi} (z - 3) \operatorname{erf}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.ab4r.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, 4; z\right) = -\frac{4 e^{z/2} (4 z^2 - 50 z + 429) I_0\left(\frac{z}{2}\right)}{35 z} - \frac{4 e^{z/2} (4 z^3 - 54 z^2 + 165 z - 1716) I_1\left(\frac{z}{2}\right)}{35 z^2}$$

07.25.03.ab4s.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (-4 z^3 + 60 z^2 - 330 z + 1575)}{4 z^3} - \frac{15 \sqrt{\pi} (8 z^2 + 48 z + 105) \operatorname{erfi}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.ab4t.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-4 z^3 - 60 z^2 - 330 z - 1575)}{4 z^3} + \frac{15 \sqrt{\pi} (8 z^2 - 48 z + 105) \operatorname{erf}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.ab4u.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, 5; z\right) = -\frac{32 e^{z/2} (2 z^2 + 429) I_0\left(\frac{z}{2}\right)}{35 z^2} - \frac{64 e^{z/2} (z^3 - 33 z^2 - 858) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.ab4v.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = -\frac{9 e^z (4 z^3 - 94 z^2 + 385 z - 2940)}{8 z^4} - \frac{45 \sqrt{\pi} (8 z^3 + 72 z^2 + 315 z + 588) \operatorname{erfi}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.ab4w.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (4 z^3 + 94 z^2 + 385 z + 2940)}{8 z^4} + \frac{45 \sqrt{\pi} (8 z^3 - 72 z^2 + 315 z - 588) \operatorname{erf}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.ab4x.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (50 z^3 + 975 z^2 + 1404 z + 21216) I_0\left(\frac{z}{2}\right)}{49 z^4} - \frac{1248 e^{z/2} (2 z^2 + 9 z + 136) I_0\left(\frac{z}{2}\right)}{49 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.ab4y.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = -\frac{1}{225} e^z (64 z^6 + 448 z^5 + 528 z^4 + 96 z^3 - 132 z^2 + 252 z - 225)$$

07.25.03.ab4z.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} e^z (32 z^5 + 144 z^4 + 48 z^3 + 24 z^2 - 54 z + 45)$$

07.25.03.ab50.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = -\frac{1}{15} e^z (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15)$$

07.25.03.ab51.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (8 z^3 - 4 z^2 - 6 z + 15)$$

07.25.03.ab52.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (4 z^3 - 4 z^2 - 3 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4 z^3 - 8 z^2 + 7 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ab53.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (4z^2 - 12z + 15)$$

07.25.03.ab54.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4z^2 - 14z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^2 - 18z + 35) I_1\left(\frac{z}{2}\right)$$

07.25.03.ab55.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (2z^2 - 11z + 24)}{5z} - \frac{12\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.ab56.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-2z^2 - 11z - 24)}{5z} + \frac{12\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.ab57.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, 3; z\right) = \frac{8}{15} e^{z/2} (z - 6) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2z^2 - 14z + 63) I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.ab58.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (z^2 - 8z + 30)}{z^2} - \frac{3\sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.ab59.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (z^2 + 8z + 30)}{z^2} + \frac{3\sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.ab5a.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (2z - 33) I_0\left(\frac{z}{2}\right)}{5z} + \frac{4 e^{z/2} (2z^2 - 3z + 132) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.ab5b.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4z^2 - 30z + 225)}{8z^3} - \frac{21\sqrt{\pi} (8z^2 + 40z + 75) \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.ab5c.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{21\sqrt{\pi} (8z^2 - 40z + 75) \operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{7 e^{-z} (4z^2 + 30z + 225)}{8z^3}$$

07.25.03.ab5d.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (21z^2 + 44z + 572) I_1\left(\frac{z}{2}\right)}{25z^3} - \frac{352 e^{z/2} (z + 13) I_0\left(\frac{z}{2}\right)}{25z^2}$$

07.25.03.ab5e.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (16z^2 - 40z + 735)}{32z^4} - \frac{63\sqrt{\pi} (16z^3 + 120z^2 + 450z + 735) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.ab5f.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16 z^2 + 40 z + 735)}{32 z^4} + \frac{63 \sqrt{\pi} (16 z^3 - 120 z^2 + 450 z - 735) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ab5g.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^3 + 323 z^2 + 884 z + 6240) I_1\left(\frac{z}{2}\right)}{35 z^4} - \frac{32 e^{z/2} (32 z^2 + 221 z + 1560) I_0\left(\frac{z}{2}\right)}{35 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.ab5h.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = -\frac{1}{9} e^z (16 z^4 + 48 z^3 + 12 z - 9)$$

07.25.03.ab5i.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (8 z^3 + 12 z^2 - 6 z + 3)$$

07.25.03.ab5j.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = -\frac{1}{3} e^z (4 z^2 - 3)$$

07.25.03.ab5k.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (3 - 2 z^2) I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} (z^2 - z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ab5l.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = -\frac{1}{3} e^z (2 z - 3)$$

07.25.03.ab5m.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{3} e^{z/2} (3 - 2 z) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (5 - 2 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ab5n.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (3 - z)}{z} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 z^{3/2}}$$

07.25.03.ab5o.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-z - 3)}{z} + \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 z^{3/2}}$$

07.25.03.ab5p.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, 3; z\right) = -\frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (z - 7) I_1\left(\frac{z}{2}\right)}{3 z}$$

07.25.03.ab5q.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = -\frac{5 e^z (z - 6)}{2 z^2} - \frac{15 \sqrt{\pi} (z + 2) \operatorname{erfi}(\sqrt{z})}{4 z^{5/2}}$$

07.25.03.ab5r.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (z+6)}{2 z^2} + \frac{15 \sqrt{\pi} (z-2) \operatorname{erf}(\sqrt{z})}{4 z^{5/2}}$$

07.25.03.ab5s.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (z+12) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{12 e^{z/2} I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.ab5t.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = -\frac{35 e^z (2z-75)}{32 z^3} - \frac{105 \sqrt{\pi} (4z^2+16z+25) \operatorname{erfi}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.ab5u.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} (4z^2-16z+25) \operatorname{erf}(\sqrt{z})}{64 z^{7/2}} - \frac{35 e^{-z} (2z+75)}{32 z^3}$$

07.25.03.ab5v.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, 5; z\right) = \frac{64 e^{z/2} (z^2+4z+22) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{32 e^{z/2} (2z+11) I_0\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.ab5w.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{315 e^z (2z^2+5z+105)}{64 z^4} - \frac{315 \sqrt{\pi} (4z^3+24z^2+75z+105) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.ab5x.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (2z^2-5z+105)}{64 z^4} + \frac{315 \sqrt{\pi} (4z^3-24z^2+75z-105) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.ab5y.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3+29z^2+100z+416) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{32 e^{z/2} (4z^2+25z+104) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.ab5z.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = -e^z (4z^2+4z-1)$$

07.25.03.ab60.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = e^z (2z+1)$$

07.25.03.ab61.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, 1; z\right) = e^{z/2} (z+1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.ab62.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = e^z$$

07.25.03.ab63.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.ab64.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{3 e^z}{2z} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.ab65.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3 e^{-z}}{2z}$$

07.25.03.ab66.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.ab67.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{45 e^z}{8 z^2} - \frac{15 \sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.ab68.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45 e^{-z}}{8 z^2}$$

07.25.03.ab69.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (z+4) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.ab6a.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{105 e^z (2z+15)}{64 z^3} - \frac{105 \sqrt{\pi} (4z^2+12z+15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.ab6b.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (2z-15)}{64 z^3} + \frac{105 \sqrt{\pi} (4z^2-12z+15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.ab6c.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (z^2+4z+12) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{32 e^{z/2} (z+3) I_0\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.ab6d.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{315 e^z (4z^2+20z+105)}{256 z^4} - \frac{315 \sqrt{\pi} (8z^3+36z^2+90z+105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ab6e.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2-20z+105)}{256 z^4} + \frac{315 \sqrt{\pi} (8z^3-36z^2+90z-105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ab6f.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^3 + 11z^2 + 36z + 96) I_1\left(\frac{z}{2}\right)}{7z^4} - \frac{32 e^{z/2} (2z^2 + 9z + 24) I_0\left(\frac{z}{2}\right)}{7z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{1}{2}$

07.25.03.0019.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = e^z - 2\sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ab6g.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = 2\sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.0020.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, 1; z\right) = e^{z/2} \left((1-2z) I_0\left(\frac{z}{2}\right) + 2z I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ab6h.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ab6i.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.0021.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{3} e^{z/2} \left((3-4z) I_0\left(\frac{z}{2}\right) + (4z+1) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.0022.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{3}{16z^{3/2}} \left(2e^z \sqrt{z} (2z+1) - \sqrt{\pi} (4z^2+1) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ab6j.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3e^{-z}(2z-1)}{8z} + \frac{3\sqrt{\pi} (4z^2+1) \operatorname{erf}(\sqrt{z})}{16z^{3/2}}$$

07.25.03.0023.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, 3; z\right) = -\frac{4}{15z} e^{z/2} \left(z(4z-3) I_0\left(\frac{z}{2}\right) - (4z^2+z+3) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ab6k.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5e^z(2z^2+z+3)}{16z^2} - \frac{5\sqrt{\pi} (4z^3+3z+3) \operatorname{erfi}(\sqrt{z})}{32z^{5/2}}$$

07.25.03.ab6l.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}(2z^2-z+3)}{16z^2} + \frac{5\sqrt{\pi} (4z^3+3z-3) \operatorname{erf}(\sqrt{z})}{32z^{5/2}}$$

07.25.03.ab6m.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, 4; z\right) = \frac{4e^{z/2} (8z^3+2z^2+11z+20) I_1\left(\frac{z}{2}\right)}{35z^2} - \frac{4e^{z/2} (8z^2-6z+5) I_0\left(\frac{z}{2}\right)}{35z}$$

07.25.03.ab6n.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (8 z^3 + 4 z^2 + 18 z + 45)}{512 z^3} - \frac{35 \sqrt{\pi} (16 z^4 + 24 z^2 + 48 z + 45) \operatorname{erfi}(\sqrt{z})}{1024 z^{7/2}}$$

07.25.03.ab6o.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (8 z^3 - 4 z^2 + 18 z - 45)}{512 z^3} + \frac{35 \sqrt{\pi} (16 z^4 + 24 z^2 - 48 z + 45) \operatorname{erf}(\sqrt{z})}{1024 z^{7/2}}$$

07.25.03.ab6p.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, 5; z\right) = \frac{64 e^{z/2} (4 z^4 + z^3 + 9 z^2 + 24 z + 42) I_1\left(\frac{z}{2}\right)}{315 z^3} - \frac{32 e^{z/2} (8 z^3 - 6 z^2 + 12 z + 21) I_0\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.ab6q.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (8 z^4 + 4 z^3 + 26 z^2 + 85 z + 210)}{1024 z^4} - \frac{63 \sqrt{\pi} (16 z^5 + 40 z^3 + 120 z^2 + 225 z + 210) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.ab6r.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8 z^4 - 4 z^3 + 26 z^2 - 85 z + 210)}{1024 z^4} + \frac{63 \sqrt{\pi} (16 z^5 + 40 z^3 - 120 z^2 + 225 z - 210) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.ab6s.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 + 4 z^4 + 54 z^3 + 195 z^2 + 492 z + 864) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (16 z^4 - 12 z^3 + 42 z^2 + 123 z + 216) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = 1$

07.25.03.ab6t.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; 1, \frac{3}{2}; z\right) = e^{z/2} (1-z) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{3}{2}$

07.25.03.ab6u.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} (1-2z) \operatorname{erfi}(\sqrt{z})}{4 \sqrt{z}} + \frac{e^z}{2}$$

07.25.03.ab6v.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{4 \sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.ab6w.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, 2; z\right) = e^{z/2} \left(1 - \frac{2z}{3}\right) I_0\left(\frac{z}{2}\right) + e^{z/2} \left(\frac{2z}{3} - \frac{1}{3}\right) I_1\left(\frac{z}{2}\right)$$

07.25.03.ab6x.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{3 e^z (2z-1)}{16z} - \frac{3 \sqrt{\pi} (4z^2-4z-1) \operatorname{erfi}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.ab6y.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (2z+1)}{16z} + \frac{3 \sqrt{\pi} (4z^2+4z-1) \operatorname{erf}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.ab6z.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (2z^2-2z-1) I_1\left(\frac{z}{2}\right)}{15z} - \frac{8}{15} e^{z/2} (z-2) I_0\left(\frac{z}{2}\right)$$

07.25.03.ab70.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (4z^2-4z-3)}{64 z^2} - \frac{5 \sqrt{\pi} (8z^3-12z^2-6z-3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.ab71.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (4z^2+4z-3)}{64 z^2} + \frac{5 \sqrt{\pi} (8z^3+12z^2-6z+3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.ab72.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (4z^3-6z^2-5z-4) I_1\left(\frac{z}{2}\right)}{35 z^2} - \frac{4 e^{z/2} (4z^2-10z-1) I_0\left(\frac{z}{2}\right)}{35 z}$$

07.25.03.ab73.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (8z^3-12z^2-14z-15)}{1024 z^3} - \frac{35 \sqrt{\pi} (16z^4-32z^3-24z^2-24z-15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.ab74.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (8z^3+12z^2-14z+15)}{1024 z^3} + \frac{35 \sqrt{\pi} (16z^4+32z^3-24z^2+24z-15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.ab75.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^4-8z^3-9z^2-12z-12) I_1\left(\frac{z}{2}\right)}{315 z^3} - \frac{32 e^{z/2} (4z^3-12z^2-3z-3) I_0\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.ab76.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (16z^4-32z^3-48z^2-80z-105)}{4096 z^4} - \frac{63 \sqrt{\pi} (32z^5-80z^4-80z^3-120z^2-150z-105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.ab77.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16z^4+32z^3-48z^2+80z-105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32z^5+80z^4-80z^3+120z^2-150z+105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.ab78.01

$${}_2F_2\left(-\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^5 - 20 z^4 - 28 z^3 - 51 z^2 - 84 z - 96) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (8 z^4 - 28 z^3 - 12 z^2 - 21 z - 24) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = -\frac{11}{2}$

07.25.03.ab79.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{108056025} (-2048 z^{12} - 75776 z^{11} - 961536 z^{10} - 5084160 z^9 - 10755840 z^8 - 6958080 z^7 - 423360 z^6 - 20160 z^5 - 10800 z^4 - 21600 z^3 - 132300 z^2 - 3572100 z + 108056025) - \frac{1}{108056025} 1024 e^z \sqrt{\pi} (2 z^{25/2} + 75 z^{23/2} + 975 z^{21/2} + 5400 z^{19/2} + 12600 z^{17/2} + 10440 z^{15/2} + 1800 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ab7a.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{108056025} (-2048 z^{12} + 75776 z^{11} - 961536 z^{10} + 5084160 z^9 - 10755840 z^8 + 6958080 z^7 - 423360 z^6 + 20160 z^5 - 10800 z^4 + 21600 z^3 - 132300 z^2 + 3572100 z + 108056025) + \frac{1}{108056025} 1024 e^{-z} \sqrt{\pi} (2 z^{25/2} - 75 z^{23/2} + 975 z^{21/2} - 5400 z^{19/2} + 12600 z^{17/2} - 10440 z^{15/2} + 1800 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ab7b.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9823275} (1024 z^{11} + 31744 z^{10} + 322560 z^9 + 1266432 z^8 + 1704960 z^7 + 423360 z^6 - 20160 z^5 - 3600 z^4 - 4320 z^3 - 18900 z^2 - 396900 z + 9823275) + \frac{512 e^z \sqrt{\pi} (2 z^{23/2} + 63 z^{21/2} + 660 z^{19/2} + 2760 z^{17/2} + 4320 z^{15/2} + 1800 z^{13/2}) \operatorname{erf}(\sqrt{z})}{9823275}$$

07.25.03.ab7c.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{9823275} (-1024 z^{11} + 31744 z^{10} - 322560 z^9 + 1266432 z^8 - 1704960 z^7 + 423360 z^6 + 20160 z^5 - 3600 z^4 + 4320 z^3 - 18900 z^2 + 396900 z + 9823275) + \frac{512 e^{-z} \sqrt{\pi} (2 z^{23/2} - 63 z^{21/2} + 660 z^{19/2} - 2760 z^{17/2} + 4320 z^{15/2} - 1800 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{9823275}$$

07.25.03.ab7d.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1091475} (-512 z^{10} - 12800 z^9 - 97536 z^8 - 248832 z^7 - 141120 z^6 + 20160 z^5 - 3600 z^4 - 1440 z^3 - 3780 z^2 - 56700 z + 1091475) - \frac{256 e^z \sqrt{\pi} (2 z^{21/2} + 51 z^{19/2} + 405 z^{17/2} + 1140 z^{15/2} + 900 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{1091475}$$

07.25.03.ab7e.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1091475} (-512 z^{10} + 12800 z^9 - 97536 z^8 + 248832 z^7 - 141120 z^6 - 20160 z^5 - 3600 z^4 + 1440 z^3 - 3780 z^2 + 56700 z + 1091475) + \frac{256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 51 z^{19/2} + 405 z^{17/2} - 1140 z^{15/2} + 900 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{1091475}$$

07.25.03.ab7f.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{155925} (256 z^9 + 4864 z^8 + 24576 z^7 + 28224 z^6 - 6720 z^5 + 3600 z^4 - 1440 z^3 - 1260 z^2 - 11340 z + 155925) + \frac{128 e^z \sqrt{\pi} (2 z^{19/2} + 39 z^{17/2} + 210 z^{15/2} + 300 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.ab7g.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{155925} (-256 z^9 + 4864 z^8 - 24576 z^7 + 28224 z^6 + 6720 z^5 + 3600 z^4 + 1440 z^3 - 1260 z^2 + 11340 z + 155925) + \frac{128 e^{-z} \sqrt{\pi} (2 z^{19/2} - 39 z^{17/2} + 210 z^{15/2} - 300 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.ab7h.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{-128 z^8 - 1664 z^7 - 4032 z^6 + 1344 z^5 - 1200 z^4 + 1440 z^3 - 1260 z^2 - 3780 z + 31185}{31185} - \frac{64 e^z \sqrt{\pi} (2 z^{17/2} + 27 z^{15/2} + 75 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.ab7i.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{-128 z^8 + 1664 z^7 - 4032 z^6 - 1344 z^5 - 1200 z^4 - 1440 z^3 - 1260 z^2 + 3780 z + 31185}{31185} + \frac{64 e^{-z} \sqrt{\pi} (2 z^{17/2} - 27 z^{15/2} + 75 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.ab7j.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{64 z^7 + 448 z^6 - 192 z^5 + 240 z^4 - 480 z^3 + 1260 z^2 - 3780 z + 10395}{10395} + \frac{32 e^z \sqrt{\pi} (2 z^{15/2} + 15 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.ab7k.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{-64 z^7 + 448 z^6 + 192 z^5 + 240 z^4 + 480 z^3 + 1260 z^2 + 3780 z + 10395}{10395} + \frac{32 e^{-z} \sqrt{\pi} (2 z^{15/2} - 15 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.ab7l.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{-32 z^6 - 32 z^5 + 240 z^4 - 1056 z^3 + 3420 z^2 - 7740 z + 10395}{10395} - \frac{16 e^z \sqrt{\pi} (2 z^{13/2} + 3 z^{11/2} - 15 z^{9/2} + 60 z^{7/2} - 180 z^{5/2} + 360 z^{3/2} - 360 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.ab7m.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{-32 z^6 + 32 z^5 + 240 z^4 + 1056 z^3 + 3420 z^2 + 7740 z + 10395}{10395} + \frac{16 e^{-z} \sqrt{\pi} (2 z^{13/2} - 3 z^{11/2} - 15 z^{9/2} - 60 z^{7/2} - 180 z^{5/2} - 360 z^{3/2} - 360 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.ab7n.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, 1; z\right) = -\frac{e^z (32 z^6 - 48 z^5 + 600 z^3 - 3150 z^2 + 8505 z - 10395)}{10395}$$

07.25.03.ab7o.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{-16 z^5 + 80 z^4 - 288 z^3 + 684 z^2 - 660 z - 1125}{10395} - \frac{8 e^z \sqrt{\pi} (2 z^6 - 9 z^5 + 30 z^4 - 60 z^3 + 360 z - 720) \operatorname{erf}(\sqrt{z})}{10395 \sqrt{z}}$$

07.25.03.ab7p.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{16 z^5 + 80 z^4 + 288 z^3 + 684 z^2 + 660 z - 1125}{10395} - \frac{8 e^{-z} \sqrt{\pi} (2 z^6 + 9 z^5 + 30 z^4 + 60 z^3 - 360 z - 720) \operatorname{erfi}(\sqrt{z})}{10395 \sqrt{z}}$$

07.25.03.ab7q.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, 2; z\right) = -\frac{e^z (32 z^5 - 240 z^4 + 1200 z^3 - 4200 z^2 + 9450 z - 10395)}{10395}$$

07.25.03.ab7r.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{-8z^5 + 88z^4 - 588z^3 + 2748z^2 - 9015z + 20160}{3465z} - \frac{4e^z \sqrt{\pi} (2z^6 - 21z^5 + 135z^4 - 600z^3 + 1800z^2 - 3240z + 2520) \operatorname{erf}(\sqrt{z})}{3465z^{3/2}}$$

07.25.03.ab7s.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-8z^5 - 88z^4 - 588z^3 - 2748z^2 - 9015z - 20160}{3465z} + \frac{4e^{-z} \sqrt{\pi} (2z^6 + 21z^5 + 135z^4 + 600z^3 + 1800z^2 + 3240z + 2520) \operatorname{erfi}(\sqrt{z})}{3465z^{3/2}}$$

07.25.03.ab7t.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, 3; z\right) = \frac{26}{z^2} - \frac{2e^z (32z^6 - 432z^5 + 3360z^4 - 17640z^3 + 62370z^2 - 135135z + 135135)}{10395z^2}$$

07.25.03.ab7u.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{-4z^5 + 68z^4 - 636z^3 + 3957z^2 - 16800z + 80640}{693z^2} - \frac{2e^z \sqrt{\pi} (2z^6 - 33z^5 + 300z^4 - 1800z^3 + 7200z^2 - 17640z + 20160) \operatorname{erf}(\sqrt{z})}{693z^{5/2}}$$

07.25.03.ab7v.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{4z^5 + 68z^4 + 636z^3 + 3957z^2 + 16800z + 80640}{693z^2} - \frac{2e^{-z} \sqrt{\pi} (2z^6 + 33z^5 + 300z^4 + 1800z^3 + 7200z^2 + 17640z + 20160) \operatorname{erfi}(\sqrt{z})}{693z^{5/2}}$$

07.25.03.ab7w.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, 4; z\right) = \frac{78(7z + 34)}{7z^3} - \frac{2e^z (32z^6 - 624z^5 + 6480z^4 - 43560z^3 + 193050z^2 - 521235z + 656370)}{3465z^3}$$

07.25.03.ab7x.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{-2z^5 + 46z^4 - 549z^3 + 4200z^2 - 10080z + 151200}{99z^3} + \frac{e^z \sqrt{\pi} (-2z^6 + 45z^5 - 525z^4 + 3900z^3 - 18900z^2 + 55440z - 75600) \operatorname{erf}(\sqrt{z})}{99z^{7/2}}$$

07.25.03.ab7y.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{-2z^5 - 46z^4 - 549z^3 - 4200z^2 - 10080z - 151200}{99z^3} + \frac{e^{-z} \sqrt{\pi} (2z^6 + 45z^5 + 525z^4 + 3900z^3 + 18900z^2 + 55440z + 75600) \operatorname{erfi}(\sqrt{z})}{99z^{7/2}}$$

07.25.03.ab7z.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, 5; z\right) = \frac{52(21z^2 + 204z + 646)}{7z^4} - \frac{8e^z(32z^6 - 816z^5 + 10560z^4 - 85800z^3 + 450450z^2 - 1422135z + 2078505)}{3465z^4}$$

07.25.03.ab80.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{-z^5 + 29z^4 - 420z^3 + 6048z^2 + 5040z + 211680}{11z^4} + \frac{e^z \sqrt{\pi} (-2z^6 + 57z^5 - 810z^4 + 7140z^3 - 40320z^2 + 136080z - 211680) \operatorname{erf}(\sqrt{z})}{22z^{9/2}}$$

07.25.03.ab81.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{z^5 + 29z^4 + 420z^3 + 6048z^2 - 5040z + 211680}{11z^4} + \frac{e^{-z} \sqrt{\pi} (-2z^6 - 57z^5 - 810z^4 - 7140z^3 - 40320z^2 - 136080z - 211680) \operatorname{erfi}(\sqrt{z})}{22z^{9/2}}$$

07.25.03.ab82.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{11}{2}, 6; z\right) = \frac{260(77z^3 + 1122z^2 + 7106z + 18088)}{77z^5} - \frac{8e^z(32z^6 - 1008z^5 + 15600z^4 - 148200z^3 + 895050z^2 - 3212235z + 5290740)}{693z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = -\frac{9}{2}$

07.25.03.ab83.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{893025} (-512z^{10} - 13312z^9 - 108288z^8 - 314368z^7 - 263616z^6 - 20160z^5 - 1200z^4 - 864z^3 - 2700z^2 - 44100z + 893025) - \frac{256e^z \sqrt{\pi} (2z^{21/2} + 53z^{19/2} + 448z^{17/2} + 1416z^{15/2} + 1488z^{13/2} + 312z^{11/2}) \operatorname{erf}(\sqrt{z})}{893025}$$

07.25.03.ab84.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{893025} (-512z^{10} + 13312z^9 - 108288z^8 + 314368z^7 - 263616z^6 + 20160z^5 - 1200z^4 + 864z^3 - 2700z^2 + 44100z + 893025) + \frac{256e^{-z} \sqrt{\pi} (2z^{21/2} - 53z^{19/2} + 448z^{17/2} - 1416z^{15/2} + 1488z^{13/2} - 312z^{11/2}) \operatorname{erfi}(\sqrt{z})}{893025}$$

07.25.03.ab85.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{256 z^9 + 5376 z^8 + 32768 z^7 + 61248 z^6 + 20160 z^5 - 1200 z^4 - 288 z^3 - 540 z^2 - 6300 z + 99225}{99225} + \frac{128 e^z \sqrt{\pi} (2 z^{19/2} + 43 z^{17/2} + 276 z^{15/2} + 588 z^{13/2} + 312 z^{11/2}) \operatorname{erf}(\sqrt{z})}{99225}$$

07.25.03.ab86.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{-256 z^9 + 5376 z^8 - 32768 z^7 + 61248 z^6 - 20160 z^5 - 1200 z^4 + 288 z^3 - 540 z^2 + 6300 z + 99225}{99225} + \frac{128 e^{-z} \sqrt{\pi} (2 z^{19/2} - 43 z^{17/2} + 276 z^{15/2} - 588 z^{13/2} + 312 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{99225}$$

07.25.03.ab87.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{-128 z^8 - 2048 z^7 - 8256 z^6 - 6720 z^5 + 1200 z^4 - 288 z^3 - 180 z^2 - 1260 z + 14175}{14175} - \frac{64 e^z \sqrt{\pi} (2 z^{17/2} + 33 z^{15/2} + 144 z^{13/2} + 156 z^{11/2}) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.ab88.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{-128 z^8 + 2048 z^7 - 8256 z^6 + 6720 z^5 + 1200 z^4 + 288 z^3 - 180 z^2 + 1260 z + 14175}{14175} + \frac{64 e^{-z} \sqrt{\pi} (2 z^{17/2} - 33 z^{15/2} + 144 z^{13/2} - 156 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.ab89.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{64 z^7 + 704 z^6 + 1344 z^5 - 400 z^4 + 288 z^3 - 180 z^2 - 420 z + 2835}{2835} + \frac{32 e^z \sqrt{\pi} (2 z^{15/2} + 23 z^{13/2} + 52 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.ab8a.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{-64 z^7 + 704 z^6 - 1344 z^5 - 400 z^4 - 288 z^3 - 180 z^2 + 420 z + 2835}{2835} + \frac{32 e^{-z} \sqrt{\pi} (2 z^{15/2} - 23 z^{13/2} + 52 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.ab8b.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} (-32 z^6 - 192 z^5 + 80 z^4 - 96 z^3 + 180 z^2 - 420 z + 945) - \frac{16}{945} e^z \sqrt{\pi} (2 z^{13/2} + 13 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ab8c.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945}(-32z^6 + 192z^5 + 80z^4 + 96z^3 + 180z^2 + 420z + 945) + \frac{16}{945}e^{-z}\sqrt{\pi}(2z^{13/2} - 13z^{11/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ab8d.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945}(16z^5 + 16z^4 - 96z^3 + 324z^2 - 732z + 945) + \frac{8}{945}e^z\sqrt{\pi}(2z^{11/2} + 3z^{9/2} - 12z^{7/2} + 36z^{5/2} - 72z^{3/2} + 72\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.ab8e.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{945}(-16z^5 + 16z^4 + 96z^3 + 324z^2 + 732z + 945) + \frac{8}{945}e^{-z}\sqrt{\pi}(2z^{11/2} - 3z^{9/2} - 12z^{7/2} - 36z^{5/2} - 72z^{3/2} - 72\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ab8f.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, 1; z\right) = \frac{1}{945}e^z(16z^5 - 16z^4 - 24z^3 + 240z^2 - 735z + 945)$$

07.25.03.ab8g.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945}(8z^4 - 32z^3 + 84z^2 - 116z - 15) + \frac{4e^z\sqrt{\pi}(2z^5 - 7z^4 + 16z^3 - 12z^2 - 48z + 120)\operatorname{erf}(\sqrt{z})}{945\sqrt{z}}$$

07.25.03.ab8h.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{945}(8z^4 + 32z^3 + 84z^2 + 116z - 15) - \frac{4e^{-z}\sqrt{\pi}(2z^5 + 7z^4 + 16z^3 + 12z^2 - 48z - 120)\operatorname{erfi}(\sqrt{z})}{945\sqrt{z}}$$

07.25.03.ab8i.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, 2; z\right) = \frac{1}{945}e^z(16z^4 - 96z^3 + 360z^2 - 840z + 945)$$

07.25.03.ab8j.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{4z^4 - 36z^3 + 188z^2 - 645z + 1440}{315z} + \frac{2e^z\sqrt{\pi}(2z^5 - 17z^4 + 84z^3 - 264z^2 + 480z - 360)\operatorname{erf}(\sqrt{z})}{315z^{3/2}}$$

07.25.03.ab8k.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-4z^4 - 36z^3 - 188z^2 - 645z - 1440}{315z} + \frac{2e^{-z}\sqrt{\pi}(2z^5 + 17z^4 + 84z^3 + 264z^2 + 480z + 360)\operatorname{erfi}(\sqrt{z})}{315z^{3/2}}$$

07.25.03.ab8l.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, 3; z\right) = \frac{2e^z(16z^5 - 176z^4 + 1064z^3 - 4032z^2 + 9009z - 9009)}{945z^2} + \frac{286}{15z^2}$$

07.25.03.ab8m.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{2z^4 - 28z^3 + 207z^2 - 960z + 5040}{63z^2} + \frac{e^z \sqrt{\pi} (2z^5 - 27z^4 + 192z^3 - 840z^2 + 2160z - 2520) \operatorname{erf}(\sqrt{z})}{63z^{5/2}}$$

07.25.03.ab8n.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{2z^4 + 28z^3 + 207z^2 + 960z + 5040}{63z^2} + \frac{e^{-z} \sqrt{\pi} (-2z^5 - 27z^4 - 192z^3 - 840z^2 - 2160z - 2520) \operatorname{erfi}(\sqrt{z})}{63z^{5/2}}$$

07.25.03.ab8o.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, 4; z\right) = \frac{286(7z + 30)}{35z^3} + \frac{2e^z (16z^5 - 256z^4 + 2088z^3 - 10296z^2 + 29601z - 38610)}{315z^3}$$

07.25.03.ab8p.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{z^4 - 19z^3 + 180z^2 - 280z + 8400}{9z^3} + \frac{e^z \sqrt{\pi} (2z^5 - 37z^4 + 340z^3 - 1860z^2 + 5880z - 8400) \operatorname{erf}(\sqrt{z})}{18z^{7/2}}$$

07.25.03.ab8q.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{-z^4 - 19z^3 - 180z^2 - 280z - 8400}{9z^3} + \frac{e^{-z} \sqrt{\pi} (2z^5 + 37z^4 + 340z^3 + 1860z^2 + 5880z + 8400) \operatorname{erfi}(\sqrt{z})}{18z^{7/2}}$$

07.25.03.ab8r.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, 5; z\right) = \frac{572(7z^2 + 60z + 170)}{35z^4} + \frac{8e^z (16z^5 - 336z^4 + 3432z^3 - 20592z^2 + 70785z - 109395)}{315z^4}$$

07.25.03.ab8s.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{5z^4 - 120z^3 + 2884z^2 + 6720z + 105840}{10z^4} + \frac{e^z \sqrt{\pi} (2z^5 - 47z^4 + 528z^3 - 3444z^2 + 12768z - 21168) \operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.ab8t.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{5z^4 + 120z^3 + 2884z^2 - 6720z + 105840}{10z^4} + \frac{e^{-z} \sqrt{\pi} (-2z^5 - 47z^4 - 528z^3 - 3444z^2 - 12768z - 21168) \operatorname{erfi}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.ab8u.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{9}{2}, 6; z\right) = \frac{52(77z^3 + 990z^2 + 5610z + 12920)}{21z^5} + \frac{8e^z (16z^5 - 416z^4 + 5096z^3 - 35880z^2 + 142545z - 251940)}{63z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = -\frac{7}{2}$

07.25.03.ab8v.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{-128 z^8 - 2176 z^7 - 9920 z^6 - 11712 z^5 - 1200 z^4 - 96 z^3 - 108 z^2 - 900 z + 11025}{11025} - \frac{64 e^z \sqrt{\pi} (2 z^{17/2} + 35 z^{15/2} + 171 z^{13/2} + 246 z^{11/2} + 66 z^{9/2}) \operatorname{erf}(\sqrt{z})}{11025}$$

07.25.03.ab8w.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{-128 z^8 + 2176 z^7 - 9920 z^6 + 11712 z^5 - 1200 z^4 + 96 z^3 - 108 z^2 + 900 z + 11025}{11025} + \frac{64 e^{-z} \sqrt{\pi} (2 z^{17/2} - 35 z^{15/2} + 171 z^{13/2} - 246 z^{11/2} + 66 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{11025}$$

07.25.03.ab8x.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{64 z^7 + 832 z^6 + 2496 z^5 + 1200 z^4 - 96 z^3 - 36 z^2 - 180 z + 1575}{1575} + \frac{32 e^z \sqrt{\pi} (2 z^{15/2} + 27 z^{13/2} + 90 z^{11/2} + 66 z^{9/2}) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.ab8y.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{-64 z^7 + 832 z^6 - 2496 z^5 + 1200 z^4 + 96 z^3 - 36 z^2 + 180 z + 1575}{1575} + \frac{32 e^{-z} \sqrt{\pi} (2 z^{15/2} - 27 z^{13/2} + 90 z^{11/2} - 66 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.ab8z.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} (-32 z^6 - 288 z^5 - 400 z^4 + 96 z^3 - 36 z^2 - 60 z + 315) - \frac{16}{315} e^z \sqrt{\pi} (2 z^{13/2} + 19 z^{11/2} + 33 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ab90.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{315} (-32 z^6 + 288 z^5 - 400 z^4 - 96 z^3 - 36 z^2 + 60 z + 315) + \frac{16}{315} e^{-z} \sqrt{\pi} (2 z^{13/2} - 19 z^{11/2} + 33 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ab91.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} (16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105) + \frac{8}{105} e^z \sqrt{\pi} (2 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ab92.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} (-16 z^5 + 80 z^4 + 32 z^3 + 36 z^2 + 60 z + 105) + \frac{8}{105} e^{-z} \sqrt{\pi} (2 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ab93.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105}(-8z^4 - 8z^3 + 36z^2 - 84z + 105) - \frac{4}{105}e^{-z}\sqrt{\pi}(2z^{9/2} + 3z^{7/2} - 9z^{5/2} + 18z^{3/2} - 18\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.ab94.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{105}(-8z^4 + 8z^3 + 36z^2 + 84z + 105) + \frac{4}{105}e^{-z}\sqrt{\pi}(2z^{9/2} - 3z^{7/2} - 9z^{5/2} - 18z^{3/2} - 18\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ab95.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, 1; z\right) = -\frac{1}{105}e^z(8z^4 - 4z^3 - 18z^2 + 75z - 105)$$

07.25.03.ab96.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{105}(-4z^3 + 12z^2 - 20z + 9) - \frac{2e^z\sqrt{\pi}(2z^4 - 5z^3 + 6z^2 + 6z - 24)\operatorname{erf}(\sqrt{z})}{105\sqrt{z}}$$

07.25.03.ab97.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{105}(4z^3 + 12z^2 + 20z + 9) - \frac{2e^{-z}\sqrt{\pi}(2z^4 + 5z^3 + 6z^2 - 6z - 24)\operatorname{erfi}(\sqrt{z})}{105\sqrt{z}}$$

07.25.03.ab98.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, 2; z\right) = -\frac{1}{105}e^z(8z^3 - 36z^2 + 90z - 105)$$

07.25.03.ab99.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{-2z^3 + 14z^2 - 53z + 120}{35z} + \frac{e^z\sqrt{\pi}(-2z^4 + 13z^3 - 45z^2 + 84z - 60)\operatorname{erf}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.ab99a.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{-2z^3 - 14z^2 - 53z - 120}{35z} + \frac{e^{-z}\sqrt{\pi}(2z^4 + 13z^3 + 45z^2 + 84z + 60)\operatorname{erfi}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.ab99b.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, 3; z\right) = \frac{66}{5z^2} - \frac{2e^z(8z^4 - 68z^3 + 294z^2 - 693z + 693)}{105z^2}$$

07.25.03.ab99c.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{-z^3 + 11z^2 - 60z + 360}{7z^2} + \frac{e^z\sqrt{\pi}(-2z^4 + 21z^3 - 108z^2 + 300z - 360)\operatorname{erf}(\sqrt{z})}{14z^{5/2}}$$

07.25.03.ab99d.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{z^3 + 11z^2 + 60z + 360}{7z^2} + \frac{e^{-z}\sqrt{\pi}(-2z^4 - 21z^3 - 108z^2 - 300z - 360)\operatorname{erfi}(\sqrt{z})}{14z^{5/2}}$$

07.25.03.ab9e.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, 4; z\right) = \frac{198(7z+26)}{35z^3} - \frac{2e^z(8z^4 - 100z^3 + 594z^2 - 1881z + 2574)}{35z^3}$$

07.25.03.ab9f.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{-z^3 + 15z^2 + 10z + 1050}{2z^3} + \frac{e^z \sqrt{\pi} (-2z^4 + 29z^3 - 195z^2 + 690z - 1050) \operatorname{erf}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.ab9g.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-z^3 - 15z^2 + 10z - 1050}{2z^3} + \frac{e^{-z} \sqrt{\pi} (2z^4 + 29z^3 + 195z^2 + 690z + 1050) \operatorname{erfi}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.ab9h.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, 5; z\right) = \frac{396(7z^2 + 52z + 130)}{35z^4} - \frac{8e^z(8z^4 - 132z^3 + 990z^2 - 3861z + 6435)}{35z^4}$$

07.25.03.ab9i.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, \frac{11}{2}; z\right) = -\frac{9(5z^3 - 326z^2 - 1330z - 11760)}{20z^4} - \frac{9e^z \sqrt{\pi} (2z^4 - 37z^3 + 306z^2 - 1302z + 2352) \operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.ab9j.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(5z^3 + 326z^2 - 1330z + 11760)}{20z^4} - \frac{9e^{-z} \sqrt{\pi} (2z^4 + 37z^3 + 306z^2 + 1302z + 2352) \operatorname{erfi}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.ab9k.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{7}{2}, 6; z\right) = \frac{12(77z^3 + 858z^2 + 4290z + 8840)}{7z^5} - \frac{8e^z(8z^4 - 164z^3 + 1482z^2 - 6825z + 13260)}{7z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = -\frac{5}{2}$

07.25.03.ab9l.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225}(-32z^6 - 320z^5 - 624z^4 - 96z^3 - 12z^2 - 36z + 225) - \frac{16}{225}e^z \sqrt{\pi} (2z^{13/2} + 21z^{11/2} + 48z^{9/2} + 18z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ab9m.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{225}(-32z^6 + 320z^5 - 624z^4 + 96z^3 - 12z^2 + 36z + 225) + \frac{16}{225}e^{-z} \sqrt{\pi} (2z^{13/2} - 21z^{11/2} + 48z^{9/2} - 18z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ab9n.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45}(16z^5 + 112z^4 + 96z^3 - 12z^2 - 12z + 45) + \frac{8}{45}e^z \sqrt{\pi} (2z^{11/2} + 15z^{9/2} + 18z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ab9o.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{45}(-16z^5 + 112z^4 - 96z^3 - 12z^2 + 12z + 45) + \frac{8}{45}e^{-z} \sqrt{\pi} (2z^{11/2} - 15z^{9/2} + 18z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ab9p.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15}(-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15}e^z \sqrt{\pi} (2z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ab9q.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15}(-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15}e^{-z} \sqrt{\pi} (2z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ab9r.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15}(4z^3 + 4z^2 - 12z + 15) + \frac{2}{15}e^z \sqrt{\pi} (2z^{7/2} + 3z^{5/2} - 6z^{3/2} + 6\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ab9s.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15}(-4z^3 + 4z^2 + 12z + 15) + \frac{2}{15}e^{-z} \sqrt{\pi} (2z^{7/2} - 3z^{5/2} - 6z^{3/2} - 6\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ab9t.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, 1; z\right) = \frac{1}{15}e^z (4z^3 - 9z + 15)$$

07.25.03.ab9u.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15}(2z^2 - 4z + 3) + \frac{e^z \sqrt{\pi} (2z^3 - 3z^2 + 6) \operatorname{erf}(\sqrt{z})}{15\sqrt{z}}$$

07.25.03.ab9v.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15}(2z^2 + 4z + 3) + \frac{e^{-z} \sqrt{\pi} (-2z^3 - 3z^2 + 6) \operatorname{erfi}(\sqrt{z})}{15\sqrt{z}}$$

07.25.03.ab9w.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, 2; z\right) = \frac{1}{15}e^z (4z^2 - 12z + 15)$$

07.25.03.ab9x.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{z^2 - 5z + 12}{5z} + \frac{e^z \sqrt{\pi} (2z^3 - 9z^2 + 18z - 12) \operatorname{erf}(\sqrt{z})}{10z^{3/2}}$$

07.25.03.ab9y.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-z^2 - 5z - 12}{5z} + \frac{e^{-z} \sqrt{\pi} (2z^3 + 9z^2 + 18z + 12) \operatorname{erfi}(\sqrt{z})}{10z^{3/2}}$$

07.25.03.ab9z.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, 3; z\right) = \frac{2e^z (4z^3 - 24z^2 + 63z - 63)}{15z^2} + \frac{42}{5z^2}$$

07.25.03.aba0.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{z^2 - 8z + 60}{2z^2} + \frac{e^z \sqrt{\pi} (2z^3 - 15z^2 + 48z - 60) \operatorname{erf}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.aba1.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{z^2 + 8z + 60}{2z^2} + \frac{e^{-z} \sqrt{\pi} (-2z^3 - 15z^2 - 48z - 60) \operatorname{erfi}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.aba2.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, 4; z\right) = \frac{18(7z+22)}{5z^3} + \frac{2e^z(4z^3-36z^2+135z-198)}{5z^3}$$

07.25.03.aba3.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7(z^2+10z+150)}{4z^3} + \frac{7e^z\sqrt{\pi}(2z^3-21z^2+90z-150)\operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.aba4.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}\sqrt{\pi}(2z^3+21z^2+90z+150)\operatorname{erfi}(\sqrt{z})}{8z^{7/2}} - \frac{7(z^2-10z+150)}{4z^3}$$

07.25.03.aba5.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, 5; z\right) = \frac{12(21z^2+132z+286)}{5z^4} + \frac{8e^z(4z^3-48z^2+231z-429)}{5z^4}$$

07.25.03.aba6.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63(47z^2+260z+1470)}{40z^4} + \frac{63e^z\sqrt{\pi}(2z^3-27z^2+144z-294)\operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.aba7.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63(47z^2-260z+1470)}{40z^4} - \frac{63e^{-z}\sqrt{\pi}(2z^3+27z^2+144z+294)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.aba8.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{5}{2}, 6; z\right) = \frac{8e^z(4z^3-60z^2+351z-780)}{z^5} + \frac{12(7z^3+66z^2+286z+520)}{z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = -\frac{3}{2}$

07.25.03.aba9.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9}(-8z^4-40z^3-12z^2-4z+9) - \frac{4}{9}e^z\sqrt{\pi}(2z^{9/2}+11z^{7/2}+7z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.abaa.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9}(-8z^4+40z^3-12z^2+4z+9) + \frac{4}{9}e^{-z}\sqrt{\pi}(2z^{9/2}-11z^{7/2}+7z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.abab.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3}(4z^3+12z^2-4z+3) + \frac{2}{3}e^z\sqrt{\pi}(2z^{7/2}+7z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.abac.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3}(-4z^3+12z^2+4z+3) + \frac{2}{3}e^{-z}\sqrt{\pi}(2z^{7/2}-7z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.abad.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3}(-2z^2-2z+3) + \frac{1}{3}e^z\sqrt{\pi}(-2z^{5/2}-3z^{3/2}+3\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.abae.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3}(-2z^2 + 2z + 3) + \frac{1}{3}e^{-z}\sqrt{\pi}(2z^{5/2} - 3z^{3/2} - 3\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.abaf.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, 1; z\right) = -\frac{1}{3}e^z(2z^2 + z - 3)$$

07.25.03.abag.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1-z}{3} + \frac{e^z\sqrt{\pi}(-2z^2 + z + 2)\operatorname{erf}(\sqrt{z})}{6\sqrt{z}}$$

07.25.03.abah.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{z+1}{3} + \frac{e^{-z}\sqrt{\pi}(-2z^2 - z + 2)\operatorname{erfi}(\sqrt{z})}{6\sqrt{z}}$$

07.25.03.abai.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, 2; z\right) = -\frac{1}{3}e^z(2z - 3)$$

07.25.03.abaj.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{3-z}{2z} + \frac{e^z\sqrt{\pi}(-2z^2 + 5z - 3)\operatorname{erf}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.abak.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-z-3}{2z} + \frac{e^{-z}\sqrt{\pi}(2z^2 + 5z + 3)\operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.abal.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, 3; z\right) = \frac{14}{3z^2} - \frac{2e^z(2z^2 - 7z + 7)}{3z^2}$$

07.25.03.abam.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, \frac{7}{2}; z\right) = -\frac{5(z-12)}{4z^2} - \frac{5e^z\sqrt{\pi}(2z^2 - 9z + 12)\operatorname{erf}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.aban.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(z+12)}{4z^2} - \frac{5e^{-z}\sqrt{\pi}(2z^2 + 9z + 12)\operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.abao.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, 4; z\right) = \frac{2(7z+18)}{z^3} - \frac{2e^z(2z^2 - 11z + 18)}{z^3}$$

07.25.03.abap.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(11z+75)}{24z^3} - \frac{35e^z\sqrt{\pi}(2z^2 - 13z + 25)\operatorname{erf}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.abaq.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(11z - 75)}{24z^3} + \frac{35e^{-z}\sqrt{\pi}(2z^2 + 13z + 25)\operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.abar.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, 5; z\right) = \frac{4(7z^2 + 36z + 66)}{z^4} - \frac{8e^z(2z^2 - 15z + 33)}{z^4}$$

07.25.03.abas.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{21(28z^2 + 165z + 630)}{16z^4} - \frac{315e^z\sqrt{\pi}(2z^2 - 17z + 42)\operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.abat.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21(28z^2 - 165z + 630)}{16z^4} - \frac{315e^{-z}\sqrt{\pi}(2z^2 + 17z + 42)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.abau.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{3}{2}, 6; z\right) = \frac{20(7z^3 + 54z^2 + 198z + 312)}{3z^5} - \frac{40e^z(2z^2 - 19z + 52)}{z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = -\frac{1}{2}$

07.25.03.abav.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, -\frac{1}{2}; z\right) = -2z^2 - 4z + e^z\sqrt{\pi}(-2z^{5/2} - 5z^{3/2})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.abaw.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, -\frac{1}{2}; -z\right) = -2z^2 + 4z + e^{-z}\sqrt{\pi}(2z^{5/2} - 5z^{3/2})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.abax.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, \frac{1}{2}; z\right) = z + \frac{1}{2}e^z\sqrt{\pi}(2z^{3/2} + 3\sqrt{z})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.abay.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, \frac{1}{2}; -z\right) = -z + \frac{1}{2}e^{-z}\sqrt{\pi}(2z^{3/2} - 3\sqrt{z})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.abaz.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, 1; z\right) = e^z(z + 1)$$

07.25.03.abb0.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z\sqrt{\pi}(2z + 1)\operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.abb1.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}\sqrt{\pi}(1 - 2z)\operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.abb2.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, 2; z\right) = e^z$$

07.25.03.abb3.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{8 z^{3/2}} + \frac{3}{4z}$$

07.25.03.abb4.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3}{4z}$$

07.25.03.abb5.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, 3; z\right) = \frac{2 e^z (z - 1)}{z^2} + \frac{2}{z^2}$$

07.25.03.abb6.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45}{8z^2}$$

07.25.03.abb7.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{45}{8z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.abb8.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, 4; z\right) = \frac{6 e^z (z - 2)}{z^3} + \frac{6(z + 2)}{z^3}$$

07.25.03.abb9.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(4z + 15)}{16 z^3} + \frac{105 e^z \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.abba.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35(4z - 15)}{16 z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.abbb.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, 5; z\right) = \frac{24 e^z (z - 3)}{z^4} + \frac{12(z^2 + 4z + 6)}{z^4}$$

07.25.03.abbc.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{63(8z^2 + 40z + 105)}{32 z^4} + \frac{945 e^z \sqrt{\pi} (2z - 7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.abbd.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63(8z^2 - 40z + 105)}{32 z^4} - \frac{945 e^{-z} \sqrt{\pi} (2z + 7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.abbe.01

$${}_2F_2\left(-\frac{1}{2}, 2; -\frac{1}{2}, 6; z\right) = \frac{120 e^z (z-4)}{z^5} + \frac{20(z^3 + 6z^2 + 18z + 24)}{z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = \frac{1}{2}$

07.25.03.0024.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{1}{2}, 1; z\right) = e^z - \frac{3}{2} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abbf.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{1}{2}, 1; -z\right) = \frac{3}{2} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.abbg.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{1}{2}, 2; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abbh.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{1}{2}, 2; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.0025.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{1}{2}, 3; z\right) = \frac{1}{5z^2} \left(2e^z(2z^2 + z - 1) - 4\sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z}) + 2 \right)$$

07.25.03.abbi.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{1}{2}, 3; -z\right) = \frac{2e^{-z}(2z^2 - z - 1)}{5z^2} + \frac{4}{5} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + \frac{2}{5z^2}$$

07.25.03.abbj.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{1}{2}, 4; z\right) = \frac{6(7z + 10)}{35z^3} + \frac{6e^z(4z^3 + 2z^2 + 3z - 10)}{35z^3} - \frac{24}{35} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abbk.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{1}{2}, 4; -z\right) = \frac{6(7z - 10)}{35z^3} + \frac{6e^{-z}(4z^3 - 2z^2 + 3z + 10)}{35z^3} + \frac{24}{35} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.abbl.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{1}{2}, 5; z\right) = \frac{4(21z^2 + 60z + 70)}{35z^4} + \frac{8e^z(8z^4 + 4z^3 + 6z^2 + 15z - 105)}{105z^4} - \frac{64}{105} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abbm.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{1}{2}, 5; -z\right) = \frac{4(21z^2 - 60z + 70)}{35z^4} + \frac{8e^{-z}(8z^4 - 4z^3 + 6z^2 - 15z - 105)}{105z^4} + \frac{64}{105} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.abbn.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{1}{2}, 6; z\right) = \frac{4(77z^3 + 330z^2 + 770z + 840)}{77z^5} + \frac{8e^z(16z^5 + 8z^4 + 12z^3 + 30z^2 + 105z - 1260)}{231z^5} - \frac{128}{231} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abbo.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{1}{2}, 6; -z\right) = \frac{4(77z^3 - 330z^2 + 770z - 840)}{77z^5} + \frac{8e^{-z}(16z^5 - 8z^4 + 12z^3 - 30z^2 + 105z + 1260)}{231z^5} + \frac{128}{231}\sqrt{\pi}\sqrt{z}\operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = 1$

07.25.03.0026.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, 1; z\right) = \frac{1}{2}e^{z/2}\left((2-3z)I_0\left(\frac{z}{2}\right) + 3zI_1\left(\frac{z}{2}\right)\right)$$

07.25.03.0027.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, \frac{3}{2}; z\right) = \frac{1}{8\sqrt{z}}\left(\sqrt{\pi}(1-6z)\operatorname{erfi}(\sqrt{z}) + 6e^z\sqrt{z}\right)$$

07.25.03.abbp.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi}(6z+1)\operatorname{erf}(\sqrt{z})}{8\sqrt{z}} + \frac{3e^{-z}}{4}$$

07.25.03.ab bq.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, 2; z\right) = e^{z/2}(1-z)I_0\left(\frac{z}{2}\right) + e^{z/2}zI_1\left(\frac{z}{2}\right)$$

07.25.03.0028.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, \frac{5}{2}; z\right) = \frac{1}{64z^{3/2}}\left(6e^z\sqrt{z}(6z+1) - 3\sqrt{\pi}(12z^2 - 4z + 1)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.abbr.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, \frac{5}{2}; -z\right) = \frac{3e^{-z}(6z-1)}{32z} + \frac{3\sqrt{\pi}(12z^2 + 4z + 1)\operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.0029.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, 3; z\right) = -\frac{2}{15z}e^{z/2}\left(z(6z-7)I_0\left(\frac{z}{2}\right) + (-6z^2 + z - 2)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.abbs.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, \frac{7}{2}; z\right) = \frac{15e^z(4z^2+3)}{128z^2} - \frac{15\sqrt{\pi}(8z^3 - 4z^2 + 2z + 3)\operatorname{erfi}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.abbt.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, \frac{7}{2}; -z\right) = \frac{15e^{-z}(4z^2+3)}{128z^2} + \frac{15\sqrt{\pi}(8z^3 + 4z^2 + 2z - 3)\operatorname{erf}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.abbu.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, 4; z\right) = \frac{4e^{z/2}(6z^3 - 2z^2 + 3z + 8)I_1\left(\frac{z}{2}\right)}{35z^2} - \frac{8e^{z/2}(3z^2 - 4z + 1)I_0\left(\frac{z}{2}\right)}{35z}$$

07.25.03.abbv.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, \frac{9}{2}; z\right) = \frac{35 e^{-z} (24 z^3 - 4 z^2 + 22 z + 75)}{2048 z^3} - \frac{35 \sqrt{\pi} (48 z^4 - 32 z^3 + 24 z^2 + 72 z + 75) \operatorname{erfi}(\sqrt{z})}{4096 z^{7/2}}$$

07.25.03.abbw.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (24 z^3 + 4 z^2 + 22 z - 75)}{2048 z^3} + \frac{35 \sqrt{\pi} (48 z^4 + 32 z^3 + 24 z^2 - 72 z + 75) \operatorname{erf}(\sqrt{z})}{4096 z^{7/2}}$$

07.25.03.abbx.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, 5; z\right) = \frac{16 e^{z/2} (4 z^4 - 2 z^3 + 3 z^2 + 12 z + 24) I_1\left(\frac{z}{2}\right)}{105 z^3} - \frac{16 e^{z/2} (4 z^3 - 6 z^2 + 3 z + 6) I_0\left(\frac{z}{2}\right)}{105 z^2}$$

07.25.03.abby.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, \frac{11}{2}; z\right) = \frac{63 e^{-z} (48 z^4 - 16 z^3 + 56 z^2 + 260 z + 735)}{8192 z^4} - \frac{63 \sqrt{\pi} (96 z^5 - 80 z^4 + 80 z^3 + 360 z^2 + 750 z + 735) \operatorname{erfi}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.abbz.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (48 z^4 + 16 z^3 + 56 z^2 - 260 z + 735)}{8192 z^4} + \frac{63 \sqrt{\pi} (96 z^5 + 80 z^4 + 80 z^3 - 360 z^2 + 750 z - 735) \operatorname{erf}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.abcc.01

$${}_2F_2\left(-\frac{1}{2}, 2; 1, 6; z\right) = \frac{32 e^{z/2} (12 z^5 - 8 z^4 + 13 z^3 + 72 z^2 + 204 z + 384) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (12 z^4 - 20 z^3 + 15 z^2 + 51 z + 96) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = \frac{3}{2}$

07.25.03.abcc1.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{3}{2}, 2; z\right) = \frac{\sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4 \sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.abcc2.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{3}{2}, 2; -z\right) = \frac{\sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4 \sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.0030.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{3}{2}, 3; z\right) = \frac{1}{15 z^2} \left(\sqrt{\pi} (5 - 6z) \operatorname{erfi}(\sqrt{z}) z^{3/2} + 2 (e^{-z} (3 z^2 - z + 1) - 1) \right)$$

07.25.03.abcc3.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{3}{2}, 3; -z\right) = \frac{2 e^{-z} (3 z^2 + z + 1)}{15 z^2} + \frac{\sqrt{\pi} (6z + 5) \operatorname{erf}(\sqrt{z})}{15 \sqrt{z}} - \frac{2}{15 z^2}$$

07.25.03.abc4.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{3}{2}, 4; z\right) = -\frac{2(7z+6)}{35z^3} + \frac{2e^z(6z^3-4z^2+z+6)}{35z^3} - \frac{2\sqrt{\pi}(6z-7)\operatorname{erfi}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.abc5.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{3}{2}, 4; -z\right) = -\frac{2(7z-6)}{35z^3} + \frac{2e^{-z}(6z^3+4z^2+z-6)}{35z^3} + \frac{2\sqrt{\pi}(6z+7)\operatorname{erf}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.abc6.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{3}{2}, 5; z\right) = -\frac{4(7z^2+12z+10)}{35z^4} + \frac{8e^z(4z^4-4z^3+3z+15)}{105z^4} - \frac{16\sqrt{\pi}(2z-3)\operatorname{erfi}(\sqrt{z})}{105\sqrt{z}}$$

07.25.03.abc7.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{3}{2}, 5; -z\right) = -\frac{4(7z^2-12z+10)}{35z^4} + \frac{8e^{-z}(4z^4+4z^3-3z+15)}{105z^4} + \frac{16\sqrt{\pi}(2z+3)\operatorname{erf}(\sqrt{z})}{105\sqrt{z}}$$

07.25.03.abc8.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{3}{2}, 6; z\right) = -\frac{4(77z^3+198z^2+330z+280)}{231z^5} + \frac{8e^z(24z^5-32z^4-4z^3+12z^2+75z+420)}{693z^5} - \frac{32\sqrt{\pi}(6z-11)\operatorname{erfi}(\sqrt{z})}{693\sqrt{z}}$$

07.25.03.abc9.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{3}{2}, 6; -z\right) = -\frac{4(77z^3-198z^2+330z-280)}{231z^5} + \frac{8e^{-z}(24z^5+32z^4-4z^3-12z^2+75z-420)}{693z^5} + \frac{32\sqrt{\pi}(6z+11)\operatorname{erf}(\sqrt{z})}{693\sqrt{z}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = 2$

07.25.03.abca.01

$${}_2F_2\left(-\frac{1}{2}, 2; 2, 2; z\right) = e^{z/2}\left(1 - \frac{2z}{3}\right)I_0\left(\frac{z}{2}\right) + e^{z/2}\left(\frac{2z}{3} - \frac{1}{3}\right)I_1\left(\frac{z}{2}\right)$$

07.25.03.abcb.01

$${}_2F_2\left(-\frac{1}{2}, 2; 2, \frac{5}{2}; z\right) = \frac{3e^z(2z-1)}{16z} - \frac{3\sqrt{\pi}(4z^2-4z-1)\operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.abcc.01

$${}_2F_2\left(-\frac{1}{2}, 2; 2, \frac{5}{2}; -z\right) = \frac{3e^{-z}(2z+1)}{16z} + \frac{3\sqrt{\pi}(4z^2+4z-1)\operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.abcd.01

$${}_2F_2\left(-\frac{1}{2}, 2; 2, 3; z\right) = \frac{4e^{z/2}(2z^2-2z-1)I_1\left(\frac{z}{2}\right)}{15z} - \frac{8}{15}e^{z/2}(z-2)I_0\left(\frac{z}{2}\right)$$

07.25.03.abce.01

$${}_2F_2\left(-\frac{1}{2}, 2; 2, \frac{7}{2}; z\right) = \frac{5 e^z (4 z^2 - 4 z - 3)}{64 z^2} - \frac{5 \sqrt{\pi} (8 z^3 - 12 z^2 - 6 z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.abcf.01

$${}_2F_2\left(-\frac{1}{2}, 2; 2, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (4 z^2 + 4 z - 3)}{64 z^2} + \frac{5 \sqrt{\pi} (8 z^3 + 12 z^2 - 6 z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.abcg.01

$${}_2F_2\left(-\frac{1}{2}, 2; 2, 4; z\right) = \frac{4 e^{z/2} (4 z^3 - 6 z^2 - 5 z - 4) I_1\left(\frac{z}{2}\right)}{35 z^2} - \frac{4 e^{z/2} (4 z^2 - 10 z - 1) I_0\left(\frac{z}{2}\right)}{35 z}$$

07.25.03.abch.01

$${}_2F_2\left(-\frac{1}{2}, 2; 2, \frac{9}{2}; z\right) = \frac{35 e^z (8 z^3 - 12 z^2 - 14 z - 15)}{1024 z^3} - \frac{35 \sqrt{\pi} (16 z^4 - 32 z^3 - 24 z^2 - 24 z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.abci.01

$${}_2F_2\left(-\frac{1}{2}, 2; 2, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.abcj.01

$${}_2F_2\left(-\frac{1}{2}, 2; 2, 5; z\right) = \frac{32 e^{z/2} (4 z^4 - 8 z^3 - 9 z^2 - 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3} - \frac{32 e^{z/2} (4 z^3 - 12 z^2 - 3 z - 3) I_0\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.abck.01

$${}_2F_2\left(-\frac{1}{2}, 2; 2, \frac{11}{2}; z\right) = \frac{63 e^z (16 z^4 - 32 z^3 - 48 z^2 - 80 z - 105)}{4096 z^4} - \frac{63 \sqrt{\pi} (32 z^5 - 80 z^4 - 80 z^3 - 120 z^2 - 150 z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.abcl.01

$${}_2F_2\left(-\frac{1}{2}, 2; 2, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16 z^4 + 32 z^3 - 48 z^2 + 80 z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.abcm.01

$${}_2F_2\left(-\frac{1}{2}, 2; 2, 6; z\right) = \frac{32 e^{z/2} (8 z^5 - 20 z^4 - 28 z^3 - 51 z^2 - 84 z - 96) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (8 z^4 - 28 z^3 - 12 z^2 - 21 z - 24) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = \frac{5}{2}$

07.25.03.0031.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{5}{2}, 3; z\right) = \frac{1}{40 z^2} \left(2(e^z (6 z^2 - 7 z - 8) + 8) + \sqrt{\pi} \sqrt{z} (-12 z^2 + 20 z + 15) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.abcn.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{5}{2}, 3; -z\right) = \frac{e^{-z}(6z^2 + 7z - 8)}{20z^2} + \frac{\sqrt{\pi}(12z^2 + 20z - 15)\operatorname{erf}(\sqrt{z})}{40z^{3/2}} + \frac{2}{5z^2}$$

07.25.03.abco.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{5}{2}, 4; z\right) = \frac{6(7z + 2)}{35z^3} + \frac{3e^z(6z^3 - 11z^2 - 20z - 8)}{70z^3} - \frac{3\sqrt{\pi}(12z^2 - 28z - 35)\operatorname{erfi}(\sqrt{z})}{140z^{3/2}}$$

07.25.03.abcp.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{5}{2}, 4; -z\right) = \frac{6(7z - 2)}{35z^3} + \frac{3e^{-z}(6z^3 + 11z^2 - 20z + 8)}{70z^3} + \frac{3\sqrt{\pi}(12z^2 + 28z - 35)\operatorname{erf}(\sqrt{z})}{140z^{3/2}}$$

07.25.03.abcq.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{5}{2}, 5; z\right) = \frac{12(7z^2 + 4z + 2)}{35z^4} + \frac{4e^z(2z^4 - 5z^3 - 12z^2 - 6z - 6)}{35z^4} - \frac{2\sqrt{\pi}(4z^2 - 12z - 21)\operatorname{erfi}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.abcr.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{5}{2}, 5; -z\right) = \frac{12(7z^2 - 4z + 2)}{35z^4} + \frac{4e^{-z}(2z^4 + 5z^3 - 12z^2 + 6z - 6)}{35z^4} + \frac{2\sqrt{\pi}(4z^2 + 12z - 21)\operatorname{erf}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.abcs.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{5}{2}, 6; z\right) = \frac{4(77z^3 + 66z^2 + 66z + 40)}{77z^5} + \frac{8e^z(6z^5 - 19z^4 - 56z^3 - 30z^2 - 39z - 60)}{231z^5} - \frac{4\sqrt{\pi}(12z^2 - 44z - 99)\operatorname{erfi}(\sqrt{z})}{231z^{3/2}}$$

07.25.03.abct.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{5}{2}, 6; -z\right) = \frac{4(77z^3 - 66z^2 + 66z - 40)}{77z^5} + \frac{8e^{-z}(6z^5 + 19z^4 - 56z^3 + 30z^2 - 39z + 60)}{231z^5} + \frac{4\sqrt{\pi}(12z^2 + 44z - 99)\operatorname{erf}(\sqrt{z})}{231z^{3/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = 3$

07.25.03.0032.01

$${}_2F_2\left(-\frac{1}{2}, 2; 3, 3; z\right) = -\frac{8}{225z^2} \left(e^{z/2}(12z^3 - 34z^2 - 15z + 30)I_0\left(\frac{z}{2}\right) - e^{z/2}z(12z^2 - 22z - 31)I_1\left(\frac{z}{2}\right) - 30 \right)$$

07.25.03.abcu.01

$${}_2F_2\left(-\frac{1}{2}, 2; 3, \frac{7}{2}; z\right) = \frac{e^z(4z^2 - 8z - 17)}{16z^2} + \frac{\sqrt{\pi}(-8z^3 + 20z^2 + 30z - 15)\operatorname{erfi}(\sqrt{z})}{32z^{5/2}} + \frac{2}{z^2}$$

07.25.03.abcv.01

$${}_2F_2\left(-\frac{1}{2}, 2; 3, \frac{7}{2}; -z\right) = \frac{e^{-z}(4z^2 + 8z - 17)}{16z^2} + \frac{\sqrt{\pi}(8z^3 + 20z^2 - 30z - 15)\operatorname{erf}(\sqrt{z})}{32z^{5/2}} + \frac{2}{z^2}$$

07.25.03.abcw.01

$${}_2F_2\left(-\frac{1}{2}, 2; 3, 4; z\right) = -\frac{16 e^{z/2} (12 z^3 - 44 z^2 - 45 z + 105) I_0\left(\frac{z}{2}\right)}{525 z^2} + \frac{16 e^{z/2} (12 z^3 - 32 z^2 - 71 z + 30) I_1\left(\frac{z}{2}\right)}{525 z^2} + \frac{16}{5 z^2}$$

07.25.03.abcx.01

$${}_2F_2\left(-\frac{1}{2}, 2; 3, \frac{9}{2}; z\right) = \frac{7 e^z (24 z^3 - 68 z^2 - 202 z + 75)}{768 z^3} - \frac{7 \sqrt{\pi} (48 z^4 - 160 z^3 - 360 z^2 + 360 z + 75) \operatorname{erfi}(\sqrt{z})}{1536 z^{7/2}} + \frac{14}{3 z^2}$$

07.25.03.abcy.01

$${}_2F_2\left(-\frac{1}{2}, 2; 3, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (24 z^3 + 68 z^2 - 202 z - 75)}{768 z^3} + \frac{7 \sqrt{\pi} (48 z^4 + 160 z^3 - 360 z^2 - 360 z + 75) \operatorname{erf}(\sqrt{z})}{1536 z^{7/2}} + \frac{14}{3 z^2}$$

07.25.03.abcz.01

$${}_2F_2\left(-\frac{1}{2}, 2; 3, 5; z\right) = -\frac{64 e^{z/2} (8 z^3 - 36 z^2 - 60 z + 165) I_0\left(\frac{z}{2}\right)}{1575 z^2} + \frac{64 e^{z/2} (8 z^4 - 28 z^3 - 84 z^2 + 75 z + 30) I_1\left(\frac{z}{2}\right)}{1575 z^3} + \frac{32}{5 z^2}$$

07.25.03.abd0.01

$${}_2F_2\left(-\frac{1}{2}, 2; 3, \frac{11}{2}; z\right) = \frac{21 e^z (48 z^4 - 176 z^3 - 664 z^2 + 540 z + 315)}{5120 z^4} - \frac{21 \sqrt{\pi} (96 z^5 - 400 z^4 - 1200 z^3 + 1800 z^2 + 750 z + 315) \operatorname{erfi}(\sqrt{z})}{10240 z^{9/2}} + \frac{42}{5 z^2}$$

07.25.03.abd1.01

$${}_2F_2\left(-\frac{1}{2}, 2; 3, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (48 z^4 + 176 z^3 - 664 z^2 - 540 z + 315)}{5120 z^4} + \frac{21 \sqrt{\pi} (96 z^5 + 400 z^4 - 1200 z^3 - 1800 z^2 + 750 z - 315) \operatorname{erf}(\sqrt{z})}{10240 z^{9/2}} + \frac{42}{5 z^2}$$

07.25.03.abd2.01

$${}_2F_2\left(-\frac{1}{2}, 2; 3, 6; z\right) = -\frac{512 e^{z/2} (6 z^4 - 32 z^3 - 75 z^2 + 240 z + 15) I_0\left(\frac{z}{2}\right)}{10395 z^3} + \frac{128 e^{z/2} (24 z^5 - 104 z^4 - 392 z^3 + 540 z^2 + 375 z + 240) I_1\left(\frac{z}{2}\right)}{10395 z^4} + \frac{32}{3 z^2}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = \frac{7}{2}$

07.25.03.abd3.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{7}{2}, 4; z\right) = \frac{6(7z-2)}{7z^3} + \frac{3 e^z (4z^3 - 12z^2 - 39z + 32)}{56z^3} - \frac{3 \sqrt{\pi} (8z^3 - 28z^2 - 70z + 105) \operatorname{erfi}(\sqrt{z})}{112 z^{5/2}}$$

07.25.03.abd4.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{7}{2}, 4; -z\right) = \frac{6(7z+2)}{7z^3} + \frac{3 e^{-z} (4z^3 + 12z^2 - 39z - 32)}{56z^3} + \frac{3 \sqrt{\pi} (8z^3 + 28z^2 - 70z - 105) \operatorname{erf}(\sqrt{z})}{112 z^{5/2}}$$

07.25.03.abd5.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{7}{2}, 5; z\right) = \frac{4(21z^2 - 12z - 2)}{7z^4} + \frac{e^z (4z^4 - 16z^3 - 69z^2 + 120z + 24)}{21z^4} + \frac{\sqrt{\pi} (-8z^3 + 36z^2 + 126z - 315) \operatorname{erfi}(\sqrt{z})}{42 z^{5/2}}$$

07.25.03.abd6.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{7}{2}, 5; -z\right) = \frac{4(21z^2 + 12z - 2)}{7z^4} + \frac{e^{-z}(4z^4 + 16z^3 - 69z^2 - 120z + 24)}{21z^4} + \frac{\sqrt{\pi}(8z^3 + 36z^2 - 126z - 315)\operatorname{erf}(\sqrt{z})}{42z^{5/2}}$$

07.25.03.abd7.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{7}{2}, 6; z\right) = \frac{20(77z^3 - 66z^2 - 22z - 8)}{77z^5} + \frac{10e^z(4z^5 - 20z^4 - 107z^3 + 288z^2 + 84z + 48)}{231z^5} - \frac{5\sqrt{\pi}(8z^3 - 44z^2 - 198z + 693)\operatorname{erfi}(\sqrt{z})}{231z^{5/2}}$$

07.25.03.abd8.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{7}{2}, 6; -z\right) = \frac{20(77z^3 + 66z^2 - 22z + 8)}{77z^5} + \frac{10e^{-z}(4z^5 + 20z^4 - 107z^3 - 288z^2 + 84z - 48)}{231z^5} + \frac{5\sqrt{\pi}(8z^3 + 44z^2 - 198z - 693)\operatorname{erf}(\sqrt{z})}{231z^{5/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = 4$

07.25.03.abd9.01

$${}_2F_2\left(-\frac{1}{2}, 2; 4, 4; z\right) = \frac{48(7z - 4)}{35z^3} - \frac{16e^{z/2}(24z^4 - 116z^3 - 244z^2 + 945z - 420)I_0\left(\frac{z}{2}\right)}{1225z^3} + \frac{16e^{z/2}(24z^3 - 92z^2 - 324z + 599)I_1\left(\frac{z}{2}\right)}{1225z^2}$$

07.25.03.abda.01

$${}_2F_2\left(-\frac{1}{2}, 2; 4, \frac{9}{2}; z\right) = \frac{2(7z - 6)}{z^3} + \frac{e^z(24z^3 - 100z^2 - 458z + 1011)}{128z^3} + \frac{\sqrt{\pi}(-48z^4 + 224z^3 + 840z^2 - 2520z + 525)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.abdb.01

$${}_2F_2\left(-\frac{1}{2}, 2; 4, \frac{9}{2}; -z\right) = \frac{2(7z + 6)}{z^3} + \frac{e^{-z}(24z^3 + 100z^2 - 458z - 1011)}{128z^3} + \frac{\sqrt{\pi}(48z^4 + 224z^3 - 840z^2 - 2520z - 525)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.abdc.01

$${}_2F_2\left(-\frac{1}{2}, 2; 4, 5; z\right) = \frac{96(7z - 8)}{35z^3} - \frac{256e^{z/2}(4z^4 - 24z^3 - 78z^2 + 420z - 315)I_0\left(\frac{z}{2}\right)}{3675z^3} + \frac{128e^{z/2}(8z^4 - 40z^3 - 192z^2 + 636z - 105)I_1\left(\frac{z}{2}\right)}{3675z^3}$$

07.25.03.abdd.01

$${}_2F_2\left(-\frac{1}{2}, 2; 4, \frac{11}{2}; z\right) = \frac{18(7z-10)}{5z^3} + \frac{9e^z(48z^4 - 256z^3 - 1504z^2 + 5480z - 735)}{2560z^4} - \frac{9\sqrt{\pi}(96z^5 - 560z^4 - 2800z^3 + 12600z^2 - 5250z - 735)\operatorname{erfi}(\sqrt{z})}{5120z^{9/2}}$$

07.25.03.abde.01

$${}_2F_2\left(-\frac{1}{2}, 2; 4, \frac{11}{2}; -z\right) = \frac{18(7z+10)}{5z^3} + \frac{9e^{-z}(48z^4 + 256z^3 - 1504z^2 - 5480z - 735)}{2560z^4} + \frac{9\sqrt{\pi}(96z^5 + 560z^4 - 2800z^3 - 12600z^2 - 5250z + 735)\operatorname{erf}(\sqrt{z})}{5120z^{9/2}}$$

07.25.03.abdf.01

$${}_2F_2\left(-\frac{1}{2}, 2; 4, 6; z\right) = \frac{32(7z-12)}{7z^3} - \frac{128e^{z/2}(48z^4 - 344z^3 - 1524z^2 + 10500z - 10605)I_0\left(\frac{z}{2}\right)}{24255z^3} + \frac{128e^{z/2}(48z^5 - 296z^4 - 1796z^3 + 8604z^2 - 3045z - 840)I_1\left(\frac{z}{2}\right)}{24255z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = \frac{9}{2}$

07.25.03.abdg.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{9}{2}, 5; z\right) = \frac{4(7z^2 - 12z + 2)}{z^4} + \frac{e^z(8z^4 - 44z^3 - 270z^2 + 1113z - 384)}{48z^4} + \frac{\sqrt{\pi}(-16z^4 + 96z^3 + 504z^2 - 2520z + 1575)\operatorname{erfi}(\sqrt{z})}{96z^{7/2}}$$

07.25.03.abdh.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{9}{2}, 5; -z\right) = \frac{4(7z^2 + 12z + 2)}{z^4} + \frac{e^{-z}(8z^4 + 44z^3 - 270z^2 - 1113z - 384)}{48z^4} + \frac{\sqrt{\pi}(16z^4 + 96z^3 - 504z^2 - 2520z - 1575)\operatorname{erf}(\sqrt{z})}{96z^{7/2}}$$

07.25.03.abdi.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{9}{2}, 6; z\right) = \frac{20(77z^3 - 198z^2 + 66z + 8)}{33z^5} + \frac{5e^z(24z^5 - 164z^4 - 1258z^3 + 7635z^2 - 5568z - 768)}{792z^5} - \frac{5\sqrt{\pi}(48z^4 - 352z^3 - 2376z^2 + 16632z - 17325)\operatorname{erfi}(\sqrt{z})}{1584z^{7/2}}$$

07.25.03.abdj.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{9}{2}, 6; -z\right) = \frac{20(77z^3 + 198z^2 + 66z - 8)}{33z^5} + \frac{5e^{-z}(24z^5 + 164z^4 - 1258z^3 - 7635z^2 - 5568z + 768)}{792z^5} + \frac{5\sqrt{\pi}(48z^4 + 352z^3 - 2376z^2 - 16632z - 17325)\operatorname{erf}(\sqrt{z})}{1584z^{7/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = 5$

07.25.03.abdk.01

$${}_2F_2\left(-\frac{1}{2}, 2; 5, 5; z\right) = \frac{64(21z^2 - 48z + 16)}{35z^4} - \frac{512e^{z/2}(16z^5 - 120z^4 - 588z^3 + 4668z^2 - 6615z + 1890)I_0\left(\frac{z}{2}\right)}{33075z^4} + \frac{512e^{z/2}(16z^4 - 104z^3 - 684z^2 + 3948z - 3063)I_1\left(\frac{z}{2}\right)}{33075z^3}$$

07.25.03.abdl.01

$${}_2F_2\left(-\frac{1}{2}, 2; 5, \frac{11}{2}; z\right) = \frac{36(7z^2 - 20z + 10)}{5z^4} + \frac{3e^z(16z^4 - 112z^3 - 888z^2 + 5820z - 5475)}{320z^4} - \frac{3\sqrt{\pi}(32z^5 - 240z^4 - 1680z^3 + 12600z^2 - 15750z + 2205)\operatorname{erfi}(\sqrt{z})}{640z^{9/2}}$$

07.25.03.abdm.01

$${}_2F_2\left(-\frac{1}{2}, 2; 5, \frac{11}{2}; -z\right) = \frac{36(7z^2 + 20z + 10)}{5z^4} + \frac{3e^{-z}(16z^4 + 112z^3 - 888z^2 - 5820z - 5475)}{320z^4} + \frac{3\sqrt{\pi}(32z^5 + 240z^4 - 1680z^3 - 12600z^2 - 15750z - 2205)\operatorname{erf}(\sqrt{z})}{640z^{9/2}}$$

07.25.03.abdn.01

$${}_2F_2\left(-\frac{1}{2}, 2; 5, 6; z\right) = \frac{64(7z^2 - 24z + 16)}{7z^4} - \frac{1024e^{z/2}(16z^5 - 144z^4 - 948z^3 + 9924z^2 - 20475z + 10395)I_0\left(\frac{z}{2}\right)}{72765z^4} + \frac{1024e^{z/2}(16z^5 - 128z^4 - 1068z^3 + 8808z^2 - 12279z + 1260)I_1\left(\frac{z}{2}\right)}{72765z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = \frac{11}{2}$

07.25.03.abdo.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{11}{2}, 6; z\right) = \frac{12(77z^3 - 330z^2 + 330z - 40)}{11z^5} + \frac{e^z(48z^5 - 416z^4 - 4144z^3 + 39360z^2 - 69315z + 15360)}{352z^5} + \frac{\sqrt{\pi}(-96z^5 + 880z^4 + 7920z^3 - 83160z^2 + 173250z - 72765)\operatorname{erfi}(\sqrt{z})}{704z^{9/2}}$$

07.25.03.abdp.01

$${}_2F_2\left(-\frac{1}{2}, 2; \frac{11}{2}, 6; -z\right) = \frac{12(77z^3 + 330z^2 + 330z + 40)}{11z^5} + \frac{e^{-z}(48z^5 + 416z^4 - 4144z^3 - 39360z^2 - 69315z - 15360)}{352z^5} + \frac{\sqrt{\pi}(96z^5 + 880z^4 - 7920z^3 - 83160z^2 - 173250z - 72765)\operatorname{erf}(\sqrt{z})}{704z^{9/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 2$, $b_1 = 6$

07.25.03.abdq.01

$${}_2F_2\left(-\frac{1}{2}, 2; 6, 6; z\right) = \frac{320(77z^3 - 396z^2 + 528z - 128)}{231z^5} - \frac{1024e^{z/2}(96z^6 - 1040z^5 - 9120z^4 + 127788z^3 - 397542z^2 + 384615z - 83160)I_0\left(\frac{z}{2}\right)}{480249z^5} + \frac{1024e^{z/2}(96z^5 - 944z^4 - 10016z^3 + 117396z^2 - 285798z + 145797)I_1\left(\frac{z}{2}\right)}{480249z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.abdr.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{1}{324168075} (e^z (8192z^{13} + 364544z^{12} + 5804032z^{11} + 41207808z^{10} + 132625920z^9 + 174048000z^8 + 68544000z^7 + 2016000z^6 + 3276000z^5 - 15498000z^4 + 60253200z^3 - 174900600z^2 + 337563450z - 324168075))$$

07.25.03.abds.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{29469825} (e^z (4096z^{12} + 155648z^{11} + 2045952z^{10} + 11397120z^9 + 26423040z^8 + 20966400z^7 + 2822400z^6 - 403200z^5 + 1436400z^4 - 5594400z^3 + 16140600z^2 - 30958200z + 29469825))$$

07.25.03.abdt.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{1}{3274425} (e^z (2048z^{11} + 64512z^{10} + 668160z^9 + 2691840z^8 + 3790080z^7 + 1008000z^6 - 100800z^5 - 151200z^4 + 642600z^3 - 1833300z^2 + 3487050z - 3274425))$$

07.25.03.abdu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{467775} (e^z (1024z^{10} + 25600z^9 + 193280z^8 + 476160z^7 + 228480z^6 - 67200z^5 + 50400z^4 - 100800z^3 + 270900z^2 - 510300z + 467775))$$

07.25.03.abdv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = -\frac{1}{93555} e^z (512z^9 + 9472z^8 + 44544z^7 + 37632z^6 - 17472z^5 + 10080z^4 + 10080z^3 - 55440z^2 + 107730z - 93555)$$

07.25.03.abdw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{e^z (256 z^8 + 3072 z^7 + 5376 z^6 - 5376 z^5 + 10080 z^4 - 20160 z^3 + 35280 z^2 - 45360 z + 31185)}{31185}$$

07.25.03.abdx.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = -\frac{e^z (128 z^7 + 704 z^6 - 1184 z^5 + 2640 z^4 - 4200 z^3 + 420 z^2 + 17010 z - 31185)}{31185}$$

07.25.03.abdy.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (-64 z^7 - 192 z^6 + 624 z^5 - 2160 z^4 + 5256 z^3 - 5832 z^2 - 8505 z + 31185) I_0\left(\frac{z}{2}\right)}{31185} + \frac{e^{z/2} (-64 z^7 - 128 z^6 + 720 z^5 - 2880 z^4 + 8424 z^3 - 15984 z^2 + 14193 z) I_1\left(\frac{z}{2}\right)}{31185}$$

07.25.03.abdz.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{e^z (64 z^6 - 64 z^5 - 240 z^4 + 2400 z^3 - 10500 z^2 + 26460 z - 31185)}{31185}$$

07.25.03.abe0.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (-64 z^6 + 224 z^5 - 560 z^4 + 96 z^3 + 5928 z^2 - 23310 z + 31185) I_0\left(\frac{z}{2}\right)}{31185} + \frac{e^{z/2} (-64 z^6 + 288 z^5 - 880 z^4 + 1184 z^3 + 3816 z^2 - 23922 z + 45045) I_1\left(\frac{z}{2}\right)}{31185}$$

07.25.03.abe1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = -\frac{e^z (32 z^5 - 240 z^4 + 1200 z^3 - 4200 z^2 + 9450 z - 10395)}{10395}$$

07.25.03.abe2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, 3; z\right) = -\frac{8 e^{z/2} (16 z^5 - 160 z^4 + 1008 z^3 - 4416 z^2 + 12915 z - 20790) I_0\left(\frac{z}{2}\right)}{31185} - \frac{4 e^{z/2} (32 z^6 - 352 z^5 + 2384 z^4 - 11424 z^3 + 38898 z^2 - 90090 z + 135135) I_1\left(\frac{z}{2}\right)}{31185 z}$$

07.25.03.abe3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (-16 z^6 + 224 z^5 - 1832 z^4 + 10344 z^3 - 40929 z^2 + 107520 z - 161280)}{2079 z^2} + \frac{1280 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{33 z^{5/2}}$$

07.25.03.abe4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-16 z^6 - 224 z^5 - 1832 z^4 - 10344 z^3 - 40929 z^2 - 107520 z - 161280)}{2079 z^2} + \frac{1280 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{33 z^{5/2}}$$

07.25.03.abe5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, 4; z\right) = -\frac{4 e^{z/2} (32 z^5 - 528 z^4 + 4896 z^3 - 30420 z^2 + 127710 z - 328185) I_0\left(\frac{z}{2}\right)}{10395 z} - \frac{4 e^{z/2} (32 z^6 - 560 z^5 + 5472 z^4 - 36204 z^3 + 167310 z^2 - 521235 z + 1312740) I_1\left(\frac{z}{2}\right)}{10395 z^2}$$

07.25.03.abe6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (-8 z^6 + 164 z^5 - 1818 z^4 + 13353 z^3 - 67200 z^2 + 221760 z - 453600)}{297 z^3} + \frac{560 \sqrt{\pi} (8 z + 45) \operatorname{erfi}(\sqrt{z})}{33 z^{7/2}}$$

07.25.03.abe7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (8 z^6 + 164 z^5 + 1818 z^4 + 13353 z^3 + 67200 z^2 + 221760 z + 453600)}{297 z^3} + \frac{560 \sqrt{\pi} (8 z - 45) \operatorname{erf}(\sqrt{z})}{33 z^{7/2}}$$

07.25.03.abe8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, 5; z\right) = -\frac{32 e^{z/2} (16 z^5 - 368 z^4 + 4460 z^3 - 34980 z^2 + 182325 z - 692835) I_0\left(\frac{z}{2}\right)}{10395 z^2} - \frac{32 e^{z/2} (16 z^6 - 384 z^5 + 4852 z^4 - 40040 z^3 + 225225 z^2 - 729300 z + 2771340) I_1\left(\frac{z}{2}\right)}{10395 z^3}$$

07.25.03.abe9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (-4 z^6 + 108 z^5 - 1503 z^4 + 13440 z^3 - 80640 z^2 + 302400 z - 793800)}{33 z^4} + \frac{420 \sqrt{\pi} (8 z^2 + 90 z + 315) \operatorname{erfi}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.abea.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-4 z^6 - 108 z^5 - 1503 z^4 - 13440 z^3 - 80640 z^2 - 302400 z - 793800)}{33 z^4} + \frac{420 \sqrt{\pi} (8 z^2 - 90 z + 315) \operatorname{erf}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.abeb.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, 6; z\right) = -\frac{32 e^{z/2} (16 z^5 - 472 z^4 + 7044 z^3 - 66300 z^2 + 365313 z - 2116296) I_0\left(\frac{z}{2}\right)}{2079 z^3} - \frac{32 e^{z/2} (16 z^6 - 488 z^5 + 7540 z^4 - 74100 z^3 + 529737 z^2 - 1461252 z + 8465184) I_1\left(\frac{z}{2}\right)}{2079 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.abec.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{1}{2679075} (e^z (2048 z^{11} + 66560 z^{10} + 723456 z^9 + 3166464 z^8 + 5295360 z^7 + 2540160 z^6 + 141120 z^5 - 131040 z^4 + 521640 z^3 - 1493100 z^2 + 2844450 z - 2679075))$$

07.25.03.abed.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{297675} (e^z (1024 z^{10} + 27648 z^9 + 237312 z^8 + 752640 z^7 + 766080 z^6 + 120960 z^5 + 10080 z^4 - 60480 z^3 + 170100 z^2 - 321300 z + 297675))$$

07.25.03.abee.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{1}{42525} e^z (512 z^9 + 11008 z^8 + 69120 z^7 + 134400 z^6 + 47040 z^5 - 10080 z^4 + 10080 z^3 - 25200 z^2 + 47250 z - 42525)$$

07.25.03.abef.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{e^z (256 z^8 + 4096 z^7 + 16128 z^6 + 10752 z^5 - 3360 z^4 + 5040 z^2 - 10080 z + 8505)}{8505}$$

07.25.03.abeg.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -\frac{e^z (128 z^7 + 1344 z^6 + 2016 z^5 - 1680 z^4 + 2520 z^3 - 3780 z^2 + 4410 z - 2835)}{2835}$$

07.25.03.abeh.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{e^z (64 z^6 + 320 z^5 - 432 z^4 + 672 z^3 - 420 z^2 - 1260 z + 2835)}{2835}$$

07.25.03.abei.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (32 z^6 + 96 z^5 - 240 z^4 + 576 z^3 - 702 z^2 - 630 z + 2835) I_0\left(\frac{z}{2}\right) + 2 e^{z/2} (16 z^6 + 32 z^5 - 144 z^4 + 432 z^3 - 837 z^2 + 774 z) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.abej.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z (32 z^5 - 16 z^4 - 144 z^3 + 840 z^2 - 2310 z + 2835)}{2835}$$

07.25.03.abek.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (32 z^5 - 80 z^4 + 96 z^3 + 348 z^2 - 1890 z + 2835) I_0\left(\frac{z}{2}\right) + e^{z/2} (32 z^5 - 112 z^4 + 224 z^3 + 36 z^2 - 1602 z + 3465) I_1\left(\frac{z}{2}\right)}{2835} + \frac{e^{z/2} (32 z^5 - 112 z^4 + 224 z^3 + 36 z^2 - 1602 z + 3465) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.abel.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{945} e^z (16z^4 - 96z^3 + 360z^2 - 840z + 945)$$

07.25.03.abem.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, 3; z\right) = \frac{4 e^{z/2} (16z^4 - 128z^3 + 612z^2 - 1848z + 2961) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (16z^5 - 144z^4 + 764z^3 - 2700z^2 + 6237z - 9009) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.aben.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^{-z} (8z^5 - 92z^4 + 594z^3 - 2499z^2 + 6720z - 10080)}{189z^2} + \frac{80\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{3z^{5/2}}$$

07.25.03.abeo.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-8z^5 - 92z^4 - 594z^3 - 2499z^2 - 6720z - 10080)}{189z^2} + \frac{80\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{3z^{5/2}}$$

07.25.03.abep.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (16z^4 - 216z^3 + 1572z^2 - 7164z + 19305) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (16z^5 - 232z^4 + 1812z^3 - 9108z^2 + 29601z - 77220) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.abeq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^{-z} (4z^5 - 68z^4 + 603z^3 - 3360z^2 + 11760z - 25200)}{27z^3} + \frac{280\sqrt{\pi} (z+5) \operatorname{erfi}(\sqrt{z})}{3z^{7/2}}$$

07.25.03.aber.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (4z^5 + 68z^4 + 603z^3 + 3360z^2 + 11760z + 25200)}{27z^3} + \frac{280\sqrt{\pi} (z-5) \operatorname{erf}(\sqrt{z})}{3z^{7/2}}$$

07.25.03.abes.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (8z^4 - 152z^3 + 1464z^2 - 8580z + 36465) I_0\left(\frac{z}{2}\right) + 128 e^{z/2} (2z^5 - 40z^4 + 407z^3 - 2574z^2 + 8580z - 36465) I_1\left(\frac{z}{2}\right)}{945z^2}$$

07.25.03.abet.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^{-z} (2z^5 - 45z^4 + 504z^3 - 3444z^2 + 13860z - 39690)}{3z^4} + \frac{105\sqrt{\pi} (2z^2 + 20z + 63) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.abeu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-2z^5 - 45z^4 - 504z^3 - 3444z^2 - 13860z - 39690)}{3z^4} + \frac{105\sqrt{\pi} (2z^2 - 20z + 63) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.abev.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^4 - 196 z^3 + 2340 z^2 - 13923 z + 100776) I_0\left(\frac{z}{2}\right)}{189 z^3} + \frac{32 e^{z/2} (8 z^5 - 204 z^4 + 2548 z^3 - 21957 z^2 + 55692 z - 403104) I_1\left(\frac{z}{2}\right)}{189 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.abew.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = -\frac{1}{33075} e^z (512 z^9 + 11520 z^8 + 78336 z^7 + 180480 z^6 + 112320 z^5 + 4320 z^4 + 7200 z^3 - 19440 z^2 + 36450 z - 33075)$$

07.25.03.abex.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{e^z (256 z^8 + 4608 z^7 + 23040 z^6 + 32640 z^5 + 7200 z^4 - 1440 z^3 + 2880 z^2 - 5400 z + 4725)}{4725}$$

07.25.03.abey.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = -\frac{1}{945} e^z (128 z^7 + 1728 z^6 + 5472 z^5 + 2640 z^4 - 360 z^3 - 540 z^2 + 1170 z - 945)$$

07.25.03.abez.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315)$$

07.25.03.abf0.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = -\frac{1}{315} e^z (32 z^5 + 144 z^4 - 144 z^3 + 120 z^2 + 90 z - 315)$$

07.25.03.abf1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (-16 z^5 - 48 z^4 + 84 z^3 - 108 z^2 - 45 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-16 z^5 - 32 z^4 + 108 z^3 - 216 z^2 + 207 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.abf2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = -\frac{1}{315} e^z (16 z^4 - 72 z^2 + 240 z - 315)$$

07.25.03.abf3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (-16 z^4 + 24 z^3 + 12 z^2 - 180 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-16 z^4 + 40 z^3 - 36 z^2 - 108 z + 315) I_1\left(\frac{z}{2}\right)$$

07.25.03.abf4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = -\frac{1}{105} e^z (8 z^3 - 36 z^2 + 90 z - 105)$$

07.25.03.abf5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, 3; z\right) = -\frac{16}{315} e^{z/2} (2z^3 - 12z^2 + 39z - 63) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8z^4 - 56z^3 + 216z^2 - 504z + 693) I_1\left(\frac{z}{2}\right)}{315z}$$

07.25.03.abf6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (-4z^4 + 36z^3 - 171z^2 + 480z - 720)}{21z^2} + \frac{120\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.abf7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-4z^4 - 36z^3 - 171z^2 - 480z - 720)}{21z^2} + \frac{120\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.abf8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, 4; z\right) = -\frac{4 e^{z/2} (8z^3 - 84z^2 + 444z - 1287) I_0\left(\frac{z}{2}\right)}{105z} - \frac{4 e^{z/2} (8z^4 - 92z^3 + 540z^2 - 1881z + 5148) I_1\left(\frac{z}{2}\right)}{105z^2}$$

07.25.03.abf9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (-2z^4 + 27z^3 - 180z^2 + 690z - 1575)}{3z^3} + \frac{15\sqrt{\pi} (8z + 35) \operatorname{erfi}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.abfa.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (2z^4 + 27z^3 + 180z^2 + 690z + 1575)}{3z^3} + \frac{15\sqrt{\pi} (8z - 35) \operatorname{erf}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.abfb.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, 5; z\right) = -\frac{32 e^{z/2} (4z^3 - 60z^2 + 429z - 2145) I_0\left(\frac{z}{2}\right)}{105z^2} - \frac{32 e^{z/2} (4z^4 - 64z^3 + 495z^2 - 1716z + 8580) I_1\left(\frac{z}{2}\right)}{105z^3}$$

07.25.03.abfc.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{135\sqrt{\pi} (4z^2 + 35z + 98) \operatorname{erfi}(\sqrt{z})}{4z^{9/2}} - \frac{3 e^z (2z^4 - 36z^3 + 306z^2 - 1365z + 4410)}{2z^4}$$

07.25.03.abfd.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{135\sqrt{\pi} (4z^2 - 35z + 98) \operatorname{erf}(\sqrt{z})}{4z^{9/2}} - \frac{3 e^{-z} (2z^4 + 36z^3 + 306z^2 + 1365z + 4410)}{2z^4}$$

07.25.03.abfe.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, 6; z\right) = -\frac{32 e^{z/2} (4z^3 - 78z^2 + 507z - 5304) I_0\left(\frac{z}{2}\right)}{21z^3} - \frac{32 e^{z/2} (4z^4 - 82z^3 + 975z^2 - 2028z + 21216) I_1\left(\frac{z}{2}\right)}{21z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.abff.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = -\frac{1}{675} e^z (128z^7 + 1856z^6 + 6880z^5 + 6000z^4 + 600z^3 - 420z^2 + 810z - 675)$$

07.25.03.abfg.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{135} e^z (64z^6 + 704z^5 + 1680z^4 + 480z^3 + 60z^2 - 180z + 135)$$

07.25.03.abfh.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = -\frac{1}{45} e^z (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45)$$

07.25.03.abfi.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{45} e^z (16 z^4 + 64 z^3 - 40 z^2 + 45)$$

07.25.03.abfj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{45} e^{z/2} (8 z^4 + 24 z^3 - 24 z^2 + 45) I_0\left(\frac{z}{2}\right) + \frac{4}{45} e^{z/2} (2 z^4 + 4 z^3 - 9 z^2 + 9 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.abfk.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{45} e^z (8 z^3 + 4 z^2 - 30 z + 45)$$

07.25.03.abfl.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{45} e^{z/2} (8 z^3 - 4 z^2 - 20 z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (8 z^3 - 12 z^2 - 4 z + 35) I_1\left(\frac{z}{2}\right)$$

07.25.03.abfm.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{15} e^z (4 z^2 - 12 z + 15)$$

07.25.03.abfn.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, 3; z\right) = \frac{4}{45} e^{z/2} (4 z^2 - 16 z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4 z^3 - 20 z^2 + 49 z - 63) I_1\left(\frac{z}{2}\right)}{45 z}$$

07.25.03.abfo.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (2 z^3 - 13 z^2 + 40 z - 60)}{3 z^2} + \frac{10 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.abfp.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-2 z^3 - 13 z^2 - 40 z - 60)}{3 z^2} + \frac{10 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.abfq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (4 z^2 - 30 z + 99) I_0\left(\frac{z}{2}\right)}{15 z} + \frac{4 e^{z/2} (4 z^3 - 34 z^2 + 135 z - 396) I_1\left(\frac{z}{2}\right)}{15 z^2}$$

07.25.03.abfr.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (2 z^3 - 20 z^2 + 90 z - 225)}{6 z^3} + \frac{35 \sqrt{\pi} (4 z + 15) \operatorname{erfi}(\sqrt{z})}{4 z^{7/2}}$$

07.25.03.abfs.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (2 z^3 + 20 z^2 + 90 z + 225)}{6 z^3} + \frac{35 \sqrt{\pi} (4 z - 15) \operatorname{erf}(\sqrt{z})}{4 z^{7/2}}$$

07.25.03.abft.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (2 z^2 - 22 z + 143) I_0\left(\frac{z}{2}\right)}{15 z^2} + \frac{64 e^{z/2} (z^3 - 12 z^2 + 44 z - 286) I_1\left(\frac{z}{2}\right)}{15 z^3}$$

07.25.03.abfu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{21 e^z (8 z^3 - 108 z^2 + 570 z - 2205)}{16 z^4} + \frac{315 \sqrt{\pi} (8 z^2 + 60 z + 147) \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.abfv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{315 \sqrt{\pi} (8 z^2 - 60 z + 147) \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{21 e^{-z} (8 z^3 + 108 z^2 + 570 z + 2205)}{16 z^4}$$

07.25.03.abfw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (2 z^2 - 13 z + 312) I_0\left(\frac{z}{2}\right)}{3 z^3} + \frac{32 e^{z/2} (2 z^3 - 47 z^2 + 52 z - 1248) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.abfx.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = -\frac{1}{27} e^z (32 z^5 + 272 z^4 + 432 z^3 + 24 z^2 + 42 z - 27)$$

07.25.03.abfy.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{9} e^z (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9)$$

07.25.03.abfz.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = -\frac{1}{9} e^z (8 z^3 + 28 z^2 - 6 z - 9)$$

07.25.03.abg0.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{9} e^{z/2} (-4 z^3 - 12 z^2 + 3 z + 9) I_0\left(\frac{z}{2}\right) + \frac{1}{9} e^{z/2} (-4 z^3 - 8 z^2 + 9 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.abg1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = -\frac{1}{9} e^z (4 z^2 + 4 z - 9)$$

07.25.03.abg2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{9} e^{z/2} (-4 z^2 - 2 z + 9) I_0\left(\frac{z}{2}\right) + \frac{1}{9} e^{z/2} (-4 z^2 + 2 z + 5) I_1\left(\frac{z}{2}\right)$$

07.25.03.abg3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = -\frac{1}{3} e^z (2 z - 3)$$

07.25.03.abg4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, 3; z\right) = -\frac{8}{9} e^{z/2} (z - 2) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (2 z^2 - 6 z + 7) I_1\left(\frac{z}{2}\right)}{9 z}$$

07.25.03.abg5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}} - \frac{5 e^z (z^2 - 4 z + 6)}{3 z^2}$$

07.25.03.abg6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}} - \frac{5e^{-z}(z^2 + 4z + 6)}{3z^2}$$

07.25.03.abg7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, 4; z\right) = -\frac{4e^{z/2}(2z - 9)I_0\left(\frac{z}{2}\right)}{3z} - \frac{4e^{z/2}(2z^2 - 11z + 36)I_1\left(\frac{z}{2}\right)}{3z^2}$$

07.25.03.abg8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi}(8z + 25)\operatorname{erfi}(\sqrt{z})}{16z^{7/2}} - \frac{35e^z(4z^2 - 26z + 75)}{24z^3}$$

07.25.03.abg9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}(4z^2 + 26z + 75)}{24z^3} + \frac{35\sqrt{\pi}(8z - 25)\operatorname{erf}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.abga.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, 5; z\right) = -\frac{32e^{z/2}(z - 11)I_0\left(\frac{z}{2}\right)}{3z^2} - \frac{32e^{z/2}(z^2 - 4z + 44)I_1\left(\frac{z}{2}\right)}{3z^3}$$

07.25.03.abgb.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi}(8z^2 + 50z + 105)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}} - \frac{105e^z(8z^2 - 60z + 315)}{32z^4}$$

07.25.03.abgc.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315\sqrt{\pi}(8z^2 - 50z + 105)\operatorname{erf}(\sqrt{z})}{64z^{9/2}} - \frac{105e^{-z}(8z^2 + 60z + 315)}{32z^4}$$

07.25.03.abgd.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, 6; z\right) = \frac{32e^{z/2}(3z + 104)I_0\left(\frac{z}{2}\right)}{3z^3} - \frac{32e^{z/2}(13z^2 + 12z + 416)I_1\left(\frac{z}{2}\right)}{3z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.abge.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = -\frac{1}{3}e^z(8z^3 + 36z^2 + 18z - 3)$$

07.25.03.abgf.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3}e^z(4z^2 + 12z + 3)$$

07.25.03.abgg.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{3}e^{z/2}(2z^2 + 6z + 3)I_0\left(\frac{z}{2}\right) + \frac{2}{3}e^{z/2}(z^2 + 2z)I_1\left(\frac{z}{2}\right)$$

07.25.03.abgh.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3}e^z(2z + 3)$$

07.25.03.abgi.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{3} e^{z/2} (2z+3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z+1) I_1\left(\frac{z}{2}\right)$$

07.25.03.abgj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = e^z$$

07.25.03.abgk.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (z-1) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.abgl.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2z-3)}{4z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.abgm.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5 e^{-z} (2z+3)}{4z^2}$$

07.25.03.abgn.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z-4) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.abgo.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (4z-15)}{16z^3} + \frac{105 \sqrt{\pi} (2z+5) \operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.abgp.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z+15)}{16z^3} + \frac{105 \sqrt{\pi} (2z-5) \operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.abgq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.abgr.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{1575 e^z (2z-21)}{128z^4} + \frac{945 \sqrt{\pi} (4z^2+20z+35) \operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.abgs.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (4z^2-20z+35) \operatorname{erf}(\sqrt{z})}{256z^{9/2}} - \frac{1575 e^{-z} (2z+21)}{128z^4}$$

07.25.03.abgt.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (z+8) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (z^2+4z+32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{1}{2}$

07.25.03.0033.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = e^z \left(1 - \frac{2z}{3}\right) - \frac{8}{3} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abgu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} e^{-z} (2z + 3) + \frac{8}{3} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.0034.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{3} e^{z/2} \left((3 - 9z) I_0\left(\frac{z}{2}\right) + 7z I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.0035.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = e^z - \frac{4}{3} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abgv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{4}{3} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.0036.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{9} e^{z/2} \left((9 - 16z) I_0\left(\frac{z}{2}\right) + (16z + 1) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.abgw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abgx.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.0037.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, 3; z\right) = -\frac{4}{45z} e^{z/2} \left(4z(4z - 3) I_0\left(\frac{z}{2}\right) + (-16z^2 - 4z + 3) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.abgy.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (4z^2 + 2z - 3)}{24 z^2} - \frac{5 \sqrt{\pi} (8z^3 - 3) \operatorname{erfi}(\sqrt{z})}{48 z^{5/2}}$$

07.25.03.abgz.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (4z^2 - 2z - 3)}{24 z^2} + \frac{5 \sqrt{\pi} (8z^3 + 3) \operatorname{erf}(\sqrt{z})}{48 z^{5/2}}$$

07.25.03.abh0.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (32z^3 + 8z^2 + 9z - 60) I_1\left(\frac{z}{2}\right)}{105 z^2} - \frac{4 e^{z/2} (32z^2 - 24z - 15) I_0\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.abh1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (8z^3 + 4z^2 + 6z - 45)}{384 z^3} - \frac{35 \sqrt{\pi} (16z^4 - 24z - 45) \operatorname{erfi}(\sqrt{z})}{768 z^{7/2}}$$

07.25.03.abh2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (8 z^3 - 4 z^2 + 6 z + 45)}{384 z^3} + \frac{35 \sqrt{\pi} (16 z^4 + 24 z - 45) \operatorname{erf}(\sqrt{z})}{768 z^{7/2}}$$

07.25.03.abh3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^4 + 8 z^3 + 9 z^2 - 60 z - 420) I_1\left(\frac{z}{2}\right)}{945 z^3} - \frac{32 e^{z/2} (32 z^3 - 24 z^2 - 15 z - 105) I_0\left(\frac{z}{2}\right)}{945 z^2}$$

07.25.03.abh4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{21 e^z (8 z^4 + 4 z^3 + 6 z^2 - 15 z - 315)}{256 z^4} - \frac{21 \sqrt{\pi} (16 z^5 - 60 z^2 - 225 z - 315) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.abh5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (8 z^4 - 4 z^3 + 6 z^2 + 15 z - 315)}{256 z^4} + \frac{21 \sqrt{\pi} (16 z^5 + 60 z^2 - 225 z + 315) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.abh6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^5 + 16 z^4 + 18 z^3 - 309 z^2 - 1596 z - 6048) I_1\left(\frac{z}{2}\right)}{2079 z^4} - \frac{32 e^{z/2} (64 z^4 - 48 z^3 - 30 z^2 - 399 z - 1512) I_0\left(\frac{z}{2}\right)}{2079 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 1$

07.25.03.0038.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{3} e^{z/2} \left((3 - 4z) I_0\left(\frac{z}{2}\right) + 4z I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.abh7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; 1, \frac{5}{2}; z\right) = e^{z/2} (1 - z) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{3}{2}$

07.25.03.0039.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{6 \sqrt{z}} \left(\sqrt{\pi} (1 - 4z) \operatorname{erfi}(\sqrt{z}) + 4 e^z \sqrt{z} \right)$$

07.25.03.abh8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} (4z + 1) \operatorname{erf}(\sqrt{z})}{6 \sqrt{z}} + \frac{2 e^{-z}}{3}$$

07.25.03.0040.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, 2; z\right) = -\frac{1}{9} e^{z/2} \left((8z - 9) I_0\left(\frac{z}{2}\right) + (1 - 8z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.abh9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{\sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{e^z}{2}$$

07.25.03.abha.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{\sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.0041.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, 3; z\right) = -\frac{4}{45z} e^{z/2} \left(z(8z - 11) I_0\left(\frac{z}{2}\right) + (-8z^2 + 3z - 1) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.abhb.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{5e^z(8z^2 - 2z + 3)}{96z^2} - \frac{5\sqrt{\pi}(16z^3 - 12z^2 + 3)\operatorname{erfi}(\sqrt{z})}{192z^{5/2}}$$

07.25.03.abhc.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}(8z^2 + 2z + 3)}{96z^2} + \frac{5\sqrt{\pi}(16z^3 + 12z^2 - 3)\operatorname{erf}(\sqrt{z})}{192z^{5/2}}$$

07.25.03.abhd.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, 4; z\right) = \frac{4e^{z/2}(16z^3 - 10z^2 + z + 12)I_1\left(\frac{z}{2}\right)}{105z^2} - \frac{4e^{z/2}(16z^2 - 26z + 3)I_0\left(\frac{z}{2}\right)}{105z}$$

07.25.03.abhe.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{35e^z(8z^3 - 4z^2 + 2z + 15)}{768z^3} - \frac{35\sqrt{\pi}(16z^4 - 16z^3 + 12z + 15)\operatorname{erfi}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.abhf.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}(8z^3 + 4z^2 + 2z - 15)}{768z^3} + \frac{35\sqrt{\pi}(16z^4 + 16z^3 - 12z + 15)\operatorname{erf}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.abhg.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, 5; z\right) = \frac{64e^{z/2}(8z^4 - 7z^3 + 12z + 30)I_1\left(\frac{z}{2}\right)}{945z^3} - \frac{32e^{z/2}(16z^3 - 30z^2 + 6z + 15)I_0\left(\frac{z}{2}\right)}{945z^2}$$

07.25.03.abhh.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{21e^z(32z^4 - 24z^3 + 4z^2 + 90z + 315)}{2048z^4} - \frac{21\sqrt{\pi}(64z^5 - 80z^4 + 120z^2 + 300z + 315)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.abhi.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z}(32z^4 + 24z^3 + 4z^2 - 90z + 315)}{2048z^4} + \frac{21\sqrt{\pi}(64z^5 + 80z^4 - 120z^2 + 300z - 315)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.abhj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^5 - 36 z^4 - 2 z^3 + 93 z^2 + 324 z + 672) I_1\left(\frac{z}{2}\right)}{2079 z^4} - \frac{32 e^{z/2} (32 z^4 - 68 z^3 + 18 z^2 + 81 z + 168) I_0\left(\frac{z}{2}\right)}{2079 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 2$

07.25.03.abhk.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = e^{z/2} \left(1 - \frac{2z}{3}\right) I_0\left(\frac{z}{2}\right) + e^{z/2} \left(\frac{2z}{3} - \frac{1}{3}\right) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{5}{2}$

07.25.03.abhl.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3 e^z (2z - 1)}{16 z} - \frac{3 \sqrt{\pi} (4 z^2 - 4 z - 1) \operatorname{erfi}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.abhm.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (2z + 1)}{16 z} + \frac{3 \sqrt{\pi} (4 z^2 + 4 z - 1) \operatorname{erf}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.abhn.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (2 z^2 - 2 z - 1) I_1\left(\frac{z}{2}\right)}{15 z} - \frac{8}{15} e^{z/2} (z - 2) I_0\left(\frac{z}{2}\right)$$

07.25.03.abho.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (4 z^2 - 4 z - 3)}{64 z^2} - \frac{5 \sqrt{\pi} (8 z^3 - 12 z^2 - 6 z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.abhp.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (4 z^2 + 4 z - 3)}{64 z^2} + \frac{5 \sqrt{\pi} (8 z^3 + 12 z^2 - 6 z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.abhq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (4 z^3 - 6 z^2 - 5 z - 4) I_1\left(\frac{z}{2}\right)}{35 z^2} - \frac{4 e^{z/2} (4 z^2 - 10 z - 1) I_0\left(\frac{z}{2}\right)}{35 z}$$

07.25.03.abhr.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (8 z^3 - 12 z^2 - 14 z - 15)}{1024 z^3} - \frac{35 \sqrt{\pi} (16 z^4 - 32 z^3 - 24 z^2 - 24 z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.abhs.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.abht.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^4 - 8z^3 - 9z^2 - 12z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3} - \frac{32 e^{z/2} (4z^3 - 12z^2 - 3z - 3) I_0\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.abhu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096 z^4} - \frac{63 \sqrt{\pi} (32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.abhv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.abhw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (8z^5 - 20z^4 - 28z^3 - 51z^2 - 84z - 96) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (8z^4 - 28z^3 - 12z^2 - 21z - 24) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = -\frac{11}{2}$

07.25.03.abhx.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{108056025} (-1024 z^{13} - 52736 z^{12} - 991744 z^{11} - 8534016 z^{10} - 34414080 z^9 - 59124480 z^8 - 32232960 z^7 - 1693440 z^6 - 70560 z^5 - 32400 z^4 - 54000 z^3 - 264600 z^2 - 5358150 z + 108056025) - \frac{1}{108056025} (256 e^z \sqrt{\pi} (4 z^{27/2} + 208 z^{25/2} + 3975 z^{23/2} + 35175 z^{21/2} + 149400 z^{19/2} + 285480 z^{17/2} + 201960 z^{15/2} + 30600 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.abhy.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{108056025} (1024 z^{13} - 52736 z^{12} + 991744 z^{11} - 8534016 z^{10} + 34414080 z^9 - 59124480 z^8 + 32232960 z^7 - 1693440 z^6 + 70560 z^5 - 32400 z^4 + 54000 z^3 - 264600 z^2 + 5358150 z + 108056025) - \frac{1}{108056025} (256 e^{-z} \sqrt{\pi} (4 z^{27/2} - 208 z^{25/2} + 3975 z^{23/2} - 35175 z^{21/2} + 149400 z^{19/2} - 285480 z^{17/2} + 201960 z^{15/2} - 30600 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.abhz.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9823275} (512 z^{12} + 22784 z^{11} + 359424 z^{10} + 2480640 z^9 + 7438080 z^8 + 8133120 z^7 + 1693440 z^6 - 70560 z^5 - 10800 z^4 - 10800 z^3 - 37800 z^2 - 595350 z + 9823275) + \frac{1}{9823275} 128 e^z \sqrt{\pi} (4 z^{25/2} + 180 z^{23/2} + 2895 z^{21/2} + 20700 z^{19/2} + 66600 z^{17/2} + 85680 z^{15/2} + 30600 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abi0.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{9823275} (512 z^{12} - 22784 z^{11} + 359424 z^{10} - 2480640 z^9 + 7438080 z^8 - 8133120 z^7 + 1693440 z^6 + 70560 z^5 - 10800 z^4 + 10800 z^3 - 37800 z^2 + 595350 z + 9823275) - \frac{1}{9823275} 128 e^{-z} \sqrt{\pi} (4 z^{25/2} - 180 z^{23/2} + 2895 z^{21/2} - 20700 z^{19/2} + 66600 z^{17/2} - 85680 z^{15/2} + 30600 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abi1.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1091475} (-256 z^{11} - 9600 z^{10} - 122240 z^9 - 633600 z^8 - 1234944 z^7 - 564480 z^6 + 70560 z^5 - 10800 z^4 - 3600 z^3 - 7560 z^2 - 85050 z + 1091475) - \frac{64 e^z \sqrt{\pi} (4 z^{23/2} + 152 z^{21/2} + 1983 z^{19/2} + 10785 z^{17/2} + 23460 z^{15/2} + 15300 z^{13/2}) \operatorname{erf}(\sqrt{z})}{1091475}$$

07.25.03.abi2.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1091475} (256 z^{11} - 9600 z^{10} + 122240 z^9 - 633600 z^8 + 1234944 z^7 - 564480 z^6 - 70560 z^5 - 10800 z^4 + 3600 z^3 - 7560 z^2 + 85050 z + 1091475) - \frac{64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 152 z^{21/2} + 1983 z^{19/2} - 10785 z^{17/2} + 23460 z^{15/2} - 15300 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{1091475}$$

07.25.03.abi3.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{155925} (128 z^{10} + 3904 z^9 + 37760 z^8 + 129792 z^7 + 112896 z^6 - 23520 z^5 + 10800 z^4 - 3600 z^3 - 2520 z^2 - 17010 z + 155925) + \frac{32 e^z \sqrt{\pi} (4 z^{21/2} + 124 z^{19/2} + 1239 z^{17/2} + 4590 z^{15/2} + 5100 z^{13/2}) \operatorname{erf}(\sqrt{z})}{155925}$$

07.25.03.abi4.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{155925} \frac{(128z^{10} - 3904z^9 + 37760z^8 - 129792z^7 + 112896z^6 + 23520z^5 + 10800z^4 + 3600z^3 - 2520z^2 + 17010z + 155925) - 32e^{-z}\sqrt{\pi}(4z^{21/2} - 124z^{19/2} + 1239z^{17/2} - 4590z^{15/2} + 5100z^{13/2})\operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.abi5.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{-64z^9 - 1504z^8 - 9888z^7 - 16128z^6 + 4704z^5 - 3600z^4 + 3600z^3 - 2520z^2 - 5670z + 31185}{31185} - \frac{16e^z\sqrt{\pi}(4z^{19/2} + 96z^{17/2} + 663z^{15/2} + 1275z^{13/2})\operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.abi6.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{64z^9 - 1504z^8 + 9888z^7 - 16128z^6 - 4704z^5 - 3600z^4 - 3600z^3 - 2520z^2 + 5670z + 31185}{31185} - \frac{16e^{-z}\sqrt{\pi}(4z^{19/2} - 96z^{17/2} + 663z^{15/2} - 1275z^{13/2})\operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.abi7.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{32z^8 + 528z^7 + 1792z^6 - 672z^5 + 720z^4 - 1200z^3 + 2520z^2 - 5670z + 10395}{10395} + \frac{8e^z\sqrt{\pi}(4z^{17/2} + 68z^{15/2} + 255z^{13/2})\operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.abi8.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{32z^8 - 528z^7 + 1792z^6 + 672z^5 + 720z^4 + 1200z^3 + 2520z^2 + 5670z + 10395}{10395} - \frac{8e^{-z}\sqrt{\pi}(4z^{17/2} - 68z^{15/2} + 255z^{13/2})\operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.abi9.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{-16z^7 - 152z^6 + 8z^5 + 240z^4 - 1200z^3 + 3960z^2 - 8730z + 10395}{10395} - \frac{1}{10395} 4e^z\sqrt{\pi}(4z^{15/2} + 40z^{13/2} + 15z^{11/2} - 75z^{9/2} + 300z^{7/2} - 900z^{5/2} + 1800z^{3/2} - 1800\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.abia.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{16z^7 - 152z^6 - 8z^5 + 240z^4 + 1200z^3 + 3960z^2 + 8730z + 10395}{10395} - \frac{1}{10395} 4e^{-z}\sqrt{\pi}(4z^{15/2} - 40z^{13/2} + 15z^{11/2} + 75z^{9/2} + 300z^{7/2} + 900z^{5/2} + 1800z^{3/2} + 1800\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.abib.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, 1; z\right) = -\frac{e^z(32z^7 + 208z^6 - 336z^5 + 600z^4 - 150z^3 - 4095z^2 + 15120z - 20790)}{20790}$$

07.25.03.abic.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{-8z^6 - 20z^5 + 120z^4 - 480z^3 + 1368z^2 - 2430z + 1755}{10395} - \frac{2e^z \sqrt{\pi} (4z^7 + 12z^6 - 57z^5 + 210z^4 - 540z^3 + 720z^2 + 360z - 2160) \operatorname{erf}(\sqrt{z})}{10395 \sqrt{z}}$$

07.25.03.abid.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{-8z^6 + 20z^5 + 120z^4 + 480z^3 + 1368z^2 + 2430z + 1755}{10395} + \frac{2e^{-z} \sqrt{\pi} (4z^7 - 12z^6 - 57z^5 - 210z^4 - 540z^3 - 720z^2 + 360z + 2160) \operatorname{erfi}(\sqrt{z})}{10395 \sqrt{z}}$$

07.25.03.abie.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, 2; z\right) = -\frac{e^z (32z^6 - 16z^5 - 240z^4 + 1800z^3 - 7350z^2 + 17955z - 20790)}{20790}$$

07.25.03.abif.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{-4z^6 + 18z^5 - 50z^4 + 24z^3 + 522z^2 - 2535z + 5040}{3465z} + \frac{e^z \sqrt{\pi} (-4z^7 + 16z^6 - 39z^5 - 15z^4 + 600z^3 - 2520z^2 + 4680z - 2520) \operatorname{erf}(\sqrt{z})}{3465z^{3/2}}$$

07.25.03.abig.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{4z^6 + 18z^5 + 50z^4 + 24z^3 - 522z^2 - 2535z - 5040}{3465z} + \frac{e^{-z} \sqrt{\pi} (-4z^7 - 16z^6 - 39z^5 + 15z^4 + 600z^3 + 2520z^2 + 4680z + 2520) \operatorname{erfi}(\sqrt{z})}{3465z^{3/2}}$$

07.25.03.abih.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, 3; z\right) = -\frac{e^z (32z^5 - 240z^4 + 1200z^3 - 4200z^2 + 9450z - 10395)}{10395}$$

07.25.03.abii.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{-2z^6 + 23z^5 - 164z^4 + 846z^3 - 3243z^2 + 9240z - 20160}{693z^2} + \frac{e^z \sqrt{\pi} (-4z^7 + 44z^6 - 303z^5 + 1500z^4 - 5400z^3 + 13680z^2 - 22680z + 20160) \operatorname{erf}(\sqrt{z})}{1386z^{5/2}}$$

07.25.03.abij.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{-2z^6 - 23z^5 - 164z^4 - 846z^3 - 3243z^2 - 9240z - 20160}{693z^2} + \frac{e^{-z} \sqrt{\pi} (4z^7 + 44z^6 + 303z^5 + 1500z^4 + 5400z^3 + 13680z^2 + 22680z + 20160) \operatorname{erfi}(\sqrt{z})}{1386z^{5/2}}$$

07.25.03.abik.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, 4; z\right) = \frac{e^z (-32 z^7 + 464 z^6 - 3984 z^5 + 24\,120 z^4 - 105\,930 z^3 + 328\,185 z^2 - 656\,370 z + 656\,370)}{3465 z^3} - \frac{1326}{7 z^3}$$

07.25.03.abil.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{-2 z^6 + 37 z^5 - 387 z^4 + 2802 z^3 - 14\,700 z^2 + 55\,440 z - 226\,800}{198 z^3} + \frac{e^z \sqrt{\pi} (-4 z^7 + 72 z^6 - 735 z^5 + 5175 z^4 - 26\,100 z^3 + 91\,980 z^2 - 206\,640 z + 226\,800) \operatorname{erf}(\sqrt{z})}{396 z^{7/2}}$$

07.25.03.abim.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{2 z^6 + 37 z^5 + 387 z^4 + 2802 z^3 + 14\,700 z^2 + 55\,440 z + 226\,800}{198 z^3} + \frac{e^{-z} \sqrt{\pi} (-4 z^7 - 72 z^6 - 735 z^5 - 5175 z^4 - 26\,100 z^3 - 91\,980 z^2 - 206\,640 z - 226\,800) \operatorname{erfi}(\sqrt{z})}{396 z^{7/2}}$$

07.25.03.abin.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, 5; z\right) = \frac{1768 (3 z + 19)}{7 z^4} - \frac{4 e^z (32 z^7 - 688 z^6 + 8112 z^5 - 64\,680 z^4 + 364\,650 z^3 - 1\,422\,135 z^2 + 3\,500\,640 z - 4\,157\,010)}{3465 z^4}$$

07.25.03.abio.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{-2 z^6 + 51 z^5 - 694 z^4 + 6300 z^3 - 40\,320 z^2 + 126\,000 z - 1\,058\,400}{44 z^4} + \frac{1}{88 z^{9/2}} e^z \sqrt{\pi} (-4 z^7 + 100 z^6 - 1335 z^5 + 11\,850 z^4 - 73\,500 z^3 + 312\,480 z^2 - 831\,600 z + 1\,058\,400) \operatorname{erf}(\sqrt{z})$$

07.25.03.abip.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{-2 z^6 - 51 z^5 - 694 z^4 - 6300 z^3 - 40\,320 z^2 - 126\,000 z - 1\,058\,400}{44 z^4} + \frac{1}{88 z^{9/2}} e^{-z} \sqrt{\pi} (4 z^7 + 100 z^6 + 1335 z^5 + 11\,850 z^4 + 73\,500 z^3 + 312\,480 z^2 + 831\,600 z + 1\,058\,400) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abiq.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{11}{2}, 6; z\right) = -\frac{4420 (33 z^2 + 418 z + 1596)}{77 z^5} - \frac{1}{693 z^5} 4 e^z (32 z^7 - 912 z^6 + 13\,584 z^5 - 132\,600 z^4 + 895\,050 z^3 - 4\,107\,285 z^2 + 11\,715\,210 z - 15\,872\,220)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = -\frac{9}{2}$

07.25.03.abir.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{893025} (-256 z^{11} - 9856 z^{10} - 130560 z^9 - 722688 z^8 - 1605120 z^7 - 1094400 z^6 - 70560 z^5 - 3600 z^4 - 2160 z^3 - 5400 z^2 - 66150 z + 893025) - \frac{1}{893025} 64 e^z \sqrt{\pi} (4 z^{23/2} + 156 z^{21/2} + 2115 z^{19/2} + 12240 z^{17/2} + 29880 z^{15/2} + 25920 z^{13/2} + 4680 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abis.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{893025} (256 z^{11} - 9856 z^{10} + 130560 z^9 - 722688 z^8 + 1605120 z^7 - 1094400 z^6 + 70560 z^5 - 3600 z^4 + 2160 z^3 - 5400 z^2 + 66150 z + 893025) - \frac{1}{893025} 64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 156 z^{21/2} + 2115 z^{19/2} - 12240 z^{17/2} + 29880 z^{15/2} - 25920 z^{13/2} + 4680 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abit.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{99225} (128 z^{10} + 4160 z^9 + 44544 z^8 + 185088 z^7 + 264960 z^6 + 70560 z^5 - 3600 z^4 - 720 z^3 - 1080 z^2 - 9450 z + 99225) + \frac{32 e^z \sqrt{\pi} (4 z^{21/2} + 132 z^{19/2} + 1455 z^{17/2} + 6420 z^{15/2} + 10620 z^{13/2} + 4680 z^{11/2}) \operatorname{erf}(\sqrt{z})}{99225}$$

07.25.03.abiu.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{99225} (128 z^{10} - 4160 z^9 + 44544 z^8 - 185088 z^7 + 264960 z^6 - 70560 z^5 - 3600 z^4 + 720 z^3 - 1080 z^2 + 9450 z + 99225) - \frac{32 e^{-z} \sqrt{\pi} (4 z^{21/2} - 132 z^{19/2} + 1455 z^{17/2} - 6420 z^{15/2} + 10620 z^{13/2} - 4680 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{99225}$$

07.25.03.abiv.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{-64 z^9 - 1696 z^8 - 13824 z^7 - 38016 z^6 - 23520 z^5 + 3600 z^4 - 720 z^3 - 360 z^2 - 1890 z + 14175}{14175} - \frac{16 e^z \sqrt{\pi} (4 z^{19/2} + 108 z^{17/2} + 915 z^{15/2} + 2760 z^{13/2} + 2340 z^{11/2}) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.abiw.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{64 z^9 - 1696 z^8 + 13824 z^7 - 38016 z^6 + 23520 z^5 + 3600 z^4 + 720 z^3 - 360 z^2 + 1890 z + 14175}{14175} - \frac{16 e^{-z} \sqrt{\pi} (4 z^{19/2} - 108 z^{17/2} + 915 z^{15/2} - 2760 z^{13/2} + 2340 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.abix.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{32 z^8 + 656 z^7 + 3648 z^6 + 4704 z^5 - 1200 z^4 + 720 z^3 - 360 z^2 - 630 z + 2835}{2835} + \frac{8 e^z \sqrt{\pi} (4 z^{17/2} + 84 z^{15/2} + 495 z^{13/2} + 780 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.abiy.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{32z^8 - 656z^7 + 3648z^6 - 4704z^5 - 1200z^4 - 720z^3 - 360z^2 + 630z + 2835}{2835} - \frac{8e^{-z}\sqrt{\pi}(4z^{17/2} - 84z^{15/2} + 495z^{13/2} - 780z^{11/2})\operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.abiz.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945}(-16z^7 - 232z^6 - 672z^5 + 240z^4 - 240z^3 + 360z^2 - 630z + 945) - \frac{4}{945}e^z\sqrt{\pi}(4z^{15/2} + 60z^{13/2} + 195z^{11/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.abj0.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945}(16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945) - \frac{4}{945}e^{-z}\sqrt{\pi}(4z^{15/2} - 60z^{13/2} + 195z^{11/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.abj1.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945}(8z^6 + 68z^5 - 96z^3 + 360z^2 - 810z + 945) + \frac{2}{945}e^z\sqrt{\pi}(4z^{13/2} + 36z^{11/2} + 15z^{9/2} - 60z^{7/2} + 180z^{5/2} - 360z^{3/2} + 360\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.abj2.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{945}(8z^6 - 68z^5 + 96z^3 + 360z^2 + 810z + 945) - \frac{2}{945}e^{-z}\sqrt{\pi}(4z^{13/2} - 36z^{11/2} + 15z^{9/2} + 60z^{7/2} + 180z^{5/2} + 360z^{3/2} + 360\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.abj3.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, 1; z\right) = \frac{e^z(16z^6 + 96z^5 - 120z^4 + 120z^3 + 225z^2 - 1260z + 1890)}{1890}$$

07.25.03.abj4.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945}(4z^5 + 10z^4 - 48z^3 + 144z^2 - 270z + 225) + \frac{e^z\sqrt{\pi}(4z^6 + 12z^5 - 45z^4 + 120z^3 - 180z^2 + 360)\operatorname{erf}(\sqrt{z})}{945\sqrt{z}}$$

07.25.03.abj5.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{945}(-4z^5 + 10z^4 + 48z^3 + 144z^2 + 270z + 225) + \frac{e^{-z}\sqrt{\pi}(4z^6 - 12z^5 - 45z^4 - 120z^3 - 180z^2 + 360)\operatorname{erfi}(\sqrt{z})}{945\sqrt{z}}$$

07.25.03.abj6.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, 2; z\right) = \frac{e^z(16z^5 - 120z^3 + 600z^2 - 1575z + 1890)}{1890}$$

07.25.03.abj7.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{2z^5 - 7z^4 + 12z^3 + 18z^2 - 165z + 360}{315z} + \frac{e^z \sqrt{\pi} (4z^6 - 12z^5 + 15z^4 + 60z^3 - 360z^2 + 720z - 360) \operatorname{erf}(\sqrt{z})}{630z^{3/2}}$$

07.25.03.abj8.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{2z^5 + 7z^4 + 12z^3 - 18z^2 - 165z - 360}{315z} + \frac{e^{-z} \sqrt{\pi} (-4z^6 - 12z^5 - 15z^4 + 60z^3 + 360z^2 + 720z + 360) \operatorname{erfi}(\sqrt{z})}{630z^{3/2}}$$

07.25.03.abj9.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, 3; z\right) = \frac{1}{945} e^z (16z^4 - 96z^3 + 360z^2 - 840z + 945)$$

07.25.03.abja.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{2z^5 - 19z^4 + 108z^3 - 426z^2 + 1200z - 2520}{126z^2} + \frac{e^z \sqrt{\pi} (4z^6 - 36z^5 + 195z^4 - 720z^3 + 1800z^2 - 2880z + 2520) \operatorname{erf}(\sqrt{z})}{252z^{5/2}}$$

07.25.03.abjb.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{-2z^5 - 19z^4 - 108z^3 - 426z^2 - 1200z - 2520}{126z^2} + \frac{e^{-z} \sqrt{\pi} (4z^6 + 36z^5 + 195z^4 + 720z^3 + 1800z^2 + 2880z + 2520) \operatorname{erfi}(\sqrt{z})}{252z^{5/2}}$$

07.25.03.abjc.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, 4; z\right) = \frac{e^z (16z^6 - 192z^5 + 1320z^4 - 6120z^3 + 19305z^2 - 38610z + 38610)}{315z^3} - \frac{858}{7z^3}$$

07.25.03.abjd.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{2z^5 - 31z^4 + 264z^3 - 1500z^2 + 5880z - 25200}{36z^3} + \frac{e^z \sqrt{\pi} (4z^6 - 60z^5 + 495z^4 - 2700z^3 + 9900z^2 - 22680z + 25200) \operatorname{erf}(\sqrt{z})}{72z^{7/2}}$$

07.25.03.abje.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{2z^5 + 31z^4 + 264z^3 + 1500z^2 + 5880z + 25200}{36z^3} + \frac{e^{-z} \sqrt{\pi} (-4z^6 - 60z^5 - 495z^4 - 2700z^3 - 9900z^2 - 22680z - 25200) \operatorname{erfi}(\sqrt{z})}{72z^{7/2}}$$

07.25.03.abjf.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, 5; z\right) = \frac{4e^z (16z^6 - 288z^5 + 2760z^4 - 17160z^3 + 70785z^2 - 180180z + 218790)}{315z^4} - \frac{1144(3z + 17)}{7z^4}$$

07.25.03.abjg.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{2z^5 - 43z^4 + 480z^3 - 3444z^2 + 10080z - 105840}{8z^4} + \frac{e^z \sqrt{\pi} (4z^6 - 84z^5 + 915z^4 - 6360z^3 + 28980z^2 - 80640z + 105840) \operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.abjh.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{-2z^5 - 43z^4 - 480z^3 - 3444z^2 - 10080z - 105840}{8z^4} + \frac{e^{-z} \sqrt{\pi} (4z^6 + 84z^5 + 915z^4 + 6360z^3 + 28980z^2 + 80640z + 105840) \operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.abji.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{9}{2}, 6; z\right) = \frac{4e^z (16z^6 - 384z^5 + 4680z^4 - 35880z^3 + 178425z^2 - 537030z + 755820)}{63z^5} - \frac{260(33z^2 + 374z + 1292)}{7z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = -\frac{7}{2}$

07.25.03.abjj.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{-64z^9 - 1760z^8 - 15264z^7 - 47552z^6 - 43104z^5 - 3600z^4 - 240z^3 - 216z^2 - 1350z + 11025}{11025} - \frac{16e^z \sqrt{\pi} (4z^{19/2} + 112z^{17/2} + 1007z^{15/2} + 3399z^{13/2} + 3822z^{11/2} + 858z^{9/2}) \operatorname{erf}(\sqrt{z})}{11025}$$

07.25.03.abjk.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{64z^9 - 1760z^8 + 15264z^7 - 47552z^6 + 43104z^5 - 3600z^4 + 240z^3 - 216z^2 + 1350z + 11025}{11025} - \frac{16e^{-z} \sqrt{\pi} (4z^{19/2} - 112z^{17/2} + 1007z^{15/2} - 3399z^{13/2} + 3822z^{11/2} - 858z^{9/2}) \operatorname{erfi}(\sqrt{z})}{11025}$$

07.25.03.abjl.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{32z^8 + 720z^7 + 4768z^6 + 9792z^5 + 3600z^4 - 240z^3 - 72z^2 - 270z + 1575}{1575} + \frac{8e^z \sqrt{\pi} (4z^{17/2} + 92z^{15/2} + 639z^{13/2} + 1482z^{11/2} + 858z^{9/2}) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.abjm.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{32z^8 - 720z^7 + 4768z^6 - 9792z^5 + 3600z^4 + 240z^3 - 72z^2 + 270z + 1575}{1575} - \frac{8e^{-z} \sqrt{\pi} (4z^{17/2} - 92z^{15/2} + 639z^{13/2} - 1482z^{11/2} + 858z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.abjn.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} (-16z^7 - 280z^6 - 1272z^5 - 1200z^4 + 240z^3 - 72z^2 - 90z + 315) - \frac{4}{315} e^z \sqrt{\pi} (4z^{15/2} + 72z^{13/2} + 351z^{11/2} + 429z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abjo.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{315} (16z^7 - 280z^6 + 1272z^5 - 1200z^4 - 240z^3 - 72z^2 + 90z + 315) - \frac{4}{315} e^{-z} \sqrt{\pi} (4z^{15/2} - 72z^{13/2} + 351z^{11/2} - 429z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abjp.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} (8z^6 + 100z^5 + 240z^4 - 80z^3 + 72z^2 - 90z + 105) + \frac{2}{105} e^z \sqrt{\pi} (4z^{13/2} + 52z^{11/2} + 143z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abjq.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} (8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} (4z^{13/2} - 52z^{11/2} + 143z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abjr.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} (-4z^5 - 30z^4 - 2z^3 + 36z^2 - 90z + 105) + \frac{1}{105} e^z \sqrt{\pi} (-4z^{11/2} - 32z^{9/2} - 15z^{7/2} + 45z^{5/2} - 90z^{3/2} + 90\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abjs.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} (4z^5 - 30z^4 + 2z^3 + 36z^2 + 90z + 105) + \frac{1}{105} e^{-z} \sqrt{\pi} (-4z^{11/2} + 32z^{9/2} - 15z^{7/2} - 45z^{5/2} - 90z^{3/2} - 90\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abjt.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, 1; z\right) = -\frac{1}{210} e^z (8z^5 + 44z^4 - 38z^3 + 3z^2 + 120z - 210)$$

07.25.03.abju.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{105} (-2z^4 - 5z^3 + 18z^2 - 36z + 33) + \frac{e^z \sqrt{\pi} (-4z^5 - 12z^4 + 33z^3 - 54z^2 + 18z + 72) \operatorname{erf}(\sqrt{z})}{210\sqrt{z}}$$

07.25.03.abjv.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} (-2z^4 + 5z^3 + 18z^2 + 36z + 33) + \frac{e^{-z} \sqrt{\pi} (4z^5 - 12z^4 - 33z^3 - 54z^2 - 18z + 72) \operatorname{erfi}(\sqrt{z})}{210\sqrt{z}}$$

07.25.03.abjw.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, 2; z\right) = -\frac{1}{210} e^z (8z^4 + 4z^3 - 54z^2 + 165z - 210)$$

07.25.03.abjx.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{-2z^4 + 5z^3 - 3z^2 - 22z + 60}{70z} + \frac{e^z \sqrt{\pi} (-4z^5 + 8z^4 + z^3 - 57z^2 + 132z - 60) \operatorname{erf}(\sqrt{z})}{140z^{3/2}}$$

07.25.03.abjy.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{2z^4 + 5z^3 + 3z^2 - 22z - 60}{70z} + \frac{e^{-z} \sqrt{\pi} (-4z^5 - 8z^4 + z^3 + 57z^2 + 132z + 60) \operatorname{erfi}(\sqrt{z})}{140z^{3/2}}$$

07.25.03.abjz.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, 3; z\right) = -\frac{1}{105} e^z (8z^3 - 36z^2 + 90z - 105)$$

07.25.03.abk0.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{-2z^4 + 15z^3 - 64z^2 + 180z - 360}{28z^2} + \frac{e^z \sqrt{\pi} (-4z^5 + 28z^4 - 111z^3 + 276z^2 - 420z + 360) \operatorname{erf}(\sqrt{z})}{56z^{5/2}}$$

07.25.03.abk1.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{-2z^4 - 15z^3 - 64z^2 - 180z - 360}{28z^2} + \frac{e^{-z} \sqrt{\pi} (4z^5 + 28z^4 + 111z^3 + 276z^2 + 420z + 360) \operatorname{erfi}(\sqrt{z})}{56z^{5/2}}$$

07.25.03.abk2.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, 4; z\right) = \frac{e^z (-8z^5 + 76z^4 - 394z^3 + 1287z^2 - 2574z + 2574)}{35z^3} - \frac{2574}{35z^3}$$

07.25.03.abk3.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{-2z^4 + 25z^3 - 165z^2 + 690z - 3150}{8z^3} + \frac{e^z \sqrt{\pi} (-4z^5 + 48z^4 - 303z^3 + 1185z^2 - 2790z + 3150) \operatorname{erf}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.abk4.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{2z^4 + 25z^3 + 165z^2 + 690z + 3150}{8z^3} + \frac{e^{-z} \sqrt{\pi} (-4z^5 - 48z^4 - 303z^3 - 1185z^2 - 2790z - 3150) \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.abk5.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, 5; z\right) = -\frac{10296(z+5)}{35z^4} - \frac{4e^z (8z^5 - 116z^4 + 858z^3 - 3861z^2 + 10296z - 12870)}{35z^4}$$

07.25.03.abk6.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9(2z^4 - 35z^3 + 306z^2 - 770z + 11760)}{16z^4} - \frac{9e^z \sqrt{\pi} (4z^5 - 68z^4 + 575z^3 - 2910z^2 + 8610z - 11760) \operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.abk7.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} \sqrt{\pi} (4 z^5 + 68 z^4 + 575 z^3 + 2910 z^2 + 8610 z + 11760) \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}} - \frac{9(2 z^4 + 35 z^3 + 306 z^2 + 770 z + 11760)}{16 z^4}$$

07.25.03.abk8.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{7}{2}, 6; z\right) = -\frac{468(11 z^2 + 110 z + 340)}{7 z^5} - \frac{4 e^z (8 z^5 - 156 z^4 + 1482 z^3 - 8307 z^2 + 26910 z - 39780)}{7 z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = -\frac{5}{2}$

07.25.03.abk9.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225} (-16 z^7 - 296 z^6 - 1504 z^5 - 2016 z^4 - 240 z^3 - 24 z^2 - 54 z + 225) - \frac{4}{225} e^z \sqrt{\pi} (4 z^{15/2} + 76 z^{13/2} + 411 z^{11/2} + 660 z^{9/2} + 198 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abka.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{225} (16 z^7 - 296 z^6 + 1504 z^5 - 2016 z^4 + 240 z^3 - 24 z^2 + 54 z + 225) - \frac{4}{225} e^{-z} \sqrt{\pi} (4 z^{15/2} - 76 z^{13/2} + 411 z^{11/2} - 660 z^{9/2} + 198 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abkb.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} (8 z^6 + 116 z^5 + 408 z^4 + 240 z^3 - 24 z^2 - 18 z + 45) + \frac{2}{45} e^z \sqrt{\pi} (4 z^{13/2} + 60 z^{11/2} + 231 z^{9/2} + 198 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abkc.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{45} (8 z^6 - 116 z^5 + 408 z^4 - 240 z^3 - 24 z^2 + 18 z + 45) - \frac{2}{45} e^{-z} \sqrt{\pi} (4 z^{13/2} - 60 z^{11/2} + 231 z^{9/2} - 198 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abkd.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) + \frac{1}{15} e^z \sqrt{\pi} (-4 z^{11/2} - 44 z^{9/2} - 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abke.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) + \frac{1}{15} e^{-z} \sqrt{\pi} (-4 z^{11/2} + 44 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abkf.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} (2 z^4 + 13 z^3 + 2 z^2 - 12 z + 15) + \frac{1}{30} e^z \sqrt{\pi} (4 z^{9/2} + 28 z^{7/2} + 15 z^{5/2} - 30 z^{3/2} + 30 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abkg.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} (2z^4 - 13z^3 + 2z^2 + 12z + 15) + \frac{1}{30} e^{-z} \sqrt{\pi} (-4z^{9/2} + 28z^{7/2} - 15z^{5/2} - 30z^{3/2} - 30\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abkh.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, 1; z\right) = \frac{1}{30} e^z (4z^4 + 20z^3 - 9z^2 - 12z + 30)$$

07.25.03.abki.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{30} (2z^3 + 5z^2 - 12z + 12) + \frac{e^z \sqrt{\pi} (4z^4 + 12z^3 - 21z^2 + 12z + 18) \operatorname{erf}(\sqrt{z})}{60\sqrt{z}}$$

07.25.03.abkj.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{30} (-2z^3 + 5z^2 + 12z + 12) + \frac{e^{-z} \sqrt{\pi} (4z^4 - 12z^3 - 21z^2 - 12z + 18) \operatorname{erfi}(\sqrt{z})}{60\sqrt{z}}$$

07.25.03.abkk.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, 2; z\right) = \frac{1}{30} e^z (4z^3 + 4z^2 - 21z + 30)$$

07.25.03.abkl.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{2z^3 - 3z^2 - 2z + 12}{20z} + \frac{e^z \sqrt{\pi} (4z^4 - 4z^3 - 9z^2 + 30z - 12) \operatorname{erf}(\sqrt{z})}{40z^{3/2}}$$

07.25.03.abkm.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{2z^3 + 3z^2 - 2z - 12}{20z} + \frac{e^{-z} \sqrt{\pi} (-4z^4 - 4z^3 + 9z^2 + 30z + 12) \operatorname{erfi}(\sqrt{z})}{40z^{3/2}}$$

07.25.03.abkn.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, 3; z\right) = \frac{1}{15} e^z (4z^2 - 12z + 15)$$

07.25.03.abko.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{2z^3 - 11z^2 + 32z - 60}{8z^2} + \frac{e^z \sqrt{\pi} (4z^4 - 20z^3 + 51z^2 - 72z + 60) \operatorname{erf}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.abkp.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-2z^3 - 11z^2 - 32z - 60}{8z^2} + \frac{e^{-z} \sqrt{\pi} (4z^4 + 20z^3 + 51z^2 + 72z + 60) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.abkq.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, 4; z\right) = \frac{e^z (4z^4 - 28z^3 + 99z^2 - 198z + 198)}{5z^3} - \frac{198}{5z^3}$$

07.25.03.abkr.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7(2z^3 - 19z^2 + 90z - 450)}{16z^3} + \frac{7e^z \sqrt{\pi} (4z^4 - 36z^3 + 159z^2 - 390z + 450) \operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.abks.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(2z^3 + 19z^2 + 90z + 450)}{16z^3} - \frac{7e^{-z}\sqrt{\pi}(4z^4 + 36z^3 + 159z^2 + 390z + 450)\operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.abkt.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, 5; z\right) = \frac{4e^z(4z^4 - 44z^3 + 231z^2 - 660z + 858)}{5z^4} - \frac{264(3z + 13)}{5z^4}$$

07.25.03.abku.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63(2z^3 - 27z^2 + 40z - 1470)}{32z^4} + \frac{63e^z\sqrt{\pi}(4z^4 - 52z^3 + 315z^2 - 1020z + 1470)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.abkv.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63e^{-z}\sqrt{\pi}(4z^4 + 52z^3 + 315z^2 + 1020z + 1470)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}} - \frac{63(2z^3 + 27z^2 + 40z + 1470)}{32z^4}$$

07.25.03.abkw.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{5}{2}, 6; z\right) = \frac{4e^z(4z^4 - 60z^3 + 411z^2 - 1482z + 2340)}{z^5} - \frac{12(33z^2 + 286z + 780)}{z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = -\frac{3}{2}$

07.25.03.abkx.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9}(-4z^5 - 46z^4 - 114z^3 - 24z^2 - 6z + 9) + \frac{1}{9}e^z\sqrt{\pi}(-4z^{11/2} - 48z^{9/2} - 135z^{7/2} - 63z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.abky.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9}(4z^5 - 46z^4 + 114z^3 - 24z^2 + 6z + 9) + \frac{1}{9}e^{-z}\sqrt{\pi}(-4z^{11/2} + 48z^{9/2} - 135z^{7/2} + 63z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.abkz.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3}(2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6}e^z\sqrt{\pi}(4z^{9/2} + 36z^{7/2} + 63z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.abl0.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3}(2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6}e^{-z}\sqrt{\pi}(-4z^{9/2} + 36z^{7/2} - 63z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.abl1.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{6}(-2z^3 - 11z^2 - 3z + 6) + \frac{1}{12}e^z\sqrt{\pi}(-4z^{7/2} - 24z^{5/2} - 15z^{3/2} + 15\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.abl2.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{6}(2z^3 - 11z^2 + 3z + 6) + \frac{1}{12}e^{-z}\sqrt{\pi}(-4z^{7/2} + 24z^{5/2} - 15z^{3/2} - 15\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.abl3.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, 1; z\right) = -\frac{1}{6} e^z (2z^3 + 9z^2 - 6)$$

07.25.03.abl4.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{12} (-2z^2 - 5z + 6) + \frac{e^z \sqrt{\pi} (-4z^3 - 12z^2 + 9z + 6) \operatorname{erf}(\sqrt{z})}{24 \sqrt{z}}$$

07.25.03.abl5.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{12} (-2z^2 + 5z + 6) + \frac{e^{-z} \sqrt{\pi} (4z^3 - 12z^2 - 9z + 6) \operatorname{erfi}(\sqrt{z})}{24 \sqrt{z}}$$

07.25.03.abl6.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, 2; z\right) = -\frac{1}{6} e^z (2z^2 + 3z - 6)$$

07.25.03.abl7.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{-2z^2 + z + 3}{8z} + \frac{e^z \sqrt{\pi} (-4z^3 + 9z - 3) \operatorname{erf}(\sqrt{z})}{16z^{3/2}}$$

07.25.03.abl8.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{2z^2 + z - 3}{8z} + \frac{e^{-z} \sqrt{\pi} (-4z^3 + 9z + 3) \operatorname{erfi}(\sqrt{z})}{16z^{3/2}}$$

07.25.03.abl9.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, 3; z\right) = -\frac{1}{3} e^z (2z - 3)$$

07.25.03.abla.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, \frac{7}{2}; z\right) = -\frac{5(2z^2 - 7z + 12)}{16z^2} - \frac{5e^z \sqrt{\pi} (4z^3 - 12z^2 + 15z - 12) \operatorname{erf}(\sqrt{z})}{32z^{5/2}}$$

07.25.03.ablb.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (4z^3 + 12z^2 + 15z + 12) \operatorname{erfi}(\sqrt{z})}{32z^{5/2}} - \frac{5(2z^2 + 7z + 12)}{16z^2}$$

07.25.03.ablc.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, 4; z\right) = \frac{e^z (-2z^3 + 9z^2 - 18z + 18)}{z^3} - \frac{18}{z^3}$$

07.25.03.abld.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, \frac{9}{2}; z\right) = -\frac{35(2z^2 - 13z + 75)}{32z^3} - \frac{35e^z \sqrt{\pi} (4z^3 - 24z^2 + 63z - 75) \operatorname{erf}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.able.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(2z^2 + 13z + 75)}{32z^3} - \frac{35e^{-z} \sqrt{\pi} (4z^3 + 24z^2 + 63z + 75) \operatorname{erfi}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.ablf.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, 5; z\right) = -\frac{24(3z+11)}{z^4} - \frac{4e^z(2z^3-15z^2+48z-66)}{z^4}$$

07.25.03.ablg.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, \frac{11}{2}; z\right) = -\frac{315(2z^2+5z+210)}{64z^4} - \frac{315e^z\sqrt{\pi}(4z^3-36z^2+135z-210)\operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.ablh.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(4z^3+36z^2+135z+210)\operatorname{erfi}(\sqrt{z})}{128z^{9/2}} - \frac{315(2z^2-5z+210)}{64z^4}$$

07.25.03.abli.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{3}{2}, 6; z\right) = -\frac{60(3z^2+22z+52)}{z^5} - \frac{20e^z(2z^3-21z^2+90z-156)}{z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = -\frac{1}{2}$

07.25.03.ablj.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{2}(-2z^3-13z^2-12z+2) + \frac{1}{4}e^z\sqrt{\pi}(-4z^{7/2}-28z^{5/2}-35z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ablk.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2}(2z^3-13z^2+12z+2) + \frac{1}{4}e^{-z}\sqrt{\pi}(-4z^{7/2}+28z^{5/2}-35z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.abll.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{4}(2z^2+9z+4) + \frac{1}{8}e^z\sqrt{\pi}(4z^{5/2}+20z^{3/2}+15\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.ablm.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{4}(2z^2-9z+4) + \frac{1}{8}e^{-z}\sqrt{\pi}(-4z^{5/2}+20z^{3/2}-15\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.abln.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, 1; z\right) = \frac{1}{2}e^z(z^2+4z+2)$$

07.25.03.ablo.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{8}(2z+5) + \frac{e^z\sqrt{\pi}(4z^2+12z+3)\operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.ablp.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{8}(5-2z) + \frac{e^{-z}\sqrt{\pi}(4z^2-12z+3)\operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.ablq.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, 2; z\right) = \frac{1}{2}e^z(z+2)$$

07.25.03.ablr.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{3(2z+1)}{16z} + \frac{3e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.abls.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3(2z-1)}{16z} - \frac{3e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.ablt.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, 3; z\right) = e^z$$

07.25.03.ablu.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{15(2z-3)}{32z^2} + \frac{15e^z \sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.ablv.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} \sqrt{\pi} (4z^2 + 4z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15(2z+3)}{32z^2}$$

07.25.03.ablw.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, 4; z\right) = \frac{3e^z(z^2 - 2z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.ablx.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{105(2z-15)}{64z^3} + \frac{105e^z \sqrt{\pi} (4z^2 - 12z + 15) \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.ably.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105(2z+15)}{64z^3} - \frac{105e^{-z} \sqrt{\pi} (4z^2 + 12z + 15) \operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.ablz.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, 5; z\right) = \frac{12e^z(z^2 - 4z + 6)}{z^4} - \frac{24(z+3)}{z^4}$$

07.25.03.abm0.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{945e^z \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256z^{9/2}} - \frac{1575(2z+21)}{128z^4}$$

07.25.03.abm1.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1575(2z-21)}{128z^4} + \frac{945e^{-z} \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.abm2.01

$${}_2F_2\left(-\frac{1}{2}, 3; -\frac{1}{2}, 6; z\right) = \frac{60e^z(z^2 - 6z + 12)}{z^5} - \frac{60(z^2 + 6z + 12)}{z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = \frac{1}{2}$

07.25.03.0042.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{1}{2}, 1; z\right) = -\frac{1}{4} e^z (z-4) - \frac{15}{8} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abm3.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{1}{2}, 1; -z\right) = \frac{1}{4} e^{-z} (z+4) + \frac{15}{8} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.0043.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{1}{2}, 2; z\right) = e^z - \frac{5}{4} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abm4.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{1}{2}, 2; -z\right) = \frac{5}{4} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.abm5.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{1}{2}, 3; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abm6.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{1}{2}, 3; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.abm7.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{1}{2}, 4; z\right) = \frac{3 e^z (2 z^3 + z^2 - 2 z + 2)}{7 z^3} - \frac{6}{7} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z}) - \frac{6}{7 z^3}$$

07.25.03.abm8.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{1}{2}, 4; -z\right) = \frac{3 e^{-z} (2 z^3 - z^2 - 2 z - 2)}{7 z^3} + \frac{6}{7} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + \frac{6}{7 z^3}$$

07.25.03.abm9.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{1}{2}, 5; z\right) = -\frac{8(3z+7)}{7z^4} + \frac{4 e^z (4 z^4 + 2 z^3 + 3 z^2 - 24 z + 42)}{21 z^4} - \frac{16}{21} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abma.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{1}{2}, 5; -z\right) = \frac{8(3z-7)}{7z^4} + \frac{4 e^{-z} (4 z^4 - 2 z^3 + 3 z^2 + 24 z + 42)}{21 z^4} + \frac{16}{21} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.abmb.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{1}{2}, 6; z\right) = -\frac{20(33 z^2 + 154 z + 252)}{77 z^5} + \frac{20 e^z (8 z^5 + 4 z^4 + 6 z^3 + 15 z^2 - 294 z + 756)}{231 z^5} - \frac{160}{231} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abmc.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{1}{2}, 6; -z\right) = \frac{20(33 z^2 - 154 z + 252)}{77 z^5} + \frac{20 e^{-z} (8 z^5 - 4 z^4 + 6 z^3 - 15 z^2 - 294 z - 756)}{231 z^5} + \frac{160}{231} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = 1$

07.25.03.0044.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, 1; z\right) = \frac{1}{4} e^{z/2} \left((4-8z) I_0\left(\frac{z}{2}\right) + 7z I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.0045.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, \frac{3}{2}; z\right) = \frac{1}{32\sqrt{z}} \left(3\sqrt{\pi} (1 - 10z) \operatorname{erfi}(\sqrt{z}) + 26 e^z \sqrt{z} \right)$$

07.25.03.abmd.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, \frac{3}{2}; -z\right) = \frac{3\sqrt{\pi} (10z + 1) \operatorname{erf}(\sqrt{z})}{32\sqrt{z}} + \frac{13 e^{-z}}{16}$$

07.25.03.0046.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, 2; z\right) = \frac{1}{4} e^{z/2} \left((4 - 5z) I_0\left(\frac{z}{2}\right) + 5z I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.0047.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, \frac{5}{2}; z\right) = \frac{3}{256 z^{3/2}} \left(2 e^z \sqrt{z} (30z + 1) - \sqrt{\pi} (60z^2 - 12z + 1) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.abme.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (30z - 1)}{128z} + \frac{3\sqrt{\pi} (60z^2 + 12z + 1) \operatorname{erf}(\sqrt{z})}{256 z^{3/2}}$$

07.25.03.abmf.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, 3; z\right) = e^{z/2} (1 - z) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.abmq.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, \frac{7}{2}; z\right) = \frac{15 e^z (20z^2 + 4z - 3)}{512 z^2} - \frac{15\sqrt{\pi} (40z^3 - 12z^2 + 2z - 3) \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.abmh.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, \frac{7}{2}; -z\right) = \frac{15 e^{-z} (20z^2 - 4z - 3)}{512 z^2} + \frac{15\sqrt{\pi} (40z^3 + 12z^2 + 2z + 3) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.abmi.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, 4; z\right) = \frac{e^{z/2} (-30z^2 + 33z + 4) I_0\left(\frac{z}{2}\right)}{35z} + \frac{e^{z/2} (30z^3 - 3z^2 + 8z - 16) I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.abmj.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, \frac{9}{2}; z\right) = \frac{105 e^z (40z^3 + 4z^2 + 26z - 75)}{8192 z^3} - \frac{105\sqrt{\pi} (80z^4 - 32z^3 + 8z^2 - 24z - 75) \operatorname{erfi}(\sqrt{z})}{16384 z^{7/2}}$$

07.25.03.abmk.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (40z^3 - 4z^2 + 26z + 75)}{8192 z^3} + \frac{105\sqrt{\pi} (80z^4 + 32z^3 + 8z^2 + 24z - 75) \operatorname{erf}(\sqrt{z})}{16384 z^{7/2}}$$

07.25.03.abml.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, 5; z\right) = \frac{8 e^{z/2} (10z^4 - 2z^3 + 3z^2 - 48) I_1\left(\frac{z}{2}\right)}{105 z^3} - \frac{16 e^{z/2} (5z^3 - 6z^2 - 6) I_0\left(\frac{z}{2}\right)}{105 z^2}$$

07.25.03.abmm.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, \frac{11}{2}; z\right) = \frac{315 e^z (48z^4 + 32z^2 + 40z - 735)}{32768 z^4} - \frac{315\sqrt{\pi} (96z^5 - 48z^4 + 16z^3 - 72z^2 - 450z - 735) \operatorname{erfi}(\sqrt{z})}{65536 z^{9/2}}$$

07.25.03.abmn.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (48 z^4 + 32 z^2 - 40 z - 735)}{32768 z^4} + \frac{315 \sqrt{\pi} (96 z^5 + 48 z^4 + 16 z^3 + 72 z^2 - 450 z + 735) \operatorname{erf}(\sqrt{z})}{65536 z^{9/2}}$$

07.25.03.abmo.01

$${}_2F_2\left(-\frac{1}{2}, 3; 1, 6; z\right) = \frac{8 e^{z/2} (20 z^5 - 6 z^4 + 7 z^3 - 12 z^2 - 144 z - 768) I_1\left(\frac{z}{2}\right)}{231 z^4} - \frac{8 e^{z/2} (20 z^4 - 26 z^3 + 3 z^2 - 36 z - 192) I_0\left(\frac{z}{2}\right)}{231 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = \frac{3}{2}$

07.25.03.0048.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{3}{2}, 2; z\right) = \frac{1}{16 \sqrt{z}} \left(\sqrt{\pi} (3 - 10 z) \operatorname{erfi}(\sqrt{z}) + 10 e^z \sqrt{z} \right)$$

07.25.03.abmp.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{3}{2}, 2; -z\right) = \frac{\sqrt{\pi} (10 z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}} + \frac{5 e^{-z}}{8}$$

07.25.03.abmq.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{3}{2}, 3; z\right) = \frac{\sqrt{\pi} (1 - 2 z) \operatorname{erfi}(\sqrt{z})}{4 \sqrt{z}} + \frac{e^z}{2}$$

07.25.03.abmr.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{3}{2}, 3; -z\right) = \frac{\sqrt{\pi} (2 z + 1) \operatorname{erf}(\sqrt{z})}{4 \sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.abms.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{3}{2}, 4; z\right) = \frac{3 e^z (5 z^3 - z^2 + 2 z - 2)}{35 z^3} - \frac{3 \sqrt{\pi} (10 z - 7) \operatorname{erfi}(\sqrt{z})}{70 \sqrt{z}} + \frac{6}{35 z^3}$$

07.25.03.abmt.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{3}{2}, 4; -z\right) = \frac{3 e^{-z} (5 z^3 + z^2 + 2 z + 2)}{35 z^3} + \frac{3 \sqrt{\pi} (10 z + 7) \operatorname{erf}(\sqrt{z})}{70 \sqrt{z}} - \frac{6}{35 z^3}$$

07.25.03.abmu.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{3}{2}, 5; z\right) = \frac{8 (3 z + 5)}{35 z^4} + \frac{4 e^z (10 z^4 - 4 z^3 + 3 z^2 + 12 z - 30)}{105 z^4} - \frac{4 \sqrt{\pi} (10 z - 9) \operatorname{erfi}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.abmv.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{3}{2}, 5; -z\right) = -\frac{8 (3 z - 5)}{35 z^4} + \frac{4 e^{-z} (10 z^4 + 4 z^3 + 3 z^2 - 12 z - 30)}{105 z^4} + \frac{4 \sqrt{\pi} (10 z + 9) \operatorname{erf}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.abmw.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{3}{2}, 6; z\right) = \frac{4 (33 z^2 + 110 z + 140)}{77 z^5} + \frac{4 e^z (20 z^5 - 12 z^4 + 4 z^3 + 21 z^2 + 90 z - 420)}{231 z^5} - \frac{8 \sqrt{\pi} (10 z - 11) \operatorname{erfi}(\sqrt{z})}{231 \sqrt{z}}$$

07.25.03.abmx.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{3}{2}, 6; -z\right) = -\frac{4(33z^2 - 110z + 140)}{77z^5} + \frac{4e^{-z}(20z^5 + 12z^4 + 4z^3 - 21z^2 + 90z + 420)}{231z^5} + \frac{8\sqrt{\pi}(10z + 11)\operatorname{erf}(\sqrt{z})}{231\sqrt{z}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = 2$

07.25.03.0049.01

$${}_2F_2\left(-\frac{1}{2}, 3; 2, 2; z\right) = -\frac{1}{6}e^{z/2}\left((5z - 6)I_0\left(\frac{z}{2}\right) + (1 - 5z)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.0050.01

$${}_2F_2\left(-\frac{1}{2}, 3; 2, \frac{5}{2}; z\right) = \frac{1}{128z^{3/2}}\left(6e^z\sqrt{z}(10z - 1) + 3\sqrt{\pi}(-20z^2 + 12z + 1)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.abmy.01

$${}_2F_2\left(-\frac{1}{2}, 3; 2, \frac{5}{2}; -z\right) = \frac{3e^{-z}(10z + 1)}{64z} + \frac{3\sqrt{\pi}(20z^2 + 12z - 1)\operatorname{erf}(\sqrt{z})}{128z^{3/2}}$$

07.25.03.abmz.01

$${}_2F_2\left(-\frac{1}{2}, 3; 2, 3; z\right) = \frac{1}{3}e^{z/2}(3 - 2z)I_0\left(\frac{z}{2}\right) + \frac{1}{3}e^{z/2}(2z - 1)I_1\left(\frac{z}{2}\right)$$

07.25.03.abn0.01

$${}_2F_2\left(-\frac{1}{2}, 3; 2, \frac{7}{2}; z\right) = \frac{5e^z(20z^2 - 8z + 3)}{256z^2} - \frac{5\sqrt{\pi}(40z^3 - 36z^2 - 6z + 3)\operatorname{erfi}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.abn1.01

$${}_2F_2\left(-\frac{1}{2}, 3; 2, \frac{7}{2}; -z\right) = \frac{5e^{-z}(20z^2 + 8z + 3)}{256z^2} + \frac{5\sqrt{\pi}(40z^3 + 36z^2 - 6z - 3)\operatorname{erf}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.abn2.01

$${}_2F_2\left(-\frac{1}{2}, 3; 2, 4; z\right) = \frac{4e^{z/2}(5z^3 - 4z^2 - z + 2)I_1\left(\frac{z}{2}\right)}{35z^2} - \frac{2e^{z/2}(10z^2 - 18z + 1)I_0\left(\frac{z}{2}\right)}{35z}$$

07.25.03.abn3.01

$${}_2F_2\left(-\frac{1}{2}, 3; 2, \frac{9}{2}; z\right) = \frac{35e^z(40z^3 - 28z^2 - 6z + 45)}{4096z^3} - \frac{35\sqrt{\pi}(80z^4 - 96z^3 - 24z^2 + 24z + 45)\operatorname{erfi}(\sqrt{z})}{8192z^{7/2}}$$

07.25.03.abn4.01

$${}_2F_2\left(-\frac{1}{2}, 3; 2, \frac{9}{2}; -z\right) = \frac{35e^{-z}(40z^3 + 28z^2 - 6z - 45)}{4096z^3} + \frac{35\sqrt{\pi}(80z^4 + 96z^3 - 24z^2 - 24z + 45)\operatorname{erf}(\sqrt{z})}{8192z^{7/2}}$$

07.25.03.abn5.01

$${}_2F_2\left(-\frac{1}{2}, 3; 2, 5; z\right) = \frac{8e^{z/2}(20z^4 - 22z^3 - 9z^2 + 12z + 48)I_1\left(\frac{z}{2}\right)}{315z^3} - \frac{8e^{z/2}(20z^3 - 42z^2 + 3z + 12)I_0\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.abn6.01

$${}_2F_2\left(-\frac{1}{2}, 3; 2, \frac{11}{2}; z\right) = \frac{315 e^z (16 z^4 - 16 z^3 - 8 z^2 + 20 z + 105)}{16384 z^4} - \frac{315 \sqrt{\pi} (32 z^5 - 48 z^4 - 16 z^3 + 24 z^2 + 90 z + 105) \operatorname{erfi}(\sqrt{z})}{32768 z^{9/2}}$$

07.25.03.abn7.01

$${}_2F_2\left(-\frac{1}{2}, 3; 2, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (16 z^4 + 16 z^3 - 8 z^2 - 20 z + 105)}{16384 z^4} + \frac{315 \sqrt{\pi} (32 z^5 + 48 z^4 - 16 z^3 - 24 z^2 + 90 z - 105) \operatorname{erf}(\sqrt{z})}{32768 z^{9/2}}$$

07.25.03.abn8.01

$${}_2F_2\left(-\frac{1}{2}, 3; 2, 6; z\right) = \frac{16 e^{z/2} (20 z^5 - 28 z^4 - 15 z^3 + 21 z^2 + 120 z + 288) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{16 e^{z/2} (20 z^4 - 48 z^3 + 3 z^2 + 30 z + 72) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = \frac{5}{2}$

07.25.03.abn9.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{5}{2}, 3; z\right) = \frac{3 e^z (2z - 1)}{16z} - \frac{3 \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.abna.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{5}{2}, 3; -z\right) = \frac{3 e^{-z} (2z + 1)}{16z} + \frac{3 \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.abnb.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{5}{2}, 4; z\right) = \frac{3 e^z (30 z^3 - 27 z^2 - 16 z + 16)}{280 z^3} - \frac{3 \sqrt{\pi} (60 z^2 - 84 z - 35) \operatorname{erfi}(\sqrt{z})}{560 z^{3/2}} - \frac{6}{35 z^3}$$

07.25.03.abnc.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{5}{2}, 4; -z\right) = \frac{3 e^{-z} (30 z^3 + 27 z^2 - 16 z - 16)}{280 z^3} + \frac{3 \sqrt{\pi} (60 z^2 + 84 z - 35) \operatorname{erf}(\sqrt{z})}{560 z^{3/2}} + \frac{6}{35 z^3}$$

07.25.03.abnd.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{5}{2}, 5; z\right) = -\frac{24(z + 1)}{35 z^4} + \frac{e^z (10 z^4 - 13 z^3 - 12 z^2 + 24)}{35 z^4} + \frac{\sqrt{\pi} (-20 z^2 + 36 z + 21) \operatorname{erfi}(\sqrt{z})}{70 z^{3/2}}$$

07.25.03.abne.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{5}{2}, 5; -z\right) = \frac{24(z - 1)}{35 z^4} + \frac{e^{-z} (10 z^4 + 13 z^3 - 12 z^2 + 24)}{35 z^4} + \frac{\sqrt{\pi} (20 z^2 + 36 z - 21) \operatorname{erf}(\sqrt{z})}{70 z^{3/2}}$$

07.25.03.abnf.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{5}{2}, 6; z\right) = -\frac{12(11z^2 + 22z + 20)}{77z^5} + \frac{2e^z(10z^5 - 17z^4 - 20z^3 - 6z^2 + 12z + 120)}{77z^5} + \frac{\sqrt{\pi}(-20z^2 + 44z + 33)\operatorname{erfi}(\sqrt{z})}{77z^{3/2}}$$

07.25.03.abng.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{5}{2}, 6; -z\right) = \frac{12(11z^2 - 22z + 20)}{77z^5} + \frac{2e^{-z}(10z^5 + 17z^4 - 20z^3 + 6z^2 + 12z - 120)}{77z^5} + \frac{\sqrt{\pi}(20z^2 + 44z - 33)\operatorname{erf}(\sqrt{z})}{77z^{3/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = 3$

07.25.03.abnh.01

$${}_2F_2\left(-\frac{1}{2}, 3; 3, 3; z\right) = \frac{4e^{z/2}(2z^2 - 2z - 1)I_1\left(\frac{z}{2}\right)}{15z} - \frac{8}{15}e^{z/2}(z-2)I_0\left(\frac{z}{2}\right)$$

07.25.03.abni.01

$${}_2F_2\left(-\frac{1}{2}, 3; 3, \frac{7}{2}; z\right) = \frac{5e^z(4z^2 - 4z - 3)}{64z^2} - \frac{5\sqrt{\pi}(8z^3 - 12z^2 - 6z - 3)\operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.abnj.01

$${}_2F_2\left(-\frac{1}{2}, 3; 3, \frac{7}{2}; -z\right) = \frac{5e^{-z}(4z^2 + 4z - 3)}{64z^2} + \frac{5\sqrt{\pi}(8z^3 + 12z^2 - 6z + 3)\operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.abnk.01

$${}_2F_2\left(-\frac{1}{2}, 3; 3, 4; z\right) = \frac{4e^{z/2}(4z^3 - 6z^2 - 5z - 4)I_1\left(\frac{z}{2}\right)}{35z^2} - \frac{4e^{z/2}(4z^2 - 10z - 1)I_0\left(\frac{z}{2}\right)}{35z}$$

07.25.03.abnl.01

$${}_2F_2\left(-\frac{1}{2}, 3; 3, \frac{9}{2}; z\right) = \frac{35e^z(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35\sqrt{\pi}(16z^4 - 32z^3 - 24z^2 - 24z - 15)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.abnm.01

$${}_2F_2\left(-\frac{1}{2}, 3; 3, \frac{9}{2}; -z\right) = \frac{35e^{-z}(8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35\sqrt{\pi}(16z^4 + 32z^3 - 24z^2 + 24z - 15)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.abnn.01

$${}_2F_2\left(-\frac{1}{2}, 3; 3, 5; z\right) = \frac{32e^{z/2}(4z^4 - 8z^3 - 9z^2 - 12z - 12)I_1\left(\frac{z}{2}\right)}{315z^3} - \frac{32e^{z/2}(4z^3 - 12z^2 - 3z - 3)I_0\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.abno.01

$${}_2F_2\left(-\frac{1}{2}, 3; 3, \frac{11}{2}; z\right) = \frac{63e^z(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63\sqrt{\pi}(32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.abnp.01

$${}_2F_2\left(-\frac{1}{2}, 3; 3, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16 z^4 + 32 z^3 - 48 z^2 + 80 z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.abnq.01

$${}_2F_2\left(-\frac{1}{2}, 3; 3, 6; z\right) = \frac{32 e^{z/2} (8 z^5 - 20 z^4 - 28 z^3 - 51 z^2 - 84 z - 96) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (8 z^4 - 28 z^3 - 12 z^2 - 21 z - 24) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = \frac{7}{2}$

07.25.03.abnr.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{7}{2}, 4; z\right) = \frac{3 e^z (20 z^3 - 32 z^2 - 41 z - 64)}{224 z^3} - \frac{3 \sqrt{\pi} (40 z^3 - 84 z^2 - 70 z - 105) \operatorname{erfi}(\sqrt{z})}{448 z^{5/2}} + \frac{6}{7 z^3}$$

07.25.03.abns.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{7}{2}, 4; -z\right) = \frac{3 e^{-z} (20 z^3 + 32 z^2 - 41 z + 64)}{224 z^3} + \frac{3 \sqrt{\pi} (40 z^3 + 84 z^2 - 70 z + 105) \operatorname{erf}(\sqrt{z})}{448 z^{5/2}} - \frac{6}{7 z^3}$$

07.25.03.abnt.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{7}{2}, 5; z\right) = \frac{8(3z+1)}{7z^4} + \frac{e^z (20z^4 - 44z^3 - 75z^2 - 192z - 96)}{84z^4} + \frac{\sqrt{\pi} (-40z^3 + 108z^2 + 126z + 315) \operatorname{erfi}(\sqrt{z})}{168z^{5/2}}$$

07.25.03.abnu.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{7}{2}, 5; -z\right) = -\frac{8(3z-1)}{7z^4} + \frac{e^{-z} (20z^4 + 44z^3 - 75z^2 + 192z - 96)}{84z^4} + \frac{\sqrt{\pi} (40z^3 + 108z^2 - 126z + 315) \operatorname{erf}(\sqrt{z})}{168z^{5/2}}$$

07.25.03.abnv.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{7}{2}, 6; z\right) = \frac{20(33z^2 + 22z + 12)}{77z^5} + \frac{5 e^z (20z^5 - 56z^4 - 117z^3 - 408z^2 - 240z - 288)}{462z^5} - \frac{5 \sqrt{\pi} (40z^3 - 132z^2 - 198z - 693) \operatorname{erfi}(\sqrt{z})}{924z^{5/2}}$$

07.25.03.abnw.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{7}{2}, 6; -z\right) = -\frac{20(33z^2 - 22z + 12)}{77z^5} + \frac{5 e^{-z} (20z^5 + 56z^4 - 117z^3 + 408z^2 - 240z + 288)}{462z^5} + \frac{5 \sqrt{\pi} (40z^3 + 132z^2 - 198z + 693) \operatorname{erf}(\sqrt{z})}{924z^{5/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = 4$

07.25.03.abnx.01

$${}_2F_2\left(-\frac{1}{2}, 3; 4, 4; z\right) = -\frac{8 e^{z/2} (60 z^4 - 192 z^3 - 71 z^2 - 210 z + 420) I_0\left(\frac{z}{2}\right)}{1225 z^3} + \frac{8 e^{z/2} (60 z^3 - 132 z^2 - 173 z - 389) I_1\left(\frac{z}{2}\right)}{1225 z^2} + \frac{96}{35 z^3}$$

07.25.03.abny.01

$${}_2F_2\left(-\frac{1}{2}, 3; 4, \frac{9}{2}; z\right) = \frac{3 e^z (40 z^3 - 92 z^2 - 166 z - 499)}{512 z^3} - \frac{3 \sqrt{\pi} (80 z^4 - 224 z^3 - 280 z^2 - 840 z + 525) \operatorname{erfi}(\sqrt{z})}{1024 z^{7/2}} + \frac{6}{z^3}$$

07.25.03.abnz.01

$${}_2F_2\left(-\frac{1}{2}, 3; 4, \frac{9}{2}; -z\right) = \frac{3 e^{-z} (40 z^3 + 92 z^2 - 166 z + 499)}{512 z^3} + \frac{3 \sqrt{\pi} (80 z^4 + 224 z^3 - 280 z^2 + 840 z + 525) \operatorname{erf}(\sqrt{z})}{1024 z^{7/2}} - \frac{6}{z^3}$$

07.25.03.abo0.01

$${}_2F_2\left(-\frac{1}{2}, 3; 4, 5; z\right) = -\frac{32 e^{z/2} (40 z^4 - 156 z^3 - 108 z^2 - 525 z + 1260) I_0\left(\frac{z}{2}\right)}{3675 z^3} + \frac{32 e^{z/2} (40 z^4 - 116 z^3 - 204 z^2 - 747 z + 420) I_1\left(\frac{z}{2}\right)}{3675 z^3} + \frac{384}{35 z^3}$$

07.25.03.abo1.01

$${}_2F_2\left(-\frac{1}{2}, 3; 4, \frac{11}{2}; z\right) = \frac{9 e^z (48 z^4 - 144 z^3 - 328 z^2 - 1436 z + 735)}{2048 z^4} - \frac{9 \sqrt{\pi} (96 z^5 - 336 z^4 - 560 z^3 - 2520 z^2 + 3150 z + 735) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} + \frac{18}{z^3}$$

07.25.03.abo2.01

$${}_2F_2\left(-\frac{1}{2}, 3; 4, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (48 z^4 + 144 z^3 - 328 z^2 + 1436 z + 735)}{2048 z^4} + \frac{9 \sqrt{\pi} (96 z^5 + 336 z^4 - 560 z^3 + 2520 z^2 + 3150 z - 735) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}} - \frac{18}{z^3}$$

07.25.03.abo3.01

$${}_2F_2\left(-\frac{1}{2}, 3; 4, 6; z\right) = -\frac{64 e^{z/2} (40 z^4 - 184 z^3 - 192 z^2 - 1260 z + 3675) I_0\left(\frac{z}{2}\right)}{8085 z^3} + \frac{128 e^{z/2} (20 z^5 - 72 z^4 - 158 z^3 - 804 z^2 + 945 z + 420) I_1\left(\frac{z}{2}\right)}{8085 z^4} + \frac{192}{7 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = \frac{9}{2}$

07.25.03.abo4.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{9}{2}, 5; z\right) = \frac{8(3z-1)}{z^4} + \frac{e^z (40 z^4 - 124 z^3 - 294 z^2 - 1419 z + 1536)}{192 z^4} + \frac{\sqrt{\pi} (-80 z^4 + 288 z^3 + 504 z^2 + 2520 z - 4725) \operatorname{erfi}(\sqrt{z})}{384 z^{7/2}}$$

07.25.03.abo5.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{9}{2}, 5; -z\right) = -\frac{8(3z+1)}{z^4} + \frac{e^{-z} (40 z^4 + 124 z^3 - 294 z^2 + 1419 z + 1536)}{192 z^4} + \frac{\sqrt{\pi} (80 z^4 + 288 z^3 - 504 z^2 + 2520 z + 4725) \operatorname{erf}(\sqrt{z})}{384 z^{7/2}}$$

07.25.03.abo6.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{9}{2}, 6; z\right) = \frac{20(33z^2 - 22z - 4)}{11z^5} + \frac{5e^z(40z^5 - 156z^4 - 454z^3 - 3027z^2 + 6912z + 1536)}{1056z^5} - \frac{5\sqrt{\pi}(80z^4 - 352z^3 - 792z^2 - 5544z + 17325)\operatorname{erfi}(\sqrt{z})}{2112z^{7/2}}$$

07.25.03.abo7.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{9}{2}, 6; -z\right) = -\frac{20(33z^2 + 22z - 4)}{11z^5} + \frac{5e^{-z}(40z^5 + 156z^4 - 454z^3 + 3027z^2 + 6912z - 1536)}{1056z^5} + \frac{5\sqrt{\pi}(80z^4 + 352z^3 - 792z^2 + 5544z + 17325)\operatorname{erf}(\sqrt{z})}{2112z^{7/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = 5$

07.25.03.abo8.01

$${}_2F_2\left(-\frac{1}{2}, 3; 5, 5; z\right) = \frac{512(3z - 2)}{35z^4} - \frac{1024e^{z/2}(10z^5 - 48z^4 - 57z^3 - 444z^2 + 1890z - 945)I_0\left(\frac{z}{2}\right)}{33075z^4} + \frac{256e^{z/2}(40z^4 - 152z^3 - 360z^2 - 2172z + 5181)I_1\left(\frac{z}{2}\right)}{33075z^3}$$

07.25.03.abo9.01

$${}_2F_2\left(-\frac{1}{2}, 3; 5, \frac{11}{2}; z\right) = \frac{72(z - 1)}{z^4} + \frac{3e^z(16z^4 - 64z^3 - 192z^2 - 1368z + 3939)}{256z^4} - \frac{3\sqrt{\pi}(32z^5 - 144z^4 - 336z^3 - 2520z^2 + 9450z - 2205)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.aboa.01

$${}_2F_2\left(-\frac{1}{2}, 3; 5, \frac{11}{2}; -z\right) = -\frac{72(z + 1)}{z^4} + \frac{3e^{-z}(16z^4 + 64z^3 - 192z^2 + 1368z + 3939)}{256z^4} + \frac{3\sqrt{\pi}(32z^5 + 144z^4 - 336z^3 + 2520z^2 + 9450z + 2205)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.abob.01

$${}_2F_2\left(-\frac{1}{2}, 3; 5, 6; z\right) = \frac{256(3z - 4)}{7z^4} - \frac{256e^{z/2}(80z^5 - 456z^4 - 780z^3 - 8196z^2 + 50085z - 41580)I_0\left(\frac{z}{2}\right)}{72765z^4} + \frac{256e^{z/2}(80z^5 - 376z^4 - 1116z^3 - 9420z^2 + 39981z - 7560)I_1\left(\frac{z}{2}\right)}{72765z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = \frac{11}{2}$

07.25.03.aboc.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{11}{2}, 6; z\right) = \frac{180(11z^2 - 22z + 4)}{11z^5} + \frac{15e^z(16z^5 - 80z^4 - 296z^3 - 2940z^2 + 15681z - 6144)}{1408z^5} - \frac{15\sqrt{\pi}(32z^5 - 176z^4 - 528z^3 - 5544z^2 + 34650z - 24255)\operatorname{erfi}(\sqrt{z})}{2816z^{9/2}}$$

07.25.03.abod.01

$${}_2F_2\left(-\frac{1}{2}, 3; \frac{11}{2}, 6; -z\right) = -\frac{180(11z^2 + 22z + 4)}{11z^5} + \frac{15e^{-z}(16z^5 + 80z^4 - 296z^3 + 2940z^2 + 15681z + 6144)}{1408z^5} + \frac{15\sqrt{\pi}(32z^5 + 176z^4 - 528z^3 + 5544z^2 + 34650z + 24255)\operatorname{erf}(\sqrt{-z})}{2816z^{9/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 3$, $b_1 = 6$

07.25.03.aboe.01

$${}_2F_2\left(-\frac{1}{2}, 3; 6, 6; z\right) = \frac{640(33z^2 - 88z + 32)}{77z^5} - \frac{512e^{z/2}(80z^6 - 544z^5 - 1308z^4 - 18624z^3 + 172317z^2 - 270270z + 83160)I_0\left(\frac{z}{2}\right)}{160083z^5} + \frac{512e^{z/2}(80z^5 - 464z^4 - 1732z^3 - 20508z^2 + 150729z - 131937)I_1\left(\frac{z}{2}\right)}{160083z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.abof.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{1}{1620840375} \left(e^z (16384z^{14} + 983040z^{13} + 22179840z^{12} + 239124480z^{11} + 1295447040z^{10} + 3398492160z^9 + 3792096000z^8 + 1306368000z^7 + 40824000z^6 + 18144000z^5 - 80967600z^4 + 312984000z^3 - 898978500z^2 + 1714608000z - 1620840375) \right)$$

07.25.03.abog.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{147349125} \left(e^z (8192z^{13} + 430080z^{12} + 8294400z^{11} + 73943040z^{10} + 314979840z^9 + 596816640z^8 + 404006400z^7 + 47174400z^6 - 3175200z^5 + 7484400z^4 - 29257200z^3 + 83349000z^2 - 157767750z + 147349125) \right)$$

07.25.03.aboh.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{1}{16372125} (e^z (4096 z^{12} + 184320 z^{11} + 2949120 z^{10} + 20751360 z^9 + 64108800 z^8 + 74027520 z^7 + 16934400 z^6 - 1814400 z^5 - 680400 z^4 + 3402000 z^3 - 9525600 z^2 + 17860500 z - 16372125))$$

07.25.03.aboi.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{2338875} (e^z (2048 z^{11} + 76800 z^{10} + 975360 z^9 + 5011200 z^8 + 9504000 z^7 + 3749760 z^6 - 907200 z^5 + 453600 z^4 - 567000 z^3 + 1417500 z^2 - 2636550 z + 2338875))$$

07.25.03.aboj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = -\frac{1}{467775} (e^z (1024 z^{10} + 30720 z^9 + 288000 z^8 + 921600 z^7 + 604800 z^6 - 241920 z^5 + 151200 z^4 - 283500 z^2 + 567000 z - 467775))$$

07.25.03.abok.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{155925} e^z (512 z^9 + 11520 z^8 + 69120 z^7 + 80640 z^6 - 60480 z^5 + 90720 z^4 - 151200 z^3 + 226800 z^2 - 255150 z + 155925)$$

07.25.03.abol.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = -\frac{1}{155925} e^z (256 z^8 + 3840 z^7 + 9600 z^6 - 12480 z^5 + 25920 z^4 - 45360 z^3 + 37800 z^2 + 56700 z - 155925)$$

07.25.03.abom.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{155925} e^{z/2} (-128 z^8 - 1536 z^7 - 1920 z^6 + 4320 z^5 - 14400 z^4 + 36000 z^3 - 46800 z^2 - 28350 z + 155925) I_0\left(\frac{z}{2}\right) - \frac{2 e^{z/2} (64 z^8 + 704 z^7 + 288 z^6 - 2160 z^5 + 9000 z^4 - 27000 z^3 + 53100 z^2 - 51075 z) I_1\left(\frac{z}{2}\right)}{155925}$$

07.25.03.abon.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{e^z (128 z^7 + 960 z^6 - 1440 z^5 + 1680 z^4 + 5400 z^3 - 41580 z^2 + 122850 z - 155925)}{155925}$$

07.25.03.aboo.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (-128 z^7 - 576 z^6 + 1920 z^5 - 6000 z^4 + 10800 z^3 + 6120 z^2 - 86940 z + 155925) I_0\left(\frac{z}{2}\right) + e^{z/2} (-128 z^7 - 448 z^6 + 2304 z^5 - 8400 z^4 + 20400 z^3 - 20520 z^2 - 43380 z + 135135) I_1\left(\frac{z}{2}\right)}{155925}$$

07.25.03.abop.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = -\frac{e^z (64 z^6 - 720 z^4 + 4800 z^3 - 18900 z^2 + 45360 z - 51975)}{51975}$$

07.25.03.aboq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, 3; z\right) = -\frac{4 e^{z/2} (64 z^6 - 192 z^5 + 240 z^4 + 1920 z^3 - 14760 z^2 + 49140 z - 72765) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (64 z^7 - 256 z^6 + 528 z^5 + 1200 z^4 - 15240 z^3 + 62820 z^2 - 135135 z + 135135) I_1\left(\frac{z}{2}\right)}{155925 z}$$

07.25.03.abor.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{e^z (32 z^5 - 240 z^4 + 1200 z^3 - 4200 z^2 + 9450 z - 10395)}{10395}$$

07.25.03.abos.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, 4; z\right) = -\frac{4 e^{z/2} (64 z^6 - 672 z^5 + 4560 z^4 - 22560 z^3 + 82080 z^2 - 210870 z + 328185) I_0\left(\frac{z}{2}\right) - \frac{1}{51975 z^2} 4 e^{z/2} (64 z^7 - 736 z^6 + 5328 z^5 - 28320 z^4 + 114000 z^3 - 347490 z^2 + 791505 z - 1312740) I_1\left(\frac{z}{2}\right)}{51975 z}$$

07.25.03.abot.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (-16 z^7 + 240 z^6 - 2160 z^5 + 13980 z^4 - 67635 z^3 + 241920 z^2 - 604800 z + 907200)}{1485 z^3} - \frac{3360 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.abou.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-16 z^7 - 240 z^6 - 2160 z^5 - 13980 z^4 - 67635 z^3 - 241920 z^2 - 604800 z - 907200)}{1485 z^3} + \frac{3360 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.abov.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, 5; z\right) = -\frac{32 e^{z/2} (32 z^6 - 576 z^5 + 6000 z^4 - 43800 z^3 + 232650 z^2 - 875160 z + 2078505) I_0\left(\frac{z}{2}\right) - \frac{1}{51975 z^3} 64 e^{z/2} (16 z^7 - 304 z^6 + 3312 z^5 - 25380 z^4 + 143715 z^3 - 598455 z^2 + 1750320 z - 4157010) I_1\left(\frac{z}{2}\right)}{51975 z^2}$$

07.25.03.abow.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (-8z^7 + 180z^6 - 2250z^5 + 19365z^4 - 120960z^3 + 544320z^2 - 1663200z + 3175200)}{165z^4} - \frac{15120\sqrt{\pi}(z+7)\operatorname{erfi}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.abox.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (8z^7 + 180z^6 + 2250z^5 + 19365z^4 + 120960z^3 + 544320z^2 + 1663200z + 3175200)}{165z^4} + \frac{15120\sqrt{\pi}(z-7)\operatorname{erf}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.aboy.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, 6; z\right) = -\frac{32e^{z/2}(32z^6 - 816z^5 + 11280z^4 - 105180z^3 + 696150z^2 - 3212235z + 10581480)I_0\left(\frac{z}{2}\right)}{10395z^3} - \frac{1}{10395z^4} 32e^{z/2}(32z^7 - 848z^6 + 12144z^5 - 117780z^4 + 820950z^3 - 4107285z^2 + 12848940z - 42325920)I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}, a_2 = \frac{7}{2}, b_1 = -\frac{9}{2}$

07.25.03.aboz.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = -\frac{1}{13395375} (e^z (4096z^{12} + 188416z^{11} + 3110912z^{10} + 22972416z^9 + 77086464z^8 + 105692160z^7 + 43464960z^6 + 1854720z^5 - 660240z^4 + 2751840z^3 - 7749000z^2 + 14553000z - 13395375))$$

07.25.03.abp0.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{1488375} (e^z (2048z^{11} + 80896z^{10} + 1110528z^9 + 6488832z^8 + 15832320z^7 + 13265280z^6 + 1834560z^5 + 10080z^4 - 325080z^3 + 888300z^2 - 1653750z + 1488375))$$

07.25.03.abp1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = -\frac{1}{212625} (e^z (1024z^{10} + 33792z^9 + 369408z^8 + 1582080z^7 + 2378880z^6 + 685440z^5 - 110880z^4 + 60480z^3 - 132300z^2 + 245700z - 212625))$$

07.25.03.abp2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{42525} e^z (512z^9 + 13568z^8 + 110080z^7 + 295680z^6 + 154560z^5 - 43680z^4 + 10080z^3 + 25200z^2 - 53550z + 42525)$$

07.25.03.abp3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{14175} e^z (256 z^8 + 5120 z^7 + 26880 z^6 + 26880 z^5 - 16800 z^4 + 20160 z^3 - 25200 z^2 + 25200 z - 14175)$$

07.25.03.abp4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 1728 z^6 + 3936 z^5 - 4272 z^4 + 6552 z^3 - 6300 z^2 - 3150 z + 14175)}{14175}$$

07.25.03.abp5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (64 z^7 + 704 z^6 + 912 z^5 - 1680 z^4 + 3960 z^3 - 5400 z^2 - 1575 z + 14175) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^7 + 640 z^6 + 304 z^5 - 1728 z^4 + 5400 z^3 - 10800 z^2 + 10575 z) I_1\left(\frac{z}{2}\right)}{14175}$$

07.25.03.abp6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z (64 z^6 + 448 z^5 - 496 z^4 + 96 z^3 + 2940 z^2 - 10500 z + 14175)}{14175}$$

07.25.03.abp7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 + 288 z^5 - 720 z^4 + 1440 z^3 - 360 z^2 - 6930 z + 14175) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^6 + 224 z^5 - 912 z^4 + 2400 z^3 - 3240 z^2 - 1710 z + 10395) I_1\left(\frac{z}{2}\right)}{14175}$$

07.25.03.abp8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (32 z^5 + 16 z^4 - 336 z^3 + 1560 z^2 - 3990 z + 4725)}{4725}$$

07.25.03.abp9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, 3; z\right) = \frac{8 e^{z/2} (16 z^5 - 32 z^4 - 16 z^3 + 480 z^2 - 1869 z + 2898) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (32 z^6 - 96 z^5 + 80 z^4 + 800 z^3 - 4302 z^2 + 9702 z - 9009) I_1\left(\frac{z}{2}\right)}{14175 z}$$

07.25.03.abpa.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{945} e^z (16 z^4 - 96 z^3 + 360 z^2 - 840 z + 945)$$

07.25.03.abpb.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 - 272 z^4 + 1440 z^3 - 5268 z^2 + 13086 z - 19305) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (32 z^6 - 304 z^5 + 1760 z^4 - 7212 z^3 + 21582 z^2 - 47619 z + 77220) I_1\left(\frac{z}{2}\right)}{4725 z^2}$$

07.25.03.abpc.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (8 z^6 - 100 z^5 + 730 z^4 - 3705 z^3 + 13440 z^2 - 33600 z + 50400)}{135 z^3} - \frac{560 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{3 z^{7/2}}$$

07.25.03.abpd.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(-8z^6 - 100z^5 - 730z^4 - 3705z^3 - 13440z^2 - 33600z - 50400)}{135z^3} + \frac{560\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{3z^{7/2}}$$

07.25.03.abpe.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, 5; z\right) = \frac{32e^{z/2}(16z^5 - 240z^4 + 2028z^3 - 11556z^2 + 45045z - 109395)I_0\left(\frac{z}{2}\right)}{4725z^2} + \frac{32e^{z/2}(16z^6 - 256z^5 + 2292z^4 - 13992z^3 + 60489z^2 - 180180z + 437580)I_1\left(\frac{z}{2}\right)}{4725z^3}$$

07.25.03.abpf.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z(4z^6 - 76z^5 + 783z^4 - 5376z^3 + 25536z^2 - 80640z + 158760)}{15z^4} - \frac{84\sqrt{\pi}(10z + 63)\operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.abpg.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z}(4z^6 + 76z^5 + 783z^4 + 5376z^3 + 25536z^2 + 80640z + 158760)}{15z^4} + \frac{84\sqrt{\pi}(10z - 63)\operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.abph.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, 6; z\right) = \frac{32e^{z/2}(16z^5 - 344z^4 + 3908z^3 - 28860z^2 + 142545z - 503880)I_0\left(\frac{z}{2}\right)}{945z^3} + \frac{32e^{z/2}(16z^6 - 360z^5 + 4276z^4 - 33332z^3 + 178425z^2 - 570180z + 2015520)I_1\left(\frac{z}{2}\right)}{945z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.abpi.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{165375}(e^z(1024z^{10} + 34816z^9 + 398592z^8 + 1849344z^7 + 3292800z^6 + 1693440z^5 + 70560z^4 + 40320z^3 - 102060z^2 + 189000z - 165375))$$

07.25.03.abpj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{23625}e^z(512z^9 + 14592z^8 + 133632z^7 + 456960z^6 + 504000z^5 + 90720z^4 - 10080z^3 + 15120z^2 - 28350z + 23625)$$

07.25.03.abpk.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = -\frac{e^z(256z^8 + 5888z^7 + 40320z^6 + 87360z^5 + 33600z^4 - 5040z^3 - 2520z^2 + 6300z - 4725)}{4725}$$

07.25.03.abpl.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575)}{1575}$$

07.25.03.abpm.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = -\frac{e^z (64 z^6 + 768 z^5 + 1584 z^4 - 1344 z^3 + 1260 z^2 - 1575)}{1575}$$

07.25.03.abpn.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (-32 z^6 - 320 z^5 - 432 z^4 + 600 z^3 - 810 z^2 + 1575) I_0\left(\frac{z}{2}\right)}{1575} - \frac{2 e^{z/2} (16 z^6 + 144 z^5 + 80 z^4 - 324 z^3 + 675 z^2 - 675 z) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.abpo.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = -\frac{e^z (32 z^5 + 208 z^4 - 144 z^3 - 168 z^2 + 1050 z - 1575)}{1575}$$

07.25.03.abpp.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (-32 z^5 - 144 z^4 + 240 z^3 - 180 z^2 - 630 z + 1575) I_0\left(\frac{z}{2}\right)}{1575} + \frac{e^{z/2} (-32 z^5 - 112 z^4 + 336 z^3 - 540 z^2 + 90 z + 945) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.abpq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = -\frac{1}{525} e^z (16 z^4 + 16 z^3 - 144 z^2 + 420 z - 525)$$

07.25.03.abpr.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (16 z^4 - 16 z^3 - 60 z^2 + 336 z - 567) I_0\left(\frac{z}{2}\right)}{1575} - \frac{4 e^{z/2} (16 z^5 - 32 z^4 - 20 z^3 + 324 z^2 - 819 z + 693) I_1\left(\frac{z}{2}\right)}{1575 z}$$

07.25.03.abps.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = -\frac{1}{105} e^z (8 z^3 - 36 z^2 + 90 z - 105)$$

07.25.03.abpt.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 - 104 z^3 + 396 z^2 - 948 z + 1287) I_0\left(\frac{z}{2}\right)}{525 z} - \frac{4 e^{z/2} (16 z^5 - 120 z^4 + 524 z^3 - 1548 z^2 + 3267 z - 5148) I_1\left(\frac{z}{2}\right)}{525 z^2}$$

07.25.03.abpu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (-4 z^5 + 40 z^4 - 225 z^3 + 840 z^2 - 2100 z + 3150)}{15 z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.abpv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-4 z^5 - 40 z^4 - 225 z^3 - 840 z^2 - 2100 z - 3150)}{15 z^3} + \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.abpw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 - 96 z^3 + 624 z^2 - 2574 z + 6435) I_0\left(\frac{z}{2}\right)}{525 z^2} - \frac{64 e^{z/2} (4 z^5 - 52 z^4 + 366 z^3 - 1683 z^2 + 5148 z - 12870) I_1\left(\frac{z}{2}\right)}{525 z^3}$$

07.25.03.abpx.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = -\frac{3 e^z (2 z^5 - 31 z^4 + 252 z^3 - 1302 z^2 + 4305 z - 8820)}{5 z^4} - \frac{189 \sqrt{\pi} (5 z + 28) \operatorname{erfi}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.abpy.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (2 z^5 + 31 z^4 + 252 z^3 + 1302 z^2 + 4305 z + 8820)}{5 z^4} + \frac{189 \sqrt{\pi} (5 z - 28) \operatorname{erf}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.abpz.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, 6; z\right) = -\frac{32 e^{z/2} (8 z^4 - 140 z^3 + 1248 z^2 - 6825 z + 26520) I_0\left(\frac{z}{2}\right)}{105 z^3} - \frac{32 e^{z/2} (8 z^5 - 148 z^4 + 1400 z^3 - 8307 z^2 + 27300 z - 106080) I_1\left(\frac{z}{2}\right)}{105 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.abq0.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (256 z^8 + 6144 z^7 + 45312 z^6 + 115200 z^5 + 79200 z^4 + 5760 z^3 - 2160 z^2 + 4320 z - 3375)}{3375}$$

07.25.03.abq1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{675} e^z (128 z^7 + 2496 z^6 + 13920 z^5 + 22800 z^4 + 5400 z^3 + 180 z^2 - 990 z + 675)$$

07.25.03.abq2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = -\frac{1}{225} e^z (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225)$$

07.25.03.abq3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{225} e^z (32 z^5 + 336 z^4 + 624 z^3 - 360 z^2 + 90 z + 225)$$

07.25.03.abq4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{225} e^{z/2} (16 z^5 + 144 z^4 + 204 z^3 - 180 z^2 + 45 z + 225) I_0\left(\frac{z}{2}\right) + \frac{1}{225} e^{z/2} (16 z^5 + 128 z^4 + 84 z^3 - 216 z^2 + 225 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.abq5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{225} e^z (16 z^4 + 96 z^3 - 24 z^2 - 120 z + 225)$$

07.25.03.abq6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{225} e^{z/2} (16z^4 + 72z^3 - 60z^2 - 60z + 225) I_0\left(\frac{z}{2}\right) + \frac{1}{225} e^{z/2} (16z^4 + 56z^3 - 108z^2 + 60z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.abq7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{75} e^z (8z^3 + 12z^2 - 54z + 75)$$

07.25.03.abq8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, 3; z\right) = \frac{16}{225} e^{z/2} (2z^3 - 9z + 18) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8z^4 - 8z^3 - 24z^2 + 84z - 63) I_1\left(\frac{z}{2}\right)}{225 z}$$

07.25.03.abq9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{15} e^z (4z^2 - 12z + 15)$$

07.25.03.abqa.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 - 36z^2 + 84z - 99) I_0\left(\frac{z}{2}\right)}{75 z} + \frac{4 e^{z/2} (8z^4 - 44z^3 + 132z^2 - 261z + 396) I_1\left(\frac{z}{2}\right)}{75 z^2}$$

07.25.03.abqb.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (2z^4 - 15z^3 + 60z^2 - 150z + 225)}{15 z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 z^{7/2}}$$

07.25.03.abqc.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 z^{7/2}} - \frac{7 e^{-z} (2z^4 + 15z^3 + 60z^2 + 150z + 225)}{15 z^3}$$

07.25.03.abqd.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^3 - 36z^2 + 165z - 429) I_0\left(\frac{z}{2}\right)}{75 z^2} + \frac{32 e^{z/2} (4z^4 - 40z^3 + 207z^2 - 660z + 1716) I_1\left(\frac{z}{2}\right)}{75 z^3}$$

07.25.03.abqe.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{21 e^z (4z^4 - 48z^3 + 288z^2 - 1020z + 2205)}{20 z^4} - \frac{189 \sqrt{\pi} (10z + 49) \operatorname{erfi}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.abqf.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (4z^4 + 48z^3 + 288z^2 + 1020z + 2205)}{20 z^4} + \frac{189 \sqrt{\pi} (10z - 49) \operatorname{erf}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.abqg.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 - 54z^2 + 351z - 1560) I_0\left(\frac{z}{2}\right)}{15 z^3} + \frac{32 e^{z/2} (4z^4 - 58z^3 + 411z^2 - 1404z + 6240) I_1\left(\frac{z}{2}\right)}{15 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.abqh.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = -\frac{1}{135} e^z (64 z^6 + 1024 z^5 + 4400 z^4 + 4800 z^3 + 300 z^2 + 240 z - 135)$$

07.25.03.abqi.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{45} e^z (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45)$$

07.25.03.abqj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = -\frac{1}{45} e^z (16 z^4 + 144 z^3 + 240 z^2 - 60 z - 45)$$

07.25.03.abqk.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{45} e^{z/2} (-8 z^4 - 64 z^3 - 96 z^2 + 30 z + 45) I_0\left(\frac{z}{2}\right) - \frac{2}{45} e^{z/2} (4 z^4 + 28 z^3 + 22 z^2 - 27 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.abql.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = -\frac{1}{45} e^z (8 z^3 + 44 z^2 + 10 z - 45)$$

07.25.03.abqm.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{45} e^{z/2} (-8 z^3 - 36 z^2 + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (-8 z^3 - 28 z^2 + 24 z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.abqn.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = -\frac{1}{15} e^z (4 z^2 + 8 z - 15)$$

07.25.03.abqo.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, 3; z\right) = -\frac{4}{45} e^{z/2} (4 z^2 + 4 z - 13) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4 z^3 - 11 z + 7) I_1\left(\frac{z}{2}\right)}{45 z}$$

07.25.03.abqp.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = -\frac{1}{3} e^z (2 z - 3)$$

07.25.03.abqq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, 4; z\right) = -\frac{4 e^{z/2} (4 z^2 - 10 z + 9) I_0\left(\frac{z}{2}\right)}{15 z} - \frac{4 e^{z/2} (4 z^3 - 14 z^2 + 25 z - 36) I_1\left(\frac{z}{2}\right)}{15 z^2}$$

07.25.03.abqr.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = -\frac{7 e^z (4 z^3 - 20 z^2 + 50 z - 75)}{12 z^3} - \frac{175 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.abqs.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{175 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{7/2}} - \frac{7 e^{-z} (4 z^3 + 20 z^2 + 50 z + 75)}{12 z^3}$$

07.25.03.abqt.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, 5; z\right) = -\frac{32 e^{z/2} (2 z^2 - 12 z + 33) I_0\left(\frac{z}{2}\right)}{15 z^2} - \frac{64 e^{z/2} (z^3 - 7 z^2 + 24 z - 66) I_1\left(\frac{z}{2}\right)}{15 z^3}$$

07.25.03.abqu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = -\frac{21 e^z (4 z^3 - 34 z^2 + 135 z - 315)}{8 z^4} - \frac{315 \sqrt{\pi} (5 z + 21) \operatorname{erfi}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.abqv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (4 z^3 + 34 z^2 + 135 z + 315)}{8 z^4} + \frac{315 \sqrt{\pi} (5 z - 21) \operatorname{erf}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.abqw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, 6; z\right) = -\frac{32 e^{z/2} (2 z^2 - 19 z + 104) I_0\left(\frac{z}{2}\right)}{3 z^3} - \frac{32 e^{z/2} (2 z^3 - 21 z^2 + 76 z - 416) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.abqx.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = -\frac{1}{15} e^z (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15)$$

07.25.03.abqy.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (8 z^3 + 60 z^2 + 90 z + 15)$$

07.25.03.abqz.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (4 z^3 + 28 z^2 + 45 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4 z^3 + 24 z^2 + 23 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.abr0.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (4 z^2 + 20 z + 15)$$

07.25.03.abr1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4 z^2 + 18 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4 z^2 + 14 z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.abr2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{5} e^z (2 z + 5)$$

07.25.03.abr3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, 3; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2 z^2 + 2 z - 1) I_1\left(\frac{z}{2}\right)}{15 z}$$

07.25.03.abr4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = e^z$$

07.25.03.abr5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (2 z - 1) I_0\left(\frac{z}{2}\right)}{5 z} + \frac{4 e^{z/2} (2 z^2 - 3 z + 4) I_1\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.abr6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4 z^2 - 10 z + 15)}{8 z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.abr7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7 e^{-z} (4 z^2 + 10 z + 15)}{8 z^3}$$

07.25.03.abr8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (z-3) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{32 e^{z/2} (z^2 - 4 z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.abr9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (8 z^2 - 40 z + 105)}{32 z^4} - \frac{945 \sqrt{\pi} (2 z + 7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.abra.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8 z^2 + 40 z + 105)}{32 z^4} + \frac{945 \sqrt{\pi} (2 z - 7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.abrb.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (z-8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4 z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{1}{2}$

07.25.03.abrc.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (-4 z^2 - 24 z + 15) - \frac{16}{5} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abrd.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} e^{-z} (-4 z^2 + 24 z + 15) + \frac{16}{5} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.abre.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-2 z^2 - 60 z + 15) I_0\left(\frac{z}{2}\right) - \frac{2}{15} e^{z/2} (z^2 - 19 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.abrf.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (15 - 2 z) - \frac{8}{5} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abrg.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (2 z + 15) + \frac{8}{5} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.abrh.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (15 - 34 z) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (30 z + 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.abri.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = e^z - \frac{6}{5} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abrj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{6}{5} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.abrk.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (32 z^2 + 3 z - 1) I_1\left(\frac{z}{2}\right)}{75 z} - \frac{4}{75} e^{z/2} (32 z - 19) I_0\left(\frac{z}{2}\right)$$

07.25.03.abrl.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.abrm.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.abrn.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^3 + 16 z^2 - 17 z + 20) I_1\left(\frac{z}{2}\right)}{175 z^2} - \frac{4 e^{z/2} (64 z^2 - 48 z + 5) I_0\left(\frac{z}{2}\right)}{175 z}$$

07.25.03.abro.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (8 z^3 + 4 z^2 - 10 z + 15)}{64 z^3} - \frac{7 \sqrt{\pi} (16 z^4 + 15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.abrp.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (8 z^3 - 4 z^2 - 10 z - 15)}{64 z^3} + \frac{7 \sqrt{\pi} (16 z^4 + 15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.abrq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, 5; z\right) = \frac{64 e^{z/2} (32 z^4 + 8 z^3 + 9 z^2 - 60 z + 210) I_1\left(\frac{z}{2}\right)}{1575 z^3} - \frac{32 e^{z/2} (64 z^3 - 48 z^2 - 30 z + 105) I_0\left(\frac{z}{2}\right)}{1575 z^2}$$

07.25.03.abrr.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (8 z^4 + 4 z^3 + 6 z^2 - 65 z + 210)}{640 z^4} - \frac{63 \sqrt{\pi} (16 z^5 + 75 z + 210) \operatorname{erfi}(\sqrt{z})}{1280 z^{9/2}}$$

07.25.03.abrs.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8 z^4 - 4 z^3 + 6 z^2 + 65 z + 210)}{640 z^4} + \frac{63 \sqrt{\pi} (16 z^5 + 75 z - 210) \operatorname{erf}(\sqrt{z})}{1280 z^{9/2}}$$

07.25.03.abrt.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (128 z^5 + 32 z^4 + 36 z^3 + 75 z^2 - 420 z + 10080) I_1\left(\frac{z}{2}\right)}{3465 z^4} - \frac{32 e^{z/2} (128 z^4 - 96 z^3 - 60 z^2 - 105 z + 2520) I_0\left(\frac{z}{2}\right)}{3465 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 1$

07.25.03.abru.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{3} e^{z/2} (3 - 5z) I_0\left(\frac{z}{2}\right) + \frac{23}{15} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.abrv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{5} e^{z/2} (5 - 6z) I_0\left(\frac{z}{2}\right) + \frac{6}{5} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.abrw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; 1, \frac{7}{2}; z\right) = e^{z/2} (1 - z) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{3}{2}$

07.25.03.abrx.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{11 e^z}{15} - \frac{2 \sqrt{\pi} (6z - 1) \operatorname{erfi}(\sqrt{z})}{15 \sqrt{z}}$$

07.25.03.abry.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{2 \sqrt{\pi} (6z + 1) \operatorname{erf}(\sqrt{z})}{15 \sqrt{z}} + \frac{11 e^{-z}}{15}$$

07.25.03.abrz.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (15 - 16z) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (16z - 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.abs0.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{\sqrt{\pi} (1 - 3z) \operatorname{erfi}(\sqrt{z})}{5 \sqrt{z}} + \frac{3 e^z}{5}$$

07.25.03.abs1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{\sqrt{\pi} (3z + 1) \operatorname{erf}(\sqrt{z})}{5 \sqrt{z}} + \frac{3 e^{-z}}{5}$$

07.25.03.abs2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (48z^2 - 8z + 1) I_1\left(\frac{z}{2}\right)}{225 z} - \frac{32}{225} e^{z/2} (6z - 7) I_0\left(\frac{z}{2}\right)$$

07.25.03.abs3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{\sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4 \sqrt{z}} + \frac{e^z}{2}$$

07.25.03.abs4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{\sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4 \sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.abs5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (96 z^3 - 32 z^2 + 13 z - 12) I_1\left(\frac{z}{2}\right)}{525 z^2} - \frac{4 e^{z/2} (96 z^2 - 128 z - 3) I_0\left(\frac{z}{2}\right)}{525 z}$$

07.25.03.abs6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (24 z^3 - 4 z^2 + 10 z - 15)}{384 z^3} - \frac{7 \sqrt{\pi} (48 z^4 - 32 z^3 - 15) \operatorname{erfi}(\sqrt{z})}{768 z^{7/2}}$$

07.25.03.abs7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (24 z^3 + 4 z^2 + 10 z + 15)}{384 z^3} + \frac{7 \sqrt{\pi} (48 z^4 + 32 z^3 - 15) \operatorname{erf}(\sqrt{z})}{768 z^{7/2}}$$

07.25.03.abs8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^4 - 16 z^3 + 3 z^2 + 12 z - 60) I_1\left(\frac{z}{2}\right)}{1575 z^3} - \frac{32 e^{z/2} (32 z^3 - 48 z^2 + 3 z - 15) I_0\left(\frac{z}{2}\right)}{1575 z^2}$$

07.25.03.abs9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{21 e^z (48 z^4 - 16 z^3 + 16 z^2 + 60 z - 315)}{2560 z^4} - \frac{21 \sqrt{\pi} (96 z^5 - 80 z^4 - 150 z - 315) \operatorname{erfi}(\sqrt{z})}{5120 z^{9/2}}$$

07.25.03.absa.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (48 z^4 + 16 z^3 + 16 z^2 - 60 z - 315)}{2560 z^4} + \frac{21 \sqrt{\pi} (96 z^5 + 80 z^4 - 150 z + 315) \operatorname{erf}(\sqrt{z})}{5120 z^{9/2}}$$

07.25.03.absb.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (192 z^5 - 128 z^4 + 10 z^3 + 63 z^2 - 300 z - 3360) I_1\left(\frac{z}{2}\right)}{10395 z^4} - \frac{32 e^{z/2} (192 z^4 - 320 z^3 + 42 z^2 - 75 z - 840) I_0\left(\frac{z}{2}\right)}{10395 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 2$

07.25.03.absc.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{5} e^{z/2} (5 - 4z) I_0\left(\frac{z}{2}\right) + \frac{1}{5} e^{z/2} (4z - 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.absd.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; 2, \frac{7}{2}; z\right) = e^{z/2} \left(1 - \frac{2z}{3}\right) I_0\left(\frac{z}{2}\right) + e^{z/2} \left(\frac{2z}{3} - \frac{1}{3}\right) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{5}{2}$

07.25.03.abse.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3 e^z (6z - 1)}{40 z} - \frac{3 \sqrt{\pi} (12 z^2 - 8z - 1) \operatorname{erfi}(\sqrt{z})}{80 z^{3/2}}$$

07.25.03.absf.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3e^{-z}(6z+1)}{40z} + \frac{3\sqrt{\pi}(12z^2+8z-1)\operatorname{erf}(\sqrt{z})}{80z^{3/2}}$$

07.25.03.absg.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, 3; z\right) = \frac{4e^{z/2}(12z^2-7z-1)I_1\left(\frac{z}{2}\right)}{75z} - \frac{4}{75}e^{z/2}(12z-19)I_0\left(\frac{z}{2}\right)$$

07.25.03.absh.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{3e^z(2z-1)}{16z} - \frac{3\sqrt{\pi}(4z^2-4z-1)\operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.absi.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{3e^{-z}(2z+1)}{16z} + \frac{3\sqrt{\pi}(4z^2+4z-1)\operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.absj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, 4; z\right) = \frac{4e^{z/2}(24z^3-22z^2-9z+4)I_1\left(\frac{z}{2}\right)}{175z^2} - \frac{4e^{z/2}(24z^2-46z+1)I_0\left(\frac{z}{2}\right)}{175z}$$

07.25.03.absk.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{7e^z(24z^3-20z^2-10z+15)}{512z^3} - \frac{7\sqrt{\pi}(48z^4-64z^3-24z^2+15)\operatorname{erfi}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.absl.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}(24z^3+20z^2-10z-15)}{512z^3} + \frac{7\sqrt{\pi}(48z^4+64z^3-24z^2+15)\operatorname{erf}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.absm.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, 5; z\right) = \frac{64e^{z/2}(4z^4-5z^3-3z^2+6)I_1\left(\frac{z}{2}\right)}{525z^3} - \frac{32e^{z/2}(8z^3-18z^2+3)I_0\left(\frac{z}{2}\right)}{525z^2}$$

07.25.03.absn.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{63e^z(24z^4-28z^3-22z^2+5z+105)}{5120z^4} - \frac{63\sqrt{\pi}(48z^5-80z^4-40z^3+75z+105)\operatorname{erfi}(\sqrt{z})}{10240z^{9/2}}$$

07.25.03.abso.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63e^{-z}(24z^4+28z^3-22z^2-5z+105)}{5120z^4} + \frac{63\sqrt{\pi}(48z^5+80z^4-40z^3+75z-105)\operatorname{erf}(\sqrt{z})}{10240z^{9/2}}$$

07.25.03.absp.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, 6; z\right) = \frac{32e^{z/2}(48z^5-76z^4-58z^3-9z^2+156z+480)I_1\left(\frac{z}{2}\right)}{3465z^4} - \frac{32e^{z/2}(48z^4-124z^3-6z^2+39z+120)I_0\left(\frac{z}{2}\right)}{3465z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 3$

07.25.03.absq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; 3, \frac{7}{2}; z\right) = \frac{4 e^{z/2} (2z^2 - 2z - 1) I_1\left(\frac{z}{2}\right)}{15z} - \frac{8}{15} e^{z/2} (z - 2) I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{7}{2}$

07.25.03.absr.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (4z^2 - 4z - 3)}{64z^2} - \frac{5\sqrt{\pi} (8z^3 - 12z^2 - 6z - 3) \operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.abss.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (4z^2 + 4z - 3)}{64z^2} + \frac{5\sqrt{\pi} (8z^3 + 12z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.abst.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (4z^3 - 6z^2 - 5z - 4) I_1\left(\frac{z}{2}\right)}{35z^2} - \frac{4 e^{z/2} (4z^2 - 10z - 1) I_0\left(\frac{z}{2}\right)}{35z}$$

07.25.03.absu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35\sqrt{\pi} (16z^4 - 32z^3 - 24z^2 - 24z - 15) \operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.absv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35\sqrt{\pi} (16z^4 + 32z^3 - 24z^2 + 24z - 15) \operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.absw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^4 - 8z^3 - 9z^2 - 12z - 12) I_1\left(\frac{z}{2}\right)}{315z^3} - \frac{32 e^{z/2} (4z^3 - 12z^2 - 3z - 3) I_0\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.absx.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63\sqrt{\pi} (32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105) \operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.absy.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63\sqrt{\pi} (32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105) \operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.absz.01

$${}_2F_2\left(-\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (8z^5 - 20z^4 - 28z^3 - 51z^2 - 84z - 96) I_1\left(\frac{z}{2}\right)}{693z^4} - \frac{32 e^{z/2} (8z^4 - 28z^3 - 12z^2 - 21z - 24) I_0\left(\frac{z}{2}\right)}{693z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = -\frac{11}{2}$

07.25.03.abt0.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{324\,168\,075} \left(-1024 z^{14} - 69\,632 z^{13} - 1\,808\,640 z^{12} - 22\,889\,216 z^{11} - 149\,188\,608 z^{10} - 486\,051\,840 z^9 - 702\,071\,040 z^8 - 330\,163\,200 z^7 - 15\,240\,960 z^6 - 564\,480 z^5 - 226\,800 z^4 - 324\,000 z^3 - 1\,323\,000 z^2 - 21\,432\,600 z + 324\,168\,075 \right) - \frac{1}{324\,168\,075} \left(128 e^z \sqrt{\pi} \left(8 z^{29/2} + 548 z^{27/2} + 14\,398 z^{25/2} + 185\,625 z^{23/2} + 1\,248\,525 z^{21/2} + 4\,305\,960 z^{19/2} + 6\,969\,960 z^{17/2} + 4\,302\,360 z^{15/2} + 581\,400 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.abt1.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{324\,168\,075} \left(-1024 z^{14} + 69\,632 z^{13} - 1\,808\,640 z^{12} + 22\,889\,216 z^{11} - 149\,188\,608 z^{10} + 486\,051\,840 z^9 - 702\,071\,040 z^8 + 330\,163\,200 z^7 - 15\,240\,960 z^6 + 564\,480 z^5 - 226\,800 z^4 + 324\,000 z^3 - 1\,323\,000 z^2 + 21\,432\,600 z + 324\,168\,075 \right) + \frac{1}{324\,168\,075} \left(128 e^{-z} \sqrt{\pi} \left(8 z^{29/2} - 548 z^{27/2} + 14\,398 z^{25/2} - 185\,625 z^{23/2} + 1\,248\,525 z^{21/2} - 4\,305\,960 z^{19/2} + 6\,969\,960 z^{17/2} - 4\,302\,360 z^{15/2} + 581\,400 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.abt2.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{29\,469\,825} \left(512 z^{13} + 30\,720 z^{12} + 689\,536 z^{11} + 7\,322\,112 z^{10} + 38\,292\,480 z^9 + 92\,785\,920 z^8 + 85\,248\,000 z^7 + 15\,240\,960 z^6 - 564\,480 z^5 - 75\,600 z^4 - 64\,800 z^3 - 189\,000 z^2 - 2\,381\,400 z + 29\,469\,825 \right) + \frac{1}{29\,469\,825} \left(64 e^z \sqrt{\pi} \left(8 z^{27/2} + 484 z^{25/2} + 11\,010 z^{23/2} + 119\,565 z^{21/2} + 650\,700 z^{19/2} + 1\,703\,160 z^{17/2} + 1\,860\,480 z^{15/2} + 581\,400 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.abt3.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{29\,469\,825} \left(-512 z^{13} + 30\,720 z^{12} - 689\,536 z^{11} + 7\,322\,112 z^{10} - 38\,292\,480 z^9 + 92\,785\,920 z^8 - 85\,248\,000 z^7 + 15\,240\,960 z^6 + 564\,480 z^5 - 75\,600 z^4 + 64\,800 z^3 - 189\,000 z^2 + 2\,381\,400 z + 29\,469\,825 \right) + \frac{1}{29\,469\,825} \left(64 e^{-z} \sqrt{\pi} \left(8 z^{27/2} - 484 z^{25/2} + 11\,010 z^{23/2} - 119\,565 z^{21/2} + 650\,700 z^{19/2} - 1\,703\,160 z^{17/2} + 1\,860\,480 z^{15/2} - 581\,400 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.abt4.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{3274425} (-256 z^{12} - 13312 z^{11} - 251712 z^{10} - 2157120 z^9 - 8471040 z^8 - 13328640 z^7 - 5080320 z^6 + 564480 z^5 - 75600 z^4 - 21600 z^3 - 37800 z^2 - 340200 z + 3274425) - \frac{1}{3274425} 32 e^z \sqrt{\pi} (8 z^{25/2} + 420 z^{23/2} + 8070 z^{21/2} + 71145 z^{19/2} + 294975 z^{17/2} + 523260 z^{15/2} + 290700 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abt5.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{3274425} (-256 z^{12} + 13312 z^{11} - 251712 z^{10} + 2157120 z^9 - 8471040 z^8 + 13328640 z^7 - 5080320 z^6 - 564480 z^5 - 75600 z^4 + 21600 z^3 - 37800 z^2 + 340200 z + 3274425) + \frac{1}{3274425} 32 e^{-z} \sqrt{\pi} (8 z^{25/2} - 420 z^{23/2} + 8070 z^{21/2} - 71145 z^{19/2} + 294975 z^{17/2} - 523260 z^{15/2} + 290700 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abt6.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{467775} (128 z^{11} + 5632 z^{10} + 86496 z^9 + 562240 z^8 + 1461120 z^7 + 1016064 z^6 - 188160 z^5 + 75600 z^4 - 21600 z^3 - 12600 z^2 - 68040 z + 467775) + \frac{16 e^z \sqrt{\pi} (8 z^{23/2} + 356 z^{21/2} + 5578 z^{19/2} + 37677 z^{17/2} + 106590 z^{15/2} + 96900 z^{13/2}) \operatorname{erf}(\sqrt{z})}{467775}$$

07.25.03.abt7.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{467775} (-128 z^{11} + 5632 z^{10} - 86496 z^9 + 562240 z^8 - 1461120 z^7 + 1016064 z^6 + 188160 z^5 + 75600 z^4 + 21600 z^3 - 12600 z^2 + 68040 z + 467775) + \frac{16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 356 z^{21/2} + 5578 z^{19/2} - 37677 z^{17/2} + 106590 z^{15/2} - 96900 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{467775}$$

07.25.03.abt8.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{93555} (-64 z^{10} - 2304 z^9 - 27152 z^8 - 119280 z^7 - 145152 z^6 + 37632 z^5 - 25200 z^4 + 21600 z^3 - 12600 z^2 - 22680 z + 93555) - \frac{8 e^z \sqrt{\pi} (8 z^{21/2} + 292 z^{19/2} + 3534 z^{17/2} + 16473 z^{15/2} + 24225 z^{13/2}) \operatorname{erf}(\sqrt{z})}{93555}$$

07.25.03.abt9.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{93555} (-64 z^{10} + 2304 z^9 - 27152 z^8 + 119280 z^7 - 145152 z^6 - 37632 z^5 - 25200 z^4 - 21600 z^3 - 12600 z^2 + 22680 z + 93555) + \frac{8 e^{-z} \sqrt{\pi} (8 z^{21/2} - 292 z^{19/2} + 3534 z^{17/2} - 16473 z^{15/2} + 24225 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{93555}$$

07.25.03.abta.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{32 z^9 + 896 z^8 + 7320 z^7 + 16128 z^6 - 5376 z^5 + 5040 z^4 - 7200 z^3 + 12600 z^2 - 22680 z + 31185}{31185} + \frac{4 e^z \sqrt{\pi} (8 z^{19/2} + 228 z^{17/2} + 1938 z^{15/2} + 4845 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.abtb.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{-32 z^9 + 896 z^8 - 7320 z^7 + 16128 z^6 + 5376 z^5 + 5040 z^4 + 7200 z^3 + 12600 z^2 + 22680 z + 31185}{31185} + \frac{4 e^{-z} \sqrt{\pi} (8 z^{19/2} - 228 z^{17/2} + 1938 z^{15/2} - 4845 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.abtc.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{-16 z^8 - 320 z^7 - 1428 z^6 + 364 z^5 + 480 z^4 - 3600 z^3 + 12600 z^2 - 27720 z + 31185}{31185} - \frac{1}{31185} (2 e^z \sqrt{\pi} (8 z^{17/2} + 164 z^{15/2} + 790 z^{13/2} + 105 z^{11/2} - 525 z^{9/2} + 2100 z^{7/2} - 6300 z^{5/2} + 12600 z^{3/2} - 12600 \sqrt{z}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.abtd.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{-16 z^8 + 320 z^7 - 1428 z^6 - 364 z^5 + 480 z^4 + 3600 z^3 + 12600 z^2 + 27720 z + 31185}{31185} + \frac{1}{31185} (2 e^{-z} \sqrt{\pi} (8 z^{17/2} - 164 z^{15/2} + 790 z^{13/2} - 105 z^{11/2} - 525 z^{9/2} - 2100 z^{7/2} - 6300 z^{5/2} - 12600 z^{3/2} - 12600 \sqrt{z}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.abte.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, 1; z\right) = -\frac{e^z (32 z^8 + 528 z^7 + 1536 z^6 - 2088 z^5 + 4050 z^4 - 4995 z^3 - 5355 z^2 + 39690 z - 62370)}{62370}$$

07.25.03.abtf.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{-8 z^7 - 96 z^6 - 46 z^5 + 420 z^4 - 1800 z^3 + 5400 z^2 - 10440 z + 9585}{31185} + \frac{e^z \sqrt{\pi} (-8 z^8 - 100 z^7 - 90 z^6 + 435 z^5 - 1650 z^4 + 4500 z^3 - 7200 z^2 + 1800 z + 10800) \operatorname{erf}(\sqrt{z})}{31185 \sqrt{z}}$$

07.25.03.abtg.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{8z^7 - 96z^6 + 46z^5 + 420z^4 + 1800z^3 + 5400z^2 + 10440z + 9585}{31185} + \frac{1}{31185\sqrt{z}} e^{-z} \sqrt{\pi} (-8z^8 + 100z^7 - 90z^6 - 435z^5 - 1650z^4 - 4500z^3 - 7200z^2 - 1800z + 10800) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abth.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, 2; z\right) = -\frac{e^z (32z^7 + 272z^6 - 368z^5 + 120z^4 + 3450z^3 - 18795z^2 + 51030z - 62370)}{62370}$$

07.25.03.abti.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{-4z^7 - 16z^6 + 87z^5 - 315z^4 + 720z^3 - 432z^2 - 2925z + 7560}{10395z} + \frac{e^z \sqrt{\pi} (-8z^8 - 36z^7 + 162z^6 - 537z^5 + 1035z^4 + 360z^3 - 8280z^2 + 18360z - 7560) \operatorname{erf}(\sqrt{z})}{20790z^{3/2}}$$

07.25.03.abtj.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-4z^7 + 16z^6 + 87z^5 + 315z^4 + 720z^3 + 432z^2 - 2925z - 7560}{10395z} + \frac{e^{-z} \sqrt{\pi} (8z^8 - 36z^7 - 162z^6 - 537z^5 - 1035z^4 + 360z^3 + 8280z^2 + 18360z + 7560) \operatorname{erfi}(\sqrt{z})}{20790z^{3/2}}$$

07.25.03.abtk.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, 3; z\right) = -\frac{e^z (32z^6 + 16z^5 - 480z^4 + 3000z^3 - 11550z^2 + 27405z - 31185)}{31185}$$

07.25.03.abtl.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{-4z^7 + 16z^6 - 27z^5 - 140z^4 + 1368z^3 - 5778z^2 + 14280z - 20160}{4158z^2} + \frac{1}{8316z^{5/2}} e^z \sqrt{\pi} (-8z^8 + 28z^7 - 34z^6 - 333z^5 + 2700z^4 - 10440z^3 + 23040z^2 - 27720z + 20160) \operatorname{erf}(\sqrt{z})$$

07.25.03.abtm.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{4z^7 + 16z^6 + 27z^5 - 140z^4 - 1368z^3 - 5778z^2 - 14280z - 20160}{4158z^2} + \frac{1}{8316z^{5/2}} e^{-z} \sqrt{\pi} (-8z^8 - 28z^7 - 34z^6 + 333z^5 + 2700z^4 + 10440z^3 + 23040z^2 + 27720z + 20160) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abtn.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, 4; z\right) = -\frac{e^z (32z^5 - 240z^4 + 1200z^3 - 4200z^2 + 9450z - 10395)}{10395}$$

07.25.03.abto.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{-4z^7 + 48z^6 - 365z^5 + 2079z^4 - 9288z^3 + 33180z^2 - 95760z + 226800}{1188z^3} + \frac{1}{2376z^{7/2}} e^z \sqrt{\pi} (-8z^8 + 92z^7 - 678z^6 + 3735z^5 - 15975z^4 + 53460z^3 - 137340z^2 + 246960z - 226800) \operatorname{erf}(\sqrt{z})$$

07.25.03.abtp.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{-4z^7 - 48z^6 - 365z^5 - 2079z^4 - 9288z^3 - 33180z^2 - 95760z - 226800}{1188z^3} + \frac{1}{2376z^{7/2}} e^{-z} \sqrt{\pi} (8z^8 + 92z^7 + 678z^6 + 3735z^5 + 15975z^4 + 53460z^3 + 137340z^2 + 246960z + 226800) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abtq.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, 5; z\right) = \frac{33592}{21z^4} - \frac{1}{10395z^4} 4e^z (32z^8 - 496z^7 + 4672z^6 - 32232z^5 + 170610z^4 - 692835z^3 + 2078505z^2 - 4157010z + 4157010)$$

07.25.03.abtr.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{-4z^7 + 80z^6 - 927z^5 + 7686z^4 - 48300z^3 + 231840z^2 - 831600z + 3175200}{264z^4} + \frac{1}{528z^{9/2}} e^z \sqrt{\pi} (-8z^8 + 156z^7 - 1770z^6 + 14355z^5 - 87750z^4 + 404460z^3 - 1350720z^2 + 2948400z - 3175200) \operatorname{erf}(\sqrt{z})$$

07.25.03.abts.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{4z^7 + 80z^6 + 927z^5 + 7686z^4 + 48300z^3 + 231840z^2 + 831600z + 3175200}{264z^4} + \frac{1}{528z^{9/2}} (e^{-z} \sqrt{\pi} (-8z^8 - 156z^7 - 1770z^6 - 14355z^5 - 87750z^4 - 404460z^3 - 1350720z^2 - 2948400z - 3175200) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.abtt.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{11}{2}, 6; z\right) = \frac{167960(11z + 84)}{231z^5} - \frac{1}{2079z^5} 4e^z (32z^8 - 752z^7 + 9936z^6 - 91848z^5 + 629850z^4 - 3212235z^3 + 11715210z^2 - 27587430z + 31744440)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = -\frac{9}{2}$

07.25.03.abtu.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{2679075} (-256z^{12} - 13568z^{11} - 263488z^{10} - 2350080z^9 - 9861888z^8 - 17710080z^7 - 10149120z^6 - 564480z^5 - 25200z^4 - 12960z^3 - 27000z^2 - 264600z + 2679075) - \frac{1}{2679075} (32e^z \sqrt{\pi} (8z^{25/2} + 428z^{23/2} + 8442z^{21/2} + 77355z^{19/2} + 341280z^{17/2} + 679320z^{15/2} + 501840z^{13/2} + 79560z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.abtv.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{2679075} (-256 z^{12} + 13568 z^{11} - 263488 z^{10} + 2350080 z^9 - 9861888 z^8 + 17710080 z^7 - 10149120 z^6 + 564480 z^5 - 25200 z^4 + 12960 z^3 - 27000 z^2 + 264600 z + 2679075) + \frac{1}{2679075} (32 e^{-z} \sqrt{\pi} (8 z^{25/2} - 428 z^{23/2} + 8442 z^{21/2} - 77355 z^{19/2} + 341280 z^{17/2} - 679320 z^{15/2} + 501840 z^{13/2} - 79560 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.abtw.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{297675} (128 z^{11} + 5888 z^{10} + 96480 z^9 + 695424 z^8 + 2190720 z^7 + 2534400 z^6 + 564480 z^5 - 25200 z^4 - 4320 z^3 - 5400 z^2 - 37800 z + 297675) + \frac{1}{297675} 16 e^z \sqrt{\pi} (8 z^{23/2} + 372 z^{21/2} + 6210 z^{19/2} + 46305 z^{17/2} + 156060 z^{15/2} + 211140 z^{13/2} + 79560 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abtx.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{297675} (-128 z^{11} + 5888 z^{10} - 96480 z^9 + 695424 z^8 - 2190720 z^7 + 2534400 z^6 - 564480 z^5 - 25200 z^4 + 4320 z^3 - 5400 z^2 + 37800 z + 297675) + \frac{1}{297675} 16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 372 z^{21/2} + 6210 z^{19/2} - 46305 z^{17/2} + 156060 z^{15/2} - 211140 z^{13/2} + 79560 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abty.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{42525} (-64 z^{10} - 2496 z^9 - 33296 z^8 - 182400 z^7 - 379584 z^6 - 188160 z^5 + 25200 z^4 - 4320 z^3 - 1800 z^2 - 7560 z + 42525) - \frac{8 e^z \sqrt{\pi} (8 z^{21/2} + 316 z^{19/2} + 4314 z^{17/2} + 24735 z^{15/2} + 57120 z^{13/2} + 39780 z^{11/2}) \operatorname{erf}(\sqrt{z})}{42525}$$

07.25.03.abtz.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{42525} (-64 z^{10} + 2496 z^9 - 33296 z^8 + 182400 z^7 - 379584 z^6 + 188160 z^5 + 25200 z^4 + 4320 z^3 - 1800 z^2 + 7560 z + 42525) + \frac{8 e^{-z} \sqrt{\pi} (8 z^{21/2} - 316 z^{19/2} + 4314 z^{17/2} - 24735 z^{15/2} + 57120 z^{13/2} - 39780 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{42525}$$

07.25.03.abu0.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{32 z^9 + 1024 z^8 + 10520 z^7 + 39072 z^6 + 37632 z^5 - 8400 z^4 + 4320 z^3 - 1800 z^2 - 2520 z + 8505}{8505} + \frac{4 e^z \sqrt{\pi} (8 z^{19/2} + 260 z^{17/2} + 2754 z^{15/2} + 10965 z^{13/2} + 13260 z^{11/2}) \operatorname{erf}(\sqrt{z})}{8505}$$

07.25.03.abu1.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{-32 z^9 + 1024 z^8 - 10520 z^7 + 39072 z^6 - 37632 z^5 - 8400 z^4 - 4320 z^3 - 1800 z^2 + 2520 z + 8505}{8505} + \frac{4 e^{-z} \sqrt{\pi} (8 z^{19/2} - 260 z^{17/2} + 2754 z^{15/2} - 10965 z^{13/2} + 13260 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{8505}$$

07.25.03.abu2.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{-16 z^8 - 400 z^7 - 2868 z^6 - 5376 z^5 + 1680 z^4 - 1440 z^3 + 1800 z^2 - 2520 z + 2835}{2835} - \frac{2 e^z \sqrt{\pi} (8 z^{17/2} + 204 z^{15/2} + 1530 z^{13/2} + 3315 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.abu3.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{-16 z^8 + 400 z^7 - 2868 z^6 + 5376 z^5 + 1680 z^4 + 1440 z^3 + 1800 z^2 + 2520 z + 2835}{2835} + \frac{2 e^{-z} \sqrt{\pi} (8 z^{17/2} - 204 z^{15/2} + 1530 z^{13/2} - 3315 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.abu4.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{8 z^7 + 144 z^6 + 574 z^5 - 120 z^4 - 216 z^3 + 1080 z^2 - 2520 z + 2835}{2835} + \frac{1}{2835} e^z \sqrt{\pi} (8 z^{15/2} + 148 z^{13/2} + 642 z^{11/2} + 105 z^{9/2} - 420 z^{7/2} + 1260 z^{5/2} - 2520 z^{3/2} + 2520 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abu5.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{-8 z^7 + 144 z^6 - 574 z^5 - 120 z^4 + 216 z^3 + 1080 z^2 + 2520 z + 2835}{2835} + \frac{1}{2835} e^{-z} \sqrt{\pi} (8 z^{15/2} - 148 z^{13/2} + 642 z^{11/2} - 105 z^{9/2} - 420 z^{7/2} - 1260 z^{5/2} - 2520 z^{3/2} - 2520 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abu6.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, 1; z\right) = \frac{e^z (16 z^7 + 240 z^6 + 648 z^5 - 720 z^4 + 945 z^3 - 135 z^2 - 3150 z + 5670)}{5670}$$

07.25.03.abu7.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{4 z^6 + 44 z^5 + 25 z^4 - 168 z^3 + 540 z^2 - 1080 z + 1035}{2835} + \frac{e^z \sqrt{\pi} (8 z^7 + 92 z^6 + 90 z^5 - 345 z^4 + 960 z^3 - 1620 z^2 + 720 z + 1800) \operatorname{erf}(\sqrt{z})}{5670 \sqrt{z}}$$

07.25.03.abu8.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{4z^6 - 44z^5 + 25z^4 + 168z^3 + 540z^2 + 1080z + 1035}{2835} + \frac{e^{-z}\sqrt{\pi}(-8z^7 + 92z^6 - 90z^5 - 345z^4 - 960z^3 - 1620z^2 - 720z + 1800)\operatorname{erfi}(\sqrt{z})}{5670\sqrt{z}}$$

07.25.03.abu9.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, 2; z\right) = \frac{e^z(16z^6 + 128z^5 - 120z^4 - 120z^3 + 1425z^2 - 4410z + 5670)}{5670}$$

07.25.03.abua.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{4z^6 + 16z^5 - 69z^4 + 180z^3 - 216z^2 - 270z + 1080}{1890z} + \frac{e^z\sqrt{\pi}(8z^7 + 36z^6 - 126z^5 + 285z^4 - 180z^3 - 1080z^2 + 2880z - 1080)\operatorname{erf}(\sqrt{z})}{3780z^{3/2}}$$

07.25.03.abub.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-4z^6 + 16z^5 + 69z^4 + 180z^3 + 216z^2 - 270z - 1080}{1890z} + \frac{e^{-z}\sqrt{\pi}(8z^7 - 36z^6 - 126z^5 - 285z^4 - 180z^3 + 1080z^2 + 2880z + 1080)\operatorname{erfi}(\sqrt{z})}{3780z^{3/2}}$$

07.25.03.abuc.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, 3; z\right) = \frac{e^z(16z^5 + 16z^4 - 216z^3 + 960z^2 - 2415z + 2835)}{2835}$$

07.25.03.abud.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{4z^6 - 12z^5 + 5z^4 + 144z^3 - 756z^2 + 1920z - 2520}{756z^2} + \frac{e^z\sqrt{\pi}(8z^7 - 20z^6 - 6z^5 + 315z^4 - 1440z^3 + 3240z^2 - 3600z + 2520)\operatorname{erf}(\sqrt{z})}{1512z^{5/2}}$$

07.25.03.abue.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{4z^6 + 12z^5 + 5z^4 - 144z^3 - 756z^2 - 1920z - 2520}{756z^2} + \frac{e^{-z}\sqrt{\pi}(-8z^7 - 20z^6 + 6z^5 + 315z^4 + 1440z^3 + 3240z^2 + 3600z + 2520)\operatorname{erfi}(\sqrt{z})}{1512z^{5/2}}$$

07.25.03.abuf.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, 4; z\right) = \frac{1}{945} e^z(16z^4 - 96z^3 + 360z^2 - 840z + 945)$$

07.25.03.abug.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{4z^6 - 40z^5 + 247z^4 - 1116z^3 + 3900z^2 - 10920z + 25200}{216z^3} + \frac{e^z \sqrt{\pi} (8z^7 - 76z^6 + 450z^5 - 1935z^4 + 6300z^3 - 15660z^2 + 27720z - 25200) \operatorname{erf}(\sqrt{z})}{432z^{7/2}}$$

07.25.03.abuh.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{-4z^6 - 40z^5 - 247z^4 - 1116z^3 - 3900z^2 - 10920z - 25200}{216z^3} + \frac{e^{-z} \sqrt{\pi} (8z^7 + 76z^6 + 450z^5 + 1935z^4 + 6300z^3 + 15660z^2 + 27720z + 25200) \operatorname{erfi}(\sqrt{z})}{432z^{7/2}}$$

07.25.03.abui.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, 5; z\right) = \frac{4e^z (16z^7 - 208z^6 + 1608z^5 - 8880z^4 + 36465z^3 - 109395z^2 + 218790z - 218790)}{945z^4} + \frac{19448}{21z^4}$$

07.25.03.abuj.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{4z^6 - 68z^5 + 657z^4 - 4440z^3 + 22092z^2 - 80640z + 317520}{48z^4} + \frac{e^z \sqrt{\pi} (8z^7 - 132z^6 + 1242z^5 - 8145z^4 + 38880z^3 - 132300z^2 + 292320z - 317520) \operatorname{erf}(\sqrt{z})}{96z^{9/2}}$$

07.25.03.abuk.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{4z^6 + 68z^5 + 657z^4 + 4440z^3 + 22092z^2 + 80640z + 317520}{48z^4} + \frac{1}{96z^{9/2}} e^{-z} \sqrt{\pi} (-8z^7 - 132z^6 - 1242z^5 - 8145z^4 - 38880z^3 - 132300z^2 - 292320z - 317520) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abul.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{9}{2}, 6; z\right) = \frac{8840(11z + 76)}{21z^5} + \frac{4e^z (16z^7 - 320z^6 + 3528z^5 - 26520z^4 + 142545z^3 - 537030z^2 + 1292850z - 1511640)}{189z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = -\frac{7}{2}$

07.25.03.abum.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{33075} \frac{(-64z^{10} - 2560z^9 - 35472z^8 - 207024z^7 - 489120z^6 - 358560z^5 - 25200z^4 - 1440z^3 - 1080z^2 - 5400z + 33075) - 8e^z \sqrt{\pi} (8z^{21/2} + 324z^{19/2} + 4590z^{17/2} + 27945z^{15/2} + 72225z^{13/2} + 66690z^{11/2} + 12870z^{9/2}) \operatorname{erf}(\sqrt{z})}{33075}$$

07.25.03.abun.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{33075} (-64 z^{10} + 2560 z^9 - 35472 z^8 + 207024 z^7 - 489120 z^6 + 358560 z^5 - 25200 z^4 + 1440 z^3 - 1080 z^2 + 5400 z + 33075) + \frac{1}{33075} 8 e^{-z} \sqrt{\pi} (8 z^{21/2} - 324 z^{19/2} + 4590 z^{17/2} - 27945 z^{15/2} + 72225 z^{13/2} - 66690 z^{11/2} + 12870 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abuo.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{32 z^9 + 1088 z^8 + 12312 z^7 + 54768 z^6 + 85200 z^5 + 25200 z^4 - 1440 z^3 - 360 z^2 - 1080 z + 4725}{4725} + \frac{4 e^z \sqrt{\pi} (8 z^{19/2} + 276 z^{17/2} + 3210 z^{15/2} + 15105 z^{13/2} + 26910 z^{11/2} + 12870 z^{9/2}) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.abup.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{-32 z^9 + 1088 z^8 - 12312 z^7 + 54768 z^6 - 85200 z^5 + 25200 z^4 + 1440 z^3 - 360 z^2 + 1080 z + 4725}{4725} + \frac{4 e^{-z} \sqrt{\pi} (8 z^{19/2} - 276 z^{17/2} + 3210 z^{15/2} - 15105 z^{13/2} + 26910 z^{11/2} - 12870 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.abuq.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} (-16 z^8 - 448 z^7 - 3924 z^6 - 11892 z^5 - 8400 z^4 + 1440 z^3 - 360 z^2 - 360 z + 945) - \frac{2}{945} e^z \sqrt{\pi} (8 z^{17/2} + 228 z^{15/2} + 2070 z^{13/2} + 6825 z^{11/2} + 6435 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abur.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{945} (-16 z^8 + 448 z^7 - 3924 z^6 + 11892 z^5 - 8400 z^4 - 1440 z^3 - 360 z^2 + 360 z + 945) + \frac{2}{945} e^{-z} \sqrt{\pi} (8 z^{17/2} - 228 z^{15/2} + 2070 z^{13/2} - 6825 z^{11/2} + 6435 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abus.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} (8 z^7 + 176 z^6 + 1086 z^5 + 1680 z^4 - 480 z^3 + 360 z^2 - 360 z + 315) + \frac{1}{315} e^z \sqrt{\pi} (8 z^{15/2} + 180 z^{13/2} + 1170 z^{11/2} + 2145 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abut.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{315} (-8 z^7 + 176 z^6 - 1086 z^5 + 1680 z^4 + 480 z^3 + 360 z^2 + 360 z + 315) + \frac{1}{315} e^{-z} \sqrt{\pi} (8 z^{15/2} - 180 z^{13/2} + 1170 z^{11/2} - 2145 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abuu.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{315} (-4z^6 - 64z^5 - 225z^4 + 33z^3 + 90z^2 - 270z + 315) + \frac{1}{630} e^z \sqrt{\pi} (-8z^{13/2} - 132z^{11/2} - 510z^{9/2} - 105z^{7/2} + 315z^{5/2} - 630z^{3/2} + 630\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abuv.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} (-4z^6 + 64z^5 - 225z^4 - 33z^3 + 90z^2 + 270z + 315) + \frac{1}{630} e^{-z} \sqrt{\pi} (8z^{13/2} - 132z^{11/2} + 510z^{9/2} - 105z^{7/2} - 315z^{5/2} - 630z^{3/2} - 630\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abuw.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, 1; z\right) = -\frac{1}{630} e^z (8z^6 + 108z^5 + 270z^4 - 225z^3 + 135z^2 + 270z - 630)$$

07.25.03.abux.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{630} (-4z^5 - 40z^4 - 27z^3 + 126z^2 - 270z + 270) + \frac{e^z \sqrt{\pi} (-8z^6 - 84z^5 - 90z^4 + 255z^3 - 450z^2 + 270z + 360) \operatorname{erf}(\sqrt{z})}{1260\sqrt{z}}$$

07.25.03.abuy.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{630} (4z^5 - 40z^4 + 27z^3 + 126z^2 + 270z + 270) + \frac{e^{-z} \sqrt{\pi} (-8z^6 + 84z^5 - 90z^4 - 255z^3 - 450z^2 - 270z + 360) \operatorname{erfi}(\sqrt{z})}{1260\sqrt{z}}$$

07.25.03.abuz.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, 2; z\right) = -\frac{1}{630} e^z (8z^5 + 60z^4 - 30z^3 - 105z^2 + 450z - 630)$$

07.25.03.abv0.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{-4z^5 - 16z^4 + 51z^3 - 81z^2 + 180}{420z} + \frac{e^z \sqrt{\pi} (-8z^6 - 36z^5 + 90z^4 - 105z^3 - 135z^2 + 540z - 180) \operatorname{erf}(\sqrt{z})}{840z^{3/2}}$$

07.25.03.abv1.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{-4z^5 + 16z^4 + 51z^3 + 81z^2 - 180}{420z} + \frac{e^{-z} \sqrt{\pi} (8z^6 - 36z^5 - 90z^4 - 105z^3 + 135z^2 + 540z + 180) \operatorname{erfi}(\sqrt{z})}{840z^{3/2}}$$

07.25.03.abv2.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, 3; z\right) = -\frac{1}{315} e^z (8z^4 + 12z^3 - 90z^2 + 255z - 315)$$

07.25.03.abv3.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{-4z^5 + 8z^4 + 9z^3 - 108z^2 + 300z - 360}{168z^2} + \frac{e^z \sqrt{\pi} (-8z^6 + 12z^5 + 30z^4 - 225z^3 + 540z^2 - 540z + 360) \operatorname{erf}(\sqrt{z})}{336z^{5/2}}$$

07.25.03.abv4.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{4z^5 + 8z^4 - 9z^3 - 108z^2 - 300z - 360}{168z^2} + \frac{e^{-z} \sqrt{\pi} (-8z^6 - 12z^5 + 30z^4 + 225z^3 + 540z^2 + 540z + 360) \operatorname{erfi}(\sqrt{z})}{336z^{5/2}}$$

07.25.03.abv5.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, 4; z\right) = -\frac{1}{105} e^z (8z^3 - 36z^2 + 90z - 105)$$

07.25.03.abv6.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{-4z^5 + 32z^4 - 153z^3 + 525z^2 - 1410z + 3150}{48z^3} + \frac{e^z \sqrt{\pi} (-8z^6 + 60z^5 - 270z^4 + 855z^3 - 2025z^2 + 3510z - 3150) \operatorname{erf}(\sqrt{z})}{96z^{7/2}}$$

07.25.03.abv7.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-4z^5 - 32z^4 - 153z^3 - 525z^2 - 1410z - 3150}{48z^3} + \frac{e^{-z} \sqrt{\pi} (8z^6 + 60z^5 + 270z^4 + 855z^3 + 2025z^2 + 3510z + 3150) \operatorname{erfi}(\sqrt{z})}{96z^{7/2}}$$

07.25.03.abv8.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, 5; z\right) = \frac{3432}{7z^4} - \frac{4e^z (8z^6 - 84z^5 + 510z^4 - 2145z^3 + 6435z^2 - 12870z + 12870)}{105z^4}$$

07.25.03.abv9.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, \frac{11}{2}; z\right) = -\frac{3(4z^5 - 56z^4 + 435z^3 - 2298z^2 + 8610z - 35280)}{32z^4} - \frac{3e^z \sqrt{\pi} (8z^6 - 108z^5 + 810z^4 - 4095z^3 + 14310z^2 - 32130z + 35280) \operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.abva.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3(4z^5 + 56z^4 + 435z^3 + 2298z^2 + 8610z + 35280)}{32z^4} - \frac{3e^{-z} \sqrt{\pi} (8z^6 + 108z^5 + 810z^4 + 4095z^3 + 14310z^2 + 32130z + 35280) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.abvb.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{7}{2}, 6; z\right) = \frac{1560(11z + 68)}{7z^5} - \frac{4e^z (8z^6 - 132z^5 + 1170z^4 - 6825z^3 + 26910z^2 - 66690z + 79560)}{21z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = -\frac{5}{2}$

07.25.03.abvc.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{675} (-16 z^8 - 464 z^7 - 4308 z^6 - 14672 z^5 - 14904 z^4 - 1440 z^3 - 120 z^2 - 216 z + 675) - \frac{2}{675} e^z \sqrt{\pi} (8 z^{17/2} + 236 z^{15/2} + 2266 z^{13/2} + 8307 z^{11/2} + 10296 z^{9/2} + 2574 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abvd.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{675} (-16 z^8 + 464 z^7 - 4308 z^6 + 14672 z^5 - 14904 z^4 + 1440 z^3 - 120 z^2 + 216 z + 675) + \frac{2}{675} e^{-z} \sqrt{\pi} (8 z^{17/2} - 236 z^{15/2} + 2266 z^{13/2} - 8307 z^{11/2} + 10296 z^{9/2} - 2574 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abve.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{135} (8 z^7 + 192 z^6 + 1390 z^5 + 3252 z^4 + 1440 z^3 - 120 z^2 - 72 z + 135) + \frac{1}{135} e^z \sqrt{\pi} (8 z^{15/2} + 196 z^{13/2} + 1482 z^{11/2} + 3861 z^{9/2} + 2574 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abvf.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{135} (-8 z^7 + 192 z^6 - 1390 z^5 + 3252 z^4 - 1440 z^3 - 120 z^2 + 72 z + 135) + \frac{1}{135} e^{-z} \sqrt{\pi} (8 z^{15/2} - 196 z^{13/2} + 1482 z^{11/2} - 3861 z^{9/2} + 2574 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abvg.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{45} (-4 z^6 - 76 z^5 - 393 z^4 - 480 z^3 + 120 z^2 - 72 z + 45) + \frac{1}{90} e^z \sqrt{\pi} (-8 z^{13/2} - 156 z^{11/2} - 858 z^{9/2} - 1287 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abvh.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{45} (-4 z^6 + 76 z^5 - 393 z^4 + 480 z^3 + 120 z^2 + 72 z + 45) + \frac{1}{90} e^{-z} \sqrt{\pi} (8 z^{13/2} - 156 z^{11/2} + 858 z^{9/2} - 1287 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abvi.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{90} (4 z^5 + 56 z^4 + 171 z^3 - 10 z^2 - 66 z + 90) + \frac{1}{180} e^z \sqrt{\pi} (8 z^{11/2} + 116 z^{9/2} + 394 z^{7/2} + 105 z^{5/2} - 210 z^{3/2} + 210 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abvj.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{90} (-4 z^5 + 56 z^4 - 171 z^3 - 10 z^2 + 66 z + 90) + \frac{1}{180} e^{-z} \sqrt{\pi} (8 z^{11/2} - 116 z^{9/2} + 394 z^{7/2} - 105 z^{5/2} - 210 z^{3/2} - 210 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abvk.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, 1; z\right) = \frac{1}{90} e^z (4z^5 + 48z^4 + 111z^3 - 57z^2 - 18z + 90)$$

07.25.03.abvl.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{180} (4z^4 + 36z^3 + 29z^2 - 84z + 90) + \frac{e^z \sqrt{\pi} (8z^5 + 76z^4 + 90z^3 - 165z^2 + 120z + 90) \operatorname{erf}(\sqrt{z})}{360 \sqrt{z}}$$

07.25.03.abvm.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{180} (4z^4 - 36z^3 + 29z^2 + 84z + 90) + \frac{e^{-z} \sqrt{\pi} (-8z^5 + 76z^4 - 90z^3 - 165z^2 - 120z + 90) \operatorname{erfi}(\sqrt{z})}{360 \sqrt{z}}$$

07.25.03.abvn.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, 2; z\right) = \frac{1}{90} e^z (4z^4 + 28z^3 - z^2 - 54z + 90)$$

07.25.03.abvo.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{4z^4 + 16z^3 - 33z^2 + 18z + 36}{120z} + \frac{e^z \sqrt{\pi} (8z^5 + 36z^4 - 54z^3 - 3z^2 + 126z - 36) \operatorname{erf}(\sqrt{z})}{240 z^{3/2}}$$

07.25.03.abvp.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-4z^4 + 16z^3 + 33z^2 + 18z - 36}{120z} + \frac{e^{-z} \sqrt{\pi} (8z^5 - 36z^4 - 54z^3 + 3z^2 + 126z + 36) \operatorname{erfi}(\sqrt{z})}{240 z^{3/2}}$$

07.25.03.abvq.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, 3; z\right) = \frac{1}{45} e^z (4z^3 + 8z^2 - 33z + 45)$$

07.25.03.abvr.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{4z^4 - 4z^3 - 15z^2 + 56z - 60}{48z^2} + \frac{e^z \sqrt{\pi} (8z^5 - 4z^4 - 38z^3 + 111z^2 - 96z + 60) \operatorname{erf}(\sqrt{z})}{96 z^{5/2}}$$

07.25.03.abvs.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{4z^4 + 4z^3 - 15z^2 - 56z - 60}{48z^2} + \frac{e^{-z} \sqrt{\pi} (-8z^5 - 4z^4 + 38z^3 + 111z^2 + 96z + 60) \operatorname{erfi}(\sqrt{z})}{96 z^{5/2}}$$

07.25.03.abvt.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, 4; z\right) = \frac{1}{15} e^z (4z^2 - 12z + 15)$$

07.25.03.abvu.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7(4z^4 - 24z^3 + 83z^2 - 210z + 450)}{96z^3} + \frac{7e^z \sqrt{\pi} (8z^5 - 44z^4 + 138z^3 - 303z^2 + 510z - 450) \operatorname{erf}(\sqrt{z})}{192 z^{7/2}}$$

07.25.03.abvv.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} \sqrt{\pi} (8 z^5 + 44 z^4 + 138 z^3 + 303 z^2 + 510 z + 450) \operatorname{erfi}(\sqrt{z})}{192 z^{7/2}} - \frac{7 (4 z^4 + 24 z^3 + 83 z^2 + 210 z + 450)}{96 z^3}$$

07.25.03.abvw.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, 5; z\right) = \frac{4 e^z (4 z^5 - 32 z^4 + 143 z^3 - 429 z^2 + 858 z - 858)}{15 z^4} + \frac{1144}{5 z^4}$$

07.25.03.abvx.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{21 (4 z^4 - 44 z^3 + 261 z^2 - 1020 z + 4410)}{64 z^4} + \frac{21 e^z \sqrt{\pi} (8 z^5 - 84 z^4 + 474 z^3 - 1725 z^2 + 3960 z - 4410) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.abvy.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21 (4 z^4 + 44 z^3 + 261 z^2 + 1020 z + 4410)}{64 z^4} - \frac{21 e^{-z} \sqrt{\pi} (8 z^5 + 84 z^4 + 474 z^3 + 1725 z^2 + 3960 z + 4410) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.abvz.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{5}{2}, 6; z\right) = \frac{104 (11 z + 60)}{z^5} + \frac{4 e^z (4 z^5 - 52 z^4 + 351 z^3 - 1482 z^2 + 3822 z - 4680)}{3 z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = -\frac{3}{2}$

07.25.03.abw0.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{27} (-4 z^6 - 80 z^5 - 457 z^4 - 747 z^3 - 120 z^2 - 24 z + 27) + \frac{1}{54} e^z \sqrt{\pi} (-8 z^{13/2} - 164 z^{11/2} - 990 z^{9/2} - 1881 z^{7/2} - 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abw1.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{27} (-4 z^6 + 80 z^5 - 457 z^4 + 747 z^3 - 120 z^2 + 24 z + 27) + \frac{1}{54} e^{-z} \sqrt{\pi} (8 z^{13/2} - 164 z^{11/2} + 990 z^{9/2} - 1881 z^{7/2} + 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.abw2.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{18} (4 z^5 + 64 z^4 + 267 z^3 + 240 z^2 - 48 z + 18) + \frac{1}{36} e^z \sqrt{\pi} (8 z^{11/2} + 132 z^{9/2} + 594 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.abw3.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{18}(-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36}e^{-z}\sqrt{\pi}(8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.abw4.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{36}(-4z^4 - 48z^3 - 125z^2 - 9z + 36) + \frac{1}{72}e^z\sqrt{\pi}(-8z^{9/2} - 100z^{7/2} - 294z^{5/2} - 105z^{3/2} + 105\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.abw5.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{36}(-4z^4 + 48z^3 - 125z^2 + 9z + 36) + \frac{1}{72}e^{-z}\sqrt{\pi}(8z^{9/2} - 100z^{7/2} + 294z^{5/2} - 105z^{3/2} - 105\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.abw6.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, 1; z\right) = -\frac{1}{18}e^z(2z^4 + 21z^3 + 45z^2 - 6z - 18)$$

07.25.03.abw7.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{72}(-4z^3 - 32z^2 - 31z + 42) + \frac{e^z\sqrt{\pi}(-8z^4 - 68z^3 - 90z^2 + 75z + 30)\operatorname{erf}(\sqrt{z})}{144\sqrt{z}}$$

07.25.03.abw8.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{72}(4z^3 - 32z^2 + 31z + 42) + \frac{e^{-z}\sqrt{\pi}(-8z^4 + 68z^3 - 90z^2 - 75z + 30)\operatorname{erfi}(\sqrt{z})}{144\sqrt{z}}$$

07.25.03.abw9.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, 2; z\right) = -\frac{1}{18}e^z(2z^3 + 13z^2 + 6z - 18)$$

07.25.03.abwa.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{-4z^3 - 16z^2 + 15z + 9}{48z} + \frac{e^z\sqrt{\pi}(-8z^4 - 36z^3 + 18z^2 + 39z - 9)\operatorname{erf}(\sqrt{z})}{96z^{3/2}}$$

07.25.03.abwb.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-4z^3 + 16z^2 + 15z - 9}{48z} + \frac{e^{-z}\sqrt{\pi}(8z^4 - 36z^3 - 18z^2 + 39z + 9)\operatorname{erfi}(\sqrt{z})}{96z^{3/2}}$$

07.25.03.abwc.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, 3; z\right) = -\frac{1}{9}e^z(2z^2 + 5z - 9)$$

07.25.03.abwd.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, \frac{7}{2}; z\right) = -\frac{5(4z^3 - 13z + 12)}{96z^2} - \frac{5e^z\sqrt{\pi}(8z^4 + 4z^3 - 30z^2 + 21z - 12)\operatorname{erf}(\sqrt{z})}{192z^{5/2}}$$

07.25.03.abwe.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^3 - 13z - 12)}{96z^2} - \frac{5e^{-z}\sqrt{\pi}(8z^4 - 4z^3 - 30z^2 - 21z - 12)\operatorname{erfi}(\sqrt{z})}{192z^{5/2}}$$

07.25.03.abwf.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, 4; z\right) = -\frac{1}{3}e^z(2z - 3)$$

07.25.03.abwg.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, \frac{9}{2}; z\right) = -\frac{35(4z^3 - 16z^2 + 37z - 75)}{192z^3} - \frac{35e^z\sqrt{\pi}(8z^4 - 28z^3 + 54z^2 - 87z + 75)\operatorname{erf}(\sqrt{z})}{384z^{7/2}}$$

07.25.03.abwh.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(8z^4 + 28z^3 + 54z^2 + 87z + 75)\operatorname{erfi}(\sqrt{z})}{384z^{7/2}} - \frac{35(4z^3 + 16z^2 + 37z + 75)}{192z^3}$$

07.25.03.abwi.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, 5; z\right) = \frac{88}{z^4} - \frac{4e^z(2z^4 - 11z^3 + 33z^2 - 66z + 66)}{3z^4}$$

07.25.03.abwj.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, \frac{11}{2}; z\right) = -\frac{105(4z^3 - 32z^2 + 135z - 630)}{128z^4} - \frac{105e^z\sqrt{\pi}(8z^4 - 60z^3 + 234z^2 - 555z + 630)\operatorname{erf}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.abwk.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{105(4z^3 + 32z^2 + 135z + 630)}{128z^4} - \frac{105e^{-z}\sqrt{\pi}(8z^4 + 60z^3 + 234z^2 + 555z + 630)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.abwl.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{3}{2}, 6; z\right) = \frac{40(11z + 52)}{z^5} - \frac{20e^z(2z^4 - 19z^3 + 90z^2 - 246z + 312)}{3z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = -\frac{1}{2}$

07.25.03.abwm.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{12}(-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24}e^z\sqrt{\pi}(-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.abwn.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{12}(-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24}e^{-z}\sqrt{\pi}(8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.abwo.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{24}(4z^3 + 40z^2 + 87z + 24) + \frac{1}{48}e^z\sqrt{\pi}(8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.abwp.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{24}(-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48}e^{-z}\sqrt{\pi}(8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.abwq.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, 1; z\right) = \frac{1}{6} e^z (z^3 + 9z^2 + 18z + 6)$$

07.25.03.abwr.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{48} (4z^2 + 28z + 33) + \frac{e^z \sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.abws.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{48} (4z^2 - 28z + 33) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.abwt.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, 2; z\right) = \frac{1}{6} e^z (z^2 + 6z + 6)$$

07.25.03.abwu.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{4z^2 + 16z + 3}{32z} + \frac{e^z \sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.abwv.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{-4z^2 + 16z - 3}{32z} + \frac{e^{-z} \sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.abww.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, 3; z\right) = \frac{1}{3} e^z (z + 3)$$

07.25.03.abwx.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{5(4z^2 + 4z - 3)}{64z^2} + \frac{5e^z \sqrt{\pi} (8z^3 + 12z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.abwy.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^2 - 4z - 3)}{64z^2} - \frac{5e^{-z} \sqrt{\pi} (8z^3 - 12z^2 - 6z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.abwz.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, 4; z\right) = e^z$$

07.25.03.abx0.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(4z^2 - 8z + 15)}{128z^3} + \frac{35e^z \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.abx1.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (8z^3 + 12z^2 + 18z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{35(4z^2 + 8z + 15)}{128 z^3}$$

07.25.03.abx2.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, 5; z\right) = \frac{4e^z (z^3 - 3z^2 + 6z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.abx3.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{315(4z^2 - 20z + 105)}{256z^4} + \frac{315e^z\sqrt{\pi}(8z^3 - 36z^2 + 90z - 105)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.abx4.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315(4z^2 + 20z + 105)}{256z^4} - \frac{315e^{-z}\sqrt{\pi}(8z^3 + 36z^2 + 90z + 105)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.abx5.01

$${}_2F_2\left(-\frac{1}{2}, 4; -\frac{1}{2}, 6; z\right) = \frac{120(z+4)}{z^5} + \frac{20e^z(z^3 - 6z^2 + 18z - 24)}{z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = \frac{1}{2}$

07.25.03.abx6.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{1}{2}, 1; z\right) = \frac{1}{24}e^z(-2z^2 - 15z + 24) - \frac{35}{16}\sqrt{\pi}\sqrt{z}\operatorname{erfi}(\sqrt{z})$$

07.25.03.abx7.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{1}{2}, 1; -z\right) = \frac{1}{24}e^{-z}(-2z^2 + 15z + 24) + \frac{35}{16}\sqrt{\pi}\sqrt{z}\operatorname{erf}(\sqrt{z})$$

07.25.03.abx8.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{1}{2}, 2; z\right) = \frac{1}{12}e^z(12 - z) - \frac{35}{24}\sqrt{\pi}\sqrt{z}\operatorname{erfi}(\sqrt{z})$$

07.25.03.abx9.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{1}{2}, 2; -z\right) = \frac{1}{12}e^{-z}(z + 12) + \frac{35}{24}\sqrt{\pi}\sqrt{z}\operatorname{erf}(\sqrt{z})$$

07.25.03.abxa.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{1}{2}, 3; z\right) = e^z - \frac{7}{6}\sqrt{\pi}\sqrt{z}\operatorname{erfi}(\sqrt{z})$$

07.25.03.abxb.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{1}{2}, 3; -z\right) = \frac{7}{6}\sqrt{\pi}\sqrt{z}\operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.abxc.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{1}{2}, 4; z\right) = e^z - \sqrt{\pi}\sqrt{z}\operatorname{erfi}(\sqrt{z})$$

07.25.03.abxd.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{1}{2}, 4; -z\right) = \sqrt{\pi}\sqrt{z}\operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.abxe.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{1}{2}, 5; z\right) = \frac{4e^z(2z^4 + z^3 - 3z^2 + 6z - 6)}{9z^4} - \frac{8}{9}\sqrt{\pi}\sqrt{z}\operatorname{erfi}(\sqrt{z}) + \frac{8}{3z^4}$$

07.25.03.abxf.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{1}{2}, 5; -z\right) = \frac{4e^{-z}(2z^4 - z^3 - 3z^2 - 6z - 6)}{9z^4} + \frac{8}{9}\sqrt{\pi}\sqrt{z}\operatorname{erf}(\sqrt{z}) + \frac{8}{3z^4}$$

07.25.03.abxg.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{1}{2}, 6; z\right) = \frac{40(11z+36)}{33z^5} + \frac{20e^z(4z^5+2z^4+3z^3-42z^2+150z-216)}{99z^5} - \frac{80}{99}\sqrt{\pi}\sqrt{z}\operatorname{erfi}(\sqrt{z})$$

07.25.03.abxh.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{1}{2}, 6; -z\right) = \frac{40(11z-36)}{33z^5} + \frac{20e^{-z}(4z^5-2z^4+3z^3+42z^2+150z+216)}{99z^5} + \frac{80}{99}\sqrt{\pi}\sqrt{z}\operatorname{erf}(\sqrt{z})$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = 1$

07.25.03.abxi.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, 1; z\right) = \frac{1}{24}e^{z/2}(-z^2-60z+24)I_0\left(\frac{z}{2}\right) + \frac{1}{24}e^{z/2}(46z-z^2)I_1\left(\frac{z}{2}\right)$$

07.25.03.abxj.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, \frac{3}{2}; z\right) = \frac{1}{96}e^z(81-4z) - \frac{5\sqrt{\pi}(14z-1)\operatorname{erfi}(\sqrt{z})}{64\sqrt{z}}$$

07.25.03.abxk.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, \frac{3}{2}; -z\right) = \frac{1}{96}e^{-z}(4z+81) + \frac{5\sqrt{\pi}(14z+1)\operatorname{erf}(\sqrt{z})}{64\sqrt{z}}$$

07.25.03.abxl.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, 2; z\right) = \frac{1}{2}e^{z/2}(2-3z)I_0\left(\frac{z}{2}\right) + \frac{17}{12}e^{z/2}zI_1\left(\frac{z}{2}\right)$$

07.25.03.abxm.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, \frac{5}{2}; z\right) = \frac{e^z(194z+3)}{256z} - \frac{3\sqrt{\pi}(140z^2-20z+1)\operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.abxn.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, \frac{5}{2}; -z\right) = \frac{e^{-z}(194z-3)}{256z} + \frac{3\sqrt{\pi}(140z^2+20z+1)\operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.abxo.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, 3; z\right) = \frac{1}{6}e^{z/2}(6-7z)I_0\left(\frac{z}{2}\right) + \frac{7}{6}e^{z/2}zI_1\left(\frac{z}{2}\right)$$

07.25.03.abxp.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, \frac{7}{2}; z\right) = \frac{5e^z(140z^2+8z-3)}{1024z^2} - \frac{5\sqrt{\pi}(280z^3-60z^2+6z-3)\operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.abxq.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, \frac{7}{2}; -z\right) = \frac{5e^{-z}(140z^2-8z-3)}{1024z^2} + \frac{5\sqrt{\pi}(280z^3+60z^2+6z+3)\operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.abxr.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, 4; z\right) = e^{z/2}(1-z)I_0\left(\frac{z}{2}\right) + e^{z/2}zI_1\left(\frac{z}{2}\right)$$

07.25.03.abxs.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, \frac{9}{2}; z\right) = \frac{35 e^{-z} (280 z^3 + 60 z^2 - 74 z + 75)}{16384 z^3} - \frac{35 \sqrt{\pi} (560 z^4 - 160 z^3 + 24 z^2 - 24 z + 75) \operatorname{erfi}(\sqrt{z})}{32768 z^{7/2}}$$

07.25.03.abxt.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (280 z^3 - 60 z^2 - 74 z - 75)}{16384 z^3} + \frac{35 \sqrt{\pi} (560 z^4 + 160 z^3 + 24 z^2 + 24 z + 75) \operatorname{erf}(\sqrt{z})}{32768 z^{7/2}}$$

07.25.03.abxu.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, 5; z\right) = \frac{4 e^{z/2} (70 z^4 - 5 z^3 + 18 z^2 - 48 z + 96) I_1\left(\frac{z}{2}\right)}{315 z^3} - \frac{4 e^{z/2} (70 z^3 - 75 z^2 - 12 z + 24) I_0\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.abxv.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, \frac{11}{2}; z\right) = \frac{315 e^{-z} (112 z^4 + 16 z^3 + 72 z^2 - 340 z + 735)}{65536 z^4} - \frac{315 \sqrt{\pi} (224 z^5 - 80 z^4 + 16 z^3 - 24 z^2 + 150 z + 735) \operatorname{erfi}(\sqrt{z})}{131072 z^{9/2}}$$

07.25.03.abxw.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (112 z^4 - 16 z^3 + 72 z^2 + 340 z + 735)}{65536 z^4} + \frac{315 \sqrt{\pi} (224 z^5 + 80 z^4 + 16 z^3 + 24 z^2 + 150 z - 735) \operatorname{erf}(\sqrt{z})}{131072 z^{9/2}}$$

07.25.03.abxx.01

$${}_2F_2\left(-\frac{1}{2}, 4; 1, 6; z\right) = \frac{8 e^{z/2} (70 z^5 - 10 z^4 + 19 z^3 + 24 z^2 - 240 z + 1536) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{16 e^{z/2} (35 z^4 - 40 z^3 - 3 z^2 - 30 z + 192) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = \frac{3}{2}$

07.25.03.abxy.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{3}{2}, 2; z\right) = \frac{11 e^z}{16} - \frac{5 \sqrt{\pi} (14 z - 3) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.abxz.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{3}{2}, 2; -z\right) = \frac{5 \sqrt{\pi} (14 z + 3) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}} + \frac{11 e^{-z}}{16}$$

07.25.03.abz0.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{3}{2}, 3; z\right) = \frac{\sqrt{\pi} (5 - 14 z) \operatorname{erfi}(\sqrt{z})}{24 \sqrt{z}} + \frac{7 e^z}{12}$$

07.25.03.abz1.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{3}{2}, 3; -z\right) = \frac{\sqrt{\pi} (14 z + 5) \operatorname{erf}(\sqrt{z})}{24 \sqrt{z}} + \frac{7 e^{-z}}{12}$$

07.25.03.ab2.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{3}{2}, 4; z\right) = \frac{\sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{e^z}{2}$$

07.25.03.ab3.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{3}{2}, 4; -z\right) = \frac{\sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.ab4.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{3}{2}, 5; z\right) = \frac{4e^z(7z^4 - z^3 + 3z^2 - 6z + 6)}{63z^4} - \frac{2\sqrt{\pi}(14z - 9)\operatorname{erfi}(\sqrt{z})}{63\sqrt{z}} - \frac{8}{21z^4}$$

07.25.03.ab5.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{3}{2}, 5; -z\right) = \frac{4e^{-z}(7z^4 + z^3 + 3z^2 + 6z + 6)}{63z^4} + \frac{2\sqrt{\pi}(14z + 9)\operatorname{erf}(\sqrt{z})}{63\sqrt{z}} - \frac{8}{21z^4}$$

07.25.03.ab6.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{3}{2}, 6; z\right) = -\frac{40(11z + 28)}{231z^5} + \frac{20e^z(14z^5 - 4z^4 + 5z^3 + 18z^2 - 102z + 168)}{693z^5} - \frac{20\sqrt{\pi}(14z - 11)\operatorname{erfi}(\sqrt{z})}{693\sqrt{z}}$$

07.25.03.ab7.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{3}{2}, 6; -z\right) = -\frac{40(11z - 28)}{231z^5} + \frac{20e^{-z}(14z^5 + 4z^4 + 5z^3 - 18z^2 - 102z - 168)}{693z^5} + \frac{20\sqrt{\pi}(14z + 11)\operatorname{erf}(\sqrt{z})}{693\sqrt{z}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = 2$

07.25.03.ab8.01

$${}_2F_2\left(-\frac{1}{2}, 4; 2, 2; z\right) = \frac{1}{36} e^{z/2} (36 - 35z) I_0\left(\frac{z}{2}\right) + \frac{1}{36} e^{z/2} (35z - 4) I_1\left(\frac{z}{2}\right)$$

07.25.03.ab9.01

$${}_2F_2\left(-\frac{1}{2}, 4; 2, \frac{5}{2}; z\right) = \frac{e^z(70z - 3)}{128z} + \frac{\sqrt{\pi}(-140z^2 + 60z + 3)\operatorname{erfi}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.ab9a.01

$${}_2F_2\left(-\frac{1}{2}, 4; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(70z + 3)}{128z} + \frac{\sqrt{\pi}(140z^2 + 60z - 3)\operatorname{erf}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.ab9b.01

$${}_2F_2\left(-\frac{1}{2}, 4; 2, 3; z\right) = \frac{1}{9} e^{z/2} (9 - 7z) I_0\left(\frac{z}{2}\right) + \frac{1}{9} e^{z/2} (7z - 2) I_1\left(\frac{z}{2}\right)$$

07.25.03.ab9c.01

$${}_2F_2\left(-\frac{1}{2}, 4; 2, \frac{7}{2}; z\right) = \frac{5e^z(140z^2 - 20z + 3)}{1536z^2} - \frac{5\sqrt{\pi}(280z^3 - 180z^2 - 18z + 3)\operatorname{erfi}(\sqrt{z})}{3072z^{5/2}}$$

07.25.03.abyd.01

$${}_2F_2\left(-\frac{1}{2}, 4; 2, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (140 z^2 + 20 z + 3)}{1536 z^2} + \frac{5 \sqrt{\pi} (280 z^3 + 180 z^2 - 18 z - 3) \operatorname{erf}(\sqrt{z})}{3072 z^{5/2}}$$

07.25.03.abye.01

$${}_2F_2\left(-\frac{1}{2}, 4; 2, 4; z\right) = \frac{1}{3} e^{z/2} (3 - 2z) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z - 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.abyf.01

$${}_2F_2\left(-\frac{1}{2}, 4; 2, \frac{9}{2}; z\right) = \frac{35 e^z (280 z^3 - 100 z^2 + 54 z - 45)}{24576 z^3} - \frac{35 \sqrt{\pi} (560 z^4 - 480 z^3 - 72 z^2 + 24 z - 45) \operatorname{erfi}(\sqrt{z})}{49152 z^{7/2}}$$

07.25.03.abyg.01

$${}_2F_2\left(-\frac{1}{2}, 4; 2, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (280 z^3 + 100 z^2 + 54 z + 45)}{24576 z^3} + \frac{35 \sqrt{\pi} (560 z^4 + 480 z^3 - 72 z^2 - 24 z - 45) \operatorname{erf}(\sqrt{z})}{49152 z^{7/2}}$$

07.25.03.abyh.01

$${}_2F_2\left(-\frac{1}{2}, 4; 2, 5; z\right) = \frac{8 e^{z/2} (70 z^4 - 50 z^3 - 9 z^2 + 24 z - 48) I_1\left(\frac{z}{2}\right)}{945 z^3} - \frac{16 e^{z/2} (35 z^3 - 60 z^2 + 3 z - 6) I_0\left(\frac{z}{2}\right)}{945 z^2}$$

07.25.03.abyi.01

$${}_2F_2\left(-\frac{1}{2}, 4; 2, \frac{11}{2}; z\right) = \frac{105 e^z (112 z^4 - 64 z^3 + 120 z - 315)}{32768 z^4} - \frac{105 \sqrt{\pi} (224 z^5 - 240 z^4 - 48 z^3 + 24 z^2 - 90 z - 315) \operatorname{erfi}(\sqrt{z})}{65536 z^{9/2}}$$

07.25.03.abyj.01

$${}_2F_2\left(-\frac{1}{2}, 4; 2, \frac{11}{2}; -z\right) = \frac{105 e^{-z} (112 z^4 + 64 z^3 - 120 z - 315)}{32768 z^4} + \frac{105 \sqrt{\pi} (224 z^5 + 240 z^4 - 48 z^3 - 24 z^2 - 90 z + 315) \operatorname{erf}(\sqrt{z})}{65536 z^{9/2}}$$

07.25.03.abyk.01

$${}_2F_2\left(-\frac{1}{2}, 4; 2, 6; z\right) = \frac{8 e^{z/2} (140 z^5 - 130 z^4 - 39 z^3 + 48 z^2 + 48 z - 1152) I_1\left(\frac{z}{2}\right)}{2079 z^4} - \frac{8 e^{z/2} (140 z^4 - 270 z^3 + 21 z^2 + 12 z - 288) I_0\left(\frac{z}{2}\right)}{2079 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = \frac{5}{2}$

07.25.03.abyl.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{5}{2}, 3; z\right) = \frac{e^z (14 z - 3)}{32 z} + \frac{\sqrt{\pi} (-28 z^2 + 20 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.abym.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (14 z + 3)}{32 z} + \frac{\sqrt{\pi} (28 z^2 + 20 z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.abyn.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{5}{2}, 4; z\right) = \frac{3 e^z (2z-1)}{16z} - \frac{3\sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.abyo.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{5}{2}, 4; -z\right) = \frac{3 e^{-z} (2z+1)}{16z} + \frac{3\sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.abyp.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{5}{2}, 5; z\right) = \frac{e^z (70z^4 - 55z^3 - 24z^2 + 48z - 48)}{210z^4} + \frac{\sqrt{\pi} (-140z^2 + 180z + 63) \operatorname{erfi}(\sqrt{z})}{420 z^{3/2}} + \frac{8}{35z^4}$$

07.25.03.abyq.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{5}{2}, 5; -z\right) = \frac{e^{-z} (70z^4 + 55z^3 - 24z^2 - 48z - 48)}{210z^4} + \frac{\sqrt{\pi} (140z^2 + 180z - 63) \operatorname{erf}(\sqrt{z})}{420 z^{3/2}} + \frac{8}{35z^4}$$

07.25.03.abyr.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{5}{2}, 6; z\right) = \frac{8(11z+20)}{77z^5} + \frac{e^z (70z^5 - 75z^4 - 52z^3 + 24z^2 + 216z - 480)}{231z^5} + \frac{\sqrt{\pi} (-140z^2 + 220z + 99) \operatorname{erfi}(\sqrt{z})}{462 z^{3/2}}$$

07.25.03.abys.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{5}{2}, 6; -z\right) = \frac{8(11z-20)}{77z^5} + \frac{e^{-z} (70z^5 + 75z^4 - 52z^3 - 24z^2 + 216z + 480)}{231z^5} + \frac{\sqrt{\pi} (140z^2 + 220z - 99) \operatorname{erf}(\sqrt{z})}{462 z^{3/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = 3$

07.25.03.abyt.01

$${}_2F_2\left(-\frac{1}{2}, 4; 3, 3; z\right) = \frac{2 e^{z/2} (14z^2 - 9z - 2) I_1\left(\frac{z}{2}\right)}{45z} - \frac{2}{45} e^{z/2} (14z - 23) I_0\left(\frac{z}{2}\right)$$

07.25.03.abyu.01

$${}_2F_2\left(-\frac{1}{2}, 4; 3, \frac{7}{2}; z\right) = \frac{5 e^z (28z^2 - 16z - 3)}{384z^2} - \frac{5\sqrt{\pi} (56z^3 - 60z^2 - 18z - 3) \operatorname{erfi}(\sqrt{z})}{768 z^{5/2}}$$

07.25.03.abyv.01

$${}_2F_2\left(-\frac{1}{2}, 4; 3, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (28z^2 + 16z - 3)}{384z^2} + \frac{5\sqrt{\pi} (56z^3 + 60z^2 - 18z + 3) \operatorname{erf}(\sqrt{z})}{768 z^{5/2}}$$

07.25.03.abyw.01

$${}_2F_2\left(-\frac{1}{2}, 4; 3, 4; z\right) = \frac{4 e^{z/2} (2z^2 - 2z - 1) I_1\left(\frac{z}{2}\right)}{15z} - \frac{8}{15} e^{z/2} (z - 2) I_0\left(\frac{z}{2}\right)$$

07.25.03.abyx.01

$${}_2F_2\left(-\frac{1}{2}, 4; 3, \frac{9}{2}; z\right) = \frac{35 e^z (56z^3 - 52z^2 - 34z + 15)}{6144z^3} - \frac{35\sqrt{\pi} (112z^4 - 160z^3 - 72z^2 - 24z + 15) \operatorname{erfi}(\sqrt{z})}{12288 z^{7/2}}$$

07.25.03.abyy.01

$${}_2F_2\left(-\frac{1}{2}, 4; 3, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (56 z^3 + 52 z^2 - 34 z - 15)}{6144 z^3} + \frac{35 \sqrt{\pi} (112 z^4 + 160 z^3 - 72 z^2 + 24 z + 15) \operatorname{erf}(\sqrt{z})}{12288 z^{7/2}}$$

07.25.03.abyz.01

$${}_2F_2\left(-\frac{1}{2}, 4; 3, 5; z\right) = \frac{16 e^{z/2} (28 z^4 - 38 z^3 - 27 z^2 - 12 z + 24) I_1\left(\frac{z}{2}\right)}{945 z^3} - \frac{16 e^{z/2} (28 z^3 - 66 z^2 - 3 z + 6) I_0\left(\frac{z}{2}\right)}{945 z^2}$$

07.25.03.abz0.01

$${}_2F_2\left(-\frac{1}{2}, 4; 3, \frac{11}{2}; z\right) = \frac{21 e^z (112 z^4 - 144 z^3 - 136 z^2 - 60 z + 315)}{8192 z^4} - \frac{21 \sqrt{\pi} (224 z^5 - 400 z^4 - 240 z^3 - 120 z^2 + 150 z + 315) \operatorname{erfi}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.abz1.01

$${}_2F_2\left(-\frac{1}{2}, 4; 3, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (112 z^4 + 144 z^3 - 136 z^2 + 60 z + 315)}{8192 z^4} + \frac{21 \sqrt{\pi} (224 z^5 + 400 z^4 - 240 z^3 + 120 z^2 + 150 z - 315) \operatorname{erf}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.abz2.01

$${}_2F_2\left(-\frac{1}{2}, 4; 3, 6; z\right) = \frac{32 e^{z/2} (28 z^5 - 48 z^4 - 43 z^3 - 30 z^2 + 36 z + 192) I_1\left(\frac{z}{2}\right)}{2079 z^4} - \frac{32 e^{z/2} (28 z^4 - 76 z^3 - 9 z^2 + 9 z + 48) I_0\left(\frac{z}{2}\right)}{2079 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = \frac{7}{2}$

07.25.03.abz3.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{7}{2}, 4; z\right) = \frac{5 e^z (4 z^2 - 4 z - 3)}{64 z^2} - \frac{5 \sqrt{\pi} (8 z^3 - 12 z^2 - 6 z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.abz4.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{7}{2}, 4; -z\right) = \frac{5 e^{-z} (4 z^2 + 4 z - 3)}{64 z^2} + \frac{5 \sqrt{\pi} (8 z^3 + 12 z^2 - 6 z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.abz5.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{7}{2}, 5; z\right) = \frac{e^z (140 z^4 - 200 z^3 - 219 z^2 - 192 z + 192)}{504 z^4} + \frac{\sqrt{\pi} (-280 z^3 + 540 z^2 + 378 z + 315) \operatorname{erfi}(\sqrt{z})}{1008 z^{5/2}} - \frac{8}{21 z^4}$$

07.25.03.abz6.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{7}{2}, 5; -z\right) = \frac{e^{-z} (140 z^4 + 200 z^3 - 219 z^2 + 192 z + 192)}{504 z^4} + \frac{\sqrt{\pi} (280 z^3 + 540 z^2 - 378 z + 315) \operatorname{erf}(\sqrt{z})}{1008 z^{5/2}} - \frac{8}{21 z^4}$$

07.25.03.abz7.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{7}{2}, 6; z\right) = \frac{40(11z+12)}{231 z^5} + \frac{5 e^z (140 z^5 - 260 z^4 - 357 z^3 - 480 z^2 - 96 z + 1152)}{2772 z^5} - \frac{5 \sqrt{\pi} (280 z^3 - 660 z^2 - 594 z - 693) \operatorname{erfi}(\sqrt{z})}{5544 z^{5/2}}$$

07.25.03.abz8.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{7}{2}, 6; -z\right) = -\frac{40(11z-12)}{231z^5} + \frac{5e^{-z}(140z^5+260z^4-357z^3+480z^2-96z-1152)}{2772z^5} + \frac{5\sqrt{\pi}(280z^3+660z^2-594z+693)\operatorname{erf}(\sqrt{z})}{5544z^{5/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = 4$

07.25.03.abz9.01

$${}_2F_2\left(-\frac{1}{2}, 4; 4, 4; z\right) = \frac{4e^{z/2}(4z^3-6z^2-5z-4)I_1\left(\frac{z}{2}\right)}{35z^2} - \frac{4e^{z/2}(4z^2-10z-1)I_0\left(\frac{z}{2}\right)}{35z}$$

07.25.03.abza.01

$${}_2F_2\left(-\frac{1}{2}, 4; 4, \frac{9}{2}; z\right) = \frac{35e^z(8z^3-12z^2-14z-15)}{1024z^3} - \frac{35\sqrt{\pi}(16z^4-32z^3-24z^2-24z-15)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.abzb.01

$${}_2F_2\left(-\frac{1}{2}, 4; 4, \frac{9}{2}; -z\right) = \frac{35e^{-z}(8z^3+12z^2-14z+15)}{1024z^3} + \frac{35\sqrt{\pi}(16z^4+32z^3-24z^2+24z-15)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.abzc.01

$${}_2F_2\left(-\frac{1}{2}, 4; 4, 5; z\right) = \frac{32e^{z/2}(4z^4-8z^3-9z^2-12z-12)I_1\left(\frac{z}{2}\right)}{315z^3} - \frac{32e^{z/2}(4z^3-12z^2-3z-3)I_0\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.abzd.01

$${}_2F_2\left(-\frac{1}{2}, 4; 4, \frac{11}{2}; z\right) = \frac{63e^z(16z^4-32z^3-48z^2-80z-105)}{4096z^4} - \frac{63\sqrt{\pi}(32z^5-80z^4-80z^3-120z^2-150z-105)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.abze.01

$${}_2F_2\left(-\frac{1}{2}, 4; 4, \frac{11}{2}; -z\right) = \frac{63e^{-z}(16z^4+32z^3-48z^2+80z-105)}{4096z^4} + \frac{63\sqrt{\pi}(32z^5+80z^4-80z^3+120z^2-150z+105)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.abzf.01

$${}_2F_2\left(-\frac{1}{2}, 4; 4, 6; z\right) = \frac{32e^{z/2}(8z^5-20z^4-28z^3-51z^2-84z-96)I_1\left(\frac{z}{2}\right)}{693z^4} - \frac{32e^{z/2}(8z^4-28z^3-12z^2-21z-24)I_0\left(\frac{z}{2}\right)}{693z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = \frac{9}{2}$

07.25.03.abzg.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{9}{2}, 5; z\right) = \frac{e^z (280 z^4 - 580 z^3 - 906 z^2 - 1653 z - 3072)}{1152 z^4} + \frac{\sqrt{\pi} (-560 z^4 + 1440 z^3 + 1512 z^2 + 2520 z + 4725) \operatorname{erfi}(\sqrt{z})}{2304 z^{7/2}} + \frac{8}{3 z^4}$$

07.25.03.abzh.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{9}{2}, 5; -z\right) = \frac{e^{-z} (280 z^4 + 580 z^3 - 906 z^2 + 1653 z - 3072)}{1152 z^4} + \frac{\sqrt{\pi} (560 z^4 + 1440 z^3 - 1512 z^2 + 2520 z - 4725) \operatorname{erf}(\sqrt{z})}{2304 z^{7/2}} + \frac{8}{3 z^4}$$

07.25.03.abzi.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{9}{2}, 6; z\right) = \frac{40(11z+4)}{33z^5} + \frac{5e^z(280z^5 - 740z^4 - 1418z^3 - 3501z^2 - 10752z - 6144)}{6336z^5} - \frac{5\sqrt{\pi}(560z^4 - 1760z^3 - 2376z^2 - 5544z - 17325)\operatorname{erfi}(\sqrt{z})}{12672z^{7/2}}$$

07.25.03.abzj.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{9}{2}, 6; -z\right) = \frac{40(11z-4)}{33z^5} + \frac{5e^{-z}(280z^5 + 740z^4 - 1418z^3 + 3501z^2 - 10752z + 6144)}{6336z^5} + \frac{5\sqrt{\pi}(560z^4 + 1760z^3 - 2376z^2 + 5544z - 17325)\operatorname{erf}(\sqrt{z})}{12672z^{7/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = 5$

07.25.03.abzk.01

$${}_2F_2\left(-\frac{1}{2}, 4; 5, 5; z\right) = -\frac{128 e^{z/2} (280 z^5 - 1020 z^4 - 516 z^3 - 1173 z^2 - 3780 z + 7560) I_0\left(\frac{z}{2}\right)}{99225 z^4} + \frac{128 e^{z/2} (280 z^4 - 740 z^3 - 1116 z^2 - 2379 z - 6582) I_1\left(\frac{z}{2}\right)}{99225 z^3} + \frac{1024}{105 z^4}$$

07.25.03.abzl.01

$${}_2F_2\left(-\frac{1}{2}, 4; 5, \frac{11}{2}; z\right) = \frac{e^z (112 z^4 - 304 z^3 - 600 z^2 - 1572 z - 5673)}{512 z^4} + \frac{\sqrt{\pi} (-224 z^5 + 720 z^4 + 1008 z^3 + 2520 z^2 + 9450 z - 6615) \operatorname{erfi}(\sqrt{z})}{1024 z^{9/2}} + \frac{24}{z^4}$$

07.25.03.abzm.01

$${}_2F_2\left(-\frac{1}{2}, 4; 5, \frac{11}{2}; -z\right) = \frac{e^{-z} (112 z^4 + 304 z^3 - 600 z^2 + 1572 z - 5673)}{512 z^4} + \frac{\sqrt{\pi} (224 z^5 + 720 z^4 - 1008 z^3 + 2520 z^2 - 9450 z - 6615) \operatorname{erf}(\sqrt{z})}{1024 z^{9/2}} + \frac{24}{z^4}$$

07.25.03.abzn.01

$${}_2F_2\left(-\frac{1}{2}, 4; 5, 6; z\right) = -\frac{512 e^{z/2} (140 z^5 - 600 z^4 - 474 z^3 - 1572 z^2 - 8505 z + 20790) I_0\left(\frac{z}{2}\right)}{218295 z^4} + \frac{256 e^{z/2} (280 z^5 - 920 z^4 - 1728 z^3 - 5052 z^2 - 22971 z + 15120) I_1\left(\frac{z}{2}\right)}{218295 z^4} + \frac{1024}{21 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = \frac{11}{2}$

07.25.03.abzo.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{11}{2}, 6; z\right) = \frac{120(11z-4)}{11z^5} + \frac{5e^z(112z^5 - 384z^4 - 928z^3 - 3288z^2 - 19395z + 24576)}{2816z^5} - \frac{5\sqrt{\pi}(224z^5 - 880z^4 - 1584z^3 - 5544z^2 - 34650z + 72765)\operatorname{erfi}(\sqrt{z})}{5632z^{9/2}}$$

07.25.03.abzp.01

$${}_2F_2\left(-\frac{1}{2}, 4; \frac{11}{2}, 6; -z\right) = \frac{120(11z+4)}{11z^5} + \frac{5e^{-z}(112z^5 + 384z^4 - 928z^3 + 3288z^2 - 19395z - 24576)}{2816z^5} + \frac{5\sqrt{\pi}(224z^5 + 880z^4 - 1584z^3 + 5544z^2 - 34650z - 72765)\operatorname{erf}(\sqrt{z})}{5632z^{9/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 4$, $b_1 = 6$

07.25.03.abzq.01

$${}_2F_2\left(-\frac{1}{2}, 4; 6, 6; z\right) = \frac{5120(11z-8)}{231z^5} - \frac{256 e^{z/2} (560 z^6 - 2840 z^5 - 3348 z^4 - 15660 z^3 - 138333 z^2 + 623700 z - 332640) I_0\left(\frac{z}{2}\right)}{480249 z^5} + \frac{256 e^{z/2} (560 z^5 - 2280 z^4 - 5348 z^3 - 21588 z^2 - 163125 z + 444588) I_1\left(\frac{z}{2}\right)}{480249 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.abzr.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{11345882625} (e^z (32768 z^{15} + 2539520 z^{14} + 76800000 z^{13} + 1165824000 z^{12} + 9525504000 z^{11} + 41774054400 z^{10} + 92546496000 z^9 + 89830944000 z^8 + 27515376000 z^7 + 811944000 z^6 + 146512800 z^5 - 588546000 z^4 + 2270835000 z^3 - 6459547500 z^2 + 12189791250 z - 11345882625))$$

07.25.03.abzs.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{1031443875} (e^z (16384 z^{14} + 1130496 z^{13} + 29921280 z^{12} + 388423680 z^{11} + 2626421760 z^{10} + 9068129280 z^9 + 14534795520 z^8 + 8578483200 z^7 + 889963200 z^6 - 39009600 z^5 + 53751600 z^4 - 213645600 z^3 + 601303500 z^2 - 1125211500 z + 1031443875))$$

07.25.03.abzt.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{1}{114604875} (e^z (8192 z^{13} + 495616 z^{12} + 11243520 z^{11} + 121128960 z^{10} + 647001600 z^9 + 1622557440 z^8 + 1588446720 z^7 + 318124800 z^6 - 32205600 z^5 - 3402000 z^4 + 25174800 z^3 - 69060600 z^2 + 128000250 z - 114604875))$$

07.25.03.abzu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{16372125} (e^z (4096 z^{12} + 212992 z^{11} + 4024320 z^{10} + 34406400 z^9 + 134265600 z^8 + 207083520 z^7 + 69431040 z^6 - 14515200 z^5 + 5670000 z^4 - 4536000 z^3 + 10319400 z^2 - 19051200 z + 16372125))$$

07.25.03.abzv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{1}{3274425} (e^z (2048 z^{11} + 89088 z^{10} + 1344000 z^9 + 8467200 z^8 + 20563200 z^7 + 11007360 z^6 - 3810240 z^5 + 2268000 z^4 - 567000 z^3 - 1984500 z^2 + 4167450 z - 3274425))$$

07.25.03.abzw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{1091475} (e^z (1024 z^{10} + 35840 z^9 + 403200 z^8 + 1612800 z^7 + 1411200 z^6 - 846720 z^5 + 1058400 z^4 - 1512000 z^3 + 1984500 z^2 - 1984500 z + 1091475))$$

07.25.03.abzx.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = -\frac{1}{1091475} (e^z (512 z^9 + 13568 z^8 + 99840 z^7 + 157440 z^6 - 160320 z^5 + 298080 z^4 - 514080 z^3 + 529200 z^2 + 198450 z - 1091475))$$

07.25.03.abzy.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{1091475} \left(e^{z/2} (-256 z^9 - 5888 z^8 - 34752 z^7 - 27840 z^6 + 41040 z^5 - 126000 z^4 + 315000 z^3 - 441000 z^2 - 99225 z + 1091475) I_0\left(\frac{z}{2}\right) + \frac{1}{1091475} e^{z/2} (-256 z^9 - 5632 z^8 - 29248 z^7 - 1152 z^6 + 32400 z^5 - 144000 z^4 + 441000 z^3 - 882000 z^2 + 870975 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.abzz.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = -\frac{1}{1091475} e^z (256 z^8 + 4608 z^7 + 15360 z^6 - 21120 z^5 + 36000 z^4 - 12960 z^3 - 211680 z^2 + 793800 z - 1091475)$$

07.25.03.ac00.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{1091475} e^{z/2} (-256 z^8 - 3712 z^7 - 6720 z^6 + 18240 z^5 - 58800 z^4 + 126000 z^3 - 63000 z^2 - 491400 z + 1091475) I_0\left(\frac{z}{2}\right) + \frac{1}{1091475} e^{z/2} (-256 z^8 - 3456 z^7 - 3392 z^6 + 20160 z^5 - 78000 z^4 + 210000 z^3 - 315000 z^2 - 12600 z + 675675) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac01.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = -\frac{e^z (128 z^7 + 1216 z^6 - 1440 z^5 - 1200 z^4 + 24600 z^3 - 117180 z^2 + 304290 z - 363825)}{363825}$$

07.25.03.ac02.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, 3; z\right) = -\frac{16 e^{z/2} (32 z^7 + 192 z^6 - 624 z^5 + 1680 z^4 - 1260 z^3 - 12600 z^2 + 58590 z - 93555) I_0\left(\frac{z}{2}\right) - \frac{1}{1091475 z} 4 e^{z/2} (128 z^8 + 640 z^7 - 3072 z^6 + 9984 z^5 - 16800 z^4 - 25200 z^3 + 231840 z^2 - 540540 z + 405405) I_1\left(\frac{z}{2}\right)}{1091475}$$

07.25.03.ac03.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{e^z (64 z^6 + 64 z^5 - 1200 z^4 + 7200 z^3 - 27300 z^2 + 64260 z - 72765)}{72765}$$

07.25.03.ac04.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, 4; z\right) = -\frac{4 e^{z/2} (128 z^7 - 320 z^6 - 192 z^5 + 8400 z^4 - 52080 z^3 + 180360 z^2 - 356400 z + 328185) I_0\left(\frac{z}{2}\right) - \frac{1}{363825 z} 4 e^{z/2} (128 z^8 - 448 z^7 + 320 z^6 + 7728 z^5 - 58800 z^4 + 239640 z^3 - 617760 z^2 + 1061775 z - 1312740) I_1\left(\frac{z}{2}\right)}{363825 z}$$

07.25.03.ac05.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{e^z (32 z^5 - 240 z^4 + 1200 z^3 - 4200 z^2 + 9450 z - 10395)}{10395}$$

07.25.03.ac06.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{363825 z^2} (32 e^{z/2} (64 z^7 - 704 z^6 + 5136 z^5 - 28560 z^4 + 125880 z^3 - 443520 z^2 + 1203345 z - 2078505) I_0\left(\frac{z}{2}\right) - \frac{1}{363825 z^3} 32 e^{z/2} (64 z^8 - 768 z^7 + 5936 z^6 - 34944 z^5 + 164760 z^4 - 634920 z^3 + 1988415 z^2 - 4813380 z + 8314020) I_1\left(\frac{z}{2}\right))$$

07.25.03.ac07.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{1155 z^4} e^z (-16 z^8 + 256 z^7 - 2520 z^6 + 18480 z^5 - 106365 z^4 + 483840 z^3 - 1693440 z^2 + 4233600 z - 6350400) + \frac{30240 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.ac08.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{1155 z^4} e^{-z} (-16 z^8 - 256 z^7 - 2520 z^6 - 18480 z^5 - 106365 z^4 - 483840 z^3 - 1693440 z^2 - 4233600 z - 6350400) + \frac{30240 \sqrt{\pi} \operatorname{erf}(\sqrt{-z})}{11 z^{9/2}}$$

07.25.03.ac09.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{72765 z^3} 32 e^{z/2} (64 z^7 - 1248 z^6 + 14448 z^5 - 121440 z^4 + 780840 z^3 - 3838770 z^2 + 13793715 z - 31744440) I_0\left(\frac{z}{2}\right) - \frac{1}{72765 z^4} (32 e^{z/2} (64 z^8 - 1312 z^7 + 15792 z^6 - 137952 z^5 + 928200 z^4 - 4856670 z^3 + 19323135 z^2 - 55174860 z + 126977760) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.ac0a.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{93767625} (e^z (8192 z^{13} + 503808 z^{12} + 11685888 z^{11} + 129939456 z^{10} + 728483328 z^9 + 1984372992 z^8 + 2306465280 z^7 + 829543680 z^6 + 30209760 z^5 - 4399920 z^4 + 20275920 z^3 - 56133000 z^2 + 104186250 z - 93767625))$$

$$\begin{aligned}
 & \text{07.25.03.ac0b.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{10418625} \left(e^z (4096 z^{12} + 221184 z^{11} + 4405248 z^{10} + 40740864 z^9 + 180907776 z^8 + 359009280 z^7 + \right. \\
 & \left. 255709440 z^6 + 31207680 z^5 - 498960 z^4 - 2449440 z^3 + 6463800 z^2 - 11907000 z + 10418625) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac0c.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \\
 & -\frac{1}{1488375} \left(e^z (2048 z^{11} + 95232 z^{10} + 1583616 z^9 + 11660544 z^8 + 37981440 z^7 + 46569600 z^6 + \right. \\
 & \left. 11430720 z^5 - 1542240 z^4 + 521640 z^3 - 963900 z^2 + 1786050 z - 1488375) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac0d.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{297675} \left(e^z (1024 z^{10} + 39936 z^9 + 532224 z^8 + 2903040 z^7 + 5927040 z^6 + 2540160 z^5 - 635040 z^4 + \right. \\
 & \left. 181440 z^3 + 170100 z^2 - 396900 z + 297675) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac0e.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = -\frac{1}{99225} \\
 & \left(e^z (512 z^9 + 16128 z^8 + 161280 z^7 + 564480 z^6 + 423360 z^5 - 211680 z^4 + 211680 z^3 - 226800 z^2 + 198450 z - 99225) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac0f.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{e^z (256 z^8 + 6144 z^7 + 40704 z^6 + 58368 z^5 - 50976 z^4 + 72576 z^3 - 75600 z^2 + 99225)}{99225}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac0g.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (128 z^8 + 2688 z^7 + 14592 z^6 + 12096 z^5 - 15840 z^4 + 35280 z^3 - 50400 z^2 + 99225) I_0\left(\frac{z}{2}\right) +}{99225} \\
 & \frac{8 e^{z/2} (16 z^8 + 320 z^7 + 1512 z^6 + 144 z^5 - 1638 z^4 + 5400 z^3 - 11025 z^2 + 11025 z) I_1\left(\frac{z}{2}\right)}{99225}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac0h.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 2112 z^6 + 6624 z^5 - 7248 z^4 + 7128 z^3 + 11340 z^2 - 66150 z + 99225)}{99225}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac0i.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (128 z^7 + 1728 z^6 + 3264 z^5 - 6960 z^4 + 15120 z^3 - 12600 z^2 - 37800 z + 99225) I_0\left(\frac{z}{2}\right) +}{99225} \\
 & \frac{e^{z/2} (128 z^7 + 1600 z^6 + 1728 z^5 - 8016 z^4 + 22800 z^3 - 37800 z^2 + 12600 z + 51975) I_1\left(\frac{z}{2}\right)}{99225}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac0j.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (64 z^6 + 576 z^5 - 432 z^4 - 1248 z^3 + 9180 z^2 - 26460 z + 33075)}{33075}
 \end{aligned}$$

07.25.03.ac0k.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 + 384 z^5 - 912 z^4 + 1344 z^3 + 2520 z^2 - 18144 z + 31563) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 + 320 z^6 - 1200 z^5 + 2640 z^4 - 840 z^3 - 14616 z^2 + 39501 z - 27027) I_1\left(\frac{z}{2}\right)}{99225 z}$$

07.25.03.ac0l.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (32 z^5 + 48 z^4 - 528 z^3 + 2280 z^2 - 5670 z + 6615)}{6615}$$

07.25.03.ac0m.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^6 - 96 z^5 - 336 z^4 + 3360 z^3 - 12744 z^2 + 24678 z - 19305) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 - 160 z^6 - 144 z^5 + 3360 z^4 - 15816 z^3 + 40986 z^2 - 65637 z + 77220) I_1\left(\frac{z}{2}\right)}{33075 z^2}$$

07.25.03.ac0n.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{945} e^z (16 z^4 - 96 z^3 + 360 z^2 - 840 z + 945)$$

07.25.03.ac0o.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 - 288 z^5 + 1680 z^4 - 7296 z^3 + 24642 z^2 - 64350 z + 109395) I_0\left(\frac{z}{2}\right) + 64 e^{z/2} (16 z^7 - 160 z^6 + 1008 z^5 - 4752 z^4 + 17787 z^3 - 54054 z^2 + 128700 z - 218790) I_1\left(\frac{z}{2}\right)}{33075 z^3}$$

07.25.03.ac0p.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (8 z^7 - 108 z^6 + 882 z^5 - 5271 z^4 + 24192 z^3 - 84672 z^2 + 211680 z - 317520)}{105 z^4} + \frac{1512 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ac0q.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-8 z^7 - 108 z^6 - 882 z^5 - 5271 z^4 - 24192 z^3 - 84672 z^2 - 211680 z - 317520)}{105 z^4} + \frac{1512 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ac0r.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^6 - 528 z^5 + 5088 z^4 - 34836 z^3 + 176670 z^2 - 646425 z + 1511640) I_0\left(\frac{z}{2}\right) + \frac{1}{6615 z^4} 32 e^{z/2} (32 z^7 - 560 z^6 + 5664 z^5 - 40812 z^4 + 220974 z^3 - 895635 z^2 + 2585700 z - 6046560) I_1\left(\frac{z}{2}\right)}{6615 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.ac0s.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{1157625} \left(e^z (2048 z^{11} + 97280 z^{10} + 1667584 z^9 + 12866304 z^8 + 45421824 z^7 + 65950080 z^6 + \right. \\
 & \left. 28929600 z^5 + 1139040 z^4 + 320040 z^3 - 744660 z^2 + 1370250 z - 1157625) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac0t.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{165375} \left(e^z (1024 z^{10} + 41984 z^9 + 602880 z^8 + 3720192 z^7 + 9690240 z^6 + 8749440 z^5 + 1340640 z^4 - \right. \\
 & \left. 100800 z^3 + 109620 z^2 - 207900 z + 165375) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac0u.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = -\frac{1}{33075} \\
 & \left(e^z (512 z^9 + 17664 z^8 + 204288 z^7 + 940800 z^6 + 1552320 z^5 + 493920 z^4 - 70560 z^3 - 15120 z^2 + 47250 z - 33075) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac0v.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{11025} e^z (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac0w.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = -\frac{e^z (128 z^7 + 2752 z^6 + 16224 z^5 + 21072 z^4 - 14952 z^3 + 13860 z^2 - 3150 z - 11025)}{11025}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac0x.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (-64 z^7 - 1216 z^6 - 6032 z^5 - 5232 z^4 + 5640 z^3 - 7560 z^2 + 1575 z + 11025) I_0\left(\frac{z}{2}\right)}{11025} + \\
 & \frac{e^{z/2} (-64 z^7 - 1152 z^6 - 4912 z^5 - 832 z^4 + 4968 z^3 - 10800 z^2 + 11025 z) I_1\left(\frac{z}{2}\right)}{11025}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac0y.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = -\frac{e^z (64 z^6 + 960 z^5 + 2832 z^4 - 2208 z^3 + 252 z^2 + 6300 z - 11025)}{11025}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac0z.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (-64 z^6 - 800 z^5 - 1584 z^4 + 2400 z^3 - 2520 z^2 - 3150 z + 11025) I_0\left(\frac{z}{2}\right)}{11025} + \\
 & \frac{e^{z/2} (-64 z^6 - 736 z^5 - 880 z^4 + 2976 z^3 - 5400 z^2 + 3150 z + 4725) I_1\left(\frac{z}{2}\right)}{11025}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac10.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = -\frac{e^z (32 z^5 + 272 z^4 - 80 z^3 - 744 z^2 + 2730 z - 3675)}{3675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac11.01} \\
 {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, 3; z\right) &= \frac{8 e^{z/2} (16 z^5 + 96 z^4 - 144 z^3 + 819 z - 1638) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (32 z^6 + 160 z^5 - 432 z^4 + 480 z^3 + 882 z^2 - 3402 z + 2079) I_1\left(\frac{z}{2}\right)}{11025}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac12.01} \\
 {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) &= -\frac{1}{735} e^z (16 z^4 + 32 z^3 - 216 z^2 + 600 z - 735)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac13.01} \\
 {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, 4; z\right) &= -\frac{4 e^{z/2} (32 z^5 - 16 z^4 - 224 z^3 + 1068 z^2 - 2082 z + 1287) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (32 z^6 - 48 z^5 - 160 z^4 + 1172 z^3 - 3186 z^2 + 4653 z - 5148) I_1\left(\frac{z}{2}\right)}{3675 z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac14.01} \\
 {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) &= -\frac{1}{105} e^z (8 z^3 - 36 z^2 + 90 z - 105)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac15.01} \\
 {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, 5; z\right) &= -\frac{32 e^{z/2} (16 z^5 - 112 z^4 + 492 z^3 - 1572 z^2 + 3861 z - 6435) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (16 z^6 - 128 z^5 + 628 z^4 - 2280 z^3 + 6633 z^2 - 15444 z + 25740) I_1\left(\frac{z}{2}\right)}{3675 z^2}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac16.01} \\
 {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) &= \frac{756 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}} - \frac{3 e^z (4 z^6 - 44 z^5 + 287 z^4 - 1344 z^3 + 4704 z^2 - 11760 z + 17640)}{35 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac17.01} \\
 {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) &= \frac{756 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}} - \frac{3 e^{-z} (4 z^6 + 44 z^5 + 287 z^4 + 1344 z^3 + 4704 z^2 + 11760 z + 17640)}{35 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac18.01} \\
 {}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, 6; z\right) &= -\frac{32 e^{z/2} (16 z^5 - 216 z^4 + 1668 z^3 - 8892 z^2 + 33345 z - 79560) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (16 z^6 - 232 z^5 + 1908 z^4 - 10932 z^3 + 45513 z^2 - 133380 z + 318240) I_1\left(\frac{z}{2}\right)}{735 z^3}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.ac19.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = -\frac{1}{23625} \left(e^z (512 z^9 + 18176 z^8 + 219648 z^7 + 1091328 z^6 + 2116800 z^5 + 1199520 z^4 + 70560 z^3 - 15120 z^2 + 32130 z - 23625) \right)$$

07.25.03.ac1a.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{e^z (256 z^8 + 7680 z^7 + 75264 z^6 + 282240 z^5 + 352800 z^4 + 70560 z^3 - 7560 z + 4725)}{4725}$$

07.25.03.ac1b.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = -\frac{e^z (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575)}{1575}$$

07.25.03.ac1c.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{e^z (64 z^6 + 1216 z^5 + 6288 z^4 + 7392 z^3 - 3780 z^2 + 1260 z + 1575)}{1575}$$

07.25.03.ac1d.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (32 z^6 + 544 z^5 + 2448 z^4 + 2256 z^3 - 1710 z^2 + 630 z + 1575) I_0\left(\frac{z}{2}\right) + 2 e^{z/2} (16 z^6 + 256 z^5 + 976 z^4 + 264 z^3 - 837 z^2 + 900 z) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.ac1e.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{e^z (32 z^5 + 432 z^4 + 1200 z^3 - 504 z^2 - 630 z + 1575)}{1575}$$

07.25.03.ac1f.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (32 z^5 + 368 z^4 + 768 z^3 - 660 z^2 - 210 z + 1575) I_0\left(\frac{z}{2}\right) + e^{z/2} (32 z^5 + 336 z^4 + 448 z^3 - 972 z^2 + 750 z + 525) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.ac1g.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{525} e^z (16 z^4 + 128 z^3 + 24 z^2 - 336 z + 525)$$

07.25.03.ac1h.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (16 z^4 + 96 z^3 - 60 z^2 - 168 z + 441) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (16 z^5 + 80 z^4 - 132 z^3 - 12 z^2 + 357 z - 189) I_1\left(\frac{z}{2}\right)}{1575 z}$$

07.25.03.ac1i.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{105} e^z (8 z^3 + 20 z^2 - 78 z + 105)$$

07.25.03.ac1j.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 + 8 z^3 - 108 z^2 + 228 z - 99) I_0\left(\frac{z}{2}\right)}{525 z} + \frac{4 e^{z/2} (16 z^5 - 8 z^4 - 92 z^3 + 300 z^2 - 387 z + 396) I_1\left(\frac{z}{2}\right)}{525 z^2}$$

07.25.03.ac1k.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{15} e^z (4 z^2 - 12 z + 15)$$

07.25.03.ac1l.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 - 40 z^3 + 120 z^2 - 264 z + 429) I_0\left(\frac{z}{2}\right)}{525 z^2} + \frac{128 e^{z/2} (2 z^5 - 12 z^4 + 43 z^3 - 117 z^2 + 264 z - 429) I_1\left(\frac{z}{2}\right)}{525 z^3}$$

07.25.03.ac1m.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (4 z^5 - 34 z^4 + 168 z^3 - 588 z^2 + 1470 z - 2205)}{10 z^4} + \frac{1323 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{9/2}}$$

07.25.03.ac1n.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1323 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{9/2}} - \frac{3 e^{-z} (4 z^5 + 34 z^4 + 168 z^3 + 588 z^2 + 1470 z + 2205)}{10 z^4}$$

07.25.03.ac1o.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^4 - 84 z^3 + 492 z^2 - 1911 z + 4680) I_0\left(\frac{z}{2}\right)}{105 z^3} + \frac{32 e^{z/2} (8 z^5 - 92 z^4 + 588 z^3 - 2553 z^2 + 7644 z - 18720) I_1\left(\frac{z}{2}\right)}{105 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.ac1p.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = -\frac{1}{945} e^z (128 z^7 + 3264 z^6 + 26208 z^5 + 75600 z^4 + 63000 z^3 + 3780 z^2 + 1890 z - 945)$$

07.25.03.ac1q.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315)$$

07.25.03.ac1r.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = -\frac{1}{315} e^z (32 z^5 + 528 z^4 + 2352 z^3 + 2520 z^2 - 630 z - 315)$$

07.25.03.ac1s.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (-16 z^5 - 240 z^4 - 972 z^3 - 972 z^2 + 315 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-16 z^5 - 224 z^4 - 756 z^3 - 312 z^2 + 423 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac1t.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = -\frac{1}{315} e^z (16z^4 + 192z^3 + 504z^2 - 315)$$

07.25.03.ac1u.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (-16z^4 - 168z^3 - 372z^2 + 60z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-16z^4 - 152z^3 - 228z^2 + 228z + 75) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac1v.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = -\frac{1}{105} e^z (8z^3 + 60z^2 + 42z - 105)$$

07.25.03.ac1w.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, 3; z\right) = -\frac{16}{315} e^{z/2} (2z^3 + 12z^2 + 3z - 21) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8z^4 + 40z^3 - 24z^2 - 48z + 21) I_1\left(\frac{z}{2}\right)}{315z}$$

07.25.03.ac1x.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = -\frac{1}{21} e^z (4z^2 + 12z - 21)$$

07.25.03.ac1y.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, 4; z\right) = -\frac{4 e^{z/2} (8z^3 + 12z^2 - 36z + 9) I_0\left(\frac{z}{2}\right)}{105z} - \frac{4 e^{z/2} (8z^4 + 4z^3 - 36z^2 + 39z - 36) I_1\left(\frac{z}{2}\right)}{105z^2}$$

07.25.03.ac1z.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = -\frac{1}{3} e^z (2z - 3)$$

07.25.03.ac20.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, 5; z\right) = -\frac{32 e^{z/2} (4z^3 - 12z^2 + 21z - 33) I_0\left(\frac{z}{2}\right)}{105z^2} - \frac{32 e^{z/2} (4z^4 - 16z^3 + 39z^2 - 84z + 132) I_1\left(\frac{z}{2}\right)}{105z^3}$$

07.25.03.ac21.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8z^{9/2}} - \frac{3 e^z (4z^4 - 24z^3 + 84z^2 - 210z + 315)}{4z^4}$$

07.25.03.ac22.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8z^{9/2}} - \frac{3 e^{-z} (4z^4 + 24z^3 + 84z^2 + 210z + 315)}{4z^4}$$

07.25.03.ac23.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, 6; z\right) = -\frac{32 e^{z/2} (4z^3 - 30z^2 + 123z - 312) I_0\left(\frac{z}{2}\right)}{21z^3} - \frac{32 e^{z/2} (4z^4 - 34z^3 + 159z^2 - 492z + 1248) I_1\left(\frac{z}{2}\right)}{21z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.ac24.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = -\frac{1}{105} e^z (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105)$$

07.25.03.ac25.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (16z^4 + 224z^3 + 840z^2 + 840z + 105)$$

07.25.03.ac26.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8z^4 + 104z^3 + 376z^2 + 420z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} (2z^4 + 24z^3 + 71z^2 + 44z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac27.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (8z^3 + 84z^2 + 210z + 105)$$

07.25.03.ac28.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (8z^3 + 76z^2 + 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 + 68z^2 + 116z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac29.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{35} e^z (4z^2 + 28z + 35)$$

07.25.03.ac2a.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 + 24z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4z^3 + 20z^2 + 9z - 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.ac2b.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (2z + 7)$$

07.25.03.ac2c.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (4z^2 + 10z - 1) I_0\left(\frac{z}{2}\right)}{35z} + \frac{4 e^{z/2} (4z^3 + 6z^2 - 5z + 4) I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.ac2d.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = e^z$$

07.25.03.ac2e.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 - 2z + 3) I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{64 e^{z/2} (z^3 - 2z^2 + 4z - 6) I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.ac2f.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (8z^3 - 28z^2 + 70z - 105)}{16z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.ac2g.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32z^{9/2}} - \frac{9 e^{-z} (8z^3 + 28z^2 + 70z + 105)}{16z^4}$$

07.25.03.ac2h.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^2 - 9z + 24) I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{32 e^{z/2} (2z^3 - 11z^2 + 36z - 96) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{1}{2}$

07.25.03.ac2i.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (-8z^3 - 92z^2 - 282z + 105) - \frac{128}{35} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac2j.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} e^{-z} (8z^3 - 92z^2 + 282z + 105) + \frac{128}{35} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.ac2k.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (-4z^3 - 44z^2 - 525z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-4z^3 - 40z^2 + 281z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac2l.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (-4z^2 - 36z + 105) - \frac{64}{35} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac2m.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} e^{-z} (-4z^2 + 36z + 105) + \frac{64}{35} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.ac2n.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-4z^2 - 290z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-4z^2 + 226z + 5) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac2o.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{35} e^z (35 - 2z) - \frac{48}{35} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac2p.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{35} e^{-z} (2z + 35) + \frac{48}{35} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.ac2q.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (246z^2 + 14z - 3) I_1\left(\frac{z}{2}\right)}{525z} - \frac{8}{525} e^{z/2} (133z - 66) I_0\left(\frac{z}{2}\right)$$

07.25.03.ac2r.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = e^z - \frac{8}{7} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac2s.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{8}{7} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.ac2t.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (512z^3 + 58z^2 - 31z + 20) I_1\left(\frac{z}{2}\right)}{1225z^2} - \frac{4 e^{z/2} (512z^2 - 314z + 5) I_0\left(\frac{z}{2}\right)}{1225z}$$

07.25.03.ac2u.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac2v.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.ac2w.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; 5; z\right) = \frac{32 e^{z/2} (512 z^4 + 128 z^3 - 171 z^2 + 300 z - 420) I_1\left(\frac{z}{2}\right)}{11\,025 z^3} - \frac{32 e^{z/2} (512 z^3 - 384 z^2 + 75 z - 105) I_0\left(\frac{z}{2}\right)}{11\,025 z^2}$$

07.25.03.ac2x.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (16 z^4 + 8 z^3 - 28 z^2 + 70 z - 105)}{160 z^4} - \frac{9 \sqrt{\pi} (32 z^5 - 105) \operatorname{erfi}(\sqrt{z})}{320 z^{9/2}}$$

07.25.03.ac2y.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (16 z^4 - 8 z^3 - 28 z^2 - 70 z - 105)}{160 z^4} + \frac{9 \sqrt{\pi} (32 z^5 + 105) \operatorname{erf}(\sqrt{z})}{320 z^{9/2}}$$

07.25.03.ac2z.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (1024 z^5 + 256 z^4 + 288 z^3 - 2865 z^2 + 10\,500 z - 30\,240) I_1\left(\frac{z}{2}\right)}{24\,255 z^4} - \frac{32 e^{z/2} (1024 z^4 - 768 z^3 - 480 z^2 + 2625 z - 7560) I_0\left(\frac{z}{2}\right)}{24\,255 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 1$

07.25.03.ac30.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{105} e^{z/2} (-2 z^2 - 210 z + 105) I_0\left(\frac{z}{2}\right) - \frac{2}{105} e^{z/2} (z^2 - 88 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac31.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{5} e^{z/2} (5 - 7 z) I_0\left(\frac{z}{2}\right) + \frac{47}{35} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.ac32.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{7} e^{z/2} (7 - 8 z) I_0\left(\frac{z}{2}\right) + \frac{8}{7} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.ac33.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; 1, \frac{9}{2}; z\right) = e^{z/2} (1 - z) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{3}{2}$

07.25.03.ac34.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (81 - 2 z) - \frac{4 \sqrt{\pi} (8 z - 1) \operatorname{erfi}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.ac35.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} e^{-z} (2 z + 81) + \frac{4 \sqrt{\pi} (8 z + 1) \operatorname{erf}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.ac36.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{21} e^{z/2} (21 - 26z) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (126z - 5) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac37.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{23 e^z}{35} - \frac{6\sqrt{\pi} (4z - 1) \operatorname{erfi}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.ac38.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{6\sqrt{\pi} (4z + 1) \operatorname{erf}(\sqrt{z})}{35\sqrt{z}} + \frac{23 e^{-z}}{35}$$

07.25.03.ac39.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (128z^2 - 13z + 1) I_1\left(\frac{z}{2}\right)}{525z} - \frac{4}{525} e^{z/2} (128z - 131) I_0\left(\frac{z}{2}\right)$$

07.25.03.ac3a.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{\sqrt{\pi} (3 - 8z) \operatorname{erfi}(\sqrt{z})}{14\sqrt{z}} + \frac{4 e^z}{7}$$

07.25.03.ac3b.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{\sqrt{\pi} (8z + 3) \operatorname{erf}(\sqrt{z})}{14\sqrt{z}} + \frac{4 e^{-z}}{7}$$

07.25.03.ac3c.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (256z^3 - 48z^2 + 9z - 4) I_1\left(\frac{z}{2}\right)}{1225z^2} - \frac{4 e^{z/2} (256z^2 - 304z - 1) I_0\left(\frac{z}{2}\right)}{1225z}$$

07.25.03.ac3d.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{\sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{e^z}{2}$$

07.25.03.ac3e.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{\sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.ac3f.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, 5; z\right) = \frac{128 e^{z/2} (64z^4 - 20z^3 + 9z^2 - 12z + 15) I_1\left(\frac{z}{2}\right)}{11025z^3} - \frac{32 e^{z/2} (256z^3 - 336z^2 - 12z + 15) I_0\left(\frac{z}{2}\right)}{11025z^2}$$

07.25.03.ac3g.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (64z^4 - 8z^3 + 28z^2 - 70z + 105)}{1280z^4} - \frac{9\sqrt{\pi} (128z^5 - 80z^4 + 105) \operatorname{erfi}(\sqrt{z})}{2560z^{9/2}}$$

07.25.03.ac3h.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (64z^4 + 8z^3 + 28z^2 + 70z + 105)}{1280z^4} + \frac{9\sqrt{\pi} (128z^5 + 80z^4 - 105) \operatorname{erf}(\sqrt{z})}{2560z^{9/2}}$$

07.25.03.ac3i.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (512 z^5 - 224 z^4 + 56 z^3 + 201 z^2 - 1020 z + 3360) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (512 z^4 - 736 z^3 + 24 z^2 - 255 z + 840) I_0\left(\frac{z}{2}\right)}{24255 z^4} - \frac{32 e^{z/2} (512 z^4 - 736 z^3 + 24 z^2 - 255 z + 840) I_0\left(\frac{z}{2}\right)}{24255 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 2$

07.25.03.ac3j.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{35} e^{z/2} (35 - 32 z) I_0\left(\frac{z}{2}\right) + \frac{1}{35} e^{z/2} (32 z - 5) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac3k.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{21} e^{z/2} (21 - 16 z) I_0\left(\frac{z}{2}\right) + \frac{1}{21} e^{z/2} (16 z - 5) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac3l.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; 2, \frac{9}{2}; z\right) = e^{z/2} \left(1 - \frac{2z}{3}\right) I_0\left(\frac{z}{2}\right) + e^{z/2} \left(\frac{2z}{3} - \frac{1}{3}\right) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{5}{2}$

07.25.03.ac3m.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3 e^z (12 z - 1)}{70 z} - \frac{3 \sqrt{\pi} (24 z^2 - 12 z - 1) \operatorname{erfi}(\sqrt{z})}{140 z^{3/2}}$$

07.25.03.ac3n.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (12 z + 1)}{70 z} + \frac{3 \sqrt{\pi} (24 z^2 + 12 z - 1) \operatorname{erf}(\sqrt{z})}{140 z^{3/2}}$$

07.25.03.ac3o.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (32 z^2 - 12 z - 1) I_1\left(\frac{z}{2}\right)}{175 z} - \frac{16}{175} e^{z/2} (8 z - 11) I_0\left(\frac{z}{2}\right)$$

07.25.03.ac3p.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{3 e^z (4 z - 1)}{28 z} - \frac{3 \sqrt{\pi} (8 z^2 - 6 z - 1) \operatorname{erfi}(\sqrt{z})}{56 z^{3/2}}$$

07.25.03.ac3q.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{3 e^{-z} (4 z + 1)}{28 z} + \frac{3 \sqrt{\pi} (8 z^2 + 6 z - 1) \operatorname{erf}(\sqrt{z})}{56 z^{3/2}}$$

07.25.03.ac3r.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (192 z^3 - 120 z^2 - 23 z + 4) I_1\left(\frac{z}{2}\right)}{1225 z^2} - \frac{4 e^{z/2} (192 z^2 - 312 z + 1) I_0\left(\frac{z}{2}\right)}{1225 z}$$

07.25.03.ac3s.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{3e^z(2z-1)}{16z} - \frac{3\sqrt{\pi}(4z^2-4z-1)\operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.ac3t.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{3e^{-z}(2z+1)}{16z} + \frac{3\sqrt{\pi}(4z^2+4z-1)\operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.ac3u.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, 5; z\right) = \frac{32e^{z/2}(64z^4-56z^3-21z^2+12z-12)I_1\left(\frac{z}{2}\right)}{3675z^3} - \frac{32e^{z/2}(64z^3-120z^2+3z-3)I_0\left(\frac{z}{2}\right)}{3675z^2}$$

07.25.03.ac3v.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{9e^z(96z^4-72z^3-28z^2+70z-105)}{2560z^4} - \frac{9\sqrt{\pi}(192z^5-240z^4-80z^3-105)\operatorname{erfi}(\sqrt{z})}{5120z^{9/2}}$$

07.25.03.ac3w.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{9e^{-z}(96z^4+72z^3-28z^2-70z-105)}{2560z^4} + \frac{9\sqrt{\pi}(192z^5+240z^4-80z^3+105)\operatorname{erf}(\sqrt{z})}{5120z^{9/2}}$$

07.25.03.ac3x.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, 6; z\right) = \frac{32e^{z/2}(128z^5-144z^4-74z^3+9z^2+108z-480)I_1\left(\frac{z}{2}\right)}{8085z^4} - \frac{32e^{z/2}(128z^4-272z^3+6z^2+27z-120)I_0\left(\frac{z}{2}\right)}{8085z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 3$

07.25.03.ac3y.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; 3, \frac{7}{2}; z\right) = \frac{4e^{z/2}(16z^2-11z-3)I_1\left(\frac{z}{2}\right)}{105z} - \frac{4}{105}e^{z/2}(16z-27)I_0\left(\frac{z}{2}\right)$$

07.25.03.ac3z.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; 3, \frac{9}{2}; z\right) = \frac{4e^{z/2}(2z^2-2z-1)I_1\left(\frac{z}{2}\right)}{15z} - \frac{8}{15}e^{z/2}(z-2)I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{7}{2}$

07.25.03.ac40.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5e^z(16z^2-10z-3)}{224z^2} - \frac{5\sqrt{\pi}(32z^3-36z^2-12z-3)\operatorname{erfi}(\sqrt{z})}{448z^{5/2}}$$

07.25.03.ac41.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}(16z^2+10z-3)}{224z^2} + \frac{5\sqrt{\pi}(32z^3+36z^2-12z+3)\operatorname{erf}(\sqrt{z})}{448z^{5/2}}$$

07.25.03.ac42.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^3 - 34 z^2 - 19 z - 4) I_1\left(\frac{z}{2}\right)}{245 z^2} - \frac{4 e^{z/2} (32 z^2 - 66 z - 1) I_0\left(\frac{z}{2}\right)}{245 z}$$

07.25.03.ac43.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{5 e^z (4 z^2 - 4 z - 3)}{64 z^2} - \frac{5 \sqrt{\pi} (8 z^3 - 12 z^2 - 6 z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.ac44.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5 e^{-z} (4 z^2 + 4 z - 3)}{64 z^2} + \frac{5 \sqrt{\pi} (8 z^3 + 12 z^2 - 6 z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.ac45.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, 5; z\right) = \frac{64 e^{z/2} (16 z^4 - 23 z^3 - 18 z^2 - 12 z + 6) I_1\left(\frac{z}{2}\right)}{2205 z^3} - \frac{32 e^{z/2} (32 z^3 - 78 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right)}{2205 z^2}$$

07.25.03.ac46.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (64 z^4 - 88 z^3 - 92 z^2 - 70 z + 105)}{2048 z^4} - \frac{9 \sqrt{\pi} (128 z^5 - 240 z^4 - 160 z^3 - 120 z^2 + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.ac47.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (64 z^4 + 88 z^3 - 92 z^2 + 70 z + 105)}{2048 z^4} + \frac{9 \sqrt{\pi} (128 z^5 + 240 z^4 - 160 z^3 + 120 z^2 - 105) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.ac48.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^5 - 116 z^4 - 114 z^3 - 111 z^2 - 12 z + 288) I_1\left(\frac{z}{2}\right)}{4851 z^4} - \frac{32 e^{z/2} (64 z^4 - 180 z^3 - 30 z^2 - 3 z + 72) I_0\left(\frac{z}{2}\right)}{4851 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 4$

07.25.03.ac49.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; 4, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (4 z^3 - 6 z^2 - 5 z - 4) I_1\left(\frac{z}{2}\right)}{35 z^2} - \frac{4 e^{z/2} (4 z^2 - 10 z - 1) I_0\left(\frac{z}{2}\right)}{35 z}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{9}{2}$

07.25.03.ac4a.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (8 z^3 - 12 z^2 - 14 z - 15)}{1024 z^3} - \frac{35 \sqrt{\pi} (16 z^4 - 32 z^3 - 24 z^2 - 24 z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.ac4b.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.ac4c.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^4 - 8z^3 - 9z^2 - 12z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3} - \frac{32 e^{z/2} (4z^3 - 12z^2 - 3z - 3) I_0\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.ac4d.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096 z^4} - \frac{63 \sqrt{\pi} (32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.ac4e.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.ac4f.01

$${}_2F_2\left(-\frac{1}{2}, \frac{9}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (8z^5 - 20z^4 - 28z^3 - 51z^2 - 84z - 96) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (8z^4 - 28z^3 - 12z^2 - 21z - 24) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = -\frac{11}{2}$

07.25.03.ac4g.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{324\,168\,075} (-256 z^{15} - 22\,144 z^{14} - 756\,672 z^{13} - 13\,174\,560 z^{12} - 125\,787\,360 z^{11} - 659\,950\,848 z^{10} - 1\,802\,707\,200 z^9 - 2\,243\,888\,640 z^8 - 926\,553\,600 z^7 - 38\,102\,400 z^6 - 1\,270\,080 z^5 - 453\,600 z^4 - 567\,000 z^3 - 1\,984\,500 z^2 - 26\,790\,750 z + 324\,168\,075) - \frac{1}{324\,168\,075} (16 e^z \sqrt{\pi} (16 z^{31/2} + 1392 z^{29/2} + 47\,976 z^{27/2} + 846\,384 z^{25/2} + 8\,251\,425 z^{23/2} + 44\,819\,145 z^{21/2} + 130\,200\,840 z^{19/2} + 182\,853\,720 z^{17/2} + 100\,117\,080 z^{15/2} + 12\,209\,400 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ac4h.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{324\,168\,075} (256 z^{15} - 22\,144 z^{14} + 756\,672 z^{13} - 13\,174\,560 z^{12} + 125\,787\,360 z^{11} - 659\,950\,848 z^{10} + 1\,802\,707\,200 z^9 - 2\,243\,888\,640 z^8 + 926\,553\,600 z^7 - 38\,102\,400 z^6 + 1\,270\,080 z^5 - 453\,600 z^4 + 567\,000 z^3 - 1\,984\,500 z^2 + 26\,790\,750 z + 324\,168\,075) - \frac{1}{324\,168\,075} (16 e^{-z} \sqrt{\pi} (16 z^{31/2} - 1392 z^{29/2} + 47\,976 z^{27/2} - 846\,384 z^{25/2} + 8\,251\,425 z^{23/2} - 44\,819\,145 z^{21/2} + 130\,200\,840 z^{19/2} - 182\,853\,720 z^{17/2} + 100\,117\,080 z^{15/2} - 12\,209\,400 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ac4i.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{29469825} (128 z^{14} + 9920 z^{13} + 299040 z^{12} + 4498800 z^{11} + 36038592 z^{10} + 151701120 z^9 + 308125440 z^8 + 243734400 z^7 + 38102400 z^6 - 1270080 z^5 - 151200 z^4 - 113400 z^3 - 283500 z^2 - 2976750 z + 29469825) + \frac{1}{29469825} (8 e^z \sqrt{\pi} (16 z^{29/2} + 1248 z^{27/2} + 37992 z^{25/2} + 580440 z^{23/2} + 4768785 z^{21/2} + 20975220 z^{19/2} + 46299960 z^{17/2} + 43953840 z^{15/2} + 12209400 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ac4j.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{29469825} (128 z^{14} - 9920 z^{13} + 299040 z^{12} - 4498800 z^{11} + 36038592 z^{10} - 151701120 z^9 + 308125440 z^8 - 243734400 z^7 + 38102400 z^6 + 1270080 z^5 - 151200 z^4 + 113400 z^3 - 283500 z^2 + 2976750 z + 29469825) - \frac{1}{29469825} (8 e^{-z} \sqrt{\pi} (16 z^{29/2} - 1248 z^{27/2} + 37992 z^{25/2} - 580440 z^{23/2} + 4768785 z^{21/2} - 20975220 z^{19/2} + 46299960 z^{17/2} - 43953840 z^{15/2} + 12209400 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ac4k.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{3274425} (-64 z^{13} - 4384 z^{12} - 114480 z^{11} - 1450152 z^{10} - 9370440 z^9 - 29599200 z^8 - 38979360 z^7 - 12700800 z^6 + 1270080 z^5 - 151200 z^4 - 37800 z^3 - 56700 z^2 - 425250 z + 3274425) - \frac{1}{3274425} (4 e^z \sqrt{\pi} (16 z^{27/2} + 1104 z^{25/2} + 29160 z^{23/2} + 376320 z^{21/2} + 2510865 z^{19/2} + 8420895 z^{17/2} + 12616380 z^{15/2} + 6104700 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ac4l.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{3274425} (64 z^{13} - 4384 z^{12} + 114480 z^{11} - 1450152 z^{10} + 9370440 z^9 - 29599200 z^8 + 38979360 z^7 - 12700800 z^6 - 1270080 z^5 - 151200 z^4 + 37800 z^3 - 56700 z^2 + 425250 z + 3274425) - \frac{1}{3274425} (4 e^{-z} \sqrt{\pi} (16 z^{27/2} - 1104 z^{25/2} + 29160 z^{23/2} - 376320 z^{21/2} + 2510865 z^{19/2} - 8420895 z^{17/2} + 12616380 z^{15/2} - 6104700 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ac4m.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{467775} (32 z^{12} + 1904 z^{11} + 42024 z^{10} + 431820 z^9 + 2113080 z^8 + 4405680 z^7 + 2540160 z^6 - 423360 z^5 + 151200 z^4 - 37800 z^3 - 18900 z^2 - 85050 z + 467775) + \frac{1}{467775} (2 e^z \sqrt{\pi} (16 z^{25/2} + 960 z^{23/2} + 21480 z^{21/2} + 225960 z^{19/2} + 1155105 z^{17/2} + 2645370 z^{15/2} + 2034900 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ac4n.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{467775} (32 z^{12} - 1904 z^{11} + 42024 z^{10} - 431820 z^9 + 2113080 z^8 - 4405680 z^7 + 2540160 z^6 + 423360 z^5 + 151200 z^4 + 37800 z^3 - 18900 z^2 + 85050 z + 467775) - \frac{1}{467775} (2 e^{-z} \sqrt{\pi} (16 z^{25/2} - 960 z^{23/2} + 21480 z^{21/2} - 225960 z^{19/2} + 1155105 z^{17/2} - 2645370 z^{15/2} + 2034900 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ac4o.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{93555} (-16 z^{11} - 808 z^{10} - 14556 z^9 - 114402 z^8 - 376470 z^7 - 362880 z^6 + 84672 z^5 - 50400 z^4 + 37800 z^3 - 18900 z^2 - 28350 z + 93555) + \frac{1}{93555} e^z \sqrt{\pi} (-16 z^{23/2} - 816 z^{21/2} - 14952 z^{19/2} - 121296 z^{17/2} - 427329 z^{15/2} - 508725 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ac4p.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{93555} (16 z^{11} - 808 z^{10} + 14556 z^9 - 114402 z^8 + 376470 z^7 - 362880 z^6 - 84672 z^5 - 50400 z^4 - 37800 z^3 - 18900 z^2 + 28350 z + 93555) + \frac{1}{93555} e^{-z} \sqrt{\pi} (-16 z^{23/2} + 816 z^{21/2} - 14952 z^{19/2} + 121296 z^{17/2} - 427329 z^{15/2} + 508725 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac4q.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{31185} (8 z^{10} + 332 z^9 + 4626 z^8 + 24975 z^7 + 40320 z^6 - 12096 z^5 + 10080 z^4 - 12600 z^3 + 18900 z^2 - 28350 z + 31185) + \frac{e^z \sqrt{\pi} (16 z^{21/2} + 672 z^{19/2} + 9576 z^{17/2} + 54264 z^{15/2} + 101745 z^{13/2}) \operatorname{erf}(\sqrt{z})}{62370}$$

07.25.03.ac4r.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{31\,185} (8z^{10} - 332z^9 + 4626z^8 - 24\,975z^7 + 40\,320z^6 + 12\,096z^5 + 10\,080z^4 + 12\,600z^3 + 18\,900z^2 + 28\,350z + 31\,185) + \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 672z^{19/2} - 9576z^{17/2} + 54\,264z^{15/2} - 101\,745z^{13/2}) \operatorname{erfi}(\sqrt{z})}{62\,370}$$

07.25.03.ac4s.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{-8z^9 - 260z^8 - 2550z^7 - 7245z^6 + 2163z^5 - 180z^4 - 6300z^3 + 25\,200z^2 - 56\,700z + 62\,370}{62\,370} + \frac{1}{124\,740} (e^z \sqrt{\pi} (-16z^{19/2} - 528z^{17/2} - 5352z^{15/2} - 16\,800z^{13/2} - 945z^{11/2} + 4725z^{9/2} - 18\,900z^{7/2} + 56\,700z^{5/2} - 113\,400z^{3/2} + 113\,400\sqrt{z}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ac4t.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{8z^9 - 260z^8 + 2550z^7 - 7245z^6 - 2163z^5 - 180z^4 + 6300z^3 + 25\,200z^2 + 56\,700z + 62\,370}{62\,370} + \frac{1}{124\,740} (e^{-z} \sqrt{\pi} (-16z^{19/2} + 528z^{17/2} - 5352z^{15/2} + 16\,800z^{13/2} - 945z^{11/2} - 4725z^{9/2} - 18\,900z^{7/2} - 56\,700z^{5/2} - 113\,400z^{3/2} - 113\,400\sqrt{z}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ac4u.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, 1; z\right) = -\frac{1}{249\,480} e^z (32z^9 + 912z^8 + 7344z^7 + 13\,272z^6 - 14\,742z^5 + 27\,405z^4 - 40\,320z^3 + 7560z^2 + 136\,080z - 249\,480)$$

07.25.03.ac4v.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{-8z^8 - 188z^7 - 1050z^6 + 21z^5 + 1710z^4 - 8100z^3 + 25\,200z^2 - 50\,400z + 49\,140}{124\,740} + \frac{1}{249\,480\sqrt{z}} (e^z \sqrt{\pi} (-16z^9 - 384z^8 - 2280z^7 - 840z^6 + 4095z^5 - 15\,750z^4 + 44\,100z^3 - 75\,600z^2 + 37\,800z + 75\,600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ac4w.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{-8z^8 + 188z^7 - 1050z^6 - 21z^5 + 1710z^4 + 8100z^3 + 25\,200z^2 + 50\,400z + 49\,140}{124\,740} + \frac{1}{249\,480\sqrt{z}} (e^{-z} \sqrt{\pi} (16z^9 - 384z^8 + 2280z^7 - 840z^6 - 4095z^5 - 15\,750z^4 - 44\,100z^3 - 75\,600z^2 - 37\,800z + 75\,600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ac4x.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, 2; z\right) = -\frac{e^z (32z^8 + 624z^7 + 2352z^6 - 3192z^5 + 4410z^4 + 5355z^3 - 61\,740z^2 + 192\,780z - 249\,480)}{249\,480}$$

07.25.03.ac4y.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{-8z^8 - 116z^7 - 126z^6 + 855z^5 - 3375z^4 + 9000z^3 - 12600z^2 - 5040z + 37800}{83160z} + \frac{1}{166320z^{3/2}}$$

$$\left(e^z \sqrt{\pi} (-16z^9 - 240z^8 - 360z^7 + 1680z^6 - 5985z^5 + 14175z^4 - 12600z^3 - 37800z^2 + 113400z - 37800) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ac4z.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{8z^8 - 116z^7 + 126z^6 + 855z^5 + 3375z^4 + 9000z^3 + 12600z^2 - 5040z - 37800}{83160z} + \frac{1}{166320z^{3/2}}$$

$$\left(e^{-z} \sqrt{\pi} (-16z^9 + 240z^8 - 360z^7 - 1680z^6 - 5985z^5 - 14175z^4 - 12600z^3 + 37800z^2 + 113400z + 37800) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ac50.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, 3; z\right) = -\frac{e^z (32z^7 + 336z^6 - 336z^5 - 840z^4 + 9450z^3 - 41895z^2 + 105840z - 124740)}{124740}$$

07.25.03.ac51.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{-8z^8 - 44z^7 + 222z^6 - 711z^5 + 1020z^4 + 3240z^3 - 23184z^2 + 57960z - 60480}{33264z^2} + \frac{1}{66528z^{5/2}}$$

$$e^z \sqrt{\pi} (-16z^9 - 96z^8 + 408z^7 - 1176z^6 + 1071z^5 + 8820z^4 - 47880z^3 + 105840z^2 - 98280z + 60480) \operatorname{erf}(\sqrt{z})$$

07.25.03.ac52.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{-8z^8 + 44z^7 + 222z^6 + 711z^5 + 1020z^4 - 3240z^3 - 23184z^2 - 57960z - 60480}{33264z^2} + \frac{1}{66528z^{5/2}}$$

$$e^{-z} \sqrt{\pi} (16z^9 - 96z^8 - 408z^7 - 1176z^6 - 1071z^5 + 8820z^4 + 47880z^3 + 105840z^2 + 98280z + 60480) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac53.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, 4; z\right) = -\frac{e^z (32z^6 + 48z^5 - 720z^4 + 4200z^3 - 15750z^2 + 36855z - 41580)}{41580}$$

07.25.03.ac54.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{-8z^8 + 28z^7 - 6z^6 - 645z^5 + 4815z^4 - 20844z^3 + 61740z^2 - 136080z + 226800}{9504z^3} + \frac{1}{19008z^{7/2}}$$

$$\left(e^z \sqrt{\pi} (-16z^9 + 48z^8 + 24z^7 - 1344z^6 + 9135z^5 - 36855z^4 + 99540z^3 - 192780z^2 + 287280z - 226800) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ac55.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{8z^8 + 28z^7 + 6z^6 - 645z^5 - 4815z^4 - 20844z^3 - 61740z^2 - 136080z - 226800}{9504z^3} + \frac{1}{19008z^{7/2}}$$

$$\left(e^{-z} \sqrt{\pi} (-16z^9 - 48z^8 + 24z^7 + 1344z^6 + 9135z^5 + 36855z^4 + 99540z^3 + 192780z^2 + 287280z + 226800) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ac56.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, 5; z\right) = -\frac{e^z (32z^5 - 240z^4 + 1200z^3 - 4200z^2 + 9450z - 10395)}{10395}$$

07.25.03.ac57.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{-8z^8 + 100z^7 - 810z^6 + 5085z^5 - 26262z^4 + 114660z^3 - 423360z^2 + 1285200z - 3175200}{2112z^4} +$$

$$\frac{1}{4224z^{9/2}} \left(e^z \sqrt{\pi} (-16z^9 + 192z^8 - 1512z^7 + 9240z^6 - 46305z^5 + 194670z^4 - 679140z^3 + 1844640z^2 - 3402000z + 3175200) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ac58.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{-8z^8 - 100z^7 - 810z^6 - 5085z^5 - 26262z^4 - 114660z^3 - 423360z^2 - 1285200z - 3175200}{2112z^4} +$$

$$\frac{1}{4224z^{9/2}} \left(e^{-z} \sqrt{\pi} (16z^9 + 192z^8 + 1512z^7 + 9240z^6 + 46305z^5 + 194670z^4 + 679140z^3 + 1844640z^2 + 3402000z + 3175200) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ac59.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{11}{2}, 6; z\right) =$$

$$\frac{1}{2079z^5} \left(e^z (-32z^9 + 528z^8 - 5424z^7 + 42168z^6 - 262458z^5 + 1322685z^4 - 5290740z^3 + 15872220z^2 - 31744440z + 31744440) - \frac{167960}{11z^5} \right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = -\frac{9}{2}$

07.25.03.ac5a.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{2679075} \left(-64z^{13} - 4448z^{12} - 118416z^{11} - 1541048z^{10} - 10368000z^9 - 35020224z^8 - 52717440z^7 - 26009280z^6 - 1270080z^5 - 50400z^4 - 22680z^3 - 40500z^2 - 330750z + 2679075 \right) -$$

$$\frac{1}{2679075} \left(4e^z \sqrt{\pi} (16z^{27/2} + 1120z^{25/2} + 30152z^{23/2} + 399528z^{21/2} + 2771145z^{19/2} + 9890640z^{17/2} + 16628040z^{15/2} + 10697760z^{13/2} + 1511640z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ac5b.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{2679075} \left(64z^{13} - 4448z^{12} + 118416z^{11} - 1541048z^{10} + 10368000z^9 - 35020224z^8 + 52717440z^7 - 26009280z^6 + 1270080z^5 - 50400z^4 + 22680z^3 - 40500z^2 + 330750z + 2679075 \right) -$$

$$\frac{1}{2679075} \left(4e^{-z} \sqrt{\pi} (16z^{27/2} - 1120z^{25/2} + 30152z^{23/2} - 399528z^{21/2} + 2771145z^{19/2} - 9890640z^{17/2} + 16628040z^{15/2} - 10697760z^{13/2} + 1511640z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ac5c.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{297675} (32 z^{12} + 1968 z^{11} + 45448 z^{10} + 498780 z^9 + 2710512 z^8 + 6869040 z^7 + 6654240 z^6 + 1270080 z^5 - 50400 z^4 - 7560 z^3 - 8100 z^2 - 47250 z + 297675) + \frac{1}{297675} \left(2 e^z \sqrt{\pi} (16 z^{25/2} + 992 z^{23/2} + 23208 z^{21/2} + 260280 z^{19/2} + 1469745 z^{17/2} + 4011660 z^{15/2} + 4593060 z^{13/2} + 1511640 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ac5d.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{297675} (32 z^{12} - 1968 z^{11} + 45448 z^{10} - 498780 z^9 + 2710512 z^8 - 6869040 z^7 + 6654240 z^6 - 1270080 z^5 - 50400 z^4 + 7560 z^3 - 8100 z^2 + 47250 z + 297675) - \frac{1}{297675} \left(2 e^{-z} \sqrt{\pi} (16 z^{25/2} - 992 z^{23/2} + 23208 z^{21/2} - 260280 z^{19/2} + 1469745 z^{17/2} - 4011660 z^{15/2} + 4593060 z^{13/2} - 1511640 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ac5e.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{42525} (-16 z^{11} - 856 z^{10} - 16740 z^9 - 149358 z^8 - 615840 z^7 - 1028520 z^6 - 423360 z^5 + 50400 z^4 - 7560 z^3 - 2700 z^2 - 9450 z + 42525) + \frac{1}{42525} e^z \sqrt{\pi} (-16 z^{23/2} - 864 z^{21/2} - 17160 z^{19/2} - 157320 z^{17/2} - 683145 z^{15/2} - 1279080 z^{13/2} - 755820 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ac5f.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{42525} (16 z^{11} - 856 z^{10} + 16740 z^9 - 149358 z^8 + 615840 z^7 - 1028520 z^6 + 423360 z^5 + 50400 z^4 + 7560 z^3 - 2700 z^2 + 9450 z + 42525) + \frac{1}{42525} \left(e^{-z} \sqrt{\pi} (-16 z^{23/2} + 864 z^{21/2} - 17160 z^{19/2} + 157320 z^{17/2} - 683145 z^{15/2} + 1279080 z^{13/2} - 755820 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ac5g.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{8505} (8 z^{10} + 364 z^9 + 5826 z^8 + 39895 z^7 + 110940 z^6 + 84672 z^5 - 16800 z^4 + 7560 z^3 - 2700 z^2 - 3150 z + 8505) + \frac{1}{8505} e^z \sqrt{\pi} (16 z^{21/2} + 736 z^{19/2} + 12008 z^{17/2} + 85272 z^{15/2} + 256785 z^{13/2} + 251940 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ac5h.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{8505} (8z^{10} - 364z^9 + 5826z^8 - 39895z^7 + 110940z^6 - 84672z^5 - 16800z^4 - 7560z^3 - 2700z^2 + 3150z + 8505) + \frac{1}{17010} e^{-z} \sqrt{\pi} (-16z^{21/2} + 736z^{19/2} - 12008z^{17/2} + 85272z^{15/2} - 256785z^{13/2} + 251940z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac5i.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{-8z^9 - 300z^8 - 3730z^7 - 17655z^6 - 24192z^5 + 6720z^4 - 5040z^3 + 5400z^2 - 6300z + 5670}{5670} + \frac{e^z \sqrt{\pi} (-16z^{19/2} - 608z^{17/2} - 7752z^{15/2} - 38760z^{13/2} - 62985z^{11/2}) \operatorname{erf}(\sqrt{z})}{11340}$$

07.25.03.ac5j.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670}{5670} + \frac{e^{-z} \sqrt{\pi} (-16z^{19/2} + 608z^{17/2} - 7752z^{15/2} + 38760z^{13/2} - 62985z^{11/2}) \operatorname{erfi}(\sqrt{z})}{11340}$$

07.25.03.ac5k.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{8z^8 + 236z^7 + 2082z^6 + 5271z^5 - 1380z^4 - 252z^3 + 3960z^2 - 10080z + 11340}{11340} + \frac{1}{22680} (e^z \sqrt{\pi} (16z^{17/2} + 480z^{15/2} + 4392z^{13/2} + 12408z^{11/2} + 945z^{9/2} - 3780z^{7/2} + 11340z^{5/2} - 22680z^{3/2} + 22680\sqrt{z}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ac5l.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{8z^8 - 236z^7 + 2082z^6 - 5271z^5 - 1380z^4 + 252z^3 + 3960z^2 + 10080z + 11340}{11340} + \frac{1}{22680} (e^{-z} \sqrt{\pi} (-16z^{17/2} + 480z^{15/2} - 4392z^{13/2} + 12408z^{11/2} - 945z^{9/2} - 3780z^{7/2} - 11340z^{5/2} - 22680z^{3/2} - 22680\sqrt{z}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ac5m.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, 1; z\right) = \frac{e^z (16z^8 + 416z^7 + 3048z^6 + 5112z^5 - 4815z^4 + 6480z^3 - 3960z^2 - 10080z + 22680)}{22680}$$

07.25.03.ac5n.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{8z^7 + 172z^6 + 882z^5 + 55z^4 - 1392z^3 + 4860z^2 - 10080z + 10080}{22680} + \frac{1}{45360\sqrt{z}} e^z \sqrt{\pi} (16z^8 + 352z^7 + 1928z^6 + 840z^5 - 3255z^4 + 9240z^3 - 16380z^2 + 10080z + 12600) \operatorname{erf}(\sqrt{z})$$

07.25.03.ac5o.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{-8z^7 + 172z^6 - 882z^5 + 55z^4 + 1392z^3 + 4860z^2 + 10080z + 10080}{22680} + \frac{1}{45360\sqrt{z}} e^{-z} \sqrt{\pi} (16z^8 - 352z^7 + 1928z^6 - 840z^5 - 3255z^4 - 9240z^3 - 16380z^2 - 10080z + 12600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac5p.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, 2; z\right) = \frac{e^z (16z^7 + 288z^6 + 1032z^5 - 1080z^4 + 585z^3 + 4140z^2 - 16380z + 22680)}{22680}$$

07.25.03.ac5q.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{8z^7 + 108z^6 + 130z^5 - 681z^4 + 1980z^3 - 3240z^2 + 720z + 5400}{15120z} + \frac{1}{30240z^{3/2}} e^z \sqrt{\pi} (16z^8 + 224z^7 + 360z^6 - 1320z^5 + 3345z^4 - 4140z^3 - 3960z^2 + 18000z - 5400) \operatorname{erf}(\sqrt{z})$$

07.25.03.ac5r.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{8z^7 - 108z^6 + 130z^5 + 681z^4 + 1980z^3 + 3240z^2 + 720z - 5400}{15120z} + \frac{1}{30240z^{3/2}} e^{-z} \sqrt{\pi} (-16z^8 + 224z^7 - 360z^6 - 1320z^5 - 3345z^4 - 4140z^3 + 3960z^2 + 18000z + 5400) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac5s.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, 3; z\right) = \frac{e^z (16z^6 + 160z^5 - 88z^4 - 552z^3 + 3345z^2 - 9240z + 11340)}{11340}$$

07.25.03.ac5t.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{8z^7 + 44z^6 - 174z^5 + 375z^4 - 2808z^3 + 7920z^2 - 7560}{6048z^2} + \frac{e^z \sqrt{\pi} (16z^8 + 96z^7 - 312z^6 + 552z^5 + 585z^4 - 6480z^3 + 15480z^2 - 12960z + 7560) \operatorname{erf}(\sqrt{z})}{12096z^{5/2}}$$

07.25.03.ac5u.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{-8z^7 + 44z^6 + 174z^5 + 375z^4 - 2808z^3 - 7920z^2 - 7560}{6048z^2} + \frac{1}{12096z^{5/2}} e^{-z} \sqrt{\pi} (16z^8 - 96z^7 - 312z^6 - 552z^5 + 585z^4 + 6480z^3 + 15480z^2 + 12960z + 7560) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac5v.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, 4; z\right) = \frac{e^z (16z^5 + 32z^4 - 312z^3 + 1320z^2 - 3255z + 3780)}{3780}$$

07.25.03.ac5w.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{8z^7 - 20z^6 - 30z^5 + 535z^4 - 2628z^3 + 7740z^2 - 15960z + 25200}{1728z^3} + \frac{1}{3456z^{7/2}} e^z \sqrt{\pi} (16z^8 - 32z^7 - 88z^6 + 1080z^5 - 4815z^4 + 12780z^3 - 22860z^2 + 32760z - 25200) \operatorname{erf}(\sqrt{z})$$

07.25.03.ac5x.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{8z^7 + 20z^6 - 30z^5 - 535z^4 - 2628z^3 - 7740z^2 - 15960z - 25200}{1728z^3} + \frac{1}{3456z^{7/2}} e^{-z} \sqrt{\pi} (-16z^8 - 32z^7 + 88z^6 + 1080z^5 + 4815z^4 + 12780z^3 + 22860z^2 + 32760z + 25200) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac5y.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, 5; z\right) = \frac{1}{945} e^z (16z^4 - 96z^3 + 360z^2 - 840z + 945)$$

07.25.03.ac5z.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{8z^7 - 84z^6 + 562z^5 - 2889z^4 + 12240z^3 - 43932z^2 + 131040z - 317520}{384z^4} + \frac{1}{768z^{9/2}} e^z \sqrt{\pi} (16z^8 - 160z^7 + 1032z^6 - 5112z^5 + 20745z^4 - 70200z^3 + 187740z^2 - 342720z + 317520) \operatorname{erf}(\sqrt{z})$$

07.25.03.ac60.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{-8z^7 - 84z^6 - 562z^5 - 2889z^4 - 12240z^3 - 43932z^2 - 131040z - 317520}{384z^4} + \frac{1}{768z^{9/2}} e^{-z} \sqrt{\pi} (16z^8 + 160z^7 + 1032z^6 + 5112z^5 + 20745z^4 + 70200z^3 + 187740z^2 + 342720z + 317520) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac61.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{9}{2}, 6; z\right) = \frac{1}{189z^5} e^z (16z^8 - 224z^7 + 1928z^6 - 12408z^5 + 62985z^4 - 251940z^3 + 755820z^2 - 1511640z + 1511640) - \frac{167960}{21z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = -\frac{7}{2}$

07.25.03.ac62.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{33075} (-16z^{11} - 872z^{10} - 17500z^9 - 162306z^8 - 713766z^7 - 1356180z^6 - 832500z^5 - 50400z^4 - 2520z^3 - 1620z^2 - 6750z + 33075) + \frac{1}{33075} \left(e^z \sqrt{\pi} (-16z^{23/2} - 880z^{21/2} - 17928z^{19/2} - 170640z^{17/2} - 787185z^{15/2} - 1650105z^{13/2} - 1292850z^{11/2} - 218790z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ac63.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{33075} (16z^{11} - 872z^{10} + 17500z^9 - 162306z^8 + 713766z^7 - 1356180z^6 + 832500z^5 - 50400z^4 + 2520z^3 - 1620z^2 + 6750z + 33075) + \frac{1}{33075} \left(e^{-z} \sqrt{\pi} (-16z^{23/2} + 880z^{21/2} - 17928z^{19/2} + 170640z^{17/2} - 787185z^{15/2} + 1650105z^{13/2} - 1292850z^{11/2} + 218790z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ac64.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{4725} (8z^{10} + 380z^9 + 6474z^8 + 48963z^7 + 163830z^6 + 204570z^5 + 50400z^4 - 2520z^3 - 540z^2 - 1350z + 4725) + \frac{1}{9450} e^z \sqrt{\pi} (16z^{21/2} + 768z^{19/2} + 13320z^{17/2} + 104040z^{15/2} + 371025z^{13/2} + 537030z^{11/2} + 218790z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ac65.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{4725} (8z^{10} - 380z^9 + 6474z^8 - 48963z^7 + 163830z^6 - 204570z^5 + 50400z^4 + 2520z^3 - 540z^2 + 1350z + 4725) + \frac{1}{9450} e^{-z} \sqrt{\pi} (-16z^{21/2} + 768z^{19/2} - 13320z^{17/2} + 104040z^{15/2} - 371025z^{13/2} + 537030z^{11/2} - 218790z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac66.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{-8z^9 - 324z^8 - 4534z^7 - 26445z^6 - 59949z^5 - 33600z^4 + 5040z^3 - 1080z^2 - 900z + 1890}{1890} + \frac{e^z \sqrt{\pi} (-16z^{19/2} - 656z^{17/2} - 9384z^{15/2} - 57120z^{13/2} - 142545z^{11/2} - 109395z^{9/2}) \operatorname{erf}(\sqrt{z})}{3780}$$

07.25.03.ac67.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{8z^9 - 324z^8 + 4534z^7 - 26445z^6 + 59949z^5 - 33600z^4 - 5040z^3 - 1080z^2 + 900z + 1890}{1890} + \frac{e^{-z} \sqrt{\pi} (-16z^{19/2} + 656z^{17/2} - 9384z^{15/2} + 57120z^{13/2} - 142545z^{11/2} + 109395z^{9/2}) \operatorname{erfi}(\sqrt{z})}{3780}$$

07.25.03.ac68.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{8z^8 + 268z^7 + 2930z^6 + 11919z^5 + 13440z^4 - 3360z^3 + 2160z^2 - 1800z + 1260}{1260} + \frac{e^z \sqrt{\pi} (16z^{17/2} + 544z^{15/2} + 6120z^{13/2} + 26520z^{11/2} + 36465z^{9/2}) \operatorname{erf}(\sqrt{z})}{2520}$$

07.25.03.ac69.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260}{1260} + \frac{e^{-z} \sqrt{\pi} (-16z^{17/2} + 544z^{15/2} - 6120z^{13/2} + 26520z^{11/2} - 36465z^{9/2}) \operatorname{erfi}(\sqrt{z})}{2520}$$

07.25.03.ac6a.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{-8z^7 - 212z^6 - 1662z^5 - 3705z^4 + 777z^3 + 450z^2 - 2070z + 2520}{2520} + \frac{1}{5040} e^z \sqrt{\pi} (-16z^{15/2} - 432z^{13/2} - 3528z^{11/2} - 8880z^{9/2} - 945z^{7/2} + 2835z^{5/2} - 5670z^{3/2} + 5670\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ac6b.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{8z^7 - 212z^6 + 1662z^5 - 3705z^4 - 777z^3 + 450z^2 + 2070z + 2520}{2520} + \frac{1}{5040} e^{-z} \sqrt{\pi} (-16z^{15/2} + 432z^{13/2} - 3528z^{11/2} + 8880z^{9/2} - 945z^{7/2} - 2835z^{5/2} - 5670z^{3/2} - 5670\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac6c.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, 1; z\right) = -\frac{e^z (8z^7 + 188z^6 + 1242z^5 + 1935z^4 - 1440z^3 + 1080z^2 + 720z - 2520)}{2520}$$

07.25.03.ac6d.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{-8z^6 - 156z^5 - 730z^4 - 123z^3 + 1062z^2 - 2430z + 2520}{5040} + \frac{e^z \sqrt{\pi} (-16z^7 - 320z^6 - 1608z^5 - 840z^4 + 2415z^3 - 4410z^2 + 3150z + 2520) \operatorname{erf}(\sqrt{z})}{10080\sqrt{z}}$$

07.25.03.ac6e.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{-8z^6 + 156z^5 - 730z^4 + 123z^3 + 1062z^2 + 2430z + 2520}{5040} + \frac{e^{-z} \sqrt{\pi} (16z^7 - 320z^6 + 1608z^5 - 840z^4 - 2415z^3 - 4410z^2 - 3150z + 2520) \operatorname{erfi}(\sqrt{z})}{10080\sqrt{z}}$$

07.25.03.ac6f.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, 2; z\right) = -\frac{e^z (8z^6 + 132z^5 + 450z^4 - 315z^3 - 180z^2 + 1620z - 2520)}{2520}$$

07.25.03.ac6g.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{-8z^6 - 100z^5 - 134z^4 + 507z^3 - 945z^2 + 540z + 900}{3360z} + \frac{e^z \sqrt{\pi} (-16z^7 - 208z^6 - 360z^5 + 960z^4 - 1425z^3 - 135z^2 + 3420z - 900) \operatorname{erf}(\sqrt{z})}{6720z^{3/2}}$$

07.25.03.ac6h.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{8z^6 - 100z^5 + 134z^4 + 507z^3 + 945z^2 + 540z - 900}{3360z} + \frac{e^{-z} \sqrt{\pi} (-16z^7 + 208z^6 - 360z^5 - 960z^4 - 1425z^3 + 135z^2 + 3420z + 900) \operatorname{erfi}(\sqrt{z})}{6720z^{3/2}}$$

07.25.03.ac6i.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, 3; z\right) = -\frac{e^z (8z^5 + 76z^4 - 6z^3 - 285z^2 + 960z - 1260)}{1260}$$

07.25.03.ac6j.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{-8z^6 - 44z^5 + 126z^4 - 135z^3 - 324z^2 + 1260z - 1080}{1344z^2} + \frac{e^z \sqrt{\pi} (-16z^7 - 96z^6 + 216z^5 - 120z^4 - 945z^3 + 2700z^2 - 1980z + 1080) \operatorname{erf}(\sqrt{z})}{2688z^{5/2}}$$

07.25.03.ac6k.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{-8z^6 + 44z^5 + 126z^4 + 135z^3 - 324z^2 - 1260z - 1080}{1344z^2} + \frac{e^{-z} \sqrt{\pi} (16z^7 - 96z^6 - 216z^5 - 120z^4 + 945z^3 + 2700z^2 + 1980z + 1080) \operatorname{erfi}(\sqrt{z})}{2688z^{5/2}}$$

07.25.03.ac6l.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, 4; z\right) = -\frac{1}{420} e^z (8z^4 + 20z^3 - 126z^2 + 345z - 420)$$

07.25.03.ac6m.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{-8z^6 + 12z^5 + 50z^4 - 369z^3 + 1125z^2 - 2130z + 3150}{384z^3} + \frac{e^z \sqrt{\pi} (-16z^7 + 16z^6 + 120z^5 - 720z^4 + 1935z^3 - 3105z^2 + 4230z - 3150) \operatorname{erf}(\sqrt{z})}{768z^{7/2}}$$

07.25.03.ac6n.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{8z^6 + 12z^5 - 50z^4 - 369z^3 - 1125z^2 - 2130z - 3150}{384z^3} + \frac{e^{-z} \sqrt{\pi} (-16z^7 - 16z^6 + 120z^5 + 720z^4 + 1935z^3 + 3105z^2 + 4230z + 3150) \operatorname{erfi}(\sqrt{z})}{768z^{7/2}}$$

07.25.03.ac6o.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, 5; z\right) = -\frac{1}{105} e^z (8z^3 - 36z^2 + 90z - 105)$$

07.25.03.ac6p.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, \frac{11}{2}; z\right) = -\frac{3(8z^6 - 68z^5 + 362z^4 - 1485z^3 + 5118z^2 - 14910z + 35280)}{256z^4} - \frac{3e^z \sqrt{\pi} (16z^7 - 128z^6 + 648z^5 - 2520z^4 + 8145z^3 - 21330z^2 + 38430z - 35280) \operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ac6q.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z} \sqrt{\pi} (16z^7 + 128z^6 + 648z^5 + 2520z^4 + 8145z^3 + 21330z^2 + 38430z + 35280) \operatorname{erfi}(\sqrt{z})}{512z^{9/2}} - \frac{3(8z^6 + 68z^5 + 362z^4 + 1485z^3 + 5118z^2 + 14910z + 35280)}{256z^4}$$

07.25.03.ac6r.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{7}{2}, 6; z\right) = \frac{e^z (-8z^7 + 92z^6 - 642z^5 + 3315z^4 - 13260z^3 + 39780z^2 - 79560z + 79560)}{21z^5} - \frac{26520}{7z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = -\frac{5}{2}$

07.25.03.ac6s.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{-8z^9 - 332z^8 - 4818z^7 - 29847z^6 - 76320z^5 - 62190z^4 - 5040z^3 - 360z^2 - 540z + 1350}{1350} + \frac{1}{2700} e^z \sqrt{\pi} (-16z^{19/2} - 672z^{17/2} - 9960z^{15/2} - 64200z^{13/2} - 178425z^{11/2} - 180180z^{9/2} - 38610z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ac6t.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{8z^9 - 332z^8 + 4818z^7 - 29847z^6 + 76320z^5 - 62190z^4 + 5040z^3 - 360z^2 + 540z + 1350}{1350} + \frac{1}{2700} e^{-z} \sqrt{\pi} (-16z^{19/2} + 672z^{17/2} - 9960z^{15/2} + 64200z^{13/2} - 178425z^{11/2} + 180180z^{9/2} - 38610z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac6u.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{540} (8z^8 + 284z^7 + 3402z^6 + 16371z^5 + 28590z^4 + 10080z^3 - 720z^2 - 360z + 540) + \frac{e^z \sqrt{\pi} (16z^{17/2} + 576z^{15/2} + 7080z^{13/2} + 35880z^{11/2} + 70785z^{9/2} + 38610z^{7/2}) \operatorname{erf}(\sqrt{z})}{1080}$$

07.25.03.ac6v.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{540} (8z^8 - 284z^7 + 3402z^6 - 16371z^5 + 28590z^4 - 10080z^3 - 720z^2 + 360z + 540) + \frac{e^{-z} \sqrt{\pi} (-16z^{17/2} + 576z^{15/2} - 7080z^{13/2} + 35880z^{11/2} - 70785z^{9/2} + 38610z^{7/2}) \operatorname{erfi}(\sqrt{z})}{1080}$$

07.25.03.ac6w.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{360} (-8z^7 - 236z^6 - 2226z^5 - 7575z^4 - 6720z^3 + 1440z^2 - 720z + 360) + \frac{1}{720} e^z \sqrt{\pi} (-16z^{15/2} - 480z^{13/2} - 4680z^{11/2} - 17160z^{9/2} - 19305z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ac6x.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{360} (8z^7 - 236z^6 + 2226z^5 - 7575z^4 + 6720z^3 + 1440z^2 + 720z + 360) + \frac{1}{720} e^{-z} \sqrt{\pi} (-16z^{15/2} + 480z^{13/2} - 4680z^{11/2} + 17160z^{9/2} - 19305z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac6y.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{720} (8z^6 + 188z^5 + 1290z^4 + 2499z^3 - 330z^2 - 450z + 720) + \frac{e^z \sqrt{\pi} (16z^{13/2} + 384z^{11/2} + 2760z^{9/2} + 6120z^{7/2} + 945z^{5/2} - 1890z^{3/2} + 1890\sqrt{z}) \operatorname{erf}(\sqrt{z})}{1440}$$

07.25.03.ac6z.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{720} (8z^6 - 188z^5 + 1290z^4 - 2499z^3 - 330z^2 + 450z + 720) + \frac{e^{-z} \sqrt{\pi} (-16z^{13/2} + 384z^{11/2} - 2760z^{9/2} + 6120z^{7/2} - 945z^{5/2} - 1890z^{3/2} - 1890\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1440}$$

07.25.03.ac70.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, 1; z\right) = \frac{1}{360} e^z (4z^6 + 84z^5 + 495z^4 + 720z^3 - 360z^2 + 360)$$

07.25.03.ac71.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{8z^5 + 140z^4 + 594z^3 + 183z^2 - 720z + 810}{1440} + \frac{e^z \sqrt{\pi} (16z^6 + 288z^5 + 1320z^4 + 840z^3 - 1575z^2 + 1260z + 630) \operatorname{erf}(\sqrt{z})}{2880\sqrt{z}}$$

07.25.03.ac72.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{-8z^5 + 140z^4 - 594z^3 + 183z^2 + 720z + 810}{1440} + \frac{e^{-z} \sqrt{\pi} (16z^6 - 288z^5 + 1320z^4 - 840z^3 - 1575z^2 - 1260z + 630) \operatorname{erfi}(\sqrt{z})}{2880\sqrt{z}}$$

07.25.03.ac73.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, 2; z\right) = \frac{1}{360} e^z (4z^5 + 60z^4 + 195z^3 - 60z^2 - 180z + 360)$$

07.25.03.ac74.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{8z^5 + 92z^4 + 138z^3 - 333z^2 + 270z + 180}{960z} + \frac{e^z \sqrt{\pi} (16z^6 + 192z^5 + 360z^4 - 600z^3 + 225z^2 + 810z - 180) \operatorname{erf}(\sqrt{z})}{1920z^{3/2}}$$

07.25.03.ac75.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{8z^5 - 92z^4 + 138z^3 + 333z^2 + 270z - 180}{960z} + \frac{e^{-z} \sqrt{\pi} (-16z^6 + 192z^5 - 360z^4 - 600z^3 - 225z^2 + 810z + 180) \operatorname{erfi}(\sqrt{z})}{1920z^{3/2}}$$

07.25.03.ac76.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, 3; z\right) = \frac{1}{180} e^z (4z^4 + 36z^3 + 15z^2 - 120z + 180)$$

07.25.03.ac77.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{8z^5 + 44z^4 - 78z^3 - 9z^2 + 240z - 180}{384z^2} + \frac{e^z \sqrt{\pi} (16z^6 + 96z^5 - 120z^4 - 120z^3 + 585z^2 - 360z + 180) \operatorname{erf}(\sqrt{z})}{768z^{5/2}}$$

07.25.03.ac78.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-8z^5 + 44z^4 + 78z^3 - 9z^2 - 240z - 180}{384z^2} + \frac{e^{-z}\sqrt{\pi}(16z^6 - 96z^5 - 120z^4 + 120z^3 + 585z^2 + 360z + 180)\operatorname{erfi}(\sqrt{z})}{768z^{5/2}}$$

07.25.03.ac79.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, 4; z\right) = \frac{1}{60} e^z (4z^3 + 12z^2 - 45z + 60)$$

07.25.03.ac7a.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7(8z^5 - 4z^4 - 54z^3 + 195z^2 - 330z + 450)}{768z^3} + \frac{7e^z\sqrt{\pi}(16z^6 - 120z^4 + 360z^3 - 495z^2 + 630z - 450)\operatorname{erf}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.ac7b.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(8z^5 + 4z^4 - 54z^3 - 195z^2 - 330z - 450)}{768z^3} - \frac{7e^{-z}\sqrt{\pi}(16z^6 - 120z^4 - 360z^3 - 495z^2 - 630z - 450)\operatorname{erfi}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.ac7c.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, 5; z\right) = \frac{1}{15} e^z (4z^2 - 12z + 15)$$

07.25.03.ac7d.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{21(8z^5 - 52z^4 + 210z^3 - 681z^2 + 1920z - 4410)}{512z^4} + \frac{21e^z\sqrt{\pi}(16z^6 - 96z^5 + 360z^4 - 1080z^3 + 2745z^2 - 4860z + 4410)\operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.ac7e.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z}\sqrt{\pi}(16z^6 + 96z^5 + 360z^4 + 1080z^3 + 2745z^2 + 4860z + 4410)\operatorname{erfi}(\sqrt{z})}{1024z^{9/2}} - \frac{21(8z^5 + 52z^4 + 210z^3 + 681z^2 + 1920z + 4410)}{512z^4}$$

07.25.03.ac7f.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{5}{2}, 6; z\right) = \frac{e^z(4z^6 - 36z^5 + 195z^4 - 780z^3 + 2340z^2 - 4680z + 4680)}{3z^5} - \frac{1560}{z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = -\frac{3}{2}$

07.25.03.ac7g.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{216} (-8z^7 - 244z^6 - 2430z^5 - 9193z^4 - 11151z^3 - 1440z^2 - 240z + 216) + \frac{1}{432} e^z \sqrt{\pi} (-16z^{15/2} - 496z^{13/2} - 5096z^{11/2} - 20592z^{9/2} - 29601z^{7/2} - 9009z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ac7h.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{216} (8z^7 - 244z^6 + 2430z^5 - 9193z^4 + 11151z^3 - 1440z^2 + 240z + 216) + \frac{1}{432} e^{-z} \sqrt{\pi} (-16z^{15/2} + 496z^{13/2} - 5096z^{11/2} + 20592z^{9/2} - 29601z^{7/2} + 9009z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac7i.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{144} (8z^6 + 204z^5 + 1618z^4 + 4431z^3 + 2880z^2 - 480z + 144) + \frac{1}{288} e^z \sqrt{\pi} (16z^{13/2} + 416z^{11/2} + 3432z^{9/2} + 10296z^{7/2} + 9009z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ac7j.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{144} (8z^6 - 204z^5 + 1618z^4 - 4431z^3 + 2880z^2 + 480z + 144) + \frac{1}{288} e^{-z} \sqrt{\pi} (-16z^{13/2} + 416z^{11/2} - 3432z^{9/2} + 10296z^{7/2} - 9009z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac7k.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{288} (-8z^5 - 164z^4 - 966z^3 - 1605z^2 + 15z + 288) + \frac{1}{576} e^z \sqrt{\pi} (-16z^{11/2} - 336z^{9/2} - 2088z^{7/2} - 4032z^{5/2} - 945z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ac7l.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{288} (8z^5 - 164z^4 + 966z^3 - 1605z^2 - 15z + 288) + \frac{1}{576} e^{-z} \sqrt{\pi} (-16z^{11/2} + 336z^{9/2} - 2088z^{7/2} + 4032z^{5/2} - 945z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac7m.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, 1; z\right) = -\frac{1}{72} e^z (2z^5 + 37z^4 + 192z^3 + 264z^2 - 48z - 72)$$

07.25.03.ac7n.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{576} (-8z^4 - 124z^3 - 474z^2 - 235z + 366) + \frac{e^z \sqrt{\pi} (-16z^5 - 256z^4 - 1064z^3 - 840z^2 + 735z + 210) \operatorname{erf}(\sqrt{z})}{1152 \sqrt{z}}$$

07.25.03.ac7o.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{576} (-8z^4 + 124z^3 - 474z^2 + 235z + 366) + \frac{e^{-z} \sqrt{\pi} (16z^5 - 256z^4 + 1064z^3 - 840z^2 - 735z + 210) \operatorname{erfi}(\sqrt{z})}{1152 \sqrt{z}}$$

07.25.03.ac7p.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, 2; z\right) = -\frac{1}{72} e^z (2z^4 + 27z^3 + 84z^2 + 12z - 72)$$

07.25.03.ac7q.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{-8z^4 - 84z^3 - 142z^2 + 159z + 45}{384z} + \frac{e^z \sqrt{\pi} (-16z^5 - 176z^4 - 360z^3 + 240z^2 + 255z - 45) \operatorname{erf}(\sqrt{z})}{768z^{3/2}}$$

07.25.03.ac7r.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{8z^4 - 84z^3 + 142z^2 + 159z - 45}{384z} + \frac{e^{-z} \sqrt{\pi} (-16z^5 + 176z^4 - 360z^3 - 240z^2 + 255z + 45) \operatorname{erfi}(\sqrt{z})}{768z^{3/2}}$$

07.25.03.ac7s.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, 3; z\right) = -\frac{1}{36} e^z (2z^3 + 17z^2 + 16z - 36)$$

07.25.03.ac7t.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, \frac{7}{2}; z\right) = -\frac{5(8z^4 + 44z^3 - 30z^2 - 57z + 36)}{768z^2} - \frac{5e^z \sqrt{\pi} (16z^5 + 96z^4 - 24z^3 - 168z^2 + 81z - 36) \operatorname{erf}(\sqrt{z})}{1536z^{5/2}}$$

07.25.03.ac7u.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^5 - 96z^4 - 24z^3 + 168z^2 + 81z + 36) \operatorname{erfi}(\sqrt{z})}{1536z^{5/2}} - \frac{5(8z^4 - 44z^3 - 30z^2 + 57z + 36)}{768z^2}$$

07.25.03.ac7v.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, 4; z\right) = -\frac{1}{12} e^z (2z^2 + 7z - 12)$$

07.25.03.ac7w.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, \frac{9}{2}; z\right) = -\frac{35(8z^4 + 4z^3 - 42z^2 + 61z - 75)}{1536z^3} - \frac{35e^z \sqrt{\pi} (16z^5 + 16z^4 - 88z^3 + 96z^2 - 111z + 75) \operatorname{erf}(\sqrt{z})}{3072z^{7/2}}$$

07.25.03.ac7x.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^4 - 4z^3 - 42z^2 - 61z - 75)}{1536z^3} - \frac{35e^{-z} \sqrt{\pi} (16z^5 - 16z^4 - 88z^3 - 96z^2 - 111z - 75) \operatorname{erfi}(\sqrt{z})}{3072z^{7/2}}$$

07.25.03.ac7y.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, 5; z\right) = -\frac{1}{3} e^z (2z - 3)$$

07.25.03.ac7z.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{105(8z^4 - 36z^3 + 106z^2 - 285z + 630)}{1024z^4} - \frac{105e^z \sqrt{\pi} (16z^5 - 64z^4 + 168z^3 - 408z^2 + 705z - 630) \operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.ac80.01} \\
 & {}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{105 e^{-z} \sqrt{\pi} (16 z^5 + 64 z^4 + 168 z^3 + 408 z^2 + 705 z + 630) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}} - \frac{105 (8 z^4 + 36 z^3 + 106 z^2 + 285 z + 630)}{1024 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac81.01} \\
 & {}_2F_2\left(-\frac{1}{2}, 5; -\frac{3}{2}, 6; z\right) = -\frac{5 e^z (2 z^5 - 13 z^4 + 52 z^3 - 156 z^2 + 312 z - 312)}{3 z^5} - \frac{520}{z^5}
 \end{aligned}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = -\frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.ac82.01} \\
 & {}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{96} (-8 z^5 - 172 z^4 - 1106 z^3 - 2295 z^2 - 960 z + 96) + \\
 & \frac{1}{192} e^z \sqrt{\pi} (-16 z^{11/2} - 352 z^{9/2} - 2376 z^{7/2} - 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac83.01} \\
 & {}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{96} (8 z^5 - 172 z^4 + 1106 z^3 - 2295 z^2 + 960 z + 96) + \\
 & \frac{1}{192} e^{-z} \sqrt{\pi} (-16 z^{11/2} + 352 z^{9/2} - 2376 z^{7/2} + 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac84.01} \\
 & {}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, \frac{1}{2}; z\right) = \\
 & \frac{1}{192} (8 z^4 + 140 z^3 + 690 z^2 + 975 z + 192) + \frac{1}{384} e^z \sqrt{\pi} (16 z^{9/2} + 288 z^{7/2} + 1512 z^{5/2} + 2520 z^{3/2} + 945 \sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac85.01} \\
 & {}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, \frac{1}{2}; -z\right) = \\
 & \frac{1}{192} (8 z^4 - 140 z^3 + 690 z^2 - 975 z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (-16 z^{9/2} + 288 z^{7/2} - 1512 z^{5/2} + 2520 z^{3/2} - 945 \sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac86.01} \\
 & {}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, 1; z\right) = \frac{1}{24} e^z (z^4 + 16 z^3 + 72 z^2 + 96 z + 24)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac87.01} \\
 & {}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{384} (8 z^3 + 108 z^2 + 370 z + 279) + \frac{e^z \sqrt{\pi} (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ac88.01} \\
 & {}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} (-8 z^3 + 108 z^2 - 370 z + 279) + \frac{e^{-z} \sqrt{\pi} (16 z^4 - 224 z^3 + 840 z^2 - 840 z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}
 \end{aligned}$$

07.25.03.ac89.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, 2; z\right) = \frac{1}{24} e^z (z^3 + 12z^2 + 36z + 24)$$

07.25.03.ac8a.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.ac8b.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.ac8c.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, 3; z\right) = \frac{1}{12} e^z (z^2 + 8z + 12)$$

07.25.03.ac8d.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5e^z \sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.ac8e.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.ac8f.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, 4; z\right) = \frac{1}{4} e^z (z + 4)$$

07.25.03.ac8g.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35e^z \sqrt{\pi} (16z^4 + 32z^3 - 24z^2 + 24z - 15) \operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.ac8h.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35e^{-z} \sqrt{\pi} (16z^4 - 32z^3 - 24z^2 - 24z - 15) \operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.ac8i.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, 5; z\right) = e^z$$

07.25.03.ac8j.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{315(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315e^z \sqrt{\pi} (16z^4 - 32z^3 + 72z^2 - 120z + 105) \operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.ac8k.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z} \sqrt{\pi} (16z^4 + 32z^3 + 72z^2 + 120z + 105) \operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315(8z^3 + 20z^2 + 50z + 105)}{2048z^4}$$

07.25.03.ac8l.01

$${}_2F_2\left(-\frac{1}{2}, 5; -\frac{1}{2}, 6; z\right) = \frac{5e^z (z^4 - 4z^3 + 12z^2 - 24z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = \frac{1}{2}$

07.25.03.ac8m.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{1}{2}, 1; z\right) = \frac{1}{192} e^z (-4z^3 - 54z^2 - 207z + 192) - \frac{315}{128} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac8n.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{1}{2}, 1; -z\right) = \frac{1}{192} e^{-z} (4z^3 - 54z^2 + 207z + 192) + \frac{315}{128} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.ac8o.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{1}{2}, 2; z\right) = \frac{1}{96} e^z (-2z^2 - 21z + 96) - \frac{105}{64} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac8p.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{1}{2}, 2; -z\right) = \frac{1}{96} e^{-z} (-2z^2 + 21z + 96) + \frac{105}{64} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.ac8q.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{1}{2}, 3; z\right) = \frac{1}{24} e^z (24 - z) - \frac{21}{16} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac8r.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{1}{2}, 3; -z\right) = \frac{1}{24} e^{-z} (z + 24) + \frac{21}{16} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.ac8s.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{1}{2}, 4; z\right) = e^z - \frac{9}{8} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac8t.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{1}{2}, 4; -z\right) = \frac{9}{8} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.ac8u.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{1}{2}, 5; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ac8v.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{1}{2}, 5; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.ac8w.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{1}{2}, 6; z\right) = \frac{5 e^z (2z^5 + z^4 - 4z^3 + 12z^2 - 24z + 24)}{11 z^5} - \frac{10}{11} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z}) - \frac{120}{11 z^5}$$

07.25.03.ac8x.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{1}{2}, 6; -z\right) = \frac{5 e^{-z} (2z^5 - z^4 - 4z^3 - 12z^2 - 24z - 24)}{11 z^5} + \frac{10}{11} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + \frac{120}{11 z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = 1$

07.25.03.ac8y.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, 1; z\right) = \frac{1}{96} e^{z/2} (-z^3 - 13z^2 - 288z + 96) I_0\left(\frac{z}{2}\right) + \frac{1}{96} e^{z/2} (-z^3 - 12z^2 + 196z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac8z.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, \frac{3}{2}; z\right) = \frac{1}{768} e^z (-8z^2 - 88z + 663) - \frac{35\sqrt{\pi} (18z - 1) \operatorname{erfi}(\sqrt{z})}{512\sqrt{z}}$$

07.25.03.ac90.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, \frac{3}{2}; -z\right) = \frac{1}{768} e^{-z} (-8z^2 + 88z + 663) + \frac{35\sqrt{\pi} (18z + 1) \operatorname{erf}(\sqrt{z})}{512\sqrt{z}}$$

07.25.03.ac91.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, 2; z\right) = \frac{1}{96} e^{z/2} (-z^2 - 168z + 96) I_0\left(\frac{z}{2}\right) + \frac{1}{96} e^{z/2} (148z - z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac92.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, \frac{5}{2}; z\right) = \frac{e^z (-32z^2 + 1618z + 15)}{2048z} - \frac{15\sqrt{\pi} (252z^2 - 28z + 1) \operatorname{erfi}(\sqrt{z})}{4096z^{3/2}}$$

07.25.03.ac93.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, \frac{5}{2}; -z\right) = \frac{e^{-z} (32z^2 + 1618z - 15)}{2048z} + \frac{15\sqrt{\pi} (252z^2 + 28z + 1) \operatorname{erf}(\sqrt{z})}{4096z^{3/2}}$$

07.25.03.ac94.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, 3; z\right) = \frac{1}{3} e^{z/2} (3 - 4z) I_0\left(\frac{z}{2}\right) + \frac{31}{24} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.ac95.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, \frac{7}{2}; z\right) = \frac{5e^z (1196z^2 + 36z - 9)}{8192z^2} - \frac{15\sqrt{\pi} (840z^3 - 140z^2 + 10z - 3) \operatorname{erfi}(\sqrt{z})}{16384z^{5/2}}$$

07.25.03.ac96.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, \frac{7}{2}; -z\right) = \frac{5e^{-z} (1196z^2 - 36z - 9)}{8192z^2} + \frac{15\sqrt{\pi} (840z^3 + 140z^2 + 10z + 3) \operatorname{erf}(\sqrt{z})}{16384z^{5/2}}$$

07.25.03.ac97.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, 4; z\right) = \frac{1}{8} e^{z/2} (8 - 9z) I_0\left(\frac{z}{2}\right) + \frac{9}{8} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.ac98.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, \frac{9}{2}; z\right) = \frac{35e^z (2520z^3 + 188z^2 - 122z + 75)}{131072z^3} - \frac{35\sqrt{\pi} (5040z^4 - 1120z^3 + 120z^2 - 72z + 75) \operatorname{erfi}(\sqrt{z})}{262144z^{7/2}}$$

07.25.03.ac99.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, \frac{9}{2}; -z\right) = \frac{35e^{-z} (2520z^3 - 188z^2 - 122z - 75)}{131072z^3} + \frac{35\sqrt{\pi} (5040z^4 + 1120z^3 + 120z^2 + 72z + 75) \operatorname{erf}(\sqrt{z})}{262144z^{7/2}}$$

07.25.03.ac9a.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, 5; z\right) = e^{z/2} (1 - z) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.ac9b.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, \frac{11}{2}; z\right) = \frac{315 e^z (1008 z^4 + 224 z^3 - 368 z^2 + 640 z - 735)}{524288 z^4} - \frac{315 \sqrt{\pi} (2016 z^5 - 560 z^4 + 80 z^3 - 72 z^2 + 150 z - 735) \operatorname{erfi}(\sqrt{z})}{1048576 z^{9/2}}$$

07.25.03.ac9c.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (1008 z^4 - 224 z^3 - 368 z^2 - 640 z - 735)}{524288 z^4} + \frac{315 \sqrt{\pi} (2016 z^5 + 560 z^4 + 80 z^3 + 72 z^2 + 150 z + 735) \operatorname{erf}(\sqrt{z})}{1048576 z^{9/2}}$$

07.25.03.ac9d.01

$${}_2F_2\left(-\frac{1}{2}, 5; 1, 6; z\right) = \frac{e^{z/2} (-630 z^4 + 665 z^3 + 120 z^2 - 384 z + 768) I_0\left(\frac{z}{2}\right)}{693 z^3} + \frac{e^{z/2} (630 z^5 - 35 z^4 + 160 z^3 - 576 z^2 + 1536 z - 3072) I_1\left(\frac{z}{2}\right)}{693 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = \frac{3}{2}$

07.25.03.ac9e.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{3}{2}, 2; z\right) = \frac{1}{384} e^z (279 - 4z) - \frac{35 \sqrt{\pi} (6z - 1) \operatorname{erfi}(\sqrt{z})}{256 \sqrt{z}}$$

07.25.03.ac9f.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{3}{2}, 2; -z\right) = \frac{1}{384} e^{-z} (4z + 279) + \frac{35 \sqrt{\pi} (6z + 1) \operatorname{erf}(\sqrt{z})}{256 \sqrt{z}}$$

07.25.03.ac9g.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{3}{2}, 3; z\right) = \frac{61 e^z}{96} - \frac{7 \sqrt{\pi} (18z - 5) \operatorname{erfi}(\sqrt{z})}{192 \sqrt{z}}$$

07.25.03.ac9h.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{3}{2}, 3; -z\right) = \frac{7 \sqrt{\pi} (18z + 5) \operatorname{erf}(\sqrt{z})}{192 \sqrt{z}} + \frac{61 e^{-z}}{96}$$

07.25.03.ac9i.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{3}{2}, 4; z\right) = \frac{\sqrt{\pi} (7 - 18z) \operatorname{erfi}(\sqrt{z})}{32 \sqrt{z}} + \frac{9 e^z}{16}$$

07.25.03.ac9j.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{3}{2}, 4; -z\right) = \frac{\sqrt{\pi} (18z + 7) \operatorname{erf}(\sqrt{z})}{32 \sqrt{z}} + \frac{9 e^{-z}}{16}$$

07.25.03.ac9k.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{3}{2}, 5; z\right) = \frac{\sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{e^z}{2}$$

07.25.03.ac9l.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{3}{2}, 5; -z\right) = \frac{\sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.ac9m.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{3}{2}, 6; z\right) = \frac{5e^z(9z^5 - z^4 + 4z^3 - 12z^2 + 24z - 24)}{99z^5} - \frac{5\sqrt{\pi}(18z - 11)\operatorname{erfi}(\sqrt{z})}{198\sqrt{z}} + \frac{40}{33z^5}$$

07.25.03.ac9n.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{3}{2}, 6; -z\right) = \frac{5e^{-z}(9z^5 + z^4 + 4z^3 + 12z^2 + 24z + 24)}{99z^5} + \frac{5\sqrt{\pi}(18z + 11)\operatorname{erf}(\sqrt{z})}{198\sqrt{z}} - \frac{40}{33z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = 2$

07.25.03.ac9o.01

$${}_2F_2\left(-\frac{1}{2}, 5; 2, 2; z\right) = \frac{1}{48} e^{z/2} (48 - 53z) I_0\left(\frac{z}{2}\right) + \frac{1}{12} e^{z/2} (13z - 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac9p.01

$${}_2F_2\left(-\frac{1}{2}, 5; 2, \frac{5}{2}; z\right) = \frac{e^z(614z - 15)}{1024z} - \frac{15\sqrt{\pi}(84z^2 - 28z - 1)\operatorname{erfi}(\sqrt{z})}{2048z^{3/2}}$$

07.25.03.ac9q.01

$${}_2F_2\left(-\frac{1}{2}, 5; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(614z + 15)}{1024z} + \frac{15\sqrt{\pi}(84z^2 + 28z - 1)\operatorname{erf}(\sqrt{z})}{2048z^{3/2}}$$

07.25.03.ac9r.01

$${}_2F_2\left(-\frac{1}{2}, 5; 2, 3; z\right) = \frac{1}{8} e^{z/2} (8 - 7z) I_0\left(\frac{z}{2}\right) + \frac{1}{24} e^{z/2} (21z - 4) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac9s.01

$${}_2F_2\left(-\frac{1}{2}, 5; 2, \frac{7}{2}; z\right) = \frac{5e^z(420z^2 - 32z + 3)}{4096z^2} - \frac{15\sqrt{\pi}(280z^3 - 140z^2 - 10z + 1)\operatorname{erfi}(\sqrt{z})}{8192z^{5/2}}$$

07.25.03.ac9t.01

$${}_2F_2\left(-\frac{1}{2}, 5; 2, \frac{7}{2}; -z\right) = \frac{5e^{-z}(420z^2 + 32z + 3)}{4096z^2} + \frac{15\sqrt{\pi}(280z^3 + 140z^2 - 10z - 1)\operatorname{erf}(\sqrt{z})}{8192z^{5/2}}$$

07.25.03.ac9u.01

$${}_2F_2\left(-\frac{1}{2}, 5; 2, 4; z\right) = \frac{1}{4} e^{z/2} (4 - 3z) I_0\left(\frac{z}{2}\right) + \frac{1}{4} e^{z/2} (3z - 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac9v.01

$${}_2F_2\left(-\frac{1}{2}, 5; 2, \frac{9}{2}; z\right) = \frac{35e^z(840z^3 - 140z^2 + 34z - 15)}{65536z^3} - \frac{35\sqrt{\pi}(1680z^4 - 1120z^3 - 120z^2 + 24z - 15)\operatorname{erfi}(\sqrt{z})}{131072z^{7/2}}$$

07.25.03.ac9w.01

$${}_2F_2\left(-\frac{1}{2}, 5; 2, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (840 z^3 + 140 z^2 + 34 z + 15)}{65 536 z^3} + \frac{35 \sqrt{\pi} (1680 z^4 + 1120 z^3 - 120 z^2 - 24 z - 15) \operatorname{erf}(\sqrt{z})}{131 072 z^{7/2}}$$

07.25.03.ac9x.01

$${}_2F_2\left(-\frac{1}{2}, 5; 2, 5; z\right) = \frac{1}{3} e^{z/2} (3 - 2z) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z - 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.ac9y.01

$${}_2F_2\left(-\frac{1}{2}, 5; 2, \frac{11}{2}; z\right) = \frac{315 e^z (336 z^4 - 112 z^3 + 72 z^2 - 100 z + 105)}{262 144 z^4} - \frac{315 \sqrt{\pi} (672 z^5 - 560 z^4 - 80 z^3 + 24 z^2 - 30 z + 105) \operatorname{erfi}(\sqrt{z})}{524 288 z^{9/2}}$$

07.25.03.ac9z.01

$${}_2F_2\left(-\frac{1}{2}, 5; 2, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (336 z^4 + 112 z^3 + 72 z^2 + 100 z + 105)}{262 144 z^4} + \frac{315 \sqrt{\pi} (672 z^5 + 560 z^4 - 80 z^3 - 24 z^2 - 30 z - 105) \operatorname{erf}(\sqrt{z})}{524 288 z^{9/2}}$$

07.25.03.aca0.01

$${}_2F_2\left(-\frac{1}{2}, 5; 2, 6; z\right) = \frac{4 e^{z/2} (105 z^5 - 70 z^4 - 10 z^3 + 36 z^2 - 96 z + 192) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{2 e^{z/2} (210 z^4 - 350 z^3 + 15 z^2 - 48 z + 96) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = \frac{5}{2}$

07.25.03.aca1.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{5}{2}, 3; z\right) = \frac{3 e^z (42 z - 5)}{256 z} + \frac{\sqrt{\pi} (-252 z^2 + 140 z + 15) \operatorname{erfi}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.aca2.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{5}{2}, 3; -z\right) = \frac{3 e^{-z} (42 z + 5)}{256 z} + \frac{\sqrt{\pi} (252 z^2 + 140 z - 15) \operatorname{erf}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.aca3.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{5}{2}, 4; z\right) = \frac{3 e^z (18 z - 5)}{128 z} - \frac{3 \sqrt{\pi} (36 z^2 - 28 z - 5) \operatorname{erfi}(\sqrt{z})}{256 z^{3/2}}$$

07.25.03.aca4.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{5}{2}, 4; -z\right) = \frac{3 e^{-z} (18 z + 5)}{128 z} + \frac{3 \sqrt{\pi} (36 z^2 + 28 z - 5) \operatorname{erf}(\sqrt{z})}{256 z^{3/2}}$$

07.25.03.aca5.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{5}{2}, 5; z\right) = \frac{3 e^z (2z - 1)}{16 z} - \frac{3 \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.aca6.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{5}{2}, 5; -z\right) = \frac{3e^{-z}(2z+1)}{16z} + \frac{3\sqrt{\pi}(4z^2+4z-1)\operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.aca7.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{5}{2}, 6; z\right) = \frac{5e^z(126z^5-91z^4-32z^3+96z^2-192z+192)}{1848z^5} - \frac{5\sqrt{\pi}(252z^2-308z-99)\operatorname{erfi}(\sqrt{z})}{3696z^{3/2}} - \frac{40}{77z^5}$$

07.25.03.aca8.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{5}{2}, 6; -z\right) = \frac{5e^{-z}(126z^5+91z^4-32z^3-96z^2-192z-192)}{1848z^5} + \frac{5\sqrt{\pi}(252z^2+308z-99)\operatorname{erf}(\sqrt{z})}{3696z^{3/2}} + \frac{40}{77z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = 3$

07.25.03.aca9.01

$${}_2F_2\left(-\frac{1}{2}, 5; 3, 3; z\right) = \frac{e^{z/2}(63z^2-28z-4)I_1\left(\frac{z}{2}\right)}{90z} - \frac{7}{90}e^{z/2}(9z-13)I_0\left(\frac{z}{2}\right)$$

07.25.03.acaa.01

$${}_2F_2\left(-\frac{1}{2}, 5; 3, \frac{7}{2}; z\right) = \frac{5e^z(84z^2-28z-3)}{1024z^2} - \frac{5\sqrt{\pi}(168z^3-140z^2-30z-3)\operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.acab.01

$${}_2F_2\left(-\frac{1}{2}, 5; 3, \frac{7}{2}; -z\right) = \frac{5e^{-z}(84z^2+28z-3)}{1024z^2} + \frac{5\sqrt{\pi}(168z^3+140z^2-30z+3)\operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.acac.01

$${}_2F_2\left(-\frac{1}{2}, 5; 3, 4; z\right) = \frac{1}{30}e^{z/2}(31-18z)I_0\left(\frac{z}{2}\right) + \frac{e^{z/2}(18z^2-13z-4)I_1\left(\frac{z}{2}\right)}{30z}$$

07.25.03.acad.01

$${}_2F_2\left(-\frac{1}{2}, 5; 3, \frac{9}{2}; z\right) = \frac{35e^z(504z^3-308z^2-82z+15)}{49152z^3} - \frac{35\sqrt{\pi}(1008z^4-1120z^3-360z^2-72z+15)\operatorname{erfi}(\sqrt{z})}{98304z^{7/2}}$$

07.25.03.acae.01

$${}_2F_2\left(-\frac{1}{2}, 5; 3, \frac{9}{2}; -z\right) = \frac{35e^{-z}(504z^3+308z^2-82z-15)}{49152z^3} + \frac{35\sqrt{\pi}(1008z^4+1120z^3-360z^2+72z+15)\operatorname{erf}(\sqrt{z})}{98304z^{7/2}}$$

07.25.03.acaf.01

$${}_2F_2\left(-\frac{1}{2}, 5; 3, 5; z\right) = \frac{4e^{z/2}(2z^2-2z-1)I_1\left(\frac{z}{2}\right)}{15z} - \frac{8}{15}e^{z/2}(z-2)I_0\left(\frac{z}{2}\right)$$

07.25.03.acag.01

$${}_2F_2\left(-\frac{1}{2}, 5; 3, \frac{11}{2}; z\right) = \frac{21e^z(1008z^4-896z^3-544z^2+360z-315)}{65536z^4} - \frac{21\sqrt{\pi}(2016z^5-2800z^4-1200z^3-360z^2+150z-315)\operatorname{erfi}(\sqrt{z})}{131072z^{9/2}}$$

07.25.03.acah.01

$${}_2F_2\left(-\frac{1}{2}, 5; 3, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (1008 z^4 + 896 z^3 - 544 z^2 - 360 z - 315)}{65\,536 z^4} + \frac{21 \sqrt{\pi} (2016 z^5 + 2800 z^4 - 1200 z^3 + 360 z^2 + 150 z + 315) \operatorname{erf}(\sqrt{z})}{131\,072 z^{9/2}}$$

07.25.03.acai.01

$${}_2F_2\left(-\frac{1}{2}, 5; 3, 6; z\right) = \frac{4 e^{z/2} (252 z^5 - 322 z^4 - 211 z^3 - 72 z^2 + 192 z - 384) I_1\left(\frac{z}{2}\right)}{2079 z^4} - \frac{4 e^{z/2} (252 z^4 - 574 z^3 - 15 z^2 + 48 z - 96) I_0\left(\frac{z}{2}\right)}{2079 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = \frac{7}{2}$

07.25.03.acaj.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{7}{2}, 4; z\right) = \frac{15 e^z (12 z^2 - 8 z - 3)}{512 z^2} - \frac{15 \sqrt{\pi} (24 z^3 - 28 z^2 - 10 z - 3) \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.acak.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{7}{2}, 4; -z\right) = \frac{15 e^{-z} (12 z^2 + 8 z - 3)}{512 z^2} + \frac{15 \sqrt{\pi} (24 z^3 + 28 z^2 - 10 z + 3) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.acal.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{7}{2}, 5; z\right) = \frac{5 e^z (4 z^2 - 4 z - 3)}{64 z^2} - \frac{5 \sqrt{\pi} (8 z^3 - 12 z^2 - 6 z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.acam.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{7}{2}, 5; -z\right) = \frac{5 e^{-z} (4 z^2 + 4 z - 3)}{64 z^2} + \frac{5 \sqrt{\pi} (8 z^3 + 12 z^2 - 6 z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.acan.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{7}{2}, 6; z\right) = \frac{5 e^z (420 z^5 - 560 z^4 - 565 z^3 - 384 z^2 + 768 z - 768)}{7392 z^5} - \frac{5 \sqrt{\pi} (840 z^3 - 1540 z^2 - 990 z - 693) \operatorname{erfi}(\sqrt{z})}{14\,784 z^{5/2}} + \frac{40}{77 z^5}$$

07.25.03.acao.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{7}{2}, 6; -z\right) = \frac{5 e^{-z} (420 z^5 + 560 z^4 - 565 z^3 + 384 z^2 + 768 z + 768)}{7392 z^5} + \frac{5 \sqrt{\pi} (840 z^3 + 1540 z^2 - 990 z + 693) \operatorname{erf}(\sqrt{z})}{14\,784 z^{5/2}} - \frac{40}{77 z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = 4$

07.25.03.acap.01

$${}_2F_2\left(-\frac{1}{2}, 5; 4, 4; z\right) = \frac{e^{z/2}(-18z^2 + 38z + 1)I_0\left(\frac{z}{2}\right) + 2e^{z/2}(9z^3 - 10z^2 - 6z - 2)I_1\left(\frac{z}{2}\right)}{35z}$$

07.25.03.acaq.01

$${}_2F_2\left(-\frac{1}{2}, 5; 4, \frac{9}{2}; z\right) = \frac{35e^z(72z^3 - 76z^2 - 62z - 15)}{8192z^3} - \frac{35\sqrt{\pi}(144z^4 - 224z^3 - 120z^2 - 72z - 15)\operatorname{erfi}(\sqrt{z})}{16384z^{7/2}}$$

07.25.03.acar.01

$${}_2F_2\left(-\frac{1}{2}, 5; 4, \frac{9}{2}; -z\right) = \frac{35e^{-z}(72z^3 + 76z^2 - 62z + 15)}{8192z^3} + \frac{35\sqrt{\pi}(144z^4 + 224z^3 - 120z^2 + 72z - 15)\operatorname{erf}(\sqrt{z})}{16384z^{7/2}}$$

07.25.03.acas.01

$${}_2F_2\left(-\frac{1}{2}, 5; 4, 5; z\right) = \frac{4e^{z/2}(4z^3 - 6z^2 - 5z - 4)I_1\left(\frac{z}{2}\right) - 4e^{z/2}(4z^2 - 10z - 1)I_0\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.acat.01

$${}_2F_2\left(-\frac{1}{2}, 5; 4, \frac{11}{2}; z\right) = \frac{63e^z(144z^4 - 208z^3 - 232z^2 - 220z + 105)}{32768z^4} - \frac{63\sqrt{\pi}(288z^5 - 560z^4 - 400z^3 - 360z^2 - 150z + 105)\operatorname{erfi}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.acau.01

$${}_2F_2\left(-\frac{1}{2}, 5; 4, \frac{11}{2}; -z\right) = \frac{63e^{-z}(144z^4 + 208z^3 - 232z^2 + 220z + 105)}{32768z^4} + \frac{63\sqrt{\pi}(288z^5 + 560z^4 - 400z^3 + 360z^2 - 150z - 105)\operatorname{erf}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.acav.01

$${}_2F_2\left(-\frac{1}{2}, 5; 4, 6; z\right) = \frac{8e^{z/2}(36z^5 - 68z^4 - 71z^3 - 81z^2 - 48z + 96)I_1\left(\frac{z}{2}\right) - 8e^{z/2}(36z^4 - 104z^3 - 21z^2 - 12z + 24)I_0\left(\frac{z}{2}\right)}{693z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = \frac{9}{2}$

07.25.03.acaw.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{9}{2}, 5; z\right) = \frac{35e^z(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35\sqrt{\pi}(16z^4 - 32z^3 - 24z^2 - 24z - 15)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.acax.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{9}{2}, 5; -z\right) = \frac{35e^{-z}(8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35\sqrt{\pi}(16z^4 + 32z^3 - 24z^2 + 24z - 15)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.acay.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{9}{2}, 6; z\right) = \frac{5e^z(2520z^5 - 4900z^4 - 7130z^3 - 11181z^2 - 12288z + 12288)}{50688z^5} - \frac{5\sqrt{\pi}(5040z^4 - 12320z^3 - 11880z^2 - 16632z - 17325)\operatorname{erfi}(\sqrt{z})}{101376z^{7/2}} - \frac{40}{33z^5}$$

07.25.03.acaz.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{9}{2}, 6; -z\right) = \frac{5 e^{-z} (2520 z^5 + 4900 z^4 - 7130 z^3 + 11181 z^2 - 12288 z - 12288)}{50688 z^5} + \frac{5 \sqrt{\pi} (5040 z^4 + 12320 z^3 - 11880 z^2 + 16632 z - 17325) \operatorname{erf}(\sqrt{z})}{101376 z^{7/2}} + \frac{40}{33 z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = 5$

07.25.03.acb0.01

$${}_2F_2\left(-\frac{1}{2}, 5; 5, 5; z\right) = \frac{32 e^{z/2} (4 z^4 - 8 z^3 - 9 z^2 - 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3} - \frac{32 e^{z/2} (4 z^3 - 12 z^2 - 3 z - 3) I_0\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.acb1.01

$${}_2F_2\left(-\frac{1}{2}, 5; 5, \frac{11}{2}; z\right) = \frac{63 e^z (16 z^4 - 32 z^3 - 48 z^2 - 80 z - 105)}{4096 z^4} - \frac{63 \sqrt{\pi} (32 z^5 - 80 z^4 - 80 z^3 - 120 z^2 - 150 z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.acb2.01

$${}_2F_2\left(-\frac{1}{2}, 5; 5, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16 z^4 + 32 z^3 - 48 z^2 + 80 z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.acb3.01

$${}_2F_2\left(-\frac{1}{2}, 5; 5, 6; z\right) = \frac{32 e^{z/2} (8 z^5 - 20 z^4 - 28 z^3 - 51 z^2 - 84 z - 96) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (8 z^4 - 28 z^3 - 12 z^2 - 21 z - 24) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = \frac{11}{2}$

07.25.03.acb4.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{11}{2}, 6; z\right) = \frac{5 e^z (1008 z^5 - 2576 z^4 - 4744 z^3 - 10716 z^2 - 23613 z - 49152)}{22528 z^5} - \frac{5 \sqrt{\pi} (2016 z^5 - 6160 z^4 - 7920 z^3 - 16632 z^2 - 34650 z - 72765) \operatorname{erfi}(\sqrt{z})}{45056 z^{9/2}} + \frac{120}{11 z^5}$$

07.25.03.acb5.01

$${}_2F_2\left(-\frac{1}{2}, 5; \frac{11}{2}, 6; -z\right) = \frac{5 e^{-z} (1008 z^5 + 2576 z^4 - 4744 z^3 + 10716 z^2 - 23613 z + 49152)}{22528 z^5} + \frac{5 \sqrt{\pi} (2016 z^5 + 6160 z^4 - 7920 z^3 + 16632 z^2 - 34650 z + 72765) \operatorname{erf}(\sqrt{z})}{45056 z^{9/2}} - \frac{120}{11 z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 5$, $b_1 = 6$

07.25.03.acb6.01

$${}_2F_2\left(-\frac{1}{2}, 5; 6, 6; z\right) = -\frac{64 e^{z/2} (2520 z^6 - 10360 z^5 - 7080 z^4 - 18924 z^3 - 48777 z^2 - 166320 z + 332640) I_0\left(\frac{z}{2}\right) + 256 e^{z/2} (630 z^5 - 1960 z^4 - 3415 z^3 - 8496 z^2 - 22389 z - 69567) I_1\left(\frac{z}{2}\right) + \frac{10240}{231 z^5}}{480249 z^5}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.acb7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = -\frac{1}{102112943625} (e^z (65536 z^{16} + 6356992 z^{15} + 247562240 z^{14} + 5019648000 z^{13} + 57523200000 z^{12} + 378838732800 z^{11} + 1396540569600 z^{10} + 2678417280000 z^9 + 2300804352000 z^8 + 634477536000 z^7 + 17343849600 z^6 + 1606651200 z^5 - 5463612000 z^4 + 21143430000 z^3 - 59594535000 z^2 + 111395938500 z - 102112943625))$$

07.25.03.acb8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9282994875} (e^z (32768 z^{15} + 2867200 z^{14} + 99409920 z^{13} + 1764249600 z^{12} + 17293977600 z^{11} + 94302489600 z^{10} + 273909081600 z^9 + 380526854400 z^8 + 199085040000 z^7 + 18611208000 z^6 - 633679200 z^5 + 486486000 z^4 - 2002077000 z^3 + 5566522500 z^2 - 10314438750 z + 9282994875))$$

07.25.03.acb9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = -\frac{1}{1031443875} (e^z (16384 z^{14} + 1277952 z^{13} + 38842368 z^{12} + 590807040 z^{11} + 4806743040 z^{10} + 20714158080 z^9 + 43740829440 z^8 + 37170524160 z^7 + 6616209600 z^6 - 618710400 z^5 - 7484400 z^4 + 239500800 z^3 - 641787300 z^2 + 1178793000 z - 1031443875))$$

07.25.03.acba.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{147349125} (e^z (8192 z^{13} + 561152 z^{12} + 14651392 z^{11} + 185518080 z^{10} + 1197504000 z^9 + 3770807040 z^8 + 4901783040 z^7 + 1429021440 z^6 - 264448800 z^5 + 87318000 z^4 - 47401200 z^3 + 96049800 z^2 - 176818950 z + 147349125))$$

07.25.03.acbb.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = -\frac{1}{29469825} (e^z (4096 z^{12} + 241664 z^{11} + 5271552 z^{10} + 53222400 z^9 + 252806400 z^8 + 494968320 z^7 + 223534080 z^6 - 67858560 z^5 + 37422000 z^4 - 12474000 z^3 - 17463600 z^2 + 39293100 z - 29469825))$$

$$\begin{aligned}
 & \text{07.25.03.acbc.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{9823275} \left(e^z (2048 z^{11} + 101376 z^{10} + 1774080 z^9 + 13305600 z^8 + 39916800 z^7 + 27941760 z^6 - \right. \\
 & \quad \left. 13970880 z^5 + 14968800 z^4 - 18711000 z^3 + 21829500 z^2 - 19646550 z + 9823275) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.acbd.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \\
 & -\frac{1}{9823275} \left(e^z (1024 z^{10} + 40960 z^9 + 538880 z^8 + 2611200 z^7 + 2985600 z^6 - 2449920 z^5 + 4039200 z^4 - \right. \\
 & \quad \left. 6652800 z^3 + 7276500 z^2 - 9823275) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.acbe.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \\
 & \frac{1}{9823275} \left(e^{z/2} (-512 z^{10} - 18432 z^9 - 211200 z^8 - 828288 z^7 - 511200 z^6 + 509760 z^5 - 1386000 z^4 + \right. \\
 & \quad \left. 3402000 z^3 - 4961250 z^2 + 9823275) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{9823275} \left(2 e^{z/2} (256 z^{10} + 8960 z^9 + 96768 z^8 + 321600 z^7 - 25776 z^6 - 140400 z^5 + \right. \right. \\
 & \quad \left. \left. 702000 z^4 - 2205000 z^3 + 4465125 z^2 - 4465125 z) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.acbf.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \\
 & -\frac{1}{9823275} \left(e^z (512 z^9 + 15616 z^8 + 136704 z^7 + 280320 z^6 - 329280 z^5 + 586080 z^4 - 617760 z^3 - \right. \\
 & \quad \left. 1164240 z^2 + 6548850 z - 9823275) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.acbg.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \\
 & \frac{1}{9823275} \left(e^{z/2} (-512 z^9 - 13568 z^8 - 95488 z^7 - 102720 z^6 + 209760 z^5 - 663600 z^4 + 1512000 z^3 - \right. \\
 & \quad \left. 1323000 z^2 - 3638250 z + 9823275) I_0\left(\frac{z}{2}\right) + \right. \\
 & \quad \left. \frac{1}{9823275} \left(e^{z/2} (-512 z^9 - 13056 z^8 - 82688 z^7 - 26048 z^6 + 205920 z^5 - 834000 z^4 + \right. \right. \\
 & \quad \left. \left. 2352000 z^3 - 3969000 z^2 + 1653750 z + 4729725) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.acbh.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \\
 & -\frac{1}{3274425} e^z (256 z^8 + 5376 z^7 + 22656 z^6 - 29760 z^5 + 28800 z^4 + 134640 z^3 - 914760 z^2 + 2619540 z - 3274425)
 \end{aligned}$$

07.25.03.acbi.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, 3; z\right) = -\frac{1}{9823275} \left(4 e^{z/2} (256 z^8 + 4352 z^7 + 10560 z^6 - 30720 z^5 + 92400 z^4 - 151200 z^3 - 189000 z^2 + 1663200 z - 2962575) I_0\left(\frac{z}{2}\right) - \frac{1}{9823275 z} \left(4 e^{z/2} (256 z^9 + 4096 z^8 + 6592 z^7 - 35520 z^6 + 127920 z^5 - 294000 z^4 + 189000 z^3 + 1171800 z^2 - 3378375 z + 2027025) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.acbj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = -\frac{e^z (128 z^7 + 1472 z^6 - 1184 z^5 - 6000 z^4 + 53400 z^3 - 226380 z^2 + 561330 z - 654885)}{654885}$$

07.25.03.acbk.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, 4; z\right) = -\frac{1}{3274425 z} \left(4 e^{z/2} (256 z^8 + 1920 z^7 - 5952 z^6 + 12864 z^5 + 15120 z^4 - 257040 z^3 + 1009800 z^2 - 1817640 z + 984555) I_0\left(\frac{z}{2}\right) - \frac{1}{3274425 z^2} \left(4 e^{z/2} (256 z^9 + 1664 z^8 - 7488 z^7 + 20928 z^6 - 10416 z^5 - 226800 z^4 + 1182600 z^3 - 2934360 z^2 + 3996135 z - 3938220) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.acbl.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = -\frac{e^z (64 z^6 + 128 z^5 - 1680 z^4 + 9600 z^3 - 35700 z^2 + 83160 z - 93555)}{93555}$$

07.25.03.acbm.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = -\frac{1}{3274425 z^2} \left(32 e^{z/2} (128 z^8 - 256 z^7 - 896 z^6 + 13536 z^5 - 80640 z^4 + 306240 z^3 - 799920 z^2 + 1531530 z - 2078505) I_0\left(\frac{z}{2}\right) - \frac{1}{3274425 z^3} \left(64 e^{z/2} (64 z^9 - 192 z^8 - 224 z^7 + 6832 z^6 - 46872 z^5 + 202200 z^4 - 626340 z^3 + 1525095 z^2 - 3063060 z + 4157010) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.acbn.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = -\frac{e^z (32 z^5 - 240 z^4 + 1200 z^3 - 4200 z^2 + 9450 z - 10395)}{10395}$$

07.25.03.acbo.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{654885 z^3} \left(32 e^{z/2} (128 z^8 - 1472 z^7 + 11520 z^6 - 71568 z^5 + 373200 z^4 - 1667880 z^3 + 6245460 z^2 - 17950725 z + 31744440) I_0\left(\frac{z}{2}\right) - \frac{1}{654885 z^4} \left(32 e^{z/2} (128 z^9 - 1600 z^8 + 13184 z^7 - 85680 z^6 + 467472 z^5 - 2198040 z^4 + 8833500 z^3 - 28949895 z^2 + 71802900 z - 126977760) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.acbp.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{843908625} \left(e^z (16384 z^{14} + 1294336 z^{13} + 39997440 z^{12} + 622141440 z^{11} + 5225210880 z^{10} + 23637795840 z^9 + 54222255360 z^8 + 54707788800 z^7 + 17480836800 z^6 + 565185600 z^5 - 34246800 z^4 + 191872800 z^3 - 521356500 z^2 + 958513500 z - 843908625) \right)$$

07.25.03.acbq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{93767625} \left(e^z (8192 z^{13} + 577536 z^{12} + 15667200 z^{11} + 209233920 z^{10} + 1461818880 z^9 + 5240712960 z^8 + 8768632320 z^7 + 5432313600 z^6 + 591948000 z^5 - 13381200 z^4 - 23814000 z^3 + 60215400 z^2 - 110139750 z + 93767625) \right)$$

07.25.03.acbr.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{13395375} \left(e^z (4096 z^{12} + 253952 z^{11} + 5928960 z^{10} + 66078720 z^9 + 367476480 z^8 + 966712320 z^7 + 1000823040 z^6 + 214099200 z^5 - 25174800 z^4 + 5896800 z^3 - 8958600 z^2 + 16669800 z - 13395375) \right)$$

07.25.03.acbs.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{2679075} \left(e^z (2048 z^{11} + 109568 z^{10} + 2142720 z^9 + 19111680 z^8 + 78624000 z^7 + 129548160 z^6 + 46992960 z^5 - 10432800 z^4 + 3061800 z^3 + 1417500 z^2 - 3770550 z + 2679075) \right)$$

07.25.03.acbt.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{893025} \left(e^z (1024 z^{10} + 46080 z^9 + 725760 z^8 + 4838400 z^7 + 12700800 z^6 + 7620480 z^5 - 3175200 z^4 + 2721600 z^3 - 2551500 z^2 + 1984500 z - 893025) \right)$$

07.25.03.acbu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{893025} (e^z (512 z^9 + 18\,688 z^8 + 222\,720 z^7 + 971\,520 z^6 + 1\,007\,040 z^5 - 721\,440 z^4 + 937\,440 z^3 - 982\,800 z^2 + 198\,450 z + 893\,025))$$

07.25.03.acbv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{893025} (e^{z/2} (256 z^9 + 8448 z^8 + 88\,512 z^7 + 319\,680 z^6 + 200\,880 z^5 - 190\,800 z^4 + 390\,600 z^3 - 567\,000 z^2 + 99\,225 z + 893\,025) I_0\left(\frac{z}{2}\right) + \frac{1}{893025} e^{z/2} (256 z^9 + 8192 z^8 + 80\,448 z^7 + 243\,072 z^6 - 9360 z^5 - 118\,080 z^4 + 423\,000 z^3 - 882\,000 z^2 + 893\,025 z) I_1\left(\frac{z}{2}\right))$$

07.25.03.acbw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{893025} e^z (256 z^8 + 7168 z^7 + 57\,600 z^6 + 111\,360 z^5 - 108\,960 z^4 + 129\,600 z^3 + 15\,120 z^2 - 529\,200 z + 893\,025)$$

07.25.03.acbx.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{893025} e^{z/2} (256 z^8 + 6272 z^7 + 41\,280 z^6 + 47\,040 z^5 - 80\,400 z^4 + 176\,400 z^3 - 189\,000 z^2 - 264\,600 z + 893\,025) I_0\left(\frac{z}{2}\right) + \frac{1}{893025} e^{z/2} (256 z^8 + 6016 z^7 + 35\,392 z^6 + 14\,400 z^5 - 82\,320 z^4 + 246\,000 z^3 - 441\,000 z^2 + 264\,600 z + 363\,825) I_1\left(\frac{z}{2}\right)$$

07.25.03.acby.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 2496 z^6 + 10\,080 z^5 - 9840 z^4 - 360 z^3 + 66\,420 z^2 - 224\,910 z + 297\,675)}{297\,675}$$

07.25.03.acbz.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, 3; z\right) = \frac{32 e^{z/2} (16 z^7 + 256 z^6 + 648 z^5 - 1440 z^4 + 2730 z^3 - 16\,065 z + 32\,130) I_0\left(\frac{z}{2}\right) + \frac{1}{893025 z} 4 e^{z/2} (128 z^8 + 1920 z^7 + 3328 z^6 - 14\,016 z^5 + 36\,000 z^4 - 42\,000 z^3 - 60\,480 z^2 + 249\,480 z - 135\,135) I_1\left(\frac{z}{2}\right)}{893025}$$

07.25.03.acc0.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (64 z^6 + 704 z^5 - 240 z^4 - 3360 z^3 + 18\,300 z^2 - 49\,140 z + 59\,535)}{59\,535}$$

07.25.03.acc1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = \frac{4 e^{z/2} (128 z^7 + 960 z^6 - 2112 z^5 + 1680 z^4 + 15\,120 z^3 - 74\,520 z^2 + 137\,160 z - 57\,915) I_0\left(\frac{z}{2}\right) + \frac{1}{297675 z^2} 4 e^{z/2} (128 z^8 + 832 z^7 - 2880 z^6 + 4848 z^5 + 8400 z^4 - 76\,680 z^3 + 201\,960 z^2 - 250\,965 z + 231\,660) I_1\left(\frac{z}{2}\right)}{297675 z}$$

07.25.03.acc2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (32 z^5 + 80 z^4 - 720 z^3 + 3000 z^2 - 7350 z + 8505)}{8505}$$

07.25.03.acc3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (64 z^7 - 64 z^6 - 624 z^5 + 5040 z^4 - 20040 z^3 + 49320 z^2 - 83655 z + 109395) I_0\left(\frac{z}{2}\right) + \frac{1}{297675 z^3} 32 e^{z/2} (64 z^8 - 128 z^7 - 464 z^6 + 5376 z^5 - 25320 z^4 + 76560 z^3 - 173745 z^2 + 334620 z - 437580) I_1\left(\frac{z}{2}\right)}{297675 z^2}$$

07.25.03.acc4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{945} e^z (16 z^4 - 96 z^3 + 360 z^2 - 840 z + 945)$$

07.25.03.acc5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 608 z^6 + 3888 z^5 - 19680 z^4 + 84120 z^3 - 305370 z^2 + 865215 z - 1511640) I_0\left(\frac{z}{2}\right) + \frac{1}{59535 z^3} 32 e^{z/2} (64 z^8 - 672 z^7 + 4592 z^6 - 24672 z^5 + 111960 z^4 - 437190 z^3 + 1410435 z^2 - 3460860 z + 6046560) I_1\left(\frac{z}{2}\right)}{59535 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.acc6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = -\frac{1}{10418625} (e^z (4096 z^{12} + 258048 z^{11} + 6156288 z^{10} + 70757376 z^9 + 412501248 z^8 + 1176602112 z^7 + 1442810880 z^6 + 551940480 z^5 + 20003760 z^4 + 3311280 z^3 - 694080 z^2 + 12757500 z - 10418625))$$

07.25.03.acc7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{1488375} (e^z (2048 z^{11} + 113664 z^{10} + 2339328 z^9 + 22512384 z^8 + 104944896 z^7 + 220993920 z^6 + 168920640 z^5 + 22589280 z^4 - 1292760 z^3 + 1009260 z^2 - 1956150 z + 1488375))$$

07.25.03.acc8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = -\frac{1}{297675} (e^z (1024 z^{10} + 49152 z^9 + 850176 z^8 + 6580224 z^7 + 22861440 z^6 + 30481920 z^5 + 8255520 z^4 - 1088640 z^3 - 102060 z^2 + 453600 z - 297675))$$

$$\begin{aligned}
 & \text{07.25.03.acc9.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{99225} \left(e^z (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + \right. \\
 & \quad \left. 408240 z^2 - 255150 z + 99225) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.acca.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \\
 & -\frac{1}{99225} e^z (256 z^8 + 8448 z^7 + 90240 z^6 + 350400 z^5 + 328320 z^4 - 196560 z^3 + 173880 z^2 - 56700 z - 99225)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.accb.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, 1; z\right) = \\
 & \frac{1}{99225} e^{z/2} (-128 z^8 - 3840 z^7 - 36480 z^6 - 120672 z^5 - 78336 z^4 + 66240 z^3 - 85680 z^2 + 28350 z + 99225) I_0\left(\frac{z}{2}\right) - \\
 & \frac{2 e^{z/2} (64 z^8 + 1856 z^7 + 16416 z^6 + 44784 z^5 + 936 z^4 - 23112 z^3 + 53100 z^2 - 55125 z) I_1\left(\frac{z}{2}\right)}{99225}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.accc.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, \frac{3}{2}; z\right) = -\frac{e^z (128 z^7 + 3264 z^6 + 23904 z^5 + 43728 z^4 - 32616 z^3 + 15876 z^2 + 47250 z - 99225)}{99225}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.accd.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, 2; z\right) = \frac{e^{z/2} (-128 z^7 - 2880 z^6 - 17664 z^5 - 21552 z^4 + 28080 z^3 - 32760 z^2 - 18900 z + 99225) I_0\left(\frac{z}{2}\right)}{99225} + \\
 & \frac{e^{z/2} (-128 z^7 - 2752 z^6 - 14976 z^5 - 7824 z^4 + 30768 z^3 - 59400 z^2 + 44100 z + 33075) I_1\left(\frac{z}{2}\right)}{99225}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.acce.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, \frac{5}{2}; z\right) = -\frac{e^z (64 z^6 + 1152 z^5 + 4464 z^4 - 2688 z^3 - 4212 z^2 + 22680 z - 33075)}{33075}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.accf.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, 3; z\right) = -\frac{4 e^{z/2} (64 z^6 + 960 z^5 + 2544 z^4 - 3840 z^3 + 2520 z^2 + 11340 z - 27405) I_0\left(\frac{z}{2}\right)}{99225} - \\
 & \frac{4 e^{z/2} (64 z^7 + 896 z^6 + 1680 z^5 - 5136 z^4 + 7800 z^3 + 1260 z^2 - 21735 z + 10395) I_1\left(\frac{z}{2}\right)}{99225 z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.accg.01} \\
 & {}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = -\frac{e^z (32 z^5 + 336 z^4 + 48 z^3 - 1608 z^2 + 5130 z - 6615)}{6615}
 \end{aligned}$$

07.25.03.acch.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = -\frac{4 e^{z/2} (64 z^6 + 480 z^5 - 624 z^4 - 672 z^3 + 6480 z^2 - 12798 z + 3861) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (64 z^7 + 416 z^6 - 1008 z^5 + 480 z^4 + 5280 z^3 - 16362 z^2 + 18117 z - 15444) I_1\left(\frac{z}{2}\right)}{33075 z^2}$$

07.25.03.acci.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = -\frac{1}{945} e^z (16 z^4 + 48 z^3 - 288 z^2 + 780 z - 945)$$

07.25.03.accj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = -\frac{32 e^{z/2} (32 z^6 - 336 z^4 + 1560 z^3 - 3654 z^2 + 5148 z - 6435) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (16 z^7 - 16 z^6 - 144 z^5 + 900 z^4 - 2733 z^3 + 5643 z^2 - 10296 z + 12870) I_1\left(\frac{z}{2}\right)}{33075 z^3}$$

07.25.03.acck.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = -\frac{1}{105} e^z (8 z^3 - 36 z^2 + 90 z - 105)$$

07.25.03.accl.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, 6; z\right) = -\frac{32 e^{z/2} (32 z^6 - 240 z^5 + 1200 z^4 - 4812 z^3 + 16614 z^2 - 46215 z + 79560) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (32 z^7 - 272 z^6 + 1488 z^5 - 6468 z^4 + 24198 z^3 - 76401 z^2 + 184860 z - 318240) I_1\left(\frac{z}{2}\right)}{6615 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.accm.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{1}{212625} (e^z (1024 z^{10} + 50176 z^9 + 893696 z^8 + 7234560 z^7 + 27151488 z^6 + 42618240 z^5 + 20532960 z^4 + 1028160 z^3 - 132300 z^2 + 306180 z - 212625))$$

07.25.03.accn.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{42525} (e^z (512 z^9 + 21760 z^8 + 327168 z^7 + 2145024 z^6 + 6068160 z^5 + 6138720 z^4 + 1058400 z^3 - 15120 z^2 - 73710 z + 42525))$$

07.25.03.acco.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{14175} e^z (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175)$$

07.25.03.accp.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 3776 z^6 + 35680 z^5 + 121680 z^4 + 103320 z^3 - 46620 z^2 + 17010 z + 14175)}{14175}$$

07.25.03.accq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (64 z^7 + 1728 z^6 + 14736 z^5 + 44400 z^4 + 30456 z^3 - 19800 z^2 + 8505 z + 14175) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^7 + 1664 z^6 + 13104 z^5 + 32064 z^4 + 3480 z^3 - 15984 z^2 + 17775 z) I_1\left(\frac{z}{2}\right)}{14175}$$

07.25.03.accr.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{e^z (64 z^6 + 1472 z^5 + 9744 z^4 + 16992 z^3 - 7812 z^2 - 3780 z + 14175)}{14175}$$

07.25.03.accs.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 + 1312 z^5 + 7472 z^4 + 9888 z^3 - 8040 z^2 - 210 z + 14175) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^6 + 1248 z^5 + 6256 z^4 + 4192 z^3 - 10152 z^2 + 8850 z + 3675) I_1\left(\frac{z}{2}\right)}{14175}$$

07.25.03.acct.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (32 z^5 + 528 z^4 + 1968 z^3 - 360 z^2 - 2646 z + 4725)}{4725}$$

07.25.03.accu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = \frac{8 e^{z/2} (16 z^5 + 224 z^4 + 624 z^3 - 480 z^2 - 525 z + 1890) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (32 z^6 + 416 z^5 + 848 z^4 - 1632 z^3 + 690 z^2 + 2310 z - 945) I_1\left(\frac{z}{2}\right)}{14175 z}$$

07.25.03.accv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{945} e^z (16 z^4 + 160 z^3 + 104 z^2 - 648 z + 945)$$

07.25.03.accw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 + 240 z^4 - 96 z^3 - 660 z^2 + 1566 z - 297) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (32 z^6 + 208 z^5 - 288 z^4 - 300 z^3 + 1614 z^2 - 1539 z + 1188) I_1\left(\frac{z}{2}\right)}{4725 z^2}$$

07.25.03.accx.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{135} e^z (8 z^3 + 28 z^2 - 102 z + 135)$$

07.25.03.accy.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^5 + 16 z^4 - 148 z^3 + 348 z^2 - 363 z + 429) I_0\left(\frac{z}{2}\right)}{4725 z^2} + \frac{32 e^{z/2} (16 z^6 - 140 z^4 + 472 z^3 - 855 z^2 + 1452 z - 1716) I_1\left(\frac{z}{2}\right)}{4725 z^3}$$

07.25.03.accz.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{15} e^z (4 z^2 - 12 z + 15)$$

07.25.03.acd0.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 88 z^4 + 324 z^3 - 1020 z^2 + 2769 z - 4680) I_0\left(\frac{z}{2}\right)}{945 z^3} + \frac{32 e^{z/2} (16 z^6 - 104 z^5 + 436 z^4 - 1524 z^3 + 4665 z^2 - 11076 z + 18720) I_1\left(\frac{z}{2}\right)}{945 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.acd1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = -\frac{1}{8505} e^z (256 z^8 + 9472 z^7 + 120960 z^6 + 649152 z^5 + 1411200 z^4 + 952560 z^3 + 52920 z^2 + 18900 z - 8505)$$

07.25.03.acd2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835)}{2835}$$

07.25.03.acd3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = -\frac{e^z (64 z^6 + 1664 z^5 + 13680 z^4 + 40320 z^3 + 31500 z^2 - 7560 z - 2835)}{2835}$$

07.25.03.acd4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \frac{e^{z/2} (-32 z^6 - 768 z^5 - 5808 z^4 - 15864 z^3 - 11898 z^2 + 3780 z + 2835) I_0\left(\frac{z}{2}\right)}{2835} - \frac{2 e^{z/2} (16 z^6 + 368 z^5 + 2544 z^4 + 5556 z^3 + 1347 z^2 - 2061 z) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.acd5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = -\frac{e^z (32 z^5 + 656 z^4 + 3888 z^3 + 6552 z^2 - 630 z - 2835)}{2835}$$

07.25.03.acd6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2} (-32 z^5 - 592 z^4 - 3120 z^3 - 4548 z^2 + 1050 z + 2835) I_0\left(\frac{z}{2}\right)}{2835} + \frac{e^{z/2} (-32 z^5 - 560 z^4 - 2576 z^3 - 2220 z^2 + 2442 z + 525) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.acd7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = -\frac{1}{945} e^z (16z^4 + 240z^3 + 864z^2 + 252z - 945)$$

07.25.03.acd8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (16z^4 + 208z^3 + 612z^2 - 735) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16z^5 + 192z^4 + 428z^3 - 348z^2 - 315z + 105) I_1\left(\frac{z}{2}\right)}{2835 - 2835z}$$

07.25.03.acd9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = -\frac{1}{189} e^z (8z^3 + 76z^2 + 90z - 189)$$

07.25.03.acda.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (16z^4 + 120z^3 + 60z^2 - 276z + 27) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16z^5 + 104z^4 - 36z^3 - 204z^2 + 159z - 108) I_1\left(\frac{z}{2}\right)}{945z - 945z^2}$$

07.25.03.acdb.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = -\frac{1}{27} e^z (4z^2 + 16z - 27)$$

07.25.03.acdc.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = -\frac{32 e^{z/2} (8z^4 + 16z^3 - 48z^2 + 30z - 33) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (4z^5 + 4z^4 - 26z^3 + 39z^2 - 60z + 66) I_1\left(\frac{z}{2}\right)}{945z^2 - 945z^3}$$

07.25.03.acdd.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = -\frac{1}{3} e^z (2z - 3)$$

07.25.03.acde.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (8z^4 - 28z^3 + 72z^2 - 189z + 312) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (8z^5 - 36z^4 + 112z^3 - 327z^2 + 756z - 1248) I_1\left(\frac{z}{2}\right)}{189z^3 - 189z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.acdf.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = -\frac{1}{945} e^z (64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945)$$

07.25.03.acdg.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945)$$

07.25.03.acdh.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (16z^5 + 336z^4 + 2220z^3 + 5484z^2 + 4725z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^5 + 320z^4 + 1908z^3 + 3720z^2 + 1689z) I_1\left(\frac{z}{2}\right)$$

07.25.03.acdi.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (16z^4 + 288z^3 + 1512z^2 + 2520z + 945)$$

07.25.03.acdj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (16z^4 + 264z^3 + 1284z^2 + 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^4 + 248z^3 + 1044z^2 + 1164z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.acdk.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (8z^3 + 108z^2 + 378z + 315)$$

07.25.03.acdl.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = \frac{16}{945} e^{z/2} (2z^3 + 24z^2 + 75z + 60) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8z^4 + 88z^3 + 216z^2 + 60z - 15) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.acdm.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (4z^2 + 36z + 63)$$

07.25.03.acdn.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 + 60z^2 + 84z - 3) I_0\left(\frac{z}{2}\right)}{315z} + \frac{4 e^{z/2} (8z^4 + 52z^3 + 36z^2 - 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.acdo.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2z + 9)$$

07.25.03.acdp.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^3 + 12z^2 - 3z + 3) I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{32 e^{z/2} (4z^4 + 8z^3 - 9z^2 + 12z - 12) I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.acdq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = e^z$$

07.25.03.acdr.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 - 6z^2 + 15z - 24) I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{32 e^{z/2} (4z^4 - 10z^3 + 27z^2 - 60z + 96) I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{1}{2}$

07.25.03.acds.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (-16z^4 - 304z^3 - 1760z^2 - 3660z + 945) - \frac{256}{63} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.acdt.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} e^{-z} (-16z^4 + 304z^3 - 1760z^2 + 3660z + 945) + \frac{256}{63} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.acdu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-8z^4 - 144z^3 - 816z^2 - 5670z + 945) I_0\left(\frac{z}{2}\right) - \frac{2}{945} e^{z/2} (4z^4 + 68z^3 + 342z^2 - 1317z) I_1\left(\frac{z}{2}\right)$$

07.25.03.acdv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (-8z^3 - 124z^2 - 570z + 945) - \frac{128}{63} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.acdw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} e^{-z} (8z^3 - 124z^2 + 570z + 945) + \frac{128}{63} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.acdx.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (-8z^3 - 116z^2 - 3080z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-8z^3 - 108z^2 + 2144z + 35) I_1\left(\frac{z}{2}\right)$$

07.25.03.acdy.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (-4z^2 - 48z + 315) - \frac{32}{21} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.acdz.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{315} e^{-z} (-4z^2 + 48z + 315) + \frac{32}{21} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.ace0.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, 3; z\right) = -\frac{4}{945} e^{z/2} (4z^2 + 556z - 237) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4z^3 - 472z^2 - 19z + 3) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.ace1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (63 - 2z) - \frac{80}{63} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ace2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{63} e^{-z} (2z + 63) + \frac{80}{63} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z})$$

07.25.03.ace3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (996z^3 + 74z^2 - 27z + 12) I_1\left(\frac{z}{2}\right)}{2205z^2} - \frac{4 e^{z/2} (1052z^2 - 558z + 3) I_0\left(\frac{z}{2}\right)}{2205z}$$

07.25.03.ace4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = e^z - \frac{10}{9} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ace5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{10}{9} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.ace6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{64 e^{z/2} (512 z^4 + 65 z^3 - 45 z^2 + 48 z - 42) I_1\left(\frac{z}{2}\right)}{19845 z^3} - \frac{32 e^{z/2} (1024 z^3 - 642 z^2 + 24 z - 21) I_0\left(\frac{z}{2}\right)}{19845 z^2}$$

07.25.03.ace7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ace8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.ace9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (2048 z^5 + 512 z^4 - 810 z^3 + 1893 z^2 - 3948 z + 6048) I_1\left(\frac{z}{2}\right)}{43659 z^4} - \frac{32 e^{z/2} (2048 z^4 - 1536 z^3 + 426 z^2 - 987 z + 1512) I_0\left(\frac{z}{2}\right)}{43659 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 1$

07.25.03.acea.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{945} e^{z/2} (-4 z^3 - 60 z^2 - 2205 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-4 z^3 - 56 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aceb.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{315} e^{z/2} (-2 z^2 - 504 z + 315) I_0\left(\frac{z}{2}\right) - \frac{2}{315} e^{z/2} (z^2 - 229 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.acec.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{7} e^{z/2} (7 - 9 z) I_0\left(\frac{z}{2}\right) + \frac{79}{63} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.aced.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{9} e^{z/2} (9 - 10 z) I_0\left(\frac{z}{2}\right) + \frac{10}{9} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.acee.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; 1, \frac{11}{2}; z\right) = e^{z/2} (1 - z) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{3}{2}$

07.25.03.acef.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (-4 z^2 - 52 z + 753) - \frac{32 \sqrt{\pi} (10 z - 1) \operatorname{erfi}(\sqrt{z})}{315 \sqrt{z}}$$

07.25.03.aceg.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} e^{-z} (-4 z^2 + 52 z + 753) + \frac{32 \sqrt{\pi} (10 z + 1) \operatorname{erf}(\sqrt{z})}{315 \sqrt{z}}$$

07.25.03.aceh.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (-4z^2 - 1330z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-4z^2 + 1234z - 35) I_1\left(\frac{z}{2}\right)$$

07.25.03.acei.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (219 - 2z) - \frac{16\sqrt{\pi} (5z - 1) \operatorname{erfi}(\sqrt{z})}{105\sqrt{z}}$$

07.25.03.acej.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{315} e^{-z} (2z + 219) + \frac{16\sqrt{\pi} (5z + 1) \operatorname{erf}(\sqrt{z})}{105\sqrt{z}}$$

07.25.03.acek.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{4e^{z/2} (254z^2 - 18z + 1) I_1\left(\frac{z}{2}\right)}{945z} - \frac{8}{945} e^{z/2} (129z - 118) I_0\left(\frac{z}{2}\right)$$

07.25.03.acel.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{13e^z}{21} - \frac{4\sqrt{\pi} (10z - 3) \operatorname{erfi}(\sqrt{z})}{63\sqrt{z}}$$

07.25.03.acem.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{4\sqrt{\pi} (10z + 3) \operatorname{erf}(\sqrt{z})}{63\sqrt{z}} + \frac{13e^{-z}}{21}$$

07.25.03.acen.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{4e^{z/2} (2560z^3 - 326z^2 + 41z - 12) I_1\left(\frac{z}{2}\right)}{11025z^2} - \frac{4e^{z/2} (2560z^2 - 2746z - 3) I_0\left(\frac{z}{2}\right)}{11025z}$$

07.25.03.aceo.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{\sqrt{\pi} (2 - 5z) \operatorname{erfi}(\sqrt{z})}{9\sqrt{z}} + \frac{5e^z}{9}$$

07.25.03.acep.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{\sqrt{\pi} (5z + 2) \operatorname{erf}(\sqrt{z})}{9\sqrt{z}} + \frac{5e^{-z}}{9}$$

07.25.03.aceq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \frac{32e^{z/2} (2560z^4 - 512z^3 + 117z^2 - 84z + 60) I_1\left(\frac{z}{2}\right)}{99225z^3} - \frac{32e^{z/2} (2560z^3 - 3072z^2 - 21z + 15) I_0\left(\frac{z}{2}\right)}{99225z^2}$$

07.25.03.acer.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{\sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{e^z}{2}$$

07.25.03.aces.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{\sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.acet.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (5120 z^5 - 1536 z^4 + 736 z^3 - 1257 z^2 + 2340 z - 3360) I_1\left(\frac{z}{2}\right)}{218295 z^4} - \frac{32 e^{z/2} (5120 z^4 - 6656 z^3 - 288 z^2 + 585 z - 840) I_0\left(\frac{z}{2}\right)}{218295 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 2$

07.25.03.aceu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{45} e^{z/2} (45 - 46z) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (318z - 35) I_1\left(\frac{z}{2}\right)$$

07.25.03.acev.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{189} e^{z/2} (189 - 160z) I_0\left(\frac{z}{2}\right) + \frac{5}{189} e^{z/2} (32z - 7) I_1\left(\frac{z}{2}\right)$$

07.25.03.acew.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{27} e^{z/2} (27 - 20z) I_0\left(\frac{z}{2}\right) + \frac{1}{27} e^{z/2} (20z - 7) I_1\left(\frac{z}{2}\right)$$

07.25.03.acex.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; 2, \frac{11}{2}; z\right) = e^{z/2} \left(1 - \frac{2z}{3}\right) I_0\left(\frac{z}{2}\right) + e^{z/2} \left(\frac{2z}{3} - \frac{1}{3}\right) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{5}{2}$

07.25.03.acey.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (59z - 3)}{105z} + \frac{\sqrt{\pi} (-40z^2 + 16z + 1) \operatorname{erfi}(\sqrt{z})}{70z^{3/2}}$$

07.25.03.acez.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (59z + 3)}{105z} + \frac{\sqrt{\pi} (40z^2 + 16z - 1) \operatorname{erf}(\sqrt{z})}{70z^{3/2}}$$

07.25.03.acf0.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (64z^2 - 17z - 1) I_1\left(\frac{z}{2}\right)}{315z} - \frac{4}{315} e^{z/2} (64z - 79) I_0\left(\frac{z}{2}\right)$$

07.25.03.acf1.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (20z - 3)}{42z} + \frac{\sqrt{\pi} (-40z^2 + 24z + 3) \operatorname{erfi}(\sqrt{z})}{84z^{3/2}}$$

07.25.03.acf2.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (20z + 3)}{42z} + \frac{\sqrt{\pi} (40z^2 + 24z - 3) \operatorname{erf}(\sqrt{z})}{84z^{3/2}}$$

07.25.03.acf3.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (640z^3 - 288z^2 - 37z + 4) I_1\left(\frac{z}{2}\right)}{3675z^2} - \frac{4 e^{z/2} (640z^2 - 928z + 1) I_0\left(\frac{z}{2}\right)}{3675z}$$

07.25.03.acf4.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (10z - 3)}{24z} + \frac{\sqrt{\pi} (-20z^2 + 16z + 3) \operatorname{erfi}(\sqrt{z})}{48z^{3/2}}$$

07.25.03.acf5.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (10z + 3)}{24z} + \frac{\sqrt{\pi} (20z^2 + 16z - 3) \operatorname{erf}(\sqrt{z})}{48z^{3/2}}$$

07.25.03.acf6.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{64 e^{z/2} (320z^4 - 208z^3 - 45z^2 + 12z - 6) I_1\left(\frac{z}{2}\right)}{33075z^3} - \frac{32 e^{z/2} (640z^3 - 1056z^2 + 6z - 3) I_0\left(\frac{z}{2}\right)}{33075z^2}$$

07.25.03.acf7.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (2z - 1)}{16z} - \frac{3\sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.acf8.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (2z + 1)}{16z} + \frac{3\sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.acf9.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (1280z^5 - 1088z^4 - 388z^3 + 255z^2 - 372z + 480) I_1\left(\frac{z}{2}\right)}{72765z^4} - \frac{32 e^{z/2} (1280z^4 - 2368z^3 + 60z^2 - 93z + 120) I_0\left(\frac{z}{2}\right)}{72765z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 3$

07.25.03.acfa.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{4 e^{z/2} (32z^2 - 16z - 3) I_1\left(\frac{z}{2}\right)}{189z} - \frac{64}{189} e^{z/2} (2z - 3) I_0\left(\frac{z}{2}\right)$$

07.25.03.acfb.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (4z^2 - 3z - 1) I_1\left(\frac{z}{2}\right)}{27z} - \frac{4}{27} e^{z/2} (4z - 7) I_0\left(\frac{z}{2}\right)$$

07.25.03.acfc.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; 3, \frac{11}{2}; z\right) = \frac{4 e^{z/2} (2z^2 - 2z - 1) I_1\left(\frac{z}{2}\right)}{15z} - \frac{8}{15} e^{z/2} (z - 2) I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{7}{2}$

07.25.03.acfd.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (40z^2 - 16z - 3)}{504z^2} - \frac{5\sqrt{\pi} (80z^3 - 72z^2 - 18z - 3) \operatorname{erfi}(\sqrt{z})}{1008z^{5/2}}$$

07.25.03.acfe.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (40 z^2 + 16 z - 3)}{504 z^2} + \frac{5 \sqrt{\pi} (80 z^3 + 72 z^2 - 18 z + 3) \operatorname{erf}(\sqrt{z})}{1008 z^{5/2}}$$

07.25.03.acff.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (320 z^3 - 256 z^2 - 99 z - 12) I_1\left(\frac{z}{2}\right)}{2205 z^2} - \frac{4 e^{z/2} (320 z^2 - 576 z - 3) I_0\left(\frac{z}{2}\right)}{2205 z}$$

07.25.03.acfg.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{5 e^z (10 z^2 - 7 z - 3)}{144 z^2} - \frac{5 \sqrt{\pi} (20 z^3 - 24 z^2 - 9 z - 3) \operatorname{erfi}(\sqrt{z})}{288 z^{5/2}}$$

07.25.03.acfh.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5 e^{-z} (10 z^2 + 7 z - 3)}{144 z^2} + \frac{5 \sqrt{\pi} (20 z^3 + 24 z^2 - 9 z + 3) \operatorname{erf}(\sqrt{z})}{288 z^{5/2}}$$

07.25.03.acfi.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (320 z^4 - 352 z^3 - 207 z^2 - 60 z + 12) I_1\left(\frac{z}{2}\right)}{19845 z^3} - \frac{32 e^{z/2} (320 z^3 - 672 z^2 - 15 z + 3) I_0\left(\frac{z}{2}\right)}{19845 z^2}$$

07.25.03.acfj.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{5 e^z (4 z^2 - 4 z - 3)}{64 z^2} - \frac{5 \sqrt{\pi} (8 z^3 - 12 z^2 - 6 z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.acfk.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{5 e^{-z} (4 z^2 + 4 z - 3)}{64 z^2} + \frac{5 \sqrt{\pi} (8 z^3 + 12 z^2 - 6 z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.acfl.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (640 z^5 - 896 z^4 - 678 z^3 - 417 z^2 + 276 z - 288) I_1\left(\frac{z}{2}\right)}{43659 z^4} - \frac{32 e^{z/2} (640 z^4 - 1536 z^3 - 102 z^2 + 69 z - 72) I_0\left(\frac{z}{2}\right)}{43659 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 4$

07.25.03.acfm.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; 4, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (40 z^3 - 46 z^2 - 29 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^2} - \frac{4 e^{z/2} (40 z^2 - 86 z - 3) I_0\left(\frac{z}{2}\right)}{315 z}$$

07.25.03.acfn.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; 4, \frac{11}{2}; z\right) = \frac{4 e^{z/2} (4 z^3 - 6 z^2 - 5 z - 4) I_1\left(\frac{z}{2}\right)}{35 z^2} - \frac{4 e^{z/2} (4 z^2 - 10 z - 1) I_0\left(\frac{z}{2}\right)}{35 z}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{9}{2}$

07.25.03.acfo.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (40 z^3 - 44 z^2 - 38 z - 15)}{4608 z^3} - \frac{35 \sqrt{\pi} (80 z^4 - 128 z^3 - 72 z^2 - 48 z - 15) \operatorname{erfi}(\sqrt{z})}{9216 z^{7/2}}$$

07.25.03.acfp.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (40 z^3 + 44 z^2 - 38 z + 15)}{4608 z^3} + \frac{35 \sqrt{\pi} (80 z^4 + 128 z^3 - 72 z^2 + 48 z - 15) \operatorname{erf}(\sqrt{z})}{9216 z^{7/2}}$$

07.25.03.acfq.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{64 e^{z/2} (20 z^4 - 31 z^3 - 27 z^2 - 24 z - 6) I_1\left(\frac{z}{2}\right)}{2835 z^3} - \frac{32 e^{z/2} (40 z^3 - 102 z^2 - 12 z - 3) I_0\left(\frac{z}{2}\right)}{2835 z^2}$$

07.25.03.acfr.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{35 e^z (8 z^3 - 12 z^2 - 14 z - 15)}{1024 z^3} - \frac{35 \sqrt{\pi} (16 z^4 - 32 z^3 - 24 z^2 - 24 z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.acfs.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{35 e^{-z} (8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.acft.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (80 z^5 - 156 z^4 - 170 z^3 - 213 z^2 - 180 z + 96) I_1\left(\frac{z}{2}\right)}{6237 z^4} - \frac{32 e^{z/2} (80 z^4 - 236 z^3 - 54 z^2 - 45 z + 24) I_0\left(\frac{z}{2}\right)}{6237 z^3}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 5$

07.25.03.acfu.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; 5, \frac{11}{2}; z\right) = \frac{32 e^{z/2} (4 z^4 - 8 z^3 - 9 z^2 - 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3} - \frac{32 e^{z/2} (4 z^3 - 12 z^2 - 3 z - 3) I_0\left(\frac{z}{2}\right)}{315 z^2}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{11}{2}$

07.25.03.acfv.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (16 z^4 - 32 z^3 - 48 z^2 - 80 z - 105)}{4096 z^4} - \frac{63 \sqrt{\pi} (32 z^5 - 80 z^4 - 80 z^3 - 120 z^2 - 150 z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.acfw.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (16 z^4 + 32 z^3 - 48 z^2 + 80 z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.acfx.01

$${}_2F_2\left(-\frac{1}{2}, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^5 - 20 z^4 - 28 z^3 - 51 z^2 - 84 z - 96) I_1\left(\frac{z}{2}\right) - 32 e^{z/2} (8 z^4 - 28 z^3 - 12 z^2 - 21 z - 24) I_0\left(\frac{z}{2}\right)}{693 z^4}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = -\frac{11}{2}$

07.25.03.acfy.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{1620840375} (-256 z^{16} - 27392 z^{15} - 1188352 z^{14} - 27162240 z^{13} - 355990320 z^{12} - 2729704080 z^{11} - 11982476160 z^{10} - 28163560320 z^9 - 30772425600 z^8 - 11313993600 z^7 - 419126400 z^6 - 12700800 z^5 - 4082400 z^4 - 4536000 z^3 - 13891500 z^2 - 160744500 z + 1620840375) - \frac{1}{1620840375} (8 e^z \sqrt{\pi} (32 z^{33/2} + 3440 z^{31/2} + 150240 z^{29/2} + 3467880 z^{27/2} + 46126290 z^{25/2} + 361935315 z^{23/2} + 1649795175 z^{21/2} + 4141531800 z^{19/2} + 5137284600 z^{17/2} + 2527345800 z^{15/2} + 280816200 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.actz.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{1620840375} (-256 z^{16} + 27392 z^{15} - 1188352 z^{14} + 27162240 z^{13} - 355990320 z^{12} + 2729704080 z^{11} - 11982476160 z^{10} + 28163560320 z^9 - 30772425600 z^8 + 11313993600 z^7 - 419126400 z^6 + 12700800 z^5 - 4082400 z^4 + 4536000 z^3 - 13891500 z^2 + 160744500 z + 1620840375) + \frac{1}{1620840375} (8 e^{-z} \sqrt{\pi} (32 z^{33/2} - 3440 z^{31/2} + 150240 z^{29/2} - 3467880 z^{27/2} + 46126290 z^{25/2} - 361935315 z^{23/2} + 1649795175 z^{21/2} - 4141531800 z^{19/2} + 5137284600 z^{17/2} - 2527345800 z^{15/2} + 280816200 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.acg0.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{147349125} (128 z^{15} + 12416 z^{14} + 482496 z^{13} + 9727200 z^{12} + 110131080 z^{11} + 708380640 z^{10} + 2494215360 z^9 + 4357261440 z^8 + 3022488000 z^7 + 419126400 z^6 - 12700800 z^5 - 1360800 z^4 - 907200 z^3 - 1984500 z^2 - 17860500 z + 147349125) + \frac{1}{147349125} (4 e^z \sqrt{\pi} (32 z^{31/2} + 3120 z^{29/2} + 122160 z^{27/2} + 2490600 z^{25/2} + 28692090 z^{23/2} + 189782775 z^{21/2} + 700881300 z^{19/2} + 1338006600 z^{17/2} + 1123264800 z^{15/2} + 280816200 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.acg1.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{147349125} \left(-128z^{15} + 12416z^{14} - 482496z^{13} + 9727200z^{12} - 110131080z^{11} + 708380640z^{10} - \right.$$

$$2494215360z^9 + 4357261440z^8 - 3022488000z^7 + 419126400z^6 +$$

$$12700800z^5 - 1360800z^4 + 907200z^3 - 1984500z^2 + 17860500z + 147349125 \Big) +$$

$$\frac{1}{147349125} \left(4e^{-z} \sqrt{\pi} \left(32z^{31/2} - 3120z^{29/2} + 122160z^{27/2} - 2490600z^{25/2} + 28692090z^{23/2} - 189782775z^{21/2} + \right. \right.$$

$$\left. \left. 700881300z^{19/2} - 1338006600z^{17/2} + 1123264800z^{15/2} - 280816200z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.acg2.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{16372125} \left(-64z^{14} - 5568z^{13} - 191168z^{12} - 3336960z^{11} - 31795740z^{10} - 164869740z^9 - 435255120z^8 - \right.$$

$$492171120z^7 - 139708800z^6 + 12700800z^5 - 1360800z^4 - 302400z^3 - 396900z^2 - 2551500z + 16372125 \Big) -$$

$$\frac{1}{16372125} \left(2e^z \sqrt{\pi} \left(32z^{29/2} + 2800z^{27/2} + 96960z^{25/2} + 1714920z^{23/2} + 16687650z^{21/2} + \right. \right.$$

$$\left. \left. 89656875z^{19/2} + 252596925z^{17/2} + 327618900z^{15/2} + 140408100z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.acg3.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{16372125} \left(-64z^{14} + 5568z^{13} - 191168z^{12} + 3336960z^{11} - 31795740z^{10} + 164869740z^9 - 435255120z^8 + \right.$$

$$492171120z^7 - 139708800z^6 - 12700800z^5 - 1360800z^4 + 302400z^3 - 396900z^2 + 2551500z + 16372125 \Big) +$$

$$\frac{1}{16372125} \left(2e^{-z} \sqrt{\pi} \left(32z^{29/2} - 2800z^{27/2} + 96960z^{25/2} - 1714920z^{23/2} + 16687650z^{21/2} - \right. \right.$$

$$\left. \left. 89656875z^{19/2} + 252596925z^{17/2} - 327618900z^{15/2} + 140408100z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.acg4.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{2338875} \left(32z^{13} + 2464z^{12} + 73424z^{11} + 1082280z^{10} + 8355690z^9 + 32760780z^8 + 56937960z^7 + \right.$$

$$27941760z^6 - 4233600z^5 + 1360800z^4 - 302400z^3 - 132300z^2 - 510300z + 2338875 \Big) +$$

$$\frac{1}{2338875} \left(e^z \sqrt{\pi} \left(32z^{27/2} + 2480z^{25/2} + 74640z^{23/2} + 1117800z^{21/2} + 8863050z^{19/2} + \right. \right.$$

$$\left. \left. 36478575z^{17/2} + 70204050z^{15/2} + 46802700z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.acg5.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{2338875} (-32 z^{13} + 2464 z^{12} - 73424 z^{11} + 1082280 z^{10} - 8355690 z^9 + 32760780 z^8 - 56937960 z^7 + 27941760 z^6 + 4233600 z^5 + 1360800 z^4 + 302400 z^3 - 132300 z^2 + 510300 z + 2338875) + \frac{1}{2338875} (e^{-z} \sqrt{\pi} (32 z^{27/2} - 2480 z^{25/2} + 74640 z^{23/2} - 1117800 z^{21/2} + 8863050 z^{19/2} - 36478575 z^{17/2} + 70204050 z^{15/2} - 46802700 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.acg6.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{467775} (-16 z^{12} - 1072 z^{11} - 27072 z^{10} - 325080 z^9 - 1914555 z^8 - 5026365 z^7 - 3991680 z^6 + 846720 z^5 - 453600 z^4 + 302400 z^3 - 132300 z^2 - 170100 z + 467775) + \frac{1}{935550} (e^z \sqrt{\pi} (-32 z^{25/2} - 2160 z^{23/2} - 55200 z^{21/2} - 676200 z^{19/2} - 4129650 z^{17/2} - 11700675 z^{15/2} - 11700675 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.acg7.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{467775} (-16 z^{12} + 1072 z^{11} - 27072 z^{10} + 325080 z^9 - 1914555 z^8 + 5026365 z^7 - 3991680 z^6 - 846720 z^5 - 453600 z^4 - 302400 z^3 - 132300 z^2 + 170100 z + 467775) + \frac{1}{935550} (e^{-z} \sqrt{\pi} (32 z^{25/2} - 2160 z^{23/2} + 55200 z^{21/2} - 676200 z^{19/2} + 4129650 z^{17/2} - 11700675 z^{15/2} + 11700675 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.acg8.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{311850} (16 z^{11} + 912 z^{10} + 18872 z^9 + 174540 z^8 + 701145 z^7 + 887040 z^6 - 241920 z^5 + 181440 z^4 - 201600 z^3 + 264600 z^2 - 340200 z + 311850) + \frac{1}{623700} e^z \sqrt{\pi} (32 z^{23/2} + 1840 z^{21/2} + 38640 z^{19/2} + 367080 z^{17/2} + 1560090 z^{15/2} + 2340135 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.acg9.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{311850} (-16 z^{11} + 912 z^{10} - 18872 z^9 + 174540 z^8 - 701145 z^7 + 887040 z^6 + 241920 z^5 + 181440 z^4 + 201600 z^3 + 264600 z^2 + 340200 z + 311850) + \frac{1}{623700} e^{-z} \sqrt{\pi} (32 z^{23/2} - 1840 z^{21/2} + 38640 z^{19/2} - 367080 z^{17/2} + 1560090 z^{15/2} - 2340135 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.acga.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{623700} \left(-16z^{10} - 752z^9 - 12112z^8 - 78000z^7 - 160335z^6 + 47985z^5 - 22140z^4 - 44100z^3 + 239400z^2 - 567000z + 623700 \right) + \frac{1}{1247400} \left(e^z \sqrt{\pi} \left(-32z^{21/2} - 1520z^{19/2} - 24960z^{17/2} - 167400z^{15/2} - 388290z^{13/2} - 10395z^{11/2} + 51975z^{9/2} - 207900z^{7/2} + 623700z^{5/2} - 1247400z^{3/2} + 1247400\sqrt{z} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.acgb.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{623700} \left(-16z^{10} + 752z^9 - 12112z^8 + 78000z^7 - 160335z^6 - 47985z^5 - 22140z^4 + 44100z^3 + 239400z^2 + 567000z + 623700 \right) + \frac{1}{1247400} \left(e^{-z} \sqrt{\pi} \left(32z^{21/2} - 1520z^{19/2} + 24960z^{17/2} - 167400z^{15/2} + 388290z^{13/2} - 10395z^{11/2} - 51975z^{9/2} - 207900z^{7/2} - 623700z^{5/2} - 1247400z^{3/2} - 1247400\sqrt{z} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.acgc.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, 1; z\right) = -\frac{1}{1247400} \left(e^z \left(32z^{10} + 1360z^9 + 19200z^8 + 101400z^7 + 131250z^6 - 120015z^5 + 206325z^4 - 315000z^3 + 189000z^2 + 567000z - 1247400 \right) \right)$$

07.25.03.acgd.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{1247400} \left(-16z^9 - 592z^8 - 6792z^7 - 23940z^6 + 4515z^5 + 15030z^4 - 85500z^3 + 277200z^2 - 567000z + 567000 \right) + \frac{1}{2494800\sqrt{z}} \left(e^z \sqrt{\pi} \left(-32z^{10} - 1200z^9 - 14160z^8 - 54120z^7 - 9450z^6 + 46305z^5 - 179550z^4 + 510300z^3 - 907200z^2 + 567000z + 680400 \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.acge.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{1247400} \left(16z^9 - 592z^8 + 6792z^7 - 23940z^6 - 4515z^5 + 15030z^4 + 85500z^3 + 277200z^2 + 567000z + 567000 \right) + \frac{1}{2494800\sqrt{z}} \left(e^{-z} \sqrt{\pi} \left(-32z^{10} + 1200z^9 - 14160z^8 + 54120z^7 - 9450z^6 - 46305z^5 - 179550z^4 - 510300z^3 - 907200z^2 - 567000z + 680400 \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.acgf.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, 2; z\right) = -\frac{1}{1\,247\,400} e^z (32 z^9 + 1040 z^8 + 9840 z^7 + 22\,680 z^6 - 27\,510 z^5 + 45\,045 z^4 - 18\,900 z^3 - 239\,400 z^2 + 907\,200 z - 1\,247\,400)$$

07.25.03.acgg.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{831\,600 z} (-16 z^9 - 432 z^8 - 2912 z^7 - 840 z^6 + 9405 z^5 - 39\,825 z^4 + 113\,400 z^3 - 189\,000 z^2 + 63\,000 z + 264\,600) + \frac{1}{1\,663\,200 z^{3/2}} (e^z \sqrt{\pi} (-32 z^{10} - 880 z^9 - 6240 z^8 - 4200 z^7 + 19\,950 z^6 - 73\,395 z^5 + 187\,425 z^4 - 239\,400 z^3 - 189\,000 z^2 + 945\,000 z - 264\,600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.acgh.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{831\,600 z} (-16 z^9 + 432 z^8 - 2912 z^7 + 840 z^6 + 9405 z^5 + 39\,825 z^4 + 113\,400 z^3 + 189\,000 z^2 + 63\,000 z - 264\,600) + \frac{1}{1\,663\,200 z^{3/2}} (e^{-z} \sqrt{\pi} (32 z^{10} - 880 z^9 + 6240 z^8 - 4200 z^7 - 19\,950 z^6 - 73\,395 z^5 - 187\,425 z^4 - 239\,400 z^3 + 189\,000 z^2 + 945\,000 z + 264\,600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.acgi.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, 3; z\right) = -\frac{e^z (32 z^8 + 720 z^7 + 3360 z^6 - 4200 z^5 + 1890 z^4 + 33\,705 z^3 - 187\,425 z^2 + 510\,300 z - 623\,700)}{623\,700}$$

07.25.03.acgj.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{332\,640 z^2} (-16 z^9 - 272 z^8 - 472 z^7 + 2820 z^6 - 10\,305 z^5 + 23\,100 z^4 - 9000 z^3 - 126\,000 z^2 + 365\,400 z - 302\,400) + \frac{1}{665\,280 z^{5/2}} (e^z \sqrt{\pi} (-32 z^{10} - 560 z^9 - 1200 z^8 + 5400 z^7 - 17\,850 z^6 + 33\,705 z^5 + 189\,000 z^4 - 315\,000 z^3 + 756\,000 z^2 - 567\,000 z + 302\,400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.acgk.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{332\,640 z^2} (16 z^9 - 272 z^8 + 472 z^7 + 2820 z^6 + 10\,305 z^5 + 23\,100 z^4 + 9000 z^3 - 126\,000 z^2 - 365\,400 z - 302\,400) + \frac{1}{665\,280 z^{5/2}} (e^{-z} \sqrt{\pi} (-32 z^{10} + 560 z^9 - 1200 z^8 - 5400 z^7 - 17\,850 z^6 - 33\,705 z^5 + 189\,000 z^4 + 315\,000 z^3 + 756\,000 z^2 + 567\,000 z + 302\,400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.acgl.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, 4; z\right) = -\frac{e^z (32 z^7 + 400 z^6 - 240 z^5 - 2280 z^4 + 17850 z^3 - 73395 z^2 + 179550 z - 207900)}{207900}$$

07.25.03.acgm.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{95040 z^3} (-16 z^9 - 112 z^8 + 528 z^7 - 1440 z^6 + 105 z^5 + 20925 z^4 - 108900 z^3 + 301140 z^2 - 529200 z + 680400) + \frac{1}{190080 z^{7/2}} \left(e^z \sqrt{\pi} (-32 z^{10} - 240 z^9 + 960 z^8 - 2280 z^7 - 1890 z^6 + 45045 z^5 - 206325 z^4 + 510300 z^3 - 774900 z^2 + 982800 z - 680400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.acgn.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{95040 z^3} (-16 z^9 + 112 z^8 + 528 z^7 + 1440 z^6 + 105 z^5 - 20925 z^4 - 108900 z^3 - 301140 z^2 - 529200 z - 680400) + \frac{1}{190080 z^{7/2}} \left(e^{-z} \sqrt{\pi} (32 z^{10} - 240 z^9 - 960 z^8 - 2280 z^7 + 1890 z^6 + 45045 z^5 + 206325 z^4 + 510300 z^3 + 774900 z^2 + 982800 z + 680400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.acgo.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, 5; z\right) = -\frac{e^z (32 z^6 + 80 z^5 - 960 z^4 + 5400 z^3 - 19950 z^2 + 46305 z - 51975)}{51975}$$

07.25.03.acgp.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{21120 z^4} (-16 z^9 + 48 z^8 + 88 z^7 - 2100 z^6 + 14715 z^5 - 67950 z^4 + 238140 z^3 - 695520 z^2 + 1738800 z - 3175200) + \frac{1}{42240 z^{9/2}} \left(e^z \sqrt{\pi} (-32 z^{10} + 80 z^9 + 240 z^8 - 4200 z^7 + 27510 z^6 - 120015 z^5 + 393750 z^4 - 1064700 z^3 + 2419200 z^2 - 3855600 z + 3175200) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.acgq.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{21120 z^4} (16 z^9 + 48 z^8 - 88 z^7 - 2100 z^6 - 14715 z^5 - 67950 z^4 - 238140 z^3 - 695520 z^2 - 1738800 z - 3175200) + \frac{1}{42240 z^{9/2}} \left(e^{-z} \sqrt{\pi} (-32 z^{10} - 80 z^9 + 240 z^8 + 4200 z^7 + 27510 z^6 + 120015 z^5 + 393750 z^4 + 1064700 z^3 + 2419200 z^2 + 3855600 z + 3175200) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.acgr.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{11}{2}, 6; z\right) = -\frac{e^z (32 z^5 - 240 z^4 + 1200 z^3 - 4200 z^2 + 9450 z - 10395)}{10395}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = -\frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.acgs.01} \\
 & {}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; z\right) = \\
 & \frac{1}{13\,395\,375} \left(-64 z^{14} - 5632 z^{13} - 196\,224 z^{12} - 3\,492\,768 z^{11} - 34\,200\,300 z^{10} - 184\,714\,560 z^9 - 521\,775\,072 z^8 - \right. \\
 & \quad \left. 675\,400\,320 z^7 - 292\,148\,640 z^6 - 12\,700\,800 z^5 - 453\,600 z^4 - 181\,440 z^3 - 283\,500 z^2 - 1\,984\,500 z + 13\,395\,375 \right) - \\
 & \frac{1}{13\,395\,375} \left(2 e^z \sqrt{\pi} \left(32 z^{29/2} + 2832 z^{27/2} + 99\,504 z^{25/2} + 1\,794\,072 z^{23/2} + 17\,927\,658 z^{21/2} + 100\,144\,485 z^{19/2} + \right. \right. \\
 & \quad \left. \left. 300\,303\,360 z^{17/2} + 437\,096\,520 z^{15/2} + 249\,071\,760 z^{13/2} + 31\,744\,440 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.acgt.01} \\
 & {}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \\
 & \frac{1}{13\,395\,375} \left(-64 z^{14} + 5632 z^{13} - 196\,224 z^{12} + 3\,492\,768 z^{11} - 34\,200\,300 z^{10} + 184\,714\,560 z^9 - 521\,775\,072 z^8 + \right. \\
 & \quad \left. 675\,400\,320 z^7 - 292\,148\,640 z^6 + 12\,700\,800 z^5 - 453\,600 z^4 + 181\,440 z^3 - 283\,500 z^2 + 1\,984\,500 z + 13\,395\,375 \right) + \\
 & \frac{1}{13\,395\,375} \left(2 e^{-z} \sqrt{\pi} \left(32 z^{29/2} - 2832 z^{27/2} + 99\,504 z^{25/2} - 1\,794\,072 z^{23/2} + 17\,927\,658 z^{21/2} - 100\,144\,485 z^{19/2} + \right. \right. \\
 & \quad \left. \left. 300\,303\,360 z^{17/2} - 437\,096\,520 z^{15/2} + 249\,071\,760 z^{13/2} - 31\,744\,440 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.acgu.01} \\
 & {}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{14\,888\,375} \left(32 z^{13} + 2528 z^{12} + 77\,904 z^{11} + 1\,202\,280 z^{10} + 9\,922\,410 z^9 + 43\,259\,976 z^8 + 91\,614\,600 z^7 + \right. \\
 & \quad \left. 76\,219\,920 z^6 + 12\,700\,800 z^5 - 453\,600 z^4 - 60\,480 z^3 - 56\,700 z^2 - 283\,500 z + 14\,888\,375 \right) + \\
 & \frac{1}{14\,888\,375} \left(e^z \sqrt{\pi} \left(32 z^{27/2} + 2544 z^{25/2} + 79\,152 z^{23/2} + 1\,240\,008 z^{21/2} + 10\,487\,610 z^{19/2} + \right. \right. \\
 & \quad \left. \left. 47\,706\,435 z^{17/2} + 109\,477\,620 z^{15/2} + 108\,663\,660 z^{13/2} + 31\,744\,440 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.acgv.01} \\
 & {}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \\
 & \frac{1}{14\,888\,375} \left(-32 z^{13} + 2528 z^{12} - 77\,904 z^{11} + 1\,202\,280 z^{10} - 9\,922\,410 z^9 + 43\,259\,976 z^8 - 91\,614\,600 z^7 + \right. \\
 & \quad \left. 76\,219\,920 z^6 - 12\,700\,800 z^5 - 453\,600 z^4 + 60\,480 z^3 - 56\,700 z^2 + 283\,500 z + 14\,888\,375 \right) + \\
 & \frac{1}{14\,888\,375} \left(e^{-z} \sqrt{\pi} \left(32 z^{27/2} - 2544 z^{25/2} + 79\,152 z^{23/2} - 1\,240\,008 z^{21/2} + 10\,487\,610 z^{19/2} - \right. \right. \\
 & \quad \left. \left. 47\,706\,435 z^{17/2} + 109\,477\,620 z^{15/2} - 108\,663\,660 z^{13/2} + 31\,744\,440 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.acgw.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{212\,625} \left(-16 z^{12} - 1120 z^{11} - 30\,000 z^{10} - 391\,680 z^9 - 2\,624\,799 z^8 - 8\,669\,160 z^7 - 12\,069\,540 z^6 - 4\,233\,600 z^5 + 453\,600 z^4 - 60\,480 z^3 - 18\,900 z^2 - 56\,700 z + 212\,625\right) + \frac{1}{425\,250} \left(e^z \sqrt{\pi} \left(-32 z^{25/2} - 2256 z^{23/2} - 61\,104 z^{21/2} - 812\,280 z^{19/2} - 5\,613\,930 z^{17/2} - 19\,636\,785 z^{15/2} - 30\,930\,480 z^{13/2} - 15\,872\,220 z^{11/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.acgx.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{212\,625} \left(-16 z^{12} + 1120 z^{11} - 30\,000 z^{10} + 391\,680 z^9 - 2\,624\,799 z^8 + 8\,669\,160 z^7 - 12\,069\,540 z^6 + 4\,233\,600 z^5 + 453\,600 z^4 + 60\,480 z^3 - 18\,900 z^2 + 56\,700 z + 212\,625\right) + \frac{1}{425\,250} \left(e^{-z} \sqrt{\pi} \left(32 z^{25/2} - 2256 z^{23/2} + 61\,104 z^{21/2} - 812\,280 z^{19/2} + 5\,613\,930 z^{17/2} - 19\,636\,785 z^{15/2} + 30\,930\,480 z^{13/2} - 15\,872\,220 z^{11/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.acgy.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{85\,050} \left(16 z^{11} + 976 z^{10} + 22\,200 z^9 + 236\,748 z^8 + 1\,214\,265 z^7 + 2\,692\,620 z^6 + 1\,693\,440 z^5 - 302\,400 z^4 + 120\,960 z^3 - 37\,800 z^2 - 37\,800 z + 85\,050\right) + \frac{1}{170\,100} \left(e^z \sqrt{\pi} \left(32 z^{23/2} + 1968 z^{21/2} + 45\,360 z^{19/2} + 494\,760 z^{17/2} + 2\,645\,370 z^{15/2} + 6\,409\,935 z^{13/2} + 5\,290\,740 z^{11/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.acgz.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{85\,050} \left(-16 z^{11} + 976 z^{10} - 22\,200 z^9 + 236\,748 z^8 - 1\,214\,265 z^7 + 2\,692\,620 z^6 - 1\,693\,440 z^5 - 302\,400 z^4 - 120\,960 z^3 - 37\,800 z^2 + 37\,800 z + 85\,050\right) + \frac{1}{170\,100} \left(e^{-z} \sqrt{\pi} \left(32 z^{23/2} - 1968 z^{21/2} + 45\,360 z^{19/2} - 494\,760 z^{17/2} + 2\,645\,370 z^{15/2} - 6\,409\,935 z^{13/2} + 5\,290\,740 z^{11/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ach0.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{56\,700} \left(-16 z^{10} - 832 z^9 - 15\,552 z^8 - 128\,280 z^7 - 451\,395 z^6 - 483\,840 z^5 + 120\,960 z^4 - 80\,640 z^3 + 75\,600 z^2 - 75\,600 z + 56\,700\right) + \frac{1}{113\,400} e^z \sqrt{\pi} \left(-32 z^{21/2} - 1680 z^{19/2} - 31\,920 z^{17/2} - 271\,320 z^{15/2} - 1\,017\,450 z^{13/2} - 1\,322\,685 z^{11/2}\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.ach1.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{56700} (-16z^{10} + 832z^9 - 15552z^8 + 128280z^7 - 451395z^6 + 483840z^5 + 120960z^4 + 80640z^3 + 75600z^2 + 75600z + 56700) + \frac{1}{113400} e^{-z} \sqrt{\pi} (32z^{21/2} - 1680z^{19/2} + 31920z^{17/2} - 271320z^{15/2} + 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ach2.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{113400} (16z^9 + 688z^8 + 10056z^7 + 58212z^6 + 106365z^5 - 28620z^4 + 7308z^3 + 32760z^2 - 98280z + 113400) + \frac{1}{226800} (e^z \sqrt{\pi} (32z^{19/2} + 1392z^{17/2} + 20784z^{15/2} + 125832z^{13/2} + 262458z^{11/2} + 10395z^{9/2} - 41580z^{7/2} + 124740z^{5/2} - 249480z^{3/2} + 249480\sqrt{z}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ach3.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{113400} (-16z^9 + 688z^8 - 10056z^7 + 58212z^6 - 106365z^5 - 28620z^4 - 7308z^3 + 32760z^2 + 98280z + 113400) + \frac{1}{226800} (e^{-z} \sqrt{\pi} (32z^{19/2} - 1392z^{17/2} + 20784z^{15/2} - 125832z^{13/2} + 262458z^{11/2} - 10395z^{9/2} - 41580z^{7/2} - 124740z^{5/2} - 249480z^{3/2} - 249480\sqrt{z}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ach4.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, 1; z\right) = \frac{1}{113400} e^z (16z^9 + 624z^8 + 8040z^7 + 38640z^6 + 46305z^5 - 36855z^4 + 47880z^3 - 37800z^2 - 37800z + 113400)$$

07.25.03.ach5.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{16z^8 + 544z^7 + 5712z^6 + 18480z^5 - 2265z^4 - 13032z^3 + 51660z^2 - 110880z + 113400}{226800} + \frac{1}{453600\sqrt{z}} (e^z \sqrt{\pi} (32z^9 + 1104z^8 + 11952z^7 + 42168z^6 + 9450z^5 - 36855z^4 + 105840z^3 - 192780z^2 + 136080z + 113400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ach6.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{16z^8 - 544z^7 + 5712z^6 - 18480z^5 - 2265z^4 + 13032z^3 + 51660z^2 + 110880z + 113400}{226800} + \frac{1}{453600\sqrt{z}} (e^{-z} \sqrt{\pi} (-32z^9 + 1104z^8 - 11952z^7 + 42168z^6 - 9450z^5 - 36855z^4 - 105840z^3 - 192780z^2 - 136080z + 113400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ach7.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, 2; z\right) = \frac{e^z (16z^8 + 480z^7 + 4200z^6 + 9240z^5 - 9135z^4 + 8820z^3 + 12600z^2 - 75600z + 113400)}{113400}$$

07.25.03.ach8.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{16z^8 + 400z^7 + 2520z^6 + 1020z^5 - 7551z^4 + 23580z^3 - 42840z^2 + 25200z + 37800}{151200z} + \frac{1}{302400z^{3/2}} \\ (e^z \sqrt{\pi} (32z^9 + 816z^8 + 5424z^7 + 4200z^6 - 15750z^5 + 41895z^4 - 61740z^3 - 7560z^2 + 151200z - 37800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ach9.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-16z^8 + 400z^7 - 2520z^6 + 1020z^5 + 7551z^4 + 23580z^3 + 42840z^2 + 25200z - 37800}{151200z} + \frac{1}{302400z^{3/2}} \\ (e^{-z} \sqrt{\pi} (32z^9 - 816z^8 + 5424z^7 - 4200z^6 - 15750z^5 - 41895z^4 - 61740z^3 + 7560z^2 + 151200z + 37800) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.acha.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, 3; z\right) = \frac{e^z (16z^7 + 336z^6 + 1512z^5 - 1344z^4 - 1071z^3 + 14175z^2 - 44100z + 56700)}{56700}$$

07.25.03.achb.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{16z^8 + 256z^7 + 480z^6 - 2232z^5 + 5835z^4 - 6480z^3 - 12600z^2 + 50400z - 37800}{60480z^2} + \frac{1}{120960z^{5/2}} \\ e^z \sqrt{\pi} (32z^9 + 528z^8 + 1200z^7 - 4200z^6 + 9450z^5 - 5355z^4 - 40320z^3 + 113400z^2 - 75600z + 37800) \operatorname{erf}(\sqrt{z})$$

07.25.03.achc.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{16z^8 - 256z^7 + 480z^6 + 2232z^5 + 5835z^4 + 6480z^3 - 12600z^2 - 50400z - 37800}{60480z^2} + \frac{1}{120960z^{5/2}} \\ (e^{-z} \sqrt{\pi} (-32z^9 + 528z^8 - 1200z^7 - 4200z^6 - 9450z^5 - 5355z^4 + 40320z^3 + 113400z^2 + 75600z + 37800) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.achd.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, 4; z\right) = \frac{e^z (16z^6 + 192z^5 - 24z^4 - 1176z^3 + 5985z^2 - 15750z + 18900)}{18900}$$

07.25.03.ache.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{16z^8 + 112z^7 - 408z^6 + 660z^5 + 1605z^4 - 13500z^3 + 39060z^2 - 63000z + 75600}{17280z^3} + \frac{1}{34560z^{7/2}} \\ e^z \sqrt{\pi} (32z^9 + 240z^8 - 720z^7 + 840z^6 + 4410z^5 - 27405z^4 + 69300z^3 - 94500z^2 + 113400z - 75600) \operatorname{erf}(\sqrt{z})$$

07.25.03.achf.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{-16z^8 + 112z^7 + 408z^6 + 660z^5 - 1605z^4 - 13500z^3 - 39060z^2 - 63000z - 75600}{17280z^3} + \frac{1}{34560z^{7/2}} \\ (e^{-z} \sqrt{\pi} (32z^9 - 240z^8 - 720z^7 - 840z^6 + 4410z^5 + 27405z^4 + 69300z^3 + 94500z^2 + 113400z + 75600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.achg.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, 5; z\right) = \frac{e^z (16z^5 + 48z^4 - 408z^3 + 1680z^2 - 4095z + 4725)}{4725}$$

07.25.03.achh.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{16z^8 - 32z^7 - 144z^6 + 1632z^5 - 8145z^4 + 27720z^3 - 75852z^2 + 181440z - 317520}{3840z^4} + \frac{1}{7680z^{9/2}} (e^z \sqrt{\pi} (32z^9 - 48z^8 - 336z^7 + 3192z^6 - 14742z^5 + 46305z^4 - 115920z^3 + 253260z^2 - 393120z + 317520) \operatorname{erf}(\sqrt{z}))$$

07.25.03.achi.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{16z^8 + 32z^7 - 144z^6 - 1632z^5 - 8145z^4 - 27720z^3 - 75852z^2 - 181440z - 317520}{3840z^4} + \frac{1}{7680z^{9/2}} (e^{-z} \sqrt{\pi} (-32z^9 - 48z^8 + 336z^7 + 3192z^6 + 14742z^5 + 46305z^4 + 115920z^3 + 253260z^2 + 393120z + 317520) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.achj.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{9}{2}, 6; z\right) = \frac{1}{945} e^z (16z^4 - 96z^3 + 360z^2 - 840z + 945)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = -\frac{7}{2}$

07.25.03.achk.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{165375} (-16z^{12} - 1136z^{11} - 31008z^{10} - 415640z^9 - 2897163z^8 - 10215297z^7 - 16210830z^6 - 8543790z^5 - 453600z^4 - 20160z^3 - 11340z^2 - 40500z + 165375) + \frac{1}{330750} (e^z \sqrt{\pi} (-32z^{25/2} - 2288z^{23/2} - 63136z^{21/2} - 861192z^{19/2} - 6181650z^{17/2} - 22979835z^{15/2} - 40538115z^{13/2} - 27587430z^{11/2} - 4157010z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.achl.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{165375} (-16z^{12} + 1136z^{11} - 31008z^{10} + 415640z^9 - 2897163z^8 + 10215297z^7 - 16210830z^6 + 8543790z^5 - 453600z^4 + 20160z^3 - 11340z^2 + 40500z + 165375) + \frac{1}{330750} (e^{-z} \sqrt{\pi} (32z^{25/2} - 2288z^{23/2} + 63136z^{21/2} - 861192z^{19/2} + 6181650z^{17/2} - 22979835z^{15/2} + 40538115z^{13/2} - 27587430z^{11/2} + 4157010z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.achm.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{47250} (16z^{11} + 1008z^{10} + 23960z^9 + 272364z^8 + 1546137z^7 + 4141290z^6 + 4310190z^5 + 907200z^4 - 40320z^3 - 7560z^2 - 16200z + 47250) + \frac{1}{94500} (e^z \sqrt{\pi} (32z^{23/2} + 2032z^{21/2} + 48912z^{19/2} + 567720z^{17/2} + 3343050z^{15/2} + 9607635z^{13/2} + 11715210z^{11/2} + 4157010z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.achn.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{47250} (-16z^{11} + 1008z^{10} - 23960z^9 + 272364z^8 - 1546137z^7 + 4141290z^6 - 4310190z^5 + 907200z^4 + 40320z^3 - 7560z^2 + 16200z + 47250) + \frac{1}{94500} (e^{-z} \sqrt{\pi} (32z^{23/2} - 2032z^{21/2} + 48912z^{19/2} - 567720z^{17/2} + 3343050z^{15/2} - 9607635z^{13/2} + 11715210z^{11/2} - 4157010z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.achp.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{18900} (-16z^{10} - 880z^9 - 17808z^8 - 165936z^7 - 724335z^6 - 1308375z^5 - 604800z^4 + 80640z^3 - 15120z^2 - 10800z + 18900) + \frac{1}{37800} (e^z \sqrt{\pi} (-32z^{21/2} - 1776z^{19/2} - 36480z^{17/2} - 348840z^{15/2} - 1598850z^{13/2} - 3212235z^{11/2} - 2078505z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.achp.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{18900} (-16z^{10} + 880z^9 - 17808z^8 + 165936z^7 - 724335z^6 + 1308375z^5 - 604800z^4 - 80640z^3 - 15120z^2 + 10800z + 18900) + \frac{1}{37800} (e^{-z} \sqrt{\pi} (32z^{21/2} - 1776z^{19/2} + 36480z^{17/2} - 348840z^{15/2} + 1598850z^{13/2} - 3212235z^{11/2} + 2078505z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.achq.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{12600} (16z^9 + 752z^8 + 12552z^7 + 90980z^6 + 274845z^5 + 241920z^4 - 53760z^3 + 30240z^2 - 21600z + 12600) + \frac{1}{25200} (e^z \sqrt{\pi} (32z^{19/2} + 1520z^{17/2} + 25840z^{15/2} + 193800z^{13/2} + 629850z^{11/2} + 692835z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.achr.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{12600} (-16z^9 + 752z^8 - 12552z^7 + 90980z^6 - 274845z^5 + 241920z^4 + 53760z^3 + 30240z^2 + 21600z + 12600) + \frac{1}{25200} e^{-z} \sqrt{\pi} (32z^{19/2} - 1520z^{17/2} + 25840z^{15/2} - 193800z^{13/2} + 629850z^{11/2} - 692835z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.achs.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{-16z^8 - 624z^7 - 8192z^6 - 42120z^5 - 67635z^4 + 15267z^3 + 630z^2 - 19170z + 25200}{25200} + \frac{1}{50400} \left(e^z \sqrt{\pi} (-32z^{17/2} - 1264z^{15/2} - 16992z^{13/2} - 91848z^{11/2} - 170610z^{9/2} - 10395z^{7/2} + 31185z^{5/2} - 62370z^{3/2} + 62370\sqrt{z}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.acht.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{-16z^8 + 624z^7 - 8192z^6 + 42120z^5 - 67635z^4 - 15267z^3 + 630z^2 + 19170z + 25200}{25200} + \frac{1}{50400} \left(e^{-z} \sqrt{\pi} (32z^{17/2} - 1264z^{15/2} + 16992z^{13/2} - 91848z^{11/2} + 170610z^{9/2} - 10395z^{7/2} - 31185z^{5/2} - 62370z^{3/2} - 62370\sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.achu.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, 1; z\right) = -\frac{e^z (8z^8 + 284z^7 + 3310z^6 + 14355z^5 + 15975z^4 - 10440z^3 + 8280z^2 + 1800z - 12600)}{12600}$$

07.25.03.achv.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{-16z^7 - 496z^6 - 4728z^5 - 13980z^4 + 447z^3 + 10458z^2 - 26010z + 27720}{50400} + \frac{1}{100800\sqrt{z}} e^z \sqrt{\pi} (-32z^8 - 1008z^7 - 9936z^6 - 32232z^5 - 9450z^4 + 27405z^3 - 51030z^2 + 39690z + 22680) \operatorname{erf}(\sqrt{z})$$

07.25.03.achw.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{16z^7 - 496z^6 + 4728z^5 - 13980z^4 - 447z^3 + 10458z^2 + 26010z + 27720}{50400} + \frac{1}{100800\sqrt{z}} e^{-z} \sqrt{\pi} (-32z^8 + 1008z^7 - 9936z^6 + 32232z^5 - 9450z^4 - 27405z^3 - 51030z^2 - 39690z + 22680) \operatorname{erfi}(\sqrt{z})$$

07.25.03.achx.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, 2; z\right) = -\frac{e^z (8z^7 + 220z^6 + 1770z^5 + 3735z^4 - 2700z^3 + 360z^2 + 7200z - 12600)}{12600}$$

07.25.03.achy.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{-16z^7 - 368z^6 - 2160z^5 - 1184z^4 + 5673z^3 - 11475z^2 + 8820z + 6300}{33600z} + \frac{1}{67200z^{3/2}} e^z \sqrt{\pi} (-32z^8 - 752z^7 - 4672z^6 - 4200z^5 + 11550z^4 - 18795z^3 + 5355z^2 + 28980z - 6300) \operatorname{erf}(\sqrt{z})$$

07.25.03.achz.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{-16z^7 + 368z^6 - 2160z^5 + 1184z^4 + 5673z^3 + 11475z^2 + 8820z - 6300}{33600z} + \frac{1}{67200z^{3/2}} e^{-z} \sqrt{\pi} (32z^8 - 752z^7 + 4672z^6 - 4200z^5 - 11550z^4 - 18795z^3 - 5355z^2 + 28980z + 6300) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aci0.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, 3; z\right) = -\frac{e^z (8z^6 + 156z^5 + 678z^4 - 333z^3 - 1035z^2 + 4500z - 6300)}{6300}$$

07.25.03.aci1.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{-16z^7 - 240z^6 - 488z^5 + 1644z^4 - 2565z^3 - 540z^2 + 8100z - 5400}{13440z^2} + \frac{1}{26880z^{5/2}} e^z \sqrt{\pi} (-32z^8 - 496z^7 - 1200z^6 + 3000z^5 - 3450z^4 - 4995z^3 + 20340z^2 - 11700z + 5400) \operatorname{erf}(\sqrt{z})$$

07.25.03.aci2.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{16z^7 - 240z^6 + 488z^5 + 1644z^4 + 2565z^3 - 540z^2 - 8100z - 5400}{13440z^2} + \frac{1}{26880z^{5/2}} e^{-z} \sqrt{\pi} (-32z^8 + 496z^7 - 1200z^6 - 3000z^5 - 3450z^4 + 4995z^3 + 20340z^2 + 11700z + 5400) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aci3.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, 4; z\right) = -\frac{e^z (8z^5 + 92z^4 + 34z^3 - 537z^2 + 1650z - 2100)}{2100}$$

07.25.03.aci4.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{-16z^7 - 112z^6 + 288z^5 - 120z^4 - 1755z^3 + 5895z^2 - 8550z + 9450}{3840z^3} + \frac{1}{7680z^{7/2}} e^z \sqrt{\pi} (-32z^8 - 240z^7 + 480z^6 + 120z^5 - 4050z^4 + 11205z^3 - 13275z^2 + 14850z - 9450) \operatorname{erf}(\sqrt{z})$$

07.25.03.aci5.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-16z^7 + 112z^6 + 288z^5 + 120z^4 - 1755z^3 - 5895z^2 - 8550z - 9450}{3840z^3} + \frac{1}{7680z^{7/2}} e^{-z} \sqrt{\pi} (32z^8 - 240z^7 - 480z^6 + 120z^5 + 4050z^4 + 11205z^3 + 13275z^2 + 14850z + 9450) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aci6.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, 5; z\right) = -\frac{1}{525} e^z (8z^4 + 28z^3 - 162z^2 + 435z - 525)$$

07.25.03.aci7.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, \frac{11}{2}; z\right) = -\frac{3(16z^7 - 16z^6 - 168z^5 + 1100z^4 - 3735z^3 + 9378z^2 - 21210z + 35280)}{2560z^4} - \frac{1}{5120z^{9/2}} 3e^z \sqrt{\pi} (32z^8 - 16z^7 - 368z^6 + 2088z^5 - 6390z^4 + 14355z^3 - 29790z^2 + 44730z - 35280) \operatorname{erf}(\sqrt{z})$$

07.25.03.aci8.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3(16z^7 + 16z^6 - 168z^5 - 1100z^4 - 3735z^3 - 9378z^2 - 21210z - 35280)}{2560z^4} - \frac{1}{5120z^{9/2}} 3e^{-z} \sqrt{\pi} (32z^8 + 16z^7 - 368z^6 - 2088z^5 - 6390z^4 - 14355z^3 - 29790z^2 - 44730z - 35280) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aci9.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{7}{2}, 6; z\right) = -\frac{1}{105} e^z (8z^3 - 36z^2 + 90z - 105)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = -\frac{5}{2}$

07.25.03.acia.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{13500} (-16z^{10} - 896z^9 - 18592z^8 - 179832z^7 - 835059z^6 - 1706580z^5 - 1158030z^4 - 80640z^3 - 5040z^2 - 6480z + 13500) + \frac{1}{27000} (e^z \sqrt{\pi} (-32z^{21/2} - 1808z^{19/2} - 38064z^{17/2} - 377400z^{15/2} - 1833450z^{13/2} - 4107285z^{11/2} - 3500640z^{9/2} - 656370z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.acib.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{13500} (-16z^{10} + 896z^9 - 18592z^8 + 179832z^7 - 835059z^6 + 1706580z^5 - 1158030z^4 + 80640z^3 - 5040z^2 + 6480z + 13500) + \frac{1}{27000} (e^{-z} \sqrt{\pi} (32z^{21/2} - 1808z^{19/2} + 38064z^{17/2} - 377400z^{15/2} + 1833450z^{13/2} - 4107285z^{11/2} + 3500640z^{9/2} - 656370z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.acic.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{5400} (16z^9 + 784z^8 + 13896z^7 + 110724z^6 + 398205z^5 + 553230z^4 + 161280z^3 - 10080z^2 - 4320z + 5400) + \frac{1}{10800} e^z \sqrt{\pi} (32z^{19/2} + 1584z^{17/2} + 28560z^{15/2} + 234600z^{13/2} + 895050z^{11/2} + 1422135z^{9/2} + 656370z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.acid.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{5400} (-16z^9 + 784z^8 - 13896z^7 + 110724z^6 - 398205z^5 + 553230z^4 - 161280z^3 - 10080z^2 + 4320z + 5400) + \frac{1}{10800} e^{-z} \sqrt{\pi} (32z^{19/2} - 1584z^{17/2} + 28560z^{15/2} - 234600z^{13/2} + 895050z^{11/2} - 1422135z^{9/2} + 656370z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.acie.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{-16z^8 - 672z^7 - 9872z^6 - 61680z^5 - 155655z^4 - 107520z^3 + 20160z^2 - 8640z + 3600}{3600} + \frac{e^z \sqrt{\pi} (-32z^{17/2} - 1360z^{15/2} - 20400z^{13/2} - 132600z^{11/2} - 364650z^{9/2} - 328185z^{7/2}) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.acif.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{-16z^8 + 672z^7 - 9872z^6 + 61680z^5 - 155655z^4 + 107520z^3 + 20160z^2 + 8640z + 3600}{3600} + \frac{e^{-z}\sqrt{\pi}(32z^{17/2} - 1360z^{15/2} + 20400z^{13/2} - 132600z^{11/2} + 364650z^{9/2} - 328185z^{7/2})\operatorname{erfi}(\sqrt{z})}{7200}$$

07.25.03.acig.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{16z^7 + 560z^6 + 6520z^5 + 29340z^4 + 40929z^3 - 6510z^2 - 3510z + 7200}{7200} + \frac{1}{14400} \frac{e^z\sqrt{\pi}(32z^{15/2} + 1136z^{13/2} + 13584z^{11/2} + 64680z^{9/2} + 105930z^{7/2} + 10395z^{5/2} - 20790z^{3/2} + 20790\sqrt{z})\operatorname{erf}(\sqrt{z})}{14400}$$

07.25.03.acih.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{-16z^7 + 560z^6 - 6520z^5 + 29340z^4 - 40929z^3 - 6510z^2 + 3510z + 7200}{7200} + \frac{1}{14400} \frac{e^{-z}\sqrt{\pi}(32z^{15/2} - 1136z^{13/2} + 13584z^{11/2} - 64680z^{9/2} + 105930z^{7/2} - 10395z^{5/2} - 20790z^{3/2} - 20790\sqrt{z})\operatorname{erfi}(\sqrt{z})}{14400}$$

07.25.03.acii.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, 1; z\right) = \frac{e^z(4z^7 + 128z^6 + 1335z^5 + 5175z^4 + 5400z^3 - 2520z^2 + 360z + 1800)}{1800}$$

07.25.03.acij.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{16z^6 + 448z^5 + 3840z^4 + 10344z^3 + 987z^2 - 7380z + 8730}{14400} + \frac{e^z\sqrt{\pi}(32z^7 + 912z^6 + 8112z^5 + 24120z^4 + 9450z^3 - 17955z^2 + 15120z + 5670)\operatorname{erf}(\sqrt{z})}{28800\sqrt{z}}$$

07.25.03.acik.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{16z^6 - 448z^5 + 3840z^4 - 10344z^3 + 987z^2 + 7380z + 8730}{14400} + \frac{e^{-z}\sqrt{\pi}(-32z^7 + 912z^6 - 8112z^5 + 24120z^4 - 9450z^3 - 17955z^2 - 15120z + 5670)\operatorname{erfi}(\sqrt{z})}{28800\sqrt{z}}$$

07.25.03.acil.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, 2; z\right) = \frac{e^z(4z^6 + 100z^5 + 735z^4 + 1500z^3 - 600z^2 - 720z + 1800)}{1800}$$

07.25.03.acim.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{16z^6 + 336z^5 + 1832z^4 + 1332z^3 - 3771z^2 + 3510z + 1260}{9600z} + \frac{e^z\sqrt{\pi}(32z^7 + 688z^6 + 3984z^5 + 4200z^4 - 7350z^3 + 4095z^2 + 6930z - 1260)\operatorname{erf}(\sqrt{z})}{19200z^{3/2}}$$

07.25.03.acin.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-16z^6 + 336z^5 - 1832z^4 + 1332z^3 + 3771z^2 + 3510z - 1260}{9600z} + \frac{e^{-z}\sqrt{\pi}(32z^7 - 688z^6 + 3984z^5 - 4200z^4 - 7350z^3 - 4095z^2 + 6930z + 1260)\operatorname{erfi}(\sqrt{z})}{19200z^{3/2}}$$

07.25.03.acio.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, 3; z\right) = \frac{1}{900} e^z (4z^5 + 72z^4 + 303z^3 - 15z^2 - 540z + 900)$$

07.25.03.acip.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{16z^6 + 224z^5 + 496z^4 - 1056z^3 + 495z^2 + 1560z - 900}{3840z^2} + \frac{e^z\sqrt{\pi}(32z^7 + 464z^6 + 1200z^5 - 1800z^4 - 150z^3 + 4545z^2 - 2160z + 900)\operatorname{erf}(\sqrt{z})}{7680z^{5/2}}$$

07.25.03.aciq.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{16z^6 - 224z^5 + 496z^4 + 1056z^3 + 495z^2 - 1560z - 900}{3840z^2} + \frac{e^{-z}\sqrt{\pi}(-32z^7 + 464z^6 - 1200z^5 - 1800z^4 + 150z^3 + 4545z^2 + 2160z + 900)\operatorname{erfi}(\sqrt{z})}{7680z^{5/2}}$$

07.25.03.acir.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, 4; z\right) = \frac{1}{300} e^z (4z^4 + 44z^3 + 39z^2 - 210z + 300)$$

07.25.03.acis.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7(16z^6 + 112z^5 - 168z^4 - 180z^3 + 1065z^2 - 1350z + 1350)}{7680z^3} + \frac{7e^z\sqrt{\pi}(32z^7 + 240z^6 - 240z^5 - 600z^4 + 2250z^3 - 2205z^2 + 2250z - 1350)\operatorname{erf}(\sqrt{z})}{15360z^{7/2}}$$

07.25.03.acit.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}\sqrt{\pi}(32z^7 - 240z^6 - 240z^5 + 600z^4 + 2250z^3 + 2205z^2 + 2250z + 1350)\operatorname{erfi}(\sqrt{z})}{15360z^{7/2}} - \frac{7(16z^6 - 112z^5 - 168z^4 + 180z^3 + 1065z^2 + 1350z + 1350)}{7680z^3}$$

07.25.03.aciu.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, 5; z\right) = \frac{1}{75} e^z (4z^3 + 16z^2 - 57z + 75)$$

07.25.03.aciv.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{21(16z^6 - 160z^4 + 600z^3 - 1341z^2 + 2820z - 4410)}{5120z^4} + \frac{21e^z\sqrt{\pi}(32z^7 + 16z^6 - 336z^5 + 1080z^4 - 2070z^3 + 4005z^2 - 5760z + 4410)\operatorname{erf}(\sqrt{z})}{10240z^{9/2}}$$

07.25.03.aciw.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21(16z^6 - 160z^4 - 600z^3 - 1341z^2 - 2820z - 4410)}{5120z^4} - \frac{21e^{-z}\sqrt{\pi}(32z^7 - 16z^6 - 336z^5 - 1080z^4 - 2070z^3 - 4005z^2 - 5760z - 4410)\operatorname{erfi}(\sqrt{z})}{10240z^{9/2}}$$

07.25.03.acix.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{5}{2}, 6; z\right) = \frac{1}{15}e^z(4z^2 - 12z + 15)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = -\frac{3}{2}$

07.25.03.aciy.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{-16z^8 - 688z^7 - 10464z^6 - 69192z^5 - 195075z^4 - 187425z^3 - 20160z^2 - 2880z + 2160}{2160} + \frac{1}{4320}e^z\sqrt{\pi}(-32z^{17/2} - 1392z^{15/2} - 21600z^{13/2} - 148200z^{11/2} - 450450z^{9/2} - 521235z^{7/2} - 135135z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aciz.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{-16z^8 + 688z^7 - 10464z^6 + 69192z^5 - 195075z^4 + 187425z^3 - 20160z^2 + 2880z + 2160}{2160} + \frac{1}{4320}e^{-z}\sqrt{\pi}(32z^{17/2} - 1392z^{15/2} + 21600z^{13/2} - 148200z^{11/2} + 450450z^{9/2} - 521235z^{7/2} + 135135z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.acj0.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{16z^7 + 592z^6 + 7512z^5 + 39420z^4 + 79905z^3 + 40320z^2 - 5760z + 1440}{1440} + \frac{e^z\sqrt{\pi}(32z^{15/2} + 1200z^{13/2} + 15600z^{11/2} + 85800z^{9/2} + 193050z^{7/2} + 135135z^{5/2})\operatorname{erf}(\sqrt{z})}{2880}$$

07.25.03.acj1.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{-16z^7 + 592z^6 - 7512z^5 + 39420z^4 - 79905z^3 + 40320z^2 + 5760z + 1440}{1440} + \frac{e^{-z}\sqrt{\pi}(32z^{15/2} - 1200z^{13/2} + 15600z^{11/2} - 85800z^{9/2} + 193050z^{7/2} - 135135z^{5/2})\operatorname{erfi}(\sqrt{z})}{2880}$$

07.25.03.acj2.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{-16z^6 - 496z^5 - 5040z^4 - 19488z^3 - 23415z^2 + 1125z + 2880}{2880} + \frac{1}{5760} e^z \sqrt{\pi} (-32z^{13/2} - 1008z^{11/2} - 10560z^{9/2} - 43560z^{7/2} - 62370z^{5/2} - 10395z^{3/2} + 10395\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.acj3.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{-16z^6 + 496z^5 - 5040z^4 + 19488z^3 - 23415z^2 - 1125z + 2880}{2880} + \frac{1}{5760} e^{-z} \sqrt{\pi} (32z^{13/2} - 1008z^{11/2} + 10560z^{9/2} - 43560z^{7/2} + 62370z^{5/2} - 10395z^{3/2} - 10395\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.acj4.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{3}{2}, 1; z\right) = -\frac{1}{360} e^z (2z^6 + 57z^5 + 525z^4 + 1800z^3 + 1800z^2 - 360z - 360)$$

07.25.03.acj5.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{-16z^5 - 400z^4 - 3048z^3 - 7476z^2 - 2085z + 3870}{5760} + \frac{e^z \sqrt{\pi} (-32z^6 - 816z^5 - 6480z^4 - 17640z^3 - 9450z^2 + 8505z + 1890) \operatorname{erf}(\sqrt{z})}{11520\sqrt{z}}$$

07.25.03.acj6.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{16z^5 - 400z^4 + 3048z^3 - 7476z^2 + 2085z + 3870}{5760} + \frac{e^{-z} \sqrt{\pi} (-32z^6 + 816z^5 - 6480z^4 + 17640z^3 - 9450z^2 - 8505z + 1890) \operatorname{erfi}(\sqrt{z})}{11520\sqrt{z}}$$

07.25.03.acj7.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, 2; z\right) = -\frac{1}{360} e^z (2z^5 + 45z^4 + 300z^3 + 600z^2 - 360)$$

07.25.03.acj8.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{-16z^5 - 304z^4 - 1536z^3 - 1464z^2 + 1845z + 315}{3840z} + \frac{e^z \sqrt{\pi} (-32z^6 - 624z^5 - 3360z^4 - 4200z^3 + 3150z^2 + 2205z - 315) \operatorname{erf}(\sqrt{z})}{7680z^{3/2}}$$

07.25.03.acj9.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-16z^5 + 304z^4 - 1536z^3 + 1464z^2 + 1845z - 315}{3840z} + \frac{e^{-z} \sqrt{\pi} (32z^6 - 624z^5 + 3360z^4 - 4200z^3 - 3150z^2 + 2205z + 315) \operatorname{erfi}(\sqrt{z})}{7680z^{3/2}}$$

07.25.03.acja.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, 3; z\right) = -\frac{1}{180} e^z (2z^4 + 33z^3 + 135z^2 + 60z - 180)$$

07.25.03.acjb.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{-16z^5 - 208z^4 - 504z^3 + 468z^2 + 375z - 180}{1536z^2} + \frac{e^z \sqrt{\pi} (-32z^6 - 432z^5 - 1200z^4 + 600z^3 + 1350z^2 - 495z + 180) \operatorname{erf}(\sqrt{z})}{3072z^{5/2}}$$

07.25.03.acjc.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{16z^5 - 208z^4 + 504z^3 + 468z^2 - 375z - 180}{1536z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^6 + 432z^5 - 1200z^4 - 600z^3 + 1350z^2 + 495z + 180) \operatorname{erfi}(\sqrt{z})}{3072z^{5/2}}$$

07.25.03.acjd.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, 4; z\right) = -\frac{1}{60} e^z (2z^3 + 21z^2 + 30z - 60)$$

07.25.03.acje.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(16z^5 + 112z^4 - 48z^3 - 240z^2 + 255z - 225)}{3072z^3} - \frac{7e^z \sqrt{\pi} (32z^6 + 240z^5 - 600z^3 + 450z^2 - 405z + 225) \operatorname{erf}(\sqrt{z})}{6144z^{7/2}}$$

07.25.03.acjf.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (32z^6 - 240z^5 + 600z^3 + 450z^2 + 405z + 225) \operatorname{erfi}(\sqrt{z})}{6144z^{7/2}} - \frac{7(16z^5 - 112z^4 - 48z^3 + 240z^2 + 255z + 225)}{3072z^3}$$

07.25.03.acjg.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, 5; z\right) = -\frac{1}{15} e^z (2z^2 + 9z - 15)$$

07.25.03.acjh.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, \frac{11}{2}; z\right) = -\frac{21(16z^5 + 16z^4 - 120z^3 + 228z^2 - 435z + 630)}{2048z^4} - \frac{21e^z \sqrt{\pi} (32z^6 + 48z^5 - 240z^4 + 360z^3 - 630z^2 + 855z - 630) \operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.acji.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21(16z^5 - 16z^4 - 120z^3 - 228z^2 - 435z - 630)}{2048z^4} - \frac{21e^{-z} \sqrt{\pi} (32z^6 - 48z^5 - 240z^4 - 360z^3 - 630z^2 - 855z - 630) \operatorname{erfi}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.acjj.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{3}{2}, 6; z\right) = -\frac{1}{3} e^z (2z - 3)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = -\frac{1}{2}$

07.25.03.acjk.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{960} (-16 z^6 - 512 z^5 - 5472 z^4 - 23\,240 z^3 - 35\,595 z^2 - 11\,520 z + 960) + \frac{e^z \sqrt{\pi} (-32 z^{13/2} - 1040 z^{11/2} - 11\,440 z^{9/2} - 51\,480 z^{7/2} - 90\,090 z^{5/2} - 45\,045 z^{3/2}) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.acjl.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{960} (-16 z^6 + 512 z^5 - 5472 z^4 + 23\,240 z^3 - 35\,595 z^2 + 11\,520 z + 960) + \frac{e^{-z} \sqrt{\pi} (32 z^{13/2} - 1040 z^{11/2} + 11\,440 z^{9/2} - 51\,480 z^{7/2} + 90\,090 z^{5/2} - 45\,045 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.acjm.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{16 z^5 + 432 z^4 + 3752 z^3 + 12\,180 z^2 + 12\,645 z + 1920}{1920} + \frac{e^z \sqrt{\pi} (32 z^{11/2} + 880 z^{9/2} + 7920 z^{7/2} + 27\,720 z^{5/2} + 34\,650 z^{3/2} + 10\,395 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.acjn.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{-16 z^5 + 432 z^4 - 3752 z^3 + 12\,180 z^2 - 12\,645 z + 1920}{1920} + \frac{e^{-z} \sqrt{\pi} (32 z^{11/2} - 880 z^{9/2} + 7920 z^{7/2} - 27\,720 z^{5/2} + 34\,650 z^{3/2} - 10\,395 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.acjo.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, 1; z\right) = \frac{1}{120} e^z (z^5 + 25 z^4 + 200 z^3 + 600 z^2 + 600 z + 120)$$

07.25.03.acjp.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{16 z^4 + 352 z^3 + 2352 z^2 + 5280 z + 2895}{3840} + \frac{e^z \sqrt{\pi} (32 z^5 + 720 z^4 + 5040 z^3 + 12\,600 z^2 + 9450 z + 945) \operatorname{erf}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.acjq.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{16 z^4 - 352 z^3 + 2352 z^2 - 5280 z + 2895}{3840} + \frac{e^{-z} \sqrt{\pi} (-32 z^5 + 720 z^4 - 5040 z^3 + 12\,600 z^2 - 9450 z + 945) \operatorname{erfi}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.acjr.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, 2; z\right) = \frac{1}{120} e^z (z^4 + 20 z^3 + 120 z^2 + 240 z + 120)$$

07.25.03.acjs.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z \sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.acjt.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z} \sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.acju.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, 3; z\right) = \frac{1}{60} e^z (z^3 + 15z^2 + 60z + 60)$$

07.25.03.acjv.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{16z^4 + 192z^3 + 512z^2 + 120z - 45}{1024z^2} + \frac{e^z \sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.acjw.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.acjx.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, 4; z\right) = \frac{1}{20} e^z (z^2 + 10z + 20)$$

07.25.03.acjy.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z \sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.acjz.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.ack0.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, 5; z\right) = \frac{1}{5} e^z (z + 5)$$

07.25.03.ack1.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z\sqrt{\pi}(32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ack2.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z}\sqrt{\pi}(32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ack3.01

$${}_2F_2\left(-\frac{1}{2}, 6; -\frac{1}{2}, 6; z\right) = e^z$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = \frac{1}{2}$

07.25.03.ack4.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{1}{2}, 1; z\right) = \frac{e^z(-8z^4 - 172z^3 - 1170z^2 - 3045z + 1920)}{1920} - \frac{693}{256}\sqrt{\pi}\sqrt{z}\operatorname{erfi}(\sqrt{z})$$

07.25.03.ack5.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{1}{2}, 1; -z\right) = \frac{e^{-z}(-8z^4 + 172z^3 - 1170z^2 + 3045z + 1920)}{1920} + \frac{693}{256}\sqrt{\pi}\sqrt{z}\operatorname{erf}(\sqrt{z})$$

07.25.03.ack6.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{1}{2}, 2; z\right) = \frac{1}{960}e^z(-4z^3 - 70z^2 - 375z + 960) - \frac{231}{128}\sqrt{\pi}\sqrt{z}\operatorname{erfi}(\sqrt{z})$$

07.25.03.ack7.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{1}{2}, 2; -z\right) = \frac{1}{960}e^{-z}(4z^3 - 70z^2 + 375z + 960) + \frac{231}{128}\sqrt{\pi}\sqrt{z}\operatorname{erf}(\sqrt{z})$$

07.25.03.ack8.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{1}{2}, 3; z\right) = \frac{1}{240}e^z(-2z^2 - 27z + 240) - \frac{231}{160}\sqrt{\pi}\sqrt{z}\operatorname{erfi}(\sqrt{z})$$

07.25.03.ack9.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{1}{2}, 3; -z\right) = \frac{1}{240}e^{-z}(-2z^2 + 27z + 240) + \frac{231}{160}\sqrt{\pi}\sqrt{z}\operatorname{erf}(\sqrt{z})$$

07.25.03.acka.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{1}{2}, 4; z\right) = \frac{1}{40}e^z(40 - z) - \frac{99}{80}\sqrt{\pi}\sqrt{z}\operatorname{erfi}(\sqrt{z})$$

07.25.03.ackb.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{1}{2}, 4; -z\right) = \frac{1}{40}e^{-z}(z + 40) + \frac{99}{80}\sqrt{\pi}\sqrt{z}\operatorname{erf}(\sqrt{z})$$

07.25.03.ackc.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{1}{2}, 5; z\right) = e^z - \frac{11}{10} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ackd.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{1}{2}, 5; -z\right) = \frac{11}{10} \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

07.25.03.acke.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{1}{2}, 6; z\right) = e^z - \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ackf.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{1}{2}, 6; -z\right) = \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + e^{-z}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = 1$

07.25.03.ackg.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, 1; z\right) = \frac{1}{960} e^{z/2} (-2z^4 - 41z^3 - 274z^2 - 3360z + 960) I_0\left(\frac{z}{2}\right) + \frac{1}{960} e^{z/2} (-2z^4 - 39z^3 - 236z^2 + 2056z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ackh.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, \frac{3}{2}; z\right) = \frac{e^z (-16z^3 - 288z^2 - 1620z + 6735)}{7680} - \frac{63 \sqrt{\pi} (22z - 1) \operatorname{erfi}(\sqrt{z})}{1024 \sqrt{z}}$$

07.25.03.acki.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, \frac{3}{2}; -z\right) = \frac{e^{-z} (16z^3 - 288z^2 + 1620z + 6735)}{7680} + \frac{63 \sqrt{\pi} (22z + 1) \operatorname{erf}(\sqrt{z})}{1024 \sqrt{z}}$$

07.25.03.ackj.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, 2; z\right) = \frac{1}{480} e^{z/2} (-z^3 - 17z^2 - 960z + 480) I_0\left(\frac{z}{2}\right) + \frac{1}{480} e^{z/2} (-z^3 - 16z^2 + 788z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ackk.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, \frac{5}{2}; z\right) = \frac{e^z (-64z^3 - 928z^2 + 16630z + 105)}{20480z} - \frac{21 \sqrt{\pi} (396z^2 - 36z + 1) \operatorname{erfi}(\sqrt{z})}{8192z^{3/2}}$$

07.25.03.ackl.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, \frac{5}{2}; -z\right) = \frac{e^{-z} (-64z^3 + 928z^2 + 16630z - 105)}{20480z} + \frac{21 \sqrt{\pi} (396z^2 + 36z + 1) \operatorname{erf}(\sqrt{z})}{8192z^{3/2}}$$

07.25.03.ackm.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, 3; z\right) = \frac{1}{240} e^{z/2} (-z^2 - 360z + 240) I_0\left(\frac{z}{2}\right) - \frac{1}{240} e^{z/2} (z - 334) z I_1\left(\frac{z}{2}\right)$$

07.25.03.ackn.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, \frac{7}{2}; z\right) = \frac{e^z (-128z^3 + 12452z^2 + 240z - 45)}{16384z^2} - \frac{15 \sqrt{\pi} (1848z^3 - 252z^2 + 14z - 3) \operatorname{erfi}(\sqrt{z})}{32768z^{5/2}}$$

07.25.03.acko.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, \frac{7}{2}; -z\right) = \frac{e^{-z}(128z^3 + 12452z^2 - 240z - 45)}{16384z^2} + \frac{15\sqrt{\pi}(1848z^3 + 252z^2 + 14z + 3)\operatorname{erf}(\sqrt{z})}{32768z^{5/2}}$$

07.25.03.ackp.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, 4; z\right) = \frac{1}{4}e^{z/2}(4 - 5z)I_0\left(\frac{z}{2}\right) + \frac{49}{40}e^{z/2}zI_1\left(\frac{z}{2}\right)$$

07.25.03.ackq.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, \frac{9}{2}; z\right) = \frac{7e^z(26696z^3 + 1140z^2 - 510z + 225)}{262144z^3} - \frac{105\sqrt{\pi}(3696z^4 - 672z^3 + 56z^2 - 24z + 15)\operatorname{erfi}(\sqrt{z})}{524288z^{7/2}}$$

07.25.03.ackr.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, \frac{9}{2}; -z\right) = \frac{7e^{-z}(26696z^3 - 1140z^2 - 510z - 225)}{262144z^3} + \frac{105\sqrt{\pi}(3696z^4 + 672z^3 + 56z^2 + 24z + 15)\operatorname{erf}(\sqrt{z})}{524288z^{7/2}}$$

07.25.03.acks.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, 5; z\right) = \frac{1}{10}e^{z/2}(10 - 11z)I_0\left(\frac{z}{2}\right) + \frac{11}{10}e^{z/2}zI_1\left(\frac{z}{2}\right)$$

07.25.03.ackt.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, \frac{11}{2}; z\right) = \frac{63e^z(11088z^4 + 976z^3 - 856z^2 + 940z - 735)}{1048576z^4} - \frac{63\sqrt{\pi}(22176z^5 - 5040z^4 + 560z^3 - 360z^2 + 450z - 735)\operatorname{erfi}(\sqrt{z})}{2097152z^{9/2}}$$

07.25.03.acku.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, \frac{11}{2}; -z\right) = \frac{63e^{-z}(11088z^4 - 976z^3 - 856z^2 - 940z - 735)}{1048576z^4} + \frac{63\sqrt{\pi}(22176z^5 + 5040z^4 + 560z^3 + 360z^2 + 450z + 735)\operatorname{erf}(\sqrt{z})}{2097152z^{9/2}}$$

07.25.03.ackv.01

$${}_2F_2\left(-\frac{1}{2}, 6; 1, 6; z\right) = e^{z/2}(1 - z)I_0\left(\frac{z}{2}\right) + e^{z/2}zI_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = \frac{3}{2}$

07.25.03.ackw.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{3}{2}, 2; z\right) = \frac{e^z(-8z^2 - 120z + 2895)}{3840} - \frac{21\sqrt{\pi}(22z - 3)\operatorname{erfi}(\sqrt{z})}{512\sqrt{z}}$$

07.25.03.ackx.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{3}{2}, 2; -z\right) = \frac{e^{-z}(-8z^2 + 120z + 2895)}{3840} + \frac{21\sqrt{\pi}(22z + 3)\operatorname{erf}(\sqrt{z})}{512\sqrt{z}}$$

07.25.03.acky.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{3}{2}, 3; z\right) = \frac{1}{960} e^z (645 - 4z) - \frac{21 \sqrt{\pi} (22z - 5) \operatorname{erfi}(\sqrt{z})}{640 \sqrt{z}}$$

07.25.03.ackz.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{3}{2}, 3; -z\right) = \frac{1}{960} e^{-z} (4z + 645) + \frac{21 \sqrt{\pi} (22z + 5) \operatorname{erf}(\sqrt{z})}{640 \sqrt{z}}$$

07.25.03.acl0.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{3}{2}, 4; z\right) = \frac{97 e^z}{160} - \frac{9 \sqrt{\pi} (22z - 7) \operatorname{erfi}(\sqrt{z})}{320 \sqrt{z}}$$

07.25.03.acl1.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{3}{2}, 4; -z\right) = \frac{9 \sqrt{\pi} (22z + 7) \operatorname{erf}(\sqrt{z})}{320 \sqrt{z}} + \frac{97 e^{-z}}{160}$$

07.25.03.acl2.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{3}{2}, 5; z\right) = \frac{\sqrt{\pi} (9 - 22z) \operatorname{erfi}(\sqrt{z})}{40 \sqrt{z}} + \frac{11 e^z}{20}$$

07.25.03.acl3.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{3}{2}, 5; -z\right) = \frac{\sqrt{\pi} (22z + 9) \operatorname{erf}(\sqrt{z})}{40 \sqrt{z}} + \frac{11 e^{-z}}{20}$$

07.25.03.acl4.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{3}{2}, 6; z\right) = \frac{\sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4 \sqrt{z}} + \frac{e^z}{2}$$

07.25.03.acl5.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{3}{2}, 6; -z\right) = \frac{\sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4 \sqrt{z}} + \frac{e^{-z}}{2}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = 2$

07.25.03.acl6.01

$${}_2F_2\left(-\frac{1}{2}, 6; 2, 2; z\right) = \frac{1}{480} e^{z/2} (-z^2 - 592z + 480) I_0\left(\frac{z}{2}\right) + \frac{1}{480} e^{z/2} (-z^2 + 564z - 32) I_1\left(\frac{z}{2}\right)$$

07.25.03.acl7.01

$${}_2F_2\left(-\frac{1}{2}, 6; 2, \frac{5}{2}; z\right) = \frac{e^z (-32z^2 + 6530z - 105)}{10240z} - \frac{21 \sqrt{\pi} (132z^2 - 36z - 1) \operatorname{erfi}(\sqrt{z})}{4096 z^{3/2}}$$

07.25.03.acl8.01

$${}_2F_2\left(-\frac{1}{2}, 6; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (32z^2 + 6530z + 105)}{10240z} + \frac{21 \sqrt{\pi} (132z^2 + 36z - 1) \operatorname{erf}(\sqrt{z})}{4096 z^{3/2}}$$

07.25.03.acl9.01

$${}_2F_2\left(-\frac{1}{2}, 6; 2, 3; z\right) = \frac{1}{30} e^{z/2} (30 - 29z) I_0\left(\frac{z}{2}\right) + \frac{1}{120} e^{z/2} (115z - 16) I_1\left(\frac{z}{2}\right)$$

07.25.03.acla.01

$${}_2F_2\left(-\frac{1}{2}, 6; 2, \frac{7}{2}; z\right) = \frac{e^z (4556z^2 - 220z + 15)}{8192z^2} - \frac{15\sqrt{\pi} (616z^3 - 252z^2 - 14z + 1) \operatorname{erfi}(\sqrt{z})}{16384z^{5/2}}$$

07.25.03.aclb.01

$${}_2F_2\left(-\frac{1}{2}, 6; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (4556z^2 + 220z + 15)}{8192z^2} + \frac{15\sqrt{\pi} (616z^3 + 252z^2 - 14z - 1) \operatorname{erf}(\sqrt{z})}{16384z^{5/2}}$$

07.25.03.aclc.01

$${}_2F_2\left(-\frac{1}{2}, 6; 2, 4; z\right) = \frac{1}{40} e^{z/2} (40 - 33z) I_0\left(\frac{z}{2}\right) + \frac{1}{40} e^{z/2} (33z - 8) I_1\left(\frac{z}{2}\right)$$

07.25.03.aclid.01

$${}_2F_2\left(-\frac{1}{2}, 6; 2, \frac{9}{2}; z\right) = \frac{7e^z (9240z^3 - 932z^2 + 150z - 45)}{131072z^3} - \frac{105\sqrt{\pi} (1232z^4 - 672z^3 - 56z^2 + 8z - 3) \operatorname{erfi}(\sqrt{z})}{262144z^{7/2}}$$

07.25.03.aclle.01

$${}_2F_2\left(-\frac{1}{2}, 6; 2, \frac{9}{2}; -z\right) = \frac{7e^{-z} (9240z^3 + 932z^2 + 150z + 45)}{131072z^3} + \frac{105\sqrt{\pi} (1232z^4 + 672z^3 - 56z^2 - 8z - 3) \operatorname{erf}(\sqrt{z})}{262144z^{7/2}}$$

07.25.03.aclf.01

$${}_2F_2\left(-\frac{1}{2}, 6; 2, 5; z\right) = \frac{1}{15} e^{z/2} (15 - 11z) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (11z - 4) I_1\left(\frac{z}{2}\right)$$

07.25.03.aclg.01

$${}_2F_2\left(-\frac{1}{2}, 6; 2, \frac{11}{2}; z\right) = \frac{63e^z (3696z^4 - 672z^3 + 208z^2 - 160z + 105)}{524288z^4} - \frac{63\sqrt{\pi} (7392z^5 - 5040z^4 - 560z^3 + 120z^2 - 90z + 105) \operatorname{erfi}(\sqrt{z})}{1048576z^{9/2}}$$

07.25.03.aclh.01

$${}_2F_2\left(-\frac{1}{2}, 6; 2, \frac{11}{2}; -z\right) = \frac{63e^{-z} (3696z^4 + 672z^3 + 208z^2 + 160z + 105)}{524288z^4} + \frac{63\sqrt{\pi} (7392z^5 + 5040z^4 - 560z^3 - 120z^2 - 90z - 105) \operatorname{erf}(\sqrt{z})}{1048576z^{9/2}}$$

07.25.03.acli.01

$${}_2F_2\left(-\frac{1}{2}, 6; 2, 6; z\right) = \frac{1}{3} e^{z/2} (3 - 2z) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z - 1) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = \frac{5}{2}$

07.25.03.aclj.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{5}{2}, 3; z\right) = \frac{e^z (274z - 21)}{512z} - \frac{21\sqrt{\pi} (132z^2 - 60z - 5) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.aclk.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{5}{2}, 3; -z\right) = \frac{e^{-z}(274z + 21)}{512z} + \frac{21\sqrt{\pi}(132z^2 + 60z - 5)\operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.acll.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{5}{2}, 4; z\right) = \frac{3e^z(198z - 35)}{1280z} - \frac{3\sqrt{\pi}(396z^2 - 252z - 35)\operatorname{erfi}(\sqrt{z})}{2560z^{3/2}}$$

07.25.03.aclm.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{5}{2}, 4; -z\right) = \frac{3e^{-z}(198z + 35)}{1280z} + \frac{3\sqrt{\pi}(396z^2 + 252z - 35)\operatorname{erf}(\sqrt{z})}{2560z^{3/2}}$$

07.25.03.acln.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{5}{2}, 5; z\right) = \frac{3e^z(22z - 7)}{160z} - \frac{3\sqrt{\pi}(44z^2 - 36z - 7)\operatorname{erfi}(\sqrt{z})}{320z^{3/2}}$$

07.25.03.aclo.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{5}{2}, 5; -z\right) = \frac{3e^{-z}(22z + 7)}{160z} + \frac{3\sqrt{\pi}(44z^2 + 36z - 7)\operatorname{erf}(\sqrt{z})}{320z^{3/2}}$$

07.25.03.aclp.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{5}{2}, 6; z\right) = \frac{3e^z(2z - 1)}{16z} - \frac{3\sqrt{\pi}(4z^2 - 4z - 1)\operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.aclq.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{5}{2}, 6; -z\right) = \frac{3e^{-z}(2z + 1)}{16z} + \frac{3\sqrt{\pi}(4z^2 + 4z - 1)\operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = 3$

07.25.03.aclr.01

$${}_2F_2\left(-\frac{1}{2}, 6; 3, 3; z\right) = \frac{1}{300}e^{z/2}(302 - 231z)I_0\left(\frac{z}{2}\right) + \frac{e^{z/2}(231z^2 - 76z - 8)I_1\left(\frac{z}{2}\right)}{300z}$$

07.25.03.acls.01

$${}_2F_2\left(-\frac{1}{2}, 6; 3, \frac{7}{2}; z\right) = \frac{e^z(924z^2 - 200z - 15)}{2048z^2} - \frac{3\sqrt{\pi}(616z^3 - 420z^2 - 70z - 5)\operatorname{erfi}(\sqrt{z})}{4096z^{5/2}}$$

07.25.03.aclt.01

$${}_2F_2\left(-\frac{1}{2}, 6; 3, \frac{7}{2}; -z\right) = \frac{e^{-z}(924z^2 + 200z - 15)}{2048z^2} + \frac{3\sqrt{\pi}(616z^3 + 420z^2 - 70z + 5)\operatorname{erf}(\sqrt{z})}{4096z^{5/2}}$$

07.25.03.aclu.01

$${}_2F_2\left(-\frac{1}{2}, 6; 3, 4; z\right) = \frac{e^{z/2}(33z^2 - 18z - 4)I_1\left(\frac{z}{2}\right)}{50z} - \frac{3}{50}e^{z/2}(11z - 17)I_0\left(\frac{z}{2}\right)$$

07.25.03.aclv.01

$${}_2F_2\left(-\frac{1}{2}, 6; 3, \frac{9}{2}; z\right) = \frac{7 e^z (1848 z^3 - 756 z^2 - 130 z + 15)}{32 768 z^3} - \frac{21 \sqrt{\pi} (1232 z^4 - 1120 z^3 - 280 z^2 - 40 z + 5) \operatorname{erfi}(\sqrt{z})}{65 536 z^{7/2}}$$

07.25.03.aclw.01

$${}_2F_2\left(-\frac{1}{2}, 6; 3, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (1848 z^3 + 756 z^2 - 130 z - 15)}{32 768 z^3} + \frac{21 \sqrt{\pi} (1232 z^4 + 1120 z^3 - 280 z^2 + 40 z + 5) \operatorname{erf}(\sqrt{z})}{65 536 z^{7/2}}$$

07.25.03.aclx.01

$${}_2F_2\left(-\frac{1}{2}, 6; 3, 5; z\right) = \frac{2 e^{z/2} (22 z^2 - 17 z - 6) I_1\left(\frac{z}{2}\right)}{75 z} - \frac{2}{75} e^{z/2} (22 z - 39) I_0\left(\frac{z}{2}\right)$$

07.25.03.aclz.01

$${}_2F_2\left(-\frac{1}{2}, 6; 3, \frac{11}{2}; z\right) = \frac{63 e^z (3696 z^4 - 2352 z^3 - 728 z^2 + 220 z - 105)}{655 360 z^4} - \frac{63 \sqrt{\pi} (7392 z^5 - 8400 z^4 - 2800 z^3 - 600 z^2 + 150 z - 105) \operatorname{erfi}(\sqrt{z})}{1 310 720 z^{9/2}}$$

07.25.03.aclz.01

$${}_2F_2\left(-\frac{1}{2}, 6; 3, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (3696 z^4 + 2352 z^3 - 728 z^2 - 220 z - 105)}{655 360 z^4} + \frac{63 \sqrt{\pi} (7392 z^5 + 8400 z^4 - 2800 z^3 + 600 z^2 + 150 z + 105) \operatorname{erf}(\sqrt{z})}{1 310 720 z^{9/2}}$$

07.25.03.acm0.01

$${}_2F_2\left(-\frac{1}{2}, 6; 3, 6; z\right) = \frac{4 e^{z/2} (2 z^2 - 2 z - 1) I_1\left(\frac{z}{2}\right)}{15 z} - \frac{8}{15} e^{z/2} (z - 2) I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = \frac{7}{2}$

07.25.03.acm1.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{7}{2}, 4; z\right) = \frac{9 e^z (44 z^2 - 20 z - 5)}{1024 z^2} - \frac{3 \sqrt{\pi} (264 z^3 - 252 z^2 - 70 z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.acm2.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{7}{2}, 4; -z\right) = \frac{9 e^{-z} (44 z^2 + 20 z - 5)}{1024 z^2} + \frac{3 \sqrt{\pi} (264 z^3 + 252 z^2 - 70 z + 15) \operatorname{erf}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.acm3.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{7}{2}, 5; z\right) = \frac{e^z (44 z^2 - 32 z - 15)}{128 z^2} + \frac{\sqrt{\pi} (-88 z^3 + 108 z^2 + 42 z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{5/2}}$$

07.25.03.acm4.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{7}{2}, 5; -z\right) = \frac{e^{-z} (44 z^2 + 32 z - 15)}{128 z^2} + \frac{\sqrt{\pi} (88 z^3 + 108 z^2 - 42 z + 15) \operatorname{erf}(\sqrt{z})}{256 z^{5/2}}$$

07.25.03.acm5.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{7}{2}, 6; z\right) = \frac{5 e^z (4 z^2 - 4 z - 3)}{64 z^2} - \frac{5 \sqrt{\pi} (8 z^3 - 12 z^2 - 6 z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.acm6.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{7}{2}, 6; -z\right) = \frac{5 e^{-z} (4 z^2 + 4 z - 3)}{64 z^2} + \frac{5 \sqrt{\pi} (8 z^3 + 12 z^2 - 6 z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = 4$

07.25.03.acm7.01

$${}_2F_2\left(-\frac{1}{2}, 6; 4, 4; z\right) = \frac{e^{z/2} (-198 z^2 + 369 z + 4) I_0\left(\frac{z}{2}\right)}{350 z} + \frac{e^{z/2} (198 z^3 - 171 z^2 - 76 z - 16) I_1\left(\frac{z}{2}\right)}{350 z^2}$$

07.25.03.acm8.01

$${}_2F_2\left(-\frac{1}{2}, 6; 4, \frac{9}{2}; z\right) = \frac{21 e^z (264 z^3 - 204 z^2 - 110 z - 15)}{16384 z^3} - \frac{21 \sqrt{\pi} (528 z^4 - 672 z^3 - 280 z^2 - 120 z - 15) \operatorname{erfi}(\sqrt{z})}{32768 z^{7/2}}$$

07.25.03.acm9.01

$${}_2F_2\left(-\frac{1}{2}, 6; 4, \frac{9}{2}; -z\right) = \frac{21 e^{-z} (264 z^3 + 204 z^2 - 110 z + 15)}{16384 z^3} + \frac{21 \sqrt{\pi} (528 z^4 + 672 z^3 - 280 z^2 + 120 z - 15) \operatorname{erf}(\sqrt{z})}{32768 z^{7/2}}$$

07.25.03.acma.01

$${}_2F_2\left(-\frac{1}{2}, 6; 4, 5; z\right) = \frac{4 e^{z/2} (22 z^3 - 26 z^2 - 17 z - 8) I_1\left(\frac{z}{2}\right)}{175 z^2} - \frac{8 e^{z/2} (11 z^2 - 24 z - 1) I_0\left(\frac{z}{2}\right)}{175 z}$$

07.25.03.acmb.01

$${}_2F_2\left(-\frac{1}{2}, 6; 4, \frac{11}{2}; z\right) = \frac{63 e^z (1584 z^4 - 1728 z^3 - 1472 z^2 - 520 z + 105)}{327680 z^4} - \frac{63 \sqrt{\pi} (3168 z^5 - 5040 z^4 - 2800 z^3 - 1800 z^2 - 450 z + 105) \operatorname{erfi}(\sqrt{z})}{655360 z^{9/2}}$$

07.25.03.acmc.01

$${}_2F_2\left(-\frac{1}{2}, 6; 4, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (1584 z^4 + 1728 z^3 - 1472 z^2 + 520 z + 105)}{327680 z^4} + \frac{63 \sqrt{\pi} (3168 z^5 + 5040 z^4 - 2800 z^3 + 1800 z^2 - 450 z - 105) \operatorname{erf}(\sqrt{z})}{655360 z^{9/2}}$$

07.25.03.acmd.01

$${}_2F_2\left(-\frac{1}{2}, 6; 4, 6; z\right) = \frac{4 e^{z/2} (4 z^3 - 6 z^2 - 5 z - 4) I_1\left(\frac{z}{2}\right)}{35 z^2} - \frac{4 e^{z/2} (4 z^2 - 10 z - 1) I_0\left(\frac{z}{2}\right)}{35 z}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = \frac{9}{2}$

07.25.03.acme.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{9}{2}, 5; z\right) = \frac{7 e^z (88 z^3 - 100 z^2 - 90 z - 45)}{2048 z^3} - \frac{7 \sqrt{\pi} (176 z^4 - 288 z^3 - 168 z^2 - 120 z - 45) \operatorname{erfi}(\sqrt{z})}{4096 z^{7/2}}$$

07.25.03.acmf.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{9}{2}, 5; -z\right) = \frac{7 e^{-z} (88 z^3 + 100 z^2 - 90 z + 45)}{2048 z^3} + \frac{7 \sqrt{\pi} (176 z^4 + 288 z^3 - 168 z^2 + 120 z - 45) \operatorname{erf}(\sqrt{z})}{4096 z^{7/2}}$$

07.25.03.acmg.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{9}{2}, 6; z\right) = \frac{35 e^z (8 z^3 - 12 z^2 - 14 z - 15)}{1024 z^3} - \frac{35 \sqrt{\pi} (16 z^4 - 32 z^3 - 24 z^2 - 24 z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.acmh.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{9}{2}, 6; -z\right) = \frac{35 e^{-z} (8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = 5$

07.25.03.acmi.01

$${}_2F_2\left(-\frac{1}{2}, 6; 5, 5; z\right) = \frac{16 e^{z/2} (44 z^4 - 70 z^3 - 63 z^2 - 60 z - 24) I_1\left(\frac{z}{2}\right)}{1575 z^3} - \frac{16 e^{z/2} (44 z^3 - 114 z^2 - 15 z - 6) I_0\left(\frac{z}{2}\right)}{1575 z^2}$$

07.25.03.acmj.01

$${}_2F_2\left(-\frac{1}{2}, 6; 5, \frac{11}{2}; z\right) = \frac{63 e^z (176 z^4 - 272 z^3 - 328 z^2 - 380 z - 105)}{40960 z^4} - \frac{63 \sqrt{\pi} (352 z^5 - 720 z^4 - 560 z^3 - 600 z^2 - 450 z - 105) \operatorname{erfi}(\sqrt{z})}{81920 z^{9/2}}$$

07.25.03.acmk.01

$${}_2F_2\left(-\frac{1}{2}, 6; 5, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (176 z^4 + 272 z^3 - 328 z^2 + 380 z - 105)}{40960 z^4} + \frac{63 \sqrt{\pi} (352 z^5 + 720 z^4 - 560 z^3 + 600 z^2 - 450 z + 105) \operatorname{erf}(\sqrt{z})}{81920 z^{9/2}}$$

07.25.03.acml.01

$${}_2F_2\left(-\frac{1}{2}, 6; 5, 6; z\right) = \frac{32 e^{z/2} (4 z^4 - 8 z^3 - 9 z^2 - 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3} - \frac{32 e^{z/2} (4 z^3 - 12 z^2 - 3 z - 3) I_0\left(\frac{z}{2}\right)}{315 z^2}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = \frac{11}{2}$

07.25.03.acmm.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{11}{2}, 6; z\right) = \frac{63 e^z (16 z^4 - 32 z^3 - 48 z^2 - 80 z - 105)}{4096 z^4} - \frac{63 \sqrt{\pi} (32 z^5 - 80 z^4 - 80 z^3 - 120 z^2 - 150 z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.acmn.01

$${}_2F_2\left(-\frac{1}{2}, 6; \frac{11}{2}, 6; -z\right) = \frac{63 e^{-z} (16 z^4 + 32 z^3 - 48 z^2 + 80 z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

For fixed z and $a_1 = -\frac{1}{2}$, $a_2 = 6$, $b_1 = 6$

07.25.03.acmo.01

$${}_2F_2\left(-\frac{1}{2}, 6; 6, 6; z\right) = \frac{32 e^{z/2} (8 z^5 - 20 z^4 - 28 z^3 - 51 z^2 - 84 z - 96) I_1\left(\frac{z}{2}\right)}{693 z^4} - \frac{32 e^{z/2} (8 z^4 - 28 z^3 - 12 z^2 - 21 z - 24) I_0\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 \geq \frac{1}{2}$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{1}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.acmp.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{108056025} (e^z (4096 z^{12} + 122880 z^{11} + 1234944 z^{10} + 5007360 z^9 + 7776000 z^8 + 3456000 z^7 + 288000 z^6 - 864000 z^5 + 4374000 z^4 - 17604000 z^3 + 53184600 z^2 - 107163000 z + 108056025))$$

07.25.03.acmq.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9823275} (e^z (2048 z^{11} + 50176 z^{10} + 391680 z^9 + 1132800 z^8 + 1056000 z^7 + 144000 z^6 + 72000 z^5 - 396000 z^4 + 1593000 z^3 - 4819500 z^2 + 9724050 z - 9823275))$$

07.25.03.acmr.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1091475} (e^z (1024 z^{10} + 19456 z^9 + 108288 z^8 + 187392 z^7 + 59520 z^6 - 17280 z^5 + 44640 z^4 - 175680 z^3 + 532980 z^2 - 1077300 z + 1091475))$$

07.25.03.acms.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{155925} e^z (512 z^9 + 6912 z^8 + 23040 z^7 + 13056 z^6 - 2880 z^5 - 4320 z^4 + 24480 z^3 - 75600 z^2 + 153090 z - 155925)$$

07.25.03.acmt.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{e^z (256 z^8 + 2048 z^7 + 2304 z^6 - 1536 z^5 + 2400 z^4 - 5760 z^3 + 15120 z^2 - 30240 z + 31185)}{31185}$$

07.25.03.acmu.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{e^z (128 z^7 + 320 z^6 - 288 z^5 + 240 z^4 + 600 z^3 - 3780 z^2 + 9450 z - 10395)}{10395}$$

07.25.03.acmv.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (64 z^6 - 192 z^5 + 720 z^4 - 2400 z^3 + 6300 z^2 - 11340 z + 10395)}{10395}$$

07.25.03.acmw.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (32 z^6 - 160 z^5 + 720 z^4 - 2496 z^3 + 5826 z^2 - 5670 z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{2 e^{z/2} (16 z^6 - 96 z^5 + 464 z^4 - 1776 z^3 + 5067 z^2 - 9762 z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.acmx.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (32 z^5 - 272 z^4 + 1584 z^3 - 6744 z^2 + 20010 z - 35685)}{10395} + \frac{512 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{231 \sqrt{z}}$$

07.25.03.acmy.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} (-32 z^5 - 272 z^4 - 1584 z^3 - 6744 z^2 - 20010 z - 35685)}{10395} + \frac{512 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{231 \sqrt{z}}$$

07.25.03.acmz.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (32 z^5 - 336 z^4 + 2208 z^3 - 9924 z^2 + 28350 z + 10395) I_0\left(\frac{z}{2}\right)}{10395} + \frac{e^{z/2} (32 z^5 - 368 z^4 + 2592 z^3 - 12732 z^2 + 42846 z - 135135) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.acn0.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (16 z^5 - 224 z^4 + 1800 z^3 - 9672 z^2 + 34185 z - 80640)}{3465 z} + \frac{128 \sqrt{\pi} (2z + 7) \operatorname{erfi}(\sqrt{z})}{77 z^{3/2}}$$

07.25.03.acn1.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (16 z^5 + 224 z^4 + 1800 z^3 + 9672 z^2 + 34185 z + 80640)}{3465 z} + \frac{128 \sqrt{\pi} (2z - 7) \operatorname{erf}(\sqrt{z})}{77 z^{3/2}}$$

07.25.03.acn2.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (16 z^4 - 256 z^3 + 2244 z^2 - 12600 z + 58905) I_0\left(\frac{z}{2}\right)}{10395} + \frac{4 e^{z/2} (16 z^5 - 272 z^4 + 2524 z^3 - 15276 z^2 + 45045 z - 225225) I_1\left(\frac{z}{2}\right)}{10395 z}$$

07.25.03.acn3.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (8z^5 - 156z^4 + 1602z^3 - 10443z^2 + 40320z - 120960)}{693z^2} + \frac{320\sqrt{\pi}(z^2 + 7z + 21)\operatorname{erfi}(\sqrt{z})}{77z^{5/2}}$$

07.25.03.acn4.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-8z^5 - 156z^4 - 1602z^3 - 10443z^2 - 40320z - 120960)}{693z^2} + \frac{320\sqrt{\pi}(z^2 - 7z + 21)\operatorname{erf}(\sqrt{z})}{77z^{5/2}}$$

07.25.03.acn5.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2}(16z^4 - 344z^3 + 3780z^2 - 19404z + 153153)I_0\left(\frac{z}{2}\right)}{3465z} + \frac{4e^{z/2}(16z^5 - 360z^4 + 4148z^3 - 36036z^2 + 81081z - 612612)I_1\left(\frac{z}{2}\right)}{3465z^2}$$

07.25.03.acn6.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (4z^5 - 100z^4 + 1251z^3 - 10080z^2 + 40320z - 151200)}{99z^3} + \frac{80\sqrt{\pi}(2z^3 + 21z^2 + 126z + 315)\operatorname{erfi}(\sqrt{z})}{33z^{7/2}}$$

07.25.03.acn7.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (4z^5 + 100z^4 + 1251z^3 + 10080z^2 + 40320z + 151200)}{99z^3} + \frac{80\sqrt{\pi}(2z^3 - 21z^2 + 126z - 315)\operatorname{erf}(\sqrt{z})}{33z^{7/2}}$$

07.25.03.acn8.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2}(56z^4 - 1512z^3 + 26136z^2 - 87516z + 1247103)I_0\left(\frac{z}{2}\right)}{24255z^2} + \frac{128e^{z/2}(14z^5 - 392z^4 + 3861z^3 - 64350z^2 + 87516z - 1247103)I_1\left(\frac{z}{2}\right)}{24255z^3}$$

07.25.03.acn9.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (2z^5 - 61z^4 + 840z^3 - 8820z^2 + 34650z - 165375)}{11z^4} + \frac{15\sqrt{\pi}(8z^4 + 112z^3 + 1008z^2 + 5040z + 11025)\operatorname{erfi}(\sqrt{z})}{22z^{9/2}}$$

07.25.03.acna.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-2z^5 - 61z^4 - 840z^3 - 8820z^2 - 34650z - 165375)}{11z^4} + \frac{15\sqrt{\pi}(8z^4 - 112z^3 + 1008z^2 - 5040z + 11025)\operatorname{erf}(\sqrt{z})}{22z^{9/2}}$$

07.25.03.acnb.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (168 z^4 - 1364 z^3 + 145 860 z^2 - 138 567 z + 7759 752) I_0\left(\frac{z}{2}\right) + 32 e^{z/2} (168 z^5 - 9724 z^4 + 24 596 z^3 - 1 553 409 z^2 + 554 268 z - 31 039 008) I_1\left(\frac{z}{2}\right)}{14 553 z^3}$$

$$\frac{32 e^{z/2} (168 z^5 - 9724 z^4 + 24 596 z^3 - 1 553 409 z^2 + 554 268 z - 31 039 008) I_1\left(\frac{z}{2}\right)}{14 553 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.acnc.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{893 025}$$

$$(e^z (1024 z^{10} + 20 480 z^9 + 124 160 z^8 + 256 000 z^7 + 144 000 z^6 + 36 000 z^4 - 144 000 z^3 + 436 500 z^2 - 882 000 z + 893 025))$$

07.25.03.acnd.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$-\frac{1}{99 225} e^z (512 z^9 + 7936 z^8 + 34 304 z^7 + 42 240 z^6 + 8640 z^5 - 4320 z^4 + 15 840 z^3 - 48 240 z^2 + 97 650 z - 99 225)$$

07.25.03.acne.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{e^z (256 z^8 + 2816 z^7 + 7296 z^6 + 2880 z^5 - 2160 z^3 + 6840 z^2 - 13 860 z + 14 175)}{14 175}$$

07.25.03.acnf.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{e^z (128 z^7 + 832 z^6 + 736 z^5 - 400 z^4 + 600 z^3 - 1380 z^2 + 2730 z - 2835)}{2835}$$

07.25.03.acng.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} e^z (64 z^6 + 128 z^5 - 80 z^4 + 300 z^2 - 840 z + 945)$$

07.25.03.acnh.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{945} e^z (32 z^5 - 80 z^4 + 240 z^3 - 600 z^2 + 1050 z - 945)$$

07.25.03.acni.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, 1; z\right) =$$

$$\frac{1}{945} e^{z/2} (-16 z^5 + 64 z^4 - 220 z^3 + 516 z^2 - 525 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16 z^5 + 80 z^4 - 308 z^3 + 880 z^2 - 1689 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.acnj.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (-16 z^4 + 112 z^3 - 512 z^2 + 1580 z - 2895) + \frac{128 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{63 \sqrt{z}}$$

07.25.03.acnk.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} e^{-z} (-16 z^4 - 112 z^3 - 512 z^2 - 1580 z - 2895) + \frac{128 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{63 \sqrt{z}}$$

07.25.03.acnl.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (-16z^4 + 136z^3 - 684z^2 + 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-16z^4 + 152z^3 - 844z^2 + 3036z - 10395) I_1\left(\frac{z}{2}\right)$$

07.25.03.acnm.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (-8z^4 + 92z^3 - 578z^2 + 2235z - 5760)}{315z} + \frac{64\sqrt{\pi} (z+3) \operatorname{erfi}(\sqrt{z})}{21z^{3/2}}$$

07.25.03.acnn.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^4 + 92z^3 + 578z^2 + 2235z + 5760)}{315z} + \frac{64\sqrt{\pi} (z-3) \operatorname{erf}(\sqrt{z})}{21z^{3/2}}$$

07.25.03.acno.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, 3; z\right) = -\frac{8}{945} e^{z/2} (4z^3 - 52z^2 + 350z - 1995) I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2} (8z^4 - 112z^3 + 816z^2 - 2310z + 15015) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.acnp.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (-4z^4 + 64z^3 - 513z^2 + 2160z - 7560)}{63z^2} + \frac{20\sqrt{\pi} (4z^2 + 24z + 63) \operatorname{erfi}(\sqrt{z})}{21z^{5/2}}$$

07.25.03.acnq.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-4z^4 - 64z^3 - 513z^2 - 2160z - 7560)}{63z^2} + \frac{20\sqrt{\pi} (4z^2 - 24z + 63) \operatorname{erf}(\sqrt{z})}{21z^{5/2}}$$

07.25.03.acnr.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, 4; z\right) = -\frac{4e^{z/2} (8z^3 - 140z^2 + 672z - 9009) I_0\left(\frac{z}{2}\right)}{315z} - \frac{4e^{z/2} (8z^4 - 148z^3 + 1848z^2 - 3003z + 36036) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.acns.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (-2z^4 + 41z^3 - 440z^2 + 1820z - 8400)}{9z^3} + \frac{10\sqrt{\pi} (4z^3 + 36z^2 + 189z + 420) \operatorname{erfi}(\sqrt{z})}{9z^{7/2}}$$

07.25.03.acnt.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (2z^4 + 41z^3 + 440z^2 + 1820z + 8400)}{9z^3} + \frac{10\sqrt{\pi} (4z^3 - 36z^2 + 189z - 420) \operatorname{erf}(\sqrt{z})}{9z^{7/2}}$$

07.25.03.acnu.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, 5; z\right) = \frac{32e^{z/2} (28z^3 - 1128z^2 + 1287z - 65637) I_0\left(\frac{z}{2}\right)}{2205z^2} - \frac{32e^{z/2} (28z^4 - 132z^3 + 12441z^2 - 5148z + 262548) I_1\left(\frac{z}{2}\right)}{2205z^3}$$

07.25.03.acnv.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (-4z^4 + 80z^3 - 1400z^2 + 5250z - 33075)}{4z^4} + \frac{5\sqrt{\pi} (8z^4 + 96z^3 + 756z^2 + 3360z + 6615) \operatorname{erfi}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.acnw.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z}(-4z^4 - 80z^3 - 1400z^2 - 5250z - 33075)}{4z^4} + \frac{5\sqrt{\pi}(8z^4 - 96z^3 + 756z^2 - 3360z + 6615)\operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.acnx.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{9}{2}, 6; z\right) = \frac{32e^{z/2}(772z^3 + 19734z^2 + 36465z + 1108536)I_0\left(\frac{z}{2}\right)}{3969z^3} - \frac{352e^{z/2}(116z^4 + 650z^3 + 19773z^2 + 13260z + 403104)I_1\left(\frac{z}{2}\right)}{3969z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.acny.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{e^z(256z^8 + 3072z^7 + 9472z^6 + 6912z^5 + 864z^4 - 1728z^3 + 5328z^2 - 10800z + 11025)}{11025}$$

07.25.03.acnz.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{e^z(128z^7 + 1088z^6 + 2016z^5 + 432z^4 + 216z^3 - 756z^2 + 1530z - 1575)}{1575}$$

07.25.03.aco0.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315}e^z(64z^6 + 320z^5 + 208z^4 - 96z^3 + 156z^2 - 300z + 315)$$

07.25.03.aco1.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{105}e^z(32z^5 + 48z^4 - 16z^3 - 24z^2 + 90z - 105)$$

07.25.03.aco2.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105}e^z(16z^4 - 32z^3 + 72z^2 - 120z + 105)$$

07.25.03.aco3.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{105}e^{z/2}(8z^4 - 24z^3 + 56z^2 - 60z + 105)I_0\left(\frac{z}{2}\right) + \frac{4}{105}e^{z/2}(2z^4 - 8z^3 + 23z^2 - 44z)I_1\left(\frac{z}{2}\right)$$

07.25.03.aco4.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{105}e^z(8z^3 - 44z^2 + 146z - 279) + \frac{64\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.aco5.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{105}e^{-z}(-8z^3 - 44z^2 - 146z - 279) + \frac{64\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.aco6.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{105}e^{z/2}(8z^3 - 52z^2 + 180z + 105)I_0\left(\frac{z}{2}\right) + \frac{1}{105}e^{z/2}(8z^3 - 60z^2 + 244z - 945)I_1\left(\frac{z}{2}\right)$$

07.25.03.aco7.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (4z^3 - 36z^2 + 163z - 480)}{35z} + \frac{48\sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.aco8.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (4z^3 + 36z^2 + 163z + 480)}{35z} + \frac{48\sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.aco9.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 - 40z + 315) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4z^3 - 44z^2 + 105z - 1155) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.acoa.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (2z^3 - 25z^2 + 120z - 540)}{7z^2} + \frac{6\sqrt{\pi} (4z^2 + 20z + 45) \operatorname{erfi}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.acob.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-2z^3 - 25z^2 - 120z - 540)}{7z^2} + \frac{6\sqrt{\pi} (4z^2 - 20z + 45) \operatorname{erf}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.acoc.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (20z^2 - 14z + 3003) I_0\left(\frac{z}{2}\right)}{175z} + \frac{4 e^{z/2} (20z^3 - 546z^2 + 231z - 12012) I_1\left(\frac{z}{2}\right)}{175z^2}$$

07.25.03.acod.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (z^3 - 20z^2 + 80z - 525)}{z^3} + \frac{\sqrt{\pi} (8z^3 + 60z^2 + 270z + 525) \operatorname{erfi}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.acoe.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (z^3 + 20z^2 + 80z + 525)}{z^3} + \frac{\sqrt{\pi} (8z^3 - 60z^2 + 270z - 525) \operatorname{erf}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.acof.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (326z^2 + 858z + 19305) I_0\left(\frac{z}{2}\right)}{1225z^2} - \frac{192 e^{z/2} (31z^3 + 594z^2 + 572z + 12870) I_1\left(\frac{z}{2}\right)}{1225z^3}$$

07.25.03.acog.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9\sqrt{\pi} (8z^4 + 80z^3 + 540z^2 + 2100z + 3675) \operatorname{erfi}(\sqrt{z})}{16z^{9/2}} - \frac{45 e^z (24z^2 - 70z + 735)}{8z^4}$$

07.25.03.acoh.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9\sqrt{\pi} (8z^4 - 80z^3 + 540z^2 - 2100z + 3675) \operatorname{erf}(\sqrt{z})}{16z^{9/2}} - \frac{45 e^{-z} (24z^2 + 70z + 735)}{8z^4}$$

07.25.03.acoi.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (512z^3 + 6006z^2 + 27885z + 291720) I_0\left(\frac{z}{2}\right)}{2205z^3} - \frac{32 e^{z/2} (512z^4 + 5258z^3 + 60489z^2 + 111540z + 1166880) I_1\left(\frac{z}{2}\right)}{2205z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.acoj.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225} e^z (64 z^6 + 384 z^5 + 432 z^4 + 108 z^2 - 216 z + 225)$$

07.25.03.acok.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{45} e^z (32 z^5 + 112 z^4 + 48 z^3 - 24 z^2 + 42 z - 45)$$

07.25.03.acol.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (16 z^4 + 16 z^3 - 12 z + 15)$$

07.25.03.acom.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{15} e^z (8 z^3 - 12 z^2 + 18 z - 15)$$

07.25.03.acon.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-4 z^3 + 8 z^2 - 9 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4 z^3 + 12 z^2 - 23 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.acoo.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (-4 z^2 + 16 z - 33) + \frac{8 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{5 \sqrt{z}}$$

07.25.03.acop.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (-4 z^2 - 16 z - 33) + \frac{8 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{5 \sqrt{z}}$$

07.25.03.acoq.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (-4 z^2 + 18 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-4 z^2 + 22 z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.acor.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-2 z^2 + 13 z - 48)}{5 z} + \frac{12 \sqrt{\pi} (z + 2) \operatorname{erfi}(\sqrt{z})}{5 z^{3/2}}$$

07.25.03.acos.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (2 z^2 + 13 z + 48)}{5 z} + \frac{12 \sqrt{\pi} (z - 2) \operatorname{erf}(\sqrt{z})}{5 z^{3/2}}$$

07.25.03.acot.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, 3; z\right) = -\frac{8}{15} e^{z/2} (z - 15) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (2 z^2 + 105) I_1\left(\frac{z}{2}\right)}{15 z}$$

07.25.03.acou.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-z^2 + 6 z - 45)}{z^2} + \frac{3 \sqrt{\pi} (2 z^2 + 8 z + 15) \operatorname{erfi}(\sqrt{z})}{2 z^{5/2}}$$

07.25.03.acov.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(-z^2 - 6z - 45)}{z^2} + \frac{3\sqrt{\pi}(2z^2 - 8z + 15)\operatorname{erf}(\sqrt{z})}{2z^{5/2}}$$

07.25.03.acow.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, 4; z\right) = \frac{44e^{z/2}(2z + 21)I_0\left(\frac{z}{2}\right)}{25z} - \frac{84e^{z/2}(2z^2 + 3z + 44)I_1\left(\frac{z}{2}\right)}{25z^2}$$

07.25.03.acox.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(2z^3 + 12z^2 + 45z + 75)\operatorname{erfi}(\sqrt{z})}{4z^{7/2}} - \frac{7e^z(2z^2 - 5z + 75)}{2z^3}$$

07.25.03.acoy.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}(2z^2 + 5z + 75)}{2z^3} + \frac{7\sqrt{\pi}(2z^3 - 12z^2 + 45z - 75)\operatorname{erf}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.acoz.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, 5; z\right) = \frac{32e^{z/2}(32z^2 + 165z + 1287)I_0\left(\frac{z}{2}\right)}{175z^2} - \frac{32e^{z/2}(32z^3 + 267z^2 + 660z + 5148)I_1\left(\frac{z}{2}\right)}{175z^3}$$

07.25.03.acp0.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63\sqrt{\pi}(16z^4 + 128z^3 + 720z^2 + 2400z + 3675)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}} - \frac{63e^z(8z^3 + 100z^2 - 50z + 3675)}{128z^4}$$

07.25.03.acp1.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63e^{-z}(8z^3 - 100z^2 - 50z - 3675)}{128z^4} + \frac{63\sqrt{\pi}(16z^4 - 128z^3 + 720z^2 - 2400z + 3675)\operatorname{erf}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.acp2.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{5}{2}, 6; z\right) = \frac{32e^{z/2}(64z^3 + 528z^2 + 3003z + 17160)I_0\left(\frac{z}{2}\right)}{315z^3} - \frac{32e^{z/2}(64z^4 + 592z^3 + 4257z^2 + 12012z + 68640)I_1\left(\frac{z}{2}\right)}{315z^4}$$

For fixed z and $a_1 = \frac{1}{2}, a_2 = \frac{1}{2}, b_1 = -\frac{3}{2}$

07.25.03.acp3.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9}e^z(16z^4 + 32z^3 + 8z^2 - 8z + 9)$$

07.25.03.acp4.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{3}e^z(8z^3 + 4z^2 + 2z - 3)$$

07.25.03.acp5.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3}e^z(4z^2 - 4z + 3)$$

07.25.03.acp6.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (2z^2 - 2z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} (z^2 - 2z) I_1\left(\frac{z}{2}\right)$$

07.25.03.acp7.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (2z - 5) + \frac{4\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{3\sqrt{z}}$$

07.25.03.acp8.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{3} e^{-z} (-2z - 5) + \frac{4\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{3\sqrt{z}}$$

07.25.03.acp9.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{3} e^{z/2} (2z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.acpa.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (z - 6)}{z} + \frac{\sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{z^{3/2}}$$

07.25.03.acpb.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (z + 6)}{z} + \frac{\sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{z^{3/2}}$$

07.25.03.acpc.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, 3; z\right) = \frac{44}{9} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{20 e^{z/2} (z + 7) I_1\left(\frac{z}{2}\right)}{9z}$$

07.25.03.acpd.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (2z^2 + 6z + 9) \operatorname{erfi}(\sqrt{z})}{4z^{5/2}} - \frac{45 e^z}{2z^2}$$

07.25.03.acpe.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5\sqrt{\pi} (2z^2 - 6z + 9) \operatorname{erf}(\sqrt{z})}{4z^{5/2}} - \frac{45 e^{-z}}{2z^2}$$

07.25.03.acpf.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (16z + 63) I_0\left(\frac{z}{2}\right)}{15z} - \frac{4 e^{z/2} (16z^2 + 49z + 252) I_1\left(\frac{z}{2}\right)}{15z^2}$$

07.25.03.acpg.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi} (4z^3 + 18z^2 + 54z + 75) \operatorname{erfi}(\sqrt{z})}{48z^{7/2}} - \frac{35 e^z (2z^2 + 4z + 75)}{24z^3}$$

07.25.03.acph.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (2z^2 - 4z + 75)}{24z^3} + \frac{35\sqrt{\pi} (4z^3 - 18z^2 + 54z - 75) \operatorname{erf}(\sqrt{z})}{48z^{7/2}}$$

07.25.03.acpi.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^2 + 72 z + 297) I_0\left(\frac{z}{2}\right)}{105 z^2} - \frac{128 e^{z/2} (4 z^3 + 22 z^2 + 72 z + 297) I_1\left(\frac{z}{2}\right)}{105 z^3}$$

07.25.03.acpj.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{105 \sqrt{\pi} (16 z^4 + 96 z^3 + 432 z^2 + 1200 z + 1575) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}} - \frac{105 e^z (8 z^3 + 52 z^2 + 150 z + 1575)}{256 z^4}$$

07.25.03.acpk.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{105 e^{-z} (8 z^3 - 52 z^2 + 150 z - 1575)}{256 z^4} + \frac{105 \sqrt{\pi} (16 z^4 - 96 z^3 + 432 z^2 - 1200 z + 1575) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.acpl.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^3 + 192 z^2 + 957 z + 3432) I_0\left(\frac{z}{2}\right)}{189 z^3} - \frac{32 e^{z/2} (32 z^4 + 224 z^3 + 1197 z^2 + 3828 z + 13728) I_1\left(\frac{z}{2}\right)}{189 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{1}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.acpm.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = e^z (4 z^2 + 1)$$

07.25.03.acpn.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -e^z (2 z - 1)$$

07.25.03.acpo.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, 1; z\right) = e^{z/2} (1 - z) I_0\left(\frac{z}{2}\right) - e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.acpp.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{\sqrt{z}} - e^z$$

07.25.03.acpq.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{\sqrt{z}} - e^{-z}$$

07.25.03.acpr.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - 3 e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.acps.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{3 \sqrt{\pi} (z + 1) \operatorname{erfi}(\sqrt{z})}{2 z^{3/2}} - \frac{3 e^z}{z}$$

07.25.03.acpt.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3 \sqrt{\pi} (z - 1) \operatorname{erf}(\sqrt{z})}{2 z^{3/2}} + \frac{3 e^{-z}}{z}$$

07.25.03.acpu.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, 3; z\right) = \frac{8}{3} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (2z+5) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.acpv.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi} (4z^2 + 8z + 9) \operatorname{erfi}(\sqrt{z})}{32z^{5/2}} - \frac{15e^{-z} (2z+9)}{16z^2}$$

07.25.03.acpw.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} (2z-9)}{16z^2} + \frac{15\sqrt{\pi} (4z^2 - 8z + 9) \operatorname{erf}(\sqrt{z})}{32z^{5/2}}$$

07.25.03.acpx.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (4z+7) I_0\left(\frac{z}{2}\right)}{5z} - \frac{4 e^{z/2} (4z^2 + 11z + 28) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.acpy.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi} (4z^3 + 12z^2 + 27z + 30) \operatorname{erfi}(\sqrt{z})}{64z^{7/2}} - \frac{35e^{-z} (2z^2 + 7z + 30)}{32z^3}$$

07.25.03.acpz.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} (2z^2 - 7z + 30)}{32z^3} + \frac{35\sqrt{\pi} (4z^3 - 12z^2 + 27z - 30) \operatorname{erf}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.acq0.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^2 + 11z + 27) I_0\left(\frac{z}{2}\right)}{35z^2} - \frac{32 e^{z/2} (4z^3 + 15z^2 + 44z + 108) I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.acq1.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi} (16z^4 + 64z^3 + 216z^2 + 480z + 525) \operatorname{erfi}(\sqrt{z})}{2048z^{9/2}} - \frac{315e^{-z} (8z^3 + 36z^2 + 130z + 525)}{1024z^4}$$

07.25.03.acq2.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z} (8z^3 - 36z^2 + 130z - 525)}{1024z^4} + \frac{315\sqrt{\pi} (16z^4 - 64z^3 + 216z^2 - 480z + 525) \operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.acq3.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (8z^3 + 30z^2 + 111z + 264) I_0\left(\frac{z}{2}\right)}{63z^3} - \frac{32 e^{z/2} (8z^4 + 38z^3 + 153z^2 + 444z + 1056) I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{1}{2}$, $b_1 = \frac{1}{2}$

07.25.03.acq4.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = e^z$$

07.25.03.acq5.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, 1; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

07.25.03.acq6.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.acq7.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.acq8.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.acq9.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi} (2z+1) \operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3e^z}{4z}$$

07.25.03.acqa.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi} (2z-1) \operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.acqb.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2} (z+1) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.acqc.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi} (4z^2+4z+3) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15e^z (2z+3)}{32z^2}$$

07.25.03.acqd.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} (2z-3)}{32z^2} + \frac{15\sqrt{\pi} (4z^2-4z+3) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.acqe.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, 4; z\right) = \frac{4e^{z/2} (2z+1) I_0\left(\frac{z}{2}\right)}{5z} - \frac{4e^{z/2} (2z^2+3z+4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.acqf.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi} (8z^3+12z^2+18z+15) \operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35e^z (4z^2+8z+15)}{128z^3}$$

07.25.03.acqg.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} (4z^2-8z+15)}{128z^3} + \frac{35\sqrt{\pi} (8z^3-12z^2+18z-15) \operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.acqh.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, 5; z\right) = \frac{32e^{z/2} (2z^2+2z+3) I_0\left(\frac{z}{2}\right)}{35z^2} - \frac{64e^{z/2} (z^3+2z^2+4z+6) I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.acqi.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (16 z^4 + 32 z^3 + 72 z^2 + 120 z + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315 e^z (8 z^3 + 20 z^2 + 50 z + 105)}{2048 z^4}$$

07.25.03.acqj.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (8 z^3 - 20 z^2 + 50 z - 105)}{2048 z^4} + \frac{315 \sqrt{\pi} (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.acqk.01

$${}_2F_2\left(\frac{1}{2}, \frac{1}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (4 z^3 + 6 z^2 + 15 z + 24) I_0\left(\frac{z}{2}\right)}{63 z^3} - \frac{32 e^{z/2} (4 z^4 + 10 z^3 + 27 z^2 + 60 z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = -\frac{11}{2}$

07.25.03.acql.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{108056025} (4096 z^{12} + 145408 z^{11} + 1772544 z^{10} + 9011712 z^9 + 18336000 z^8 + 11399040 z^7 + 665280 z^6 + 30240 z^5 + 15120 z^4 + 27000 z^3 + 132300 z^2 + 1786050 z + 108056025) + \frac{4096 e^z \sqrt{\pi} (z^{25/2} + 36 z^{23/2} + 450 z^{21/2} + 2400 z^{19/2} + 5400 z^{17/2} + 4320 z^{15/2} + 720 z^{13/2}) \operatorname{erf}(\sqrt{z})}{108056025}$$

07.25.03.acqm.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{108056025} (4096 z^{12} - 145408 z^{11} + 1772544 z^{10} - 9011712 z^9 + 18336000 z^8 - 11399040 z^7 + 665280 z^6 - 30240 z^5 + 15120 z^4 - 27000 z^3 + 132300 z^2 - 1786050 z + 108056025) - \frac{4096 e^{-z} \sqrt{\pi} (z^{25/2} - 36 z^{23/2} + 450 z^{21/2} - 2400 z^{19/2} + 5400 z^{17/2} - 4320 z^{15/2} + 720 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{108056025}$$

07.25.03.acqn.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9823275} (-2048 z^{11} - 60416 z^{10} - 585216 z^9 - 2192640 z^8 - 2816640 z^7 - 665280 z^6 + 30240 z^5 + 5040 z^4 + 5400 z^3 + 18900 z^2 + 198450 z + 9823275) - \frac{2048 e^z \sqrt{\pi} (z^{23/2} + 30 z^{21/2} + 300 z^{19/2} + 1200 z^{17/2} + 1800 z^{15/2} + 720 z^{13/2}) \operatorname{erf}(\sqrt{z})}{9823275}$$

07.25.03.acqp.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{9823275} (2048 z^{11} - 60416 z^{10} + 585216 z^9 - 2192640 z^8 + 2816640 z^7 - 665280 z^6 - 30240 z^5 + 5040 z^4 - 5400 z^3 + 18900 z^2 - 198450 z + 9823275) - \frac{2048 e^{-z} \sqrt{\pi} (z^{23/2} - 30 z^{21/2} + 300 z^{19/2} - 1200 z^{17/2} + 1800 z^{15/2} - 720 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{9823275}$$

07.25.03.acqp.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1091475} (1024 z^{10} + 24064 z^9 + 172800 z^8 + 415872 z^7 + 221760 z^6 - 30240 z^5 + 5040 z^4 + 1800 z^3 + 3780 z^2 + 28350 z + 1091475) + \frac{1024 e^z \sqrt{\pi} (z^{21/2} + 24 z^{19/2} + 180 z^{17/2} + 480 z^{15/2} + 360 z^{13/2}) \operatorname{erf}(\sqrt{z})}{1091475}$$

07.25.03.acqp.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1091475} (1024 z^{10} - 24064 z^9 + 172800 z^8 - 415872 z^7 + 221760 z^6 + 30240 z^5 + 5040 z^4 - 1800 z^3 + 3780 z^2 - 28350 z + 1091475) - \frac{1024 e^{-z} \sqrt{\pi} (z^{21/2} - 24 z^{19/2} + 180 z^{17/2} - 480 z^{15/2} + 360 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{1091475}$$

07.25.03.acqr.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{155925} (-512 z^9 - 8960 z^8 - 41856 z^7 - 44352 z^6 + 10080 z^5 - 5040 z^4 + 1800 z^3 + 1260 z^2 + 5670 z + 155925) - \frac{512 e^z \sqrt{\pi} (z^{19/2} + 18 z^{17/2} + 90 z^{15/2} + 120 z^{13/2}) \operatorname{erf}(\sqrt{z})}{155925}$$

07.25.03.acqs.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{155925} (512 z^9 - 8960 z^8 + 41856 z^7 - 44352 z^6 - 10080 z^5 - 5040 z^4 - 1800 z^3 + 1260 z^2 - 5670 z + 155925) - \frac{512 e^{-z} \sqrt{\pi} (z^{19/2} - 18 z^{17/2} + 90 z^{15/2} - 120 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.acqt.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{256 z^8 + 2944 z^7 + 6336 z^6 - 2016 z^5 + 1680 z^4 - 1800 z^3 + 1260 z^2 + 1890 z + 31185}{31185} + \frac{256 e^z \sqrt{\pi} (z^{17/2} + 12 z^{15/2} + 30 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.acqu.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{256 z^8 - 2944 z^7 + 6336 z^6 + 2016 z^5 + 1680 z^4 + 1800 z^3 + 1260 z^2 - 1890 z + 31185}{31185} - \frac{256 e^{-z} \sqrt{\pi} (z^{17/2} - 12 z^{15/2} + 30 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.acqv.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{-128 z^7 - 704 z^6 + 288 z^5 - 336 z^4 + 600 z^3 - 1260 z^2 + 1890 z + 10395}{10395} - \frac{128 e^z \sqrt{\pi} (z^{15/2} + 6 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.acqw.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{128 z^7 - 704 z^6 - 288 z^5 - 336 z^4 - 600 z^3 - 1260 z^2 - 1890 z + 10395}{10395} - \frac{128 e^{-z} \sqrt{\pi} (z^{15/2} - 6 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.acqx.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{64 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{64 z^6 - 32 z^5 + 48 z^4 - 120 z^3 + 420 z^2 - 1890 z + 10395}{10395}$$

07.25.03.acqy.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 + 1890 z + 10395}{10395} - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.acqz.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, 1; z\right) = \frac{e^z (64 z^6 - 192 z^5 + 720 z^4 - 2400 z^3 + 6300 z^2 - 11340 z + 10395)}{10395}$$

07.25.03.acr0.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{32 z^5 - 208 z^4 + 1080 z^3 - 4524 z^2 + 14730 z - 35685}{10395} + \frac{32 e^z \sqrt{\pi} (z^6 - 6 z^5 + 30 z^4 - 120 z^3 + 360 z^2 - 720 z + 720) \operatorname{erf}(\sqrt{z})}{10395 \sqrt{z}}$$

07.25.03.acr1.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{-32 z^5 - 208 z^4 - 1080 z^3 - 4524 z^2 - 14730 z - 35685}{10395} + \frac{32 e^{-z} \sqrt{\pi} (z^6 + 6 z^5 + 30 z^4 + 120 z^3 + 360 z^2 + 720 z + 720) \operatorname{erfi}(\sqrt{z})}{10395 \sqrt{z}}$$

07.25.03.acr2.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, 2; z\right) = \frac{e^z (64 z^6 - 576 z^5 + 3600 z^4 - 16800 z^3 + 56700 z^2 - 124740 z + 135135)}{10395 z} - \frac{13}{z}$$

07.25.03.acr3.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{16 z^5 - 200 z^4 + 1548 z^3 - 8574 z^2 + 34185 z - 161280}{3465 z} + \frac{16 e^z \sqrt{\pi} (z^6 - 12 z^5 + 90 z^4 - 480 z^3 + 1800 z^2 - 4320 z + 5040) \operatorname{erf}(\sqrt{z})}{3465 z^{3/2}}$$

07.25.03.acr4.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{16 z^5 + 200 z^4 + 1548 z^3 + 8574 z^2 + 34185 z + 161280}{3465 z} - \frac{16 e^{-z} \sqrt{\pi} (z^6 + 12 z^5 + 90 z^4 + 480 z^3 + 1800 z^2 + 4320 z + 5040) \operatorname{erfi}(\sqrt{z})}{3465 z^{3/2}}$$

07.25.03.acr5.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, 3; z\right) = \frac{2 e^z (64 z^6 - 960 z^5 + 8400 z^4 - 50400 z^3 + 207900 z^2 - 540540 z + 675675)}{10395 z^2} - \frac{26(z+5)}{z^2}$$

07.25.03.acr6.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{8 z^5 - 148 z^4 + 1518 z^3 - 10443 z^2 + 26880 z - 322560}{693 z^2} + \frac{8 e^z \sqrt{\pi} (z^6 - 18 z^5 + 180 z^4 - 1200 z^3 + 5400 z^2 - 15120 z + 20160) \operatorname{erf}(\sqrt{z})}{693 z^{5/2}}$$

07.25.03.acr7.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{-8 z^5 - 148 z^4 - 1518 z^3 - 10443 z^2 - 26880 z - 322560}{693 z^2} + \frac{8 e^{-z} \sqrt{\pi} (z^6 + 18 z^5 + 180 z^4 + 1200 z^3 + 5400 z^2 + 15120 z + 20160) \operatorname{erfi}(\sqrt{z})}{693 z^{5/2}}$$

07.25.03.acr8.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, 4; z\right) = \frac{2 e^z (64 z^6 - 1344 z^5 + 15120 z^4 - 110880 z^3 + 540540 z^2 - 1621620 z + 2297295)}{3465 z^3} - \frac{39(z^2 + 10z + 34)}{z^3}$$

07.25.03.acr9.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{4 z^5 - 98 z^4 + 1251 z^3 - 14784 z^2 - 483840}{99 z^3} + \frac{4 e^z \sqrt{\pi} (z^6 - 24 z^5 + 300 z^4 - 2400 z^3 + 12600 z^2 - 40320 z + 60480) \operatorname{erf}(\sqrt{z})}{99 z^{7/2}}$$

07.25.03.acra.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{4z^5 + 98z^4 + 1251z^3 + 14784z^2 + 483840}{99z^3} - \frac{4e^{-z}\sqrt{\pi}(z^6 + 24z^5 + 300z^4 + 2400z^3 + 12600z^2 + 40320z + 60480)\operatorname{erfi}(\sqrt{z})}{99z^{7/2}}$$

07.25.03.acrb.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, 5; z\right) = \frac{8e^z(64z^6 - 1728z^5 + 23760z^4 - 205920z^3 + 1158300z^2 - 3938220z + 6235515)}{3465z^4} - \frac{52(7z^3 + 105z^2 + 714z + 1938)}{7z^4}$$

07.25.03.acrc.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{2z^5 - 61z^4 + 288z^3 - 20160z^2 - 40320z - 604800}{11z^4} + \frac{2e^z\sqrt{\pi}(z^6 - 30z^5 + 450z^4 - 4200z^3 + 25200z^2 - 90720z + 151200)\operatorname{erf}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.acrd.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{-2z^5 - 61z^4 - 288z^3 - 20160z^2 + 40320z - 604800}{11z^4} + \frac{2e^{-z}\sqrt{\pi}(z^6 + 30z^5 + 450z^4 + 4200z^3 + 25200z^2 + 90720z + 151200)\operatorname{erfi}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.acre.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{11}{2}, 6; z\right) = \frac{8e^z(64z^6 - 2112z^5 + 34320z^4 - 343200z^3 + 2187900z^2 - 8314020z + 14549535)}{693z^5} - \frac{65(7z^4 + 140z^3 + 1428z^2 + 7752z + 18088)}{7z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = -\frac{9}{2}$

07.25.03.acrf.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{893025}(1024z^{10} + 25088z^9 + 192768z^8 + 529280z^7 + 419520z^6 + 30240z^5 + 1680z^4 + 1080z^3 + 2700z^2 + 22050z + 893025) + \frac{1024e^z\sqrt{\pi}(z^{21/2} + 25z^{19/2} + 200z^{17/2} + 600z^{15/2} + 600z^{13/2} + 120z^{11/2})\operatorname{erf}(\sqrt{z})}{893025}$$

07.25.03.acrg.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{893\,025} (1024 z^{10} - 25\,088 z^9 + 192\,768 z^8 - 529\,280 z^7 + 419\,520 z^6 - 30\,240 z^5 + 1680 z^4 - 1080 z^3 + 2700 z^2 - 22\,050 z + 893\,025) - \frac{1024 e^{-z} \sqrt{\pi} (z^{21/2} - 25 z^{19/2} + 200 z^{17/2} - 600 z^{15/2} + 600 z^{13/2} - 120 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{893\,025}$$

07.25.03.acrh.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{-512 z^9 - 9984 z^8 - 56\,704 z^7 - 98\,880 z^6 - 30\,240 z^5 + 1680 z^4 + 360 z^3 + 540 z^2 + 3150 z + 99\,225}{99\,225} - \frac{512 e^z \sqrt{\pi} (z^{19/2} + 20 z^{17/2} + 120 z^{15/2} + 240 z^{13/2} + 120 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{99\,225}$$

07.25.03.acri.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{512 z^9 - 9984 z^8 + 56\,704 z^7 - 98\,880 z^6 + 30\,240 z^5 + 1680 z^4 - 360 z^3 + 540 z^2 - 3150 z + 99\,225}{99\,225} - \frac{512 e^{-z} \sqrt{\pi} (z^{19/2} - 20 z^{17/2} + 120 z^{15/2} - 240 z^{13/2} + 120 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{99\,225}$$

07.25.03.acrj.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{256 z^8 + 3712 z^7 + 13\,632 z^6 + 10\,080 z^5 - 1680 z^4 + 360 z^3 + 180 z^2 + 630 z + 14\,175}{14\,175} + \frac{256 e^z \sqrt{\pi} (z^{17/2} + 15 z^{15/2} + 60 z^{13/2} + 60 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{14\,175}$$

07.25.03.acrk.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{256 z^8 - 3712 z^7 + 13\,632 z^6 - 10\,080 z^5 - 1680 z^4 - 360 z^3 + 180 z^2 - 630 z + 14\,175}{14\,175} - \frac{256 e^{-z} \sqrt{\pi} (z^{17/2} - 15 z^{15/2} + 60 z^{13/2} - 60 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{14\,175}$$

07.25.03.acrl.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{-128 z^7 - 1216 z^6 - 2016 z^5 + 560 z^4 - 360 z^3 + 180 z^2 + 210 z + 2835}{2835} - \frac{128 e^z \sqrt{\pi} (z^{15/2} + 10 z^{13/2} + 20 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.acrm.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{128 z^7 - 1216 z^6 + 2016 z^5 + 560 z^4 + 360 z^3 + 180 z^2 - 210 z + 2835}{2835} - \frac{128 e^{-z} \sqrt{\pi} (z^{15/2} - 10 z^{13/2} + 20 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.acrn.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} (64 z^6 + 288 z^5 - 112 z^4 + 120 z^3 - 180 z^2 + 210 z + 945) + \frac{64}{945} e^z \sqrt{\pi} (z^{13/2} + 5 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.acro.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945} (64 z^6 - 288 z^5 - 112 z^4 - 120 z^3 - 180 z^2 - 210 z + 945) - \frac{64}{945} e^{-z} \sqrt{\pi} (z^{13/2} - 5 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.acrp.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.acrq.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.acrr.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, 1; z\right) = -\frac{1}{945} e^z (32 z^5 - 80 z^4 + 240 z^3 - 600 z^2 + 1050 z - 945)$$

07.25.03.acrs.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945} (-16 z^4 + 88 z^3 - 372 z^2 + 1210 z - 2895) - \frac{16 e^z \sqrt{\pi} (z^5 - 5 z^4 + 20 z^3 - 60 z^2 + 120 z - 120) \operatorname{erf}(\sqrt{z})}{945 \sqrt{z}}$$

07.25.03.acrt.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} (-16 z^4 - 88 z^3 - 372 z^2 - 1210 z - 2895) + \frac{16 e^{-z} \sqrt{\pi} (z^5 + 5 z^4 + 20 z^3 + 60 z^2 + 120 z + 120) \operatorname{erfi}(\sqrt{z})}{945 \sqrt{z}}$$

07.25.03.acru.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, 2; z\right) = \frac{e^z (-32 z^5 + 240 z^4 - 1200 z^3 + 4200 z^2 - 9450 z + 10395)}{945 z} - \frac{11}{z}$$

07.25.03.acrv.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-8 z^4 + 84 z^3 - 526 z^2 + 2235 z - 11520}{315 z} - \frac{8 e^z \sqrt{\pi} (z^5 - 10 z^4 + 60 z^3 - 240 z^2 + 600 z - 720) \operatorname{erf}(\sqrt{z})}{315 z^{3/2}}$$

07.25.03.acrw.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{8 z^4 + 84 z^3 + 526 z^2 + 2235 z + 11520}{315 z} - \frac{8 e^{-z} \sqrt{\pi} (z^5 + 10 z^4 + 60 z^3 + 240 z^2 + 600 z + 720) \operatorname{erfi}(\sqrt{z})}{315 z^{3/2}}$$

07.25.03.acrx.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, 3; z\right) = -\frac{22(3z+13)}{3z^2} - \frac{2 e^z (32 z^5 - 400 z^4 + 2800 z^3 - 12600 z^2 + 34650 z - 45045)}{945 z^2}$$

07.25.03.acry.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-4z^4 + 62z^3 - 513z^2 + 960z - 20160}{63z^2} - \frac{4e^z \sqrt{\pi} (z^5 - 15z^4 + 120z^3 - 600z^2 + 1800z - 2520) \operatorname{erf}(\sqrt{z})}{63z^{5/2}}$$

07.25.03.acrz.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{-4z^4 - 62z^3 - 513z^2 - 960z - 20160}{63z^2} + \frac{4e^{-z} \sqrt{\pi} (z^5 + 15z^4 + 120z^3 + 600z^2 + 1800z + 2520) \operatorname{erfi}(\sqrt{z})}{63z^{5/2}}$$

07.25.03.acs0.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, 4; z\right) = -\frac{11(3z^2 + 26z + 78)}{z^3} - \frac{2e^z (32z^5 - 560z^4 + 5040z^3 - 27720z^2 + 90090z - 135135)}{315z^3}$$

07.25.03.acs1.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-2z^4 + 41z^3 - 768z^2 - 1120z - 26880}{9z^3} - \frac{2e^z \sqrt{\pi} (z^5 - 20z^4 + 200z^3 - 1200z^2 + 4200z - 6720) \operatorname{erf}(\sqrt{z})}{9z^{7/2}}$$

07.25.03.acs2.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{2z^4 + 41z^3 + 768z^2 - 1120z + 26880}{9z^3} - \frac{2e^{-z} \sqrt{\pi} (z^5 + 20z^4 + 200z^3 + 1200z^2 + 4200z + 6720) \operatorname{erfi}(\sqrt{z})}{9z^{7/2}}$$

07.25.03.acs3.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, 5; z\right) = -\frac{44(7z^3 + 91z^2 + 546z + 1326)}{7z^4} - \frac{8e^z (32z^5 - 720z^4 + 7920z^3 - 51480z^2 + 193050z - 328185)}{315z^4}$$

07.25.03.acs4.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-z^4 - 24z^3 - 1064z^2 - 3360z - 30240}{z^4} + \frac{e^z \sqrt{\pi} (-z^5 + 25z^4 - 300z^3 + 2100z^2 - 8400z + 15120) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.acs5.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{-z^4 + 24z^3 - 1064z^2 + 3360z - 30240}{z^4} + \frac{e^{-z} \sqrt{\pi} (z^5 + 25z^4 + 300z^3 + 2100z^2 + 8400z + 15120) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.acs6.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{9}{2}, 6; z\right) = \frac{55(21z^4 + 364z^3 + 3276z^2 + 15912z + 33592)}{21z^5} - \frac{8e^z(32z^5 - 880z^4 + 11440z^3 - 85800z^2 + 364650z - 692835)}{63z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = -\frac{7}{2}$

07.25.03.acs7.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{256z^8 + 3968z^7 + 16576z^6 + 17952z^5 + 1680z^4 + 120z^3 + 108z^2 + 450z + 11025}{11025} + \frac{256e^z\sqrt{\pi}(z^{17/2} + 16z^{15/2} + 72z^{13/2} + 96z^{11/2} + 24z^{9/2})\operatorname{erf}(\sqrt{z})}{11025}$$

07.25.03.acs8.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{256z^8 - 3968z^7 + 16576z^6 - 17952z^5 + 1680z^4 - 120z^3 + 108z^2 - 450z + 11025}{11025} - \frac{256e^{-z}\sqrt{\pi}(z^{17/2} - 16z^{15/2} + 72z^{13/2} - 96z^{11/2} + 24z^{9/2})\operatorname{erfi}(\sqrt{z})}{11025}$$

07.25.03.acs9.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{-128z^7 - 1472z^6 - 3936z^5 - 1680z^4 + 120z^3 + 36z^2 + 90z + 1575}{1575} - \frac{128e^z\sqrt{\pi}(z^{15/2} + 12z^{13/2} + 36z^{11/2} + 24z^{9/2})\operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.acsa.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{128z^7 - 1472z^6 + 3936z^5 - 1680z^4 - 120z^3 + 36z^2 - 90z + 1575}{1575} - \frac{128e^{-z}\sqrt{\pi}(z^{15/2} - 12z^{13/2} + 36z^{11/2} - 24z^{9/2})\operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.acsb.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315}(64z^6 + 480z^5 + 560z^4 - 120z^3 + 36z^2 + 30z + 315) + \frac{64}{315}e^z\sqrt{\pi}(z^{13/2} + 8z^{11/2} + 12z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.acsc.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{315}(64z^6 - 480z^5 + 560z^4 + 120z^3 + 36z^2 - 30z + 315) - \frac{64}{315}e^{-z}\sqrt{\pi}(z^{13/2} - 8z^{11/2} + 12z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.acsd.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105}(-32z^5 - 112z^4 + 40z^3 - 36z^2 + 30z + 105) - \frac{32}{105}e^z\sqrt{\pi}(z^{11/2} + 4z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.acse.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} (32 z^5 - 112 z^4 - 40 z^3 - 36 z^2 - 30 z + 105) - \frac{32}{105} e^{-z} \sqrt{\pi} (z^{11/2} - 4 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.acsf.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{16}{105} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)$$

07.25.03.acsg.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.acsh.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^z (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105)$$

07.25.03.acsi.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{105} (8 z^3 - 36 z^2 + 118 z - 279) + \frac{8 e^z \sqrt{\pi} (z^4 - 4 z^3 + 12 z^2 - 24 z + 24) \operatorname{erf}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.acsj.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} (-8 z^3 - 36 z^2 - 118 z - 279) + \frac{8 e^{-z} \sqrt{\pi} (z^4 + 4 z^3 + 12 z^2 + 24 z + 24) \operatorname{erfi}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.acsk.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, 2; z\right) = \frac{e^z (16 z^4 - 96 z^3 + 360 z^2 - 840 z + 945)}{105 z} - \frac{9}{z}$$

07.25.03.acsl.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{4 z^3 - 34 z^2 + 163 z - 960}{35 z} + \frac{4 e^z \sqrt{\pi} (z^4 - 8 z^3 + 36 z^2 - 96 z + 120) \operatorname{erf}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.acsm.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{4 z^3 + 34 z^2 + 163 z + 960}{35 z} - \frac{4 e^{-z} \sqrt{\pi} (z^4 + 8 z^3 + 36 z^2 + 96 z + 120) \operatorname{erfi}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.acsn.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, 3; z\right) = \frac{2 e^z (16 z^4 - 160 z^3 + 840 z^2 - 2520 z + 3465)}{105 z^2} - \frac{6(3 z + 11)}{z^2}$$

07.25.03.acso.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{2 z^3 - 25 z^2 - 1440}{7 z^2} + \frac{2 e^z \sqrt{\pi} (z^4 - 12 z^3 + 72 z^2 - 240 z + 360) \operatorname{erf}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.acsp.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{-2 z^3 - 25 z^2 - 1440}{7 z^2} + \frac{2 e^{-z} \sqrt{\pi} (z^4 + 12 z^3 + 72 z^2 + 240 z + 360) \operatorname{erfi}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.acsq.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, 4; z\right) = \frac{2 e^z (16 z^4 - 224 z^3 + 1512 z^2 - 5544 z + 9009)}{35 z^3} - \frac{9(15 z^2 + 110 z + 286)}{5 z^3}$$

07.25.03.acsr.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{z^3 - 48z^2 - 160z - 1680}{z^3} + \frac{e^z \sqrt{\pi} (z^4 - 16z^3 + 120z^2 - 480z + 840) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.acss.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{z^3 + 48z^2 - 160z + 1680}{z^3} + \frac{e^{-z} \sqrt{\pi} (-z^4 - 16z^3 - 120z^2 - 480z - 840) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.acst.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, 5; z\right) = \frac{8e^z (16z^4 - 288z^3 + 2376z^2 - 10296z + 19305)}{35z^4} - \frac{36(35z^3 + 385z^2 + 2002z + 4290)}{35z^4}$$

07.25.03.acsu.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9e^z \sqrt{\pi} (z^4 - 20z^3 + 180z^2 - 840z + 1680) \operatorname{erf}(\sqrt{z})}{2z^{9/2}} - \frac{36(z^3 + 17z^2 + 70z + 420)}{z^4}$$

07.25.03.acsv.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{36(z^3 - 17z^2 + 70z - 420)}{z^4} + \frac{9e^{-z} \sqrt{\pi} (z^4 + 20z^3 + 180z^2 + 840z + 1680) \operatorname{erfi}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.acsw.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{7}{2}, 6; z\right) = \frac{8e^z (16z^4 - 352z^3 + 3432z^2 - 17160z + 36465)}{7z^5} - \frac{3(105z^4 + 1540z^3 + 12012z^2 + 51480z + 97240)}{7z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = -\frac{5}{2}$

07.25.03.acsx.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225} (64z^6 + 544z^5 + 912z^4 + 120z^3 + 12z^2 + 18z + 225) + \frac{64}{225} e^z \sqrt{\pi} (z^{13/2} + 9z^{11/2} + 18z^{9/2} + 6z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.acsy.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{225} (64z^6 - 544z^5 + 912z^4 - 120z^3 + 12z^2 - 18z + 225) - \frac{64}{225} e^{-z} \sqrt{\pi} (z^{13/2} - 9z^{11/2} + 18z^{9/2} - 6z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.acsz.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} (-32z^5 - 176z^4 - 120z^3 + 12z^2 + 6z + 45) - \frac{32}{45} e^z \sqrt{\pi} (z^{11/2} + 6z^{9/2} + 6z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.act0.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{45} (32z^5 - 176z^4 + 120z^3 + 12z^2 - 6z + 45) - \frac{32}{45} e^{-z} \sqrt{\pi} (z^{11/2} - 6z^{9/2} + 6z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.act1.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} (16z^4 + 40z^3 - 12z^2 + 6z + 15) + \frac{16}{15} e^z \sqrt{\pi} (z^{9/2} + 3z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.act2.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} (16z^4 - 40z^3 - 12z^2 - 6z + 15) - \frac{16}{15} e^{-z} \sqrt{\pi} (z^{9/2} - 3z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.act3.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} (-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15} e^z \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.act4.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} (8z^3 + 4z^2 + 6z + 15) - \frac{8}{15} e^{-z} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.act5.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, 1; z\right) = -\frac{1}{15} e^z (8z^3 - 12z^2 + 18z - 15)$$

07.25.03.act6.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15} (-4z^2 + 14z - 33) - \frac{4 e^z \sqrt{\pi} (z^3 - 3z^2 + 6z - 6) \operatorname{erf}(\sqrt{z})}{15 \sqrt{z}}$$

07.25.03.act7.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} (-4z^2 - 14z - 33) + \frac{4 e^{-z} \sqrt{\pi} (z^3 + 3z^2 + 6z + 6) \operatorname{erfi}(\sqrt{z})}{15 \sqrt{z}}$$

07.25.03.act8.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, 2; z\right) = \frac{e^z (-8z^3 + 36z^2 - 90z + 105)}{15z} - \frac{7}{z}$$

07.25.03.act9.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-2z^2 + 13z - 96}{5z} - \frac{2 e^z \sqrt{\pi} (z^3 - 6z^2 + 18z - 24) \operatorname{erf}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.acta.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{2z^2 + 13z + 96}{5z} - \frac{2 e^{-z} \sqrt{\pi} (z^3 + 6z^2 + 18z + 24) \operatorname{erfi}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.actb.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, 3; z\right) = -\frac{14(z+3)}{z^2} - \frac{2 e^z (8z^3 - 60z^2 + 210z - 315)}{15z^2}$$

07.25.03.actc.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-z^2 - 8z - 120}{z^2} + \frac{e^z \sqrt{\pi} (-z^3 + 9z^2 - 36z + 60) \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.actd.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-z^2 + 8z - 120}{z^2} + \frac{e^{-z} \sqrt{\pi} (z^3 + 9z^2 + 36z + 60) \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.acte.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, 4; z\right) = -\frac{21(5z^2 + 30z + 66)}{5z^3} - \frac{2 e^z (8z^3 - 84z^2 + 378z - 693)}{5z^3}$$

07.25.03.actf.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{28(z^2 + 5z + 30)}{z^3} - \frac{7e^z \sqrt{\pi} (z^3 - 12z^2 + 60z - 120) \operatorname{erf}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.actg.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{28(z^2 - 5z + 30)}{z^3} - \frac{7e^{-z} \sqrt{\pi} (z^3 + 12z^2 + 60z + 120) \operatorname{erfi}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.acth.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, 5; z\right) = -\frac{8e^z(8z^3 - 108z^2 + 594z - 1287)}{5z^4} - \frac{4(35z^3 + 315z^2 + 1386z + 2574)}{5z^4}$$

07.25.03.acti.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{63(z^3 + 11z^2 + 50z + 210)}{2z^4} - \frac{63e^z \sqrt{\pi} (z^3 - 15z^2 + 90z - 210) \operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.actj.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63(z^3 - 11z^2 + 50z - 210)}{2z^4} + \frac{63e^{-z} \sqrt{\pi} (z^3 + 15z^2 + 90z + 210) \operatorname{erfi}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.actk.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{5}{2}, 6; z\right) = \frac{-35z^4 - 420z^3 - 2772z^2 - 10296z - 17160}{z^5} - \frac{8e^z(8z^3 - 132z^2 + 858z - 2145)}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = -\frac{3}{2}$

07.25.03.actl.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9}(16z^4 + 56z^3 + 12z^2 + 2z + 9) + \frac{16}{9}e^z \sqrt{\pi} (z^{9/2} + 4z^{7/2} + 2z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.actm.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9}(16z^4 - 56z^3 + 12z^2 - 2z + 9) - \frac{16}{9}e^{-z} \sqrt{\pi} (z^{9/2} - 4z^{7/2} + 2z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.actn.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3}(-8z^3 - 12z^2 + 2z + 3) - \frac{8}{3}e^z \sqrt{\pi} (z^{7/2} + 2z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.acto.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3}(8z^3 - 12z^2 - 2z + 3) - \frac{8}{3}e^{-z} \sqrt{\pi} (z^{7/2} - 2z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.actp.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{4}{3}e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3}(4z^2 - 2z + 3)$$

07.25.03.actq.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3}(4z^2 + 2z + 3) - \frac{4}{3}e^{-z} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.actr.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, 1; z\right) = \frac{1}{3} e^z (4z^2 - 4z + 3)$$

07.25.03.acts.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3} (2z - 5) + \frac{2 e^z \sqrt{\pi} (z^2 - 2z + 2) \operatorname{erf}(\sqrt{z})}{3 \sqrt{z}}$$

07.25.03.actt.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{3} (-2z - 5) + \frac{2 e^{-z} \sqrt{\pi} (z^2 + 2z + 2) \operatorname{erfi}(\sqrt{z})}{3 \sqrt{z}}$$

07.25.03.actu.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, 2; z\right) = \frac{e^z (4z^2 - 12z + 15)}{3z} - \frac{5}{z}$$

07.25.03.actv.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{z - 12}{z} + \frac{e^z \sqrt{\pi} (z^2 - 4z + 6) \operatorname{erf}(\sqrt{z})}{z^{3/2}}$$

07.25.03.actw.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{z + 12}{z} + \frac{e^{-z} \sqrt{\pi} (-z^2 - 4z - 6) \operatorname{erfi}(\sqrt{z})}{z^{3/2}}$$

07.25.03.actx.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, 3; z\right) = \frac{2 e^z (4z^2 - 20z + 35)}{3z^2} - \frac{10(3z + 7)}{3z^2}$$

07.25.03.acty.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5 e^z \sqrt{\pi} (z^2 - 6z + 12) \operatorname{erf}(\sqrt{z})}{2 z^{5/2}} - \frac{10(z + 6)}{z^2}$$

07.25.03.actz.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{10(z - 6)}{z^2} + \frac{5 e^{-z} \sqrt{\pi} (z^2 + 6z + 12) \operatorname{erfi}(\sqrt{z})}{2 z^{5/2}}$$

07.25.03.acu0.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, 4; z\right) = \frac{-15z^2 - 70z - 126}{z^3} + \frac{2 e^z (4z^2 - 28z + 63)}{z^3}$$

07.25.03.acu1.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35 e^z \sqrt{\pi} (z^2 - 8z + 20) \operatorname{erf}(\sqrt{z})}{4 z^{7/2}} - \frac{35(3z^2 + 16z + 60)}{6z^3}$$

07.25.03.acu2.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(3z^2 - 16z + 60)}{6z^3} - \frac{35 e^{-z} \sqrt{\pi} (z^2 + 8z + 20) \operatorname{erfi}(\sqrt{z})}{4 z^{7/2}}$$

07.25.03.acu3.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, 5; z\right) = \frac{8 e^z (4 z^2 - 36 z + 99)}{z^4} - \frac{4 (5 z^3 + 35 z^2 + 126 z + 198)}{z^4}$$

07.25.03.acu4.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{315 e^z \sqrt{\pi} (z^2 - 10 z + 30) \operatorname{erf}(\sqrt{z})}{8 z^{9/2}} - \frac{15 (6 z^3 + 49 z^2 + 210 z + 630)}{4 z^4}$$

07.25.03.acu5.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{15 (6 z^3 - 49 z^2 + 210 z - 630)}{4 z^4} + \frac{315 e^{-z} \sqrt{\pi} (z^2 + 10 z + 30) \operatorname{erfi}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.acu6.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{3}{2}, 6; z\right) = \frac{40 e^z (4 z^2 - 44 z + 143)}{z^5} - \frac{5 (15 z^4 + 140 z^3 + 756 z^2 + 2376 z + 3432)}{3 z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = -\frac{1}{2}$

07.25.03.acu7.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, -\frac{1}{2}; z\right) = 4 z^2 + 2 z + 4 e^z \sqrt{\pi} (z^{5/2} + z^{3/2}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.acu8.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, -\frac{1}{2}; -z\right) = 4 z^2 - 2 z - 4 e^{-z} \sqrt{\pi} (z^{5/2} - z^{3/2}) \operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.acu9.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, \frac{1}{2}; z\right) = -2 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} - 2 z + 1$$

07.25.03.acua.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, \frac{1}{2}; -z\right) = -2 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + 2 z + 1$$

07.25.03.acub.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, 1; z\right) = -e^z (2 z - 1)$$

07.25.03.acuc.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (1 - z) \operatorname{erf}(\sqrt{z})}{\sqrt{z}} - 1$$

07.25.03.acud.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (z + 1) \operatorname{erfi}(\sqrt{z})}{\sqrt{z}} - 1$$

07.25.03.acue.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, 2; z\right) = \frac{e^z (3 - 2 z)}{z} - \frac{3}{z}$$

07.25.03.acuf.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{3 e^z \sqrt{\pi} (z-2) \operatorname{erf}(\sqrt{z})}{2 z^{3/2}} - \frac{6}{z}$$

07.25.03.acug.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{6}{z} - \frac{3 e^{-z} \sqrt{\pi} (z+2) \operatorname{erfi}(\sqrt{z})}{2 z^{3/2}}$$

07.25.03.acuh.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, 3; z\right) = -\frac{2 e^z (2z-5)}{z^2} - \frac{2(3z+5)}{z^2}$$

07.25.03.acui.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{15(z+3)}{2 z^2} - \frac{15 e^z \sqrt{\pi} (z-3) \operatorname{erf}(\sqrt{z})}{4 z^{5/2}}$$

07.25.03.acuj.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15(z-3)}{2 z^2} + \frac{15 e^{-z} \sqrt{\pi} (z+3) \operatorname{erfi}(\sqrt{z})}{4 z^{5/2}}$$

07.25.03.acuk.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, 4; z\right) = -\frac{6 e^z (2z-7)}{z^3} - \frac{3(3z^2+10z+14)}{z^3}$$

07.25.03.acul.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{7(6z^2+25z+60)}{4 z^3} - \frac{105 e^z \sqrt{\pi} (z-4) \operatorname{erf}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.acum.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7(6z^2-25z+60)}{4 z^3} - \frac{105 e^{-z} \sqrt{\pi} (z+4) \operatorname{erfi}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.acun.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, 5; z\right) = -\frac{24 e^z (2z-9)}{z^4} - \frac{12(z^3+5z^2+14z+18)}{z^4}$$

07.25.03.acuo.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{9(12z^3+70z^2+245z+525)}{8 z^4} - \frac{945 e^z \sqrt{\pi} (z-5) \operatorname{erf}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.acup.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{9(12z^3-70z^2+245z-525)}{8 z^4} + \frac{945 e^{-z} \sqrt{\pi} (z+5) \operatorname{erfi}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.acuq.01

$${}_2F_2\left(\frac{1}{2}, 1; -\frac{1}{2}, 6; z\right) = -\frac{120 e^z (2z-11)}{z^5} - \frac{5(3z^4+20z^3+84z^2+216z+264)}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = \frac{1}{2}$

07.25.03.acur.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, \frac{1}{2}; z\right) = e^z \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.acus.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, \frac{1}{2}; -z\right) = 1 - e^{-z} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.acut.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, 1; z\right) = e^z$$

07.25.03.acuu.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.acuv.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.acuw.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, 2; z\right) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.acux.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3}{2z}$$

07.25.03.acuy.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3}{2z} - \frac{3 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.acuz.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, 3; z\right) = \frac{2 e^z}{z^2} - \frac{2(z+1)}{z^2}$$

07.25.03.acv0.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5(2z+3)}{4 z^2}$$

07.25.03.acv1.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5(2z-3)}{4 z^2} + \frac{15 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.acv2.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, 4; z\right) = \frac{6 e^z}{z^3} - \frac{3(z^2 + 2z + 2)}{z^3}$$

07.25.03.acv3.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{105 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7(4z^2 + 10z + 15)}{8z^3}$$

07.25.03.acv4.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7(4z^2 - 10z + 15)}{8z^3} - \frac{105 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.acv5.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, 5; z\right) = \frac{24 e^z}{z^4} - \frac{4(z^3 + 3z^2 + 6z + 6)}{z^4}$$

07.25.03.acv6.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9(8z^3 + 28z^2 + 70z + 105)}{16z^4}$$

07.25.03.acv7.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{9(8z^3 - 28z^2 + 70z - 105)}{16z^4} + \frac{945 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.acv8.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{1}{2}, 6; z\right) = \frac{120 e^z}{z^5} - \frac{5(z^4 + 4z^3 + 12z^2 + 24z + 24)}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = 1$

07.25.03.acv9.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, 1; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

07.25.03.acva.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.acvb.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.acvc.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.acvd.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3e^z}{4z}$$

07.25.03.acve.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.acvf.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (z+1) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.acvg.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, \frac{7}{2}; z\right) = \frac{15 \sqrt{\pi} (4z^2 + 4z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{5/2}} - \frac{15 e^z (2z + 3)}{32 z^2}$$

07.25.03.acvh.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, \frac{7}{2}; -z\right) = \frac{15 e^{-z} (2z - 3)}{32 z^2} + \frac{15 \sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.acvi.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, 4; z\right) = \frac{4 e^{z/2} (2z + 1) I_0\left(\frac{z}{2}\right)}{5z} - \frac{4 e^{z/2} (2z^2 + 3z + 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.acvj.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, \frac{9}{2}; z\right) = \frac{35 \sqrt{\pi} (8z^3 + 12z^2 + 18z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{35 e^z (4z^2 + 8z + 15)}{128 z^3}$$

07.25.03.acvk.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z^2 - 8z + 15)}{128 z^3} + \frac{35 \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.acvl.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, 5; z\right) = \frac{32 e^{z/2} (2z^2 + 2z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} - \frac{64 e^{z/2} (z^3 + 2z^2 + 4z + 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.acvm.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (16z^4 + 32z^3 + 72z^2 + 120z + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315 e^z (8z^3 + 20z^2 + 50z + 105)}{2048 z^4}$$

07.25.03.acvn.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (8z^3 - 20z^2 + 50z - 105)}{2048 z^4} + \frac{315 \sqrt{\pi} (16z^4 - 32z^3 + 72z^2 - 120z + 105) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.acvo.01

$${}_2F_2\left(\frac{1}{2}, 1; 1, 6; z\right) = \frac{32 e^{z/2} (4z^3 + 6z^2 + 15z + 24) I_0\left(\frac{z}{2}\right)}{63 z^3} - \frac{32 e^{z/2} (4z^4 + 10z^3 + 27z^2 + 60z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = \frac{3}{2}$

07.25.03.0051.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{3}{2}, 2; z\right) = \frac{1}{z} (\sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z}) - e^z + 1)$$

07.25.03.acvp.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{3}{2}, 2; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{\sqrt{z}} + \frac{e^{-z}}{z} - \frac{1}{z}$$

07.25.03.0052.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{3}{2}, 3; z\right) = \frac{1}{3z^2} \left(4\sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + 6z - 2e^z(2z+1) + 2\right)$$

07.25.03.acvq.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{3}{2}, 3; -z\right) = \frac{2-6z}{3z^2} + \frac{e^{-z}(4z-2)}{3z^2} + \frac{4\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{3\sqrt{z}}$$

07.25.03.acvr.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{3}{2}, 4; z\right) = -\frac{2e^z(4z^2+2z+3)}{5z^3} + \frac{15z^2+10z+6}{5z^3} + \frac{8\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{5\sqrt{z}}$$

07.25.03.acvs.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{3}{2}, 4; -z\right) = \frac{-15z^2+10z-6}{5z^3} + \frac{2e^{-z}(4z^2-2z+3)}{5z^3} + \frac{8\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{5\sqrt{z}}$$

07.25.03.acvt.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{3}{2}, 5; z\right) = -\frac{8e^z(8z^3+4z^2+6z+15)}{35z^4} + \frac{4(35z^3+35z^2+42z+30)}{35z^4} + \frac{64\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.acvu.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{3}{2}, 5; -z\right) = \frac{8e^{-z}(8z^3-4z^2+6z-15)}{35z^4} - \frac{4(35z^3-35z^2+42z-30)}{35z^4} + \frac{64\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.acvv.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{3}{2}, 6; z\right) = -\frac{8e^z(16z^4+8z^3+12z^2+30z+105)}{63z^5} + \frac{105z^4+140z^3+252z^2+360z+280}{21z^5} + \frac{128\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{63\sqrt{z}}$$

07.25.03.acvw.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{3}{2}, 6; -z\right) = \frac{-105z^4+140z^3-252z^2+360z-280}{21z^5} + \frac{8e^{-z}(16z^4-8z^3+12z^2-30z+105)}{63z^5} + \frac{128\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{63\sqrt{z}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = 2$

07.25.03.0053.01

$${}_2F_2\left(\frac{1}{2}, 1; 2, 2; z\right) = \frac{1}{z} \left(2e^{z/2}(z-1)I_0\left(\frac{z}{2}\right) - 2e^{z/2}zI_1\left(\frac{z}{2}\right) + 2\right)$$

07.25.03.0054.01

$${}_2F_2\left(\frac{1}{2}, 1; 2, \frac{5}{2}; z\right) = \frac{1}{4z^{3/2}} \left(3\sqrt{\pi}(2z-1)\operatorname{erfi}(\sqrt{z}) - 6(-2+e^z)\sqrt{z}\right)$$

07.25.03.acvx.01

$${}_2F_2\left(\frac{1}{2}, 1; 2, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi}(2z+1)\operatorname{erf}(\sqrt{z})}{4z^{3/2}} + \frac{3e^{-z}}{2z} - \frac{3}{z}$$

07.25.03.0055.01

$${}_2F_2\left(\frac{1}{2}, 1; 2, 3; z\right) = \frac{4}{3z} \left(e^{z/2}(2z-3)I_0\left(\frac{z}{2}\right) - e^{z/2}(2z-1)I_1\left(\frac{z}{2}\right) + 3 \right)$$

07.25.03.acvy.01

$${}_2F_2\left(\frac{1}{2}, 1; 2, \frac{7}{2}; z\right) = -\frac{15e^{-z}(2z-1)}{16z^2} + \frac{15\sqrt{\pi}(4z^2-4z-1)\operatorname{erfi}(\sqrt{z})}{32z^{5/2}} + \frac{5}{z}$$

07.25.03.acvz.01

$${}_2F_2\left(\frac{1}{2}, 1; 2, \frac{7}{2}; -z\right) = \frac{15e^{-z}(2z+1)}{16z^2} + \frac{15\sqrt{\pi}(4z^2+4z-1)\operatorname{erf}(\sqrt{z})}{32z^{5/2}} - \frac{5}{z}$$

07.25.03.acw0.01

$${}_2F_2\left(\frac{1}{2}, 1; 2, 4; z\right) = \frac{16e^{z/2}(z-2)I_0\left(\frac{z}{2}\right)}{5z} - \frac{8e^{z/2}(2z^2-2z-1)I_1\left(\frac{z}{2}\right)}{5z^2} + \frac{6}{z}$$

07.25.03.acw1.01

$${}_2F_2\left(\frac{1}{2}, 1; 2, \frac{9}{2}; z\right) = -\frac{35e^{-z}(4z^2-4z-3)}{64z^3} + \frac{35\sqrt{\pi}(8z^3-12z^2-6z-3)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}} + \frac{7}{z}$$

07.25.03.acw2.01

$${}_2F_2\left(\frac{1}{2}, 1; 2, \frac{9}{2}; -z\right) = \frac{35e^{-z}(4z^2+4z-3)}{64z^3} + \frac{35\sqrt{\pi}(8z^3+12z^2-6z+3)\operatorname{erf}(\sqrt{z})}{128z^{7/2}} - \frac{7}{z}$$

07.25.03.acw3.01

$${}_2F_2\left(\frac{1}{2}, 1; 2, 5; z\right) = \frac{32e^{z/2}(4z^2-10z-1)I_0\left(\frac{z}{2}\right)}{35z^2} - \frac{32e^{z/2}(4z^3-6z^2-5z-4)I_1\left(\frac{z}{2}\right)}{35z^3} + \frac{8}{z}$$

07.25.03.acw4.01

$${}_2F_2\left(\frac{1}{2}, 1; 2, \frac{11}{2}; z\right) = -\frac{315e^{-z}(8z^3-12z^2-14z-15)}{1024z^4} + \frac{315\sqrt{\pi}(16z^4-32z^3-24z^2-24z-15)\operatorname{erfi}(\sqrt{z})}{2048z^{9/2}} + \frac{9}{z}$$

07.25.03.acw5.01

$${}_2F_2\left(\frac{1}{2}, 1; 2, \frac{11}{2}; -z\right) = \frac{315e^{-z}(8z^3+12z^2-14z+15)}{1024z^4} + \frac{315\sqrt{\pi}(16z^4+32z^3-24z^2+24z-15)\operatorname{erf}(\sqrt{z})}{2048z^{9/2}} - \frac{9}{z}$$

07.25.03.acw6.01

$${}_2F_2\left(\frac{1}{2}, 1; 2, 6; z\right) = \frac{64e^{z/2}(4z^3-12z^2-3z-3)I_0\left(\frac{z}{2}\right)}{63z^3} - \frac{64e^{z/2}(4z^4-8z^3-9z^2-12z-12)I_1\left(\frac{z}{2}\right)}{63z^4} + \frac{10}{z}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = \frac{5}{2}$

07.25.03.0056.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{5}{2}, 3; z\right) = \frac{1}{z^2} \left(\sqrt{\pi} \sqrt{z} (2z-3) \operatorname{erfi}(\sqrt{z}) - 2e^z(z-1) + 6z-2 \right)$$

07.25.03.acw7.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{5}{2}, 3; -z\right) = \frac{2e^{-z}(z+1)}{z^2} - \frac{2(3z+1)}{z^2} + \frac{\sqrt{\pi}(2z+3)\operatorname{erf}(\sqrt{z})}{z^{3/2}}$$

07.25.03.acw8.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{5}{2}, 4; z\right) = -\frac{6e^z(2z^2-4z-1)}{5z^3} + \frac{3(15z^2-10z-2)}{5z^3} + \frac{6\sqrt{\pi}(2z-5)\operatorname{erfi}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.acw9.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{5}{2}, 4; -z\right) = \frac{6e^{-z}(2z^2+4z-1)}{5z^3} - \frac{3(15z^2+10z-2)}{5z^3} + \frac{6\sqrt{\pi}(2z+5)\operatorname{erf}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.acwa.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{5}{2}, 5; z\right) = -\frac{24e^z(4z^3-12z^2-4z-3)}{35z^4} + \frac{12(35z^3-35z^2-14z-6)}{35z^4} + \frac{48\sqrt{\pi}(2z-7)\operatorname{erfi}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.acwb.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{5}{2}, 5; -z\right) = \frac{24e^{-z}(4z^3+12z^2-4z+3)}{35z^4} - \frac{12(35z^3+35z^2-14z+6)}{35z^4} + \frac{48\sqrt{\pi}(2z+7)\operatorname{erf}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.acwc.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{5}{2}, 6; z\right) = -\frac{8e^z(8z^4-32z^3-12z^2-12z-15)}{21z^5} + \frac{105z^4-140z^3-84z^2-72z-40}{7z^5} + \frac{32\sqrt{\pi}(2z-9)\operatorname{erfi}(\sqrt{z})}{21z^{3/2}}$$

07.25.03.acwd.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{5}{2}, 6; -z\right) = \frac{-105z^4-140z^3+84z^2-72z+40}{7z^5} + \frac{8e^{-z}(8z^4+32z^3-12z^2+12z-15)}{21z^5} + \frac{32\sqrt{\pi}(2z+9)\operatorname{erf}(\sqrt{z})}{21z^{3/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = 3$

07.25.03.0057.01

$${}_2F_2\left(\frac{1}{2}, 1; 3, 3; z\right) = \frac{8}{9z^2} \left(-4e^{z/2}(z-2)I_1\left(\frac{z}{2}\right)z + 9z + 2e^{z/2}(2z^2-6z+3)I_0\left(\frac{z}{2}\right) - 6 \right)$$

07.25.03.acwe.01

$${}_2F_2\left(\frac{1}{2}, 1; 3, \frac{7}{2}; z\right) = \frac{10(z-1)}{z^2} - \frac{5e^z(2z-5)}{4z^2} + \frac{5\sqrt{\pi}(4z^2-12z+3)\operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.acwf.01

$${}_2F_2\left(\frac{1}{2}, 1; 3, \frac{7}{2}; -z\right) = -\frac{10(z+1)}{z^2} + \frac{5e^{-z}(2z+5)}{4z^2} + \frac{5\sqrt{\pi}(4z^2+12z+3)\operatorname{erf}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.acwg.01

$${}_2F_2\left(\frac{1}{2}, 1; 3, 4; z\right) = \frac{4(3z-4)}{z^2} + \frac{16e^{z/2}(4z^2-18z+15)I_0\left(\frac{z}{2}\right)}{15z^2} - \frac{16e^{z/2}(4z^2-14z+3)I_1\left(\frac{z}{2}\right)}{15z^2}$$

07.25.03.acwh.01

$${}_2F_2\left(\frac{1}{2}, 1; 3, \frac{9}{2}; z\right) = \frac{14(3z-5)}{3z^2} - \frac{35e^z(4z^2-16z+3)}{48z^3} + \frac{35\sqrt{\pi}(8z^3-36z^2+18z+3)\operatorname{erfi}(\sqrt{z})}{96z^{7/2}}$$

07.25.03.acwi.01

$${}_2F_2\left(\frac{1}{2}, 1; 3, \frac{9}{2}; -z\right) = -\frac{14(3z+5)}{3z^2} + \frac{35e^{-z}(4z^2+16z+3)}{48z^3} + \frac{35\sqrt{\pi}(8z^3+36z^2+18z-3)\operatorname{erf}(\sqrt{z})}{96z^{7/2}}$$

07.25.03.acwj.01

$${}_2F_2\left(\frac{1}{2}, 1; 3, 5; z\right) = \frac{16(z-2)}{z^2} + \frac{128e^{z/2}(4z^2-24z+27)I_0\left(\frac{z}{2}\right)}{105z^2} - \frac{128e^{z/2}(4z^3-20z^2+9z+3)I_1\left(\frac{z}{2}\right)}{105z^3}$$

07.25.03.acwk.01

$${}_2F_2\left(\frac{1}{2}, 1; 3, \frac{11}{2}; z\right) = \frac{6(3z-7)}{z^2} - \frac{105e^z(8z^3-44z^2+18z+9)}{256z^4} + \frac{105\sqrt{\pi}(16z^4-96z^3+72z^2+24z+9)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.acwl.01

$${}_2F_2\left(\frac{1}{2}, 1; 3, \frac{11}{2}; -z\right) = -\frac{6(3z+7)}{z^2} + \frac{105e^{-z}(8z^3+44z^2+18z-9)}{256z^4} + \frac{105\sqrt{\pi}(16z^4+96z^3+72z^2-24z+9)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.acwm.01

$${}_2F_2\left(\frac{1}{2}, 1; 3, 6; z\right) = \frac{20(3z-8)}{3z^2} + \frac{128e^{z/2}(8z^3-60z^2+84z+3)I_0\left(\frac{z}{2}\right)}{189z^3} - \frac{128e^{z/2}(8z^4-52z^3+36z^2+21z+12)I_1\left(\frac{z}{2}\right)}{189z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = \frac{7}{2}$

07.25.03.acwn.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{7}{2}, 4; z\right) = -\frac{3e^z(2z^2-9z+4)}{2z^3} + \frac{3(5z^2-10z+2)}{z^3} + \frac{3\sqrt{\pi}(4z^2-20z+15)\operatorname{erfi}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.acwo.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{7}{2}, 4; -z\right) = \frac{3e^{-z}(2z^2+9z+4)}{2z^3} - \frac{3(5z^2+10z+2)}{z^3} + \frac{3\sqrt{\pi}(4z^2+20z+15)\operatorname{erf}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.acwp.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{7}{2}, 5; z\right) = -\frac{12e^z(2z^3-13z^2+12z+2)}{7z^4} + \frac{4(35z^3-105z^2+42z+6)}{7z^4} + \frac{6\sqrt{\pi}(4z^2-28z+35)\operatorname{erfi}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.acwq.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{7}{2}, 5; -z\right) = \frac{12e^{-z}(2z^3+13z^2+12z-2)}{7z^4} - \frac{4(35z^3+105z^2+42z-6)}{7z^4} + \frac{6\sqrt{\pi}(4z^2+28z+35)\operatorname{erf}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.acwr.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{7}{2}, 6; z\right) = -\frac{40e^z(2z^4-17z^3+24z^2+6z+3)}{21z^5} + \frac{5(35z^4-140z^3+84z^2+24z+8)}{7z^5} + \frac{20\sqrt{\pi}(4z^2-36z+63)\operatorname{erfi}(\sqrt{z})}{21z^{5/2}}$$

07.25.03.acws.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{7}{2}, 6; -z\right) = \frac{40 e^{-z} (2 z^4 + 17 z^3 + 24 z^2 - 6 z + 3)}{21 z^5} - \frac{5 (35 z^4 + 140 z^3 + 84 z^2 - 24 z + 8)}{7 z^5} + \frac{20 \sqrt{\pi} (4 z^2 + 36 z + 63) \operatorname{erf}(\sqrt{z})}{21 z^{5/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = 4$

07.25.03.acwt.01

$${}_2F_2\left(\frac{1}{2}, 1; 4, 4; z\right) = \frac{6 (15 z^2 - 40 z + 16)}{5 z^3} + \frac{32 e^{z/2} (4 z^3 - 28 z^2 + 45 z - 15) I_0\left(\frac{z}{2}\right)}{25 z^3} - \frac{32 e^{z/2} (4 z^2 - 24 z + 23) I_1\left(\frac{z}{2}\right)}{25 z^2}$$

07.25.03.acwu.01

$${}_2F_2\left(\frac{1}{2}, 1; 4, \frac{9}{2}; z\right) = \frac{7 (3 z^2 - 10 z + 6)}{z^3} - \frac{7 e^z (4 z^2 - 28 z + 33)}{8 z^3} + \frac{7 \sqrt{\pi} (8 z^3 - 60 z^2 + 90 z - 15) \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.acwv.01

$${}_2F_2\left(\frac{1}{2}, 1; 4, \frac{9}{2}; -z\right) = -\frac{7 (3 z^2 + 10 z + 6)}{z^3} + \frac{7 e^{-z} (4 z^2 + 28 z + 33)}{8 z^3} + \frac{7 \sqrt{\pi} (8 z^3 + 60 z^2 + 90 z + 15) \operatorname{erf}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.acww.01

$${}_2F_2\left(\frac{1}{2}, 1; 4, 5; z\right) = \frac{24 (5 z^2 - 20 z + 16)}{5 z^3} + \frac{128 e^{z/2} (8 z^3 - 76 z^2 + 180 z - 105) I_0\left(\frac{z}{2}\right)}{175 z^3} - \frac{128 e^{z/2} (8 z^3 - 68 z^2 + 116 z - 15) I_1\left(\frac{z}{2}\right)}{175 z^3}$$

07.25.03.acwx.01

$${}_2F_2\left(\frac{1}{2}, 1; 4, \frac{11}{2}; z\right) = \frac{9 (3 z^2 - 14 z + 14)}{z^3} - \frac{63 e^z (8 z^3 - 76 z^2 + 146 z - 15)}{128 z^4} + \frac{63 \sqrt{\pi} (16 z^4 - 160 z^3 + 360 z^2 - 120 z - 15) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.acwy.01

$${}_2F_2\left(\frac{1}{2}, 1; 4, \frac{11}{2}; -z\right) = -\frac{9 (3 z^2 + 14 z + 14)}{z^3} + \frac{63 e^{-z} (8 z^3 + 76 z^2 + 146 z + 15)}{128 z^4} + \frac{63 \sqrt{\pi} (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.acwz.01

$${}_2F_2\left(\frac{1}{2}, 1; 4, 6; z\right) = \frac{2 (15 z^2 - 80 z + 96)}{z^3} + \frac{1024 e^{z/2} (2 z^3 - 24 z^2 + 75 z - 60) I_0\left(\frac{z}{2}\right)}{315 z^3} - \frac{256 e^{z/2} (8 z^4 - 88 z^3 + 216 z^2 - 60 z - 15) I_1\left(\frac{z}{2}\right)}{315 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = \frac{9}{2}$

07.25.03.acx0.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{9}{2}, 5; z\right) = \frac{e^z(-4z^3 + 40z^2 - 87z + 24)}{z^4} + \frac{4(7z^3 - 35z^2 + 42z - 6)}{z^4} + \frac{\sqrt{\pi}(8z^3 - 84z^2 + 210z - 105)\operatorname{erfi}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.acx1.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{9}{2}, 5; -z\right) = \frac{e^{-z}(4z^3 + 40z^2 + 87z + 24)}{z^4} - \frac{4(7z^3 + 35z^2 + 42z + 6)}{z^4} + \frac{\sqrt{\pi}(8z^3 + 84z^2 + 210z + 105)\operatorname{erf}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.acx2.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{9}{2}, 6; z\right) = -\frac{10e^z(4z^4 - 52z^3 + 165z^2 - 96z - 12)}{9z^5} + \frac{5(21z^4 - 140z^3 + 252z^2 - 72z - 8)}{3z^5} + \frac{5\sqrt{\pi}(8z^3 - 108z^2 + 378z - 315)\operatorname{erfi}(\sqrt{z})}{9z^{7/2}}$$

07.25.03.acx3.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{9}{2}, 6; -z\right) = \frac{10e^{-z}(4z^4 + 52z^3 + 165z^2 + 96z - 12)}{9z^5} - \frac{5(21z^4 + 140z^3 + 252z^2 + 72z - 8)}{3z^5} + \frac{5\sqrt{\pi}(8z^3 + 108z^2 + 378z + 315)\operatorname{erf}(\sqrt{z})}{9z^{7/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 1$, $b_1 = 5$

07.25.03.acx4.01

$${}_2F_2\left(\frac{1}{2}, 1; 5, 5; z\right) = \frac{32(35z^3 - 210z^2 + 336z - 96)}{35z^4} + \frac{1024e^{z/2}(8z^4 - 104z^3 + 376z^2 - 420z + 105)I_0\left(\frac{z}{2}\right) - 4096e^{z/2}(2z^3 - 24z^2 + 71z - 44)I_1\left(\frac{z}{2}\right)}{1225z^4}$$

07.25.03.acx5.01

$${}_2F_2\left(\frac{1}{2}, 1; 5, \frac{11}{2}; z\right) = \frac{36(z^3 - 7z^2 + 14z - 6)}{z^4} - \frac{9e^z(8z^3 - 108z^2 + 370z - 279)}{16z^4} + \frac{9\sqrt{\pi}(16z^4 - 224z^3 + 840z^2 - 840z + 105)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.acx6.01

$${}_2F_2\left(\frac{1}{2}, 1; 5, \frac{11}{2}; -z\right) = -\frac{36(z^3 + 7z^2 + 14z + 6)}{z^4} + \frac{9e^{-z}(8z^3 + 108z^2 + 370z + 279)}{16z^4} + \frac{9\sqrt{\pi}(16z^4 + 224z^3 + 840z^2 + 840z + 105)\operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.acx7.01

$${}_2F_2\left(\frac{1}{2}, 1; 5, 6; z\right) = \frac{8(35z^3 - 280z^2 + 672z - 384)}{7z^4} + \frac{1024e^{z/2}(16z^4 - 264z^3 + 1284z^2 - 2100z + 945)I_0\left(\frac{z}{2}\right)}{2205z^4} - \frac{1024e^{z/2}(16z^4 - 248z^3 + 1044z^2 - 1164z + 105)I_1\left(\frac{z}{2}\right)}{2205z^4}$$

For fixed z and $a_1 = \frac{1}{2}, a_2 = 1, b_1 = \frac{11}{2}$

07.25.03.acx8.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{11}{2}, 6; z\right) = \frac{15(3z^4 - 28z^3 + 84z^2 - 72z + 8)}{z^5} - \frac{5e^z(8z^4 - 140z^3 + 690z^2 - 975z + 192)}{8z^5} + \frac{5\sqrt{\pi}(16z^4 - 288z^3 + 1512z^2 - 2520z + 945)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.acx9.01

$${}_2F_2\left(\frac{1}{2}, 1; \frac{11}{2}, 6; -z\right) = -\frac{15(3z^4 + 28z^3 + 84z^2 + 72z + 8)}{z^5} + \frac{5e^{-z}(8z^4 + 140z^3 + 690z^2 + 975z + 192)}{8z^5} + \frac{5\sqrt{\pi}(16z^4 + 288z^3 + 1512z^2 + 2520z + 945)\operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

For fixed z and $a_1 = \frac{1}{2}, a_2 = 1, b_1 = 6$

07.25.03.acxa.01

$${}_2F_2\left(\frac{1}{2}, 1; 6, 6; z\right) = \frac{10(105z^4 - 1120z^3 + 4032z^2 - 4608z + 1024)}{21z^5} + \frac{2048e^{z/2}(16z^5 - 336z^4 + 2220z^3 - 5484z^2 + 4725z - 945)I_0\left(\frac{z}{2}\right)}{3969z^5} - \frac{2048e^{z/2}(16z^4 - 320z^3 + 1908z^2 - 3720z + 1689)I_1\left(\frac{z}{2}\right)}{3969z^4}$$

For fixed z and $a_1 = \frac{1}{2}, a_2 = \frac{3}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{1}{2}, a_2 = \frac{3}{2}, b_1 = -\frac{11}{2}$

07.25.03.acxb.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{108056025} \left(e^z (8192z^{13} + 348160z^{12} + 5296128z^{11} + 35948544z^{10} + 110691840z^9 + 139104000z^8 + 52416000z^7 + 2016000z^6 - 756000z^5 + 4158000z^4 - 16858800z^3 + 51597000z^2 - 105376950z + 108056025) \right)$$

07.25.03.acxc.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9823275} (e^z (4096 z^{12} + 147456 z^{11} + 1837056 z^{10} + 9707520 z^9 + 21369600 z^8 + 16128000 z^7 + 2016000 z^6 - 378000 z^4 + 1512000 z^3 - 4649400 z^2 + 9525600 z - 9823275))$$

07.25.03.acxd.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1091475} (e^z (2048 z^{11} + 60416 z^{10} + 586240 z^9 + 2215680 z^8 + 2929920 z^7 + 739200 z^6 - 100800 z^5 + 50400 z^4 - 163800 z^3 + 510300 z^2 - 1048950 z + 1091475))$$

07.25.03.acxe.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{155925} (e^z (1024 z^{10} + 23552 z^9 + 163584 z^8 + 371712 z^7 + 163968 z^6 - 40320 z^5 + 10080 z^4 + 20160 z^3 - 71820 z^2 + 147420 z - 155925))$$

07.25.03.acxf.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{31185} e^z (512 z^9 + 8448 z^8 + 35328 z^7 + 26880 z^6 - 12096 z^5 + 10080 z^4 - 10080 z^3 + 15120 z^2 - 28350 z + 31185)$$

07.25.03.acxg.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{e^z (256 z^8 + 2560 z^7 + 3584 z^6 - 2688 z^5 + 3360 z^4 - 3360 z^3 + 7560 z - 10395)}{10395}$$

07.25.03.acxh.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13230 z + 10395)}{10395}$$

07.25.03.acxi.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (64 z^7 + 64 z^6 - 112 z^5 + 432 z^4 - 1512 z^3 + 3936 z^2 - 6615 z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^7 - 80 z^5 + 448 z^4 - 1800 z^3 + 5208 z^2 - 9129 z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.acxj.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (64 z^6 - 192 z^5 + 720 z^4 - 2400 z^3 + 6300 z^2 - 11340 z + 10395)}{10395}$$

07.25.03.acxk.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 - 352 z^5 + 1776 z^4 - 7200 z^3 + 21 576 z^2 - 39 690 z + 10 395) I_0\left(\frac{z}{2}\right)}{10 395} + \frac{e^{z/2} (64 z^6 - 416 z^5 + 2224 z^4 - 9696 z^3 + 33 000 z^2 - 81 894 z + 135 135) I_1\left(\frac{z}{2}\right)}{10 395}$$

07.25.03.acxl.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (32 z^6 - 304 z^5 + 2032 z^4 - 10 344 z^3 + 39 354 z^2 - 104 055 z + 161 280)}{3465 z} - \frac{256 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{3/2}}$$

07.25.03.acxm.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-32 z^6 - 304 z^5 - 2032 z^4 - 10 344 z^3 - 39 354 z^2 - 104 055 z - 161 280)}{3465 z} + \frac{256 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{3/2}}$$

07.25.03.acxn.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, 3; z\right) = \frac{8 e^{z/2} (16 z^5 - 192 z^4 + 1488 z^3 - 8328 z^2 + 33 075 z - 83 160) I_0\left(\frac{z}{2}\right)}{10 395} + \frac{4 e^{z/2} (32 z^6 - 416 z^5 + 3408 z^4 - 20 304 z^3 + 88 674 z^2 - 270 270 z + 675 675) I_1\left(\frac{z}{2}\right)}{10 395 z}$$

07.25.03.acxo.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (16 z^6 - 256 z^5 + 2424 z^4 - 16 080 z^3 + 75 957 z^2 - 241 920 z + 483 840)}{693 z^2} - \frac{640 \sqrt{\pi} (z + 6) \operatorname{erfi}(\sqrt{z})}{11 z^{5/2}}$$

07.25.03.acxp.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16 z^6 + 256 z^5 + 2424 z^4 + 16 080 z^3 + 75 957 z^2 + 241 920 z + 483 840)}{693 z^2} + \frac{640 \sqrt{\pi} (z - 6) \operatorname{erf}(\sqrt{z})}{11 z^{5/2}}$$

07.25.03.acxq.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 - 592 z^4 + 6208 z^3 - 44 100 z^2 + 214 830 z - 765 765) I_0\left(\frac{z}{2}\right)}{3465 z} + \frac{4 e^{z/2} (32 z^6 - 624 z^5 + 6848 z^4 - 51 292 z^3 + 270 270 z^2 - 855 855 z + 3 063 060) I_1\left(\frac{z}{2}\right)}{3465 z^2}$$

07.25.03.acxr.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (8 z^6 - 180 z^5 + 2202 z^4 - 17 949 z^3 + 100 800 z^2 - 362 880 z + 907 200)}{99 z^3} - \frac{1120 \sqrt{\pi} (z^2 + 12 z + 45) \operatorname{erfi}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.acxs.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(-8z^6 - 180z^5 - 2202z^4 - 17949z^3 - 100800z^2 - 362880z - 907200)}{99z^3} + \frac{1120\sqrt{\pi}(z^2 - 12z + 45)\operatorname{erf}(\sqrt{z})}{11z^{7/2}}$$

07.25.03.acxt.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2}(16z^5 - 400z^4 + 5292z^3 - 45540z^2 + 240669z - 1247103)I_0\left(\frac{z}{2}\right)}{3465z^2} + \frac{32e^{z/2}(16z^6 - 416z^5 + 5716z^4 - 51480z^3 + 338481z^2 - 962676z + 4988412)I_1\left(\frac{z}{2}\right)}{3465z^3}$$

07.25.03.acxu.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z(4z^6 - 116z^5 + 1739z^4 - 16800z^3 + 110880z^2 - 428400z + 1323000)}{11z^4} - \frac{420\sqrt{\pi}(4z^3 + 72z^2 + 540z + 1575)\operatorname{erfi}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.acxv.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z}(4z^6 + 116z^5 + 1739z^4 + 16800z^3 + 110880z^2 + 428400z + 1323000)}{11z^4} + \frac{420\sqrt{\pi}(4z^3 - 72z^2 + 540z - 1575)\operatorname{erf}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.acxw.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{11}{2}, 6; z\right) = \frac{32e^{z/2}(16z^5 - 504z^4 + 8052z^3 - 87516z^2 + 415701z - 3325608)I_0\left(\frac{z}{2}\right)}{693z^3} + \frac{32e^{z/2}(16z^6 - 520z^5 + 8580z^4 - 84084z^3 + 765765z^2 - 1662804z + 13302432)I_1\left(\frac{z}{2}\right)}{693z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.acxx.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{893025} (e^z(2048z^{11} + 62464z^{10} + 637440z^9 + 2622720z^8 + 4128000z^7 + 1872000z^6 + 72000z^5 + 36000z^4 - 135000z^3 + 418500z^2 - 859950z + 893025))$$

07.25.03.acxy.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{99225} (e^z(1024z^{10} + 25600z^9 + 203520z^8 + 599040z^7 + 566400z^6 + 86400z^5 - 7200z^4 + 14400z^3 - 45900z^2 + 94500z - 99225))$$

07.25.03.acxz.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{14175} e^z (512 z^9 + 9984 z^8 + 56832 z^7 + 100608 z^6 + 31680 z^5 - 4320 z^4 - 1440 z^3 + 6480 z^2 - 13230 z + 14175)$$

07.25.03.acy0.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{e^z (256 z^8 + 3584 z^7 + 12288 z^6 + 7296 z^5 - 2400 z^4 + 1440 z^3 - 1440 z^2 + 2520 z - 2835)}{2835}$$

07.25.03.acy1.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} e^z (128 z^7 + 1088 z^6 + 1248 z^5 - 720 z^4 + 600 z^3 - 180 z^2 - 630 z + 945)$$

07.25.03.acy2.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)$$

07.25.03.acy3.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-32 z^6 - 32 z^5 + 48 z^4 - 144 z^3 + 366 z^2 - 630 z + 945) I_0\left(\frac{z}{2}\right) - \frac{2}{945} e^{z/2} (16 z^6 - 16 z^4 + 72 z^3 - 213 z^2 + 372 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.acy4.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{945} e^z (32 z^5 - 80 z^4 + 240 z^3 - 600 z^2 + 1050 z - 945)$$

07.25.03.acy5.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (-32 z^5 + 144 z^4 - 576 z^3 + 1716 z^2 - 3150 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-32 z^5 + 176 z^4 - 768 z^3 + 2604 z^2 - 6414 z + 10395) I_1\left(\frac{z}{2}\right)$$

07.25.03.acy6.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^z (-16 z^5 + 128 z^4 - 696 z^3 + 2736 z^2 - 7365 z + 11520)}{315 z} - \frac{128 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.acy7.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-16 z^5 - 128 z^4 - 696 z^3 - 2736 z^2 - 7365 z - 11520)}{315 z} + \frac{128 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.acy8.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, 3; z\right) = -\frac{4}{945} e^{z/2} (16 z^4 - 160 z^3 + 996 z^2 - 4200 z + 11025) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (16 z^5 - 176 z^4 + 1180 z^3 - 5484 z^2 + 17325 z - 45045) I_1\left(\frac{z}{2}\right)}{945 z}$$

07.25.03.acy9.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (-8 z^5 + 108 z^4 - 834 z^3 + 4287 z^2 - 14400 z + 30240)}{63 z^2} - \frac{80 \sqrt{\pi} (4 z + 21) \operatorname{erfi}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.acya.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (8z^5 + 108z^4 + 834z^3 + 4287z^2 + 14400z + 30240)}{63z^2} + \frac{80\sqrt{\pi} (4z - 21) \operatorname{erf}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.acyb.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, 4; z\right) = -\frac{4e^{z/2} (16z^4 - 248z^3 + 2100z^2 - 11340z + 45045) I_0\left(\frac{z}{2}\right)}{315z} - \frac{4e^{z/2} (16z^5 - 264z^4 + 2372z^3 - 13860z^2 + 45045z - 180180) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.acyc.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (-4z^5 + 76z^4 - 759z^3 + 4800z^2 - 18480z + 50400)}{9z^3} - \frac{40\sqrt{\pi} (2z^2 + 21z + 70) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.acyd.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-4z^5 - 76z^4 - 759z^3 - 4800z^2 - 18480z - 50400)}{9z^3} + \frac{40\sqrt{\pi} (2z^2 - 21z + 70) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.acye.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, 5; z\right) = -\frac{32e^{z/2} (8z^4 - 168z^3 + 1800z^2 - 10296z + 65637) I_0\left(\frac{z}{2}\right)}{315z^2} - \frac{128e^{z/2} (2z^5 - 44z^4 + 495z^3 - 3861z^2 + 10296z - 65637) I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.acyf.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (-2z^5 + 49z^4 - 600z^3 + 4620z^2 - 18900z + 66150)}{z^4} - \frac{15\sqrt{\pi} (8z^3 + 126z^2 + 840z + 2205) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.acyg.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (2z^5 + 49z^4 + 600z^3 + 4620z^2 + 18900z + 66150)}{z^4} + \frac{15\sqrt{\pi} (8z^3 - 126z^2 + 840z - 2205) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.acyh.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{9}{2}, 6; z\right) = -\frac{32e^{z/2} (56z^4 - 1484z^3 + 22308z^2 - 94809z + 1108536) I_0\left(\frac{z}{2}\right)}{441z^3} - \frac{32e^{z/2} (56z^5 - 1540z^4 + 17732z^3 - 227799z^2 + 379236z - 4434144) I_1\left(\frac{z}{2}\right)}{441z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.acyi.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{11025} e^z (512 z^9 + 10496 z^8 + 65024 z^7 + 136960 z^6 + 77760 z^5 + 4320 z^4 - 1440 z^3 + 5040 z^2 - 10350 z + 11025)$$

07.25.03.acyj.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{e^z (256 z^8 + 4096 z^7 + 18176 z^6 + 23040 z^5 + 4320 z^4 - 720 z^2 + 1440 z - 1575)}{1575}$$

07.25.03.acyk.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} e^z (128 z^7 + 1472 z^6 + 3936 z^5 + 1680 z^4 - 360 z^3 + 180 z^2 - 270 z + 315)$$

07.25.03.acyl.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{105} e^z (64 z^6 + 448 z^5 + 400 z^4 - 160 z^3 + 60 z^2 + 60 z - 105)$$

07.25.03.acym.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105)$$

07.25.03.acyn.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (16 z^5 + 16 z^4 - 20 z^3 + 44 z^2 - 75 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (16 z^5 - 12 z^3 + 40 z^2 - 71 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.acyo.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105)$$

07.25.03.acyp.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (16 z^4 - 56 z^3 + 164 z^2 - 300 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (16 z^4 - 72 z^3 + 244 z^2 - 596 z + 945) I_1\left(\frac{z}{2}\right)$$

07.25.03.acyq.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (8 z^4 - 52 z^3 + 218 z^2 - 605 z + 960)}{35 z} - \frac{96 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.acyr.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-8 z^4 - 52 z^3 - 218 z^2 - 605 z - 960)}{35 z} + \frac{96 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.acys.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, 3; z\right) = \frac{16}{105} e^{z/2} (2 z^3 - 16 z^2 + 75 z - 210) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8 z^4 - 72 z^3 + 376 z^2 - 1260 z + 3465) I_1\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.acyt.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (4 z^4 - 44 z^3 + 263 z^2 - 960 z + 2160)}{7 z^2} - \frac{120 \sqrt{\pi} (2 z + 9) \operatorname{erfi}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.acyu.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (4z^4 + 44z^3 + 263z^2 + 960z + 2160)}{7z^2} + \frac{120\sqrt{\pi} (2z - 9) \operatorname{erf}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.acyv.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, 4; z\right) = \frac{4e^{z/2} (8z^3 - 100z^2 + 644z - 3003) I_0\left(\frac{z}{2}\right)}{35z} + \frac{4e^{z/2} (8z^4 - 108z^3 + 756z^2 - 2541z + 12012) I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.acyw.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (2z^4 - 31z^3 + 240z^2 - 1020z + 3150)}{z^3} - \frac{15\sqrt{\pi} (4z^2 + 36z + 105) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.acyx.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-2z^4 - 31z^3 - 240z^2 - 1020z - 3150)}{z^3} + \frac{15\sqrt{\pi} (4z^2 - 36z + 105) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.acyy.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, 5; z\right) = \frac{32e^{z/2} (4z^3 - 68z^2 + 429z - 3861) I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{32e^{z/2} (4z^4 - 72z^3 + 759z^2 - 1716z + 15444) I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.acyz.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9e^z (z^4 - 20z^3 + 200z^2 - 875z + 3675)}{z^4} - \frac{45\sqrt{\pi} (4z^3 + 54z^2 + 315z + 735) \operatorname{erfi}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.acz0.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9e^{-z} (z^4 + 20z^3 + 200z^2 + 875z + 3675)}{z^4} + \frac{45\sqrt{\pi} (4z^3 - 54z^2 + 315z - 735) \operatorname{erf}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.acz1.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{7}{2}, 6; z\right) = \frac{32e^{z/2} (28z^3 - 858z^2 + 2145z - 58344) I_0\left(\frac{z}{2}\right)}{49z^3} + \frac{32e^{z/2} (28z^4 - 374z^3 + 10725z^2 - 8580z + 233376) I_1\left(\frac{z}{2}\right)}{49z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.acz2.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225} e^z (128z^7 + 1600z^6 + 5088z^5 + 3888z^4 + 216z^3 + 108z^2 - 198z + 225)$$

07.25.03.acz3.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{45} e^z (64z^6 + 576z^5 + 1104z^4 + 288z^3 - 36z^2 + 36z - 45)$$

07.25.03.acz4.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (32z^5 + 176z^4 + 112z^3 - 24z^2 - 6z + 15)$$

07.25.03.acz5.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{15} e^z (16z^4 + 32z^3 - 24z^2 + 24z - 15)$$

07.25.03.acz6.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-8z^4 - 8z^3 + 8z^2 - 12z + 15) I_0\left(\frac{z}{2}\right) - \frac{4}{15} e^{z/2} (2z^4 - z^2 + 2z) I_1\left(\frac{z}{2}\right)$$

07.25.03.acz7.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{15} e^z (8z^3 - 12z^2 + 18z - 15)$$

07.25.03.acz8.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (-8z^3 + 20z^2 - 36z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-8z^3 + 28z^2 - 68z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.acz9.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-4z^3 + 20z^2 - 59z + 96)}{5z} - \frac{48\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.acza.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-4z^3 - 20z^2 - 59z - 96)}{5z} + \frac{48\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.aczb.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, 3; z\right) = -\frac{4}{15} e^{z/2} (4z^2 - 24z + 75) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4z^3 - 28z^2 + 105z - 315) I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.aczc.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-2z^3 + 17z^2 - 72z + 180)}{z^2} - \frac{6\sqrt{\pi} (4z + 15) \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aczd.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (2z^3 + 17z^2 + 72z + 180)}{z^2} + \frac{6\sqrt{\pi} (4z - 15) \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.acze.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, 4; z\right) = -\frac{4 e^{z/2} (4z^2 - 38z + 231) I_0\left(\frac{z}{2}\right)}{5z} - \frac{4 e^{z/2} (4z^3 - 42z^2 + 147z - 924) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.aczf.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7 e^z (z^3 - 12z^2 + 60z - 225)}{z^3} - \frac{21\sqrt{\pi} (4z^2 + 30z + 75) \operatorname{erfi}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.aczg.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{21\sqrt{\pi} (4z^2 - 30z + 75) \operatorname{erf}(\sqrt{z})}{2z^{7/2}} - \frac{7 e^{-z} (z^3 + 12z^2 + 60z + 225)}{z^3}$$

07.25.03.aczh.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, 5; z\right) = -\frac{32 e^{z/2} (10z^2 - 66z + 1287) I_0\left(\frac{z}{2}\right)}{25z^2} - \frac{64 e^{z/2} (5z^3 - 102z^2 + 132z - 2574) I_1\left(\frac{z}{2}\right)}{25z^3}$$

07.25.03.aczi.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{63 e^z (8 z^3 - 140 z^2 + 650 z - 3675)}{16 z^4} - \frac{63 \sqrt{\pi} (32 z^3 + 360 z^2 + 1800 z + 3675) \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.aczj.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8 z^3 + 140 z^2 + 650 z + 3675)}{16 z^4} + \frac{63 \sqrt{\pi} (32 z^3 - 360 z^2 + 1800 z - 3675) \operatorname{erf}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.aczk.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (58 z^3 + 2937 z^2 + 1716 z + 68640) I_1\left(\frac{z}{2}\right)}{35 z^4} - \frac{1056 e^{z/2} (6 z^2 + 13 z + 520) I_0\left(\frac{z}{2}\right)}{35 z^3}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.aczl.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} e^z (32 z^5 + 208 z^4 + 240 z^3 + 24 z^2 - 6 z + 9)$$

07.25.03.aczm.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{3} e^z (16 z^4 + 64 z^3 + 24 z^2 - 3)$$

07.25.03.aczn.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (8 z^3 + 12 z^2 - 6 z + 3)$$

07.25.03.aczo.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (4 z^3 + 4 z^2 - 3 z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (4 z^3 - z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aczp.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (4 z^2 - 4 z + 3)$$

07.25.03.aczq.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{3} e^{z/2} (4 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (4 z^2 - 10 z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.aczr.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (2 z^2 - 7 z + 12)}{z} - \frac{6 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{3/2}}$$

07.25.03.aczs.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-2 z^2 - 7 z - 12)}{z} + \frac{6 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{3/2}}$$

07.25.03.aczt.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, 3; z\right) = \frac{8}{3} e^{z/2} (z - 4) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2 z^2 - 10 z + 35) I_1\left(\frac{z}{2}\right)}{3 z}$$

07.25.03.aczu.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (z^2 - 6z + 18)}{z^2} - \frac{15 \sqrt{\pi} (z + 3) \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aczv.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (z^2 + 6z + 18)}{z^2} + \frac{15 \sqrt{\pi} (z - 3) \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aczw.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (2z - 21) I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (2z^2 - 7z + 84) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.aczx.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (2z^2 - 14z + 75)}{4 z^3} - \frac{105 \sqrt{\pi} (2z^2 + 12z + 25) \operatorname{erfi}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.aczy.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} (2z^2 - 12z + 25) \operatorname{erf}(\sqrt{z})}{8 z^{7/2}} - \frac{35 e^{-z} (2z^2 + 14z + 75)}{4 z^3}$$

07.25.03.aczz.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (13z^2 + 12z + 396) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{96 e^{z/2} (z + 33) I_0\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.ad00.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{315 e^z (12z^2 - 50z + 525)}{32 z^4} - \frac{315 \sqrt{\pi} (8z^3 + 72z^2 + 300z + 525) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ad01.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (12z^2 + 50z + 525)}{32 z^4} + \frac{315 \sqrt{\pi} (8z^3 - 72z^2 + 300z - 525) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ad02.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (16z^3 + 207z^2 + 484z + 4576) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{32 e^{z/2} (16z^2 + 121z + 1144) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.ad03.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = e^z (8z^3 + 20z^2 + 2z + 1)$$

07.25.03.ad04.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -e^z (4z^2 + 4z - 1)$$

07.25.03.ad05.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, 1; z\right) = e^{z/2} (-2z^2 - 2z + 1) I_0\left(\frac{z}{2}\right) - 2 e^{z/2} z^2 I_1\left(\frac{z}{2}\right)$$

07.25.03.ad06.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -e^z (2z - 1)$$

07.25.03.ad07.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, 2; z\right) = e^{z/2} (1 - 2z) I_0\left(\frac{z}{2}\right) + e^{z/2} (3 - 2z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ad08.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{3e^z(z-2)}{z} - \frac{3\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{z^{3/2}}$$

07.25.03.ad09.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{z^{3/2}} - \frac{3e^{-z}(z+2)}{z}$$

07.25.03.ad0a.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, 3; z\right) = -4e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(z-5)I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.ad0b.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{15e^z(2z-9)}{4z^2} - \frac{15\sqrt{\pi}(4z+9)\operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.ad0c.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z}(2z+9)}{4z^2} + \frac{15\sqrt{\pi}(4z-9)\operatorname{erf}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.ad0d.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, 4; z\right) = \frac{4e^{z/2}(z+28)I_1\left(\frac{z}{2}\right)}{z^2} - \frac{28e^{z/2}I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.ad0e.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{105e^z(z-15)}{8z^3} - \frac{105\sqrt{\pi}(2z^2+9z+15)\operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.ad0f.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105\sqrt{\pi}(2z^2-9z+15)\operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{105e^{-z}(z+15)}{8z^3}$$

07.25.03.ad0g.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, 5; z\right) = \frac{128e^{z/2}(z^2+4z+27)I_1\left(\frac{z}{2}\right)}{5z^3} - \frac{32e^{z/2}(4z+27)I_0\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.ad0h.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{315e^z(8z^2+10z+525)}{128z^4} - \frac{315\sqrt{\pi}(16z^3+108z^2+360z+525)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.ad0i.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (8z^2 - 10z + 525)}{128 z^4} + \frac{315 \sqrt{\pi} (16z^3 - 108z^2 + 360z - 525) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.ad0j.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (8z^3 + 65z^2 + 228z + 1056) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{32 e^{z/2} (8z^2 + 57z + 264) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{1}{2}$

07.25.03.ad0k.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = e^z (2z + 1)$$

07.25.03.ad0l.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, 1; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.ad0m.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = e^z$$

07.25.03.ad0n.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.ad0o.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{3 e^z}{2z} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.ad0p.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3 e^{-z}}{2z}$$

07.25.03.ad0q.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.ad0r.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{45 e^z}{8 z^2} - \frac{15 \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.ad0s.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45 e^{-z}}{8 z^2}$$

07.25.03.ad0t.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (z + 4) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.ad0u.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{105 e^z (2z + 15)}{64 z^3} - \frac{105 \sqrt{\pi} (4z^2 + 12z + 15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.ad0v.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (2z - 15)}{64 z^3} + \frac{105 \sqrt{\pi} (4z^2 - 12z + 15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.ad0w.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (z^2 + 4z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{32 e^{z/2} (z + 3) I_0\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.ad0x.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{315 e^z (4z^2 + 20z + 105)}{256 z^4} - \frac{315 \sqrt{\pi} (8z^3 + 36z^2 + 90z + 105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ad0y.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2 - 20z + 105)}{256 z^4} + \frac{315 \sqrt{\pi} (8z^3 - 36z^2 + 90z - 105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ad0z.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^3 + 11z^2 + 36z + 96) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{32 e^{z/2} (2z^2 + 9z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = 1$

07.25.03.ad10.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; 1, \frac{3}{2}; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{3}{2}$

07.25.03.ad11.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.ad12.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.ad13.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.ad14.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{3 \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3 e^z}{4 z}$$

07.25.03.ad15.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi}(2z-1)\operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.ad16.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, 3; z\right) = \frac{4}{3}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(z+1)I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.ad17.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi}(4z^2+4z+3)\operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15e^z(2z+3)}{32z^2}$$

07.25.03.ad18.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z}(2z-3)}{32z^2} + \frac{15\sqrt{\pi}(4z^2-4z+3)\operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.ad19.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, 4; z\right) = \frac{4e^{z/2}(2z+1)I_0\left(\frac{z}{2}\right)}{5z} - \frac{4e^{z/2}(2z^2+3z+4)I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.ad1a.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi}(8z^3+12z^2+18z+15)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35e^z(4z^2+8z+15)}{128z^3}$$

07.25.03.ad1b.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}(4z^2-8z+15)}{128z^3} + \frac{35\sqrt{\pi}(8z^3-12z^2+18z-15)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.ad1c.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, 5; z\right) = \frac{32e^{z/2}(2z^2+2z+3)I_0\left(\frac{z}{2}\right)}{35z^2} - \frac{64e^{z/2}(z^3+2z^2+4z+6)I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.ad1d.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi}(16z^4+32z^3+72z^2+120z+105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315e^z(8z^3+20z^2+50z+105)}{2048z^4}$$

07.25.03.ad1e.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}(8z^3-20z^2+50z-105)}{2048z^4} + \frac{315\sqrt{\pi}(16z^4-32z^3+72z^2-120z+105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.ad1f.01

$${}_2F_2\left(\frac{1}{2}, \frac{3}{2}; \frac{3}{2}, 6; z\right) = \frac{32e^{z/2}(4z^3+6z^2+15z+24)I_0\left(\frac{z}{2}\right)}{63z^3} - \frac{32e^{z/2}(4z^4+10z^3+27z^2+60z+96)I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = -\frac{11}{2}$

07.25.03.ad1g.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{108056025} (4096 z^{13} + 200704 z^{12} + 3588096 z^{11} + 29328384 z^{10} + 112235520 z^9 + 182718720 z^8 + 94141440 z^7 + 4656960 z^6 + 181440 z^5 + 75600 z^4 + 108000 z^3 + 396900 z^2 + 3572100 z + 108056025) + \frac{1}{108056025} (2048 e^z \sqrt{\pi} (2 z^{27/2} + 99 z^{25/2} + 1800 z^{23/2} + 15150 z^{21/2} + 61200 z^{19/2} + 111240 z^{17/2} + 74880 z^{15/2} + 10800 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ad1h.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{108056025} (-4096 z^{13} + 200704 z^{12} - 3588096 z^{11} + 29328384 z^{10} - 112235520 z^9 + 182718720 z^8 - 94141440 z^7 + 4656960 z^6 - 181440 z^5 + 75600 z^4 - 108000 z^3 + 396900 z^2 - 3572100 z + 108056025) + \frac{1}{108056025} (2048 e^{-z} \sqrt{\pi} (2 z^{27/2} - 99 z^{25/2} + 1800 z^{23/2} - 15150 z^{21/2} + 61200 z^{19/2} - 111240 z^{17/2} + 74880 z^{15/2} - 10800 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ad1i.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9823275} (-2048 z^{12} - 86016 z^{11} - 1278976 z^{10} - 8309760 z^9 - 23420160 z^8 - 24007680 z^7 - 4656960 z^6 + 181440 z^5 + 25200 z^4 + 21600 z^3 + 56700 z^2 + 396900 z + 9823275) - \frac{1}{9823275} 1024 e^z \sqrt{\pi} (2 z^{25/2} + 85 z^{23/2} + 1290 z^{21/2} + 8700 z^{19/2} + 26400 z^{17/2} + 32040 z^{15/2} + 10800 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ad1j.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{9823275} (-2048 z^{12} + 86016 z^{11} - 1278976 z^{10} + 8309760 z^9 - 23420160 z^8 + 24007680 z^7 - 4656960 z^6 - 181440 z^5 + 25200 z^4 - 21600 z^3 + 56700 z^2 - 396900 z + 9823275) + \frac{1}{9823275} 1024 e^{-z} \sqrt{\pi} (2 z^{25/2} - 85 z^{23/2} + 1290 z^{21/2} - 8700 z^{19/2} + 26400 z^{17/2} - 32040 z^{15/2} + 10800 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ad1k.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1091475} (1024 z^{11} + 35840 z^{10} + 424960 z^9 + 2046720 z^8 + 3695616 z^7 + 1552320 z^6 - 181440 z^5 + 25200 z^4 + 7200 z^3 + 11340 z^2 + 56700 z + 1091475) + \frac{512 e^z \sqrt{\pi} (2 z^{23/2} + 71 z^{21/2} + 864 z^{19/2} + 4380 z^{17/2} + 8880 z^{15/2} + 5400 z^{13/2}) \operatorname{erf}(\sqrt{z})}{1091475}$$

07.25.03.ad1l.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1091475} \left(-1024 z^{11} + 35840 z^{10} - 424960 z^9 + 2046720 z^8 - 3695616 z^7 + 1552320 z^6 + 181440 z^5 + 25200 z^4 - 7200 z^3 + 11340 z^2 - 56700 z + 1091475 \right) + \frac{512 e^{-z} \sqrt{\pi} \left(2 z^{23/2} - 71 z^{21/2} + 864 z^{19/2} - 4380 z^{17/2} + 8880 z^{15/2} - 5400 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})}{1091475}$$

07.25.03.ad1m.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{155925} \left(-512 z^{10} - 14336 z^9 - 126720 z^8 - 396288 z^7 - 310464 z^6 + 60480 z^5 - 25200 z^4 + 7200 z^3 + 3780 z^2 + 11340 z + 155925 \right) - \frac{256 e^z \sqrt{\pi} \left(2 z^{21/2} + 57 z^{19/2} + 522 z^{17/2} + 1770 z^{15/2} + 1800 z^{13/2} \right) \operatorname{erf}(\sqrt{z})}{155925}$$

07.25.03.ad1n.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{155925} \left(-512 z^{10} + 14336 z^9 - 126720 z^8 + 396288 z^7 - 310464 z^6 - 60480 z^5 - 25200 z^4 - 7200 z^3 + 3780 z^2 - 11340 z + 155925 \right) + \frac{256 e^{-z} \sqrt{\pi} \left(2 z^{21/2} - 57 z^{19/2} + 522 z^{17/2} - 1770 z^{15/2} + 1800 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.ad1o.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{256 z^9 + 5376 z^8 + 31232 z^7 + 44352 z^6 - 12096 z^5 + 8400 z^4 - 7200 z^3 + 3780 z^2 + 3780 z + 31185}{31185} + \frac{128 e^z \sqrt{\pi} \left(2 z^{19/2} + 43 z^{17/2} + 264 z^{15/2} + 450 z^{13/2} \right) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.ad1p.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{31185} \left(-256 z^9 + 5376 z^8 - 31232 z^7 + 44352 z^6 + 12096 z^5 + 8400 z^4 + 7200 z^3 + 3780 z^2 - 3780 z + 31185 \right) + \frac{128 e^{-z} \sqrt{\pi} \left(2 z^{19/2} - 43 z^{17/2} + 264 z^{15/2} - 450 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.ad1q.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{-128 z^8 - 1792 z^7 - 4928 z^6 + 1728 z^5 - 1680 z^4 + 2400 z^3 - 3780 z^2 + 3780 z + 10395}{10395} - \frac{64 e^z \sqrt{\pi} (2 z^{17/2} + 29 z^{15/2} + 90 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.ad1r.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{-128 z^8 + 1792 z^7 - 4928 z^6 - 1728 z^5 - 1680 z^4 - 2400 z^3 - 3780 z^2 - 3780 z + 10395}{10395} + \frac{64 e^{-z} \sqrt{\pi} (2 z^{17/2} - 29 z^{15/2} + 90 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.ad1s.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{64 z^7 + 448 z^6 - 192 z^5 + 240 z^4 - 480 z^3 + 1260 z^2 - 3780 z + 10395}{10395} + \frac{32 e^z \sqrt{\pi} (2 z^{15/2} + 15 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.ad1t.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{-64 z^7 + 448 z^6 + 192 z^5 + 240 z^4 + 480 z^3 + 1260 z^2 + 3780 z + 10395}{10395} + \frac{32 e^{-z} \sqrt{\pi} (2 z^{15/2} - 15 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.ad1u.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, 1; z\right) = \frac{e^z (64 z^7 + 256 z^6 - 432 z^5 + 1200 z^4 - 3300 z^3 + 7560 z^2 - 12285 z + 10395)}{10395}$$

07.25.03.ad1v.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{32 z^6 - 80 z^4 + 480 z^3 - 2052 z^2 + 6420 z - 12645}{10395} + \frac{16 e^z \sqrt{\pi} (2 z^7 + z^6 - 6 z^5 + 30 z^4 - 120 z^3 + 360 z^2 - 720 z + 720) \operatorname{erf}(\sqrt{z})}{10395 \sqrt{z}}$$

07.25.03.ad1w.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{32 z^6 - 80 z^4 - 480 z^3 - 2052 z^2 - 6420 z - 12645}{10395} - \frac{16 e^{-z} \sqrt{\pi} (2 z^7 - z^6 - 6 z^5 - 30 z^4 - 120 z^3 - 360 z^2 - 720 z - 720) \operatorname{erfi}(\sqrt{z})}{10395 \sqrt{z}}$$

07.25.03.ad1x.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, 2; z\right) = \frac{e^z (64 z^6 - 192 z^5 + 720 z^4 - 2400 z^3 + 6300 z^2 - 11340 z + 10395)}{10395}$$

07.25.03.ad1y.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{16z^6 - 112z^5 + 640z^4 - 3036z^3 + 11652z^2 - 34935z + 80640}{3465z} + \frac{8e^z \sqrt{\pi} (2z^7 - 13z^6 + 72z^5 - 330z^4 + 1200z^3 - 3240z^2 + 5760z - 5040) \operatorname{erf}(\sqrt{z})}{3465z^{3/2}}$$

07.25.03.ad1z.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-16z^6 - 112z^5 - 640z^4 - 3036z^3 - 11652z^2 - 34935z - 80640}{3465z} + \frac{8e^{-z} \sqrt{\pi} (2z^7 + 13z^6 + 72z^5 + 330z^4 + 1200z^3 + 3240z^2 + 5760z + 5040) \operatorname{erfi}(\sqrt{z})}{3465z^{3/2}}$$

07.25.03.ad20.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, 3; z\right) = \frac{2e^z (64z^7 - 640z^6 + 4560z^5 - 25200z^4 + 107100z^3 - 332640z^2 + 675675z - 675675)}{10395z^2} + \frac{130}{z^2}$$

07.25.03.ad21.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{8z^6 - 112z^5 + 996z^4 - 6564z^3 + 32757z^2 - 120960z + 483840}{693z^2} + \frac{4e^z \sqrt{\pi} (2z^7 - 27z^6 + 234z^5 - 1500z^4 + 7200z^3 - 24840z^2 + 55440z - 60480) \operatorname{erf}(\sqrt{z})}{693z^{5/2}}$$

07.25.03.ad22.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{8z^6 + 112z^5 + 996z^4 + 6564z^3 + 32757z^2 + 120960z + 483840}{693z^2} - \frac{4e^{-z} \sqrt{\pi} (2z^7 + 27z^6 + 234z^5 + 1500z^4 + 7200z^3 + 24840z^2 + 55440z + 60480) \operatorname{erfi}(\sqrt{z})}{693z^{5/2}}$$

07.25.03.ad23.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, 4; z\right) = \frac{78(5z + 34)}{z^3} + \frac{2e^z (64z^7 - 1088z^6 + 11088z^5 - 80640z^4 + 429660z^3 - 1621620z^2 + 3918915z - 4594590)}{3465z^3}$$

07.25.03.ad24.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{4z^6 - 84z^5 + 1004z^4 - 8349z^3 + 50400z^2 - 161280z + 1209600}{99z^3} + \frac{2e^z \sqrt{\pi} (2z^7 - 41z^6 + 480z^5 - 3900z^4 + 22800z^3 - 93240z^2 + 241920z - 302400) \operatorname{erf}(\sqrt{z})}{99z^{7/2}}$$

07.25.03.ad25.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{-4z^6 - 84z^5 - 1004z^4 - 8349z^3 - 50400z^2 - 161280z - 1209600}{99z^3} + \frac{2e^{-z} \sqrt{\pi} (2z^7 + 41z^6 + 480z^5 + 3900z^4 + 22800z^3 + 93240z^2 + 241920z + 302400) \operatorname{erfi}(\sqrt{z})}{99z^{7/2}}$$

07.25.03.ad26.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, 5; z\right) = \frac{156(35z^2 + 476z + 1938)}{7z^4} + \frac{1}{3465z^4} 8e^z(64z^7 - 1536z^6 + 20304z^5 - 182160z^4 + 1158300z^3 - 5096520z^2 + 14111955z - 18706545)$$

07.25.03.ad27.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{2z^6 - 56z^5 + 839z^4 - 8400z^3 + 70560z^2 - 100800z + 2116800}{11z^4} + \frac{e^z \sqrt{\pi} (2z^7 - 55z^6 + 810z^5 - 7950z^4 + 54600z^3 - 257040z^2 + 756000z - 1058400) \operatorname{erf}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.ad28.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{2z^6 + 56z^5 + 839z^4 + 8400z^3 + 70560z^2 + 100800z + 2116800}{11z^4} + \frac{1}{11z^{9/2}} e^{-z} \sqrt{\pi} (-2z^7 - 55z^6 - 810z^5 - 7950z^4 - 54600z^3 - 257040z^2 - 756000z - 1058400) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ad29.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{11}{2}, 6; z\right) = \frac{260(35z^3 + 714z^2 + 5814z + 18088)}{7z^5} + \frac{1}{693z^5} 8e^z(64z^7 - 1984z^6 + 32208z^5 - 343200z^4 + 2531100z^3 - 12689820z^2 + 39491595z - 58198140)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = -\frac{9}{2}$

07.25.03.ad2a.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{893025} (1024z^{11} + 36864z^{10} + 455680z^9 + 2349312z^8 + 4848640z^7 + 3059520z^6 + 181440z^5 + 8400z^4 + 4320z^3 + 8100z^2 + 44100z + 893025) + \frac{1}{893025} 512e^z \sqrt{\pi} (2z^{23/2} + 73z^{21/2} + 925z^{19/2} + 5000z^{17/2} + 11400z^{15/2} + 9240z^{13/2} + 1560z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ad2b.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{893025} (-1024z^{11} + 36864z^{10} - 455680z^9 + 2349312z^8 - 4848640z^7 + 3059520z^6 - 181440z^5 + 8400z^4 - 4320z^3 + 8100z^2 - 44100z + 893025) + \frac{1}{893025} 512e^{-z} \sqrt{\pi} (2z^{23/2} - 73z^{21/2} + 925z^{19/2} - 5000z^{17/2} + 11400z^{15/2} - 9240z^{13/2} + 1560z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ad2c.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{99225} \left(-512 z^{10} - 15360 z^9 - 151296 z^8 - 576512 z^7 - 753600 z^6 - 181440 z^5 + 8400 z^4 + 1440 z^3 + 1620 z^2 + 6300 z + 99225 \right) - \frac{256 e^z \sqrt{\pi} (2 z^{21/2} + 61 z^{19/2} + 620 z^{17/2} + 2520 z^{15/2} + 3840 z^{13/2} + 1560 z^{11/2}) \operatorname{erf}(\sqrt{z})}{99225}$$

07.25.03.ad2d.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{99225} \left(-512 z^{10} + 15360 z^9 - 151296 z^8 + 576512 z^7 - 753600 z^6 + 181440 z^5 + 8400 z^4 - 1440 z^3 + 1620 z^2 - 6300 z + 99225 \right) + \frac{256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 61 z^{19/2} + 620 z^{17/2} - 2520 z^{15/2} + 3840 z^{13/2} - 1560 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{99225}$$

07.25.03.ad2e.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{256 z^9 + 6144 z^8 + 45056 z^7 + 110784 z^6 + 60480 z^5 - 8400 z^4 + 1440 z^3 + 540 z^2 + 1260 z + 14175}{14175} + \frac{128 e^z \sqrt{\pi} (2 z^{19/2} + 49 z^{17/2} + 375 z^{15/2} + 1020 z^{13/2} + 780 z^{11/2}) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.ad2f.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{14175} \left(-256 z^9 + 6144 z^8 - 45056 z^7 + 110784 z^6 - 60480 z^5 - 8400 z^4 - 1440 z^3 + 540 z^2 - 1260 z + 14175 \right) + \frac{128 e^{-z} \sqrt{\pi} (2 z^{19/2} - 49 z^{17/2} + 375 z^{15/2} - 1020 z^{13/2} + 780 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.ad2g.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{-128 z^8 - 2304 z^7 - 11072 z^6 - 12096 z^5 + 2800 z^4 - 1440 z^3 + 540 z^2 + 420 z + 2835}{2835} - \frac{64 e^z \sqrt{\pi} (2 z^{17/2} + 37 z^{15/2} + 190 z^{13/2} + 260 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.ad2h.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{-128 z^8 + 2304 z^7 - 11072 z^6 + 12096 z^5 + 2800 z^4 + 1440 z^3 + 540 z^2 - 420 z + 2835}{2835} + \frac{64 e^{-z} \sqrt{\pi} (2 z^{17/2} - 37 z^{15/2} + 190 z^{13/2} - 260 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.ad2i.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} (64 z^7 + 768 z^6 + 1728 z^5 - 560 z^4 + 480 z^3 - 540 z^2 + 420 z + 945) + \frac{32}{945} e^z \sqrt{\pi} (2 z^{15/2} + 25 z^{13/2} + 65 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ad2j.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945} (-64 z^7 + 768 z^6 - 1728 z^5 - 560 z^4 - 480 z^3 - 540 z^2 - 420 z + 945) + \frac{32}{945} e^{-z} \sqrt{\pi} (2 z^{15/2} - 25 z^{13/2} + 65 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ad2k.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945} (-32 z^6 - 192 z^5 + 80 z^4 - 96 z^3 + 180 z^2 - 420 z + 945) - \frac{16}{945} e^z \sqrt{\pi} (2 z^{13/2} + 13 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ad2l.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} (-32 z^6 + 192 z^5 + 80 z^4 + 96 z^3 + 180 z^2 + 420 z + 945) + \frac{16}{945} e^{-z} \sqrt{\pi} (2 z^{13/2} - 13 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ad2m.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, 1; z\right) = -\frac{1}{945} e^z (32 z^6 + 112 z^5 - 160 z^4 + 360 z^3 - 750 z^2 + 1155 z - 945)$$

07.25.03.ad2n.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945} (-16 z^5 + 32 z^3 - 156 z^2 + 500 z - 975) - \frac{8 e^z \sqrt{\pi} (2 z^6 + z^5 - 5 z^4 + 20 z^3 - 60 z^2 + 120 z - 120) \operatorname{erf}(\sqrt{z})}{945 \sqrt{z}}$$

07.25.03.ad2o.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} (16 z^5 - 32 z^3 - 156 z^2 - 500 z - 975) - \frac{8 e^{-z} \sqrt{\pi} (2 z^6 - z^5 - 5 z^4 - 20 z^3 - 60 z^2 - 120 z - 120) \operatorname{erfi}(\sqrt{z})}{945 \sqrt{z}}$$

07.25.03.ad2p.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, 2; z\right) = -\frac{1}{945} e^z (32 z^5 - 80 z^4 + 240 z^3 - 600 z^2 + 1050 z - 945)$$

07.25.03.ad2q.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-8 z^5 + 48 z^4 - 228 z^3 + 868 z^2 - 2565 z + 5760}{315 z} - \frac{4 e^z \sqrt{\pi} (2 z^6 - 11 z^5 + 50 z^4 - 180 z^3 + 480 z^2 - 840 z + 720) \operatorname{erf}(\sqrt{z})}{315 z^{3/2}}$$

07.25.03.ad2r.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-8z^5 - 48z^4 - 228z^3 - 868z^2 - 2565z - 5760}{315z} + \frac{4e^{-z}\sqrt{\pi}(2z^6 + 11z^5 + 50z^4 + 180z^3 + 480z^2 + 840z + 720)\operatorname{erfi}(\sqrt{z})}{315z^{3/2}}$$

07.25.03.ad2s.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, 3; z\right) = \frac{286}{3z^2} - \frac{2e^z(32z^6 - 272z^5 + 1600z^4 - 7000z^3 + 22050z^2 - 45045z + 45045)}{945z^2}$$

07.25.03.ad2t.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-4z^5 + 48z^4 - 356z^3 + 1887z^2 - 7200z + 30240}{63z^2} - \frac{2e^z\sqrt{\pi}(2z^6 - 23z^5 + 165z^4 - 840z^3 + 3000z^2 - 6840z + 7560)\operatorname{erf}(\sqrt{z})}{63z^{5/2}}$$

07.25.03.ad2u.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{4z^5 + 48z^4 + 356z^3 + 1887z^2 + 7200z + 30240}{63z^2} - \frac{2e^{-z}\sqrt{\pi}(2z^6 + 23z^5 + 165z^4 + 840z^3 + 3000z^2 + 6840z + 7560)\operatorname{erfi}(\sqrt{z})}{63z^{5/2}}$$

07.25.03.ad2v.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, 4; z\right) = \frac{286(z+6)}{z^3} - \frac{2e^z(32z^6 - 464z^5 + 3920z^4 - 22680z^3 + 90090z^2 - 225225z + 270270)}{315z^3}$$

07.25.03.ad2w.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-2z^5 + 36z^4 - 359z^3 + 2400z^2 - 7280z + 67200}{9z^3} + \frac{e^z\sqrt{\pi}(-2z^6 + 35z^5 - 340z^4 + 2200z^3 - 9600z^2 + 26040z - 33600)\operatorname{erf}(\sqrt{z})}{9z^{7/2}}$$

07.25.03.ad2x.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{-2z^5 - 36z^4 - 359z^3 - 2400z^2 - 7280z - 67200}{9z^3} + \frac{e^{-z}\sqrt{\pi}(2z^6 + 35z^5 + 340z^4 + 2200z^3 + 9600z^2 + 26040z + 33600)\operatorname{erfi}(\sqrt{z})}{9z^{7/2}}$$

07.25.03.ad2y.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, 5; z\right) = \frac{572(7z^2 + 84z + 306)}{7z^4} - \frac{8e^z(32z^6 - 656z^5 + 7200z^4 - 51480z^3 + 244530z^2 - 714285z + 984555)}{315z^4}$$

07.25.03.ad2z.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-z^5 + 24z^4 - 300z^3 + 3164z^2 - 1680z + 105840}{z^4} + \frac{e^z \sqrt{\pi} (-2z^6 + 47z^5 - 575z^4 + 4500z^3 - 23100z^2 + 72240z - 105840) \operatorname{erf}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.ad30.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{z^5 + 24z^4 + 300z^3 + 3164z^2 + 1680z + 105840}{z^4} + \frac{e^{-z} \sqrt{\pi} (-2z^6 - 47z^5 - 575z^4 - 4500z^3 - 23100z^2 - 72240z - 105840) \operatorname{erfi}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.ad31.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{9}{2}, 6; z\right) = \frac{2860(7z^3 + 126z^2 + 918z + 2584)}{21z^5} - \frac{8e^z(32z^6 - 848z^5 + 11440z^4 - 97240z^3 + 536250z^2 - 1786785z + 2771340)}{63z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = -\frac{7}{2}$

07.25.03.ad32.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{256z^9 + 6400z^8 + 50176z^7 + 140608z^6 + 113856z^5 + 8400z^4 + 480z^3 + 324z^2 + 900z + 11025}{11025} + \frac{128e^z \sqrt{\pi} (2z^{19/2} + 51z^{17/2} + 416z^{15/2} + 1272z^{13/2} + 1296z^{11/2} + 264z^{9/2}) \operatorname{erf}(\sqrt{z})}{11025}$$

07.25.03.ad33.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{11025} (-256z^9 + 6400z^8 - 50176z^7 + 140608z^6 - 113856z^5 + 8400z^4 - 480z^3 + 324z^2 - 900z + 11025) + \frac{128e^{-z} \sqrt{\pi} (2z^{19/2} - 51z^{17/2} + 416z^{15/2} - 1272z^{13/2} + 1296z^{11/2} - 264z^{9/2}) \operatorname{erfi}(\sqrt{z})}{11025}$$

07.25.03.ad34.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{-128z^8 - 2560z^7 - 14912z^6 - 26688z^5 - 8400z^4 + 480z^3 + 108z^2 + 180z + 1575}{1575} - \frac{64e^z \sqrt{\pi} (2z^{17/2} + 41z^{15/2} + 252z^{13/2} + 516z^{11/2} + 264z^{9/2}) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.ad35.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{-128 z^8 + 2560 z^7 - 14912 z^6 + 26688 z^5 - 8400 z^4 - 480 z^3 + 108 z^2 - 180 z + 1575}{1575} + \frac{64 e^{-z} \sqrt{\pi} (2 z^{17/2} - 41 z^{15/2} + 252 z^{13/2} - 516 z^{11/2} + 264 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.ad36.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} (64 z^7 + 960 z^6 + 3648 z^5 + 2800 z^4 - 480 z^3 + 108 z^2 + 60 z + 315) + \frac{32}{315} e^z \sqrt{\pi} (2 z^{15/2} + 31 z^{13/2} + 128 z^{11/2} + 132 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ad37.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{315} (-64 z^7 + 960 z^6 - 3648 z^5 + 2800 z^4 + 480 z^3 + 108 z^2 - 60 z + 315) + \frac{32}{315} e^{-z} \sqrt{\pi} (2 z^{15/2} - 31 z^{13/2} + 128 z^{11/2} - 132 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ad38.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} (-32 z^6 - 320 z^5 - 560 z^4 + 160 z^3 - 108 z^2 + 60 z + 105) - \frac{16}{105} e^z \sqrt{\pi} (2 z^{13/2} + 21 z^{11/2} + 44 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ad39.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} (-32 z^6 + 320 z^5 - 560 z^4 - 160 z^3 - 108 z^2 - 60 z + 105) + \frac{16}{105} e^{-z} \sqrt{\pi} (2 z^{13/2} - 21 z^{11/2} + 44 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ad3a.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} (16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105) + \frac{8}{105} e^z \sqrt{\pi} (2 z^{11/2} + 11 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ad3b.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} (-16 z^5 + 80 z^4 + 32 z^3 + 36 z^2 + 60 z + 105) + \frac{8}{105} e^{-z} \sqrt{\pi} (2 z^{11/2} - 11 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ad3c.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^z (16 z^5 + 48 z^4 - 56 z^3 + 96 z^2 - 135 z + 105)$$

07.25.03.ad3d.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{105} (8 z^4 - 12 z^2 + 44 z - 87) + \frac{4 e^z \sqrt{\pi} (2 z^5 + z^4 - 4 z^3 + 12 z^2 - 24 z + 24) \operatorname{erf}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.ad3e.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} (8 z^4 - 12 z^2 - 44 z - 87) - \frac{4 e^{-z} \sqrt{\pi} (2 z^5 - z^4 - 4 z^3 - 12 z^2 - 24 z - 24) \operatorname{erfi}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.ad3f.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, 2; z\right) = \frac{1}{105} e^z (16z^4 - 32z^3 + 72z^2 - 120z + 105)$$

07.25.03.ad3g.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{4z^4 - 20z^3 + 76z^2 - 221z + 480}{35z} + \frac{2e^z \sqrt{\pi} (2z^5 - 9z^4 + 32z^3 - 84z^2 + 144z - 120) \operatorname{erf}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.ad3h.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{-4z^4 - 20z^3 - 76z^2 - 221z - 480}{35z} + \frac{2e^{-z} \sqrt{\pi} (2z^5 + 9z^4 + 32z^3 + 84z^2 + 144z + 120) \operatorname{erfi}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.ad3i.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, 3; z\right) = \frac{2e^z (16z^5 - 112z^4 + 520z^3 - 1680z^2 + 3465z - 3465)}{105z^2} + \frac{66}{z^2}$$

07.25.03.ad3j.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{2z^4 - 20z^3 + 119z^2 - 480z + 2160}{7z^2} + \frac{e^z \sqrt{\pi} (2z^5 - 19z^4 + 108z^3 - 408z^2 + 960z - 1080) \operatorname{erf}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.ad3k.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{2z^4 + 20z^3 + 119z^2 + 480z + 2160}{7z^2} + \frac{e^{-z} \sqrt{\pi} (-2z^5 - 19z^4 - 108z^3 - 408z^2 - 960z - 1080) \operatorname{erfi}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.ad3l.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, 4; z\right) = \frac{198(5z + 26)}{5z^3} + \frac{2e^z (16z^5 - 192z^4 + 1288z^3 - 5544z^2 + 14553z - 18018)}{35z^3}$$

07.25.03.ad3m.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{z^4 - 15z^3 + 120z^2 - 320z + 4200}{z^3} + \frac{e^z \sqrt{\pi} (2z^5 - 29z^4 + 224z^3 - 1080z^2 + 3120z - 4200) \operatorname{erf}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.ad3n.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-z^4 - 15z^3 - 120z^2 - 320z - 4200}{z^3} + \frac{e^{-z} \sqrt{\pi} (2z^5 + 29z^4 + 224z^3 + 1080z^2 + 3120z + 4200) \operatorname{erfi}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.ad3o.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, 5; z\right) = \frac{396(35z^2 + 364z + 1170)}{35z^4} + \frac{8e^z (16z^5 - 272z^4 + 2376z^3 - 12672z^2 + 39897z - 57915)}{35z^4}$$

07.25.03.ad3p.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9(z^4 - 20z^3 + 316z^2 + 280z + 11760)}{2z^4} + \frac{9e^z \sqrt{\pi} (2z^5 - 39z^4 + 380z^3 - 2220z^2 + 7560z - 11760) \operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.ad3q.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(z^4 + 20z^3 + 316z^2 - 280z + 11760)}{2z^4} - \frac{9e^{-z}\sqrt{\pi}(2z^5 + 39z^4 + 380z^3 + 2220z^2 + 7560z + 11760)\operatorname{erfi}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.ad3r.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{7}{2}, 6; z\right) = \frac{132(35z^3 + 546z^2 + 3510z + 8840)}{7z^5} + \frac{8e^z(16z^5 - 352z^4 + 3784z^3 - 24024z^2 + 87945z - 145860)}{7z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = -\frac{5}{2}$

07.25.03.ad3s.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225}(64z^7 + 1024z^6 + 4416z^5 + 4944z^4 + 480z^3 + 36z^2 + 36z + 225) + \frac{32}{225}e^z\sqrt{\pi}(2z^{15/2} + 33z^{13/2} + 153z^{11/2} + 210z^{9/2} + 54z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ad3t.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{225}(-64z^7 + 1024z^6 - 4416z^5 + 4944z^4 - 480z^3 + 36z^2 - 36z + 225) + \frac{32}{225}e^{-z}\sqrt{\pi}(2z^{15/2} - 33z^{13/2} + 153z^{11/2} - 210z^{9/2} + 54z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ad3u.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45}(-32z^6 - 384z^5 - 1072z^4 - 480z^3 + 36z^2 + 12z + 45) - \frac{16}{45}e^z\sqrt{\pi}(2z^{13/2} + 25z^{11/2} + 78z^{9/2} + 54z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ad3v.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{45}(-32z^6 + 384z^5 - 1072z^4 + 480z^3 + 36z^2 - 12z + 45) + \frac{16}{45}e^{-z}\sqrt{\pi}(2z^{13/2} - 25z^{11/2} + 78z^{9/2} - 54z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ad3w.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15}(16z^5 + 128z^4 + 160z^3 - 36z^2 + 12z + 15) + \frac{8}{15}e^z\sqrt{\pi}(2z^{11/2} + 17z^{9/2} + 27z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ad3x.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15}(-16z^5 + 128z^4 - 160z^3 - 36z^2 - 12z + 15) + \frac{8}{15}e^{-z}\sqrt{\pi}(2z^{11/2} - 17z^{9/2} + 27z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ad3y.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15}(-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15}e^z\sqrt{\pi}(2z^{9/2} + 9z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ad3z.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15}(-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15}e^{-z}\sqrt{\pi}(2z^{9/2} - 9z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ad40.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, 1; z\right) = -\frac{1}{15}e^z(8z^4 + 20z^3 - 18z^2 + 21z - 15)$$

07.25.03.ad41.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15}(-4z^3 + 4z - 9) - \frac{2e^z\sqrt{\pi}(2z^4 + z^3 - 3z^2 + 6z - 6)\operatorname{erf}(\sqrt{z})}{15\sqrt{z}}$$

07.25.03.ad42.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15}(4z^3 - 4z - 9) - \frac{2e^{-z}\sqrt{\pi}(2z^4 - z^3 - 3z^2 - 6z - 6)\operatorname{erfi}(\sqrt{z})}{15\sqrt{z}}$$

07.25.03.ad43.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, 2; z\right) = -\frac{1}{15}e^z(8z^3 - 12z^2 + 18z - 15)$$

07.25.03.ad44.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-2z^3 + 8z^2 - 23z + 48}{5z} + \frac{e^z\sqrt{\pi}(-2z^4 + 7z^3 - 18z^2 + 30z - 24)\operatorname{erf}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.ad45.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-2z^3 - 8z^2 - 23z - 48}{5z} + \frac{e^{-z}\sqrt{\pi}(2z^4 + 7z^3 + 18z^2 + 30z + 24)\operatorname{erfi}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.ad46.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, 3; z\right) = \frac{42}{z^2} - \frac{2e^z(8z^4 - 44z^3 + 150z^2 - 315z + 315)}{15z^2}$$

07.25.03.ad47.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-z^3 + 8z^2 - 36z + 180}{z^2} + \frac{e^z\sqrt{\pi}(-2z^4 + 15z^3 - 63z^2 + 156z - 180)\operatorname{erf}(\sqrt{z})}{2z^{5/2}}$$

07.25.03.ad48.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{z^3 + 8z^2 + 36z + 180}{z^2} + \frac{e^{-z}\sqrt{\pi}(-2z^4 - 15z^3 - 63z^2 - 156z - 180)\operatorname{erfi}(\sqrt{z})}{2z^{5/2}}$$

07.25.03.ad49.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, 4; z\right) = \frac{126(5z + 22)}{5z^3} - \frac{2e^z(8z^4 - 76z^3 + 378z^2 - 1071z + 1386)}{5z^3}$$

07.25.03.ad4a.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(z^3 - 12z^2 + 20z - 600)}{2z^3} - \frac{7e^z\sqrt{\pi}(2z^4 - 23z^3 + 132z^2 - 420z + 600)\operatorname{erf}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.ad4b.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} \sqrt{\pi} (2 z^4 + 23 z^3 + 132 z^2 + 420 z + 600) \operatorname{erfi}(\sqrt{z})}{4 z^{7/2}} - \frac{7 (z^3 + 12 z^2 + 20 z + 600)}{2 z^3}$$

07.25.03.ad4c.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, 5; z\right) = \frac{36 (35 z^2 + 308 z + 858)}{5 z^4} - \frac{8 e^z (8 z^4 - 108 z^3 + 702 z^2 - 2475 z + 3861)}{5 z^4}$$

07.25.03.ad4d.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{63 (z^3 - 37 z^2 - 110 z - 1470)}{4 z^4} - \frac{63 e^z \sqrt{\pi} (2 z^4 - 31 z^3 + 225 z^2 - 870 z + 1470) \operatorname{erf}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.ad4e.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63 (z^3 + 37 z^2 - 110 z + 1470)}{4 z^4} - \frac{63 e^{-z} \sqrt{\pi} (2 z^4 + 31 z^3 + 225 z^2 + 870 z + 1470) \operatorname{erfi}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.ad4f.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{5}{2}, 6; z\right) = \frac{12 (35 z^3 + 462 z^2 + 2574 z + 5720)}{z^5} - \frac{8 e^z (8 z^4 - 140 z^3 + 1122 z^2 - 4719 z + 8580)}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = -\frac{3}{2}$

07.25.03.ad4g.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} (16 z^5 + 144 z^4 + 256 z^3 + 36 z^2 + 4 z + 9) + \frac{8}{9} e^z \sqrt{\pi} (2 z^{11/2} + 19 z^{9/2} + 40 z^{7/2} + 14 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ad4h.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9} (-16 z^5 + 144 z^4 - 256 z^3 + 36 z^2 - 4 z + 9) + \frac{8}{9} e^{-z} \sqrt{\pi} (2 z^{11/2} - 19 z^{9/2} + 40 z^{7/2} - 14 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ad4i.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} (-8 z^4 - 48 z^3 - 36 z^2 + 4 z + 3) - \frac{4}{3} e^z \sqrt{\pi} (2 z^{9/2} + 13 z^{7/2} + 14 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ad4j.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} (-8 z^4 + 48 z^3 - 36 z^2 - 4 z + 3) + \frac{4}{3} e^{-z} \sqrt{\pi} (2 z^{9/2} - 13 z^{7/2} + 14 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ad4k.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} (4 z^3 + 12 z^2 - 4 z + 3) + \frac{2}{3} e^z \sqrt{\pi} (2 z^{7/2} + 7 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ad4l.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} (-4 z^3 + 12 z^2 + 4 z + 3) + \frac{2}{3} e^{-z} \sqrt{\pi} (2 z^{7/2} - 7 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ad4m.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, 1; z\right) = \frac{1}{3} e^z (4 z^3 + 8 z^2 - 5 z + 3)$$

07.25.03.ad4n.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3}(2z^2 - 1) + \frac{e^z \sqrt{\pi} (2z^3 + z^2 - 2z + 2) \operatorname{erf}(\sqrt{z})}{3\sqrt{z}}$$

07.25.03.ad4o.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{3}(2z^2 - 1) + \frac{e^{-z} \sqrt{\pi} (-2z^3 + z^2 + 2z + 2) \operatorname{erfi}(\sqrt{z})}{3\sqrt{z}}$$

07.25.03.ad4p.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, 2; z\right) = \frac{1}{3}e^z(4z^2 - 4z + 3)$$

07.25.03.ad4q.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{z^2 - 3z + 6}{z} + \frac{e^z \sqrt{\pi} (2z^3 - 5z^2 + 8z - 6) \operatorname{erf}(\sqrt{z})}{2z^{3/2}}$$

07.25.03.ad4r.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-z^2 - 3z - 6}{z} + \frac{e^{-z} \sqrt{\pi} (2z^3 + 5z^2 + 8z + 6) \operatorname{erfi}(\sqrt{z})}{2z^{3/2}}$$

07.25.03.ad4s.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, 3; z\right) = \frac{2e^z(4z^3 - 16z^2 + 35z - 35)}{3z^2} + \frac{70}{3z^2}$$

07.25.03.ad4t.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(z^2 - 6z + 36)}{2z^2} + \frac{5e^z \sqrt{\pi} (2z^3 - 11z^2 + 30z - 36) \operatorname{erf}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.ad4u.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(z^2 + 6z + 36)}{2z^2} - \frac{5e^{-z} \sqrt{\pi} (2z^3 + 11z^2 + 30z + 36) \operatorname{erfi}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.ad4v.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, 4; z\right) = \frac{14(5z + 18)}{z^3} + \frac{2e^z(4z^3 - 28z^2 + 91z - 126)}{z^3}$$

07.25.03.ad4w.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(3z^2 + 8z + 300)}{12z^3} + \frac{35e^z \sqrt{\pi} (2z^3 - 17z^2 + 64z - 100) \operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.ad4x.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (2z^3 + 17z^2 + 64z + 100) \operatorname{erfi}(\sqrt{z})}{8z^{7/2}} - \frac{35(3z^2 - 8z + 300)}{12z^3}$$

07.25.03.ad4y.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, 5; z\right) = \frac{4(35z^2 + 252z + 594)}{z^4} + \frac{8e^z(4z^3 - 40z^2 + 171z - 297)}{z^4}$$

07.25.03.ad4z.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{105(17z^2 + 90z + 630)}{8z^4} + \frac{315e^z\sqrt{\pi}(2z^3 - 23z^2 + 110z - 210)\operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.ad50.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{105(17z^2 - 90z + 630)}{8z^4} - \frac{315e^{-z}\sqrt{\pi}(2z^3 + 23z^2 + 110z + 210)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.ad51.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{3}{2}, 6; z\right) = \frac{40e^z(4z^3 - 52z^2 + 275z - 572)}{z^5} + \frac{20(35z^3 + 378z^2 + 1782z + 3432)}{3z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = -\frac{1}{2}$

07.25.03.ad52.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, -\frac{1}{2}; z\right) = 4z^3 + 16z^2 + 4z + 2e^z\sqrt{\pi}(2z^{7/2} + 9z^{5/2} + 5z^{3/2})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.ad53.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, -\frac{1}{2}; -z\right) = -4z^3 + 16z^2 - 4z + 2e^{-z}\sqrt{\pi}(2z^{7/2} - 9z^{5/2} + 5z^{3/2})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.ad54.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, \frac{1}{2}; z\right) = -2z^2 - 4z + e^z\sqrt{\pi}(-2z^{5/2} - 5z^{3/2})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.ad55.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, \frac{1}{2}; -z\right) = -2z^2 + 4z + e^{-z}\sqrt{\pi}(2z^{5/2} - 5z^{3/2})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.ad56.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, 1; z\right) = -e^z(2z^2 + 3z - 1)$$

07.25.03.ad57.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z\sqrt{\pi}(-2z^2 - z + 1)\operatorname{erf}(\sqrt{z})}{2\sqrt{z}} - z$$

07.25.03.ad58.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, \frac{3}{2}; -z\right) = z + \frac{e^{-z}\sqrt{\pi}(-2z^2 + z + 1)\operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.ad59.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, 2; z\right) = -e^z(2z - 1)$$

07.25.03.ad5a.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{3(z-2)}{2z} - \frac{3e^z\sqrt{\pi}(2z^2 - 3z + 2)\operatorname{erf}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.ad5b.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2 z^2 + 3 z + 2) \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}} - \frac{3(z+2)}{2z}$$

07.25.03.ad5c.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, 3; z\right) = \frac{10}{z^2} - \frac{2 e^z (2 z^2 - 5 z + 5)}{z^2}$$

07.25.03.ad5d.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{15(z-9)}{4 z^2} - \frac{15 e^z \sqrt{\pi} (2 z^2 - 7 z + 9) \operatorname{erf}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.ad5e.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15(z+9)}{4 z^2} - \frac{15 e^{-z} \sqrt{\pi} (2 z^2 + 7 z + 9) \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.ad5f.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, 4; z\right) = \frac{6(5z+14)}{z^3} - \frac{6 e^z (2 z^2 - 9 z + 14)}{z^3}$$

07.25.03.ad5g.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(7z+60)}{8 z^3} - \frac{105 e^z \sqrt{\pi} (2 z^2 - 11 z + 20) \operatorname{erf}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.ad5h.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35(7z-60)}{8 z^3} + \frac{105 e^{-z} \sqrt{\pi} (2 z^2 + 11 z + 20) \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.ad5i.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, 5; z\right) = \frac{12(5 z^2 + 28 z + 54)}{z^4} - \frac{24 e^z (2 z^2 - 13 z + 27)}{z^4}$$

07.25.03.ad5j.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{315(4 z^2 + 25 z + 105)}{16 z^4} - \frac{945 e^z \sqrt{\pi} (2 z^2 - 15 z + 35) \operatorname{erf}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.ad5k.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315(4 z^2 - 25 z + 105)}{16 z^4} - \frac{945 e^{-z} \sqrt{\pi} (2 z^2 + 15 z + 35) \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.ad5l.01

$${}_2F_2\left(\frac{1}{2}, 2; -\frac{1}{2}, 6; z\right) = \frac{20(5 z^3 + 42 z^2 + 162 z + 264)}{z^5} - \frac{120 e^z (2 z^2 - 17 z + 44)}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = \frac{1}{2}$

07.25.03.ad5m.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, \frac{1}{2}; z\right) = z + \frac{1}{2} e^z \sqrt{\pi} (2 z^{3/2} + 3 \sqrt{z}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.ad5n.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, \frac{1}{2}; -z\right) = -z + \frac{1}{2} e^{-z} \sqrt{\pi} (2z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.ad5o.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, 1; z\right) = e^z (z + 1)$$

07.25.03.ad5p.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.ad5q.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.ad5r.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, 2; z\right) = e^z$$

07.25.03.ad5s.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (2z - 1) \operatorname{erfi}(\sqrt{z})}{8z^{3/2}} + \frac{3}{4z}$$

07.25.03.ad5t.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3}{4z}$$

07.25.03.ad5u.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, 3; z\right) = \frac{2 e^z (z - 1)}{z^2} + \frac{2}{z^2}$$

07.25.03.ad5v.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} (2z - 3) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}} + \frac{45}{8z^2}$$

07.25.03.ad5w.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{45}{8z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.ad5x.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, 4; z\right) = \frac{6 e^z (z - 2)}{z^3} + \frac{6(z + 2)}{z^3}$$

07.25.03.ad5y.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(4z + 15)}{16z^3} + \frac{105 e^z \sqrt{\pi} (2z - 5) \operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.ad5z.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35(4z - 15)}{16z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.ad60.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, 5; z\right) = \frac{24 e^z (z-3)}{z^4} + \frac{12(z^2 + 4z + 6)}{z^4}$$

07.25.03.ad61.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{63(8z^2 + 40z + 105)}{32z^4} + \frac{945 e^z \sqrt{\pi} (2z-7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ad62.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63(8z^2 - 40z + 105)}{32z^4} - \frac{945 e^{-z} \sqrt{\pi} (2z+7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ad63.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{1}{2}, 6; z\right) = \frac{120 e^z (z-4)}{z^5} + \frac{20(z^3 + 6z^2 + 18z + 24)}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = 1$

07.25.03.0058.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, 1; z\right) = \frac{1}{2} e^{z/2} \left((z+2) I_0\left(\frac{z}{2}\right) + z I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.0059.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, \frac{3}{2}; z\right) = \frac{1}{4} \left(\frac{\sqrt{\pi}}{\sqrt{z}} \operatorname{erfi}(\sqrt{z}) + 2 e^z \right)$$

07.25.03.ad64.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 \sqrt{z}} + \frac{e^{-z}}{2}$$

07.25.03.ad65.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

07.25.03.0060.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, \frac{5}{2}; z\right) = \frac{1}{16 z^{3/2}} \left(3 \sqrt{\pi} (2z-1) \operatorname{erfi}(\sqrt{z}) + 6 e^z \sqrt{z} \right)$$

07.25.03.ad66.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, \frac{5}{2}; -z\right) = \frac{3 \sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{16 z^{3/2}} - \frac{3 e^{-z}}{8z}$$

07.25.03.0061.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, 3; z\right) = \frac{2}{3z} e^{z/2} \left(z I_0\left(\frac{z}{2}\right) - (z-2) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ad67.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, \frac{7}{2}; z\right) = \frac{15 \sqrt{\pi} (4z^2 - 4z - 9) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}} - \frac{15 e^z (2z-9)}{64 z^2}$$

07.25.03.ad68.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, \frac{7}{2}; -z\right) = \frac{15 e^{-z} (2z + 9)}{64 z^2} + \frac{15 \sqrt{\pi} (4z^2 + 4z - 9) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.ad69.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, 4; z\right) = \frac{4 e^{z/2} (z - 2) I_0\left(\frac{z}{2}\right)}{5 z} - \frac{4 e^{z/2} (z^2 - z - 8) I_1\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.ad6a.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, \frac{9}{2}; z\right) = \frac{35 \sqrt{\pi} (8z^3 - 12z^2 - 54z - 75) \operatorname{erfi}(\sqrt{z})}{512 z^{7/2}} - \frac{35 e^z (4z^2 - 4z - 75)}{256 z^3}$$

07.25.03.ad6b.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z^2 + 4z - 75)}{256 z^3} + \frac{35 \sqrt{\pi} (8z^3 + 12z^2 - 54z + 75) \operatorname{erf}(\sqrt{z})}{512 z^{7/2}}$$

07.25.03.ad6c.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, 5; z\right) = \frac{16 e^{z/2} (2z^2 - 5z - 18) I_0\left(\frac{z}{2}\right)}{35 z^2} - \frac{16 e^{z/2} (2z^3 - 3z^2 - 20z - 72) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.ad6d.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (16z^4 - 32z^3 - 216z^2 - 600z - 735) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}} - \frac{315 e^z (8z^3 - 12z^2 - 110z - 735)}{4096 z^4}$$

07.25.03.ad6e.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (8z^3 + 12z^2 - 110z + 735)}{4096 z^4} + \frac{315 \sqrt{\pi} (16z^4 + 32z^3 - 216z^2 + 600z - 735) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.ad6f.01

$${}_2F_2\left(\frac{1}{2}, 2; 1, 6; z\right) = \frac{32 e^{z/2} (2z^3 - 6z^2 - 33z - 96) I_0\left(\frac{z}{2}\right)}{63 z^3} - \frac{64 e^{z/2} (z^4 - 2z^3 - 18z^2 - 66z - 192) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = \frac{3}{2}$

07.25.03.ad6g.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{3}{2}, 2; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.ad6h.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{3}{2}, 2; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.0062.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{3}{2}, 3; z\right) = \frac{2}{3 z^2} \left(\sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} - e^z (z - 1) - 1 \right)$$

07.25.03.ad6i.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{3}{2}, 3; -z\right) = \frac{2e^{-z}(z+1)}{3z^2} + \frac{2\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{3\sqrt{z}} - \frac{2}{3z^2}$$

07.25.03.ad6j.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{3}{2}, 4; z\right) = -\frac{2(5z+6)}{5z^3} - \frac{2e^z(2z^2+z-6)}{5z^3} + \frac{4\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{5\sqrt{z}}$$

07.25.03.ad6k.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{3}{2}, 4; -z\right) = -\frac{2(5z-6)}{5z^3} + \frac{2e^{-z}(2z^2-z-6)}{5z^3} + \frac{4\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{5\sqrt{z}}$$

07.25.03.ad6l.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{3}{2}, 5; z\right) = -\frac{4(35z^2+84z+90)}{35z^4} - \frac{8e^z(4z^3+2z^2+3z-45)}{35z^4} + \frac{32\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.ad6m.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{3}{2}, 5; -z\right) = -\frac{4(35z^2-84z+90)}{35z^4} + \frac{8e^{-z}(4z^3-2z^2+3z+45)}{35z^4} + \frac{32\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.ad6n.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{3}{2}, 6; z\right) = -\frac{4(35z^3+126z^2+270z+280)}{21z^5} - \frac{8e^z(8z^4+4z^3+6z^2+15z-420)}{63z^5} + \frac{64\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{63\sqrt{z}}$$

07.25.03.ad6o.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{3}{2}, 6; -z\right) = -\frac{4(35z^3-126z^2+270z-280)}{21z^5} + \frac{8e^{-z}(8z^4-4z^3+6z^2-15z-420)}{63z^5} + \frac{64\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{63\sqrt{z}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = 2$

07.25.03.ad6p.01

$${}_2F_2\left(\frac{1}{2}, 2; 2, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.ad6q.01

$${}_2F_2\left(\frac{1}{2}, 2; 2, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi}(2z+1)\operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3e^z}{4z}$$

07.25.03.ad6r.01

$${}_2F_2\left(\frac{1}{2}, 2; 2, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi}(2z-1)\operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.ad6s.01

$${}_2F_2\left(\frac{1}{2}, 2; 2, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(z+1)I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.ad6t.01

$${}_2F_2\left(\frac{1}{2}, 2; 2, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi}(4z^2 + 4z + 3)\operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15e^z(2z + 3)}{32z^2}$$

07.25.03.ad6u.01

$${}_2F_2\left(\frac{1}{2}, 2; 2, \frac{7}{2}; -z\right) = \frac{15e^{-z}(2z - 3)}{32z^2} + \frac{15\sqrt{\pi}(4z^2 - 4z + 3)\operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.ad6v.01

$${}_2F_2\left(\frac{1}{2}, 2; 2, 4; z\right) = \frac{4e^{z/2}(2z + 1)I_0\left(\frac{z}{2}\right)}{5z} - \frac{4e^{z/2}(2z^2 + 3z + 4)I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.ad6w.01

$${}_2F_2\left(\frac{1}{2}, 2; 2, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi}(8z^3 + 12z^2 + 18z + 15)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35e^z(4z^2 + 8z + 15)}{128z^3}$$

07.25.03.ad6x.01

$${}_2F_2\left(\frac{1}{2}, 2; 2, \frac{9}{2}; -z\right) = \frac{35e^{-z}(4z^2 - 8z + 15)}{128z^3} + \frac{35\sqrt{\pi}(8z^3 - 12z^2 + 18z - 15)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.ad6y.01

$${}_2F_2\left(\frac{1}{2}, 2; 2, 5; z\right) = \frac{32e^{z/2}(2z^2 + 2z + 3)I_0\left(\frac{z}{2}\right)}{35z^2} - \frac{64e^{z/2}(z^3 + 2z^2 + 4z + 6)I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.ad6z.01

$${}_2F_2\left(\frac{1}{2}, 2; 2, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi}(16z^4 + 32z^3 + 72z^2 + 120z + 105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315e^z(8z^3 + 20z^2 + 50z + 105)}{2048z^4}$$

07.25.03.ad70.01

$${}_2F_2\left(\frac{1}{2}, 2; 2, \frac{11}{2}; -z\right) = \frac{315e^{-z}(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315\sqrt{\pi}(16z^4 - 32z^3 + 72z^2 - 120z + 105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.ad71.01

$${}_2F_2\left(\frac{1}{2}, 2; 2, 6; z\right) = \frac{32e^{z/2}(4z^3 + 6z^2 + 15z + 24)I_0\left(\frac{z}{2}\right)}{63z^3} - \frac{32e^{z/2}(4z^4 + 10z^3 + 27z^2 + 60z + 96)I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = \frac{5}{2}$

07.25.03.0063.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{5}{2}, 3; z\right) = \frac{1}{2z^2} \left(\sqrt{\pi} \sqrt{z} (2z + 3) \operatorname{erfi}(\sqrt{z}) - 2e^z(z + 2) + 4 \right)$$

07.25.03.ad72.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{5}{2}, 3; -z\right) = \frac{e^{-z}(z - 2)}{z^2} + \frac{\sqrt{\pi}(2z - 3)\operatorname{erf}(\sqrt{z})}{2z^{3/2}} + \frac{2}{z^2}$$

07.25.03.ad73.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{5}{2}, 4; z\right) = \frac{6(5z+2)}{5z^3} - \frac{6e^z(z^2+3z+2)}{5z^3} + \frac{3\sqrt{\pi}(2z+5)\operatorname{erfi}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.ad74.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{5}{2}, 4; -z\right) = \frac{6(5z-2)}{5z^3} + \frac{6e^{-z}(z^2-3z+2)}{5z^3} + \frac{3\sqrt{\pi}(2z-5)\operatorname{erf}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.ad75.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{5}{2}, 5; z\right) = \frac{12(35z^2+28z+18)}{35z^4} - \frac{24e^z(2z^3+8z^2+5z+9)}{35z^4} + \frac{24\sqrt{\pi}(2z+7)\operatorname{erfi}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.ad76.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{5}{2}, 5; -z\right) = \frac{12(35z^2-28z+18)}{35z^4} + \frac{24e^{-z}(2z^3-8z^2+5z-9)}{35z^4} + \frac{24\sqrt{\pi}(2z-7)\operatorname{erf}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.ad77.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{5}{2}, 6; z\right) = \frac{4(35z^3+42z^2+54z+40)}{7z^5} - \frac{8e^z(4z^4+20z^3+12z^2+21z+60)}{21z^5} + \frac{16\sqrt{\pi}(2z+9)\operatorname{erfi}(\sqrt{z})}{21z^{3/2}}$$

07.25.03.ad78.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{5}{2}, 6; -z\right) = \frac{4(35z^3-42z^2+54z-40)}{7z^5} + \frac{8e^{-z}(4z^4-20z^3+12z^2-21z+60)}{21z^5} + \frac{16\sqrt{\pi}(2z-9)\operatorname{erf}(\sqrt{z})}{21z^{3/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = 3$

07.25.03.0064.01

$${}_2F_2\left(\frac{1}{2}, 2; 3, 3; z\right) = \frac{8}{9z^2} \left(e^{z/2}(2z^2+3z-6)I_0\left(\frac{z}{2}\right) - e^{z/2}z(2z+5)I_1\left(\frac{z}{2}\right) + 6 \right)$$

07.25.03.ad79.01

$${}_2F_2\left(\frac{1}{2}, 2; 3, \frac{7}{2}; z\right) = -\frac{5e^z(2z+7)}{8z^2} + \frac{5\sqrt{\pi}(4z^2+12z-9)\operatorname{erfi}(\sqrt{z})}{16z^{5/2}} + \frac{10}{z^2}$$

07.25.03.ad7a.01

$${}_2F_2\left(\frac{1}{2}, 2; 3, \frac{7}{2}; -z\right) = \frac{5e^{-z}(2z-7)}{8z^2} + \frac{5\sqrt{\pi}(4z^2-12z-9)\operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{10}{z^2}$$

07.25.03.ad7b.01

$${}_2F_2\left(\frac{1}{2}, 2; 3, 4; z\right) = \frac{16e^{z/2}(2z^2+6z-15)I_0\left(\frac{z}{2}\right) - 32e^{z/2}(z^2+4z-3)I_1\left(\frac{z}{2}\right) + 16}{15z^2}$$

07.25.03.ad7c.01

$${}_2F_2\left(\frac{1}{2}, 2; 3, \frac{9}{2}; z\right) = -\frac{35e^z(4z^2+20z-15)}{96z^3} + \frac{35\sqrt{\pi}(8z^3+36z^2-54z-15)\operatorname{erfi}(\sqrt{z})}{192z^{7/2}} + \frac{70}{3z^2}$$

07.25.03.ad7d.01

$${}_2F_2\left(\frac{1}{2}, 2; 3, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z^2 - 20z - 15)}{96 z^3} + \frac{35 \sqrt{\pi} (8z^3 - 36z^2 - 54z + 15) \operatorname{erf}(\sqrt{z})}{192 z^{7/2}} + \frac{70}{3 z^2}$$

07.25.03.ad7e.01

$${}_2F_2\left(\frac{1}{2}, 2; 3, 5; z\right) = \frac{64 e^{z/2} (4z^2 + 18z - 57) I_0\left(\frac{z}{2}\right)}{105 z^2} - \frac{64 e^{z/2} (4z^3 + 22z^2 - 33z - 18) I_1\left(\frac{z}{2}\right)}{105 z^3} + \frac{32}{z^2}$$

07.25.03.ad7f.01

$${}_2F_2\left(\frac{1}{2}, 2; 3, \frac{11}{2}; z\right) = -\frac{105 e^z (8z^3 + 52z^2 - 78z - 63)}{512 z^4} + \frac{105 \sqrt{\pi} (16z^4 + 96z^3 - 216z^2 - 120z - 63) \operatorname{erfi}(\sqrt{z})}{1024 z^{9/2}} + \frac{42}{z^2}$$

07.25.03.ad7g.01

$${}_2F_2\left(\frac{1}{2}, 2; 3, \frac{11}{2}; -z\right) = \frac{105 e^{-z} (8z^3 - 52z^2 - 78z + 63)}{512 z^4} + \frac{105 \sqrt{\pi} (16z^4 - 96z^3 - 216z^2 + 120z - 63) \operatorname{erf}(\sqrt{z})}{1024 z^{9/2}} + \frac{42}{z^2}$$

07.25.03.ad7h.01

$${}_2F_2\left(\frac{1}{2}, 2; 3, 6; z\right) = \frac{128 e^{z/2} (4z^3 + 24z^2 - 93z - 12) I_0\left(\frac{z}{2}\right)}{189 z^3} - \frac{128 e^{z/2} (4z^4 + 28z^3 - 63z^2 - 57z - 48) I_1\left(\frac{z}{2}\right)}{189 z^4} + \frac{160}{3 z^2}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = \frac{7}{2}$

07.25.03.ad7i.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{7}{2}, 4; z\right) = \frac{6(5z - 2)}{z^3} - \frac{3 e^z (2z^2 + 11z - 16)}{4 z^3} + \frac{3 \sqrt{\pi} (4z^2 + 20z - 45) \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.ad7j.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{7}{2}, 4; -z\right) = \frac{6(5z + 2)}{z^3} + \frac{3 e^{-z} (2z^2 - 11z - 16)}{4 z^3} + \frac{3 \sqrt{\pi} (4z^2 - 20z - 45) \operatorname{erf}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.ad7k.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{7}{2}, 5; z\right) = \frac{12(35z^2 - 28z - 6)}{7 z^4} - \frac{6 e^z (2z^3 + 15z^2 - 44z - 12)}{7 z^4} + \frac{3 \sqrt{\pi} (4z^2 + 28z - 105) \operatorname{erfi}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.ad7l.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{7}{2}, 5; -z\right) = \frac{12(35z^2 + 28z - 6)}{7 z^4} + \frac{6 e^{-z} (2z^3 - 15z^2 - 44z + 12)}{7 z^4} + \frac{3 \sqrt{\pi} (4z^2 - 28z - 105) \operatorname{erf}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.ad7m.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{7}{2}, 6; z\right) = \frac{20(35z^3 - 42z^2 - 18z - 8)}{7 z^5} - \frac{20 e^z (2z^4 + 19z^3 - 84z^2 - 30z - 24)}{21 z^5} + \frac{10 \sqrt{\pi} (4z^2 + 36z - 189) \operatorname{erfi}(\sqrt{z})}{21 z^{5/2}}$$

07.25.03.ad7n.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{7}{2}, 6; -z\right) = \frac{20(35z^3 + 42z^2 - 18z + 8)}{7z^5} + \frac{20e^{-z}(2z^4 - 19z^3 - 84z^2 + 30z - 24)}{21z^5} + \frac{10\sqrt{\pi}(4z^2 - 36z - 189)\operatorname{erf}(\sqrt{z})}{21z^{5/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = 4$

07.25.03.ad7o.01

$${}_2F_2\left(\frac{1}{2}, 2; 4, 4; z\right) = \frac{48(5z - 4)}{5z^3} + \frac{16e^{z/2}(4z^3 + 22z^2 - 105z + 60)I_0\left(\frac{z}{2}\right)}{25z^3} - \frac{16e^{z/2}(4z^2 + 26z - 77)I_1\left(\frac{z}{2}\right)}{25z^2}$$

07.25.03.ad7p.01

$${}_2F_2\left(\frac{1}{2}, 2; 4, \frac{9}{2}; z\right) = \frac{14(5z - 6)}{z^3} - \frac{7e^z(4z^2 + 32z - 117)}{16z^3} + \frac{7\sqrt{\pi}(8z^3 + 60z^2 - 270z + 75)\operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.ad7q.01

$${}_2F_2\left(\frac{1}{2}, 2; 4, \frac{9}{2}; -z\right) = \frac{14(5z + 6)}{z^3} + \frac{7e^{-z}(4z^2 - 32z - 117)}{16z^3} + \frac{7\sqrt{\pi}(8z^3 - 60z^2 - 270z - 75)\operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.ad7r.01

$${}_2F_2\left(\frac{1}{2}, 2; 4, 5; z\right) = \frac{96(5z - 8)}{5z^3} + \frac{128e^{z/2}(4z^3 + 32z^2 - 225z + 210)I_0\left(\frac{z}{2}\right)}{175z^3} - \frac{128e^{z/2}(4z^3 + 36z^2 - 187z + 45)I_1\left(\frac{z}{2}\right)}{175z^3}$$

07.25.03.ad7s.01

$${}_2F_2\left(\frac{1}{2}, 2; 4, \frac{11}{2}; z\right) = \frac{126(z - 2)}{z^3} - \frac{63e^z(8z^3 + 84z^2 - 494z + 105)}{256z^4} + \frac{63\sqrt{\pi}(16z^4 + 160z^3 - 1080z^2 + 600z + 105)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ad7t.01

$${}_2F_2\left(\frac{1}{2}, 2; 4, \frac{11}{2}; -z\right) = \frac{126(z + 2)}{z^3} + \frac{63e^{-z}(8z^3 - 84z^2 - 494z - 105)}{256z^4} + \frac{63\sqrt{\pi}(16z^4 - 160z^3 - 1080z^2 - 600z + 105)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ad7u.01

$${}_2F_2\left(\frac{1}{2}, 2; 4, 6; z\right) = \frac{32(5z - 12)}{z^3} + \frac{128e^{z/2}(8z^3 + 84z^2 - 780z + 975)I_0\left(\frac{z}{2}\right)}{315z^3} - \frac{128e^{z/2}(8z^4 + 92z^3 - 684z^2 + 345z + 120)I_1\left(\frac{z}{2}\right)}{315z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = \frac{9}{2}$

07.25.03.ad7v.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{9}{2}, 5; z\right) = \frac{4(35z^2 - 84z + 18)}{z^4} + \frac{e^z(-4z^3 - 44z^2 + 291z - 144)}{2z^4} + \frac{\sqrt{\pi}(8z^3 + 84z^2 - 630z + 525)\operatorname{erfi}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.ad7w.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{9}{2}, 5; -z\right) = \frac{4(35z^2 + 84z + 18)}{z^4} + \frac{e^{-z}(4z^3 - 44z^2 - 291z - 144)}{2z^4} + \frac{\sqrt{\pi}(8z^3 - 84z^2 - 630z - 525)\operatorname{erf}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.ad7x.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{9}{2}, 6; z\right) = \frac{20(35z^3 - 126z^2 + 54z + 8)}{3z^5} - \frac{5e^z(4z^4 + 56z^3 - 537z^2 + 552z + 96)}{9z^5} + \frac{5\sqrt{\pi}(8z^3 + 108z^2 - 1134z + 1575)\operatorname{erfi}(\sqrt{z})}{18z^{7/2}}$$

07.25.03.ad7y.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{9}{2}, 6; -z\right) = \frac{20(35z^3 + 126z^2 + 54z - 8)}{3z^5} + \frac{5e^{-z}(4z^4 - 56z^3 - 537z^2 - 552z + 96)}{9z^5} + \frac{5\sqrt{\pi}(8z^3 - 108z^2 - 1134z - 1575)\operatorname{erf}(\sqrt{z})}{18z^{7/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 2$, $b_1 = 5$

07.25.03.ad7z.01

$${}_2F_2\left(\frac{1}{2}, 2; 5, 5; z\right) = \frac{192(35z^2 - 112z + 48)}{35z^4} + \frac{512e^{z/2}(8z^4 + 92z^3 - 996z^2 + 1785z - 630)I_0\left(\frac{z}{2}\right)}{1225z^4} - \frac{512e^{z/2}(8z^3 + 100z^2 - 892z + 951)I_1\left(\frac{z}{2}\right)}{1225z^3}$$

07.25.03.ad80.01

$${}_2F_2\left(\frac{1}{2}, 2; 5, \frac{11}{2}; z\right) = \frac{36(7z^2 - 28z + 18)}{z^4} - \frac{9e^z(8z^3 + 116z^2 - 1198z + 1569)}{32z^4} + \frac{9\sqrt{\pi}(16z^4 + 224z^3 - 2520z^2 + 4200z - 735)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.ad81.01

$${}_2F_2\left(\frac{1}{2}, 2; 5, \frac{11}{2}; -z\right) = \frac{36(7z^2 + 28z + 18)}{z^4} + \frac{9e^{-z}(8z^3 - 116z^2 - 1198z - 1569)}{32z^4} + \frac{9\sqrt{\pi}(16z^4 - 224z^3 - 2520z^2 - 4200z - 735)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.ad82.01

$${}_2F_2\left(\frac{1}{2}, 2; 5, 6; z\right) = \frac{64(35z^2 - 168z + 144)}{7z^4} + \frac{1024e^{z/2}(8z^4 + 120z^3 - 1752z^2 + 4620z - 2835)I_0\left(\frac{z}{2}\right)}{2205z^4} - \frac{4096e^{z/2}(2z^4 + 32z^3 - 405z^2 + 768z - 105)I_1\left(\frac{z}{2}\right)}{2205z^4}$$

For fixed z and $a_1 = \frac{1}{2}, a_2 = 2, b_1 = \frac{11}{2}$

07.25.03.ad83.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{11}{2}, 6; z\right) = \frac{60(7z^3 - 42z^2 + 54z - 8)}{z^5} - \frac{5e^z(8z^4 + 148z^3 - 2190z^2 + 5289z - 1536)}{16z^5} + \frac{5\sqrt{\pi}(16z^4 + 288z^3 - 4536z^2 + 12600z - 6615)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.ad84.01

$${}_2F_2\left(\frac{1}{2}, 2; \frac{11}{2}, 6; -z\right) = \frac{60(7z^3 + 42z^2 + 54z + 8)}{z^5} + \frac{5e^{-z}(8z^4 - 148z^3 - 2190z^2 - 5289z - 1536)}{16z^5} + \frac{5\sqrt{\pi}(16z^4 - 288z^3 - 4536z^2 - 12600z - 6615)\operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

For fixed z and $a_1 = \frac{1}{2}, a_2 = 2, b_1 = 6$

07.25.03.ad85.01

$${}_2F_2\left(\frac{1}{2}, 2; 6, 6; z\right) = \frac{320(35z^3 - 252z^2 + 432z - 128)}{21z^5} + \frac{1024e^{z/2}(16z^5 + 312z^4 - 6204z^3 + 24972z^2 - 29295z + 7560)I_0\left(\frac{z}{2}\right)}{3969z^5} - \frac{1024e^{z/2}(16z^4 + 328z^3 - 5868z^2 + 19284z - 12567)I_1\left(\frac{z}{2}\right)}{3969z^4}$$

For fixed z and $a_1 = \frac{1}{2}, a_2 = \frac{5}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{1}{2}, a_2 = \frac{5}{2}, b_1 = -\frac{11}{2}$

07.25.03.ad86.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{324168075} \left(e^z (16384z^{14} + 933888z^{13} + 19992576z^{12} + 204300288z^{11} + 1048200192z^{10} + 2602736640z^9 + 2747808000z^8 + 895104000z^7 + 28728000z^6 - 1512000z^5 + 12020400z^4 - 48535200z^3 + 150425100z^2 - 310772700z + 324168075) \right)$$

07.25.03.ad87.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{29469825} \left(e^z (8192z^{13} + 405504z^{12} + 7360512z^{11} + 61667328z^{10} + 246597120z^9 + 438278400z^8 + 278208000z^7 + 30240000z^6 - 756000z^5 - 1134000z^4 + 4309200z^3 - 13494600z^2 + 27981450z - 29469825) \right)$$

07.25.03.ad88.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{3274425} (e^z (4096 z^{12} + 172032 z^{11} + 2562048 z^{10} + 16742400 z^9 + 47957760 z^8 + 51287040 z^7 + 10886400 z^6 - 1209600 z^5 + 226800 z^4 - 453600 z^3 + 1474200 z^2 - 3061800 z + 3274425))$$

07.25.03.ad89.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{467775} (e^z (2048 z^{11} + 70656 z^{10} + 821760 z^9 + 3851520 z^8 + 6647040 z^7 + 2378880 z^6 - 504000 z^5 + 151200 z^4 + 37800 z^3 - 207900 z^2 + 425250 z - 467775))$$

07.25.03.ad8a.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{93555} (e^z (1024 z^{10} + 27648 z^9 + 231168 z^8 + 654336 z^7 + 379008 z^6 - 137088 z^5 + 90720 z^4 - 60480 z^3 + 49140 z^2 - 79380 z + 93555))$$

07.25.03.ad8b.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{31185} e^z (512 z^9 + 9984 z^8 + 50688 z^7 + 48384 z^6 - 28224 z^5 + 30240 z^4 - 30240 z^3 + 15120 z^2 + 17010 z - 31185)$$

07.25.03.ad8c.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (256 z^8 + 3072 z^7 + 5376 z^6 - 5376 z^5 + 10080 z^4 - 20160 z^3 + 35280 z^2 - 45360 z + 31185)}{31185}$$

07.25.03.ad8d.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (128 z^8 + 1152 z^7 + 768 z^6 - 576 z^5 + 1440 z^4 - 4464 z^3 + 11808 z^2 - 22680 z + 31185) I_0\left(\frac{z}{2}\right) + 8 e^{z/2} (16 z^8 + 128 z^7 - 24 z^6 + 90 z^4 - 432 z^3 + 1287 z^2 - 2124 z) I_1\left(\frac{z}{2}\right)}{31185}$$

07.25.03.ad8e.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 576 z^6 - 1056 z^5 + 3120 z^4 - 9000 z^3 + 21420 z^2 - 35910 z + 31185)}{31185}$$

07.25.03.ad8f.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (128 z^7 + 192 z^6 - 576 z^5 + 2640 z^4 - 10224 z^3 + 29448 z^2 - 52920 z + 31185) I_0\left(\frac{z}{2}\right) + e^{z/2} (128 z^7 + 64 z^6 - 576 z^5 + 3120 z^4 - 13296 z^3 + 43416 z^2 - 100152 z + 135135) I_1\left(\frac{z}{2}\right)}{31185}$$

07.25.03.ad8g.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (64 z^6 - 192 z^5 + 720 z^4 - 2400 z^3 + 6300 z^2 - 11340 z + 10395)}{10395}$$

07.25.03.ad8h.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 - 384 z^5 + 2160 z^4 - 10176 z^3 + 38232 z^2 - 105840 z + 176715) I_0\left(\frac{z}{2}\right)}{31185} + \frac{4 e^{z/2} (64 z^7 - 448 z^6 + 2640 z^5 - 13104 z^4 + 53304 z^3 - 170568 z^2 + 405405 z - 675675) I_1\left(\frac{z}{2}\right)}{31185 z}$$

07.25.03.ad8i.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (32 z^7 - 336 z^6 + 2544 z^5 - 15192 z^4 + 71514 z^3 - 255969 z^2 + 645120 z - 967680)}{2079 z^2} + \frac{2560 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{5/2}}$$

07.25.03.ad8j.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-32 z^7 - 336 z^6 - 2544 z^5 - 15192 z^4 - 71514 z^3 - 255969 z^2 - 645120 z - 967680)}{2079 z^2} + \frac{2560 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{5/2}}$$

07.25.03.ad8k.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^6 - 864 z^5 + 7728 z^4 - 51936 z^3 + 264600 z^2 - 977130 z + 2297295) I_0\left(\frac{z}{2}\right)}{10395 z} + \frac{1}{10395 z^2} 4 e^{z/2} (64 z^7 - 928 z^6 + 8688 z^5 - 61152 z^4 + 331224 z^3 - 1351350 z^2 + 3918915 z - 9189180) I_1\left(\frac{z}{2}\right)$$

07.25.03.ad8l.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (16 z^7 - 288 z^6 + 3144 z^5 - 24888 z^4 + 147753 z^3 - 645120 z^2 + 1935360 z - 3628800)}{297 z^3} + \frac{4480 \sqrt{\pi} (2z + 15) \operatorname{erfi}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.ad8m.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (16 z^7 + 288 z^6 + 3144 z^5 + 24888 z^4 + 147753 z^3 + 645120 z^2 + 1935360 z + 3628800)}{297 z^3} + \frac{4480 \sqrt{\pi} (2z - 15) \operatorname{erf}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.ad8n.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 - 672 z^5 + 8208 z^4 - 70560 z^3 + 442530 z^2 - 1969110 z + 6235515) I_0\left(\frac{z}{2}\right)}{10395 z^2} + \frac{1}{10395 z^3} 64 e^{z/2} (16 z^7 - 352 z^6 + 4464 z^5 - 39936 z^4 + 263835 z^3 - 1274130 z^2 + 3938220 z - 12471030) I_1\left(\frac{z}{2}\right)$$

07.25.03.ad8o.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (8z^7 - 204z^6 + 2898z^5 - 28383z^4 + 201600z^3 - 1028160z^2 + 3477600z - 7938000)}{33z^4} + \frac{2520\sqrt{\pi} (8z^2 + 120z + 525) \operatorname{erfi}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.ad8p.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-8z^7 - 204z^6 - 2898z^5 - 28383z^4 - 201600z^3 - 1028160z^2 - 3477600z - 7938000)}{33z^4} + \frac{2520\sqrt{\pi} (8z^2 - 120z + 525) \operatorname{erf}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.ad8q.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{11}{2}, 6; z\right) = \frac{32e^{z/2} (32z^6 - 912z^5 + 14112z^4 - 147444z^3 + 1093950z^2 - 5404113z + 23279256) I_0\left(\frac{z}{2}\right)}{2079z^3} + \frac{1}{2079z^4} 32e^{z/2} (32z^7 - 944z^6 + 15072z^5 - 163020z^4 + 1265550z^3 - 7285707z^2 + 21616452z - 93117024) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{1}{2}, a_2 = \frac{5}{2}, b_1 = -\frac{9}{2}$

07.25.03.ad8r.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{2679075} (e^z (4096z^{12} + 176128z^{11} + 2711552z^{10} + 18631680z^9 + 58087680z^8 + 73920000z^7 + 28224000z^6 + 1008000z^5 + 126000z^4 - 378000z^3 + 1209600z^2 - 2513700z + 2679075))$$

07.25.03.ad8s.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{297675} (e^z (2048z^{11} + 74752z^{10} + 944640z^9 + 5064960z^8 + 11316480z^7 + 8668800z^6 + 1108800z^5 - 50400z^4 + 37800z^3 - 132300z^2 + 274050z - 297675))$$

07.25.03.ad8t.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{42525} (e^z (1024z^{10} + 30720z^9 + 303360z^8 + 1167360z^7 + 1572480z^6 + 403200z^5 - 50400z^4 + 18900z^2 - 37800z + 42525))$$

07.25.03.ad8u.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{8505} e^z (512z^9 + 12032z^8 + 85504z^7 + 198912z^6 + 90048z^5 - 23520z^4 + 10080z^3 - 5040z^2 + 6930z - 8505)$$

07.25.03.ad8v.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{e^z (256 z^8 + 4352 z^7 + 18816 z^6 + 14784 z^5 - 6720 z^4 + 5040 z^3 - 2520 z^2 - 1260 z + 2835)}{2835}$$

07.25.03.ad8w.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{e^z (128 z^7 + 1344 z^6 + 2016 z^5 - 1680 z^4 + 2520 z^3 - 3780 z^2 + 4410 z - 2835)}{2835}$$

07.25.03.ad8x.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (-64 z^7 - 512 z^6 - 336 z^5 + 240 z^4 - 504 z^3 + 1188 z^2 - 2205 z + 2835) I_0\left(\frac{z}{2}\right)}{2835} + \frac{e^{z/2} (-64 z^7 - 448 z^6 + 80 z^5 - 216 z^3 + 756 z^2 - 1287 z) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.ad8y.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{e^z (64 z^6 + 256 z^5 - 400 z^4 + 960 z^3 - 2100 z^2 + 3360 z - 2835)}{2835}$$

07.25.03.ad8z.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (-64 z^6 - 96 z^5 + 240 z^4 - 864 z^3 + 2448 z^2 - 4410 z + 2835) I_0\left(\frac{z}{2}\right)}{2835} + \frac{e^{z/2} (-64 z^6 - 32 z^5 + 240 z^4 - 1056 z^3 + 3456 z^2 - 7902 z + 10395) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.ad90.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{945} e^z (32 z^5 - 80 z^4 + 240 z^3 - 600 z^2 + 1050 z - 945)$$

07.25.03.ad91.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, 3; z\right) = -\frac{8 e^{z/2} (16 z^5 - 80 z^4 + 368 z^3 - 1356 z^2 + 3675 z - 5985) I_0\left(\frac{z}{2}\right)}{2835} - \frac{4 e^{z/2} (32 z^6 - 192 z^5 + 944 z^4 - 3784 z^3 + 11898 z^2 - 27720 z + 45045) I_1\left(\frac{z}{2}\right)}{2835 z}$$

07.25.03.ad92.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (-16 z^6 + 144 z^5 - 912 z^4 + 4404 z^3 - 15939 z^2 + 40320 z - 60480)}{189 z^2} + \frac{160 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.ad93.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-16 z^6 - 144 z^5 - 912 z^4 - 4404 z^3 - 15939 z^2 - 40320 z - 60480)}{189 z^2} + \frac{160 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

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07.25.03.ad93.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, 4; z\right) = -\frac{4 e^{z/2} (32 z^5 - 368 z^4 + 2736 z^3 - 14700 z^2 + 56070 z - 135135) I_0\left(\frac{z}{2}\right)}{945 z} - \frac{4 e^{z/2} (32 z^6 - 400 z^5 + 3152 z^4 - 18084 z^3 + 76230 z^2 - 225225 z + 540540) I_1\left(\frac{z}{2}\right)}{945 z^2}$$

07.25.03.ad94.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (-8 z^6 + 124 z^5 - 1138 z^4 + 7323 z^3 - 33600 z^2 + 104160 z - 201600)}{27 z^3} + \frac{560 \sqrt{\pi} (3 z + 20) \operatorname{erfi}(\sqrt{z})}{3 z^{7/2}}$$

07.25.03.ad95.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (8 z^6 + 124 z^5 + 1138 z^4 + 7323 z^3 + 33600 z^2 + 104160 z + 201600)}{27 z^3} + \frac{560 \sqrt{\pi} (3 z - 20) \operatorname{erf}(\sqrt{z})}{3 z^{7/2}}$$

07.25.03.ad96.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, 5; z\right) = -\frac{32 e^{z/2} (16 z^5 - 288 z^4 + 2940 z^3 - 20340 z^2 + 96525 z - 328185) I_0\left(\frac{z}{2}\right)}{945 z^2} - \frac{32 e^{z/2} (16 z^6 - 304 z^5 + 3252 z^4 - 23760 z^3 + 122265 z^2 - 386100 z + 1312740) I_1\left(\frac{z}{2}\right)}{945 z^3}$$

07.25.03.ad97.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (-4 z^6 + 88 z^5 - 1053 z^4 + 8400 z^3 - 46200 z^2 + 163800 z - 396900)}{3 z^4} + \frac{210 \sqrt{\pi} (6 z^2 + 80 z + 315) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ad98.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-4 z^6 - 88 z^5 - 1053 z^4 - 8400 z^3 - 46200 z^2 - 163800 z - 396900)}{3 z^4} + \frac{210 \sqrt{\pi} (6 z^2 - 80 z + 315) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ad99.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{9}{2}, 6; z\right) = -\frac{32 e^{z/2} (16 z^5 - 392 z^4 + 5084 z^3 - 42900 z^2 + 226083 z - 1108536) I_0\left(\frac{z}{2}\right)}{189 z^3} - \frac{32 e^{z/2} (16 z^6 - 408 z^5 + 5500 z^4 - 48620 z^3 + 310167 z^2 - 904332 z + 4434144) I_1\left(\frac{z}{2}\right)}{189 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.ad9a.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{33075} (e^z (1024 z^{10} + 31744 z^9 + 329472 z^8 + 1379328 z^7 + 2209920 z^6 + 1019520 z^5 + 44640 z^4 - 2880 z^3 + 14580 z^2 - 29700 z + 33075))$$

07.25.03.ad9b.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{4725} e^z (512 z^9 + 13056 z^8 + 105984 z^7 + 318720 z^6 + 308160 z^5 + 47520 z^4 - 1440 z^3 - 2160 z^2 + 4050 z - 4725)$$

07.25.03.ad9c.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} e^z (256 z^8 + 5120 z^7 + 29952 z^6 + 54528 z^5 + 17760 z^4 - 2880 z^3 + 720 z^2 - 720 z + 945)$$

07.25.03.ad9d.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{315} e^z (128 z^7 + 1856 z^6 + 6624 z^5 + 4080 z^4 - 1320 z^3 + 540 z^2 + 90 z - 315)$$

07.25.03.ad9e.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315)$$

07.25.03.ad9f.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (32 z^6 + 224 z^5 + 144 z^4 - 96 z^3 + 162 z^2 - 270 z + 315) I_0\left(\frac{z}{2}\right) + \frac{2}{315} e^{z/2} (16 z^6 + 96 z^5 - 16 z^4 + 27 z^2 - 54 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ad9g.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{315} e^z (32 z^5 + 112 z^4 - 144 z^3 + 264 z^2 - 390 z + 315)$$

07.25.03.ad9h.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (32 z^5 + 48 z^4 - 96 z^3 + 252 z^2 - 450 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (32 z^5 + 16 z^4 - 96 z^3 + 324 z^2 - 738 z + 945) I_1\left(\frac{z}{2}\right)$$

07.25.03.ad9i.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{105} e^z (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105)$$

07.25.03.ad9j.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, 3; z\right) = \frac{4}{315} e^{z/2} (16 z^4 - 64 z^3 + 228 z^2 - 600 z + 945) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (16 z^5 - 80 z^4 + 316 z^3 - 972 z^2 + 2205 z - 3465) I_1\left(\frac{z}{2}\right)}{315 z}$$

07.25.03.ad9k.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (8z^5 - 60z^4 + 306z^3 - 1131z^2 + 2880z - 4320)}{21z^2} + \frac{720\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.ad9l.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-8z^5 - 60z^4 - 306z^3 - 1131z^2 - 2880z - 4320)}{21z^2} + \frac{720\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7z^{5/2}}$$

07.25.03.ad9m.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, 4; z\right) = \frac{4e^{z/2} (16z^4 - 152z^3 + 900z^2 - 3612z + 9009) I_0\left(\frac{z}{2}\right) + 4e^{z/2} (16z^5 - 168z^4 + 1076z^3 - 4788z^2 + 14553z - 36036) I_1\left(\frac{z}{2}\right)}{105z} + \frac{4e^{z/2} (16z^5 - 168z^4 + 1076z^3 - 4788z^2 + 14553z - 36036) I_1\left(\frac{z}{2}\right)}{105z^2}$$

07.25.03.ad9n.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (4z^5 - 52z^4 + 387z^3 - 1920z^2 + 6240z - 12600)}{3z^3} + \frac{60\sqrt{\pi} (6z + 35) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ad9o.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (4z^5 + 52z^4 + 387z^3 + 1920z^2 + 6240z + 12600)}{3z^3} + \frac{60\sqrt{\pi} (6z - 35) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ad9p.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, 5; z\right) = \frac{32e^{z/2} (8z^4 - 120z^3 + 984z^2 - 5148z + 19305) I_0\left(\frac{z}{2}\right) + 128e^{z/2} (2z^5 - 32z^4 + 279z^3 - 1584z^2 + 5148z - 19305) I_1\left(\frac{z}{2}\right)}{105z^2} + \frac{128e^{z/2} (2z^5 - 32z^4 + 279z^3 - 1584z^2 + 5148z - 19305) I_1\left(\frac{z}{2}\right)}{105z^3}$$

07.25.03.ad9q.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3e^z (2z^5 - 37z^4 + 360z^3 - 2220z^2 + 8400z - 22050)}{z^4} + \frac{135\sqrt{\pi} (6z^2 + 70z + 245) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ad9r.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{135\sqrt{\pi} (6z^2 - 70z + 245) \operatorname{erf}(\sqrt{z})}{z^{9/2}} - \frac{3e^{-z} (2z^5 + 37z^4 + 360z^3 + 2220z^2 + 8400z + 22050)}{z^4}$$

07.25.03.ad9s.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{7}{2}, 6; z\right) = \frac{32e^{z/2} (8z^4 - 164z^3 + 1716z^2 - 9867z + 58344) I_0\left(\frac{z}{2}\right) + 32e^{z/2} (8z^5 - 172z^4 + 1892z^3 - 14157z^2 + 39468z - 233376) I_1\left(\frac{z}{2}\right)}{21z^3} + \frac{32e^{z/2} (8z^5 - 172z^4 + 1892z^3 - 14157z^2 + 39468z - 233376) I_1\left(\frac{z}{2}\right)}{21z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.ad9t.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{675} e^z (256z^8 + 5376z^7 + 34176z^6 + 73920z^5 + 43200z^4 + 2160z^3 + 360z^2 - 540z + 675)$$

07.25.03.ad9u.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{135} e^z (128 z^7 + 2112 z^6 + 9696 z^5 + 12720 z^4 + 2520 z^3 - 180 z^2 + 90 z - 135)$$

07.25.03.ad9v.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{45} e^z (64 z^6 + 768 z^5 + 2160 z^4 + 960 z^3 - 180 z^2 + 45)$$

07.25.03.ad9w.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{45} e^z (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45)$$

07.25.03.ad9x.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{45} e^{z/2} (-16 z^5 - 96 z^4 - 60 z^3 + 36 z^2 - 45 z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (-16 z^5 - 80 z^4 + 12 z^3 - 9 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ad9y.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{45} e^z (16 z^4 + 48 z^3 - 48 z^2 + 60 z - 45)$$

07.25.03.ad9z.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{45} e^{z/2} (-16 z^4 - 24 z^3 + 36 z^2 - 60 z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (-16 z^4 - 8 z^3 + 36 z^2 - 84 z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.ada0.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{1}{15} e^z (8 z^3 - 12 z^2 + 18 z - 15)$$

07.25.03.ada1.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, 3; z\right) = -\frac{8}{45} e^{z/2} (4 z^3 - 12 z^2 + 30 z - 45) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8 z^4 - 32 z^3 + 96 z^2 - 210 z + 315) I_1\left(\frac{z}{2}\right)}{45 z}$$

07.25.03.ada2.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-4 z^4 + 24 z^3 - 93 z^2 + 240 z - 360)}{3 z^2} + \frac{60 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.ada3.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-4 z^4 - 24 z^3 - 93 z^2 - 240 z - 360)}{3 z^2} + \frac{60 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.ada4.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, 4; z\right) = -\frac{4 e^{z/2} (8 z^3 - 60 z^2 + 264 z - 693) I_0\left(\frac{z}{2}\right)}{15 z} - \frac{4 e^{z/2} (8 z^4 - 68 z^3 + 336 z^2 - 1071 z + 2772) I_1\left(\frac{z}{2}\right)}{15 z^2}$$

07.25.03.ada5.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{210 \sqrt{\pi} (z+5) \operatorname{erfi}(\sqrt{z})}{z^{7/2}} - \frac{7 e^z (2 z^4 - 21 z^3 + 120 z^2 - 420 z + 900)}{3 z^3}$$

07.25.03.ada6.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (2 z^4 + 21 z^3 + 120 z^2 + 420 z + 900)}{3 z^3} + \frac{210 \sqrt{\pi} (z-5) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ada7.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, 5; z\right) = -\frac{32 e^{z/2} (4 z^3 - 48 z^2 + 297 z - 1287) I_0\left(\frac{z}{2}\right)}{15 z^2} - \frac{32 e^{z/2} (4 z^4 - 52 z^3 + 351 z^2 - 1188 z + 5148) I_1\left(\frac{z}{2}\right)}{15 z^3}$$

07.25.03.ada8.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{945 \sqrt{\pi} (8 z^2 + 80 z + 245) \operatorname{erfi}(\sqrt{z})}{16 z^{9/2}} - \frac{21 e^z (8 z^4 - 120 z^3 + 900 z^2 - 3750 z + 11 025)}{8 z^4}$$

07.25.03.ada9.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (8 z^2 - 80 z + 245) \operatorname{erf}(\sqrt{z})}{16 z^{9/2}} - \frac{21 e^{-z} (8 z^4 + 120 z^3 + 900 z^2 + 3750 z + 11 025)}{8 z^4}$$

07.25.03.adaa.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{5}{2}, 6; z\right) = -\frac{32 e^{z/2} (4 z^3 - 66 z^2 + 429 z - 3432) I_0\left(\frac{z}{2}\right)}{3 z^3} - \frac{32 e^{z/2} (4 z^4 - 70 z^3 + 693 z^2 - 1716 z + 13 728) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.adab.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{27} e^z (64 z^6 + 832 z^5 + 2768 z^4 + 2208 z^3 + 156 z^2 - 12 z + 27)$$

07.25.03.adac.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{9} e^z (32 z^5 + 304 z^4 + 624 z^3 + 168 z^2 - 6 z - 9)$$

07.25.03.adad.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{9} e^z (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9)$$

07.25.03.adae.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{9} e^{z/2} (8 z^4 + 40 z^3 + 24 z^2 - 12 z + 9) I_0\left(\frac{z}{2}\right) + \frac{4}{9} e^{z/2} (2 z^4 + 8 z^3 - z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.adaf.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{9} e^z (8 z^3 + 20 z^2 - 14 z + 9)$$

07.25.03.adag.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{9} e^{z/2} (8 z^3 + 12 z^2 - 12 z + 9) I_0\left(\frac{z}{2}\right) + \frac{1}{9} e^{z/2} (8 z^3 + 4 z^2 - 12 z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.adah.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{3} e^z (4 z^2 - 4 z + 3)$$

07.25.03.adai.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, 3; z\right) = \frac{4}{9} e^{z/2} (4 z^2 - 8 z + 11) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4 z^3 - 12 z^2 + 25 z - 35) I_1\left(\frac{z}{2}\right)}{9 z}$$

07.25.03.adaj.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2 z^3 - 9 z^2 + 24 z - 36)}{3 z^2} + \frac{30 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.adak.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{30 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}} - \frac{5 e^{-z} (2 z^3 + 9 z^2 + 24 z + 36)}{3 z^2}$$

07.25.03.adal.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (4 z^2 - 22 z + 63) I_0\left(\frac{z}{2}\right)}{3 z} + \frac{4 e^{z/2} (4 z^3 - 26 z^2 + 91 z - 252) I_1\left(\frac{z}{2}\right)}{3 z^2}$$

07.25.03.adam.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (z^3 - 8 z^2 + 32 z - 75)}{3 z^3} + \frac{35 \sqrt{\pi} (6 z + 25) \operatorname{erfi}(\sqrt{z})}{2 z^{7/2}}$$

07.25.03.adan.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (z^3 + 8 z^2 + 32 z + 75)}{3 z^3} + \frac{35 \sqrt{\pi} (6 z - 25) \operatorname{erf}(\sqrt{z})}{2 z^{7/2}}$$

07.25.03.adao.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (2 z^2 - 18 z + 99) I_0\left(\frac{z}{2}\right)}{3 z^2} + \frac{64 e^{z/2} (z^3 - 10 z^2 + 36 z - 198) I_1\left(\frac{z}{2}\right)}{3 z^3}$$

07.25.03.adap.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{105 e^z (8 z^3 - 92 z^2 + 450 z - 1575)}{16 z^4} + \frac{315 \sqrt{\pi} (24 z^2 + 200 z + 525) \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.adaq.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315 \sqrt{\pi} (24 z^2 - 200 z + 525) \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{105 e^{-z} (8 z^3 + 92 z^2 + 450 z + 1575)}{16 z^4}$$

07.25.03.adar.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (10 z^2 - 77 z + 1144) I_0\left(\frac{z}{2}\right)}{3 z^3} + \frac{32 e^{z/2} (10 z^3 - 183 z^2 + 308 z - 4576) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.adas.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (16 z^4 + 112 z^3 + 144 z^2 + 12 z + 3)$$

07.25.03.adat.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{3} e^z (8 z^3 + 36 z^2 + 18 z - 3)$$

07.25.03.adau.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (-4 z^3 - 16 z^2 - 9 z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (-4 z^3 - 12 z^2 + z) I_1\left(\frac{z}{2}\right)$$

07.25.03.adav.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{3} e^z (4z^2 + 8z - 3)$$

07.25.03.adaw.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{3} e^{z/2} (-4z^2 - 6z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (-4z^2 - 2z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.adax.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -e^z (2z - 1)$$

07.25.03.aday.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, 3; z\right) = -\frac{8}{3} e^{z/2} (z - 1) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (2z^2 - 4z + 5) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.adaz.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{45 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{5/2}} - \frac{5 e^z (2z^2 - 6z + 9)}{2 z^2}$$

07.25.03.adb0.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{45 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{5/2}} - \frac{5 e^{-z} (2z^2 + 6z + 9)}{2 z^2}$$

07.25.03.adb1.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, 4; z\right) = -\frac{4 e^{z/2} (2z - 7) I_0\left(\frac{z}{2}\right)}{z} - \frac{4 e^{z/2} (2z^2 - 9z + 28) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.adb2.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{105 \sqrt{\pi} (3z + 10) \operatorname{erfi}(\sqrt{z})}{8 z^{7/2}} - \frac{35 e^z (2z^2 - 11z + 30)}{4 z^3}$$

07.25.03.adb3.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (2z^2 + 11z + 30)}{4 z^3} + \frac{105 \sqrt{\pi} (3z - 10) \operatorname{erf}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.adb4.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, 5; z\right) = -\frac{32 e^{z/2} (z - 9) I_0\left(\frac{z}{2}\right)}{z^2} - \frac{32 e^{z/2} (z^2 - 4z + 36) I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.adb5.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{945 \sqrt{\pi} (12z^2 + 80z + 175) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}} - \frac{315 e^z (16z^2 - 110z + 525)}{64 z^4}$$

07.25.03.adb6.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (12z^2 - 80z + 175) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}} - \frac{315 e^{-z} (16z^2 + 110z + 525)}{64 z^4}$$

07.25.03.adb7.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (z + 88) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (11 z^2 + 4 z + 352) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{1}{2}$

07.25.03.adb8.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (4 z^2 + 12 z + 3)$$

07.25.03.adb9.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (2 z^2 + 6 z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} (z^2 + 2 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.adba.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (2 z + 3)$$

07.25.03.adbb.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{3} e^{z/2} (2 z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2 z + 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.adbc.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = e^z$$

07.25.03.adbd.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (z - 1) I_1\left(\frac{z}{2}\right)}{3 z}$$

07.25.03.adbe.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2 z - 3)}{4 z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.adbf.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5 e^{-z} (2 z + 3)}{4 z^2}$$

07.25.03.adbg.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z - 4) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.adbh.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (4 z - 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2 z + 5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.adbi.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4 z + 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2 z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.adbj.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.adbk.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1575 e^z (2z - 21)}{128 z^4} + \frac{945 \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.adbl.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 e^{-z} (2z + 21)}{128 z^4}$$

07.25.03.adbm.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (z + 8) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (z^2 + 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 1$

07.25.03.0065.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{3} e^{z/2} \left((z + 3) I_0\left(\frac{z}{2}\right) + z I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.adbn.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; 1, \frac{5}{2}; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{3}{2}$

07.25.03.0066.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3} \left(\frac{\sqrt{\pi}}{\sqrt{z}} \operatorname{erfi}(\sqrt{z}) + e^z \right)$$

07.25.03.adbo.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{3 \sqrt{z}} + \frac{e^{-z}}{3}$$

07.25.03.0067.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{3} e^{z/2} \left(3 I_0\left(\frac{z}{2}\right) - I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.adbp.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.adbq.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.0068.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, 3; z\right) = \frac{4}{9z} e^{z/2} \left(2z I_0\left(\frac{z}{2}\right) + (1-2z) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.adbr.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} (4z^2 - 3) \operatorname{erfi}(\sqrt{z})}{32z^{5/2}} - \frac{5e^z (2z - 3)}{16z^2}$$

07.25.03.adbs.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} (2z + 3)}{16z^2} + \frac{5\sqrt{\pi} (4z^2 - 3) \operatorname{erf}(\sqrt{z})}{32z^{5/2}}$$

07.25.03.adbt.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, 4; z\right) = \frac{4e^{z/2} (4z - 3) I_0\left(\frac{z}{2}\right)}{15z} - \frac{4e^{z/2} (4z^2 + z - 12) I_1\left(\frac{z}{2}\right)}{15z^2}$$

07.25.03.adbu.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi} (4z^3 - 9z - 15) \operatorname{erfi}(\sqrt{z})}{192z^{7/2}} - \frac{35e^z (2z^2 + z - 15)}{96z^3}$$

07.25.03.adbv.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} (2z^2 - z - 15)}{96z^3} + \frac{35\sqrt{\pi} (4z^3 - 9z + 15) \operatorname{erf}(\sqrt{z})}{192z^{7/2}}$$

07.25.03.adbw.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, 5; z\right) = \frac{32e^{z/2} (4z^2 - 3z - 15) I_0\left(\frac{z}{2}\right)}{105z^2} - \frac{32e^{z/2} (4z^3 + z^2 - 12z - 60) I_1\left(\frac{z}{2}\right)}{105z^3}$$

07.25.03.adbx.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{105\sqrt{\pi} (16z^4 - 72z^2 - 240z - 315) \operatorname{erfi}(\sqrt{z})}{2048z^{9/2}} - \frac{105e^z (8z^3 + 4z^2 - 30z - 315)}{1024z^4}$$

07.25.03.adby.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{105e^{-z} (8z^3 - 4z^2 - 30z + 315)}{1024z^4} + \frac{105\sqrt{\pi} (16z^4 - 72z^2 + 240z - 315) \operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.adbz.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{3}{2}, 6; z\right) = \frac{32e^{z/2} (8z^3 - 6z^2 - 51z - 168) I_0\left(\frac{z}{2}\right)}{189z^3} - \frac{32e^{z/2} (8z^4 + 2z^3 - 45z^2 - 204z - 672) I_1\left(\frac{z}{2}\right)}{189z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 2$

07.25.03.adc0.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; 2, \frac{5}{2}; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - e^{z/2} I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{5}{2}$

07.25.03.adc1.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi}(2z+1)\operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3e^z}{4z}$$

07.25.03.adc2.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi}(2z-1)\operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.adc3.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, 3; z\right) = \frac{4}{3}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(z+1)I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.adc4.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi}(4z^2+4z+3)\operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15e^z(2z+3)}{32z^2}$$

07.25.03.adc5.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z}(2z-3)}{32z^2} + \frac{15\sqrt{\pi}(4z^2-4z+3)\operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.adc6.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, 4; z\right) = \frac{4e^{z/2}(2z+1)I_0\left(\frac{z}{2}\right)}{5z} - \frac{4e^{z/2}(2z^2+3z+4)I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.adc7.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi}(8z^3+12z^2+18z+15)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35e^z(4z^2+8z+15)}{128z^3}$$

07.25.03.adc8.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}(4z^2-8z+15)}{128z^3} + \frac{35\sqrt{\pi}(8z^3-12z^2+18z-15)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.adc9.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, 5; z\right) = \frac{32e^{z/2}(2z^2+2z+3)I_0\left(\frac{z}{2}\right)}{35z^2} - \frac{64e^{z/2}(z^3+2z^2+4z+6)I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.adca.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi}(16z^4+32z^3+72z^2+120z+105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315e^z(8z^3+20z^2+50z+105)}{2048z^4}$$

07.25.03.adcb.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}(8z^3-20z^2+50z-105)}{2048z^4} + \frac{315\sqrt{\pi}(16z^4-32z^3+72z^2-120z+105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.adcc.01

$${}_2F_2\left(\frac{1}{2}, \frac{5}{2}; \frac{5}{2}, 6; z\right) = \frac{32e^{z/2}(4z^3+6z^2+15z+24)I_0\left(\frac{z}{2}\right)}{63z^3} - \frac{32e^{z/2}(4z^4+10z^3+27z^2+60z+96)I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.adcd.01} \\
 & {}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; z\right) = \\
 & \frac{1}{108056025} (2048 z^{14} + 132096 z^{13} + 3248128 z^{12} + 38836224 z^{11} + 238639104 z^{10} + 731205120 z^9 + 990270720 z^8 + \\
 & \quad 434695680 z^7 + 18627840 z^6 + 635040 z^5 + 226800 z^4 + 270000 z^3 + 793800 z^2 + 5358150 z + 108056025) + \\
 & \frac{1}{108056025} \left(512 e^z \sqrt{\pi} (4 z^{29/2} + 260 z^{27/2} + 6471 z^{25/2} + 78900 z^{23/2} + 501150 z^{21/2} + \right. \\
 & \quad \left. 1630080 z^{19/2} + 2485800 z^{17/2} + 1444320 z^{15/2} + 183600 z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.adce.01} \\
 & {}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \\
 & \frac{1}{108056025} (2048 z^{14} - 132096 z^{13} + 3248128 z^{12} - 38836224 z^{11} + 238639104 z^{10} - 731205120 z^9 + 990270720 z^8 - \\
 & \quad 434695680 z^7 + 18627840 z^6 - 635040 z^5 + 226800 z^4 - 270000 z^3 + 793800 z^2 - 5358150 z + 108056025) - \\
 & \frac{1}{108056025} \left(512 e^{-z} \sqrt{\pi} (4 z^{29/2} - 260 z^{27/2} + 6471 z^{25/2} - 78900 z^{23/2} + 501150 z^{21/2} - \right. \\
 & \quad \left. 1630080 z^{19/2} + 2485800 z^{17/2} - 1444320 z^{15/2} + 183600 z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.adcf.01} \\
 & {}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & \frac{1}{9823275} (-1024 z^{13} - 57856 z^{12} - 1219584 z^{11} - 12128256 z^{10} - 59220480 z^9 - 133505280 z^8 - 113564160 z^7 - \\
 & \quad 18627840 z^6 + 635040 z^5 + 75600 z^4 + 54000 z^3 + 113400 z^2 + 595350 z + 9823275) - \frac{1}{9823275} \left(256 e^z \sqrt{\pi} \right. \\
 & \quad \left. (4 z^{27/2} + 228 z^{25/2} + 4875 z^{23/2} + 49650 z^{21/2} + 252900 z^{19/2} + 618480 z^{17/2} + 630360 z^{15/2} + 183600 z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.adcg.01} \\
 & {}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \\
 & \frac{1}{9823275} (1024 z^{13} - 57856 z^{12} + 1219584 z^{11} - 12128256 z^{10} + 59220480 z^9 - 133505280 z^8 + 113564160 z^7 - \\
 & \quad 18627840 z^6 - 635040 z^5 + 75600 z^4 - 54000 z^3 + 113400 z^2 - 595350 z + 9823275) - \frac{1}{9823275} \left(256 e^{-z} \sqrt{\pi} \right. \\
 & \quad \left. (4 z^{27/2} - 228 z^{25/2} + 4875 z^{23/2} - 49650 z^{21/2} + 252900 z^{19/2} - 618480 z^{17/2} + 630360 z^{15/2} - 183600 z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

07.25.03.adch.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1091475} (512 z^{12} + 24832 z^{11} + 436224 z^{10} + 3458560 z^9 + 12506880 z^8 + 18012672 z^7 + 6209280 z^6 - 635040 z^5 + 75600 z^4 + 18000 z^3 + 22680 z^2 + 85050 z + 1091475) + \frac{1}{1091475} 128 e^z \sqrt{\pi} (4 z^{25/2} + 196 z^{23/2} + 3503 z^{21/2} + 28632 z^{19/2} + 109740 z^{17/2} + 179520 z^{15/2} + 91800 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adci.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1091475} (512 z^{12} - 24832 z^{11} + 436224 z^{10} - 3458560 z^9 + 12506880 z^8 - 18012672 z^7 + 6209280 z^6 + 635040 z^5 + 75600 z^4 - 18000 z^3 + 22680 z^2 - 85050 z + 1091475) - \frac{1}{1091475} 128 e^{-z} \sqrt{\pi} (4 z^{25/2} - 196 z^{23/2} + 3503 z^{21/2} - 28632 z^{19/2} + 109740 z^{17/2} - 179520 z^{15/2} + 91800 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adcj.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{155925} (-256 z^{11} - 10368 z^{10} - 145664 z^9 - 860160 z^8 - 2013696 z^7 - 1241856 z^6 + 211680 z^5 - 75600 z^4 + 18000 z^3 + 7560 z^2 + 17010 z + 155925) - \frac{64 e^z \sqrt{\pi} (4 z^{23/2} + 164 z^{21/2} + 2355 z^{19/2} + 14502 z^{17/2} + 37230 z^{15/2} + 30600 z^{13/2}) \operatorname{erf}(\sqrt{z})}{155925}$$

07.25.03.adck.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{155925} (256 z^{11} - 10368 z^{10} + 145664 z^9 - 860160 z^8 + 2013696 z^7 - 1241856 z^6 - 211680 z^5 - 75600 z^4 - 18000 z^3 + 7560 z^2 - 17010 z + 155925) - \frac{64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 164 z^{21/2} + 2355 z^{19/2} - 14502 z^{17/2} + 37230 z^{15/2} - 30600 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.adcl.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{31185} (128 z^{10} + 4160 z^9 + 43776 z^8 + 169344 z^7 + 177408 z^6 - 42336 z^5 + 25200 z^4 - 18000 z^3 + 7560 z^2 + 5670 z + 31185) + \frac{32 e^z \sqrt{\pi} (4 z^{21/2} + 132 z^{19/2} + 1431 z^{17/2} + 5916 z^{15/2} + 7650 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.adcm.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{31185} \frac{(128z^{10} - 4160z^9 + 43776z^8 - 169344z^7 + 177408z^6 + 42336z^5 + 25200z^4 + 18000z^3 + 7560z^2 - 5670z + 31185) - 32e^{-z}\sqrt{\pi}(4z^{21/2} - 132z^{19/2} + 1431z^{17/2} - 5916z^{15/2} + 7650z^{13/2})\operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.adcn.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{-64z^9 - 1568z^8 - 10944z^7 - 19712z^6 + 6048z^5 - 5040z^4 + 6000z^3 - 7560z^2 + 5670z + 10395}{10395} - \frac{16e^z\sqrt{\pi}(4z^{19/2} + 100z^{17/2} + 731z^{15/2} + 1530z^{13/2})\operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.adco.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{64z^9 - 1568z^8 + 10944z^7 - 19712z^6 - 6048z^5 - 5040z^4 - 6000z^3 - 7560z^2 - 5670z + 10395}{10395} - \frac{16e^{-z}\sqrt{\pi}(4z^{19/2} - 100z^{17/2} + 731z^{15/2} - 1530z^{13/2})\operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.adcp.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{32z^8 + 528z^7 + 1792z^6 - 672z^5 + 720z^4 - 1200z^3 + 2520z^2 - 5670z + 10395}{10395} + \frac{8e^z\sqrt{\pi}(4z^{17/2} + 68z^{15/2} + 255z^{13/2})\operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.adcq.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{32z^8 - 528z^7 + 1792z^6 + 672z^5 + 720z^4 + 1200z^3 + 2520z^2 + 5670z + 10395}{10395} - \frac{8e^{-z}\sqrt{\pi}(4z^{17/2} - 68z^{15/2} + 255z^{13/2})\operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.adcr.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, 1; z\right) = \frac{e^z(64z^8 + 832z^7 + 1616z^6 - 1824z^5 + 3900z^4 - 8940z^3 + 17955z^2 - 26460z + 20790)}{20790}$$

07.25.03.adcs.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{16z^7 + 136z^6 - 48z^5 + 240z^3 - 1224z^2 + 3870z - 6885}{10395} + \frac{4e^z\sqrt{\pi}(4z^8 + 36z^7 + 3z^6 - 18z^5 + 90z^4 - 360z^3 + 1080z^2 - 2160z + 2160)\operatorname{erf}(\sqrt{z})}{10395\sqrt{z}}$$

07.25.03.adct.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{-16z^7 + 136z^6 + 48z^5 - 240z^3 - 1224z^2 - 3870z - 6885}{10395} + \frac{4e^{-z}\sqrt{\pi}(4z^8 - 36z^7 + 3z^6 + 18z^5 + 90z^4 + 360z^3 + 1080z^2 + 2160z + 2160)\operatorname{erfi}(\sqrt{z})}{10395\sqrt{z}}$$

07.25.03.adcu.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, 2; z\right) = \frac{e^z(64z^7 + 320z^6 - 624z^5 + 1920z^4 - 5700z^3 + 13860z^2 - 23625z + 20790)}{20790}$$

07.25.03.adcv.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{8z^7 + 4z^6 - 48z^5 + 280z^4 - 1272z^3 + 4518z^2 - 11895z + 20160}{3465z} + \frac{2e^z\sqrt{\pi}(4z^8 + 4z^7 - 25z^6 + 132z^5 - 570z^4 + 1920z^3 - 4680z^2 + 7200z - 5040)\operatorname{erf}(\sqrt{z})}{3465z^{3/2}}$$

07.25.03.adcw.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{8z^7 - 4z^6 - 48z^5 - 280z^4 - 1272z^3 - 4518z^2 - 11895z - 20160}{3465z} - \frac{2e^{-z}\sqrt{\pi}(4z^8 - 4z^7 - 25z^6 - 132z^5 - 570z^4 - 1920z^3 - 4680z^2 - 7200z - 5040)\operatorname{erfi}(\sqrt{z})}{3465z^{3/2}}$$

07.25.03.adcx.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, 3; z\right) = \frac{e^z(64z^6 - 192z^5 + 720z^4 - 2400z^3 + 6300z^2 - 11340z + 10395)}{10395}$$

07.25.03.adcy.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{4z^7 - 30z^6 + 188z^5 - 1008z^4 + 4554z^3 - 16923z^2 + 50400z - 120960}{693z^2} + \frac{1}{693z^{5/2}}e^z\sqrt{\pi}(4z^8 - 28z^7 + 171z^6 - 894z^5 + 3900z^4 - 13680z^3 + 36360z^2 - 65520z + 60480)\operatorname{erf}(\sqrt{z})$$

07.25.03.adcz.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{-4z^7 - 30z^6 - 188z^5 - 1008z^4 - 4554z^3 - 16923z^2 - 50400z - 120960}{693z^2} + \frac{1}{693z^{5/2}}e^{-z}\sqrt{\pi}(4z^8 + 28z^7 + 171z^6 + 894z^5 + 3900z^4 + 13680z^3 + 36360z^2 + 65520z + 60480)\operatorname{erfi}(\sqrt{z})$$

07.25.03.add0.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, 4; z\right) = \frac{1}{3465z^3}e^z(64z^8 - 704z^7 + 5648z^6 - 36288z^5 + 187740z^4 - 762300z^3 + 2297295z^2 - 4594590z + 4594590) - \frac{1326}{z^3}$$

07.25.03.add1.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{2z^7 - 31z^6 + 312z^5 - 2394z^4 + 14451z^3 - 68040z^2 + 241920z - 907200}{99z^3} + \frac{1}{198z^{7/2}} e^z \sqrt{\pi} (4z^8 - 60z^7 + 591z^6 - 4440z^5 + 26100z^4 - 118080z^3 + 390600z^2 - 846720z + 907200) \operatorname{erf}(\sqrt{z})$$

07.25.03.add2.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{2z^7 + 31z^6 + 312z^5 + 2394z^4 + 14451z^3 + 68040z^2 + 241920z + 907200}{99z^3} + \frac{1}{198z^{7/2}} e^{-z} \sqrt{\pi} (-4z^8 - 60z^7 - 591z^6 - 4440z^5 - 26100z^4 - 118080z^3 - 390600z^2 - 846720z - 907200) \operatorname{erfi}(\sqrt{z})$$

07.25.03.add3.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, 5; z\right) = \frac{1}{3465z^4} 4e^z (64z^8 - 1216z^7 + 14160z^6 - 121248z^5 + 793980z^4 - 3938220z^3 + 14111955z^2 - 32818500z + 37413090) - \frac{5304(7z + 57)}{7z^4}$$

07.25.03.add4.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{2z^7 - 47z^6 + 642z^5 - 6272z^4 + 46200z^3 - 257040z^2 + 856800z - 5292000}{22z^4} + \frac{1}{44z^{9/2}} e^z \sqrt{\pi} (4z^8 - 92z^7 + 1235z^6 - 11850z^5 + 85350z^4 - 459480z^3 + 1769040z^2 - 4384800z + 5292000) \operatorname{erf}(\sqrt{z})$$

07.25.03.add5.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{-2z^7 - 47z^6 - 642z^5 - 6272z^4 - 46200z^3 - 257040z^2 - 856800z - 5292000}{22z^4} + \frac{1}{44z^{9/2}} e^{-z} \sqrt{\pi} (4z^8 + 92z^7 + 1235z^6 + 11850z^5 + 85350z^4 + 459480z^3 + 1769040z^2 + 4384800z + 5292000) \operatorname{erfi}(\sqrt{z})$$

07.25.03.add6.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{11}{2}, 6; z\right) = \frac{1}{693z^5} (4e^z (64z^8 - 1728z^7 + 26256z^6 - 278784z^5 + 2187900z^4 - 12689820z^3 + 52181415z^2 - 137181330z + 174594420)) - \frac{13260(7z^2 + 114z + 532)}{7z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = -\frac{9}{2}$

07.25.03.add7.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{893\,025} (512 z^{12} + 25\,344 z^{11} + 457\,984 z^{10} + 3\,786\,240 z^9 + 14\,664\,960 z^8 + 24\,184\,320 z^7 + 12\,637\,440 z^6 + 635\,040 z^5 + 25\,200 z^4 + 10\,800 z^3 + 16\,200 z^2 + 66\,150 z + 893\,025) + \frac{1}{893\,025} (128 e^z \sqrt{\pi} (4 z^{25/2} + 200 z^{23/2} + 3675 z^{21/2} + 31\,275 z^{19/2} + 127\,800 z^{17/2} + 235\,080 z^{15/2} + 160\,200 z^{13/2} + 23\,400 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.add8.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{893\,025} (512 z^{12} - 25\,344 z^{11} + 457\,984 z^{10} - 3\,786\,240 z^9 + 14\,664\,960 z^8 - 24\,184\,320 z^7 + 12\,637\,440 z^6 - 635\,040 z^5 + 25\,200 z^4 - 10\,800 z^3 + 16\,200 z^2 - 66\,150 z + 893\,025) - \frac{1}{893\,025} (128 e^{-z} \sqrt{\pi} (4 z^{25/2} - 200 z^{23/2} + 3675 z^{21/2} - 31\,275 z^{19/2} + 127\,800 z^{17/2} - 235\,080 z^{15/2} + 160\,200 z^{13/2} - 23\,400 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.add9.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{99\,225} (-256 z^{11} - 10\,880 z^{10} - 163\,840 z^9 - 1\,079\,040 z^8 - 3\,085\,824 z^7 - 3\,214\,080 z^6 - 635\,040 z^5 + 25\,200 z^4 + 3600 z^3 + 3240 z^2 + 9450 z + 99\,225) - \frac{1}{99\,225} 64 e^z \sqrt{\pi} (4 z^{23/2} + 172 z^{21/2} + 2643 z^{19/2} + 18\,060 z^{17/2} + 55\,560 z^{15/2} + 68\,400 z^{13/2} + 23\,400 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adda.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{99\,225} (256 z^{11} - 10\,880 z^{10} + 163\,840 z^9 - 1\,079\,040 z^8 + 3\,085\,824 z^7 - 3\,214\,080 z^6 + 635\,040 z^5 + 25\,200 z^4 - 3600 z^3 + 3240 z^2 - 9450 z + 99\,225) - \frac{1}{99\,225} 64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 172 z^{21/2} + 2643 z^{19/2} - 18\,060 z^{17/2} + 55\,560 z^{15/2} - 68\,400 z^{13/2} + 23\,400 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.addb.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{14\,175} (128 z^{10} + 4544 z^9 + 54\,720 z^8 + 268\,032 z^7 + 493\,056 z^6 + 211\,680 z^5 - 25\,200 z^4 + 3600 z^3 + 1080 z^2 + 1890 z + 14\,175) + \frac{32 e^z \sqrt{\pi} (4 z^{21/2} + 144 z^{19/2} + 1779 z^{17/2} + 9165 z^{15/2} + 18\,900 z^{13/2} + 11\,700 z^{11/2}) \operatorname{erf}(\sqrt{z})}{14\,175}$$

07.25.03.addc.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{14\,175} (128 z^{10} - 4544 z^9 + 54\,720 z^8 - 268\,032 z^7 + 493\,056 z^6 - 211\,680 z^5 - 25\,200 z^4 - 3600 z^3 + 1080 z^2 - 1890 z + 14\,175) - \frac{32 e^{-z} \sqrt{\pi} (4 z^{21/2} - 144 z^{19/2} + 1779 z^{17/2} - 9165 z^{15/2} + 18\,900 z^{13/2} - 11\,700 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{14\,175}$$

07.25.03.addd.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{-64 z^9 - 1824 z^8 - 16448 z^7 - 52608 z^6 - 42336 z^5 + 8400 z^4 - 3600 z^3 + 1080 z^2 + 630 z + 2835}{2835} - \frac{16 e^z \sqrt{\pi} (4 z^{19/2} + 116 z^{17/2} + 1083 z^{15/2} + 3750 z^{13/2} + 3900 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.adde.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{64 z^9 - 1824 z^8 + 16448 z^7 - 52608 z^6 + 42336 z^5 + 8400 z^4 + 3600 z^3 + 1080 z^2 - 630 z + 2835}{2835} - \frac{16 e^{-z} \sqrt{\pi} (4 z^{19/2} - 116 z^{17/2} + 1083 z^{15/2} - 3750 z^{13/2} + 3900 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.addf.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} (32 z^8 + 688 z^7 + 4112 z^6 + 6048 z^5 - 1680 z^4 + 1200 z^3 - 1080 z^2 + 630 z + 945) + \frac{8}{945} e^z \sqrt{\pi} (4 z^{17/2} + 88 z^{15/2} + 555 z^{13/2} + 975 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.addg.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945} (32 z^8 - 688 z^7 + 4112 z^6 - 6048 z^5 - 1680 z^4 - 1200 z^3 - 1080 z^2 - 630 z + 945) - \frac{8}{945} e^{-z} \sqrt{\pi} (4 z^{17/2} - 88 z^{15/2} + 555 z^{13/2} - 975 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.addh.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945} (-16 z^7 - 232 z^6 - 672 z^5 + 240 z^4 - 240 z^3 + 360 z^2 - 630 z + 945) - \frac{4}{945} e^z \sqrt{\pi} (4 z^{15/2} + 60 z^{13/2} + 195 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.addi.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} (16 z^7 - 232 z^6 + 672 z^5 + 240 z^4 + 240 z^3 + 360 z^2 + 630 z + 945) - \frac{4}{945} e^{-z} \sqrt{\pi} (4 z^{15/2} - 60 z^{13/2} + 195 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.addj.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, 1; z\right) = -\frac{e^z (32 z^7 + 368 z^6 + 624 z^5 - 600 z^4 + 1050 z^3 - 1845 z^2 + 2520 z - 1890)}{1890}$$

07.25.03.addk.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945} (-8 z^6 - 60 z^5 + 20 z^4 - 72 z^2 + 270 z - 495) - \frac{2 e^z \sqrt{\pi} (4 z^7 + 32 z^6 + 3 z^5 - 15 z^4 + 60 z^3 - 180 z^2 + 360 z - 360) \operatorname{erf}(\sqrt{z})}{945 \sqrt{z}}$$

07.25.03.addl.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} (-8z^6 + 60z^5 + 20z^4 - 72z^2 - 270z - 495) + \frac{2e^{-z}\sqrt{\pi}(4z^7 - 32z^6 + 3z^5 + 15z^4 + 60z^3 + 180z^2 + 360z + 360)\operatorname{erfi}(\sqrt{z})}{945\sqrt{z}}$$

07.25.03.addm.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, 2; z\right) = -\frac{e^z(32z^6 + 144z^5 - 240z^4 + 600z^3 - 1350z^2 + 2205z - 1890)}{1890}$$

07.25.03.addn.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-4z^6 - 2z^5 + 20z^4 - 96z^3 + 342z^2 - 885z + 1440}{315z} + \frac{e^z\sqrt{\pi}(-4z^7 - 4z^6 + 21z^5 - 90z^4 + 300z^3 - 720z^2 + 1080z - 720)\operatorname{erf}(\sqrt{z})}{315z^{3/2}}$$

07.25.03.addo.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{4z^6 - 2z^5 - 20z^4 - 96z^3 - 342z^2 - 885z - 1440}{315z} + \frac{e^{-z}\sqrt{\pi}(-4z^7 + 4z^6 + 21z^5 + 90z^4 + 300z^3 + 720z^2 + 1080z + 720)\operatorname{erfi}(\sqrt{z})}{315z^{3/2}}$$

07.25.03.addp.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, 3; z\right) = -\frac{1}{945} e^z(32z^5 - 80z^4 + 240z^3 - 600z^2 + 1050z - 945)$$

07.25.03.addq.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-2z^6 + 13z^5 - 69z^4 + 306z^3 - 1113z^2 + 3240z - 7560}{63z^2} + \frac{e^z\sqrt{\pi}(-4z^7 + 24z^6 - 123z^5 + 525z^4 - 1800z^3 + 4680z^2 - 8280z + 7560)\operatorname{erf}(\sqrt{z})}{126z^{5/2}}$$

07.25.03.addr.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{-2z^6 - 13z^5 - 69z^4 - 306z^3 - 1113z^2 - 3240z - 7560}{63z^2} + \frac{e^{-z}\sqrt{\pi}(4z^7 + 24z^6 + 123z^5 + 525z^4 + 1800z^3 + 4680z^2 + 8280z + 7560)\operatorname{erfi}(\sqrt{z})}{126z^{5/2}}$$

07.25.03.adds.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, 4; z\right) = \frac{e^z(-32z^7 + 304z^6 - 2064z^5 + 10920z^4 - 44730z^3 + 135135z^2 - 270270z + 270270)}{315z^3} - \frac{858}{z^3}$$

07.25.03.addt.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-2z^6 + 27z^5 - 232z^4 + 1482z^3 - 7200z^2 + 26040z - 100800}{18z^3} + \frac{e^z \sqrt{\pi} (-4z^7 + 52z^6 - 435z^5 + 2700z^4 - 12600z^3 + 42480z^2 - 93240z + 100800) \operatorname{erf}(\sqrt{z})}{36z^{7/2}}$$

07.25.03.addu.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{2z^6 + 27z^5 + 232z^4 + 1482z^3 + 7200z^2 + 26040z + 100800}{18z^3} + \frac{e^{-z} \sqrt{\pi} (-4z^7 - 52z^6 - 435z^5 - 2700z^4 - 12600z^3 - 42480z^2 - 93240z - 100800) \operatorname{erfi}(\sqrt{z})}{36z^{7/2}}$$

07.25.03.addv.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, 5; z\right) = \frac{3432(7z + 51)}{7z^4} - \frac{4e^z(32z^7 - 528z^6 + 5232z^5 - 37080z^4 + 193050z^3 - 714285z^2 + 1698840z - 1969110)}{315z^4}$$

07.25.03.addw.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-2z^6 + 41z^5 - 479z^4 + 3900z^3 - 23100z^2 + 75600z - 529200}{4z^4} + \frac{e^z \sqrt{\pi} (-4z^7 + 80z^6 - 915z^5 + 7275z^4 - 41700z^3 + 167580z^2 - 428400z + 529200) \operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.addx.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{-2z^6 - 41z^5 - 479z^4 - 3900z^3 - 23100z^2 - 75600z - 529200}{4z^4} + \frac{e^{-z} \sqrt{\pi} (4z^7 + 80z^6 + 915z^5 + 7275z^4 + 41700z^3 + 167580z^2 + 428400z + 529200) \operatorname{erfi}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.addy.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{9}{2}, 6; z\right) = -\frac{2860(21z^2 + 306z + 1292)}{7z^5} - \frac{4e^z(32z^7 - 752z^6 + 9744z^5 - 85800z^4 + 536250z^3 - 2323035z^2 + 6344910z - 8314020)}{63z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = -\frac{7}{2}$

07.25.03.addz.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{11025} \left(128z^{10} + 4672z^9 + 58624z^8 + 307200z^7 + 645376z^6 + 415392z^5 + 25200z^4 + 1200z^3 + 648z^2 + 1350z + 11025\right) + \frac{1}{11025} 32e^z \sqrt{\pi} (4z^{21/2} + 148z^{19/2} + 1903z^{17/2} + 10448z^{15/2} + 24216z^{13/2} + 19968z^{11/2} + 3432z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ade0.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{11025} (128 z^{10} - 4672 z^9 + 58624 z^8 - 307200 z^7 + 645376 z^6 - 415392 z^5 + 25200 z^4 - 1200 z^3 + 648 z^2 - 1350 z + 11025) - \frac{1}{11025} 32 e^{-z} \sqrt{\pi} (4 z^{21/2} - 148 z^{19/2} + 1903 z^{17/2} - 10448 z^{15/2} + 24216 z^{13/2} - 19968 z^{11/2} + 3432 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ade1.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{-64 z^9 - 1952 z^8 - 19584 z^7 - 76160 z^6 - 101856 z^5 - 25200 z^4 + 1200 z^3 + 216 z^2 + 270 z + 1575}{1575} - \frac{16 e^z \sqrt{\pi} (4 z^{19/2} + 124 z^{17/2} + 1283 z^{15/2} + 5316 z^{13/2} + 8268 z^{11/2} + 3432 z^{9/2}) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.ade2.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{64 z^9 - 1952 z^8 + 19584 z^7 - 76160 z^6 + 101856 z^5 - 25200 z^4 - 1200 z^3 + 216 z^2 - 270 z + 1575}{1575} - \frac{16 e^{-z} \sqrt{\pi} (4 z^{19/2} - 124 z^{17/2} + 1283 z^{15/2} - 5316 z^{13/2} + 8268 z^{11/2} - 3432 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.ade3.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} (32 z^8 + 784 z^7 + 5888 z^6 + 14880 z^5 + 8400 z^4 - 1200 z^3 + 216 z^2 + 90 z + 315) + \frac{8}{315} e^z \sqrt{\pi} (4 z^{17/2} + 100 z^{15/2} + 783 z^{13/2} + 2184 z^{11/2} + 1716 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ade4.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{315} (32 z^8 - 784 z^7 + 5888 z^6 - 14880 z^5 + 8400 z^4 + 1200 z^3 + 216 z^2 - 90 z + 315) - \frac{8}{315} e^{-z} \sqrt{\pi} (4 z^{17/2} - 100 z^{15/2} + 783 z^{13/2} - 2184 z^{11/2} + 1716 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ade5.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} (-16 z^7 - 296 z^6 - 1472 z^5 - 1680 z^4 + 400 z^3 - 216 z^2 + 90 z + 105) - \frac{4}{105} e^z \sqrt{\pi} (4 z^{15/2} + 76 z^{13/2} + 403 z^{11/2} + 572 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ade6.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} (16 z^7 - 296 z^6 + 1472 z^5 - 1680 z^4 - 400 z^3 - 216 z^2 - 90 z + 105) - \frac{4}{105} e^{-z} \sqrt{\pi} (4 z^{15/2} - 76 z^{13/2} + 403 z^{11/2} - 572 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ade7.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} (8 z^6 + 100 z^5 + 240 z^4 - 80 z^3 + 72 z^2 - 90 z + 105) + \frac{2}{105} e^z \sqrt{\pi} (4 z^{13/2} + 52 z^{11/2} + 143 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ade8.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} (8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} (4z^{13/2} - 52z^{11/2} + 143z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ade9.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, 1; z\right) = \frac{1}{210} e^z (16z^6 + 160z^5 + 232z^4 - 184z^3 + 249z^2 - 300z + 210)$$

07.25.03.adea.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{105} (4z^5 + 26z^4 - 8z^3 + 18z - 39) + \frac{e^z \sqrt{\pi} (4z^6 + 28z^5 + 3z^4 - 12z^3 + 36z^2 - 72z + 72) \operatorname{erf}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.adeb.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} (-4z^5 + 26z^4 + 8z^3 - 18z - 39) + \frac{e^{-z} \sqrt{\pi} (4z^6 - 28z^5 + 3z^4 + 12z^3 + 36z^2 + 72z + 72) \operatorname{erfi}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.adeb.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, 2; z\right) = \frac{1}{210} e^z (16z^5 + 64z^4 - 88z^3 + 168z^2 - 255z + 210)$$

07.25.03.aded.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{2z^5 + z^4 - 8z^3 + 30z^2 - 77z + 120}{35z} + \frac{e^z \sqrt{\pi} (4z^6 + 4z^5 - 17z^4 + 56z^3 - 132z^2 + 192z - 120) \operatorname{erf}(\sqrt{z})}{70z^{3/2}}$$

07.25.03.adee.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{2z^5 - z^4 - 8z^3 - 30z^2 - 77z - 120}{35z} + \frac{e^{-z} \sqrt{\pi} (-4z^6 + 4z^5 + 17z^4 + 56z^3 + 132z^2 + 192z + 120) \operatorname{erfi}(\sqrt{z})}{70z^{3/2}}$$

07.25.03.adeb.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, 3; z\right) = \frac{1}{105} e^z (16z^4 - 32z^3 + 72z^2 - 120z + 105)$$

07.25.03.adeb.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{2z^5 - 11z^4 + 48z^3 - 170z^2 + 480z - 1080}{14z^2} + \frac{e^z \sqrt{\pi} (4z^6 - 20z^5 + 83z^4 - 276z^3 + 696z^2 - 1200z + 1080) \operatorname{erf}(\sqrt{z})}{28z^{5/2}}$$

07.25.03.adeh.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{-2z^5 - 11z^4 - 48z^3 - 170z^2 - 480z - 1080}{14z^2} + \frac{e^{-z}\sqrt{\pi}(4z^6 + 20z^5 + 83z^4 + 276z^3 + 696z^2 + 1200z + 1080)\operatorname{erfi}(\sqrt{z})}{28z^{5/2}}$$

07.25.03.adei.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, 4; z\right) = \frac{e^z(16z^6 - 128z^5 + 712z^4 - 2968z^3 + 9009z^2 - 18018z + 18018)}{35z^3} - \frac{2574}{5z^3}$$

07.25.03.adej.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{2z^5 - 23z^4 + 164z^3 - 840z^2 + 3120z - 12600}{4z^3} + \frac{e^z\sqrt{\pi}(4z^6 - 44z^5 + 303z^4 - 1488z^3 + 5160z^2 - 11520z + 12600)\operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.adek.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{2z^5 + 23z^4 + 164z^3 + 840z^2 + 3120z + 12600}{4z^3} + \frac{e^{-z}\sqrt{\pi}(-4z^6 - 44z^5 - 303z^4 - 1488z^3 - 5160z^2 - 11520z - 12600)\operatorname{erfi}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.adel.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, 5; z\right) = \frac{4e^z(16z^6 - 224z^5 + 1832z^4 - 10296z^3 + 39897z^2 - 97812z + 115830)}{35z^4} - \frac{10296(7z + 45)}{35z^4}$$

07.25.03.adem.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9(2z^5 - 35z^4 + 340z^3 - 2220z^2 + 7000z - 58800)}{8z^4} + \frac{9e^z\sqrt{\pi}(4z^6 - 68z^5 + 643z^4 - 4060z^3 + 17340z^2 - 46200z + 58800)\operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.aden.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9e^{-z}\sqrt{\pi}(4z^6 + 68z^5 + 643z^4 + 4060z^3 + 17340z^2 + 46200z + 58800)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}} - \frac{9(2z^5 + 35z^4 + 340z^3 + 2220z^2 + 7000z + 58800)}{8z^4}$$

07.25.03.adeo.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{7}{2}, 6; z\right) = \frac{4e^z(16z^6 - 320z^5 + 3432z^4 - 24024z^3 + 111969z^2 - 321750z + 437580)}{7z^5} - \frac{5148(7z^2 + 90z + 340)}{7z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = -\frac{5}{2}$

07.25.03.adeq.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225} (32 z^8 + 816 z^7 + 6544 z^6 + 18816 z^5 + 15696 z^4 + 1200 z^3 + 72 z^2 + 54 z + 225) + \frac{8}{225} e^z \sqrt{\pi} (4 z^{17/2} + 104 z^{15/2} + 867 z^{13/2} + 2715 z^{11/2} + 2838 z^{9/2} + 594 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adeq.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{225} (32 z^8 - 816 z^7 + 6544 z^6 - 18816 z^5 + 15696 z^4 - 1200 z^3 + 72 z^2 - 54 z + 225) - \frac{8}{225} e^{-z} \sqrt{\pi} (4 z^{17/2} - 104 z^{15/2} + 867 z^{13/2} - 2715 z^{11/2} + 2838 z^{9/2} - 594 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ader.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} (-16 z^7 - 328 z^6 - 1968 z^5 - 3648 z^4 - 1200 z^3 + 72 z^2 + 18 z + 45) - \frac{4}{45} e^z \sqrt{\pi} (4 z^{15/2} + 84 z^{13/2} + 531 z^{11/2} + 1122 z^{9/2} + 594 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ades.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{45} (16 z^7 - 328 z^6 + 1968 z^5 - 3648 z^4 + 1200 z^3 + 72 z^2 - 18 z + 45) - \frac{4}{45} e^{-z} \sqrt{\pi} (4 z^{15/2} - 84 z^{13/2} + 531 z^{11/2} - 1122 z^{9/2} + 594 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adet.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} (8 z^6 + 124 z^5 + 492 z^4 + 400 z^3 - 72 z^2 + 18 z + 15) + \frac{2}{15} e^z \sqrt{\pi} (4 z^{13/2} + 64 z^{11/2} + 275 z^{9/2} + 297 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adeu.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} (8 z^6 - 124 z^5 + 492 z^4 - 400 z^3 - 72 z^2 - 18 z + 15) - \frac{2}{15} e^{-z} \sqrt{\pi} (4 z^{13/2} - 64 z^{11/2} + 275 z^{9/2} - 297 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adev.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) + \frac{1}{15} e^z \sqrt{\pi} (-4 z^{11/2} - 44 z^{9/2} - 99 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adev.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) + \frac{1}{15} e^{-z} \sqrt{\pi} (-4 z^{11/2} + 44 z^{9/2} - 99 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adex.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, 1; z\right) = -\frac{1}{30} e^z (8 z^5 + 68 z^4 + 82 z^3 - 51 z^2 + 48 z - 30)$$

07.25.03.adey.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15} (-2 z^4 - 11 z^3 + 3 z^2 - 3) + \frac{e^z \sqrt{\pi} (-4 z^5 - 24 z^4 - 3 z^3 + 9 z^2 - 18 z + 18) \operatorname{erf}(\sqrt{z})}{30 \sqrt{z}}$$

07.25.03.adez.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15}(-2z^4 + 11z^3 + 3z^2 - 3) + \frac{e^{-z}\sqrt{\pi}(4z^5 - 24z^4 + 3z^3 + 9z^2 + 18z + 18)\operatorname{erfi}(\sqrt{z})}{30\sqrt{z}}$$

07.25.03.adf0.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, 2; z\right) = -\frac{1}{30}e^z(8z^4 + 28z^3 - 30z^2 + 39z - 30)$$

07.25.03.adf1.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-2z^4 - z^3 + 6z^2 - 16z + 24}{10z} + \frac{e^z\sqrt{\pi}(-4z^5 - 4z^4 + 13z^3 - 30z^2 + 42z - 24)\operatorname{erf}(\sqrt{z})}{20z^{3/2}}$$

07.25.03.adf2.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{2z^4 - z^3 - 6z^2 - 16z - 24}{10z} + \frac{e^{-z}\sqrt{\pi}(-4z^5 + 4z^4 + 13z^3 + 30z^2 + 42z + 24)\operatorname{erfi}(\sqrt{z})}{20z^{3/2}}$$

07.25.03.adf3.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, 3; z\right) = -\frac{1}{15}e^z(8z^3 - 12z^2 + 18z - 15)$$

07.25.03.adf4.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-2z^4 + 9z^3 - 31z^2 + 84z - 180}{4z^2} + \frac{e^z\sqrt{\pi}(-4z^5 + 16z^4 - 51z^3 + 123z^2 - 204z + 180)\operatorname{erf}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.adf5.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-2z^4 - 9z^3 - 31z^2 - 84z - 180}{4z^2} + \frac{e^{-z}\sqrt{\pi}(4z^5 + 16z^4 + 51z^3 + 123z^2 + 204z + 180)\operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.adf6.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, 4; z\right) = \frac{e^z(-8z^5 + 52z^4 - 226z^3 + 693z^2 - 1386z + 1386)}{5z^3} - \frac{1386}{5z^3}$$

07.25.03.adf7.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7(2z^4 - 19z^3 + 108z^2 - 420z + 180)}{8z^3} - \frac{7e^z\sqrt{\pi}(4z^5 - 36z^4 + 195z^3 - 708z^2 + 1620z - 1800)\operatorname{erf}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.adf8.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(2z^4 + 19z^3 + 108z^2 + 420z + 180)}{8z^3} - \frac{7e^{-z}\sqrt{\pi}(4z^5 + 36z^4 + 195z^3 + 708z^2 + 1620z + 1800)\operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.adf9.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, 5; z\right) = -\frac{792(7z + 39)}{5z^4} - \frac{4e^z(8z^5 - 92z^4 + 594z^3 - 2475z^2 + 6336z - 7722)}{5z^4}$$

07.25.03.adfa.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63(2z^4 - 29z^3 + 225z^2 - 650z + 7350)}{16z^4} - \frac{63e^z\sqrt{\pi}(4z^5 - 56z^4 + 419z^3 - 1965z^2 + 5550z - 7350)\operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.adfb.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63e^{-z}\sqrt{\pi}(4z^5 + 56z^4 + 419z^3 + 1965z^2 + 5550z + 7350)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}} - \frac{63(2z^4 + 29z^3 + 225z^2 + 650z + 7350)}{16z^4}$$

07.25.03.adfc.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{5}{2}, 6; z\right) = -\frac{396(7z^2 + 78z + 260)}{z^5} - \frac{4e^z(8z^5 - 132z^4 + 1122z^3 - 5841z^2 + 18018z - 25740)}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = -\frac{3}{2}$

07.25.03.adfd.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9}(8z^6 + 132z^5 + 592z^4 + 696z^3 + 72z^2 + 6z + 9) + \frac{2}{9}e^z\sqrt{\pi}(4z^{13/2} + 68z^{11/2} + 327z^{9/2} + 468z^{7/2} + 126z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.adfe.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9}(8z^6 - 132z^5 + 592z^4 - 696z^3 + 72z^2 - 6z + 9) - \frac{2}{9}e^{-z}\sqrt{\pi}(4z^{13/2} - 68z^{11/2} + 327z^{9/2} - 468z^{7/2} + 126z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.adff.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3}(-4z^5 - 50z^4 - 148z^3 - 72z^2 + 6z + 3) + \frac{1}{3}e^z\sqrt{\pi}(-4z^{11/2} - 52z^{9/2} - 171z^{7/2} - 126z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.adfg.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3}(4z^5 - 50z^4 + 148z^3 - 72z^2 - 6z + 3) + \frac{1}{3}e^{-z}\sqrt{\pi}(-4z^{11/2} + 52z^{9/2} - 171z^{7/2} + 126z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.adfh.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3}(2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6}e^z\sqrt{\pi}(4z^{9/2} + 36z^{7/2} + 63z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.adfi.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3}(2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6}e^{-z}\sqrt{\pi}(-4z^{9/2} + 36z^{7/2} - 63z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.adfj.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, 1; z\right) = \frac{1}{6} e^z (4z^4 + 28z^3 + 27z^2 - 12z + 6)$$

07.25.03.adfk.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{6} (2z^3 + 9z^2 - 2z) + \frac{e^z \sqrt{\pi} (4z^4 + 20z^3 + 3z^2 - 6z + 6) \operatorname{erf}(\sqrt{z})}{12\sqrt{z}}$$

07.25.03.adfl.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{6} (-2z^3 + 9z^2 + 2z) + \frac{e^{-z} \sqrt{\pi} (4z^4 - 20z^3 + 3z^2 + 6z + 6) \operatorname{erfi}(\sqrt{z})}{12\sqrt{z}}$$

07.25.03.adfm.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, 2; z\right) = \frac{1}{6} e^z (4z^3 + 12z^2 - 9z + 6)$$

07.25.03.adfn.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{2z^3 + z^2 - 4z + 6}{4z} + \frac{e^z \sqrt{\pi} (4z^4 + 4z^3 - 9z^2 + 12z - 6) \operatorname{erf}(\sqrt{z})}{8z^{3/2}}$$

07.25.03.adfo.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{2z^3 - z^2 - 4z - 6}{4z} + \frac{e^{-z} \sqrt{\pi} (-4z^4 + 4z^3 + 9z^2 + 12z + 6) \operatorname{erfi}(\sqrt{z})}{8z^{3/2}}$$

07.25.03.adfp.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, 3; z\right) = \frac{1}{3} e^z (4z^2 - 4z + 3)$$

07.25.03.adfq.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(2z^3 - 7z^2 + 18z - 36)}{8z^2} + \frac{5e^z \sqrt{\pi} (4z^4 - 12z^3 + 27z^2 - 42z + 36) \operatorname{erf}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.adfr.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (4z^4 + 12z^3 + 27z^2 + 42z + 36) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}} - \frac{5(2z^3 + 7z^2 + 18z + 36)}{8z^2}$$

07.25.03.adfs.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, 4; z\right) = \frac{e^z (4z^4 - 20z^3 + 63z^2 - 126z + 126)}{z^3} - \frac{126}{z^3}$$

07.25.03.adft.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(2z^3 - 15z^2 + 64z - 300)}{16z^3} + \frac{35e^z \sqrt{\pi} (4z^4 - 28z^3 + 111z^2 - 264z + 300) \operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.adfu.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(2z^3 + 15z^2 + 64z + 300)}{16z^3} - \frac{35e^{-z} \sqrt{\pi} (4z^4 + 28z^3 + 111z^2 + 264z + 300) \operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.adfv.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, 5; z\right) = \frac{4 e^z (4 z^4 - 36 z^3 + 171 z^2 - 468 z + 594)}{z^4} - \frac{72 (7 z + 33)}{z^4}$$

07.25.03.adfw.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{315 (2 z^3 - 23 z^2 + 50 z - 1050)}{32 z^4} + \frac{315 e^z \sqrt{\pi} (4 z^4 - 44 z^3 + 243 z^2 - 750 z + 1050) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.adfx.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} \sqrt{\pi} (4 z^4 + 44 z^3 + 243 z^2 + 750 z + 1050) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}} - \frac{315 (2 z^3 + 23 z^2 + 50 z + 1050)}{32 z^4}$$

07.25.03.adfy.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{3}{2}, 6; z\right) = \frac{20 e^z (4 z^4 - 52 z^3 + 327 z^2 - 1122 z + 1716)}{z^5} - \frac{60 (21 z^2 + 198 z + 572)}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = -\frac{1}{2}$

07.25.03.adfz.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, -\frac{1}{2}; z\right) = 2 z^4 + 19 z^3 + 37 z^2 + 6 z + \frac{1}{2} e^z \sqrt{\pi} (4 z^{9/2} + 40 z^{7/2} + 91 z^{5/2} + 35 z^{3/2}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.adg0.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, -\frac{1}{2}; -z\right) = 2 z^4 - 19 z^3 + 37 z^2 - 6 z + \frac{1}{2} e^{-z} \sqrt{\pi} (-4 z^{9/2} + 40 z^{7/2} - 91 z^{5/2} + 35 z^{3/2}) \operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.adg1.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{2} (-2 z^3 - 13 z^2 - 12 z + 2) + \frac{1}{4} e^z \sqrt{\pi} (-4 z^{7/2} - 28 z^{5/2} - 35 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adg2.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{2} (2 z^3 - 13 z^2 + 12 z + 2) + \frac{1}{4} e^{-z} \sqrt{\pi} (-4 z^{7/2} + 28 z^{5/2} - 35 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adg3.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, 1; z\right) = -\frac{1}{2} e^z (2 z^3 + 11 z^2 + 8 z - 2)$$

07.25.03.adg4.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{4} (-2 z^2 - 7 z + 1) + \frac{e^z \sqrt{\pi} (-4 z^3 - 16 z^2 - 3 z + 3) \operatorname{erf}(\sqrt{z})}{8 \sqrt{z}}$$

07.25.03.adg5.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{4} (-2 z^2 + 7 z + 1) + \frac{e^{-z} \sqrt{\pi} (4 z^3 - 16 z^2 + 3 z + 3) \operatorname{erfi}(\sqrt{z})}{8 \sqrt{z}}$$

07.25.03.adg6.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, 2; z\right) = -\frac{1}{2} e^z (2 z^2 + 5 z - 2)$$

07.25.03.adg7.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{3(2z^2 + z - 2)}{8z} - \frac{3e^z \sqrt{\pi} (4z^3 + 4z^2 - 5z + 2) \operatorname{erf}(\sqrt{z})}{16z^{3/2}}$$

07.25.03.adg8.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3(2z^2 - z - 2)}{8z} - \frac{3e^{-z} \sqrt{\pi} (4z^3 - 4z^2 - 5z - 2) \operatorname{erfi}(\sqrt{z})}{16z^{3/2}}$$

07.25.03.adg9.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, 3; z\right) = -e^z (2z - 1)$$

07.25.03.adga.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{15(2z^2 - 5z + 9)}{16z^2} - \frac{15e^z \sqrt{\pi} (4z^3 - 8z^2 + 11z - 9) \operatorname{erf}(\sqrt{z})}{32z^{5/2}}$$

07.25.03.adgb.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} \sqrt{\pi} (4z^3 + 8z^2 + 11z + 9) \operatorname{erfi}(\sqrt{z})}{32z^{5/2}} - \frac{15(2z^2 + 5z + 9)}{16z^2}$$

07.25.03.adgc.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, 4; z\right) = -\frac{3e^z (2z^3 - 7z^2 + 14z - 14)}{z^3} - \frac{42}{z^3}$$

07.25.03.adgd.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{105(2z^2 - 11z + 60)}{32z^3} - \frac{105e^z \sqrt{\pi} (4z^3 - 20z^2 + 51z - 60) \operatorname{erf}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.adge.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105(2z^2 + 11z + 60)}{32z^3} - \frac{105e^{-z} \sqrt{\pi} (4z^3 + 20z^2 + 51z + 60) \operatorname{erfi}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.adgf.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, 5; z\right) = -\frac{24(7z + 27)}{z^4} - \frac{12e^z (2z^3 - 13z^2 + 40z - 54)}{z^4}$$

07.25.03.adgg.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{315(6z^2 + 5z + 525)}{64z^4} - \frac{945e^z \sqrt{\pi} (4z^3 - 32z^2 + 115z - 175) \operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.adgh.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{945e^{-z} \sqrt{\pi} (4z^3 + 32z^2 + 115z + 175) \operatorname{erfi}(\sqrt{z})}{128z^{9/2}} - \frac{315(6z^2 - 5z + 525)}{64z^4}$$

07.25.03.adgi.01

$${}_2F_2\left(\frac{1}{2}, 3; -\frac{1}{2}, 6; z\right) = -\frac{60(7z^2 + 54z + 132)}{z^5} - \frac{60e^z (2z^3 - 19z^2 + 78z - 132)}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = \frac{1}{2}$

07.25.03.adgj.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{4} (2z^2 + 9z + 4) + \frac{1}{8} e^z \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adgk.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{4} (2z^2 - 9z + 4) + \frac{1}{8} e^{-z} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adgl.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, 1; z\right) = \frac{1}{2} e^z (z^2 + 4z + 2)$$

07.25.03.adgm.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{8} (2z + 5) + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.adgn.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{8} (5 - 2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.adgo.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, 2; z\right) = \frac{1}{2} e^z (z + 2)$$

07.25.03.adgp.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{3(2z + 1)}{16z} + \frac{3e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.adgq.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3(2z - 1)}{16z} - \frac{3e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.adgr.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, 3; z\right) = e^z$$

07.25.03.adgs.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{15(2z - 3)}{32z^2} + \frac{15e^z \sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.adgt.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} \sqrt{\pi} (4z^2 + 4z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15(2z + 3)}{32z^2}$$

07.25.03.adgu.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, 4; z\right) = \frac{3e^z (z^2 - 2z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.adgv.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{105(2z - 15)}{64z^3} + \frac{105e^z \sqrt{\pi} (4z^2 - 12z + 15) \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.adgw.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105(2z+15)}{64z^3} - \frac{105e^{-z}\sqrt{\pi}(4z^2+12z+15)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.adgx.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, 5; z\right) = \frac{12e^z(z^2-4z+6)}{z^4} - \frac{24(z+3)}{z^4}$$

07.25.03.adgy.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{945e^z\sqrt{\pi}(4z^2-20z+35)\operatorname{erf}(\sqrt{z})}{256z^{9/2}} - \frac{1575(2z+21)}{128z^4}$$

07.25.03.adgz.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1575(2z-21)}{128z^4} + \frac{945e^{-z}\sqrt{\pi}(4z^2+20z+35)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.adh0.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{1}{2}, 6; z\right) = \frac{60e^z(z^2-6z+12)}{z^5} - \frac{60(z^2+6z+12)}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = 1$

07.25.03.0069.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, 1; z\right) = \frac{1}{4}e^{z/2}\left(I_0\left(\frac{z}{2}\right)(z+2)^2 + z(z+3)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.0070.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, \frac{3}{2}; z\right) = \frac{1}{16}\left(2e^z(2z+5) + \frac{3\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{\sqrt{z}}\right)$$

07.25.03.adh1.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, \frac{3}{2}; -z\right) = \frac{1}{8}e^{-z}(5-2z) + \frac{3\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.0071.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, 2; z\right) = \frac{1}{4}e^{z/2}\left((z+4)I_0\left(\frac{z}{2}\right) + zI_1\left(\frac{z}{2}\right)\right)$$

07.25.03.0072.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, \frac{5}{2}; z\right) = \frac{3}{64z^{3/2}}\left(2e^z\sqrt{z}(4z+1) + \sqrt{\pi}(6z-1)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.adh2.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, \frac{5}{2}; -z\right) = \frac{3e^{-z}(4z-1)}{32z} + \frac{3\sqrt{\pi}(6z+1)\operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.adh3.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, 3; z\right) = e^{z/2}I_0\left(\frac{z}{2}\right)$$

07.25.03.adh4.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, \frac{7}{2}; z\right) = \frac{15 e^{-z} (10z - 9)}{256 z^2} + \frac{15 \sqrt{\pi} (12z^2 - 4z + 9) \operatorname{erfi}(\sqrt{z})}{512 z^{5/2}}$$

07.25.03.adh5.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} (12z^2 + 4z + 9) \operatorname{erf}(\sqrt{z})}{512 z^{5/2}} - \frac{15 e^{-z} (10z + 9)}{256 z^2}$$

07.25.03.adh6.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, 4; z\right) = \frac{e^{z/2} (3z + 4) I_0\left(\frac{z}{2}\right)}{5z} + \frac{e^{z/2} (-3z^2 + 8z - 16) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.adh7.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, \frac{9}{2}; z\right) = \frac{105 \sqrt{\pi} (8z^3 - 4z^2 + 18z + 75) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}} - \frac{105 e^{-z} (4z^2 - 32z + 75)}{1024 z^3}$$

07.25.03.adh8.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (4z^2 + 32z + 75)}{1024 z^3} + \frac{105 \sqrt{\pi} (8z^3 + 4z^2 + 18z - 75) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.adh9.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, 5; z\right) = \frac{8 e^{z/2} (3z^2 - 4z + 36) I_0\left(\frac{z}{2}\right)}{35 z^2} - \frac{8 e^{z/2} (3z^3 - z^2 - 16z + 144) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.adha.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (48z^4 - 32z^3 + 216z^2 + 1800z + 3675) \operatorname{erfi}(\sqrt{z})}{32768 z^{9/2}} - \frac{315 e^{-z} (24z^3 - 4z^2 - 650z + 3675)}{16384 z^4}$$

07.25.03.adhb.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (24z^3 + 4z^2 - 650z - 3675)}{16384 z^4} + \frac{315 \sqrt{\pi} (48z^4 + 32z^3 + 216z^2 - 1800z + 3675) \operatorname{erf}(\sqrt{z})}{32768 z^{9/2}}$$

07.25.03.adhc.01

$${}_2F_2\left(\frac{1}{2}, 3; 1, 6; z\right) = \frac{8 e^{z/2} (2z^3 - 3z^2 + 12z + 192) I_0\left(\frac{z}{2}\right)}{21 z^3} - \frac{8 e^{z/2} (2z^4 - z^3 + 12z^2 + 48z + 768) I_1\left(\frac{z}{2}\right)}{21 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = \frac{3}{2}$

07.25.03.0073.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{3}{2}, 2; z\right) = \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 \sqrt{z}} + \frac{e^{-z}}{4}$$

07.25.03.adhd.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{3}{2}, 2; -z\right) = \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 \sqrt{z}} + \frac{e^{-z}}{4}$$

07.25.03.adhe.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{3}{2}, 3; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.adhf.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{3}{2}, 3; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.adhg.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{3}{2}, 4; z\right) = -\frac{3e^z(z^2 - 2z + 2)}{5z^3} + \frac{3\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{5\sqrt{z}} + \frac{6}{5z^3}$$

07.25.03.adhh.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{3}{2}, 4; -z\right) = \frac{3e^{-z}(z^2 + 2z + 2)}{5z^3} + \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{5\sqrt{z}} - \frac{6}{5z^3}$$

07.25.03.adhi.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{3}{2}, 5; z\right) = \frac{24(7z + 15)}{35z^4} - \frac{12e^z(2z^3 + z^2 - 16z + 30)}{35z^4} + \frac{24\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.adhj.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{3}{2}, 5; -z\right) = -\frac{24(7z - 15)}{35z^4} + \frac{12e^{-z}(2z^3 - z^2 - 16z - 30)}{35z^4} + \frac{24\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.adhk.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{3}{2}, 6; z\right) = \frac{4(21z^2 + 90z + 140)}{7z^5} - \frac{4e^z(4z^4 + 2z^3 + 3z^2 - 150z + 420)}{21z^5} + \frac{16\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{21\sqrt{z}}$$

07.25.03.adhl.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{3}{2}, 6; -z\right) = -\frac{4(21z^2 - 90z + 140)}{7z^5} + \frac{4e^{-z}(4z^4 - 2z^3 + 3z^2 + 150z + 420)}{21z^5} + \frac{16\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{21\sqrt{z}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = 2$

07.25.03.0074.01

$${}_2F_2\left(\frac{1}{2}, 3; 2, 2; z\right) = \frac{1}{2} e^{z/2} \left(2I_0\left(\frac{z}{2}\right) - I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.0075.01

$${}_2F_2\left(\frac{1}{2}, 3; 2, \frac{5}{2}; z\right) = \frac{3}{32z^{3/2}} \left(\sqrt{\pi} (6z + 1) \operatorname{erfi}(\sqrt{z}) - 2e^z \sqrt{z} \right)$$

07.25.03.adhm.01

$${}_2F_2\left(\frac{1}{2}, 3; 2, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi} (6z - 1) \operatorname{erf}(\sqrt{z})}{32z^{3/2}} + \frac{3e^{-z}}{16z}$$

07.25.03.adhn.01

$${}_2F_2\left(\frac{1}{2}, 3; 2, 3; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.adho.01

$${}_2F_2\left(\frac{1}{2}, 3; 2, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi}(12z^2 + 4z - 3)\operatorname{erfi}(\sqrt{z})}{256z^{5/2}} - \frac{45e^z(2z - 1)}{128z^2}$$

07.25.03.adhp.01

$${}_2F_2\left(\frac{1}{2}, 3; 2, \frac{7}{2}; -z\right) = \frac{45e^{-z}(2z + 1)}{128z^2} + \frac{15\sqrt{\pi}(12z^2 - 4z - 3)\operatorname{erf}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.adhq.01

$${}_2F_2\left(\frac{1}{2}, 3; 2, 4; z\right) = \frac{2e^{z/2}(3z - 1)I_0\left(\frac{z}{2}\right)}{5z} - \frac{2e^{z/2}(3z^2 + 2z - 4)I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.adhr.01

$${}_2F_2\left(\frac{1}{2}, 3; 2, \frac{9}{2}; z\right) = \frac{105\sqrt{\pi}(8z^3 + 4z^2 - 6z - 15)\operatorname{erfi}(\sqrt{z})}{1024z^{7/2}} - \frac{105e^z(4z^2 + 4z - 15)}{512z^3}$$

07.25.03.adhs.01

$${}_2F_2\left(\frac{1}{2}, 3; 2, \frac{9}{2}; -z\right) = \frac{105e^{-z}(4z^2 - 4z - 15)}{512z^3} + \frac{105\sqrt{\pi}(8z^3 - 4z^2 - 6z + 15)\operatorname{erf}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.adht.01

$${}_2F_2\left(\frac{1}{2}, 3; 2, 5; z\right) = \frac{8e^{z/2}(6z^2 - z - 12)I_0\left(\frac{z}{2}\right)}{35z^2} - \frac{8e^{z/2}(6z^3 + 5z^2 - 4z - 48)I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.adhu.01

$${}_2F_2\left(\frac{1}{2}, 3; 2, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi}(48z^4 + 32z^3 - 72z^2 - 360z - 525)\operatorname{erfi}(\sqrt{z})}{16384z^{9/2}} - \frac{315e^z(24z^3 + 28z^2 - 10z - 525)}{8192z^4}$$

07.25.03.adhv.01

$${}_2F_2\left(\frac{1}{2}, 3; 2, \frac{11}{2}; -z\right) = \frac{315e^{-z}(24z^3 - 28z^2 - 10z + 525)}{8192z^4} + \frac{315\sqrt{\pi}(48z^4 - 32z^3 - 72z^2 + 360z - 525)\operatorname{erf}(\sqrt{z})}{16384z^{9/2}}$$

07.25.03.adhw.01

$${}_2F_2\left(\frac{1}{2}, 3; 2, 6; z\right) = \frac{32e^{z/2}(z^3 - 3z - 12)I_0\left(\frac{z}{2}\right)}{21z^3} - \frac{16e^{z/2}(2z^4 + 2z^3 - 3z^2 - 24z - 96)I_1\left(\frac{z}{2}\right)}{21z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = \frac{5}{2}$

07.25.03.adhx.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{5}{2}, 3; z\right) = \frac{3\sqrt{\pi}(2z + 1)\operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3e^z}{4z}$$

07.25.03.adhy.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{5}{2}, 3; -z\right) = \frac{3\sqrt{\pi}(2z-1)\operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.adhz.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{5}{2}, 4; z\right) = -\frac{3e^z(3z^2+4z-4)}{10z^3} + \frac{3\sqrt{\pi}(6z+5)\operatorname{erfi}(\sqrt{z})}{20z^{3/2}} - \frac{6}{5z^3}$$

07.25.03.adi0.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{5}{2}, 4; -z\right) = \frac{3e^{-z}(3z^2-4z-4)}{10z^3} + \frac{3\sqrt{\pi}(6z-5)\operatorname{erf}(\sqrt{z})}{20z^{3/2}} + \frac{6}{5z^3}$$

07.25.03.adi1.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{5}{2}, 5; z\right) = -\frac{24(7z+9)}{35z^4} - \frac{12e^z(3z^3+5z^2+4z-18)}{35z^4} + \frac{6\sqrt{\pi}(6z+7)\operatorname{erfi}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.adi2.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{5}{2}, 5; -z\right) = \frac{24(7z-9)}{35z^4} + \frac{12e^{-z}(3z^3-5z^2+4z+18)}{35z^4} + \frac{6\sqrt{\pi}(6z-7)\operatorname{erf}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.adi3.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{5}{2}, 6; z\right) = -\frac{12(7z^2+18z+20)}{7z^5} - \frac{4e^z(2z^4+4z^3+3z^2+6z-60)}{7z^5} + \frac{4\sqrt{\pi}(2z+3)\operatorname{erfi}(\sqrt{z})}{7z^{3/2}}$$

07.25.03.adi4.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{5}{2}, 6; -z\right) = \frac{12(7z^2-18z+20)}{7z^5} + \frac{4e^{-z}(2z^4-4z^3+3z^2-6z-60)}{7z^5} + \frac{4\sqrt{\pi}(2z-3)\operatorname{erf}(\sqrt{z})}{7z^{3/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = 3$

07.25.03.adi5.01

$${}_2F_2\left(\frac{1}{2}, 3; 3, 3; z\right) = \frac{4}{3}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(z+1)I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.adi6.01

$${}_2F_2\left(\frac{1}{2}, 3; 3, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi}(4z^2+4z+3)\operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15e^z(2z+3)}{32z^2}$$

07.25.03.adi7.01

$${}_2F_2\left(\frac{1}{2}, 3; 3, \frac{7}{2}; -z\right) = \frac{15e^{-z}(2z-3)}{32z^2} + \frac{15\sqrt{\pi}(4z^2-4z+3)\operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.adi8.01

$${}_2F_2\left(\frac{1}{2}, 3; 3, 4; z\right) = \frac{4e^{z/2}(2z+1)I_0\left(\frac{z}{2}\right)}{5z} - \frac{4e^{z/2}(2z^2+3z+4)I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.adi9.01

$${}_2F_2\left(\frac{1}{2}, 3; 3, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi}(8z^3 + 12z^2 + 18z + 15)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35e^z(4z^2 + 8z + 15)}{128z^3}$$

07.25.03.adia.01

$${}_2F_2\left(\frac{1}{2}, 3; 3, \frac{9}{2}; -z\right) = \frac{35e^{-z}(4z^2 - 8z + 15)}{128z^3} + \frac{35\sqrt{\pi}(8z^3 - 12z^2 + 18z - 15)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.adib.01

$${}_2F_2\left(\frac{1}{2}, 3; 3, 5; z\right) = \frac{32e^{z/2}(2z^2 + 2z + 3)I_0\left(\frac{z}{2}\right)}{35z^2} - \frac{64e^{z/2}(z^3 + 2z^2 + 4z + 6)I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.adic.01

$${}_2F_2\left(\frac{1}{2}, 3; 3, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi}(16z^4 + 32z^3 + 72z^2 + 120z + 105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315e^z(8z^3 + 20z^2 + 50z + 105)}{2048z^4}$$

07.25.03.adid.01

$${}_2F_2\left(\frac{1}{2}, 3; 3, \frac{11}{2}; -z\right) = \frac{315e^{-z}(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315\sqrt{\pi}(16z^4 - 32z^3 + 72z^2 - 120z + 105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.adie.01

$${}_2F_2\left(\frac{1}{2}, 3; 3, 6; z\right) = \frac{32e^{z/2}(4z^3 + 6z^2 + 15z + 24)I_0\left(\frac{z}{2}\right)}{63z^3} - \frac{32e^{z/2}(4z^4 + 10z^3 + 27z^2 + 60z + 96)I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = \frac{7}{2}$

07.25.03.adif.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{7}{2}, 4; z\right) = -\frac{3e^z(6z^2 + 13z + 32)}{16z^3} + \frac{3\sqrt{\pi}(12z^2 + 20z + 45)\operatorname{erfi}(\sqrt{z})}{32z^{5/2}} + \frac{6}{z^3}$$

07.25.03.adig.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{7}{2}, 4; -z\right) = \frac{3e^{-z}(6z^2 - 13z + 32)}{16z^3} + \frac{3\sqrt{\pi}(12z^2 - 20z + 45)\operatorname{erf}(\sqrt{z})}{32z^{5/2}} - \frac{6}{z^3}$$

07.25.03.adih.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{7}{2}, 5; z\right) = \frac{24(7z + 3)}{7z^4} - \frac{3e^z(6z^3 + 17z^2 + 64z + 48)}{14z^4} + \frac{3\sqrt{\pi}(12z^2 + 28z + 105)\operatorname{erfi}(\sqrt{z})}{28z^{5/2}}$$

07.25.03.adii.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{7}{2}, 5; -z\right) = -\frac{24(7z - 3)}{7z^4} + \frac{3e^{-z}(6z^3 - 17z^2 + 64z - 48)}{14z^4} + \frac{3\sqrt{\pi}(12z^2 - 28z + 105)\operatorname{erf}(\sqrt{z})}{28z^{5/2}}$$

07.25.03.adij.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{7}{2}, 6; z\right) = \frac{60(7z^2 + 6z + 4)}{7z^5} - \frac{5e^z(2z^4 + 7z^3 + 36z^2 + 24z + 48)}{7z^5} + \frac{5\sqrt{\pi}(4z^2 + 12z + 63)\operatorname{erfi}(\sqrt{z})}{14z^{5/2}}$$

07.25.03.adik.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{7}{2}, 6; -z\right) = -\frac{60(7z^2 - 6z + 4)}{7z^5} + \frac{5e^{-z}(2z^4 - 7z^3 + 36z^2 - 24z + 48)}{7z^5} + \frac{5\sqrt{\pi}(4z^2 - 12z + 63)\operatorname{erf}(\sqrt{z})}{14z^{5/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = 4$

07.25.03.adil.01

$${}_2F_2\left(\frac{1}{2}, 3; 4, 4; z\right) = \frac{16e^{z/2}(3z^3 + 4z^2 + 15z - 30)I_0\left(\frac{z}{2}\right) - 8e^{z/2}(6z^2 + 14z + 47)I_1\left(\frac{z}{2}\right) + 96}{25z^3}$$

07.25.03.adim.01

$${}_2F_2\left(\frac{1}{2}, 3; 4, \frac{9}{2}; z\right) = -\frac{21e^z(4z^2 + 12z + 53)}{64z^3} + \frac{21\sqrt{\pi}(8z^3 + 20z^2 + 90z - 75)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}} + \frac{42}{z^3}$$

07.25.03.adin.01

$${}_2F_2\left(\frac{1}{2}, 3; 4, \frac{9}{2}; -z\right) = \frac{21e^{-z}(4z^2 - 12z + 53)}{64z^3} + \frac{21\sqrt{\pi}(8z^3 - 20z^2 + 90z + 75)\operatorname{erf}(\sqrt{z})}{128z^{7/2}} - \frac{42}{z^3}$$

07.25.03.adio.01

$${}_2F_2\left(\frac{1}{2}, 3; 4, 5; z\right) = \frac{32e^{z/2}(12z^3 + 26z^2 + 165z - 420)I_0\left(\frac{z}{2}\right) - 32e^{z/2}(12z^3 + 38z^2 + 209z - 180)I_1\left(\frac{z}{2}\right) + 384}{175z^3}$$

07.25.03.adip.01

$${}_2F_2\left(\frac{1}{2}, 3; 4, \frac{11}{2}; z\right) = -\frac{63e^z(24z^3 + 92z^2 + 598z - 525)}{1024z^4} + \frac{63\sqrt{\pi}(48z^4 + 160z^3 + 1080z^2 - 1800z - 525)\operatorname{erfi}(\sqrt{z})}{2048z^{9/2}} + \frac{126}{z^3}$$

07.25.03.adiq.01

$${}_2F_2\left(\frac{1}{2}, 3; 4, \frac{11}{2}; -z\right) = \frac{63e^{-z}(24z^3 - 92z^2 + 598z + 525)}{1024z^4} + \frac{63\sqrt{\pi}(48z^4 - 160z^3 + 1080z^2 + 1800z - 525)\operatorname{erf}(\sqrt{z})}{2048z^{9/2}} - \frac{126}{z^3}$$

07.25.03.adir.01

$${}_2F_2\left(\frac{1}{2}, 3; 4, 6; z\right) = \frac{64e^{z/2}(4z^3 + 12z^2 + 105z - 345)I_0\left(\frac{z}{2}\right) - 64e^{z/2}(4z^4 + 16z^3 + 123z^2 - 210z - 120)I_1\left(\frac{z}{2}\right) + 192}{105z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = \frac{9}{2}$

07.25.03.adis.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{9}{2}, 5; z\right) = \frac{24(7z - 3)}{z^4} - \frac{3e^z(4z^3 + 16z^2 + 115z - 192)}{8z^4} + \frac{3\sqrt{\pi}(8z^3 + 28z^2 + 210z - 525)\operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.adit.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{9}{2}, 5; -z\right) = -\frac{24(7z + 3)}{z^4} + \frac{3e^{-z}(4z^3 - 16z^2 + 115z + 192)}{8z^4} + \frac{3\sqrt{\pi}(8z^3 - 28z^2 + 210z + 525)\operatorname{erf}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.adiu.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{9}{2}, 6; z\right) = \frac{20(21z^2 - 18z - 4)}{z^5} - \frac{5e^z(4z^4 + 20z^3 + 201z^2 - 672z - 192)}{12z^5} + \frac{5\sqrt{\pi}(8z^3 + 36z^2 + 378z - 1575)\operatorname{erfi}(\sqrt{z})}{24z^{7/2}}$$

07.25.03.adiv.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{9}{2}, 6; -z\right) = \frac{20(21z^2 + 18z - 4)}{z^5} + \frac{5e^{-z}(4z^4 - 20z^3 + 201z^2 + 672z - 192)}{12z^5} + \frac{5\sqrt{\pi}(8z^3 - 36z^2 + 378z + 1575)\operatorname{erf}(\sqrt{z})}{24z^{7/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = 5$

07.25.03.adiv.01

$${}_2F_2\left(\frac{1}{2}, 3; 5, 5; z\right) = \frac{1536(7z - 6)}{35z^4} + \frac{256e^{z/2}(12z^4 + 40z^3 + 417z^2 - 2100z + 1260)I_0\left(\frac{z}{2}\right)}{1225z^4} - \frac{256e^{z/2}(12z^3 + 52z^2 + 475z - 1587)I_1\left(\frac{z}{2}\right)}{1225z^3}$$

07.25.03.adix.01

$${}_2F_2\left(\frac{1}{2}, 3; 5, \frac{11}{2}; z\right) = \frac{72(7z - 9)}{z^4} - \frac{9e^z(24z^3 + 124z^2 + 1334z - 5541)}{128z^4} + \frac{9\sqrt{\pi}(48z^4 + 224z^3 + 2520z^2 - 12600z + 3675)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.adiy.01

$${}_2F_2\left(\frac{1}{2}, 3; 5, \frac{11}{2}; -z\right) = \frac{72(7z + 9)}{z^4} + \frac{9e^{-z}(24z^3 - 124z^2 + 1334z + 5541)}{128z^4} + \frac{9\sqrt{\pi}(48z^4 - 224z^3 + 2520z^2 + 12600z + 3675)\operatorname{erf}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.adiz.01

$${}_2F_2\left(\frac{1}{2}, 3; 5, 6; z\right) = \frac{768(7z - 12)}{7z^4} + \frac{256e^{z/2}(8z^4 + 36z^3 + 516z^2 - 3885z + 3780)I_0\left(\frac{z}{2}\right)}{735z^4} - \frac{256e^{z/2}(8z^4 + 44z^3 + 564z^2 - 3291z + 840)I_1\left(\frac{z}{2}\right)}{735z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = \frac{11}{2}$

07.25.03.adj0.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{11}{2}, 6; z\right) = \frac{180(7z^2 - 18z + 4)}{z^5} - \frac{15e^z(8z^4 + 52z^3 + 786z^2 - 5871z + 3072)}{64z^5} + \frac{15\sqrt{\pi}(16z^4 + 96z^3 + 1512z^2 - 12600z + 11025)\operatorname{erfi}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.adj1.01

$${}_2F_2\left(\frac{1}{2}, 3; \frac{11}{2}, 6; -z\right) = -\frac{180(7z^2 + 18z + 4)}{z^5} + \frac{15e^{-z}(8z^4 - 52z^3 + 786z^2 + 5871z + 3072)}{64z^5} + \frac{15\sqrt{\pi}(16z^4 - 96z^3 + 1512z^2 + 12600z + 11025)\operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 3$, $b_1 = 6$

07.25.03.adj2.01

$${}_2F_2\left(\frac{1}{2}, 3; 6, 6; z\right) = \frac{640(21z^2 - 72z + 32)}{7z^5} + \frac{1024e^{z/2}(4z^5 + 24z^4 + 474z^3 - 5556z^2 + 10395z - 3780)I_0\left(\frac{z}{2}\right)}{1323z^5} - \frac{512e^{z/2}(8z^4 + 56z^3 + 1008z^2 - 10068z + 11307)I_1\left(\frac{z}{2}\right)}{1323z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.adj3.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{1620840375} \left(e^z (32768z^{15} + 2408448z^{14} + 68935680z^{13} + 988385280z^{12} + 7612508160z^{11} + 31410478080z^{10} + 65358558720z^9 + 59494176000z^8 + 17064432000z^7 + 485352000z^6 + 1360800z^5 + 59194800z^4 - 233037000z^3 + 732280500z^2 - 1527072750z + 1620840375) \right)$$

07.25.03.adj4.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{147349125} \left(e^z (16384z^{14} + 1064960z^{13} + 26480640z^{12} + 322068480z^{11} + 2034877440z^{10} + 6548290560z^9 + 9760262400z^8 + 5346432000z^7 + 512568000z^6 - 13608000z^5 - 6123600z^4 + 20412000z^3 - 65488500z^2 + 136930500z - 147349125) \right)$$

07.25.03.adj5.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{16372125} \left(e^z (8192z^{13} + 462848z^{12} + 9768960z^{11} + 97536000z^{10} + 480990720z^9 + 1109687040z^8 + 996226560z^7 + 182649600z^6 - 17690400z^5 + 2041200z^4 - 2041200z^3 + 7144200z^2 - 14883750z + 16372125) \right)$$

07.25.03.adj6.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{2338875} (e^z (4096 z^{12} + 196608 z^{11} + 3409920 z^{10} + 26603520 z^9 + 94176000 z^8 + 131051520 z^7 + 39432960 z^6 - 7257600 z^5 + 2041200 z^4 - 1020600 z^2 + 2041200 z - 2338875))$$

07.25.03.adj7.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{467775} (e^z (2048 z^{11} + 80896 z^{10} + 1098240 z^9 + 6163200 z^8 + 13190400 z^7 + 6168960 z^6 - 1874880 z^5 + 1058400 z^4 - 567000 z^3 + 283500 z^2 - 368550 z + 467775))$$

07.25.03.adj8.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{155925} (e^z (1024 z^{10} + 31744 z^9 + 311040 z^8 + 1059840 z^7 + 766080 z^6 - 362880 z^5 + 332640 z^4 - 302400 z^3 + 170100 z^2 + 56700 z - 155925))$$

07.25.03.adj9.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{155925} e^z (512 z^9 + 11520 z^8 + 69120 z^7 + 80640 z^6 - 60480 z^5 + 90720 z^4 - 151200 z^3 + 226800 z^2 - 255150 z + 155925)$$

07.25.03.adja.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{155925} \frac{(e^{z/2} (256 z^9 + 4864 z^8 + 22464 z^7 + 12480 z^6 - 6480 z^5 + 10800 z^4 - 27000 z^3 + 66600 z^2 - 127575 z + 155925) I_0\left(\frac{z}{2}\right) + e^{z/2} (256 z^9 + 4608 z^8 + 17984 z^7 - 3456 z^6 + 2160 z^5 - 9000 z^3 + 32400 z^2 - 53775 z) I_1\left(\frac{z}{2}\right))}{155925}$$

07.25.03.adjb.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (256 z^8 + 3584 z^7 + 7680 z^6 - 9600 z^5 + 22560 z^4 - 56160 z^3 + 120960 z^2 - 189000 z + 155925)}{155925}$$

07.25.03.adjc.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{155925} e^{z/2} (256 z^8 + 2688 z^7 + 2112 z^6 - 2880 z^5 + 10800 z^4 - 39600 z^3 + 111960 z^2 - 204120 z + 155925) I_0\left(\frac{z}{2}\right) + \frac{1}{155925} e^{z/2} (256 z^8 + 2432 z^7 - 192 z^6 - 1728 z^5 + 10800 z^4 - 46800 z^3 + 150840 z^2 - 334440 z + 405405) I_1\left(\frac{z}{2}\right)$$

07.25.03.adjd.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 704 z^6 - 1440 z^5 + 4560 z^4 - 13800 z^3 + 34020 z^2 - 58590 z + 51975)}{51975}$$

07.25.03.adje.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, 3; z\right) = \frac{16 e^{z/2} (32 z^7 + 64 z^6 - 240 z^5 + 1200 z^4 - 5100 z^3 + 16920 z^2 - 39690 z + 51975) I_0\left(\frac{z}{2}\right)}{155925} + \frac{1}{155925 z} 4 e^{z/2} (128 z^8 + 128 z^7 - 1024 z^6 + 5760 z^5 - 26400 z^4 + 96720 z^3 - 270720 z^2 + 540540 z - 675675) I_1\left(\frac{z}{2}\right)$$

07.25.03.adjf.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (64 z^6 - 192 z^5 + 720 z^4 - 2400 z^3 + 6300 z^2 - 11340 z + 10395)}{10395}$$

07.25.03.adjg.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{51975 z} 4 e^{z/2} (128 z^7 - 832 z^6 + 5184 z^5 - 28080 z^4 + 128400 z^3 - 476280 z^2 + 1330560 z - 2297295) I_0\left(\frac{z}{2}\right) + \frac{1}{51975 z^2} (4 e^{z/2} (128 z^8 - 960 z^7 + 6208 z^6 - 34896 z^5 + 167760 z^4 - 672360 z^3 + 2162160 z^2 - 5270265 z + 9189180) I_1\left(\frac{z}{2}\right))$$

07.25.03.adjh.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{1485 z^3} e^z (32 z^8 - 368 z^7 + 3120 z^6 - 21480 z^5 + 121290 z^4 - 551475 z^3 + 1935360 z^2 - 4838400 z + 7257600) - \frac{26880 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.adji.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{1485 z^3} e^{-z} (-32 z^8 - 368 z^7 - 3120 z^6 - 21480 z^5 - 121290 z^4 - 551475 z^3 - 1935360 z^2 - 4838400 z - 7257600) + \frac{26880 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.adjj.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{51975 z^2} 32 e^{z/2} (64 z^7 - 960 z^6 + 9744 z^5 - 76560 z^4 + 476280 z^3 - 2304720 z^2 + 8204625 z - 18706545) I_0\left(\frac{z}{2}\right) + \frac{1}{51975 z^3} (32 e^{z/2} (64 z^8 - 1024 z^7 + 10800 z^6 - 87936 z^5 + 570840 z^4 - 2934360 z^3 + 11563695 z^2 - 32818500 z + 74826180) I_1\left(\frac{z}{2}\right))$$

07.25.03.adjk.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{165 z^4} e^z (16 z^8 - 320 z^7 + 3960 z^6 - 36480 z^5 + 261285 z^4 - 1451520 z^3 + 6048000 z^2 - 17539200 z + 31752000) - \frac{30240 \sqrt{\pi} (4z + 35) \operatorname{erfi}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.adjl.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{165 z^4} e^{-z} (16 z^8 + 320 z^7 + 3960 z^6 + 36480 z^5 + 261285 z^4 + 1451520 z^3 + 6048000 z^2 + 17539200 z + 31752000) + \frac{30240 \sqrt{\pi} (4z - 35) \operatorname{erf}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.adjm.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{10395 z^3} 32 e^{z/2} (64 z^7 - 1504 z^6 + 20976 z^5 - 211680 z^4 + 1622280 z^3 - 9407970 z^2 + 39491595 z - 116396280) I_0\left(\frac{z}{2}\right) + \frac{1}{10395 z^4} (32 e^{z/2} (64 z^8 - 1568 z^7 + 22576 z^6 - 235104 z^5 + 1870440 z^4 - 11424270 z^3 + 52181415 z^2 - 157966380 z + 465585120) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.adjn.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{13395375} (e^z (8192 z^{13} + 471040 z^{12} + 10178560 z^{11} + 105052160 z^{10} + 544704000 z^9 + 1367681280 z^8 + 1460928000 z^7 + 481824000 z^6 + 15372000 z^5 + 882000 z^4 - 1738800 z^3 + 5859000 z^2 - 12237750 z + 13395375))$$

07.25.03.adjo.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{1488375} (e^z (4096 z^{12} + 204800 z^{11} + 3758080 z^{10} + 31856640 z^9 + 128997120 z^8 + 232350720 z^7 + 149587200 z^6 + 16531200 z^5 - 579600 z^4 + 151200 z^3 - 642600 z^2 + 1323000 z - 1488375))$$

07.25.03.adj.p.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{212625} (e^z (2048 z^{11} + 87040 z^{10} + 1313280 z^9 + 8705280 z^8 + 25324800 z^7 + 27538560 z^6 + 5947200 z^5 - 655200 z^4 + 37800 z^3 + 94500 z^2 - 179550 z + 212625))$$

07.25.03.adj.q.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{42525} (e^z (1024 z^{10} + 35840 z^9 + 423680 z^8 + 2022400 z^7 + 3561600 z^6 + 1303680 z^5 - 285600 z^4 + 100800 z^3 - 31500 z^2 + 31500 z - 42525))$$

07.25.03.adj.r.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{14175} e^z (512 z^9 + 14080 z^8 + 120320 z^7 + 349440 z^6 + 208320 z^5 - 77280 z^4 + 50400 z^3 - 25200 z^2 - 3150 z + 14175)$$

07.25.03.adj.s.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{14175} e^z (256 z^8 + 5120 z^7 + 26880 z^6 + 26880 z^5 - 16800 z^4 + 20160 z^3 - 25200 z^2 + 25200 z - 14175)$$

07.25.03.adj.t.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (-128 z^8 - 2176 z^7 - 8960 z^6 - 4800 z^5 + 2400 z^4 - 3600 z^3 + 7200 z^2 - 12600 z + 14175) I_0\left(\frac{z}{2}\right) - 8 e^{z/2} (16 z^8 + 256 z^7 + 872 z^6 - 160 z^5 + 90 z^4 - 225 z^2 + 450 z) I_1\left(\frac{z}{2}\right)}{14175}$$

07.25.03.adj.u.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{e^z (128 z^7 + 1600 z^6 + 3040 z^5 - 3280 z^4 + 6360 z^3 - 12180 z^2 + 17850 z - 14175)}{14175}$$

07.25.03.adj.v.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (-128 z^7 - 1216 z^6 - 960 z^5 + 1200 z^4 - 3600 z^3 + 9720 z^2 - 17640 z + 14175) I_0\left(\frac{z}{2}\right) + e^{z/2} (-128 z^7 - 1088 z^6 + 64 z^5 + 720 z^4 - 3600 z^3 + 11880 z^2 - 26280 z + 31185) I_1\left(\frac{z}{2}\right)}{14175}$$

07.25.03.adj.w.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{e^z (64 z^6 + 320 z^5 - 560 z^4 + 1440 z^3 - 3300 z^2 + 5460 z - 4725)}{4725}$$

07.25.03.adjx.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, 3; z\right) = -\frac{4 e^{z/2} (64 z^6 + 128 z^5 - 400 z^4 + 1600 z^3 - 5160 z^2 + 11\,760 z - 14\,805) I_0\left(\frac{z}{2}\right)}{14\,175} - \frac{4 e^{z/2} (64 z^7 + 64 z^6 - 432 z^5 + 2000 z^4 - 7240 z^3 + 19\,800 z^2 - 38\,115 z + 45\,045) I_1\left(\frac{z}{2}\right)}{14\,175 z}$$

07.25.03.adjy.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{1}{945} e^z (32 z^5 - 80 z^4 + 240 z^3 - 600 z^2 + 1050 z - 945)$$

07.25.03.adjz.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, 4; z\right) = -\frac{4 e^{z/2} (64 z^6 - 352 z^5 + 1840 z^4 - 8160 z^3 + 29\,400 z^2 - 80\,010 z + 135\,135) I_0\left(\frac{z}{2}\right)}{4725 z} - \frac{4 e^{z/2} (64 z^7 - 416 z^6 + 2288 z^5 - 10\,720 z^4 + 41\,880 z^3 - 131\,670 z^2 + 315\,315 z - 540\,540) I_1\left(\frac{z}{2}\right)}{4725 z^2}$$

07.25.03.adk0.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (-16 z^7 + 160 z^6 - 1160 z^5 + 6680 z^4 - 30\,585 z^3 + 107\,520 z^2 - 268\,800 z + 403\,200)}{135 z^3} - \frac{4480 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{3 z^{7/2}}$$

07.25.03.adk1.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-16 z^7 - 160 z^6 - 1160 z^5 - 6680 z^4 - 30\,585 z^3 - 107\,520 z^2 - 268\,800 z - 403\,200)}{135 z^3} + \frac{4480 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{3 z^{7/2}}$$

07.25.03.adk2.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, 5; z\right) = -\frac{32 e^{z/2} (32 z^6 - 416 z^5 + 3600 z^4 - 23\,520 z^3 + 117\,090 z^2 - 424\,710 z + 984\,555) I_0\left(\frac{z}{2}\right)}{4725 z^2} - \frac{1}{4725 z^3} 64 e^{z/2} (16 z^7 - 224 z^6 + 2032 z^5 - 13\,920 z^4 + 73\,755 z^3 - 296\,010 z^2 + 849\,420 z - 1\,969\,110) I_1\left(\frac{z}{2}\right)$$

07.25.03.adk3.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (-8 z^7 + 140 z^6 - 1490 z^5 + 11\,535 z^4 - 67\,200 z^3 + 288\,960 z^2 - 856\,800 z + 1\,587\,600)}{15 z^4} - \frac{840 \sqrt{\pi} (8 z + 63) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.adk4.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (8 z^7 + 140 z^6 + 1490 z^5 + 11\,535 z^4 + 67\,200 z^3 + 288\,960 z^2 + 856\,800 z + 1\,587\,600)}{15 z^4} + \frac{840 \sqrt{\pi} (8 z - 63) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.adk5.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{9}{2}, 6; z\right) = -\frac{32 e^{z/2} (32 z^6 - 656 z^5 + 7840 z^4 - 66100 z^3 + 407550 z^2 - 1786785 z + 5542680) I_0\left(\frac{z}{2}\right)}{945 z^3} - \frac{1}{945 z^4} 32 e^{z/2} (32 z^7 - 688 z^6 + 8544 z^5 - 75020 z^4 + 487630 z^3 - 2323035 z^2 + 7147140 z - 22170720) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.adk6.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{165375} (e^z (2048 z^{11} + 89088 z^{10} + 1389056 z^9 + 9677568 z^8 + 30627072 z^7 + 39607680 z^6 + 15382080 z^5 + 574560 z^4 - 2520 z^3 + 71820 z^2 - 141750 z + 165375))$$

07.25.03.adk7.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{23625} (e^z (1024 z^{10} + 37888 z^9 + 486144 z^8 + 2651136 z^7 + 6034560 z^6 + 4717440 z^5 + 614880 z^4 - 20160 z^3 - 11340 z^2 + 18900 z - 23625))$$

07.25.03.adk8.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{4725} e^z (512 z^9 + 15616 z^8 + 157184 z^7 + 618240 z^6 + 853440 z^5 + 225120 z^4 - 30240 z^3 + 5040 z^2 - 3150 z + 4725)$$

07.25.03.adk9.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{e^z (256 z^8 + 6144 z^7 + 44800 z^6 + 107520 z^5 + 50400 z^4 - 13440 z^3 + 5040 z^2 - 1575)}{1575}$$

07.25.03.adka.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575)}{1575}$$

07.25.03.adkb.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (64 z^7 + 960 z^6 + 3472 z^5 + 1776 z^4 - 840 z^3 + 1080 z^2 - 1575 z + 1575) I_0\left(\frac{z}{2}\right)}{1575} + \frac{e^{z/2} (64 z^7 + 896 z^6 + 2608 z^5 - 448 z^4 + 216 z^3 - 225 z) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.adkc.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z (64 z^6 + 704 z^5 + 1168 z^4 - 1056 z^3 + 1596 z^2 - 2100 z + 1575)}{1575}$$

07.25.03.adkd.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 + 544 z^5 + 432 z^4 - 480 z^3 + 1080 z^2 - 1890 z + 1575) I_0\left(\frac{z}{2}\right)}{1575} + \frac{e^{z/2} (64 z^6 + 480 z^5 - 16 z^4 - 288 z^3 + 1080 z^2 - 2430 z + 2835) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.adke.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{525} e^z (32 z^5 + 144 z^4 - 208 z^3 + 408 z^2 - 630 z + 525)$$

07.25.03.adkf.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, 3; z\right) = \frac{8 e^{z/2} (16 z^5 + 32 z^4 - 80 z^3 + 240 z^2 - 525 z + 630) I_0\left(\frac{z}{2}\right)}{1575} + \frac{4 e^{z/2} (32 z^6 + 32 z^5 - 176 z^4 + 640 z^3 - 1710 z^2 + 3150 z - 3465) I_1\left(\frac{z}{2}\right)}{1575 z}$$

07.25.03.adkg.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{105} e^z (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105)$$

07.25.03.adkh.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 - 144 z^4 + 608 z^3 - 2100 z^2 + 5502 z - 9009) I_0\left(\frac{z}{2}\right)}{525 z} + \frac{4 e^{z/2} (32 z^6 - 176 z^5 + 800 z^4 - 3020 z^3 + 9198 z^2 - 21483 z + 36036) I_1\left(\frac{z}{2}\right)}{525 z^2}$$

07.25.03.adki.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (8 z^6 - 68 z^5 + 410 z^4 - 1905 z^3 + 6720 z^2 - 16800 z + 25200)}{15 z^3} - \frac{840 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.adkj.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-8 z^6 - 68 z^5 - 410 z^4 - 1905 z^3 - 6720 z^2 - 16800 z - 25200)}{15 z^3} + \frac{840 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.adkk.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^5 - 176 z^4 + 1260 z^3 - 6564 z^2 + 24453 z - 57915) I_0\left(\frac{z}{2}\right)}{525 z^2} + \frac{32 e^{z/2} (16 z^6 - 192 z^5 + 1460 z^4 - 8136 z^3 + 33561 z^2 - 97812 z + 231660) I_1\left(\frac{z}{2}\right)}{525 z^3}$$

07.25.03.adkl.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (4 z^6 - 60 z^5 + 535 z^4 - 3360 z^3 + 15120 z^2 - 46200 z + 88200)}{5 z^4} - \frac{3780 \sqrt{\pi} (z+7) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.adkm.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (4 z^6 + 60 z^5 + 535 z^4 + 3360 z^3 + 15120 z^2 + 46200 z + 88200)}{5 z^4} + \frac{3780 \sqrt{\pi} (z-7) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.adkn.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 280 z^4 + 2788 z^3 - 18876 z^2 + 87945 z - 291720) I_0\left(\frac{z}{2}\right)}{105 z^3} + \frac{32 e^{z/2} (16 z^6 - 296 z^5 + 3092 z^4 - 22132 z^3 + 111969 z^2 - 351780 z + 1166880) I_1\left(\frac{z}{2}\right)}{105 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.adko.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{3375} e^z (512 z^9 + 16128 z^8 + 170496 z^7 + 728832 z^6 + 1195200 z^5 + 565920 z^4 + 24480 z^3 + 2160 z^2 - 2430 z + 3375)$$

07.25.03.adkp.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{675} e^z (256 z^8 + 6656 z^7 + 55296 z^6 + 170880 z^5 + 170400 z^4 + 27360 z^3 - 1440 z^2 + 360 z - 675)$$

07.25.03.adkq.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{225} e^z (128 z^7 + 2624 z^6 + 15840 z^5 + 30000 z^4 + 10200 z^3 - 1620 z^2 + 90 z + 225)$$

07.25.03.adkr.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{225} e^z (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225)$$

07.25.03.adks.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{225} e^{z/2} (-32 z^6 - 416 z^5 - 1296 z^4 - 624 z^3 + 270 z^2 - 270 z + 225) I_0\left(\frac{z}{2}\right) - \frac{2}{225} e^{z/2} (16 z^6 + 192 z^5 + 464 z^4 - 72 z^3 + 27 z^2) I_1\left(\frac{z}{2}\right)$$

07.25.03.adkt.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{225} e^z (32 z^5 + 304 z^4 + 432 z^3 - 312 z^2 + 330 z - 225)$$

07.25.03.adku.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{225} e^{z/2} (-32 z^5 - 240 z^4 - 192 z^3 + 180 z^2 - 270 z + 225) I_0\left(\frac{z}{2}\right) + \frac{1}{225} e^{z/2} (-32 z^5 - 208 z^4 + 108 z^2 - 270 z + 315) I_1\left(\frac{z}{2}\right)$$

07.25.03.adkv.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{1}{75} e^z (16 z^4 + 64 z^3 - 72 z^2 + 96 z - 75)$$

07.25.03.adkw.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, 3; z\right) = -\frac{4}{225} e^{z/2} (16z^4 + 32z^3 - 60z^2 + 120z - 135) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (16z^5 + 16z^4 - 68z^3 + 180z^2 - 315z + 315) I_1\left(\frac{z}{2}\right)}{225z}$$

07.25.03.adkx.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{1}{15} e^z (8z^3 - 12z^2 + 18z - 15)$$

07.25.03.adky.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (16z^4 - 56z^3 + 180z^2 - 444z + 693) I_0\left(\frac{z}{2}\right)}{75z} - \frac{4 e^{z/2} (16z^5 - 72z^4 + 260z^3 - 756z^2 + 1701z - 2772) I_1\left(\frac{z}{2}\right)}{75z^2}$$

07.25.03.adkz.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7 e^z (4z^5 - 28z^4 + 135z^3 - 480z^2 + 1200z - 1800)}{15z^3} - \frac{420 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.adl0.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{420 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}} - \frac{7 e^{-z} (4z^5 + 28z^4 + 135z^3 + 480z^2 + 1200z + 1800)}{15z^3}$$

07.25.03.adl1.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (8z^4 - 72z^3 + 408z^2 - 1584z + 3861) I_0\left(\frac{z}{2}\right)}{75z^2} - \frac{128 e^{z/2} (2z^5 - 20z^4 + 123z^3 - 531z^2 + 1584z - 3861) I_1\left(\frac{z}{2}\right)}{75z^3}$$

07.25.03.adl2.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{21 e^z (4z^5 - 50z^4 + 360z^3 - 1740z^2 + 5550z - 11025)}{10z^4} - \frac{945 \sqrt{\pi} (8z + 49) \operatorname{erfi}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.adl3.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (4z^5 + 50z^4 + 360z^3 + 1740z^2 + 5550z + 11025)}{10z^4} + \frac{945 \sqrt{\pi} (8z - 49) \operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.adl4.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (8z^4 - 116z^3 + 924z^2 - 4719z + 17160) I_0\left(\frac{z}{2}\right)}{15z^3} - \frac{32 e^{z/2} (8z^5 - 124z^4 + 1052z^3 - 5841z^2 + 18876z - 68640) I_1\left(\frac{z}{2}\right)}{15z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.adl5.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{135} e^z (128 z^7 + 2752 z^6 + 18016 z^5 + 40400 z^4 + 24600 z^3 + 1380 z^2 - 30 z + 135)$$

07.25.03.adl6.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{45} e^z (64 z^6 + 1088 z^5 + 5200 z^4 + 7200 z^3 + 1500 z^2 - 60 z - 45)$$

07.25.03.adl7.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{45} e^z (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45)$$

07.25.03.adl8.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{45} e^{z/2} (16 z^5 + 176 z^4 + 460 z^3 + 204 z^2 - 75 z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (16 z^5 + 160 z^4 + 308 z^3 - 40 z^2 + 9 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.adl9.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{45} e^z (16 z^4 + 128 z^3 + 152 z^2 - 80 z + 45)$$

07.25.03.adla.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{45} e^{z/2} (16 z^4 + 104 z^3 + 84 z^2 - 60 z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (16 z^4 + 88 z^3 + 4 z^2 - 36 z + 45) I_1\left(\frac{z}{2}\right)$$

07.25.03.adlb.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{15} e^z (8 z^3 + 28 z^2 - 22 z + 15)$$

07.25.03.adlc.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, 3; z\right) = \frac{16}{45} e^{z/2} (2 z^3 + 4 z^2 - 5 z + 5) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8 z^4 + 8 z^3 - 24 z^2 + 40 z - 35) I_1\left(\frac{z}{2}\right)}{45 z}$$

07.25.03.adld.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{3} e^z (4 z^2 - 4 z + 3)$$

07.25.03.adle.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (8 z^3 - 20 z^2 + 44 z - 63) I_0\left(\frac{z}{2}\right)}{15 z} + \frac{4 e^{z/2} (8 z^4 - 28 z^3 + 76 z^2 - 161 z + 252) I_1\left(\frac{z}{2}\right)}{15 z^2}$$

07.25.03.adlf.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (2 z^4 - 11 z^3 + 40 z^2 - 100 z + 150)}{3 z^3} - \frac{175 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.adlg.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{175 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}} - \frac{7 e^{-z} (2 z^4 + 11 z^3 + 40 z^2 + 100 z + 150)}{3 z^3}$$

07.25.03.adlh.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (4 z^3 - 28 z^2 + 117 z - 297) I_0\left(\frac{z}{2}\right)}{15 z^2} + \frac{32 e^{z/2} (4 z^4 - 32 z^3 + 151 z^2 - 468 z + 1188) I_1\left(\frac{z}{2}\right)}{15 z^3}$$

07.25.03.adli.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{21 e^z (4 z^4 - 40 z^3 + 220 z^2 - 750 z + 1575)}{4 z^4} - \frac{1575 \sqrt{\pi} (4 z + 21) \operatorname{erfi}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.adlj.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (4 z^4 + 40 z^3 + 220 z^2 + 750 z + 1575)}{4 z^4} + \frac{1575 \sqrt{\pi} (4 z - 21) \operatorname{erf}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.adlk.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (4 z^3 - 46 z^2 + 275 z - 1144) I_0\left(\frac{z}{2}\right)}{3 z^3} + \frac{32 e^{z/2} (4 z^4 - 50 z^3 + 327 z^2 - 1100 z + 4576) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.adll.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (32 z^5 + 432 z^4 + 1520 z^3 + 1320 z^2 + 90 z + 15)$$

07.25.03.adlm.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{15} e^z (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15)$$

07.25.03.adln.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-8 z^4 - 72 z^3 - 152 z^2 - 60 z + 15) I_0\left(\frac{z}{2}\right) - \frac{4}{15} e^{z/2} (2 z^4 + 16 z^3 + 23 z^2 - 2 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.adlo.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{15} e^z (8 z^3 + 52 z^2 + 50 z - 15)$$

07.25.03.adlp.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (-8 z^3 - 44 z^2 - 36 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-8 z^3 - 36 z^2 - 4 z + 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.adlq.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{1}{5} e^z (4 z^2 + 12 z - 5)$$

07.25.03.adlr.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, 3; z\right) = -\frac{4}{15} e^{z/2} (4 z^2 + 8 z - 5) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4 z^3 + 4 z^2 - 7 z + 5) I_1\left(\frac{z}{2}\right)}{15 z}$$

07.25.03.adls.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -e^z (2 z - 1)$$

07.25.03.adlt.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, 4; z\right) = -\frac{4 e^{z/2} (4 z^2 - 6 z + 7) I_0\left(\frac{z}{2}\right)}{5 z} - \frac{4 e^{z/2} (4 z^3 - 10 z^2 + 19 z - 28) I_1\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.adlu.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{7 e^z (z^3 - 4 z^2 + 10 z - 15)}{z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 z^{7/2}}$$

07.25.03.adlv.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 z^{7/2}} - \frac{7 e^{-z} (z^3 + 4 z^2 + 10 z + 15)}{z^3}$$

07.25.03.adlw.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, 5; z\right) = -\frac{32 e^{z/2} (2 z^2 - 10 z + 27) I_0\left(\frac{z}{2}\right)}{5 z^2} - \frac{64 e^{z/2} (z^3 - 6 z^2 + 20 z - 54) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.adlx.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{63 e^z (8 z^3 - 60 z^2 + 230 z - 525)}{16 z^4} - \frac{945 \sqrt{\pi} (8 z + 35) \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.adly.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8 z^3 + 60 z^2 + 230 z + 525)}{16 z^4} + \frac{945 \sqrt{\pi} (8 z - 35) \operatorname{erf}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.adlz.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; -\frac{1}{2}, 6; z\right) = -\frac{32 e^{z/2} (2 z^2 - 17 z + 88) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (2 z^3 - 19 z^2 + 68 z - 352) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{1}{2}$

07.25.03.adm0.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{15} e^z (8 z^3 + 60 z^2 + 90 z + 15)$$

07.25.03.adm1.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (4 z^3 + 28 z^2 + 45 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4 z^3 + 24 z^2 + 23 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.adm2.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (4 z^2 + 20 z + 15)$$

07.25.03.adm3.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4 z^2 + 18 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4 z^2 + 14 z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.adm4.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{5} e^z (2 z + 5)$$

07.25.03.adm5.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, 3; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2 z^2 + 2 z - 1) I_1\left(\frac{z}{2}\right)}{15 z}$$

07.25.03.adm6.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = e^z$$

07.25.03.adm7.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (2z - 1) I_0\left(\frac{z}{2}\right)}{5z} + \frac{4 e^{z/2} (2z^2 - 3z + 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.adm8.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4z^2 - 10z + 15)}{8z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.adm9.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{7 e^{-z} (4z^2 + 10z + 15)}{8z^3}$$

07.25.03.adma.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (z - 3) I_0\left(\frac{z}{2}\right)}{5z^2} + \frac{32 e^{z/2} (z^2 - 4z + 12) I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.admb.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (8z^2 - 40z + 105)}{32z^4} - \frac{945 \sqrt{\pi} (2z + 7) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.admc.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8z^2 + 40z + 105)}{32z^4} + \frac{945 \sqrt{\pi} (2z - 7) \operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.admd.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (z - 8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 1$

07.25.03.adme.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{15} e^{z/2} (2z^2 + 10z + 15) I_0\left(\frac{z}{2}\right) + \frac{2}{15} e^{z/2} (z^2 + 4z) I_1\left(\frac{z}{2}\right)$$

07.25.03.admf.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{5} e^{z/2} (z + 5) I_0\left(\frac{z}{2}\right) + \frac{1}{5} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.admg.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; 1, \frac{7}{2}; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{3}{2}$

07.25.03.admh.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (2z + 7) + \frac{4\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{15\sqrt{z}}$$

07.25.03.admi.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} e^{-z} (7 - 2z) + \frac{4\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{15\sqrt{z}}$$

07.25.03.admj.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (2z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (2z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.admk.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{2\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{5\sqrt{z}} + \frac{e^z}{5}$$

07.25.03.adml.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{2\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{5\sqrt{z}} + \frac{e^{-z}}{5}$$

07.25.03.admm.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, 3; z\right) = \frac{44}{45} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (5z - 1) I_1\left(\frac{z}{2}\right)}{45z}$$

07.25.03.admn.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.admo.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.admp.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (16z + 3) I_0\left(\frac{z}{2}\right)}{75z} - \frac{4 e^{z/2} (16z^2 - 11z + 12) I_1\left(\frac{z}{2}\right)}{75z^2}$$

07.25.03.admq.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi} (8z^3 + 15) \operatorname{erfi}(\sqrt{z})}{96z^{7/2}} - \frac{7e^z (4z^2 - 10z + 15)}{48z^3}$$

07.25.03.admr.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} (4z^2 + 10z + 15)}{48z^3} + \frac{7\sqrt{\pi} (8z^3 - 15) \operatorname{erf}(\sqrt{z})}{96z^{7/2}}$$

07.25.03.adms.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (16z^2 - 12z + 45) I_0\left(\frac{z}{2}\right)}{525z^2} - \frac{128 e^{z/2} (4z^3 + z^2 - 12z + 45) I_1\left(\frac{z}{2}\right)}{525z^3}$$

07.25.03.admt.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{21\sqrt{\pi}(16z^4 + 120z + 315)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}} - \frac{21e^z(8z^3 + 4z^2 - 90z + 315)}{256z^4}$$

07.25.03.admu.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z}(8z^3 - 4z^2 - 90z - 315)}{256z^4} + \frac{21\sqrt{\pi}(16z^4 - 120z + 315)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.admv.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{3}{2}, 6; z\right) = \frac{32e^{z/2}(32z^3 - 24z^2 - 15z + 840)I_0\left(\frac{z}{2}\right)}{945z^3} - \frac{32e^{z/2}(32z^4 + 8z^3 + 9z^2 - 60z + 3360)I_1\left(\frac{z}{2}\right)}{945z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 2$

07.25.03.admw.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; 2, \frac{5}{2}; z\right) = e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{3}{5}e^{z/2}I_1\left(\frac{z}{2}\right)$$

07.25.03.admx.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; 2, \frac{7}{2}; z\right) = e^{z/2}I_0\left(\frac{z}{2}\right) - e^{z/2}I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{5}{2}$

07.25.03.admy.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi}(4z + 1)\operatorname{erfi}(\sqrt{z})}{20z^{3/2}} - \frac{3e^z}{10z}$$

07.25.03.admz.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi}(4z - 1)\operatorname{erf}(\sqrt{z})}{20z^{3/2}} + \frac{3e^{-z}}{10z}$$

07.25.03.adn0.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, 3; z\right) = \frac{16}{15}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(4z + 1)I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.adn1.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{3\sqrt{\pi}(2z + 1)\operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3e^z}{4z}$$

07.25.03.adn2.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{3\sqrt{\pi}(2z - 1)\operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.adn3.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, 4; z\right) = \frac{4e^{z/2}(8z - 1)I_0\left(\frac{z}{2}\right)}{25z} - \frac{4e^{z/2}(8z^2 + 7z - 4)I_1\left(\frac{z}{2}\right)}{25z^2}$$

07.25.03.adn4.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{7\sqrt{\pi}(16z^3 + 12z^2 - 15)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}} - \frac{7e^z(8z^2 + 10z - 15)}{64z^3}$$

07.25.03.adn5.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}(8z^2 - 10z - 15)}{64z^3} + \frac{7\sqrt{\pi}(16z^3 - 12z^2 + 15)\operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.adn6.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, 5; z\right) = \frac{32e^{z/2}(8z^2 + z - 9)I_0\left(\frac{z}{2}\right)}{175z^2} - \frac{32e^{z/2}(8z^3 + 9z^2 + 4z - 36)I_1\left(\frac{z}{2}\right)}{175z^3}$$

07.25.03.adn7.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{63\sqrt{\pi}(16z^4 + 16z^3 - 60z - 105)\operatorname{erfi}(\sqrt{z})}{1024z^{9/2}} - \frac{63e^z(8z^3 + 12z^2 + 10z - 105)}{512z^4}$$

07.25.03.adn8.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63e^{-z}(8z^3 - 12z^2 + 10z + 105)}{512z^4} + \frac{63\sqrt{\pi}(16z^4 - 16z^3 + 60z - 105)\operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.adn9.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{5}{2}, 6; z\right) = \frac{32e^{z/2}(16z^3 + 6z^2 - 21z - 120)I_0\left(\frac{z}{2}\right)}{315z^3} - \frac{32e^{z/2}(16z^4 + 22z^3 + 9z^2 - 84z - 480)I_1\left(\frac{z}{2}\right)}{315z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 3$

07.25.03.adna.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; 3, \frac{7}{2}; z\right) = \frac{4}{3}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(z+1)I_1\left(\frac{z}{2}\right)}{3z}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{7}{2}$

07.25.03.adnb.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi}(4z^2 + 4z + 3)\operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15e^z(2z + 3)}{32z^2}$$

07.25.03.adnc.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z}(2z - 3)}{32z^2} + \frac{15\sqrt{\pi}(4z^2 - 4z + 3)\operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.adnd.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, 4; z\right) = \frac{4e^{z/2}(2z + 1)I_0\left(\frac{z}{2}\right)}{5z} - \frac{4e^{z/2}(2z^2 + 3z + 4)I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.adne.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi}(8z^3 + 12z^2 + 18z + 15)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35e^z(4z^2 + 8z + 15)}{128z^3}$$

07.25.03.adnf.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z^2 - 8z + 15)}{128 z^3} + \frac{35 \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.adng.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 + 2z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} - \frac{64 e^{z/2} (z^3 + 2z^2 + 4z + 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.adnh.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (16z^4 + 32z^3 + 72z^2 + 120z + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315 e^z (8z^3 + 20z^2 + 50z + 105)}{2048 z^4}$$

07.25.03.adni.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (8z^3 - 20z^2 + 50z - 105)}{2048 z^4} + \frac{315 \sqrt{\pi} (16z^4 - 32z^3 + 72z^2 - 120z + 105) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.adnj.01

$${}_2F_2\left(\frac{1}{2}, \frac{7}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 + 6z^2 + 15z + 24) I_0\left(\frac{z}{2}\right)}{63 z^3} - \frac{32 e^{z/2} (4z^4 + 10z^3 + 27z^2 + 60z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = -\frac{11}{2}$

07.25.03.adnk.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{324168075} (2048 z^{15} + 167936 z^{14} + 5426688 z^{13} + 89118720 z^{12} + 800295936 z^{11} + 3936909312 z^{10} + 10047191040 z^9 + 11632469760 z^8 + 4440960000 z^7 + 167650560 z^6 + 5080320 z^5 + 1587600 z^4 + 1620000 z^3 + 3969000 z^2 + 21432600 z + 324168075) + \frac{1}{324168075} (256 e^z \sqrt{\pi} (8z^{31/2} + 660z^{29/2} + 21522z^{27/2} + 358401z^{25/2} + 3290400z^{23/2} + 16791210z^{21/2} + 45723600z^{19/2} + 60062040z^{17/2} + 30697920z^{15/2} + 3488400z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.adnl.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{324168075} (-2048 z^{15} + 167936 z^{14} - 5426688 z^{13} + 89118720 z^{12} - 800295936 z^{11} + 3936909312 z^{10} - 10047191040 z^9 + 11632469760 z^8 - 4440960000 z^7 + 167650560 z^6 - 5080320 z^5 + 1587600 z^4 - 1620000 z^3 + 3969000 z^2 - 21432600 z + 324168075) + \frac{1}{324168075} (256 e^{-z} \sqrt{\pi} (8z^{31/2} - 660z^{29/2} + 21522z^{27/2} - 358401z^{25/2} + 3290400z^{23/2} - 16791210z^{21/2} + 45723600z^{19/2} - 60062040z^{17/2} + 30697920z^{15/2} - 3488400z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.adnm.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{29469825} \left(-1024 z^{14} - 74752 z^{13} - 2115840 z^{12} - 29784576 z^{11} - 222409728 z^{10} - 868976640 z^9 - 1629930240 z^8 - \right.$$

$$\left. 1182643200 z^7 - 167650560 z^6 + 5080320 z^5 + 529200 z^4 + 324000 z^3 + 567000 z^2 + 2381400 z + 29469825 \right) -$$

$$\frac{1}{29469825} \left(128 e^z \sqrt{\pi} \left(8 z^{29/2} + 588 z^{27/2} + 16818 z^{25/2} + 240675 z^{23/2} + 1846350 z^{21/2} + \right. \right.$$

$$\left. \left. 7559460 z^{19/2} + 15485760 z^{17/2} + 13604760 z^{15/2} + 3488400 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.adnn.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{29469825} \left(-1024 z^{14} + 74752 z^{13} - 2115840 z^{12} + 29784576 z^{11} - 222409728 z^{10} + 868976640 z^9 - 1629930240 z^8 + \right.$$

$$\left. 1182643200 z^7 - 167650560 z^6 - 5080320 z^5 + 529200 z^4 - 324000 z^3 + 567000 z^2 - 2381400 z + 29469825 \right) +$$

$$\frac{1}{29469825} \left(128 e^{-z} \sqrt{\pi} \left(8 z^{29/2} - 588 z^{27/2} + 16818 z^{25/2} - 240675 z^{23/2} + 1846350 z^{21/2} - \right. \right.$$

$$\left. \left. 7559460 z^{19/2} + 15485760 z^{17/2} - 13604760 z^{15/2} + 3488400 z^{13/2} \right) \operatorname{erfi}(\sqrt{-z}) \right)$$

07.25.03.adno.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{3274425} \left(512 z^{13} + 32768 z^{12} + 796032 z^{11} + 9335808 z^{10} + 55549440 z^9 + 160554240 z^8 + 191877120 z^7 + \right.$$

$$\left. 55883520 z^6 - 5080320 z^5 + 529200 z^4 + 108000 z^3 + 113400 z^2 + 340200 z + 3274425 \right) +$$

$$\frac{1}{3274425} \left(64 e^z \sqrt{\pi} \left(8 z^{27/2} + 516 z^{25/2} + 12690 z^{23/2} + 151845 z^{21/2} + 935280 z^{19/2} + \right. \right.$$

$$\left. \left. 2883060 z^{17/2} + 3953520 z^{15/2} + 1744200 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.adnp.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{3274425} \left(-512 z^{13} + 32768 z^{12} - 796032 z^{11} + 9335808 z^{10} - 55549440 z^9 + 160554240 z^8 - 191877120 z^7 + \right.$$

$$\left. 55883520 z^6 + 5080320 z^5 + 529200 z^4 - 108000 z^3 + 113400 z^2 - 340200 z + 3274425 \right) +$$

$$\frac{1}{3274425} \left(64 e^{-z} \sqrt{\pi} \left(8 z^{27/2} - 516 z^{25/2} + 12690 z^{23/2} - 151845 z^{21/2} + 935280 z^{19/2} - \right. \right.$$

$$\left. \left. 2883060 z^{17/2} + 3953520 z^{15/2} - 1744200 z^{13/2} \right) \operatorname{erfi}(\sqrt{-z}) \right)$$

07.25.03.adnq.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{467775} \left(-256 z^{12} - 14080 z^{11} - 285504 z^{10} - 2676096 z^9 - 11844480 z^8 - 22095360 z^7 - 11176704 z^6 + 1693440 z^5 - 529200 z^4 + 108000 z^3 + 37800 z^2 + 68040 z + 467775 \right) - \frac{1}{467775} 32 e^z \sqrt{\pi} \left(8 z^{25/2} + 444 z^{23/2} + 9138 z^{21/2} + 87879 z^{19/2} + 408006 z^{17/2} + 843030 z^{15/2} + 581400 z^{13/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.adnr.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{467775} \left(-256 z^{12} + 14080 z^{11} - 285504 z^{10} + 2676096 z^9 - 11844480 z^8 + 22095360 z^7 - 11176704 z^6 - 1693440 z^5 - 529200 z^4 - 108000 z^3 + 37800 z^2 - 68040 z + 467775 \right) + \frac{1}{467775} 32 e^{-z} \sqrt{\pi} \left(8 z^{25/2} - 444 z^{23/2} + 9138 z^{21/2} - 87879 z^{19/2} + 408006 z^{17/2} - 843030 z^{15/2} + 581400 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adns.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{93555} \left(128 z^{11} + 5888 z^{10} + 95712 z^9 + 670848 z^8 + 1938240 z^7 + 1596672 z^6 - 338688 z^5 + 176400 z^4 - 108000 z^3 + 37800 z^2 + 22680 z + 93555 \right) + \frac{16 e^z \sqrt{\pi} \left(8 z^{23/2} + 372 z^{21/2} + 6162 z^{19/2} + 44745 z^{17/2} + 139536 z^{15/2} + 145350 z^{13/2} \right) \operatorname{erf}(\sqrt{z})}{93555}$$

07.25.03.adnt.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{93555} \left(-128 z^{11} + 5888 z^{10} - 95712 z^9 + 670848 z^8 - 1938240 z^7 + 1596672 z^6 + 338688 z^5 + 176400 z^4 + 108000 z^3 + 37800 z^2 - 22680 z + 93555 \right) + \frac{16 e^{-z} \sqrt{\pi} \left(8 z^{23/2} - 372 z^{21/2} + 6162 z^{19/2} - 44745 z^{17/2} + 139536 z^{15/2} - 145350 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})}{93555}$$

07.25.03.adnu.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{31185} \left(-64 z^{10} - 2368 z^9 - 28944 z^8 - 133920 z^7 - 177408 z^6 + 48384 z^5 - 35280 z^4 + 36000 z^3 - 37800 z^2 + 22680 z + 31185 \right) - \frac{8 e^z \sqrt{\pi} \left(8 z^{21/2} + 300 z^{19/2} + 3762 z^{17/2} + 18411 z^{15/2} + 29070 z^{13/2} \right) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.adnv.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{31185} (-64 z^{10} + 2368 z^9 - 28944 z^8 + 133920 z^7 - 177408 z^6 - 48384 z^5 - 35280 z^4 - 36000 z^3 - 37800 z^2 - 22680 z + 31185) + \frac{8 e^{-z} \sqrt{\pi} (8 z^{21/2} - 300 z^{19/2} + 3762 z^{17/2} - 18411 z^{15/2} + 29070 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.adnw.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{32 z^9 + 896 z^8 + 7320 z^7 + 16128 z^6 - 5376 z^5 + 5040 z^4 - 7200 z^3 + 12600 z^2 - 22680 z + 31185}{31185} + \frac{4 e^z \sqrt{\pi} (8 z^{19/2} + 228 z^{17/2} + 1938 z^{15/2} + 4845 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.adnx.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{-32 z^9 + 896 z^8 - 7320 z^7 + 16128 z^6 + 5376 z^5 + 5040 z^4 + 7200 z^3 + 12600 z^2 + 22680 z + 31185}{31185} + \frac{4 e^{-z} \sqrt{\pi} (8 z^{19/2} - 228 z^{17/2} + 1938 z^{15/2} - 4845 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.adny.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, 1; z\right) = \frac{1}{62370} e^z (64 z^9 + 1536 z^8 + 9936 z^7 + 12720 z^6 - 10692 z^5 + 18360 z^4 - 35685 z^3 + 63315 z^2 - 85050 z + 62370)$$

07.25.03.adnz.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{16 z^8 + 304 z^7 + 1236 z^6 - 456 z^5 + 360 z^4 - 1800 z^2 + 6840 z - 12015}{31185} + \frac{1}{31185 \sqrt{z}} 2 e^z \sqrt{\pi} (8 z^9 + 156 z^8 + 690 z^7 + 15 z^6 - 90 z^5 + 450 z^4 - 1800 z^3 + 5400 z^2 - 10800 z + 10800) \operatorname{erf}(\sqrt{z})$$

07.25.03.ado0.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{16 z^8 - 304 z^7 + 1236 z^6 + 456 z^5 + 360 z^4 - 1800 z^2 - 6840 z - 12015}{31185} - \frac{1}{31185 \sqrt{z}} 2 e^{-z} \sqrt{\pi} (8 z^9 - 156 z^8 + 690 z^7 - 15 z^6 - 90 z^5 - 450 z^4 - 1800 z^3 - 5400 z^2 - 10800 z - 10800) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ado1.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, 2; z\right) = \frac{e^z (64 z^8 + 960 z^7 + 2256 z^6 - 3072 z^5 + 7740 z^4 - 20340 z^3 + 45675 z^2 - 73710 z + 62370)}{62370}$$

07.25.03.ado2.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{8 z^8 + 80 z^7 - 18 z^6 - 72 z^5 + 540 z^4 - 2520 z^3 + 8712 z^2 - 21285 z + 30240}{10395 z} + \frac{1}{10395 z^{3/2}} e^z \sqrt{\pi} (8 z^9 + 84 z^8 + 18 z^7 - 111 z^6 + 576 z^5 - 2430 z^4 + 7920 z^3 - 18360 z^2 + 25920 z - 15120) \operatorname{erf}(\sqrt{z})$$

07.25.03.ado3.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-8z^8 + 80z^7 + 18z^6 - 72z^5 - 540z^4 - 2520z^3 - 8712z^2 - 21285z - 30240}{10395z} + \frac{1}{10395z^{3/2}} e^{-z} \sqrt{\pi} (8z^9 - 84z^8 + 18z^7 + 111z^6 + 576z^5 + 2430z^4 + 7920z^3 + 18360z^2 + 25920z + 15120) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ado4.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, 3; z\right) = \frac{e^z (64z^7 + 384z^6 - 816z^5 + 2640z^4 - 8100z^3 + 20160z^2 - 34965z + 31185)}{31185}$$

07.25.03.ado5.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{4z^8 + 4z^7 - 39z^6 + 234z^5 - 1140z^4 + 4536z^3 - 14409z^2 + 35280z - 60480}{2079z^2} + \frac{1}{4158z^{5/2}} e^z \sqrt{\pi} (8z^9 + 12z^8 - 78z^7 + 435z^6 - 2034z^5 + 7740z^4 - 23040z^3 + 50760z^2 - 75600z + 60480) \operatorname{erf}(\sqrt{z})$$

07.25.03.ado6.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{4z^8 - 4z^7 - 39z^6 - 234z^5 - 1140z^4 - 4536z^3 - 14409z^2 - 35280z - 60480}{2079z^2} + \frac{1}{4158z^{5/2}} e^{-z} \sqrt{\pi} (-8z^9 + 12z^8 + 78z^7 + 435z^6 + 2034z^5 + 7740z^4 + 23040z^3 + 50760z^2 + 75600z + 60480) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ado7.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, 4; z\right) = \frac{e^z (64z^6 - 192z^5 + 720z^4 - 2400z^3 + 6300z^2 - 11340z + 10395)}{10395}$$

07.25.03.ado8.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{4z^8 - 32z^7 + 219z^6 - 1320z^5 + 6948z^4 - 31374z^3 + 118440z^2 - 362880z + 907200}{594z^3} + \frac{1}{1188z^{7/2}} (e^z \sqrt{\pi} (8z^9 - 60z^8 + 402z^7 - 2379z^6 + 12240z^5 - 53460z^4 + 190800z^3 - 521640z^2 + 967680z - 907200) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ado9.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{-4z^8 - 32z^7 - 219z^6 - 1320z^5 - 6948z^4 - 31374z^3 - 118440z^2 - 362880z - 907200}{594z^3} + \frac{1}{1188z^{7/2}} (e^{-z} \sqrt{\pi} (8z^9 + 60z^8 + 402z^7 + 2379z^6 + 12240z^5 + 53460z^4 + 190800z^3 + 521640z^2 + 967680z + 907200) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.adoa.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, 5; z\right) = \frac{1}{10395z^4} (4e^z (64z^9 - 768z^8 + 6864z^7 - 50448z^6 + 308988z^5 - 1556280z^4 + 6235515z^3 - 18706545z^2 + 37413090z - 37413090)) + \frac{100776}{7z^4}$$

07.25.03.adob.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{4z^8 - 68z^7 + 765z^6 - 6714z^5 + 47718z^4 - 274680z^3 + 1254960z^2 - 4384800z + 15876000}{132z^4} + \frac{1}{264z^{9/2}} \left(e^z \sqrt{\pi} (8z^9 - 132z^8 + 1458z^7 - 12585z^6 + 87750z^5 - 492210z^4 + 2159640z^3 - 7000560z^2 + 14968800z - 15876000) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.adoc.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{4z^8 + 68z^7 + 765z^6 + 6714z^5 + 47718z^4 + 274680z^3 + 1254960z^2 + 4384800z + 15876000}{132z^4} + \frac{1}{264z^{9/2}} \left(e^{-z} \sqrt{\pi} (-8z^9 - 132z^8 - 1458z^7 - 12585z^6 - 87750z^5 - 492210z^4 - 2159640z^3 - 7000560z^2 - 14968800z - 15876000) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.adod.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{11}{2}, 6; z\right) = \frac{167960(3z + 28)}{7z^5} + \frac{1}{2079z^5} \left(4e^z (64z^9 - 1344z^8 + 17616z^7 - 173760z^6 + 1351548z^5 - 8314020z^4 + 39491595z^3 - 137181330z^2 + 311775750z - 349188840) \right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = -\frac{9}{2}$

07.25.03.adoe.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{2679075} \left(512z^{13} + 33280z^{12} + 825216z^{11} + 9956992z^{10} + 61793280z^9 + 191404800z^8 + 262348800z^7 + 116732160z^6 + 5080320z^5 + 176400z^4 + 64800z^3 + 81000z^2 + 264600z + 2679075 \right) + \frac{1}{2679075} \left(64e^z \sqrt{\pi} (8z^{27/2} + 524z^{25/2} + 13150z^{23/2} + 161775z^{21/2} + 1037475z^{19/2} + 3409560z^{17/2} + 5257080z^{15/2} + 3090600z^{13/2} + 397800z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.adof.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{2679075} \left(-512z^{13} + 33280z^{12} - 825216z^{11} + 9956992z^{10} - 61793280z^9 + 191404800z^8 - 262348800z^7 + 116732160z^6 - 5080320z^5 + 176400z^4 - 64800z^3 + 81000z^2 - 264600z + 2679075 \right) + \frac{1}{2679075} \left(64e^{-z} \sqrt{\pi} (8z^{27/2} - 524z^{25/2} + 13150z^{23/2} - 161775z^{21/2} + 1037475z^{19/2} - 3409560z^{17/2} + 5257080z^{15/2} - 3090600z^{13/2} + 397800z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.adog.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{297675} \left(-256 z^{12} - 14592 z^{11} - 310592 z^{10} - 3121920 z^9 - 15425280 z^8 - 35235840 z^7 - 30424320 z^6 - 5080320 z^5 + 176400 z^4 + 21600 z^3 + 16200 z^2 + 37800 z + 297675 \right) - \frac{1}{297675} \left(32 e^z \sqrt{\pi} \left(8 z^{25/2} + 460 z^{23/2} + 9930 z^{21/2} + 102195 z^{19/2} + 526500 z^{17/2} + 1303560 z^{15/2} + 1346400 z^{13/2} + 397800 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.adoh.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{297675} \left(-256 z^{12} + 14592 z^{11} - 310592 z^{10} + 3121920 z^9 - 15425280 z^8 + 35235840 z^7 - 30424320 z^6 + 5080320 z^5 + 176400 z^4 - 21600 z^3 + 16200 z^2 - 37800 z + 297675 \right) + \frac{1}{297675} \left(32 e^{-z} \sqrt{\pi} \left(8 z^{25/2} - 460 z^{23/2} + 9930 z^{21/2} - 102195 z^{19/2} + 526500 z^{17/2} - 1303560 z^{15/2} + 1346400 z^{13/2} - 397800 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.adoi.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{42525} \left(128 z^{11} + 6272 z^{10} + 111456 z^9 + 895200 z^8 + 3285120 z^7 + 4811904 z^6 + 1693440 z^5 - 176400 z^4 + 21600 z^3 + 5400 z^2 + 7560 z + 42525 \right) + \frac{1}{42525} 16 e^z \sqrt{\pi} \left(8 z^{23/2} + 396 z^{21/2} + 7158 z^{19/2} + 59247 z^{17/2} + 230265 z^{15/2} + 382500 z^{13/2} + 198900 z^{11/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.adoj.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{42525} \left(-128 z^{11} + 6272 z^{10} - 111456 z^9 + 895200 z^8 - 3285120 z^7 + 4811904 z^6 - 1693440 z^5 - 176400 z^4 - 21600 z^3 + 5400 z^2 - 7560 z + 42525 \right) + \frac{1}{42525} 16 e^{-z} \sqrt{\pi} \left(8 z^{23/2} - 396 z^{21/2} + 7158 z^{19/2} - 59247 z^{17/2} + 230265 z^{15/2} - 382500 z^{13/2} + 198900 z^{11/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adok.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{8505} \frac{(-64 z^{10} - 2624 z^9 - 37392 z^8 - 224480 z^7 - 535872 z^6 - 338688 z^5 + 58800 z^4 - 21600 z^3 + 5400 z^2 + 2520 z + 8505) - 8 e^z \sqrt{\pi} \left(8 z^{21/2} + 332 z^{19/2} + 4834 z^{17/2} + 30243 z^{15/2} + 79050 z^{13/2} + 66300 z^{11/2} \right) \operatorname{erf}(\sqrt{z})}{8505}$$

07.25.03.adol.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{8505} \frac{(-64 z^{10} + 2624 z^9 - 37392 z^8 + 224480 z^7 - 535872 z^6 + 338688 z^5 + 58800 z^4 + 21600 z^3 + 5400 z^2 - 2520 z + 8505) + 8 e^{-z} \sqrt{\pi} \left(8 z^{21/2} - 332 z^{19/2} + 4834 z^{17/2} - 30243 z^{15/2} + 79050 z^{13/2} - 66300 z^{11/2} \right) \operatorname{erfi}(\sqrt{z})}{8505}$$

07.25.03.adom.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{32 z^9 + 1056 z^8 + 11320 z^7 + 44808 z^6 + 48384 z^5 - 11760 z^4 + 7200 z^3 - 5400 z^2 + 2520 z + 2835}{2835} + \frac{4 e^z \sqrt{\pi} (8 z^{19/2} + 268 z^{17/2} + 2958 z^{15/2} + 12495 z^{13/2} + 16575 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.adon.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2835} (-32 z^9 + 1056 z^8 - 11320 z^7 + 44808 z^6 - 48384 z^5 - 11760 z^4 - 7200 z^3 - 5400 z^2 - 2520 z + 2835) + \frac{4 e^{-z} \sqrt{\pi} (8 z^{19/2} - 268 z^{17/2} + 2958 z^{15/2} - 12495 z^{13/2} + 16575 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.adoo.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{-16 z^8 - 400 z^7 - 2868 z^6 - 5376 z^5 + 1680 z^4 - 1440 z^3 + 1800 z^2 - 2520 z + 2835}{2835} - \frac{2 e^z \sqrt{\pi} (8 z^{17/2} + 204 z^{15/2} + 1530 z^{13/2} + 3315 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.adop.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{-16 z^8 + 400 z^7 - 2868 z^6 + 5376 z^5 + 1680 z^4 + 1440 z^3 + 1800 z^2 + 2520 z + 2835}{2835} + \frac{2 e^{-z} \sqrt{\pi} (8 z^{17/2} - 204 z^{15/2} + 1530 z^{13/2} - 3315 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.adoq.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, 1; z\right) = -\frac{e^z (32 z^8 + 688 z^7 + 3936 z^6 + 4392 z^5 - 3150 z^4 + 4455 z^3 - 6705 z^2 + 8190 z - 5670)}{5670}$$

07.25.03.ador.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{-8 z^7 - 136 z^6 - 486 z^5 + 170 z^4 - 120 z^3 + 360 z - 765}{2835} + \frac{e^z \sqrt{\pi} (-8 z^8 - 140 z^7 - 550 z^6 - 15 z^5 + 75 z^4 - 300 z^3 + 900 z^2 - 1800 z + 1800) \operatorname{erf}(\sqrt{z})}{2835 \sqrt{z}}$$

07.25.03.ados.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{8 z^7 - 136 z^6 + 486 z^5 + 170 z^4 + 120 z^3 - 360 z - 765}{2835} + \frac{e^{-z} \sqrt{\pi} (-8 z^8 + 140 z^7 - 550 z^6 + 15 z^5 + 75 z^4 + 300 z^3 + 900 z^2 + 1800 z + 1800) \operatorname{erfi}(\sqrt{z})}{2835 \sqrt{z}}$$

07.25.03.adot.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, 2; z\right) = -\frac{e^z (32 z^7 + 432 z^6 + 912 z^5 - 1080 z^4 + 2250 z^3 - 4545 z^2 + 6930 z - 5670)}{5670}$$

07.25.03.adou.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-4z^7 - 36z^6 + 7z^5 + 30z^4 - 180z^3 + 648z^2 - 1575z + 2160}{945z} + \frac{e^z \sqrt{\pi} (-8z^8 - 76z^7 - 18z^6 + 93z^5 - 390z^4 + 1260z^3 - 2880z^2 + 3960z - 2160) \operatorname{erf}(\sqrt{z})}{1890z^{3/2}}$$

07.25.03.adov.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-4z^7 + 36z^6 + 7z^5 - 30z^4 - 180z^3 - 648z^2 - 1575z - 2160}{945z} + \frac{e^{-z} \sqrt{\pi} (8z^8 - 76z^7 + 18z^6 + 93z^5 + 390z^4 + 1260z^3 + 2880z^2 + 3960z + 2160) \operatorname{erfi}(\sqrt{z})}{1890z^{3/2}}$$

07.25.03.adow.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, 3; z\right) = -\frac{e^z (32z^6 + 176z^5 - 320z^4 + 840z^3 - 1950z^2 + 3255z - 2835)}{2835}$$

07.25.03.adox.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-4z^7 - 4z^6 + 33z^5 - 165z^4 + 648z^3 - 1998z^2 + 4680z - 7560}{378z^2} + \frac{e^z \sqrt{\pi} (-8z^8 - 12z^7 + 66z^6 - 303z^5 + 1125z^4 - 3240z^3 + 6840z^2 - 9720z + 7560) \operatorname{erf}(\sqrt{z})}{756z^{5/2}}$$

07.25.03.adoy.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{4z^7 - 4z^6 - 33z^5 - 165z^4 - 648z^3 - 1998z^2 - 4680z - 7560}{378z^2} + \frac{e^{-z} \sqrt{\pi} (-8z^8 + 12z^7 + 66z^6 + 303z^5 + 1125z^4 + 3240z^3 + 6840z^2 + 9720z + 7560) \operatorname{erfi}(\sqrt{z})}{756z^{5/2}}$$

07.25.03.adoz.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, 4; z\right) = -\frac{1}{945} e^z (32z^5 - 80z^4 + 240z^3 - 600z^2 + 1050z - 945)$$

07.25.03.adp0.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-4z^7 + 28z^6 - 165z^5 + 844z^4 - 3708z^3 + 13680z^2 - 41160z + 100800}{108z^3} + \frac{1}{216z^{7/2}} e^z \sqrt{\pi} (-8z^8 + 52z^7 - 298z^6 + 1485z^5 - 6300z^4 + 21960z^3 - 59040z^2 + 108360z - 100800) \operatorname{erf}(\sqrt{z})$$

07.25.03.adp1.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{-4z^7 - 28z^6 - 165z^5 - 844z^4 - 3708z^3 - 13680z^2 - 41160z - 100800}{108z^3} + \frac{1}{216z^{7/2}} e^{-z} \sqrt{\pi} (8z^8 + 52z^7 + 298z^6 + 1485z^5 + 6300z^4 + 21960z^3 + 59040z^2 + 108360z + 100800) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adp2.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, 5; z\right) = \frac{58344}{7z^4} - \frac{1}{945z^4} 4e^z (32z^8 - 336z^7 + 2592z^6 - 16152z^5 + 81810z^4 - 328185z^3 + 984555z^2 - 1969110z + 1969110)$$

07.25.03.adp3.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-4z^7 + 60z^6 - 587z^5 + 4401z^4 - 26100z^3 + 121380z^2 - 428400z + 1587600}{24z^4} + \frac{1}{48z^{9/2}} e^z \sqrt{\pi} (-8z^8 + 116z^7 - 1110z^6 + 8145z^5 - 47025z^4 + 210060z^3 - 689220z^2 + 1486800z - 1587600) \operatorname{erf}(\sqrt{z})$$

07.25.03.adp4.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{4z^7 + 60z^6 + 587z^5 + 4401z^4 + 26100z^3 + 121380z^2 + 428400z + 1587600}{24z^4} + \frac{1}{48z^{9/2}} (e^{-z} \sqrt{\pi} (-8z^8 - 116z^7 - 1110z^6 - 8145z^5 - 47025z^4 - 210060z^3 - 689220z^2 - 1486800z - 1587600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.adp5.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{9}{2}, 6; z\right) = \frac{97240(9z + 76)}{21z^5} - \frac{1}{189z^5} 4e^z (32z^8 - 592z^7 + 6736z^6 - 56568z^5 + 364650z^4 - 1786785z^3 + 6344910z^2 - 14658930z + 16628040)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = -\frac{7}{2}$

07.25.03.adp6.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{33075} (128z^{11} + 6400z^{10} + 116960z^9 + 979200z^8 + 3846912z^7 + 6447360z^6 + 3432960z^5 + 176400z^4 + 7200z^3 + 3240z^2 + 5400z + 33075) + \frac{1}{33075} (16e^z \sqrt{\pi} (8z^{23/2} + 404z^{21/2} + 7506z^{19/2} + 64665z^{17/2} + 267840z^{15/2} + 500040z^{13/2} + 346320z^{11/2} + 51480z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.adp7.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{33075} (-128z^{11} + 6400z^{10} - 116960z^9 + 979200z^8 - 3846912z^7 + 6447360z^6 - 3432960z^5 + 176400z^4 - 7200z^3 + 3240z^2 - 5400z + 33075) + \frac{1}{33075} (16e^{-z} \sqrt{\pi} (8z^{23/2} - 404z^{21/2} + 7506z^{19/2} - 64665z^{17/2} + 267840z^{15/2} - 500040z^{13/2} + 346320z^{11/2} - 51480z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.adp8.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{4725} (-64 z^{10} - 2752 z^9 - 42000 z^8 - 280896 z^7 - 817728 z^6 - 869760 z^5 - 176400 z^4 + 7200 z^3 + 1080 z^2 + 1080 z + 4725) - \frac{1}{4725} 8 e^z \sqrt{\pi} (8 z^{21/2} + 348 z^{19/2} + 5418 z^{17/2} + 37575 z^{15/2} + 117540 z^{13/2} + 147420 z^{11/2} + 51480 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adp9.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{4725} (-64 z^{10} + 2752 z^9 - 42000 z^8 + 280896 z^7 - 817728 z^6 + 869760 z^5 - 176400 z^4 - 7200 z^3 + 1080 z^2 - 1080 z + 4725) + \frac{1}{4725} 8 e^{-z} \sqrt{\pi} (8 z^{21/2} - 348 z^{19/2} + 5418 z^{17/2} - 37575 z^{15/2} + 117540 z^{13/2} - 147420 z^{11/2} + 51480 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adpa.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} (32 z^9 + 1152 z^8 + 14104 z^7 + 70464 z^6 + 132768 z^5 + 58800 z^4 - 7200 z^3 + 1080 z^2 + 360 z + 945) + \frac{4}{945} e^z \sqrt{\pi} (8 z^{19/2} + 292 z^{17/2} + 3666 z^{15/2} + 19245 z^{13/2} + 40560 z^{11/2} + 25740 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adpb.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{945} (-32 z^9 + 1152 z^8 - 14104 z^7 + 70464 z^6 - 132768 z^5 + 58800 z^4 + 7200 z^3 + 1080 z^2 - 360 z + 945) + \frac{4}{945} e^{-z} \sqrt{\pi} (8 z^{19/2} - 292 z^{17/2} + 3666 z^{15/2} - 19245 z^{13/2} + 40560 z^{11/2} - 25740 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adpc.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} (-16 z^8 - 464 z^7 - 4276 z^6 - 14064 z^5 - 11760 z^4 + 2400 z^3 - 1080 z^2 + 360 z + 315) - \frac{2}{315} e^z \sqrt{\pi} (8 z^{17/2} + 236 z^{15/2} + 2250 z^{13/2} + 7995 z^{11/2} + 8580 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adpd.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{315} (-16 z^8 + 464 z^7 - 4276 z^6 + 14064 z^5 - 11760 z^4 - 2400 z^3 - 1080 z^2 - 360 z + 315) + \frac{2}{315} e^{-z} \sqrt{\pi} (8 z^{17/2} - 236 z^{15/2} + 2250 z^{13/2} - 7995 z^{11/2} + 8580 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adpe.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{315} (8 z^7 + 176 z^6 + 1086 z^5 + 1680 z^4 - 480 z^3 + 360 z^2 - 360 z + 315) + \frac{1}{315} e^z \sqrt{\pi} (8 z^{15/2} + 180 z^{13/2} + 1170 z^{11/2} + 2145 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adpf.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} (-8z^7 + 176z^6 - 1086z^5 + 1680z^4 + 480z^3 + 360z^2 + 360z + 315) + \frac{1}{315} e^{-z} \sqrt{\pi} (8z^{15/2} - 180z^{13/2} + 1170z^{11/2} - 2145z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adpg.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, 1; z\right) = \frac{1}{630} e^z (16z^7 + 304z^6 + 1512z^5 + 1440z^4 - 855z^3 + 945z^2 - 990z + 630)$$

07.25.03.adph.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{315} (4z^6 + 60z^5 + 185z^4 - 60z^3 + 36z^2 - 45) + \frac{e^z \sqrt{\pi} (8z^7 + 124z^6 + 426z^5 + 15z^4 - 60z^3 + 180z^2 - 360z + 360) \operatorname{erf}(\sqrt{z})}{630 \sqrt{z}}$$

07.25.03.adpi.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{315} (4z^6 - 60z^5 + 185z^4 + 60z^3 + 36z^2 - 45) + \frac{e^{-z} \sqrt{\pi} (-8z^7 + 124z^6 - 426z^5 + 15z^4 + 60z^3 + 180z^2 + 360z + 360) \operatorname{erfi}(\sqrt{z})}{630 \sqrt{z}}$$

07.25.03.adpj.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, 2; z\right) = \frac{1}{630} e^z (16z^6 + 192z^5 + 360z^4 - 360z^3 + 585z^2 - 810z + 630)$$

07.25.03.adpk.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{4z^6 + 32z^5 - 5z^4 - 24z^3 + 108z^2 - 270z + 360}{210z} + \frac{e^z \sqrt{\pi} (8z^7 + 68z^6 + 18z^5 - 75z^4 + 240z^3 - 540z^2 + 720z - 360) \operatorname{erf}(\sqrt{z})}{420z^{3/2}}$$

07.25.03.adpl.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{-4z^6 + 32z^5 + 5z^4 - 24z^3 - 108z^2 - 270z - 360}{210z} + \frac{e^{-z} \sqrt{\pi} (8z^7 - 68z^6 + 18z^5 + 75z^4 + 240z^3 + 540z^2 + 720z + 360) \operatorname{erfi}(\sqrt{z})}{420z^{3/2}}$$

07.25.03.adpm.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, 3; z\right) = \frac{1}{315} e^z (16z^5 + 80z^4 - 120z^3 + 240z^2 - 375z + 315)$$

07.25.03.adpn.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{4z^6 + 4z^5 - 27z^4 + 108z^3 - 324z^2 + 720z - 1080}{84z^2} + \frac{e^z \sqrt{\pi} (8z^7 + 12z^6 - 54z^5 + 195z^4 - 540z^3 + 1080z^2 - 1440z + 1080) \operatorname{erf}(\sqrt{z})}{168z^{5/2}}$$

07.25.03.adpo.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{4z^6 - 4z^5 - 27z^4 - 108z^3 - 324z^2 - 720z - 1080}{84z^2} + \frac{e^{-z}\sqrt{\pi}(-8z^7 + 12z^6 + 54z^5 + 195z^4 + 540z^3 + 1080z^2 + 1440z + 1080)\operatorname{erfi}(\sqrt{z})}{168z^{5/2}}$$

07.25.03.adpp.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, 4; z\right) = \frac{1}{105} e^z (16z^4 - 32z^3 + 72z^2 - 120z + 105)$$

07.25.03.adpq.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{4z^6 - 24z^5 + 119z^4 - 504z^3 + 1800z^2 - 5280z + 12600}{24z^3} + \frac{e^z\sqrt{\pi}(8z^7 - 44z^6 + 210z^5 - 855z^4 + 2880z^3 - 7560z^2 + 13680z - 12600)\operatorname{erf}(\sqrt{z})}{48z^{7/2}}$$

07.25.03.adpr.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-4z^6 - 24z^5 - 119z^4 - 504z^3 - 1800z^2 - 5280z - 12600}{24z^3} + \frac{e^{-z}\sqrt{\pi}(8z^7 + 44z^6 + 210z^5 + 855z^4 + 2880z^3 + 7560z^2 + 13680z + 12600)\operatorname{erfi}(\sqrt{z})}{48z^{7/2}}$$

07.25.03.adps.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, 5; z\right) = \frac{4e^z(16z^7 - 144z^6 + 936z^5 - 4800z^4 + 19305z^3 - 57915z^2 + 115830z - 115830)}{105z^4} + \frac{30888}{7z^4}$$

07.25.03.adpt.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3(4z^6 - 52z^5 + 433z^4 - 2700z^3 + 12900z^2 - 46200z + 176400)}{16z^4} + \frac{3e^z\sqrt{\pi}(8z^7 - 100z^6 + 810z^5 - 4905z^4 + 22500z^3 - 75060z^2 + 163800z - 176400)\operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.adpu.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3(4z^6 + 52z^5 + 433z^4 + 2700z^3 + 12900z^2 + 46200z + 176400)}{16z^4} - \frac{1}{32z^{9/2}} 3e^{-z}\sqrt{\pi}(8z^7 + 100z^6 + 810z^5 + 4905z^4 + 22500z^3 + 75060z^2 + 163800z + 176400)\operatorname{erfi}(\sqrt{z})$$

07.25.03.adpv.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{7}{2}, 6; z\right) = \frac{17160(9z + 68)}{7z^5} + \frac{4e^z(16z^7 - 256z^6 + 2472z^5 - 17160z^4 + 87945z^3 - 321750z^2 + 759330z - 875160)}{21z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = -\frac{5}{2}$

07.25.03.adpw.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{675} (32 z^9 + 1184 z^8 + 15096 z^7 + 80616 z^6 + 173232 z^5 + 114624 z^4 + 7200 z^3 + 360 z^2 + 216 z + 675) + \frac{4}{675} e^z \sqrt{\pi} (8 z^{19/2} + 300 z^{17/2} + 3918 z^{15/2} + 21903 z^{13/2} + 51831 z^{11/2} + 43758 z^{9/2} + 7722 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adpx.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{675} (-32 z^9 + 1184 z^8 - 15096 z^7 + 80616 z^6 - 173232 z^5 + 114624 z^4 - 7200 z^3 + 360 z^2 - 216 z + 675) + \frac{4}{675} e^{-z} \sqrt{\pi} (8 z^{19/2} - 300 z^{17/2} + 3918 z^{15/2} - 21903 z^{13/2} + 51831 z^{11/2} - 43758 z^{9/2} + 7722 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adpy.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{135} (-16 z^8 - 496 z^7 - 5076 z^6 - 20232 z^5 - 27912 z^4 - 7200 z^3 + 360 z^2 + 72 z + 135) - \frac{2}{135} e^z \sqrt{\pi} (8 z^{17/2} + 252 z^{15/2} + 2658 z^{13/2} + 11271 z^{11/2} + 18018 z^{9/2} + 7722 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adpz.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{135} (-16 z^8 + 496 z^7 - 5076 z^6 + 20232 z^5 - 27912 z^4 + 7200 z^3 + 360 z^2 - 72 z + 135) + \frac{2}{135} e^{-z} \sqrt{\pi} (8 z^{17/2} - 252 z^{15/2} + 2658 z^{13/2} - 11271 z^{11/2} + 18018 z^{9/2} - 7722 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adq0.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{45} (8 z^7 + 200 z^6 + 1542 z^5 + 4038 z^4 + 2400 z^3 - 360 z^2 + 72 z + 45) + \frac{1}{45} e^z \sqrt{\pi} (8 z^{15/2} + 204 z^{13/2} + 1638 z^{11/2} + 4719 z^{9/2} + 3861 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adq1.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{45} (-8 z^7 + 200 z^6 - 1542 z^5 + 4038 z^4 - 2400 z^3 - 360 z^2 - 72 z + 45) + \frac{1}{45} e^{-z} \sqrt{\pi} (8 z^{15/2} - 204 z^{13/2} + 1638 z^{11/2} - 4719 z^{9/2} + 3861 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adq2.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{45} (-4 z^6 - 76 z^5 - 393 z^4 - 480 z^3 + 120 z^2 - 72 z + 45) + \frac{1}{90} e^z \sqrt{\pi} (-8 z^{13/2} - 156 z^{11/2} - 858 z^{9/2} - 1287 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adq3.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{45}(-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45) + \frac{1}{90}e^{-z}\sqrt{\pi}(8z^{13/2} - 156z^{11/2} + 858z^{9/2} - 1287z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.adq4.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, 1; z\right) = -\frac{1}{90}e^z(8z^6 + 132z^5 + 558z^4 + 441z^3 - 207z^2 + 162z - 90)$$

07.25.03.adq5.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{90}(-4z^5 - 52z^4 - 135z^3 + 39z^2 - 18z) + \frac{e^{-z}\sqrt{\pi}(-8z^6 - 108z^5 - 318z^4 - 15z^3 + 45z^2 - 90z + 90)\operatorname{erf}(\sqrt{z})}{180\sqrt{z}}$$

07.25.03.adq6.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{90}(4z^5 - 52z^4 + 135z^3 + 39z^2 + 18z) + \frac{e^{-z}\sqrt{\pi}(-8z^6 + 108z^5 - 318z^4 + 15z^3 + 45z^2 + 90z + 90)\operatorname{erfi}(\sqrt{z})}{180\sqrt{z}}$$

07.25.03.adq7.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, 2; z\right) = -\frac{1}{90}e^z(8z^5 + 84z^4 + 138z^3 - 111z^2 + 126z - 90)$$

07.25.03.adq8.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-4z^5 - 28z^4 + 3z^3 + 18z^2 - 54z + 72}{60z} + \frac{e^z\sqrt{\pi}(-8z^6 - 60z^5 - 18z^4 + 57z^3 - 126z^2 + 162z - 72)\operatorname{erf}(\sqrt{z})}{120z^{3/2}}$$

07.25.03.adq9.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-4z^5 + 28z^4 + 3z^3 - 18z^2 - 54z - 72}{60z} + \frac{e^{-z}\sqrt{\pi}(8z^6 - 60z^5 + 18z^4 + 57z^3 + 126z^2 + 162z + 72)\operatorname{erfi}(\sqrt{z})}{120z^{3/2}}$$

07.25.03.adqa.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, 3; z\right) = -\frac{1}{45}e^z(8z^4 + 36z^3 - 42z^2 + 57z - 45)$$

07.25.03.adqb.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-4z^5 - 4z^4 + 21z^3 - 63z^2 + 132z - 180}{24z^2} + \frac{e^z\sqrt{\pi}(-8z^6 - 12z^5 + 42z^4 - 111z^3 + 207z^2 - 252z + 180)\operatorname{erf}(\sqrt{z})}{48z^{5/2}}$$

07.25.03.adqc.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{4z^5 - 4z^4 - 21z^3 - 63z^2 - 132z - 180}{24z^2} + \frac{e^{-z}\sqrt{\pi}(-8z^6 + 12z^5 + 42z^4 + 111z^3 + 207z^2 + 252z + 180)\operatorname{erfi}(\sqrt{z})}{48z^{5/2}}$$

07.25.03.adqd.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, 4; z\right) = -\frac{1}{15}e^z(8z^3 - 12z^2 + 18z - 15)$$

07.25.03.adqe.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(4z^5 - 20z^4 + 81z^3 - 276z^2 + 780z - 1800)}{48z^3} - \frac{7e^z\sqrt{\pi}(8z^6 - 36z^5 + 138z^4 - 441z^3 + 1116z^2 - 1980z + 1800)\operatorname{erf}(\sqrt{z})}{96z^{7/2}}$$

07.25.03.adqf.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}\sqrt{\pi}(8z^6 + 36z^5 + 138z^4 + 441z^3 + 1116z^2 + 1980z + 1800)\operatorname{erfi}(\sqrt{z})}{96z^{7/2}} - \frac{7(4z^5 + 20z^4 + 81z^3 + 276z^2 + 780z + 1800)}{48z^3}$$

07.25.03.adqg.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, 5; z\right) = \frac{10296}{5z^4} - \frac{4e^z(8z^6 - 60z^5 + 318z^4 - 1287z^3 + 3861z^2 - 7722z + 7722)}{15z^4}$$

07.25.03.adqh.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{21(4z^5 - 44z^4 + 303z^3 - 1515z^2 + 5550z - 22050)}{32z^4} - \frac{21e^z\sqrt{\pi}(8z^6 - 84z^5 + 558z^4 - 2673z^3 + 9135z^2 - 20250z + 22050)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.adqi.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21(4z^5 + 44z^4 + 303z^3 + 1515z^2 + 5550z + 22050)}{32z^4} - \frac{21e^{-z}\sqrt{\pi}(8z^6 + 84z^5 + 558z^4 + 2673z^3 + 9135z^2 + 20250z + 22050)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.adqj.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{5}{2}, 6; z\right) = \frac{3432(3z + 20)}{z^5} - \frac{4e^z(8z^6 - 108z^5 + 858z^4 - 4719z^3 + 18018z^2 - 43758z + 51480)}{3z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = -\frac{3}{2}$

07.25.03.adqk.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{27} (8z^7 + 208z^6 + 1710z^5 + 5080z^4 + 4428z^3 + 360z^2 + 24z + 27) + \frac{1}{27} e^z \sqrt{\pi} (8z^{15/2} + 212z^{13/2} + 1810z^{11/2} + 5841z^{9/2} + 6336z^{7/2} + 1386z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adql.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{27} (-8z^7 + 208z^6 - 1710z^5 + 5080z^4 - 4428z^3 + 360z^2 - 24z + 27) + \frac{1}{27} e^{-z} \sqrt{\pi} (8z^{15/2} - 212z^{13/2} + 1810z^{11/2} - 5841z^{9/2} + 6336z^{7/2} - 1386z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adqm.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{9} (-4z^6 - 84z^5 - 521z^4 - 1014z^3 - 360z^2 + 24z + 9) + \frac{1}{18} e^z \sqrt{\pi} (-8z^{13/2} - 172z^{11/2} - 1122z^{9/2} - 2475z^{7/2} - 1386z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adqn.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{9} (-4z^6 + 84z^5 - 521z^4 + 1014z^3 - 360z^2 - 24z + 9) + \frac{1}{18} e^{-z} \sqrt{\pi} (8z^{13/2} - 172z^{11/2} + 1122z^{9/2} - 2475z^{7/2} + 1386z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adqo.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{18} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36} e^z \sqrt{\pi} (8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adqp.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{18} (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36} e^{-z} \sqrt{\pi} (8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adqq.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, 1; z\right) = \frac{1}{18} e^z (4z^5 + 56z^4 + 195z^3 + 123z^2 - 42z + 18)$$

07.25.03.adqr.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{36} (4z^4 + 44z^3 + 93z^2 - 22z + 6) + \frac{e^z \sqrt{\pi} (8z^5 + 92z^4 + 226z^3 + 15z^2 - 30z + 30) \operatorname{erf}(\sqrt{z})}{72\sqrt{z}}$$

07.25.03.adqs.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{36} (4z^4 - 44z^3 + 93z^2 + 22z + 6) + \frac{e^{-z} \sqrt{\pi} (-8z^5 + 92z^4 - 226z^3 + 15z^2 + 30z + 30) \operatorname{erfi}(\sqrt{z})}{72\sqrt{z}}$$

07.25.03.adqt.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, 2; z\right) = \frac{1}{18} e^z (4z^4 + 36z^3 + 51z^2 - 30z + 18)$$

07.25.03.adqu.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{4z^4 + 24z^3 - z^2 - 12z + 18}{24z} + \frac{e^z \sqrt{\pi} (8z^5 + 52z^4 + 18z^3 - 39z^2 + 48z - 18) \operatorname{erf}(\sqrt{z})}{48z^{3/2}}$$

07.25.03.adqv.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-4z^4 + 24z^3 + z^2 - 12z - 18}{24z} + \frac{e^{-z} \sqrt{\pi} (8z^5 - 52z^4 + 18z^3 + 39z^2 + 48z + 18) \operatorname{erfi}(\sqrt{z})}{48z^{3/2}}$$

07.25.03.adqw.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, 3; z\right) = \frac{1}{9} e^z (4z^3 + 16z^2 - 13z + 9)$$

07.25.03.adqx.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(4z^4 + 4z^3 - 15z^2 + 30z - 36)}{48z^2} + \frac{5e^z \sqrt{\pi} (8z^5 + 12z^4 - 30z^3 + 51z^2 - 54z + 36) \operatorname{erf}(\sqrt{z})}{96z^{5/2}}$$

07.25.03.adqy.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^4 - 4z^3 - 15z^2 - 30z - 36)}{48z^2} - \frac{5e^{-z} \sqrt{\pi} (8z^5 - 12z^4 - 30z^3 - 51z^2 - 54z - 36) \operatorname{erfi}(\sqrt{z})}{96z^{5/2}}$$

07.25.03.adqz.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, 4; z\right) = \frac{1}{3} e^z (4z^2 - 4z + 3)$$

07.25.03.adr0.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(4z^4 - 16z^3 + 51z^2 - 136z + 300)}{96z^3} + \frac{35e^z \sqrt{\pi} (8z^5 - 28z^4 + 82z^3 - 195z^2 + 336z - 300) \operatorname{erf}(\sqrt{z})}{192z^{7/2}}$$

07.25.03.adr1.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (8z^5 + 28z^4 + 82z^3 + 195z^2 + 336z + 300) \operatorname{erfi}(\sqrt{z})}{192z^{7/2}} - \frac{35(4z^4 + 16z^3 + 51z^2 + 136z + 300)}{96z^3}$$

07.25.03.adr2.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, 5; z\right) = \frac{4e^z (4z^5 - 24z^4 + 99z^3 - 297z^2 + 594z - 594)}{3z^4} + \frac{792}{z^4}$$

07.25.03.adr3.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{105(4z^4 - 36z^3 + 197z^2 - 750z + 3150)}{64z^4} + \frac{105e^z \sqrt{\pi} (8z^5 - 68z^4 + 354z^3 - 1257z^2 + 2850z - 3150) \operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.adr4.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{105(4z^4 + 36z^3 + 197z^2 + 750z + 3150)}{64z^4} - \frac{105e^{-z} \sqrt{\pi} (8z^5 + 68z^4 + 354z^3 + 1257z^2 + 2850z + 3150) \operatorname{erfi}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.adr5.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{3}{2}, 6; z\right) = \frac{440(9z+52)}{z^5} + \frac{20e^z(4z^5 - 44z^4 + 275z^3 - 1122z^2 + 2838z - 3432)}{3z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = -\frac{1}{2}$

07.25.03.adr6.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{6}(4z^5 + 68z^4 + 319z^3 + 405z^2 + 48z + 6) + \frac{1}{12}e^z\sqrt{\pi}(8z^{11/2} + 140z^{9/2} + 702z^{7/2} + 1071z^{5/2} + 315z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.adr7.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{6}(-4z^5 + 68z^4 - 319z^3 + 405z^2 - 48z + 6) + \frac{1}{12}e^{-z}\sqrt{\pi}(8z^{11/2} - 140z^{9/2} + 702z^{7/2} - 1071z^{5/2} + 315z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.adr8.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{12}(-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24}e^z\sqrt{\pi}(-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.adr9.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{12}(-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24}e^{-z}\sqrt{\pi}(8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.adra.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, 1; z\right) = -\frac{1}{6}e^z(2z^4 + 23z^3 + 63z^2 + 30z - 6)$$

07.25.03.adrb.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{24}(-4z^3 - 36z^2 - 59z + 9) + \frac{e^z\sqrt{\pi}(-8z^4 - 76z^3 - 150z^2 - 15z + 15)\operatorname{erf}(\sqrt{z})}{48\sqrt{z}}$$

07.25.03.adrc.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{24}(4z^3 - 36z^2 + 59z + 9) + \frac{e^{-z}\sqrt{\pi}(-8z^4 + 76z^3 - 150z^2 + 15z + 15)\operatorname{erfi}(\sqrt{z})}{48\sqrt{z}}$$

07.25.03.adrd.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, 2; z\right) = -\frac{1}{6}e^z(2z^3 + 15z^2 + 18z - 6)$$

07.25.03.adre.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{-4z^3 - 20z^2 - z + 6}{16z} + \frac{e^z\sqrt{\pi}(-8z^4 - 44z^3 - 18z^2 + 21z - 6)\operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.adrf.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{-4z^3 + 20z^2 - z - 6}{16z} + \frac{e^{-z}\sqrt{\pi}(8z^4 - 44z^3 + 18z^2 + 21z + 6)\operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.adrg.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, 3; z\right) = -\frac{1}{3} e^z (2z^2 + 7z - 3)$$

07.25.03.adrh.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{5(4z^3 + 4z^2 - 9z + 9)}{32z^2} - \frac{5e^z \sqrt{\pi} (8z^4 + 12z^3 - 18z^2 + 15z - 9) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.adri.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^3 - 4z^2 - 9z - 9)}{32z^2} - \frac{5e^{-z} \sqrt{\pi} (8z^4 - 12z^3 - 18z^2 - 15z - 9) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.adrj.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, 4; z\right) = -e^z (2z - 1)$$

07.25.03.adrk.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{35(4z^3 - 12z^2 + 29z - 60)}{64z^3} - \frac{35e^z \sqrt{\pi} (8z^4 - 20z^3 + 42z^2 - 69z + 60) \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.adrl.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (8z^4 + 20z^3 + 42z^2 + 69z + 60) \operatorname{erfi}(\sqrt{z})}{128z^{7/2}} - \frac{35(4z^3 + 12z^2 + 29z + 60)}{64z^3}$$

07.25.03.adrm.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, 5; z\right) = \frac{216}{z^4} - \frac{4e^z (2z^4 - 9z^3 + 27z^2 - 54z + 54)}{z^4}$$

07.25.03.adrn.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{315(4z^3 - 28z^2 + 115z - 525)}{128z^4} - \frac{315e^z \sqrt{\pi} (8z^4 - 52z^3 + 198z^2 - 465z + 525) \operatorname{erf}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.adro.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315(4z^3 + 28z^2 + 115z + 525)}{128z^4} - \frac{315e^{-z} \sqrt{\pi} (8z^4 + 52z^3 + 198z^2 + 465z + 525) \operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.adrp.01

$${}_2F_2\left(\frac{1}{2}, 4; -\frac{1}{2}, 6; z\right) = \frac{120(9z + 44)}{z^5} - \frac{20e^z (2z^4 - 17z^3 + 78z^2 - 210z + 264)}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = \frac{1}{2}$

07.25.03.adrq.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{24} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} e^z \sqrt{\pi} (8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adrr.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{24} (-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48} e^{-z} \sqrt{\pi} (8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adrs.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, 1; z\right) = \frac{1}{6} e^z (z^3 + 9z^2 + 18z + 6)$$

07.25.03.adrt.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{48} (4z^2 + 28z + 33) + \frac{e^z \sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.adru.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{48} (4z^2 - 28z + 33) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.adrv.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, 2; z\right) = \frac{1}{6} e^z (z^2 + 6z + 6)$$

07.25.03.adrw.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{4z^2 + 16z + 3}{32z} + \frac{e^z \sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.adrx.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{-4z^2 + 16z - 3}{32z} + \frac{e^{-z} \sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.adry.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, 3; z\right) = \frac{1}{3} e^z (z + 3)$$

07.25.03.adrz.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5(4z^2 + 4z - 3)}{64z^2} + \frac{5e^z \sqrt{\pi} (8z^3 + 12z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.ads0.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^2 - 4z - 3)}{64z^2} - \frac{5e^{-z} \sqrt{\pi} (8z^3 - 12z^2 - 6z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.ads1.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, 4; z\right) = e^z$$

07.25.03.ads2.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(4z^2 - 8z + 15)}{128z^3} + \frac{35e^z \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.ads3.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (8z^3 + 12z^2 + 18z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{35(4z^2 + 8z + 15)}{128 z^3}$$

07.25.03.ads4.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, 5; z\right) = \frac{4e^z (z^3 - 3z^2 + 6z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.ads5.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{315(4z^2 - 20z + 105)}{256z^4} + \frac{315e^z\sqrt{\pi}(8z^3 - 36z^2 + 90z - 105)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ads6.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315(4z^2 + 20z + 105)}{256z^4} - \frac{315e^{-z}\sqrt{\pi}(8z^3 + 36z^2 + 90z + 105)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ads7.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{1}{2}, 6; z\right) = \frac{120(z+4)}{z^5} + \frac{20e^z(z^3 - 6z^2 + 18z - 24)}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = 1$

07.25.03.ads8.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, 1; z\right) = \frac{1}{24}e^{z/2}(2z^3 + 17z^2 + 36z + 24)I_0\left(\frac{z}{2}\right) + \frac{1}{24}e^{z/2}(2z^3 + 15z^2 + 22z)I_1\left(\frac{z}{2}\right)$$

07.25.03.ads9.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, \frac{3}{2}; z\right) = \frac{1}{48}e^z(4z^2 + 26z + 33) + \frac{5\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{32\sqrt{z}}$$

07.25.03.adsa.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, \frac{3}{2}; -z\right) = \frac{1}{48}e^{-z}(4z^2 - 26z + 33) + \frac{5\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{32\sqrt{z}}$$

07.25.03.adsb.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, 2; z\right) = \frac{1}{12}e^{z/2}(z^2 + 6z + 12)I_0\left(\frac{z}{2}\right) + \frac{1}{12}e^{z/2}(z^2 + 5z)I_1\left(\frac{z}{2}\right)$$

07.25.03.adsc.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, \frac{5}{2}; z\right) = \frac{e^z(8z^2 + 32z + 3)}{64z} + \frac{3\sqrt{\pi}(10z - 1)\operatorname{erfi}(\sqrt{z})}{128z^{3/2}}$$

07.25.03.adsd.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, \frac{5}{2}; -z\right) = \frac{e^{-z}(-8z^2 + 32z - 3)}{64z} + \frac{3\sqrt{\pi}(10z + 1)\operatorname{erf}(\sqrt{z})}{128z^{3/2}}$$

07.25.03.adse.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, 3; z\right) = \frac{1}{6}e^{z/2}(z + 6)I_0\left(\frac{z}{2}\right) + \frac{1}{6}e^{z/2}zI_1\left(\frac{z}{2}\right)$$

07.25.03.adsf.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, \frac{7}{2}; z\right) = \frac{5e^z(32z^2 + 18z - 9)}{512z^2} + \frac{15\sqrt{\pi}(20z^2 - 4z + 3)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.adsg.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, \frac{7}{2}; -z\right) = \frac{5e^{-z}(32z^2 - 18z - 9)}{512z^2} + \frac{15\sqrt{\pi}(20z^2 + 4z + 3)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.adsh.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, 4; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

07.25.03.adsi.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, \frac{9}{2}; z\right) = \frac{35 e^z (44 z^2 - 68 z + 75)}{2048 z^3} + \frac{35 \sqrt{\pi} (40 z^3 - 12 z^2 + 18 z - 75) \operatorname{erfi}(\sqrt{z})}{4096 z^{7/2}}$$

07.25.03.adsj.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, \frac{9}{2}; -z\right) = \frac{35 \sqrt{\pi} (40 z^3 + 12 z^2 + 18 z + 75) \operatorname{erf}(\sqrt{z})}{4096 z^{7/2}} - \frac{35 e^{-z} (44 z^2 + 68 z + 75)}{2048 z^3}$$

07.25.03.adsk.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, 5; z\right) = \frac{4 e^{z/2} (5 z^2 + 12 z - 24) I_0\left(\frac{z}{2}\right)}{35 z^2} - \frac{4 e^{z/2} (5 z^3 - 18 z^2 + 48 z - 96) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.adsl.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (80 z^4 - 32 z^3 + 72 z^2 - 600 z - 3675) \operatorname{erfi}(\sqrt{z})}{65 536 z^{9/2}} - \frac{315 e^z (40 z^3 - 508 z^2 + 1850 z - 3675)}{32 768 z^4}$$

07.25.03.adsm.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (40 z^3 + 508 z^2 + 1850 z + 3675)}{32 768 z^4} + \frac{315 \sqrt{\pi} (80 z^4 + 32 z^3 + 72 z^2 + 600 z - 3675) \operatorname{erf}(\sqrt{z})}{65 536 z^{9/2}}$$

07.25.03.adsn.01

$${}_2F_2\left(\frac{1}{2}, 4; 1, 6; z\right) = \frac{8 e^{z/2} (5 z^3 - 6 z^2 + 84 z - 384) I_0\left(\frac{z}{2}\right)}{63 z^3} - \frac{8 e^{z/2} (5 z^4 - z^3 - 72 z^2 + 336 z - 1536) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = \frac{3}{2}$

07.25.03.adso.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{3}{2}, 2; z\right) = \frac{1}{24} e^z (2z + 9) + \frac{5 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.adsp.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{3}{2}, 2; -z\right) = \frac{1}{24} e^{-z} (9 - 2z) + \frac{5 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.adsq.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{3}{2}, 3; z\right) = \frac{5 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{12 \sqrt{z}} + \frac{e^z}{6}$$

07.25.03.adsr.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{3}{2}, 3; -z\right) = \frac{5 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{12 \sqrt{z}} + \frac{e^{-z}}{6}$$

07.25.03.adss.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{3}{2}, 4; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.adst.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{3}{2}, 4; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.adsu.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{3}{2}, 5; z\right) = -\frac{4e^z(z^3 - 3z^2 + 6z - 6)}{7z^4} + \frac{4\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7\sqrt{z}} - \frac{24}{7z^4}$$

07.25.03.adsv.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{3}{2}, 5; -z\right) = \frac{4e^{-z}(z^3 + 3z^2 + 6z + 6)}{7z^4} + \frac{4\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7\sqrt{z}} - \frac{24}{7z^4}$$

07.25.03.adsw.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{3}{2}, 6; z\right) = -\frac{40(9z + 28)}{21z^5} - \frac{20e^z(2z^4 + z^3 - 30z^2 + 114z - 168)}{63z^5} + \frac{40\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{63\sqrt{z}}$$

07.25.03.adsx.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{3}{2}, 6; -z\right) = -\frac{40(9z - 28)}{21z^5} + \frac{20e^{-z}(2z^4 - z^3 - 30z^2 - 114z - 168)}{63z^5} + \frac{40\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{63\sqrt{z}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = 2$

07.25.03.adsy.01

$${}_2F_2\left(\frac{1}{2}, 4; 2, 2; z\right) = \frac{1}{12} e^{z/2} (z + 12) I_0\left(\frac{z}{2}\right) + \frac{1}{12} e^{z/2} (z - 4) I_1\left(\frac{z}{2}\right)$$

07.25.03.adsz.01

$${}_2F_2\left(\frac{1}{2}, 4; 2, \frac{5}{2}; z\right) = \frac{e^z(4z - 3)}{32z} + \frac{3\sqrt{\pi}(10z + 1) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.adt0.01

$${}_2F_2\left(\frac{1}{2}, 4; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(4z + 3)}{32z} + \frac{3\sqrt{\pi}(10z - 1) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.adt1.01

$${}_2F_2\left(\frac{1}{2}, 4; 2, 3; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{2}{3} e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.adt2.01

$${}_2F_2\left(\frac{1}{2}, 4; 2, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi}(20z^2 + 4z - 1) \operatorname{erfi}(\sqrt{z})}{512z^{5/2}} - \frac{5e^z(14z - 3)}{256z^2}$$

07.25.03.adt3.01

$${}_2F_2\left(\frac{1}{2}, 4; 2, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (14z + 3)}{256 z^2} + \frac{15 \sqrt{\pi} (20z^2 - 4z - 1) \operatorname{erf}(\sqrt{z})}{512 z^{5/2}}$$

07.25.03.adt4.01

$${}_2F_2\left(\frac{1}{2}, 4; 2, 4; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.adt5.01

$${}_2F_2\left(\frac{1}{2}, 4; 2, \frac{9}{2}; z\right) = \frac{35 \sqrt{\pi} (40z^3 + 12z^2 - 6z + 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}} - \frac{35 e^z (20z^2 - 16z + 15)}{1024 z^3}$$

07.25.03.adt6.01

$${}_2F_2\left(\frac{1}{2}, 4; 2, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (20z^2 + 16z + 15)}{1024 z^3} + \frac{35 \sqrt{\pi} (40z^3 - 12z^2 - 6z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.adt7.01

$${}_2F_2\left(\frac{1}{2}, 4; 2, 5; z\right) = \frac{8 e^{z/2} (5z^2 - 2z + 4) I_0\left(\frac{z}{2}\right)}{35 z^2} - \frac{8 e^{z/2} (5z^3 + 3z^2 - 8z + 16) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.adt8.01

$${}_2F_2\left(\frac{1}{2}, 4; 2, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (80z^4 + 32z^3 - 24z^2 + 120z + 525) \operatorname{erfi}(\sqrt{z})}{32768 z^{9/2}} - \frac{315 e^z (40z^3 + 36z^2 - 230z + 525)}{16384 z^4}$$

07.25.03.adt9.01

$${}_2F_2\left(\frac{1}{2}, 4; 2, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (40z^3 - 36z^2 - 230z - 525)}{16384 z^4} + \frac{315 \sqrt{\pi} (80z^4 - 32z^3 - 24z^2 - 120z + 525) \operatorname{erf}(\sqrt{z})}{32768 z^{9/2}}$$

07.25.03.adta.01

$${}_2F_2\left(\frac{1}{2}, 4; 2, 6; z\right) = \frac{8 e^{z/2} (10z^3 - 3z^2 - 12z + 96) I_0\left(\frac{z}{2}\right)}{63 z^3} - \frac{8 e^{z/2} (10z^4 + 7z^3 - 48z + 384) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = \frac{5}{2}$

07.25.03.adtb.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{5}{2}, 3; z\right) = \frac{\sqrt{\pi} (10z + 3) \operatorname{erfi}(\sqrt{z})}{16 z^{3/2}} - \frac{3 e^z}{8z}$$

07.25.03.adtc.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{5}{2}, 3; -z\right) = \frac{\sqrt{\pi} (10z - 3) \operatorname{erf}(\sqrt{z})}{16 z^{3/2}} + \frac{3 e^{-z}}{8z}$$

07.25.03.adtd.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{5}{2}, 4; z\right) = \frac{3 \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3 e^z}{4z}$$

07.25.03.adte.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{5}{2}, 4; -z\right) = \frac{3\sqrt{\pi}(2z-1)\operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.adtf.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{5}{2}, 5; z\right) = -\frac{6e^z(5z^3+6z^2-12z+12)}{35z^4} + \frac{3\sqrt{\pi}(10z+7)\operatorname{erfi}(\sqrt{z})}{35z^{3/2}} + \frac{72}{35z^4}$$

07.25.03.adtg.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{5}{2}, 5; -z\right) = \frac{6e^{-z}(5z^3-6z^2-12z-12)}{35z^4} + \frac{3\sqrt{\pi}(10z-7)\operatorname{erf}(\sqrt{z})}{35z^{3/2}} + \frac{72}{35z^4}$$

07.25.03.adth.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{5}{2}, 6; z\right) = \frac{8(9z+20)}{7z^5} - \frac{4e^z(5z^4+7z^3+6z^2-66z+120)}{21z^5} + \frac{2\sqrt{\pi}(10z+9)\operatorname{erfi}(\sqrt{z})}{21z^{3/2}}$$

07.25.03.adti.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{5}{2}, 6; -z\right) = \frac{8(9z-20)}{7z^5} + \frac{4e^{-z}(5z^4-7z^3+6z^2+66z+120)}{21z^5} + \frac{2\sqrt{\pi}(10z-9)\operatorname{erf}(\sqrt{z})}{21z^{3/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = 3$

07.25.03.adtj.01

$${}_2F_2\left(\frac{1}{2}, 4; 3, 3; z\right) = \frac{10}{9}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{2e^{z/2}(5z+2)I_1\left(\frac{z}{2}\right)}{9z}$$

07.25.03.adtk.01

$${}_2F_2\left(\frac{1}{2}, 4; 3, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi}(20z^2+12z+3)\operatorname{erfi}(\sqrt{z})}{128z^{5/2}} - \frac{5e^z(10z+3)}{64z^2}$$

07.25.03.adtl.01

$${}_2F_2\left(\frac{1}{2}, 4; 3, \frac{7}{2}; -z\right) = \frac{5e^{-z}(10z-3)}{64z^2} + \frac{5\sqrt{\pi}(20z^2-12z+3)\operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.adtm.01

$${}_2F_2\left(\frac{1}{2}, 4; 3, 4; z\right) = \frac{4}{3}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(z+1)I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.adtn.01

$${}_2F_2\left(\frac{1}{2}, 4; 3, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi}(40z^3+36z^2+18z-15)\operatorname{erfi}(\sqrt{z})}{1536z^{7/2}} - \frac{35e^z(20z^2+28z-15)}{768z^3}$$

07.25.03.adto.01

$${}_2F_2\left(\frac{1}{2}, 4; 3, \frac{9}{2}; -z\right) = \frac{35e^{-z}(20z^2-28z-15)}{768z^3} + \frac{35\sqrt{\pi}(40z^3-36z^2+18z+15)\operatorname{erf}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.adtp.01

$${}_2F_2\left(\frac{1}{2}, 4; 3, 5; z\right) = \frac{16 e^{z/2} (10 z^2 + 3 z - 6) I_0\left(\frac{z}{2}\right)}{105 z^2} - \frac{16 e^{z/2} (10 z^3 + 13 z^2 + 12 z - 24) I_1\left(\frac{z}{2}\right)}{105 z^3}$$

07.25.03.adtq.01

$${}_2F_2\left(\frac{1}{2}, 4; 3, \frac{11}{2}; z\right) = \frac{105 \sqrt{\pi} (80 z^4 + 96 z^3 + 72 z^2 - 120 z - 315) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}} - \frac{105 e^z (40 z^3 + 68 z^2 + 90 z - 315)}{4096 z^4}$$

07.25.03.adtr.01

$${}_2F_2\left(\frac{1}{2}, 4; 3, \frac{11}{2}; -z\right) = \frac{105 e^{-z} (40 z^3 - 68 z^2 + 90 z + 315)}{4096 z^4} + \frac{105 \sqrt{\pi} (80 z^4 - 96 z^3 + 72 z^2 + 120 z - 315) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.adts.01

$${}_2F_2\left(\frac{1}{2}, 4; 3, 6; z\right) = \frac{32 e^{z/2} (10 z^3 + 6 z^2 - 3 z - 48) I_0\left(\frac{z}{2}\right)}{189 z^3} - \frac{64 e^{z/2} (5 z^4 + 8 z^3 + 9 z^2 - 6 z - 96) I_1\left(\frac{z}{2}\right)}{189 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = \frac{7}{2}$

07.25.03.adtt.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{7}{2}, 4; z\right) = \frac{15 \sqrt{\pi} (4 z^2 + 4 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{5/2}} - \frac{15 e^z (2 z + 3)}{32 z^2}$$

07.25.03.adtu.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{7}{2}, 4; -z\right) = \frac{15 e^{-z} (2 z - 3)}{32 z^2} + \frac{15 \sqrt{\pi} (4 z^2 - 4 z + 3) \operatorname{erf}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.adtv.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{7}{2}, 5; z\right) = -\frac{3 e^z (10 z^3 + 19 z^2 + 32 z - 32)}{28 z^4} + \frac{3 \sqrt{\pi} (20 z^2 + 28 z + 35) \operatorname{erfi}(\sqrt{z})}{56 z^{5/2}} - \frac{24}{7 z^4}$$

07.25.03.adtw.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{7}{2}, 5; -z\right) = \frac{3 e^{-z} (10 z^3 - 19 z^2 + 32 z + 32)}{28 z^4} + \frac{3 \sqrt{\pi} (20 z^2 - 28 z + 35) \operatorname{erf}(\sqrt{z})}{56 z^{5/2}} - \frac{24}{7 z^4}$$

07.25.03.adtx.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{7}{2}, 6; z\right) = -\frac{40 (3 z + 4)}{7 z^5} - \frac{5 e^z (10 z^4 + 23 z^3 + 48 z^2 + 48 z - 192)}{42 z^5} + \frac{5 \sqrt{\pi} (20 z^2 + 36 z + 63) \operatorname{erfi}(\sqrt{z})}{84 z^{5/2}}$$

07.25.03.adty.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{7}{2}, 6; -z\right) = -\frac{40 (3 z - 4)}{7 z^5} + \frac{5 e^{-z} (10 z^4 - 23 z^3 + 48 z^2 - 48 z - 192)}{42 z^5} + \frac{5 \sqrt{\pi} (20 z^2 - 36 z + 63) \operatorname{erf}(\sqrt{z})}{84 z^{5/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = 4$

07.25.03.adtz.01

$${}_2F_2\left(\frac{1}{2}, 4; 4, 4; z\right) = \frac{4 e^{z/2} (2 z + 1) I_0\left(\frac{z}{2}\right)}{5 z} - \frac{4 e^{z/2} (2 z^2 + 3 z + 4) I_1\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.adu0.01

$${}_2F_2\left(\frac{1}{2}, 4; 4, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi}(8z^3 + 12z^2 + 18z + 15)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35e^z(4z^2 + 8z + 15)}{128z^3}$$

07.25.03.adu1.01

$${}_2F_2\left(\frac{1}{2}, 4; 4, \frac{9}{2}; -z\right) = \frac{35e^{-z}(4z^2 - 8z + 15)}{128z^3} + \frac{35\sqrt{\pi}(8z^3 - 12z^2 + 18z - 15)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.adu2.01

$${}_2F_2\left(\frac{1}{2}, 4; 4, 5; z\right) = \frac{32e^{z/2}(2z^2 + 2z + 3)I_0\left(\frac{z}{2}\right)}{35z^2} - \frac{64e^{z/2}(z^3 + 2z^2 + 4z + 6)I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.adu3.01

$${}_2F_2\left(\frac{1}{2}, 4; 4, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi}(16z^4 + 32z^3 + 72z^2 + 120z + 105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315e^z(8z^3 + 20z^2 + 50z + 105)}{2048z^4}$$

07.25.03.adu4.01

$${}_2F_2\left(\frac{1}{2}, 4; 4, \frac{11}{2}; -z\right) = \frac{315e^{-z}(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315\sqrt{\pi}(16z^4 - 32z^3 + 72z^2 - 120z + 105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.adu5.01

$${}_2F_2\left(\frac{1}{2}, 4; 4, 6; z\right) = \frac{32e^{z/2}(4z^3 + 6z^2 + 15z + 24)I_0\left(\frac{z}{2}\right)}{63z^3} - \frac{32e^{z/2}(4z^4 + 10z^3 + 27z^2 + 60z + 96)I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = \frac{9}{2}$

07.25.03.adu6.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{9}{2}, 5; z\right) = \frac{e^z(-20z^3 - 52z^2 - 141z - 384)}{16z^4} + \frac{\sqrt{\pi}(40z^3 + 84z^2 + 210z + 525)\operatorname{erfi}(\sqrt{z})}{32z^{7/2}} + \frac{24}{z^4}$$

07.25.03.adu7.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{9}{2}, 5; -z\right) = \frac{e^{-z}(20z^3 - 52z^2 + 141z - 384)}{16z^4} + \frac{\sqrt{\pi}(40z^3 - 84z^2 + 210z - 525)\operatorname{erf}(\sqrt{z})}{32z^{7/2}} + \frac{24}{z^4}$$

07.25.03.adu8.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{9}{2}, 6; z\right) = \frac{40(9z + 4)}{3z^5} - \frac{5e^z(20z^4 + 64z^3 + 231z^2 + 960z + 768)}{72z^5} + \frac{5\sqrt{\pi}(40z^3 + 108z^2 + 378z + 1575)\operatorname{erfi}(\sqrt{z})}{144z^{7/2}}$$

07.25.03.adu9.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{9}{2}, 6; -z\right) = \frac{40(9z - 4)}{3z^5} + \frac{5e^{-z}(20z^4 - 64z^3 + 231z^2 - 960z + 768)}{72z^5} + \frac{5\sqrt{\pi}(40z^3 - 108z^2 + 378z - 1575)\operatorname{erf}(\sqrt{z})}{144z^{7/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = 5$

07.25.03.adua.01

$${}_2F_2\left(\frac{1}{2}, 4; 5, 5; z\right) = \frac{128 e^{z/2} (20 z^4 + 34 z^3 + 107 z^2 + 420 z - 840) I_0\left(\frac{z}{2}\right)}{1225 z^4} - \frac{128 e^{z/2} (20 z^3 + 54 z^2 + 171 z + 638) I_1\left(\frac{z}{2}\right)}{1225 z^3} + \frac{3072}{35 z^4}$$

07.25.03.adub.01

$${}_2F_2\left(\frac{1}{2}, 4; 5, \frac{11}{2}; z\right) = -\frac{9 e^{-z} (40 z^3 + 132 z^2 + 506 z + 2469)}{256 z^4} + \frac{9 \sqrt{\pi} (80 z^4 + 224 z^3 + 840 z^2 + 4200 z - 3675) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}} + \frac{216}{z^4}$$

07.25.03.aduc.01

$${}_2F_2\left(\frac{1}{2}, 4; 5, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (40 z^3 - 132 z^2 + 506 z - 2469)}{256 z^4} + \frac{9 \sqrt{\pi} (80 z^4 - 224 z^3 + 840 z^2 - 4200 z - 3675) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}} + \frac{216}{z^4}$$

07.25.03.adud.01

$${}_2F_2\left(\frac{1}{2}, 4; 5, 6; z\right) = \frac{256 e^{z/2} (20 z^4 + 48 z^3 + 219 z^2 + 1470 z - 3780) I_0\left(\frac{z}{2}\right)}{2205 z^4} - \frac{256 e^{z/2} (20 z^4 + 68 z^3 + 297 z^2 + 1821 z - 1680) I_1\left(\frac{z}{2}\right)}{2205 z^4} + \frac{3072}{7 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = \frac{11}{2}$

07.25.03.adue.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{11}{2}, 6; z\right) = \frac{120 (9 z - 4)}{z^5} - \frac{5 e^z (40 z^4 + 164 z^3 + 858 z^2 + 6861 z - 12288)}{128 z^5} + \frac{5 \sqrt{\pi} (80 z^4 + 288 z^3 + 1512 z^2 + 12600 z - 33075) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.aduf.01

$${}_2F_2\left(\frac{1}{2}, 4; \frac{11}{2}, 6; -z\right) = \frac{120 (9 z + 4)}{z^5} + \frac{5 e^{-z} (40 z^4 - 164 z^3 + 858 z^2 - 6861 z - 12288)}{128 z^5} + \frac{5 \sqrt{\pi} (80 z^4 - 288 z^3 + 1512 z^2 - 12600 z - 33075) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 4$, $b_1 = 6$

07.25.03.adug.01

$${}_2F_2\left(\frac{1}{2}, 4; 6, 6; z\right) = \frac{5120 (9 z - 8)}{21 z^5} + \frac{256 e^{z/2} (40 z^5 + 132 z^4 + 852 z^3 + 9483 z^2 - 49140 z + 30240) I_0\left(\frac{z}{2}\right)}{3969 z^5} - \frac{256 e^{z/2} (40 z^4 + 172 z^3 + 1044 z^2 + 10653 z - 37668) I_1\left(\frac{z}{2}\right)}{3969 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.aduh.01} \\
 {}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) &= \frac{1}{11\,345\,882\,625} \\
 & \left(e^z (65\,536\,z^{16} + 6029\,312\,z^{15} + 222\,167\,040\,z^{14} + 4\,251\,648\,000\,z^{13} + 45\,864\,960\,000\,z^{12} + 283\,583\,692\,800\,z^{11} + \right. \\
 & \quad 978\,800\,025\,600\,z^{10} + 1\,752\,952\,320\,000\,z^9 + 1\,402\,494\,912\,000\,z^8 + 359\,323\,776\,000\,z^7 + 9\,224\,409\,600\,z^6 + \\
 & \quad \left. 141\,523\,200\,z^5 + 421\,848\,000\,z^4 - 1\,564\,920\,000\,z^3 + 5\,000\,940\,000\,z^2 - 10\,501\,974\,000\,z + 11\,345\,882\,625)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.adui.01} \\
 {}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) &= \\
 & -\frac{1}{1\,031\,443\,875} \left(e^z (32\,768\,z^{15} + 2\,703\,360\,z^{14} + 88\,104\,960\,z^{13} + 1\,465\,036\,800\,z^{12} + 13\,409\,740\,800\,z^{11} + \right. \\
 & \quad 68\,038\,272\,000\,z^{10} + 183\,227\,788\,800\,z^9 + 235\,178\,899\,200\,z^8 + 113\,300\,208\,000\,z^7 + 9\,711\,576\,000\,z^6 - \\
 & \quad \left. 243\,583\,200\,z^5 - 51\,030\,000\,z^4 + 134\,379\,000\,z^3 - 446\,512\,500\,z^2 + 937\,676\,250\,z - 1\,031\,443\,875)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aduj.01} \\
 {}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) &= \\
 & \frac{1}{114\,604\,875} \left(e^z (16\,384\,z^{14} + 1\,196\,032\,z^{13} + 33\,886\,208\,z^{12} + 478\,371\,840\,z^{11} + 3\,595\,453\,440\,z^{10} + 14\,244\,142\,080\,z^9 + \right. \\
 & \quad 27\,515\,255\,040\,z^8 + 21\,286\,056\,960\,z^7 + 3\,434\,961\,600\,z^6 - 296\,654\,400\,z^5 + \\
 & \quad \left. 26\,535\,600\,z^4 - 12\,247\,200\,z^3 + 48\,818\,700\,z^2 - 101\,209\,500\,z + 114\,604\,875)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aduk.01} \\
 {}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) &= \\
 & -\frac{1}{16\,372\,125} \left(e^z (8\,192\,z^{13} + 520\,192\,z^{12} + 12\,521\,472\,z^{11} + 145\,274\,880\,z^{10} + 853\,440\,000\,z^9 + 2\,428\,151\,040\,z^8 + 2\,830\,947\,840\right. \\
 & \quad \left. z^7 + 734\,711\,040\,z^6 - 119\,296\,800\,z^5 + 30\,618\,000\,z^4 - 2\,041\,200\,z^3 - 7\,144\,200\,z^2 + 13\,693\,050\,z - 16\,372\,125)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.adul.01} \\
 {}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) &= \\
 & \frac{1}{3\,274\,425} \left(e^z (4096\,z^{12} + 221\,184\,z^{11} + 4\,380\,672\,z^{10} + 39\,782\,400\,z^9 + 168\,134\,400\,z^8 + 289\,336\,320\,z^7 + \right. \\
 & \quad \left. 113\,460\,480\,z^6 - 29\,756\,160\,z^5 + 14\,742\,000\,z^4 - 6\,804\,000\,z^3 + 2\,381\,400\,z^2 - 2\,381\,400\,z + 3\,274\,425)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.adum.01} \\
 {}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) &= \\
 & -\frac{1}{1\,091\,475} \left(e^z (2048\,z^{11} + 91\,136\,z^{10} + 1\,415\,680\,z^9 + 9\,273\,600\,z^8 + 23\,788\,800\,z^7 + 13\,829\,760\,z^6 - 5\,503\,680\,z^5 + \right. \\
 & \quad \left. 4\,384\,800\,z^4 - 3\,591\,000\,z^3 + 1\,984\,500\,z^2 + 198\,450\,z - 1\,091\,475)\right)
 \end{aligned}$$

07.25.03.adun.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{1091475} (e^z (1024 z^{10} + 35840 z^9 + 403200 z^8 + 1612800 z^7 + 1411200 z^6 - 846720 z^5 + 1058400 z^4 - 1512000 z^3 + 1984500 z^2 - 1984500 z + 1091475))$$

07.25.03.aduo.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{1091475} (e^{z/2} (512 z^{10} + 15872 z^9 + 152320 z^8 + 480768 z^7 + 232800 z^6 - 99360 z^5 + 126000 z^4 - 252000 z^3 + 551250 z^2 - 992250 z + 1091475) I_0\left(\frac{z}{2}\right) + \frac{1}{1091475} 2 e^{z/2} (256 z^{10} + 7680 z^9 + 68608 z^8 + 175360 z^7 - 31536 z^6 + 21600 z^5 - 18000 z^4 + 55125 z^2 - 110250 z) I_1\left(\frac{z}{2}\right))$$

07.25.03.adup.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{1091475} (e^z (512 z^9 + 13056 z^8 + 90624 z^7 + 126720 z^6 - 118080 z^5 + 226080 z^4 - 488160 z^3 + 952560 z^2 - 1389150 z + 1091475))$$

07.25.03.aduq.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{1091475} (e^{z/2} (512 z^9 + 11008 z^8 + 58368 z^7 + 35520 z^6 - 27360 z^5 + 75600 z^4 - 252000 z^3 + 693000 z^2 - 1275750 z + 1091475) I_0\left(\frac{z}{2}\right) + \frac{1}{1091475} (e^{z/2} (512 z^9 + 10496 z^8 + 48128 z^7 - 7872 z^6 - 4320 z^5 + 54000 z^4 - 252000 z^3 + 819000 z^2 - 1779750 z + 2027025) I_1\left(\frac{z}{2}\right))$$

07.25.03.adur.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{363825} e^z (256 z^8 + 4096 z^7 + 10496 z^6 - 15360 z^5 + 40800 z^4 - 111360 z^3 + 257040 z^2 - 423360 z + 363825)$$

07.25.03.adus.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{1091475} 4 e^{z/2} (256 z^8 + 3072 z^7 + 2880 z^6 - 5760 z^5 + 25200 z^4 - 100800 z^3 + 315000 z^2 - 680400 z + 779625) I_0\left(\frac{z}{2}\right) + \frac{1}{1091475 z} (4 e^{z/2} (256 z^9 + 2816 z^8 + 192 z^7 - 4800 z^6 + 28080 z^5 - 126000 z^4 + 441000 z^3 - 1146600 z^2 + 2027025 z - 2027025) I_1\left(\frac{z}{2}\right))$$

07.25.03.adut.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (128 z^7 + 832 z^6 - 1824 z^5 + 6000 z^4 - 18600 z^3 + 46620 z^2 - 81270 z + 72765)}{72765}$$

07.25.03.aduu.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{363825z} 4e^{z/2} (256z^8 + 640z^7 - 2752z^6 + 14784z^5 - 68880z^4 + 263760z^3 - 793800z^2 + 1746360z - 2297295) I_0\left(\frac{z}{2}\right) + \frac{1}{363825z^2} (4e^{z/2} (256z^9 + 384z^8 - 3008z^7 + 17728z^6 - 87696z^5 + 361200z^4 - 1213800z^3 + 3243240z^2 - 6621615z + 9189180) I_1\left(\frac{z}{2}\right))$$

07.25.03.aduv.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (64z^6 - 192z^5 + 720z^4 - 2400z^3 + 6300z^2 - 11340z + 10395)}{10395}$$

07.25.03.aduw.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{363825z^2} (32e^{z/2} (128z^8 - 896z^7 + 6144z^6 - 37824z^5 + 204960z^4 - 952560z^3 + 3635280z^2 - 10501920z + 18706545) I_0\left(\frac{z}{2}\right) + \frac{1}{363825z^3} (128e^{z/2} (32z^9 - 256z^8 + 1808z^7 - 11424z^6 + 63924z^5 - 310800z^4 + 1274130z^3 - 4208490z^2 + 10501920z - 18706545) I_1\left(\frac{z}{2}\right))$$

07.25.03.adux.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{1155z^4} (e^z (32z^9 - 400z^8 + 3760z^7 - 29400z^6 + 194250z^5 - 1074045z^4 + 4838400z^3 - 16934400z^2 + 42336000z - 63504000)) + \frac{302400\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.aduy.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{1155z^4} (e^{-z} (-32z^9 - 400z^8 - 3760z^7 - 29400z^6 - 194250z^5 - 1074045z^4 - 4838400z^3 - 16934400z^2 - 42336000z - 63504000)) + \frac{302400\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.aduz.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{72765z^3} \left(32e^{z/2}(128z^8 - 2112z^7 + 24000z^6 - 216048z^5 + 1587600z^4 - 9476280z^3 + 44633160z^2 - 155887875z + 349188840) I_0\left(\frac{z}{2}\right) + \frac{1}{72765z^4} \left(32e^{z/2}(128z^9 - 2240z^8 + 26304z^7 - 243600z^6 + 1846992z^5 - 11480040z^4 + 57400200z^3 - 222181245z^2 + 623551500z - 1396755360) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{1}{2}, a_2 = \frac{9}{2}, b_1 = -\frac{9}{2}$

07.25.03.adv0.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{93767625} \left(e^z (16384z^{14} + 1212416z^{13} + 34959360z^{12} + 505282560z^{11} + 3925816320z^{10} + 16352962560z^9 + 34378525440z^8 + 31643136000z^7 + 9185400000z^6 + 263088000z^5 + 9752400z^4 - 10886400z^3 + 39973500z^2 - 83349000z + 93767625) \right)$$

07.25.03.adv1.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{10418625} \left(e^z (8192z^{13} + 536576z^{12} + 13455360z^{11} + 165181440z^{10} + 1054410240z^9 + 3431635200z^8 + 5178539520z^7 + 2875219200z^6 + 279871200z^5 - 8391600z^4 + 680400z^3 - 4422600z^2 + 8930250z - 10418625) \right)$$

07.25.03.adv2.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{1488375} \left(e^z (4096z^{12} + 233472z^{11} + 4976640z^{10} + 50242560z^9 + 250871040z^8 + 586897920z^7 + 535127040z^6 + 99792000z^5 - 9752400z^4 + 680400z^3 + 680400z^2 - 1190700z + 1488375) \right)$$

07.25.03.adv3.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{297675} \left(e^z (2048z^{11} + 99328z^{10} + 1743360z^9 + 13789440z^8 + 49593600z^7 + 70277760z^6 + 21591360z^5 - 4082400z^4 + 1247400z^3 - 283500z^2 + 198450z - 297675) \right)$$

07.25.03.adv4.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{99225} \left(e^z (1024z^{10} + 40960z^9 + 564480z^8 + 3225600z^7 + 7056000z^6 + 3386880z^5 - 1058400z^4 + 604800z^3 - 283500z^2 + 99225) \right)$$

07.25.03.adv5.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{99225} \left(e^z (512 z^9 + 16128 z^8 + 161280 z^7 + 564480 z^6 + 423360 z^5 - 211680 z^4 + 211680 z^3 - 226800 z^2 + 198450 z - 99225) \right)$$

07.25.03.adv6.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{99225} \left(e^{z/2} (-256 z^9 - 7168 z^8 - 61632 z^7 - 173760 z^6 - 79920 z^5 + 32400 z^4 - 37800 z^3 + 63000 z^2 - 99225 z + 99225) I_0\left(\frac{z}{2}\right) + \frac{1}{99225} e^{z/2} (-256 z^9 - 6912 z^8 - 54848 z^7 - 122112 z^6 + 20880 z^5 - 12960 z^4 + 9000 z^3 - 11025 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.adv7.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{99225} e^z (256 z^8 + 5888 z^7 + 36480 z^6 + 45120 z^5 - 36480 z^4 + 58320 z^3 - 98280 z^2 + 132300 z - 99225)$$

07.25.03.adv8.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{99225} e^{z/2} (-256 z^8 - 4992 z^7 - 24000 z^6 - 14400 z^5 + 10800 z^4 - 25200 z^3 + 63000 z^2 - 113400 z + 99225) I_0\left(\frac{z}{2}\right) + \frac{1}{99225} e^{z/2} (-256 z^8 - 4736 z^7 - 19392 z^6 + 2880 z^5 + 2160 z^4 - 18000 z^3 + 63000 z^2 - 138600 z + 155925) I_1\left(\frac{z}{2}\right)$$

07.25.03.adv9.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{e^z (128 z^7 + 1856 z^6 + 4320 z^5 - 5520 z^4 + 12120 z^3 - 25380 z^2 + 39690 z - 33075)}{33075}$$

07.25.03.adva.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, 3; z\right) = -\frac{8 e^{z/2} (64 z^7 + 704 z^6 + 672 z^5 - 1200 z^4 + 4200 z^3 - 12600 z^2 + 26460 z - 29295) I_0\left(\frac{z}{2}\right) - \frac{1}{99225 z} 4 e^{z/2} (128 z^8 + 1280 z^7 + 128 z^6 - 2016 z^5 + 9600 z^4 - 33600 z^3 + 85680 z^2 - 145530 z + 135135) I_1\left(\frac{z}{2}\right)}{99225}$$

07.25.03.advb.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{e^z (64 z^6 + 384 z^5 - 720 z^4 + 1920 z^3 - 4500 z^2 + 7560 z - 6615)}{6615}$$

07.25.03.advc.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, 4; z\right) = -\frac{4 e^{z/2} (128 z^7 + 320 z^6 - 1152 z^5 + 5040 z^4 - 18480 z^3 + 52920 z^2 - 109620 z + 135135) I_0\left(\frac{z}{2}\right) - \frac{1}{33075 z^2} 4 e^{z/2} (128 z^8 + 192 z^7 - 1280 z^6 + 6288 z^5 - 25200 z^4 + 81480 z^3 - 207900 z^2 + 405405 z - 540540) I_1\left(\frac{z}{2}\right)}{33075 z}$$

07.25.03.advd.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{1}{945} e^z (32 z^5 - 80 z^4 + 240 z^3 - 600 z^2 + 1050 z - 945)$$

07.25.03.adve.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, 5; z\right) =$$

$$-\frac{1}{33075 z^2} 32 e^{z/2} (64 z^7 - 384 z^6 + 2256 z^5 - 11760 z^4 + 52920 z^3 - 197100 z^2 + 559845 z - 984555) I_0\left(\frac{z}{2}\right) -$$

$$\frac{1}{33075 z^3} 32 e^{z/2} (64 z^8 - 448 z^7 + 2736 z^6 - 14784 z^5 + 69720 z^4 - 279180 z^3 + 907335 z^2 - 2239380 z + 3938220) I_1\left(\frac{z}{2}\right)$$

07.25.03.advf.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{105 z^4} e^z (-16 z^8 + 176 z^7 - 1440 z^6 + 9660 z^5 - 53655 z^4 + 241920 z^3 - 846720 z^2 + 2116800 z - 3175200) +$$

$$\frac{15120 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.advg.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{105 z^4} e^{-z} (-16 z^8 - 176 z^7 - 1440 z^6 - 9660 z^5 - 53655 z^4 - 241920 z^3 - 846720 z^2 - 2116800 z - 3175200) +$$

$$\frac{15120 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.advh.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{9}{2}, 6; z\right) =$$

$$-\frac{1}{6615 z^3} 32 e^{z/2} (64 z^7 - 928 z^6 + 9168 z^5 - 70560 z^4 + 432480 z^3 - 2072070 z^2 + 7329465 z - 16628040) I_0\left(\frac{z}{2}\right) -$$

$$\frac{1}{6615 z^4} \left(32 e^{z/2} (64 z^8 - 992 z^7 + 10192 z^6 - 81312 z^5 + 520080 z^4 - 2646930 z^3 + 10366785 z^2 - 29317860 z + 66512160) I_1\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.advi.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{1157625} \left(e^z (4096 z^{12} + 237568 z^{11} + 5183488 z^{10} + 54081536 z^9 + 283838208 z^8 + 722383872 z^7 + 783310080 z^6 + 262644480 z^5 + 8613360 z^4 + 110880 z^3 + 506520 z^2 - 945000 z + 1157625)\right)$$

07.25.03.advj.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{165375} (e^z (2048 z^{11} + 103424 z^{10} + 1919488 z^9 + 16483584 z^8 + 67742976 z^7 + 124091520 z^6 + 81426240 z^5 + 9182880 z^4 - 284760 z^3 - 86940 z^2 + 122850 z - 165375))$$

07.25.03.advk.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{33075} (e^z (1024 z^{10} + 44032 z^9 + 673536 z^8 + 4537344 z^7 + 13453440 z^6 + 14958720 z^5 + 3316320 z^4 - 383040 z^3 + 49140 z^2 - 18900 z + 33075))$$

07.25.03.advl.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{11025} (e^z (512 z^9 + 18176 z^8 + 218624 z^7 + 1066240 z^6 + 1928640 z^5 + 729120 z^4 - 164640 z^3 + 55440 z^2 - 3150 z - 11025))$$

07.25.03.advm.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{11025} e^z (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025)$$

07.25.03.advn.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{11025} e^{z/2} (128 z^8 + 3200 z^7 + 24320 z^6 + 60352 z^5 + 26016 z^4 - 9840 z^3 + 10080 z^2 - 12600 z + 11025) I_0\left(\frac{z}{2}\right) + \frac{8 e^{z/2} (16 z^8 + 384 z^7 + 2664 z^6 + 5056 z^5 - 806 z^4 + 432 z^3 - 225 z^2) I_1\left(\frac{z}{2}\right)}{11025}$$

07.25.03.advo.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 2624 z^6 + 14304 z^5 + 15408 z^4 - 10536 z^3 + 13356 z^2 - 15750 z + 11025)}{11025}$$

07.25.03.advp.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (128 z^7 + 2240 z^6 + 9664 z^5 + 5712 z^4 - 4080 z^3 + 7560 z^2 - 12600 z + 11025) I_0\left(\frac{z}{2}\right) + e^{z/2} (128 z^7 + 2112 z^6 + 7616 z^5 - 976 z^4 - 1008 z^3 + 5400 z^2 - 12600 z + 14175) I_1\left(\frac{z}{2}\right)}{11025}$$

07.25.03.advq.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (64 z^6 + 832 z^5 + 1744 z^4 - 1888 z^3 + 3228 z^2 - 4620 z + 3675)}{3675}$$

07.25.03.advr.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 + 640 z^5 + 624 z^4 - 960 z^3 + 2520 z^2 - 5040 z + 5355) I_0\left(\frac{z}{2}\right)}{11025} + \frac{4 e^{z/2} (64 z^7 + 576 z^6 + 80 z^5 - 816 z^4 + 3000 z^3 - 7560 z^2 + 12285 z - 10395) I_1\left(\frac{z}{2}\right)}{11025 z}$$

07.25.03.advs.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{735} e^z (32 z^5 + 176 z^4 - 272 z^3 + 552 z^2 - 870 z + 735)$$

07.25.03.advt.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^6 + 160 z^5 - 464 z^4 + 1568 z^3 - 4200 z^2 + 8022 z - 9009) I_0\left(\frac{z}{2}\right)}{3675 z} + \frac{4 e^{z/2} (64 z^7 + 96 z^6 - 528 z^5 + 2080 z^4 - 6440 z^3 + 15498 z^2 - 28413 z + 36036) I_1\left(\frac{z}{2}\right)}{3675 z^2}$$

07.25.03.advu.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{105} e^z (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105)$$

07.25.03.advv.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 - 160 z^5 + 784 z^4 - 3360 z^3 + 12066 z^2 - 33462 z + 57915) I_0\left(\frac{z}{2}\right)}{3675 z^2} + \frac{64 e^{z/2} (16 z^7 - 96 z^6 + 496 z^5 - 2240 z^4 + 8667 z^3 - 27522 z^2 + 66924 z - 115830) I_1\left(\frac{z}{2}\right)}{3675 z^3}$$

07.25.03.advw.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (8 z^7 - 76 z^6 + 530 z^5 - 2975 z^4 + 13440 z^3 - 47040 z^2 + 117600 z - 176400)}{35 z^4} + \frac{7560 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.advx.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{7560 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}} - \frac{3 e^{-z} (8 z^7 + 76 z^6 + 530 z^5 + 2975 z^4 + 13440 z^3 + 47040 z^2 + 117600 z + 176400)}{35 z^4}$$

07.25.03.advy.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^6 - 400 z^5 + 3360 z^4 - 21492 z^3 + 105534 z^2 - 379665 z + 875160) I_0\left(\frac{z}{2}\right)}{735 z^3} + \frac{1}{735 z^4} 32 e^{z/2} (32 z^7 - 432 z^6 + 3808 z^5 - 25548 z^4 + 133518 z^3 - 531531 z^2 + 1518660 z - 3500640) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.advz.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{23625} (e^z (1024 z^{10} + 45056 z^9 + 711936 z^8 + 5038080 z^7 + 16238208 z^6 + 21450240 z^5 + 8537760 z^4 + 322560 z^3 + 18900 z^2 - 15120 z + 23625))$$

07.25.03.adw0.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{4725} (e^z (512 z^9 + 19200 z^8 + 250368 z^7 + 1392384 z^6 + 3245760 z^5 + 2610720 z^4 + 352800 z^3 - 15120 z^2 + 1890 z - 4725))$$

07.25.03.adw1.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{e^z (256 z^8 + 7936 z^7 + 81536 z^6 + 329280 z^5 + 470400 z^4 + 129360 z^3 - 17640 z^2 + 1260 z + 1575)}{1575}$$

07.25.03.adw2.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{e^z (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575)}{1575}$$

07.25.03.adw3.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, 1; z\right) = \frac{e^{z/2} (-64 z^7 - 1408 z^6 - 9296 z^5 - 19920 z^4 - 7896 z^3 + 2700 z^2 - 2205 z + 1575) I_0\left(\frac{z}{2}\right) + e^{z/2} (-64 z^7 - 1344 z^6 - 7984 z^5 - 12544 z^4 + 1800 z^3 - 756 z^2 + 225 z) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.adw4.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{e^z (64 z^6 + 1152 z^5 + 5424 z^4 + 4992 z^3 - 2772 z^2 + 2520 z - 1575)}{1575}$$

07.25.03.adw5.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (-64 z^6 - 992 z^5 - 3792 z^4 - 2208 z^3 + 1440 z^2 - 1890 z + 1575) I_0\left(\frac{z}{2}\right) + e^{z/2} (-64 z^6 - 928 z^5 - 2896 z^4 + 288 z^3 + 432 z^2 - 1350 z + 1575) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.adw6.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{1}{525} e^z (32 z^5 + 368 z^4 + 688 z^3 - 600 z^2 + 714 z - 525)$$

07.25.03.adw7.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, 3; z\right) = -\frac{8 e^{z/2} (16 z^5 + 144 z^4 + 144 z^3 - 180 z^2 + 315 z - 315) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (32 z^6 + 256 z^5 + 48 z^4 - 312 z^3 + 810 z^2 - 1260 z + 945) I_1\left(\frac{z}{2}\right)}{1575 z}$$

07.25.03.adw8.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{1}{105} e^z (16 z^4 + 80 z^3 - 96 z^2 + 132 z - 105)$$

07.25.03.adw9.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, 4; z\right) = -\frac{4 e^{z/2} (32 z^5 + 80 z^4 - 176 z^3 + 420 z^2 - 714 z + 693) I_0\left(\frac{z}{2}\right)}{525 z} - \frac{4 e^{z/2} (32 z^6 + 48 z^5 - 208 z^4 + 620 z^3 - 1386 z^2 + 2331 z - 2772) I_1\left(\frac{z}{2}\right)}{525 z^2}$$

07.25.03.adwa.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{1}{15} e^z (8 z^3 - 12 z^2 + 18 z - 15)$$

07.25.03.adwb.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, 5; z\right) = -\frac{32 e^{z/2} (16 z^5 - 64 z^4 + 252 z^3 - 852 z^2 + 2277 z - 3861) I_0\left(\frac{z}{2}\right)}{525 z^2} - \frac{32 e^{z/2} (16 z^6 - 80 z^5 + 340 z^4 - 1248 z^3 + 3825 z^2 - 9108 z + 15444) I_1\left(\frac{z}{2}\right)}{525 z^3}$$

07.25.03.adwc.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{6615 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 z^{9/2}} - \frac{3 e^z (4 z^6 - 32 z^5 + 185 z^4 - 840 z^3 + 2940 z^2 - 7350 z + 11025)}{5 z^4}$$

07.25.03.adwd.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{6615 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 z^{9/2}} - \frac{3 e^{-z} (4 z^6 + 32 z^5 + 185 z^4 + 840 z^3 + 2940 z^2 + 7350 z + 11025)}{5 z^4}$$

07.25.03.adwe.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{5}{2}, 6; z\right) = -\frac{32 e^{z/2} (16 z^5 - 168 z^4 + 1164 z^3 - 5940 z^2 + 21879 z - 51480) I_0\left(\frac{z}{2}\right)}{105 z^3} - \frac{32 e^{z/2} (16 z^6 - 184 z^5 + 1356 z^4 - 7404 z^3 + 30195 z^2 - 87516 z + 205920) I_1\left(\frac{z}{2}\right)}{105 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.adwf.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} e^z (256 z^8 + 8192 z^7 + 88320 z^6 + 387072 z^5 + 655200 z^4 + 322560 z^3 + 15120 z^2 + 945)$$

07.25.03.adwg.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{315} e^z (128 z^7 + 3392 z^6 + 28896 z^5 + 92400 z^4 + 96600 z^3 + 16380 z^2 - 630 z - 315)$$

07.25.03.adwh.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315)$$

07.25.03.adwi.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (32 z^6 + 608 z^5 + 3408 z^4 + 6144 z^3 + 2178 z^2 - 630 z + 315) I_0\left(\frac{z}{2}\right) + \frac{2}{315} e^{z/2} (16 z^6 + 288 z^5 + 1424 z^4 + 1776 z^3 - 213 z^2 + 54 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.adwj.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{315} e^z (32 z^5 + 496 z^4 + 1968 z^3 + 1512 z^2 - 630 z + 315)$$

07.25.03.adwk.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (32 z^5 + 432 z^4 + 1440 z^3 + 828 z^2 - 450 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (32 z^5 + 400 z^4 + 1056 z^3 - 60 z^2 - 162 z + 225) I_1\left(\frac{z}{2}\right)$$

07.25.03.adwl.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{105} e^z (16 z^4 + 160 z^3 + 264 z^2 - 168 z + 105)$$

07.25.03.adwm.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, 3; z\right) = \frac{4}{315} e^{z/2} (16 z^4 + 128 z^3 + 132 z^2 - 120 z + 105) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (16 z^5 + 112 z^4 + 28 z^3 - 108 z^2 + 165 z - 105) I_1\left(\frac{z}{2}\right)}{315 z}$$

07.25.03.adwn.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{21} e^z (8 z^3 + 36 z^2 - 30 z + 21)$$

07.25.03.adwo.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 + 40 z^3 - 60 z^2 + 84 z - 63) I_0\left(\frac{z}{2}\right)}{105 z} + \frac{4 e^{z/2} (16 z^5 + 24 z^4 - 76 z^3 + 156 z^2 - 231 z + 252) I_1\left(\frac{z}{2}\right)}{105 z^2}$$

07.25.03.adwp.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{3} e^z (4 z^2 - 4 z + 3)$$

07.25.03.adwq.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 - 24 z^3 + 72 z^2 - 180 z + 297) I_0\left(\frac{z}{2}\right)}{105 z^2} + \frac{128 e^{z/2} (2 z^5 - 8 z^4 + 27 z^3 - 78 z^2 + 180 z - 297) I_1\left(\frac{z}{2}\right)}{105 z^3}$$

07.25.03.adwr.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (4 z^5 - 26 z^4 + 120 z^3 - 420 z^2 + 1050 z - 1575)}{2 z^4} + \frac{4725 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{9/2}}$$

07.25.03.adws.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{4725 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{9/2}} - \frac{3 e^{-z} (4 z^5 + 26 z^4 + 120 z^3 + 420 z^2 + 1050 z + 1575)}{2 z^4}$$

07.25.03.adwt.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^4 - 68 z^3 + 372 z^2 - 1419 z + 3432) I_0\left(\frac{z}{2}\right) + 32 e^{z/2} (8 z^5 - 76 z^4 + 452 z^3 - 1917 z^2 + 5676 z - 13728) I_1\left(\frac{z}{2}\right)}{21 z^3 + 21 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.adwu.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} e^z (64 z^6 + 1408 z^5 + 9520 z^4 + 22400 z^3 + 14700 z^2 + 840 z + 105)$$

07.25.03.adwv.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{105} e^z (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105)$$

07.25.03.adww.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (-16 z^5 - 256 z^4 - 1180 z^3 - 1724 z^2 - 525 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-16 z^5 - 240 z^4 - 948 z^3 - 880 z^2 + 71 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.adwx.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{105} e^z (16 z^4 + 208 z^3 + 672 z^2 + 420 z - 105)$$

07.25.03.adwy.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-16 z^4 - 184 z^3 - 524 z^2 - 300 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-16 z^4 - 168 z^3 - 364 z^2 - 4 z + 45) I_1\left(\frac{z}{2}\right)$$

07.25.03.adwz.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{1}{35} e^z (8 z^3 + 68 z^2 + 98 z - 35)$$

07.25.03.adx0.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, 3; z\right) = -\frac{8}{105} e^{z/2} (4 z^3 + 28 z^2 + 30 z - 15) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8 z^4 + 48 z^3 + 16 z^2 - 30 z + 15) I_1\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.adx1.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{1}{7} e^z (4 z^2 + 16 z - 7)$$

07.25.03.adx2.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, 4; z\right) = -\frac{4 e^{z/2} (8 z^3 + 20 z^2 - 16 z + 7) I_0\left(\frac{z}{2}\right)}{35 z} - \frac{4 e^{z/2} (8 z^4 + 12 z^3 - 24 z^2 + 29 z - 28) I_1\left(\frac{z}{2}\right)}{35 z^2}$$

07.25.03.adx3.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -e^z (2 z - 1)$$

07.25.03.adx4.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, 5; z\right) = -\frac{32 e^{z/2} (4 z^3 - 8 z^2 + 17 z - 27) I_0\left(\frac{z}{2}\right)}{35 z^2} - \frac{32 e^{z/2} (4 z^4 - 12 z^3 + 31 z^2 - 68 z + 108) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.adx5.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{4725 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{9/2}} - \frac{9 e^z (8 z^4 - 40 z^3 + 140 z^2 - 350 z + 525)}{8 z^4}$$

07.25.03.adx6.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{4725 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{9/2}} - \frac{9 e^{-z} (8 z^4 + 40 z^3 + 140 z^2 + 350 z + 525)}{8 z^4}$$

07.25.03.adx7.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; -\frac{1}{2}, 6; z\right) = -\frac{32 e^{z/2} (4 z^3 - 26 z^2 + 105 z - 264) I_0\left(\frac{z}{2}\right)}{7 z^3} - \frac{32 e^{z/2} (4 z^4 - 30 z^3 + 137 z^2 - 420 z + 1056) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{1}{2}$

07.25.03.adx8.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105)$$

07.25.03.adx9.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (8 z^4 + 104 z^3 + 376 z^2 + 420 z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} (2 z^4 + 24 z^3 + 71 z^2 + 44 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.adxa.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (8 z^3 + 84 z^2 + 210 z + 105)$$

07.25.03.adxb.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (8 z^3 + 76 z^2 + 180 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8 z^3 + 68 z^2 + 116 z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.adxc.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{35} e^z (4 z^2 + 28 z + 35)$$

07.25.03.adxd.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4 z^2 + 24 z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4 z^3 + 20 z^2 + 9 z - 3) I_1\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.adxe.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (2 z + 7)$$

07.25.03.adxf.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (4 z^2 + 10 z - 1) I_0\left(\frac{z}{2}\right)}{35 z} + \frac{4 e^{z/2} (4 z^3 + 6 z^2 - 5 z + 4) I_1\left(\frac{z}{2}\right)}{35 z^2}$$

07.25.03.adxg.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = e^z$$

07.25.03.adxh.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 - 2z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} + \frac{64 e^{z/2} (z^3 - 2z^2 + 4z - 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.adxi.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (8z^3 - 28z^2 + 70z - 105)}{16 z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.adxj.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9 e^{-z} (8z^3 + 28z^2 + 70z + 105)}{16 z^4}$$

07.25.03.adxk.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^2 - 9z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{32 e^{z/2} (2z^3 - 11z^2 + 36z - 96) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 1$

07.25.03.adxl.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{105} e^{z/2} (4z^3 + 40z^2 + 105z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (4z^3 + 36z^2 + 71z) I_1\left(\frac{z}{2}\right)$$

07.25.03.adxm.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{35} e^{z/2} (2z^2 + 14z + 35) I_0\left(\frac{z}{2}\right) + \frac{2}{35} e^{z/2} (z^2 + 6z) I_1\left(\frac{z}{2}\right)$$

07.25.03.adxn.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{7} e^{z/2} (z + 7) I_0\left(\frac{z}{2}\right) + \frac{1}{7} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.adxo.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; 1, \frac{9}{2}; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{3}{2}$

07.25.03.adxp.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (4z^2 + 32z + 57) + \frac{8 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.adxq.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} e^{-z} (4z^2 - 32z + 57) + \frac{8 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.adxr.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (4z^2 + 30z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (4z^2 + 26z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.adxs.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{35} e^z (2z + 11) + \frac{12\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.adxt.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{35} e^{-z} (11 - 2z) + \frac{12\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{35\sqrt{z}}$$

07.25.03.adxu.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, 3; z\right) = \frac{8}{105} e^{z/2} (z + 13) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2z^2 - 8z + 1) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.adxv.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{3\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7\sqrt{z}} + \frac{e^z}{7}$$

07.25.03.adxw.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7\sqrt{z}} + \frac{e^{-z}}{7}$$

07.25.03.adxx.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (42z + 1) I_0\left(\frac{z}{2}\right)}{175z} - \frac{4 e^{z/2} (22z^2 - 7z + 4) I_1\left(\frac{z}{2}\right)}{175z^2}$$

07.25.03.adxy.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.adxz.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.ady0.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (32z^2 + 11z - 15) I_0\left(\frac{z}{2}\right)}{1225z^2} - \frac{32 e^{z/2} (32z^3 - 27z^2 + 44z - 60) I_1\left(\frac{z}{2}\right)}{1225z^3}$$

07.25.03.ady1.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{9\sqrt{\pi} (16z^4 - 105) \operatorname{erfi}(\sqrt{z})}{256z^{9/2}} - \frac{9e^z (8z^3 - 28z^2 + 70z - 105)}{128z^4}$$

07.25.03.ady2.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{9e^{-z} (8z^3 + 28z^2 + 70z + 105)}{128z^4} + \frac{9\sqrt{\pi} (16z^4 - 105) \operatorname{erf}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.ady3.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^3 - 48 z^2 + 285 z - 840) I_0\left(\frac{z}{2}\right)}{2205 z^3} - \frac{32 e^{z/2} (64 z^4 + 16 z^3 - 297 z^2 + 1140 z - 3360) I_1\left(\frac{z}{2}\right)}{2205 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 2$

07.25.03.ady4.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{35} e^{z/2} (2z + 35) I_0\left(\frac{z}{2}\right) + \frac{1}{35} e^{z/2} (2z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.ady5.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; 2, \frac{7}{2}; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{5}{7} e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.ady6.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; 2, \frac{9}{2}; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - e^{z/2} I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{5}{2}$

07.25.03.ady7.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3 e^z (z - 2)}{35 z} + \frac{3 \sqrt{\pi} (6z + 1) \operatorname{erfi}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.ady8.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (z + 2)}{35 z} + \frac{3 \sqrt{\pi} (6z - 1) \operatorname{erf}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.ady9.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, 3; z\right) = \frac{36}{35} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (7z + 1) I_1\left(\frac{z}{2}\right)}{35 z}$$

07.25.03.adya.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{3 \sqrt{\pi} (3z + 1) \operatorname{erfi}(\sqrt{z})}{14 z^{3/2}} - \frac{3 e^z}{7 z}$$

07.25.03.adyb.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{3 \sqrt{\pi} (3z - 1) \operatorname{erf}(\sqrt{z})}{14 z^{3/2}} + \frac{3 e^{-z}}{7 z}$$

07.25.03.adyc.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (48z - 1) I_0\left(\frac{z}{2}\right)}{175 z} - \frac{4 e^{z/2} (48z^2 + 17z - 4) I_1\left(\frac{z}{2}\right)}{175 z^2}$$

07.25.03.adyd.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{3 \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3 e^z}{4 z}$$

07.25.03.adye.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{3\sqrt{\pi}(2z-1)\operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.adyf.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, 5; z\right) = \frac{32e^{z/2}(48z^2-8z+9)I_0\left(\frac{z}{2}\right)}{1225z^2} - \frac{128e^{z/2}(12z^3+10z^2-8z+9)I_1\left(\frac{z}{2}\right)}{1225z^3}$$

07.25.03.adyg.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{9\sqrt{\pi}(48z^4+32z^3+105)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}} - \frac{9e^{-z}(24z^3+28z^2-70z+105)}{256z^4}$$

07.25.03.adyh.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{9e^{-z}(24z^3-28z^2-70z-105)}{256z^4} + \frac{9\sqrt{\pi}(48z^4-32z^3+105)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.adyi.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{5}{2}, 6; z\right) = \frac{32e^{z/2}(32z^3-33z+120)I_0\left(\frac{z}{2}\right)}{735z^3} - \frac{32e^{z/2}(32z^4+32z^3+15z^2-132z+480)I_1\left(\frac{z}{2}\right)}{735z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 3$

07.25.03.adyj.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; 3, \frac{7}{2}; z\right) = \frac{8}{7}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(2z+1)I_1\left(\frac{z}{2}\right)}{7z}$$

07.25.03.adyk.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; 3, \frac{9}{2}; z\right) = \frac{4}{3}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(z+1)I_1\left(\frac{z}{2}\right)}{3z}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{7}{2}$

07.25.03.adyl.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi}(12z^2+8z+3)\operatorname{erfi}(\sqrt{z})}{224z^{5/2}} - \frac{45e^{-z}(2z+1)}{112z^2}$$

07.25.03.adym.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{45e^{-z}(2z-1)}{112z^2} + \frac{15\sqrt{\pi}(12z^2-8z+3)\operatorname{erf}(\sqrt{z})}{224z^{5/2}}$$

07.25.03.adyn.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, 4; z\right) = \frac{4e^{z/2}(12z+1)I_0\left(\frac{z}{2}\right)}{35z} - \frac{4e^{z/2}(12z^2+13z+4)I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.adyo.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{15\sqrt{\pi}(4z^2+4z+3)\operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15e^{-z}(2z+3)}{32z^2}$$

07.25.03.adyp.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{15 e^{-z} (2z - 3)}{32 z^2} + \frac{15 \sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.adyq.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (12z^2 + 5z - 3) I_0\left(\frac{z}{2}\right)}{245 z^2} - \frac{32 e^{z/2} (12z^3 + 17z^2 + 20z - 12) I_1\left(\frac{z}{2}\right)}{245 z^3}$$

07.25.03.adyr.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{45 \sqrt{\pi} (48z^4 + 64z^3 + 72z^2 - 105) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}} - \frac{45 e^z (24z^3 + 44z^2 + 70z - 105)}{1024 z^4}$$

07.25.03.adys.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{45 e^{-z} (24z^3 - 44z^2 + 70z + 105)}{1024 z^4} + \frac{45 \sqrt{\pi} (48z^4 - 64z^3 + 72z^2 - 105) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.adyt.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (8z^3 + 6z^2 + 3z - 24) I_0\left(\frac{z}{2}\right)}{147 z^3} - \frac{32 e^{z/2} (8z^4 + 14z^3 + 21z^2 + 12z - 96) I_1\left(\frac{z}{2}\right)}{147 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 4$

07.25.03.adyu.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; 4, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (2z + 1) I_0\left(\frac{z}{2}\right)}{5 z} - \frac{4 e^{z/2} (2z^2 + 3z + 4) I_1\left(\frac{z}{2}\right)}{5 z^2}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{9}{2}$

07.25.03.adyv.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 \sqrt{\pi} (8z^3 + 12z^2 + 18z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{35 e^z (4z^2 + 8z + 15)}{128 z^3}$$

07.25.03.adyw.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z^2 - 8z + 15)}{128 z^3} + \frac{35 \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.adyx.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 + 2z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} - \frac{64 e^{z/2} (z^3 + 2z^2 + 4z + 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.adyy.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (16z^4 + 32z^3 + 72z^2 + 120z + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315 e^z (8z^3 + 20z^2 + 50z + 105)}{2048 z^4}$$

07.25.03.adyz.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (8z^3 - 20z^2 + 50z - 105)}{2048 z^4} + \frac{315 \sqrt{\pi} (16z^4 - 32z^3 + 72z^2 - 120z + 105) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.adz0.01

$${}_2F_2\left(\frac{1}{2}, \frac{9}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (4 z^3 + 6 z^2 + 15 z + 24) I_0\left(\frac{z}{2}\right)}{63 z^3} - \frac{32 e^{z/2} (4 z^4 + 10 z^3 + 27 z^2 + 60 z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 = -\frac{11}{2}$

07.25.03.adz1.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{324\,168\,075} (512 z^{16} + 51\,968 z^{15} + 2\,133\,120 z^{14} + 46\,001\,088 z^{13} + 567\,060\,480 z^{12} + 4\,075\,747\,200 z^{11} + 16\,705\,492\,992 z^{10} + 36\,497\,341\,440 z^9 + 36\,862\,076\,160 z^8 + 12\,435\,897\,600 z^7 + 419\,126\,400 z^6 + 11\,430\,720 z^5 + 3\,175\,200 z^4 + 2\,835\,000 z^3 + 5\,953\,500 z^2 + 26\,790\,750 z + 324\,168\,075) + \frac{1}{324\,168\,075} (32 e^z \sqrt{\pi} (16 z^{33/2} + 1632 z^{31/2} + 67\,464 z^{29/2} + 1\,470\,072 z^{27/2} + 18\,408\,033 z^{25/2} + 135\,584\,820 z^{23/2} + 578\,392\,290 z^{21/2} + 1\,354\,661\,280 z^{19/2} + 1\,562\,946\,840 z^{17/2} + 713\,028\,960 z^{15/2} + 73\,256\,400 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.adz2.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{324\,168\,075} (512 z^{16} - 51\,968 z^{15} + 2\,133\,120 z^{14} - 46\,001\,088 z^{13} + 567\,060\,480 z^{12} - 4\,075\,747\,200 z^{11} + 16\,705\,492\,992 z^{10} - 36\,497\,341\,440 z^9 + 36\,862\,076\,160 z^8 - 12\,435\,897\,600 z^7 + 419\,126\,400 z^6 - 11\,430\,720 z^5 + 3\,175\,200 z^4 - 2\,835\,000 z^3 + 5\,953\,500 z^2 - 26\,790\,750 z + 324\,168\,075) - \frac{1}{324\,168\,075} (32 e^{-z} \sqrt{\pi} (16 z^{33/2} - 1632 z^{31/2} + 67\,464 z^{29/2} - 1\,470\,072 z^{27/2} + 18\,408\,033 z^{25/2} - 135\,584\,820 z^{23/2} + 578\,392\,290 z^{21/2} - 1\,354\,661\,280 z^{19/2} + 1\,562\,946\,840 z^{17/2} - 713\,028\,960 z^{15/2} + 73\,256\,400 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.adz3.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{29\,469\,825} (-256 z^{15} - 23\,424 z^{14} - 855\,872 z^{13} - 16\,164\,960 z^{12} - 170\,775\,360 z^{11} - 1\,020\,336\,768 z^{10} - 3\,319\,718\,400 z^9 - 5\,325\,143\,040 z^8 - 3\,363\,897\,600 z^7 - 419\,126\,400 z^6 + 11\,430\,720 z^5 + 1\,058\,400 z^4 + 567\,000 z^3 + 850\,500 z^2 + 2\,976\,750 z + 29\,469\,825) - \frac{1}{29\,469\,825} (16 e^z \sqrt{\pi} (16 z^{31/2} + 1472 z^{29/2} + 54\,216 z^{27/2} + 1\,036\,344 z^{25/2} + 11\,153\,625 z^{23/2} + 68\,663\,070 z^{21/2} + 235\,076\,940 z^{19/2} + 414\,353\,520 z^{17/2} + 319\,886\,280 z^{15/2} + 73\,256\,400 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.adz4.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{29469825} (256 z^{15} - 23424 z^{14} + 855872 z^{13} - 16164960 z^{12} + 170775360 z^{11} - 1020336768 z^{10} +$$

$$3319718400 z^9 - 5325143040 z^8 + 3363897600 z^7 - 419126400 z^6 -$$

$$11430720 z^5 + 1058400 z^4 - 567000 z^3 + 850500 z^2 - 2976750 z + 29469825) -$$

$$\frac{1}{29469825} \left(16 e^{-z} \sqrt{\pi} (16 z^{31/2} - 1472 z^{29/2} + 54216 z^{27/2} - 1036344 z^{25/2} + 11153625 z^{23/2} -$$

$$68663070 z^{21/2} + 235076940 z^{19/2} - 414353520 z^{17/2} + 319886280 z^{15/2} - 73256400 z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.adz5.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{3274425} (128 z^{14} + 10432 z^{13} + 334112 z^{12} + 5414640 z^{11} + 47639808 z^{10} + 226664640 z^9 + 544919040 z^8 +$$

$$555569280 z^7 + 139708800 z^6 - 11430720 z^5 + 1058400 z^4 + 189000 z^3 + 170100 z^2 + 425250 z + 3274425) +$$

$$\frac{1}{3274425} \left(8 e^z \sqrt{\pi} (16 z^{29/2} + 1312 z^{27/2} + 42408 z^{25/2} + 697080 z^{23/2} + 6274065 z^{21/2} +$$

$$31018680 z^{19/2} + 79983540 z^{17/2} + 94419360 z^{15/2} + 36628200 z^{13/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.adz6.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{3274425} (128 z^{14} - 10432 z^{13} + 334112 z^{12} - 5414640 z^{11} + 47639808 z^{10} - 226664640 z^9 + 544919040 z^8 -$$

$$555569280 z^7 + 139708800 z^6 + 11430720 z^5 + 1058400 z^4 - 189000 z^3 + 170100 z^2 - 425250 z + 3274425) -$$

$$\frac{1}{3274425} \left(8 e^{-z} \sqrt{\pi} (16 z^{29/2} - 1312 z^{27/2} + 42408 z^{25/2} - 697080 z^{23/2} + 6274065 z^{21/2} -$$

$$31018680 z^{19/2} + 79983540 z^{17/2} - 94419360 z^{15/2} + 36628200 z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.adz7.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{467775} (-64 z^{13} - 4576 z^{12} - 125904 z^{11} - 1702296 z^{10} - 11961360 z^9 - 42277680 z^8 - 65413440 z^7 -$$

$$27941760 z^6 + 3810240 z^5 - 1058400 z^4 + 189000 z^3 + 56700 z^2 + 85050 z + 467775) -$$

$$\frac{1}{467775} \left(4 e^z \sqrt{\pi} (16 z^{27/2} + 1152 z^{25/2} + 32040 z^{23/2} + 440760 z^{21/2} + 3188745 z^{19/2} +$$

$$11886210 z^{17/2} + 20552490 z^{15/2} + 12209400 z^{13/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.adz8.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{467775} (64 z^{13} - 4576 z^{12} + 125904 z^{11} - 1702296 z^{10} + 11961360 z^9 - 42277680 z^8 + 65413440 z^7 -$$

$$27941760 z^6 - 3810240 z^5 - 1058400 z^4 - 189000 z^3 + 56700 z^2 - 85050 z + 467775) -$$

$$\frac{1}{467775} \left(4 e^{-z} \sqrt{\pi} (16 z^{27/2} - 1152 z^{25/2} + 32040 z^{23/2} - 440760 z^{21/2} + 3188745 z^{19/2} -$$

$$11886210 z^{17/2} + 20552490 z^{15/2} - 12209400 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.adz9.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{93555} (32 z^{12} + 1968 z^{11} + 45256 z^{10} + 490044 z^9 + 2570688 z^8 + 5911560 z^7 + 3991680 z^6 - 762048 z^5 +$$

$$352800 z^4 - 189000 z^3 + 56700 z^2 + 28350 z + 93555) + \frac{1}{93555}$$

$$\left(2 e^z \sqrt{\pi} (16 z^{25/2} + 992 z^{23/2} + 23112 z^{21/2} + 255864 z^{19/2} + 1397697 z^{17/2} + 3500028 z^{15/2} + 3052350 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.adza.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{93555} (32 z^{12} - 1968 z^{11} + 45256 z^{10} - 490044 z^9 + 2570688 z^8 - 5911560 z^7 + 3991680 z^6 + 762048 z^5 +$$

$$352800 z^4 + 189000 z^3 + 56700 z^2 - 28350 z + 93555) - \frac{1}{93555}$$

$$\left(2 e^{-z} \sqrt{\pi} (16 z^{25/2} - 992 z^{23/2} + 23112 z^{21/2} - 255864 z^{19/2} + 1397697 z^{17/2} - 3500028 z^{15/2} + 3052350 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.adzb.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{31185} (-16 z^{11} - 824 z^{10} - 15220 z^9 - 123654 z^8 - 426420 z^7 - 443520 z^6 + 108864 z^5 - 70560 z^4 +$$

$$63000 z^3 - 56700 z^2 + 28350 z + 31185) +$$

$$\frac{1}{31185} e^z \sqrt{\pi} (-16 z^{23/2} - 832 z^{21/2} - 15624 z^{19/2} - 130872 z^{17/2} - 481593 z^{15/2} - 610470 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.adzc.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{31185} (16 z^{11} - 824 z^{10} + 15220 z^9 - 123654 z^8 + 426420 z^7 - 443520 z^6 - 108864 z^5 - 70560 z^4 -$$

$$63000 z^3 - 56700 z^2 - 28350 z + 31185) +$$

$$\frac{1}{31185} e^{-z} \sqrt{\pi} (-16 z^{23/2} + 832 z^{21/2} - 15624 z^{19/2} + 130872 z^{17/2} - 481593 z^{15/2} + 610470 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.adzd.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{31185} (8z^{10} + 332z^9 + 4626z^8 + 24975z^7 + 40320z^6 - 12096z^5 + 10080z^4 - 12600z^3 + 18900z^2 - 28350z + 31185) + \frac{e^z \sqrt{\pi} (16z^{21/2} + 672z^{19/2} + 9576z^{17/2} + 54264z^{15/2} + 101745z^{13/2}) \operatorname{erf}(\sqrt{z})}{62370}$$

07.25.03.adze.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{31185} (8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185) + \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 672z^{19/2} - 9576z^{17/2} + 54264z^{15/2} - 101745z^{13/2}) \operatorname{erfi}(\sqrt{z})}{62370}$$

07.25.03.adzf.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, 1; z\right) = \frac{1}{249480} (e^z (64z^{10} + 2368z^9 + 28368z^8 + 122016z^7 + 116508z^6 - 77868z^5 + 111195z^4 - 186480z^3 + 294840z^2 - 362880z + 249480))$$

07.25.03.adzg.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{8z^9 + 252z^8 + 2362z^7 + 6195z^6 - 2142z^5 + 1890z^4 - 1800z^3 + 6300z - 13230}{62370} + \frac{1}{124740\sqrt{z}} (e^z \sqrt{\pi} (16z^{10} + 512z^9 + 4968z^8 + 14520z^7 + 105z^6 - 630z^5 + 3150z^4 - 12600z^3 + 37800z^2 - 75600z + 75600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.adzh.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{-8z^9 + 252z^8 - 2362z^7 + 6195z^6 + 2142z^5 + 1890z^4 + 1800z^3 - 6300z - 13230}{62370} + \frac{1}{124740\sqrt{z}} (e^{-z} \sqrt{\pi} (16z^{10} - 512z^9 + 4968z^8 - 14520z^7 + 105z^6 + 630z^5 + 3150z^4 + 12600z^3 + 37800z^2 + 75600z + 75600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.adzi.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, 2; z\right) = \frac{1}{249480} e^z (64z^9 + 1728z^8 + 12816z^7 + 19488z^6 - 19908z^5 + 41580z^4 - 96705z^3 + 200340z^2 - 306180z + 249480)$$

07.25.03.adzj.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{8z^9 + 172z^8 + 818z^7 - 273z^6 + 1350z^4 - 7200z^3 + 25200z^2 - 59220z + 75600}{41580z} + \frac{1}{83160z^{3/2}} \left(e^z \sqrt{\pi} (16z^{10} + 352z^9 + 1800z^8 + 120z^7 - 735z^6 + 3780z^5 - 15750z^4 + 50400z^3 - 113400z^2 + 151200z - 75600) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.adzk.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{8z^9 - 172z^8 + 818z^7 + 273z^6 - 1350z^4 - 7200z^3 - 25200z^2 - 59220z - 75600}{41580z} + \frac{1}{83160z^{3/2}} \left(e^{-z} \sqrt{\pi} (-16z^{10} + 352z^9 - 1800z^8 + 120z^7 + 735z^6 + 3780z^5 + 15750z^4 + 50400z^3 + 113400z^2 + 151200z + 75600) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.adzl.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, 3; z\right) = \frac{e^z (64z^8 + 1088z^7 + 3024z^6 - 4704z^5 + 13020z^4 - 36540z^3 + 85995z^2 - 143640z + 124740)}{124740}$$

07.25.03.adzm.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{8z^9 + 92z^8 - 6z^7 - 189z^6 + 1242z^5 - 5940z^4 + 22320z^3 - 64512z^2 + 136080z - 181440}{16632z^2} + \frac{1}{33264z^{5/2}} \left(e^z \sqrt{\pi} (16z^{10} + 192z^9 + 72z^8 - 456z^7 + 2457z^6 - 10962z^5 + 39060z^4 - 105840z^3 + 204120z^2 - 257040z + 181440) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.adzn.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{-8z^9 + 92z^8 + 6z^7 - 189z^6 - 1242z^5 - 5940z^4 - 22320z^3 - 64512z^2 - 136080z - 181440}{16632z^2} + \frac{1}{33264z^{5/2}} \left(e^{-z} \sqrt{\pi} (16z^{10} - 192z^9 + 72z^8 + 456z^7 + 2457z^6 + 10962z^5 + 39060z^4 + 105840z^3 + 204120z^2 + 257040z + 181440) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.adzo.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, 4; z\right) = \frac{e^z (64z^7 + 448z^6 - 1008z^5 + 3360z^4 - 10500z^3 + 26460z^2 - 46305z + 41580)}{41580}$$

07.25.03.adzp.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{8z^9 + 12z^8 - 110z^7 + 687z^6 - 3600z^5 + 16020z^4 - 60192z^3 + 189000z^2 - 483840z + 907200}{4752z^3} + \frac{1}{9504z^{7/2}} \left(e^z \sqrt{\pi} (16z^{10} + 32z^9 - 216z^8 + 1272z^7 - 6447z^6 + 27720z^5 - 99540z^4 + 292320z^3 - 672840z^2 + 1088640z - 907200) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.adzq.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{8z^9 - 12z^8 - 110z^7 - 687z^6 - 3600z^5 - 16020z^4 - 60192z^3 - 189000z^2 - 483840z - 907200}{4752z^3} +$$

$$\frac{1}{9504z^{7/2}} \left(e^{-z} \sqrt{\pi} (-16z^{10} + 32z^9 + 216z^8 + 1272z^7 + 6447z^6 + 27720z^5 + 99540z^4 + 292320z^3 + 672840z^2 + 1088640z + 907200) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.adzr.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, 5; z\right) = \frac{e^z (64z^6 - 192z^5 + 720z^4 - 2400z^3 + 6300z^2 - 11340z + 10395)}{10395}$$

07.25.03.adzs.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{1056z^4} (8z^9 - 68z^8 + 506z^7 - 3405z^6 + 20610z^5 - 110466z^4 + 511560z^3 - 1980720z^2 + 6199200z - 15876000) +$$

$$\frac{1}{2112z^{9/2}} \left(e^z \sqrt{\pi} (16z^{10} - 128z^9 + 936z^8 - 6216z^7 + 37065z^6 - 194670z^5 + 873810z^4 - 3202920z^3 + 8935920z^2 - 16783200z + 15876000) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.adzt.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{1056z^4} (-8z^9 - 68z^8 - 506z^7 - 3405z^6 - 20610z^5 - 110466z^4 - 511560z^3 - 1980720z^2 - 6199200z - 15876000) +$$

$$\frac{1}{2112z^{9/2}} \left(e^{-z} \sqrt{\pi} (16z^{10} + 128z^9 + 936z^8 + 6216z^7 + 37065z^6 + 194670z^5 + 873810z^4 + 3202920z^3 + 8935920z^2 + 16783200z + 15876000) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.adzu.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{11}{2}, 6; z\right) =$$

$$\frac{1}{2079z^5} \left(e^z (64z^{10} - 832z^9 + 8208z^8 - 68064z^7 + 482748z^6 - 2907828z^5 + 14549535z^4 - 58198140z^3 + 174594420z^2 - 349188840z + 349188840) \right) - \frac{167960}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 = -\frac{9}{2}$

07.25.03.adzv.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{2679075} (128 z^{14} + 10560 z^{13} + 343520 z^{12} + 5682960 z^{11} + 51449072 z^{10} + 255381120 z^9 + 658327680 z^8 + 770908800 z^7 + 298195200 z^6 + 11430720 z^5 + 352800 z^4 + 113400 z^3 + 121500 z^2 + 330750 z + 2679075) + \frac{1}{2679075} (8 e^z \sqrt{\pi} (16 z^{29/2} + 1328 z^{27/2} + 43592 z^{25/2} + 731200 z^{23/2} + 6766425 z^{21/2} + 34830945 z^{19/2} + 95753160 z^{17/2} + 127094040 z^{15/2} + 65698200 z^{13/2} + 7558200 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.adzw.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{2679075} (128 z^{14} - 10560 z^{13} + 343520 z^{12} - 5682960 z^{11} + 51449072 z^{10} - 255381120 z^9 + 658327680 z^8 - 770908800 z^7 + 298195200 z^6 - 11430720 z^5 + 352800 z^4 - 113400 z^3 + 121500 z^2 - 330750 z + 2679075) - \frac{1}{2679075} (8 e^{-z} \sqrt{\pi} (16 z^{29/2} - 1328 z^{27/2} + 43592 z^{25/2} - 731200 z^{23/2} + 6766425 z^{21/2} - 34830945 z^{19/2} + 95753160 z^{17/2} - 127094040 z^{15/2} + 65698200 z^{13/2} - 7558200 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.adzx.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{297675} (-64 z^{13} - 4704 z^{12} - 134160 z^{11} - 1904632 z^{10} - 14358240 z^9 - 56704320 z^8 - 107669760 z^7 - 79243200 z^6 - 11430720 z^5 + 352800 z^4 + 37800 z^3 + 24300 z^2 + 47250 z + 297675) - \frac{1}{297675} (4 e^z \sqrt{\pi} (16 z^{27/2} + 1184 z^{25/2} + 34120 z^{23/2} + 492360 z^{21/2} + 3812265 z^{19/2} + 15769620 z^{17/2} + 32674680 z^{15/2} + 29070000 z^{13/2} + 7558200 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.adzy.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{297675} (64 z^{13} - 4704 z^{12} + 134160 z^{11} - 1904632 z^{10} + 14358240 z^9 - 56704320 z^8 + 107669760 z^7 - 79243200 z^6 + 11430720 z^5 + 352800 z^4 - 37800 z^3 + 24300 z^2 - 47250 z + 297675) - \frac{1}{297675} (4 e^{-z} \sqrt{\pi} (16 z^{27/2} - 1184 z^{25/2} + 34120 z^{23/2} - 492360 z^{21/2} + 3812265 z^{19/2} - 15769620 z^{17/2} + 32674680 z^{15/2} - 29070000 z^{13/2} + 7558200 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.adzz.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{42525} (32 z^{12} + 2064 z^{11} + 50584 z^{10} + 599220 z^9 + 3606660 z^8 + 10564080 z^7 + 12825360 z^6 + 3810240 z^5 - 352800 z^4 + 37800 z^3 + 8100 z^2 + 9450 z + 42525) + \frac{1}{42525} \left(2 e^z \sqrt{\pi} (16 z^{25/2} + 1040 z^{23/2} + 25800 z^{21/2} + 311760 z^{19/2} + 1941705 z^{17/2} + 6061095 z^{15/2} + 8430300 z^{13/2} + 3779100 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ae00.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{42525} (32 z^{12} - 2064 z^{11} + 50584 z^{10} - 599220 z^9 + 3606660 z^8 - 10564080 z^7 + 12825360 z^6 - 3810240 z^5 - 352800 z^4 - 37800 z^3 + 8100 z^2 - 9450 z + 42525) - \frac{1}{42525} \left(2 e^{-z} \sqrt{\pi} (16 z^{25/2} - 1040 z^{23/2} + 25800 z^{21/2} - 311760 z^{19/2} + 1941705 z^{17/2} - 6061095 z^{15/2} + 8430300 z^{13/2} - 3779100 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ae01.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{8505} (-16 z^{11} - 888 z^{10} - 18196 z^9 - 172662 z^8 - 775420 z^7 - 1472280 z^6 - 762048 z^5 + 117600 z^4 - 37800 z^3 + 8100 z^2 + 3150 z + 8505) + \frac{1}{8505} \left(e^z \sqrt{\pi} (-16 z^{23/2} - 896 z^{21/2} - 18632 z^{19/2} - 181336 z^{17/2} - 853689 z^{15/2} - 1792650 z^{13/2} - 1259700 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ae02.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{8505} (16 z^{11} - 888 z^{10} + 18196 z^9 - 172662 z^8 + 775420 z^7 - 1472280 z^6 + 762048 z^5 + 117600 z^4 + 37800 z^3 + 8100 z^2 - 3150 z + 8505) + \frac{1}{8505} \left(e^{-z} \sqrt{\pi} (-16 z^{23/2} + 896 z^{21/2} - 18632 z^{19/2} + 181336 z^{17/2} - 853689 z^{15/2} + 1792650 z^{13/2} - 1259700 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ae03.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{2835} (8 z^{10} + 372 z^9 + 6126 z^8 + 43625 z^7 + 128595 z^6 + 108864 z^5 - 23520 z^4 + 12600 z^3 - 8100 z^2 + 3150 z + 2835) + \frac{e^z \sqrt{\pi} (16 z^{21/2} + 752 z^{19/2} + 12616 z^{17/2} + 93024 z^{15/2} + 295545 z^{13/2} + 314925 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.ae04.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2835} (8z^{10} - 372z^9 + 6126z^8 - 43625z^7 + 128595z^6 - 108864z^5 - 23520z^4 - 12600z^3 - 8100z^2 - 3150z + 2835) + \frac{1}{5670} e^{-z} \sqrt{\pi} (-16z^{21/2} + 752z^{19/2} - 12616z^{17/2} + 93024z^{15/2} - 295545z^{13/2} + 314925z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ae05.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{-8z^9 - 300z^8 - 3730z^7 - 17655z^6 - 24192z^5 + 6720z^4 - 5040z^3 + 5400z^2 - 6300z + 5670}{5670} + \frac{e^z \sqrt{\pi} (-16z^{19/2} - 608z^{17/2} - 7752z^{15/2} - 38760z^{13/2} - 62985z^{11/2}) \operatorname{erf}(\sqrt{z})}{11340}$$

07.25.03.ae06.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670}{5670} + \frac{e^{-z} \sqrt{\pi} (-16z^{19/2} + 608z^{17/2} - 7752z^{15/2} + 38760z^{13/2} - 62985z^{11/2}) \operatorname{erfi}(\sqrt{z})}{11340}$$

07.25.03.ae07.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, 1; z\right) = -\frac{1}{22680} e^z (32z^9 + 1072z^8 + 11504z^7 + 43752z^6 + 36378z^5 - 20745z^4 + 24480z^3 - 32040z^2 + 35280z - 22680)$$

07.25.03.ae08.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{-8z^8 - 228z^7 - 1910z^6 - 4389z^5 + 1435z^4 - 1140z^3 + 900z^2 - 1260}{11340} + \frac{1}{22680\sqrt{z}} + \frac{e^z \sqrt{\pi} (-16z^9 - 464z^8 - 4040z^7 - 10480z^6 - 105z^5 + 525z^4 - 2100z^3 + 6300z^2 - 12600z + 12600) \operatorname{erf}(\sqrt{z})}{11340}$$

07.25.03.ae09.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{-8z^8 + 228z^7 - 1910z^6 + 4389z^5 + 1435z^4 + 1140z^3 + 900z^2 - 1260}{11340} + \frac{1}{22680\sqrt{z}} + \frac{e^{-z} \sqrt{\pi} (16z^9 - 464z^8 + 4040z^7 - 10480z^6 + 105z^5 + 525z^4 + 2100z^3 + 6300z^2 + 12600z + 12600) \operatorname{erfi}(\sqrt{z})}{11340}$$

07.25.03.ae0a.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, 2; z\right) = -\frac{e^z (32z^8 + 784z^7 + 5232z^6 + 7128z^5 - 6390z^4 + 11205z^3 - 20340z^2 + 28980z - 22680)}{22680}$$

07.25.03.ae0b.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-8z^8 - 156z^7 - 666z^6 + 205z^5 + 30z^4 - 900z^3 + 3600z^2 - 8640z + 10800}{7560z} + \frac{1}{15120z^{3/2}} e^z \sqrt{\pi} (-16z^9 - 320z^8 - 1480z^7 - 120z^6 + 615z^5 - 2550z^4 + 8100z^3 - 18000z^2 + 23400z - 10800) \operatorname{erf}(\sqrt{z})$$

07.25.03.ae0c.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{8z^8 - 156z^7 + 666z^6 + 205z^5 - 30z^4 - 900z^3 - 3600z^2 - 8640z - 10800}{7560z} + \frac{1}{15120z^{3/2}} \\ \left(e^{-z}\sqrt{\pi}(-16z^9 + 320z^8 - 1480z^7 + 120z^6 + 615z^5 + 2550z^4 + 8100z^3 + 18000z^2 + 23400z + 10800)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ae0d.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, 3; z\right) = -\frac{e^z(32z^7 + 496z^6 + 1264z^5 - 1720z^4 + 3930z^3 - 8445z^2 + 13440z - 11340)}{11340}$$

07.25.03.ae0e.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-8z^8 - 84z^7 + 2z^6 + 159z^5 - 855z^4 + 3240z^3 - 9144z^2 + 18360z - 22680}{3024z^2} + \\ \frac{1}{6048z^{5/2}}e^z\sqrt{\pi}(-16z^9 - 176z^8 - 72z^7 + 384z^6 - 1689z^5 + 5895z^4 - 15480z^3 + 28440z^2 - 33480z + 22680)\operatorname{erf}(\sqrt{z})$$

07.25.03.ae0f.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{-8z^8 + 84z^7 + 2z^6 - 159z^5 - 855z^4 - 3240z^3 - 9144z^2 - 18360z - 22680}{3024z^2} + \\ \frac{1}{6048z^{5/2}}e^{-z}\sqrt{\pi}(16z^9 - 176z^8 + 72z^7 + 384z^6 + 1689z^5 + 5895z^4 + 15480z^3 + 28440z^2 + 33480z + 22680)\operatorname{erfi}(\sqrt{z})$$

07.25.03.ae0g.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, 4; z\right) = -\frac{e^z(32z^6 + 208z^5 - 400z^4 + 1080z^3 - 2550z^2 + 4305z - 3780)}{3780}$$

07.25.03.ae0h.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-8z^8 - 12z^7 + 94z^6 - 495z^5 + 2140z^4 - 7704z^3 + 23040z^2 - 56280z + 100800}{864z^3} + \frac{1}{1728z^{7/2}} \\ \left(e^z\sqrt{\pi}(-16z^9 - 32z^8 + 184z^7 - 904z^6 + 3735z^5 - 12780z^4 + 35640z^3 - 78480z^2 + 123480z - 100800)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ae0i.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{8z^8 - 12z^7 - 94z^6 - 495z^5 - 2140z^4 - 7704z^3 - 23040z^2 - 56280z - 100800}{864z^3} + \frac{1}{1728z^{7/2}} \\ \left(e^{-z}\sqrt{\pi}(-16z^9 + 32z^8 + 184z^7 + 904z^6 + 3735z^5 + 12780z^4 + 35640z^3 + 78480z^2 + 123480z + 100800)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ae0j.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, 5; z\right) = -\frac{1}{945}e^z(32z^5 - 80z^4 + 240z^3 - 600z^2 + 1050z - 945)$$

07.25.03.ae0k.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, \frac{11}{2}; z\right) = \\ \frac{-8z^8 + 60z^7 - 390z^6 + 2275z^5 - 11817z^4 + 53460z^3 - 203700z^2 + 630000z - 1587600}{192z^4} + \frac{1}{384z^{9/2}}\left(e^z\sqrt{\pi}(-16z^9 + \right. \\ \left. 112z^8 - 712z^7 + 4080z^6 - 20745z^5 + 90945z^4 - 328140z^3 + 905940z^2 - 1688400z + 1587600)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ae0l.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{-8z^8 - 60z^7 - 390z^6 - 2275z^5 - 11817z^4 - 53460z^3 - 203700z^2 - 630000z - 1587600}{192z^4} + \frac{1}{384z^{9/2}} \left(e^{-z} \sqrt{\pi} (16z^9 + 112z^8 + 712z^7 + 4080z^6 + 20745z^5 + 90945z^4 + 328140z^3 + 905940z^2 + 1688400z + 1587600) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ae0m.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{9}{2}, 6; z\right) = \frac{1}{189z^5} \left(e^z (-32z^9 + 368z^8 - 3184z^7 + 22888z^6 - 138378z^5 + 692835z^4 - 2771340z^3 + 8314020z^2 - 16628040z + 16628040) \right) - \frac{1847560}{21z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 = -\frac{7}{2}$

07.25.03.ae0n.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{33075} (32z^{12} + 2096z^{11} + 52424z^{10} + 638780z^9 + 4008960z^8 + 12579168z^7 + 17503680z^6 + 7930080z^5 + 352800z^4 + 12600z^3 + 4860z^2 + 6750z + 33075) + \frac{1}{33075} \left(2e^z \sqrt{\pi} (16z^{25/2} + 1056z^{23/2} + 26728z^{21/2} + 331992z^{19/2} + 2152305z^{17/2} + 7160400z^{15/2} + 11193480z^{13/2} + 6683040z^{11/2} + 875160z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ae0o.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{33075} (32z^{12} - 2096z^{11} + 52424z^{10} - 638780z^9 + 4008960z^8 - 12579168z^7 + 17503680z^6 - 7930080z^5 + 352800z^4 - 12600z^3 + 4860z^2 - 6750z + 33075) - \frac{1}{33075} \left(2e^{-z} \sqrt{\pi} (16z^{25/2} - 1056z^{23/2} + 26728z^{21/2} - 331992z^{19/2} + 2152305z^{17/2} - 7160400z^{15/2} + 11193480z^{13/2} - 6683040z^{11/2} + 875160z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ae0p.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{4725} (-16z^{11} - 920z^{10} - 19780z^9 - 201150z^8 - 1007544z^7 - 2339160z^6 - 2059920z^5 - 352800z^4 + 12600z^3 + 1620z^2 + 1350z + 4725) + \frac{1}{4725} \left(e^z \sqrt{\pi} (-16z^{23/2} - 928z^{21/2} - 20232z^{19/2} - 210600z^{17/2} - 1099305z^{15/2} - 2763180z^{13/2} - 2903940z^{11/2} - 875160z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ae0q.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{4725} (16z^{11} - 920z^{10} + 19780z^9 - 201150z^8 + 1007544z^7 - 2339160z^6 + 2059920z^5 - 352800z^4 - 12600z^3 + 1620z^2 - 1350z + 4725) + \frac{1}{4725} (e^{-z} \sqrt{\pi} (-16z^{23/2} + 928z^{21/2} - 20232z^{19/2} + 210600z^{17/2} - 1099305z^{15/2} + 2763180z^{13/2} - 2903940z^{11/2} + 875160z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ae0r.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} (8z^{10} + 396z^9 + 7122z^8 + 58031z^7 + 216720z^6 + 324468z^5 + 117600z^4 - 12600z^3 + 1620z^2 + 450z + 945) + \frac{1}{1890} e^z \sqrt{\pi} (16z^{21/2} + 800z^{19/2} + 14632z^{17/2} + 122808z^{15/2} + 485265z^{13/2} + 822120z^{11/2} + 437580z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ae0s.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{945} (8z^{10} - 396z^9 + 7122z^8 - 58031z^7 + 216720z^6 - 324468z^5 + 117600z^4 + 12600z^3 + 1620z^2 - 450z + 945) + \frac{1}{1890} (e^{-z} \sqrt{\pi} (-16z^{21/2} + 800z^{19/2} - 14632z^{17/2} + 122808z^{15/2} - 485265z^{13/2} + 822120z^{11/2} - 437580z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ae0t.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{630} (-8z^9 - 332z^8 - 4802z^7 - 29375z^6 - 71868z^5 - 47040z^4 + 8400z^3 - 3240z^2 + 900z + 630) + \frac{e^z \sqrt{\pi} (-16z^{19/2} - 672z^{17/2} - 9928z^{15/2} - 63240z^{13/2} - 169065z^{11/2} - 145860z^{9/2}) \operatorname{erf}(\sqrt{z})}{1260}$$

07.25.03.ae0u.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{630} (8z^9 - 332z^8 + 4802z^7 - 29375z^6 + 71868z^5 - 47040z^4 - 8400z^3 - 3240z^2 - 900z + 630) + \frac{e^{-z} \sqrt{\pi} (-16z^{19/2} + 672z^{17/2} - 9928z^{15/2} + 63240z^{13/2} - 169065z^{11/2} + 145860z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1260}$$

07.25.03.ae0v.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{8z^8 + 268z^7 + 2930z^6 + 11919z^5 + 13440z^4 - 3360z^3 + 2160z^2 - 1800z + 1260}{1260} + \frac{e^z \sqrt{\pi} (16z^{17/2} + 544z^{15/2} + 6120z^{13/2} + 26520z^{11/2} + 36465z^{9/2}) \operatorname{erf}(\sqrt{z})}{2520}$$

07.25.03.ae0w.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260}{1260} + \frac{e^{-z} \sqrt{\pi} (-16z^{17/2} + 544z^{15/2} - 6120z^{13/2} + 26520z^{11/2} - 36465z^{9/2}) \operatorname{erfi}(\sqrt{z})}{2520}$$

07.25.03.ae0x.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, 1; z\right) = \frac{e^z (16z^8 + 480z^7 + 4552z^6 + 15048z^5 + 10665z^4 - 5040z^3 + 4680z^2 - 4320z + 2520)}{2520}$$

07.25.03.ae0y.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{8z^7 + 204z^6 + 1506z^5 + 2975z^4 - 900z^3 + 612z^2 - 360z}{2520} + \frac{e^z \sqrt{\pi} (16z^8 + 416z^7 + 3208z^6 + 7272z^5 + 105z^4 - 420z^3 + 1260z^2 - 2520z + 2520) \operatorname{erf}(\sqrt{z})}{5040 \sqrt{z}}$$

07.25.03.ae0z.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{-8z^7 + 204z^6 - 1506z^5 + 2975z^4 + 900z^3 + 612z^2 + 360z}{2520} + \frac{e^{-z} \sqrt{\pi} (16z^8 - 416z^7 + 3208z^6 - 7272z^5 + 105z^4 + 420z^3 + 1260z^2 + 2520z + 2520) \operatorname{erfi}(\sqrt{z})}{5040 \sqrt{z}}$$

07.25.03.ae10.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, 2; z\right) = \frac{e^z (16z^7 + 352z^6 + 2088z^5 + 2520z^4 - 1935z^3 + 2700z^2 - 3420z + 2520)}{2520}$$

07.25.03.ae11.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{8z^7 + 140z^6 + 530z^5 - 145z^4 - 48z^3 + 540z^2 - 1440z + 1800}{1680z} + \frac{e^z \sqrt{\pi} (16z^8 + 288z^7 + 1192z^6 + 120z^5 - 495z^4 + 1560z^3 - 3420z^2 + 4320z - 1800) \operatorname{erf}(\sqrt{z})}{3360z^{3/2}}$$

07.25.03.ae12.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{8z^7 - 140z^6 + 530z^5 + 145z^4 - 48z^3 - 540z^2 - 1440z - 1800}{1680z} + \frac{1}{3360z^{3/2}} e^{-z} \sqrt{\pi} (-16z^8 + 288z^7 - 1192z^6 + 120z^5 + 495z^4 + 1560z^3 + 3420z^2 + 4320z + 1800) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ae13.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, 3; z\right) = \frac{e^z (16z^6 + 224z^5 + 520z^4 - 600z^3 + 1065z^2 - 1560z + 1260)}{1260}$$

07.25.03.ae14.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{8z^7 + 76z^6 + 2z^5 - 129z^4 + 540z^3 - 1512z^2 + 2880z - 3240}{672z^2} + \frac{e^z \sqrt{\pi} (16z^8 + 160z^7 + 72z^6 - 312z^5 + 1065z^4 - 2700z^3 + 4680z^2 - 5040z + 3240) \operatorname{erf}(\sqrt{z})}{1344z^{5/2}}$$

07.25.03.ae15.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{-8z^7 + 76z^6 - 2z^5 - 129z^4 - 540z^3 - 1512z^2 - 2880z - 3240}{672z^2} + \frac{e^{-z} \sqrt{\pi} (16z^8 - 160z^7 + 72z^6 + 312z^5 + 1065z^4 + 2700z^3 + 4680z^2 + 5040z + 3240) \operatorname{erfi}(\sqrt{z})}{1344z^{5/2}}$$

07.25.03.ae16.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, 4; z\right) = \frac{1}{420} e^z (16z^5 + 96z^4 - 152z^3 + 312z^2 - 495z + 420)$$

07.25.03.ae17.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{8z^7 + 12z^6 - 78z^5 + 335z^4 - 1152z^3 + 3240z^2 - 7440z + 12600}{192z^3} + \frac{1}{384z^{7/2}} e^z \sqrt{\pi} (16z^8 + 32z^7 - 152z^6 + 600z^5 - 1935z^4 + 5040z^3 - 10440z^2 + 15840z - 12600) \operatorname{erf}(\sqrt{z})$$

07.25.03.ae18.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{8z^7 - 12z^6 - 78z^5 - 335z^4 - 1152z^3 - 3240z^2 - 7440z - 12600}{192z^3} + \frac{1}{384z^{7/2}} e^{-z} \sqrt{\pi} (-16z^8 + 32z^7 + 152z^6 + 600z^5 + 1935z^4 + 5040z^3 + 10440z^2 + 15840z + 12600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ae19.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, 5; z\right) = \frac{1}{105} e^z (16z^4 - 32z^3 + 72z^2 - 120z + 105)$$

07.25.03.ae1a.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3(8z^7 - 52z^6 + 290z^5 - 1441z^4 + 6300z^3 - 23460z^2 + 71400z - 176400)}{128z^4} + \frac{1}{256z^{9/2}} 3e^z \sqrt{\pi} (16z^8 - 96z^7 + 520z^6 - 2520z^5 + 10665z^4 - 37620z^3 + 102420z^2 - 189000z + 176400) \operatorname{erf}(\sqrt{z})$$

07.25.03.ae1b.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{256z^{9/2}} 3e^{-z} \sqrt{\pi} (16z^8 + 96z^7 + 520z^6 + 2520z^5 + 10665z^4 + 37620z^3 + 102420z^2 + 189000z + 176400) \operatorname{erfi}(\sqrt{z}) - \frac{3(8z^7 + 52z^6 + 290z^5 + 1441z^4 + 6300z^3 + 23460z^2 + 71400z + 176400)}{128z^4}$$

07.25.03.ae1c.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{7}{2}, 6; z\right) = \frac{e^z (16z^8 - 160z^7 + 1192z^6 - 7272z^5 + 36465z^4 - 145860z^3 + 437580z^2 - 875160z + 875160)}{21z^5} - \frac{291720}{7z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 = -\frac{5}{2}$

07.25.03.ae1d.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{675} (8z^{10} + 404z^9 + 7470z^8 + 63417z^7 + 253371z^6 + 433530z^5 + 236970z^4 + 12600z^3 + 540z^2 + 270z + 675) + \frac{1}{1350} (e^z \sqrt{\pi} (16z^{21/2} + 816z^{19/2} + 15336z^{17/2} + 133920z^{15/2} + 563625z^{13/2} + 1072305z^{11/2} + 759330z^{9/2} + 115830z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ae1e.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{675} (8z^{10} - 404z^9 + 7470z^8 - 63417z^7 + 253371z^6 - 433530z^5 + 236970z^4 - 12600z^3 + 540z^2 - 270z + 675) + \frac{1}{1350} (e^{-z} \sqrt{\pi} (-16z^{21/2} + 816z^{19/2} - 15336z^{17/2} + 133920z^{15/2} - 563625z^{13/2} + 1072305z^{11/2} - 759330z^{9/2} + 115830z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ae1f.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{270} (-8z^9 - 348z^8 - 5386z^7 - 36651z^6 - 109062z^5 - 119370z^4 - 25200z^3 + 1080z^2 + 180z + 270) + \frac{1}{540} e^z \sqrt{\pi} (-16z^{19/2} - 704z^{17/2} - 11112z^{15/2} - 78360z^{13/2} - 250185z^{11/2} - 321750z^{9/2} - 115830z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ae1g.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{270} (8z^9 - 348z^8 + 5386z^7 - 36651z^6 + 109062z^5 - 119370z^4 + 25200z^3 + 1080z^2 - 180z + 270) + \frac{1}{540} e^{-z} \sqrt{\pi} (-16z^{19/2} + 704z^{17/2} - 11112z^{15/2} + 78360z^{13/2} - 250185z^{11/2} + 321750z^{9/2} - 115830z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ae1h.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{180} (8z^8 + 292z^7 + 3638z^6 + 18597z^5 + 36165z^4 + 16800z^3 - 2160z^2 + 360z + 180) + \frac{1}{360} e^z \sqrt{\pi} (16z^{17/2} + 592z^{15/2} + 7560z^{13/2} + 40560z^{11/2} + 87945z^{9/2} + 57915z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ae1i.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{180} (8z^8 - 292z^7 + 3638z^6 - 18597z^5 + 36165z^4 - 16800z^3 - 2160z^2 - 360z + 180) + \frac{1}{360} e^{-z} \sqrt{\pi} (-16z^{17/2} + 592z^{15/2} - 7560z^{13/2} + 40560z^{11/2} - 87945z^{9/2} + 57915z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ae1j.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{360} (-8z^7 - 236z^6 - 2226z^5 - 7575z^4 - 6720z^3 + 1440z^2 - 720z + 360) + \frac{1}{720} e^z \sqrt{\pi} (-16z^{15/2} - 480z^{13/2} - 4680z^{11/2} - 17160z^{9/2} - 19305z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ae1k.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{360} (8z^7 - 236z^6 + 2226z^5 - 7575z^4 + 6720z^3 + 1440z^2 + 720z + 360) + \frac{1}{720} e^{-z} \sqrt{\pi} (-16z^{15/2} + 480z^{13/2} - 4680z^{11/2} + 17160z^{9/2} - 19305z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ae1l.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, 1; z\right) = -\frac{1}{360} e^z (8z^7 + 212z^6 + 1746z^5 + 4905z^4 + 2880z^3 - 1080z^2 + 720z - 360)$$

07.25.03.ae1m.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{720} (-8z^6 - 180z^5 - 1150z^4 - 1905z^3 + 513z^2 - 270z + 90) + \frac{e^z \sqrt{\pi} (-16z^7 - 368z^6 - 2472z^5 - 4800z^4 - 105z^3 + 315z^2 - 630z + 630) \operatorname{erf}(\sqrt{z})}{1440 \sqrt{z}}$$

07.25.03.ae1n.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{720} (-8z^6 + 180z^5 - 1150z^4 + 1905z^3 + 513z^2 + 270z + 90) + \frac{e^{-z} \sqrt{\pi} (16z^7 - 368z^6 + 2472z^5 - 4800z^4 + 105z^3 + 315z^2 + 630z + 630) \operatorname{erfi}(\sqrt{z})}{1440 \sqrt{z}}$$

07.25.03.ae1o.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, 2; z\right) = -\frac{1}{360} e^z (8z^6 + 156z^5 + 810z^4 + 855z^3 - 540z^2 + 540z - 360)$$

07.25.03.ae1p.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-8z^6 - 124z^5 - 410z^4 + 93z^3 + 54z^2 - 270z + 360}{480z} + \frac{e^z \sqrt{\pi} (-16z^7 - 256z^6 - 936z^5 - 120z^4 + 375z^3 - 810z^2 + 990z - 360) \operatorname{erf}(\sqrt{z})}{960z^{3/2}}$$

07.25.03.ae1q.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{8z^6 - 124z^5 + 410z^4 + 93z^3 - 54z^2 - 270z - 360}{480z} + \frac{e^{-z} \sqrt{\pi} (-16z^7 + 256z^6 - 936z^5 + 120z^4 + 375z^3 + 810z^2 + 990z + 360) \operatorname{erfi}(\sqrt{z})}{960z^{3/2}}$$

07.25.03.ae1r.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, 3; z\right) = -\frac{1}{180} e^z (8z^5 + 100z^4 + 210z^3 - 195z^2 + 240z - 180)$$

07.25.03.ae1s.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-8z^6 - 68z^5 - 6z^4 + 99z^3 - 297z^2 + 540z - 540}{192z^2} + \frac{e^z \sqrt{\pi} (-16z^7 - 144z^6 - 72z^5 + 240z^4 - 585z^3 + 945z^2 - 900z + 540) \operatorname{erf}(\sqrt{z})}{384z^{5/2}}$$

07.25.03.ae1t.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-8z^6 + 68z^5 - 6z^4 - 99z^3 - 297z^2 - 540z - 540}{192z^2} + \frac{e^{-z} \sqrt{\pi} (16z^7 - 144z^6 + 72z^5 + 240z^4 + 585z^3 + 945z^2 + 900z + 540) \operatorname{erfi}(\sqrt{z})}{384z^{5/2}}$$

07.25.03.ae1u.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, 4; z\right) = -\frac{1}{60} e^z (8z^4 + 44z^3 - 54z^2 + 75z - 60)$$

07.25.03.ae1v.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(8z^6 + 12z^5 - 62z^4 + 207z^3 - 540z^2 + 1140z - 1800)}{384z^3} - \frac{7e^z \sqrt{\pi} (16z^7 + 32z^6 - 120z^5 + 360z^4 - 855z^3 + 1620z^2 - 2340z + 1800) \operatorname{erf}(\sqrt{z})}{768z^{7/2}}$$

07.25.03.ae1w.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(8z^6 - 12z^5 - 62z^4 - 207z^3 - 540z^2 - 1140z - 1800)}{384z^3} - \frac{7e^{-z} \sqrt{\pi} (16z^7 - 32z^6 - 120z^5 - 360z^4 - 855z^3 - 1620z^2 - 2340z - 1800) \operatorname{erfi}(\sqrt{z})}{768z^{7/2}}$$

07.25.03.ae1x.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, 5; z\right) = -\frac{1}{15} e^z (8z^3 - 12z^2 + 18z - 15)$$

07.25.03.ae1y.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{21(8z^6 - 44z^5 + 206z^4 - 855z^3 + 3075z^2 - 9150z + 22050)}{256z^4} - \frac{21 e^z \sqrt{\pi} (16z^7 - 80z^6 + 360z^5 - 1440z^4 + 4905z^3 - 13095z^2 + 23850z - 22050) \operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ae1z.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} \sqrt{\pi} (16z^7 + 80z^6 + 360z^5 + 1440z^4 + 4905z^3 + 13095z^2 + 23850z + 22050) \operatorname{erfi}(\sqrt{z})}{512z^{9/2}} - \frac{21(8z^6 + 44z^5 + 206z^4 + 855z^3 + 3075z^2 + 9150z + 22050)}{256z^4}$$

07.25.03.ae20.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{5}{2}, 6; z\right) = \frac{e^z (-8z^7 + 68z^6 - 426z^5 + 2145z^4 - 8580z^3 + 25740z^2 - 51480z + 51480)}{3z^5} - \frac{17160}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 = -\frac{3}{2}$

07.25.03.ae21.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{108} (8z^8 + 300z^7 + 3890z^6 + 21231z^5 + 46976z^4 + 32382z^3 + 2160z^2 + 120z + 108) + \frac{1}{216} e^z \sqrt{\pi} (16z^{17/2} + 608z^{15/2} + 8072z^{13/2} + 46072z^{11/2} + 111969z^{9/2} + 97812z^{7/2} + 18018z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ae22.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{108} (8z^8 - 300z^7 + 3890z^6 - 21231z^5 + 46976z^4 - 32382z^3 + 2160z^2 - 120z + 108) + \frac{1}{216} e^{-z} \sqrt{\pi} (-16z^{17/2} + 608z^{15/2} - 8072z^{13/2} + 46072z^{11/2} - 111969z^{9/2} + 97812z^{7/2} - 18018z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ae23.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{72} (-8z^7 - 252z^6 - 2634z^5 - 10811z^4 - 15582z^3 - 4320z^2 + 240z + 72) + \frac{1}{144} e^z \sqrt{\pi} (-16z^{15/2} - 512z^{13/2} - 5512z^{11/2} - 24024z^{9/2} - 39897z^{7/2} - 18018z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ae24.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{72} (8z^7 - 252z^6 + 2634z^5 - 10811z^4 + 15582z^3 - 4320z^2 - 240z + 72) + \frac{1}{144} e^{-z} \sqrt{\pi} (-16z^{15/2} + 512z^{13/2} - 5512z^{11/2} + 24024z^{9/2} - 39897z^{7/2} + 18018z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ae25.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{144} (8z^6 + 204z^5 + 1618z^4 + 4431z^3 + 2880z^2 - 480z + 144) + \frac{1}{288} e^z \sqrt{\pi} (16z^{13/2} + 416z^{11/2} + 3432z^{9/2} + 10296z^{7/2} + 9009z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ae26.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{144} (8z^6 - 204z^5 + 1618z^4 - 4431z^3 + 2880z^2 + 480z + 144) + \frac{1}{288} e^{-z} \sqrt{\pi} (-16z^{13/2} + 416z^{11/2} - 3432z^{9/2} + 10296z^{7/2} - 9009z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ae27.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, 1; z\right) = \frac{1}{72} e^z (4z^6 + 92z^5 + 643z^4 + 1488z^3 + 696z^2 - 192z + 72)$$

07.25.03.ae28.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{288} (8z^5 + 156z^4 + 842z^3 + 1131z^2 - 250z + 78) + \frac{e^z \sqrt{\pi} (16z^6 + 320z^5 + 1832z^4 + 2968z^3 + 105z^2 - 210z + 210) \operatorname{erf}(\sqrt{z})}{576 \sqrt{z}}$$

07.25.03.ae29.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{288} (-8z^5 + 156z^4 - 842z^3 + 1131z^2 + 250z + 78) + \frac{e^{-z} \sqrt{\pi} (16z^6 - 320z^5 + 1832z^4 - 2968z^3 + 105z^2 + 210z + 210) \operatorname{erfi}(\sqrt{z})}{576 \sqrt{z}}$$

07.25.03.ae2a.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, 2; z\right) = \frac{1}{72} e^z (4z^5 + 68z^4 + 303z^3 + 276z^2 - 132z + 72)$$

07.25.03.ae2b.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{8z^5 + 108z^4 + 306z^3 - 49z^2 - 48z + 90}{192z} + \frac{e^z \sqrt{\pi} (16z^6 + 224z^5 + 712z^4 + 120z^3 - 255z^2 + 300z - 90) \operatorname{erf}(\sqrt{z})}{384z^{3/2}}$$

07.25.03.ae2c.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{8z^5 - 108z^4 + 306z^3 + 49z^2 - 48z - 90}{192z} + \frac{e^{-z} \sqrt{\pi} (-16z^6 + 224z^5 - 712z^4 + 120z^3 + 255z^2 + 300z + 90) \operatorname{erfi}(\sqrt{z})}{384z^{3/2}}$$

07.25.03.ae2d.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, 3; z\right) = \frac{1}{36} e^z (4z^4 + 44z^3 + 83z^2 - 56z + 36)$$

07.25.03.ae2e.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(8z^5 + 60z^4 + 10z^3 - 69z^2 + 126z - 108)}{384z^2} + \frac{5e^z\sqrt{\pi}(16z^6 + 128z^5 + 72z^4 - 168z^3 + 249z^2 - 198z + 108)\operatorname{erf}(\sqrt{z})}{768z^{5/2}}$$

07.25.03.ae2f.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}\sqrt{\pi}(16z^6 - 128z^5 + 72z^4 + 168z^3 + 249z^2 + 198z + 108)\operatorname{erfi}(\sqrt{z})}{768z^{5/2}} - \frac{5(8z^5 - 60z^4 + 10z^3 + 69z^2 + 126z + 108)}{384z^2}$$

07.25.03.ae2g.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, 4; z\right) = \frac{1}{12}e^z(4z^3 + 20z^2 - 17z + 12)$$

07.25.03.ae2h.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(8z^5 + 12z^4 - 46z^3 + 111z^2 - 208z + 300)}{768z^3} + \frac{35e^z\sqrt{\pi}(16z^6 + 32z^5 - 88z^4 + 184z^3 - 303z^2 + 408z - 300)\operatorname{erf}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.ae2i.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^5 - 12z^4 - 46z^3 - 111z^2 - 208z - 300)}{768z^3} - \frac{35e^{-z}\sqrt{\pi}(16z^6 - 32z^5 - 88z^4 - 184z^3 - 303z^2 - 408z - 300)\operatorname{erfi}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.ae2j.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, 5; z\right) = \frac{1}{3}e^z(4z^2 - 4z + 3)$$

07.25.03.ae2k.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{105(8z^5 - 36z^4 + 138z^3 - 469z^2 + 1350z - 3150)}{512z^4} + \frac{105e^z\sqrt{\pi}(16z^6 - 64z^5 + 232z^4 - 744z^3 + 1929z^2 - 3450z + 3150)\operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.ae2l.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{105e^{-z}\sqrt{\pi}(16z^6 + 64z^5 + 232z^4 + 744z^3 + 1929z^2 + 3450z + 3150)\operatorname{erfi}(\sqrt{z})}{1024z^{9/2}} - \frac{105(8z^5 + 36z^4 + 138z^3 + 469z^2 + 1350z + 3150)}{512z^4}$$

07.25.03.ae2m.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{3}{2}, 6; z\right) = \frac{5e^z(4z^6 - 28z^5 + 143z^4 - 572z^3 + 1716z^2 - 3432z + 3432)}{3z^5} - \frac{5720}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 = -\frac{1}{2}$

07.25.03.ae2n.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{48} (8z^6 + 212z^5 + 1790z^4 + 5537z^3 + 5175z^2 + 480z + 48) + \frac{1}{96} e^z \sqrt{\pi} (16z^{13/2} + 432z^{11/2} + 3784z^{9/2} + 12672z^{7/2} + 14553z^{5/2} + 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ae2o.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{48} (8z^6 - 212z^5 + 1790z^4 - 5537z^3 + 5175z^2 - 480z + 48) + \frac{1}{96} e^{-z} \sqrt{\pi} (-16z^{13/2} + 432z^{11/2} - 3784z^{9/2} + 12672z^{7/2} - 14553z^{5/2} + 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ae2p.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{96} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) + \frac{1}{192} e^z \sqrt{\pi} (-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ae2q.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{96} (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) + \frac{1}{192} e^{-z} \sqrt{\pi} (-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ae2r.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, 1; z\right) = -\frac{1}{24} e^z (2z^5 + 39z^4 + 224z^3 + 408z^2 + 144z - 24)$$

07.25.03.ae2s.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{192} (-8z^4 - 132z^3 - 582z^2 - 605z + 87) + \frac{e^z \sqrt{\pi} (-16z^5 - 272z^4 - 1288z^3 - 1680z^2 - 105z + 105) \operatorname{erf}(\sqrt{z})}{384\sqrt{z}}$$

07.25.03.ae2t.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{192} (-8z^4 + 132z^3 - 582z^2 + 605z + 87) + \frac{e^{-z} \sqrt{\pi} (16z^5 - 272z^4 + 1288z^3 - 1680z^2 + 105z + 105) \operatorname{erfi}(\sqrt{z})}{384\sqrt{z}}$$

07.25.03.ae2u.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, 2; z\right) = -\frac{1}{24} e^z (2z^4 + 29z^3 + 108z^2 + 84z - 24)$$

07.25.03.ae2v.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{-8z^4 - 92z^3 - 218z^2 + 13z + 30}{128z} + \frac{e^z \sqrt{\pi} (-16z^5 - 192z^4 - 520z^3 - 120z^2 + 135z - 30) \operatorname{erf}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.ae2w.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{8z^4 - 92z^3 + 218z^2 + 13z - 30}{128z} + \frac{e^{-z}\sqrt{\pi}(-16z^5 + 192z^4 - 520z^3 + 120z^2 + 135z + 30)\operatorname{erfi}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.ae2x.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, 3; z\right) = -\frac{1}{12}e^z(2z^3 + 19z^2 + 32z - 12)$$

07.25.03.ae2y.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{5(8z^4 + 52z^3 + 14z^2 - 39z + 27)}{256z^2} - \frac{5e^z\sqrt{\pi}(16z^5 + 112z^4 + 72z^3 - 96z^2 + 57z - 27)\operatorname{erf}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.ae2z.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}\sqrt{\pi}(16z^5 - 112z^4 + 72z^3 + 96z^2 + 57z + 27)\operatorname{erfi}(\sqrt{z})}{512z^{5/2}} - \frac{5(8z^4 - 52z^3 + 14z^2 + 39z + 27)}{256z^2}$$

07.25.03.ae30.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, 4; z\right) = -\frac{1}{4}e^z(2z^2 + 9z - 4)$$

07.25.03.ae31.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{35(8z^4 + 12z^3 - 30z^2 + 47z - 60)}{512z^3} - \frac{35e^z\sqrt{\pi}(16z^5 + 32z^4 - 56z^3 + 72z^2 - 87z + 60)\operatorname{erf}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.ae32.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^4 - 12z^3 - 30z^2 - 47z - 60)}{512z^3} - \frac{35e^{-z}\sqrt{\pi}(16z^5 - 32z^4 - 56z^3 - 72z^2 - 87z - 60)\operatorname{erfi}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.ae33.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, 5; z\right) = -e^z(2z - 1)$$

07.25.03.ae34.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{315(8z^4 - 28z^3 + 86z^2 - 235z + 525)}{1024z^4} - \frac{315e^z\sqrt{\pi}(16z^5 - 48z^4 + 136z^3 - 336z^2 + 585z - 525)\operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.ae35.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(16z^5 + 48z^4 + 136z^3 + 336z^2 + 585z + 525)\operatorname{erfi}(\sqrt{z})}{2048z^{9/2}} - \frac{315(8z^4 + 28z^3 + 86z^2 + 235z + 525)}{1024z^4}$$

07.25.03.ae36.01

$${}_2F_2\left(\frac{1}{2}, 5; -\frac{1}{2}, 6; z\right) = -\frac{5e^z(2z^5 - 11z^4 + 44z^3 - 132z^2 + 264z - 264)}{z^5} - \frac{1320}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 = \frac{1}{2}$

07.25.03.ae37.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{192} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ae38.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{192} (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ae39.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, 1; z\right) = \frac{1}{24} e^z (z^4 + 16z^3 + 72z^2 + 96z + 24)$$

07.25.03.ae3a.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{384} (8z^3 + 108z^2 + 370z + 279) + \frac{e^z \sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.ae3b.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} (-8z^3 + 108z^2 - 370z + 279) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.ae3c.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, 2; z\right) = \frac{1}{24} e^z (z^3 + 12z^2 + 36z + 24)$$

07.25.03.ae3d.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.ae3e.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.ae3f.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, 3; z\right) = \frac{1}{12} e^z (z^2 + 8z + 12)$$

07.25.03.ae3g.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5e^z \sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.ae3h.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.ae3i.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, 4; z\right) = \frac{1}{4} e^z (z + 4)$$

07.25.03.ae3j.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35e^z\sqrt{\pi}(16z^4 + 32z^3 - 24z^2 + 24z - 15)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.ae3k.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35e^{-z}\sqrt{\pi}(16z^4 - 32z^3 - 24z^2 - 24z - 15)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.ae3l.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, 5; z\right) = e^z$$

07.25.03.ae3m.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{315(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315e^z\sqrt{\pi}(16z^4 - 32z^3 + 72z^2 - 120z + 105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.ae3n.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(16z^4 + 32z^3 + 72z^2 + 120z + 105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315(8z^3 + 20z^2 + 50z + 105)}{2048z^4}$$

07.25.03.ae3o.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{1}{2}, 6; z\right) = \frac{5e^z(z^4 - 4z^3 + 12z^2 - 24z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 = 1$

07.25.03.ae3p.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, 1; z\right) = \frac{1}{96}e^{z/2}(2z^4 + 30z^3 + 131z^2 + 192z + 96)I_0\left(\frac{z}{2}\right) + \frac{1}{48}e^{z/2}(z^4 + 14z^3 + 52z^2 + 50z)I_1\left(\frac{z}{2}\right)$$

07.25.03.ae3q.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, \frac{3}{2}; z\right) = \frac{1}{384}e^z(8z^3 + 100z^2 + 326z + 279) + \frac{35\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{256\sqrt{z}}$$

07.25.03.ae3r.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, \frac{3}{2}; -z\right) = \frac{1}{384}e^{-z}(-8z^3 + 100z^2 - 326z + 279) + \frac{35\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{256\sqrt{z}}$$

07.25.03.ae3s.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, 2; z\right) = \frac{1}{96}e^{z/2}(2z^3 + 23z^2 + 72z + 96)I_0\left(\frac{z}{2}\right) + \frac{1}{96}e^{z/2}(2z^3 + 21z^2 + 52z)I_1\left(\frac{z}{2}\right)$$

07.25.03.ae3t.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, \frac{5}{2}; z\right) = \frac{e^z(16z^3 + 144z^2 + 292z + 15)}{512z} + \frac{15\sqrt{\pi}(14z - 1)\operatorname{erfi}(\sqrt{z})}{1024z^{3/2}}$$

07.25.03.ae3u.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, \frac{5}{2}; -z\right) = \frac{e^{-z}(16z^3 - 144z^2 + 292z - 15)}{512z} + \frac{15\sqrt{\pi}(14z + 1)\operatorname{erf}(\sqrt{z})}{1024z^{3/2}}$$

07.25.03.ae3v.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, 3; z\right) = \frac{1}{24} e^{z/2} (z^2 + 8z + 24) I_0\left(\frac{z}{2}\right) + \frac{1}{24} e^{z/2} z(z+7) I_1\left(\frac{z}{2}\right)$$

07.25.03.ae3w.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, \frac{7}{2}; z\right) = \frac{5 e^z (64 z^3 + 352 z^2 + 78 z - 27)}{4096 z^2} + \frac{15 \sqrt{\pi} (140 z^2 - 20 z + 9) \operatorname{erfi}(\sqrt{z})}{8192 z^{5/2}}$$

07.25.03.ae3x.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} (140 z^2 + 20 z + 9) \operatorname{erf}(\sqrt{z})}{8192 z^{5/2}} - \frac{5 e^{-z} (64 z^3 - 352 z^2 + 78 z + 27)}{4096 z^2}$$

07.25.03.ae3y.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, 4; z\right) = \frac{1}{8} e^{z/2} (z+8) I_0\left(\frac{z}{2}\right) + \frac{1}{8} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.ae3z.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, \frac{9}{2}; z\right) = \frac{35 e^z (128 z^3 + 116 z^2 - 104 z + 75)}{16384 z^3} + \frac{35 \sqrt{\pi} (280 z^3 - 60 z^2 + 54 z - 75) \operatorname{erfi}(\sqrt{z})}{32768 z^{7/2}}$$

07.25.03.ae40.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (128 z^3 - 116 z^2 - 104 z - 75)}{16384 z^3} + \frac{35 \sqrt{\pi} (280 z^3 + 60 z^2 + 54 z + 75) \operatorname{erf}(\sqrt{z})}{32768 z^{7/2}}$$

07.25.03.ae41.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, 5; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

07.25.03.ae42.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, \frac{11}{2}; z\right) = \frac{315 e^z (744 z^3 - 1596 z^2 + 3050 z - 3675)}{262144 z^4} + \frac{315 \sqrt{\pi} (560 z^4 - 160 z^3 + 216 z^2 - 600 z + 3675) \operatorname{erfi}(\sqrt{z})}{524288 z^{9/2}}$$

07.25.03.ae43.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, \frac{11}{2}; -z\right) = \frac{315 \sqrt{\pi} (560 z^4 + 160 z^3 + 216 z^2 + 600 z + 3675) \operatorname{erf}(\sqrt{z})}{524288 z^{9/2}} - \frac{315 e^{-z} (744 z^3 + 1596 z^2 + 3050 z + 3675)}{262144 z^4}$$

07.25.03.ae44.01

$${}_2F_2\left(\frac{1}{2}, 5; 1, 6; z\right) = \frac{e^{z/2} (35 z^3 + 120 z^2 - 384 z + 768) I_0\left(\frac{z}{2}\right)}{63 z^3} + \frac{e^{z/2} (-35 z^4 + 160 z^3 - 576 z^2 + 1536 z - 3072) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 = \frac{3}{2}$

07.25.03.ae45.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{3}{2}, 2; z\right) = \frac{1}{192} e^z (4 z^2 + 38 z + 87) + \frac{35 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{128 \sqrt{z}}$$

07.25.03.ae46.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{3}{2}, 2; -z\right) = \frac{1}{192} e^{-z} (4z^2 - 38z + 87) + \frac{35\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{128\sqrt{z}}$$

07.25.03.ae47.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{3}{2}, 3; z\right) = \frac{1}{48} e^z (2z + 13) + \frac{35\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.ae48.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{3}{2}, 3; -z\right) = \frac{1}{48} e^{-z} (13 - 2z) + \frac{35\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.ae49.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{3}{2}, 4; z\right) = \frac{7\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16\sqrt{z}} + \frac{e^z}{8}$$

07.25.03.ae4a.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{3}{2}, 4; -z\right) = \frac{7\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16\sqrt{z}} + \frac{e^{-z}}{8}$$

07.25.03.ae4b.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{3}{2}, 5; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.ae4c.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{3}{2}, 5; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.ae4d.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{3}{2}, 6; z\right) = -\frac{5e^z(z^4 - 4z^3 + 12z^2 - 24z + 24)}{9z^5} + \frac{5\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{9\sqrt{z}} + \frac{40}{3z^5}$$

07.25.03.ae4e.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{3}{2}, 6; -z\right) = \frac{5e^{-z}(z^4 + 4z^3 + 12z^2 + 24z + 24)}{9z^5} + \frac{5\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{9\sqrt{z}} - \frac{40}{3z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 = 2$

07.25.03.ae4f.01

$${}_2F_2\left(\frac{1}{2}, 5; 2, 2; z\right) = \frac{1}{48} e^{z/2} (z^2 + 9z + 48) I_0\left(\frac{z}{2}\right) + \frac{1}{48} e^{z/2} (z^2 + 8z - 12) I_1\left(\frac{z}{2}\right)$$

07.25.03.ae4g.01

$${}_2F_2\left(\frac{1}{2}, 5; 2, \frac{5}{2}; z\right) = \frac{e^z(8z^2 + 56z - 15)}{256z} + \frac{15\sqrt{\pi}(14z + 1) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.ae4h.01

$${}_2F_2\left(\frac{1}{2}, 5; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(-8z^2 + 56z + 15)}{256z} + \frac{15\sqrt{\pi}(14z - 1)\operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.ae4i.01

$${}_2F_2\left(\frac{1}{2}, 5; 2, 3; z\right) = \frac{1}{24}e^{z/2}(z + 24)I_0\left(\frac{z}{2}\right) + \frac{1}{24}e^{z/2}(z - 12)I_1\left(\frac{z}{2}\right)$$

07.25.03.ae4j.01

$${}_2F_2\left(\frac{1}{2}, 5; 2, \frac{7}{2}; z\right) = \frac{5e^z(32z^2 - 66z + 9)}{2048z^2} + \frac{15\sqrt{\pi}(140z^2 + 20z - 3)\operatorname{erfi}(\sqrt{z})}{4096z^{5/2}}$$

07.25.03.ae4k.01

$${}_2F_2\left(\frac{1}{2}, 5; 2, \frac{7}{2}; -z\right) = \frac{5e^{-z}(32z^2 + 66z + 9)}{2048z^2} + \frac{15\sqrt{\pi}(140z^2 - 20z - 3)\operatorname{erf}(\sqrt{z})}{4096z^{5/2}}$$

07.25.03.ae4l.01

$${}_2F_2\left(\frac{1}{2}, 5; 2, 4; z\right) = e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{3}{4}e^{z/2}I_1\left(\frac{z}{2}\right)$$

07.25.03.ae4m.01

$${}_2F_2\left(\frac{1}{2}, 5; 2, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi}(280z^3 + 60z^2 - 18z + 15)\operatorname{erfi}(\sqrt{z})}{16384z^{7/2}} - \frac{35e^z(76z^2 - 28z + 15)}{8192z^3}$$

07.25.03.ae4n.01

$${}_2F_2\left(\frac{1}{2}, 5; 2, \frac{9}{2}; -z\right) = \frac{35e^{-z}(76z^2 + 28z + 15)}{8192z^3} + \frac{35\sqrt{\pi}(280z^3 - 60z^2 - 18z - 15)\operatorname{erf}(\sqrt{z})}{16384z^{7/2}}$$

07.25.03.ae4o.01

$${}_2F_2\left(\frac{1}{2}, 5; 2, 5; z\right) = e^{z/2}I_0\left(\frac{z}{2}\right) - e^{z/2}I_1\left(\frac{z}{2}\right)$$

07.25.03.ae4p.01

$${}_2F_2\left(\frac{1}{2}, 5; 2, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi}(560z^4 + 160z^3 - 72z^2 + 120z - 525)\operatorname{erfi}(\sqrt{z})}{262144z^{9/2}} - \frac{315e^z(280z^3 - 292z^2 + 470z - 525)}{131072z^4}$$

07.25.03.ae4q.01

$${}_2F_2\left(\frac{1}{2}, 5; 2, \frac{11}{2}; -z\right) = \frac{315e^{-z}(280z^3 + 292z^2 + 470z + 525)}{131072z^4} + \frac{315\sqrt{\pi}(560z^4 - 160z^3 - 72z^2 - 120z - 525)\operatorname{erf}(\sqrt{z})}{262144z^{9/2}}$$

07.25.03.ae4r.01

$${}_2F_2\left(\frac{1}{2}, 5; 2, 6; z\right) = \frac{2e^{z/2}(35z^3 - 15z^2 + 48z - 96)I_0\left(\frac{z}{2}\right)}{63z^3} - \frac{2e^{z/2}(35z^4 + 20z^3 - 72z^2 + 192z - 384)I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 = \frac{5}{2}$

07.25.03.ae4s.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{5}{2}, 3; z\right) = \frac{e^z(4z - 15)}{64z} + \frac{5\sqrt{\pi}(14z + 3)\operatorname{erfi}(\sqrt{z})}{128z^{3/2}}$$

07.25.03.ae4t.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{5}{2}, 3; -z\right) = \frac{e^{-z}(4z+15)}{64z} + \frac{5\sqrt{\pi}(14z-3)\operatorname{erf}(\sqrt{z})}{128z^{3/2}}$$

07.25.03.ae4u.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{5}{2}, 4; z\right) = \frac{3\sqrt{\pi}(14z+5)\operatorname{erfi}(\sqrt{z})}{64z^{3/2}} - \frac{15e^z}{32z}$$

07.25.03.ae4v.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{5}{2}, 4; -z\right) = \frac{3\sqrt{\pi}(14z-5)\operatorname{erf}(\sqrt{z})}{64z^{3/2}} + \frac{15e^{-z}}{32z}$$

07.25.03.ae4w.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{5}{2}, 5; z\right) = \frac{3\sqrt{\pi}(2z+1)\operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3e^z}{4z}$$

07.25.03.ae4x.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{5}{2}, 5; -z\right) = \frac{3\sqrt{\pi}(2z-1)\operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

07.25.03.ae4y.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{5}{2}, 6; z\right) = -\frac{5e^z(7z^4+8z^3-24z^2+48z-48)}{42z^5} + \frac{5\sqrt{\pi}(14z+9)\operatorname{erfi}(\sqrt{z})}{84z^{3/2}} - \frac{40}{7z^5}$$

07.25.03.ae4z.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{5}{2}, 6; -z\right) = \frac{5e^{-z}(7z^4-8z^3-24z^2-48z-48)}{42z^5} + \frac{5\sqrt{\pi}(14z-9)\operatorname{erf}(\sqrt{z})}{84z^{3/2}} + \frac{40}{7z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 = 3$

07.25.03.ae50.01

$${}_2F_2\left(\frac{1}{2}, 5; 3, 3; z\right) = \frac{19}{18}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{2e^{z/2}(4z+1)I_1\left(\frac{z}{2}\right)}{9z}$$

07.25.03.ae51.01

$${}_2F_2\left(\frac{1}{2}, 5; 3, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi}(140z^2+60z+9)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{45e^z(6z+1)}{512z^2}$$

07.25.03.ae52.01

$${}_2F_2\left(\frac{1}{2}, 5; 3, \frac{7}{2}; -z\right) = \frac{45e^{-z}(6z-1)}{512z^2} + \frac{5\sqrt{\pi}(140z^2-60z+9)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.ae53.01

$${}_2F_2\left(\frac{1}{2}, 5; 3, 4; z\right) = \frac{7}{6}e^{z/2}I_0\left(\frac{z}{2}\right) + \frac{e^{z/2}(-7z-4)I_1\left(\frac{z}{2}\right)}{6z}$$

07.25.03.ae54.01

$${}_2F_2\left(\frac{1}{2}, 5; 3, \frac{9}{2}; z\right) = \frac{35\sqrt{\pi}(280z^3 + 180z^2 + 54z - 15)\operatorname{erfi}(\sqrt{z})}{12288z^{7/2}} - \frac{35e^z(140z^2 + 64z - 15)}{6144z^3}$$

07.25.03.ae55.01

$${}_2F_2\left(\frac{1}{2}, 5; 3, \frac{9}{2}; -z\right) = \frac{35e^{-z}(140z^2 - 64z - 15)}{6144z^3} + \frac{35\sqrt{\pi}(280z^3 - 180z^2 + 54z + 15)\operatorname{erf}(\sqrt{z})}{12288z^{7/2}}$$

07.25.03.ae56.01

$${}_2F_2\left(\frac{1}{2}, 5; 3, 5; z\right) = \frac{4}{3}e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2}(z+1)I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.ae57.01

$${}_2F_2\left(\frac{1}{2}, 5; 3, \frac{11}{2}; z\right) = \frac{105\sqrt{\pi}(560z^4 + 480z^3 + 216z^2 - 120z + 315)\operatorname{erfi}(\sqrt{z})}{65536z^{9/2}} - \frac{525e^z(56z^3 + 76z^2 - 66z + 63)}{32768z^4}$$

07.25.03.ae58.01

$${}_2F_2\left(\frac{1}{2}, 5; 3, \frac{11}{2}; -z\right) = \frac{525e^{-z}(56z^3 - 76z^2 - 66z - 63)}{32768z^4} + \frac{105\sqrt{\pi}(560z^4 - 480z^3 + 216z^2 + 120z + 315)\operatorname{erf}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.ae59.01

$${}_2F_2\left(\frac{1}{2}, 5; 3, 6; z\right) = \frac{4e^{z/2}(70z^3 + 15z^2 - 48z + 96)I_0\left(\frac{z}{2}\right)}{189z^3} - \frac{4e^{z/2}(70z^4 + 85z^3 + 72z^2 - 192z + 384)I_1\left(\frac{z}{2}\right)}{189z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 = \frac{7}{2}$

07.25.03.ae5a.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{7}{2}, 4; z\right) = \frac{15\sqrt{\pi}(28z^2 + 20z + 9)\operatorname{erfi}(\sqrt{z})}{512z^{5/2}} - \frac{15e^z(14z + 9)}{256z^2}$$

07.25.03.ae5b.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{7}{2}, 4; -z\right) = \frac{15e^{-z}(14z - 9)}{256z^2} + \frac{15\sqrt{\pi}(28z^2 - 20z + 9)\operatorname{erf}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.ae5c.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{7}{2}, 5; z\right) = \frac{15\sqrt{\pi}(4z^2 + 4z + 3)\operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15e^z(2z + 3)}{32z^2}$$

07.25.03.ae5d.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{7}{2}, 5; -z\right) = \frac{15e^{-z}(2z - 3)}{32z^2} + \frac{15\sqrt{\pi}(4z^2 - 4z + 3)\operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.ae5e.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{7}{2}, 6; z\right) = -\frac{5e^z(70z^4 + 125z^3 + 192z^2 - 384z + 384)}{336z^5} + \frac{5\sqrt{\pi}(140z^2 + 180z + 189)\operatorname{erfi}(\sqrt{z})}{672z^{5/2}} + \frac{40}{7z^5}$$

07.25.03.ae5f.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{7}{2}, 6; -z\right) = \frac{5 e^{-z} (70 z^4 - 125 z^3 + 192 z^2 + 384 z + 384)}{336 z^5} + \frac{5 \sqrt{\pi} (140 z^2 - 180 z + 189) \operatorname{erf}(\sqrt{z})}{672 z^{5/2}} - \frac{40}{7 z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 = 4$

07.25.03.ae5g.01

$${}_2F_2\left(\frac{1}{2}, 5; 4, 4; z\right) = \frac{e^{z/2} (7z + 1) I_0\left(\frac{z}{2}\right)}{5z} + \frac{e^{z/2} (-7z^2 - 8z - 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.ae5h.01

$${}_2F_2\left(\frac{1}{2}, 5; 4, \frac{9}{2}; z\right) = \frac{35 \sqrt{\pi} (56 z^3 + 60 z^2 + 54 z + 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}} - \frac{35 e^z (28 z^2 + 44 z + 15)}{1024 z^3}$$

07.25.03.ae5i.01

$${}_2F_2\left(\frac{1}{2}, 5; 4, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (28 z^2 - 44 z + 15)}{1024 z^3} + \frac{35 \sqrt{\pi} (56 z^3 - 60 z^2 + 54 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.ae5j.01

$${}_2F_2\left(\frac{1}{2}, 5; 4, 5; z\right) = \frac{4 e^{z/2} (2z + 1) I_0\left(\frac{z}{2}\right)}{5z} - \frac{4 e^{z/2} (2z^2 + 3z + 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.ae5k.01

$${}_2F_2\left(\frac{1}{2}, 5; 4, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (112 z^4 + 160 z^3 + 216 z^2 + 120 z - 105) \operatorname{erfi}(\sqrt{z})}{32768 z^{9/2}} - \frac{315 e^z (56 z^3 + 108 z^2 + 190 z - 105)}{16384 z^4}$$

07.25.03.ae5l.01

$${}_2F_2\left(\frac{1}{2}, 5; 4, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (56 z^3 - 108 z^2 + 190 z + 105)}{16384 z^4} + \frac{315 \sqrt{\pi} (112 z^4 - 160 z^3 + 216 z^2 - 120 z - 105) \operatorname{erf}(\sqrt{z})}{32768 z^{9/2}}$$

07.25.03.ae5m.01

$${}_2F_2\left(\frac{1}{2}, 5; 4, 6; z\right) = \frac{16 e^{z/2} (7 z^3 + 6 z^2 + 6 z - 12) I_0\left(\frac{z}{2}\right)}{63 z^3} - \frac{8 e^{z/2} (14 z^4 + 26 z^3 + 45 z^2 + 48 z - 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 5$, $b_1 = \frac{9}{2}$

07.25.03.ae5n.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{9}{2}, 5; z\right) = \frac{35 \sqrt{\pi} (8 z^3 + 12 z^2 + 18 z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{35 e^z (4 z^2 + 8 z + 15)}{128 z^3}$$

07.25.03.ae5o.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{9}{2}, 5; -z\right) = \frac{35 e^{-z} (4 z^2 - 8 z + 15)}{128 z^3} + \frac{35 \sqrt{\pi} (8 z^3 - 12 z^2 + 18 z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.ae5p.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{9}{2}, 6; z\right) = \frac{5 e^z (140 z^4 + 340 z^3 + 807 z^2 + 1536 z - 1536)}{576 z^5} + \frac{5 \sqrt{\pi} (280 z^3 + 540 z^2 + 1134 z + 1575) \operatorname{erfi}(\sqrt{z})}{1152 z^{7/2}} - \frac{40}{3 z^5}$$

07.25.03.ae5q.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{9}{2}, 6; -z\right) = \frac{5 e^{-z} (140 z^4 - 340 z^3 + 807 z^2 - 1536 z - 1536)}{576 z^5} + \frac{5 \sqrt{\pi} (280 z^3 - 540 z^2 + 1134 z - 1575) \operatorname{erf}(\sqrt{z})}{1152 z^{7/2}} + \frac{40}{3 z^5}$$

For fixed z and $a_1 = \frac{1}{2}, a_2 = 5, b_1 = 5$

07.25.03.ae5r.01

$${}_2F_2\left(\frac{1}{2}, 5; 5, 5; z\right) = \frac{32 e^{z/2} (2 z^2 + 2 z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} - \frac{64 e^{z/2} (z^3 + 2 z^2 + 4 z + 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.ae5s.01

$${}_2F_2\left(\frac{1}{2}, 5; 5, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (16 z^4 + 32 z^3 + 72 z^2 + 120 z + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315 e^z (8 z^3 + 20 z^2 + 50 z + 105)}{2048 z^4}$$

07.25.03.ae5t.01

$${}_2F_2\left(\frac{1}{2}, 5; 5, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (8 z^3 - 20 z^2 + 50 z - 105)}{2048 z^4} + \frac{315 \sqrt{\pi} (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.ae5u.01

$${}_2F_2\left(\frac{1}{2}, 5; 5, 6; z\right) = \frac{32 e^{z/2} (4 z^3 + 6 z^2 + 15 z + 24) I_0\left(\frac{z}{2}\right)}{63 z^3} - \frac{32 e^{z/2} (4 z^4 + 10 z^3 + 27 z^2 + 60 z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{1}{2}, a_2 = 5, b_1 = \frac{11}{2}$

07.25.03.ae5v.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{11}{2}, 6; z\right) = \frac{5 e^z (280 z^4 + 860 z^3 + 2838 z^2 + 8499 z + 24576)}{1024 z^5} + \frac{5 \sqrt{\pi} (560 z^4 + 1440 z^3 + 4536 z^2 + 12600 z + 33075) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}} + \frac{120}{z^5}$$

07.25.03.ae5w.01

$${}_2F_2\left(\frac{1}{2}, 5; \frac{11}{2}, 6; -z\right) = \frac{5 e^{-z} (280 z^4 - 860 z^3 + 2838 z^2 - 8499 z + 24576)}{1024 z^5} + \frac{5 \sqrt{\pi} (560 z^4 - 1440 z^3 + 4536 z^2 - 12600 z + 33075) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}} - \frac{120}{z^5}$$

For fixed z and $a_1 = \frac{1}{2}, a_2 = 5, b_1 = 6$

07.25.03.ae5x.01

$${}_2F_2\left(\frac{1}{2}, 5; 6, 6; z\right) = \frac{64 e^{z/2} (140 z^5 + 300 z^4 + 1119 z^3 + 3747 z^2 + 15120 z - 30240) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (140 z^4 + 440 z^3 + 1629 z^2 + 5736 z + 22548) I_1\left(\frac{z}{2}\right) + 10240}{3969 z^5} + \frac{10240}{21 z^5}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.ae5y.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{102112943625} (e^z (131072 z^{17} + 14745600 z^{16} + 679477248 z^{15} + 16723476480 z^{14} + 24053760000 z^{13} + 2080711065600 z^{12} + 10748694528000 z^{11} + 31891105382400 z^{10} + 50134702464000 z^9 + 35781020352000 z^8 + 8282895667200 z^7 + 193995648000 z^6 + 3532636800 z^5 + 4041576000 z^4 - 1347192000 z^3 + 44008272000 z^2 - 92829948750 z + 102112943625))$$

07.25.03.ae5z.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{9282994875} (e^z (65536 z^{16} + 6684672 z^{15} + 276234240 z^{14} + 6013747200 z^{13} + 75165696000 z^{12} + 551778508800 z^{11} + 2339565465600 z^{10} + 5417508096000 z^9 + 6106072896000 z^8 + 2625327936000 z^7 + 203455929600 z^6 - 4730140800 z^5 - 598752000 z^4 + 1122660000 z^3 - 3929310000 z^2 + 8251551000 z - 9282994875))$$

07.25.03.ae60.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1031443875} (e^z (32768 z^{15} + 2998272 z^{14} + 109633536 z^{13} + 2074988544 z^{12} + 22020433920 z^{11} + 132756433920 z^{10} + 439622346240 z^9 + 730453489920 z^8 + 496449233280 z^7 + 71540884800 z^6 - 5583362400 z^5 + 426610800 z^4 - 86070600 z^3 + 432224100 z^2 - 884094750 z + 1031443875))$$

07.25.03.ae61.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{147349125} (e^z (16384 z^{14} + 1327104 z^{13} + 42209280 z^{12} + 678715392 z^{11} + 5919851520 z^{10} + 27899182080 z^9 + 66365671680 z^8 + 66581222400 z^7 + 15190338240 z^6 - 2205403200 z^5 + 516423600 z^4 - 44906400 z^3 - 65488500 z^2 + 117879300 z - 147349125))$$

07.25.03.ae62.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{29469825} (e^z (8192 z^{13} + 577536 z^{12} + 15618048 z^{11} + 206604288 z^{10} + 1410393600 z^9 + 4782032640 z^8 + 6881656320 z^7 + 2323157760 z^6 - 535883040 z^5 + 237006000 z^4 - 97297200 z^3 + 26195400 z^2 - 19646550 z + 29469825))$$

07.25.03.ae63.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{9823275} (e^z (4096 z^{12} + 245760 z^{11} + 5474304 z^{10} + 56770560 z^9 + 279417600 z^8 + 574801920 z^7 + 279417600 z^6 - 95800320 z^5 + 67359600 z^4 - 49896000 z^3 + 26195400 z^2 - 9823275))$$

07.25.03.ae64.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{9823275} (e^z (2048 z^{11} + 101376 z^{10} + 1774080 z^9 + 13305600 z^8 + 39916800 z^7 + 27941760 z^6 - 13970880 z^5 + 14968800 z^4 - 18711000 z^3 + 21829500 z^2 - 19646550 z + 9823275))$$

07.25.03.ae65.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{9823275} (e^{z/2} (1024 z^{11} + 46080 z^{10} + 718080 z^9 + 4639488 z^8 + 11227392 z^7 + 4832640 z^6 - 1797840 z^5 + 1890000 z^4 - 3118500 z^3 + 5953500 z^2 - 9823275 z + 9823275) I_0\left(\frac{z}{2}\right) + \frac{1}{9823275} (e^{z/2} (1024 z^{11} + 45056 z^{10} + 673536 z^9 + 3987456 z^8 + 7534848 z^7 - 1254528 z^6 + 824400 z^5 - 792000 z^4 + 661500 z^3 - 893025 z) I_1\left(\frac{z}{2}\right))$$

07.25.03.ae66.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{9823275} (e^z (1024 z^{10} + 39936 z^9 + 507648 z^8 + 2337792 z^7 + 2424960 z^6 - 1791360 z^5 + 2867040 z^4 - 5417280 z^3 + 9604980 z^2 - 13097700 z + 9823275))$$

07.25.03.ae67.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{9823275} (e^{z/2} (1024 z^{10} + 35328 z^9 + 381696 z^8 + 1370112 z^7 + 714240 z^6 - 390240 z^5 + 781200 z^4 - 2268000 z^3 + 5953500 z^2 - 10914750 z + 9823275) I_0\left(\frac{z}{2}\right) + \frac{1}{9823275} (e^{z/2} (1024 z^{10} + 34304 z^9 + 347904 z^8 + 1038336 z^7 - 181248 z^6 + 56160 z^5 + 306000 z^4 - 1764000 z^3 + 5953500 z^2 - 12899250 z + 14189175) I_1\left(\frac{z}{2}\right))$$

07.25.03.ae68.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{3274425} (e^z (512 z^9 + 14592 z^8 + 115200 z^7 + 189696 z^6 - 210240 z^5 + 470880 z^4 - 1156320 z^3 + 2494800 z^2 - 3929310 z + 3274425))$$

07.25.03.ae69.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{9823275} (8 e^{z/2} (256 z^9 + 6144 z^8 + 36864 z^7 + 24960 z^6 - 28080 z^5 + 100800 z^4 - 378000 z^3 + 1134000 z^2 - 2338875 z + 2494800) I_0\left(\frac{z}{2}\right) + \frac{1}{9823275 z} (4 e^{z/2} (512 z^{10} + 11776 z^9 + 62208 z^8 - 6912 z^7 - 28320 z^6 + 194400 z^5 - 882000 z^4 + 3024000 z^3 - 7512750 z^2 + 12162150 z - 10135125) I_1\left(\frac{z}{2}\right))$$

07.25.03.ae6a.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{654885} e^z (256 z^8 + 4608 z^7 + 13824 z^6 - 22656 z^5 + 64800 z^4 - 185760 z^3 + 443520 z^2 - 748440 z + 654885)$$

07.25.03.ae6b.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{3274425 z} (4 e^{z/2} (512 z^9 + 6912 z^8 + 7680 z^7 - 19776 z^6 + 94752 z^5 - 408240 z^4 + 1421280 z^3 - 3742200 z^2 + 6798330 z - 6891885) I_0\left(\frac{z}{2}\right) + \frac{1}{3274425 z^2} (4 e^{z/2} (512 z^{10} + 6400 z^9 + 1536 z^8 - 18624 z^7 + 109344 z^6 - 515088 z^5 + 1965600 z^4 - 5934600 z^3 + 13783770 z^2 - 23918895 z + 27567540) I_1\left(\frac{z}{2}\right))$$

07.25.03.ae6c.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 + 960 z^6 - 2208 z^5 + 7440 z^4 - 23400 z^3 + 59220 z^2 - 103950 z + 93555)}{93555}$$

07.25.03.ae6d.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{3274425 z^2} (32 e^{z/2} (256 z^9 + 768 z^8 - 3648 z^7 + 20928 z^6 - 106704 z^5 + 468720 z^4 - 1746360 z^3 + 5381640 z^2 - 12799215 z + 18706545) I_0\left(\frac{z}{2}\right) + \frac{1}{3274425 z^3} (32 e^{z/2} (256 z^{10} + 512 z^9 - 4032 z^8 + 24960 z^7 - 133392 z^6 + 616896 z^5 - 2457000 z^4 + 8339760 z^3 - 23455575 z^2 + 51196860 z - 74826180) I_1\left(\frac{z}{2}\right))$$

07.25.03.ae6e.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (64 z^6 - 192 z^5 + 720 z^4 - 2400 z^3 + 6300 z^2 - 11340 z + 10395)}{10395}$$

07.25.03.ae6f.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{654885 z^3} \left(32 e^{z/2} (256 z^9 - 1920 z^8 + 14400 z^7 - 99648 z^6 + 625968 z^5 - 3492720 z^4 + 16746840 z^3 - 65637000 z^2 + 193300965 z - 349188840) I_0\left(\frac{z}{2}\right) + \frac{1}{654885 z^4} \left(32 e^{z/2} (256 z^{10} - 2176 z^9 + 16704 z^8 - 117696 z^7 + 754992 z^6 - 4333392 z^5 + 21673080 z^4 - 91068120 z^3 + 306196605 z^2 - 773203860 z + 1396755360) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.ae6g.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{843908625} \left(e^z (32768 z^{15} + 3031040 z^{14} + 112353280 z^{13} + 2164224000 z^{12} + 23515392000 z^{11} + 146554598400 z^{10} + 510287040000 z^9 + 922749408000 z^8 + 746162928000 z^7 + 193419576000 z^6 + 5018176800 z^5 + 144018000 z^4 - 83349000 z^3 + 352957500 z^2 - 729303750 z + 843908625) \right)$$

07.25.03.ae6h.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{93767625} \left(e^z (16384 z^{14} + 1359872 z^{13} + 44617728 z^{12} + 747479040 z^{11} + 6899082240 z^{10} + 35332346880 z^9 + 96147959040 z^8 + 124856847360 z^7 + 60939345600 z^6 + 5300769600 z^5 - 141296400 z^4 + 1360800 z^3 - 39633300 z^2 + 77395500 z - 93767625) \right)$$

07.25.03.ae6i.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{13395375} \left(e^z (8192 z^{13} + 602112 z^{12} + 17190912 z^{11} + 244807680 z^{10} + 1858291200 z^9 + 7445571840 z^8 + 14568906240 z^7 + 11437251840 z^6 + 1876543200 z^5 - 164430000 z^4 + 11566800 z^3 + 6463800 z^2 - 10120950 z + 13395375) \right)$$

07.25.03.ae6j.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{2679075} \left(e^z (4096 z^{12} + 262144 z^{11} + 6367232 z^{10} + 74649600 z^9 + 443923200 z^8 + 1281208320 z^7 + 1519015680 z^6 + 402071040 z^5 - 66906000 z^4 + 18144000 z^3 - 3288600 z^2 + 1587600 z - 2679075) \right)$$

07.25.03.ae6k.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{893025} (e^z (2048 z^{11} + 111616 z^{10} + 2234880 z^9 + 20563200 z^8 + 88300800 z^7 + 154949760 z^6 + 62233920 z^5 - 16783200 z^4 + 8505000 z^3 - 3685500 z^2 + 198450 z + 893025))$$

07.25.03.ae6l.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{893025} (e^z (1024 z^{10} + 46080 z^9 + 725760 z^8 + 4838400 z^7 + 12700800 z^6 + 7620480 z^5 - 3175200 z^4 + 2721600 z^3 - 2551500 z^2 + 1984500 z - 893025))$$

07.25.03.ae6m.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{893025} (e^{z/2} (-512 z^{10} - 20992 z^9 - 295680 z^8 - 1713408 z^7 - 3708000 z^6 - 1499040 z^5 + 522000 z^4 - 504000 z^3 + 708750 z^2 - 992250 z + 893025) I_0\left(\frac{z}{2}\right) - \frac{1}{893025} (2 e^{z/2} (256 z^{10} + 10240 z^9 + 137728 z^8 + 723840 z^7 + 1189584 z^6 - 187200 z^5 + 111600 z^4 - 90000 z^3 + 55125 z^2) I_1\left(\frac{z}{2}\right))$$

07.25.03.ae6n.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{893025} (e^z (512 z^9 + 18176 z^8 + 208384 z^7 + 856320 z^6 + 784320 z^5 - 503520 z^4 + 678240 z^3 - 1013040 z^2 + 1256850 z - 893025))$$

07.25.03.ae6o.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{893025} (e^{z/2} (-512 z^9 - 16128 z^8 - 158208 z^7 - 515520 z^6 - 260640 z^5 + 140400 z^4 - 252000 z^3 + 567000 z^2 - 992250 z + 893025) I_0\left(\frac{z}{2}\right) + \frac{1}{893025} (e^{z/2} (-512 z^9 - 15616 z^8 - 142848 z^7 - 379968 z^6 + 61920 z^5 - 10800 z^4 - 108000 z^3 + 441000 z^2 - 992250 z + 1091475) I_1\left(\frac{z}{2}\right))$$

07.25.03.ae6p.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{297675} e^z (256 z^8 + 6656 z^7 + 47616 z^6 + 71040 z^5 - 69600 z^4 + 131040 z^3 - 250560 z^2 + 370440 z - 297675)$$

07.25.03.ae6q.01

$$\begin{aligned}
 {}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, 3; z\right) = & \\
 & -\frac{1}{893025} 4 e^{z/2} (256 z^8 + 5632 z^7 + 31040 z^6 + 21120 z^5 - 22800 z^4 + 67200 z^3 - 189000 z^2 + 378000 z - 392175) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{893025} z \left(4 e^{z/2} \right. \\
 & \left. (256 z^9 + 5376 z^8 + 25792 z^7 - 2240 z^6 - 12240 z^5 + 66000 z^4 - 231000 z^3 + 567000 z^2 - 883575 z + 675675) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

07.25.03.ae6r.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{e^z (128 z^7 + 2112 z^6 + 5856 z^5 - 8400 z^4 + 19800 z^3 - 43380 z^2 + 69930 z - 59535)}{59535}$$

07.25.03.ae6s.01

$$\begin{aligned}
 {}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = & \\
 & -\frac{1}{297675} 4 e^{z/2} (256 z^8 + 3200 z^7 + 3648 z^6 - 8256 z^5 + 31920 z^4 - 105840 z^3 + 264600 z^2 - 446040 z + 405405) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{297675} z^2 \left(4 e^{z/2} (256 z^9 + 2944 z^8 + 832 z^7 - 7872 z^6 + 38064 z^5 - \right. \\
 & \left. 142800 z^4 + 415800 z^3 - 914760 z^2 + 1486485 z - 1621620) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

07.25.03.ae6t.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{e^z (64 z^6 + 448 z^5 - 880 z^4 + 2400 z^3 - 5700 z^2 + 9660 z - 8505)}{8505}$$

07.25.03.ae6u.01

$$\begin{aligned}
 {}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, 5; z\right) = & \\
 & -\frac{1}{297675} 32 e^{z/2} (128 z^8 + 384 z^7 - 1536 z^6 + 7296 z^5 - 30240 z^4 + 105840 z^3 - 306720 z^2 + 694980 z - 984555) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{297675} z^3 \left(128 e^{z/2} (32 z^9 + 64 z^8 - 432 z^7 + 2256 z^6 - 9996 z^5 + 37800 z^4 - 121770 z^3 + 328185 z^2 - 694980 z + 984555) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

07.25.03.ae6v.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = -\frac{1}{945} e^z (32 z^5 - 80 z^4 + 240 z^3 - 600 z^2 + 1050 z - 945)$$

$$\begin{aligned}
 & \text{07.25.03.ae6w.01} \\
 & {}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = \\
 & -\frac{1}{59535 z^3} \left(32 e^{z/2} (128 z^8 - 832 z^7 + 5440 z^6 - 32688 z^5 + 176400 z^4 - 826680 z^3 + 3191760 z^2 - 9298575 z + 16628040) \right. \\
 & \quad \left. I_0\left(\frac{z}{2}\right) - \frac{1}{59535 z^4} \left(32 e^{z/2} (128 z^9 - 960 z^8 + 6464 z^7 - 39760 z^6 + 220752 z^5 - \right. \right. \\
 & \quad \left. \left. 1078440 z^4 + 4461600 z^3 - 14845545 z^2 + 37194300 z - 66512160) I_1\left(\frac{z}{2}\right)\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.ae6x.01} \\
 & {}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{10418625} \\
 & \left(e^z (8192 z^{13} + 610304 z^{12} + 17731584 z^{11} + 258484224 z^{10} + 2027877888 z^9 + 8540722944 z^8 + 18181449216 z^7 + \right. \\
 & \quad \left. 16974800640 z^6 + 5007471840 z^5 + 146648880 z^4 + 2676240 z^3 + 4694760 z^2 - 8079750 z + 10418625)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ae6y.01} \\
 & {}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \\
 & -\frac{1}{1488375} \left(e^z (4096 z^{12} + 270336 z^{11} + 6838272 z^{10} + 84793344 z^9 + 547575552 z^8 + 1806271488 z^7 + \right. \\
 & \quad \left. 2768774400 z^6 + 1565464320 z^5 + 155539440 z^4 - 4445280 z^3 - 884520 z^2 + 1020600 z - 1488375)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ae6z.01} \\
 & {}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{297675} \left(e^z (2048 z^{11} + 117760 z^{10} + 2535936 z^9 + 25913088 z^8 + 131265792 z^7 + 312439680 z^6 + \right. \\
 & \quad \left. 290848320 z^5 + 55611360 z^4 - 5647320 z^3 + 601020 z^2 - 141750 z + 297675)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ae70.01} \\
 & {}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \\
 & -\frac{1}{99225} \left(e^z (1024 z^{10} + 50176 z^9 + 891648 z^8 + 7160832 z^7 + 26248320 z^6 + 38102400 z^5 + 12065760 z^4 - \right. \\
 & \quad \left. 2358720 z^3 + 714420 z^2 - 56700 z - 99225)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ae71.01} \\
 & {}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{99225} \left(e^z (512 z^9 + 20736 z^8 + 290304 z^7 + \right. \\
 & \quad \left. 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + 408240 z^2 - 255150 z + 99225)\right)
 \end{aligned}$$

07.25.03.ae72.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{99225} \left(e^{z/2} (256 z^9 + 9472 z^8 + 119232 z^7 + 611520 z^6 + 1166256 z^5 + 435888 z^4 - 139320 z^3 + 118440 z^2 - 127575 z + 99225) I_0\left(\frac{z}{2}\right) + \frac{1}{99225} e^{z/2} (256 z^9 + 9216 z^8 + 110144 z^7 + 505728 z^6 + 707184 z^5 - 103104 z^4 + 53208 z^3 - 32400 z^2 + 11025 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ae73.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{99225} e^z (256 z^8 + 8192 z^7 + 83712 z^6 + 302592 z^5 + 240864 z^4 - 131328 z^3 + 142128 z^2 - 151200 z + 99225)$$

07.25.03.ae74.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{99225} e^{z/2} (256 z^8 + 7296 z^7 + 64320 z^6 + 188352 z^5 + 92016 z^4 - 48240 z^3 + 73080 z^2 - 113400 z + 99225) I_0\left(\frac{z}{2}\right) + \frac{1}{99225} e^{z/2} (256 z^8 + 7040 z^7 + 57408 z^6 + 134208 z^5 - 19728 z^4 - 144 z^3 + 34200 z^2 - 88200 z + 99225) I_1\left(\frac{z}{2}\right)$$

07.25.03.ae75.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 3008 z^6 + 19296 z^5 + 25872 z^4 - 21864 z^3 + 32724 z^2 - 43470 z + 33075)}{33075}$$

07.25.03.ae76.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, 3; z\right) = \frac{32 e^{z/2} (16 z^7 + 320 z^6 + 1608 z^5 + 1104 z^4 - 1110 z^3 + 2520 z^2 - 4725 z + 4725) I_0\left(\frac{z}{2}\right)}{99225} + \frac{1}{99225 z} 4 e^{z/2} (128 z^8 + 2432 z^7 + 10496 z^6 - 576 z^5 - 5088 z^4 + 20400 z^3 - 50400 z^2 + 75600 z - 51975) I_1\left(\frac{z}{2}\right)$$

07.25.03.ae77.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (64 z^6 + 960 z^5 + 2448 z^4 - 2976 z^3 + 5436 z^2 - 8100 z + 6615)}{6615}$$

07.25.03.ae78.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (128 z^7 + 1472 z^6 + 1728 z^5 - 3312 z^4 + 9744 z^3 - 22680 z^2 + 34776 z - 27027) I_0\left(\frac{z}{2}\right)}{33075 z} + \frac{1}{33075 z^2} 4 e^{z/2} (128 z^8 + 1344 z^7 + 448 z^6 - 3216 z^5 + 12240 z^4 - 34440 z^3 + 71064 z^2 - 106029 z + 108108) I_1\left(\frac{z}{2}\right)$$

07.25.03.ae79.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 208 z^4 - 336 z^3 + 696 z^2 - 1110 z + 945)$$

07.25.03.ae7a.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (64 z^7 + 192 z^6 - 624 z^5 + 2352 z^4 - 7560 z^3 + 20088 z^2 - 42471 z + 57915) I_0\left(\frac{z}{2}\right) + \frac{1}{33075 z^3} 32 e^{z/2} (64 z^8 + 128 z^7 - 720 z^6 + 3072 z^5 - 10920 z^4 + 32832 z^3 - 83457 z^2 + 169884 z - 231660) I_1\left(\frac{z}{2}\right)}{33075 z^2}$$

07.25.03.ae7b.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{105} e^z (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105)$$

07.25.03.ae7c.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 - 352 z^6 + 1968 z^5 - 10080 z^4 + 45624 z^3 - 172458 z^2 + 495495 z - 875160) I_0\left(\frac{z}{2}\right) + \frac{1}{6615 z^4} 32 e^{z/2} (64 z^8 - 416 z^7 + 2416 z^6 - 12768 z^5 + 60216 z^4 - 243606 z^3 + 799227 z^2 - 1981980 z + 3500640) I_1\left(\frac{z}{2}\right)}{6615 z^3}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.ae7d.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{212625} (e^z (2048 z^{11} + 119808 z^{10} + 2640384 z^9 + 27874560 z^8 + 148352256 z^7 + 383902848 z^6 + 424630080 z^5 + 145787040 z^4 + 4876200 z^3 + 215460 z^2 - 119070 z + 212625))$$

07.25.03.ae7e.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{42525} (e^z (1024 z^{10} + 52224 z^9 + 980736 z^8 + 8543232 z^7 + 35731584 z^6 + 66890880 z^5 + 45087840 z^4 + 5261760 z^3 - 192780 z^2 + 11340 z - 42525))$$

07.25.03.ae7f.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{14175} (e^z (512 z^9 + 22272 z^8 + 345600 z^7 + 2370816 z^6 + 7197120 z^5 + 8255520 z^4 + 1905120 z^3 - 226800 z^2 + 17010 z + 14175))$$

07.25.03.ae7g.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{14175} e^z (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175)$$

07.25.03.ae7h.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{14175} e^{z/2} (-128 z^8 - 4224 z^7 - 46848 z^6 - 209088 z^5 - 344736 z^4 - 116496 z^3 + 33120 z^2 - 22680 z + 14175) I_0\left(\frac{z}{2}\right) - \frac{8 e^{z/2} (16 z^8 + 512 z^7 + 5352 z^6 + 21024 z^5 + 24282 z^4 - 3168 z^3 + 1287 z^2 - 450 z) I_1\left(\frac{z}{2}\right)}{14175}$$

07.25.03.ae7i.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{e^z (128 z^7 + 3648 z^6 + 32736 z^5 + 102192 z^4 + 69336 z^3 - 30996 z^2 + 24570 z - 14175)}{14175}$$

07.25.03.ae7j.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (-128 z^7 - 3264 z^6 - 25536 z^5 - 66384 z^4 - 31248 z^3 + 15480 z^2 - 17640 z + 14175) I_0\left(\frac{z}{2}\right) + e^{z/2} (-128 z^7 - 3136 z^6 - 22464 z^5 - 45360 z^4 + 5616 z^3 + 1512 z^2 - 9000 z + 11025) I_1\left(\frac{z}{2}\right)}{14175}$$

07.25.03.ae7k.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{e^z (64 z^6 + 1344 z^5 + 7632 z^4 + 9120 z^3 - 6372 z^2 + 6804 z - 4725)}{4725}$$

07.25.03.ae7l.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = -\frac{4 e^{z/2} (64 z^6 + 1152 z^5 + 5232 z^4 + 3648 z^3 - 3240 z^2 + 5040 z - 4725) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (64 z^7 + 1088 z^6 + 4176 z^5 - 48 z^4 - 1992 z^3 + 5400 z^2 - 7875 z + 4725) I_1\left(\frac{z}{2}\right)}{14175 z}$$

07.25.03.ae7m.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{1}{945} e^z (32 z^5 + 432 z^4 + 1008 z^3 - 984 z^2 + 1242 z - 945)$$

07.25.03.ae7n.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = -\frac{4 e^{z/2} (64 z^6 + 672 z^5 + 816 z^4 - 1248 z^3 + 2520 z^2 - 3402 z + 2079) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (64 z^7 + 608 z^6 + 240 z^5 - 1248 z^4 + 3480 z^3 - 6678 z^2 + 8883 z - 8316) I_1\left(\frac{z}{2}\right)}{4725 z^2}$$

07.25.03.ae7o.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{1}{135} e^z (16 z^4 + 96 z^3 - 120 z^2 + 168 z - 135)$$

07.25.03.ae7p.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, 5; z\right) = -\frac{32 e^{z/2} (32 z^6 + 96 z^5 - 240 z^4 + 672 z^3 - 1566 z^2 + 2970 z - 3861) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (16 z^7 + 32 z^6 - 144 z^5 + 480 z^4 - 1317 z^3 + 3078 z^2 - 5940 z + 7722) I_1\left(\frac{z}{2}\right)}{4725 z^3}$$

$$07.25.03.ae7q.01$$

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{1}{15} e^z (8z^3 - 12z^2 + 18z - 15)$$

$$07.25.03.ae7r.01$$

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{5}{2}, 6; z\right) = -\frac{32 e^{z/2} (32z^6 - 144z^5 + 672z^4 - 2868z^3 + 10494z^2 - 29601z + 51480) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (32z^7 - 176z^6 + 864z^5 - 3852z^4 + 15054z^3 - 48411z^2 + 118404z - 205920) I_1\left(\frac{z}{2}\right)}{945 z^3}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{3}{2}$

$$07.25.03.ae7s.01$$

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{8505} (e^z (512z^9 + 22784z^8 + 365056z^7 + 2628864z^6 + 8664768z^5 + 11783520z^4 + 4868640z^3 + 196560z^2 + 1890z + 8505))$$

$$07.25.03.ae7t.01$$

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{2835} e^z (256z^8 + 9728z^7 + 129024z^6 + 733824z^5 + 1764000z^4 + 1481760z^3 + 211680z^2 - 7560z - 2835)$$

$$07.25.03.ae7u.01$$

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{e^z (128z^7 + 4032z^6 + 42336z^5 + 176400z^4 + 264600z^3 + 79380z^2 - 13230z + 2835)}{2835}$$

$$07.25.03.ae7v.01$$

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \frac{e^{z/2} (64z^7 + 1856z^6 + 17808z^5 + 67632z^4 + 93912z^3 + 27792z^2 - 6615z + 2835) I_0\left(\frac{z}{2}\right) + e^{z/2} (64z^7 + 1792z^6 + 16048z^5 + 52416z^4 + 47928z^3 - 5208z^2 + 1287z) I_1\left(\frac{z}{2}\right)}{2835}$$

$$07.25.03.ae7w.01$$

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (64z^6 + 1600z^5 + 12368z^4 + 32544z^3 + 18396z^2 - 6300z + 2835)}{2835}$$

$$07.25.03.ae7x.01$$

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2} (64z^6 + 1440z^5 + 9840z^4 + 22368z^3 + 10152z^2 - 4410z + 2835) I_0\left(\frac{z}{2}\right) + e^{z/2} (64z^6 + 1376z^5 + 8496z^4 + 14496z^3 - 1272z^2 - 918z + 1575) I_1\left(\frac{z}{2}\right)}{2835}$$

$$07.25.03.ae7y.01$$

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{945} e^z (32z^5 + 592z^4 + 2928z^3 + 3096z^2 - 1638z + 945)$$

07.25.03.ae7z.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{8 e^{z/2} (16 z^5 + 256 z^4 + 1040 z^3 + 744 z^2 - 525 z + 420) I_0\left(\frac{z}{2}\right)}{2835} + \frac{4 e^{z/2} (32 z^6 + 480 z^5 + 1616 z^4 + 80 z^3 - 702 z^2 + 1050 z - 525) I_1\left(\frac{z}{2}\right)}{2835 z}$$

07.25.03.ae80.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{189} e^z (16 z^4 + 192 z^3 + 408 z^2 - 288 z + 189)$$

07.25.03.ae81.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 + 304 z^4 + 384 z^3 - 420 z^2 + 462 z - 189) I_0\left(\frac{z}{2}\right)}{945 z} + \frac{4 e^{z/2} (32 z^6 + 272 z^5 + 128 z^4 - 444 z^3 + 798 z^2 - 903 z + 756) I_1\left(\frac{z}{2}\right)}{945 z^2}$$

07.25.03.ae82.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{27} e^z (8 z^3 + 44 z^2 - 38 z + 27)$$

07.25.03.ae83.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^5 + 48 z^4 - 84 z^3 + 156 z^2 - 243 z + 297) I_0\left(\frac{z}{2}\right)}{945 z^2} + \frac{32 e^{z/2} (16 z^6 + 32 z^5 - 108 z^4 + 264 z^3 - 543 z^2 + 972 z - 1188) I_1\left(\frac{z}{2}\right)}{945 z^3}$$

07.25.03.ae84.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{3} e^z (4 z^2 - 4 z + 3)$$

07.25.03.ae85.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 56 z^4 + 212 z^3 - 732 z^2 + 2013 z - 3432) I_0\left(\frac{z}{2}\right)}{189 z^3} + \frac{32 e^{z/2} (16 z^6 - 72 z^5 + 292 z^4 - 1076 z^3 + 3357 z^2 - 8052 z + 13728) I_1\left(\frac{z}{2}\right)}{189 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.ae86.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} e^z (128 z^7 + 4160 z^6 + 45792 z^5 + 206640 z^4 + 365400 z^3 + 192780 z^2 + 9450 z + 945)$$

07.25.03.ae87.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 1728 z^5 + 15120 z^4 + 50400 z^3 + 56700 z^2 + 11340 z - 945)$$

07.25.03.ae88.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-32 z^6 - 800 z^5 - 6480 z^4 - 20304 z^3 - 22866 z^2 - 5670 z + 945) I_0\left(\frac{z}{2}\right) - \frac{2}{945} e^{z/2} (16 z^6 + 384 z^5 + 2864 z^4 + 7464 z^3 + 5067 z^2 - 372 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ae89.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{945} e^z (32 z^5 + 688 z^4 + 4464 z^3 + 9576 z^2 + 4410 z - 945)$$

07.25.03.ae8a.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (-32 z^5 - 624 z^4 - 3648 z^3 - 7116 z^2 - 3150 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-32 z^5 - 592 z^4 - 3072 z^3 - 4308 z^2 + 114 z + 315) I_1\left(\frac{z}{2}\right)$$

07.25.03.ae8b.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{1}{315} e^z (16 z^4 + 256 z^3 + 1080 z^2 + 1008 z - 315)$$

07.25.03.ae8c.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = -\frac{4}{945} e^{z/2} (16 z^4 + 224 z^3 + 804 z^2 + 600 z - 255) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (16 z^5 + 208 z^4 + 604 z^3 + 84 z^2 - 195 z + 75) I_1\left(\frac{z}{2}\right)}{945 z}$$

07.25.03.ae8d.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{1}{63} e^z (8 z^3 + 84 z^2 + 162 z - 63)$$

07.25.03.ae8e.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 + 136 z^3 + 180 z^2 - 108 z + 21) I_0\left(\frac{z}{2}\right)}{315 z} - \frac{4 e^{z/2} (16 z^5 + 120 z^4 + 68 z^3 - 132 z^2 + 117 z - 84) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.ae8f.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{1}{9} e^z (4 z^2 + 20 z - 9)$$

07.25.03.ae8g.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = -\frac{32 e^{z/2} (8 z^4 + 24 z^3 - 24 z^2 + 24 z - 27) I_0\left(\frac{z}{2}\right)}{315 z^2} - \frac{128 e^{z/2} (2 z^5 + 4 z^4 - 9 z^3 + 15 z^2 - 24 z + 27) I_1\left(\frac{z}{2}\right)}{315 z^3}$$

07.25.03.ae8h.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -e^z (2 z - 1)$$

07.25.03.ae8i.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^4 - 20 z^3 + 60 z^2 - 159 z + 264) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (8 z^5 - 28 z^4 + 92 z^3 - 273 z^2 + 636 z - 1056) I_1\left(\frac{z}{2}\right)}{63 z^3}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{1}{2}$

07.25.03.ae8j.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945)$$

07.25.03.ae8k.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (16 z^5 + 336 z^4 + 2220 z^3 + 5484 z^2 + 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^5 + 320 z^4 + 1908 z^3 + 3720 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ae8l.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (16 z^4 + 288 z^3 + 1512 z^2 + 2520 z + 945)$$

07.25.03.ae8m.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (16 z^4 + 264 z^3 + 1284 z^2 + 2100 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^4 + 248 z^3 + 1044 z^2 + 1164 z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.ae8n.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (8 z^3 + 108 z^2 + 378 z + 315)$$

07.25.03.ae8o.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, 3; z\right) = \frac{16}{945} e^{z/2} (2 z^3 + 24 z^2 + 75 z + 60) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8 z^4 + 88 z^3 + 216 z^2 + 60 z - 15) I_1\left(\frac{z}{2}\right)}{945 z}$$

07.25.03.ae8p.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (4 z^2 + 36 z + 63)$$

07.25.03.ae8q.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (8 z^3 + 60 z^2 + 84 z - 3) I_0\left(\frac{z}{2}\right)}{315 z} + \frac{4 e^{z/2} (8 z^4 + 52 z^3 + 36 z^2 - 21 z + 12) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.ae8r.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2 z + 9)$$

07.25.03.ae8s.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (4 z^3 + 12 z^2 - 3 z + 3) I_0\left(\frac{z}{2}\right)}{315 z^2} + \frac{32 e^{z/2} (4 z^4 + 8 z^3 - 9 z^2 + 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3}$$

07.25.03.ae8t.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = e^z$$

07.25.03.ae8u.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 - 6z^2 + 15z - 24) I_0\left(\frac{z}{2}\right)}{63 z^3} + \frac{32 e^{z/2} (4z^4 - 10z^3 + 27z^2 - 60z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 1$

07.25.03.ae8v.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{945} e^{z/2} (8z^4 + 136z^3 + 696z^2 + 1260z + 945) I_0\left(\frac{z}{2}\right) + \frac{4}{945} e^{z/2} (2z^4 + 32z^3 + 143z^2 + 186z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ae8w.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{315} e^{z/2} (4z^3 + 52z^2 + 189z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (4z^3 + 48z^2 + 143z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ae8x.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{63} e^{z/2} (2z^2 + 18z + 63) I_0\left(\frac{z}{2}\right) + \frac{2}{63} e^{z/2} (z^2 + 8z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ae8y.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{9} e^{z/2} (z + 9) I_0\left(\frac{z}{2}\right) + \frac{1}{9} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.ae8z.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; 1, \frac{11}{2}; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{3}{2}$

07.25.03.ae90.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (8z^3 + 116z^2 + 466z + 561) + \frac{64 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{315 \sqrt{z}}$$

07.25.03.ae91.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} e^{-z} (-8z^3 + 116z^2 - 466z + 561) + \frac{64 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{315 \sqrt{z}}$$

07.25.03.ae92.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (8z^3 + 108z^2 + 420z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (8z^3 + 100z^2 + 324z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.ae93.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (4z^2 + 44z + 123) + \frac{32 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.ae94.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{315} e^{-z} (4z^2 - 44z + 123) + \frac{32\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{105\sqrt{z}}$$

07.25.03.ae95.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{4}{945} e^{z/2} (4z^2 + 40z + 235) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4z^3 + 36z^2 - 55z + 5) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.ae96.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (2z + 15) + \frac{8\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{21\sqrt{z}}$$

07.25.03.ae97.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{63} e^{-z} (15 - 2z) + \frac{8\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{21\sqrt{z}}$$

07.25.03.ae98.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (20z^2 + 386z + 3) I_0\left(\frac{z}{2}\right)}{1575z} + \frac{4 e^{z/2} (20z^3 - 146z^2 + 31z - 12) I_1\left(\frac{z}{2}\right)}{1575z^2}$$

07.25.03.ae99.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{4\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{9\sqrt{z}} + \frac{e^z}{9}$$

07.25.03.ae9a.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{4\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{9\sqrt{z}} + \frac{e^{-z}}{9}$$

07.25.03.ae9b.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (326z^2 + 18z - 15) I_0\left(\frac{z}{2}\right)}{11025z^2} - \frac{64 e^{z/2} (93z^3 - 38z^2 + 36z - 30) I_1\left(\frac{z}{2}\right)}{11025z^3}$$

07.25.03.ae9c.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.ae9d.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.ae9e.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (512z^3 + 246z^2 - 555z + 840) I_0\left(\frac{z}{2}\right)}{19845z^3} - \frac{32 e^{z/2} (512z^4 - 502z^3 + 1089z^2 - 2220z + 3360) I_1\left(\frac{z}{2}\right)}{19845z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 2$

07.25.03.ae9f.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{315} e^{z/2} (4z^2 + 42z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (4z^2 + 38z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.ae9g.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{63} e^{z/2} (2z + 63) I_0\left(\frac{z}{2}\right) + \frac{1}{63} e^{z/2} (2z - 35) I_1\left(\frac{z}{2}\right)$$

07.25.03.ae9h.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; 2, \frac{9}{2}; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{7}{9} e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.ae9i.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; 2, \frac{11}{2}; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) - e^{z/2} I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{5}{2}$

07.25.03.ae9j.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (2z^2 + 17z - 12)}{105z} + \frac{2\sqrt{\pi} (8z + 1) \operatorname{erfi}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.ae9k.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (-2z^2 + 17z + 12)}{105z} + \frac{2\sqrt{\pi} (8z - 1) \operatorname{erf}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.ae9l.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{8}{315} e^{z/2} (z + 40) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2z^2 - 50z - 5) I_1\left(\frac{z}{2}\right)}{315z}$$

07.25.03.ae9m.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (z - 6)}{21z} + \frac{\sqrt{\pi} (4z + 1) \operatorname{erfi}(\sqrt{z})}{7z^{3/2}}$$

07.25.03.ae9n.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (z + 6)}{21z} + \frac{\sqrt{\pi} (4z - 1) \operatorname{erf}(\sqrt{z})}{7z^{3/2}}$$

07.25.03.ae9o.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (138z - 1) I_0\left(\frac{z}{2}\right)}{525z} - \frac{4 e^{z/2} (118z^2 + 27z - 4) I_1\left(\frac{z}{2}\right)}{525z^2}$$

07.25.03.ae9p.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{\sqrt{\pi} (8z + 3) \operatorname{erfi}(\sqrt{z})}{12z^{3/2}} - \frac{e^z}{2z}$$

07.25.03.ae9q.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{\sqrt{\pi} (8z - 3) \operatorname{erf}(\sqrt{z})}{12z^{3/2}} + \frac{e^{-z}}{2z}$$

07.25.03.ae9r.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (128 z^2 - 5 z + 3) I_0\left(\frac{z}{2}\right)}{3675 z^2} - \frac{32 e^{z/2} (128 z^3 + 53 z^2 - 20 z + 12) I_1\left(\frac{z}{2}\right)}{3675 z^3}$$

07.25.03.ae9s.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{3 \sqrt{\pi} (2 z + 1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3 e^z}{4 z}$$

07.25.03.ae9t.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3 \sqrt{\pi} (2 z - 1) \operatorname{erf}(\sqrt{z})}{8 z^{3/2}} + \frac{3 e^{-z}}{4 z}$$

07.25.03.ae9u.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (256 z^3 - 48 z^2 + 87 z - 120) I_0\left(\frac{z}{2}\right)}{6615 z^3} - \frac{32 e^{z/2} (256 z^4 + 208 z^3 - 207 z^2 + 348 z - 480) I_1\left(\frac{z}{2}\right)}{6615 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 3$

07.25.03.ae9v.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{68}{63} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{20 e^{z/2} (3 z + 1) I_1\left(\frac{z}{2}\right)}{63 z}$$

07.25.03.ae9w.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{32}{27} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8 z + 5) I_1\left(\frac{z}{2}\right)}{27 z}$$

07.25.03.ae9x.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; 3, \frac{11}{2}; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (z + 1) I_1\left(\frac{z}{2}\right)}{3 z}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{7}{2}$

07.25.03.ae9y.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5 \sqrt{\pi} (8 z^2 + 4 z + 1) \operatorname{erfi}(\sqrt{z})}{56 z^{5/2}} - \frac{5 e^z (10 z + 3)}{84 z^2}$$

07.25.03.ae9z.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (10 z - 3)}{84 z^2} + \frac{5 \sqrt{\pi} (8 z^2 - 4 z + 1) \operatorname{erf}(\sqrt{z})}{56 z^{5/2}}$$

07.25.03.aea0.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z + 1) I_0\left(\frac{z}{2}\right)}{105 z} - \frac{4 e^{z/2} (32 z^2 + 23 z + 4) I_1\left(\frac{z}{2}\right)}{105 z^2}$$

07.25.03.aea1.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{5 \sqrt{\pi} (8 z^2 + 6 z + 3) \operatorname{erfi}(\sqrt{z})}{48 z^{5/2}} - \frac{5 e^z (4 z + 3)}{24 z^2}$$

07.25.03.aaa2.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5 e^{-z} (4z - 3)}{24 z^2} + \frac{5 \sqrt{\pi} (8z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{48 z^{5/2}}$$

07.25.03.aaa3.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (32z^2 + 4z - 1) I_0\left(\frac{z}{2}\right)}{735 z^2} - \frac{128 e^{z/2} (8z^3 + 9z^2 + 4z - 1) I_1\left(\frac{z}{2}\right)}{735 z^3}$$

07.25.03.aaa4.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{15 \sqrt{\pi} (4z^2 + 4z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{5/2}} - \frac{15 e^z (2z + 3)}{32 z^2}$$

07.25.03.aaa5.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{15 e^{-z} (2z - 3)}{32 z^2} + \frac{15 \sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.aaa6.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (64z^3 + 24z^2 - 21z + 24) I_0\left(\frac{z}{2}\right)}{1323 z^3} - \frac{32 e^{z/2} (64z^4 + 88z^3 + 99z^2 - 84z + 96) I_1\left(\frac{z}{2}\right)}{1323 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 4$

07.25.03.aaa7.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; 4, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (16z + 3) I_0\left(\frac{z}{2}\right)}{45 z} - \frac{4 e^{z/2} (16z^2 + 19z + 12) I_1\left(\frac{z}{2}\right)}{45 z^2}$$

07.25.03.aaa8.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; 4, \frac{11}{2}; z\right) = \frac{4 e^{z/2} (2z + 1) I_0\left(\frac{z}{2}\right)}{5 z} - \frac{4 e^{z/2} (2z^2 + 3z + 4) I_1\left(\frac{z}{2}\right)}{5 z^2}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{9}{2}$

07.25.03.aaa9.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 \sqrt{\pi} (32z^3 + 36z^2 + 36z + 15) \operatorname{erfi}(\sqrt{z})}{1152 z^{7/2}} - \frac{35 e^z (16z^2 + 26z + 15)}{576 z^3}$$

07.25.03.aaaa.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (16z^2 - 26z + 15)}{576 z^3} + \frac{35 \sqrt{\pi} (32z^3 - 36z^2 + 36z - 15) \operatorname{erf}(\sqrt{z})}{1152 z^{7/2}}$$

07.25.03.aeab.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (16z^2 + 9z + 3) I_0\left(\frac{z}{2}\right)}{315 z^2} - \frac{32 e^{z/2} (16z^3 + 25z^2 + 36z + 12) I_1\left(\frac{z}{2}\right)}{315 z^3}$$

07.25.03.aeac.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{35 \sqrt{\pi} (8z^3 + 12z^2 + 18z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{35 e^z (4z^2 + 8z + 15)}{128 z^3}$$

07.25.03.aead.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{35 e^{-z} (4z^2 - 8z + 15)}{128 z^3} + \frac{35 \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.aeee.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (32z^3 + 30z^2 + 39z - 24) I_0\left(\frac{z}{2}\right)}{567 z^3} - \frac{32 e^{z/2} (32z^4 + 62z^3 + 117z^2 + 156z - 96) I_1\left(\frac{z}{2}\right)}{567 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 5$

07.25.03.aeaf.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; 5, \frac{11}{2}; z\right) = \frac{32 e^{z/2} (2z^2 + 2z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} - \frac{64 e^{z/2} (z^3 + 2z^2 + 4z + 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{11}{2}$

07.25.03.aeag.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (16z^4 + 32z^3 + 72z^2 + 120z + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315 e^z (8z^3 + 20z^2 + 50z + 105)}{2048 z^4}$$

07.25.03.aeah.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (8z^3 - 20z^2 + 50z - 105)}{2048 z^4} + \frac{315 \sqrt{\pi} (16z^4 - 32z^3 + 72z^2 - 120z + 105) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.aeai.01

$${}_2F_2\left(\frac{1}{2}, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 + 6z^2 + 15z + 24) I_0\left(\frac{z}{2}\right)}{63 z^3} - \frac{32 e^{z/2} (4z^4 + 10z^3 + 27z^2 + 60z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = -\frac{11}{2}$

07.25.03.aeaj.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{1620840375} (512 z^{17} + 62976 z^{16} + 3198208 z^{15} + 87571584 z^{14} + 1417076640 z^{13} + 13978742400 z^{12} + 83720508480 z^{11} + 293931555840 z^{10} + 560977079040 z^9 + 502023916800 z^8 + 151574976000 z^7 + 4610390400 z^6 + 114307200 z^5 + 28576800 z^4 + 22680000 z^3 + 41674500 z^2 + 160744500 z + 1620840375) + \frac{1}{1620840375} (16 e^z \sqrt{\pi} (32 z^{35/2} + 3952 z^{33/2} + 201840 z^{31/2} + 5571240 z^{29/2} + 91208730 z^{27/2} + 915450795 z^{25/2} + 5631083640 z^{23/2} + 20639483550 z^{21/2} + 42411070800 z^{19/2} + 43625622600 z^{17/2} + 17972236800 z^{15/2} + 1684897200 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeak.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; -z\right) =$$

$$\frac{1}{1620840375} \left(-512 z^{17} + 62976 z^{16} - 3198208 z^{15} + 87571584 z^{14} - 1417076640 z^{13} + 13978742400 z^{12} - \right.$$

$$83720508480 z^{11} + 293931555840 z^{10} - 560977079040 z^9 + 502023916800 z^8 - 151574976000 z^7 +$$

$$4610390400 z^6 - 114307200 z^5 + 28576800 z^4 - 22680000 z^3 + 41674500 z^2 - 160744500 z + 1620840375 \Big) +$$

$$\frac{1}{1620840375} \left(16 e^{-z} \sqrt{\pi} \left(32 z^{35/2} - 3952 z^{33/2} + 201840 z^{31/2} - 5571240 z^{29/2} + 91208730 z^{27/2} - \right. \right.$$

$$915450795 z^{25/2} + 5631083640 z^{23/2} - 20639483550 z^{21/2} + 42411070800 z^{19/2} -$$

$$\left. \left. 43625622600 z^{17/2} + 17972236800 z^{15/2} - 1684897200 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aeal.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{147349125} \left(-256 z^{16} - 28672 z^{15} - 1312512 z^{14} - 31987200 z^{13} - 453262320 z^{12} - 3831014880 z^{11} - \right.$$

$$19066282560 z^{10} - 53105713920 z^9 - 74345040000 z^8 - 41538873600 z^7 - 4610390400 z^6 +$$

$$114307200 z^5 + 9525600 z^4 + 4536000 z^3 + 5953500 z^2 + 17860500 z + 147349125 \Big) -$$

$$\frac{1}{147349125} \left(8 e^z \sqrt{\pi} \left(32 z^{33/2} + 3600 z^{31/2} + 165840 z^{29/2} + 4078680 z^{27/2} + 58579290 z^{25/2} + 505395765 z^{23/2} + \right. \right.$$

$$\left. \left. 2598709050 z^{21/2} + 7645938300 z^{19/2} + 11827317600 z^{17/2} + 8143669800 z^{15/2} + 1684897200 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aeam.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{147349125} \left(-256 z^{16} + 28672 z^{15} - 1312512 z^{14} + 31987200 z^{13} - 453262320 z^{12} + 3831014880 z^{11} - \right.$$

$$19066282560 z^{10} + 53105713920 z^9 - 74345040000 z^8 + 41538873600 z^7 - 4610390400 z^6 -$$

$$114307200 z^5 + 9525600 z^4 - 4536000 z^3 + 5953500 z^2 - 17860500 z + 147349125 \Big) +$$

$$\frac{1}{147349125} \left(8 e^{-z} \sqrt{\pi} \left(32 z^{33/2} - 3600 z^{31/2} + 165840 z^{29/2} - 4078680 z^{27/2} + 58579290 z^{25/2} - 505395765 z^{23/2} + \right. \right.$$

$$\left. \left. 2598709050 z^{21/2} - 7645938300 z^{19/2} + 11827317600 z^{17/2} - 8143669800 z^{15/2} + 1684897200 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aean.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{16372125} \left(128 z^{15} + 12928 z^{14} + 527040 z^{13} + 11256544 z^{12} + 136826760 z^{11} + 962746560 z^{10} + 3813173280 z^9 + \right.$$

$$7839302400 z^8 + 6959856960 z^7 + 1536796800 z^6 - 114307200 z^5 +$$

$$9525600 z^4 + 1512000 z^3 + 1190700 z^2 + 2551500 z + 16372125 \Big) +$$

$$\frac{1}{16372125} \left(4 e^z \sqrt{\pi} \left(32 z^{31/2} + 3248 z^{29/2} + 133360 z^{27/2} + 2878440 z^{25/2} + 35551770 z^{23/2} + 256533375 z^{21/2} + \right. \right.$$

$$\left. \left. 1059508800 z^{19/2} + 2348394300 z^{17/2} + 2433740400 z^{15/2} + 842448600 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aeao.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{16372125} \left(-128z^{15} + 12928z^{14} - 527040z^{13} + 11256544z^{12} - 136826760z^{11} + 962746560z^{10} - 3813173280z^9 + 7839302400z^8 - 6959856960z^7 + 1536796800z^6 + 114307200z^5 + 9525600z^4 - 1512000z^3 + 1190700z^2 - 2551500z + 16372125 \right) + \frac{1}{16372125} \left(4e^{-z}\sqrt{\pi} \left(32z^{31/2} - 3248z^{29/2} + 133360z^{27/2} - 2878440z^{25/2} + 35551770z^{23/2} - 256533375z^{21/2} + 1059508800z^{19/2} - 2348394300z^{17/2} + 2433740400z^{15/2} - 842448600z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aeap.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{2338875} \left(-64z^{14} - 5760z^{13} - 205952z^{12} - 3777504z^{11} - 38289420z^{10} - 215003880z^9 - 631819800z^8 - 833798880z^7 - 307359360z^6 + 38102400z^5 - 9525600z^4 + 1512000z^3 + 396900z^2 + 510300z + 2338875 \right) - \frac{1}{2338875} \left(2e^z\sqrt{\pi} \left(32z^{29/2} + 2896z^{27/2} + 104400z^{25/2} + 1938840z^{23/2} + 20041050z^{21/2} + 116246025z^{19/2} + 362032650z^{17/2} + 538231050z^{15/2} + 280816200z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aeaq.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{2338875} \left(-64z^{14} + 5760z^{13} - 205952z^{12} + 3777504z^{11} - 38289420z^{10} + 215003880z^9 - 631819800z^8 + 833798880z^7 - 307359360z^6 - 38102400z^5 - 9525600z^4 - 1512000z^3 + 396900z^2 - 510300z + 2338875 \right) + \frac{1}{2338875} \left(2e^{-z}\sqrt{\pi} \left(32z^{29/2} - 2896z^{27/2} + 104400z^{25/2} - 1938840z^{23/2} + 20041050z^{21/2} - 116246025z^{19/2} + 362032650z^{17/2} - 538231050z^{15/2} + 280816200z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aear.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{467775} \left(32z^{13} + 2528z^{12} + 77712z^{11} + 1190568z^{10} + 9656010z^9 + 40419000z^8 + 77043420z^7 + 43908480z^6 - 7620480z^5 + 3175200z^4 - 1512000z^3 + 396900z^2 + 170100z + 467775 \right) + \frac{1}{467775} \left(e^z\sqrt{\pi} \left(32z^{27/2} + 2544z^{25/2} + 78960z^{23/2} + 1228200z^{21/2} + 10215450z^{19/2} + 44737875z^{17/2} + 93605400z^{15/2} + 70204050z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aeas.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{467775} \left(-32z^{13} + 2528z^{12} - 77712z^{11} + 1190568z^{10} - 9656010z^9 + 40419000z^8 - 77043420z^7 + 43908480z^6 + 7620480z^5 + 3175200z^4 + 1512000z^3 + 396900z^2 - 170100z + 467775 \right) + \frac{1}{467775} \left(e^{-z} \sqrt{\pi} \left(32z^{27/2} - 2544z^{25/2} + 78960z^{23/2} - 1228200z^{21/2} + 10215450z^{19/2} - 44737875z^{17/2} + 93605400z^{15/2} - 70204050z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aeat.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{155925} \left(-16z^{12} - 1088z^{11} - 27984z^{10} - 343952z^9 - 2089095z^8 - 5727510z^7 - 4878720z^6 + 1088640z^5 - 635040z^4 + 504000z^3 - 396900z^2 + 170100z + 155925 \right) + \frac{1}{311850} \left(e^z \sqrt{\pi} \left(-32z^{25/2} - 2192z^{23/2} - 57040z^{21/2} - 714840z^{19/2} - 4496730z^{17/2} - 13260765z^{15/2} - 14040810z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aeau.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{155925} \left(-16z^{12} + 1088z^{11} - 27984z^{10} + 343952z^9 - 2089095z^8 + 5727510z^7 - 4878720z^6 - 1088640z^5 - 635040z^4 - 504000z^3 - 396900z^2 - 170100z + 155925 \right) + \frac{1}{311850} \left(e^{-z} \sqrt{\pi} \left(32z^{25/2} - 2192z^{23/2} + 57040z^{21/2} - 714840z^{19/2} + 4496730z^{17/2} - 13260765z^{15/2} + 14040810z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aeav.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{311850} \left(16z^{11} + 912z^{10} + 18872z^9 + 174540z^8 + 701145z^7 + 887040z^6 - 241920z^5 + 181440z^4 - 201600z^3 + 264600z^2 - 340200z + 311850 \right) + \frac{1}{623700} e^z \sqrt{\pi} \left(32z^{23/2} + 1840z^{21/2} + 38640z^{19/2} + 367080z^{17/2} + 1560090z^{15/2} + 2340135z^{13/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.aeaw.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{311850} \left(-16z^{11} + 912z^{10} - 18872z^9 + 174540z^8 - 701145z^7 + 887040z^6 + 241920z^5 + 181440z^4 + 201600z^3 + 264600z^2 + 340200z + 311850 \right) + \frac{1}{623700} e^{-z} \sqrt{\pi} \left(32z^{23/2} - 1840z^{21/2} + 38640z^{19/2} - 367080z^{17/2} + 1560090z^{15/2} - 2340135z^{13/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aeax.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, 1; z\right) = \frac{1}{1247400} (e^z (64z^{11} + 3328z^{10} + 61520z^9 + 490800z^8 + 1580700z^7 + 1203720z^6 - 667485z^5 + 814275z^4 - 1197000z^3 + 1701000z^2 - 1927800z + 1247400))$$

07.25.03.aeay.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{623700} (16z^{10} + 736z^9 + 11520z^8 + 71208z^7 + 136395z^6 - 43470z^5 + 37170z^4 - 41400z^3 + 37800z^2 - 56700) + \frac{1}{1247400\sqrt{z}} (e^z \sqrt{\pi} (32z^{11} + 1488z^{10} + 23760z^9 + 153240z^8 + 334170z^7 + 945z^6 - 5670z^5 + 28350z^4 - 113400z^3 + 340200z^2 - 680400z + 680400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeaz.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{623700} (16z^{10} - 736z^9 + 11520z^8 - 71208z^7 + 136395z^6 + 43470z^5 + 37170z^4 + 41400z^3 + 37800z^2 - 56700) + \frac{1}{1247400\sqrt{z}} (e^{-z} \sqrt{\pi} (-32z^{11} + 1488z^{10} - 23760z^9 + 153240z^8 - 334170z^7 + 945z^6 + 5670z^5 + 28350z^4 + 113400z^3 + 340200z^2 + 680400z + 680400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeb0.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, 2; z\right) = \frac{1}{1247400} (e^z (64z^{10} + 2624z^9 + 35280z^8 + 173280z^7 + 194460z^6 - 157500z^5 + 277515z^4 - 573300z^3 + 1096200z^2 - 1587600z + 1247400))$$

07.25.03.aeb1.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{415800z} (16z^{10} + 560z^9 + 5928z^8 + 18116z^7 - 6195z^6 + 3780z^5 + 5850z^4 - 50400z^3 + 189000z^2 - 441000z + 529200) + \frac{1}{831600z^{3/2}} (e^z \sqrt{\pi} (32z^{11} + 1136z^{10} + 12400z^9 + 41640z^8 + 1050z^7 - 6405z^6 + 32760z^5 - 135450z^4 + 428400z^3 - 945000z^2 + 1209600z - 529200) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeb2.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{415\,800 z} (-16 z^{10} + 560 z^9 - 5928 z^8 + 18\,116 z^7 + 6195 z^6 + 3780 z^5 - 5850 z^4 - 50\,400 z^3 - 189\,000 z^2 - 441\,000 z - 529\,200) + \frac{1}{831\,600 z^{3/2}} \left(e^{-z} \sqrt{\pi} (32 z^{11} - 1136 z^{10} + 12\,400 z^9 - 41\,640 z^8 + 1050 z^7 + 6405 z^6 + 32\,760 z^5 + 135\,450 z^4 + 428\,400 z^3 + 945\,000 z^2 + 1\,209\,600 z + 529\,200) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aeb3.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, 3; z\right) = \frac{1}{623\,700} e^z (64 z^9 + 1920 z^8 + 16\,080 z^7 + 28\,560 z^6 - 34\,020 z^5 + 80\,640 z^4 - 206\,325 z^3 + 458\,325 z^2 - 737\,100 z + 623\,700)$$

07.25.03.aeb4.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{166\,320 z^2} (16 z^{10} + 384 z^9 + 2096 z^8 - 576 z^7 - 945 z^6 + 8910 z^5 - 44\,100 z^4 + 162\,000 z^3 - 441\,000 z^2 + 831\,600 z - 907\,200) + \frac{1}{332\,640 z^{5/2}} \left(e^z \sqrt{\pi} (32 z^{11} + 784 z^{10} + 4560 z^9 + 600 z^8 - 3750 z^7 + 19\,845 z^6 - 86\,310 z^5 + 296\,100 z^4 - 756\,000 z^3 + 1\,323\,000 z^2 - 1\,436\,400 z + 907\,200) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aeb5.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{166\,320 z^2} (16 z^{10} - 384 z^9 + 2096 z^8 + 576 z^7 - 945 z^6 - 8910 z^5 - 44\,100 z^4 - 162\,000 z^3 - 441\,000 z^2 - 831\,600 z - 907\,200) + \frac{1}{332\,640 z^{5/2}} \left(e^{-z} \sqrt{\pi} (-32 z^{11} + 784 z^{10} - 4560 z^9 + 600 z^8 + 3750 z^7 + 19\,845 z^6 + 86\,310 z^5 + 296\,100 z^4 + 756\,000 z^3 + 1\,323\,000 z^2 + 1\,436\,400 z + 907\,200) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aeb6.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, 4; z\right) = \frac{e^z (64 z^8 + 1216 z^7 + 3920 z^6 - 6720 z^5 + 19\,740 z^4 - 57\,540 z^3 + 138\,915 z^2 - 236\,250 z + 207\,900)}{207\,900}$$

07.25.03.aeb7.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{47\,520 z^3} (16 z^{10} + 208 z^9 + 24 z^8 - 708 z^7 + 4545 z^6 - 22\,680 z^5 + 92\,700 z^4 - 309\,600 z^3 + 839\,160 z^2 - 1\,814\,400 z + 2\,721\,600) + \frac{1}{95\,040 z^{7/2}} \left(e^z \sqrt{\pi} (32 z^{11} + 432 z^{10} + 240 z^9 - 1560 z^8 + 8730 z^7 - 41\,265 z^6 + 161\,280 z^5 - 510\,300 z^4 + 1\,285\,200 z^3 - 2\,532\,600 z^2 + 3\,628\,800 z - 2\,721\,600) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aeb8.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{47520 z^3} (-16 z^{10} + 208 z^9 - 24 z^8 - 708 z^7 - 4545 z^6 - 22680 z^5 - 92700 z^4 - 309600 z^3 - 839160 z^2 - 1814400 z - 2721600) + \frac{1}{95040 z^{7/2}} \left(e^{-z} \sqrt{\pi} (32 z^{11} - 432 z^{10} + 240 z^9 + 1560 z^8 + 8730 z^7 + 41265 z^6 + 161280 z^5 + 510300 z^4 + 1285200 z^3 + 2532600 z^2 + 3628800 z + 2721600) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aeb9.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, 5; z\right) = \frac{e^z (64 z^7 + 512 z^6 - 1200 z^5 + 4080 z^4 - 12900 z^3 + 32760 z^2 - 57645 z + 51975)}{51975}$$

07.25.03.aeba.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{10560 z^4} (16 z^{10} + 32 z^9 - 288 z^8 + 1880 z^7 - 10605 z^6 + 52650 z^5 - 230850 z^4 + 889560 z^3 - 2948400 z^2 + 8013600 z - 15876000) + \frac{1}{21120 z^{9/2}} \left(e^z \sqrt{\pi} (32 z^{11} + 80 z^{10} - 560 z^9 + 3480 z^8 - 19110 z^7 + 92505 z^6 - 393750 z^5 + 1458450 z^4 - 4548600 z^3 + 11113200 z^2 - 18597600 z + 15876000) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aebb.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{10560 z^4} (16 z^{10} - 32 z^9 - 288 z^8 - 1880 z^7 - 10605 z^6 - 52650 z^5 - 230850 z^4 - 889560 z^3 - 2948400 z^2 - 8013600 z - 15876000) + \frac{1}{21120 z^{9/2}} \left(e^{-z} \sqrt{\pi} (-32 z^{11} + 80 z^{10} + 560 z^9 + 3480 z^8 + 19110 z^7 + 92505 z^6 + 393750 z^5 + 1458450 z^4 + 4548600 z^3 + 11113200 z^2 + 18597600 z + 15876000) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aebc.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{11}{2}, 6; z\right) = \frac{e^z (64 z^6 - 192 z^5 + 720 z^4 - 2400 z^3 + 6300 z^2 - 11340 z + 10395)}{10395}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = -\frac{9}{2}$

07.25.03.aebd.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{13395375} (128 z^{15} + 13056 z^{14} + 538816 z^{13} + 11689440 z^{12} + 145058760 z^{11} + 1050383640 z^{10} + 4341360960 z^9 + 9575012160 z^8 + 9776491200 z^7 + 3340612800 z^6 + 114307200 z^5 + 3175200 z^4 + 907200 z^3 + 850500 z^2 + 1984500 z + 13395375) + \frac{1}{13395375} \left(4 e^z \sqrt{\pi} (32 z^{31/2} + 3280 z^{29/2} + 136320 z^{27/2} + 2988120 z^{25/2} + 37662450 z^{23/2} + 279421065 z^{21/2} + 1201603725 z^{19/2} + 2839523400 z^{17/2} + 3308747400 z^{15/2} + 1526175000 z^{13/2} + 158722200 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aebe.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{13395375} \left(-128 z^{15} + 13056 z^{14} - 538816 z^{13} + 11689440 z^{12} - 145058760 z^{11} + 1050383640 z^{10} - 4341360960 z^9 + 9575012160 z^8 - 9776491200 z^7 + 3340612800 z^6 - 114307200 z^5 + 3175200 z^4 - 907200 z^3 + 850500 z^2 - 1984500 z + 13395375 \right) + \frac{1}{13395375} \left(4 e^{-z} \sqrt{\pi} \left(32 z^{31/2} - 3280 z^{29/2} + 136320 z^{27/2} - 2988120 z^{25/2} + 37662450 z^{23/2} - 279421065 z^{21/2} + 1201603725 z^{19/2} - 2839523400 z^{17/2} + 3308747400 z^{15/2} - 1526175000 z^{13/2} + 158722200 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aebf.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{1488375} \left(-64 z^{14} - 5888 z^{13} - 216448 z^{12} - 4116000 z^{11} - 43818540 z^{10} - 264093840 z^9 - 867854880 z^8 - 1408317120 z^7 - 901908000 z^6 - 114307200 z^5 + 3175200 z^4 + 302400 z^3 + 170100 z^2 + 283500 z + 1488375 \right) - \frac{1}{1488375} \left(2 e^z \sqrt{\pi} \left(32 z^{29/2} + 2960 z^{27/2} + 109680 z^{25/2} + 2110680 z^{23/2} + 22887690 z^{21/2} + 142094925 z^{19/2} + 491129100 z^{17/2} + 875007000 z^{15/2} + 683726400 z^{13/2} + 158722200 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aebg.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1488375} \left(-64 z^{14} + 5888 z^{13} - 216448 z^{12} + 4116000 z^{11} - 43818540 z^{10} + 264093840 z^9 - 867854880 z^8 + 1408317120 z^7 - 901908000 z^6 + 114307200 z^5 + 3175200 z^4 - 302400 z^3 + 170100 z^2 - 283500 z + 1488375 \right) + \frac{1}{1488375} \left(2 e^{-z} \sqrt{\pi} \left(32 z^{29/2} - 2960 z^{27/2} + 109680 z^{25/2} - 2110680 z^{23/2} + 22887690 z^{21/2} - 142094925 z^{19/2} + 491129100 z^{17/2} - 875007000 z^{15/2} + 683726400 z^{13/2} - 158722200 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aebh.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{212625} \left(32 z^{13} + 2624 z^{12} + 84624 z^{11} + 1382280 z^{10} + 12272490 z^9 + 59008770 z^8 + 143629560 z^7 + 148637160 z^6 + 38102400 z^5 - 3175200 z^4 + 302400 z^3 + 56700 z^2 + 56700 z + 212625 \right) + \frac{1}{212625} \left(e^z \sqrt{\pi} \left(32 z^{27/2} + 2640 z^{25/2} + 85920 z^{23/2} + 1423320 z^{21/2} + 12924450 z^{19/2} + 64548225 z^{17/2} + 168387975 z^{15/2} + 201455100 z^{13/2} + 79361100 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aebi.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{212\,625} \left(-32 z^{13} + 2624 z^{12} - 84\,624 z^{11} + 1\,382\,280 z^{10} - 12\,272\,490 z^9 + 59\,008\,770 z^8 - 143\,629\,560 z^7 + 148\,637\,160 z^6 - 38\,102\,400 z^5 - 3\,175\,200 z^4 - 302\,400 z^3 + 56\,700 z^2 - 56\,700 z + 212\,625 \right) + \frac{1}{212\,625} \left(e^{-z} \sqrt{\pi} \left(32 z^{27/2} - 2640 z^{25/2} + 85\,920 z^{23/2} - 1\,423\,320 z^{21/2} + 12\,924\,450 z^{19/2} - 64\,548\,225 z^{17/2} + 168\,387\,975 z^{15/2} - 201\,455\,100 z^{13/2} + 79\,361\,100 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aebj.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{42\,525} \left(-16 z^{12} - 1152 z^{11} - 31\,952 z^{10} - 436\,080 z^9 - 3\,098\,295 z^8 - 11\,097\,690 z^7 - 17\,454\,780 z^6 - 7\,620\,480 z^5 + 1\,058\,400 z^4 - 302\,400 z^3 + 56\,700 z^2 + 18\,900 z + 42\,525 \right) + \frac{1}{85\,050} \left(e^z \sqrt{\pi} \left(-32 z^{25/2} - 2320 z^{23/2} - 65\,040 z^{21/2} - 903\,000 z^{19/2} - 6\,603\,450 z^{17/2} - 24\,927\,525 z^{15/2} - 43\,750\,350 z^{13/2} - 26\,453\,700 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aebk.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{42\,525} \left(-16 z^{12} + 1152 z^{11} - 31\,952 z^{10} + 436\,080 z^9 - 3\,098\,295 z^8 + 11\,097\,690 z^7 - 17\,454\,780 z^6 + 7\,620\,480 z^5 + 1\,058\,400 z^4 + 302\,400 z^3 + 56\,700 z^2 - 18\,900 z + 42\,525 \right) + \frac{1}{85\,050} \left(e^{-z} \sqrt{\pi} \left(32 z^{25/2} - 2320 z^{23/2} + 65\,040 z^{21/2} - 903\,000 z^{19/2} + 6\,603\,450 z^{17/2} - 24\,927\,525 z^{15/2} + 43\,750\,350 z^{13/2} - 26\,453\,700 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aebl.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{28\,350} \left(16 z^{11} + 992 z^{10} + 23\,032 z^9 + 252\,300 z^8 + 1\,342\,545 z^7 + 3\,144\,015 z^6 + 2\,177\,280 z^5 - 423\,360 z^4 + 201\,600 z^3 - 113\,400 z^2 + 37\,800 z + 28\,350 \right) + \frac{1}{56\,700} \left(e^z \sqrt{\pi} \left(32 z^{23/2} + 2000 z^{21/2} + 47\,040 z^{19/2} + 526\,680 z^{17/2} + 2916\,690 z^{15/2} + 7\,427\,385 z^{13/2} + 6\,613\,425 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aebm.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{28350}(-16z^{11} + 992z^{10} - 23032z^9 + 252300z^8 - 1342545z^7 + 3144015z^6 - 2177280z^5 - 423360z^4 - 201600z^3 - 113400z^2 - 37800z + 28350) + \frac{1}{56700} \left(e^{-z} \sqrt{\pi} (32z^{23/2} - 2000z^{21/2} + 47040z^{19/2} - 526680z^{17/2} + 2916690z^{15/2} - 7427385z^{13/2} + 6613425z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aebn.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{56700}(-16z^{10} - 832z^9 - 15552z^8 - 128280z^7 - 451395z^6 - 483840z^5 + 120960z^4 - 80640z^3 + 75600z^2 - 75600z + 56700) + \frac{1}{113400} e^z \sqrt{\pi} (-32z^{21/2} - 1680z^{19/2} - 31920z^{17/2} - 271320z^{15/2} - 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aebo.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{56700}(-16z^{10} + 832z^9 - 15552z^8 + 128280z^7 - 451395z^6 + 483840z^5 + 120960z^4 + 80640z^3 + 75600z^2 + 75600z + 56700) + \frac{1}{113400} e^{-z} \sqrt{\pi} (32z^{21/2} - 1680z^{19/2} + 31920z^{17/2} - 271320z^{15/2} + 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aebp.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, 1; z\right) = -\frac{1}{113400} (e^z (32z^{10} + 1520z^9 + 25440z^8 + 181800z^7 + 517650z^6 + 343035z^5 - 162225z^4 + 163800z^3 - 189000z^2 + 189000z - 113400))$$

07.25.03.aebq.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{-16z^9 - 672z^8 - 9512z^7 - 52500z^6 - 87885z^5 + 26355z^4 - 20340z^3 + 18900z^2 - 12600z}{113400} + \frac{1}{226800\sqrt{z}} \left(e^z \sqrt{\pi} (-32z^{10} - 1360z^9 - 19680z^8 - 113880z^7 - 220290z^6 - 945z^5 + 4725z^4 - 18900z^3 + 56700z^2 - 113400z + 113400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aebr.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{16z^9 - 672z^8 + 9512z^7 - 52500z^6 + 87885z^5 + 26355z^4 + 20340z^3 + 18900z^2 + 12600z}{113400} + \frac{1}{226800\sqrt{z}} \left(e^{-z} \sqrt{\pi} (-32z^{10} + 1360z^9 - 19680z^8 + 113880z^7 - 220290z^6 + 945z^5 + 4725z^4 + 18900z^3 + 56700z^2 + 113400z + 113400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aebs.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, 2; z\right) = -\frac{1}{113400} e^z (32 z^9 + 1200 z^8 + 14640 z^7 + 64680 z^6 + 64890 z^5 - 46305 z^4 + 69300 z^3 - 113400 z^2 + 151200 z - 113400)$$

07.25.03.aebt.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-16 z^9 - 512 z^8 - 4912 z^7 - 13440 z^6 + 4305 z^5 - 2070 z^4 - 4500 z^3 + 25200 z^2 - 63000 z + 75600}{75600 z} + \frac{1}{151200 z^{3/2}} \left(e^z \sqrt{\pi} (-32 z^{10} - 1040 z^9 - 10320 z^8 - 31320 z^7 - 1050 z^6 + 5355 z^5 - 22050 z^4 + 69300 z^3 - 151200 z^2 + 189000 z - 75600) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aebu.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-16 z^9 + 512 z^8 - 4912 z^7 + 13440 z^6 + 4305 z^5 + 2070 z^4 - 4500 z^3 - 25200 z^2 - 63000 z - 75600}{75600 z} + \frac{1}{151200 z^{3/2}} \left(e^{-z} \sqrt{\pi} (32 z^{10} - 1040 z^9 + 10320 z^8 - 31320 z^7 + 1050 z^6 + 5355 z^5 + 22050 z^4 + 69300 z^3 + 151200 z^2 + 189000 z + 75600) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aebv.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, 3; z\right) = -\frac{e^z (32 z^8 + 880 z^7 + 6720 z^6 + 10920 z^5 - 11550 z^4 + 22995 z^3 - 45675 z^2 + 69300 z - 56700)}{56700}$$

07.25.03.aebw.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-16 z^9 - 352 z^8 - 1752 z^7 + 420 z^6 + 855 z^5 - 6075 z^4 + 23400 z^3 - 63000 z^2 + 113400 z - 113400}{30240 z^2} + \frac{1}{60480 z^{5/2}} \left(e^z \sqrt{\pi} (-32 z^{10} - 720 z^9 - 3840 z^8 - 600 z^7 + 3150 z^6 - 13545 z^5 + 45675 z^4 - 113400 z^3 + 189000 z^2 - 189000 z + 113400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aebx.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{16 z^9 - 352 z^8 + 1752 z^7 + 420 z^6 - 855 z^5 - 6075 z^4 - 23400 z^3 - 63000 z^2 - 113400 z - 113400}{30240 z^2} + \frac{1}{60480 z^{5/2}} \left(e^{-z} \sqrt{\pi} (-32 z^{10} + 720 z^9 - 3840 z^8 + 600 z^7 + 3150 z^6 + 13545 z^5 + 45675 z^4 + 113400 z^3 + 189000 z^2 + 189000 z + 113400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aeby.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, 4; z\right) = -\frac{e^z (32 z^7 + 560 z^6 + 1680 z^5 - 2520 z^4 + 6090 z^3 - 13545 z^2 + 22050 z - 18900)}{18900}$$

07.25.03.aebz.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{8640 z^3} (-16 z^9 - 192 z^8 - 32 z^7 + 600 z^6 - 3195 z^5 + 12900 z^4 - 41400 z^3 + 105840 z^2 - 214200 z + 302400) + \frac{1}{17280 z^{7/2}} \left(e^z \sqrt{\pi} (-32 z^{10} - 400 z^9 - 240 z^8 + 1320 z^7 - 6090 z^6 + 22995 z^5 - 69300 z^4 + 163800 z^3 - 302400 z^2 + 415800 z - 302400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aec0.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{8640 z^3} (-16 z^9 + 192 z^8 - 32 z^7 - 600 z^6 - 3195 z^5 - 12900 z^4 - 41400 z^3 - 105840 z^2 - 214200 z - 302400) + \frac{1}{17280 z^{7/2}} \left(e^{-z} \sqrt{\pi} (32 z^{10} - 400 z^9 + 240 z^8 + 1320 z^7 + 6090 z^6 + 22995 z^5 + 69300 z^4 + 163800 z^3 + 302400 z^2 + 415800 z + 302400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aec1.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, 5; z\right) = -\frac{e^z (32 z^6 + 240 z^5 - 480 z^4 + 1320 z^3 - 3150 z^2 + 5355 z - 4725)}{4725}$$

07.25.03.aec2.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{1920 z^4} (-16 z^9 - 32 z^8 + 248 z^7 - 1380 z^6 + 6555 z^5 - 27225 z^4 + 99540 z^3 - 316260 z^2 + 831600 z - 1587600) + \frac{1}{3840 z^{9/2}} \left(e^z \sqrt{\pi} (-32 z^{10} - 80 z^9 + 480 z^8 - 2520 z^7 + 11550 z^6 - 46305 z^5 + 162225 z^4 - 485100 z^3 + 1152900 z^2 - 1890000 z + 1587600) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aec3.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{1920 z^4} (16 z^9 - 32 z^8 - 248 z^7 - 1380 z^6 - 6555 z^5 - 27225 z^4 - 99540 z^3 - 316260 z^2 - 831600 z - 1587600) + \frac{1}{3840 z^{9/2}} \left(e^{-z} \sqrt{\pi} (-32 z^{10} + 80 z^9 + 480 z^8 + 2520 z^7 + 11550 z^6 + 46305 z^5 + 162225 z^4 + 485100 z^3 + 1152900 z^2 + 1890000 z + 1587600) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aec4.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{9}{2}, 6; z\right) = -\frac{1}{945} e^z (32 z^5 - 80 z^4 + 240 z^3 - 600 z^2 + 1050 z - 945)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = -\frac{7}{2}$

07.25.03.aec5.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{165375} (32 z^{13} + 2656 z^{12} + 86992 z^{11} + 1450344 z^{10} + 13247530 z^9 + 66437280 z^8 + 173336976 z^7 + 205906560 z^6 + 81051120 z^5 + 3175200 z^4 + 100800 z^3 + 34020 z^2 + 40500 z + 165375) + \frac{1}{165375} \left(e^z \sqrt{\pi} (32 z^{27/2} + 2672 z^{25/2} + 88304 z^{23/2} + 1492552 z^{21/2} + 13932378 z^{19/2} + 72433035 z^{17/2} + 201396960 z^{15/2} + 270816120 z^{13/2} + 142094160 z^{11/2} + 16628040 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aec6.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{165375} (-32 z^{13} + 2656 z^{12} - 86992 z^{11} + 1450344 z^{10} - 13247530 z^9 + 66437280 z^8 - 173336976 z^7 + 205906560 z^6 - 81051120 z^5 + 3175200 z^4 - 100800 z^3 + 34020 z^2 - 40500 z + 165375) + \frac{1}{165375} \left(e^{-z} \sqrt{\pi} (32 z^{27/2} - 2672 z^{25/2} + 88304 z^{23/2} - 1492552 z^{21/2} + 13932378 z^{19/2} - 72433035 z^{17/2} + 201396960 z^{15/2} - 270816120 z^{13/2} + 142094160 z^{11/2} - 16628040 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aec7.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{23625} (-16 z^{12} - 1184 z^{11} - 34032 z^{10} - 487520 z^9 - 3714255 z^8 - 14853708 z^7 - 28634700 z^6 - 21474360 z^5 - 3175200 z^4 + 100800 z^3 + 11340 z^2 + 8100 z + 23625) + \frac{1}{47250} \left(e^z \sqrt{\pi} (-32 z^{25/2} - 2384 z^{23/2} - 69232 z^{21/2} - 1007928 z^{19/2} - 7884810 z^{17/2} - 33008985 z^{15/2} - 69361020 z^{13/2} - 62733060 z^{11/2} - 16628040 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aec8.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{23625} (-16 z^{12} + 1184 z^{11} - 34032 z^{10} + 487520 z^9 - 3714255 z^8 + 14853708 z^7 - 28634700 z^6 + 21474360 z^5 - 3175200 z^4 - 100800 z^3 + 11340 z^2 - 8100 z + 23625) + \frac{1}{47250} \left(e^{-z} \sqrt{\pi} (32 z^{25/2} - 2384 z^{23/2} + 69232 z^{21/2} - 1007928 z^{19/2} + 7884810 z^{17/2} - 33008985 z^{15/2} + 69361020 z^{13/2} - 62733060 z^{11/2} + 16628040 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aec9.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{9450} (16z^{11} + 1040z^{10} + 25720z^9 + 307980z^8 + 1878009z^7 + 5589960z^6 + 6926940z^5 + 2116800z^4 - 201600z^3 + 22680z^2 + 5400z + 9450) + \frac{1}{18900} (e^z \sqrt{\pi} (32z^{23/2} + 2096z^{21/2} + 52464z^{19/2} + 640680z^{17/2} + 4040730z^{15/2} + 12805335z^{13/2} + 18139680z^{11/2} + 8314020z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeca.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9450} (-16z^{11} + 1040z^{10} - 25720z^9 + 307980z^8 - 1878009z^7 + 5589960z^6 - 6926940z^5 + 2116800z^4 + 201600z^3 + 22680z^2 - 5400z + 9450) + \frac{1}{18900} (e^{-z} \sqrt{\pi} (32z^{23/2} - 2096z^{21/2} + 52464z^{19/2} - 640680z^{17/2} + 4040730z^{15/2} - 12805335z^{13/2} + 18139680z^{11/2} - 8314020z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aecb.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{6300} (-16z^{10} - 896z^9 - 18560z^8 - 178488z^7 - 815315z^6 - 1583220z^5 - 846720z^4 + 134400z^3 - 45360z^2 + 10800z + 6300) + \frac{1}{12600} (e^z \sqrt{\pi} (-32z^{21/2} - 1808z^{19/2} - 38000z^{17/2} - 374680z^{15/2} - 1792650z^{13/2} - 3842085z^{11/2} - 2771340z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aecc.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{6300} (-16z^{10} + 896z^9 - 18560z^8 + 178488z^7 - 815315z^6 + 1583220z^5 - 846720z^4 - 134400z^3 - 45360z^2 - 10800z + 6300) + \frac{1}{12600} (e^{-z} \sqrt{\pi} (32z^{21/2} - 1808z^{19/2} + 38000z^{17/2} - 374680z^{15/2} + 1792650z^{13/2} - 3842085z^{11/2} + 2771340z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aecd.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{12600} (16z^9 + 752z^8 + 12552z^7 + 90980z^6 + 274845z^5 + 241920z^4 - 53760z^3 + 30240z^2 - 21600z + 12600) + \frac{e^z \sqrt{\pi} (32z^{19/2} + 1520z^{17/2} + 25840z^{15/2} + 193800z^{13/2} + 629850z^{11/2} + 692835z^{9/2}) \operatorname{erf}(\sqrt{z})}{25200}$$

07.25.03.aece.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{12600} (-16z^9 + 752z^8 - 12552z^7 + 90980z^6 - 274845z^5 + 241920z^4 + 53760z^3 + 30240z^2 + 21600z + 12600) + \frac{1}{25200} e^{-z} \sqrt{\pi} (32z^{19/2} - 1520z^{17/2} + 25840z^{15/2} - 193800z^{13/2} + 629850z^{11/2} - 692835z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aecf.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, 1; z\right) = \frac{1}{12\,600} e^z (16 z^9 + 688 z^8 + 10\,312 z^7 + 65\,120 z^6 + 161\,145 z^5 + 90\,945 z^4 - 35\,640 z^3 + 28\,440 z^2 - 23\,400 z + 12\,600)$$

07.25.03.aecg.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{16 z^8 + 608 z^7 + 7696 z^6 + 37\,392 z^5 + 53\,655 z^4 - 14\,820 z^3 + 9828 z^2 - 6840 z + 2520}{25\,200} + \frac{1}{50\,400 \sqrt{z}} (e^{-z} \sqrt{\pi} (32 z^9 + 1232 z^8 + 15\,984 z^7 + 81\,912 z^6 + 138\,378 z^5 + 945 z^4 - 3780 z^3 + 11\,340 z^2 - 22\,680 z + 22\,680) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aech.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{16 z^8 - 608 z^7 + 7696 z^6 - 37\,392 z^5 + 53\,655 z^4 + 14\,820 z^3 + 9828 z^2 + 6840 z + 2520}{25\,200} + \frac{1}{50\,400 \sqrt{z}} (e^{-z} \sqrt{\pi} (-32 z^9 + 1232 z^8 - 15\,984 z^7 + 81\,912 z^6 - 138\,378 z^5 + 945 z^4 + 3780 z^3 + 11\,340 z^2 + 22\,680 z + 22\,680) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeci.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, 2; z\right) = \frac{e^z (16 z^8 + 544 z^7 + 5960 z^6 + 23\,400 z^5 + 20\,745 z^4 - 12\,780 z^3 + 15\,480 z^2 - 18\,000 z + 12\,600)}{12\,600}$$

07.25.03.aecj.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{16 z^8 + 464 z^7 + 3992 z^6 + 9660 z^5 - 2815 z^4 + 888 z^3 + 3060 z^2 - 10\,080 z + 12\,600}{16\,800 z} + \frac{1}{33\,600 z^{3/2}} (e^z \sqrt{\pi} (32 z^9 + 944 z^8 + 8432 z^7 + 22\,888 z^6 + 1050 z^5 - 4305 z^4 + 13\,440 z^3 - 28\,980 z^2 + 35\,280 z - 12\,600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeck.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{-16 z^8 + 464 z^7 - 3992 z^6 + 9660 z^5 + 2815 z^4 + 888 z^3 - 3060 z^2 - 10\,080 z - 12\,600}{16\,800 z} + \frac{1}{33\,600 z^{3/2}} (e^{-z} \sqrt{\pi} (32 z^9 - 944 z^8 + 8432 z^7 - 22\,888 z^6 + 1050 z^5 + 4305 z^4 + 13\,440 z^3 + 28\,980 z^2 + 35\,280 z + 12\,600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aecl.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, 3; z\right) = \frac{e^z (16 z^7 + 400 z^6 + 2760 z^5 + 4080 z^4 - 3735 z^3 + 5895 z^2 - 8100 z + 6300)}{6300}$$

07.25.03.aecm.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{16 z^8 + 320 z^7 + 1440 z^6 - 280 z^5 - 741 z^4 + 3780 z^3 - 10\,440 z^2 + 18\,000 z - 16\,200}{6720 z^2} + \frac{1}{13\,440 z^{5/2}} e^z \sqrt{\pi} (32 z^9 + 656 z^8 + 3184 z^7 + 600 z^6 - 2550 z^5 + 8445 z^4 - 20\,340 z^3 + 32\,040 z^2 - 28\,800 z + 16\,200) \operatorname{erf}(\sqrt{z})$$

07.25.03.aecn.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{16 z^8 - 320 z^7 + 1440 z^6 + 280 z^5 - 741 z^4 - 3780 z^3 - 10\,440 z^2 - 18\,000 z - 16\,200}{6720 z^2} + \frac{1}{13\,440 z^{5/2}} (e^{-z} \sqrt{\pi} (-32 z^9 + 656 z^8 - 3184 z^7 + 600 z^6 + 2550 z^5 + 8445 z^4 + 20\,340 z^3 + 32\,040 z^2 + 28\,800 z + 16\,200) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeco.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, 4; z\right) = \frac{e^z (16z^6 + 256z^5 + 712z^4 - 904z^3 + 1689z^2 - 2550z + 2100)}{2100}$$

07.25.03.aecp.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{16z^8 + 176z^7 + 40z^6 - 492z^5 + 2085z^4 - 6480z^3 + 15480z^2 - 28800z + 37800}{1920z^3} + \frac{1}{3840z^{7/2}}$$

$$\left(e^z \sqrt{\pi} (32z^9 + 368z^8 + 240z^7 - 1080z^6 + 3930z^5 - 11205z^4 + 24480z^3 - 41400z^2 + 54000z - 37800) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.aecq.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-16z^8 + 176z^7 - 40z^6 - 492z^5 - 2085z^4 - 6480z^3 - 15480z^2 - 28800z - 37800}{1920z^3} + \frac{1}{3840z^{7/2}}$$

$$\left(e^{-z} \sqrt{\pi} (32z^9 - 368z^8 + 240z^7 + 1080z^6 + 3930z^5 + 11205z^4 + 24480z^3 + 41400z^2 + 54000z + 37800) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.aecr.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, 5; z\right) = \frac{1}{525} e^z (16z^5 + 112z^4 - 184z^3 + 384z^2 - 615z + 525)$$

07.25.03.aecs.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3(16z^8 + 32z^7 - 208z^6 + 960z^5 - 3745z^4 + 12780z^3 - 38340z^2 + 96600z - 176400)}{1280z^4} + \frac{1}{2560z^{9/2}}$$

$$\left(3e^z \sqrt{\pi} (32z^9 + 80z^8 - 400z^7 + 1720z^6 - 6390z^5 + 20745z^4 - 58500z^3 + 134100z^2 - 214200z + 176400) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aect.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{3(16z^8 - 32z^7 - 208z^6 - 960z^5 - 3745z^4 - 12780z^3 - 38340z^2 - 96600z - 176400)}{1280z^4} - \frac{1}{2560z^{9/2}} \left(3e^{-z} \sqrt{\pi} \right.$$

$$\left. (32z^9 - 80z^8 - 400z^7 - 1720z^6 - 6390z^5 - 20745z^4 - 58500z^3 - 134100z^2 - 214200z - 176400) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.aecu.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{7}{2}, 6; z\right) = \frac{1}{105} e^z (16z^4 - 32z^3 + 72z^2 - 120z + 105)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = -\frac{5}{2}$

07.25.03.aecv.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{6750} (16z^{11} + 1056z^{10} + 26648z^9 + 328140z^8 + 2085633z^7 + 6646467z^6 + 9429930z^5 + 4381290z^4 +$$

$$201600z^3 + 7560z^2 + 3240z + 6750) + \frac{1}{13500} \left(e^z \sqrt{\pi} (32z^{23/2} + 2128z^{21/2} + 54336z^{19/2} + 681912z^{17/2} +$$

$$4475250z^{15/2} + 15107985z^{13/2} + 24037065z^{11/2} + 14658930z^{9/2} + 1969110z^{7/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aecw.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{6750} (-16z^{11} + 1056z^{10} - 26648z^9 + 328140z^8 - 2085633z^7 + 6646467z^6 - 9429930z^5 + 4381290z^4 - 201600z^3 + 7560z^2 - 3240z + 6750) + \frac{1}{13500} \left(e^{-z} \sqrt{\pi} (32z^{23/2} - 2128z^{21/2} + 54336z^{19/2} - 681912z^{17/2} + 4475250z^{15/2} - 15107985z^{13/2} + 24037065z^{11/2} - 14658930z^{9/2} + 1969110z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aecx.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{2700} (-16z^{10} - 928z^9 - 20160z^8 - 207624z^7 - 1056507z^6 - 2502990z^5 - 2264490z^4 - 403200z^3 + 15120z^2 + 2160z + 2700) + \frac{1}{5400} \left(e^z \sqrt{\pi} (-32z^{21/2} - 1872z^{19/2} - 41232z^{17/2} - 434520z^{15/2} - 2302650z^{13/2} - 5897385z^{11/2} - 6344910z^{9/2} - 1969110z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aecy.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{2700} (-16z^{10} + 928z^9 - 20160z^8 + 207624z^7 - 1056507z^6 + 2502990z^5 - 2264490z^4 + 403200z^3 + 15120z^2 - 2160z + 2700) + \frac{1}{5400} \left(e^{-z} \sqrt{\pi} (32z^{21/2} - 1872z^{19/2} + 41232z^{17/2} - 434520z^{15/2} + 2302650z^{13/2} - 5897385z^{11/2} + 6344910z^{9/2} - 1969110z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aecz.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{1800} (16z^9 + 800z^8 + 14568z^7 + 120596z^6 + 459885z^5 + 708885z^4 + 268800z^3 - 30240z^2 + 4320z + 1800) + \frac{1}{3600} \left(e^z \sqrt{\pi} (32z^{19/2} + 1616z^{17/2} + 29920z^{15/2} + 255000z^{13/2} + 1027650z^{11/2} + 1786785z^{9/2} + 984555z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aed0.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{1800} (-16z^9 + 800z^8 - 14568z^7 + 120596z^6 - 459885z^5 + 708885z^4 - 268800z^3 - 30240z^2 - 4320z + 1800) + \frac{1}{3600} \left(e^{-z} \sqrt{\pi} (32z^{19/2} - 1616z^{17/2} + 29920z^{15/2} - 255000z^{13/2} + 1027650z^{11/2} - 1786785z^{9/2} + 984555z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aed1.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{-16z^8 - 672z^7 - 9872z^6 - 61680z^5 - 155655z^4 - 107520z^3 + 20160z^2 - 8640z + 3600}{3600} + \frac{e^z \sqrt{\pi} (-32z^{17/2} - 1360z^{15/2} - 20400z^{13/2} - 132600z^{11/2} - 364650z^{9/2} - 328185z^{7/2}) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.aed2.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{-16z^8 + 672z^7 - 9872z^6 + 61680z^5 - 155655z^4 + 107520z^3 + 20160z^2 + 8640z + 3600}{3600} + \frac{e^{-z} \sqrt{\pi} (32z^{17/2} - 1360z^{15/2} + 20400z^{13/2} - 132600z^{11/2} + 364650z^{9/2} - 328185z^{7/2}) \operatorname{erfi}(\sqrt{z})}{7200}$$

07.25.03.aed3.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, 1; z\right) = -\frac{e^z (8z^8 + 308z^7 + 4078z^6 + 22365z^5 + 47025z^4 + 21960z^3 - 6840z^2 + 3960z - 1800)}{1800}$$

07.25.03.aed4.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{-16z^7 - 544z^6 - 6072z^5 - 25500z^4 - 30585z^3 + 7497z^2 - 3870z + 1530}{7200} + \frac{1}{14400\sqrt{z}} e^z \sqrt{\pi} (-32z^8 - 1104z^7 - 12672z^6 - 56568z^5 - 81810z^4 - 945z^3 + 2835z^2 - 5670z + 5670) \operatorname{erf}(\sqrt{z})$$

07.25.03.aed5.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{16z^7 - 544z^6 + 6072z^5 - 25500z^4 + 30585z^3 + 7497z^2 + 3870z + 1530}{7200} + \frac{1}{14400\sqrt{z}} e^{-z} \sqrt{\pi} (-32z^8 + 1104z^7 - 12672z^6 + 56568z^5 - 81810z^4 + 945z^3 + 2835z^2 + 5670z + 5670) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aed6.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, 2; z\right) = -\frac{e^z (8z^7 + 244z^6 + 2370z^5 + 8145z^4 + 6300z^3 - 3240z^2 + 2880z - 1800)}{1800}$$

07.25.03.aed7.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-16z^7 - 416z^6 - 3168z^5 - 6680z^4 + 1677z^3 - 162z^2 - 1710z + 2520}{4800z} + \frac{1}{9600z^{3/2}} e^z \sqrt{\pi} (-32z^8 - 848z^7 - 6736z^6 - 16152z^5 - 1050z^4 + 3255z^3 - 6930z^2 + 8190z - 2520) \operatorname{erf}(\sqrt{z})$$

07.25.03.aed8.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-16z^7 + 416z^6 - 3168z^5 + 6680z^4 + 1677z^3 + 162z^2 - 1710z - 2520}{4800z} + \frac{1}{9600z^{3/2}} e^{-z} \sqrt{\pi} (32z^8 - 848z^7 + 6736z^6 - 16152z^5 + 1050z^4 + 3255z^3 + 6930z^2 + 8190z + 2520) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aed9.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, 3; z\right) = -\frac{1}{900} e^z (8z^6 + 180z^5 + 1110z^4 + 1485z^3 - 1125z^2 + 1260z - 900)$$

07.25.03.aeda.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-16z^7 - 288z^6 - 1160z^5 + 156z^4 + 603z^3 - 2025z^2 + 3420z - 2700}{1920z^2} + \frac{1}{3840z^{5/2}} e^z \sqrt{\pi} (-32z^8 - 592z^7 - 2592z^6 - 600z^5 + 1950z^4 - 4545z^3 + 6705z^2 - 5220z + 2700) \operatorname{erf}(\sqrt{z})$$

07.25.03.aedb.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{16z^7 - 288z^6 + 1160z^5 + 156z^4 - 603z^3 - 2025z^2 - 3420z - 2700}{1920z^2} + \frac{1}{3840z^{5/2}} e^{-z} \sqrt{\pi} (-32z^8 + 592z^7 - 2592z^6 + 600z^5 + 1950z^4 + 4545z^3 + 6705z^2 + 5220z + 2700) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aedc.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, 4; z\right) = -\frac{1}{300} e^z (8z^5 + 116z^4 + 298z^3 - 303z^2 + 390z - 300)$$

07.25.03.aedd.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(16z^7 + 160z^6 + 48z^5 - 384z^4 + 1215z^3 - 2700z^2 + 4500z - 5400)}{3840z^3} - \frac{7e^z \sqrt{\pi} (32z^8 + 336z^7 + 240z^6 - 840z^5 + 2250z^4 - 4455z^3 + 6660z^2 - 8100z + 5400) \operatorname{erf}(\sqrt{z})}{7680z^{7/2}}$$

07.25.03.aede.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (32z^8 - 336z^7 + 240z^6 + 840z^5 + 2250z^4 + 4455z^3 + 6660z^2 + 8100z + 5400) \operatorname{erfi}(\sqrt{z})}{7680z^{7/2}} - \frac{7(16z^7 - 160z^6 + 48z^5 + 384z^4 + 1215z^3 + 2700z^2 + 4500z + 5400)}{3840z^3}$$

07.25.03.aedf.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, 5; z\right) = -\frac{1}{75} e^z (8z^4 + 52z^3 - 66z^2 + 93z - 75)$$

07.25.03.aedg.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{21(16z^7 + 32z^6 - 168z^5 + 620z^4 - 1935z^3 + 5355z^2 - 12750z + 22050)}{2560z^4} - \frac{1}{5120z^{9/2}} 21e^z \sqrt{\pi} (32z^8 + 80z^7 - 320z^6 + 1080z^5 - 3150z^4 + 8145z^3 - 17775z^2 + 27450z - 22050) \operatorname{erf}(\sqrt{z})$$

07.25.03.aedh.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21(16z^7 - 32z^6 - 168z^5 - 620z^4 - 1935z^3 - 5355z^2 - 12750z - 22050)}{2560z^4} - \frac{1}{5120z^{9/2}} 21e^{-z} \sqrt{\pi} (32z^8 - 80z^7 - 320z^6 - 1080z^5 - 3150z^4 - 8145z^3 - 17775z^2 - 27450z - 22050) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aedi.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{5}{2}, 6; z\right) = -\frac{1}{15} e^z (8z^3 - 12z^2 + 18z - 15)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.aedj.01} \\
 & {}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{1080} (16z^9 + 816z^8 + 15272z^7 + 131652z^6 + 536589z^5 + 943380z^4 + 536130z^3 + 30240z^2 + 1440z + 1080) + \\
 & \frac{1}{2160} \left(e^z \sqrt{\pi} (32z^{19/2} + 1648z^{17/2} + 31344z^{15/2} + 277800z^{13/2} + \right. \\
 & \quad \left. 1191450z^{11/2} + 2323035z^{9/2} + 1698840z^{7/2} + 270270z^{5/2}) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aedk.01} \\
 & {}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \\
 & \frac{1}{1080} (-16z^9 + 816z^8 - 15272z^7 + 131652z^6 - 536589z^5 + 943380z^4 - 536130z^3 + 30240z^2 - 1440z + 1080) + \\
 & \frac{1}{2160} \left(e^{-z} \sqrt{\pi} (32z^{19/2} - 1648z^{17/2} + 31344z^{15/2} - 277800z^{13/2} + \right. \\
 & \quad \left. 1191450z^{11/2} - 2323035z^{9/2} + 1698840z^{7/2} - 270270z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aedl.01} \\
 & {}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{720} (-16z^8 - 704z^7 - 11056z^6 - 76704z^5 - 234495z^4 - 267330z^3 - 60480z^2 + 2880z + 720) + \\
 & \frac{1}{1440} e^z \sqrt{\pi} (-32z^{17/2} - 1424z^{15/2} - 22800z^{13/2} - 163800z^{11/2} - 536250z^{9/2} - 714285z^{7/2} - 270270z^{5/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aedm.01} \\
 & {}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{720} (-16z^8 + 704z^7 - 11056z^6 + 76704z^5 - 234495z^4 + 267330z^3 - 60480z^2 - 2880z + 720) + \\
 & \frac{1}{1440} e^{-z} \sqrt{\pi} (32z^{17/2} - 1424z^{15/2} + 22800z^{13/2} - 163800z^{11/2} + 536250z^{9/2} - 714285z^{7/2} + 270270z^{5/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aedn.01} \\
 & {}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{16z^7 + 592z^6 + 7512z^5 + 39420z^4 + 79905z^3 + 40320z^2 - 5760z + 1440}{1440} + \\
 & \frac{e^z \sqrt{\pi} (32z^{15/2} + 1200z^{13/2} + 15600z^{11/2} + 85800z^{9/2} + 193050z^{7/2} + 135135z^{5/2}) \operatorname{erf}(\sqrt{z})}{2880}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aedo.01} \\
 & {}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{-16z^7 + 592z^6 - 7512z^5 + 39420z^4 - 79905z^3 + 40320z^2 + 5760z + 1440}{1440} + \\
 & \frac{e^{-z} \sqrt{\pi} (32z^{15/2} - 1200z^{13/2} + 15600z^{11/2} - 85800z^{9/2} + 193050z^{7/2} - 135135z^{5/2}) \operatorname{erfi}(\sqrt{z})}{2880}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aedp.01} \\
 & {}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, 1; z\right) = \frac{1}{360} e^z (4z^7 + 136z^6 + 1563z^5 + 7275z^4 + 12600z^3 + 4680z^2 - 1080z + 360)
 \end{aligned}$$

07.25.03.aedq.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{16z^6 + 480z^5 + 4640z^4 + 16440z^3 + 15939z^2 - 3210z + 990}{2880} + \frac{e^z \sqrt{\pi} (32z^7 + 976z^6 + 9744z^5 + 37080z^4 + 44730z^3 + 945z^2 - 1890z + 1890) \operatorname{erf}(\sqrt{z})}{5760\sqrt{z}}$$

07.25.03.aedr.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{16z^6 - 480z^5 + 4640z^4 - 16440z^3 + 15939z^2 + 3210z + 990}{2880} + \frac{e^{-z} \sqrt{\pi} (-32z^7 + 976z^6 - 9744z^5 + 37080z^4 - 44730z^3 + 945z^2 + 1890z + 1890) \operatorname{erfi}(\sqrt{z})}{5760\sqrt{z}}$$

07.25.03.aeds.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, 2; z\right) = \frac{1}{360} e^z (4z^6 + 108z^5 + 915z^4 + 2700z^3 + 1800z^2 - 720z + 360)$$

07.25.03.aedt.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{16z^6 + 368z^5 + 2440z^4 + 4404z^3 - 843z^2 - 180z + 630}{1920z} + \frac{e^z \sqrt{\pi} (32z^7 + 752z^6 + 5232z^5 + 10920z^4 + 1050z^3 - 2205z^2 + 2520z - 630) \operatorname{erf}(\sqrt{z})}{3840z^{3/2}}$$

07.25.03.aedu.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-16z^6 + 368z^5 - 2440z^4 + 4404z^3 + 843z^2 - 180z - 630}{1920z} + \frac{e^{-z} \sqrt{\pi} (32z^7 - 752z^6 + 5232z^5 - 10920z^4 + 1050z^3 + 2205z^2 + 2520z + 630) \operatorname{erfi}(\sqrt{z})}{3840z^{3/2}}$$

07.25.03.aedv.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, 3; z\right) = \frac{1}{180} e^z (4z^5 + 80z^4 + 435z^3 + 525z^2 - 300z + 180)$$

07.25.03.aedw.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{16z^6 + 256z^5 + 912z^4 - 48z^3 - 441z^2 + 810z - 540}{768z^2} + \frac{e^z \sqrt{\pi} (32z^7 + 528z^6 + 2064z^5 + 600z^4 - 1350z^3 + 1845z^2 - 1170z + 540) \operatorname{erf}(\sqrt{z})}{1536z^{5/2}}$$

07.25.03.aedx.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{16z^6 - 256z^5 + 912z^4 + 48z^3 - 441z^2 - 810z - 540}{768z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^7 + 528z^6 - 2064z^5 + 600z^4 + 1350z^3 + 1845z^2 + 1170z + 540) \operatorname{erfi}(\sqrt{z})}{1536z^{5/2}}$$

07.25.03.aedy.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, 4; z\right) = \frac{1}{60} e^z (4z^4 + 52z^3 + 123z^2 - 90z + 60)$$

07.25.03.aedz.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(16z^6 + 144z^5 + 56z^4 - 276z^3 + 585z^2 - 840z + 900)}{1536z^3} + \frac{7e^z \sqrt{\pi} (32z^7 + 304z^6 + 240z^5 - 600z^4 + 1050z^3 - 1305z^2 + 1440z - 900) \operatorname{erf}(\sqrt{z})}{3072z^{7/2}}$$

07.25.03.aee0.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (32z^7 - 304z^6 + 240z^5 + 600z^4 + 1050z^3 + 1305z^2 + 1440z + 900) \operatorname{erfi}(\sqrt{z})}{3072z^{7/2}} - \frac{7(16z^6 - 144z^5 + 56z^4 + 276z^3 + 585z^2 + 840z + 900)}{1536z^3}$$

07.25.03.aee1.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, 5; z\right) = \frac{1}{15} e^z (4z^3 + 24z^2 - 21z + 15)$$

07.25.03.aee2.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{21(16z^6 + 32z^5 - 128z^4 + 360z^3 - 885z^2 + 1950z - 3150)}{1024z^4} + \frac{21e^z \sqrt{\pi} (32z^7 + 80z^6 - 240z^5 + 600z^4 - 1350z^3 + 2745z^2 - 4050z + 3150) \operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.aee3.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21(16z^6 - 32z^5 - 128z^4 - 360z^3 - 885z^2 - 1950z - 3150)}{1024z^4} - \frac{21e^{-z} \sqrt{\pi} (32z^7 - 80z^6 - 240z^5 - 600z^4 - 1350z^3 - 2745z^2 - 4050z - 3150) \operatorname{erfi}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.aee4.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{3}{2}, 6; z\right) = \frac{1}{3} e^z (4z^2 - 4z + 3)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = -\frac{1}{2}$

07.25.03.aee5.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{480} (16z^7 + 608z^6 + 8024z^5 + 44892z^4 + 103145z^3 + 75915z^2 + 5760z + 480) + \frac{1}{960} e^z \sqrt{\pi} (32z^{15/2} + 1232z^{13/2} + 16640z^{11/2} + 97240z^{9/2} + 244530z^{7/2} + 225225z^{5/2} + 45045z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aee6.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{480} (-16 z^7 + 608 z^6 - 8024 z^5 + 44\,892 z^4 - 103\,145 z^3 + 75\,915 z^2 - 5760 z + 480) + \frac{1}{960} e^{-z} \sqrt{\pi} (32 z^{15/2} - 1232 z^{13/2} + 16\,640 z^{11/2} - 97\,240 z^{9/2} + 244\,530 z^{7/2} - 225\,225 z^{5/2} + 45\,045 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aee7.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{960} (-16 z^6 - 512 z^5 - 5472 z^4 - 23\,240 z^3 - 35\,595 z^2 - 11\,520 z + 960) + \frac{e^z \sqrt{\pi} (-32 z^{13/2} - 1040 z^{11/2} - 11\,440 z^{9/2} - 51\,480 z^{7/2} - 90\,090 z^{5/2} - 45\,045 z^{3/2}) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.aee8.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{960} (-16 z^6 + 512 z^5 - 5472 z^4 + 23\,240 z^3 - 35\,595 z^2 + 11\,520 z + 960) + \frac{e^{-z} \sqrt{\pi} (32 z^{13/2} - 1040 z^{11/2} + 11\,440 z^{9/2} - 51\,480 z^{7/2} + 90\,090 z^{5/2} - 45\,045 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.aee9.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, 1; z\right) = -\frac{1}{120} e^z (2 z^6 + 59 z^5 + 575 z^4 + 2200 z^3 + 3000 z^2 + 840 z - 120)$$

07.25.03.aeea.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{-16 z^5 - 416 z^4 - 3400 z^3 - 9828 z^2 - 7365 z + 975}{1920} + \frac{e^z \sqrt{\pi} (-32 z^6 - 848 z^5 - 7200 z^4 - 22\,680 z^3 - 22\,050 z^2 - 945 z + 945) \operatorname{erf}(\sqrt{z})}{3840 \sqrt{z}}$$

07.25.03.aeeb.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{16 z^5 - 416 z^4 + 3400 z^3 - 9828 z^2 + 7365 z + 975}{1920} + \frac{e^{-z} \sqrt{\pi} (-32 z^6 + 848 z^5 - 7200 z^4 + 22\,680 z^3 - 22\,050 z^2 + 945 z + 945) \operatorname{erfi}(\sqrt{z})}{3840 \sqrt{z}}$$

07.25.03.aeec.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, 2; z\right) = -\frac{1}{120} e^z (2 z^5 + 47 z^4 + 340 z^3 + 840 z^2 + 480 z - 120)$$

07.25.03.aeed.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{-16 z^5 - 320 z^4 - 1808 z^3 - 2736 z^2 + 265 z + 210}{1280 z} + \frac{e^z \sqrt{\pi} (-32 z^6 - 656 z^5 - 3920 z^4 - 7000 z^3 - 1050 z^2 + 1155 z - 210) \operatorname{erf}(\sqrt{z})}{2560 z^{3/2}}$$

07.25.03.aeee.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{-16z^5 + 320z^4 - 1808z^3 + 2736z^2 + 265z - 210}{1280z} + \frac{e^{-z}\sqrt{\pi}(32z^6 - 656z^5 + 3920z^4 - 7000z^3 + 1050z^2 + 1155z + 210)\operatorname{erfi}(\sqrt{z})}{2560z^{3/2}}$$

07.25.03.aeef.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, 3; z\right) = -\frac{1}{60}e^z(2z^4 + 35z^3 + 165z^2 + 180z - 60)$$

07.25.03.aeeg.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{-16z^5 - 224z^4 - 696z^3 - 44z^2 + 255z - 135}{512z^2} + \frac{e^z\sqrt{\pi}(-32z^6 - 464z^5 - 1600z^4 - 600z^3 + 750z^2 - 345z + 135)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.aeeh.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{16z^5 - 224z^4 + 696z^3 - 44z^2 - 255z - 135}{512z^2} + \frac{e^{-z}\sqrt{\pi}(-32z^6 + 464z^5 - 1600z^4 + 600z^3 + 750z^2 + 345z + 135)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.aeei.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, 4; z\right) = -\frac{1}{20}e^z(2z^3 + 23z^2 + 50z - 20)$$

07.25.03.aeej.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{7(16z^5 + 128z^4 + 64z^3 - 168z^2 + 195z - 180)}{1024z^3} - \frac{7e^z\sqrt{\pi}(32z^6 + 272z^5 + 240z^4 - 360z^3 + 330z^2 - 315z + 180)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.aeek.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}\sqrt{\pi}(32z^6 - 272z^5 + 240z^4 + 360z^3 + 330z^2 + 315z + 180)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}} - \frac{7(16z^5 - 128z^4 + 64z^3 + 168z^2 + 195z + 180)}{1024z^3}$$

07.25.03.aeel.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, 5; z\right) = -\frac{1}{5}e^z(2z^2 + 11z - 5)$$

07.25.03.aeem.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{63(16z^5 + 32z^4 - 88z^3 + 180z^2 - 355z + 525)}{2048z^4} - \frac{63e^z\sqrt{\pi}(32z^6 + 80z^5 - 160z^4 + 280z^3 - 510z^2 + 705z - 525)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.aeen.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63(16z^5 - 32z^4 - 88z^3 - 180z^2 - 355z - 525)}{2048z^4} - \frac{63e^{-z}\sqrt{\pi}(32z^6 - 80z^5 - 160z^4 - 280z^3 - 510z^2 - 705z - 525)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.aeeo.01

$${}_2F_2\left(\frac{1}{2}, 6; -\frac{1}{2}, 6; z\right) = -e^z(2z - 1)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = \frac{1}{2}$

07.25.03.aeep.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920}{1920} + \frac{e^z\sqrt{\pi}(32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z})\operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.aeeq.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920}{1920} + \frac{e^{-z}\sqrt{\pi}(32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z})\operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.aeer.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, 1; z\right) = \frac{1}{120}e^z(z^5 + 25z^4 + 200z^3 + 600z^2 + 600z + 120)$$

07.25.03.aees.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{16z^4 + 352z^3 + 2352z^2 + 5280z + 2895}{3840} + \frac{e^z\sqrt{\pi}(32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945)\operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.aeet.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{16z^4 - 352z^3 + 2352z^2 - 5280z + 2895}{3840} + \frac{e^{-z}\sqrt{\pi}(-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945)\operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.aeeu.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, 2; z\right) = \frac{1}{120}e^z(z^4 + 20z^3 + 120z^2 + 240z + 120)$$

07.25.03.aeev.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z \sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.aeev.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z} \sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.aeex.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, 3; z\right) = \frac{1}{60} e^z (z^3 + 15z^2 + 60z + 60)$$

07.25.03.aeey.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{16z^4 + 192z^3 + 512z^2 + 120z - 45}{1024z^2} + \frac{e^z \sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.aeez.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.aef0.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, 4; z\right) = \frac{1}{20} e^z (z^2 + 10z + 20)$$

07.25.03.aef1.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z \sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.aef2.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.aef3.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, 5; z\right) = \frac{1}{5} e^z (z + 5)$$

07.25.03.aef4.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z\sqrt{\pi}(32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.aef5.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z}\sqrt{\pi}(32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.aef6.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{1}{2}, 6; z\right) = e^z$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = 1$

07.25.03.aef7.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, 1; z\right) = \frac{1}{960}e^{z/2}(4z^5 + 94z^4 + 715z^3 + 2126z^2 + 2400z + 960)I_0\left(\frac{z}{2}\right) + \frac{1}{960}e^{z/2}(4z^5 + 90z^4 + 627z^3 + 1540z^2 + 1096z)I_1\left(\frac{z}{2}\right)$$

07.25.03.aef8.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, \frac{3}{2}; z\right) = \frac{e^z(16z^4 + 328z^3 + 2052z^2 + 4470z + 2895)}{3840} + \frac{63\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{512\sqrt{z}}$$

07.25.03.aef9.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, \frac{3}{2}; -z\right) = \frac{e^{-z}(16z^4 - 328z^3 + 2052z^2 - 4470z + 2895)}{3840} + \frac{63\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{512\sqrt{z}}$$

07.25.03.aefa.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, 2; z\right) = \frac{1}{480}e^{z/2}(2z^4 + 38z^3 + 223z^2 + 480z + 480)I_0\left(\frac{z}{2}\right) + \frac{1}{240}e^{z/2}(z^4 + 18z^3 + 94z^2 + 154z)I_1\left(\frac{z}{2}\right)$$

07.25.03.aefb.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, \frac{5}{2}; z\right) = \frac{e^z(32z^4 + 512z^3 + 2312z^2 + 3160z + 105)}{5120z} + \frac{21\sqrt{\pi}(18z - 1)\operatorname{erfi}(\sqrt{z})}{2048z^{3/2}}$$

07.25.03.aefc.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, \frac{5}{2}; -z\right) = \frac{e^{-z}(-32z^4 + 512z^3 - 2312z^2 + 3160z - 105)}{5120z} + \frac{21\sqrt{\pi}(18z + 1)\operatorname{erf}(\sqrt{z})}{2048z^{3/2}}$$

07.25.03.aefd.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, 3; z\right) = \frac{1}{240}e^{z/2}(2z^3 + 29z^2 + 120z + 240)I_0\left(\frac{z}{2}\right) + \frac{1}{240}e^{z/2}z(2z^2 + 27z + 94)I_1\left(\frac{z}{2}\right)$$

07.25.03.aefe.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, \frac{7}{2}; z\right) = \frac{e^z (128 z^4 + 1472 z^3 + 4096 z^2 + 510 z - 135)}{8192 z^2} + \frac{15 \sqrt{\pi} (252 z^2 - 28 z + 9) \operatorname{erfi}(\sqrt{z})}{16384 z^{5/2}}$$

07.25.03.aeff.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, \frac{7}{2}; -z\right) = \frac{e^{-z} (128 z^4 - 1472 z^3 + 4096 z^2 - 510 z - 135)}{8192 z^2} + \frac{15 \sqrt{\pi} (252 z^2 + 28 z + 9) \operatorname{erf}(\sqrt{z})}{16384 z^{5/2}}$$

07.25.03.aefg.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, 4; z\right) = \frac{1}{40} e^{z/2} (z^2 + 10 z + 40) I_0\left(\frac{z}{2}\right) + \frac{1}{40} e^{z/2} z (z + 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.aefh.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, \frac{9}{2}; z\right) = \frac{7 e^z (256 z^4 + 1792 z^3 + 660 z^2 - 420 z + 225)}{32768 z^3} + \frac{105 \sqrt{\pi} (168 z^3 - 28 z^2 + 18 z - 15) \operatorname{erfi}(\sqrt{z})}{65536 z^{7/2}}$$

07.25.03.aefi.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} (168 z^3 + 28 z^2 + 18 z + 15) \operatorname{erf}(\sqrt{z})}{65536 z^{7/2}} - \frac{7 e^{-z} (256 z^4 - 1792 z^3 + 660 z^2 + 420 z + 225)}{32768 z^3}$$

07.25.03.aefj.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, 5; z\right) = \frac{1}{10} e^{z/2} (z + 10) I_0\left(\frac{z}{2}\right) + \frac{1}{10} e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.aefk.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, \frac{11}{2}; z\right) = \frac{63 e^z (2048 z^4 + 2600 z^3 - 3260 z^2 + 4250 z - 3675)}{524288 z^4} + \frac{315 \sqrt{\pi} (1008 z^4 - 224 z^3 + 216 z^2 - 360 z + 735) \operatorname{erfi}(\sqrt{z})}{1048576 z^{9/2}}$$

07.25.03.aefl.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (2048 z^4 - 2600 z^3 - 3260 z^2 - 4250 z - 3675)}{524288 z^4} + \frac{315 \sqrt{\pi} (1008 z^4 + 224 z^3 + 216 z^2 + 360 z + 735) \operatorname{erf}(\sqrt{z})}{1048576 z^{9/2}}$$

07.25.03.aefm.01

$${}_2F_2\left(\frac{1}{2}, 6; 1, 6; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = \frac{3}{2}$

07.25.03.aefn.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{3}{2}, 2; z\right) = \frac{e^z (8 z^3 + 132 z^2 + 630 z + 975)}{1920} + \frac{63 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{256 \sqrt{z}}$$

07.25.03.aefo.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{3}{2}, 2; -z\right) = \frac{e^{-z}(-8z^3 + 132z^2 - 630z + 975)}{1920} + \frac{63\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{256\sqrt{z}}$$

07.25.03.aefp.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{3}{2}, 3; z\right) = \frac{1}{480} e^z(4z^2 + 50z + 165) + \frac{21\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{64\sqrt{z}}$$

07.25.03.aefq.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{3}{2}, 3; -z\right) = \frac{1}{480} e^{-z}(4z^2 - 50z + 165) + \frac{21\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{64\sqrt{z}}$$

07.25.03.aefr.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{3}{2}, 4; z\right) = \frac{1}{80} e^z(2z + 17) + \frac{63\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{160\sqrt{z}}$$

07.25.03.aefs.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{3}{2}, 4; -z\right) = \frac{1}{80} e^{-z}(17 - 2z) + \frac{63\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{160\sqrt{z}}$$

07.25.03.aeft.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{3}{2}, 5; z\right) = \frac{9\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{20\sqrt{z}} + \frac{e^z}{10}$$

07.25.03.aefu.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{3}{2}, 5; -z\right) = \frac{9\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{20\sqrt{z}} + \frac{e^{-z}}{10}$$

07.25.03.aefv.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{3}{2}, 6; z\right) = \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.aefw.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{3}{2}, 6; -z\right) = \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = 2$

07.25.03.aefx.01

$${}_2F_2\left(\frac{1}{2}, 6; 2, 2; z\right) = \frac{1}{480} e^{z/2}(2z^3 + 31z^2 + 144z + 480) I_0\left(\frac{z}{2}\right) + \frac{1}{480} e^{z/2}(2z^3 + 29z^2 + 116z - 96) I_1\left(\frac{z}{2}\right)$$

07.25.03.aefy.01

$${}_2F_2\left(\frac{1}{2}, 6; 2, \frac{5}{2}; z\right) = \frac{e^z(16z^3 + 208z^2 + 740z - 105)}{2560z} + \frac{21\sqrt{\pi}(18z + 1) \operatorname{erfi}(\sqrt{z})}{1024z^{3/2}}$$

07.25.03.aefz.01

$${}_2F_2\left(\frac{1}{2}, 6; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(16z^3 - 208z^2 + 740z + 105)}{2560z} + \frac{21\sqrt{\pi}(18z - 1)\operatorname{erf}(\sqrt{z})}{1024z^{3/2}}$$

07.25.03.aeg0.01

$${}_2F_2\left(\frac{1}{2}, 6; 2, 3; z\right) = \frac{1}{120}e^{z/2}(z^2 + 12z + 120)I_0\left(\frac{z}{2}\right) + \frac{1}{120}e^{z/2}(z^2 + 11z - 48)I_1\left(\frac{z}{2}\right)$$

07.25.03.aeg1.01

$${}_2F_2\left(\frac{1}{2}, 6; 2, \frac{7}{2}; z\right) = \frac{e^z(64z^3 + 608z^2 - 450z + 45)}{4096z^2} + \frac{15\sqrt{\pi}(252z^2 + 28z - 3)\operatorname{erfi}(\sqrt{z})}{8192z^{5/2}}$$

07.25.03.aeg2.01

$${}_2F_2\left(\frac{1}{2}, 6; 2, \frac{7}{2}; -z\right) = \frac{e^{-z}(-64z^3 + 608z^2 + 450z + 45)}{4096z^2} + \frac{15\sqrt{\pi}(252z^2 - 28z - 3)\operatorname{erf}(\sqrt{z})}{8192z^{5/2}}$$

07.25.03.aeg3.01

$${}_2F_2\left(\frac{1}{2}, 6; 2, 4; z\right) = \frac{1}{40}e^{z/2}(z + 40)I_0\left(\frac{z}{2}\right) + \frac{1}{40}e^{z/2}(z - 24)I_1\left(\frac{z}{2}\right)$$

07.25.03.aeg4.01

$${}_2F_2\left(\frac{1}{2}, 6; 2, \frac{9}{2}; z\right) = \frac{7e^z(128z^3 - 492z^2 + 120z - 45)}{16384z^3} + \frac{105\sqrt{\pi}(168z^3 + 28z^2 - 6z + 3)\operatorname{erfi}(\sqrt{z})}{32768z^{7/2}}$$

07.25.03.aeg5.01

$${}_2F_2\left(\frac{1}{2}, 6; 2, \frac{9}{2}; -z\right) = \frac{7e^{-z}(128z^3 + 492z^2 + 120z + 45)}{16384z^3} + \frac{105\sqrt{\pi}(168z^3 - 28z^2 - 6z - 3)\operatorname{erf}(\sqrt{z})}{32768z^{7/2}}$$

07.25.03.aeg6.01

$${}_2F_2\left(\frac{1}{2}, 6; 2, 5; z\right) = e^{z/2}I_0\left(\frac{z}{2}\right) - \frac{4}{5}e^{z/2}I_1\left(\frac{z}{2}\right)$$

07.25.03.aeg7.01

$${}_2F_2\left(\frac{1}{2}, 6; 2, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi}(1008z^4 + 224z^3 - 72z^2 + 72z - 105)\operatorname{erfi}(\sqrt{z})}{524288z^{9/2}} - \frac{63e^z(1496z^3 - 740z^2 + 710z - 525)}{262144z^4}$$

07.25.03.aeg8.01

$${}_2F_2\left(\frac{1}{2}, 6; 2, \frac{11}{2}; -z\right) = \frac{63e^{-z}(1496z^3 + 740z^2 + 710z + 525)}{262144z^4} + \frac{315\sqrt{\pi}(1008z^4 - 224z^3 - 72z^2 - 72z - 105)\operatorname{erf}(\sqrt{z})}{524288z^{9/2}}$$

07.25.03.aeg9.01

$${}_2F_2\left(\frac{1}{2}, 6; 2, 6; z\right) = e^{z/2}I_0\left(\frac{z}{2}\right) - e^{z/2}I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = \frac{5}{2}$

07.25.03.aega.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{5}{2}, 3; z\right) = \frac{e^z(8z^2 + 80z - 105)}{640z} + \frac{21\sqrt{\pi}(6z + 1)\operatorname{erfi}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.aegb.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{5}{2}, 3; -z\right) = \frac{e^{-z}(-8z^2 + 80z + 105)}{640z} + \frac{21\sqrt{\pi}(6z-1)\operatorname{erf}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.aegc.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{5}{2}, 4; z\right) = \frac{3e^z(4z-35)}{320z} + \frac{21\sqrt{\pi}(18z+5)\operatorname{erfi}(\sqrt{z})}{640z^{3/2}}$$

07.25.03.aegd.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{5}{2}, 4; -z\right) = \frac{3e^{-z}(4z+35)}{320z} + \frac{21\sqrt{\pi}(18z-5)\operatorname{erf}(\sqrt{z})}{640z^{3/2}}$$

07.25.03.aege.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{5}{2}, 5; z\right) = \frac{3\sqrt{\pi}(18z+7)\operatorname{erfi}(\sqrt{z})}{80z^{3/2}} - \frac{21e^z}{40z}$$

07.25.03.aegf.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{5}{2}, 5; -z\right) = \frac{3\sqrt{\pi}(18z-7)\operatorname{erf}(\sqrt{z})}{80z^{3/2}} + \frac{21e^{-z}}{40z}$$

07.25.03.aegg.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{5}{2}, 6; z\right) = \frac{3\sqrt{\pi}(2z+1)\operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3e^z}{4z}$$

07.25.03.aegh.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{5}{2}, 6; -z\right) = \frac{3\sqrt{\pi}(2z-1)\operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3e^{-z}}{4z}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = 3$

07.25.03.aegi.01

$${}_2F_2\left(\frac{1}{2}, 6; 3, 3; z\right) = \frac{1}{60}e^{z/2}(z+62)I_0\left(\frac{z}{2}\right) + \frac{e^{z/2}(z^2-44z-8)I_1\left(\frac{z}{2}\right)}{60z}$$

07.25.03.aegj.01

$${}_2F_2\left(\frac{1}{2}, 6; 3, \frac{7}{2}; z\right) = \frac{e^z(32z^2-390z-45)}{1024z^2} + \frac{15\sqrt{\pi}(84z^2+28z+3)\operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.aegk.01

$${}_2F_2\left(\frac{1}{2}, 6; 3, \frac{7}{2}; -z\right) = \frac{e^{-z}(32z^2+390z-45)}{1024z^2} + \frac{15\sqrt{\pi}(84z^2-28z+3)\operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.aegl.01

$${}_2F_2\left(\frac{1}{2}, 6; 3, 4; z\right) = \frac{11}{10}e^{z/2}I_0\left(\frac{z}{2}\right) + \frac{e^{z/2}(-5z-2)I_1\left(\frac{z}{2}\right)}{5z}$$

07.25.03.aegm.01

$${}_2F_2\left(\frac{1}{2}, 6; 3, \frac{9}{2}; z\right) = \frac{105 \sqrt{\pi} (56 z^3 + 28 z^2 + 6 z - 1) \operatorname{erfi}(\sqrt{z})}{8192 z^{7/2}} - \frac{7 e^z (356 z^2 + 100 z - 15)}{4096 z^3}$$

07.25.03.aegn.01

$${}_2F_2\left(\frac{1}{2}, 6; 3, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (356 z^2 - 100 z - 15)}{4096 z^3} + \frac{105 \sqrt{\pi} (56 z^3 - 28 z^2 + 6 z + 1) \operatorname{erf}(\sqrt{z})}{8192 z^{7/2}}$$

07.25.03.aego.01

$${}_2F_2\left(\frac{1}{2}, 6; 3, 5; z\right) = \frac{6}{5} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{2 e^{z/2} (3 z + 2) I_1\left(\frac{z}{2}\right)}{5 z}$$

07.25.03.aegp.01

$${}_2F_2\left(\frac{1}{2}, 6; 3, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (336 z^4 + 224 z^3 + 72 z^2 - 24 z + 21) \operatorname{erfi}(\sqrt{z})}{131072 z^{9/2}} - \frac{63 e^z (840 z^3 + 468 z^2 - 190 z + 105)}{65536 z^4}$$

07.25.03.aeqq.01

$${}_2F_2\left(\frac{1}{2}, 6; 3, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (840 z^3 - 468 z^2 - 190 z - 105)}{65536 z^4} + \frac{315 \sqrt{\pi} (336 z^4 - 224 z^3 + 72 z^2 + 24 z + 21) \operatorname{erf}(\sqrt{z})}{131072 z^{9/2}}$$

07.25.03.aegr.01

$${}_2F_2\left(\frac{1}{2}, 6; 3, 6; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (z + 1) I_1\left(\frac{z}{2}\right)}{3 z}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = \frac{7}{2}$

07.25.03.aegs.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{7}{2}, 4; z\right) = \frac{3 \sqrt{\pi} (252 z^2 + 140 z + 45) \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}} - \frac{15 e^z (22 z + 9)}{512 z^2}$$

07.25.03.aegt.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{7}{2}, 4; -z\right) = \frac{15 e^{-z} (22 z - 9)}{512 z^2} + \frac{3 \sqrt{\pi} (252 z^2 - 140 z + 45) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.aegu.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{7}{2}, 5; z\right) = \frac{3 \sqrt{\pi} (36 z^2 + 28 z + 15) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}} - \frac{9 e^z (6 z + 5)}{64 z^2}$$

07.25.03.aegv.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{7}{2}, 5; -z\right) = \frac{9 e^{-z} (6 z - 5)}{64 z^2} + \frac{3 \sqrt{\pi} (36 z^2 - 28 z + 15) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.aegw.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{7}{2}, 6; z\right) = \frac{15 \sqrt{\pi} (4 z^2 + 4 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{5/2}} - \frac{15 e^z (2 z + 3)}{32 z^2}$$

07.25.03.aegx.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{7}{2}, 6; -z\right) = \frac{15 e^{-z} (2z - 3)}{32 z^2} + \frac{15 \sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64 z^{5/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = 4$

07.25.03.aegy.01

$${}_2F_2\left(\frac{1}{2}, 6; 4, 4; z\right) = \frac{e^{z/2} (63z + 4) I_0\left(\frac{z}{2}\right)}{50z} + \frac{e^{z/2} (-63z^2 - 52z - 16) I_1\left(\frac{z}{2}\right)}{50z^2}$$

07.25.03.aegz.01

$${}_2F_2\left(\frac{1}{2}, 6; 4, \frac{9}{2}; z\right) = \frac{21 \sqrt{\pi} (168z^3 + 140z^2 + 90z + 15) \operatorname{erfi}(\sqrt{z})}{4096 z^{7/2}} - \frac{21 e^z (84z^2 + 80z + 15)}{2048 z^3}$$

07.25.03.aeh0.01

$${}_2F_2\left(\frac{1}{2}, 6; 4, \frac{9}{2}; -z\right) = \frac{21 e^{-z} (84z^2 - 80z + 15)}{2048 z^3} + \frac{21 \sqrt{\pi} (168z^3 - 140z^2 + 90z - 15) \operatorname{erf}(\sqrt{z})}{4096 z^{7/2}}$$

07.25.03.aeh1.01

$${}_2F_2\left(\frac{1}{2}, 6; 4, 5; z\right) = \frac{4 e^{z/2} (9z + 2) I_0\left(\frac{z}{2}\right)}{25z} - \frac{4 e^{z/2} (9z^2 + 11z + 8) I_1\left(\frac{z}{2}\right)}{25z^2}$$

07.25.03.aeh2.01

$${}_2F_2\left(\frac{1}{2}, 6; 4, \frac{11}{2}; z\right) = \frac{63 \sqrt{\pi} (1008z^4 + 1120z^3 + 1080z^2 + 360z - 105) \operatorname{erfi}(\sqrt{z})}{65536 z^{9/2}} - \frac{63 e^z (504z^3 + 812z^2 + 430z - 105)}{32768 z^4}$$

07.25.03.aeh3.01

$${}_2F_2\left(\frac{1}{2}, 6; 4, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (504z^3 - 812z^2 + 430z + 105)}{32768 z^4} + \frac{63 \sqrt{\pi} (1008z^4 - 1120z^3 + 1080z^2 - 360z - 105) \operatorname{erf}(\sqrt{z})}{65536 z^{9/2}}$$

07.25.03.aeh4.01

$${}_2F_2\left(\frac{1}{2}, 6; 4, 6; z\right) = \frac{4 e^{z/2} (2z + 1) I_0\left(\frac{z}{2}\right)}{5z} - \frac{4 e^{z/2} (2z^2 + 3z + 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = \frac{9}{2}$

07.25.03.aeh5.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{9}{2}, 5; z\right) = \frac{21 \sqrt{\pi} (24z^3 + 28z^2 + 30z + 15) \operatorname{erfi}(\sqrt{z})}{512 z^{7/2}} - \frac{21 e^z (12z^2 + 20z + 15)}{256 z^3}$$

07.25.03.aeh6.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{9}{2}, 5; -z\right) = \frac{21 e^{-z} (12z^2 - 20z + 15)}{256 z^3} + \frac{21 \sqrt{\pi} (24z^3 - 28z^2 + 30z - 15) \operatorname{erf}(\sqrt{z})}{512 z^{7/2}}$$

07.25.03.aeh7.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{9}{2}, 6; z\right) = \frac{35 \sqrt{\pi} (8z^3 + 12z^2 + 18z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{35 e^z (4z^2 + 8z + 15)}{128 z^3}$$

07.25.03.aeh8.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{9}{2}, 6; -z\right) = \frac{35 e^{-z} (4z^2 - 8z + 15)}{128 z^3} + \frac{35 \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = 5$

07.25.03.aeh9.01

$${}_2F_2\left(\frac{1}{2}, 6; 5, 5; z\right) = \frac{16 e^{z/2} (18z^2 + 11z + 6) I_0\left(\frac{z}{2}\right)}{175 z^2} - \frac{16 e^{z/2} (18z^3 + 29z^2 + 44z + 24) I_1\left(\frac{z}{2}\right)}{175 z^3}$$

07.25.03.aeha.01

$${}_2F_2\left(\frac{1}{2}, 6; 5, \frac{11}{2}; z\right) = \frac{63 \sqrt{\pi} (144z^4 + 224z^3 + 360z^2 + 360z + 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}} - \frac{63 e^z (72z^3 + 148z^2 + 290z + 105)}{4096 z^4}$$

07.25.03.aehb.01

$${}_2F_2\left(\frac{1}{2}, 6; 5, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (72z^3 - 148z^2 + 290z - 105)}{4096 z^4} + \frac{63 \sqrt{\pi} (144z^4 - 224z^3 + 360z^2 - 360z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.aehc.01

$${}_2F_2\left(\frac{1}{2}, 6; 5, 6; z\right) = \frac{32 e^{z/2} (2z^2 + 2z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} - \frac{64 e^{z/2} (z^3 + 2z^2 + 4z + 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = \frac{11}{2}$

07.25.03.aehd.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{11}{2}, 6; z\right) = \frac{315 \sqrt{\pi} (16z^4 + 32z^3 + 72z^2 + 120z + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315 e^z (8z^3 + 20z^2 + 50z + 105)}{2048 z^4}$$

07.25.03.aehe.01

$${}_2F_2\left(\frac{1}{2}, 6; \frac{11}{2}, 6; -z\right) = \frac{315 e^{-z} (8z^3 - 20z^2 + 50z - 105)}{2048 z^4} + \frac{315 \sqrt{\pi} (16z^4 - 32z^3 + 72z^2 - 120z + 105) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

For fixed z and $a_1 = \frac{1}{2}$, $a_2 = 6$, $b_1 = 6$

07.25.03.aehf.01

$${}_2F_2\left(\frac{1}{2}, 6; 6, 6; z\right) = \frac{32 e^{z/2} (4z^3 + 6z^2 + 15z + 24) I_0\left(\frac{z}{2}\right)}{63 z^3} - \frac{32 e^{z/2} (4z^4 + 10z^3 + 27z^2 + 60z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = 1$, $a_2 \geq 1$

For fixed z and $a_1 = 1$, $a_2 = 1$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 1$, $a_2 = 1$, $b_1 = -\frac{11}{2}$

07.25.03.aehg.01

$${}_2F_2\left(1, 1; -\frac{11}{2}, 1; z\right) = \frac{64 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{1}{10395} (64 z^6 - 32 z^5 + 48 z^4 - 120 z^3 + 420 z^2 - 1890 z + 10395)$$

07.25.03.aehh.01

$${}_2F_2\left(1, 1; -\frac{11}{2}, 1; -z\right) = \frac{1}{10395} (64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 + 1890 z + 10395) - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} \operatorname{erfi}(\sqrt{z})}{10395}$$

For fixed z and $a_1 = 1, a_2 = 1, b_1 = -\frac{9}{2}$

07.25.03.aehi.01

$${}_2F_2\left(1, 1; -\frac{9}{2}, 1; z\right) = \frac{1}{945} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aehj.01

$${}_2F_2\left(1, 1; -\frac{9}{2}, 1; -z\right) = \frac{1}{945} (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 1, b_1 = -\frac{7}{2}$

07.25.03.aehk.01

$${}_2F_2\left(1, 1; -\frac{7}{2}, 1; z\right) = \frac{16}{105} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)$$

07.25.03.aehl.01

$${}_2F_2\left(1, 1; -\frac{7}{2}, 1; -z\right) = \frac{1}{105} (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 1, b_1 = -\frac{5}{2}$

07.25.03.aehm.01

$${}_2F_2\left(1, 1; -\frac{5}{2}, 1; z\right) = \frac{1}{15} (-8 z^3 + 4 z^2 - 6 z + 15) - \frac{8}{15} e^z \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aehn.01

$${}_2F_2\left(1, 1; -\frac{5}{2}, 1; -z\right) = \frac{1}{15} (8 z^3 + 4 z^2 + 6 z + 15) - \frac{8}{15} e^{-z} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 1, b_1 = -\frac{3}{2}$

07.25.03.aeho.01

$${}_2F_2\left(1, 1; -\frac{3}{2}, 1; z\right) = \frac{4}{3} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (4 z^2 - 2 z + 3)$$

07.25.03.aehp.01

$${}_2F_2\left(1, 1; -\frac{3}{2}, 1; -z\right) = \frac{1}{3} (4 z^2 + 2 z + 3) - \frac{4}{3} e^{-z} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 1, b_1 = -\frac{1}{2}$

07.25.03.aehq.01

$${}_2F_2\left(1, 1; -\frac{1}{2}, 1; z\right) = -2 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} - 2z + 1$$

07.25.03.aehr.01

$${}_2F_2\left(1, 1; -\frac{1}{2}, 1; -z\right) = -2 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + 2z + 1$$

For fixed z and $a_1 = 1, a_2 = 1, b_1 = \frac{1}{2}$

07.25.03.aehs.01

$${}_2F_2\left(1, 1; \frac{1}{2}, 1; z\right) = e^z \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.aeht.01

$${}_2F_2\left(1, 1; \frac{1}{2}, 1; -z\right) = 1 - e^{-z} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 1, b_1 = 1$

07.25.03.aehu.01

$${}_2F_2(1, 1; 1, 1; z) = e^z$$

07.25.03.aehv.01

$${}_2F_2\left(1, 1; 1, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.aehw.01

$${}_2F_2\left(1, 1; 1, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.aehx.01

$${}_2F_2(1, 1; 1, 2; z) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.aehy.01

$${}_2F_2\left(1, 1; 1, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3}{2z}$$

07.25.03.aehz.01

$${}_2F_2\left(1, 1; 1, \frac{5}{2}; -z\right) = \frac{3}{2z} - \frac{3 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.aei0.01

$${}_2F_2(1, 1; 1, 3; z) = \frac{2 e^z}{z^2} - \frac{2(z+1)}{z^2}$$

07.25.03.aei1.01

$${}_2F_2\left(1, 1; 1, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5(2z+3)}{4 z^2}$$

07.25.03.aei2.01

$${}_2F_2\left(1, 1; 1, \frac{7}{2}; -z\right) = \frac{5(2z-3)}{4 z^2} + \frac{15 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.aei3.01

$${}_2F_2(1, 1; 1, 4; z) = \frac{6 e^z}{z^3} - \frac{3(z^2 + 2z + 2)}{z^3}$$

07.25.03.aei4.01

$${}_2F_2\left(1, 1; 1, \frac{9}{2}; z\right) = \frac{105 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7(4z^2 + 10z + 15)}{8 z^3}$$

07.25.03.aei5.01

$${}_2F_2\left(1, 1; 1, \frac{9}{2}; -z\right) = \frac{7(4z^2 - 10z + 15)}{8 z^3} - \frac{105 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.aei6.01

$${}_2F_2(1, 1; 1, 5; z) = \frac{24 e^z}{z^4} - \frac{4(z^3 + 3z^2 + 6z + 6)}{z^4}$$

07.25.03.aei7.01

$${}_2F_2\left(1, 1; 1, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9(8z^3 + 28z^2 + 70z + 105)}{16 z^4}$$

07.25.03.aei8.01

$${}_2F_2\left(1, 1; 1, \frac{11}{2}; -z\right) = \frac{9(8z^3 - 28z^2 + 70z - 105)}{16 z^4} + \frac{945 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.aei9.01

$${}_2F_2(1, 1; 1, 6; z) = \frac{120 e^z}{z^5} - \frac{5(z^4 + 4z^3 + 12z^2 + 24z + 24)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = 1, b_1 = 2$

07.25.03.0076.01

$${}_2F_2(1, 1; 2, 2; z) = \frac{1}{2z} \left(2 \operatorname{Ei}(z) + \log\left(\frac{1}{z}\right) - \log(z) - 2\gamma \right)$$

07.25.03.0077.01

$${}_2F_2(1, 1; 2, 3; z) = \frac{1}{z^2} \left(2 \operatorname{Ei}(z) z + \log\left(\frac{1}{z}\right) z - \log(z) z - 2\gamma z + 2z - 2e^z + 2 \right)$$

07.25.03.aeia.01

$${}_2F_2(1, 1; 2, 4; z) = -\frac{3 e^z (z+1)}{z^3} - \frac{3(2\gamma z^2 - 3z^2 - 4z - 2)}{2z^3} + \frac{3 \operatorname{Ei}(z)}{z} + \frac{3 \log\left(\frac{1}{z}\right)}{2z} - \frac{3 \log(z)}{2z}$$

07.25.03.aeib.01

$${}_2F_2(1, 1; 2, 5; z) = -\frac{4 e^z (z^2 + z + 2)}{z^4} - \frac{2(6 \gamma z^3 - 11 z^3 - 18 z^2 - 18 z - 12)}{3 z^4} + \frac{4 \operatorname{Ei}(z)}{z} + \frac{2 \log\left(\frac{1}{z}\right)}{z} - \frac{2 \log(z)}{z}$$

07.25.03.aeic.01

$${}_2F_2(1, 1; 2, 6; z) = -\frac{5 e^z (z^3 + z^2 + 2 z + 6)}{z^5} - \frac{1}{12 z^5} (5(12 \gamma z^4 - 25 z^4 - 48 z^3 - 72 z^2 - 96 z - 72)) + \frac{5 \operatorname{Ei}(z)}{z} + \frac{5 \log\left(\frac{1}{z}\right)}{2 z} - \frac{5 \log(z)}{2 z}$$

For fixed z and $a_1 = 1, a_2 = 1, b_1 = 3$

07.25.03.0078.01

$${}_2F_2(1, 1; 3, 3; z) = \frac{2}{z^2} \left(2(z-1) \operatorname{Ei}(z) - \log(z) z - 2 \gamma z + 4 z - 2 e^z + (z-1) \log\left(\frac{1}{z}\right) + \log(z) + 2 \gamma + 2 \right)$$

07.25.03.aeid.01

$${}_2F_2(1, 1; 3, 4; z) = -\frac{6 e^z (z-1)}{z^3} - \frac{3(2 \gamma z^2 - 5 z^2 - 4 \gamma z + 2)}{z^3} + \frac{6(z-2) \operatorname{Ei}(z)}{z^2} + \frac{3(z-2) \log\left(\frac{1}{z}\right)}{z^2} - \frac{3(z-2) \log(z)}{z^2}$$

07.25.03.aeie.01

$${}_2F_2(1, 1; 3, 5; z) = -\frac{8 e^z (z^2 - 2 z - 1)}{z^4} - \frac{4(6 \gamma z^3 - 17 z^3 - 18 \gamma z^2 + 9 z^2 + 18 z + 6)}{3 z^4} + \frac{8(z-3) \operatorname{Ei}(z)}{z^2} + \frac{4(z-3) \log\left(\frac{1}{z}\right)}{z^2} - \frac{4(z-3) \log(z)}{z^2}$$

07.25.03.aeif.01

$${}_2F_2(1, 1; 3, 6; z) = -\frac{10 e^z (z^3 - 3 z^2 - 2 z - 2)}{z^5} - \frac{1}{6 z^5} (5(12 \gamma z^4 - 37 z^4 - 48 \gamma z^3 + 40 z^3 + 72 z^2 + 48 z + 24)) + \frac{10(z-4) \operatorname{Ei}(z)}{z^2} + \frac{5(z-4) \log\left(\frac{1}{z}\right)}{z^2} - \frac{5(z-4) \log(z)}{z^2}$$

For fixed z and $a_1 = 1, a_2 = 1, b_1 = 4$

07.25.03.aeig.01

$${}_2F_2(1, 1; 4, 4; z) = -\frac{9 e^z (z-3)}{z^3} - \frac{9(\gamma z^2 - 3 z^2 - 4 \gamma z + 4 z + 2 \gamma + 3)}{z^3} + \frac{9(z^2 - 4 z + 2) \operatorname{Ei}(z)}{z^3} + \frac{9(z^2 - 4 z + 2) \log\left(\frac{1}{z}\right)}{2 z^3} - \frac{9(z^2 - 4 z + 2) \log(z)}{2 z^3}$$

07.25.03.aeih.01

$${}_2F_2(1, 1; 4, 5; z) = -\frac{12 e^z (z^2 - 5 z + 2)}{z^4} - \frac{1}{z^4} (4(3 \gamma z^3 - 10 z^3 - 18 \gamma z^2 + 27 z^2 + 18 \gamma z + 9 z - 6)) + \frac{12(z^2 - 6 z + 6) \operatorname{Ei}(z)}{z^3} + \frac{6(z^2 - 6 z + 6) \log\left(\frac{1}{z}\right)}{z^3} - \frac{6(z^2 - 6 z + 6) \log(z)}{z^3}$$

07.25.03.aeii.01

$${}_2F_2(1, 1; 4, 6; z) = -\frac{15 e^z (z^3 - 7 z^2 + 6 z + 2)}{z^5} - \frac{1}{4 z^5} (5 (12 \gamma z^4 - 43 z^4 - 96 \gamma z^3 + 176 z^3 + 144 \gamma z^2 - 96 z - 24)) + \frac{15 (z^2 - 8 z + 12) \text{Ei}(z)}{z^3} + \frac{15 (z^2 - 8 z + 12) \log\left(\frac{1}{z}\right)}{2 z^3} - \frac{15 (z^2 - 8 z + 12) \log(z)}{2 z^3}$$

For fixed z and $a_1 = 1, a_2 = 1, b_1 = 5$

07.25.03.aeij.01

$${}_2F_2(1, 1; 5, 5; z) = -\frac{16 e^z (z^2 - 8 z + 11)}{z^4} - \frac{1}{3 z^4} (16 (3 \gamma z^3 - 11 z^3 - 27 \gamma z^2 + 54 z^2 + 54 \gamma z - 27 z - 18 \gamma - 33)) + \frac{16 (z^3 - 9 z^2 + 18 z - 6) \text{Ei}(z)}{z^4} + \frac{8 (z^3 - 9 z^2 + 18 z - 6) \log\left(\frac{1}{z}\right)}{z^4} - \frac{8 (z^3 - 9 z^2 + 18 z - 6) \log(z)}{z^4}$$

07.25.03.aeik.01

$${}_2F_2(1, 1; 5, 6; z) = -\frac{20 e^z (z^3 - 11 z^2 + 26 z - 6)}{z^5} - \frac{1}{3 z^5} (5 (12 \gamma z^4 - 47 z^4 - 144 \gamma z^3 + 336 z^3 + 432 \gamma z^2 - 432 z^2 - 288 \gamma z - 240 z + 72)) + \frac{20 (z^3 - 12 z^2 + 36 z - 24) \text{Ei}(z)}{z^4} + \frac{10 (z^3 - 12 z^2 + 36 z - 24) \log\left(\frac{1}{z}\right)}{z^4} - \frac{10 (z^3 - 12 z^2 + 36 z - 24) \log(z)}{z^4}$$

For fixed z and $a_1 = 1, a_2 = 1, b_1 = 6$

07.25.03.aeil.01

$${}_2F_2(1, 1; 6, 6; z) = -\frac{25 e^z (z^3 - 15 z^2 + 58 z - 50)}{z^5} - \frac{1}{6 z^5} (25 (6 \gamma z^4 - 25 z^4 - 96 \gamma z^3 + 256 z^3 + 432 \gamma z^2 - 648 z^2 - 576 \gamma z + 96 z + 144 \gamma + 300)) + \frac{25 (z^4 - 16 z^3 + 72 z^2 - 96 z + 24) \text{Ei}(z)}{z^5} + \frac{25 (z^4 - 16 z^3 + 72 z^2 - 96 z + 24) \log\left(\frac{1}{z}\right)}{2 z^5} - \frac{25 (z^4 - 16 z^3 + 72 z^2 - 96 z + 24) \log(z)}{2 z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = -\frac{11}{2}$

07.25.03.aeim.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{108056025} (8192 z^{13} + 397312 z^{12} + 7030784 z^{11} + 56884224 z^{10} + 215459328 z^9 + 347101440 z^8 + 176883840 z^7 + 8648640 z^6 + 332640 z^5 + 136080 z^4 + 189000 z^3 + 661500 z^2 + 5358150 z + 108056025) + \frac{1}{108056025} (8192 e^z \sqrt{\pi} (z^{27/2} + 49 z^{25/2} + 882 z^{23/2} + 7350 z^{21/2} + 29400 z^{19/2} + 52920 z^{17/2} + 35280 z^{15/2} + 5040 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aein.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{108056025} (-8192 z^{13} + 397312 z^{12} - 7030784 z^{11} + 56884224 z^{10} - 215459328 z^9 + 347101440 z^8 - 176883840 z^7 + 8648640 z^6 - 332640 z^5 + 136080 z^4 - 189000 z^3 + 661500 z^2 - 5358150 z + 108056025) + \frac{1}{108056025} (8192 e^{-z} \sqrt{\pi} (z^{27/2} - 49 z^{25/2} + 882 z^{23/2} - 7350 z^{21/2} + 29400 z^{19/2} - 52920 z^{17/2} + 35280 z^{15/2} - 5040 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeio.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9823275} (-4096 z^{12} - 169984 z^{11} - 2497536 z^{10} - 16034304 z^9 - 44647680 z^8 - 45198720 z^7 - 8648640 z^6 + 332640 z^5 + 45360 z^4 + 37800 z^3 + 94500 z^2 + 595350 z + 9823275) - \frac{1}{9823275} (4096 e^z \sqrt{\pi} (z^{25/2} + 42 z^{23/2} + 630 z^{21/2} + 4200 z^{19/2} + 12600 z^{17/2} + 15120 z^{15/2} + 5040 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeip.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{9823275} (-4096 z^{12} + 169984 z^{11} - 2497536 z^{10} + 16034304 z^9 - 44647680 z^8 + 45198720 z^7 - 8648640 z^6 - 332640 z^5 + 45360 z^4 - 37800 z^3 + 94500 z^2 - 595350 z + 9823275) + \frac{1}{9823275} (4096 e^{-z} \sqrt{\pi} (z^{25/2} - 42 z^{23/2} + 630 z^{21/2} - 4200 z^{19/2} + 12600 z^{17/2} - 15120 z^{15/2} + 5040 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeiq.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1091475} (2048 z^{11} + 70656 z^{10} + 825856 z^9 + 3920640 z^8 + 6975360 z^7 + 2882880 z^6 - 332640 z^5 + 45360 z^4 + 12600 z^3 + 18900 z^2 + 85050 z + 1091475) + \frac{1}{1091475} (2048 e^z \sqrt{\pi} (z^{23/2} + 35 z^{21/2} + 420 z^{19/2} + 2100 z^{17/2} + 4200 z^{15/2} + 2520 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeir.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1091475} (-2048 z^{11} + 70656 z^{10} - 825856 z^9 + 3920640 z^8 - 6975360 z^7 + 2882880 z^6 + 332640 z^5 + 45360 z^4 - 12600 z^3 + 18900 z^2 - 85050 z + 1091475) + \frac{1}{1091475} (2048 e^{-z} \sqrt{\pi} (z^{23/2} - 35 z^{21/2} + 420 z^{19/2} - 2100 z^{17/2} + 4200 z^{15/2} - 2520 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeis.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{155925} (-1024 z^{10} - 28160 z^9 - 244480 z^8 - 750720 z^7 - 576576 z^6 + 110880 z^5 - 45360 z^4 + 12600 z^3 + 6300 z^2 + 17010 z + 155925) - \frac{1}{155925} (1024 e^z \sqrt{\pi} (z^{21/2} + 28 z^{19/2} + 252 z^{17/2} + 840 z^{15/2} + 840 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeit.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{155925} (-1024 z^{10} + 28160 z^9 - 244480 z^8 + 750720 z^7 - 576576 z^6 - 110880 z^5 - 45360 z^4 - 12600 z^3 + 6300 z^2 - 17010 z + 155925) + \frac{1}{155925} (1024 e^{-z} \sqrt{\pi} (z^{21/2} - 28 z^{19/2} + 252 z^{17/2} - 840 z^{15/2} + 840 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeiu.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{31185} (512 z^9 + 10496 z^8 + 59520 z^7 + 82368 z^6 - 22176 z^5 + 15120 z^4 - 12600 z^3 + 6300 z^2 + 5670 z + 31185) + \frac{1}{31185} (512 e^z \sqrt{\pi} (z^{19/2} + 21 z^{17/2} + 126 z^{15/2} + 210 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeiv.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{31185} (-512 z^9 + 10496 z^8 - 59520 z^7 + 82368 z^6 + 22176 z^5 + 15120 z^4 + 12600 z^3 + 6300 z^2 - 5670 z + 31185) + \frac{1}{31185} (512 e^{-z} \sqrt{\pi} (z^{19/2} - 21 z^{17/2} + 126 z^{15/2} - 210 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeiw.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{10395} (-256 z^8 - 3456 z^7 - 9152 z^6 + 3168 z^5 - 3024 z^4 + 4200 z^3 - 6300 z^2 + 5670 z + 10395) - \frac{1}{10395} (256 e^z \sqrt{\pi} (z^{17/2} + 14 z^{15/2} + 42 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeix.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{10395} (-256 z^8 + 3456 z^7 - 9152 z^6 - 3168 z^5 - 3024 z^4 - 4200 z^3 - 6300 z^2 - 5670 z + 10395) + \frac{1}{10395} (256 e^{-z} \sqrt{\pi} (z^{17/2} - 14 z^{15/2} + 42 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeiy.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{10395} (128 z^7 + 832 z^6 - 352 z^5 + 432 z^4 - 840 z^3 + 2100 z^2 - 5670 z + 10395) + \frac{128 e^z \sqrt{\pi} (z^{15/2} + 7 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.aeiz.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{10395} (-128 z^7 + 832 z^6 + 352 z^5 + 432 z^4 + 840 z^3 + 2100 z^2 + 5670 z + 10395) + \frac{128 e^{-z} \sqrt{\pi} (z^{15/2} - 7 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.aej0.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{10395} (e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13230 z + 10395))$$

07.25.03.aej1.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{64 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{1}{10395} (64 z^6 - 32 z^5 + 48 z^4 - 120 z^3 + 420 z^2 - 1890 z + 10395)$$

07.25.03.aej2.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{10395} (64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 + 1890 z + 10395) - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.aej3.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{10395 z} (e^z (128 z^7 - 448 z^6 + 2016 z^5 - 8400 z^4 + 29400 z^3 - 79380 z^2 + 145530 z - 135135)) + \frac{13}{z}$$

07.25.03.aej4.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{3465 z} (32 z^6 - 240 z^5 + 1480 z^4 - 7620 z^3 + 31878 z^2 - 104055 z + 322560) + \frac{1}{3465 z^{3/2}} (32 e^z \sqrt{\pi} (z^7 - 7 z^6 + 42 z^5 - 210 z^4 + 840 z^3 - 2520 z^2 + 5040 z - 5040) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aej5.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{3465 z} (-32 z^6 - 240 z^5 - 1480 z^4 - 7620 z^3 - 31878 z^2 - 104055 z - 322560) + \frac{1}{3465 z^{3/2}} (32 e^{-z} \sqrt{\pi} (z^7 + 7 z^6 + 42 z^5 + 210 z^4 + 840 z^3 + 2520 z^2 + 5040 z + 5040) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aej6.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, 3; z\right) = \frac{26(z+15)}{z^2} + \frac{1}{10395z^2} (2e^z (128z^7 - 1344z^6 + 10080z^5 - 58800z^4 + 264600z^3 - 873180z^2 + 1891890z - 2027025))$$

07.25.03.aej7.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{693z^2} (16z^6 - 232z^5 + 2140z^4 - 14646z^3 + 75957z^2 - 268800z + 1290240) + \frac{1}{693z^{5/2}} (16e^z \sqrt{\pi} (z^7 - 14z^6 + 126z^5 - 840z^4 + 4200z^3 - 15120z^2 + 35280z - 40320) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aej8.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{693z^2} (16z^6 + 232z^5 + 2140z^4 + 14646z^3 + 75957z^2 + 268800z + 1290240) - \frac{1}{693z^{5/2}} (16e^{-z} \sqrt{\pi} (z^7 + 14z^6 + 126z^5 + 840z^4 + 4200z^3 + 15120z^2 + 35280z + 40320) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aej9.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, 4; z\right) = \frac{39(z^2 + 30z + 170)}{z^3} + \frac{1}{3465z^3} (2e^z (128z^7 - 2240z^6 + 23520z^5 - 176400z^4 + 970200z^3 - 3783780z^2 + 9459450z - 11486475))$$

07.25.03.aeja.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{99z^3} (8z^6 - 172z^5 + 2106z^4 - 17949z^3 + 115584z^2 - 322560z + 2903040) + \frac{1}{99z^{7/2}} (8e^z \sqrt{\pi} (z^7 - 21z^6 + 252z^5 - 2100z^4 + 12600z^3 - 52920z^2 + 141120z - 181440) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aejb.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{99z^3} (-8z^6 - 172z^5 - 2106z^4 - 17949z^3 - 115584z^2 - 322560z - 2903040) + \frac{1}{99z^{7/2}} (8e^{-z} \sqrt{\pi} (z^7 + 21z^6 + 252z^5 + 2100z^4 + 12600z^3 + 52920z^2 + 141120z + 181440) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aejc.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, 5; z\right) = \frac{52(z^3 + 45z^2 + 510z + 1938)}{z^4} + \frac{1}{3465z^4} (8e^z (128z^7 - 3136z^6 + 42336z^5 - 388080z^4 + 2522520z^3 - 11351340z^2 + 32162130z - 43648605))$$

07.25.03.aejd.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{11z^4} (4z^6 - 114z^5 + 1739z^4 - 17088z^3 + 161280z^2 - 161280z + 4838400) + \frac{1}{11z^{9/2}} (4e^z \sqrt{\pi} (z^7 - 28z^6 + 420z^5 - 4200z^4 + 29400z^3 - 141120z^2 + 423360z - 604800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeje.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{11z^4} (4z^6 + 114z^5 + 1739z^4 + 17088z^3 + 161280z^2 + 161280z + 4838400) - \frac{1}{11z^{9/2}} (4e^{-z}\sqrt{\pi}(z^7 + 28z^6 + 420z^5 + 4200z^4 + 29400z^3 + 141120z^2 + 423360z + 604800)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aejf.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{11}{2}, 6; z\right) = \frac{65(z^4 + 60z^3 + 1020z^2 + 7752z + 23256)}{z^5} + \frac{1}{693z^5} (8e^z(128z^7 - 4032z^6 + 66528z^5 - 720720z^4 + 5405400z^3 - 27567540z^2 + 87297210z - 130945815))$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = -\frac{9}{2}$

07.25.03.aejg.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{893025} (2048z^{11} + 72704z^{10} + 886272z^9 + 4505856z^8 + 9168000z^7 + 5699520z^6 + 332640z^5 + 15120z^4 + 7560z^3 + 13500z^2 + 66150z + 893025) + \frac{1}{893025} (2048e^z\sqrt{\pi}(z^{23/2} + 36z^{21/2} + 450z^{19/2} + 2400z^{17/2} + 5400z^{15/2} + 4320z^{13/2} + 720z^{11/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.aejh.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{893025} (-2048z^{11} + 72704z^{10} - 886272z^9 + 4505856z^8 - 9168000z^7 + 5699520z^6 - 332640z^5 + 15120z^4 - 7560z^3 + 13500z^2 - 66150z + 893025) + \frac{1}{893025} (2048e^{-z}\sqrt{\pi}(z^{23/2} - 36z^{21/2} + 450z^{19/2} - 2400z^{17/2} + 5400z^{15/2} - 4320z^{13/2} + 720z^{11/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeji.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{99225} (-1024z^{10} - 30208z^9 - 292608z^8 - 1096320z^7 - 1408320z^6 - 332640z^5 + 15120z^4 + 2520z^3 + 2700z^2 + 9450z + 99225) - \frac{1}{99225} (1024e^z\sqrt{\pi}(z^{21/2} + 30z^{19/2} + 300z^{17/2} + 1200z^{15/2} + 1800z^{13/2} + 720z^{11/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.aejj.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{99225} (-1024z^{10} + 30208z^9 - 292608z^8 + 1096320z^7 - 1408320z^6 + 332640z^5 + 15120z^4 - 2520z^3 + 2700z^2 - 9450z + 99225) + \frac{1}{99225} (1024e^{-z}\sqrt{\pi}(z^{21/2} - 30z^{19/2} + 300z^{17/2} - 1200z^{15/2} + 1800z^{13/2} - 720z^{11/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aejk.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{14175} (512 z^9 + 12032 z^8 + 86400 z^7 + 207936 z^6 + 110880 z^5 - 15120 z^4 + 2520 z^3 + 900 z^2 + 1890 z + 14175) + \frac{1}{14175} (512 e^z \sqrt{\pi} (z^{19/2} + 24 z^{17/2} + 180 z^{15/2} + 480 z^{13/2} + 360 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aejl.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{14175} (-512 z^9 + 12032 z^8 - 86400 z^7 + 207936 z^6 - 110880 z^5 - 15120 z^4 - 2520 z^3 + 900 z^2 - 1890 z + 14175) + \frac{1}{14175} (512 e^{-z} \sqrt{\pi} (z^{19/2} - 24 z^{17/2} + 180 z^{15/2} - 480 z^{13/2} + 360 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aejm.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{2835} (-256 z^8 - 4480 z^7 - 20928 z^6 - 22176 z^5 + 5040 z^4 - 2520 z^3 + 900 z^2 + 630 z + 2835) - \frac{1}{2835} (256 e^z \sqrt{\pi} (z^{17/2} + 18 z^{15/2} + 90 z^{13/2} + 120 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aejn.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{2835} (-256 z^8 + 4480 z^7 - 20928 z^6 + 22176 z^5 + 5040 z^4 + 2520 z^3 + 900 z^2 - 630 z + 2835) + \frac{1}{2835} (256 e^{-z} \sqrt{\pi} (z^{17/2} - 18 z^{15/2} + 90 z^{13/2} - 120 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aejo.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} (128 z^7 + 1472 z^6 + 3168 z^5 - 1008 z^4 + 840 z^3 - 900 z^2 + 630 z + 945) + \frac{128}{945} e^z \sqrt{\pi} (z^{15/2} + 12 z^{13/2} + 30 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aejp.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945} (-128 z^7 + 1472 z^6 - 3168 z^5 - 1008 z^4 - 840 z^3 - 900 z^2 - 630 z + 945) + \frac{128}{945} e^{-z} \sqrt{\pi} (z^{15/2} - 12 z^{13/2} + 30 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aejq.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945} (-64 z^6 - 352 z^5 + 144 z^4 - 168 z^3 + 300 z^2 - 630 z + 945) - \frac{64}{945} e^z \sqrt{\pi} (z^{13/2} + 6 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aejr.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} (-64 z^6 + 352 z^5 + 144 z^4 + 168 z^3 + 300 z^2 + 630 z + 945) + \frac{64}{945} e^{-z} \sqrt{\pi} (z^{13/2} - 6 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aejs.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, 1; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)$$

07.25.03.aejt.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945} (-32z^5 + 16z^4 - 24z^3 + 60z^2 - 210z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aeju.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} (32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aejv.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{945z} (e^z (-64z^6 + 192z^5 - 720z^4 + 2400z^3 - 6300z^2 + 11340z - 10395)) + \frac{11}{z}$$

07.25.03.aejw.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{315z} (-16z^5 + 104z^4 - 540z^3 + 2262z^2 - 7365z + 23040) - \frac{1}{315z^{3/2}} (16e^z \sqrt{\pi} (z^6 - 6z^5 + 30z^4 - 120z^3 + 360z^2 - 720z + 720) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aejx.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{1}{315z} (-16z^5 - 104z^4 - 540z^3 - 2262z^2 - 7365z - 23040) + \frac{1}{315z^{3/2}} (16e^{-z} \sqrt{\pi} (z^6 + 6z^5 + 30z^4 + 120z^3 + 360z^2 + 720z + 720) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aejy.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, 3; z\right) = \frac{22(z+13)}{z^2} - \frac{1}{945z^2} (2e^z (64z^6 - 576z^5 + 3600z^4 - 16800z^3 + 56700z^2 - 124740z + 135135))$$

07.25.03.aejz.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{63z^2} (-8z^5 + 100z^4 - 774z^3 + 4287z^2 - 15360z + 80640) - \frac{1}{63z^{5/2}} (8e^z \sqrt{\pi} (z^6 - 12z^5 + 90z^4 - 480z^3 + 1800z^2 - 4320z + 5040) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aek0.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{1}{63z^2} (8z^5 + 100z^4 + 774z^3 + 4287z^2 + 15360z + 80640) - \frac{1}{63z^{5/2}} (8e^{-z} \sqrt{\pi} (z^6 + 12z^5 + 90z^4 + 480z^3 + 1800z^2 + 4320z + 5040) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aek1.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, 4; z\right) = \frac{33(z^2 + 26z + 130)}{z^3} - \frac{1}{315z^3} (2e^z (64z^6 - 960z^5 + 8400z^4 - 50400z^3 + 207900z^2 - 540540z + 675675))$$

07.25.03.aek2.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{9z^3} (-4z^5 + 74z^4 - 759z^3 + 5568z^2 - 13440z + 161280) - \frac{1}{9z^{7/2}} (4e^z \sqrt{\pi} (z^6 - 18z^5 + 180z^4 - 1200z^3 + 5400z^2 - 15120z + 20160) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aek3.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{9z^3} (-4z^5 - 74z^4 - 759z^3 - 5568z^2 - 13440z - 161280) +$$

$$\frac{1}{9z^{7/2}} (4e^{-z}\sqrt{\pi}(z^6 + 18z^5 + 180z^4 + 1200z^3 + 5400z^2 + 15120z + 20160)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aek4.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, 5; z\right) =$$

$$\frac{44(z^3 + 39z^2 + 390z + 1326)}{z^4} - \frac{1}{315z^4} (8e^z(64z^6 - 1344z^5 + 15120z^4 - 110880z^3 + 540540z^2 - 1621620z + 2297295))$$

07.25.03.aek5.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-2z^5 + 49z^4 - 576z^3 + 7392z^2 + 241920}{z^4} -$$

$$\frac{1}{z^{9/2}} (2e^z\sqrt{\pi}(z^6 - 24z^5 + 300z^4 - 2400z^3 + 12600z^2 - 40320z + 60480)\operatorname{erf}(\sqrt{z}))$$

07.25.03.aek6.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{2z^5 + 49z^4 + 576z^3 + 7392z^2 + 241920}{z^4} -$$

$$\frac{1}{z^{9/2}} (2e^{-z}\sqrt{\pi}(z^6 + 24z^5 + 300z^4 + 2400z^3 + 12600z^2 + 40320z + 60480)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aek7.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{9}{2}, 6; z\right) = \frac{1}{7z^5} (55(7z^4 + 364z^3 + 5460z^2 + 37128z + 100776)) -$$

$$\frac{1}{63z^5} (8e^z(64z^6 - 1728z^5 + 23760z^4 - 205920z^3 + 1158300z^2 - 3938220z + 6235515))$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = -\frac{7}{2}$

07.25.03.aek8.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{11025} (512z^9 + 12544z^8 + 96384z^7 + 264640z^6 + 209760z^5 + 15120z^4 + 840z^3 + 540z^2 + 1350z + 11025) +$$

$$\frac{1}{11025} (512e^z\sqrt{\pi}(z^{19/2} + 25z^{17/2} + 200z^{15/2} + 600z^{13/2} + 600z^{11/2} + 120z^{9/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.aek9.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{11025} (-512z^9 + 12544z^8 - 96384z^7 + 264640z^6 - 209760z^5 + 15120z^4 - 840z^3 + 540z^2 - 1350z + 11025) +$$

$$\frac{1}{11025} (512e^{-z}\sqrt{\pi}(z^{19/2} - 25z^{17/2} + 200z^{15/2} - 600z^{13/2} + 600z^{11/2} - 120z^{9/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeka.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{1575} (-256 z^8 - 4992 z^7 - 28352 z^6 - 49440 z^5 - 15120 z^4 + 840 z^3 + 180 z^2 + 270 z + 1575) - \frac{1}{1575} (256 e^z \sqrt{\pi} (z^{17/2} + 20 z^{15/2} + 120 z^{13/2} + 240 z^{11/2} + 120 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aekb.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{1575} (-256 z^8 + 4992 z^7 - 28352 z^6 + 49440 z^5 - 15120 z^4 - 840 z^3 + 180 z^2 - 270 z + 1575) + \frac{1}{1575} (256 e^{-z} \sqrt{\pi} (z^{17/2} - 20 z^{15/2} + 120 z^{13/2} - 240 z^{11/2} + 120 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aekc.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} (128 z^7 + 1856 z^6 + 6816 z^5 + 5040 z^4 - 840 z^3 + 180 z^2 + 90 z + 315) + \frac{128}{315} e^z \sqrt{\pi} (z^{15/2} + 15 z^{13/2} + 60 z^{11/2} + 60 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aekd.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{315} (-128 z^7 + 1856 z^6 - 6816 z^5 + 5040 z^4 + 840 z^3 + 180 z^2 - 90 z + 315) + \frac{128}{315} e^{-z} \sqrt{\pi} (z^{15/2} - 15 z^{13/2} + 60 z^{11/2} - 60 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aeke.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} (-64 z^6 - 608 z^5 - 1008 z^4 + 280 z^3 - 180 z^2 + 90 z + 105) - \frac{64}{105} e^z \sqrt{\pi} (z^{13/2} + 10 z^{11/2} + 20 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aekf.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} (-64 z^6 + 608 z^5 - 1008 z^4 - 280 z^3 - 180 z^2 - 90 z + 105) + \frac{64}{105} e^{-z} \sqrt{\pi} (z^{13/2} - 10 z^{11/2} + 20 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aekg.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} (32 z^5 + 144 z^4 - 56 z^3 + 60 z^2 - 90 z + 105) + \frac{32}{105} e^z \sqrt{\pi} (z^{11/2} + 5 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aekh.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} (-32 z^5 + 144 z^4 + 56 z^3 + 60 z^2 + 90 z + 105) + \frac{32}{105} e^{-z} \sqrt{\pi} (z^{11/2} - 5 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aeki.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^z (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105)$$

07.25.03.aekj.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{16}{105} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)$$

07.25.03.aekk.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} (16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aekl.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{105z} (e^z (32z^5 - 80z^4 + 240z^3 - 600z^2 + 1050z - 945)) + \frac{9}{z}$$

07.25.03.aekm.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{8z^4 - 44z^3 + 186z^2 - 605z + 1920}{35z} + \frac{1}{35z^{3/2}} (8e^z \sqrt{\pi} (z^5 - 5z^4 + 20z^3 - 60z^2 + 120z - 120) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aekn.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{-8z^4 - 44z^3 - 186z^2 - 605z - 1920}{35z} + \frac{1}{35z^{3/2}} (8e^{-z} \sqrt{\pi} (z^5 + 5z^4 + 20z^3 + 60z^2 + 120z + 120) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeko.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, 3; z\right) = \frac{18(z+11)}{z^2} + \frac{1}{105z^2} (2e^z (32z^5 - 240z^4 + 1200z^3 - 4200z^2 + 9450z - 10395))$$

07.25.03.aekp.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{4z^4 - 42z^3 + 263z^2 - 960z + 5760}{7z^2} + \frac{1}{7z^{5/2}} (4e^z \sqrt{\pi} (z^5 - 10z^4 + 60z^3 - 240z^2 + 600z - 720) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aekq.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{4z^4 + 42z^3 + 263z^2 + 960z + 5760}{7z^2} - \frac{1}{7z^{5/2}} (4e^{-z} \sqrt{\pi} (z^5 + 10z^4 + 60z^3 + 240z^2 + 600z + 720) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aekr.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, 4; z\right) = \frac{9(3z^2 + 66z + 286)}{z^3} + \frac{1}{35z^3} (2e^z (32z^5 - 400z^4 + 2800z^3 - 12600z^2 + 34650z - 45045))$$

07.25.03.aeks.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{2z^4 - 31z^3 + 288z^2 - 480z + 10080}{z^3} + \frac{1}{z^{7/2}} (2e^z \sqrt{\pi} (z^5 - 15z^4 + 120z^3 - 600z^2 + 1800z - 2520) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aekt.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-2z^4 - 31z^3 - 288z^2 - 480z - 10080}{z^3} + \frac{1}{z^{7/2}} (2e^{-z} \sqrt{\pi} (z^5 + 15z^4 + 120z^3 + 600z^2 + 1800z + 2520) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeku.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, 5; z\right) = \frac{36(z^3 + 33z^2 + 286z + 858)}{z^4} + \frac{1}{35z^4} (8e^z(32z^5 - 560z^4 + 5040z^3 - 27720z^2 + 90090z - 135135))$$

07.25.03.aekv.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9(z^4 - 16z^3 + 384z^2 + 560z + 13440)}{z^4} + \frac{1}{z^{9/2}} (9e^z\sqrt{\pi}(z^5 - 20z^4 + 200z^3 - 1200z^2 + 4200z - 6720)\operatorname{erf}(\sqrt{z}))$$

07.25.03.aekw.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(z^4 + 16z^3 + 384z^2 - 560z + 13440)}{z^4} - \frac{1}{z^{9/2}} (9e^{-z}\sqrt{\pi}(z^5 + 20z^4 + 200z^3 + 1200z^2 + 4200z + 6720)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aekx.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{7z^5} (45(7z^4 + 308z^3 + 4004z^2 + 24024z + 58344)) + \frac{1}{7z^5} (8e^z(32z^5 - 720z^4 + 7920z^3 - 51480z^2 + 193050z - 328185))$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = -\frac{5}{2}$

07.25.03.aeky.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225} (128z^7 + 1984z^6 + 8288z^5 + 8976z^4 + 840z^3 + 60z^2 + 54z + 225) + \frac{128}{225} e^z\sqrt{\pi}(z^{15/2} + 16z^{13/2} + 72z^{11/2} + 96z^{9/2} + 24z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aekz.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{225} (-128z^7 + 1984z^6 - 8288z^5 + 8976z^4 - 840z^3 + 60z^2 - 54z + 225) + \frac{128}{225} e^{-z}\sqrt{\pi}(z^{15/2} - 16z^{13/2} + 72z^{11/2} - 96z^{9/2} + 24z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ael0.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} (-64z^6 - 736z^5 - 1968z^4 - 840z^3 + 60z^2 + 18z + 45) - \frac{64}{45} e^z\sqrt{\pi}(z^{13/2} + 12z^{11/2} + 36z^{9/2} + 24z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ael1.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{45} (-64z^6 + 736z^5 - 1968z^4 + 840z^3 + 60z^2 - 18z + 45) + \frac{64}{45} e^{-z}\sqrt{\pi}(z^{13/2} - 12z^{11/2} + 36z^{9/2} - 24z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ael2.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} (32 z^5 + 240 z^4 + 280 z^3 - 60 z^2 + 18 z + 15) + \frac{32}{15} e^z \sqrt{\pi} (z^{11/2} + 8 z^{9/2} + 12 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ael3.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} (-32 z^5 + 240 z^4 - 280 z^3 - 60 z^2 - 18 z + 15) + \frac{32}{15} e^{-z} \sqrt{\pi} (z^{11/2} - 8 z^{9/2} + 12 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ael4.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} (-16 z^4 - 56 z^3 + 20 z^2 - 18 z + 15) - \frac{16}{15} e^z \sqrt{\pi} (z^{9/2} + 4 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ael5.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} (-16 z^4 + 56 z^3 + 20 z^2 + 18 z + 15) + \frac{16}{15} e^{-z} \sqrt{\pi} (z^{9/2} - 4 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ael6.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, 1; z\right) = -\frac{1}{15} e^z (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15)$$

07.25.03.ael7.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15} (-8 z^3 + 4 z^2 - 6 z + 15) - \frac{8}{15} e^z \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.ael8.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} (8 z^3 + 4 z^2 + 6 z + 15) - \frac{8}{15} e^{-z} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.ael9.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^z (-16 z^4 + 32 z^3 - 72 z^2 + 120 z - 105)}{15 z} + \frac{7}{z}$$

07.25.03.aela.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-4 z^3 + 18 z^2 - 59 z + 192}{5 z} - \frac{1}{5 z^{3/2}} (4 e^z \sqrt{\pi} (z^4 - 4 z^3 + 12 z^2 - 24 z + 24) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aelb.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-4 z^3 - 18 z^2 - 59 z - 192}{5 z} + \frac{1}{5 z^{3/2}} (4 e^{-z} \sqrt{\pi} (z^4 + 4 z^3 + 12 z^2 + 24 z + 24) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aelc.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, 3; z\right) = \frac{14(z+9)}{z^2} - \frac{2 e^z (16 z^4 - 96 z^3 + 360 z^2 - 840 z + 945)}{15 z^2}$$

07.25.03.aeld.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-2 z^3 + 17 z^2 - 64 z + 480}{z^2} - \frac{1}{z^{5/2}} (2 e^z \sqrt{\pi} (z^4 - 8 z^3 + 36 z^2 - 96 z + 120) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aele.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{2 z^3 + 17 z^2 + 64 z + 480}{z^2} - \frac{1}{z^{5/2}} (2 e^{-z} \sqrt{\pi} (z^4 + 8 z^3 + 36 z^2 + 96 z + 120) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aelf.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, 4; z\right) = \frac{21(z^2 + 18z + 66)}{z^3} - \frac{1}{5z^3} (2e^z(16z^4 - 160z^3 + 840z^2 - 2520z + 3465))$$

07.25.03.aelg.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(z^3 - 16z^2 - 720)}{z^3} - \frac{1}{z^{7/2}} (7e^z\sqrt{\pi}(z^4 - 12z^3 + 72z^2 - 240z + 360)\operatorname{erf}(\sqrt{z}))$$

07.25.03.aelh.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{z^{7/2}} (7e^{-z}\sqrt{\pi}(z^4 + 12z^3 + 72z^2 + 240z + 360)\operatorname{erfi}(\sqrt{z})) - \frac{7(z^3 + 16z^2 + 720)}{z^3}$$

07.25.03.aeli.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, 5; z\right) = \frac{28(5z^3 + 135z^2 + 990z + 2574)}{5z^4} - \frac{1}{5z^4} (8e^z(16z^4 - 224z^3 + 1512z^2 - 5544z + 9009))$$

07.25.03.aelj.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{504(3z^2 + 10z + 105)}{z^4} - \frac{1}{2z^{9/2}} (63e^z\sqrt{\pi}(z^4 - 16z^3 + 120z^2 - 480z + 840)\operatorname{erf}(\sqrt{z}))$$

07.25.03.aelk.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{504(3z^2 - 10z + 105)}{z^4} - \frac{1}{2z^{9/2}} (63e^{-z}\sqrt{\pi}(z^4 + 16z^3 + 120z^2 + 480z + 840)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aell.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{5}{2}, 6; z\right) = \frac{1}{z^5} (35z^4 + 1260z^3 + 13860z^2 + 72072z + 154440) - \frac{1}{z^5} (8e^z(16z^4 - 288z^3 + 2376z^2 - 10296z + 19305))$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = -\frac{3}{2}$

07.25.03.aelm.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} (32z^5 + 272z^4 + 456z^3 + 60z^2 + 6z + 9) + \frac{32}{9} e^z\sqrt{\pi}(z^{11/2} + 9z^{9/2} + 18z^{7/2} + 6z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aeln.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9} (-32z^5 + 272z^4 - 456z^3 + 60z^2 - 6z + 9) + \frac{32}{9} e^{-z}\sqrt{\pi}(z^{11/2} - 9z^{9/2} + 18z^{7/2} - 6z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aelo.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} (-16z^4 - 88z^3 - 60z^2 + 6z + 3) - \frac{16}{3} e^z\sqrt{\pi}(z^{9/2} + 6z^{7/2} + 6z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aelp.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} (-16z^4 + 88z^3 - 60z^2 - 6z + 3) + \frac{16}{3} e^{-z}\sqrt{\pi}(z^{9/2} - 6z^{7/2} + 6z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aelq.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} (8z^3 + 20z^2 - 6z + 3) + \frac{8}{3} e^z\sqrt{\pi}(z^{7/2} + 3z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aelr.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3}(-8z^3 + 20z^2 + 6z + 3) + \frac{8}{3}e^{-z}\sqrt{\pi}(z^{7/2} - 3z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aels.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{3}e^z(8z^3 + 12z^2 - 6z + 3)$$

07.25.03.aelt.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{4}{3}e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{5/2} + \frac{1}{3}(4z^2 - 2z + 3)$$

07.25.03.aelu.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{3}(4z^2 + 2z + 3) - \frac{4}{3}e^{-z}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.aelv.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^z(8z^3 - 12z^2 + 18z - 15)}{3z} + \frac{5}{z}$$

07.25.03.aelw.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{2z^2 - 7z + 24}{z} + \frac{2e^z\sqrt{\pi}(z^3 - 3z^2 + 6z - 6)\operatorname{erf}(\sqrt{z})}{z^{3/2}}$$

07.25.03.aelx.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-2z^2 - 7z - 24}{z} + \frac{2e^{-z}\sqrt{\pi}(z^3 + 3z^2 + 6z + 6)\operatorname{erfi}(\sqrt{z})}{z^{3/2}}$$

07.25.03.aely.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, 3; z\right) = \frac{10(z + 7)}{z^2} + \frac{2e^z(8z^3 - 36z^2 + 90z - 105)}{3z^2}$$

07.25.03.aelz.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(z^2 - 4z + 48)}{z^2} + \frac{5e^z\sqrt{\pi}(z^3 - 6z^2 + 18z - 24)\operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aem0.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(z^2 + 4z + 48)}{z^2} - \frac{5e^{-z}\sqrt{\pi}(z^3 + 6z^2 + 18z + 24)\operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aem1.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, 4; z\right) = \frac{15(z^2 + 14z + 42)}{z^3} + \frac{2e^z(8z^3 - 60z^2 + 210z - 315)}{z^3}$$

07.25.03.aem2.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(z^2 + 4z + 60)}{z^3} + \frac{35e^z\sqrt{\pi}(z^3 - 9z^2 + 36z - 60)\operatorname{erf}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.aem3.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(z^3 + 9z^2 + 36z + 60)\operatorname{erfi}(\sqrt{z})}{2z^{7/2}} - \frac{35(z^2 - 4z + 60)}{z^3}$$

07.25.03.aem4.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, 5; z\right) = \frac{4(5z^3 + 105z^2 + 630z + 1386)}{z^4} + \frac{8e^z(8z^3 - 84z^2 + 378z - 693)}{z^4}$$

07.25.03.aem5.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{45(z^3 + 28z^2 + 140z + 840)}{2z^4} + \frac{1}{4z^{9/2}}(315e^z\sqrt{\pi}(z^3 - 12z^2 + 60z - 120)\operatorname{erf}(\sqrt{z}))$$

07.25.03.aem6.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = -\frac{45(z^3 - 28z^2 + 140z - 840)}{2z^4} - \frac{1}{4z^{9/2}}(315e^{-z}\sqrt{\pi}(z^3 + 12z^2 + 60z + 120)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aem7.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{3}{2}, 6; z\right) = \frac{40e^z(8z^3 - 108z^2 + 594z - 1287)}{z^5} + \frac{1}{z^5}(5(5z^4 + 140z^3 + 1260z^2 + 5544z + 10296))$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = -\frac{1}{2}$

07.25.03.aem8.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = 8z^3 + 28z^2 + 6z + 8e^z\sqrt{\pi}(z^{7/2} + 4z^{5/2} + 2z^{3/2})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.aem9.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = -8z^3 + 28z^2 - 6z + 8e^{-z}\sqrt{\pi}(z^{7/2} - 4z^{5/2} + 2z^{3/2})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.aema.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -4z^2 - 6z - 4e^z\sqrt{\pi}(z^{5/2} + 2z^{3/2})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.aemb.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = -4z^2 + 6z + 4e^{-z}\sqrt{\pi}(z^{5/2} - 2z^{3/2})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.aemc.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, 1; z\right) = -e^z(4z^2 + 4z - 1)$$

07.25.03.aemd.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -2e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{3/2} - 2z + 1$$

07.25.03.aeme.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = -2e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{3/2} + 2z + 1$$

07.25.03.aemf.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^z(-4z^2 + 4z - 3)}{z} + \frac{3}{z}$$

07.25.03.aemg.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{3(z-4)}{z} - \frac{3e^z\sqrt{\pi}(z^2 - 2z + 2)\operatorname{erf}(\sqrt{z})}{z^{3/2}}$$

07.25.03.aemh.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (z^2 + 2z + 2) \operatorname{erfi}(\sqrt{z})}{z^{3/2}} - \frac{3(z+4)}{z}$$

07.25.03.aemi.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, 3; z\right) = \frac{6(z+5)}{z^2} - \frac{2 e^z (4z^2 - 12z + 15)}{z^2}$$

07.25.03.aemj.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{90}{z^2} - \frac{15 e^z \sqrt{\pi} (z^2 - 4z + 6) \operatorname{erf}(\sqrt{z})}{2 z^{5/2}}$$

07.25.03.aemk.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{90}{z^2} - \frac{15 e^{-z} \sqrt{\pi} (z^2 + 4z + 6) \operatorname{erfi}(\sqrt{z})}{2 z^{5/2}}$$

07.25.03.aeml.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, 4; z\right) = \frac{3(3z^2 + 30z + 70)}{z^3} - \frac{6 e^z (4z^2 - 20z + 35)}{z^3}$$

07.25.03.aemm.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{21(z^2 + 10z + 60)}{2 z^3} - \frac{105 e^z \sqrt{\pi} (z^2 - 6z + 12) \operatorname{erf}(\sqrt{z})}{4 z^{7/2}}$$

07.25.03.aemn.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105 e^{-z} \sqrt{\pi} (z^2 + 6z + 12) \operatorname{erfi}(\sqrt{z})}{4 z^{7/2}} - \frac{21(z^2 - 10z + 60)}{2 z^3}$$

07.25.03.aemo.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, 5; z\right) = \frac{12(z^3 + 15z^2 + 70z + 126)}{z^4} - \frac{24 e^z (4z^2 - 28z + 63)}{z^4}$$

07.25.03.aemp.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{9(6z^3 + 105z^2 + 560z + 2100)}{4 z^4} - \frac{945 e^z \sqrt{\pi} (z^2 - 8z + 20) \operatorname{erf}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.aemq.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{9(6z^3 - 105z^2 + 560z - 2100)}{4 z^4} - \frac{945 e^{-z} \sqrt{\pi} (z^2 + 8z + 20) \operatorname{erfi}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.aemr.01

$${}_2F_2\left(1, \frac{3}{2}; -\frac{1}{2}, 6; z\right) = \frac{15(z^4 + 20z^3 + 140z^2 + 504z + 792)}{z^5} - \frac{120 e^z (4z^2 - 36z + 99)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = \frac{1}{2}$

07.25.03.0079.01

$${}_2F_2\left(1, \frac{3}{2}, \frac{1}{2}, \frac{1}{2}; z\right) = 2z + 2 e^z \sqrt{\pi} (z+1) \operatorname{erf}(\sqrt{z}) \sqrt{z} + 1$$

07.25.03.aems.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = -2z + 2e^{-z}\sqrt{\pi}(z^{3/2} - \sqrt{z})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.aemt.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, 1; z\right) = e^z(2z + 1)$$

07.25.03.aemu.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = e^z\sqrt{\pi}\sqrt{z}\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.aemv.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = 1 - e^{-z}\sqrt{\pi}\sqrt{z}\operatorname{erfi}(\sqrt{z})$$

07.25.03.0080.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, 2; z\right) = \frac{e^z(2z - 1) + 1}{z}$$

07.25.03.0081.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{2z^{3/2}}(3e^z\sqrt{\pi}(z - 1)\operatorname{erf}(\sqrt{z}) + 6\sqrt{z})$$

07.25.03.aemw.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3e^{-z}\sqrt{\pi}(z + 1)\operatorname{erfi}(\sqrt{z})}{2z^{3/2}} - \frac{3}{z}$$

07.25.03.0082.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, 3; z\right) = \frac{2}{z^2}(z + e^z(2z - 3) + 3)$$

07.25.03.aemx.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5(z + 6)}{2z^2} + \frac{15e^z\sqrt{\pi}(z - 2)\operatorname{erf}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.aemy.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = -\frac{5(z - 6)}{2z^2} - \frac{15e^{-z}\sqrt{\pi}(z + 2)\operatorname{erfi}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.aemz.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, 4; z\right) = \frac{6e^z(2z - 5)}{z^3} + \frac{3(z^2 + 6z + 10)}{z^3}$$

07.25.03.aen0.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7(2z^2 + 15z + 45)}{4z^3} + \frac{105e^z\sqrt{\pi}(z - 3)\operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.aen1.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105e^{-z}\sqrt{\pi}(z + 3)\operatorname{erfi}(\sqrt{z})}{8z^{7/2}} - \frac{7(2z^2 - 15z + 45)}{4z^3}$$

07.25.03.aen2.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, 5; z\right) = \frac{24 e^z (2z - 7)}{z^4} + \frac{4(z^3 + 9z^2 + 30z + 42)}{z^4}$$

07.25.03.aen3.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{9(4z^3 + 42z^2 + 175z + 420)}{8z^4} + \frac{945 e^z \sqrt{\pi} (z - 4) \operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.aen4.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{9(4z^3 - 42z^2 + 175z - 420)}{8z^4} - \frac{945 e^{-z} \sqrt{\pi} (z + 4) \operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.aen5.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{1}{2}, 6; z\right) = \frac{120 e^z (2z - 9)}{z^5} + \frac{5(z^4 + 12z^3 + 60z^2 + 168z + 216)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = 1$

07.25.03.aen6.01

$${}_2F_2\left(1, \frac{3}{2}; 1, 1; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.aen7.01

$${}_2F_2\left(1, \frac{3}{2}; 1, \frac{3}{2}; z\right) = e^z$$

07.25.03.aen8.01

$${}_2F_2\left(1, \frac{3}{2}; 1, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.aen9.01

$${}_2F_2\left(1, \frac{3}{2}; 1, \frac{5}{2}; z\right) = \frac{3 e^z}{2z} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.aena.01

$${}_2F_2\left(1, \frac{3}{2}; 1, \frac{5}{2}; -z\right) = \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3 e^{-z}}{2z}$$

07.25.03.aenb.01

$${}_2F_2\left(1, \frac{3}{2}; 1, 3; z\right) = \frac{4 e^{z/2} I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.aenc.01

$${}_2F_2\left(1, \frac{3}{2}; 1, \frac{7}{2}; z\right) = \frac{45 e^z}{8z^2} - \frac{15 \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.aend.01

$${}_2F_2\left(1, \frac{3}{2}; 1, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45 e^{-z}}{8z^2}$$

07.25.03.aene.01

$${}_2F_2\left(1, \frac{3}{2}; 1, 4; z\right) = \frac{4 e^{z/2} (z+4) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.aenf.01

$${}_2F_2\left(1, \frac{3}{2}; 1, \frac{9}{2}; z\right) = \frac{105 e^z (2z+15)}{64 z^3} - \frac{105 \sqrt{\pi} (4z^2+12z+15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.aeng.01

$${}_2F_2\left(1, \frac{3}{2}; 1, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (2z-15)}{64 z^3} + \frac{105 \sqrt{\pi} (4z^2-12z+15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.aenh.01

$${}_2F_2\left(1, \frac{3}{2}; 1, 5; z\right) = \frac{32 e^{z/2} (z^2+4z+12) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{32 e^{z/2} (z+3) I_0\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.aeni.01

$${}_2F_2\left(1, \frac{3}{2}; 1, \frac{11}{2}; z\right) = \frac{315 e^z (4z^2+20z+105)}{256 z^4} - \frac{1}{512 z^{9/2}} (315 \sqrt{\pi} (8z^3+36z^2+90z+105) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aenj.01

$${}_2F_2\left(1, \frac{3}{2}; 1, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2-20z+105)}{256 z^4} + \frac{315 \sqrt{\pi} (8z^3-36z^2+90z-105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.aenk.01

$${}_2F_2\left(1, \frac{3}{2}; 1, 6; z\right) = \frac{32 e^{z/2} (2z^3+11z^2+36z+96) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{32 e^{z/2} (2z^2+9z+24) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = \frac{3}{2}$

07.25.03.aeni.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.aenm.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.aenn.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{3}{2}, 2; z\right) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.aeno.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3}{2z}$$

07.25.03.aenp.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{3}{2z} - \frac{3e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.aenq.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{3}{2}, 3; z\right) = \frac{2e^z}{z^2} - \frac{2(z+1)}{z^2}$$

07.25.03.aenr.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{15e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5(2z+3)}{4z^2}$$

07.25.03.aens.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(2z-3)}{4z^2} + \frac{15e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.aent.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{3}{2}, 4; z\right) = \frac{6e^z}{z^3} - \frac{3(z^2+2z+2)}{z^3}$$

07.25.03.aenu.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{105e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{7(4z^2+10z+15)}{8z^3}$$

07.25.03.aenv.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7(4z^2-10z+15)}{8z^3} - \frac{105e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.aenw.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{3}{2}, 5; z\right) = \frac{24e^z}{z^4} - \frac{4(z^3+3z^2+6z+6)}{z^4}$$

07.25.03.aenx.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{945e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{32z^{9/2}} - \frac{9(8z^3+28z^2+70z+105)}{16z^4}$$

07.25.03.aeny.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{9(8z^3-28z^2+70z-105)}{16z^4} + \frac{945e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.aenz.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{3}{2}, 6; z\right) = \frac{120e^z}{z^5} - \frac{5(z^4+4z^3+12z^2+24z+24)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = 2$

07.25.03.0083.01

$${}_2F_2\left(1, \frac{3}{2}; 2, 2; z\right) = \frac{2}{z}\left(e^{z/2}I_0\left(\frac{z}{2}\right) - 1\right)$$

07.25.03.0084.01

$${}_2F_2\left(1, \frac{3}{2}; 2, \frac{5}{2}; z\right) = \frac{3\sqrt{\pi}}{2z^{3/2}} \operatorname{erfi}(\sqrt{z}) - \frac{3}{z}$$

07.25.03.aeo0.01

$${}_2F_2\left(1, \frac{3}{2}; 2, \frac{5}{2}; -z\right) = \frac{3}{z} - \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2z^{3/2}}$$

07.25.03.0085.01

$${}_2F_2\left(1, \frac{3}{2}; 2, 3; z\right) = \frac{4}{z} \left(e^{z/2} I_0\left(\frac{z}{2}\right) - e^{z/2} I_1\left(\frac{z}{2}\right) - 1 \right)$$

07.25.03.aeo1.01

$${}_2F_2\left(1, \frac{3}{2}; 2, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi}(2z+1)\operatorname{erfi}(\sqrt{z})}{8z^{5/2}} - \frac{5}{z} - \frac{15e^z}{4z^2}$$

07.25.03.aeo2.01

$${}_2F_2\left(1, \frac{3}{2}; 2, \frac{7}{2}; -z\right) = -\frac{15\sqrt{\pi}(2z-1)\operatorname{erf}(\sqrt{z})}{8z^{5/2}} + \frac{5}{z} - \frac{15e^{-z}}{4z^2}$$

07.25.03.aeo3.01

$${}_2F_2\left(1, \frac{3}{2}; 2, 4; z\right) = \frac{8e^{z/2}I_0\left(\frac{z}{2}\right)}{z} - \frac{8e^{z/2}(z+1)I_1\left(\frac{z}{2}\right)}{z^2} - \frac{6}{z}$$

07.25.03.aeo4.01

$${}_2F_2\left(1, \frac{3}{2}; 2, \frac{9}{2}; z\right) = -\frac{105e^z(2z+3)}{32z^3} + \frac{105\sqrt{\pi}(4z^2+4z+3)\operatorname{erfi}(\sqrt{z})}{64z^{7/2}} - \frac{7}{z}$$

07.25.03.aeo5.01

$${}_2F_2\left(1, \frac{3}{2}; 2, \frac{9}{2}; -z\right) = -\frac{105e^{-z}(2z-3)}{32z^3} - \frac{105\sqrt{\pi}(4z^2-4z+3)\operatorname{erf}(\sqrt{z})}{64z^{7/2}} + \frac{7}{z}$$

07.25.03.aeo6.01

$${}_2F_2\left(1, \frac{3}{2}; 2, 5; z\right) = \frac{32e^{z/2}(2z+1)I_0\left(\frac{z}{2}\right)}{5z^2} - \frac{32e^{z/2}(2z^2+3z+4)I_1\left(\frac{z}{2}\right)}{5z^3} - \frac{8}{z}$$

07.25.03.aeo7.01

$${}_2F_2\left(1, \frac{3}{2}; 2, \frac{11}{2}; z\right) = -\frac{315e^z(4z^2+8z+15)}{128z^4} + \frac{315\sqrt{\pi}(8z^3+12z^2+18z+15)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}} - \frac{9}{z}$$

07.25.03.aeo8.01

$${}_2F_2\left(1, \frac{3}{2}; 2, \frac{11}{2}; -z\right) = -\frac{315e^{-z}(4z^2-8z+15)}{128z^4} - \frac{315\sqrt{\pi}(8z^3-12z^2+18z-15)\operatorname{erf}(\sqrt{z})}{256z^{9/2}} + \frac{9}{z}$$

07.25.03.aeo9.01

$${}_2F_2\left(1, \frac{3}{2}; 2, 6; z\right) = \frac{64e^{z/2}(2z^2+2z+3)I_0\left(\frac{z}{2}\right)}{7z^3} - \frac{128e^{z/2}(z^3+2z^2+4z+6)I_1\left(\frac{z}{2}\right)}{7z^4} - \frac{10}{z}$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = \frac{5}{2}$

07.25.03.0086.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{5}{2}, 3; z\right) = -\frac{6}{z^2} \left(z - \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) \sqrt{z} + e^z - 1\right)$$

07.25.03.aeoa.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{5}{2}, 3; -z\right) = \frac{6(z+1)}{z^2} - \frac{6\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{3/2}} - \frac{6e^{-z}}{z^2}$$

07.25.03.aeob.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{5}{2}, 4; z\right) = -\frac{6e^z(2z+1)}{z^3} - \frac{3(3z^2-6z-2)}{z^3} + \frac{12\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{3/2}}$$

07.25.03.aeoc.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{5}{2}, 4; -z\right) = -\frac{6e^{-z}(2z-1)}{z^3} + \frac{3(3z^2+6z-2)}{z^3} - \frac{12\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{3/2}}$$

07.25.03.aeod.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{5}{2}, 5; z\right) = -\frac{24e^z(4z^2+2z+3)}{5z^4} - \frac{12(5z^3-15z^2-10z-6)}{5z^4} + \frac{96\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.aeoe.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{5}{2}, 5; -z\right) = -\frac{24e^{-z}(4z^2-2z+3)}{5z^4} + \frac{12(5z^3+15z^2-10z+6)}{5z^4} - \frac{96\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.aeof.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{5}{2}, 6; z\right) = -\frac{24e^z(8z^3+4z^2+6z+15)}{7z^5} - \frac{3(35z^4-140z^3-140z^2-168z-120)}{7z^5} + \frac{192\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7z^{3/2}}$$

07.25.03.aeog.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{5}{2}, 6; -z\right) = -\frac{24e^{-z}(8z^3-4z^2+6z-15)}{7z^5} + \frac{3(35z^4+140z^3-140z^2+168z-120)}{7z^5} - \frac{192\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7z^{3/2}}$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = 3$

07.25.03.0087.01

$${}_2F_2\left(1, \frac{3}{2}; 3, 3; z\right) = \frac{8}{z^2} \left(-2e^{z/2} I_1\left(\frac{z}{2}\right) z - z + 2e^{z/2} (z-1) I_0\left(\frac{z}{2}\right) + 2\right)$$

07.25.03.aeoh.01

$${}_2F_2\left(1, \frac{3}{2}; 3, \frac{7}{2}; z\right) = -\frac{10(z-3)}{z^2} + \frac{15\sqrt{\pi} (2z-1) \operatorname{erfi}(\sqrt{z})}{2z^{5/2}} - \frac{15e^z}{z^2}$$

07.25.03.aeoi.01

$${}_2F_2\left(1, \frac{3}{2}; 3, \frac{7}{2}; -z\right) = \frac{10(z+3)}{z^2} - \frac{15\sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{2z^{5/2}} - \frac{15e^{-z}}{z^2}$$

07.25.03.aeoj.01

$${}_2F_2\left(1, \frac{3}{2}; 3, 4; z\right) = -\frac{12(z-4)}{z^2} + \frac{16e^{z/2}(2z-3)I_0\left(\frac{z}{2}\right)}{z^2} - \frac{16e^{z/2}(2z-1)I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.aeok.01

$${}_2F_2\left(1, \frac{3}{2}; 3, \frac{9}{2}; z\right) = -\frac{14(z-5)}{z^2} - \frac{105e^z(2z-1)}{8z^3} + \frac{105\sqrt{\pi}(4z^2-4z-1)\operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.aeol.01

$${}_2F_2\left(1, \frac{3}{2}; 3, \frac{9}{2}; -z\right) = \frac{14(z+5)}{z^2} - \frac{105e^{-z}(2z+1)}{8z^3} - \frac{105\sqrt{\pi}(4z^2+4z-1)\operatorname{erf}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.aeom.01

$${}_2F_2\left(1, \frac{3}{2}; 3, 5; z\right) = -\frac{16(z-6)}{z^2} + \frac{256e^{z/2}(z-2)I_0\left(\frac{z}{2}\right)}{5z^2} - \frac{128e^{z/2}(2z^2-2z-1)I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.aeon.01

$${}_2F_2\left(1, \frac{3}{2}; 3, \frac{11}{2}; z\right) = -\frac{18(z-7)}{z^2} - \frac{315e^z(4z^2-4z-3)}{32z^4} + \frac{315\sqrt{\pi}(8z^3-12z^2-6z-3)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.aeoo.01

$${}_2F_2\left(1, \frac{3}{2}; 3, \frac{11}{2}; -z\right) = \frac{18(z+7)}{z^2} - \frac{315e^{-z}(4z^2+4z-3)}{32z^4} - \frac{315\sqrt{\pi}(8z^3+12z^2-6z+3)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.aeop.01

$${}_2F_2\left(1, \frac{3}{2}; 3, 6; z\right) = -\frac{20(z-8)}{z^2} + \frac{128e^{z/2}(4z^2-10z-1)I_0\left(\frac{z}{2}\right)}{7z^3} - \frac{128e^{z/2}(4z^3-6z^2-5z-4)I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = \frac{7}{2}$

07.25.03.aeoo.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{7}{2}, 4; z\right) = -\frac{30e^z(z-1)}{z^3} - \frac{15(z^2-6z+2)}{z^3} + \frac{15\sqrt{\pi}(2z-3)\operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aeor.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{7}{2}, 4; -z\right) = -\frac{30e^{-z}(z+1)}{z^3} + \frac{15(z^2+6z+2)}{z^3} - \frac{15\sqrt{\pi}(2z+3)\operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aeos.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{7}{2}, 5; z\right) = -\frac{24e^z(2z^2-4z-1)}{z^4} - \frac{4(5z^3-45z^2+30z+6)}{z^4} + \frac{24\sqrt{\pi}(2z-5)\operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aeot.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{7}{2}, 5; -z\right) = -\frac{24e^{-z}(2z^2+4z-1)}{z^4} + \frac{4(5z^3+45z^2+30z-6)}{z^4} - \frac{24\sqrt{\pi}(2z+5)\operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aeou.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{7}{2}, 6; z\right) = -\frac{120 e^z (4 z^3 - 12 z^2 - 4 z - 3)}{7 z^5} - \frac{5 (35 z^4 - 420 z^3 + 420 z^2 + 168 z + 72)}{7 z^5} + \frac{240 \sqrt{\pi} (2 z - 7) \operatorname{erfi}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.aeov.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{7}{2}, 6; -z\right) = -\frac{120 e^{-z} (4 z^3 + 12 z^2 - 4 z + 3)}{7 z^5} + \frac{5 (35 z^4 + 420 z^3 + 420 z^2 - 168 z + 72)}{7 z^5} - \frac{240 \sqrt{\pi} (2 z + 7) \operatorname{erf}(\sqrt{z})}{7 z^{5/2}}$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = 4$

07.25.03.aeow.01

$${}_2F_2\left(1, \frac{3}{2}; 4, 4; z\right) = -\frac{6 (3 z^2 - 24 z + 16)}{z^3} + \frac{32 e^{z/2} (2 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{64 e^{z/2} (z - 2) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.aeox.01

$${}_2F_2\left(1, \frac{3}{2}; 4, \frac{9}{2}; z\right) = -\frac{105 e^z (2 z - 5)}{4 z^3} - \frac{21 (z^2 - 10 z + 10)}{z^3} + \frac{105 \sqrt{\pi} (4 z^2 - 12 z + 3) \operatorname{erfi}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.aeoy.01

$${}_2F_2\left(1, \frac{3}{2}; 4, \frac{9}{2}; -z\right) = -\frac{105 e^{-z} (2 z + 5)}{4 z^3} + \frac{21 (z^2 + 10 z + 10)}{z^3} - \frac{105 \sqrt{\pi} (4 z^2 + 12 z + 3) \operatorname{erf}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.aeoz.01

$${}_2F_2\left(1, \frac{3}{2}; 4, 5; z\right) = -\frac{24 (z^2 - 12 z + 16)}{z^3} + \frac{128 e^{z/2} (4 z^2 - 18 z + 15) I_0\left(\frac{z}{2}\right)}{5 z^3} - \frac{128 e^{z/2} (4 z^2 - 14 z + 3) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.aep0.01

$${}_2F_2\left(1, \frac{3}{2}; 4, \frac{11}{2}; z\right) = -\frac{9 (3 z^2 - 42 z + 70)}{z^3} - \frac{315 e^z (4 z^2 - 16 z + 3)}{16 z^4} + \frac{315 \sqrt{\pi} (8 z^3 - 36 z^2 + 18 z + 3) \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.aep1.01

$${}_2F_2\left(1, \frac{3}{2}; 4, \frac{11}{2}; -z\right) = \frac{9 (3 z^2 + 42 z + 70)}{z^3} - \frac{315 e^{-z} (4 z^2 + 16 z + 3)}{16 z^4} - \frac{315 \sqrt{\pi} (8 z^3 + 36 z^2 + 18 z - 3) \operatorname{erf}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.aep2.01

$${}_2F_2\left(1, \frac{3}{2}; 4, 6; z\right) = -\frac{30 (z^2 - 16 z + 32)}{z^3} + \frac{256 e^{z/2} (4 z^2 - 24 z + 27) I_0\left(\frac{z}{2}\right)}{7 z^3} - \frac{256 e^{z/2} (4 z^3 - 20 z^2 + 9 z + 3) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = \frac{9}{2}$

07.25.03.aep3.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{9}{2}, 5; z\right) = -\frac{42 e^z (2 z^2 - 9 z + 4)}{z^4} - \frac{28 (z^3 - 15 z^2 + 30 z - 6)}{z^4} + \frac{21 \sqrt{\pi} (4 z^2 - 20 z + 15) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aep4.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{9}{2}, 5; -z\right) = -\frac{42 e^{-z} (2 z^2 + 9 z + 4)}{z^4} + \frac{28 (z^3 + 15 z^2 + 30 z + 6)}{z^4} - \frac{21 \sqrt{\pi} (4 z^2 + 20 z + 15) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aep5.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{9}{2}, 6; z\right) = -\frac{60 e^z (2 z^3 - 13 z^2 + 12 z + 2)}{z^5} - \frac{5 (7 z^4 - 140 z^3 + 420 z^2 - 168 z - 24)}{z^5} + \frac{30 \sqrt{\pi} (4 z^2 - 28 z + 35) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aep6.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{9}{2}, 6; -z\right) = -\frac{60 e^{-z} (2 z^3 + 13 z^2 + 12 z - 2)}{z^5} + \frac{5 (7 z^4 + 140 z^3 + 420 z^2 + 168 z - 24)}{z^5} - \frac{30 \sqrt{\pi} (4 z^2 + 28 z + 35) \operatorname{erf}(\sqrt{-z})}{z^{7/2}}$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = 5$

07.25.03.aep7.01

$${}_2F_2\left(1, \frac{3}{2}; 5, 5; z\right) = -\frac{32 (5 z^3 - 90 z^2 + 240 z - 96)}{5 z^4} + \frac{1024 e^{z/2} (4 z^3 - 28 z^2 + 45 z - 15) I_0\left(\frac{z}{2}\right)}{25 z^4} - \frac{1024 e^{z/2} (4 z^2 - 24 z + 23) I_1\left(\frac{z}{2}\right)}{25 z^3}$$

07.25.03.aep8.01

$${}_2F_2\left(1, \frac{3}{2}; 5, \frac{11}{2}; z\right) = -\frac{63 e^z (4 z^2 - 28 z + 33)}{2 z^4} - \frac{36 (z^3 - 21 z^2 + 70 z - 42)}{z^4} + \frac{63 \sqrt{\pi} (8 z^3 - 60 z^2 + 90 z - 15) \operatorname{erfi}(\sqrt{z})}{4 z^{9/2}}$$

07.25.03.aep9.01

$${}_2F_2\left(1, \frac{3}{2}; 5, \frac{11}{2}; -z\right) = -\frac{63 e^{-z} (4 z^2 + 28 z + 33)}{2 z^4} + \frac{36 (z^3 + 21 z^2 + 70 z + 42)}{z^4} - \frac{63 \sqrt{\pi} (8 z^3 + 60 z^2 + 90 z + 15) \operatorname{erf}(\sqrt{-z})}{4 z^{9/2}}$$

07.25.03.aepa.01

$${}_2F_2\left(1, \frac{3}{2}; 5, 6; z\right) = -\frac{8 (5 z^3 - 120 z^2 + 480 z - 384)}{z^4} + \frac{1024 e^{z/2} (8 z^3 - 76 z^2 + 180 z - 105) I_0\left(\frac{z}{2}\right)}{35 z^4} - \frac{1024 e^{z/2} (8 z^3 - 68 z^2 + 116 z - 15) I_1\left(\frac{z}{2}\right)}{35 z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = \frac{11}{2}$

07.25.03.aepb.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{11}{2}, 6; z\right) = -\frac{45 e^z (4 z^3 - 40 z^2 + 87 z - 24)}{z^5} - \frac{45 (z^4 - 28 z^3 + 140 z^2 - 168 z + 24)}{z^5} + \frac{1}{2 z^{9/2}} (45 \sqrt{\pi} (8 z^3 - 84 z^2 + 210 z - 105) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aepc.01

$${}_2F_2\left(1, \frac{3}{2}; \frac{11}{2}, 6; -z\right) = -\frac{45 e^{-z} (4 z^3 + 40 z^2 + 87 z + 24)}{z^5} + \frac{45 (z^4 + 28 z^3 + 140 z^2 + 168 z + 24)}{z^5} - \frac{45 \sqrt{\pi} (8 z^3 + 84 z^2 + 210 z + 105) \operatorname{erf}(\sqrt{z})}{2 z^{9/2}}$$

For fixed z and $a_1 = 1, a_2 = \frac{3}{2}, b_1 = 6$

07.25.03.aepd.01

$${}_2F_2\left(1, \frac{3}{2}; 6, 6; z\right) = -\frac{1}{7 z^5} (10 (35 z^4 - 1120 z^3 + 6720 z^2 - 10752 z + 3072)) + \frac{1}{49 z^5} (2048 e^{z/2} (8 z^4 - 104 z^3 + 376 z^2 - 420 z + 105) I_0\left(\frac{z}{2}\right)) - \frac{8192 e^{z/2} (2 z^3 - 24 z^2 + 71 z - 44) I_1\left(\frac{z}{2}\right)}{49 z^4}$$

For fixed z and $a_1 = 1, a_2 = 2, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 1, a_2 = 2, b_1 = -\frac{11}{2}$

07.25.03.aepe.01

$${}_2F_2\left(1, 2; -\frac{11}{2}, 1; z\right) = \frac{1}{10395} (64 z^7 + 448 z^6 - 192 z^5 + 240 z^4 - 480 z^3 + 1260 z^2 - 3780 z + 10395) + \frac{32 e^z \sqrt{\pi} (2 z^{15/2} + 15 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.aepf.01

$${}_2F_2\left(1, 2; -\frac{11}{2}, 1; -z\right) = \frac{1}{10395} (-64 z^7 + 448 z^6 + 192 z^5 + 240 z^4 + 480 z^3 + 1260 z^2 + 3780 z + 10395) + \frac{32 e^{-z} \sqrt{\pi} (2 z^{15/2} - 15 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.aepg.01

$${}_2F_2\left(1, 2; -\frac{11}{2}, 2; z\right) = \frac{64 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{1}{10395} (64 z^6 - 32 z^5 + 48 z^4 - 120 z^3 + 420 z^2 - 1890 z + 10395)$$

07.25.03.aeph.01

$${}_2F_2\left(1, 2; -\frac{11}{2}, 2; -z\right) = \frac{1}{10395} (64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 + 1890 z + 10395) - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} \operatorname{erfi}(\sqrt{z})}{10395}$$

For fixed z and $a_1 = 1, a_2 = 2, b_1 = -\frac{9}{2}$

07.25.03.aepi.01

$${}_2F_2\left(1, 2; -\frac{9}{2}, 1; z\right) = \frac{1}{945} (-32 z^6 - 192 z^5 + 80 z^4 - 96 z^3 + 180 z^2 - 420 z + 945) - \frac{16}{945} e^z \sqrt{\pi} (2 z^{13/2} + 13 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aepj.01

$${}_2F_2\left(1, 2; -\frac{9}{2}, 1; -z\right) = \frac{1}{945} (-32z^6 + 192z^5 + 80z^4 + 96z^3 + 180z^2 + 420z + 945) + \frac{16}{945} e^{-z} \sqrt{\pi} (2z^{13/2} - 13z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aepk.01

$${}_2F_2\left(1, 2; -\frac{9}{2}, 2; z\right) = \frac{1}{945} (-32z^5 + 16z^4 - 24z^3 + 60z^2 - 210z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aepl.01

$${}_2F_2\left(1, 2; -\frac{9}{2}, 2; -z\right) = \frac{1}{945} (32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 2, b_1 = -\frac{7}{2}$

07.25.03.aepm.01

$${}_2F_2\left(1, 2; -\frac{7}{2}, 1; z\right) = \frac{1}{105} (16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105) + \frac{8}{105} e^z \sqrt{\pi} (2z^{11/2} + 11z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aepn.01

$${}_2F_2\left(1, 2; -\frac{7}{2}, 1; -z\right) = \frac{1}{105} (-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105) + \frac{8}{105} e^{-z} \sqrt{\pi} (2z^{11/2} - 11z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aepo.01

$${}_2F_2\left(1, 2; -\frac{7}{2}, 2; z\right) = \frac{16}{105} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

07.25.03.aepp.01

$${}_2F_2\left(1, 2; -\frac{7}{2}, 2; -z\right) = \frac{1}{105} (16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 2, b_1 = -\frac{5}{2}$

07.25.03.aepq.01

$${}_2F_2\left(1, 2; -\frac{5}{2}, 1; z\right) = \frac{1}{15} (-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15} e^z \sqrt{\pi} (2z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aepr.01

$${}_2F_2\left(1, 2; -\frac{5}{2}, 1; -z\right) = \frac{1}{15} (-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15} e^{-z} \sqrt{\pi} (2z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aeps.01

$${}_2F_2\left(1, 2; -\frac{5}{2}, 2; z\right) = \frac{1}{15} (-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15} e^z \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aept.01

$${}_2F_2\left(1, 2; -\frac{5}{2}, 2; -z\right) = \frac{1}{15} (8z^3 + 4z^2 + 6z + 15) - \frac{8}{15} e^{-z} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 2, b_1 = -\frac{3}{2}$

07.25.03.aepu.01

$${}_2F_2\left(1, 2; -\frac{3}{2}, 1; z\right) = \frac{1}{3} (4z^3 + 12z^2 - 4z + 3) + \frac{2}{3} e^z \sqrt{\pi} (2z^{7/2} + 7z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aepv.01

$${}_2F_2\left(1, 2; -\frac{3}{2}, 1; -z\right) = \frac{1}{3} (-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3} e^{-z} \sqrt{\pi} (2z^{7/2} - 7z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aepw.01

$${}_2F_2\left(1, 2; -\frac{3}{2}, 2; z\right) = \frac{4}{3} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (4z^2 - 2z + 3)$$

07.25.03.aepx.01

$${}_2F_2\left(1, 2; -\frac{3}{2}, 2; -z\right) = \frac{1}{3} (4z^2 + 2z + 3) - \frac{4}{3} e^{-z} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 2, b_1 = -\frac{1}{2}$

07.25.03.aepy.01

$${}_2F_2\left(1, 2; -\frac{1}{2}, 1; z\right) = -2z^2 - 4z + e^z \sqrt{\pi} (-2z^{5/2} - 5z^{3/2}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.aepz.01

$${}_2F_2\left(1, 2; -\frac{1}{2}, 1; -z\right) = -2z^2 + 4z + e^{-z} \sqrt{\pi} (2z^{5/2} - 5z^{3/2}) \operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.aeq0.01

$${}_2F_2\left(1, 2; -\frac{1}{2}, 2; z\right) = -2e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} - 2z + 1$$

07.25.03.aeq1.01

$${}_2F_2\left(1, 2; -\frac{1}{2}, 2; -z\right) = -2e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + 2z + 1$$

For fixed z and $a_1 = 1, a_2 = 2, b_1 = \frac{1}{2}$

07.25.03.aeq2.01

$${}_2F_2\left(1, 2; \frac{1}{2}, 1; z\right) = z + \frac{1}{2} e^z \sqrt{\pi} (2z^{3/2} + 3\sqrt{z}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.aeq3.01

$${}_2F_2\left(1, 2; \frac{1}{2}, 1; -z\right) = -z + \frac{1}{2} e^{-z} \sqrt{\pi} (2z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.aeq4.01

$${}_2F_2\left(1, 2; \frac{1}{2}, 2; z\right) = e^z \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.aeq5.01

$${}_2F_2\left(1, 2; \frac{1}{2}, 2; -z\right) = 1 - e^{-z} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 2, b_1 = 1$

07.25.03.aeq6.01

$${}_2F_2(1, 2; 1, 1; z) = e^z (z + 1)$$

07.25.03.aeq7.01

$${}_2F_2\left(1, 2; 1, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4 \sqrt{z}} + \frac{1}{2}$$

07.25.03.aeq8.01

$${}_2F_2\left(1, 2; 1, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4 \sqrt{z}} + \frac{1}{2}$$

07.25.03.aeq9.01

$${}_2F_2(1, 2; 1, 2; z) = e^z$$

07.25.03.aeqa.01

$${}_2F_2\left(1, 2; 1, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{8 z^{3/2}} + \frac{3}{4z}$$

07.25.03.aeqb.01

$${}_2F_2\left(1, 2; 1, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3}{4z}$$

07.25.03.aeqc.01

$${}_2F_2(1, 2; 1, 3; z) = \frac{2 e^z (z - 1)}{z^2} + \frac{2}{z^2}$$

07.25.03.aeqd.01

$${}_2F_2\left(1, 2; 1, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45}{8 z^2}$$

07.25.03.aeqe.01

$${}_2F_2\left(1, 2; 1, \frac{7}{2}; -z\right) = \frac{45}{8 z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.aeqf.01

$${}_2F_2(1, 2; 1, 4; z) = \frac{6 e^z (z - 2)}{z^3} + \frac{6(z + 2)}{z^3}$$

07.25.03.aeqg.01

$${}_2F_2\left(1, 2; 1, \frac{9}{2}; z\right) = \frac{35(4z + 15)}{16 z^3} + \frac{105 e^z \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.aeqh.01

$${}_2F_2\left(1, 2; 1, \frac{9}{2}; -z\right) = \frac{35(4z - 15)}{16 z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.aeqi.01

$${}_2F_2(1, 2; 1, 5; z) = \frac{24 e^z (z - 3)}{z^4} + \frac{12(z^2 + 4z + 6)}{z^4}$$

07.25.03.aeqj.01

$${}_2F_2\left(1, 2; 1, \frac{11}{2}; z\right) = \frac{63(8z^2 + 40z + 105)}{32z^4} + \frac{945e^z\sqrt{\pi}(2z-7)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.aeqk.01

$${}_2F_2\left(1, 2; 1, \frac{11}{2}; -z\right) = \frac{63(8z^2 - 40z + 105)}{32z^4} - \frac{945e^{-z}\sqrt{\pi}(2z+7)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.aeql.01

$${}_2F_2(1, 2; 1, 6; z) = \frac{120e^z(z-4)}{z^5} + \frac{20(z^3 + 6z^2 + 18z + 24)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = 2, b_1 = \frac{3}{2}$

07.25.03.aeqm.01

$${}_2F_2\left(1, 2; \frac{3}{2}, 2; z\right) = \frac{e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.aeqn.01

$${}_2F_2\left(1, 2; \frac{3}{2}, 2; -z\right) = \frac{e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

For fixed z and $a_1 = 1, a_2 = 2, b_1 = 2$

07.25.03.aeqo.01

$${}_2F_2(1, 2; 2, 2; z) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.aeqp.01

$${}_2F_2\left(1, 2; 2, \frac{5}{2}; z\right) = \frac{3e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3}{2z}$$

07.25.03.aeqq.01

$${}_2F_2\left(1, 2; 2, \frac{5}{2}; -z\right) = \frac{3}{2z} - \frac{3e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.aeqr.01

$${}_2F_2(1, 2; 2, 3; z) = \frac{2e^z}{z^2} - \frac{2(z+1)}{z^2}$$

07.25.03.aeqs.01

$${}_2F_2\left(1, 2; 2, \frac{7}{2}; z\right) = \frac{15e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5(2z+3)}{4z^2}$$

07.25.03.aeqt.01

$${}_2F_2\left(1, 2; 2, \frac{7}{2}; -z\right) = \frac{5(2z-3)}{4z^2} + \frac{15e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.aequ.01

$${}_2F_2(1, 2; 2, 4; z) = \frac{6 e^z}{z^3} - \frac{3(z^2 + 2z + 2)}{z^3}$$

07.25.03.aeqv.01

$${}_2F_2\left(1, 2; 2, \frac{9}{2}; z\right) = \frac{105 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7(4z^2 + 10z + 15)}{8 z^3}$$

07.25.03.aeqw.01

$${}_2F_2\left(1, 2; 2, \frac{9}{2}; -z\right) = \frac{7(4z^2 - 10z + 15)}{8 z^3} - \frac{105 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.aeqx.01

$${}_2F_2(1, 2; 2, 5; z) = \frac{24 e^z}{z^4} - \frac{4(z^3 + 3z^2 + 6z + 6)}{z^4}$$

07.25.03.aeqy.01

$${}_2F_2\left(1, 2; 2, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9(8z^3 + 28z^2 + 70z + 105)}{16 z^4}$$

07.25.03.aeqz.01

$${}_2F_2\left(1, 2; 2, \frac{11}{2}; -z\right) = \frac{9(8z^3 - 28z^2 + 70z - 105)}{16 z^4} + \frac{945 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.aer0.01

$${}_2F_2(1, 2; 2, 6; z) = \frac{120 e^z}{z^5} - \frac{5(z^4 + 4z^3 + 12z^2 + 24z + 24)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = 2, b_1 = 3$

07.25.03.0088.01

$${}_2F_2(1, 2; 3, 3; z) = -\frac{2}{z^2} \left(2z - 2 \operatorname{Ei}(z) - \log\left(\frac{1}{z}\right) + \log(z) + 2\gamma \right)$$

07.25.03.aer1.01

$${}_2F_2(1, 2; 3, 4; z) = -\frac{6(z^2 + 2\gamma z - 2z - 2)}{z^3} + \frac{12 \operatorname{Ei}(z)}{z^2} + \frac{6 \log\left(\frac{1}{z}\right)}{z^2} - \frac{6 \log(z)}{z^2} - \frac{12 e^z}{z^3}$$

07.25.03.aer2.01

$${}_2F_2(1, 2; 3, 5; z) = -\frac{24 e^z (z + 1)}{z^4} - \frac{4(2z^3 + 6\gamma z^2 - 9z^2 - 12z - 6)}{z^4} + \frac{24 \operatorname{Ei}(z)}{z^2} + \frac{12 \log\left(\frac{1}{z}\right)}{z^2} - \frac{12 \log(z)}{z^2}$$

07.25.03.aer3.01

$${}_2F_2(1, 2; 3, 6; z) = -\frac{40 e^z (z^2 + z + 2)}{z^5} - \frac{1}{3 z^5} (10(3z^4 + 12\gamma z^3 - 22z^3 - 36z^2 - 36z - 24)) + \frac{40 \operatorname{Ei}(z)}{z^2} + \frac{20 \log\left(\frac{1}{z}\right)}{z^2} - \frac{20 \log(z)}{z^2}$$

For fixed z and $a_1 = 1, a_2 = 2, b_1 = 4$

07.25.03.aer4.01

$${}_2F_2(1, 2; 4, 4; z) = -\frac{9(z^2 + 4\gamma z - 8z - 4\gamma - 4)}{z^3} + \frac{36(z-1)\text{Ei}(z)}{z^3} + \frac{18(z-1)\log\left(\frac{1}{z}\right)}{z^3} - \frac{18(z-1)\log(z)}{z^3} - \frac{36e^z}{z^3}$$

07.25.03.aer5.01

$${}_2F_2(1, 2; 4, 5; z) = -\frac{72e^z(z-1)}{z^4} - \frac{12(z^3 + 6\gamma z^2 - 15z^2 - 12\gamma z + 6)}{z^4} + \frac{72(z-2)\text{Ei}(z)}{z^3} + \frac{36(z-2)\log\left(\frac{1}{z}\right)}{z^3} - \frac{36(z-2)\log(z)}{z^3}$$

07.25.03.aer6.01

$${}_2F_2(1, 2; 4, 6; z) = -\frac{120e^z(z^2 - 2z - 1)}{z^5} - \frac{1}{z^5} (5(3z^4 + 24\gamma z^3 - 68z^3 - 72\gamma z^2 + 36z^2 + 72z + 24)) + \frac{120(z-3)\text{Ei}(z)}{z^3} + \frac{60(z-3)\log\left(\frac{1}{z}\right)}{z^3} - \frac{60(z-3)\log(z)}{z^3}$$

For fixed z and $a_1 = 1, a_2 = 2, b_1 = 5$

07.25.03.aer7.01

$${}_2F_2(1, 2; 5, 5; z) = -\frac{144e^z(z-3)}{z^4} - \frac{1}{z^4} (16(z^3 + 9\gamma z^2 - 27z^2 - 36\gamma z + 36z + 18\gamma + 27)) + \frac{144(z^2 - 4z + 2)\text{Ei}(z)}{z^4} + \frac{72(z^2 - 4z + 2)\log\left(\frac{1}{z}\right)}{z^4} - \frac{72(z^2 - 4z + 2)\log(z)}{z^4}$$

07.25.03.aer8.01

$${}_2F_2(1, 2; 5, 6; z) = -\frac{240e^z(z^2 - 5z + 2)}{z^5} - \frac{1}{z^5} (20(z^4 + 12\gamma z^3 - 40z^3 - 72\gamma z^2 + 108z^2 + 72\gamma z + 36z - 24)) + \frac{240(z^2 - 6z + 6)\text{Ei}(z)}{z^4} + \frac{120(z^2 - 6z + 6)\log\left(\frac{1}{z}\right)}{z^4} - \frac{120(z^2 - 6z + 6)\log(z)}{z^4}$$

For fixed z and $a_1 = 1, a_2 = 2, b_1 = 6$

07.25.03.aer9.01

$${}_2F_2(1, 2; 6, 6; z) = -\frac{400e^z(z^2 - 8z + 11)}{z^5} - \frac{1}{3z^5} (25(3z^4 + 48\gamma z^3 - 176z^3 - 432\gamma z^2 + 864z^2 + 864\gamma z - 432z - 288\gamma - 528)) + \frac{400(z^3 - 9z^2 + 18z - 6)\text{Ei}(z)}{z^5} + \frac{200(z^3 - 9z^2 + 18z - 6)\log\left(\frac{1}{z}\right)}{z^5} - \frac{200(z^3 - 9z^2 + 18z - 6)\log(z)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = -\frac{11}{2}$

07.25.03.aera.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) =$$

$$\frac{1}{324\,168\,075} (16\,384 z^{14} + 1\,040\,384 z^{13} + 25\,178\,112 z^{12} + 296\,192\,000 z^{11} + 1\,790\,026\,752 z^{10} + 5\,391\,687\,168 z^9 +$$

$$7\,172\,954\,880 z^8 + 3\,089\,600\,640 z^7 + 129\,729\,600 z^6 + 4\,324\,320 z^5 +$$

$$14\,968\,800 z^4 + 1\,701\,000 z^3 + 4\,630\,500 z^2 + 26\,790\,750 z + 324\,168\,075) +$$

$$\frac{1}{324\,168\,075} (16\,384 e^z \sqrt{\pi} (z^{29/2} + 64 z^{27/2} + 1568 z^{25/2} + 18\,816 z^{23/2} + 117\,600 z^{21/2} +$$

$$376\,320 z^{19/2} + 564\,480 z^{17/2} + 322\,560 z^{15/2} + 40\,320 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aerb.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; -z\right) =$$

$$\frac{1}{324\,168\,075} (16\,384 z^{14} - 1\,040\,384 z^{13} + 25\,178\,112 z^{12} - 296\,192\,000 z^{11} + 1\,790\,026\,752 z^{10} - 5\,391\,687\,168 z^9 +$$

$$7\,172\,954\,880 z^8 - 3\,089\,600\,640 z^7 + 129\,729\,600 z^6 - 4\,324\,320 z^5 +$$

$$14\,968\,800 z^4 - 1\,701\,000 z^3 + 4\,630\,500 z^2 - 26\,790\,750 z + 324\,168\,075) -$$

$$\frac{1}{324\,168\,075} (16\,384 e^{-z} \sqrt{\pi} (z^{29/2} - 64 z^{27/2} + 1568 z^{25/2} - 18\,816 z^{23/2} + 117\,600 z^{21/2} -$$

$$376\,320 z^{19/2} + 564\,480 z^{17/2} - 322\,560 z^{15/2} + 40\,320 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aerc.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{29\,469\,825} (-8\,192 z^{13} - 454\,656 z^{12} - 9\,410\,560 z^{11} - 91\,849\,728 z^{10} - 439\,939\,584 z^9 - 972\,168\,960 z^8 - 809\,665\,920 z^7 -$$

$$129\,729\,600 z^6 + 4\,324\,320 z^5 + 498\,960 z^4 + 340\,200 z^3 + 661\,500 z^2 + 297\,675 z + 29\,469\,825) - \frac{1}{29\,469\,825} (8192$$

$$e^z \sqrt{\pi} (z^{27/2} + 56 z^{25/2} + 1176 z^{23/2} + 11\,760 z^{21/2} + 58\,800 z^{19/2} + 141\,120 z^{17/2} + 141\,120 z^{15/2} + 40\,320 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aerd.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{29\,469\,825} (8192 z^{13} - 454\,656 z^{12} + 9\,410\,560 z^{11} - 91\,849\,728 z^{10} + 439\,939\,584 z^9 - 972\,168\,960 z^8 + 809\,665\,920 z^7 -$$

$$129\,729\,600 z^6 - 4\,324\,320 z^5 + 498\,960 z^4 - 340\,200 z^3 + 661\,500 z^2 - 297\,675 z + 29\,469\,825) -$$

$$\frac{1}{29\,469\,825} (8192 e^{-z} \sqrt{\pi} (z^{27/2} - 56 z^{25/2} + 1176 z^{23/2} - 11\,760 z^{21/2} + 58\,800 z^{19/2} -$$

$$141\,120 z^{17/2} + 141\,120 z^{15/2} - 40\,320 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aere.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{3274425} (4096 z^{12} + 194560 z^{11} + 3345408 z^{10} + 25944576 z^9 + 91695360 z^8 + 128903040 z^7 + 43243200 z^6 - 4324320 z^5 + 498960 z^4 + 113400 z^3 + 132300 z^2 + 425250 z + 3274425) + \frac{1}{3274425} (4096 e^z \sqrt{\pi} (z^{25/2} + 48 z^{23/2} + 840 z^{21/2} + 6720 z^{19/2} + 25200 z^{17/2} + 40320 z^{15/2} + 20160 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aerf.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{3274425} (4096 z^{12} - 194560 z^{11} + 3345408 z^{10} - 25944576 z^9 + 91695360 z^8 - 128903040 z^7 + 43243200 z^6 + 4324320 z^5 + 498960 z^4 - 113400 z^3 + 132300 z^2 - 425250 z + 3274425) - \frac{1}{3274425} (4096 e^{-z} \sqrt{\pi} (z^{25/2} - 48 z^{23/2} + 840 z^{21/2} - 6720 z^{19/2} + 25200 z^{17/2} - 40320 z^{15/2} + 20160 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aerg.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{467775} (-2048 z^{11} - 80896 z^{10} - 1107456 z^9 - 6365440 z^8 - 14482560 z^7 - 8648640 z^6 + 1441440 z^5 - 498960 z^4 + 113400 z^3 + 44100 z^2 + 85050 z + 467775) - \frac{1}{467775} (2048 e^z \sqrt{\pi} (z^{23/2} + 40 z^{21/2} + 560 z^{19/2} + 3360 z^{17/2} + 8400 z^{15/2} + 6720 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aerh.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{467775} (2048 z^{11} - 80896 z^{10} + 1107456 z^9 - 6365440 z^8 + 14482560 z^7 - 8648640 z^6 - 1441440 z^5 - 498960 z^4 - 113400 z^3 + 44100 z^2 - 85050 z + 467775) - \frac{1}{467775} (2048 e^{-z} \sqrt{\pi} (z^{23/2} - 40 z^{21/2} + 560 z^{19/2} - 3360 z^{17/2} + 8400 z^{15/2} - 6720 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeri.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{93555} (1024 z^{10} + 32256 z^9 + 328448 z^8 + 1226880 z^7 + 1235520 z^6 - 288288 z^5 + 166320 z^4 - 113400 z^3 + 44100 z^2 + 28350 z + 93555) + \frac{1}{93555} (1024 e^z \sqrt{\pi} (z^{21/2} + 32 z^{19/2} + 336 z^{17/2} + 1344 z^{15/2} + 1680 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aerj.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{93555} (1024 z^{10} - 32256 z^9 + 328448 z^8 - 1226880 z^7 + 1235520 z^6 + 288288 z^5 + 166320 z^4 + 113400 z^3 + 44100 z^2 - 28350 z + 93555) - \frac{1}{93555} (1024 e^{-z} \sqrt{\pi} (z^{21/2} - 32 z^{19/2} + 336 z^{17/2} - 1344 z^{15/2} + 1680 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aerk.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{31185} (-512 z^9 - 12032 z^8 - 80256 z^7 - 137280 z^6 + 41184 z^5 - 33264 z^4 + 37800 z^3 - 44100 z^2 + 28350 z + 31185) - \frac{1}{31185} (512 e^z \sqrt{\pi} (z^{19/2} + 24 z^{17/2} + 168 z^{15/2} + 336 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aerl.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{31185} (512 z^9 - 12032 z^8 + 80256 z^7 - 137280 z^6 - 41184 z^5 - 33264 z^4 - 37800 z^3 - 44100 z^2 - 28350 z + 31185) - \frac{1}{31185} (512 e^{-z} \sqrt{\pi} (z^{19/2} - 24 z^{17/2} + 168 z^{15/2} - 336 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aerm.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{31185} (256 z^8 + 3968 z^7 + 12480 z^6 - 4576 z^5 + 4752 z^4 - 7560 z^3 + 14700 z^2 - 28350 z + 31185) + \frac{1}{31185} (256 e^z \sqrt{\pi} (z^{17/2} + 16 z^{15/2} + 56 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aern.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{31185} (256 z^8 - 3968 z^7 + 12480 z^6 + 4576 z^5 + 4752 z^4 + 7560 z^3 + 14700 z^2 + 28350 z + 31185) - \frac{1}{31185} (256 e^{-z} \sqrt{\pi} (z^{17/2} - 16 z^{15/2} + 56 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aero.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{31185} (e^z (256 z^8 + 3072 z^7 + 5376 z^6 - 5376 z^5 + 10080 z^4 - 20160 z^3 + 35280 z^2 - 45360 z + 31185))$$

07.25.03.aerp.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{128 e^z \sqrt{\pi} (z + 8) \operatorname{erf}(\sqrt{z}) z^{13/2}}{31185} + \frac{1}{31185} (128 z^7 + 960 z^6 - 416 z^5 + 528 z^4 - 1080 z^3 + 2940 z^2 - 9450 z + 31185)$$

07.25.03.aerq.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{128 e^{-z} \sqrt{\pi} (z-8) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{31185} + \frac{1}{31185} (-128 z^7 + 960 z^6 + 416 z^5 + 528 z^4 + 1080 z^3 + 2940 z^2 + 9450 z + 31185)$$

07.25.03.aerr.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{31185 z} (e^z (256 z^8 + 1024 z^7 - 1792 z^6 + 5376 z^5 - 16800 z^4 + 47040 z^3 - 105840 z^2 + 166320 z - 135135)) + \frac{13}{3z}$$

07.25.03.aers.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{64 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{1}{10395} (64 z^6 - 32 z^5 + 48 z^4 - 120 z^3 + 420 z^2 - 1890 z + 10395)$$

07.25.03.aert.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{10395} (64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 + 1890 z + 10395) - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.aeru.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, 3; z\right) = \frac{26(z-15)}{3z^2} + \frac{1}{31185 z^2} (2 e^z (256 z^8 - 1024 z^7 + 5376 z^6 - 26880 z^5 + 117600 z^4 - 423360 z^3 + 1164240 z^2 - 2162160 z + 2027025))$$

07.25.03.aerv.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{2079 z^2} (32 z^7 - 272 z^6 + 1944 z^5 - 11900 z^4 + 61170 z^3 - 255969 z^2 + 860160 z - 2580480) + \frac{1}{2079 z^{5/2}} (32 e^z \sqrt{\pi} (z^8 - 8 z^7 + 56 z^6 - 336 z^5 + 1680 z^4 - 6720 z^3 + 20160 z^2 - 40320 z + 40320) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aerw.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{2079 z^2} (-32 z^7 - 272 z^6 - 1944 z^5 - 11900 z^4 - 61170 z^3 - 255969 z^2 - 860160 z - 2580480) + \frac{1}{2079 z^{5/2}} (32 e^{-z} \sqrt{\pi} (z^8 + 8 z^7 + 56 z^6 + 336 z^5 + 1680 z^4 + 6720 z^3 + 20160 z^2 + 40320 z + 40320) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aerx.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, 4; z\right) = \frac{13(z^2 - 30z - 510)}{z^3} + \frac{1}{10395 z^3} (2 e^z (256 z^8 - 3072 z^7 + 26880 z^6 - 188160 z^5 + 1058400 z^4 - 4656960 z^3 + 15135120 z^2 - 32432400 z + 34459425))$$

07.25.03.aery.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{297 z^3} (16 z^7 - 264 z^6 + 2828 z^5 - 23070 z^4 + 147753 z^3 - 731136 z^2 + 2580480 z - 11612160) + \frac{1}{297 z^{7/2}} (16 e^z \sqrt{\pi} (z^8 - 16 z^7 + 168 z^6 - 1344 z^5 + 8400 z^4 - 40320 z^3 + 141120 z^2 - 322560 z + 362880) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aerz.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{297 z^3} (16 z^7 + 264 z^6 + 2828 z^5 + 23\,070 z^4 + 147\,753 z^3 + 731\,136 z^2 + 2\,580\,480 z + 11\,612\,160) - \frac{1}{297 z^{7/2}} (16 e^{-z} \sqrt{\pi} (z^8 + 16 z^7 + 168 z^6 + 1344 z^5 + 8400 z^4 + 40\,320 z^3 + 141\,120 z^2 + 322\,560 z + 362\,880) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aes0.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, 5; z\right) = \frac{52(z^3 - 45 z^2 - 1530 z - 9690)}{3 z^4} + \frac{1}{10\,395 z^4} (8 e^z (256 z^8 - 5120 z^7 + 62\,720 z^6 - 564\,480 z^5 + 3\,880\,800 z^4 - 20\,180\,160 z^3 + 75\,675\,600 z^2 - 183\,783\,600 z + 218\,243\,025))$$

07.25.03.aes1.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{33 z^4} (8 z^7 - 196 z^6 + 2790 z^5 - 28\,383 z^4 + 218\,112 z^3 - 1\,290\,240 z^2 + 3\,870\,720 z - 29\,030\,400) + \frac{1}{33 z^{9/2}} (8 e^z \sqrt{\pi} (z^8 - 24 z^7 + 336 z^6 - 3360 z^5 + 25\,200 z^4 - 141\,120 z^3 + 564\,480 z^2 - 1\,451\,520 z + 1\,814\,400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aes2.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{33 z^4} (-8 z^7 - 196 z^6 - 2790 z^5 - 28\,383 z^4 - 218\,112 z^3 - 1\,290\,240 z^2 - 3\,870\,720 z - 29\,030\,400) + \frac{1}{33 z^{9/2}} (8 e^{-z} \sqrt{\pi} (z^8 + 24 z^7 + 336 z^6 + 3360 z^5 + 25\,200 z^4 + 141\,120 z^3 + 564\,480 z^2 + 1\,451\,520 z + 1\,814\,400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aes3.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{11}{2}, 6; z\right) = \frac{65(z^4 - 60 z^3 - 3060 z^2 - 38\,760 z - 162\,792)}{3 z^5} + \frac{1}{2079 z^5} (8 e^z (256 z^8 - 7168 z^7 + 112\,896 z^6 - 1\,241\,856 z^5 + 10\,090\,080 z^4 - 60\,540\,480 z^3 + 257\,297\,040 z^2 - 698\,377\,680 z + 916\,620\,705))$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = -\frac{9}{2}$

07.25.03.aes4.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{2\,679\,075} (4096 z^{12} + 198\,656 z^{11} + 3\,515\,392 z^{10} + 28\,442\,112 z^9 + 107\,729\,664 z^8 + 173\,550\,720 z^7 + 88\,441\,920 z^6 + 4\,324\,320 z^5 + 166\,320 z^4 + 68\,040 z^3 + 94\,500 z^2 + 330\,750 z + 2\,679\,075) + \frac{1}{2\,679\,075} (4096 e^z \sqrt{\pi} (z^{25/2} + 49 z^{23/2} + 882 z^{21/2} + 7350 z^{19/2} + 29\,400 z^{17/2} + 52\,920 z^{15/2} + 35\,280 z^{13/2} + 5040 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aes5.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{2679075} (4096 z^{12} - 198656 z^{11} + 3515392 z^{10} - 28442112 z^9 + 107729664 z^8 - 173550720 z^7 + 88441920 z^6 - 4324320 z^5 + 166320 z^4 - 68040 z^3 + 94500 z^2 - 330750 z + 2679075) - \frac{1}{2679075} (4096 e^{-z} \sqrt{\pi} (z^{25/2} - 49 z^{23/2} + 882 z^{21/2} - 7350 z^{19/2} + 29400 z^{17/2} - 52920 z^{15/2} + 35280 z^{13/2} - 5040 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aes6.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{297675} (-2048 z^{11} - 84992 z^{10} - 1248768 z^9 - 8017152 z^8 - 22323840 z^7 - 22599360 z^6 - 4324320 z^5 + 166320 z^4 + 22680 z^3 + 18900 z^2 + 47250 z + 297675) - \frac{1}{297675} (2048 e^z \sqrt{\pi} (z^{23/2} + 42 z^{21/2} + 630 z^{19/2} + 4200 z^{17/2} + 12600 z^{15/2} + 15120 z^{13/2} + 5040 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aes7.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{297675} (2048 z^{11} - 84992 z^{10} + 1248768 z^9 - 8017152 z^8 + 22323840 z^7 - 22599360 z^6 + 4324320 z^5 + 166320 z^4 - 22680 z^3 + 18900 z^2 - 47250 z + 297675) - \frac{1}{297675} (2048 e^{-z} \sqrt{\pi} (z^{23/2} - 42 z^{21/2} + 630 z^{19/2} - 4200 z^{17/2} + 12600 z^{15/2} - 15120 z^{13/2} + 5040 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aes8.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{42525} (1024 z^{10} + 35328 z^9 + 412928 z^8 + 1960320 z^7 + 3487680 z^6 + 1441440 z^5 - 166320 z^4 + 22680 z^3 + 6300 z^2 + 9450 z + 42525) + \frac{1}{42525} (1024 e^z \sqrt{\pi} (z^{21/2} + 35 z^{19/2} + 420 z^{17/2} + 2100 z^{15/2} + 4200 z^{13/2} + 2520 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aes9.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{42525} (1024 z^{10} - 35328 z^9 + 412928 z^8 - 1960320 z^7 + 3487680 z^6 - 1441440 z^5 - 166320 z^4 - 22680 z^3 + 6300 z^2 - 9450 z + 42525) - \frac{1}{42525} (1024 e^{-z} \sqrt{\pi} (z^{21/2} - 35 z^{19/2} + 420 z^{17/2} - 2100 z^{15/2} + 4200 z^{13/2} - 2520 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aesa.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{8505} (-512 z^9 - 14080 z^8 - 122240 z^7 - 375360 z^6 - 288288 z^5 + 55440 z^4 - 22680 z^3 + 6300 z^2 + 3150 z + 8505) - \frac{1}{8505} (512 e^z \sqrt{\pi} (z^{19/2} + 28 z^{17/2} + 252 z^{15/2} + 840 z^{13/2} + 840 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aesb.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{8505} (512 z^9 - 14080 z^8 + 122240 z^7 - 375360 z^6 + 288288 z^5 + 55440 z^4 + 22680 z^3 + 6300 z^2 - 3150 z + 8505) - \frac{1}{8505} (512 e^{-z} \sqrt{\pi} (z^{19/2} - 28 z^{17/2} + 252 z^{15/2} - 840 z^{13/2} + 840 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aesc.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{2835} (256 z^8 + 5248 z^7 + 29760 z^6 + 41184 z^5 - 11088 z^4 + 7560 z^3 - 6300 z^2 + 3150 z + 2835) + \frac{1}{2835} (256 e^z \sqrt{\pi} (z^{17/2} + 21 z^{15/2} + 126 z^{13/2} + 210 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aesd.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2835} (256 z^8 - 5248 z^7 + 29760 z^6 - 41184 z^5 - 11088 z^4 - 7560 z^3 - 6300 z^2 - 3150 z + 2835) - \frac{1}{2835} (256 e^{-z} \sqrt{\pi} (z^{17/2} - 21 z^{15/2} + 126 z^{13/2} - 210 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aese.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{2835} (-128 z^7 - 1728 z^6 - 4576 z^5 + 1584 z^4 - 1512 z^3 + 2100 z^2 - 3150 z + 2835) - \frac{1}{2835} (128 e^z \sqrt{\pi} (z^{15/2} + 14 z^{13/2} + 42 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aesf.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{2835} (128 z^7 - 1728 z^6 + 4576 z^5 + 1584 z^4 + 1512 z^3 + 2100 z^2 + 3150 z + 2835) - \frac{1}{2835} (128 e^{-z} \sqrt{\pi} (z^{15/2} - 14 z^{13/2} + 42 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aesg.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, 1; z\right) = -\frac{1}{2835} (e^z (128 z^7 + 1344 z^6 + 2016 z^5 - 1680 z^4 + 2520 z^3 - 3780 z^2 + 4410 z - 2835))$$

07.25.03.aesh.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{2835} (-64 z^6 - 416 z^5 + 176 z^4 - 216 z^3 + 420 z^2 - 1050 z + 2835) - \frac{64 e^z \sqrt{\pi} z^{11/2} (z + 7) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.aesi.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{64 e^{-z} \sqrt{\pi} (z-7) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{2835} + \frac{1}{2835} (-64 z^6 + 416 z^5 + 176 z^4 + 216 z^3 + 420 z^2 + 1050 z + 2835)$$

07.25.03.aesj.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{2835 z} (e^z (-128 z^7 - 448 z^6 + 672 z^5 - 1680 z^4 + 4200 z^3 - 8820 z^2 + 13230 z - 10395)) + \frac{11}{3z}$$

07.25.03.aesk.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{945} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aesl.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{1}{945} (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aesm.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, 3; z\right) = \frac{22(z-13)}{3z^2} - \frac{1}{2835z^2} (2e^z (128z^7 - 448z^6 + 2016z^5 - 8400z^4 + 29400z^3 - 79380z^2 + 145530z - 135135))$$

07.25.03.aesn.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{189z^2} (-16z^6 + 120z^5 - 740z^4 + 3810z^3 - 15939z^2 + 53760z - 161280) - \frac{1}{189z^{5/2}} (16e^z \sqrt{\pi} (z^7 - 7z^6 + 42z^5 - 210z^4 + 840z^3 - 2520z^2 + 5040z - 5040) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeso.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{1}{189z^2} (-16z^6 - 120z^5 - 740z^4 - 3810z^3 - 15939z^2 - 53760z - 161280) + \frac{1}{189z^{5/2}} (16e^{-z} \sqrt{\pi} (z^7 + 7z^6 + 42z^5 + 210z^4 + 840z^3 + 2520z^2 + 5040z + 5040) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aesp.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, 4; z\right) = \frac{11(z^2 - 26z - 390)}{z^3} - \frac{1}{945z^3} (2e^z (128z^7 - 1344z^6 + 10080z^5 - 58800z^4 + 264600z^3 - 873180z^2 + 1891890z - 2027025))$$

07.25.03.aesq.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{27z^3} (-8z^6 + 116z^5 - 1070z^4 + 7323z^3 - 37632z^2 + 134400z - 645120) - \frac{1}{27z^{7/2}} (8e^z \sqrt{\pi} (z^7 - 14z^6 + 126z^5 - 840z^4 + 4200z^3 - 15120z^2 + 35280z - 40320) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aesr.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{27z^3} (8z^6 + 116z^5 + 1070z^4 + 7323z^3 + 37632z^2 + 134400z + 645120) - \frac{1}{27z^{7/2}} (8e^{-z}\sqrt{\pi}(z^7 + 14z^6 + 126z^5 + 840z^4 + 4200z^3 + 15120z^2 + 35280z + 40320)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aess.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, 5; z\right) = \frac{44(z^3 - 39z^2 - 1170z - 6630)}{3z^4} - \frac{1}{945z^4} (8e^z(128z^7 - 2240z^6 + 23520z^5 - 176400z^4 + 970200z^3 - 3783780z^2 + 9459450z - 11486475))$$

07.25.03.aest.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{3z^4} (-4z^6 + 86z^5 - 1053z^4 + 9024z^3 - 57792z^2 + 161280z - 1451520) - \frac{1}{3z^{9/2}} (4e^z\sqrt{\pi}(z^7 - 21z^6 + 252z^5 - 2100z^4 + 12600z^3 - 52920z^2 + 141120z - 181440)\operatorname{erf}(\sqrt{z}))$$

07.25.03.aesu.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{3z^4} (-4z^6 - 86z^5 - 1053z^4 - 9024z^3 - 57792z^2 - 161280z - 1451520) + \frac{1}{3z^{9/2}} (4e^{-z}\sqrt{\pi}(z^7 + 21z^6 + 252z^5 + 2100z^4 + 12600z^3 + 52920z^2 + 141120z + 181440)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aesv.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{9}{2}, 6; z\right) = \frac{55(z^4 - 52z^3 - 2340z^2 - 26520z - 100776)}{3z^5} - \frac{1}{189z^5} (8e^z(128z^7 - 3136z^6 + 42336z^5 - 388080z^4 + 2522520z^3 - 11351340z^2 + 32162130z - 43648605))$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = -\frac{7}{2}$

07.25.03.aesw.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{33075} (1024z^{10} + 36352z^9 + 443136z^8 + 2252928z^7 + 4584000z^6 + 2849760z^5 + 166320z^4 + 7560z^3 + 3780z^2 + 6750z + 33075) + \frac{1}{33075} (1024e^z\sqrt{\pi}(z^{21/2} + 36z^{19/2} + 450z^{17/2} + 2400z^{15/2} + 5400z^{13/2} + 4320z^{11/2} + 720z^{9/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.aesx.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{33075} (1024z^{10} - 36352z^9 + 443136z^8 - 2252928z^7 + 4584000z^6 - 2849760z^5 + 166320z^4 - 7560z^3 + 3780z^2 - 6750z + 33075) - \frac{1}{33075} (1024e^{-z}\sqrt{\pi}(z^{21/2} - 36z^{19/2} + 450z^{17/2} - 2400z^{15/2} + 5400z^{13/2} - 4320z^{11/2} + 720z^{9/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aesy.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{4725} (-512 z^9 - 15\,104 z^8 - 146\,304 z^7 - 548\,160 z^6 - 704\,160 z^5 - 166\,320 z^4 + 7560 z^3 + 1260 z^2 + 1350 z + 4725) - \frac{1}{4725} (512 e^z \sqrt{\pi} (z^{19/2} + 30 z^{17/2} + 300 z^{15/2} + 1200 z^{13/2} + 1800 z^{11/2} + 720 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aesz.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{4725} (512 z^9 - 15\,104 z^8 + 146\,304 z^7 - 548\,160 z^6 + 704\,160 z^5 - 166\,320 z^4 - 7560 z^3 + 1260 z^2 - 1350 z + 4725) - \frac{1}{4725} (512 e^{-z} \sqrt{\pi} (z^{19/2} - 30 z^{17/2} + 300 z^{15/2} - 1200 z^{13/2} + 1800 z^{11/2} - 720 z^{9/2}) \operatorname{erfi}(\sqrt{-z}))$$

07.25.03.aet0.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} (256 z^8 + 6016 z^7 + 43\,200 z^6 + 103\,968 z^5 + 55\,440 z^4 - 7560 z^3 + 1260 z^2 + 450 z + 945) + \frac{256}{945} e^z \sqrt{\pi} (z^{17/2} + 24 z^{15/2} + 180 z^{13/2} + 480 z^{11/2} + 360 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aet1.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{945} (256 z^8 - 6016 z^7 + 43\,200 z^6 - 103\,968 z^5 + 55\,440 z^4 + 7560 z^3 + 1260 z^2 - 450 z + 945) - \frac{256}{945} e^{-z} \sqrt{\pi} (z^{17/2} - 24 z^{15/2} + 180 z^{13/2} - 480 z^{11/2} + 360 z^{9/2}) \operatorname{erfi}(\sqrt{-z})$$

07.25.03.aet2.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} (-128 z^7 - 2240 z^6 - 10\,464 z^5 - 11\,088 z^4 + 2520 z^3 - 1260 z^2 + 450 z + 315) - \frac{128}{315} e^z \sqrt{\pi} (z^{15/2} + 18 z^{13/2} + 90 z^{11/2} + 120 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aet3.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{315} (128 z^7 - 2240 z^6 + 10\,464 z^5 - 11\,088 z^4 - 2520 z^3 - 1260 z^2 - 450 z + 315) - \frac{128}{315} e^{-z} \sqrt{\pi} (z^{15/2} - 18 z^{13/2} + 90 z^{11/2} - 120 z^{9/2}) \operatorname{erfi}(\sqrt{-z})$$

07.25.03.aet4.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{315} (64 z^6 + 736 z^5 + 1584 z^4 - 504 z^3 + 420 z^2 - 450 z + 315) + \frac{64}{315} e^z \sqrt{\pi} (z^{13/2} + 12 z^{11/2} + 30 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aet5.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} (64 z^6 - 736 z^5 + 1584 z^4 + 504 z^3 + 420 z^2 + 450 z + 315) - \frac{64}{315} e^{-z} \sqrt{\pi} (z^{13/2} - 12 z^{11/2} + 30 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aet6.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{315} e^z (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315)$$

07.25.03.aet7.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{32}{315} e^z \sqrt{\pi} (z + 6) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{315} (32 z^5 + 176 z^4 - 72 z^3 + 84 z^2 - 150 z + 315)$$

07.25.03.aet8.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{32}{315} e^{-z} \sqrt{\pi} (z - 6) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{315} (-32 z^5 + 176 z^4 + 72 z^3 + 84 z^2 + 150 z + 315)$$

07.25.03.aet9.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{315 z} (e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)) + \frac{3}{z}$$

07.25.03.aeta.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{16}{105} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)$$

07.25.03.aetb.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{1}{105} (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aetc.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, 3; z\right) = \frac{6(z - 11)}{z^2} + \frac{1}{315 z^2} (2 e^z (64 z^6 - 192 z^5 + 720 z^4 - 2400 z^3 + 6300 z^2 - 11340 z + 10395))$$

07.25.03.aetd.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{21 z^2} (8 z^5 - 52 z^4 + 270 z^3 - 1131 z^2 + 3840 z - 11520) + \frac{1}{21 z^{5/2}} (8 e^z \sqrt{\pi} (z^6 - 6 z^5 + 30 z^4 - 120 z^3 + 360 z^2 - 720 z + 720) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aete.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{1}{21 z^2} (-8 z^5 - 52 z^4 - 270 z^3 - 1131 z^2 - 3840 z - 11520) + \frac{1}{21 z^{5/2}} (8 e^{-z} \sqrt{\pi} (z^6 + 6 z^5 + 30 z^4 + 120 z^3 + 360 z^2 + 720 z + 720) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aetf.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, 4; z\right) = \frac{9(z^2 - 22z - 286)}{z^3} + \frac{1}{105 z^3} (2 e^z (64 z^6 - 576 z^5 + 3600 z^4 - 16800 z^3 + 56700 z^2 - 124740 z + 135135))$$

07.25.03.aetg.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{3z^3} (4z^5 - 50z^4 + 387z^3 - 2112z^2 + 7680z - 40320) + \frac{1}{3z^{7/2}} (4e^z \sqrt{\pi} (z^6 - 12z^5 + 90z^4 - 480z^3 + 1800z^2 - 4320z + 5040) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeth.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{3z^3} (4z^5 + 50z^4 + 387z^3 + 2112z^2 + 7680z + 40320) - \frac{1}{3z^{7/2}} (4e^{-z} \sqrt{\pi} (z^6 + 12z^5 + 90z^4 + 480z^3 + 1800z^2 + 4320z + 5040) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeti.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, 5; z\right) = \frac{12(z^3 - 33z^2 - 858z - 4290)}{z^4} + \frac{1}{105z^4} (8e^z (64z^6 - 960z^5 + 8400z^4 - 50400z^3 + 207900z^2 - 540540z + 675675))$$

07.25.03.aetj.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{z^4} (3(2z^5 - 37z^4 + 384z^3 - 2784z^2 + 6720z - 80640)) + \frac{1}{z^{9/2}} (6e^z \sqrt{\pi} (z^6 - 18z^5 + 180z^4 - 1200z^3 + 5400z^2 - 15120z + 20160) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aetk.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{z^{9/2}} (6e^{-z} \sqrt{\pi} (z^6 + 18z^5 + 180z^4 + 1200z^3 + 5400z^2 + 15120z + 20160) \operatorname{erfi}(\sqrt{z})) - \frac{1}{z^4} (3(2z^5 + 37z^4 + 384z^3 + 2784z^2 + 6720z + 80640))$$

07.25.03.aetl.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{7}{2}, 6; z\right) = \frac{15(z^4 - 44z^3 - 1716z^2 - 17160z - 58344)}{z^5} + \frac{1}{21z^5} (8e^z (64z^6 - 1344z^5 + 15120z^4 - 110880z^3 + 540540z^2 - 1621620z + 2297295))$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = -\frac{5}{2}$

07.25.03.aetm.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{675} (256z^8 + 6272z^7 + 48192z^6 + 132320z^5 + 104880z^4 + 7560z^3 + 420z^2 + 270z + 675) + \frac{256}{675} e^z \sqrt{\pi} (z^{17/2} + 25z^{15/2} + 200z^{13/2} + 600z^{11/2} + 600z^{9/2} + 120z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aetn.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{675} (256 z^8 - 6272 z^7 + 48\,192 z^6 - 132\,320 z^5 + 104\,880 z^4 - 7560 z^3 + 420 z^2 - 270 z + 675) - \frac{256}{675} e^{-z} \sqrt{\pi} (z^{17/2} - 25 z^{15/2} + 200 z^{13/2} - 600 z^{11/2} + 600 z^{9/2} - 120 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aeto.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{135} (-128 z^7 - 2496 z^6 - 14\,176 z^5 - 24\,720 z^4 - 7560 z^3 + 420 z^2 + 90 z + 135) - \frac{128}{135} e^z \sqrt{\pi} (z^{15/2} + 20 z^{13/2} + 120 z^{11/2} + 240 z^{9/2} + 120 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aetp.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{135} (128 z^7 - 2496 z^6 + 14\,176 z^5 - 24\,720 z^4 + 7560 z^3 + 420 z^2 - 90 z + 135) - \frac{128}{135} e^{-z} \sqrt{\pi} (z^{15/2} - 20 z^{13/2} + 120 z^{11/2} - 240 z^{9/2} + 120 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aetq.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{45} (64 z^6 + 928 z^5 + 3408 z^4 + 2520 z^3 - 420 z^2 + 90 z + 45) + \frac{64}{45} e^z \sqrt{\pi} (z^{13/2} + 15 z^{11/2} + 60 z^{9/2} + 60 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aetr.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{45} (64 z^6 - 928 z^5 + 3408 z^4 - 2520 z^3 - 420 z^2 - 90 z + 45) - \frac{64}{45} e^{-z} \sqrt{\pi} (z^{13/2} - 15 z^{11/2} + 60 z^{9/2} - 60 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aets.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{45} (-32 z^5 - 304 z^4 - 504 z^3 + 140 z^2 - 90 z + 45) - \frac{32}{45} e^z \sqrt{\pi} (z^{11/2} + 10 z^{9/2} + 20 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aett.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{45} (32 z^5 - 304 z^4 + 504 z^3 + 140 z^2 + 90 z + 45) - \frac{32}{45} e^{-z} \sqrt{\pi} (z^{11/2} - 10 z^{9/2} + 20 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aetu.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, 1; z\right) = -\frac{1}{45} e^z (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45)$$

07.25.03.aetv.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{45} (-16 z^4 - 72 z^3 + 28 z^2 - 30 z + 45) - \frac{16}{45} e^z \sqrt{\pi} z^{7/2} (z + 5) \operatorname{erf}(\sqrt{z})$$

07.25.03.aetw.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{16}{45} e^{-z} \sqrt{\pi} (z - 5) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{45} (-16 z^4 + 72 z^3 + 28 z^2 + 30 z + 45)$$

07.25.03.aetx.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{45z} (e^z (-32z^5 - 80z^4 + 80z^3 - 120z^2 + 150z - 105)) + \frac{7}{3z}$$

07.25.03.aety.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{15} (-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15} e^z \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aetz.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{15} (8z^3 + 4z^2 + 6z + 15) - \frac{8}{15} e^{-z} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aeu0.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, 3; z\right) = \frac{14(z-9)}{3z^2} - \frac{1}{45z^2} (2e^z (32z^5 - 80z^4 + 240z^3 - 600z^2 + 1050z - 945))$$

07.25.03.aeu1.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-4z^4 + 22z^3 - 93z^2 + 320z - 960}{3z^2} - \frac{1}{3z^{5/2}} (4e^z \sqrt{\pi} (z^5 - 5z^4 + 20z^3 - 60z^2 + 120z - 120) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeu2.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-4z^4 - 22z^3 - 93z^2 - 320z - 960}{3z^2} + \frac{1}{3z^{5/2}} (4e^{-z} \sqrt{\pi} (z^5 + 5z^4 + 20z^3 + 60z^2 + 120z + 120) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeu3.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, 4; z\right) = \frac{7(z^2 - 18z - 198)}{z^3} - \frac{1}{15z^3} (2e^z (32z^5 - 240z^4 + 1200z^3 - 4200z^2 + 9450z - 10395))$$

07.25.03.aeu4.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7(2z^4 - 21z^3 + 128z^2 - 480z + 2880)}{3z^3} - \frac{1}{3z^{7/2}} (14e^z \sqrt{\pi} (z^5 - 10z^4 + 60z^3 - 240z^2 + 600z - 720) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeu5.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(2z^4 + 21z^3 + 128z^2 + 480z + 2880)}{3z^3} - \frac{1}{3z^{7/2}} (14e^{-z} \sqrt{\pi} (z^5 + 10z^4 + 60z^3 + 240z^2 + 600z + 720) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeu6.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, 5; z\right) = \frac{28(z^3 - 27z^2 - 594z - 2574)}{3z^4} - \frac{1}{15z^4} (8e^z (32z^5 - 400z^4 + 2800z^3 - 12600z^2 + 34650z - 45045))$$

07.25.03.aeu7.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{21(z^4 - 16z^3 + 144z^2 - 240z + 5040)}{z^4} - \frac{1}{z^{9/2}} \left(21 e^z \sqrt{\pi} (z^5 - 15z^4 + 120z^3 - 600z^2 + 1800z - 2520) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aeu8.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{z^{9/2}} \left(21 e^{-z} \sqrt{\pi} (z^5 + 15z^4 + 120z^3 + 600z^2 + 1800z + 2520) \operatorname{erfi}(\sqrt{z})\right) - \frac{21(z^4 + 16z^3 + 144z^2 + 240z + 5040)}{z^4}$$

07.25.03.aeu9.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{5}{2}, 6; z\right) = \frac{35(z^4 - 36z^3 - 1188z^2 - 10296z - 30888)}{3z^5} - \frac{1}{3z^5} (8 e^z (32z^5 - 560z^4 + 5040z^3 - 27720z^2 + 90090z - 135135))$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = -\frac{3}{2}$

07.25.03.aeua.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{27} (64z^6 + 992z^5 + 4144z^4 + 4488z^3 + 420z^2 + 30z + 27) + \frac{64}{27} e^z \sqrt{\pi} (z^{13/2} + 16z^{11/2} + 72z^{9/2} + 96z^{7/2} + 24z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aeub.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{27} (64z^6 - 992z^5 + 4144z^4 - 4488z^3 + 420z^2 - 30z + 27) - \frac{64}{27} e^{-z} \sqrt{\pi} (z^{13/2} - 16z^{11/2} + 72z^{9/2} - 96z^{7/2} + 24z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aeuc.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{9} (-32z^5 - 368z^4 - 984z^3 - 420z^2 + 30z + 9) - \frac{32}{9} e^z \sqrt{\pi} (z^{11/2} + 12z^{9/2} + 36z^{7/2} + 24z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aeud.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{9} (32z^5 - 368z^4 + 984z^3 - 420z^2 - 30z + 9) - \frac{32}{9} e^{-z} \sqrt{\pi} (z^{11/2} - 12z^{9/2} + 36z^{7/2} - 24z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aeue.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{9} (16z^4 + 120z^3 + 140z^2 - 30z + 9) + \frac{16}{9} e^z \sqrt{\pi} (z^{9/2} + 8z^{7/2} + 12z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aeuf.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{9} (16z^4 - 120z^3 + 140z^2 + 30z + 9) - \frac{16}{9} e^{-z} \sqrt{\pi} (z^{9/2} - 8z^{7/2} + 12z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aeug.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{9} e^z (16z^4 + 96z^3 + 72z^2 - 24z + 9)$$

07.25.03.aeuh.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{8}{9} e^z \sqrt{\pi} (z+4) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{9} (8z^3 + 28z^2 - 10z + 9)$$

07.25.03.aeui.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{8}{9} e^{-z} \sqrt{\pi} (z-4) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{9} (-8z^3 + 28z^2 + 10z + 9)$$

07.25.03.aeuj.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^z (16z^4 + 32z^3 - 24z^2 + 24z - 15)}{9z} + \frac{5}{3z}$$

07.25.03.aeuk.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{4}{3} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (4z^2 - 2z + 3)$$

07.25.03.aeul.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{3} (4z^2 + 2z + 3) - \frac{4}{3} e^{-z} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.aeum.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, 3; z\right) = \frac{10(z-7)}{3z^2} + \frac{2e^z (16z^4 - 32z^3 + 72z^2 - 120z + 105)}{9z^2}$$

07.25.03.aeun.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(2z^3 - 9z^2 + 32z - 96)}{3z^2} + \frac{1}{3z^{5/2}} (10e^z \sqrt{\pi} (z^4 - 4z^3 + 12z^2 - 24z + 24) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeuo.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{3z^{5/2}} (10e^{-z} \sqrt{\pi} (z^4 + 4z^3 + 12z^2 + 24z + 24) \operatorname{erfi}(\sqrt{z})) - \frac{5(2z^3 + 9z^2 + 32z + 96)}{3z^2}$$

07.25.03.aeup.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, 4; z\right) = \frac{5(z^2 - 14z - 126)}{z^3} + \frac{2e^z (16z^4 - 96z^3 + 360z^2 - 840z + 945)}{3z^3}$$

07.25.03.aeup.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(z^3 - 8z^2 + 32z - 240)}{3z^3} + \frac{1}{3z^{7/2}} (35e^z \sqrt{\pi} (z^4 - 8z^3 + 36z^2 - 96z + 120) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aeur.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(z^3 + 8z^2 + 32z + 240)}{3z^3} - \frac{1}{3z^{7/2}} (35e^{-z} \sqrt{\pi} (z^4 + 8z^3 + 36z^2 + 96z + 120) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aeus.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, 5; z\right) = \frac{20(z^3 - 21z^2 - 378z - 1386)}{3z^4} + \frac{1}{3z^4} (8e^z(16z^4 - 160z^3 + 840z^2 - 2520z + 3465))$$

07.25.03.aeut.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{60(z^3 - 14z^2 - 630)}{z^4} + \frac{1}{2z^{9/2}} (105e^z\sqrt{\pi}(z^4 - 12z^3 + 72z^2 - 240z + 360)\operatorname{erf}(\sqrt{z}))$$

07.25.03.aeuv.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{2z^{9/2}} (105e^{-z}\sqrt{\pi}(z^4 + 12z^3 + 72z^2 + 240z + 360)\operatorname{erfi}(\sqrt{z})) - \frac{60(z^3 + 14z^2 + 630)}{z^4}$$

07.25.03.aevu.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{3}{2}, 6; z\right) = \frac{5(5z^4 - 140z^3 - 3780z^2 - 27720z - 72072)}{3z^5} + \frac{1}{3z^5} (40e^z(16z^4 - 224z^3 + 1512z^2 - 5544z + 9009))$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = -\frac{1}{2}$

07.25.03.aeuw.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} (16z^4 + 136z^3 + 228z^2 + 30z + 3) + \frac{16}{3} e^z\sqrt{\pi}(z^{9/2} + 9z^{7/2} + 18z^{5/2} + 6z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aeux.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3} (16z^4 - 136z^3 + 228z^2 - 30z + 3) - \frac{16}{3} e^{-z}\sqrt{\pi}(z^{9/2} - 9z^{7/2} + 18z^{5/2} - 6z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aeuy.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3} (-8z^3 - 44z^2 - 30z + 3) - \frac{8}{3} e^z\sqrt{\pi}(z^{7/2} + 6z^{5/2} + 6z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aeuz.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} (8z^3 - 44z^2 + 30z + 3) - \frac{8}{3} e^{-z}\sqrt{\pi}(z^{7/2} - 6z^{5/2} + 6z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aev0.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, 1; z\right) = -\frac{1}{3} e^z(8z^3 + 36z^2 + 18z - 3)$$

07.25.03.aev1.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3} (-4z^2 - 10z + 3) - \frac{4}{3} e^z\sqrt{\pi}(z^{5/2} + 3z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aev2.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{3} (-4z^2 + 10z + 3) + \frac{4}{3} e^{-z}\sqrt{\pi}(z^{5/2} - 3z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aev3.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^z(-8z^3 - 12z^2 + 6z - 3)}{3z} + \frac{1}{z}$$

07.25.03.aev4.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -2 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} - 2z + 1$$

07.25.03.aev5.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = -2 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + 2z + 1$$

07.25.03.aev6.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, 3; z\right) = \frac{2(z-5)}{z^2} - \frac{2 e^z (8z^3 - 12z^2 + 18z - 15)}{3z^2}$$

07.25.03.aev7.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{5(z^2 - 4z + 12)}{z^2} - \frac{5 e^z \sqrt{\pi} (z^3 - 3z^2 + 6z - 6) \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aev8.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} \sqrt{\pi} (z^3 + 3z^2 + 6z + 6) \operatorname{erfi}(\sqrt{z})}{z^{5/2}} - \frac{5(z^2 + 4z + 12)}{z^2}$$

07.25.03.aev9.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, 4; z\right) = \frac{3(z^2 - 10z - 70)}{z^3} - \frac{2 e^z (8z^3 - 36z^2 + 90z - 105)}{z^3}$$

07.25.03.aeva.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{14(z^2 - 5z + 60)}{z^3} - \frac{35 e^z \sqrt{\pi} (z^3 - 6z^2 + 18z - 24) \operatorname{erf}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.aevb.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{14(z^2 + 5z + 60)}{z^3} - \frac{35 e^{-z} \sqrt{\pi} (z^3 + 6z^2 + 18z + 24) \operatorname{erfi}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.aevc.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, 5; z\right) = \frac{4(z^3 - 15z^2 - 210z - 630)}{z^4} - \frac{8 e^z (8z^3 - 60z^2 + 210z - 315)}{z^4}$$

07.25.03.aevd.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{9(z^3 - 35z^2 - 140z - 2100)}{2z^4} - \frac{315 e^z \sqrt{\pi} (z^3 - 9z^2 + 36z - 60) \operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.aeve.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} \sqrt{\pi} (z^3 + 9z^2 + 36z + 60) \operatorname{erfi}(\sqrt{z})}{4z^{9/2}} - \frac{9(z^3 + 35z^2 - 140z + 2100)}{2z^4}$$

07.25.03.aevf.01

$${}_2F_2\left(1, \frac{5}{2}; -\frac{1}{2}, 6; z\right) = \frac{5(z^4 - 20z^3 - 420z^2 - 2520z - 5544)}{z^5} - \frac{40 e^z (8z^3 - 84z^2 + 378z - 693)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = \frac{1}{2}$

07.25.03.0089.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3} (4z^2 + 14z + 4e^z \sqrt{\pi} (z^2 + 4z + 2) \operatorname{erf}(\sqrt{z}) \sqrt{z} + 3)$$

07.25.03.aevg.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{3} (4z^2 - 14z + 3) - \frac{4}{3} e^{-z} \sqrt{\pi} (z^{5/2} - 4z^{3/2} + 2\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aevh.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{3} e^z (4z^2 + 12z + 3)$$

07.25.03.0090.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3} (2z + 2e^z \sqrt{\pi} (z + 2) \operatorname{erf}(\sqrt{z}) \sqrt{z} + 3)$$

07.25.03.aevi.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{3} (3 - 2z) + \frac{2}{3} e^{-z} \sqrt{\pi} (z - 2) \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0091.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{3z} (e^z (4z^2 + 4z - 1) + 1)$$

07.25.03.aevj.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = e^z \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.aevk.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = 1 - e^{-z} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.0092.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, 3; z\right) = \frac{2}{3z^2} (z + e^z (4z^2 - 4z + 3) - 3)$$

07.25.03.aevl.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{10(z-3)}{3z^2} + \frac{5e^z \sqrt{\pi} (z^2 - 2z + 2) \operatorname{erf}(\sqrt{z})}{2z^{5/2}}$$

07.25.03.aevm.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (z^2 + 2z + 2) \operatorname{erfi}(\sqrt{z})}{2z^{5/2}} - \frac{10(z+3)}{3z^2}$$

07.25.03.aevn.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, 4; z\right) = \frac{z^2 - 6z - 30}{z^3} + \frac{2e^z (4z^2 - 12z + 15)}{z^3}$$

07.25.03.aevo.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7(z^2 - 90)}{6z^3} + \frac{35e^z \sqrt{\pi} (z^2 - 4z + 6) \operatorname{erf}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.aevp.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = -\frac{7(z^2 - 90)}{6z^3} - \frac{35 e^{-z} \sqrt{\pi} (z^2 + 4z + 6) \operatorname{erfi}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.aevq.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, 5; z\right) = \frac{8 e^z (4z^2 - 20z + 35)}{z^4} + \frac{4(z^3 - 9z^2 - 90z - 210)}{3z^4}$$

07.25.03.aevr.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{3(2z^3 - 21z^2 - 210z - 1260)}{4z^4} + \frac{315 e^z \sqrt{\pi} (z^2 - 6z + 12) \operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.aevs.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} \sqrt{\pi} (z^2 + 6z + 12) \operatorname{erfi}(\sqrt{z})}{8z^{9/2}} - \frac{3(2z^3 + 21z^2 - 210z + 1260)}{4z^4}$$

07.25.03.aevt.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{1}{2}, 6; z\right) = \frac{40 e^z (4z^2 - 28z + 63)}{z^5} + \frac{5(z^4 - 12z^3 - 180z^2 - 840z - 1512)}{3z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = 1$

07.25.03.aevu.01

$${}_2F_2\left(1, \frac{5}{2}; 1, 1; z\right) = \frac{1}{3} e^{z/2} (2z^2 + 6z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} (z^2 + 2z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aevv.01

$${}_2F_2\left(1, \frac{5}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{3} e^z (2z + 3)$$

07.25.03.aevw.01

$${}_2F_2\left(1, \frac{5}{2}; 1, 2; z\right) = \frac{1}{3} e^{z/2} (2z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z + 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.aevx.01

$${}_2F_2\left(1, \frac{5}{2}; 1, \frac{5}{2}; z\right) = e^z$$

07.25.03.aevy.01

$${}_2F_2\left(1, \frac{5}{2}; 1, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (z - 1) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.aevz.01

$${}_2F_2\left(1, \frac{5}{2}; 1, \frac{7}{2}; z\right) = \frac{5 e^z (2z - 3)}{4z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.aew0.01

$${}_2F_2\left(1, \frac{5}{2}; 1, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5 e^{-z} (2z + 3)}{4z^2}$$

07.25.03.aew1.01

$${}_2F_2\left(1, \frac{5}{2}; 1, 4; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z-4) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.aew2.01

$${}_2F_2\left(1, \frac{5}{2}; 1, \frac{9}{2}; z\right) = \frac{35 e^z (4z-15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z+5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.aew3.01

$${}_2F_2\left(1, \frac{5}{2}; 1, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z+15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z-5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.aew4.01

$${}_2F_2\left(1, \frac{5}{2}; 1, 5; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.aew5.01

$${}_2F_2\left(1, \frac{5}{2}; 1, \frac{11}{2}; z\right) = \frac{1575 e^z (2z-21)}{128 z^4} + \frac{945 \sqrt{\pi} (4z^2+20z+35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.aew6.01

$${}_2F_2\left(1, \frac{5}{2}; 1, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (4z^2-20z+35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 e^{-z} (2z+21)}{128 z^4}$$

07.25.03.aew7.01

$${}_2F_2\left(1, \frac{5}{2}; 1, 6; z\right) = \frac{32 e^{z/2} (z+8) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (z^2+4z+32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = \frac{3}{2}$

07.25.03.0093.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3 \sqrt{z}} \left(e^z \sqrt{\pi} (z+1) \operatorname{erf}(\sqrt{z}) + \sqrt{z} \right)$$

07.25.03.aew8.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (1-z) \operatorname{erfi}(\sqrt{z})}{3 \sqrt{z}} + \frac{1}{3}$$

07.25.03.0094.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{3z} (e^z (2z+1) - 1)$$

07.25.03.aew9.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.aewa.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.0095.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{3}{2}, 3; z\right) = \frac{1}{3z^2} (e^z (4z - 2) + 2 - 2z)$$

07.25.03.aewb.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{5 e^z \sqrt{\pi} (z - 1) \operatorname{erf}(\sqrt{z})}{4 z^{5/2}} - \frac{5(z - 3)}{6 z^2}$$

07.25.03.aewc.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(z + 3)}{6 z^2} - \frac{5 e^{-z} \sqrt{\pi} (z + 1) \operatorname{erfi}(\sqrt{z})}{4 z^{5/2}}$$

07.25.03.aewd.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{3}{2}, 4; z\right) = \frac{2 e^z (2z - 3)}{z^3} + \frac{-z^2 + 2z + 6}{z^3}$$

07.25.03.aewe.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{35 e^z \sqrt{\pi} (z - 2) \operatorname{erf}(\sqrt{z})}{8 z^{7/2}} - \frac{7(2z^2 - 5z - 30)}{12 z^3}$$

07.25.03.aewf.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7(2z^2 + 5z - 30)}{12 z^3} + \frac{35 e^{-z} \sqrt{\pi} (z + 2) \operatorname{erfi}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.aewg.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{3}{2}, 5; z\right) = \frac{8 e^z (2z - 5)}{z^4} - \frac{4(z^3 - 3z^2 - 18z - 30)}{3 z^4}$$

07.25.03.aewh.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{315 e^z \sqrt{\pi} (z - 3) \operatorname{erf}(\sqrt{z})}{16 z^{9/2}} - \frac{3(4z^3 - 14z^2 - 105z - 315)}{8 z^4}$$

07.25.03.aewi.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3(4z^3 + 14z^2 - 105z + 315)}{8 z^4} - \frac{315 e^{-z} \sqrt{\pi} (z + 3) \operatorname{erfi}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.aewj.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{3}{2}, 6; z\right) = \frac{40 e^z (2z - 7)}{z^5} - \frac{5(z^4 - 4z^3 - 36z^2 - 120z - 168)}{3 z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = 2$

07.25.03.0096.01

$${}_2F_2\left(1, \frac{5}{2}; 2, 2; z\right) = \frac{2}{3z} \left(e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right) - 1 \right)$$

07.25.03.aewk.01

$${}_2F_2\left(1, \frac{5}{2}; 2, \frac{5}{2}; z\right) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.0097.01

$${}_2F_2\left(1, \frac{5}{2}; 2, 3; z\right) = \frac{4}{3z} \left(e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right) - 1 \right)$$

07.25.03.aewl.01

$${}_2F_2\left(1, \frac{5}{2}; 2, \frac{7}{2}; z\right) = -\frac{5\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4z^{5/2}} - \frac{5}{3z} + \frac{5e^z}{2z^2}$$

07.25.03.aewm.01

$${}_2F_2\left(1, \frac{5}{2}; 2, \frac{7}{2}; -z\right) = -\frac{5\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{5/2}} + \frac{5}{3z} + \frac{5e^{-z}}{2z^2}$$

07.25.03.aewn.01

$${}_2F_2\left(1, \frac{5}{2}; 2, 4; z\right) = \frac{8e^{z/2} I_1\left(\frac{z}{2}\right)}{z^2} - \frac{2}{z}$$

07.25.03.aewo.01

$${}_2F_2\left(1, \frac{5}{2}; 2, \frac{9}{2}; z\right) = -\frac{35\sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{16z^{7/2}} - \frac{7}{3z} + \frac{105e^z}{8z^3}$$

07.25.03.aewp.01

$${}_2F_2\left(1, \frac{5}{2}; 2, \frac{9}{2}; -z\right) = -\frac{35\sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{16z^{7/2}} + \frac{7}{3z} - \frac{105e^{-z}}{8z^3}$$

07.25.03.aewq.01

$${}_2F_2\left(1, \frac{5}{2}; 2, 5; z\right) = -\frac{32e^{z/2} I_0\left(\frac{z}{2}\right)}{3z^2} + \frac{32e^{z/2} (z+4) I_1\left(\frac{z}{2}\right)}{3z^3} - \frac{8}{3z}$$

07.25.03.aewr.01

$${}_2F_2\left(1, \frac{5}{2}; 2, \frac{11}{2}; z\right) = \frac{315e^z (2z+15)}{64z^4} - \frac{315\sqrt{\pi} (4z^2+12z+15) \operatorname{erfi}(\sqrt{z})}{128z^{9/2}} - \frac{3}{z}$$

07.25.03.aews.01

$${}_2F_2\left(1, \frac{5}{2}; 2, \frac{11}{2}; -z\right) = -\frac{315e^{-z} (2z-15)}{64z^4} - \frac{315\sqrt{\pi} (4z^2-12z+15) \operatorname{erf}(\sqrt{z})}{128z^{9/2}} + \frac{3}{z}$$

07.25.03.aewt.01

$${}_2F_2\left(1, \frac{5}{2}; 2, 6; z\right) = -\frac{64e^{z/2} (z+3) I_0\left(\frac{z}{2}\right)}{3z^3} + \frac{64e^{z/2} (z^2+4z+12) I_1\left(\frac{z}{2}\right)}{3z^4} - \frac{10}{3z}$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = \frac{5}{2}$

07.25.03.aewu.01

$${}_2F_2\left(1, \frac{5}{2}, \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3}{2z}$$

07.25.03.aewv.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3}{2z} - \frac{3e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.aeww.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{5}{2}, 3; z\right) = \frac{2e^z}{z^2} - \frac{2(z+1)}{z^2}$$

07.25.03.aewx.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{15e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5(2z+3)}{4z^2}$$

07.25.03.aewy.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{5(2z-3)}{4z^2} + \frac{15e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.aewz.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{5}{2}, 4; z\right) = \frac{6e^z}{z^3} - \frac{3(z^2+2z+2)}{z^3}$$

07.25.03.aex0.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{105e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{7(4z^2+10z+15)}{8z^3}$$

07.25.03.aex1.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(4z^2-10z+15)}{8z^3} - \frac{105e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.aex2.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{5}{2}, 5; z\right) = \frac{24e^z}{z^4} - \frac{4(z^3+3z^2+6z+6)}{z^4}$$

07.25.03.aex3.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{945e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{32z^{9/2}} - \frac{9(8z^3+28z^2+70z+105)}{16z^4}$$

07.25.03.aex4.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{9(8z^3-28z^2+70z-105)}{16z^4} + \frac{945e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.aex5.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{5}{2}, 6; z\right) = \frac{120e^z}{z^5} - \frac{5(z^4+4z^3+12z^2+24z+24)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = 3$

07.25.03.0098.01

$${}_2F_2\left(1, \frac{5}{2}; 3, 3; z\right) = -\frac{8}{3z^2}\left(z - 2e^{z/2}I_0\left(\frac{z}{2}\right) + 2\right)$$

07.25.03.aex6.01

$${}_2F_2\left(1, \frac{5}{2}; 3, \frac{7}{2}; z\right) = \frac{5\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}} - \frac{10(z+3)}{3z^2}$$

07.25.03.aex7.01

$${}_2F_2\left(1, \frac{5}{2}; 3, \frac{7}{2}; -z\right) = \frac{10(z-3)}{3z^2} + \frac{5\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aex8.01

$${}_2F_2\left(1, \frac{5}{2}; 3, 4; z\right) = -\frac{4(z+4)}{z^2} + \frac{16e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{16e^{z/2} I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.aex9.01

$${}_2F_2\left(1, \frac{5}{2}; 3, \frac{9}{2}; z\right) = -\frac{14(z+5)}{3z^2} + \frac{35\sqrt{\pi} (2z+1) \operatorname{erfi}(\sqrt{z})}{4z^{7/2}} - \frac{35e^z}{2z^3}$$

07.25.03.aexa.01

$${}_2F_2\left(1, \frac{5}{2}; 3, \frac{9}{2}; -z\right) = \frac{14(z-5)}{3z^2} + \frac{35\sqrt{\pi} (2z-1) \operatorname{erf}(\sqrt{z})}{4z^{7/2}} + \frac{35e^{-z}}{2z^3}$$

07.25.03.aexb.01

$${}_2F_2\left(1, \frac{5}{2}; 3, 5; z\right) = -\frac{16(z+6)}{3z^2} + \frac{128e^{z/2} I_0\left(\frac{z}{2}\right)}{3z^2} - \frac{128e^{z/2} (z+1) I_1\left(\frac{z}{2}\right)}{3z^3}$$

07.25.03.aexc.01

$${}_2F_2\left(1, \frac{5}{2}; 3, \frac{11}{2}; z\right) = -\frac{6(z+7)}{z^2} - \frac{315e^z (2z+3)}{16z^4} + \frac{315\sqrt{\pi} (4z^2+4z+3) \operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.aexd.01

$${}_2F_2\left(1, \frac{5}{2}; 3, \frac{11}{2}; -z\right) = \frac{6(z-7)}{z^2} + \frac{315e^{-z} (2z-3)}{16z^4} + \frac{315\sqrt{\pi} (4z^2-4z+3) \operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.aexe.01

$${}_2F_2\left(1, \frac{5}{2}; 3, 6; z\right) = -\frac{20(z+8)}{3z^2} + \frac{128e^{z/2} (2z+1) I_0\left(\frac{z}{2}\right)}{3z^3} - \frac{128e^{z/2} (2z^2+3z+4) I_1\left(\frac{z}{2}\right)}{3z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = \frac{7}{2}$

07.25.03.aexf.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{7}{2}, 4; z\right) = -\frac{5(z^2+6z-6)}{z^3} + \frac{30\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}} - \frac{30e^z}{z^3}$$

07.25.03.aexg.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{7}{2}, 4; -z\right) = \frac{5(z^2-6z-6)}{z^3} + \frac{30\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}} + \frac{30e^{-z}}{z^3}$$

07.25.03.aexh.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{7}{2}, 5; z\right) = -\frac{40 e^z (2z+1)}{z^4} - \frac{20(z^3+9z^2-18z-6)}{3z^4} + \frac{80\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aexi.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{7}{2}, 5; -z\right) = \frac{40 e^{-z} (2z-1)}{z^4} + \frac{20(z^3-9z^2-18z+6)}{3z^4} + \frac{80\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aexj.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{7}{2}, 6; z\right) = -\frac{40 e^z (4z^2+2z+3)}{z^5} - \frac{5(5z^4+60z^3-180z^2-120z-72)}{3z^5} + \frac{160\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aexk.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{7}{2}, 6; -z\right) = \frac{40 e^{-z} (4z^2-2z+3)}{z^5} + \frac{5(5z^4-60z^3-180z^2+120z-72)}{3z^5} + \frac{160\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = 4$

07.25.03.aexl.01

$${}_2F_2\left(1, \frac{5}{2}; 4, 4; z\right) = -\frac{6(z^2+8z-16)}{z^3} + \frac{96 e^{z/2} (z-1) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{96 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.aexm.01

$${}_2F_2\left(1, \frac{5}{2}; 4, \frac{9}{2}; z\right) = -\frac{7(z^2+10z-30)}{z^3} + \frac{105\sqrt{\pi} (2z-1) \operatorname{erfi}(\sqrt{z})}{2z^{7/2}} - \frac{105 e^z}{z^3}$$

07.25.03.aexn.01

$${}_2F_2\left(1, \frac{5}{2}; 4, \frac{9}{2}; -z\right) = \frac{7(z^2-10z-30)}{z^3} + \frac{105\sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{2z^{7/2}} + \frac{105 e^{-z}}{z^3}$$

07.25.03.aexo.01

$${}_2F_2\left(1, \frac{5}{2}; 4, 5; z\right) = -\frac{8(z^2+12z-48)}{z^3} + \frac{128 e^{z/2} (2z-3) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{128 e^{z/2} (2z-1) I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.aexp.01

$${}_2F_2\left(1, \frac{5}{2}; 4, \frac{11}{2}; z\right) = -\frac{945 e^z (2z-1)}{8z^4} - \frac{9(z^2+14z-70)}{z^3} + \frac{945\sqrt{\pi} (4z^2-4z-1) \operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.aexq.01

$${}_2F_2\left(1, \frac{5}{2}; 4, \frac{11}{2}; -z\right) = \frac{945 e^{-z} (2z+1)}{8z^4} + \frac{9(z^2-14z-70)}{z^3} + \frac{945\sqrt{\pi} (4z^2+4z-1) \operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.aexr.01

$${}_2F_2\left(1, \frac{5}{2}; 4, 6; z\right) = -\frac{10(z^2+16z-96)}{z^3} + \frac{512 e^{z/2} (z-2) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{256 e^{z/2} (2z^2-2z-1) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = \frac{9}{2}$

07.25.03.aexs.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{9}{2}, 5; z\right) = -\frac{280 e^z (z-1)}{z^4} - \frac{28(z^3 + 15z^2 - 90z + 30)}{3z^4} + \frac{140\sqrt{\pi}(2z-3)\operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aext.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{9}{2}, 5; -z\right) = \frac{280 e^{-z} (z+1)}{z^4} + \frac{28(z^3 - 15z^2 - 90z - 30)}{3z^4} + \frac{140\sqrt{\pi}(2z+3)\operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aexu.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{9}{2}, 6; z\right) = -\frac{280 e^z (2z^2 - 4z - 1)}{z^5} - \frac{35(z^4 + 20z^3 - 180z^2 + 120z + 24)}{3z^5} + \frac{280\sqrt{\pi}(2z-5)\operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aexv.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{9}{2}, 6; -z\right) = \frac{280 e^{-z} (2z^2 + 4z - 1)}{z^5} + \frac{35(z^4 - 20z^3 - 180z^2 - 120z + 24)}{3z^5} + \frac{280\sqrt{\pi}(2z+5)\operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = 5$

07.25.03.aexw.01

$${}_2F_2\left(1, \frac{5}{2}; 5, 5; z\right) = -\frac{32(z^3 + 18z^2 - 144z + 96)}{3z^4} + \frac{1024 e^{z/2} (2z^2 - 6z + 3) I_0\left(\frac{z}{2}\right)}{3z^4} - \frac{2048 e^{z/2} (z-2) I_1\left(\frac{z}{2}\right)}{3z^3}$$

07.25.03.aexx.01

$${}_2F_2\left(1, \frac{5}{2}; 5, \frac{11}{2}; z\right) = -\frac{315 e^z (2z-5)}{z^4} - \frac{12(z^3 + 21z^2 - 210z + 210)}{z^4} + \frac{315\sqrt{\pi}(4z^2 - 12z + 3)\operatorname{erfi}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.aexy.01

$${}_2F_2\left(1, \frac{5}{2}; 5, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (2z+5)}{z^4} + \frac{12(z^3 - 21z^2 - 210z - 210)}{z^4} + \frac{315\sqrt{\pi}(4z^2 + 12z + 3)\operatorname{erf}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.aexz.01

$${}_2F_2\left(1, \frac{5}{2}; 5, 6; z\right) = -\frac{40(z^3 + 24z^2 - 288z + 384)}{3z^4} + \frac{1024 e^{z/2} (4z^2 - 18z + 15) I_0\left(\frac{z}{2}\right)}{3z^4} - \frac{1024 e^{z/2} (4z^2 - 14z + 3) I_1\left(\frac{z}{2}\right)}{3z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = \frac{11}{2}$

07.25.03.aey0.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{11}{2}, 6; z\right) = -\frac{630 e^z (2z^2 - 9z + 4)}{z^5} - \frac{15(z^4 + 28z^3 - 420z^2 + 840z - 168)}{z^5} + \frac{315\sqrt{\pi}(4z^2 - 20z + 15)\operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.aey1.01

$${}_2F_2\left(1, \frac{5}{2}; \frac{11}{2}, 6; -z\right) = \frac{630 e^{-z} (2z^2 + 9z + 4)}{z^5} + \frac{15(z^4 - 28z^3 - 420z^2 - 840z - 168)}{z^5} + \frac{315\sqrt{\pi}(4z^2 + 20z + 15)\operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

For fixed z and $a_1 = 1, a_2 = \frac{5}{2}, b_1 = 6$

$$\begin{aligned}
 & \text{07.25.03.aey2.01} \\
 {}_2F_2\left(1, \frac{5}{2}; 6, 6; z\right) &= -\frac{1}{3z^5} (10(5z^4 + 160z^3 - 2880z^2 + 7680z - 3072)) + \\
 & \frac{2048 e^{z/2} (4z^3 - 28z^2 + 45z - 15) I_0\left(\frac{z}{2}\right)}{3z^5} - \frac{2048 e^{z/2} (4z^2 - 24z + 23) I_1\left(\frac{z}{2}\right)}{3z^4}
 \end{aligned}$$

For fixed z and $a_1 = 1, a_2 = 3, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 1, a_2 = 3, b_1 = -\frac{11}{2}$

$$\begin{aligned}
 & \text{07.25.03.aey3.01} \\
 {}_2F_2\left(1, 3; -\frac{11}{2}, 1; z\right) &= \frac{32z^8 + 528z^7 + 1792z^6 - 672z^5 + 720z^4 - 1200z^3 + 2520z^2 - 5670z + 10395}{10395} + \\
 & \frac{8 e^z \sqrt{\pi} (4z^{17/2} + 68z^{15/2} + 255z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aey4.01} \\
 {}_2F_2\left(1, 3; -\frac{11}{2}, 1; -z\right) &= \frac{32z^8 - 528z^7 + 1792z^6 + 672z^5 + 720z^4 + 1200z^3 + 2520z^2 + 5670z + 10395}{10395} - \\
 & \frac{8 e^{-z} \sqrt{\pi} (4z^{17/2} - 68z^{15/2} + 255z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aey5.01} \\
 {}_2F_2\left(1, 3; -\frac{11}{2}, 2; z\right) &= \\
 & \frac{32z^7 + 256z^6 - 112z^5 + 144z^4 - 300z^3 + 840z^2 - 2835z + 10395}{10395} + \frac{16 e^z \sqrt{\pi} (2z^{15/2} + 17z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aey6.01} \\
 {}_2F_2\left(1, 3; -\frac{11}{2}, 2; -z\right) &= \\
 & \frac{-32z^7 + 256z^6 + 112z^5 + 144z^4 + 300z^3 + 840z^2 + 2835z + 10395}{10395} + \frac{16 e^{-z} \sqrt{\pi} (2z^{15/2} - 17z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aey7.01} \\
 {}_2F_2\left(1, 3; -\frac{11}{2}, 3; z\right) &= \frac{64 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{64z^6 - 32z^5 + 48z^4 - 120z^3 + 420z^2 - 1890z + 10395}{10395}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aey8.01} \\
 {}_2F_2\left(1, 3; -\frac{11}{2}, 3; -z\right) &= \frac{64z^6 + 32z^5 + 48z^4 + 120z^3 + 420z^2 + 1890z + 10395}{10395} - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} \operatorname{erfi}(\sqrt{z})}{10395}
 \end{aligned}$$

For fixed z and $a_1 = 1, a_2 = 3, b_1 = -\frac{9}{2}$

07.25.03.aey9.01

$${}_2F_2\left(1, 3; -\frac{9}{2}, 1; z\right) = \frac{1}{945}(-16z^7 - 232z^6 - 672z^5 + 240z^4 - 240z^3 + 360z^2 - 630z + 945) - \frac{4}{945}e^z\sqrt{\pi}(4z^{15/2} + 60z^{13/2} + 195z^{11/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aeya.01

$${}_2F_2\left(1, 3; -\frac{9}{2}, 1; -z\right) = \frac{1}{945}(16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945) - \frac{4}{945}e^{-z}\sqrt{\pi}(4z^{15/2} - 60z^{13/2} + 195z^{11/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aeyb.01

$${}_2F_2\left(1, 3; -\frac{9}{2}, 2; z\right) = \frac{1}{945}(-16z^6 - 112z^5 + 48z^4 - 60z^3 + 120z^2 - 315z + 945) - \frac{8}{945}e^z\sqrt{\pi}(2z^{13/2} + 15z^{11/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aeyc.01

$${}_2F_2\left(1, 3; -\frac{9}{2}, 2; -z\right) = \frac{1}{945}(-16z^6 + 112z^5 + 48z^4 + 60z^3 + 120z^2 + 315z + 945) + \frac{8}{945}e^{-z}\sqrt{\pi}(2z^{13/2} - 15z^{11/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aeyd.01

$${}_2F_2\left(1, 3; -\frac{9}{2}, 3; z\right) = \frac{1}{945}(-32z^5 + 16z^4 - 24z^3 + 60z^2 - 210z + 945) - \frac{32}{945}e^z\sqrt{\pi}z^{11/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.aeye.01

$${}_2F_2\left(1, 3; -\frac{9}{2}, 3; -z\right) = \frac{1}{945}(32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945) - \frac{32}{945}e^{-z}\sqrt{\pi}z^{11/2}\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 3, b_1 = -\frac{7}{2}$

07.25.03.aeyf.01

$${}_2F_2\left(1, 3; -\frac{7}{2}, 1; z\right) = \frac{1}{105}(8z^6 + 100z^5 + 240z^4 - 80z^3 + 72z^2 - 90z + 105) + \frac{2}{105}e^z\sqrt{\pi}(4z^{13/2} + 52z^{11/2} + 143z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aeyg.01

$${}_2F_2\left(1, 3; -\frac{7}{2}, 1; -z\right) = \frac{1}{105}(8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105) - \frac{2}{105}e^{-z}\sqrt{\pi}(4z^{13/2} - 52z^{11/2} + 143z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aeyh.01

$${}_2F_2\left(1, 3; -\frac{7}{2}, 2; z\right) = \frac{1}{105}(8z^5 + 48z^4 - 20z^3 + 24z^2 - 45z + 105) + \frac{4}{105}e^z\sqrt{\pi}(2z^{11/2} + 13z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aeyi.01

$${}_2F_2\left(1, 3; -\frac{7}{2}, 2; -z\right) = \frac{1}{105}(-8z^5 + 48z^4 + 20z^3 + 24z^2 + 45z + 105) + \frac{4}{105}e^{-z}\sqrt{\pi}(2z^{11/2} - 13z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aeyj.01

$${}_2F_2\left(1, 3; -\frac{7}{2}, 3; z\right) = \frac{16}{105}e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{9/2} + \frac{1}{105}(16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

07.25.03.aeyk.01

$${}_2F_2\left(1, 3; -\frac{7}{2}, 3; -z\right) = \frac{1}{105} (16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 3, b_1 = -\frac{5}{2}$

07.25.03.aeyl.01

$${}_2F_2\left(1, 3; -\frac{5}{2}, 1; z\right) = \frac{1}{15} (-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) + \frac{1}{15} e^z \sqrt{\pi} (-4z^{11/2} - 44z^{9/2} - 99z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aeym.01

$${}_2F_2\left(1, 3; -\frac{5}{2}, 1; -z\right) = \frac{1}{15} (4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) + \frac{1}{15} e^{-z} \sqrt{\pi} (-4z^{11/2} + 44z^{9/2} - 99z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aeyn.01

$${}_2F_2\left(1, 3; -\frac{5}{2}, 2; z\right) = \frac{1}{15} (-4z^4 - 20z^3 + 8z^2 - 9z + 15) - \frac{2}{15} e^z \sqrt{\pi} (2z^{9/2} + 11z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aeyo.01

$${}_2F_2\left(1, 3; -\frac{5}{2}, 2; -z\right) = \frac{1}{15} (-4z^4 + 20z^3 + 8z^2 + 9z + 15) + \frac{2}{15} e^{-z} \sqrt{\pi} (2z^{9/2} - 11z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aeyp.01

$${}_2F_2\left(1, 3; -\frac{5}{2}, 3; z\right) = \frac{1}{15} (-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15} e^z \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aeyq.01

$${}_2F_2\left(1, 3; -\frac{5}{2}, 3; -z\right) = \frac{1}{15} (8z^3 + 4z^2 + 6z + 15) - \frac{8}{15} e^{-z} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 3, b_1 = -\frac{3}{2}$

07.25.03.aeyr.01

$${}_2F_2\left(1, 3; -\frac{3}{2}, 1; z\right) = \frac{1}{3} (2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6} e^z \sqrt{\pi} (4z^{9/2} + 36z^{7/2} + 63z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aeys.01

$${}_2F_2\left(1, 3; -\frac{3}{2}, 1; -z\right) = \frac{1}{3} (2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6} e^{-z} \sqrt{\pi} (-4z^{9/2} + 36z^{7/2} - 63z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aeyt.01

$${}_2F_2\left(1, 3; -\frac{3}{2}, 2; z\right) = \frac{1}{3} (2z^3 + 8z^2 - 3z + 3) + \frac{1}{3} e^z \sqrt{\pi} (2z^{7/2} + 9z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aeyu.01

$${}_2F_2\left(1, 3; -\frac{3}{2}, 2; -z\right) = \frac{1}{3} (-2z^3 + 8z^2 + 3z + 3) + \frac{1}{3} e^{-z} \sqrt{\pi} (2z^{7/2} - 9z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aeyv.01

$${}_2F_2\left(1, 3; -\frac{3}{2}, 3; z\right) = \frac{4}{3} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (4z^2 - 2z + 3)$$

07.25.03.aeyw.01

$${}_2F_2\left(1, 3; -\frac{3}{2}, 3; -z\right) = \frac{1}{3}(4z^2 + 2z + 3) - \frac{4}{3}e^{-z}\sqrt{\pi}z^{5/2}\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 3, b_1 = -\frac{1}{2}$

07.25.03.aeyx.01

$${}_2F_2\left(1, 3; -\frac{1}{2}, 1; z\right) = \frac{1}{2}(-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4}e^z\sqrt{\pi}(-4z^{7/2} - 28z^{5/2} - 35z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aeyy.01

$${}_2F_2\left(1, 3; -\frac{1}{2}, 1; -z\right) = \frac{1}{2}(2z^3 - 13z^2 + 12z + 2) + \frac{1}{4}e^{-z}\sqrt{\pi}(-4z^{7/2} + 28z^{5/2} - 35z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aeyz.01

$${}_2F_2\left(1, 3; -\frac{1}{2}, 2; z\right) = -z^2 - 3z + \frac{1}{2}e^z\sqrt{\pi}(-2z^{5/2} - 7z^{3/2})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.aez0.01

$${}_2F_2\left(1, 3; -\frac{1}{2}, 2; -z\right) = -z^2 + 3z + \frac{1}{2}e^{-z}\sqrt{\pi}(2z^{5/2} - 7z^{3/2})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.aez1.01

$${}_2F_2\left(1, 3; -\frac{1}{2}, 3; z\right) = -2e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{3/2} - 2z + 1$$

07.25.03.aez2.01

$${}_2F_2\left(1, 3; -\frac{1}{2}, 3; -z\right) = -2e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{3/2} + 2z + 1$$

For fixed z and $a_1 = 1, a_2 = 3, b_1 = \frac{1}{2}$

07.25.03.aez3.01

$${}_2F_2\left(1, 3; \frac{1}{2}, 1; z\right) = \frac{1}{4}(2z^2 + 9z + 4) + \frac{1}{8}e^z\sqrt{\pi}(4z^{5/2} + 20z^{3/2} + 15\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.aez4.01

$${}_2F_2\left(1, 3; \frac{1}{2}, 1; -z\right) = \frac{1}{4}(2z^2 - 9z + 4) + \frac{1}{8}e^{-z}\sqrt{\pi}(-4z^{5/2} + 20z^{3/2} - 15\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.0099.01

$${}_2F_2\left(1, 3; \frac{1}{2}, 2; z\right) = \frac{1}{4}(2(z+2) + e^z\sqrt{\pi}\sqrt{z}(2z+5)\operatorname{erf}(\sqrt{z}))$$

07.25.03.aez5.01

$${}_2F_2\left(1, 3; \frac{1}{2}, 2; -z\right) = \frac{2-z}{2} + \frac{1}{4}e^{-z}\sqrt{\pi}(2z^{3/2} - 5\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aez6.01

$${}_2F_2\left(1, 3; \frac{1}{2}, 3; z\right) = e^z\sqrt{\pi}\sqrt{z}\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.aez7.01

$${}_2F_2\left(1, 3; \frac{1}{2}, 3; -z\right) = 1 - e^{-z}\sqrt{\pi}\sqrt{z}\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 3, b_1 = 1$

07.25.03.aez8.01

$${}_2F_2(1, 3; 1, 1; z) = \frac{1}{2} e^z (z^2 + 4z + 2)$$

07.25.03.aez9.01

$${}_2F_2\left(1, 3; 1, \frac{3}{2}; z\right) = \frac{1}{8} (2z + 5) + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.aeza.01

$${}_2F_2\left(1, 3; 1, \frac{3}{2}; -z\right) = \frac{1}{8} (5 - 2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.aezb.01

$${}_2F_2(1, 3; 1, 2; z) = \frac{1}{2} e^z (z + 2)$$

07.25.03.aezc.01

$${}_2F_2\left(1, 3; 1, \frac{5}{2}; z\right) = \frac{3(2z + 1)}{16z} + \frac{3 e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.aezd.01

$${}_2F_2\left(1, 3; 1, \frac{5}{2}; -z\right) = \frac{3(2z - 1)}{16z} - \frac{3 e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.aeze.01

$${}_2F_2(1, 3; 1, 3; z) = e^z$$

07.25.03.aezf.01

$${}_2F_2\left(1, 3; 1, \frac{7}{2}; z\right) = \frac{15(2z - 3)}{32 z^2} + \frac{15 e^z \sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.aezg.01

$${}_2F_2\left(1, 3; 1, \frac{7}{2}; -z\right) = \frac{15 e^{-z} \sqrt{\pi} (4z^2 + 4z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{5/2}} - \frac{15(2z + 3)}{32 z^2}$$

07.25.03.aezh.01

$${}_2F_2(1, 3; 1, 4; z) = \frac{3 e^z (z^2 - 2z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.aezi.01

$${}_2F_2\left(1, 3; 1, \frac{9}{2}; z\right) = \frac{105(2z - 15)}{64 z^3} + \frac{105 e^z \sqrt{\pi} (4z^2 - 12z + 15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.aej.01

$${}_2F_2\left(1, 3; 1, \frac{9}{2}; -z\right) = \frac{105(2z + 15)}{64 z^3} - \frac{105 e^{-z} \sqrt{\pi} (4z^2 + 12z + 15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.aezk.01

$${}_2F_2(1, 3; 1, 5; z) = \frac{12 e^z (z^2 - 4z + 6)}{z^4} - \frac{24 (z + 3)}{z^4}$$

07.25.03.aezi.01

$${}_2F_2\left(1, 3; 1, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 (2z + 21)}{128 z^4}$$

07.25.03.aezm.01

$${}_2F_2\left(1, 3; 1, \frac{11}{2}; -z\right) = \frac{1575 (2z - 21)}{128 z^4} + \frac{945 e^{-z} \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.aezn.01

$${}_2F_2(1, 3; 1, 6; z) = \frac{60 e^z (z^2 - 6z + 12)}{z^5} - \frac{60 (z^2 + 6z + 12)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = 3, b_1 = \frac{3}{2}$

07.25.03.0100.01

$${}_2F_2\left(1, 3; \frac{3}{2}, 2; z\right) = \frac{1}{8 \sqrt{z}} \left(e^z \sqrt{\pi} (2z + 3) \operatorname{erf}(\sqrt{z}) + 2 \sqrt{z} \right)$$

07.25.03.aezo.01

$${}_2F_2\left(1, 3; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} \sqrt{\pi} (3 - 2z) \operatorname{erfi}(\sqrt{z})}{8 \sqrt{z}} + \frac{1}{4}$$

07.25.03.aezp.01

$${}_2F_2\left(1, 3; \frac{3}{2}, 3; z\right) = \frac{e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.aezq.01

$${}_2F_2\left(1, 3; \frac{3}{2}, 3; -z\right) = \frac{e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

For fixed z and $a_1 = 1, a_2 = 3, b_1 = 2$

07.25.03.0101.01

$${}_2F_2(1, 3; 2, 2; z) = \frac{1}{2z} (e^z (z + 1) - 1)$$

07.25.03.0102.01

$${}_2F_2\left(1, 3; 2, \frac{5}{2}; z\right) = \frac{1}{16 z^{3/2}} \left(3 e^z \sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z}) - 6 \sqrt{z} \right)$$

07.25.03.aezr.01

$${}_2F_2\left(1, 3; 2, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z - 1) \operatorname{erfi}(\sqrt{z})}{16 z^{3/2}} + \frac{3}{8z}$$

07.25.03.aezs.01

$${}_2F_2(1, 3; 2, 3; z) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.aezt.01

$${}_2F_2\left(1, 3; 2, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{32 z^{5/2}} - \frac{5(4z - 3)}{16 z^2}$$

07.25.03.aezu.01

$${}_2F_2\left(1, 3; 2, \frac{7}{2}; -z\right) = \frac{5(4z + 3)}{16 z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{32 z^{5/2}}$$

07.25.03.ae zv.01

$${}_2F_2(1, 3; 2, 4; z) = \frac{3 e^z (z - 1)}{z^3} - \frac{3(z^2 - 2)}{2 z^3}$$

07.25.03.aezw.01

$${}_2F_2\left(1, 3; 2, \frac{9}{2}; z\right) = \frac{105 e^z \sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{7/2}} - \frac{7(8z^2 - 45)}{32 z^3}$$

07.25.03.aezx.01

$${}_2F_2\left(1, 3; 2, \frac{9}{2}; -z\right) = \frac{7(8z^2 - 45)}{32 z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.aezy.01

$${}_2F_2(1, 3; 2, 5; z) = \frac{12 e^z (z - 2)}{z^4} - \frac{2(z^3 - 6z - 12)}{z^4}$$

07.25.03.aezz.01

$${}_2F_2\left(1, 3; 2, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}} - \frac{9(16z^3 - 140z - 525)}{64 z^4}$$

07.25.03.af00.01

$${}_2F_2\left(1, 3; 2, \frac{11}{2}; -z\right) = \frac{9(16z^3 - 140z + 525)}{64 z^4} - \frac{945 e^{-z} \sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.af01.01

$${}_2F_2(1, 3; 2, 6; z) = \frac{60 e^z (z - 3)}{z^5} - \frac{5(z^4 - 12z^2 - 48z - 72)}{2 z^5}$$

For fixed z and $a_1 = 1, a_2 = 3, b_1 = \frac{5}{2}$

07.25.03.af02.01

$${}_2F_2\left(1, 3; \frac{5}{2}, 3; z\right) = \frac{3 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3}{2z}$$

07.25.03.af03.01

$${}_2F_2\left(1, 3; \frac{5}{2}, 3; -z\right) = \frac{3}{2z} - \frac{3 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

For fixed z and $a_1 = 1, a_2 = 3, b_1 = 3$

07.25.03.af04.01

$${}_2F_2(1, 3; 3, 3; z) = \frac{2 e^z}{z^2} - \frac{2(z+1)}{z^2}$$

07.25.03.af05.01

$${}_2F_2\left(1, 3; 3, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5(2z+3)}{4 z^2}$$

07.25.03.af06.01

$${}_2F_2\left(1, 3; 3, \frac{7}{2}; -z\right) = \frac{5(2z-3)}{4 z^2} + \frac{15 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.af07.01

$${}_2F_2(1, 3; 3, 4; z) = \frac{6 e^z}{z^3} - \frac{3(z^2 + 2z + 2)}{z^3}$$

07.25.03.af08.01

$${}_2F_2\left(1, 3; 3, \frac{9}{2}; z\right) = \frac{105 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7(4z^2 + 10z + 15)}{8 z^3}$$

07.25.03.af09.01

$${}_2F_2\left(1, 3; 3, \frac{9}{2}; -z\right) = \frac{7(4z^2 - 10z + 15)}{8 z^3} - \frac{105 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.af0a.01

$${}_2F_2(1, 3; 3, 5; z) = \frac{24 e^z}{z^4} - \frac{4(z^3 + 3z^2 + 6z + 6)}{z^4}$$

07.25.03.af0b.01

$${}_2F_2\left(1, 3; 3, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9(8z^3 + 28z^2 + 70z + 105)}{16 z^4}$$

07.25.03.af0c.01

$${}_2F_2\left(1, 3; 3, \frac{11}{2}; -z\right) = \frac{9(8z^3 - 28z^2 + 70z - 105)}{16 z^4} + \frac{945 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.af0d.01

$${}_2F_2(1, 3; 3, 6; z) = \frac{120 e^z}{z^5} - \frac{5(z^4 + 4z^3 + 12z^2 + 24z + 24)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = 3, b_1 = 4$

07.25.03.af0e.01

$${}_2F_2(1, 3; 4, 4; z) = -\frac{9(z^2 + 4z + 4\gamma)}{2z^3} + \frac{18 \operatorname{Ei}(z)}{z^3} + \frac{9 \log\left(\frac{1}{z}\right)}{z^3} - \frac{9 \log(z)}{z^3}$$

07.25.03.af0f.01

$${}_2F_2(1, 3; 4, 5; z) = -\frac{6(z^3 + 6z^2 + 12\gamma z - 12z - 12)}{z^4} + \frac{72 \operatorname{Ei}(z)}{z^3} + \frac{36 \log\left(\frac{1}{z}\right)}{z^3} - \frac{36 \log(z)}{z^3} - \frac{72 e^z}{z^4}$$

07.25.03.af0g.01

$${}_2F_2(1, 3; 4, 6; z) = -\frac{180 e^z (z + 1)}{z^5} - \frac{15(z^4 + 8z^3 + 24\gamma z^2 - 36z^2 - 48z - 24)}{2z^5} + \frac{180 \operatorname{Ei}(z)}{z^3} + \frac{90 \log\left(\frac{1}{z}\right)}{z^3} - \frac{90 \log(z)}{z^3}$$

For fixed z and $a_1 = 1, a_2 = 3, b_1 = 5$

07.25.03.af0h.01

$${}_2F_2(1, 3; 5, 5; z) = -\frac{8(z^3 + 9z^2 + 36\gamma z - 72z - 36\gamma - 36)}{z^4} + \frac{288(z - 1) \operatorname{Ei}(z)}{z^4} + \frac{144(z - 1) \log\left(\frac{1}{z}\right)}{z^4} - \frac{144(z - 1) \log(z)}{z^4} - \frac{288 e^z}{z^4}$$

07.25.03.af0i.01

$${}_2F_2(1, 3; 5, 6; z) = -\frac{720 e^z (z - 1)}{z^5} - \frac{10(z^4 + 12z^3 + 72\gamma z^2 - 180z^2 - 144\gamma z + 72)}{z^5} + \frac{720(z - 2) \operatorname{Ei}(z)}{z^4} + \frac{360(z - 2) \log\left(\frac{1}{z}\right)}{z^4} - \frac{360(z - 2) \log(z)}{z^4}$$

For fixed z and $a_1 = 1, a_2 = 3, b_1 = 6$

07.25.03.af0j.01

$${}_2F_2(1, 3; 6, 6; z) = -\frac{1800 e^z (z - 3)}{z^5} - \frac{25(z^4 + 16z^3 + 144\gamma z^2 - 432z^2 - 576\gamma z + 576z + 288\gamma + 432)}{2z^5} + \frac{1800(z^2 - 4z + 2) \operatorname{Ei}(z)}{z^5} + \frac{900(z^2 - 4z + 2) \log\left(\frac{1}{z}\right)}{z^5} - \frac{900(z^2 - 4z + 2) \log(z)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = -\frac{11}{2}$

07.25.03.af0k.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) =$$

$$\frac{1}{1\,620\,840\,375} (32\,768 z^{15} + 2\,637\,824 z^{14} + 83\,632\,128 z^{13} + 1\,346\,727\,936 z^{12} + 11\,850\,700\,800 z^{11} + 57\,081\,922\,560 z^{10} +$$

$$142\,505\,685\,504 z^9 + 161\,201\,698\,560 z^8 + 60\,023\,617\,920 z^7 + 2\,205\,403\,200 z^6 +$$

$$64\,864\,800 z^5 + 19\,459\,440 z^4 + 18\,711\,000 z^3 + 41\,674\,500 z^2 + 187\,535\,250 z + 1\,620\,840\,375) +$$

$$\frac{1}{1\,620\,840\,375} (32\,768 e^z \sqrt{\pi} (z^{31/2} + 81 z^{29/2} + 2592 z^{27/2} + 42\,336 z^{25/2} + 381\,024 z^{23/2} + 1\,905\,120 z^{21/2} +$$

$$5\,080\,320 z^{19/2} + 6\,531\,840 z^{17/2} + 3\,265\,920 z^{15/2} + 362\,880 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.af0l.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; -z\right) =$$

$$\frac{1}{1\,620\,840\,375} (-32\,768 z^{15} + 2\,637\,824 z^{14} - 83\,632\,128 z^{13} + 1\,346\,727\,936 z^{12} - 11\,850\,700\,800 z^{11} +$$

$$57\,081\,922\,560 z^{10} - 142\,505\,685\,504 z^9 + 161\,201\,698\,560 z^8 - 60\,023\,617\,920 z^7 + 2\,205\,403\,200 z^6 -$$

$$64\,864\,800 z^5 + 19\,459\,440 z^4 - 18\,711\,000 z^3 + 41\,674\,500 z^2 - 187\,535\,250 z + 1\,620\,840\,375) +$$

$$\frac{1}{1\,620\,840\,375} (32\,768 e^{-z} \sqrt{\pi} (z^{31/2} - 81 z^{29/2} + 2592 z^{27/2} - 42\,336 z^{25/2} + 381\,024 z^{23/2} - 1\,905\,120 z^{21/2} +$$

$$5\,080\,320 z^{19/2} - 6\,531\,840 z^{17/2} + 3\,265\,920 z^{15/2} - 362\,880 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.af0m.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{147\,349\,125} (-16\,384 z^{14} - 1\,171\,456 z^{13} - 32\,452\,608 z^{12} - 446\,760\,960 z^{11} - 3\,259\,622\,400 z^{10} - 12\,430\,720\,512 z^9 -$$

$$22\,727\,658\,240 z^8 - 16\,044\,255\,360 z^7 - 2\,205\,403\,200 z^6 + 64\,864\,800 z^5 +$$

$$64\,864\,800 z^4 + 3\,742\,200 z^3 + 5\,953\,500 z^2 + 20\,837\,250 z + 147\,349\,125) -$$

$$\frac{1}{147\,349\,125} (16\,384 e^z \sqrt{\pi} (z^{29/2} + 72 z^{27/2} + 2016 z^{25/2} + 28\,224 z^{23/2} + 211\,680 z^{21/2} +$$

$$846\,720 z^{19/2} + 1\,693\,440 z^{17/2} + 1\,451\,520 z^{15/2} + 362\,880 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.af0n.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{147\,349\,125} (-16\,384 z^{14} + 1\,171\,456 z^{13} - 32\,452\,608 z^{12} + 446\,760\,960 z^{11} - 3\,259\,622\,400 z^{10} + 12\,430\,720\,512 z^9 -$$

$$22\,727\,658\,240 z^8 + 16\,044\,255\,360 z^7 - 2\,205\,403\,200 z^6 - 64\,864\,800 z^5 +$$

$$64\,864\,800 z^4 - 3\,742\,200 z^3 + 5\,953\,500 z^2 - 20\,837\,250 z + 147\,349\,125) +$$

$$\frac{1}{147\,349\,125} (16\,384 e^{-z} \sqrt{\pi} (z^{29/2} - 72 z^{27/2} + 2016 z^{25/2} - 28\,224 z^{23/2} + 211\,680 z^{21/2} -$$

$$846\,720 z^{19/2} + 1\,693\,440 z^{17/2} - 1\,451\,520 z^{15/2} + 362\,880 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.af0o.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{16372125} (8192 z^{13} + 512000 z^{12} + 12134400 z^{11} + 138685440 z^{10} + 803163648 z^9 + 2255904000 z^8 + 2614308480 z^7 + 735134400 z^6 - 64864800 z^5 + 6486480 z^4 + 1247400 z^3 + 1190700 z^2 + 2976750 z + 16372125) + \frac{1}{16372125} (8192 e^z \sqrt{\pi} (z^{27/2} + 63 z^{25/2} + 1512 z^{23/2} + 17640 z^{21/2} + 105840 z^{19/2} + 317520 z^{17/2} + 423360 z^{15/2} + 181440 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.af0p.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{16372125} (-8192 z^{13} + 512000 z^{12} - 12134400 z^{11} + 138685440 z^{10} - 803163648 z^9 + 2255904000 z^8 - 2614308480 z^7 + 735134400 z^6 + 64864800 z^5 + 6486480 z^4 - 1247400 z^3 + 1190700 z^2 - 2976750 z + 16372125) + \frac{1}{16372125} (8192 e^{-z} \sqrt{\pi} (z^{27/2} - 63 z^{25/2} + 1512 z^{23/2} - 17640 z^{21/2} + 105840 z^{19/2} - 317520 z^{17/2} + 423360 z^{15/2} - 181440 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.af0q.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{2338875} (-4096 z^{12} - 219136 z^{11} - 4316160 z^{10} - 39234048 z^9 - 168080640 z^8 - 302693760 z^7 - 147026880 z^6 + 21621600 z^5 - 6486480 z^4 + 1247400 z^3 + 396900 z^2 + 595350 z + 2338875) - \frac{1}{2338875} 4096 e^z \sqrt{\pi} (z^{25/2} + 54 z^{23/2} + 1080 z^{21/2} + 10080 z^{19/2} + 45360 z^{17/2} + 90720 z^{15/2} + 60480 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af0r.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{2338875} (-4096 z^{12} + 219136 z^{11} - 4316160 z^{10} + 39234048 z^9 - 168080640 z^8 + 302693760 z^7 - 147026880 z^6 - 21621600 z^5 - 6486480 z^4 - 1247400 z^3 + 396900 z^2 - 595350 z + 2338875) + \frac{1}{2338875} 4096 e^{-z} \sqrt{\pi} (z^{25/2} - 54 z^{23/2} + 1080 z^{21/2} - 10080 z^{19/2} + 45360 z^{17/2} - 90720 z^{15/2} + 60480 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af0s.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{467775} (2048 z^{11} + 91136 z^{10} + 1430016 z^9 + 9649920 z^8 + 26751360 z^7 + 21003840 z^6 - 4324320 z^5 + 2162160 z^4 - 1247400 z^3 + 396900 z^2 + 198450 z + 467775) + \frac{1}{467775} 2048 e^z \sqrt{\pi} (z^{23/2} + 45 z^{21/2} + 720 z^{19/2} + 5040 z^{17/2} + 15120 z^{15/2} + 15120 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af0t.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{467775} \left(-2048 z^{11} + 91136 z^{10} - 1430016 z^9 + 9649920 z^8 - 26751360 z^7 + 21003840 z^6 + 4324320 z^5 + 2162160 z^4 + 1247400 z^3 + 396900 z^2 - 198450 z + 467775 \right) + \frac{2048 e^{-z} \sqrt{\pi} \left(z^{23/2} - 45 z^{21/2} + 720 z^{19/2} - 5040 z^{17/2} + 15120 z^{15/2} - 15120 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})}{467775}$$

07.25.03.af0u.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{155925} \left(-1024 z^{10} - 36352 z^9 - 424704 z^8 - 1868928 z^7 - 2333760 z^6 + 617760 z^5 - 432432 z^4 + 415800 z^3 - 396900 z^2 + 198450 z + 155925 \right) - \frac{1024 e^z \sqrt{\pi} \left(z^{21/2} + 36 z^{19/2} + 432 z^{17/2} + 2016 z^{15/2} + 3024 z^{13/2} \right) \operatorname{erf}(\sqrt{z})}{155925}$$

07.25.03.af0v.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{155925} \left(-1024 z^{10} + 36352 z^9 - 424704 z^8 + 1868928 z^7 - 2333760 z^6 - 617760 z^5 - 432432 z^4 - 415800 z^3 - 396900 z^2 - 198450 z + 155925 \right) + \frac{1024 e^{-z} \sqrt{\pi} \left(z^{21/2} - 36 z^{19/2} + 432 z^{17/2} - 2016 z^{15/2} + 3024 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.af0w.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{155925} \left(512 z^9 + 13568 z^8 + 104064 z^7 + 212160 z^6 - 68640 z^5 + 61776 z^4 - 83160 z^3 + 132300 z^2 - 198450 z + 155925 \right) + \frac{512 e^z \sqrt{\pi} \left(z^{19/2} + 27 z^{17/2} + 216 z^{15/2} + 504 z^{13/2} \right) \operatorname{erf}(\sqrt{z})}{155925}$$

07.25.03.af0x.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{155925} \left(-512 z^9 + 13568 z^8 - 104064 z^7 + 212160 z^6 + 68640 z^5 + 61776 z^4 + 83160 z^3 + 132300 z^2 + 198450 z + 155925 \right) + \frac{512 e^{-z} \sqrt{\pi} \left(z^{19/2} - 27 z^{17/2} + 216 z^{15/2} - 504 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.af0y.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{155925} e^z \left(512 z^9 + 11520 z^8 + 69120 z^7 + 80640 z^6 - 60480 z^5 + 90720 z^4 - 151200 z^3 + 226800 z^2 - 255150 z + 155925 \right)$$

07.25.03.af0z.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{256 e^z \sqrt{\pi} (z^2 + 18z + 72) \operatorname{erf}(\sqrt{z}) z^{13/2}}{155925} + \frac{256 z^8 + 4480 z^7 + 16320 z^6 - 6240 z^5 + 6864 z^4 - 11880 z^3 + 26460 z^2 - 66150 z + 155925}{155925}$$

07.25.03.af10.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{256 z^8 - 4480 z^7 + 16320 z^6 + 6240 z^5 + 6864 z^4 + 11880 z^3 + 26460 z^2 + 66150 z + 155925}{155925} - \frac{256 e^{-z} \sqrt{\pi} z^{13/2} (z^2 - 18z + 72) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.af11.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{155925 z} e^z (512 z^9 + 6912 z^8 + 13824 z^7 - 16128 z^6 + 36288 z^5 - 90720 z^4 + 211680 z^3 - 408240 z^2 + 561330 z - 405405) + \frac{13}{5z}$$

07.25.03.af12.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{128 e^z \sqrt{\pi} (z + 9) \operatorname{erf}(\sqrt{z}) z^{13/2}}{51975} + \frac{128 z^7 + 1088 z^6 - 480 z^5 + 624 z^4 - 1320 z^3 + 3780 z^2 - 13230 z + 51975}{51975}$$

07.25.03.af13.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{128 e^{-z} \sqrt{\pi} (z - 9) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{51975} + \frac{-128 z^7 + 1088 z^6 + 480 z^5 + 624 z^4 + 1320 z^3 + 3780 z^2 + 13230 z + 51975}{51975}$$

07.25.03.af14.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, 3; z\right) = \frac{26(z - 5)}{5z^2} + \frac{1}{155925 z^2} (2 e^z (512 z^9 + 2304 z^8 - 4608 z^7 + 16128 z^6 - 60480 z^5 + 211680 z^4 - 635040 z^3 + 1496880 z^2 - 2432430 z + 2027025))$$

07.25.03.af15.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{64 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{64 z^6 - 32 z^5 + 48 z^4 - 120 z^3 + 420 z^2 - 1890 z + 10395}{10395}$$

07.25.03.af16.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 + 1890 z + 10395}{10395} - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.af17.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, 4; z\right) = \frac{39(z^2 - 10z + 170)}{5z^3} + \frac{1}{51975z^3} (2e^z(512z^9 - 2304z^8 + 13824z^7 - 80640z^6 + 423360z^5 - 1905120z^4 + 6985440z^3 - 19459440z^2 + 36486450z - 34459425))$$

07.25.03.af18.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{1485z^3} (32z^8 - 304z^7 + 2472z^6 - 17556z^5 + 107310z^4 - 551475z^3 + 2322432z^2 - 7741440z + 23224320) + \frac{1}{1485z^{7/2}} 32e^z\sqrt{\pi} (z^9 - 9z^8 + 72z^7 - 504z^6 + 3024z^5 - 15120z^4 + 60480z^3 - 181440z^2 + 362880z - 362880) \operatorname{erf}(\sqrt{z})$$

07.25.03.af19.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{1485z^3} (-32z^8 - 304z^7 - 2472z^6 - 17556z^5 - 107310z^4 - 551475z^3 - 2322432z^2 - 7741440z - 23224320) + \frac{1}{1485z^{7/2}} 32e^{-z}\sqrt{\pi} (z^9 + 9z^8 + 72z^7 + 504z^6 + 3024z^5 + 15120z^4 + 60480z^3 + 181440z^2 + 362880z + 362880) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af1a.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, 5; z\right) = \frac{52(z^3 - 15z^2 + 510z + 9690)}{5z^4} + \frac{1}{51975z^4} (8e^z(512z^9 - 6912z^8 + 69120z^7 - 564480z^6 + 3810240z^5 - 20956320z^4 + 90810720z^3 - 291891600z^2 + 620269650z - 654729075))$$

07.25.03.af1b.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{165z^4} (16z^8 - 296z^7 + 3612z^6 - 34230z^5 + 261285z^4 - 1603584z^3 + 7741440z^2 - 27095040z + 116121600) + \frac{1}{165z^{9/2}} (16e^z\sqrt{\pi} (z^9 - 18z^8 + 216z^7 - 2016z^6 + 15120z^5 - 90720z^4 + 423360z^3 - 1451520z^2 + 3265920z - 3628800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.af1c.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{165z^4} (16z^8 + 296z^7 + 3612z^6 + 34230z^5 + 261285z^4 + 1603584z^3 + 7741440z^2 + 27095040z + 116121600) - \frac{1}{165z^{9/2}} (16e^{-z}\sqrt{\pi} (z^9 + 18z^8 + 216z^7 + 2016z^6 + 15120z^5 + 90720z^4 + 423360z^3 + 1451520z^2 + 3265920z + 3628800) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.af1d.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{11}{2}, 6; z\right) = \frac{13(z^4 - 20z^3 + 1020z^2 + 38760z + 271320)}{z^5} + \frac{1}{10395z^5} (8e^z(512z^9 - 11520z^8 + 161280z^7 - 1693440z^6 + 13970880z^5 - 90810720z^4 + 454053600z^3 - 1654052400z^2 + 3928374450z - 4583103525))$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = -\frac{9}{2}$

07.25.03.af1e.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{13395375} (8192z^{13} + 520192z^{12} + 12589056z^{11} + 148096000z^{10} + 895013376z^9 + 2695843584z^8 + 3586477440z^7 + 1544800320z^6 + 64864800z^5 + 2162160z^4 + 748440z^3 + 850500z^2 + 2315250z + 13395375) + \frac{1}{13395375} (8192e^z\sqrt{\pi}(z^{27/2} + 64z^{25/2} + 1568z^{23/2} + 18816z^{21/2} + 117600z^{19/2} + 376320z^{17/2} + 564480z^{15/2} + 322560z^{13/2} + 40320z^{11/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.af1f.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{13395375} (-8192z^{13} + 520192z^{12} - 12589056z^{11} + 148096000z^{10} - 895013376z^9 + 2695843584z^8 - 3586477440z^7 + 1544800320z^6 - 64864800z^5 + 2162160z^4 - 748440z^3 + 850500z^2 - 2315250z + 13395375) + \frac{1}{13395375} (8192e^{-z}\sqrt{\pi}(z^{27/2} - 64z^{25/2} + 1568z^{23/2} - 18816z^{21/2} + 117600z^{19/2} - 376320z^{17/2} + 564480z^{15/2} - 322560z^{13/2} + 40320z^{11/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.af1g.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{1488375} (-4096z^{12} - 227328z^{11} - 4705280z^{10} - 45924864z^9 - 219969792z^8 - 486084480z^7 - 404832960z^6 - 64864800z^5 + 2162160z^4 + 249480z^3 + 170100z^2 + 330750z + 1488375) - \frac{1}{1488375} (4096e^z\sqrt{\pi}(z^{25/2} + 56z^{23/2} + 1176z^{21/2} + 11760z^{19/2} + 58800z^{17/2} + 141120z^{15/2} + 141120z^{13/2} + 40320z^{11/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.af1h.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1488375} (-4096z^{12} + 227328z^{11} - 4705280z^{10} + 45924864z^9 - 219969792z^8 + 486084480z^7 - 404832960z^6 + 64864800z^5 + 2162160z^4 - 249480z^3 + 170100z^2 - 330750z + 1488375) + \frac{1}{1488375} (4096e^{-z}\sqrt{\pi}(z^{25/2} - 56z^{23/2} + 1176z^{21/2} - 11760z^{19/2} + 58800z^{17/2} - 141120z^{15/2} + 141120z^{13/2} - 40320z^{11/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.af1i.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{212625} (2048 z^{11} + 97280 z^{10} + 1672704 z^9 + 12972288 z^8 + 45847680 z^7 + 64451520 z^6 + 21621600 z^5 - 2162160 z^4 + 249480 z^3 + 56700 z^2 + 66150 z + 212625) + \frac{1}{212625} 2048 e^z \sqrt{\pi} (z^{23/2} + 48 z^{21/2} + 840 z^{19/2} + 6720 z^{17/2} + 25200 z^{15/2} + 40320 z^{13/2} + 20160 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af1j.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{212625} (-2048 z^{11} + 97280 z^{10} - 1672704 z^9 + 12972288 z^8 - 45847680 z^7 + 64451520 z^6 - 21621600 z^5 - 2162160 z^4 - 249480 z^3 + 56700 z^2 - 66150 z + 212625) + \frac{1}{212625} 2048 e^{-z} \sqrt{\pi} (z^{23/2} - 48 z^{21/2} + 840 z^{19/2} - 6720 z^{17/2} + 25200 z^{15/2} - 40320 z^{13/2} + 20160 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af1k.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{42525} (-1024 z^{10} - 40448 z^9 - 553728 z^8 - 3182720 z^7 - 7241280 z^6 - 4324320 z^5 + 720720 z^4 - 249480 z^3 + 56700 z^2 + 22050 z + 42525) - \frac{1024 e^z \sqrt{\pi} (z^{21/2} + 40 z^{19/2} + 560 z^{17/2} + 3360 z^{15/2} + 8400 z^{13/2} + 6720 z^{11/2}) \operatorname{erf}(\sqrt{z})}{42525}$$

07.25.03.af1l.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{42525} (-1024 z^{10} + 40448 z^9 - 553728 z^8 + 3182720 z^7 - 7241280 z^6 + 4324320 z^5 + 720720 z^4 + 249480 z^3 + 56700 z^2 - 22050 z + 42525) + \frac{1024 e^{-z} \sqrt{\pi} (z^{21/2} - 40 z^{19/2} + 560 z^{17/2} - 3360 z^{15/2} + 8400 z^{13/2} - 6720 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{42525}$$

07.25.03.af1m.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{14175} (512 z^9 + 16128 z^8 + 164224 z^7 + 613440 z^6 + 617760 z^5 - 144144 z^4 + 83160 z^3 - 56700 z^2 + 22050 z + 14175) + \frac{512 e^z \sqrt{\pi} (z^{19/2} + 32 z^{17/2} + 336 z^{15/2} + 1344 z^{13/2} + 1680 z^{11/2}) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.af1n.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{14175} (-512 z^9 + 16128 z^8 - 164224 z^7 + 613440 z^6 - 617760 z^5 - 144144 z^4 - 83160 z^3 - 56700 z^2 - 22050 z + 14175) + \frac{512 e^{-z} \sqrt{\pi} (z^{19/2} - 32 z^{17/2} + 336 z^{15/2} - 1344 z^{13/2} + 1680 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.af1o.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{-256 z^8 - 6016 z^7 - 40128 z^6 - 68640 z^5 + 20592 z^4 - 16632 z^3 + 18900 z^2 - 22050 z + 14175}{14175} - \frac{256 e^z \sqrt{\pi} (z^{17/2} + 24 z^{15/2} + 168 z^{13/2} + 336 z^{11/2}) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.af1p.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{-256 z^8 + 6016 z^7 - 40128 z^6 + 68640 z^5 + 20592 z^4 + 16632 z^3 + 18900 z^2 + 22050 z + 14175}{14175} + \frac{256 e^{-z} \sqrt{\pi} (z^{17/2} - 24 z^{15/2} + 168 z^{13/2} - 336 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.af1q.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, 1; z\right) = -\frac{1}{14175} e^z (256 z^8 + 5120 z^7 + 26880 z^6 + 26880 z^5 - 16800 z^4 + 20160 z^3 - 25200 z^2 + 25200 z - 14175)$$

07.25.03.af1r.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{-128 z^7 - 1984 z^6 - 6240 z^5 + 2288 z^4 - 2376 z^3 + 3780 z^2 - 7350 z + 14175}{14175} - \frac{128 e^z \sqrt{\pi} z^{11/2} (z^2 + 16 z + 56) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.af1s.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{128 z^7 - 1984 z^6 + 6240 z^5 + 2288 z^4 + 2376 z^3 + 3780 z^2 + 7350 z + 14175}{14175} - \frac{128 e^{-z} \sqrt{\pi} z^{11/2} (z^2 - 16 z + 56) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.af1t.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^z (-256 z^8 - 3072 z^7 - 5376 z^6 + 5376 z^5 - 10080 z^4 + 20160 z^3 - 35280 z^2 + 45360 z - 31185)}{14175 z} + \frac{11}{5 z}$$

07.25.03.af1u.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-64 z^6 - 480 z^5 + 208 z^4 - 264 z^3 + 540 z^2 - 1470 z + 4725}{4725} - \frac{64 e^z \sqrt{\pi} z^{11/2} (z + 8) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.af1v.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{64 e^{-z} \sqrt{\pi} (z-8) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{4725} + \frac{-64 z^6 + 480 z^5 + 208 z^4 + 264 z^3 + 540 z^2 + 1470 z + 4725}{4725}$$

07.25.03.af1w.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, 3; z\right) = \frac{22(3z-13)}{15z^2} - \frac{1}{14175z^2} 2e^z (256z^8 + 1024z^7 - 1792z^6 + 5376z^5 - 16800z^4 + 47040z^3 - 105840z^2 + 166320z - 135135)$$

07.25.03.af1x.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{945} (-32z^5 + 16z^4 - 24z^3 + 60z^2 - 210z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.af1y.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{1}{945} (32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.af1z.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, 4; z\right) = \frac{11(3z^2 - 26z + 390)}{5z^3} - \frac{1}{4725z^3} 2e^z (256z^8 - 1024z^7 + 5376z^6 - 26880z^5 + 117600z^4 - 423360z^3 + 1164240z^2 - 2162160z + 2027025)$$

07.25.03.af20.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-16z^7 + 136z^6 - 972z^5 + 5950z^4 - 30585z^3 + 129024z^2 - 430080z + 1290240}{135z^3} - \frac{16e^z \sqrt{\pi} (z^8 - 8z^7 + 56z^6 - 336z^5 + 1680z^4 - 6720z^3 + 20160z^2 - 40320z + 40320) \operatorname{erf}(\sqrt{z})}{135z^{7/2}}$$

07.25.03.af21.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{-16z^7 - 136z^6 - 972z^5 - 5950z^4 - 30585z^3 - 129024z^2 - 430080z - 1290240}{135z^3} + \frac{1}{135z^{7/2}} 16e^{-z} \sqrt{\pi} (z^8 + 8z^7 + 56z^6 + 336z^5 + 1680z^4 + 6720z^3 + 20160z^2 + 40320z + 40320) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af22.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, 5; z\right) = \frac{44(z^3 - 13z^2 + 390z + 6630)}{5z^4} - \frac{1}{4725z^4} (8e^z (256z^8 - 3072z^7 + 26880z^6 - 188160z^5 + 1058400z^4 - 4656960z^3 + 15135120z^2 - 32432400z + 34459425))$$

07.25.03.af23.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-8z^7 + 132z^6 - 1414z^5 + 11535z^4 - 73728z^3 + 365568z^2 - 1290240z + 5806080}{15z^4} - \frac{1}{15z^{9/2}} 8e^z \sqrt{\pi} (z^8 - 16z^7 + 168z^6 - 1344z^5 + 8400z^4 - 40320z^3 + 141120z^2 - 322560z + 362880) \operatorname{erf}(\sqrt{z})$$

07.25.03.af24.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{8z^7 + 132z^6 + 1414z^5 + 11535z^4 + 73728z^3 + 365568z^2 + 1290240z + 5806080}{15z^4} - \frac{1}{15z^{9/2}} 8e^{-z}\sqrt{\pi} (z^8 + 16z^7 + 168z^6 + 1344z^5 + 8400z^4 + 40320z^3 + 141120z^2 + 322560z + 362880) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af25.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{9}{2}, 6; z\right) = \frac{11(3z^4 - 52z^3 + 2340z^2 + 79560z + 503880)}{3z^5} - \frac{1}{945z^5} (8e^z(256z^8 - 5120z^7 + 62720z^6 - 564480z^5 + 3880800z^4 - 20180160z^3 + 75675600z^2 - 183783600z + 218243025))$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = -\frac{7}{2}$

07.25.03.af26.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{165375} (2048z^{11} + 99328z^{10} + 1757696z^9 + 14221056z^8 + 53864832z^7 + 86775360z^6 + 44220960z^5 + 2162160z^4 + 83160z^3 + 34020z^2 + 47250z + 165375) + \frac{1}{165375} (2048e^z\sqrt{\pi} (z^{23/2} + 49z^{21/2} + 882z^{19/2} + 7350z^{17/2} + 29400z^{15/2} + 52920z^{13/2} + 35280z^{11/2} + 5040z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.af27.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{165375} (-2048z^{11} + 99328z^{10} - 1757696z^9 + 14221056z^8 - 53864832z^7 + 86775360z^6 - 44220960z^5 + 2162160z^4 - 83160z^3 + 34020z^2 - 47250z + 165375) + \frac{1}{165375} (2048e^{-z}\sqrt{\pi} (z^{23/2} - 49z^{21/2} + 882z^{19/2} - 7350z^{17/2} + 29400z^{15/2} - 52920z^{13/2} + 35280z^{11/2} - 5040z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.af28.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{23625} (-1024z^{10} - 42496z^9 - 624384z^8 - 4008576z^7 - 11161920z^6 - 11299680z^5 - 2162160z^4 + 83160z^3 + 11340z^2 + 9450z + 23625) - \frac{1}{23625} 1024e^z\sqrt{\pi} (z^{21/2} + 42z^{19/2} + 630z^{17/2} + 4200z^{15/2} + 12600z^{13/2} + 15120z^{11/2} + 5040z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af29.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{23625} (-1024z^{10} + 42496z^9 - 624384z^8 + 4008576z^7 - 11161920z^6 + 11299680z^5 - 2162160z^4 - 83160z^3 + 11340z^2 - 9450z + 23625) + \frac{1}{23625} 1024e^{-z}\sqrt{\pi} (z^{21/2} - 42z^{19/2} + 630z^{17/2} - 4200z^{15/2} + 12600z^{13/2} - 15120z^{11/2} + 5040z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af2a.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{4725} (512 z^9 + 17\,664 z^8 + 206\,464 z^7 + 980\,160 z^6 + 1\,743\,840 z^5 + 720\,720 z^4 - 83\,160 z^3 + 11\,340 z^2 + 3\,150 z + 4725) + \frac{512 e^z \sqrt{\pi} (z^{19/2} + 35 z^{17/2} + 420 z^{15/2} + 2100 z^{13/2} + 4200 z^{11/2} + 2520 z^{9/2}) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.af2b.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{4725} (-512 z^9 + 17\,664 z^8 - 206\,464 z^7 + 980\,160 z^6 - 1\,743\,840 z^5 + 720\,720 z^4 + 83\,160 z^3 + 11\,340 z^2 - 3\,150 z + 4725) + \frac{512 e^{-z} \sqrt{\pi} (z^{19/2} - 35 z^{17/2} + 420 z^{15/2} - 2100 z^{13/2} + 4200 z^{11/2} - 2520 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.af2c.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{-256 z^8 - 7040 z^7 - 61\,120 z^6 - 187\,680 z^5 - 144\,144 z^4 + 27\,720 z^3 - 11\,340 z^2 + 3\,150 z + 1575}{1575} - \frac{256 e^z \sqrt{\pi} (z^{17/2} + 28 z^{15/2} + 252 z^{13/2} + 840 z^{11/2} + 840 z^{9/2}) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.af2d.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{-256 z^8 + 7040 z^7 - 61\,120 z^6 + 187\,680 z^5 - 144\,144 z^4 - 27\,720 z^3 - 11\,340 z^2 - 3\,150 z + 1575}{1575} + \frac{256 e^{-z} \sqrt{\pi} (z^{17/2} - 28 z^{15/2} + 252 z^{13/2} - 840 z^{11/2} + 840 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.af2e.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{128 z^7 + 2624 z^6 + 14\,880 z^5 + 20\,592 z^4 - 5544 z^3 + 3780 z^2 - 3\,150 z + 1575}{1575} + \frac{128 e^z \sqrt{\pi} (z^{15/2} + 21 z^{13/2} + 126 z^{11/2} + 210 z^{9/2}) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.af2f.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{-128 z^7 + 2624 z^6 - 14\,880 z^5 + 20\,592 z^4 + 5544 z^3 + 3780 z^2 + 3\,150 z + 1575}{1575} + \frac{128 e^{-z} \sqrt{\pi} (z^{15/2} - 21 z^{13/2} + 126 z^{11/2} - 210 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.af2g.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^z (128 z^7 + 2240 z^6 + 10\,080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3\,150 z + 1575)}{1575}$$

07.25.03.af2h.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{64 e^z \sqrt{\pi} (z^2 + 14z + 42) \operatorname{erf}(\sqrt{z}) z^{9/2}}{1575} + \frac{64 z^6 + 864 z^5 + 2288 z^4 - 792 z^3 + 756 z^2 - 1050 z + 1575}{1575}$$

07.25.03.af2i.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{64 z^6 - 864 z^5 + 2288 z^4 + 792 z^3 + 756 z^2 + 1050 z + 1575}{1575} - \frac{64 e^{-z} \sqrt{\pi} z^{9/2} (z^2 - 14z + 42) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.af2j.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^z (128 z^7 + 1344 z^6 + 2016 z^5 - 1680 z^4 + 2520 z^3 - 3780 z^2 + 4410 z - 2835)}{1575 z} + \frac{9}{5 z}$$

07.25.03.af2k.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{32}{525} e^z \sqrt{\pi} (z + 7) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{525} (32 z^5 + 208 z^4 - 88 z^3 + 108 z^2 - 210 z + 525)$$

07.25.03.af2l.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{32}{525} e^{-z} \sqrt{\pi} (z - 7) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{525} (-32 z^5 + 208 z^4 + 88 z^3 + 108 z^2 + 210 z + 525)$$

07.25.03.af2m.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, 3; z\right) = \frac{6(3z - 11)}{5 z^2} + \frac{2 e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13230 z + 10395)}{1575 z^2}$$

07.25.03.af2n.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{16}{105} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)$$

07.25.03.af2o.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{1}{105} (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.af2p.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, 4; z\right) = \frac{9(3z^2 - 22z + 286)}{5 z^3} + \frac{2 e^z (128 z^7 - 448 z^6 + 2016 z^5 - 8400 z^4 + 29400 z^3 - 79380 z^2 + 145530 z - 135135)}{525 z^3}$$

07.25.03.af2q.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{8 z^6 - 60 z^5 + 370 z^4 - 1905 z^3 + 8064 z^2 - 26880 z + 80640}{15 z^3} + \frac{8 e^z \sqrt{\pi} (z^7 - 7 z^6 + 42 z^5 - 210 z^4 + 840 z^3 - 2520 z^2 + 5040 z - 5040) \operatorname{erf}(\sqrt{z})}{15 z^{7/2}}$$

07.25.03.af2r.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-8 z^6 - 60 z^5 - 370 z^4 - 1905 z^3 - 8064 z^2 - 26880 z - 80640}{15 z^3} + \frac{8 e^{-z} \sqrt{\pi} (z^7 + 7 z^6 + 42 z^5 + 210 z^4 + 840 z^3 + 2520 z^2 + 5040 z + 5040) \operatorname{erfi}(\sqrt{z})}{15 z^{7/2}}$$

07.25.03.af2s.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, 5; z\right) = \frac{36(z^3 - 11z^2 + 286z + 4290)}{5z^4} + \frac{8e^z(128z^7 - 1344z^6 + 10080z^5 - 58800z^4 + 264600z^3 - 873180z^2 + 1891890z - 2027025)}{525z^4}$$

07.25.03.af2t.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3(4z^6 - 58z^5 + 535z^4 - 3648z^3 + 18816z^2 - 67200z + 322560)}{5z^4} + \frac{12e^z\sqrt{\pi}(z^7 - 14z^6 + 126z^5 - 840z^4 + 4200z^3 - 15120z^2 + 35280z - 40320)\operatorname{erf}(\sqrt{z})}{5z^{9/2}}$$

07.25.03.af2u.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3(4z^6 + 58z^5 + 535z^4 + 3648z^3 + 18816z^2 + 67200z + 322560)}{5z^4} - \frac{12e^{-z}\sqrt{\pi}(z^7 + 14z^6 + 126z^5 + 840z^4 + 4200z^3 + 15120z^2 + 35280z + 40320)\operatorname{erfi}(\sqrt{z})}{5z^{9/2}}$$

07.25.03.af2v.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{7}{2}, 6; z\right) = \frac{3(3z^4 - 44z^3 + 1716z^2 + 51480z + 291720)}{z^5} + \frac{1}{105z^5} 8e^z(128z^7 - 2240z^6 + 23520z^5 - 176400z^4 + 970200z^3 - 3783780z^2 + 9459450z - 11486475)$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = -\frac{5}{2}$

07.25.03.af2w.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{3375} (512z^9 + 18176z^8 + 221568z^7 + 1126464z^6 + 2292000z^5 + 1424880z^4 + 83160z^3 + 3780z^2 + 1890z + 3375) + \frac{512e^z\sqrt{\pi}(z^{19/2} + 36z^{17/2} + 450z^{15/2} + 2400z^{13/2} + 5400z^{11/2} + 4320z^{9/2} + 720z^{7/2})\operatorname{erf}(\sqrt{z})}{3375}$$

07.25.03.af2x.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{3375} (-512z^9 + 18176z^8 - 221568z^7 + 1126464z^6 - 2292000z^5 + 1424880z^4 - 83160z^3 + 3780z^2 - 1890z + 3375) + \frac{512e^{-z}\sqrt{\pi}(z^{19/2} - 36z^{17/2} + 450z^{15/2} - 2400z^{13/2} + 5400z^{11/2} - 4320z^{9/2} + 720z^{7/2})\operatorname{erfi}(\sqrt{z})}{3375}$$

07.25.03.af2y.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{675} (-256 z^8 - 7552 z^7 - 73152 z^6 - 274080 z^5 - 352080 z^4 - 83160 z^3 + 3780 z^2 + 630 z + 675) - \frac{256}{675} e^z \sqrt{\pi} (z^{17/2} + 30 z^{15/2} + 300 z^{13/2} + 1200 z^{11/2} + 1800 z^{9/2} + 720 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af2z.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{675} (-256 z^8 + 7552 z^7 - 73152 z^6 + 274080 z^5 - 352080 z^4 + 83160 z^3 + 3780 z^2 - 630 z + 675) + \frac{256}{675} e^{-z} \sqrt{\pi} (z^{17/2} - 30 z^{15/2} + 300 z^{13/2} - 1200 z^{11/2} + 1800 z^{9/2} - 720 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af30.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{225} (128 z^7 + 3008 z^6 + 21600 z^5 + 51984 z^4 + 27720 z^3 - 3780 z^2 + 630 z + 225) + \frac{128}{225} e^z \sqrt{\pi} (z^{15/2} + 24 z^{13/2} + 180 z^{11/2} + 480 z^{9/2} + 360 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af31.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{225} (-128 z^7 + 3008 z^6 - 21600 z^5 + 51984 z^4 - 27720 z^3 - 3780 z^2 - 630 z + 225) + \frac{128}{225} e^{-z} \sqrt{\pi} (z^{15/2} - 24 z^{13/2} + 180 z^{11/2} - 480 z^{9/2} + 360 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af32.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{225} (-64 z^6 - 1120 z^5 - 5232 z^4 - 5544 z^3 + 1260 z^2 - 630 z + 225) - \frac{64}{225} e^z \sqrt{\pi} (z^{13/2} + 18 z^{11/2} + 90 z^{9/2} + 120 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af33.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{225} (-64 z^6 + 1120 z^5 - 5232 z^4 + 5544 z^3 + 1260 z^2 + 630 z + 225) + \frac{64}{225} e^{-z} \sqrt{\pi} (z^{13/2} - 18 z^{11/2} + 90 z^{9/2} - 120 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af34.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, 1; z\right) = -\frac{1}{225} e^z (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225)$$

07.25.03.af35.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{225} (-32 z^5 - 368 z^4 - 792 z^3 + 252 z^2 - 210 z + 225) - \frac{32}{225} e^z \sqrt{\pi} z^{7/2} (z^2 + 12 z + 30) \operatorname{erf}(\sqrt{z})$$

07.25.03.af36.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{225} (32 z^5 - 368 z^4 + 792 z^3 + 252 z^2 + 210 z + 225) - \frac{32}{225} e^{-z} \sqrt{\pi} z^{7/2} (z^2 - 12 z + 30) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af37.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^z (-64 z^6 - 576 z^5 - 720 z^4 + 480 z^3 - 540 z^2 + 540 z - 315)}{225 z} + \frac{7}{5 z}$$

07.25.03.af38.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{75}(-16z^4 - 88z^3 + 36z^2 - 42z + 75) - \frac{16}{75}e^z \sqrt{\pi} z^{7/2} (z + 6) \operatorname{erf}(\sqrt{z})$$

07.25.03.af39.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{16}{75}e^{-z} \sqrt{\pi} (z - 6) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{75}(-16z^4 + 88z^3 + 36z^2 + 42z + 75)$$

07.25.03.af3a.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, 3; z\right) = \frac{14(z-3)}{5z^2} - \frac{2e^z(64z^6 + 192z^5 - 240z^4 + 480z^3 - 900z^2 + 1260z - 945)}{225z^2}$$

07.25.03.af3b.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{15}(-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15}e^z \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.af3c.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{15}(8z^3 + 4z^2 + 6z + 15) - \frac{8}{15}e^{-z} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.af3d.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, 4; z\right) = \frac{21(z^2 - 6z + 66)}{5z^3} - \frac{2e^z(64z^6 - 192z^5 + 720z^4 - 2400z^3 + 6300z^2 - 11340z + 10395)}{75z^3}$$

07.25.03.af3e.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7(4z^5 - 26z^4 + 135z^3 - 576z^2 + 1920z - 5760)}{15z^3} - \frac{28e^z \sqrt{\pi} (z^6 - 6z^5 + 30z^4 - 120z^3 + 360z^2 - 720z + 720) \operatorname{erf}(\sqrt{z})}{15z^{7/2}}$$

07.25.03.af3f.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{28e^{-z} \sqrt{\pi} (z^6 + 6z^5 + 30z^4 + 120z^3 + 360z^2 + 720z + 720) \operatorname{erfi}(\sqrt{z})}{15z^{7/2}} - \frac{7(4z^5 + 26z^4 + 135z^3 + 576z^2 + 1920z + 5760)}{15z^3}$$

07.25.03.af3g.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, 5; z\right) = \frac{28(z^3 - 9z^2 + 198z + 2574)}{5z^4} - \frac{8e^z(64z^6 - 576z^5 + 3600z^4 - 16800z^3 + 56700z^2 - 124740z + 135135)}{75z^4}$$

07.25.03.af3h.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{21(2z^5 - 25z^4 + 192z^3 - 1056z^2 + 3840z - 20160)}{5z^4} - \frac{42e^z \sqrt{\pi} (z^6 - 12z^5 + 90z^4 - 480z^3 + 1800z^2 - 4320z + 5040) \operatorname{erf}(\sqrt{z})}{5z^{9/2}}$$

07.25.03.af3i.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21(2z^5 + 25z^4 + 192z^3 + 1056z^2 + 3840z + 20160)}{5z^4} - \frac{42e^{-z}\sqrt{\pi}(z^6 + 12z^5 + 90z^4 + 480z^3 + 1800z^2 + 4320z + 5040)\operatorname{erfi}(\sqrt{z})}{5z^{9/2}}$$

07.25.03.af3j.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{5}{2}, 6; z\right) = \frac{7(z^4 - 12z^3 + 396z^2 + 10296z + 51480)}{z^5} - \frac{8e^z(64z^6 - 960z^5 + 8400z^4 - 50400z^3 + 207900z^2 - 540540z + 675675)}{15z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = -\frac{3}{2}$

07.25.03.af3k.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{135}(128z^7 + 3136z^6 + 24096z^5 + 66160z^4 + 52440z^3 + 3780z^2 + 210z + 135) + \frac{128}{135}e^z\sqrt{\pi}(z^{15/2} + 25z^{13/2} + 200z^{11/2} + 600z^{9/2} + 600z^{7/2} + 120z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.af3l.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{135}(-128z^7 + 3136z^6 - 24096z^5 + 66160z^4 - 52440z^3 + 3780z^2 - 210z + 135) + \frac{128}{135}e^{-z}\sqrt{\pi}(z^{15/2} - 25z^{13/2} + 200z^{11/2} - 600z^{9/2} + 600z^{7/2} - 120z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.af3m.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{45}(-64z^6 - 1248z^5 - 7088z^4 - 12360z^3 - 3780z^2 + 210z + 45) - \frac{64}{45}e^z\sqrt{\pi}(z^{13/2} + 20z^{11/2} + 120z^{9/2} + 240z^{7/2} + 120z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.af3n.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{45}(-64z^6 + 1248z^5 - 7088z^4 + 12360z^3 - 3780z^2 - 210z + 45) + \frac{64}{45}e^{-z}\sqrt{\pi}(z^{13/2} - 20z^{11/2} + 120z^{9/2} - 240z^{7/2} + 120z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.af3o.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{45}(32z^5 + 464z^4 + 1704z^3 + 1260z^2 - 210z + 45) + \frac{32}{45}e^z\sqrt{\pi}(z^{11/2} + 15z^{9/2} + 60z^{7/2} + 60z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.af3p.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{45}(-32z^5 + 464z^4 - 1704z^3 + 1260z^2 + 210z + 45) + \frac{32}{45}e^{-z}\sqrt{\pi}(z^{11/2} - 15z^{9/2} + 60z^{7/2} - 60z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.af3q.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{45} e^z (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45)$$

07.25.03.af3r.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{16}{45} e^z \sqrt{\pi} (z^2 + 10 z + 20) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{45} (16 z^4 + 152 z^3 + 252 z^2 - 70 z + 45)$$

07.25.03.af3s.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{45} (16 z^4 - 152 z^3 + 252 z^2 + 70 z + 45) - \frac{16}{45} e^{-z} \sqrt{\pi} z^{5/2} (z^2 - 10 z + 20) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af3t.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^z (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45)}{45 z} + \frac{1}{z}$$

07.25.03.af3u.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{8}{15} e^z \sqrt{\pi} (z + 5) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{15} (8 z^3 + 36 z^2 - 14 z + 15)$$

07.25.03.af3v.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{8}{15} e^{-z} \sqrt{\pi} (z - 5) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{15} (-8 z^3 + 36 z^2 + 14 z + 15)$$

07.25.03.af3w.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, 3; z\right) = \frac{2(3z - 7)}{3z^2} + \frac{2e^z(32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)}{45z^2}$$

07.25.03.af3x.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{4}{3} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (4 z^2 - 2 z + 3)$$

07.25.03.af3y.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{3} (4 z^2 + 2 z + 3) - \frac{4}{3} e^{-z} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.af3z.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, 4; z\right) = \frac{3z^2 - 14z + 126}{z^3} + \frac{2e^z(32z^5 - 80z^4 + 240z^3 - 600z^2 + 1050z - 945)}{15z^3}$$

07.25.03.af40.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(2z^4 - 11z^3 + 48z^2 - 160z + 480)}{3z^3} + \frac{14e^z\sqrt{\pi}(z^5 - 5z^4 + 20z^3 - 60z^2 + 120z - 120)\operatorname{erf}(\sqrt{z})}{3z^{7/2}}$$

07.25.03.af41.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{14e^{-z}\sqrt{\pi}(z^5 + 5z^4 + 20z^3 + 60z^2 + 120z + 120)\operatorname{erfi}(\sqrt{z})}{3z^{7/2}} - \frac{7(2z^4 + 11z^3 + 48z^2 + 160z + 480)}{3z^3}$$

07.25.03.af42.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, 5; z\right) = \frac{4(z^3 - 7z^2 + 126z + 1386)}{z^4} + \frac{8e^z(32z^5 - 240z^4 + 1200z^3 - 4200z^2 + 9450z - 10395)}{15z^4}$$

07.25.03.af43.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{3(7z^4 - 72z^3 + 448z^2 - 1680z + 10080)}{z^4} + \frac{21e^z\sqrt{\pi}(z^5 - 10z^4 + 60z^3 - 240z^2 + 600z - 720)\operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.af44.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3(7z^4 + 72z^3 + 448z^2 + 1680z + 10080)}{z^4} - \frac{21e^{-z}\sqrt{\pi}(z^5 + 10z^4 + 60z^3 + 240z^2 + 600z + 720)\operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.af45.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{3}{2}, 6; z\right) = \frac{5(3z^4 - 28z^3 + 756z^2 + 16632z + 72072)}{3z^5} + \frac{8e^z(32z^5 - 400z^4 + 2800z^3 - 12600z^2 + 34650z - 45045)}{3z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = -\frac{1}{2}$

07.25.03.af46.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{15}(32z^5 + 496z^4 + 2072z^3 + 2244z^2 + 210z + 15) + \frac{32}{15}e^z\sqrt{\pi}(z^{11/2} + 16z^{9/2} + 72z^{7/2} + 96z^{5/2} + 24z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.af47.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15}(-32z^5 + 496z^4 - 2072z^3 + 2244z^2 - 210z + 15) + \frac{32}{15}e^{-z}\sqrt{\pi}(z^{11/2} - 16z^{9/2} + 72z^{7/2} - 96z^{5/2} + 24z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.af48.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{15}(-16z^4 - 184z^3 - 492z^2 - 210z + 15) - \frac{16}{15}e^z\sqrt{\pi}(z^{9/2} + 12z^{7/2} + 36z^{5/2} + 24z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.af49.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{15}(-16z^4 + 184z^3 - 492z^2 + 210z + 15) + \frac{16}{15}e^{-z}\sqrt{\pi}(z^{9/2} - 12z^{7/2} + 36z^{5/2} - 24z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.af4a.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, 1; z\right) = -\frac{1}{15}e^z(16z^4 + 160z^3 + 360z^2 + 120z - 15)$$

07.25.03.af4b.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{15}(-8z^3 - 60z^2 - 70z + 15) - \frac{8}{15}e^z\sqrt{\pi}z^{3/2}(z^2 + 8z + 12)\operatorname{erf}(\sqrt{z})$$

07.25.03.af4c.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{15}(8z^3 - 60z^2 + 70z + 15) - \frac{8}{15}e^{-z}\sqrt{\pi}z^{3/2}(z^2 - 8z + 12)\operatorname{erfi}(\sqrt{z})$$

07.25.03.af4d.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^z(-16z^4 - 96z^3 - 72z^2 + 24z - 9)}{15z} + \frac{3}{5z}$$

07.25.03.af4e.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{5}(-4z^2 - 14z + 5) - \frac{4}{5}e^z\sqrt{\pi}z^{3/2}(z+4)\operatorname{erf}(\sqrt{z})$$

07.25.03.af4f.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{4}{5}e^{-z}\sqrt{\pi}(z-4)\operatorname{erfi}(\sqrt{z})z^{3/2} + \frac{1}{5}(-4z^2 + 14z + 5)$$

07.25.03.af4g.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, 3; z\right) = \frac{2(3z-5)}{5z^2} - \frac{2e^z(16z^4 + 32z^3 - 24z^2 + 24z - 15)}{15z^2}$$

07.25.03.af4h.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -2e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{3/2} - 2z + 1$$

07.25.03.af4i.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = -2e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{3/2} + 2z + 1$$

07.25.03.af4j.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, 4; z\right) = \frac{3(3z^2 - 10z + 70)}{5z^3} - \frac{2e^z(16z^4 - 32z^3 + 72z^2 - 120z + 105)}{5z^3}$$

07.25.03.af4k.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{7(5z^3 - 24z^2 + 80z - 240)}{5z^3} - \frac{7e^z\sqrt{\pi}(z^4 - 4z^3 + 12z^2 - 24z + 24)\operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.af4l.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}\sqrt{\pi}(z^4 + 4z^3 + 12z^2 + 24z + 24)\operatorname{erfi}(\sqrt{z})}{z^{7/2}} - \frac{7(5z^3 + 24z^2 + 80z + 240)}{5z^3}$$

07.25.03.af4m.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, 5; z\right) = \frac{12(z^3 - 5z^2 + 70z + 630)}{5z^4} - \frac{8e^z(16z^4 - 96z^3 + 360z^2 - 840z + 945)}{5z^4}$$

07.25.03.af4n.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{36(4z^3 - 35z^2 + 140z - 1050)}{5z^4} - \frac{63e^z\sqrt{\pi}(z^4 - 8z^3 + 36z^2 - 96z + 120)\operatorname{erf}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.af4o.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{36(4z^3 + 35z^2 + 140z + 1050)}{5z^4} - \frac{63e^{-z}\sqrt{\pi}(z^4 + 8z^3 + 36z^2 + 96z + 120)\operatorname{erfi}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.af4p.01

$${}_2F_2\left(1, \frac{7}{2}; -\frac{1}{2}, 6; z\right) = \frac{3z^4 - 20z^3 + 420z^2 + 7560z + 27720}{z^5} - \frac{8e^z(16z^4 - 160z^3 + 840z^2 - 2520z + 3465)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = \frac{1}{2}$

07.25.03.af4q.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{15} (8z^3 + 68z^2 + 114z + 15) + \frac{8}{15} e^z \sqrt{\pi} (z^{7/2} + 9z^{5/2} + 18z^{3/2} + 6\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af4r.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} (-8z^3 + 68z^2 - 114z + 15) + \frac{8}{15} e^{-z} \sqrt{\pi} (z^{7/2} - 9z^{5/2} + 18z^{3/2} - 6\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af4s.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{15} e^z (8z^3 + 60z^2 + 90z + 15)$$

07.25.03.af4t.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{15} (4z^2 + 22z + 15) + \frac{4}{15} e^z \sqrt{\pi} \sqrt{z} (z^2 + 6z + 6) \operatorname{erf}(\sqrt{z})$$

07.25.03.af4u.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} (4z^2 - 22z + 15) - \frac{4}{15} e^{-z} \sqrt{\pi} \sqrt{z} (z^2 - 6z + 6) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af4v.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, 2; z\right) = \frac{e^z (8z^3 + 36z^2 + 18z - 3)}{15z} + \frac{1}{5z}$$

07.25.03.af4w.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{5} (2z + 5) + \frac{2}{5} e^z \sqrt{\pi} \sqrt{z} (z + 3) \operatorname{erf}(\sqrt{z})$$

07.25.03.af4x.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{5} (5 - 2z) + \frac{2}{5} e^{-z} \sqrt{\pi} (z - 3) \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.af4y.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, 3; z\right) = \frac{2(z - 1)}{5z^2} + \frac{2e^z (8z^3 + 12z^2 - 6z + 3)}{15z^2}$$

07.25.03.af4z.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = e^z \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.af50.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = 1 - e^{-z} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.af51.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, 4; z\right) = \frac{3(z^2 - 2z + 10)}{5z^3} + \frac{2e^z (8z^3 - 12z^2 + 18z - 15)}{5z^3}$$

07.25.03.af52.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7(3z^2 - 10z + 30)}{5z^3} + \frac{7e^z \sqrt{\pi} (z^3 - 3z^2 + 6z - 6) \operatorname{erf}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.af53.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} \sqrt{\pi} (z^3 + 3z^2 + 6z + 6) \operatorname{erfi}(\sqrt{z})}{2 z^{7/2}} - \frac{7(3z^2 + 10z + 30)}{5 z^3}$$

07.25.03.af54.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, 5; z\right) = \frac{4(z^3 - 3z^2 + 30z + 210)}{5 z^4} + \frac{8 e^z (8z^3 - 36z^2 + 90z - 105)}{5 z^4}$$

07.25.03.af55.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{9(z^3 + 14z^2 - 70z + 840)}{10 z^4} + \frac{63 e^z \sqrt{\pi} (z^3 - 6z^2 + 18z - 24) \operatorname{erf}(\sqrt{z})}{4 z^{9/2}}$$

07.25.03.af56.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{9(z^3 - 14z^2 - 70z - 840)}{10 z^4} - \frac{63 e^{-z} \sqrt{\pi} (z^3 + 6z^2 + 18z + 24) \operatorname{erfi}(\sqrt{z})}{4 z^{9/2}}$$

07.25.03.af57.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{1}{2}, 6; z\right) = \frac{8 e^z (8z^3 - 60z^2 + 210z - 315)}{z^5} + \frac{z^4 - 4z^3 + 60z^2 + 840z + 2520}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = 1$

07.25.03.af58.01

$${}_2F_2\left(1, \frac{7}{2}; 1, 1; z\right) = \frac{1}{15} e^{z/2} (4z^3 + 28z^2 + 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^3 + 24z^2 + 23z) I_1\left(\frac{z}{2}\right)$$

07.25.03.af59.01

$${}_2F_2\left(1, \frac{7}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{15} e^z (4z^2 + 20z + 15)$$

07.25.03.af5a.01

$${}_2F_2\left(1, \frac{7}{2}; 1, 2; z\right) = \frac{1}{15} e^{z/2} (4z^2 + 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^2 + 14z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.af5b.01

$${}_2F_2\left(1, \frac{7}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{5} e^z (2z + 5)$$

07.25.03.af5c.01

$${}_2F_2\left(1, \frac{7}{2}; 1, 3; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2z^2 + 2z - 1) I_1\left(\frac{z}{2}\right)}{15 z}$$

07.25.03.af5d.01

$${}_2F_2\left(1, \frac{7}{2}; 1, \frac{7}{2}; z\right) = e^z$$

07.25.03.af5e.01

$${}_2F_2\left(1, \frac{7}{2}; 1, 4; z\right) = \frac{4 e^{z/2} (2z - 1) I_0\left(\frac{z}{2}\right)}{5 z} + \frac{4 e^{z/2} (2z^2 - 3z + 4) I_1\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.af5f.01

$${}_2F_2\left(1, \frac{7}{2}; 1, \frac{9}{2}; z\right) = \frac{7 e^z (4 z^2 - 10 z + 15)}{8 z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.af5g.01

$${}_2F_2\left(1, \frac{7}{2}; 1, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7 e^{-z} (4 z^2 + 10 z + 15)}{8 z^3}$$

07.25.03.af5h.01

$${}_2F_2\left(1, \frac{7}{2}; 1, 5; z\right) = \frac{32 e^{z/2} (z-3) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{32 e^{z/2} (z^2 - 4 z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.af5i.01

$${}_2F_2\left(1, \frac{7}{2}; 1, \frac{11}{2}; z\right) = \frac{63 e^z (8 z^2 - 40 z + 105)}{32 z^4} - \frac{945 \sqrt{\pi} (2 z + 7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.af5j.01

$${}_2F_2\left(1, \frac{7}{2}; 1, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8 z^2 + 40 z + 105)}{32 z^4} + \frac{945 \sqrt{\pi} (2 z - 7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.af5k.01

$${}_2F_2\left(1, \frac{7}{2}; 1, 6; z\right) = \frac{32 e^{z/2} (z-8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4 z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = \frac{3}{2}$

07.25.03.af5l.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{15} (2 z + 7) + \frac{2 e^z \sqrt{\pi} (z^2 + 4 z + 2) \operatorname{erf}(\sqrt{z})}{15 \sqrt{z}}$$

07.25.03.af5m.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} (7 - 2 z) + \frac{2 e^{-z} \sqrt{\pi} (z^2 - 4 z + 2) \operatorname{erfi}(\sqrt{z})}{15 \sqrt{z}}$$

07.25.03.af5n.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{3}{2}, 2; z\right) = \frac{e^z (4 z^2 + 12 z + 3)}{15 z} - \frac{1}{5 z}$$

07.25.03.af5o.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z \sqrt{\pi} (z+2) \operatorname{erf}(\sqrt{z})}{5 \sqrt{z}} + \frac{1}{5}$$

07.25.03.af5p.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (2-z) \operatorname{erfi}(\sqrt{z})}{5 \sqrt{z}} + \frac{1}{5}$$

07.25.03.af5q.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{3}{2}, 3; z\right) = \frac{2e^z(4z^2 + 4z - 1)}{15z^2} - \frac{2(3z - 1)}{15z^2}$$

07.25.03.af5r.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.af5s.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.af5t.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{3}{2}, 4; z\right) = \frac{-3z^2 + 2z - 6}{5z^3} + \frac{2e^z(4z^2 - 4z + 3)}{5z^3}$$

07.25.03.af5u.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7e^z \sqrt{\pi} (z^2 - 2z + 2) \operatorname{erf}(\sqrt{z})}{4z^{7/2}} - \frac{7(3z^2 - 10z + 30)}{30z^3}$$

07.25.03.af5v.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7(3z^2 + 10z + 30)}{30z^3} - \frac{7e^{-z} \sqrt{\pi} (z^2 + 2z + 2) \operatorname{erfi}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.af5w.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{3}{2}, 5; z\right) = \frac{8e^z(4z^2 - 12z + 15)}{5z^4} - \frac{4(z^3 - z^2 + 6z + 30)}{5z^4}$$

07.25.03.af5x.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{63e^z \sqrt{\pi} (z^2 - 4z + 6) \operatorname{erf}(\sqrt{z})}{8z^{9/2}} - \frac{3(6z^3 - 7z^2 + 630)}{20z^4}$$

07.25.03.af5y.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3(6z^3 + 7z^2 - 630)}{20z^4} + \frac{63e^{-z} \sqrt{\pi} (z^2 + 4z + 6) \operatorname{erfi}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.af5z.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{3}{2}, 6; z\right) = \frac{8e^z(4z^2 - 20z + 35)}{z^5} + \frac{-3z^4 + 4z^3 - 36z^2 - 360z - 840}{3z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = 2$

07.25.03.af60.01

$${}_2F_2\left(1, \frac{7}{2}; 2, 2; z\right) = \frac{2e^{z/2}(2z^2 + 6z + 3)I_0\left(\frac{z}{2}\right)}{15z} + \frac{4}{15}e^{z/2}(z + 2)I_1\left(\frac{z}{2}\right) - \frac{2}{5z}$$

07.25.03.af61.01

$${}_2F_2\left(1, \frac{7}{2}; 2, \frac{5}{2}; z\right) = \frac{e^z(2z + 3)}{5z} - \frac{3}{5z}$$

07.25.03.af62.01

$${}_2F_2\left(1, \frac{7}{2}; 2, 3; z\right) = \frac{4 e^{z/2} (2z+3) I_0\left(\frac{z}{2}\right)}{15z} + \frac{4 e^{z/2} (2z+1) I_1\left(\frac{z}{2}\right)}{15z} - \frac{4}{5z}$$

07.25.03.af63.01

$${}_2F_2\left(1, \frac{7}{2}; 2, \frac{7}{2}; z\right) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.af64.01

$${}_2F_2\left(1, \frac{7}{2}; 2, 4; z\right) = \frac{8 e^{z/2} I_0\left(\frac{z}{2}\right)}{5z} + \frac{8 e^{z/2} (z-1) I_1\left(\frac{z}{2}\right)}{5z^2} - \frac{6}{5z}$$

07.25.03.af65.01

$${}_2F_2\left(1, \frac{7}{2}; 2, \frac{9}{2}; z\right) = \frac{7 e^z (2z-3)}{4z^3} + \frac{21 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8z^{7/2}} - \frac{7}{5z}$$

07.25.03.af66.01

$${}_2F_2\left(1, \frac{7}{2}; 2, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (2z+3)}{4z^3} - \frac{21 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8z^{7/2}} + \frac{7}{5z}$$

07.25.03.af67.01

$${}_2F_2\left(1, \frac{7}{2}; 2, 5; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{5z^2} + \frac{32 e^{z/2} (z-4) I_1\left(\frac{z}{2}\right)}{5z^3} - \frac{8}{5z}$$

07.25.03.af68.01

$${}_2F_2\left(1, \frac{7}{2}; 2, \frac{11}{2}; z\right) = \frac{63 e^z (4z-15)}{16z^4} + \frac{189 \sqrt{\pi} (2z+5) \operatorname{erfi}(\sqrt{z})}{32z^{9/2}} - \frac{9}{5z}$$

07.25.03.af69.01

$${}_2F_2\left(1, \frac{7}{2}; 2, \frac{11}{2}; -z\right) = -\frac{63 e^{-z} (4z+15)}{16z^4} - \frac{189 \sqrt{\pi} (2z-5) \operatorname{erf}(\sqrt{z})}{32z^{9/2}} + \frac{9}{5z}$$

07.25.03.af6a.01

$${}_2F_2\left(1, \frac{7}{2}; 2, 6; z\right) = \frac{64 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^3} - \frac{256 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^4} - \frac{2}{z}$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = \frac{5}{2}$

07.25.03.af6b.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (z+1) \operatorname{erf}(\sqrt{z})}{10z^{3/2}} - \frac{3}{5z}$$

07.25.03.af6c.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (z-1) \operatorname{erfi}(\sqrt{z})}{10z^{3/2}} + \frac{3}{5z}$$

07.25.03.af6d.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{5}{2}, 3; z\right) = \frac{2 e^z (2z+1)}{5z^2} - \frac{2(3z+1)}{5z^2}$$

07.25.03.af6e.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{3 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3}{2 z}$$

07.25.03.af6f.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{3}{2 z} - \frac{3 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.af6g.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{5}{2}, 4; z\right) = \frac{6 e^z (2 z - 1)}{5 z^3} - \frac{3 (3 z^2 + 2 z - 2)}{5 z^3}$$

07.25.03.af6h.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{21 e^z \sqrt{\pi} (z - 1) \operatorname{erf}(\sqrt{z})}{8 z^{7/2}} - \frac{7 (6 z^2 + 5 z - 15)}{20 z^3}$$

07.25.03.af6i.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7 (6 z^2 - 5 z - 15)}{20 z^3} + \frac{21 e^{-z} \sqrt{\pi} (z + 1) \operatorname{erfi}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.af6j.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{5}{2}, 5; z\right) = \frac{24 e^z (2 z - 3)}{5 z^4} - \frac{12 (z^3 + z^2 - 2 z - 6)}{5 z^4}$$

07.25.03.af6k.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{189 e^z \sqrt{\pi} (z - 2) \operatorname{erf}(\sqrt{z})}{16 z^{9/2}} - \frac{9 (12 z^3 + 14 z^2 - 35 z - 210)}{40 z^4}$$

07.25.03.af6l.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{9 (12 z^3 - 14 z^2 - 35 z + 210)}{40 z^4} - \frac{189 e^{-z} \sqrt{\pi} (z + 2) \operatorname{erfi}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.af6m.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{5}{2}, 6; z\right) = \frac{24 e^z (2 z - 5)}{z^5} + \frac{-3 z^4 - 4 z^3 + 12 z^2 + 72 z + 120}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = 3$

07.25.03.af6n.01

$${}_2F_2\left(1, \frac{7}{2}; 3, 3; z\right) = -\frac{8 (3 z + 2)}{15 z^2} + \frac{16 e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right)}{15 z^2} + \frac{16 e^{z/2} I_1\left(\frac{z}{2}\right)}{15 z}$$

07.25.03.af6o.01

$${}_2F_2\left(1, \frac{7}{2}; 3, \frac{7}{2}; z\right) = \frac{2 e^z}{z^2} - \frac{2 (z + 1)}{z^2}$$

07.25.03.af6p.01

$${}_2F_2\left(1, \frac{7}{2}; 3, 4; z\right) = -\frac{4 (3 z + 4)}{5 z^2} + \frac{16 e^{z/2} I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{16 e^{z/2} I_1\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.af6q.01

$${}_2F_2\left(1, \frac{7}{2}; 3, \frac{9}{2}; z\right) = -\frac{14(3z+5)}{15z^2} - \frac{7\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2z^{7/2}} + \frac{7e^z}{z^3}$$

07.25.03.af6r.01

$${}_2F_2\left(1, \frac{7}{2}; 3, \frac{9}{2}; -z\right) = \frac{14(3z-5)}{15z^2} + \frac{7\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2z^{7/2}} - \frac{7e^{-z}}{z^3}$$

07.25.03.af6s.01

$${}_2F_2\left(1, \frac{7}{2}; 3, 5; z\right) = \frac{128e^{z/2} I_1\left(\frac{z}{2}\right)}{5z^3} - \frac{16(z+2)}{5z^2}$$

07.25.03.af6t.01

$${}_2F_2\left(1, \frac{7}{2}; 3, \frac{11}{2}; z\right) = -\frac{6(3z+7)}{5z^2} - \frac{63\sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{8z^{9/2}} + \frac{189e^z}{4z^4}$$

07.25.03.af6u.01

$${}_2F_2\left(1, \frac{7}{2}; 3, \frac{11}{2}; -z\right) = \frac{6(3z-7)}{5z^2} + \frac{63\sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{8z^{9/2}} + \frac{189e^{-z}}{4z^4}$$

07.25.03.af6v.01

$${}_2F_2\left(1, \frac{7}{2}; 3, 6; z\right) = -\frac{4(3z+8)}{3z^2} - \frac{128e^{z/2} I_0\left(\frac{z}{2}\right)}{3z^3} + \frac{128e^{z/2} (z+4) I_1\left(\frac{z}{2}\right)}{3z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = \frac{7}{2}$

07.25.03.af6w.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{15e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5(2z+3)}{4z^2}$$

07.25.03.af6x.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5(2z-3)}{4z^2} + \frac{15e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.af6y.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{7}{2}, 4; z\right) = \frac{6e^z}{z^3} - \frac{3(z^2+2z+2)}{z^3}$$

07.25.03.af6z.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{105e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{7(4z^2+10z+15)}{8z^3}$$

07.25.03.af70.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{7(4z^2-10z+15)}{8z^3} - \frac{105e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.af71.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{7}{2}, 5; z\right) = \frac{24 e^z}{z^4} - \frac{4(z^3 + 3z^2 + 6z + 6)}{z^4}$$

07.25.03.af72.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9(8z^3 + 28z^2 + 70z + 105)}{16 z^4}$$

07.25.03.af73.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(8z^3 - 28z^2 + 70z - 105)}{16 z^4} + \frac{945 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.af74.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{7}{2}, 6; z\right) = \frac{120 e^z}{z^5} - \frac{5(z^4 + 4z^3 + 12z^2 + 24z + 24)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = 4$

07.25.03.af75.01

$${}_2F_2\left(1, \frac{7}{2}; 4, 4; z\right) = \frac{96 e^{z/2} I_0\left(\frac{z}{2}\right)}{5 z^3} - \frac{6(3z^2 + 8z + 16)}{5 z^3}$$

07.25.03.af76.01

$${}_2F_2\left(1, \frac{7}{2}; 4, \frac{9}{2}; z\right) = \frac{21 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}} - \frac{7(3z^2 + 10z + 30)}{5 z^3}$$

07.25.03.af77.01

$${}_2F_2\left(1, \frac{7}{2}; 4, \frac{9}{2}; -z\right) = \frac{7(3z^2 - 10z + 30)}{5 z^3} - \frac{21 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.af78.01

$${}_2F_2\left(1, \frac{7}{2}; 4, 5; z\right) = -\frac{24(z^2 + 4z + 16)}{5 z^3} + \frac{384 e^{z/2} I_0\left(\frac{z}{2}\right)}{5 z^3} - \frac{384 e^{z/2} I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.af79.01

$${}_2F_2\left(1, \frac{7}{2}; 4, \frac{11}{2}; z\right) = -\frac{9(3z^2 + 14z + 70)}{5 z^3} + \frac{189 \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{4 z^{9/2}} - \frac{189 e^z}{2 z^4}$$

07.25.03.af7a.01

$${}_2F_2\left(1, \frac{7}{2}; 4, \frac{11}{2}; -z\right) = \frac{9(3z^2 - 14z + 70)}{5 z^3} - \frac{189 \sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{4 z^{9/2}} - \frac{189 e^{-z}}{2 z^4}$$

07.25.03.af7b.01

$${}_2F_2\left(1, \frac{7}{2}; 4, 6; z\right) = -\frac{2(3z^2 + 16z + 96)}{z^3} + \frac{256 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^3} - \frac{256 e^{z/2} (z + 1) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = \frac{9}{2}$

07.25.03.af7c.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{9}{2}, 5; z\right) = -\frac{28(z^3 + 5z^2 + 30z - 30)}{5z^4} + \frac{168\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}} - \frac{168e^z}{z^4}$$

07.25.03.af7d.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{9}{2}, 5; -z\right) = \frac{28(z^3 - 5z^2 + 30z + 30)}{5z^4} - \frac{168\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}} - \frac{168e^{-z}}{z^4}$$

07.25.03.af7e.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{9}{2}, 6; z\right) = -\frac{280e^z(2z+1)}{z^5} - \frac{7(3z^4 + 20z^3 + 180z^2 - 360z - 120)}{3z^5} + \frac{560\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.af7f.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{9}{2}, 6; -z\right) = -\frac{280e^{-z}(2z-1)}{z^5} + \frac{7(3z^4 - 20z^3 + 180z^2 + 360z - 120)}{3z^5} - \frac{560\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = 5$

07.25.03.af7g.01

$${}_2F_2\left(1, \frac{7}{2}; 5, 5; z\right) = -\frac{32(z^3 + 6z^2 + 48z - 96)}{5z^4} + \frac{3072e^{z/2}(z-1)I_0\left(\frac{z}{2}\right)}{5z^4} - \frac{3072e^{z/2}I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.af7h.01

$${}_2F_2\left(1, \frac{7}{2}; 5, \frac{11}{2}; z\right) = -\frac{36(z^3 + 7z^2 + 70z - 210)}{5z^4} + \frac{378\sqrt{\pi}(2z-1)\operatorname{erfi}(\sqrt{z})}{z^{9/2}} - \frac{756e^z}{z^4}$$

07.25.03.af7i.01

$${}_2F_2\left(1, \frac{7}{2}; 5, \frac{11}{2}; -z\right) = \frac{36(z^3 - 7z^2 + 70z + 210)}{5z^4} - \frac{378\sqrt{\pi}(2z+1)\operatorname{erf}(\sqrt{z})}{z^{9/2}} - \frac{756e^{-z}}{z^4}$$

07.25.03.af7j.01

$${}_2F_2\left(1, \frac{7}{2}; 5, 6; z\right) = -\frac{8(z^3 + 8z^2 + 96z - 384)}{z^4} + \frac{1024e^{z/2}(2z-3)I_0\left(\frac{z}{2}\right)}{z^4} - \frac{1024e^{z/2}(2z-1)I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = \frac{11}{2}$

07.25.03.af7k.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{11}{2}, 6; z\right) = -\frac{2520e^z(z-1)}{z^5} - \frac{3(3z^4 + 28z^3 + 420z^2 - 2520z + 840)}{z^5} + \frac{1260\sqrt{\pi}(2z-3)\operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.af7l.01

$${}_2F_2\left(1, \frac{7}{2}; \frac{11}{2}, 6; -z\right) = -\frac{2520e^{-z}(z+1)}{z^5} + \frac{3(3z^4 - 28z^3 + 420z^2 + 2520z + 840)}{z^5} - \frac{1260\sqrt{\pi}(2z+3)\operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

For fixed z and $a_1 = 1, a_2 = \frac{7}{2}, b_1 = 6$

07.25.03.af7m.01

$${}_2F_2\left(1, \frac{7}{2}; 6, 6; z\right) = -\frac{10(3z^4 + 32z^3 + 576z^2 - 4608z + 3072)}{3z^5} + \frac{10240e^{z/2}(2z^2 - 6z + 3)I_0\left(\frac{z}{2}\right)}{3z^5} - \frac{20480e^{z/2}(z-2)I_1\left(\frac{z}{2}\right)}{3z^4}$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = -\frac{11}{2}$

07.25.03.af7n.01

$${}_2F_2\left(1, 4; -\frac{11}{2}, 1; z\right) = \frac{32z^9 + 896z^8 + 7320z^7 + 16128z^6 - 5376z^5 + 5040z^4 - 7200z^3 + 12600z^2 - 22680z + 31185}{31185} + \frac{4e^z\sqrt{\pi}(8z^{19/2} + 228z^{17/2} + 1938z^{15/2} + 4845z^{13/2})\operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.af7o.01

$${}_2F_2\left(1, 4; -\frac{11}{2}, 1; -z\right) = \frac{-32z^9 + 896z^8 - 7320z^7 + 16128z^6 + 5376z^5 + 5040z^4 + 7200z^3 + 12600z^2 + 22680z + 31185}{31185} + \frac{4e^{-z}\sqrt{\pi}(8z^{19/2} - 228z^{17/2} + 1938z^{15/2} - 4845z^{13/2})\operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.af7p.01

$${}_2F_2\left(1, 4; -\frac{11}{2}, 2; z\right) = \frac{32z^8 + 592z^7 + 2304z^6 - 896z^5 + 1008z^4 - 1800z^3 + 4200z^2 - 11340z + 31185}{31185} + \frac{8e^z\sqrt{\pi}(4z^{17/2} + 76z^{15/2} + 323z^{13/2})\operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.af7q.01

$${}_2F_2\left(1, 4; -\frac{11}{2}, 2; -z\right) = \frac{32z^8 - 592z^7 + 2304z^6 + 896z^5 + 1008z^4 + 1800z^3 + 4200z^2 + 11340z + 31185}{31185} - \frac{8e^{-z}\sqrt{\pi}(4z^{17/2} - 76z^{15/2} + 323z^{13/2})\operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.af7r.01

$${}_2F_2\left(1, 4; -\frac{11}{2}, 3; z\right) = \frac{64z^7 + 576z^6 - 256z^5 + 336z^4 - 720z^3 + 2100z^2 - 7560z + 31185}{31185} + \frac{32e^z\sqrt{\pi}(2z^{15/2} + 19z^{13/2})\operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.af7s.01

$${}_2F_2\left(1, 4; -\frac{11}{2}, 3; -z\right) = \frac{-64z^7 + 576z^6 + 256z^5 + 336z^4 + 720z^3 + 2100z^2 + 7560z + 31185}{31185} + \frac{32e^{-z}\sqrt{\pi}(2z^{15/2} - 19z^{13/2})\operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.af7t.01

$${}_2F_2\left(1, 4; -\frac{11}{2}, 4; z\right) = \frac{64 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{64 z^6 - 32 z^5 + 48 z^4 - 120 z^3 + 420 z^2 - 1890 z + 10395}{10395}$$

07.25.03.af7u.01

$${}_2F_2\left(1, 4; -\frac{11}{2}, 4; -z\right) = \frac{64 z^6 + 32 z^5 + 48 z^4 + 120 z^3 + 420 z^2 + 1890 z + 10395}{10395} - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} \operatorname{erfi}(\sqrt{z})}{10395}$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = -\frac{9}{2}$

07.25.03.af7v.01

$${}_2F_2\left(1, 4; -\frac{9}{2}, 1; z\right) = \frac{-16 z^8 - 400 z^7 - 2868 z^6 - 5376 z^5 + 1680 z^4 - 1440 z^3 + 1800 z^2 - 2520 z + 2835}{2835} - \frac{2 e^z \sqrt{\pi} (8 z^{17/2} + 204 z^{15/2} + 1530 z^{13/2} + 3315 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.af7w.01

$${}_2F_2\left(1, 4; -\frac{9}{2}, 1; -z\right) = \frac{-16 z^8 + 400 z^7 - 2868 z^6 + 5376 z^5 + 1680 z^4 + 1440 z^3 + 1800 z^2 + 2520 z + 2835}{2835} + \frac{2 e^{-z} \sqrt{\pi} (8 z^{17/2} - 204 z^{15/2} + 1530 z^{13/2} - 3315 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.af7x.01

$${}_2F_2\left(1, 4; -\frac{9}{2}, 2; z\right) = \frac{-16 z^7 - 264 z^6 - 896 z^5 + 336 z^4 - 360 z^3 + 600 z^2 - 1260 z + 2835}{2835} - \frac{4 e^z \sqrt{\pi} (4 z^{15/2} + 68 z^{13/2} + 255 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.af7y.01

$${}_2F_2\left(1, 4; -\frac{9}{2}, 2; -z\right) = \frac{16 z^7 - 264 z^6 + 896 z^5 + 336 z^4 + 360 z^3 + 600 z^2 + 1260 z + 2835}{2835} - \frac{4 e^{-z} \sqrt{\pi} (4 z^{15/2} - 68 z^{13/2} + 255 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.af7z.01

$${}_2F_2\left(1, 4; -\frac{9}{2}, 3; z\right) = \frac{-32 z^6 - 256 z^5 + 112 z^4 - 144 z^3 + 300 z^2 - 840 z + 2835}{2835} - \frac{16 e^z \sqrt{\pi} (2 z^{13/2} + 17 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.af80.01

$${}_2F_2\left(1, 4; -\frac{9}{2}, 3; -z\right) = \frac{-32 z^6 + 256 z^5 + 112 z^4 + 144 z^3 + 300 z^2 + 840 z + 2835}{2835} + \frac{16 e^{-z} \sqrt{\pi} (2 z^{13/2} - 17 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.af81.01

$${}_2F_2\left(1, 4; -\frac{9}{2}, 4; z\right) = \frac{1}{945} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.af82.01

$${}_2F_2\left(1, 4; -\frac{9}{2}, 4; -z\right) = \frac{1}{945} (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = -\frac{7}{2}$

07.25.03.af83.01

$${}_2F_2\left(1, 4; -\frac{7}{2}, 1; z\right) = \frac{1}{315} (8 z^7 + 176 z^6 + 1086 z^5 + 1680 z^4 - 480 z^3 + 360 z^2 - 360 z + 315) + \frac{1}{315} e^z \sqrt{\pi} (8 z^{15/2} + 180 z^{13/2} + 1170 z^{11/2} + 2145 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af84.01

$${}_2F_2\left(1, 4; -\frac{7}{2}, 1; -z\right) = \frac{1}{315} (-8 z^7 + 176 z^6 - 1086 z^5 + 1680 z^4 + 480 z^3 + 360 z^2 + 360 z + 315) + \frac{1}{315} e^{-z} \sqrt{\pi} (8 z^{15/2} - 180 z^{13/2} + 1170 z^{11/2} - 2145 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af85.01

$${}_2F_2\left(1, 4; -\frac{7}{2}, 2; z\right) = \frac{1}{315} (8 z^6 + 116 z^5 + 336 z^4 - 120 z^3 + 120 z^2 - 180 z + 315) + \frac{2}{315} e^z \sqrt{\pi} (4 z^{13/2} + 60 z^{11/2} + 195 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af86.01

$${}_2F_2\left(1, 4; -\frac{7}{2}, 2; -z\right) = \frac{1}{315} (8 z^6 - 116 z^5 + 336 z^4 + 120 z^3 + 120 z^2 + 180 z + 315) - \frac{2}{315} e^{-z} \sqrt{\pi} (4 z^{13/2} - 60 z^{11/2} + 195 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af87.01

$${}_2F_2\left(1, 4; -\frac{7}{2}, 3; z\right) = \frac{1}{315} (16 z^5 + 112 z^4 - 48 z^3 + 60 z^2 - 120 z + 315) + \frac{8}{315} e^z \sqrt{\pi} (2 z^{11/2} + 15 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af88.01

$${}_2F_2\left(1, 4; -\frac{7}{2}, 3; -z\right) = \frac{1}{315} (-16 z^5 + 112 z^4 + 48 z^3 + 60 z^2 + 120 z + 315) + \frac{8}{315} e^{-z} \sqrt{\pi} (2 z^{11/2} - 15 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af89.01

$${}_2F_2\left(1, 4; -\frac{7}{2}, 4; z\right) = \frac{16}{105} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16 z^4 - 8 z^3 + 12 z^2 - 30 z + 105)$$

07.25.03.af8a.01

$${}_2F_2\left(1, 4; -\frac{7}{2}, 4; -z\right) = \frac{1}{105} (16 z^4 + 8 z^3 + 12 z^2 + 30 z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = -\frac{5}{2}$

07.25.03.af8b.01

$${}_2F_2\left(1, 4; -\frac{5}{2}, 1; z\right) = \frac{1}{45}(-4z^6 - 76z^5 - 393z^4 - 480z^3 + 120z^2 - 72z + 45) + \frac{1}{90}e^z\sqrt{\pi}(-8z^{13/2} - 156z^{11/2} - 858z^{9/2} - 1287z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.af8c.01

$${}_2F_2\left(1, 4; -\frac{5}{2}, 1; -z\right) = \frac{1}{45}(-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45) + \frac{1}{90}e^{-z}\sqrt{\pi}(8z^{13/2} - 156z^{11/2} + 858z^{9/2} - 1287z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.af8d.01

$${}_2F_2\left(1, 4; -\frac{5}{2}, 2; z\right) = \frac{1}{45}(-4z^5 - 50z^4 - 120z^3 + 40z^2 - 36z + 45) + \frac{1}{45}e^z\sqrt{\pi}(-4z^{11/2} - 52z^{9/2} - 143z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.af8e.01

$${}_2F_2\left(1, 4; -\frac{5}{2}, 2; -z\right) = \frac{1}{45}(4z^5 - 50z^4 + 120z^3 + 40z^2 + 36z + 45) + \frac{1}{45}e^{-z}\sqrt{\pi}(-4z^{11/2} + 52z^{9/2} - 143z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.af8f.01

$${}_2F_2\left(1, 4; -\frac{5}{2}, 3; z\right) = \frac{1}{45}(-8z^4 - 48z^3 + 20z^2 - 24z + 45) - \frac{4}{45}e^z\sqrt{\pi}(2z^{9/2} + 13z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.af8g.01

$${}_2F_2\left(1, 4; -\frac{5}{2}, 3; -z\right) = \frac{1}{45}(-8z^4 + 48z^3 + 20z^2 + 24z + 45) + \frac{4}{45}e^{-z}\sqrt{\pi}(2z^{9/2} - 13z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.af8h.01

$${}_2F_2\left(1, 4; -\frac{5}{2}, 4; z\right) = \frac{1}{15}(-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15}e^z\sqrt{\pi}z^{7/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.af8i.01

$${}_2F_2\left(1, 4; -\frac{5}{2}, 4; -z\right) = \frac{1}{15}(8z^3 + 4z^2 + 6z + 15) - \frac{8}{15}e^{-z}\sqrt{\pi}z^{7/2}\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = -\frac{3}{2}$

07.25.03.af8j.01

$${}_2F_2\left(1, 4; -\frac{3}{2}, 1; z\right) = \frac{1}{18}(4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36}e^z\sqrt{\pi}(8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.af8k.01

$${}_2F_2\left(1, 4; -\frac{3}{2}, 1; -z\right) = \frac{1}{18}(-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36}e^{-z}\sqrt{\pi}(8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.af8l.01

$${}_2F_2\left(1, 4; -\frac{3}{2}, 2; z\right) = \frac{1}{9} (2z^4 + 21z^3 + 40z^2 - 12z + 9) + \frac{1}{18} e^z \sqrt{\pi} (4z^{9/2} + 44z^{7/2} + 99z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af8m.01

$${}_2F_2\left(1, 4; -\frac{3}{2}, 2; -z\right) = \frac{1}{9} (2z^4 - 21z^3 + 40z^2 + 12z + 9) + \frac{1}{18} e^{-z} \sqrt{\pi} (-4z^{9/2} + 44z^{7/2} - 99z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af8n.01

$${}_2F_2\left(1, 4; -\frac{3}{2}, 3; z\right) = \frac{1}{9} (4z^3 + 20z^2 - 8z + 9) + \frac{2}{9} e^z \sqrt{\pi} (2z^{7/2} + 11z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af8o.01

$${}_2F_2\left(1, 4; -\frac{3}{2}, 3; -z\right) = \frac{1}{9} (-4z^3 + 20z^2 + 8z + 9) + \frac{2}{9} e^{-z} \sqrt{\pi} (2z^{7/2} - 11z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af8p.01

$${}_2F_2\left(1, 4; -\frac{3}{2}, 4; z\right) = \frac{4}{3} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (4z^2 - 2z + 3)$$

07.25.03.af8q.01

$${}_2F_2\left(1, 4; -\frac{3}{2}, 4; -z\right) = \frac{1}{3} (4z^2 + 2z + 3) - \frac{4}{3} e^{-z} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = -\frac{1}{2}$

07.25.03.af8r.01

$${}_2F_2\left(1, 4; -\frac{1}{2}, 1; z\right) = \frac{1}{12} (-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24} e^z \sqrt{\pi} (-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af8s.01

$${}_2F_2\left(1, 4; -\frac{1}{2}, 1; -z\right) = \frac{1}{12} (-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24} e^{-z} \sqrt{\pi} (8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af8t.01

$${}_2F_2\left(1, 4; -\frac{1}{2}, 2; z\right) = \frac{1}{6} (-2z^3 - 17z^2 - 24z + 6) + \frac{1}{12} e^z \sqrt{\pi} (-4z^{7/2} - 36z^{5/2} - 63z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af8u.01

$${}_2F_2\left(1, 4; -\frac{1}{2}, 2; -z\right) = \frac{1}{6} (2z^3 - 17z^2 + 24z + 6) + \frac{1}{12} e^{-z} \sqrt{\pi} (-4z^{7/2} + 36z^{5/2} - 63z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af8v.01

$${}_2F_2\left(1, 4; -\frac{1}{2}, 3; z\right) = \frac{1}{3} (-2z^2 - 8z + 3) + \frac{1}{3} e^z \sqrt{\pi} (-2z^{5/2} - 9z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af8w.01

$${}_2F_2\left(1, 4; -\frac{1}{2}, 3; -z\right) = \frac{1}{3} (-2z^2 + 8z + 3) + \frac{1}{3} e^{-z} \sqrt{\pi} (2z^{5/2} - 9z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af8x.01

$${}_2F_2\left(1, 4; -\frac{1}{2}, 4; z\right) = -2 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} - 2z + 1$$

07.25.03.af8y.01

$${}_2F_2\left(1, 4; -\frac{1}{2}, 4; -z\right) = -2 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + 2z + 1$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = \frac{1}{2}$

07.25.03.af8z.01

$${}_2F_2\left(1, 4; \frac{1}{2}, 1; z\right) = \frac{1}{24} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} e^z \sqrt{\pi} (8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af90.01

$${}_2F_2\left(1, 4; \frac{1}{2}, 1; -z\right) = \frac{1}{24} (-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48} e^{-z} \sqrt{\pi} (8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af91.01

$${}_2F_2\left(1, 4; \frac{1}{2}, 2; z\right) = \frac{1}{12} (2z^2 + 13z + 12) + \frac{1}{24} e^z \sqrt{\pi} (4z^{5/2} + 28z^{3/2} + 35\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af92.01

$${}_2F_2\left(1, 4; \frac{1}{2}, 2; -z\right) = \frac{1}{12} (2z^2 - 13z + 12) + \frac{1}{24} e^{-z} \sqrt{\pi} (-4z^{5/2} + 28z^{3/2} - 35\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af93.01

$${}_2F_2\left(1, 4; \frac{1}{2}, 3; z\right) = \frac{z+3}{3} + \frac{1}{6} e^z \sqrt{\pi} (2z^{3/2} + 7\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af94.01

$${}_2F_2\left(1, 4; \frac{1}{2}, 3; -z\right) = \frac{3-z}{3} + \frac{1}{6} e^{-z} \sqrt{\pi} (2z^{3/2} - 7\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af95.01

$${}_2F_2\left(1, 4; \frac{1}{2}, 4; z\right) = e^z \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.af96.01

$${}_2F_2\left(1, 4; \frac{1}{2}, 4; -z\right) = 1 - e^{-z} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = 1$

07.25.03.af97.01

$${}_2F_2(1, 4; 1, 1; z) = \frac{1}{6} e^z (z^3 + 9z^2 + 18z + 6)$$

07.25.03.af98.01

$${}_2F_2\left(1, 4; 1, \frac{3}{2}; z\right) = \frac{1}{48} (4z^2 + 28z + 33) + \frac{e^z \sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.af99.01

$${}_2F_2\left(1, 4; 1, \frac{3}{2}; -z\right) = \frac{1}{48} (4z^2 - 28z + 33) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.af9a.01

$${}_2F_2(1, 4; 1, 2; z) = \frac{1}{6} e^z (z^2 + 6z + 6)$$

07.25.03.af9b.01

$${}_2F_2\left(1, 4; 1, \frac{5}{2}; z\right) = \frac{4z^2 + 16z + 3}{32z} + \frac{e^z \sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.af9c.01

$${}_2F_2\left(1, 4; 1, \frac{5}{2}; -z\right) = \frac{-4z^2 + 16z - 3}{32z} + \frac{e^{-z} \sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.af9d.01

$${}_2F_2(1, 4; 1, 3; z) = \frac{1}{3} e^z (z + 3)$$

07.25.03.af9e.01

$${}_2F_2\left(1, 4; 1, \frac{7}{2}; z\right) = \frac{5(4z^2 + 4z - 3)}{64z^2} + \frac{5e^z \sqrt{\pi} (8z^3 + 12z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.af9f.01

$${}_2F_2\left(1, 4; 1, \frac{7}{2}; -z\right) = \frac{5(4z^2 - 4z - 3)}{64z^2} - \frac{5e^{-z} \sqrt{\pi} (8z^3 - 12z^2 - 6z - 3) \operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.af9g.01

$${}_2F_2(1, 4; 1, 4; z) = e^z$$

07.25.03.af9h.01

$${}_2F_2\left(1, 4; 1, \frac{9}{2}; z\right) = \frac{35(4z^2 - 8z + 15)}{128z^3} + \frac{35e^z \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.af9i.01

$${}_2F_2\left(1, 4; 1, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (8z^3 + 12z^2 + 18z + 15) \operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35(4z^2 + 8z + 15)}{128z^3}$$

07.25.03.af9j.01

$${}_2F_2(1, 4; 1, 5; z) = \frac{4e^z (z^3 - 3z^2 + 6z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.af9k.01

$${}_2F_2\left(1, 4; 1, \frac{11}{2}; z\right) = \frac{315(4z^2 - 20z + 105)}{256z^4} + \frac{315e^z \sqrt{\pi} (8z^3 - 36z^2 + 90z - 105) \operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.af9l.01

$${}_2F_2\left(1, 4; 1, \frac{11}{2}; -z\right) = \frac{315(4z^2 + 20z + 105)}{256z^4} - \frac{315e^{-z} \sqrt{\pi} (8z^3 + 36z^2 + 90z + 105) \operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.af9m.01

$${}_2F_2(1, 4; 1, 6; z) = \frac{120(z + 4)}{z^5} + \frac{20e^z (z^3 - 6z^2 + 18z - 24)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = \frac{3}{2}$

07.25.03.af9n.01

$${}_2F_2\left(1, 4; \frac{3}{2}, 2; z\right) = \frac{1}{24}(2z+9) + \frac{e^z \sqrt{\pi} (4z^2 + 20z + 15) \operatorname{erf}(\sqrt{z})}{48 \sqrt{z}}$$

07.25.03.af9o.01

$${}_2F_2\left(1, 4; \frac{3}{2}, 2; -z\right) = \frac{1}{24}(9-2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 20z + 15) \operatorname{erfi}(\sqrt{z})}{48 \sqrt{z}}$$

07.25.03.af9p.01

$${}_2F_2\left(1, 4; \frac{3}{2}, 3; z\right) = \frac{e^z \sqrt{\pi} (2z+5) \operatorname{erf}(\sqrt{z})}{12 \sqrt{z}} + \frac{1}{6}$$

07.25.03.af9q.01

$${}_2F_2\left(1, 4; \frac{3}{2}, 3; -z\right) = \frac{e^{-z} \sqrt{\pi} (5-2z) \operatorname{erfi}(\sqrt{z})}{12 \sqrt{z}} + \frac{1}{6}$$

07.25.03.af9r.01

$${}_2F_2\left(1, 4; \frac{3}{2}, 4; z\right) = \frac{e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.af9s.01

$${}_2F_2\left(1, 4; \frac{3}{2}, 4; -z\right) = \frac{e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = 2$

07.25.03.af9t.01

$${}_2F_2(1, 4; 2, 2; z) = \frac{e^z (z^2 + 4z + 2)}{6z} - \frac{1}{3z}$$

07.25.03.af9u.01

$${}_2F_2\left(1, 4; 2, \frac{5}{2}; z\right) = \frac{2z-3}{16z} + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.af9v.01

$${}_2F_2\left(1, 4; 2, \frac{5}{2}; -z\right) = \frac{2z+3}{16z} + \frac{e^{-z} \sqrt{\pi} (-4z^2 + 12z - 3) \operatorname{erfi}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.af9w.01

$${}_2F_2(1, 4; 2, 3; z) = \frac{e^z (z+2)}{3z} - \frac{2}{3z}$$

07.25.03.af9x.01

$${}_2F_2\left(1, 4; 2, \frac{7}{2}; z\right) = \frac{5 e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{64 z^{5/2}} - \frac{5(10z-3)}{96 z^2}$$

07.25.03.af9y.01

$${}_2F_2\left(1, 4; 2, \frac{7}{2}; -z\right) = \frac{5(10z+3)}{96z^2} + \frac{5e^{-z}\sqrt{\pi}(4z^2-4z-1)\operatorname{erfi}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.af9z.01

$${}_2F_2(1, 4; 2, 4; z) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.afa0.01

$${}_2F_2\left(1, 4; 2, \frac{9}{2}; z\right) = \frac{35e^z\sqrt{\pi}(4z^2-4z+3)\operatorname{erf}(\sqrt{z})}{128z^{7/2}} - \frac{7(32z^2-30z+45)}{192z^3}$$

07.25.03.afa1.01

$${}_2F_2\left(1, 4; 2, \frac{9}{2}; -z\right) = \frac{7(32z^2+30z+45)}{192z^3} - \frac{35e^{-z}\sqrt{\pi}(4z^2+4z+3)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.afa2.01

$${}_2F_2(1, 4; 2, 5; z) = \frac{4e^z(z^2-2z+2)}{z^4} - \frac{4(z^3+6)}{3z^4}$$

07.25.03.afa3.01

$${}_2F_2\left(1, 4; 2, \frac{11}{2}; z\right) = \frac{315e^z\sqrt{\pi}(4z^2-12z+15)\operatorname{erf}(\sqrt{z})}{256z^{9/2}} - \frac{3(64z^3-210z+1575)}{128z^4}$$

07.25.03.afa4.01

$${}_2F_2\left(1, 4; 2, \frac{11}{2}; -z\right) = \frac{3(64z^3-210z-1575)}{128z^4} + \frac{315e^{-z}\sqrt{\pi}(4z^2+12z+15)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.afa5.01

$${}_2F_2(1, 4; 2, 6; z) = \frac{20e^z(z^2-4z+6)}{z^5} - \frac{5(z^4+24z+72)}{3z^5}$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = \frac{5}{2}$

07.25.03.afa6.01

$${}_2F_2\left(1, 4; \frac{5}{2}, 3; z\right) = \frac{e^z\sqrt{\pi}(2z+3)\operatorname{erf}(\sqrt{z})}{8z^{3/2}} - \frac{3}{4z}$$

07.25.03.afa7.01

$${}_2F_2\left(1, 4; \frac{5}{2}, 3; -z\right) = \frac{e^{-z}\sqrt{\pi}(2z-3)\operatorname{erfi}(\sqrt{z})}{8z^{3/2}} + \frac{3}{4z}$$

07.25.03.afa8.01

$${}_2F_2\left(1, 4; \frac{5}{2}, 4; z\right) = \frac{3e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3}{2z}$$

07.25.03.afa9.01

$${}_2F_2\left(1, 4; \frac{5}{2}, 4; -z\right) = \frac{3}{2z} - \frac{3 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = 3$

07.25.03.afa.01

$${}_2F_2(1, 4; 3, 3; z) = \frac{2 e^z (z+1)}{3 z^2} - \frac{2 (2z+1)}{3 z^2}$$

07.25.03.afab.01

$${}_2F_2\left(1, 4; 3, \frac{7}{2}; z\right) = \frac{5 e^z \sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} - \frac{5 (8z+3)}{24 z^2}$$

07.25.03.afac.01

$${}_2F_2\left(1, 4; 3, \frac{7}{2}; -z\right) = \frac{5 (8z-3)}{24 z^2} - \frac{5 e^{-z} \sqrt{\pi} (2z-1) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.afad.01

$${}_2F_2(1, 4; 3, 4; z) = \frac{2 e^z}{z^2} - \frac{2 (z+1)}{z^2}$$

07.25.03.afa.01

$${}_2F_2\left(1, 4; 3, \frac{9}{2}; z\right) = \frac{35 e^z \sqrt{\pi} (2z-1) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}} - \frac{7 (16 z^2 + 20 z - 15)}{48 z^3}$$

07.25.03.afaf.01

$${}_2F_2\left(1, 4; 3, \frac{9}{2}; -z\right) = \frac{7 (16 z^2 - 20 z - 15)}{48 z^3} + \frac{35 e^{-z} \sqrt{\pi} (2z+1) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.afag.01

$${}_2F_2(1, 4; 3, 5; z) = \frac{8 e^z (z-1)}{z^4} - \frac{4 (2 z^3 + 3 z^2 - 6)}{3 z^4}$$

07.25.03.afah.01

$${}_2F_2\left(1, 4; 3, \frac{11}{2}; z\right) = \frac{315 e^z \sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}} - \frac{3 (32 z^3 + 56 z^2 - 315)}{32 z^4}$$

07.25.03.afai.01

$${}_2F_2\left(1, 4; 3, \frac{11}{2}; -z\right) = \frac{3 (32 z^3 - 56 z^2 + 315)}{32 z^4} - \frac{315 e^{-z} \sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.afaj.01

$${}_2F_2(1, 4; 3, 6; z) = \frac{40 e^z (z-2)}{z^5} - \frac{10 (z^4 + 2 z^3 - 12 z - 24)}{3 z^5}$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = \frac{7}{2}$

07.25.03.afak.01

$${}_2F_2\left(1, 4; \frac{7}{2}, 4; z\right) = \frac{15 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5(2z+3)}{4 z^2}$$

07.25.03.afal.01

$${}_2F_2\left(1, 4; \frac{7}{2}, 4; -z\right) = \frac{5(2z-3)}{4 z^2} + \frac{15 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = 4$

07.25.03.afam.01

$${}_2F_2(1, 4; 4, 4; z) = \frac{6 e^z}{z^3} - \frac{3(z^2 + 2z + 2)}{z^3}$$

07.25.03.afan.01

$${}_2F_2\left(1, 4; 4, \frac{9}{2}; z\right) = \frac{105 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7(4z^2 + 10z + 15)}{8 z^3}$$

07.25.03.afao.01

$${}_2F_2\left(1, 4; 4, \frac{9}{2}; -z\right) = \frac{7(4z^2 - 10z + 15)}{8 z^3} - \frac{105 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.afap.01

$${}_2F_2(1, 4; 4, 5; z) = \frac{24 e^z}{z^4} - \frac{4(z^3 + 3z^2 + 6z + 6)}{z^4}$$

07.25.03.afaq.01

$${}_2F_2\left(1, 4; 4, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9(8z^3 + 28z^2 + 70z + 105)}{16 z^4}$$

07.25.03.afar.01

$${}_2F_2\left(1, 4; 4, \frac{11}{2}; -z\right) = \frac{9(8z^3 - 28z^2 + 70z - 105)}{16 z^4} + \frac{945 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.afas.01

$${}_2F_2(1, 4; 4, 6; z) = \frac{120 e^z}{z^5} - \frac{5(z^4 + 4z^3 + 12z^2 + 24z + 24)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = 5$

07.25.03.afat.01

$${}_2F_2(1, 4; 5, 5; z) = -\frac{8(2z^3 + 9z^2 + 36z + 36\gamma)}{3 z^4} + \frac{96 \operatorname{Ei}(z)}{z^4} + \frac{48 \log\left(\frac{1}{z}\right)}{z^4} - \frac{48 \log(z)}{z^4}$$

07.25.03.afau.01

$${}_2F_2(1, 4; 5, 6; z) = -\frac{20(z^4 + 6z^3 + 36z^2 + 72\gamma z - 72z - 72)}{3 z^5} + \frac{480 \operatorname{Ei}(z)}{z^4} + \frac{240 \log\left(\frac{1}{z}\right)}{z^4} - \frac{240 \log(z)}{z^4} - \frac{480 e^z}{z^5}$$

For fixed z and $a_1 = 1, a_2 = 4, b_1 = 6$

07.25.03.afav.01

$${}_2F_2(1, 4; 6, 6; z) = -\frac{25(z^4 + 8z^3 + 72z^2 + 288\gamma z - 576z - 288\gamma - 288)}{3z^5} + \frac{2400(z-1)\text{Ei}(z)}{z^5} + \frac{1200(z-1)\log\left(\frac{1}{z}\right)}{z^5} - \frac{1200(z-1)\log(z)}{z^5} - \frac{2400e^z}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = -\frac{11}{2}$

07.25.03.afaw.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{11345882625} (65536z^{16} + 6520832z^{15} + 262193152z^{14} + 5534392320z^{13} + 66719354880z^{12} + 468524267520z^{11} + 1874155760640z^{10} + 3990712803840z^9 + 3921674400000z^8 + 1284277680000z^7 + 41902660800z^6 + 1102701600z^5 + 291891600z^4 + 243243000z^3 + 458419500z^2 + 1687817250z + 11345882625) + \frac{1}{11345882625} (65536e^z\sqrt{\pi}(z^{33/2} + 100z^{31/2} + 4050z^{29/2} + 86400z^{27/2} + 1058400z^{25/2} + 7620480z^{23/2} + 31752000z^{21/2} + 72576000z^{19/2} + 81648000z^{17/2} + 36288000z^{15/2} + 3628800z^{13/2})\text{erf}(\sqrt{z}))$$

07.25.03.afx.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{11345882625} (65536z^{16} - 6520832z^{15} + 262193152z^{14} - 5534392320z^{13} + 66719354880z^{12} - 468524267520z^{11} + 1874155760640z^{10} - 3990712803840z^9 + 3921674400000z^8 - 1284277680000z^7 + 41902660800z^6 - 1102701600z^5 + 291891600z^4 - 243243000z^3 + 458419500z^2 - 1687817250z + 11345882625) - \frac{1}{11345882625} (65536e^{-z}\sqrt{\pi}(z^{33/2} - 100z^{31/2} + 4050z^{29/2} - 86400z^{27/2} + 1058400z^{25/2} - 7620480z^{23/2} + 31752000z^{21/2} - 72576000z^{19/2} + 81648000z^{17/2} - 36288000z^{15/2} + 3628800z^{13/2})\text{erfi}(\sqrt{z}))$$

07.25.03.afay.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{1031443875} (-32768z^{15} - 2932736z^{14} - 104718336z^{13} - 1930874880z^{12} - 19892398080z^{11} - 115755125760z^{10} - 366258654720z^9 - 570299546880z^8 - 348820214400z^7 - 41902660800z^6 + 1102701600z^5 + 97297200z^4 + 48648600z^3 + 65488500z^2 + 187535250z + 1031443875) - \frac{1}{1031443875} (32768e^z\sqrt{\pi}(z^{31/2} + 90z^{29/2} + 3240z^{27/2} + 60480z^{25/2} + 635040z^{23/2} + 3810240z^{21/2} + 12700800z^{19/2} + 21772800z^{17/2} + 16329600z^{15/2} + 3628800z^{13/2})\text{erf}(\sqrt{z}))$$

07.25.03.afaz.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{1031443875} (32768 z^{15} - 2932736 z^{14} + 104718336 z^{13} - 1930874880 z^{12} + 19892398080 z^{11} - 115755125760 z^{10} + 366258654720 z^9 - 570299546880 z^8 + 348820214400 z^7 - 41902660800 z^6 - 1102701600 z^5 + 97297200 z^4 - 48648600 z^3 + 65488500 z^2 - 187535250 z + 1031443875) - \frac{1}{1031443875} (32768 e^{-z} \sqrt{\pi} (z^{31/2} - 90 z^{29/2} + 3240 z^{27/2} - 60480 z^{25/2} + 635040 z^{23/2} - 3810240 z^{21/2} + 12700800 z^{19/2} - 21772800 z^{17/2} + 16329600 z^{15/2} - 3628800 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.afb0.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{114604875} (16384 z^{14} + 1302528 z^{13} + 40644608 z^{12} + 640911360 z^{11} + 5478589440 z^{10} + 25281338880 z^9 + 58822122240 z^8 + 57873191040 z^7 + 13967553600 z^6 - 1102701600 z^5 + 97297200 z^4 + 16216200 z^3 + 13097700 z^2 + 26790750 z + 114604875) + \frac{1}{114604875} (16384 e^z \sqrt{\pi} (z^{29/2} + 80 z^{27/2} + 2520 z^{25/2} + 40320 z^{23/2} + 352800 z^{21/2} + 1693440 z^{19/2} + 4233600 z^{17/2} + 4838400 z^{15/2} + 1814400 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.afb1.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{114604875} (16384 z^{14} - 1302528 z^{13} + 40644608 z^{12} - 640911360 z^{11} + 5478589440 z^{10} - 25281338880 z^9 + 58822122240 z^8 - 57873191040 z^7 + 13967553600 z^6 + 1102701600 z^5 + 97297200 z^4 - 16216200 z^3 + 13097700 z^2 - 26790750 z + 114604875) - \frac{1}{114604875} (16384 e^{-z} \sqrt{\pi} (z^{29/2} - 80 z^{27/2} + 2520 z^{25/2} - 40320 z^{23/2} + 352800 z^{21/2} - 1693440 z^{19/2} + 4233600 z^{17/2} - 4838400 z^{15/2} + 1814400 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.afb2.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{16372125} (-8192 z^{13} - 569344 z^{12} - 15202304 z^{11} - 199111680 z^{10} - 1352440320 z^9 - 4609032960 z^8 - 6852021120 z^7 - 2793510720 z^6 + 367567200 z^5 - 97297200 z^4 + 16216200 z^3 + 4365900 z^2 + 5358150 z + 16372125) - \frac{1}{16372125} (8192 e^z \sqrt{\pi} (z^{27/2} + 70 z^{25/2} + 1890 z^{23/2} + 25200 z^{21/2} + 176400 z^{19/2} + 635040 z^{17/2} + 1058400 z^{15/2} + 604800 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.afb3.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{16372125} (8192 z^{13} - 569344 z^{12} + 15202304 z^{11} - 199111680 z^{10} + 1352440320 z^9 - 4609032960 z^8 + 6852021120 z^7 - 2793510720 z^6 - 367567200 z^5 - 97297200 z^4 - 16216200 z^3 + 4365900 z^2 - 5358150 z + 16372125) - \frac{1}{16372125} (8192 e^{-z} \sqrt{\pi} (z^{27/2} - 70 z^{25/2} + 1890 z^{23/2} - 25200 z^{21/2} + 176400 z^{19/2} - 635040 z^{17/2} + 1058400 z^{15/2} - 604800 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.afb4.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{3274425} (4096 z^{12} + 243712 z^{11} + 5409792 z^{10} + 56394240 z^9 + 283879680 z^8 + 623710080 z^7 + 399072960 z^6 - 73513440 z^5 + 32432400 z^4 - 16216200 z^3 + 4365900 z^2 + 1786050 z + 3274425) + \frac{1}{3274425} 4096 e^z \sqrt{\pi} (z^{25/2} + 60 z^{23/2} + 1350 z^{21/2} + 14400 z^{19/2} + 75600 z^{17/2} + 181440 z^{15/2} + 151200 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afb5.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{3274425} (4096 z^{12} - 243712 z^{11} + 5409792 z^{10} - 56394240 z^9 + 283879680 z^8 - 623710080 z^7 + 399072960 z^6 + 73513440 z^5 + 32432400 z^4 + 16216200 z^3 + 4365900 z^2 - 1786050 z + 3274425) - \frac{1}{3274425} 4096 e^{-z} \sqrt{\pi} (z^{25/2} - 60 z^{23/2} + 1350 z^{21/2} - 14400 z^{19/2} + 75600 z^{17/2} - 181440 z^{15/2} + 151200 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afb6.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{1091475} (-2048 z^{11} - 101376 z^{10} - 1793536 z^9 - 13896960 z^8 - 45440640 z^7 - 44341440 z^6 + 10501920 z^5 - 6486480 z^4 + 5405400 z^3 - 4365900 z^2 + 1786050 z + 1091475) - \frac{2048 e^z \sqrt{\pi} (z^{23/2} + 50 z^{21/2} + 900 z^{19/2} + 7200 z^{17/2} + 25200 z^{15/2} + 30240 z^{13/2}) \operatorname{erf}(\sqrt{z})}{1091475}$$

07.25.03.afb7.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{1091475} (2048 z^{11} - 101376 z^{10} + 1793536 z^9 - 13896960 z^8 + 45440640 z^7 - 44341440 z^6 - 10501920 z^5 - 6486480 z^4 - 5405400 z^3 - 4365900 z^2 - 1786050 z + 1091475) - \frac{2048 e^{-z} \sqrt{\pi} (z^{23/2} - 50 z^{21/2} + 900 z^{19/2} - 7200 z^{17/2} + 25200 z^{15/2} - 30240 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{1091475}$$

07.25.03.afb8.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{1091475} (1024 z^{10} + 40448 z^9 + 533248 z^8 + 2701440 z^7 + 4031040 z^6 - 1166880 z^5 + 926640 z^4 - 1081080 z^3 + 1455300 z^2 - 1786050 z + 1091475) + \frac{1024 e^z \sqrt{\pi} (z^{21/2} + 40 z^{19/2} + 540 z^{17/2} + 2880 z^{15/2} + 5040 z^{13/2}) \operatorname{erf}(\sqrt{z})}{1091475}$$

07.25.03.afb9.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{1091475} (1024 z^{10} - 40448 z^9 + 533248 z^8 - 2701440 z^7 + 4031040 z^6 + 1166880 z^5 + 926640 z^4 + 1081080 z^3 + 1455300 z^2 + 1786050 z + 1091475) - \frac{1024 e^{-z} \sqrt{\pi} (z^{21/2} - 40 z^{19/2} + 540 z^{17/2} - 2880 z^{15/2} + 5040 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{1091475}$$

07.25.03.afba.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{1091475} (e^z (1024 z^{10} + 35840 z^9 + 403200 z^8 + 1612800 z^7 + 1411200 z^6 - 846720 z^5 + 1058400 z^4 - 1512000 z^3 + 1984500 z^2 - 1984500 z + 1091475))$$

07.25.03.afbb.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{512 e^z \sqrt{\pi} (z^3 + 30 z^2 + 270 z + 720) \operatorname{erf}(\sqrt{z}) z^{13/2}}{1091475} + \frac{1}{1091475} (512 z^9 + 15104 z^8 + 130944 z^7 + 310080 z^6 - 106080 z^5 + 102960 z^4 - 154440 z^3 + 291060 z^2 - 595350 z + 1091475)$$

07.25.03.afbc.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{512 e^{-z} \sqrt{\pi} (z^3 - 30 z^2 + 270 z - 720) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{1091475} + \frac{1}{1091475} (-512 z^9 + 15104 z^8 - 130944 z^7 + 310080 z^6 + 106080 z^5 + 102960 z^4 + 154440 z^3 + 291060 z^2 + 595350 z + 1091475)$$

07.25.03.afbd.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{1091475 z} (e^z (1024 z^{10} + 25600 z^9 + 172800 z^8 + 230400 z^7 - 201600 z^6 + 362880 z^5 - 756000 z^4 + 1512000 z^3 - 2551500 z^2 + 3118500 z - 2027025)) + \frac{13}{7z}$$

07.25.03.afbe.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{256 e^z \sqrt{\pi} (z^2 + 20 z + 90) \operatorname{erf}(\sqrt{z}) z^{13/2}}{363825} + \frac{256 z^8 + 4992 z^7 + 20672 z^6 - 8160 z^5 + 9360 z^4 - 17160 z^3 + 41580 z^2 - 119070 z + 363825}{363825}$$

07.25.03.afbf.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{256z^8 - 4992z^7 + 20672z^6 + 8160z^5 + 9360z^4 + 17160z^3 + 41580z^2 + 119070z + 363825}{363825} - \frac{256e^{-z}\sqrt{\pi}z^{13/2}(z^2 - 20z + 90)\operatorname{erfi}(\sqrt{z})}{363825}$$

07.25.03.afbg.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, 3; z\right) = \frac{26(z-3)}{7z^2} + \frac{1}{1091475z^2} (2e^z(1024z^{10} + 15360z^9 + 34560z^8 - 46080z^7 + 120960z^6 - 362880z^5 + 1058400z^4 - 2721600z^3 + 5613300z^2 - 8108100z + 6081075))$$

07.25.03.afbh.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{128e^z\sqrt{\pi}(z+10)\operatorname{erf}(\sqrt{z})z^{13/2}}{72765} + \frac{128z^7 + 1216z^6 - 544z^5 + 720z^4 - 1560z^3 + 4620z^2 - 17010z + 72765}{72765}$$

07.25.03.afbi.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{128e^{-z}\sqrt{\pi}(z-10)\operatorname{erfi}(\sqrt{z})z^{13/2}}{72765} + \frac{-128z^7 + 1216z^6 + 544z^5 + 720z^4 + 1560z^3 + 4620z^2 + 17010z + 72765}{72765}$$

07.25.03.afbj.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, 4; z\right) = \frac{39(z^2 - 6z + 34)}{7z^3} + \frac{1}{363825z^3} (2e^z(1024z^{10} + 5120z^9 - 11520z^8 + 46080z^7 - 201600z^6 + 846720z^5 - 3175200z^4 + 9979200z^3 - 24324300z^2 + 40540500z - 34459425))$$

07.25.03.afbk.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{64e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{13/2}}{10395} + \frac{64z^6 - 32z^5 + 48z^4 - 120z^3 + 420z^2 - 1890z + 10395}{10395}$$

07.25.03.afbl.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{64z^6 + 32z^5 + 48z^4 + 120z^3 + 420z^2 + 1890z + 10395}{10395} - \frac{64e^{-z}\sqrt{\pi}z^{13/2}\operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.afbm.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, 5; z\right) = \frac{52(z^3 - 9z^2 + 102z - 1938)}{7z^4} + \frac{1}{363825z^4} (8e^z(1024z^{10} - 5120z^9 + 34560z^8 - 230400z^7 + 1411200z^6 - 7620480z^5 + 34927200z^4 - 129729600z^3 + 364864500z^2 - 689188500z + 654729075))$$

07.25.03.afbn.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{1155 z^4} (32 z^9 - 336 z^8 + 3064 z^7 - 24780 z^6 + 175770 z^5 - 1074045 z^4 + 5529600 z^3 - 23224320 z^2 + 77414400 z - 232243200) + \frac{1}{1155 z^{9/2}} (32 e^z \sqrt{\pi} (z^{10} - 10 z^9 + 90 z^8 - 720 z^7 + 5040 z^6 - 30240 z^5 + 151200 z^4 - 604800 z^3 + 1814400 z^2 - 3628800 z + 3628800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.afbo.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{1155 z^4} (-32 z^9 - 336 z^8 - 3064 z^7 - 24780 z^6 - 175770 z^5 - 1074045 z^4 - 5529600 z^3 - 23224320 z^2 - 77414400 z - 232243200) + \frac{1}{1155 z^{9/2}} (32 e^{-z} \sqrt{\pi} (z^{10} + 10 z^9 + 90 z^8 + 720 z^7 + 5040 z^6 + 30240 z^5 + 151200 z^4 + 604800 z^3 + 1814400 z^2 + 3628800 z + 3628800) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.afbp.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{11}{2}, 6; z\right) = \frac{65 (z^4 - 12 z^3 + 204 z^2 - 7752 z - 162792)}{7 z^5} + \frac{1}{72765 z^5} (8 e^z (1024 z^{10} - 15360 z^9 + 172800 z^8 - 1612800 z^7 + 12700800 z^6 - 83825280 z^5 + 454053600 z^4 - 1945944000 z^3 + 6202696500 z^2 - 13094581500 z + 13749310575))$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = -\frac{9}{2}$

07.25.03.afbq.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{93767625} (16384 z^{14} + 1318912 z^{13} + 41816064 z^{12} + 673363968 z^{11} + 5925350400 z^{10} + 28540961280 z^9 + 71252842752 z^8 + 80600849280 z^7 + 30011808960 z^6 + 1102701600 z^5 + 32432400 z^4 + 9729720 z^3 + 9355500 z^2 + 20837250 z + 93767625) + \frac{1}{93767625} (16384 e^z \sqrt{\pi} (z^{29/2} + 81 z^{27/2} + 2592 z^{25/2} + 42336 z^{23/2} + 381024 z^{21/2} + 1905120 z^{19/2} + 5080320 z^{17/2} + 6531840 z^{15/2} + 3265920 z^{13/2} + 362880 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.afbr.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{93767625} (16384 z^{14} - 1318912 z^{13} + 41816064 z^{12} - 673363968 z^{11} + 5925350400 z^{10} - 28540961280 z^9 +$$

$$71252842752 z^8 - 80600849280 z^7 + 30011808960 z^6 - 1102701600 z^5 +$$

$$32432400 z^4 - 9729720 z^3 + 9355500 z^2 - 20837250 z + 93767625) -$$

$$\frac{1}{93767625} \left(16384 e^{-z} \sqrt{\pi} (z^{29/2} - 81 z^{27/2} + 2592 z^{25/2} - 42336 z^{23/2} + 381024 z^{21/2} - 1905120 z^{19/2} +$$

$$5080320 z^{17/2} - 6531840 z^{15/2} + 3265920 z^{13/2} - 362880 z^{11/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.afbs.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{10418625} (-8192 z^{13} - 585728 z^{12} - 16226304 z^{11} - 223380480 z^{10} - 1629811200 z^9 - 6215360256 z^8 - 11363829120$$

$$z^7 - 8022127680 z^6 - 1102701600 z^5 + 32432400 z^4 + 3243240 z^3 + 1871100 z^2 + 2976750 z + 10418625) -$$

$$\frac{1}{10418625} \left(8192 e^z \sqrt{\pi} (z^{27/2} + 72 z^{25/2} + 2016 z^{23/2} + 28224 z^{21/2} + 211680 z^{19/2} + 846720 z^{17/2} +$$

$$1693440 z^{15/2} + 1451520 z^{13/2} + 362880 z^{11/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.afbt.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{10418625} (8192 z^{13} - 585728 z^{12} + 16226304 z^{11} - 223380480 z^{10} + 1629811200 z^9 - 6215360256 z^8 + 11363829120$$

$$z^7 - 8022127680 z^6 + 1102701600 z^5 + 32432400 z^4 - 3243240 z^3 + 1871100 z^2 - 2976750 z + 10418625) -$$

$$\frac{1}{10418625} \left(8192 e^{-z} \sqrt{\pi} (z^{27/2} - 72 z^{25/2} + 2016 z^{23/2} - 28224 z^{21/2} + 211680 z^{19/2} -$$

$$846720 z^{17/2} + 1693440 z^{15/2} - 1451520 z^{13/2} + 362880 z^{11/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.afbu.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{1488375} (4096 z^{12} + 256000 z^{11} + 6067200 z^{10} + 69342720 z^9 + 401581824 z^8 + 1127952000 z^7 + 1307154240 z^6 +$$

$$367567200 z^5 - 32432400 z^4 + 3243240 z^3 + 623700 z^2 + 595350 z + 1488375) + \frac{1}{1488375} \left(4096 e^z \sqrt{\pi} \right.$$

$$\left. (z^{25/2} + 63 z^{23/2} + 1512 z^{21/2} + 17640 z^{19/2} + 105840 z^{17/2} + 317520 z^{15/2} + 423360 z^{13/2} + 181440 z^{11/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.afbv.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{1488375} (4096 z^{12} - 256000 z^{11} + 6067200 z^{10} - 69342720 z^9 + 401581824 z^8 - 1127952000 z^7 + 1307154240 z^6 - 367567200 z^5 - 32432400 z^4 - 3243240 z^3 + 623700 z^2 - 595350 z + 1488375) - \frac{1}{1488375} (4096 e^{-z} \sqrt{\pi} (z^{25/2} - 63 z^{23/2} + 1512 z^{21/2} - 17640 z^{19/2} + 105840 z^{17/2} - 317520 z^{15/2} + 423360 z^{13/2} - 181440 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.afbw.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{297675} (-2048 z^{11} - 109568 z^{10} - 2158080 z^9 - 19617024 z^8 - 84040320 z^7 - 151346880 z^6 - 73513440 z^5 + 10810800 z^4 - 3243240 z^3 + 623700 z^2 + 198450 z + 297675) - \frac{1}{297675} 2048 e^z \sqrt{\pi} (z^{23/2} + 54 z^{21/2} + 1080 z^{19/2} + 10080 z^{17/2} + 45360 z^{15/2} + 90720 z^{13/2} + 60480 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afbx.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{297675} (2048 z^{11} - 109568 z^{10} + 2158080 z^9 - 19617024 z^8 + 84040320 z^7 - 151346880 z^6 + 73513440 z^5 + 10810800 z^4 + 3243240 z^3 + 623700 z^2 - 198450 z + 297675) - \frac{1}{297675} 2048 e^{-z} \sqrt{\pi} (z^{23/2} - 54 z^{21/2} + 1080 z^{19/2} - 10080 z^{17/2} + 45360 z^{15/2} - 90720 z^{13/2} + 60480 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afby.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{99225} (1024 z^{10} + 45568 z^9 + 715008 z^8 + 4824960 z^7 + 13375680 z^6 + 10501920 z^5 - 2162160 z^4 + 1081080 z^3 - 623700 z^2 + 198450 z + 99225) + \frac{1024 e^z \sqrt{\pi} (z^{21/2} + 45 z^{19/2} + 720 z^{17/2} + 5040 z^{15/2} + 15120 z^{13/2} + 15120 z^{11/2}) \operatorname{erf}(\sqrt{z})}{99225}$$

07.25.03.afbz.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{99225} (1024 z^{10} - 45568 z^9 + 715008 z^8 - 4824960 z^7 + 13375680 z^6 - 10501920 z^5 - 2162160 z^4 - 1081080 z^3 - 623700 z^2 - 198450 z + 99225) - \frac{1024 e^{-z} \sqrt{\pi} (z^{21/2} - 45 z^{19/2} + 720 z^{17/2} - 5040 z^{15/2} + 15120 z^{13/2} - 15120 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{99225}$$

07.25.03.afc0.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{99225} (-512 z^9 - 18176 z^8 - 212352 z^7 - 934464 z^6 - 1166880 z^5 + 308880 z^4 - 216216 z^3 + 207900 z^2 - 198450 z + 99225) - \frac{512 e^z \sqrt{\pi} (z^{19/2} + 36 z^{17/2} + 432 z^{15/2} + 2016 z^{13/2} + 3024 z^{11/2}) \operatorname{erf}(\sqrt{z})}{99225}$$

07.25.03.afc1.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{99225} (512 z^9 - 18176 z^8 + 212352 z^7 - 934464 z^6 + 1166880 z^5 + 308880 z^4 + 216216 z^3 + 207900 z^2 + 198450 z + 99225) - \frac{512 e^{-z} \sqrt{\pi} (z^{19/2} - 36 z^{17/2} + 432 z^{15/2} - 2016 z^{13/2} + 3024 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{99225}$$

07.25.03.afc2.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, 1; z\right) = -\frac{1}{99225} (e^z (512 z^9 + 16128 z^8 + 161280 z^7 + 564480 z^6 + 423360 z^5 - 211680 z^4 + 211680 z^3 - 226800 z^2 + 198450 z - 99225))$$

07.25.03.afc3.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{-256 z^8 - 6784 z^7 - 52032 z^6 - 106080 z^5 + 34320 z^4 - 30888 z^3 + 41580 z^2 - 66150 z + 99225}{99225} - \frac{256 e^z \sqrt{\pi} z^{11/2} (z^3 + 27 z^2 + 216 z + 504) \operatorname{erf}(\sqrt{z})}{99225}$$

07.25.03.afc4.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{256 e^{-z} \sqrt{\pi} (z^3 - 27 z^2 + 216 z - 504) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{99225} + \frac{-256 z^8 + 6784 z^7 - 52032 z^6 + 106080 z^5 + 34320 z^4 + 30888 z^3 + 41580 z^2 + 66150 z + 99225}{99225}$$

07.25.03.afc5.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{99225 z} e^z (-512 z^9 - 11520 z^8 - 69120 z^7 - 80640 z^6 + 60480 z^5 - 90720 z^4 + 151200 z^3 - 226800 z^2 + 255150 z - 155925) + \frac{11}{7 z}$$

07.25.03.afc6.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-128 z^7 - 2240 z^6 - 8160 z^5 + 3120 z^4 - 3432 z^3 + 5940 z^2 - 13230 z + 33075}{33075} - \frac{128 e^z \sqrt{\pi} z^{11/2} (z^2 + 18 z + 72) \operatorname{erf}(\sqrt{z})}{33075}$$

07.25.03.afc7.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{128 z^7 - 2240 z^6 + 8160 z^5 + 3120 z^4 + 3432 z^3 + 5940 z^2 + 13230 z + 33075}{33075} - \frac{128 e^{-z} \sqrt{\pi} z^{11/2} (z^2 - 18z + 72) \operatorname{erfi}(\sqrt{z})}{33075}$$

07.25.03.afc8.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, 3; z\right) = \frac{22(5z - 13)}{35z^2} - \frac{1}{99225z^2}$$

$$2e^z(512z^9 + 6912z^8 + 13824z^7 - 16128z^6 + 36288z^5 - 90720z^4 + 211680z^3 - 408240z^2 + 561330z - 405405)$$

07.25.03.afc9.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-64z^6 - 544z^5 + 240z^4 - 312z^3 + 660z^2 - 1890z + 6615}{6615} - \frac{64 e^z \sqrt{\pi} z^{11/2} (z + 9) \operatorname{erf}(\sqrt{z})}{6615}$$

07.25.03.afca.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{64 e^{-z} \sqrt{\pi} (z - 9) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{6615} + \frac{-64z^6 + 544z^5 + 240z^4 + 312z^3 + 660z^2 + 1890z + 6615}{6615}$$

07.25.03.afcb.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, 4; z\right) = \frac{33(5z^2 - 26z + 130)}{35z^3} - \frac{1}{33075z^3}$$

$$(2e^z(512z^9 + 2304z^8 - 4608z^7 + 16128z^6 - 60480z^5 + 211680z^4 - 635040z^3 + 1496880z^2 - 2432430z + 2027025))$$

07.25.03.afcc.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{945}(-32z^5 + 16z^4 - 24z^3 + 60z^2 - 210z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.afcd.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{945}(32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.afce.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, 5; z\right) = \frac{44(5z^3 - 39z^2 + 390z - 6630)}{35z^4} - \frac{1}{33075z^4} (8e^z(512z^9 - 2304z^8 + 13824z^7 - 80640z^6 + 423360z^5 - 1905120z^4 + 6985440z^3 - 19459440z^2 + 36486450z - 34459425))$$

07.25.03.afcf.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{105z^4}(-16z^8 + 152z^7 - 1236z^6 + 8778z^5 - 53655z^4 + 276480z^3 - 1161216z^2 + 3870720z - 11612160) - \frac{1}{105z^{9/2}} 16 e^z \sqrt{\pi} (z^9 - 9z^8 + 72z^7 - 504z^6 + 3024z^5 - 15120z^4 + 60480z^3 - 181440z^2 + 362880z - 362880) \operatorname{erf}(\sqrt{z})$$

07.25.03.afcg.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{105 z^4} (-16 z^8 - 152 z^7 - 1236 z^6 - 8778 z^5 - 53\,655 z^4 - 276\,480 z^3 - 1\,161\,216 z^2 - 3\,870\,720 z - 11\,612\,160) + \frac{1}{105 z^{9/2}} 16 e^{-z} \sqrt{\pi} (z^9 + 9 z^8 + 72 z^7 + 504 z^6 + 3024 z^5 + 15\,120 z^4 + 60\,480 z^3 + 181\,440 z^2 + 362\,880 z + 362\,880) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afch.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{9}{2}, 6; z\right) = \frac{11(5 z^4 - 52 z^3 + 780 z^2 - 26\,520 z - 503\,880)}{7 z^5} - \frac{1}{6615 z^5} (8 e^z (512 z^9 - 6912 z^8 + 69\,120 z^7 - 564\,480 z^6 + 3\,810\,240 z^5 - 20\,956\,320 z^4 + 90\,810\,720 z^3 - 291\,891\,600 z^2 + 620\,269\,650 z - 654\,729\,075))$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = -\frac{7}{2}$

07.25.03.afci.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{1\,157\,625} (4096 z^{12} + 260\,096 z^{11} + 6\,294\,528 z^{10} + 74\,048\,000 z^9 + 447\,506\,688 z^8 + 1\,347\,921\,792 z^7 + 1\,793\,238\,720 z^6 + 772\,400\,160 z^5 + 32\,432\,400 z^4 + 1\,081\,080 z^3 + 374\,220 z^2 + 425\,250 z + 1\,157\,625) + \frac{1}{1\,157\,625} (4096 e^z \sqrt{\pi} (z^{25/2} + 64 z^{23/2} + 1568 z^{21/2} + 18\,816 z^{19/2} + 117\,600 z^{17/2} + 376\,320 z^{15/2} + 564\,480 z^{13/2} + 322\,560 z^{11/2} + 40\,320 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.afcj.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1\,157\,625} (4096 z^{12} - 260\,096 z^{11} + 6\,294\,528 z^{10} - 74\,048\,000 z^9 + 447\,506\,688 z^8 - 1\,347\,921\,792 z^7 + 1\,793\,238\,720 z^6 - 772\,400\,160 z^5 + 32\,432\,400 z^4 - 1\,081\,080 z^3 + 374\,220 z^2 - 425\,250 z + 1\,157\,625) - \frac{1}{1\,157\,625} (4096 e^{-z} \sqrt{\pi} (z^{25/2} - 64 z^{23/2} + 1568 z^{21/2} - 18\,816 z^{19/2} + 117\,600 z^{17/2} - 376\,320 z^{15/2} + 564\,480 z^{13/2} - 322\,560 z^{11/2} + 40\,320 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.afck.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{165\,375} (-2048 z^{11} - 113\,664 z^{10} - 2\,352\,640 z^9 - 22\,962\,432 z^8 - 109\,984\,896 z^7 - 243\,042\,240 z^6 - 202\,416\,480 z^5 - 32\,432\,400 z^4 + 1\,081\,080 z^3 + 124\,740 z^2 + 85\,050 z + 165\,375) - \frac{1}{165\,375} (2048 e^z \sqrt{\pi} (z^{23/2} + 56 z^{21/2} + 1176 z^{19/2} + 11\,760 z^{17/2} + 58\,800 z^{15/2} + 141\,120 z^{13/2} + 141\,120 z^{11/2} + 40\,320 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.afcl.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{165375} (2048 z^{11} - 113664 z^{10} + 2352640 z^9 - 22962432 z^8 + 109984896 z^7 - 243042240 z^6 + 202416480 z^5 - 32432400 z^4 - 1081080 z^3 + 124740 z^2 - 85050 z + 165375) - \frac{1}{165375} (2048 e^{-z} \sqrt{\pi} (z^{23/2} - 56 z^{21/2} + 1176 z^{19/2} - 11760 z^{17/2} + 58800 z^{15/2} - 141120 z^{13/2} + 141120 z^{11/2} - 40320 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.afcm.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{33075} (1024 z^{10} + 48640 z^9 + 836352 z^8 + 6486144 z^7 + 22923840 z^6 + 32225760 z^5 + 10810800 z^4 - 1081080 z^3 + 124740 z^2 + 28350 z + 33075) + \frac{1}{33075} 1024 e^z \sqrt{\pi} (z^{21/2} + 48 z^{19/2} + 840 z^{17/2} + 6720 z^{15/2} + 25200 z^{13/2} + 40320 z^{11/2} + 20160 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afcn.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{33075} (1024 z^{10} - 48640 z^9 + 836352 z^8 - 6486144 z^7 + 22923840 z^6 - 32225760 z^5 + 10810800 z^4 - 1081080 z^3 + 124740 z^2 - 28350 z + 33075) - \frac{1}{33075} 1024 e^{-z} \sqrt{\pi} (z^{21/2} - 48 z^{19/2} + 840 z^{17/2} - 6720 z^{15/2} + 25200 z^{13/2} - 40320 z^{11/2} + 20160 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afco.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{11025} (-512 z^9 - 20224 z^8 - 276864 z^7 - 1591360 z^6 - 3620640 z^5 - 2162160 z^4 + 360360 z^3 - 124740 z^2 + 28350 z + 11025) - \frac{512 e^z \sqrt{\pi} (z^{19/2} + 40 z^{17/2} + 560 z^{15/2} + 3360 z^{13/2} + 8400 z^{11/2} + 6720 z^{9/2}) \operatorname{erf}(\sqrt{z})}{11025}$$

07.25.03.afcp.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{11025} (512 z^9 - 20224 z^8 + 276864 z^7 - 1591360 z^6 + 3620640 z^5 - 2162160 z^4 - 360360 z^3 - 124740 z^2 - 28350 z + 11025) - \frac{512 e^{-z} \sqrt{\pi} (z^{19/2} - 40 z^{17/2} + 560 z^{15/2} - 3360 z^{13/2} + 8400 z^{11/2} - 6720 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{11025}$$

07.25.03.afcq.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{256 z^8 + 8064 z^7 + 82\,112 z^6 + 306\,720 z^5 + 308\,880 z^4 - 72\,072 z^3 + 41\,580 z^2 - 28\,350 z + 11\,025}{11\,025} + \frac{256 e^z \sqrt{\pi} (z^{17/2} + 32 z^{15/2} + 336 z^{13/2} + 1344 z^{11/2} + 1680 z^{9/2}) \operatorname{erf}(\sqrt{z})}{11\,025}$$

07.25.03.afcr.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{256 z^8 - 8064 z^7 + 82\,112 z^6 - 306\,720 z^5 + 308\,880 z^4 + 72\,072 z^3 + 41\,580 z^2 + 28\,350 z + 11\,025}{11\,025} - \frac{256 e^{-z} \sqrt{\pi} (z^{17/2} - 32 z^{15/2} + 336 z^{13/2} - 1344 z^{11/2} + 1680 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{11\,025}$$

07.25.03.afcs.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{11\,025} e^z (256 z^8 + 7168 z^7 + 62\,720 z^6 + 188\,160 z^5 + 117\,600 z^4 - 47\,040 z^3 + 35\,280 z^2 - 25\,200 z + 11\,025)$$

07.25.03.afct.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{128 e^z \sqrt{\pi} (z^3 + 24 z^2 + 168 z + 336) \operatorname{erf}(\sqrt{z}) z^{9/2}}{11\,025} + \frac{128 z^7 + 3008 z^6 + 20\,064 z^5 + 34\,320 z^4 - 10\,296 z^3 + 8316 z^2 - 9450 z + 11\,025}{11\,025}$$

07.25.03.afcu.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{128 e^{-z} \sqrt{\pi} (z^3 - 24 z^2 + 168 z - 336) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{11\,025} + \frac{-128 z^7 + 3008 z^6 - 20\,064 z^5 + 34\,320 z^4 + 10\,296 z^3 + 8316 z^2 + 9450 z + 11\,025}{11\,025}$$

07.25.03.afcv.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^z (256 z^8 + 5120 z^7 + 26\,880 z^6 + 26\,880 z^5 - 16\,800 z^4 + 20\,160 z^3 - 25\,200 z^2 + 25\,200 z - 14\,175)}{11\,025 z} + \frac{9}{7z}$$

07.25.03.afcw.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{64 e^z \sqrt{\pi} (z^2 + 16 z + 56) \operatorname{erf}(\sqrt{z}) z^{9/2}}{3675} + \frac{64 z^6 + 992 z^5 + 3120 z^4 - 1144 z^3 + 1188 z^2 - 1890 z + 3675}{3675}$$

07.25.03.afcx.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{64 z^6 - 992 z^5 + 3120 z^4 + 1144 z^3 + 1188 z^2 + 1890 z + 3675}{3675} - \frac{64 e^{-z} \sqrt{\pi} z^{9/2} (z^2 - 16 z + 56) \operatorname{erfi}(\sqrt{z})}{3675}$$

07.25.03.afcy.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, 3; z\right) = \frac{18(5z - 11)}{35z^2} + \frac{2e^z(256z^8 + 3072z^7 + 5376z^6 - 5376z^5 + 10080z^4 - 20160z^3 + 35280z^2 - 45360z + 31185)}{11025z^2}$$

07.25.03.afcz.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{32}{735} e^z \sqrt{\pi} (z + 8) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{735} (32z^5 + 240z^4 - 104z^3 + 132z^2 - 270z + 735)$$

07.25.03.afd0.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{32}{735} e^{-z} \sqrt{\pi} (z - 8) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{735} (-32z^5 + 240z^4 + 104z^3 + 132z^2 + 270z + 735)$$

07.25.03.afd1.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, 4; z\right) = \frac{9(15z^2 - 66z + 286)}{35z^3} + \frac{1}{3675z^3} 2e^z(256z^8 + 1024z^7 - 1792z^6 + 5376z^5 - 16800z^4 + 47040z^3 - 105840z^2 + 166320z - 135135)$$

07.25.03.afd2.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{16}{105} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

07.25.03.afd3.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{105} (16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.afd4.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, 5; z\right) = \frac{36(5z^3 - 33z^2 + 286z - 4290)}{35z^4} + \frac{1}{3675z^4} 8e^z(256z^8 - 1024z^7 + 5376z^6 - 26880z^5 + 117600z^4 - 423360z^3 + 1164240z^2 - 2162160z + 2027025)$$

07.25.03.afd5.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3(8z^7 - 68z^6 + 486z^5 - 2975z^4 + 15360z^3 - 64512z^2 + 215040z - 645120)}{35z^4} + \frac{24e^z \sqrt{\pi} (z^8 - 8z^7 + 56z^6 - 336z^5 + 1680z^4 - 6720z^3 + 20160z^2 - 40320z + 40320) \operatorname{erf}(\sqrt{z})}{35z^{9/2}}$$

07.25.03.afd6.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{24e^{-z} \sqrt{\pi} (z^8 + 8z^7 + 56z^6 + 336z^5 + 1680z^4 + 6720z^3 + 20160z^2 + 40320z + 40320) \operatorname{erfi}(\sqrt{z})}{35z^{9/2}} - \frac{3(8z^7 + 68z^6 + 486z^5 + 2975z^4 + 15360z^3 + 64512z^2 + 215040z + 645120)}{35z^4}$$

07.25.03.afd7.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{7}{2}, 6; z\right) = \frac{9(5z^4 - 44z^3 + 572z^2 - 17160z - 291720)}{7z^5} + \frac{1}{735z^5}$$

$$(8e^z(256z^8 - 3072z^7 + 26880z^6 - 188160z^5 + 1058400z^4 - 4656960z^3 + 15135120z^2 - 32432400z + 34459425))$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = -\frac{5}{2}$

07.25.03.afd8.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{23625}(1024z^{10} + 49664z^9 + 878848z^8 + 7110528z^7 + 26932416z^6 + 43387680z^5 + 22110480z^4 +$$

$$1081080z^3 + 41580z^2 + 17010z + 23625) +$$

$$\frac{1}{23625}1024e^z\sqrt{\pi}(z^{21/2} + 49z^{19/2} + 882z^{17/2} + 7350z^{15/2} + 29400z^{13/2} + 52920z^{11/2} + 35280z^{9/2} + 5040z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.afd9.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{23625}(1024z^{10} - 49664z^9 + 878848z^8 - 7110528z^7 + 26932416z^6 - 43387680z^5 + 22110480z^4 -$$

$$1081080z^3 + 41580z^2 - 17010z + 23625) - \frac{1}{23625}$$

$$(1024e^{-z}\sqrt{\pi}(z^{21/2} - 49z^{19/2} + 882z^{17/2} - 7350z^{15/2} + 29400z^{13/2} - 52920z^{11/2} + 35280z^{9/2} - 5040z^{7/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.afda.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{4725}$$

$$(-512z^9 - 21248z^8 - 312192z^7 - 2004288z^6 - 5580960z^5 - 5649840z^4 - 1081080z^3 + 41580z^2 + 5670z + 4725) -$$

$$\frac{1}{4725}512e^z\sqrt{\pi}(z^{19/2} + 42z^{17/2} + 630z^{15/2} + 4200z^{13/2} + 12600z^{11/2} + 15120z^{9/2} + 5040z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.afdb.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{4725}$$

$$(512z^9 - 21248z^8 + 312192z^7 - 2004288z^6 + 5580960z^5 - 5649840z^4 + 1081080z^3 + 41580z^2 - 5670z + 4725) -$$

$$\frac{1}{4725}512e^{-z}\sqrt{\pi}(z^{19/2} - 42z^{17/2} + 630z^{15/2} - 4200z^{13/2} + 12600z^{11/2} - 15120z^{9/2} + 5040z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.afdc.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{256z^8 + 8832z^7 + 103232z^6 + 490080z^5 + 871920z^4 + 360360z^3 - 41580z^2 + 5670z + 1575}{1575} +$$

$$\frac{256e^z\sqrt{\pi}(z^{17/2} + 35z^{15/2} + 420z^{13/2} + 2100z^{11/2} + 4200z^{9/2} + 2520z^{7/2})\operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.afdd.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{256 z^8 - 8832 z^7 + 103\,232 z^6 - 490\,080 z^5 + 871\,920 z^4 - 360\,360 z^3 - 41\,580 z^2 - 5670 z + 1575}{1575} - \frac{256 e^{-z} \sqrt{\pi} (z^{17/2} - 35 z^{15/2} + 420 z^{13/2} - 2100 z^{11/2} + 4200 z^{9/2} - 2520 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.afde.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{-128 z^7 - 3520 z^6 - 30\,560 z^5 - 93\,840 z^4 - 72\,072 z^3 + 13\,860 z^2 - 5670 z + 1575}{1575} - \frac{128 e^z \sqrt{\pi} (z^{15/2} + 28 z^{13/2} + 252 z^{11/2} + 840 z^{9/2} + 840 z^{7/2}) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.afdf.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{128 z^7 - 3520 z^6 + 30\,560 z^5 - 93\,840 z^4 + 72\,072 z^3 + 13\,860 z^2 + 5670 z + 1575}{1575} - \frac{128 e^{-z} \sqrt{\pi} (z^{15/2} - 28 z^{13/2} + 252 z^{11/2} - 840 z^{9/2} + 840 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.afdg.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, 1; z\right) = -\frac{e^z (128 z^7 + 3136 z^6 + 23\,520 z^5 + 58\,800 z^4 + 29\,400 z^3 - 8820 z^2 + 4410 z - 1575)}{1575}$$

07.25.03.afdh.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{-64 z^6 - 1312 z^5 - 7440 z^4 - 10\,296 z^3 + 2772 z^2 - 1890 z + 1575}{1575} - \frac{64 e^z \sqrt{\pi} z^{7/2} (z^3 + 21 z^2 + 126 z + 210) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.afdi.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{64 e^{-z} \sqrt{\pi} (z^3 - 21 z^2 + 126 z - 210) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{1575} + \frac{-64 z^6 + 1312 z^5 - 7440 z^4 + 10\,296 z^3 + 2772 z^2 + 1890 z + 1575}{1575}$$

07.25.03.afdj.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^z (-128 z^7 - 2240 z^6 - 10\,080 z^5 - 8400 z^4 + 4200 z^3 - 3780 z^2 + 3150 z - 1575)}{1575} + \frac{1}{z}$$

07.25.03.afdk.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{525} (-32 z^5 - 432 z^4 - 1144 z^3 + 396 z^2 - 378 z + 525) - \frac{32}{525} e^z \sqrt{\pi} z^{7/2} (z^2 + 14 z + 42) \operatorname{erf}(\sqrt{z})$$

07.25.03.afdl.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{525} (32 z^5 - 432 z^4 + 1144 z^3 + 396 z^2 + 378 z + 525) - \frac{32}{525} e^{-z} \sqrt{\pi} z^{7/2} (z^2 - 14 z + 42) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afdm.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, 3; z\right) = \frac{2(5z-9)}{5z^2} - \frac{2e^z(128z^7 + 1344z^6 + 2016z^5 - 1680z^4 + 2520z^3 - 3780z^2 + 4410z - 2835)}{1575z^2}$$

07.25.03.afdn.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{105}(-16z^4 - 104z^3 + 44z^2 - 54z + 105) - \frac{16}{105}e^z\sqrt{\pi}z^{7/2}(z+7)\operatorname{erf}(\sqrt{z})$$

07.25.03.afdo.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{16}{105}e^{-z}\sqrt{\pi}(z-7)\operatorname{erfi}(\sqrt{z})z^{7/2} + \frac{1}{105}(-16z^4 + 104z^3 + 44z^2 + 54z + 105)$$

07.25.03.afdp.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, 4; z\right) = \frac{3(5z^2 - 18z + 66)}{5z^3} - \frac{2e^z(128z^7 + 448z^6 - 672z^5 + 1680z^4 - 4200z^3 + 8820z^2 - 13230z + 10395)}{525z^3}$$

07.25.03.afdq.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{15}(-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15}e^z\sqrt{\pi}z^{7/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.afdr.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{15}(8z^3 + 4z^2 + 6z + 15) - \frac{8}{15}e^{-z}\sqrt{\pi}z^{7/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.afds.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, 5; z\right) = \frac{4(5z^3 - 27z^2 + 198z - 2574)}{5z^4} - \frac{8e^z(128z^7 - 448z^6 + 2016z^5 - 8400z^4 + 29400z^3 - 79380z^2 + 145530z - 135135)}{525z^4}$$

07.25.03.afdt.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{3(4z^6 - 30z^5 + 185z^4 - 960z^3 + 4032z^2 - 13440z + 40320)}{5z^4} - \frac{12e^z\sqrt{\pi}(z^7 - 7z^6 + 42z^5 - 210z^4 + 840z^3 - 2520z^2 + 5040z - 5040)\operatorname{erf}(\sqrt{z})}{5z^{9/2}}$$

07.25.03.afdu.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{12e^{-z}\sqrt{\pi}(z^7 + 7z^6 + 42z^5 + 210z^4 + 840z^3 + 2520z^2 + 5040z + 5040)\operatorname{erfi}(\sqrt{z})}{5z^{9/2}} - \frac{3(4z^6 + 30z^5 + 185z^4 + 960z^3 + 4032z^2 + 13440z + 40320)}{5z^4}$$

07.25.03.afdv.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{5}{2}, 6; z\right) = \frac{5z^4 - 36z^3 + 396z^2 - 10296z - 154440}{z^5} - \frac{8e^z(128z^7 - 1344z^6 + 10080z^5 - 58800z^4 + 264600z^3 - 873180z^2 + 1891890z - 2027025)}{105z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = -\frac{3}{2}$

07.25.03.afdw.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} (256 z^8 + 9088 z^7 + 110784 z^6 + 563232 z^5 + 1146000 z^4 + 712440 z^3 + 41580 z^2 + 1890 z + 945) + \frac{256}{945} e^z \sqrt{\pi} (z^{17/2} + 36 z^{15/2} + 450 z^{13/2} + 2400 z^{11/2} + 5400 z^{9/2} + 4320 z^{7/2} + 720 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afdx.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{945} (256 z^8 - 9088 z^7 + 110784 z^6 - 563232 z^5 + 1146000 z^4 - 712440 z^3 + 41580 z^2 - 1890 z + 945) - \frac{256}{945} e^{-z} \sqrt{\pi} (z^{17/2} - 36 z^{15/2} + 450 z^{13/2} - 2400 z^{11/2} + 5400 z^{9/2} - 4320 z^{7/2} + 720 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afdy.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} (-128 z^7 - 3776 z^6 - 36576 z^5 - 137040 z^4 - 176040 z^3 - 41580 z^2 + 1890 z + 315) - \frac{128}{315} e^z \sqrt{\pi} (z^{15/2} + 30 z^{13/2} + 300 z^{11/2} + 1200 z^{9/2} + 1800 z^{7/2} + 720 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afdz.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{315} (128 z^7 - 3776 z^6 + 36576 z^5 - 137040 z^4 + 176040 z^3 - 41580 z^2 - 1890 z + 315) - \frac{128}{315} e^{-z} \sqrt{\pi} (z^{15/2} - 30 z^{13/2} + 300 z^{11/2} - 1200 z^{9/2} + 1800 z^{7/2} - 720 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afe0.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{315} (64 z^6 + 1504 z^5 + 10800 z^4 + 25992 z^3 + 13860 z^2 - 1890 z + 315) + \frac{64}{315} e^z \sqrt{\pi} (z^{13/2} + 24 z^{11/2} + 180 z^{9/2} + 480 z^{7/2} + 360 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afe1.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} (64 z^6 - 1504 z^5 + 10800 z^4 - 25992 z^3 + 13860 z^2 + 1890 z + 315) - \frac{64}{315} e^{-z} \sqrt{\pi} (z^{13/2} - 24 z^{11/2} + 180 z^{9/2} - 480 z^{7/2} + 360 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afe2.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{315} e^z (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315)$$

07.25.03.afe3.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{32}{315} e^z \sqrt{\pi} (z^3 + 18z^2 + 90z + 120) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{315} (32z^5 + 560z^4 + 2616z^3 + 2772z^2 - 630z + 315)$$

07.25.03.afe4.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{32}{315} e^{-z} \sqrt{\pi} (z^3 - 18z^2 + 90z - 120) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{315} (-32z^5 + 560z^4 - 2616z^3 + 2772z^2 + 630z + 315)$$

07.25.03.afe5.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^z (64z^6 + 960z^5 + 3600z^4 + 2400z^3 - 900z^2 + 540z - 225)}{315z} + \frac{5}{7z}$$

07.25.03.afe6.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{16}{105} e^z \sqrt{\pi} (z^2 + 12z + 30) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{105} (16z^4 + 184z^3 + 396z^2 - 126z + 105)$$

07.25.03.afe7.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{105} (16z^4 - 184z^3 + 396z^2 + 126z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} z^{5/2} (z^2 - 12z + 30) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afe8.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, 3; z\right) = \frac{2(5z - 7)}{7z^2} + \frac{2e^z (64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)}{315z^2}$$

07.25.03.afe9.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{8}{21} e^z \sqrt{\pi} (z + 6) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{21} (8z^3 + 44z^2 - 18z + 21)$$

07.25.03.afea.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{8}{21} e^{-z} \sqrt{\pi} (z - 6) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{21} (-8z^3 + 44z^2 + 18z + 21)$$

07.25.03.afeb.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, 4; z\right) = \frac{3(5z^2 - 14z + 42)}{7z^3} + \frac{2e^z (64z^6 + 192z^5 - 240z^4 + 480z^3 - 900z^2 + 1260z - 945)}{105z^3}$$

07.25.03.afec.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{4}{3} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (4z^2 - 2z + 3)$$

07.25.03.afed.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{3} (4z^2 + 2z + 3) - \frac{4}{3} e^{-z} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.afee.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, 5; z\right) = \frac{4(5z^3 - 21z^2 + 126z - 1386)}{7z^4} + \frac{8e^z (64z^6 - 192z^5 + 720z^4 - 2400z^3 + 6300z^2 - 11340z + 10395)}{105z^4}$$

07.25.03.afef.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{3(14z^5 - 91z^4 + 480z^3 - 2016z^2 + 6720z - 20160)}{7z^4} + \frac{6e^z \sqrt{\pi} (z^6 - 6z^5 + 30z^4 - 120z^3 + 360z^2 - 720z + 720) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.afeg.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{6e^{-z} \sqrt{\pi} (z^6 + 6z^5 + 30z^4 + 120z^3 + 360z^2 + 720z + 720) \operatorname{erfi}(\sqrt{z})}{z^{9/2}} - \frac{3(14z^5 + 91z^4 + 480z^3 + 2016z^2 + 6720z + 20160)}{7z^4}$$

07.25.03.afeh.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{3}{2}, 6; z\right) = \frac{5(5z^4 - 28z^3 + 252z^2 - 5544z - 72072)}{7z^5} + \frac{8e^z (64z^6 - 576z^5 + 3600z^4 - 16800z^3 + 56700z^2 - 124740z + 135135)}{21z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = -\frac{1}{2}$

07.25.03.afei.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} (64z^6 + 1568z^5 + 12048z^4 + 33080z^3 + 26220z^2 + 1890z + 105) + \frac{64}{105} e^z \sqrt{\pi} (z^{13/2} + 25z^{11/2} + 200z^{9/2} + 600z^{7/2} + 600z^{5/2} + 120z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afej.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} (64z^6 - 1568z^5 + 12048z^4 - 33080z^3 + 26220z^2 - 1890z + 105) - \frac{64}{105} e^{-z} \sqrt{\pi} (z^{13/2} - 25z^{11/2} + 200z^{9/2} - 600z^{7/2} + 600z^{5/2} - 120z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afek.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{105} (-32z^5 - 624z^4 - 3544z^3 - 6180z^2 - 1890z + 105) - \frac{32}{105} e^z \sqrt{\pi} (z^{11/2} + 20z^{9/2} + 120z^{7/2} + 240z^{5/2} + 120z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afel.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} (32z^5 - 624z^4 + 3544z^3 - 6180z^2 + 1890z + 105) - \frac{32}{105} e^{-z} \sqrt{\pi} (z^{11/2} - 20z^{9/2} + 120z^{7/2} - 240z^{5/2} + 120z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afem.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, 1; z\right) = -\frac{1}{105} e^z (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105)$$

07.25.03.afen.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{105} (-16z^4 - 232z^3 - 852z^2 - 630z + 105) - \frac{16}{105} e^z \sqrt{\pi} z^{3/2} (z^3 + 15z^2 + 60z + 60) \operatorname{erf}(\sqrt{z})$$

07.25.03.afeo.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{16}{105} e^{-z} \sqrt{\pi} (z^3 - 15z^2 + 60z - 60) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{105} (-16z^4 + 232z^3 - 852z^2 + 630z + 105)$$

07.25.03.afep.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^z (-32z^5 - 400z^4 - 1200z^3 - 600z^2 + 150z - 45)}{105z} + \frac{3}{7z}$$

07.25.03.afeq.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{35} (-8z^3 - 76z^2 - 126z + 35) - \frac{8}{35} e^z \sqrt{\pi} z^{3/2} (z^2 + 10z + 20) \operatorname{erf}(\sqrt{z})$$

07.25.03.affer.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{35} (8z^3 - 76z^2 + 126z + 35) - \frac{8}{35} e^{-z} \sqrt{\pi} z^{3/2} (z^2 - 10z + 20) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afes.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, 3; z\right) = \frac{6(z-1)}{7z^2} - \frac{2e^z (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)}{105z^2}$$

07.25.03.afet.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{7} (-4z^2 - 18z + 7) - \frac{4}{7} e^z \sqrt{\pi} z^{3/2} (z + 5) \operatorname{erf}(\sqrt{z})$$

07.25.03.afeu.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{4}{7} e^{-z} \sqrt{\pi} (z - 5) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{7} (-4z^2 + 18z + 7)$$

07.25.03.afev.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, 4; z\right) = \frac{3(3z^2 - 6z + 14)}{7z^3} - \frac{2e^z (32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)}{35z^3}$$

07.25.03.afew.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -2e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} - 2z + 1$$

07.25.03.afex.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = -2e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + 2z + 1$$

07.25.03.afey.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, 5; z\right) = \frac{12(z^3 - 3z^2 + 14z - 126)}{7z^4} - \frac{8e^z (32z^5 - 80z^4 + 240z^3 - 600z^2 + 1050z - 945)}{35z^4}$$

07.25.03.afez.01

$${}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{9(7z^4 - 40z^3 + 168z^2 - 560z + 1680)}{7z^4} - \frac{9e^z \sqrt{\pi} (z^5 - 5z^4 + 20z^3 - 60z^2 + 120z - 120) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.aff0.01} \\
 & {}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{9 e^{-z} \sqrt{\pi} (z^5 + 5 z^4 + 20 z^3 + 60 z^2 + 120 z + 120) \operatorname{erfi}(\sqrt{z})}{z^{9/2}} - \frac{9(7 z^4 + 40 z^3 + 168 z^2 + 560 z + 1680)}{7 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aff1.01} \\
 & {}_2F_2\left(1, \frac{9}{2}; -\frac{1}{2}, 6; z\right) = \frac{15(z^4 - 4 z^3 + 28 z^2 - 504 z - 5544)}{7 z^5} - \frac{8 e^z (32 z^5 - 240 z^4 + 1200 z^3 - 4200 z^2 + 9450 z - 10395)}{7 z^5}
 \end{aligned}$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = \frac{1}{2}$

$$\begin{aligned}
 & \text{07.25.03.aff2.01} \\
 & {}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \\
 & \frac{1}{105} (16 z^4 + 248 z^3 + 1036 z^2 + 1122 z + 105) + \frac{16}{105} e^z \sqrt{\pi} (z^{9/2} + 16 z^{7/2} + 72 z^{5/2} + 96 z^{3/2} + 24 \sqrt{z}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aff3.01} \\
 & {}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \\
 & \frac{1}{105} (16 z^4 - 248 z^3 + 1036 z^2 - 1122 z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} (z^{9/2} - 16 z^{7/2} + 72 z^{5/2} - 96 z^{3/2} + 24 \sqrt{z}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aff4.01} \\
 & {}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{105} e^z (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aff5.01} \\
 & {}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{105} (8 z^3 + 92 z^2 + 246 z + 105) + \frac{8}{105} e^z \sqrt{\pi} \sqrt{z} (z^3 + 12 z^2 + 36 z + 24) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aff6.01} \\
 & {}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} (-8 z^3 + 92 z^2 - 246 z + 105) + \frac{8}{105} e^{-z} \sqrt{\pi} \sqrt{z} (z^3 - 12 z^2 + 36 z - 24) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aff7.01} \\
 & {}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, 2; z\right) = \frac{e^z (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15)}{105 z} + \frac{1}{7 z}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aff8.01} \\
 & {}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{35} (4 z^2 + 30 z + 35) + \frac{4}{35} e^z \sqrt{\pi} \sqrt{z} (z^2 + 8 z + 12) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aff9.01} \\
 & {}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{35} (4 z^2 - 30 z + 35) - \frac{4}{35} e^{-z} \sqrt{\pi} \sqrt{z} (z^2 - 8 z + 12) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.affa.01} \\
 & {}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, 3; z\right) = \frac{2(5 z - 3)}{35 z^2} + \frac{2 e^z (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9)}{105 z^2}
 \end{aligned}$$

07.25.03.affb.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{7}(2z+7) + \frac{2}{7}e^z \sqrt{\pi} \sqrt{z} (z+4) \operatorname{erf}(\sqrt{z})$$

07.25.03.affc.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{7}(7-2z) + \frac{2}{7}e^{-z} \sqrt{\pi} (z-4) \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.affd.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, 4; z\right) = \frac{3(5z^2-6z+10)}{35z^3} + \frac{2e^z(16z^4+32z^3-24z^2+24z-15)}{35z^3}$$

07.25.03.affe.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = e^z \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.afff.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = 1 - e^{-z} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.affg.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, 5; z\right) = \frac{4(5z^3-9z^2+30z-210)}{35z^4} + \frac{8e^z(16z^4-32z^3+72z^2-120z+105)}{35z^4}$$

07.25.03.affh.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{36(5z^3-21z^2+70z-210)}{35z^4} + \frac{9e^z \sqrt{\pi} (z^4-4z^3+12z^2-24z+24) \operatorname{erf}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.affi.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{9e^{-z} \sqrt{\pi} (z^4+4z^3+12z^2+24z+24) \operatorname{erfi}(\sqrt{z})}{2z^{9/2}} - \frac{36(5z^3+21z^2+70z+210)}{35z^4}$$

07.25.03.affj.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{1}{2}, 6; z\right) = \frac{5z^4-12z^3+60z^2-840z-7560}{7z^5} + \frac{8e^z(16z^4-96z^3+360z^2-840z+945)}{7z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = 1$

07.25.03.affk.01

$${}_2F_2\left(1, \frac{9}{2}; 1, 1; z\right) = \frac{1}{105} e^{z/2} (8z^4+104z^3+376z^2+420z+105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} (2z^4+24z^3+71z^2+44z) I_1\left(\frac{z}{2}\right)$$

07.25.03.affl.01

$${}_2F_2\left(1, \frac{9}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{105} e^z (8z^3+84z^2+210z+105)$$

07.25.03.affm.01

$${}_2F_2\left(1, \frac{9}{2}; 1, 2; z\right) = \frac{1}{105} e^{z/2} (8z^3+76z^2+180z+105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3+68z^2+116z+15) I_1\left(\frac{z}{2}\right)$$

07.25.03.affn.01

$${}_2F_2\left(1, \frac{9}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{35} e^z (4z^2+28z+35)$$

07.25.03.affo.01

$${}_2F_2\left(1, \frac{9}{2}; 1, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 + 24z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4z^3 + 20z^2 + 9z - 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.affp.01

$${}_2F_2\left(1, \frac{9}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{7} e^z (2z + 7)$$

07.25.03.affq.01

$${}_2F_2\left(1, \frac{9}{2}; 1, 4; z\right) = \frac{4 e^{z/2} (4z^2 + 10z - 1) I_0\left(\frac{z}{2}\right)}{35z} + \frac{4 e^{z/2} (4z^3 + 6z^2 - 5z + 4) I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.affr.01

$${}_2F_2\left(1, \frac{9}{2}; 1, \frac{9}{2}; z\right) = e^z$$

07.25.03.affs.01

$${}_2F_2\left(1, \frac{9}{2}; 1, 5; z\right) = \frac{32 e^{z/2} (2z^2 - 2z + 3) I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{64 e^{z/2} (z^3 - 2z^2 + 4z - 6) I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.afft.01

$${}_2F_2\left(1, \frac{9}{2}; 1, \frac{11}{2}; z\right) = \frac{9 e^z (8z^3 - 28z^2 + 70z - 105)}{16z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.affu.01

$${}_2F_2\left(1, \frac{9}{2}; 1, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32z^{9/2}} - \frac{9 e^{-z} (8z^3 + 28z^2 + 70z + 105)}{16z^4}$$

07.25.03.affv.01

$${}_2F_2\left(1, \frac{9}{2}; 1, 6; z\right) = \frac{32 e^{z/2} (2z^2 - 9z + 24) I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{32 e^{z/2} (2z^3 - 11z^2 + 36z - 96) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = \frac{3}{2}$

07.25.03.affw.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{105} (4z^2 + 34z + 57) + \frac{4 e^z \sqrt{\pi} (z^3 + 9z^2 + 18z + 6) \operatorname{erf}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.affx.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} (4z^2 - 34z + 57) - \frac{4 e^{-z} \sqrt{\pi} (z^3 - 9z^2 + 18z - 6) \operatorname{erfi}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.affy.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{3}{2}, 2; z\right) = \frac{e^z (8z^3 + 60z^2 + 90z + 15)}{105z} - \frac{1}{7z}$$

07.25.03.affz.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{35} (2z + 11) + \frac{2 e^z \sqrt{\pi} (z^2 + 6z + 6) \operatorname{erf}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.afg0.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{35} (11 - 2z) + \frac{2 e^{-z} \sqrt{\pi} (z^2 - 6z + 6) \operatorname{erfi}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.afg1.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{3}{2}, 3; z\right) = \frac{2 e^z (8 z^3 + 36 z^2 + 18 z - 3)}{105 z^2} - \frac{2(5z - 1)}{35 z^2}$$

07.25.03.afg2.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z \sqrt{\pi} (z + 3) \operatorname{erf}(\sqrt{z})}{7 \sqrt{z}} + \frac{1}{7}$$

07.25.03.afg3.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (3 - z) \operatorname{erfi}(\sqrt{z})}{7 \sqrt{z}} + \frac{1}{7}$$

07.25.03.afg4.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{3}{2}, 4; z\right) = \frac{2 e^z (8 z^3 + 12 z^2 - 6 z + 3)}{35 z^3} - \frac{3(5 z^2 - 2 z + 2)}{35 z^3}$$

07.25.03.afg5.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.afg6.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.afg7.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{3}{2}, 5; z\right) = \frac{8 e^z (8 z^3 - 12 z^2 + 18 z - 15)}{35 z^4} - \frac{4(5 z^3 - 3 z^2 + 6 z - 30)}{35 z^4}$$

07.25.03.afg8.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{9 e^z \sqrt{\pi} (z^3 - 3 z^2 + 6 z - 6) \operatorname{erf}(\sqrt{z})}{4 z^{9/2}} - \frac{9(5 z^3 - 21 z^2 + 70 z - 210)}{70 z^4}$$

07.25.03.afg9.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{9(5 z^3 + 21 z^2 + 70 z + 210)}{70 z^4} - \frac{9 e^{-z} \sqrt{\pi} (z^3 + 3 z^2 + 6 z + 6) \operatorname{erfi}(\sqrt{z})}{4 z^{9/2}}$$

07.25.03.afga.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{3}{2}, 6; z\right) = \frac{8 e^z (8 z^3 - 36 z^2 + 90 z - 105)}{7 z^5} + \frac{-5 z^4 + 4 z^3 - 12 z^2 + 120 z + 840}{7 z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = 2$

07.25.03.afgb.01

$${}_2F_2\left(1, \frac{9}{2}; 2, 2; z\right) = \frac{2 e^{z/2} (4 z^3 + 28 z^2 + 45 z + 15) I_0\left(\frac{z}{2}\right)}{105 z} + \frac{2}{105} e^{z/2} (4 z^2 + 24 z + 23) I_1\left(\frac{z}{2}\right) - \frac{2}{7 z}$$

07.25.03.afgc.01

$${}_2F_2\left(1, \frac{9}{2}; 2, \frac{5}{2}; z\right) = \frac{e^z (4 z^2 + 20 z + 15)}{35 z} - \frac{3}{7 z}$$

07.25.03.afgd.01

$${}_2F_2\left(1, \frac{9}{2}; 2, 3; z\right) = \frac{4 e^{z/2} (4 z^2 + 18 z + 15) I_0\left(\frac{z}{2}\right)}{105 z} + \frac{4 e^{z/2} (4 z^2 + 14 z + 3) I_1\left(\frac{z}{2}\right)}{105 z} - \frac{4}{7 z}$$

07.25.03.afge.01

$${}_2F_2\left(1, \frac{9}{2}; 2, \frac{7}{2}; z\right) = \frac{e^z (2 z + 5)}{7 z} - \frac{5}{7 z}$$

07.25.03.afgf.01

$${}_2F_2\left(1, \frac{9}{2}; 2, 4; z\right) = \frac{16 e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right)}{35 z} + \frac{8 e^{z/2} (2 z^2 + 2 z - 1) I_1\left(\frac{z}{2}\right)}{35 z^2} - \frac{6}{7 z}$$

07.25.03.afgg.01

$${}_2F_2\left(1, \frac{9}{2}; 2, \frac{9}{2}; z\right) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.afgh.01

$${}_2F_2\left(1, \frac{9}{2}; 2, 5; z\right) = \frac{32 e^{z/2} (2 z - 1) I_0\left(\frac{z}{2}\right)}{35 z^2} + \frac{32 e^{z/2} (2 z^2 - 3 z + 4) I_1\left(\frac{z}{2}\right)}{35 z^3} - \frac{8}{7 z}$$

07.25.03.afgi.01

$${}_2F_2\left(1, \frac{9}{2}; 2, \frac{11}{2}; z\right) = \frac{9 e^z (4 z^2 - 10 z + 15)}{8 z^4} - \frac{135 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{9/2}} - \frac{9}{7 z}$$

07.25.03.afgj.01

$${}_2F_2\left(1, \frac{9}{2}; 2, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (4 z^2 + 10 z + 15)}{8 z^4} - \frac{135 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{9/2}} + \frac{9}{7 z}$$

07.25.03.afgk.01

$${}_2F_2\left(1, \frac{9}{2}; 2, 6; z\right) = \frac{64 e^{z/2} (z - 3) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{64 e^{z/2} (z^2 - 4 z + 12) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{10}{7 z}$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = \frac{5}{2}$

07.25.03.afgl.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3(z-4)}{35 z} + \frac{3 e^z \sqrt{\pi} (z^2 + 4 z + 2) \operatorname{erf}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.afgm.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3(z+4)}{35 z} - \frac{3 e^{-z} \sqrt{\pi} (z^2 - 4 z + 2) \operatorname{erfi}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.afgn.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{5}{2}, 3; z\right) = \frac{2e^z(4z^2 + 12z + 3)}{35z^2} - \frac{6(5z + 1)}{35z^2}$$

07.25.03.afgo.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{3e^z\sqrt{\pi}(z+2)\operatorname{erf}(\sqrt{z})}{14z^{3/2}} - \frac{6}{7z}$$

07.25.03.afgp.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{3e^{-z}\sqrt{\pi}(z-2)\operatorname{erfi}(\sqrt{z})}{14z^{3/2}} + \frac{6}{7z}$$

07.25.03.afgq.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{5}{2}, 4; z\right) = \frac{6e^z(4z^2 + 4z - 1)}{35z^3} - \frac{3(15z^2 + 6z - 2)}{35z^3}$$

07.25.03.afgr.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{3e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3}{2z}$$

07.25.03.afgs.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{3}{2z} - \frac{3e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.afgt.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{5}{2}, 5; z\right) = \frac{24e^z(4z^2 - 4z + 3)}{35z^4} - \frac{12(5z^3 + 3z^2 - 2z + 6)}{35z^4}$$

07.25.03.afgu.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{27e^z\sqrt{\pi}(z^2 - 2z + 2)\operatorname{erf}(\sqrt{z})}{8z^{9/2}} - \frac{9(30z^3 + 21z^2 - 70z + 210)}{140z^4}$$

07.25.03.afgv.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{9(30z^3 - 21z^2 - 70z - 210)}{140z^4} + \frac{27e^{-z}\sqrt{\pi}(z^2 + 2z + 2)\operatorname{erfi}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.afgw.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{5}{2}, 6; z\right) = \frac{24e^z(4z^2 - 12z + 15)}{7z^5} - \frac{3(5z^4 + 4z^3 - 4z^2 + 24z + 120)}{7z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = 3$

07.25.03.afgx.01

$${}_2F_2\left(1, \frac{9}{2}; 3, 3; z\right) = -\frac{8(5z+2)}{35z^2} + \frac{16e^{z/2}(2z^2+6z+3)I_0\left(\frac{z}{2}\right)}{105z^2} + \frac{32e^{z/2}(z+2)I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.afgy.01

$${}_2F_2\left(1, \frac{9}{2}; 3, \frac{7}{2}; z\right) = \frac{2e^z(2z+3)}{7z^2} - \frac{2(5z+3)}{7z^2}$$

07.25.03.afgz.01

$${}_2F_2\left(1, \frac{9}{2}; 3, 4; z\right) = -\frac{12(5z+4)}{35z^2} + \frac{16e^{z/2}(2z+3)I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{16e^{z/2}(2z+1)I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.afh0.01

$${}_2F_2\left(1, \frac{9}{2}; 3, \frac{9}{2}; z\right) = \frac{2e^z}{z^2} - \frac{2(z+1)}{z^2}$$

07.25.03.afh1.01

$${}_2F_2\left(1, \frac{9}{2}; 3, 5; z\right) = -\frac{16(5z+6)}{35z^2} + \frac{128e^{z/2}I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{128e^{z/2}(z-1)I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.afh2.01

$${}_2F_2\left(1, \frac{9}{2}; 3, \frac{11}{2}; z\right) = \frac{9e^z(2z-3)}{2z^4} - \frac{18(5z+7)}{35z^2} + \frac{27\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.afh3.01

$${}_2F_2\left(1, \frac{9}{2}; 3, \frac{11}{2}; -z\right) = -\frac{9e^{-z}(2z+3)}{2z^4} + \frac{18(5z-7)}{35z^2} + \frac{27\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.afh4.01

$${}_2F_2\left(1, \frac{9}{2}; 3, 6; z\right) = -\frac{4(5z+8)}{7z^2} + \frac{128e^{z/2}I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{128e^{z/2}(z-4)I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = \frac{7}{2}$

07.25.03.afh5.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{15e^z\sqrt{\pi}(z+1)\operatorname{erf}(\sqrt{z})}{28z^{5/2}} - \frac{5(5z+3)}{14z^2}$$

07.25.03.afh6.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5(5z-3)}{14z^2} - \frac{15e^{-z}\sqrt{\pi}(z-1)\operatorname{erfi}(\sqrt{z})}{28z^{5/2}}$$

07.25.03.afh7.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{7}{2}, 4; z\right) = \frac{6e^z(2z+1)}{7z^3} - \frac{3(5z^2+6z+2)}{7z^3}$$

07.25.03.afh8.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{15e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5(2z+3)}{4z^2}$$

07.25.03.afh9.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5(2z-3)}{4z^2} + \frac{15e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.afha.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{7}{2}, 5; z\right) = \frac{24e^z(2z-1)}{7z^4} - \frac{4(5z^3+9z^2+6z-6)}{7z^4}$$

07.25.03.afhb.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{135 e^z \sqrt{\pi} (z-1) \operatorname{erf}(\sqrt{z})}{16 z^{9/2}} - \frac{9(20 z^3 + 42 z^2 + 35 z - 105)}{56 z^4}$$

07.25.03.afhc.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(20 z^3 - 42 z^2 + 35 z + 105)}{56 z^4} - \frac{135 e^{-z} \sqrt{\pi} (z+1) \operatorname{erfi}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.afhd.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{7}{2}, 6; z\right) = \frac{120 e^z (2z-3)}{7 z^5} - \frac{5(5 z^4 + 12 z^3 + 12 z^2 - 24 z - 72)}{7 z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = 4$

07.25.03.afhe.01

$${}_2F_2\left(1, \frac{9}{2}; 4, 4; z\right) = -\frac{6(15 z^2 + 24 z + 16)}{35 z^3} + \frac{96 e^{z/2} (z+1) I_0\left(\frac{z}{2}\right)}{35 z^3} + \frac{96 e^{z/2} I_1\left(\frac{z}{2}\right)}{35 z^2}$$

07.25.03.afhf.01

$${}_2F_2\left(1, \frac{9}{2}; 4, \frac{9}{2}; z\right) = \frac{6 e^z}{z^3} - \frac{3(z^2 + 2z + 2)}{z^3}$$

07.25.03.afhg.01

$${}_2F_2\left(1, \frac{9}{2}; 4, 5; z\right) = -\frac{24(5 z^2 + 12 z + 16)}{35 z^3} + \frac{384 e^{z/2} I_0\left(\frac{z}{2}\right)}{35 z^3} + \frac{384 e^{z/2} I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.afhh.01

$${}_2F_2\left(1, \frac{9}{2}; 4, \frac{11}{2}; z\right) = -\frac{9(15 z^2 + 42 z + 70)}{35 z^3} - \frac{27 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 z^{9/2}} + \frac{27 e^z}{z^4}$$

07.25.03.afhi.01

$${}_2F_2\left(1, \frac{9}{2}; 4, \frac{11}{2}; -z\right) = \frac{9(15 z^2 - 42 z + 70)}{35 z^3} - \frac{27 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 z^{9/2}} + \frac{27 e^{-z}}{z^4}$$

07.25.03.afhj.01

$${}_2F_2\left(1, \frac{9}{2}; 4, 6; z\right) = \frac{768 e^{z/2} I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{6(5 z^2 + 16 z + 32)}{7 z^3}$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = \frac{9}{2}$

07.25.03.afhk.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{105 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7(4 z^2 + 10 z + 15)}{8 z^3}$$

07.25.03.afhl.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7(4 z^2 - 10 z + 15)}{8 z^3} - \frac{105 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.afhm.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{9}{2}, 5; z\right) = \frac{24 e^z}{z^4} - \frac{4(z^3 + 3z^2 + 6z + 6)}{z^4}$$

07.25.03.afhn.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9(8z^3 + 28z^2 + 70z + 105)}{16 z^4}$$

07.25.03.afho.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{9(8z^3 - 28z^2 + 70z - 105)}{16 z^4} + \frac{945 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.afhp.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{9}{2}, 6; z\right) = \frac{120 e^z}{z^5} - \frac{5(z^4 + 4z^3 + 12z^2 + 24z + 24)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = 5$

07.25.03.afhq.01

$${}_2F_2\left(1, \frac{9}{2}; 5, 5; z\right) = \frac{3072 e^{z/2} I_0\left(\frac{z}{2}\right)}{35 z^4} - \frac{32(5z^3 + 18z^2 + 48z + 96)}{35 z^4}$$

07.25.03.afhr.01

$${}_2F_2\left(1, \frac{9}{2}; 5, \frac{11}{2}; z\right) = \frac{108 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}} - \frac{36(5z^3 + 21z^2 + 70z + 210)}{35 z^4}$$

07.25.03.afhs.01

$${}_2F_2\left(1, \frac{9}{2}; 5, \frac{11}{2}; -z\right) = \frac{36(5z^3 - 21z^2 + 70z - 210)}{35 z^4} + \frac{108 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.afht.01

$${}_2F_2\left(1, \frac{9}{2}; 5, 6; z\right) = -\frac{8(5z^3 + 24z^2 + 96z + 384)}{7 z^4} + \frac{3072 e^{z/2} I_0\left(\frac{z}{2}\right)}{7 z^4} - \frac{3072 e^{z/2} I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = \frac{11}{2}$

07.25.03.afhu.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{11}{2}, 6; z\right) = -\frac{9(5z^4 + 28z^3 + 140z^2 + 840z - 840)}{7 z^5} + \frac{1080 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}} - \frac{1080 e^z}{z^5}$$

07.25.03.afhv.01

$${}_2F_2\left(1, \frac{9}{2}; \frac{11}{2}, 6; -z\right) = \frac{9(5z^4 - 28z^3 + 140z^2 - 840z - 840)}{7 z^5} + \frac{1080 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}} + \frac{1080 e^{-z}}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{9}{2}, b_1 = 6$

07.25.03.afhw.01

$${}_2F_2\left(1, \frac{9}{2}; 6, 6; z\right) = -\frac{10(5z^4 + 32z^3 + 192z^2 + 1536z - 3072)}{7z^5} + \frac{30720e^{z/2}(z-1)I_0\left(\frac{z}{2}\right)}{7z^5} - \frac{30720e^{z/2}I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = -\frac{11}{2}$

07.25.03.afhx.01

$${}_2F_2\left(1, 5; -\frac{11}{2}, 1; z\right) = \frac{1}{31185} (8z^{10} + 332z^9 + 4626z^8 + 24975z^7 + 40320z^6 - 12096z^5 + 10080z^4 - 12600z^3 + 18900z^2 - 28350z + 31185) + \frac{e^z \sqrt{\pi} (16z^{21/2} + 672z^{19/2} + 9576z^{17/2} + 54264z^{15/2} + 101745z^{13/2}) \operatorname{erf}(\sqrt{z})}{62370}$$

07.25.03.afhy.01

$${}_2F_2\left(1, 5; -\frac{11}{2}, 1; -z\right) = \frac{1}{31185} (8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185) + \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 672z^{19/2} - 9576z^{17/2} + 54264z^{15/2} - 101745z^{13/2}) \operatorname{erfi}(\sqrt{z})}{62370}$$

07.25.03.afhz.01

$${}_2F_2\left(1, 5; -\frac{11}{2}, 2; z\right) = \frac{8z^9 + 248z^8 + 2274z^7 + 5760z^6 - 2016z^5 + 2016z^4 - 3150z^3 + 6300z^2 - 14175z + 31185}{31185} + \frac{e^z \sqrt{\pi} (8z^{19/2} + 252z^{17/2} + 2394z^{15/2} + 6783z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.afi0.01

$${}_2F_2\left(1, 5; -\frac{11}{2}, 2; -z\right) = \frac{-8z^9 + 248z^8 - 2274z^7 + 5760z^6 + 2016z^5 + 2016z^4 + 3150z^3 + 6300z^2 + 14175z + 31185}{31185} + \frac{e^{-z} \sqrt{\pi} (8z^{19/2} - 252z^{17/2} + 2394z^{15/2} - 6783z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.afi1.01

$${}_2F_2\left(1, 5; -\frac{11}{2}, 3; z\right) = \frac{16z^8 + 328z^7 + 1440z^6 - 576z^5 + 672z^4 - 1260z^3 + 3150z^2 - 9450z + 31185}{31185} + \frac{4e^z \sqrt{\pi} (4z^{17/2} + 84z^{15/2} + 399z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.af12.01

$${}_2F_2\left(1, 5; -\frac{11}{2}, 3; -z\right) = \frac{16z^8 - 328z^7 + 1440z^6 + 576z^5 + 672z^4 + 1260z^3 + 3150z^2 + 9450z + 31185}{31185} - \frac{4e^{-z}\sqrt{\pi}(4z^{17/2} - 84z^{15/2} + 399z^{13/2})\operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.af13.01

$${}_2F_2\left(1, 5; -\frac{11}{2}, 4; z\right) = \frac{32z^7 + 320z^6 - 144z^5 + 192z^4 - 420z^3 + 1260z^2 - 4725z + 20790}{20790} + \frac{8e^z\sqrt{\pi}(2z^{15/2} + 21z^{13/2})\operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.af14.01

$${}_2F_2\left(1, 5; -\frac{11}{2}, 4; -z\right) = \frac{-32z^7 + 320z^6 + 144z^5 + 192z^4 + 420z^3 + 1260z^2 + 4725z + 20790}{20790} + \frac{8e^{-z}\sqrt{\pi}(2z^{15/2} - 21z^{13/2})\operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.af15.01

$${}_2F_2\left(1, 5; -\frac{11}{2}, 5; z\right) = \frac{64e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{13/2}}{10395} + \frac{64z^6 - 32z^5 + 48z^4 - 120z^3 + 420z^2 - 1890z + 10395}{10395}$$

07.25.03.af16.01

$${}_2F_2\left(1, 5; -\frac{11}{2}, 5; -z\right) = \frac{64z^6 + 32z^5 + 48z^4 + 120z^3 + 420z^2 + 1890z + 10395}{10395} - \frac{64e^{-z}\sqrt{\pi}z^{13/2}\operatorname{erfi}(\sqrt{z})}{10395}$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = -\frac{9}{2}$

07.25.03.af17.01

$${}_2F_2\left(1, 5; -\frac{9}{2}, 1; z\right) = \frac{-8z^9 - 300z^8 - 3730z^7 - 17655z^6 - 24192z^5 + 6720z^4 - 5040z^3 + 5400z^2 - 6300z + 5670}{5670} + \frac{e^z\sqrt{\pi}(-16z^{19/2} - 608z^{17/2} - 7752z^{15/2} - 38760z^{13/2} - 62985z^{11/2})\operatorname{erf}(\sqrt{z})}{11340}$$

07.25.03.af18.01

$${}_2F_2\left(1, 5; -\frac{9}{2}, 1; -z\right) = \frac{8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670}{5670} + \frac{e^{-z}\sqrt{\pi}(-16z^{19/2} + 608z^{17/2} - 7752z^{15/2} + 38760z^{13/2} - 62985z^{11/2})\operatorname{erfi}(\sqrt{z})}{11340}$$

07.25.03.af19.01

$${}_2F_2\left(1, 5; -\frac{9}{2}, 2; z\right) = \frac{-4z^8 - 112z^7 - 915z^6 - 2016z^5 + 672z^4 - 630z^3 + 900z^2 - 1575z + 2835}{2835} + \frac{e^z\sqrt{\pi}(-8z^{17/2} - 228z^{15/2} - 1938z^{13/2} - 4845z^{11/2})\operatorname{erf}(\sqrt{z})}{5670}$$

07.25.03.afia.01

$${}_2F_2\left(1, 5; -\frac{9}{2}, 2; -z\right) = \frac{-4z^8 + 112z^7 - 915z^6 + 2016z^5 + 672z^4 + 630z^3 + 900z^2 + 1575z + 2835}{2835} + \frac{e^{-z}\sqrt{\pi}\left(8z^{17/2} - 228z^{15/2} + 1938z^{13/2} - 4845z^{11/2}\right)\operatorname{erfi}(\sqrt{z})}{5670}$$

07.25.03.afib.01

$${}_2F_2\left(1, 5; -\frac{9}{2}, 3; z\right) = \frac{-8z^7 - 148z^6 - 576z^5 + 224z^4 - 252z^3 + 450z^2 - 1050z + 2835}{2835} - \frac{2e^z\sqrt{\pi}\left(4z^{15/2} + 76z^{13/2} + 323z^{11/2}\right)\operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.afic.01

$${}_2F_2\left(1, 5; -\frac{9}{2}, 3; -z\right) = \frac{8z^7 - 148z^6 + 576z^5 + 224z^4 + 252z^3 + 450z^2 + 1050z + 2835}{2835} - \frac{2e^{-z}\sqrt{\pi}\left(4z^{15/2} - 76z^{13/2} + 323z^{11/2}\right)\operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.afid.01

$${}_2F_2\left(1, 5; -\frac{9}{2}, 4; z\right) = \frac{-16z^6 - 144z^5 + 64z^4 - 84z^3 + 180z^2 - 525z + 1890}{1890} - \frac{4}{945}e^z\sqrt{\pi}\left(2z^{13/2} + 19z^{11/2}\right)\operatorname{erf}(\sqrt{z})$$

07.25.03.afe.01

$${}_2F_2\left(1, 5; -\frac{9}{2}, 4; -z\right) = \frac{-16z^6 + 144z^5 + 64z^4 + 84z^3 + 180z^2 + 525z + 1890}{1890} + \frac{4}{945}e^{-z}\sqrt{\pi}\left(2z^{13/2} - 19z^{11/2}\right)\operatorname{erfi}(\sqrt{z})$$

07.25.03.afif.01

$${}_2F_2\left(1, 5; -\frac{9}{2}, 5; z\right) = \frac{1}{945}\left(-32z^5 + 16z^4 - 24z^3 + 60z^2 - 210z + 945\right) - \frac{32}{945}e^z\sqrt{\pi}z^{11/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.afig.01

$${}_2F_2\left(1, 5; -\frac{9}{2}, 5; -z\right) = \frac{1}{945}\left(32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945\right) - \frac{32}{945}e^{-z}\sqrt{\pi}z^{11/2}\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = -\frac{7}{2}$

07.25.03.afih.01

$${}_2F_2\left(1, 5; -\frac{7}{2}, 1; z\right) = \frac{8z^8 + 268z^7 + 2930z^6 + 11919z^5 + 13440z^4 - 3360z^3 + 2160z^2 - 1800z + 1260}{1260} + \frac{e^z\sqrt{\pi}\left(16z^{17/2} + 544z^{15/2} + 6120z^{13/2} + 26520z^{11/2} + 36465z^{9/2}\right)\operatorname{erf}(\sqrt{z})}{2520}$$

07.25.03.afii.01

$${}_2F_2\left(1, 5; -\frac{7}{2}, 1; -z\right) = \frac{8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260}{1260} + \frac{e^{-z}\sqrt{\pi}\left(-16z^{17/2} + 544z^{15/2} - 6120z^{13/2} + 26520z^{11/2} - 36465z^{9/2}\right)\operatorname{erfi}(\sqrt{z})}{2520}$$

07.25.03.afij.01

$${}_2F_2\left(1, 5; -\frac{7}{2}, 2; z\right) = \frac{1}{630} (4z^7 + 100z^6 + 717z^5 + 1344z^4 - 420z^3 + 360z^2 - 450z + 630) + \frac{e^z \sqrt{\pi} (8z^{15/2} + 204z^{13/2} + 1530z^{11/2} + 3315z^{9/2}) \operatorname{erf}(\sqrt{z})}{1260}$$

07.25.03.afik.01

$${}_2F_2\left(1, 5; -\frac{7}{2}, 2; -z\right) = \frac{1}{630} (-4z^7 + 100z^6 - 717z^5 + 1344z^4 + 420z^3 + 360z^2 + 450z + 630) + \frac{e^{-z} \sqrt{\pi} (8z^{15/2} - 204z^{13/2} + 1530z^{11/2} - 3315z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1260}$$

07.25.03.afil.01

$${}_2F_2\left(1, 5; -\frac{7}{2}, 3; z\right) = \frac{1}{315} (4z^6 + 66z^5 + 224z^4 - 84z^3 + 90z^2 - 150z + 315) + \frac{1}{315} e^z \sqrt{\pi} (4z^{13/2} + 68z^{11/2} + 255z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afim.01

$${}_2F_2\left(1, 5; -\frac{7}{2}, 3; -z\right) = \frac{1}{315} (4z^6 - 66z^5 + 224z^4 + 84z^3 + 90z^2 + 150z + 315) + \frac{1}{315} e^{-z} \sqrt{\pi} (-4z^{13/2} + 68z^{11/2} - 255z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afin.01

$${}_2F_2\left(1, 5; -\frac{7}{2}, 4; z\right) = \frac{1}{210} (8z^5 + 64z^4 - 28z^3 + 36z^2 - 75z + 210) + \frac{2}{105} e^z \sqrt{\pi} (2z^{11/2} + 17z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afio.01

$${}_2F_2\left(1, 5; -\frac{7}{2}, 4; -z\right) = \frac{1}{210} (-8z^5 + 64z^4 + 28z^3 + 36z^2 + 75z + 210) + \frac{2}{105} e^{-z} \sqrt{\pi} (2z^{11/2} - 17z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afip.01

$${}_2F_2\left(1, 5; -\frac{7}{2}, 5; z\right) = \frac{16}{105} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

07.25.03.afiq.01

$${}_2F_2\left(1, 5; -\frac{7}{2}, 5; -z\right) = \frac{1}{105} (16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = -\frac{5}{2}$

07.25.03.afir.01

$${}_2F_2\left(1, 5; -\frac{5}{2}, 1; z\right) = \frac{1}{360} (-8z^7 - 236z^6 - 2226z^5 - 7575z^4 - 6720z^3 + 1440z^2 - 720z + 360) + \frac{1}{720} e^z \sqrt{\pi} (-16z^{15/2} - 480z^{13/2} - 4680z^{11/2} - 17160z^{9/2} - 19305z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afis.01

$${}_2F_2\left(1, 5; -\frac{5}{2}, 1; -z\right) = \frac{1}{360} (8z^7 - 236z^6 + 2226z^5 - 7575z^4 + 6720z^3 + 1440z^2 + 720z + 360) + \frac{1}{720} e^{-z} \sqrt{\pi} (-16z^{15/2} + 480z^{13/2} - 4680z^{11/2} + 17160z^{9/2} - 19305z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afit.01

$${}_2F_2\left(1, 5; -\frac{5}{2}, 2; z\right) = \frac{1}{180} (-4z^6 - 88z^5 - 543z^4 - 840z^3 + 240z^2 - 180z + 180) + \frac{1}{360} e^z \sqrt{\pi} (-8z^{13/2} - 180z^{11/2} - 1170z^{9/2} - 2145z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afiu.01

$${}_2F_2\left(1, 5; -\frac{5}{2}, 2; -z\right) = \frac{1}{180} (-4z^6 + 88z^5 - 543z^4 + 840z^3 + 240z^2 + 180z + 180) + \frac{1}{360} e^{-z} \sqrt{\pi} (8z^{13/2} - 180z^{11/2} + 1170z^{9/2} - 2145z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afiv.01

$${}_2F_2\left(1, 5; -\frac{5}{2}, 3; z\right) = \frac{1}{45} (-2z^5 - 29z^4 - 84z^3 + 30z^2 - 30z + 45) + \frac{1}{90} e^z \sqrt{\pi} (-4z^{11/2} - 60z^{9/2} - 195z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afiw.01

$${}_2F_2\left(1, 5; -\frac{5}{2}, 3; -z\right) = \frac{1}{45} (2z^5 - 29z^4 + 84z^3 + 30z^2 + 30z + 45) + \frac{1}{90} e^{-z} \sqrt{\pi} (-4z^{11/2} + 60z^{9/2} - 195z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afix.01

$${}_2F_2\left(1, 5; -\frac{5}{2}, 4; z\right) = \frac{1}{30} (-4z^4 - 28z^3 + 12z^2 - 15z + 30) + \frac{1}{15} e^z \sqrt{\pi} (-2z^{9/2} - 15z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afiy.01

$${}_2F_2\left(1, 5; -\frac{5}{2}, 4; -z\right) = \frac{1}{30} (-4z^4 + 28z^3 + 12z^2 + 15z + 30) + \frac{1}{15} e^{-z} \sqrt{\pi} (2z^{9/2} - 15z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afiz.01

$${}_2F_2\left(1, 5; -\frac{5}{2}, 5; z\right) = \frac{1}{15} (-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15} e^z \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.afj0.01

$${}_2F_2\left(1, 5; -\frac{5}{2}, 5; -z\right) = \frac{1}{15} (8z^3 + 4z^2 + 6z + 15) - \frac{8}{15} e^{-z} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = -\frac{3}{2}$

07.25.03.afj1.01

$${}_2F_2\left(1, 5; -\frac{3}{2}, 1; z\right) = \frac{1}{144} (8z^6 + 204z^5 + 1618z^4 + 4431z^3 + 2880z^2 - 480z + 144) + \frac{1}{288} e^z \sqrt{\pi} (16z^{13/2} + 416z^{11/2} + 3432z^{9/2} + 10296z^{7/2} + 9009z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afj2.01

$${}_2F_2\left(1, 5; -\frac{3}{2}, 1; -z\right) = \frac{1}{144} (8z^6 - 204z^5 + 1618z^4 - 4431z^3 + 2880z^2 + 480z + 144) + \frac{1}{288} e^{-z} \sqrt{\pi} (-16z^{13/2} + 416z^{11/2} - 3432z^{9/2} + 10296z^{7/2} - 9009z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afj3.01

$${}_2F_2\left(1, 5; -\frac{3}{2}, 2; z\right) = \frac{1}{72} (4z^5 + 76z^4 + 393z^3 + 480z^2 - 120z + 72) + \frac{1}{144} e^z \sqrt{\pi} (8z^{11/2} + 156z^{9/2} + 858z^{7/2} + 1287z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afj4.01

$${}_2F_2\left(1, 5; -\frac{3}{2}, 2; -z\right) = \frac{1}{72} (-4z^5 + 76z^4 - 393z^3 + 480z^2 + 120z + 72) + \frac{1}{144} e^{-z} \sqrt{\pi} (8z^{11/2} - 156z^{9/2} + 858z^{7/2} - 1287z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afj5.01

$${}_2F_2\left(1, 5; -\frac{3}{2}, 3; z\right) = \frac{1}{18} (2z^4 + 25z^3 + 60z^2 - 20z + 18) + \frac{1}{36} e^z \sqrt{\pi} (4z^{9/2} + 52z^{7/2} + 143z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afj6.01

$${}_2F_2\left(1, 5; -\frac{3}{2}, 3; -z\right) = \frac{1}{18} (2z^4 - 25z^3 + 60z^2 + 20z + 18) + \frac{1}{36} e^{-z} \sqrt{\pi} (-4z^{9/2} + 52z^{7/2} - 143z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afj7.01

$${}_2F_2\left(1, 5; -\frac{3}{2}, 4; z\right) = \frac{1}{6} (2z^3 + 12z^2 - 5z + 6) + \frac{1}{6} e^z \sqrt{\pi} (2z^{7/2} + 13z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afj8.01

$${}_2F_2\left(1, 5; -\frac{3}{2}, 4; -z\right) = \frac{1}{6} (-2z^3 + 12z^2 + 5z + 6) + \frac{1}{6} e^{-z} \sqrt{\pi} (2z^{7/2} - 13z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afj9.01

$${}_2F_2\left(1, 5; -\frac{3}{2}, 5; z\right) = \frac{4}{3} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (4z^2 - 2z + 3)$$

07.25.03.afja.01

$${}_2F_2\left(1, 5; -\frac{3}{2}, 5; -z\right) = \frac{1}{3} (4z^2 + 2z + 3) - \frac{4}{3} e^{-z} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = -\frac{1}{2}$

07.25.03.afjb.01

$${}_2F_2\left(1, 5; -\frac{1}{2}, 1; z\right) = \frac{1}{96} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) + \frac{1}{192} e^z \sqrt{\pi} (-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afjc.01

$${}_2F_2\left(1, 5; -\frac{1}{2}, 1; -z\right) = \frac{1}{96} (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) + \frac{1}{192} e^{-z} \sqrt{\pi} (-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afjd.01

$${}_2F_2\left(1, 5; -\frac{1}{2}, 2; z\right) = \frac{1}{48} (-4z^4 - 64z^3 - 267z^2 - 240z + 48) + \frac{1}{96} e^z \sqrt{\pi} (-8z^{9/2} - 132z^{7/2} - 594z^{5/2} - 693z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afje.01

$${}_2F_2\left(1, 5; -\frac{1}{2}, 2; -z\right) = \frac{1}{48} (-4z^4 + 64z^3 - 267z^2 + 240z + 48) + \frac{1}{96} e^{-z} \sqrt{\pi} (8z^{9/2} - 132z^{7/2} + 594z^{5/2} - 693z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afjf.01

$${}_2F_2\left(1, 5; -\frac{1}{2}, 3; z\right) = \frac{1}{12} (-2z^3 - 21z^2 - 40z + 12) + \frac{1}{24} e^z \sqrt{\pi} (-4z^{7/2} - 44z^{5/2} - 99z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afjg.01

$${}_2F_2\left(1, 5; -\frac{1}{2}, 3; -z\right) = \frac{1}{12} (2z^3 - 21z^2 + 40z + 12) + \frac{1}{24} e^{-z} \sqrt{\pi} (-4z^{7/2} + 44z^{5/2} - 99z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afjh.01

$${}_2F_2\left(1, 5; -\frac{1}{2}, 4; z\right) = \frac{1}{2} (-z^2 - 5z + 2) + \frac{1}{4} e^z \sqrt{\pi} (-2z^{5/2} - 11z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afji.01

$${}_2F_2\left(1, 5; -\frac{1}{2}, 4; -z\right) = \frac{1}{2} (-z^2 + 5z + 2) + \frac{1}{4} e^{-z} \sqrt{\pi} (2z^{5/2} - 11z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afjj.01

$${}_2F_2\left(1, 5; -\frac{1}{2}, 5; z\right) = -2 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} - 2z + 1$$

07.25.03.afjk.01

$${}_2F_2\left(1, 5; -\frac{1}{2}, 5; -z\right) = -2 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + 2z + 1$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = \frac{1}{2}$

07.25.03.afjl.01

$${}_2F_2\left(1, 5; \frac{1}{2}, 1; z\right) = \frac{1}{192} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} e^z \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afjm.01

$${}_2F_2\left(1, 5; \frac{1}{2}, 1; -z\right) = \frac{1}{192} (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afjn.01

$${}_2F_2\left(1, 5; \frac{1}{2}, 2; z\right) = \frac{1}{96} (4z^3 + 52z^2 + 165z + 96) + \frac{1}{192} e^z \sqrt{\pi} (8z^{7/2} + 108z^{5/2} + 378z^{3/2} + 315\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afjo.01

$${}_2F_2\left(1, 5; \frac{1}{2}, 2; -z\right) = \frac{1}{96} (-4z^3 + 52z^2 - 165z + 96) + \frac{1}{192} e^{-z} \sqrt{\pi} (8z^{7/2} - 108z^{5/2} + 378z^{3/2} - 315\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afjp.01

$${}_2F_2\left(1, 5; \frac{1}{2}, 3; z\right) = \frac{1}{24} (2z^2 + 17z + 24) + \frac{1}{48} e^z \sqrt{\pi} (4z^{5/2} + 36z^{3/2} + 63\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afjq.01

$${}_2F_2\left(1, 5; \frac{1}{2}, 3; -z\right) = \frac{1}{24} (2z^2 - 17z + 24) + \frac{1}{48} e^{-z} \sqrt{\pi} (-4z^{5/2} + 36z^{3/2} - 63\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afjr.01

$${}_2F_2\left(1, 5; \frac{1}{2}, 4; z\right) = \frac{z+4}{4} + \frac{1}{8} e^z \sqrt{\pi} (2z^{3/2} + 9\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afjs.01

$${}_2F_2\left(1, 5; \frac{1}{2}, 4; -z\right) = \frac{4-z}{4} + \frac{1}{8} e^{-z} \sqrt{\pi} (2z^{3/2} - 9\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afjt.01

$${}_2F_2\left(1, 5; \frac{1}{2}, 5; z\right) = e^z \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.afju.01

$${}_2F_2\left(1, 5; \frac{1}{2}, 5; -z\right) = 1 - e^{-z} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = 1$

07.25.03.afjv.01

$${}_2F_2(1, 5; 1, 1; z) = \frac{1}{24} e^z (z^4 + 16z^3 + 72z^2 + 96z + 24)$$

07.25.03.afjw.01

$${}_2F_2\left(1, 5; 1, \frac{3}{2}; z\right) = \frac{1}{384} (8z^3 + 108z^2 + 370z + 279) + \frac{e^z \sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.afjx.01

$${}_2F_2\left(1, 5; 1, \frac{3}{2}; -z\right) = \frac{1}{384} (-8z^3 + 108z^2 - 370z + 279) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.afjy.01

$${}_2F_2(1, 5; 1, 2; z) = \frac{1}{24} e^z (z^3 + 12z^2 + 36z + 24)$$

07.25.03.afjz.01

$${}_2F_2\left(1, 5; 1, \frac{5}{2}; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.afk0.01

$${}_2F_2\left(1, 5; 1, \frac{5}{2}; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.afk1.01

$${}_2F_2(1, 5; 1, 3; z) = \frac{1}{12} e^z (z^2 + 8z + 12)$$

07.25.03.afk2.01

$${}_2F_2\left(1, 5; 1, \frac{7}{2}; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5e^z \sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.afk3.01

$${}_2F_2\left(1, 5; 1, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.afk4.01

$${}_2F_2(1, 5; 1, 4; z) = \frac{1}{4} e^z (z + 4)$$

07.25.03.afk5.01

$${}_2F_2\left(1, 5; 1, \frac{9}{2}; z\right) = \frac{35(8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35e^z \sqrt{\pi} (16z^4 + 32z^3 - 24z^2 + 24z - 15) \operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.afk6.01

$${}_2F_2\left(1, 5; 1, \frac{9}{2}; -z\right) = \frac{35(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35e^{-z} \sqrt{\pi} (16z^4 - 32z^3 - 24z^2 - 24z - 15) \operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.afk7.01

$${}_2F_2(1, 5; 1, 5; z) = e^z$$

07.25.03.afk8.01

$${}_2F_2\left(1, 5; 1, \frac{11}{2}; z\right) = \frac{315(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315e^z \sqrt{\pi} (16z^4 - 32z^3 + 72z^2 - 120z + 105) \operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.afk9.01

$${}_2F_2\left(1, 5; 1, \frac{11}{2}; -z\right) = \frac{315e^{-z} \sqrt{\pi} (16z^4 + 32z^3 + 72z^2 + 120z + 105) \operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315(8z^3 + 20z^2 + 50z + 105)}{2048z^4}$$

07.25.03.afka.01

$${}_2F_2(1, 5; 1, 6; z) = \frac{5e^z (z^4 - 4z^3 + 12z^2 - 24z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = \frac{3}{2}$

07.25.03.afkb.01

$${}_2F_2\left(1, 5; \frac{3}{2}, 2; z\right) = \frac{1}{192} (4z^2 + 40z + 87) + \frac{e^z \sqrt{\pi} (8z^3 + 84z^2 + 210z + 105) \operatorname{erf}(\sqrt{z})}{384\sqrt{z}}$$

07.25.03.afkc.01

$${}_2F_2\left(1, 5; \frac{3}{2}, 2; -z\right) = \frac{1}{192} (4z^2 - 40z + 87) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 84z^2 - 210z + 105) \operatorname{erfi}(\sqrt{z})}{384\sqrt{z}}$$

07.25.03.afkd.01

$${}_2F_2\left(1, 5; \frac{3}{2}, 3; z\right) = \frac{1}{48} (2z + 13) + \frac{e^z \sqrt{\pi} (4z^2 + 28z + 35) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.afke.01

$${}_2F_2\left(1, 5; \frac{3}{2}, 3; -z\right) = \frac{1}{48} (13 - 2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 28z + 35) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.afkf.01

$${}_2F_2\left(1, 5; \frac{3}{2}, 4; z\right) = \frac{e^z \sqrt{\pi} (2z + 7) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}} + \frac{1}{8}$$

07.25.03.afkg.01

$${}_2F_2\left(1, 5; \frac{3}{2}, 4; -z\right) = \frac{e^{-z} \sqrt{\pi} (7 - 2z) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}} + \frac{1}{8}$$

07.25.03.afkh.01

$${}_2F_2\left(1, 5; \frac{3}{2}, 5; z\right) = \frac{e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.afki.01

$${}_2F_2\left(1, 5; \frac{3}{2}, 5; -z\right) = \frac{e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = 2$

07.25.03.afkj.01

$${}_2F_2(1, 5; 2, 2; z) = \frac{e^z (z^3 + 9z^2 + 18z + 6)}{24z} - \frac{1}{4z}$$

07.25.03.afkk.01

$${}_2F_2\left(1, 5; 2, \frac{5}{2}; z\right) = \frac{4z^2 + 28z - 15}{128z} + \frac{e^z \sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{256 z^{3/2}}$$

07.25.03.afkl.01

$${}_2F_2\left(1, 5; 2, \frac{5}{2}; -z\right) = \frac{-4z^2 + 28z + 15}{128z} + \frac{e^{-z} \sqrt{\pi} (8z^3 - 60z^2 + 90z - 15) \operatorname{erfi}(\sqrt{z})}{256 z^{3/2}}$$

07.25.03.afkm.01

$${}_2F_2(1, 5; 2, 3; z) = \frac{e^z (z^2 + 6z + 6)}{12z} - \frac{1}{2z}$$

07.25.03.afkn.01

$${}_2F_2\left(1, 5; 2, \frac{7}{2}; z\right) = \frac{5(4z^2 - 16z + 3)}{256z^2} + \frac{5e^z \sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{512 z^{5/2}}$$

07.25.03.afko.01

$${}_2F_2\left(1, 5; 2, \frac{7}{2}; -z\right) = \frac{5(4z^2 + 16z + 3)}{256z^2} - \frac{5e^{-z}\sqrt{\pi}(8z^3 - 36z^2 + 18z + 3)\operatorname{erfi}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.afkp.01

$${}_2F_2(1, 5; 2, 4; z) = \frac{e^z(z+3)}{4z} - \frac{3}{4z}$$

07.25.03.afkq.01

$${}_2F_2\left(1, 5; 2, \frac{9}{2}; z\right) = \frac{35e^z\sqrt{\pi}(8z^3 + 12z^2 - 6z + 3)\operatorname{erf}(\sqrt{z})}{1024z^{7/2}} - \frac{7(44z^2 - 20z + 15)}{512z^3}$$

07.25.03.afkr.01

$${}_2F_2\left(1, 5; 2, \frac{9}{2}; -z\right) = \frac{7(44z^2 + 20z + 15)}{512z^3} + \frac{35e^{-z}\sqrt{\pi}(8z^3 - 12z^2 - 6z - 3)\operatorname{erfi}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.afks.01

$${}_2F_2(1, 5; 2, 5; z) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.afkt.01

$${}_2F_2\left(1, 5; 2, \frac{11}{2}; z\right) = \frac{315e^z\sqrt{\pi}(8z^3 - 12z^2 + 18z - 15)\operatorname{erf}(\sqrt{z})}{2048z^{9/2}} - \frac{9(128z^3 - 140z^2 + 280z - 525)}{1024z^4}$$

07.25.03.afku.01

$${}_2F_2\left(1, 5; 2, \frac{11}{2}; -z\right) = \frac{9(128z^3 + 140z^2 + 280z + 525)}{1024z^4} - \frac{315e^{-z}\sqrt{\pi}(8z^3 + 12z^2 + 18z + 15)\operatorname{erfi}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.afkv.01

$${}_2F_2(1, 5; 2, 6; z) = \frac{5e^z(z^3 - 3z^2 + 6z - 6)}{z^5} - \frac{5(z^4 - 24)}{4z^5}$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = \frac{5}{2}$

07.25.03.afkw.01

$${}_2F_2\left(1, 5; \frac{5}{2}, 3; z\right) = \frac{2z - 15}{32z} + \frac{e^z\sqrt{\pi}(4z^2 + 20z + 15)\operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.afkx.01

$${}_2F_2\left(1, 5; \frac{5}{2}, 3; -z\right) = \frac{2z + 15}{32z} + \frac{e^{-z}\sqrt{\pi}(-4z^2 + 20z - 15)\operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.afky.01

$${}_2F_2\left(1, 5; \frac{5}{2}, 4; z\right) = \frac{3e^z\sqrt{\pi}(2z + 5)\operatorname{erf}(\sqrt{z})}{32z^{3/2}} - \frac{15}{16z}$$

07.25.03.afkz.01

$${}_2F_2\left(1, 5; \frac{5}{2}, 4; -z\right) = \frac{3e^{-z}\sqrt{\pi}(2z - 5)\operatorname{erfi}(\sqrt{z})}{32z^{3/2}} + \frac{15}{16z}$$

07.25.03.af10.01

$${}_2F_2\left(1, 5; \frac{5}{2}, 5; z\right) = \frac{3 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3}{2 z}$$

07.25.03.af11.01

$${}_2F_2\left(1, 5; \frac{5}{2}, 5; -z\right) = \frac{3}{2 z} - \frac{3 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = 3$

07.25.03.af12.01

$${}_2F_2(1, 5; 3, 3; z) = \frac{-3 z - 1}{3 z^2} + \frac{e^z (z^2 + 4 z + 2)}{6 z^2}$$

07.25.03.af13.01

$${}_2F_2\left(1, 5; 3, \frac{7}{2}; z\right) = \frac{5 e^z \sqrt{\pi} (4 z^2 + 12 z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}} - \frac{5 (14 z + 3)}{64 z^2}$$

07.25.03.af14.01

$${}_2F_2\left(1, 5; 3, \frac{7}{2}; -z\right) = \frac{5 (14 z - 3)}{64 z^2} + \frac{5 e^{-z} \sqrt{\pi} (4 z^2 - 12 z + 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.af15.01

$${}_2F_2(1, 5; 3, 4; z) = \frac{-3 z - 2}{2 z^2} + \frac{e^z (z + 2)}{2 z^2}$$

07.25.03.af16.01

$${}_2F_2\left(1, 5; 3, \frac{9}{2}; z\right) = \frac{35 e^z \sqrt{\pi} (4 z^2 + 4 z - 1) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}} - \frac{7 (96 z^2 + 50 z - 15)}{384 z^3}$$

07.25.03.af17.01

$${}_2F_2\left(1, 5; 3, \frac{9}{2}; -z\right) = \frac{7 (96 z^2 - 50 z - 15)}{384 z^3} - \frac{35 e^{-z} \sqrt{\pi} (4 z^2 - 4 z - 1) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.af18.01

$${}_2F_2(1, 5; 3, 5; z) = \frac{2 e^z}{z^2} - \frac{2 (z + 1)}{z^2}$$

07.25.03.af19.01

$${}_2F_2\left(1, 5; 3, \frac{11}{2}; z\right) = \frac{315 e^z \sqrt{\pi} (4 z^2 - 4 z + 3) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}} - \frac{3 (192 z^3 + 224 z^2 - 210 z + 315)}{256 z^4}$$

07.25.03.af1a.01

$${}_2F_2\left(1, 5; 3, \frac{11}{2}; -z\right) = \frac{3 (192 z^3 - 224 z^2 - 210 z - 315)}{256 z^4} + \frac{315 e^{-z} \sqrt{\pi} (4 z^2 + 4 z + 3) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.af1b.01

$${}_2F_2(1, 5; 3, 6; z) = \frac{10 e^z (z^2 - 2 z + 2)}{z^5} - \frac{5 (3 z^4 + 4 z^3 + 24)}{6 z^5}$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = \frac{7}{2}$

07.25.03.afic.01

$${}_2F_2\left(1, 5; \frac{7}{2}, 4; z\right) = \frac{15 e^z \sqrt{\pi} (2z+3) \operatorname{erf}(\sqrt{z})}{64 z^{5/2}} - \frac{15(4z+3)}{32 z^2}$$

07.25.03.afid.01

$${}_2F_2\left(1, 5; \frac{7}{2}, 4; -z\right) = \frac{15(4z-3)}{32 z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z-3) \operatorname{erfi}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.afle.01

$${}_2F_2\left(1, 5; \frac{7}{2}, 5; z\right) = \frac{15 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5(2z+3)}{4 z^2}$$

07.25.03.afif.01

$${}_2F_2\left(1, 5; \frac{7}{2}, 5; -z\right) = \frac{5(2z-3)}{4 z^2} + \frac{15 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = 4$

07.25.03.afig.01

$${}_2F_2(1, 5; 4, 4; z) = \frac{3 e^z (z+1)}{2 z^3} - \frac{3(3z^2+4z+2)}{4 z^3}$$

07.25.03.afih.01

$${}_2F_2\left(1, 5; 4, \frac{9}{2}; z\right) = \frac{105 e^z \sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}} - \frac{7(24z^2+40z+15)}{64 z^3}$$

07.25.03.afii.01

$${}_2F_2\left(1, 5; 4, \frac{9}{2}; -z\right) = \frac{7(24z^2-40z+15)}{64 z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z-1) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.afij.01

$${}_2F_2(1, 5; 4, 5; z) = \frac{6 e^z}{z^3} - \frac{3(z^2+2z+2)}{z^3}$$

07.25.03.afik.01

$${}_2F_2\left(1, 5; 4, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} (2z-1) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{9(48z^3+112z^2+140z-105)}{128 z^4}$$

07.25.03.afil.01

$${}_2F_2\left(1, 5; 4, \frac{11}{2}; -z\right) = \frac{9(48z^3-112z^2+140z+105)}{128 z^4} - \frac{945 e^{-z} \sqrt{\pi} (2z+1) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.afim.01

$${}_2F_2(1, 5; 4, 6; z) = \frac{30 e^z (z-1)}{z^5} - \frac{5(3z^4+8z^3+12z^2-24)}{4 z^5}$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = \frac{9}{2}$

07.25.03.afln.01

$${}_2F_2\left(1, 5; \frac{9}{2}, 5; z\right) = \frac{105 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7(4z^2 + 10z + 15)}{8z^3}$$

07.25.03.aflo.01

$${}_2F_2\left(1, 5; \frac{9}{2}, 5; -z\right) = \frac{7(4z^2 - 10z + 15)}{8z^3} - \frac{105 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = 5$

07.25.03.aflp.01

$${}_2F_2(1, 5; 5, 5; z) = \frac{24 e^z}{z^4} - \frac{4(z^3 + 3z^2 + 6z + 6)}{z^4}$$

07.25.03.aflq.01

$${}_2F_2\left(1, 5; 5, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9(8z^3 + 28z^2 + 70z + 105)}{16z^4}$$

07.25.03.aflr.01

$${}_2F_2\left(1, 5; 5, \frac{11}{2}; -z\right) = \frac{9(8z^3 - 28z^2 + 70z - 105)}{16z^4} + \frac{945 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.afis.01

$${}_2F_2(1, 5; 5, 6; z) = \frac{120 e^z}{z^5} - \frac{5(z^4 + 4z^3 + 12z^2 + 24z + 24)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = 5, b_1 = 6$

07.25.03.afit.01

$${}_2F_2(1, 5; 6, 6; z) = -\frac{25(3z^4 + 16z^3 + 72z^2 + 288z + 288)\gamma}{12z^5} + \frac{600 \operatorname{Ei}(z)}{z^5} + \frac{300 \log\left(\frac{1}{z}\right)}{z^5} - \frac{300 \log(z)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = -\frac{11}{2}$

07.25.03.aflu.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{102\,112\,943\,625} (131\,072 z^{17} + 15\,794\,176 z^{16} + 785\,154\,048 z^{15} + 21\,025\,767\,424 z^{14} + 332\,430\,336\,000 z^{13} + 3\,200\,570\,265\,600 z^{12} + 18\,686\,050\,437\,120 z^{11} + 63\,863\,198\,530\,560 z^{10} + 118\,451\,012\,359\,680 z^9 + 102\,798\,200\,736\,000 z^8 + 30\,014\,020\,713\,600 z^7 + 879\,955\,876\,800 z^6 + 20\,951\,330\,400 z^5 + 4\,962\,157\,200 z^4 + 3\,648\,645\,000 z^3 + 5\,959\,453\,500 z^2 + 18\,565\,989\,750 z + 102\,112\,943\,625) + \frac{1}{102\,112\,943\,625} (131\,072 e^{-z} \sqrt{\pi} (z^{35/2} + 121 z^{33/2} + 6050 z^{31/2} + 163\,350 z^{29/2} + 2\,613\,600 z^{27/2} + 25\,613\,280 z^{25/2} + 153\,679\,680 z^{23/2} + 548\,856\,000 z^{21/2} + 1\,097\,712\,000 z^{19/2} + 1\,097\,712\,000 z^{17/2} + 439\,084\,800 z^{15/2} + 39\,916\,800 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aflv.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{102\,112\,943\,625} (-131\,072 z^{17} + 15\,794\,176 z^{16} - 785\,154\,048 z^{15} + 21\,025\,767\,424 z^{14} - 332\,430\,336\,000 z^{13} + 3\,200\,570\,265\,600 z^{12} - 18\,686\,050\,437\,120 z^{11} + 63\,863\,198\,530\,560 z^{10} - 118\,451\,012\,359\,680 z^9 + 102\,798\,200\,736\,000 z^8 - 30\,014\,020\,713\,600 z^7 + 879\,955\,876\,800 z^6 - 20\,951\,330\,400 z^5 + 4\,962\,157\,200 z^4 - 3\,648\,645\,000 z^3 + 5\,959\,453\,500 z^2 - 18\,565\,989\,750 z + 102\,112\,943\,625) + \frac{1}{102\,112\,943\,625} (131\,072 e^{-z} \sqrt{\pi} (z^{35/2} - 121 z^{33/2} + 6050 z^{31/2} - 163\,350 z^{29/2} + 2\,613\,600 z^{27/2} - 25\,613\,280 z^{25/2} + 153\,679\,680 z^{23/2} - 548\,856\,000 z^{21/2} + 1\,097\,712\,000 z^{19/2} - 1\,097\,712\,000 z^{17/2} + 439\,084\,800 z^{15/2} - 39\,916\,800 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aflw.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9\,282\,994\,875} (-65\,536 z^{16} - 7\,176\,192 z^{15} - 320\,847\,872 z^{14} - 7\,628\,759\,040 z^{13} - 105\,336\,852\,480 z^{12} - 866\,372\,229\,120 z^{11} - 4\,189\,258\,275\,840 z^{10} - 11\,315\,885\,898\,240 z^9 - 15\,327\,665\,337\,600 z^8 - 8\,260\,681\,968\,000 z^7 - 879\,955\,876\,800 z^6 + 20\,951\,330\,400 z^5 + 1\,654\,052\,400 z^4 + 729\,729\,000 z^3 + 851\,350\,500 z^2 + 2\,062\,887\,750 z + 9\,282\,994\,875) - \frac{1}{9\,282\,994\,875} (65\,536 e^{-z} \sqrt{\pi} (z^{33/2} + 110 z^{31/2} + 4950 z^{29/2} + 118\,800 z^{27/2} + 1\,663\,200 z^{25/2} + 13\,970\,880 z^{23/2} + 69\,854\,400 z^{21/2} + 199\,584\,000 z^{19/2} + 299\,376\,000 z^{17/2} + 199\,584\,000 z^{15/2} + 39\,916\,800 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aflx.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{9\,282\,994\,875} (-65\,536 z^{16} + 7\,176\,192 z^{15} - 320\,847\,872 z^{14} + 7\,628\,759\,040 z^{13} - 105\,336\,852\,480 z^{12} + 866\,372\,229\,120 z^{11} - 4\,189\,258\,275\,840 z^{10} + 11\,315\,885\,898\,240 z^9 - 15\,327\,665\,337\,600 z^8 + 8\,260\,681\,968\,000 z^7 - 879\,955\,876\,800 z^6 - 20\,951\,330\,400 z^5 + 1\,654\,052\,400 z^4 - 729\,729\,000 z^3 + 851\,350\,500 z^2 - 2\,062\,887\,750 z + 9\,282\,994\,875) + \frac{1}{9\,282\,994\,875} (65\,536 e^{-z} \sqrt{\pi} (z^{33/2} - 110 z^{31/2} + 4950 z^{29/2} - 118\,800 z^{27/2} + 1\,663\,200 z^{25/2} - 13\,970\,880 z^{23/2} + 69\,854\,400 z^{21/2} - 199\,584\,000 z^{19/2} + 299\,376\,000 z^{17/2} - 199\,584\,000 z^{15/2} + 39\,916\,800 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.afly.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{1031443875} (32768 z^{15} + 3227648 z^{14} + 128163840 z^{13} + 2662477824 z^{12} + 31428802560 z^{11} +$$

$$214369735680 z^{10} + 821322754560 z^9 + 1629097747200 z^8 + 1390537653120 z^7 + 293318625600 z^6 -$$

$$20951330400 z^5 + 1654052400 z^4 + 243243000 z^3 + 170270100 z^2 + 294698250 z + 1031443875) +$$

$$\frac{1}{1031443875} (32768 e^z \sqrt{\pi} (z^{31/2} + 99 z^{29/2} + 3960 z^{27/2} + 83160 z^{25/2} + 997920 z^{23/2} + 6985440 z^{21/2} +$$

$$27941760 z^{19/2} + 59875200 z^{17/2} + 59875200 z^{15/2} + 19958400 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aflz.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{1031443875} (-32768 z^{15} + 3227648 z^{14} - 128163840 z^{13} + 2662477824 z^{12} - 31428802560 z^{11} +$$

$$214369735680 z^{10} - 821322754560 z^9 + 1629097747200 z^8 - 1390537653120 z^7 + 293318625600 z^6 -$$

$$20951330400 z^5 + 1654052400 z^4 - 243243000 z^3 + 170270100 z^2 - 294698250 z + 1031443875) +$$

$$\frac{1}{1031443875} (32768 e^{-z} \sqrt{\pi} (z^{31/2} - 99 z^{29/2} + 3960 z^{27/2} - 83160 z^{25/2} + 997920 z^{23/2} - 6985440 z^{21/2} +$$

$$27941760 z^{19/2} - 59875200 z^{17/2} + 59875200 z^{15/2} - 19958400 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.afm0.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{147349125} (-16384 z^{14} - 1433600 z^{13} - 49754112 z^{12} - 884148224 z^{11} - 8664376320 z^{10} - 46920384000 z^9 -$$

$$132566649600 z^8 - 167505528960 z^7 - 58663725120 z^6 + 6983776800 z^5 -$$

$$1654052400 z^4 + 243243000 z^3 + 56756700 z^2 + 58939650 z + 147349125) -$$

$$\frac{1}{147349125} (16384 e^z \sqrt{\pi} (z^{29/2} + 88 z^{27/2} + 3080 z^{25/2} + 55440 z^{23/2} + 554400 z^{21/2} +$$

$$3104640 z^{19/2} + 9313920 z^{17/2} + 13305600 z^{15/2} + 6652800 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.afm1.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{147349125} (-16384 z^{14} + 1433600 z^{13} - 49754112 z^{12} + 884148224 z^{11} - 8664376320 z^{10} + 46920384000 z^9 -$$

$$132566649600 z^8 + 167505528960 z^7 - 58663725120 z^6 - 6983776800 z^5 -$$

$$1654052400 z^4 - 243243000 z^3 + 56756700 z^2 - 58939650 z + 147349125) +$$

$$\frac{1}{147349125} (16384 e^{-z} \sqrt{\pi} (z^{29/2} - 88 z^{27/2} + 3080 z^{25/2} - 55440 z^{23/2} + 554400 z^{21/2} -$$

$$3104640 z^{19/2} + 9313920 z^{17/2} - 13305600 z^{15/2} + 6652800 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.afm2.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{29469825} (8192 z^{13} + 626688 z^{12} + 18614272 z^{11} + 274848768 z^{10} + 2141959680 z^9 + 8583348480 z^8 + 15583962240 z^7 + 8380532160 z^6 - 1396755360 z^5 + 551350800 z^4 - 243243000 z^3 + 56756700 z^2 + 19646550 z + 29469825) + \frac{1}{29469825} (8192 e^z \sqrt{\pi} (z^{27/2} + 77 z^{25/2} + 2310 z^{23/2} + 34650 z^{21/2} + 277200 z^{19/2} + 1164240 z^{17/2} + 2328480 z^{15/2} + 1663200 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.afm3.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{29469825} (-8192 z^{13} + 626688 z^{12} - 18614272 z^{11} + 274848768 z^{10} - 2141959680 z^9 + 8583348480 z^8 - 15583962240 z^7 + 8380532160 z^6 + 1396755360 z^5 + 551350800 z^4 + 243243000 z^3 + 56756700 z^2 - 19646550 z + 29469825) + \frac{1}{29469825} (8192 e^{-z} \sqrt{\pi} (z^{27/2} - 77 z^{25/2} + 2310 z^{23/2} - 34650 z^{21/2} + 277200 z^{19/2} - 1164240 z^{17/2} + 2328480 z^{15/2} - 1663200 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.afm4.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{9823275} (-4096 z^{12} - 268288 z^{11} - 6626304 z^{10} - 77916672 z^9 - 450643200 z^8 - 1168997760 z^7 - 931170240 z^6 + 199536480 z^5 - 110270160 z^4 + 81081000 z^3 - 56756700 z^2 + 19646550 z + 9823275) - \frac{1}{9823275} 4096 e^z \sqrt{\pi} (z^{25/2} + 66 z^{23/2} + 1650 z^{21/2} + 19800 z^{19/2} + 118800 z^{17/2} + 332640 z^{15/2} + 332640 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afm5.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{9823275} (-4096 z^{12} + 268288 z^{11} - 6626304 z^{10} + 77916672 z^9 - 450643200 z^8 + 1168997760 z^7 - 931170240 z^6 - 199536480 z^5 - 110270160 z^4 - 81081000 z^3 - 56756700 z^2 - 19646550 z + 9823275) + \frac{1}{9823275} 4096 e^{-z} \sqrt{\pi} (z^{25/2} - 66 z^{23/2} + 1650 z^{21/2} - 19800 z^{19/2} + 118800 z^{17/2} - 332640 z^{15/2} + 332640 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afm6.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{9823275} (2048 z^{11} + 111616 z^{10} + 2198016 z^9 + 19229440 z^8 + 72455040 z^7 + 84651840 z^6 - 22170720 z^5 + 15752880 z^4 - 16216200 z^3 + 18918900 z^2 - 19646550 z + 9823275) + \frac{2048 e^z \sqrt{\pi} (z^{23/2} + 55 z^{21/2} + 1100 z^{19/2} + 9900 z^{17/2} + 39600 z^{15/2} + 55440 z^{13/2}) \operatorname{erf}(\sqrt{z})}{9823275}$$

07.25.03.afm7.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{9823275} (-2048 z^{11} + 111616 z^{10} - 2198016 z^9 + 19229440 z^8 - 72455040 z^7 + 84651840 z^6 + 22170720 z^5 + 15752880 z^4 + 16216200 z^3 + 18918900 z^2 + 19646550 z + 9823275) + \frac{2048 e^{-z} \sqrt{\pi} (z^{23/2} - 55 z^{21/2} + 1100 z^{19/2} - 9900 z^{17/2} + 39600 z^{15/2} - 55440 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{9823275}$$

07.25.03.afm8.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{9823275} (e^z (2048 z^{11} + 101376 z^{10} + 1774080 z^9 + 13305600 z^8 + 39916800 z^7 + 27941760 z^6 - 13970880 z^5 + 14968800 z^4 - 18711000 z^3 + 21829500 z^2 - 19646550 z + 9823275))$$

07.25.03.afm9.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1024 e^z \sqrt{\pi} (z^4 + 44 z^3 + 660 z^2 + 3960 z + 7920) \operatorname{erf}(\sqrt{z}) z^{13/2}}{9823275} + \frac{1}{9823275} (1024 z^{10} + 44544 z^9 + 654080 z^8 + 3748992 z^7 + 6511680 z^6 - 2015520 z^5 + 1750320 z^4 - 2316600 z^3 + 3783780 z^2 - 6548850 z + 9823275)$$

07.25.03.afma.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{9823275} (1024 z^{10} - 44544 z^9 + 654080 z^8 - 3748992 z^7 + 6511680 z^6 + 2015520 z^5 + 1750320 z^4 + 2316600 z^3 + 3783780 z^2 + 6548850 z + 9823275) - \frac{1024 e^{-z} \sqrt{\pi} z^{13/2} (z^4 - 44 z^3 + 660 z^2 - 3960 z + 7920) \operatorname{erfi}(\sqrt{z})}{9823275}$$

07.25.03.afmb.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{9823275 z} (e^z (2048 z^{11} + 78848 z^{10} + 985600 z^9 + 4435200 z^8 + 4435200 z^7 - 3104640 z^6 + 4656960 z^5 - 8316000 z^4 + 14553000 z^3 - 21829500 z^2 + 24012450 z - 14189175)) + \frac{13}{9z}$$

07.25.03.afmc.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{512 e^z \sqrt{\pi} (z^3 + 33 z^2 + 330 z + 990) \operatorname{erf}(\sqrt{z}) z^{13/2}}{3274425} + \frac{1}{3274425} (512 z^9 + 16640 z^8 + 160896 z^7 + 434112 z^6 - 155040 z^5 + 159120 z^4 - 257400 z^3 + 540540 z^2 - 1309770 z + 3274425)$$

07.25.03.afmd.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{512 e^{-z} \sqrt{\pi} (z^3 - 33 z^2 + 330 z - 990) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{3\,274\,425} + \frac{1}{3\,274\,425} (-512 z^9 + 16\,640 z^8 - 160\,896 z^7 + 434\,112 z^6 + 155\,040 z^5 + 159\,120 z^4 + 257\,400 z^3 + 540\,540 z^2 + 1\,309\,770 z + 3\,274\,425)$$

07.25.03.afme.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, 3; z\right) = \frac{26(7z - 15)}{63 z^2} + \frac{1}{9\,823\,275 z^2} (2 e^z (2048 z^{11} + 56\,320 z^{10} + 422\,400 z^9 + 633\,600 z^8 - 633\,600 z^7 + 1\,330\,560 z^6 - 3\,326\,400 z^5 + 8\,316\,000 z^4 - 18\,711\,000 z^3 + 34\,303\,500 z^2 - 44\,594\,550 z + 30\,405\,375))$$

07.25.03.afmf.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{256 e^z \sqrt{\pi} (z^2 + 22 z + 110) \operatorname{erf}(\sqrt{z}) z^{13/2}}{654\,885} + \frac{256 z^8 + 5504 z^7 + 25\,536 z^6 - 10\,336 z^5 + 12\,240 z^4 - 23\,400 z^3 + 60\,060 z^2 - 187\,110 z + 654\,885}{654\,885}$$

07.25.03.afmg.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{256 z^8 - 5504 z^7 + 25\,536 z^6 + 10\,336 z^5 + 12\,240 z^4 + 23\,400 z^3 + 60\,060 z^2 + 187\,110 z + 654\,885}{654\,885} - \frac{256 e^{-z} \sqrt{\pi} z^{13/2} (z^2 - 22 z + 110) \operatorname{erfi}(\sqrt{z})}{654\,885}$$

07.25.03.afmh.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, 4; z\right) = \frac{13(7z^2 - 30z + 102)}{21 z^3} + \frac{1}{3\,274\,425 z^3} (2 e^z (2048 z^{11} + 33\,792 z^{10} + 84\,480 z^9 - 126\,720 z^8 + 380\,160 z^7 - 1\,330\,560 z^6 + 4\,656\,960 z^5 - 14\,968\,800 z^4 + 41\,164\,200 z^3 - 89\,189\,100 z^2 + 133\,783\,650 z - 103\,378\,275))$$

07.25.03.afmi.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{128 e^z \sqrt{\pi} (z + 11) \operatorname{erf}(\sqrt{z}) z^{13/2}}{93\,555} + \frac{128 z^7 + 1344 z^6 - 608 z^5 + 816 z^4 - 1800 z^3 + 5460 z^2 - 20\,790 z + 93\,555}{93\,555}$$

07.25.03.afmj.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{128 e^{-z} \sqrt{\pi} (z - 11) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{93\,555} + \frac{-128 z^7 + 1344 z^6 + 608 z^5 + 816 z^4 + 1800 z^3 + 5460 z^2 + 20\,790 z + 93\,555}{93\,555}$$

07.25.03.afmk.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = \frac{52(7z^3 - 45z^2 + 306z - 1938)}{63z^4} + \frac{1}{3274425z^4} (8e^z(2048z^{11} + 11264z^{10} - 28160z^9 + 126720z^8 - 633600z^7 + 3104640z^6 - 13970880z^5 + 54885600z^4 - 178378200z^3 + 445945500z^2 - 758107350z + 654729075))$$

07.25.03.afml.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{64e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{13/2}}{10395} + \frac{64z^6 - 32z^5 + 48z^4 - 120z^3 + 420z^2 - 1890z + 10395}{10395}$$

07.25.03.afmm.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{64z^6 + 32z^5 + 48z^4 + 120z^3 + 420z^2 + 1890z + 10395}{10395} - \frac{64e^{-z}\sqrt{\pi}z^{13/2}\operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.afmn.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \frac{65(7z^4 - 60z^3 + 612z^2 - 7752z + 162792)}{63z^5} + \frac{1}{654885z^5} (8e^z(2048z^{11} - 11264z^{10} + 84480z^9 - 633600z^8 + 4435200z^7 - 27941760z^6 + 153679680z^5 - 713512800z^4 + 2675673000z^3 - 7581073500z^2 + 14404039650z - 13749310575))$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = -\frac{9}{2}$

07.25.03.afmo.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{843908625} (32768z^{15} + 3260416z^{14} + 131096576z^{13} + 2767196160z^{12} + 33359677440z^{11} + 234262133760z^{10} + 937077880320z^9 + 1995356401920z^8 + 1960837200000z^7 + 642138840000z^6 + 20951330400z^5 + 551350800z^4 + 145945800z^3 + 121621500z^2 + 229209750z + 843908625) + \frac{1}{843908625} (32768e^z\sqrt{\pi}(z^{31/2} + 100z^{29/2} + 4050z^{27/2} + 86400z^{25/2} + 1058400z^{23/2} + 7620480z^{21/2} + 31752000z^{19/2} + 72576000z^{17/2} + 81648000z^{15/2} + 36288000z^{13/2} + 3628800z^{11/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.afmp.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{843908625} (-32768z^{15} + 3260416z^{14} - 131096576z^{13} + 2767196160z^{12} - 33359677440z^{11} + 234262133760z^{10} - 937077880320z^9 + 1995356401920z^8 - 1960837200000z^7 + 642138840000z^6 - 20951330400z^5 + 551350800z^4 - 145945800z^3 + 121621500z^2 - 229209750z + 843908625) + \frac{1}{843908625} (32768e^{-z}\sqrt{\pi}(z^{31/2} - 100z^{29/2} + 4050z^{27/2} - 86400z^{25/2} + 1058400z^{23/2} - 7620480z^{21/2} + 31752000z^{19/2} - 72576000z^{17/2} + 81648000z^{15/2} - 36288000z^{13/2} + 3628800z^{11/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.afmq.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{93767625} \left(-16384 z^{14} - 1466368 z^{13} - 52359168 z^{12} - 965437440 z^{11} - 9946199040 z^{10} - 57877562880 z^9 - 183129327360 z^8 - 285149773440 z^7 - 174410107200 z^6 - 20951330400 z^5 + 551350800 z^4 + 48648600 z^3 + 24324300 z^2 + 32744250 z + 93767625 \right) - \frac{1}{93767625} \left(16384 e^z \sqrt{\pi} \left(z^{29/2} + 90 z^{27/2} + 3240 z^{25/2} + 60480 z^{23/2} + 635040 z^{21/2} + 3810240 z^{19/2} + 12700800 z^{17/2} + 21772800 z^{15/2} + 16329600 z^{13/2} + 3628800 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.afmr.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{93767625} \left(-16384 z^{14} + 1466368 z^{13} - 52359168 z^{12} + 965437440 z^{11} - 9946199040 z^{10} + 57877562880 z^9 - 183129327360 z^8 + 285149773440 z^7 - 174410107200 z^6 + 20951330400 z^5 + 551350800 z^4 - 48648600 z^3 + 24324300 z^2 - 32744250 z + 93767625 \right) + \frac{1}{93767625} \left(16384 e^{-z} \sqrt{\pi} \left(z^{29/2} - 90 z^{27/2} + 3240 z^{25/2} - 60480 z^{23/2} + 635040 z^{21/2} - 3810240 z^{19/2} + 12700800 z^{17/2} - 21772800 z^{15/2} + 16329600 z^{13/2} - 3628800 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.afms.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{13395375} \left(8192 z^{13} + 651264 z^{12} + 20322304 z^{11} + 320455680 z^{10} + 2739294720 z^9 + 12640669440 z^8 + 29411061120 z^7 + 28936595520 z^6 + 6983776800 z^5 - 551350800 z^4 + 48648600 z^3 + 8108100 z^2 + 6548850 z + 13395375 \right) + \frac{1}{13395375} \left(8192 e^z \sqrt{\pi} \left(z^{27/2} + 80 z^{25/2} + 2520 z^{23/2} + 40320 z^{21/2} + 352800 z^{19/2} + 1693440 z^{17/2} + 4233600 z^{15/2} + 4838400 z^{13/2} + 1814400 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.afmt.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{13395375} \left(-8192 z^{13} + 651264 z^{12} - 20322304 z^{11} + 320455680 z^{10} - 2739294720 z^9 + 12640669440 z^8 - 29411061120 z^7 + 28936595520 z^6 - 6983776800 z^5 - 551350800 z^4 - 48648600 z^3 + 8108100 z^2 - 6548850 z + 13395375 \right) + \frac{1}{13395375} \left(8192 e^{-z} \sqrt{\pi} \left(z^{27/2} - 80 z^{25/2} + 2520 z^{23/2} - 40320 z^{21/2} + 352800 z^{19/2} - 1693440 z^{17/2} + 4233600 z^{15/2} - 4838400 z^{13/2} + 1814400 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.afmu.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{2679075} (-4096 z^{12} - 284672 z^{11} - 7601152 z^{10} - 99555840 z^9 - 676220160 z^8 - 2304516480 z^7 - 3426010560 z^6 - 1396755360 z^5 + 183783600 z^4 - 48648600 z^3 + 8108100 z^2 + 2182950 z + 2679075) - \frac{1}{2679075} (4096 e^z \sqrt{\pi} (z^{25/2} + 70 z^{23/2} + 1890 z^{21/2} + 25200 z^{19/2} + 176400 z^{17/2} + 635040 z^{15/2} + 1058400 z^{13/2} + 604800 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.afmv.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{2679075} (-4096 z^{12} + 284672 z^{11} - 7601152 z^{10} + 99555840 z^9 - 676220160 z^8 + 2304516480 z^7 - 3426010560 z^6 + 1396755360 z^5 + 183783600 z^4 + 48648600 z^3 + 8108100 z^2 - 2182950 z + 2679075) + \frac{1}{2679075} (4096 e^{-z} \sqrt{\pi} (z^{25/2} - 70 z^{23/2} + 1890 z^{21/2} - 25200 z^{19/2} + 176400 z^{17/2} - 635040 z^{15/2} + 1058400 z^{13/2} - 604800 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.afmw.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{893025} (2048 z^{11} + 121856 z^{10} + 2704896 z^9 + 28197120 z^8 + 141939840 z^7 + 311855040 z^6 + 199536480 z^5 - 36756720 z^4 + 16216200 z^3 - 8108100 z^2 + 2182950 z + 893025) + \frac{1}{893025} 2048 e^z \sqrt{\pi} (z^{23/2} + 60 z^{21/2} + 1350 z^{19/2} + 14400 z^{17/2} + 75600 z^{15/2} + 181440 z^{13/2} + 151200 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afmx.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{893025} (-2048 z^{11} + 121856 z^{10} - 2704896 z^9 + 28197120 z^8 - 141939840 z^7 + 311855040 z^6 - 199536480 z^5 - 36756720 z^4 - 16216200 z^3 - 8108100 z^2 - 2182950 z + 893025) + \frac{1}{893025} 2048 e^{-z} \sqrt{\pi} (z^{23/2} - 60 z^{21/2} + 1350 z^{19/2} - 14400 z^{17/2} + 75600 z^{15/2} - 181440 z^{13/2} + 151200 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afmy.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{893025} (-1024 z^{10} - 50688 z^9 - 896768 z^8 - 6948480 z^7 - 22720320 z^6 - 22170720 z^5 + 5250960 z^4 - 3243240 z^3 + 2702700 z^2 - 2182950 z + 893025) - \frac{1024 e^z \sqrt{\pi} (z^{21/2} + 50 z^{19/2} + 900 z^{17/2} + 7200 z^{15/2} + 25200 z^{13/2} + 30240 z^{11/2}) \operatorname{erf}(\sqrt{z})}{893025}$$

07.25.03.afmz.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{893025} \left(-1024 z^{10} + 50688 z^9 - 896768 z^8 + 6948480 z^7 - 22720320 z^6 + 22170720 z^5 + 5250960 z^4 + 3243240 z^3 + 2702700 z^2 + 2182950 z + 893025 \right) + \frac{1024 e^{-z} \sqrt{\pi} \left(z^{21/2} - 50 z^{19/2} + 900 z^{17/2} - 7200 z^{15/2} + 25200 z^{13/2} - 30240 z^{11/2} \right) \operatorname{erfi}(\sqrt{z})}{893025}$$

07.25.03.afn0.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, 1; z\right) = -\frac{1}{893025} \left(e^z \left(1024 z^{10} + 46080 z^9 + 725760 z^8 + 4838400 z^7 + 12700800 z^6 + 7620480 z^5 - 3175200 z^4 + 2721600 z^3 - 2551500 z^2 + 1984500 z - 893025 \right) \right)$$

07.25.03.afn1.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{893025} \left(-512 z^9 - 20224 z^8 - 266624 z^7 - 1350720 z^6 - 2015520 z^5 + 583440 z^4 - 463320 z^3 + 540540 z^2 - 727650 z + 893025 \right) - \frac{512 e^z \sqrt{\pi} z^{11/2} \left(z^4 + 40 z^3 + 540 z^2 + 2880 z + 5040 \right) \operatorname{erf}(\sqrt{z})}{893025}$$

07.25.03.afn2.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{893025} \left(512 z^9 - 20224 z^8 + 266624 z^7 - 1350720 z^6 + 2015520 z^5 + 583440 z^4 + 463320 z^3 + 540540 z^2 + 727650 z + 893025 \right) - \frac{512 e^{-z} \sqrt{\pi} z^{11/2} \left(z^4 - 40 z^3 + 540 z^2 - 2880 z + 5040 \right) \operatorname{erfi}(\sqrt{z})}{893025}$$

07.25.03.afn3.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{893025 z} \left(e^z \left(-1024 z^{10} - 35840 z^9 - 403200 z^8 - 1612800 z^7 - 1411200 z^6 + 846720 z^5 - 1058400 z^4 + 1512000 z^3 - 1984500 z^2 + 1984500 z - 1091475 \right) \right) + \frac{11}{9z}$$

07.25.03.afn4.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{297675} \left(-256 z^8 - 7552 z^7 - 65472 z^6 - 155040 z^5 + 53040 z^4 - 51480 z^3 + 77220 z^2 - 145530 z + 297675 \right) - \frac{256 e^z \sqrt{\pi} z^{11/2} \left(z^3 + 30 z^2 + 270 z + 720 \right) \operatorname{erf}(\sqrt{z})}{297675}$$

07.25.03.afn5.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{256 e^{-z} \sqrt{\pi} (z^3 - 30z^2 + 270z - 720) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{297675} + \frac{1}{297675} (-256z^8 + 7552z^7 - 65472z^6 + 155040z^5 + 53040z^4 + 51480z^3 + 77220z^2 + 145530z + 297675)$$

07.25.03.afn6.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, 3; z\right) = \frac{22(7z - 13)}{63z^2} - \frac{1}{893025z^2} (2e^z (1024z^{10} + 25600z^9 + 172800z^8 + 230400z^7 - 201600z^6 + 362880z^5 - 756000z^4 + 1512000z^3 - 2551500z^2 + 3118500z - 2027025))$$

07.25.03.afn7.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-128z^7 - 2496z^6 - 10336z^5 + 4080z^4 - 4680z^3 + 8580z^2 - 20790z + 59535}{59535} - \frac{128 e^z \sqrt{\pi} z^{11/2} (z^2 + 20z + 90) \operatorname{erf}(\sqrt{z})}{59535}$$

07.25.03.afn8.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{128z^7 - 2496z^6 + 10336z^5 + 4080z^4 + 4680z^3 + 8580z^2 + 20790z + 59535}{59535} - \frac{128 e^{-z} \sqrt{\pi} z^{11/2} (z^2 - 20z + 90) \operatorname{erfi}(\sqrt{z})}{59535}$$

07.25.03.afn9.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = \frac{11(7z^2 - 26z + 78)}{21z^3} - \frac{1}{297675z^3} (2e^z (1024z^{10} + 15360z^9 + 34560z^8 - 46080z^7 + 120960z^6 - 362880z^5 + 1058400z^4 - 2721600z^3 + 5613300z^2 - 8108100z + 6081075))$$

07.25.03.afna.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-64z^6 - 608z^5 + 272z^4 - 360z^3 + 780z^2 - 2310z + 8505}{8505} - \frac{64 e^z \sqrt{\pi} z^{11/2} (z + 10) \operatorname{erf}(\sqrt{z})}{8505}$$

07.25.03.afnb.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{64 e^{-z} \sqrt{\pi} (z - 10) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{8505} + \frac{-64z^6 + 608z^5 + 272z^4 + 360z^3 + 780z^2 + 2310z + 8505}{8505}$$

07.25.03.afnc.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, 5; z\right) = \frac{44(7z^3 - 39z^2 + 234z - 1326)}{63z^4} - \frac{1}{297675z^4} (8e^z (1024z^{10} + 5120z^9 - 11520z^8 + 46080z^7 - 201600z^6 + 846720z^5 - 3175200z^4 + 9979200z^3 - 24324300z^2 + 40540500z - 34459425))$$

$$07.25.03.afnd.01$$

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{945} (-32z^5 + 16z^4 - 24z^3 + 60z^2 - 210z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

$$07.25.03.afne.01$$

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{945} (32z^5 + 16z^4 + 24z^3 + 60z^2 + 210z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

$$07.25.03.afnf.01$$

$${}_2F_2\left(1, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = \frac{55(7z^4 - 52z^3 + 468z^2 - 5304z + 100776)}{63z^5} - \frac{1}{59535z^5} (8e^z(1024z^{10} - 5120z^9 + 34560z^8 - 230400z^7 + 1411200z^6 - 7620480z^5 + 34927200z^4 - 129729600z^3 + 364864500z^2 - 689188500z + 654729075))$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = -\frac{7}{2}$

$$07.25.03.afng.01$$

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{10418625} (8192z^{13} + 659456z^{12} + 20908032z^{11} + 336681984z^{10} + 2962675200z^9 + 14270480640z^8 + 35626421376z^7 + 40300424640z^6 + 15005904480z^5 + 551350800z^4 + 16216200z^3 + 4864860z^2 + 4677750z + 10418625) + \frac{1}{10418625} (8192e^z \sqrt{\pi} (z^{27/2} + 81z^{25/2} + 2592z^{23/2} + 42336z^{21/2} + 381024z^{19/2} + 1905120z^{17/2} + 5080320z^{15/2} + 6531840z^{13/2} + 3265920z^{11/2} + 362880z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

$$07.25.03.afnh.01$$

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{10418625} (-8192z^{13} + 659456z^{12} - 20908032z^{11} + 336681984z^{10} - 2962675200z^9 + 14270480640z^8 - 35626421376z^7 + 40300424640z^6 - 15005904480z^5 + 551350800z^4 - 16216200z^3 + 4864860z^2 - 4677750z + 10418625) + \frac{1}{10418625} (8192e^{-z} \sqrt{\pi} (z^{27/2} - 81z^{25/2} + 2592z^{23/2} - 42336z^{21/2} + 381024z^{19/2} - 1905120z^{17/2} + 5080320z^{15/2} - 6531840z^{13/2} + 3265920z^{11/2} - 362880z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

$$07.25.03.afni.01$$

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{1488375} (-4096z^{12} - 292864z^{11} - 8113152z^{10} - 111690240z^9 - 814905600z^8 - 3107680128z^7 - 5681914560z^6 - 4011063840z^5 - 551350800z^4 + 16216200z^3 + 1621620z^2 + 935550z + 1488375) - \frac{1}{1488375} (4096e^z \sqrt{\pi} (z^{25/2} + 72z^{23/2} + 2016z^{21/2} + 28224z^{19/2} + 211680z^{17/2} + 846720z^{15/2} + 1693440z^{13/2} + 1451520z^{11/2} + 362880z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.afnj.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{1488375} (-4096 z^{12} + 292864 z^{11} - 8113152 z^{10} + 111690240 z^9 - 814905600 z^8 + 3107680128 z^7 -$$

$$5681914560 z^6 + 4011063840 z^5 - 551350800 z^4 - 16216200 z^3 + 1621620 z^2 - 935550 z + 1488375) +$$

$$\frac{1}{1488375} (4096 e^{-z} \sqrt{\pi} (z^{25/2} - 72 z^{23/2} + 2016 z^{21/2} - 28224 z^{19/2} + 211680 z^{17/2} -$$

$$846720 z^{15/2} + 1693440 z^{13/2} - 1451520 z^{11/2} + 362880 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.afnk.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{297675} (2048 z^{11} + 128000 z^{10} + 3033600 z^9 + 34671360 z^8 + 200790912 z^7 + 563976000 z^6 + 653577120 z^5 +$$

$$183783600 z^4 - 16216200 z^3 + 1621620 z^2 + 311850 z + 297675) + \frac{1}{297675} (2048 e^z \sqrt{\pi}$$

$$(z^{23/2} + 63 z^{21/2} + 1512 z^{19/2} + 17640 z^{17/2} + 105840 z^{15/2} + 317520 z^{13/2} + 423360 z^{11/2} + 181440 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.afnl.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{297675} (-2048 z^{11} + 128000 z^{10} - 3033600 z^9 + 34671360 z^8 - 200790912 z^7 + 563976000 z^6 - 653577120 z^5 +$$

$$183783600 z^4 + 16216200 z^3 + 1621620 z^2 - 311850 z + 297675) + \frac{1}{297675} (2048 e^{-z} \sqrt{\pi}$$

$$(z^{23/2} - 63 z^{21/2} + 1512 z^{19/2} - 17640 z^{17/2} + 105840 z^{15/2} - 317520 z^{13/2} + 423360 z^{11/2} - 181440 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.afnm.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{99225} (-1024 z^{10} - 54784 z^9 - 1079040 z^8 - 9808512 z^7 - 42020160 z^6 - 75673440 z^5 - 36756720 z^4 +$$

$$5405400 z^3 - 1621620 z^2 + 311850 z + 99225) -$$

$$\frac{1}{99225} 1024 e^z \sqrt{\pi} (z^{21/2} + 54 z^{19/2} + 1080 z^{17/2} + 10080 z^{15/2} + 45360 z^{13/2} + 90720 z^{11/2} + 60480 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afnn.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{99225} (-1024 z^{10} + 54784 z^9 - 1079040 z^8 + 9808512 z^7 - 42020160 z^6 + 75673440 z^5 - 36756720 z^4 -$$

$$5405400 z^3 - 1621620 z^2 - 311850 z + 99225) +$$

$$\frac{1}{99225} 1024 e^{-z} \sqrt{\pi} (z^{21/2} - 54 z^{19/2} + 1080 z^{17/2} - 10080 z^{15/2} + 45360 z^{13/2} - 90720 z^{11/2} + 60480 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afno.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{99225} (512 z^9 + 22784 z^8 + 357504 z^7 + 2412480 z^6 + 6687840 z^5 + 5250960 z^4 - 1081080 z^3 + 540540 z^2 - 311850 z + 99225) + \frac{512 e^z \sqrt{\pi} (z^{19/2} + 45 z^{17/2} + 720 z^{15/2} + 5040 z^{13/2} + 15120 z^{11/2} + 15120 z^{9/2}) \operatorname{erf}(\sqrt{z})}{99225}$$

07.25.03.afnp.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{99225} (-512 z^9 + 22784 z^8 - 357504 z^7 + 2412480 z^6 - 6687840 z^5 + 5250960 z^4 + 1081080 z^3 + 540540 z^2 + 311850 z + 99225) + \frac{512 e^{-z} \sqrt{\pi} (z^{19/2} - 45 z^{17/2} + 720 z^{15/2} - 5040 z^{13/2} + 15120 z^{11/2} - 15120 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{99225}$$

07.25.03.afnq.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{99225} (e^z (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + 408240 z^2 - 255150 z + 99225))$$

07.25.03.afnr.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{256 e^z \sqrt{\pi} (z^4 + 36 z^3 + 432 z^2 + 2016 z + 3024) \operatorname{erf}(\sqrt{z}) z^{9/2}}{99225} + \frac{1}{99225} (256 z^8 + 9088 z^7 + 106176 z^6 + 467232 z^5 + 583440 z^4 - 154440 z^3 + 108108 z^2 - 103950 z + 99225)$$

07.25.03.afns.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{99225} (256 z^8 - 9088 z^7 + 106176 z^6 - 467232 z^5 + 583440 z^4 + 154440 z^3 + 108108 z^2 + 103950 z + 99225) - \frac{256 e^{-z} \sqrt{\pi} z^{9/2} (z^4 - 36 z^3 + 432 z^2 - 2016 z + 3024) \operatorname{erfi}(\sqrt{z})}{99225}$$

07.25.03.afnt.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{99225 z} (e^z (512 z^9 + 16128 z^8 + 161280 z^7 + 564480 z^6 + 423360 z^5 - 211680 z^4 + 211680 z^3 - 226800 z^2 + 198450 z - 99225)) + \frac{1}{z}$$

07.25.03.afnu.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{128 e^z \sqrt{\pi} (z^3 + 27 z^2 + 216 z + 504) \operatorname{erf}(\sqrt{z}) z^{9/2}}{33075} + \frac{128 z^7 + 3392 z^6 + 26016 z^5 + 53040 z^4 - 17160 z^3 + 15444 z^2 - 20790 z + 33075}{33075}$$

07.25.03.afnv.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{128 e^{-z} \sqrt{\pi} (z^3 - 27 z^2 + 216 z - 504) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{33075} + \frac{-128 z^7 + 3392 z^6 - 26016 z^5 + 53040 z^4 + 17160 z^3 + 15444 z^2 + 20790 z + 33075}{33075}$$

07.25.03.afnw.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, 3; z\right) = \frac{2(7z - 11)}{7z^2} + \frac{1}{99225z^2} (2 e^z (512 z^9 + 11520 z^8 + 69120 z^7 + 80640 z^6 - 60480 z^5 + 90720 z^4 - 151200 z^3 + 226800 z^2 - 255150 z + 155925))$$

07.25.03.afnx.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{64 e^z \sqrt{\pi} (z^2 + 18z + 72) \operatorname{erf}(\sqrt{z}) z^{9/2}}{6615} + \frac{64 z^6 + 1120 z^5 + 4080 z^4 - 1560 z^3 + 1716 z^2 - 2970 z + 6615}{6615}$$

07.25.03.afny.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{64 z^6 - 1120 z^5 + 4080 z^4 + 1560 z^3 + 1716 z^2 + 2970 z + 6615}{6615} - \frac{64 e^{-z} \sqrt{\pi} z^{9/2} (z^2 - 18z + 72) \operatorname{erfi}(\sqrt{z})}{6615}$$

07.25.03.afnz.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = \frac{3(35z^2 - 110z + 286)}{35z^3} + \frac{1}{33075z^3} (2 e^z (512 z^9 + 6912 z^8 + 13824 z^7 - 16128 z^6 + 36288 z^5 - 90720 z^4 + 211680 z^3 - 408240 z^2 + 561330 z - 405405))$$

07.25.03.fo0.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{32}{945} e^z \sqrt{\pi} (z + 9) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{945} (32 z^5 + 272 z^4 - 120 z^3 + 156 z^2 - 330 z + 945)$$

07.25.03.fo1.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{32}{945} e^{-z} \sqrt{\pi} (z - 9) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{945} (-32 z^5 + 272 z^4 + 120 z^3 + 156 z^2 + 330 z + 945)$$

07.25.03.fo2.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = \frac{4(35z^3 - 165z^2 + 858z - 4290)}{35z^4} + \frac{1}{33075z^4} (8 e^z (512 z^9 + 2304 z^8 - 4608 z^7 + 16128 z^6 - 60480 z^5 + 211680 z^4 - 635040 z^3 + 1496880 z^2 - 2432430 z + 2027025))$$

$$\begin{aligned}
 & \text{07.25.03.af03.01} \\
 {}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) &= \frac{16}{105} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16z^4 - 8z^3 + 12z^2 - 30z + 105)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.af04.01} \\
 {}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) &= \frac{1}{105} (16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.af05.01} \\
 {}_2F_2\left(1, \frac{11}{2}; -\frac{7}{2}, 6; z\right) &= \\
 & \frac{35z^4 - 220z^3 + 1716z^2 - 17160z + 291720}{7z^5} + \frac{1}{6615z^5} (8e^z (512z^9 - 2304z^8 + 13824z^7 - 80640z^6 + \\
 & 423360z^5 - 1905120z^4 + 6985440z^3 - 19459440z^2 + 36486450z - 34459425))
 \end{aligned}$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = -\frac{5}{2}$

$$\begin{aligned}
 & \text{07.25.03.af06.01} \\
 {}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) &= \\
 & \frac{1}{212625} (2048z^{11} + 130048z^{10} + 3147264z^9 + 37024000z^8 + 223753344z^7 + 673960896z^6 + 896619360z^5 + \\
 & 386200080z^4 + 16216200z^3 + 540540z^2 + 187110z + 212625) + \\
 & \frac{1}{212625} (2048e^z \sqrt{\pi} (z^{23/2} + 64z^{21/2} + 1568z^{19/2} + 18816z^{17/2} + 117600z^{15/2} + \\
 & 376320z^{13/2} + 564480z^{11/2} + 322560z^{9/2} + 40320z^{7/2}) \operatorname{erf}(\sqrt{z}))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.af07.01} \\
 {}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) &= \\
 & \frac{1}{212625} (-2048z^{11} + 130048z^{10} - 3147264z^9 + 37024000z^8 - 223753344z^7 + 673960896z^6 - \\
 & 896619360z^5 + 386200080z^4 - 16216200z^3 + 540540z^2 - 187110z + 212625) + \\
 & \frac{1}{212625} (2048e^{-z} \sqrt{\pi} (z^{23/2} - 64z^{21/2} + 1568z^{19/2} - 18816z^{17/2} + 117600z^{15/2} - \\
 & 376320z^{13/2} + 564480z^{11/2} - 322560z^{9/2} + 40320z^{7/2}) \operatorname{erfi}(\sqrt{z}))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.af08.01} \\
 {}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) &= \\
 & \frac{1}{42525} (-1024z^{10} - 56832z^9 - 1176320z^8 - 11481216z^7 - 54992448z^6 - 121521120z^5 - 101208240z^4 - \\
 & 16216200z^3 + 540540z^2 + 62370z + 42525) - \frac{1}{42525} \\
 & (1024e^z \sqrt{\pi} (z^{21/2} + 56z^{19/2} + 1176z^{17/2} + 11760z^{15/2} + 58800z^{13/2} + 141120z^{11/2} + 141120z^{9/2} + 40320z^{7/2}) \operatorname{erf}(\sqrt{z}))
 \end{aligned}$$

07.25.03.af09.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{42525} (-1024 z^{10} + 56832 z^9 - 1176320 z^8 + 11481216 z^7 - 54992448 z^6 + 121521120 z^5 - 101208240 z^4 + 16216200 z^3 + 540540 z^2 - 62370 z + 42525) + \frac{1}{42525} (1024 e^{-z} \sqrt{\pi} (z^{21/2} - 56 z^{19/2} + 1176 z^{17/2} - 11760 z^{15/2} + 58800 z^{13/2} - 141120 z^{11/2} + 141120 z^{9/2} - 40320 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.af0a.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{14175} (512 z^9 + 24320 z^8 + 418176 z^7 + 3243072 z^6 + 11461920 z^5 + 16112880 z^4 + 5405400 z^3 - 540540 z^2 + 62370 z + 14175) + \frac{1}{14175} 512 e^z \sqrt{\pi} (z^{19/2} + 48 z^{17/2} + 840 z^{15/2} + 6720 z^{13/2} + 25200 z^{11/2} + 40320 z^{9/2} + 20160 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.af0b.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{14175} (-512 z^9 + 24320 z^8 - 418176 z^7 + 3243072 z^6 - 11461920 z^5 + 16112880 z^4 - 5405400 z^3 - 540540 z^2 - 62370 z + 14175) + \frac{1}{14175} 512 e^{-z} \sqrt{\pi} (z^{19/2} - 48 z^{17/2} + 840 z^{15/2} - 6720 z^{13/2} + 25200 z^{11/2} - 40320 z^{9/2} + 20160 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af0c.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{14175} (-256 z^8 - 10112 z^7 - 138432 z^6 - 795680 z^5 - 1810320 z^4 - 1081080 z^3 + 180180 z^2 - 62370 z + 14175) - \frac{256 e^z \sqrt{\pi} (z^{17/2} + 40 z^{15/2} + 560 z^{13/2} + 3360 z^{11/2} + 8400 z^{9/2} + 6720 z^{7/2}) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.af0d.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{14175} (-256 z^8 + 10112 z^7 - 138432 z^6 + 795680 z^5 - 1810320 z^4 + 1081080 z^3 + 180180 z^2 + 62370 z + 14175) + \frac{256 e^{-z} \sqrt{\pi} (z^{17/2} - 40 z^{15/2} + 560 z^{13/2} - 3360 z^{11/2} + 8400 z^{9/2} - 6720 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.af0e.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, 1; z\right) = -\frac{1}{14175} e^z (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175)$$

07.25.03.afof.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{-128 z^7 - 4032 z^6 - 41\,056 z^5 - 153\,360 z^4 - 154\,440 z^3 + 36\,036 z^2 - 20\,790 z + 14\,175}{14\,175} - \frac{128 e^z \sqrt{\pi} z^{7/2} (z^4 + 32 z^3 + 336 z^2 + 1344 z + 1680) \operatorname{erf}(\sqrt{z})}{14\,175}$$

07.25.03.afog.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{128 z^7 - 4032 z^6 + 41\,056 z^5 - 153\,360 z^4 + 154\,440 z^3 + 36\,036 z^2 + 20\,790 z + 14\,175}{14\,175} - \frac{128 e^{-z} \sqrt{\pi} z^{7/2} (z^4 - 32 z^3 + 336 z^2 - 1344 z + 1680) \operatorname{erfi}(\sqrt{z})}{14\,175}$$

07.25.03.afoh.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{14\,175 z} e^z (-256 z^8 - 7168 z^7 - 62\,720 z^6 - 188\,160 z^5 - 117\,600 z^4 + 47\,040 z^3 - 35\,280 z^2 + 25\,200 z - 11\,025) + \frac{7}{9 z}$$

07.25.03.afoi.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-64 z^6 - 1504 z^5 - 10\,032 z^4 - 17\,160 z^3 + 5148 z^2 - 4158 z + 4725}{4725} - \frac{64 e^z \sqrt{\pi} z^{7/2} (z^3 + 24 z^2 + 168 z + 336) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.afoj.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{64 e^{-z} \sqrt{\pi} (z^3 - 24 z^2 + 168 z - 336) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{4725} + \frac{-64 z^6 + 1504 z^5 - 10\,032 z^4 + 17\,160 z^3 + 5148 z^2 + 4158 z + 4725}{4725}$$

07.25.03.afok.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = \frac{2(7z-9)}{9z^2} - \frac{1}{14\,175 z^2} {}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = \frac{2 e^z (256 z^8 + 5120 z^7 + 26\,880 z^6 + 26\,880 z^5 - 16\,800 z^4 + 20\,160 z^3 - 25\,200 z^2 + 25\,200 z - 14\,175)}{14\,175 z^2}$$

07.25.03.afol.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{945} (-32 z^5 - 496 z^4 - 1560 z^3 + 572 z^2 - 594 z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{7/2} (z^2 + 16 z + 56) \operatorname{erf}(\sqrt{z})$$

07.25.03.afom.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{945} (32 z^5 - 496 z^4 + 1560 z^3 + 572 z^2 + 594 z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{7/2} (z^2 - 16 z + 56) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afon.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = \frac{35z^2 - 90z + 198}{15z^3} - \frac{2e^z(256z^8 + 3072z^7 + 5376z^6 - 5376z^5 + 10080z^4 - 20160z^3 + 35280z^2 - 45360z + 31185)}{4725z^3}$$

07.25.03.afoo.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{135}(-16z^4 - 120z^3 + 52z^2 - 66z + 135) - \frac{16}{135}e^z\sqrt{\pi}z^{7/2}(z+8)\operatorname{erf}(\sqrt{z})$$

07.25.03.afop.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{16}{135}e^{-z}\sqrt{\pi}(z-8)\operatorname{erfi}(\sqrt{z})z^{7/2} + \frac{1}{135}(-16z^4 + 120z^3 + 52z^2 + 66z + 135)$$

07.25.03.afoc.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, 5; z\right) = \frac{4(35z^3 - 135z^2 + 594z - 2574)}{45z^4} - \frac{1}{4725z^4}8e^z(256z^8 + 1024z^7 - 1792z^6 + 5376z^5 - 16800z^4 + 47040z^3 - 105840z^2 + 166320z - 135135)$$

07.25.03.afor.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{15}(-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15}e^z\sqrt{\pi}z^{7/2}\operatorname{erf}(\sqrt{z})$$

07.25.03.afos.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{15}(8z^3 + 4z^2 + 6z + 15) - \frac{8}{15}e^{-z}\sqrt{\pi}z^{7/2}\operatorname{erfi}(\sqrt{z})$$

07.25.03.afot.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{5}{2}, 6; z\right) = \frac{35z^4 - 180z^3 + 1188z^2 - 10296z + 154440}{9z^5} - \frac{1}{945z^5}8e^z(256z^8 - 1024z^7 + 5376z^6 - 26880z^5 + 117600z^4 - 423360z^3 + 1164240z^2 - 2162160z + 2027025)$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = -\frac{3}{2}$

07.25.03.afou.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{8505}(512z^9 + 24832z^8 + 439424z^7 + 3555264z^6 + 13466208z^5 + 21693840z^4 + 11055240z^3 + 540540z^2 + 20790z + 8505) + \frac{1}{8505}512e^z\sqrt{\pi}(z^{19/2} + 49z^{17/2} + 882z^{15/2} + 7350z^{13/2} + 29400z^{11/2} + 52920z^{9/2} + 35280z^{7/2} + 5040z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.afov.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{8505}(-512z^9 + 24832z^8 - 439424z^7 + 3555264z^6 - 13466208z^5 + 21693840z^4 - 11055240z^3 + 540540z^2 - 20790z + 8505) + \frac{1}{8505}512e^{-z}\sqrt{\pi}(z^{19/2} - 49z^{17/2} + 882z^{15/2} - 7350z^{13/2} + 29400z^{11/2} - 52920z^{9/2} + 35280z^{7/2} - 5040z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.afow.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{2835} (-256 z^8 - 10624 z^7 - 156096 z^6 - 1002144 z^5 - 2790480 z^4 - 2824920 z^3 - 540540 z^2 + 20790 z + 2835) - \frac{1}{2835} 256 e^z \sqrt{\pi} (z^{17/2} + 42 z^{15/2} + 630 z^{13/2} + 4200 z^{11/2} + 12600 z^{9/2} + 15120 z^{7/2} + 5040 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afox.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2835} (-256 z^8 + 10624 z^7 - 156096 z^6 + 1002144 z^5 - 2790480 z^4 + 2824920 z^3 - 540540 z^2 - 20790 z + 2835) + \frac{1}{2835} 256 e^{-z} \sqrt{\pi} (z^{17/2} - 42 z^{15/2} + 630 z^{13/2} - 4200 z^{11/2} + 12600 z^{9/2} - 15120 z^{7/2} + 5040 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afoy.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{128 z^7 + 4416 z^6 + 51616 z^5 + 245040 z^4 + 435960 z^3 + 180180 z^2 - 20790 z + 2835}{2835} + \frac{128 e^z \sqrt{\pi} (z^{15/2} + 35 z^{13/2} + 420 z^{11/2} + 2100 z^{9/2} + 4200 z^{7/2} + 2520 z^{5/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.afoz.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{-128 z^7 + 4416 z^6 - 51616 z^5 + 245040 z^4 - 435960 z^3 + 180180 z^2 + 20790 z + 2835}{2835} + \frac{128 e^{-z} \sqrt{\pi} (z^{15/2} - 35 z^{13/2} + 420 z^{11/2} - 2100 z^{9/2} + 4200 z^{7/2} - 2520 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.afp0.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \frac{e^z (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835)}{2835}$$

07.25.03.afp1.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{64 e^z \sqrt{\pi} (z^4 + 28 z^3 + 252 z^2 + 840 z + 840) \operatorname{erf}(\sqrt{z}) z^{5/2}}{2835} + \frac{64 z^6 + 1760 z^5 + 15280 z^4 + 46920 z^3 + 36036 z^2 - 6930 z + 2835}{2835}$$

07.25.03.afp2.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{64 z^6 - 1760 z^5 + 15280 z^4 - 46920 z^3 + 36036 z^2 + 6930 z + 2835}{2835} - \frac{64 e^{-z} \sqrt{\pi} z^{5/2} (z^4 - 28 z^3 + 252 z^2 - 840 z + 840) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.afp3.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^z (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575)}{2835 z} + \frac{5}{9 z}$$

07.25.03.afp4.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{32}{945} e^z \sqrt{\pi} (z^3 + 21z^2 + 126z + 210) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{945} (32z^5 + 656z^4 + 3720z^3 + 5148z^2 - 1386z + 945)$$

07.25.03.afp5.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{32}{945} e^{-z} \sqrt{\pi} (z^3 - 21z^2 + 126z - 210) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{945} (-32z^5 + 656z^4 - 3720z^3 + 5148z^2 + 1386z + 945)$$

07.25.03.afp6.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{10(z-1)}{9z^2} + \frac{2e^z(128z^7 + 2240z^6 + 10080z^5 + 8400z^4 - 4200z^3 + 3780z^2 - 3150z + 1575)}{2835z^2}$$

07.25.03.afp7.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{16}{189} e^z \sqrt{\pi} (z^2 + 14z + 42) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{189} (16z^4 + 216z^3 + 572z^2 - 198z + 189)$$

07.25.03.afp8.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{189} (16z^4 - 216z^3 + 572z^2 + 198z + 189) - \frac{16}{189} e^{-z} \sqrt{\pi} z^{5/2} (z^2 - 14z + 42) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afp9.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \frac{5z^2 - 10z + 18}{3z^3} + \frac{2e^z(128z^7 + 1344z^6 + 2016z^5 - 1680z^4 + 2520z^3 - 3780z^2 + 4410z - 2835)}{945z^3}$$

07.25.03.afpa.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{8}{27} e^z \sqrt{\pi} (z + 7) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{27} (8z^3 + 52z^2 - 22z + 27)$$

07.25.03.afpb.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{8}{27} e^{-z} \sqrt{\pi} (z - 7) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{27} (-8z^3 + 52z^2 + 22z + 27)$$

07.25.03.afpc.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = \frac{4(5z^3 - 15z^2 + 54z - 198)}{9z^4} + \frac{8e^z(128z^7 + 448z^6 - 672z^5 + 1680z^4 - 4200z^3 + 8820z^2 - 13230z + 10395)}{945z^4}$$

07.25.03.afpd.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{4}{3} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (4z^2 - 2z + 3)$$

07.25.03.afpe.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{3} (4z^2 + 2z + 3) - \frac{4}{3} e^{-z} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

07.25.03.afpf.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{3}{2}, 6; z\right) = \frac{5(5z^4 - 20z^3 + 108z^2 - 792z + 10296)}{9z^5} + \frac{8e^z(128z^7 - 448z^6 + 2016z^5 - 8400z^4 + 29400z^3 - 79380z^2 + 145530z - 135135)}{189z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = -\frac{1}{2}$

07.25.03.afpg.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{945}(128z^7 + 4544z^6 + 55392z^5 + 281616z^4 + 573000z^3 + 356220z^2 + 20790z + 945) + \frac{128}{945}e^z\sqrt{\pi}(z^{15/2} + 36z^{13/2} + 450z^{11/2} + 2400z^{9/2} + 5400z^{7/2} + 4320z^{5/2} + 720z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.afph.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945}(-128z^7 + 4544z^6 - 55392z^5 + 281616z^4 - 573000z^3 + 356220z^2 - 20790z + 945) + \frac{128}{945}e^{-z}\sqrt{\pi}(z^{15/2} - 36z^{13/2} + 450z^{11/2} - 2400z^{9/2} + 5400z^{7/2} - 4320z^{5/2} + 720z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.afpi.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{945}(-64z^6 - 1888z^5 - 18288z^4 - 68520z^3 - 88020z^2 - 20790z + 945) - \frac{64}{945}e^z\sqrt{\pi}(z^{13/2} + 30z^{11/2} + 300z^{9/2} + 1200z^{7/2} + 1800z^{5/2} + 720z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.afpj.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{945}(-64z^6 + 1888z^5 - 18288z^4 + 68520z^3 - 88020z^2 + 20790z + 945) + \frac{64}{945}e^{-z}\sqrt{\pi}(z^{13/2} - 30z^{11/2} + 300z^{9/2} - 1200z^{7/2} + 1800z^{5/2} - 720z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.afpk.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = -\frac{1}{945}e^z(64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945)$$

07.25.03.afpl.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{945}(-32z^5 - 752z^4 - 5400z^3 - 12996z^2 - 6930z + 945) - \frac{32}{945}e^z\sqrt{\pi}z^{3/2}(z^4 + 24z^3 + 180z^2 + 480z + 360)\operatorname{erf}(\sqrt{z})$$

07.25.03.afpm.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{945}(32z^5 - 752z^4 + 5400z^3 - 12996z^2 + 6930z + 945) - \frac{32}{945}e^{-z}\sqrt{\pi}z^{3/2}(z^4 - 24z^3 + 180z^2 - 480z + 360)\operatorname{erfi}(\sqrt{z})$$

07.25.03.afpn.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^z(-64z^6 - 1344z^5 - 8400z^4 - 16800z^3 - 6300z^2 + 1260z - 315)}{945z} + \frac{1}{3z}$$

07.25.03.afpo.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{315}(-16z^4 - 280z^3 - 1308z^2 - 1386z + 315) - \frac{16}{315}e^z\sqrt{\pi}z^{3/2}(z^3 + 18z^2 + 90z + 120)\operatorname{erf}(\sqrt{z})$$

07.25.03.afpp.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{16}{315}e^{-z}\sqrt{\pi}(z^3 - 18z^2 + 90z - 120)\operatorname{erfi}(\sqrt{z})z^{3/2} + \frac{1}{315}(-16z^4 + 280z^3 - 1308z^2 + 1386z + 315)$$

07.25.03.afpq.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = \frac{2(7z - 5)}{21z^2} - \frac{2e^z(64z^6 + 960z^5 + 3600z^4 + 2400z^3 - 900z^2 + 540z - 225)}{945z^2}$$

07.25.03.afpr.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{63}(-8z^3 - 92z^2 - 198z + 63) - \frac{8}{63}e^z\sqrt{\pi}z^{3/2}(z^2 + 12z + 30)\operatorname{erf}(\sqrt{z})$$

07.25.03.afps.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{63}(8z^3 - 92z^2 + 198z + 63) - \frac{8}{63}e^{-z}\sqrt{\pi}z^{3/2}(z^2 - 12z + 30)\operatorname{erfi}(\sqrt{z})$$

07.25.03.afpt.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = \frac{7z^2 - 10z + 14}{7z^3} - \frac{2e^z(64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)}{315z^3}$$

07.25.03.afpu.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{9}(-4z^2 - 22z + 9) - \frac{4}{9}e^z\sqrt{\pi}z^{3/2}(z + 6)\operatorname{erf}(\sqrt{z})$$

07.25.03.afpv.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{4}{9}e^{-z}\sqrt{\pi}(z - 6)\operatorname{erfi}(\sqrt{z})z^{3/2} + \frac{1}{9}(-4z^2 + 22z + 9)$$

07.25.03.afpw.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = \frac{4(7z^3 - 15z^2 + 42z - 126)}{21z^4} - \frac{8e^z(64z^6 + 192z^5 - 240z^4 + 480z^3 - 900z^2 + 1260z - 945)}{315z^4}$$

07.25.03.afpx.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -2e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{3/2} - 2z + 1$$

07.25.03.afpy.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -2e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})z^{3/2} + 2z + 1$$

07.25.03.afpz.01

$${}_2F_2\left(1, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = \frac{5(7z^4 - 20z^3 + 84z^2 - 504z + 5544)}{21z^5} - \frac{8e^z(64z^6 - 192z^5 + 720z^4 - 2400z^3 + 6300z^2 - 11340z + 10395)}{63z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = \frac{1}{2}$

07.25.03.afq0.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{945} (32 z^5 + 784 z^4 + 6024 z^3 + 16540 z^2 + 13110 z + 945) + \frac{32}{945} e^z \sqrt{\pi} (z^{11/2} + 25 z^{9/2} + 200 z^{7/2} + 600 z^{5/2} + 600 z^{3/2} + 120 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afq1.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} (-32 z^5 + 784 z^4 - 6024 z^3 + 16540 z^2 - 13110 z + 945) + \frac{32}{945} e^{-z} \sqrt{\pi} (z^{11/2} - 25 z^{9/2} + 200 z^{7/2} - 600 z^{5/2} + 600 z^{3/2} - 120 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afq2.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{945} e^z (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945)$$

07.25.03.afq3.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{945} (16 z^4 + 312 z^3 + 1772 z^2 + 3090 z + 945) + \frac{16}{945} e^z \sqrt{\pi} \sqrt{z} (z^4 + 20 z^3 + 120 z^2 + 240 z + 120) \operatorname{erf}(\sqrt{z})$$

07.25.03.afq4.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} (16 z^4 - 312 z^3 + 1772 z^2 - 3090 z + 945) - \frac{16}{945} e^{-z} \sqrt{\pi} \sqrt{z} (z^4 - 20 z^3 + 120 z^2 - 240 z + 120) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afq5.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{e^z (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105)}{945 z} + \frac{1}{9 z}$$

07.25.03.afq6.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{315} (8 z^3 + 116 z^2 + 426 z + 315) + \frac{8}{315} e^z \sqrt{\pi} \sqrt{z} (z^3 + 15 z^2 + 60 z + 60) \operatorname{erf}(\sqrt{z})$$

07.25.03.afq7.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{315} (-8 z^3 + 116 z^2 - 426 z + 315) + \frac{8}{315} e^{-z} \sqrt{\pi} \sqrt{z} (z^3 - 15 z^2 + 60 z - 60) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afq8.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, 3; z\right) = \frac{2(7z-3)}{63z^2} + \frac{2e^z(32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45)}{945z^2}$$

07.25.03.afq9.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{63} (4 z^2 + 38 z + 63) + \frac{4}{63} e^z \sqrt{\pi} \sqrt{z} (z^2 + 10 z + 20) \operatorname{erf}(\sqrt{z})$$

07.25.03.afqa.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{63} (4z^2 - 38z + 63) - \frac{4}{63} e^{-z} \sqrt{\pi} \sqrt{z} (z^2 - 10z + 20) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afqb.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, 4; z\right) = \frac{7z^2 - 6z + 6}{21z^3} + \frac{2e^z(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)}{315z^3}$$

07.25.03.afqc.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{9} (2z + 9) + \frac{2}{9} e^z \sqrt{\pi} \sqrt{z} (z + 5) \operatorname{erf}(\sqrt{z})$$

07.25.03.afqd.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{9} (9 - 2z) + \frac{2}{9} e^{-z} \sqrt{\pi} (z - 5) \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.afqe.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{4(7z^3 - 9z^2 + 18z - 42)}{63z^4} + \frac{8e^z(32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)}{315z^4}$$

07.25.03.afqf.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = e^z \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.afqg.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = 1 - e^{-z} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

07.25.03.afqh.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \frac{5(7z^4 - 12z^3 + 36z^2 - 168z + 1512)}{63z^5} + \frac{8e^z(32z^5 - 80z^4 + 240z^3 - 600z^2 + 1050z - 945)}{63z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = 1$

07.25.03.afqi.01

$${}_2F_2\left(1, \frac{11}{2}; 1, 1; z\right) = \frac{1}{945} e^{z/2} (16z^5 + 336z^4 + 2220z^3 + 5484z^2 + 4725z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^5 + 320z^4 + 1908z^3 + 3720z^2 + 1689z) I_1\left(\frac{z}{2}\right)$$

07.25.03.afqj.01

$${}_2F_2\left(1, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{945} e^z (16z^4 + 288z^3 + 1512z^2 + 2520z + 945)$$

07.25.03.afqk.01

$${}_2F_2\left(1, \frac{11}{2}; 1, 2; z\right) = \frac{1}{945} e^{z/2} (16z^4 + 264z^3 + 1284z^2 + 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^4 + 248z^3 + 1044z^2 + 1164z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.afql.01

$${}_2F_2\left(1, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{315} e^z (8z^3 + 108z^2 + 378z + 315)$$

07.25.03.afqm.01

$${}_2F_2\left(1, \frac{11}{2}; 1, 3; z\right) = \frac{16}{945} e^{z/2} (2z^3 + 24z^2 + 75z + 60) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8z^4 + 88z^3 + 216z^2 + 60z - 15) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.afqn.01

$${}_2F_2\left(1, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{63} e^z (4z^2 + 36z + 63)$$

07.25.03.afqo.01

$${}_2F_2\left(1, \frac{11}{2}; 1, 4; z\right) = \frac{4 e^{z/2} (8z^3 + 60z^2 + 84z - 3) I_0\left(\frac{z}{2}\right)}{315z} + \frac{4 e^{z/2} (8z^4 + 52z^3 + 36z^2 - 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.afqp.01

$${}_2F_2\left(1, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2z + 9)$$

07.25.03.afqq.01

$${}_2F_2\left(1, \frac{11}{2}; 1, 5; z\right) = \frac{32 e^{z/2} (4z^3 + 12z^2 - 3z + 3) I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{32 e^{z/2} (4z^4 + 8z^3 - 9z^2 + 12z - 12) I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.afqr.01

$${}_2F_2\left(1, \frac{11}{2}; 1, \frac{11}{2}; z\right) = e^z$$

07.25.03.afqs.01

$${}_2F_2\left(1, \frac{11}{2}; 1, 6; z\right) = \frac{32 e^{z/2} (4z^3 - 6z^2 + 15z - 24) I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{32 e^{z/2} (4z^4 - 10z^3 + 27z^2 - 60z + 96) I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = \frac{3}{2}$

07.25.03.afqt.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{945} (8z^3 + 124z^2 + 518z + 561) + \frac{8 e^z \sqrt{\pi} (z^4 + 16z^3 + 72z^2 + 96z + 24) \operatorname{erf}(\sqrt{z})}{945 \sqrt{z}}$$

07.25.03.afqu.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} (-8z^3 + 124z^2 - 518z + 561) + \frac{8 e^{-z} \sqrt{\pi} (z^4 - 16z^3 + 72z^2 - 96z + 24) \operatorname{erfi}(\sqrt{z})}{945 \sqrt{z}}$$

07.25.03.afqv.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{e^z (16z^4 + 224z^3 + 840z^2 + 840z + 105)}{945z} - \frac{1}{9z}$$

07.25.03.afqw.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{315} (4z^2 + 46z + 123) + \frac{4 e^z \sqrt{\pi} (z^3 + 12z^2 + 36z + 24) \operatorname{erf}(\sqrt{z})}{315 \sqrt{z}}$$

07.25.03.afqx.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{315} (4z^2 - 46z + 123) - \frac{4 e^{-z} \sqrt{\pi} (z^3 - 12z^2 + 36z - 24) \operatorname{erfi}(\sqrt{z})}{315 \sqrt{z}}$$

07.25.03.afqy.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{2 e^z (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15)}{945 z^2} - \frac{2(7z-1)}{63 z^2}$$

07.25.03.afqz.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{63} (2z+15) + \frac{2 e^z \sqrt{\pi} (z^2 + 8z + 12) \operatorname{erf}(\sqrt{z})}{63 \sqrt{z}}$$

07.25.03.afr0.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{63} (15-2z) + \frac{2 e^{-z} \sqrt{\pi} (z^2 - 8z + 12) \operatorname{erfi}(\sqrt{z})}{63 \sqrt{z}}$$

07.25.03.afr1.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{-35 z^2 + 10 z - 6}{105 z^3} + \frac{2 e^z (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9)}{315 z^3}$$

07.25.03.afr2.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z \sqrt{\pi} (z+4) \operatorname{erf}(\sqrt{z})}{9 \sqrt{z}} + \frac{1}{9}$$

07.25.03.afr3.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (4-z) \operatorname{erfi}(\sqrt{z})}{9 \sqrt{z}} + \frac{1}{9}$$

07.25.03.afr4.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \frac{8 e^z (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15)}{315 z^4} - \frac{4(35 z^3 - 15 z^2 + 18 z - 30)}{315 z^4}$$

07.25.03.afr5.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.afr6.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

07.25.03.afr7.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \frac{-35 z^4 + 20 z^3 - 36 z^2 + 120 z - 840}{63 z^5} + \frac{8 e^z (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105)}{63 z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = 2$

07.25.03.afr8.01

$${}_2F_2\left(1, \frac{11}{2}; 2, 2; z\right) = \frac{2 e^{z/2} (8 z^4 + 104 z^3 + 376 z^2 + 420 z + 105) I_0\left(\frac{z}{2}\right)}{945 z} + \frac{8}{945} e^{z/2} (2 z^3 + 24 z^2 + 71 z + 44) I_1\left(\frac{z}{2}\right) - \frac{2}{9 z}$$

07.25.03.afr9.01

$${}_2F_2\left(1, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \frac{e^z (8z^3 + 84z^2 + 210z + 105)}{315z} - \frac{1}{3z}$$

07.25.03.afra.01

$${}_2F_2\left(1, \frac{11}{2}; 2, 3; z\right) = \frac{4e^{z/2} (8z^3 + 76z^2 + 180z + 105) I_0\left(\frac{z}{2}\right)}{945z} + \frac{4e^{z/2} (8z^3 + 68z^2 + 116z + 15) I_1\left(\frac{z}{2}\right)}{945z} - \frac{4}{9z}$$

07.25.03.afrb.01

$${}_2F_2\left(1, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{e^z (4z^2 + 28z + 35)}{63z} - \frac{5}{9z}$$

07.25.03.afrc.01

$${}_2F_2\left(1, \frac{11}{2}; 2, 4; z\right) = \frac{8e^{z/2} (4z^2 + 24z + 27) I_0\left(\frac{z}{2}\right)}{315z} + \frac{8e^{z/2} (4z^3 + 20z^2 + 9z - 3) I_1\left(\frac{z}{2}\right)}{315z^2} - \frac{2}{3z}$$

07.25.03.afrd.01

$${}_2F_2\left(1, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{e^z (2z + 7)}{9z} - \frac{7}{9z}$$

07.25.03.afre.01

$${}_2F_2\left(1, \frac{11}{2}; 2, 5; z\right) = \frac{32e^{z/2} (4z^2 + 10z - 1) I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{32e^{z/2} (4z^3 + 6z^2 - 5z + 4) I_1\left(\frac{z}{2}\right)}{315z^3} - \frac{8}{9z}$$

07.25.03.afrf.01

$${}_2F_2\left(1, \frac{11}{2}; 2, \frac{11}{2}; z\right) = \frac{e^z}{z} - \frac{1}{z}$$

07.25.03.afrg.01

$${}_2F_2\left(1, \frac{11}{2}; 2, 6; z\right) = \frac{64e^{z/2} (2z^2 - 2z + 3) I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{128e^{z/2} (z^3 - 2z^2 + 4z - 6) I_1\left(\frac{z}{2}\right)}{63z^4} - \frac{10}{9z}$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = \frac{5}{2}$

07.25.03.afrh.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{2z^2 + 17z - 24}{105z} + \frac{2e^z \sqrt{\pi} (z^3 + 9z^2 + 18z + 6) \operatorname{erf}(\sqrt{z})}{105z^{3/2}}$$

07.25.03.afri.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-2z^2 + 17z + 24}{105z} + \frac{2e^{-z} \sqrt{\pi} (z^3 - 9z^2 + 18z - 6) \operatorname{erfi}(\sqrt{z})}{105z^{3/2}}$$

07.25.03.afrj.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{2e^z (8z^3 + 60z^2 + 90z + 15)}{315z^2} - \frac{2(7z + 1)}{21z^2}$$

07.25.03.afrk.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{z - 12}{21z} + \frac{e^z \sqrt{\pi} (z^2 + 6z + 6) \operatorname{erf}(\sqrt{z})}{21z^{3/2}}$$

07.25.03.afrl.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{z+12}{21z} + \frac{e^{-z}\sqrt{\pi}(-z^2+6z-6)\operatorname{erfi}(\sqrt{z})}{21z^{3/2}}$$

07.25.03.afrm.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{-35z^2-10z+2}{35z^3} + \frac{2e^z(8z^3+36z^2+18z-3)}{105z^3}$$

07.25.03.afm.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z\sqrt{\pi}(z+3)\operatorname{erf}(\sqrt{z})}{6z^{3/2}} - \frac{1}{z}$$

07.25.03.afro.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}\sqrt{\pi}(z-3)\operatorname{erfi}(\sqrt{z})}{6z^{3/2}} + \frac{1}{z}$$

07.25.03.afrp.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{8e^z(8z^3+12z^2-6z+3)}{105z^4} - \frac{4(35z^3+15z^2-6z+6)}{105z^4}$$

07.25.03.afrq.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{3e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3}{2z}$$

07.25.03.afrr.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3}{2z} - \frac{3e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.afrs.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{8e^z(8z^3-12z^2+18z-15)}{21z^5} + \frac{-35z^4-20z^3+12z^2-24z+120}{21z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = 3$

07.25.03.afrt.01

$${}_2F_2\left(1, \frac{11}{2}; 3, 3; z\right) = -\frac{8(7z+2)}{63z^2} + \frac{16e^{z/2}(4z^3+28z^2+45z+15)I_0\left(\frac{z}{2}\right)}{945z^2} + \frac{16e^{z/2}(4z^2+24z+23)I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.afru.01

$${}_2F_2\left(1, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{2e^z(4z^2+20z+15)}{63z^2} - \frac{10(7z+3)}{63z^2}$$

07.25.03.afrv.01

$${}_2F_2\left(1, \frac{11}{2}; 3, 4; z\right) = -\frac{4(7z+4)}{21z^2} + \frac{16e^{z/2}(4z^2+18z+15)I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{16e^{z/2}(4z^2+14z+3)I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.afrw.01

$${}_2F_2\left(1, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{2e^z(2z+5)}{9z^2} - \frac{2(7z+5)}{9z^2}$$

07.25.03.afrx.01

$${}_2F_2\left(1, \frac{11}{2}; 3, 5; z\right) = -\frac{16(7z+6)}{63z^2} + \frac{256e^{z/2}(z+2)I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{128e^{z/2}(2z^2+2z-1)I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.afry.01

$${}_2F_2\left(1, \frac{11}{2}; 3, \frac{11}{2}; z\right) = \frac{2e^z}{z^2} - \frac{2(z+1)}{z^2}$$

07.25.03.afrz.01

$${}_2F_2\left(1, \frac{11}{2}; 3, 6; z\right) = -\frac{20(7z+8)}{63z^2} + \frac{128e^{z/2}(2z-1)I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{128e^{z/2}(2z^2-3z+4)I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = \frac{7}{2}$

07.25.03.afs0.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5e^z\sqrt{\pi}(z^2+4z+2)\operatorname{erf}(\sqrt{z})}{42z^{5/2}} - \frac{10(8z+3)}{63z^2}$$

07.25.03.afs1.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{10(8z-3)}{63z^2} + \frac{5e^{-z}\sqrt{\pi}(z^2-4z+2)\operatorname{erfi}(\sqrt{z})}{42z^{5/2}}$$

07.25.03.afs2.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{-35z^2-30z-6}{21z^3} + \frac{2e^z(4z^2+12z+3)}{21z^3}$$

07.25.03.afs3.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{5e^z\sqrt{\pi}(z+2)\operatorname{erf}(\sqrt{z})}{12z^{5/2}} - \frac{5(7z+6)}{18z^2}$$

07.25.03.afs4.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5(7z-6)}{18z^2} - \frac{5e^{-z}\sqrt{\pi}(z-2)\operatorname{erfi}(\sqrt{z})}{12z^{5/2}}$$

07.25.03.afs5.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{8e^z(4z^2+4z-1)}{21z^4} - \frac{4(35z^3+45z^2+18z-6)}{63z^4}$$

07.25.03.afs6.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{15e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5(2z+3)}{4z^2}$$

07.25.03.afs7.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{5(2z-3)}{4z^2} + \frac{15e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.afs8.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \frac{40e^z(4z^2-4z+3)}{21z^5} - \frac{5(35z^4+60z^3+36z^2-24z+72)}{63z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = 4$

07.25.03.afs9.01

$${}_2F_2\left(1, \frac{11}{2}; 4, 4; z\right) = -\frac{2(35z^2 + 40z + 16)}{35z^3} + \frac{32e^{z/2}(2z^2 + 6z + 3)I_0\left(\frac{z}{2}\right)}{105z^3} + \frac{64e^{z/2}(z+2)I_1\left(\frac{z}{2}\right)}{105z^2}$$

07.25.03.afsa.01

$${}_2F_2\left(1, \frac{11}{2}; 4, \frac{9}{2}; z\right) = \frac{2e^z(2z+3)}{3z^3} + \frac{-7z^2 - 10z - 6}{3z^3}$$

07.25.03.afsb.01

$${}_2F_2\left(1, \frac{11}{2}; 4, 5; z\right) = -\frac{8(35z^2 + 60z + 48)}{105z^3} + \frac{128e^{z/2}(2z+3)I_0\left(\frac{z}{2}\right)}{105z^3} + \frac{128e^{z/2}(2z+1)I_1\left(\frac{z}{2}\right)}{105z^3}$$

07.25.03.afsc.01

$${}_2F_2\left(1, \frac{11}{2}; 4, \frac{11}{2}; z\right) = \frac{6e^z}{z^3} - \frac{3(z^2 + 2z + 2)}{z^3}$$

07.25.03.afsd.01

$${}_2F_2\left(1, \frac{11}{2}; 4, 6; z\right) = -\frac{2(35z^2 + 80z + 96)}{21z^3} + \frac{256e^{z/2}I_0\left(\frac{z}{2}\right)}{21z^3} + \frac{256e^{z/2}(z-1)I_1\left(\frac{z}{2}\right)}{21z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = \frac{9}{2}$

07.25.03.afse.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{35e^z\sqrt{\pi}(z+1)\operatorname{erf}(\sqrt{z})}{24z^{7/2}} - \frac{7(14z^2 + 25z + 15)}{36z^3}$$

07.25.03.afsf.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7(14z^2 - 25z + 15)}{36z^3} + \frac{35e^{-z}\sqrt{\pi}(z-1)\operatorname{erfi}(\sqrt{z})}{24z^{7/2}}$$

07.25.03.afsg.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{8e^z(2z+1)}{3z^4} - \frac{4(7z^3 + 15z^2 + 18z + 6)}{9z^4}$$

07.25.03.afsh.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{105e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{7(4z^2 + 10z + 15)}{8z^3}$$

07.25.03.afsi.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{7(4z^2 - 10z + 15)}{8z^3} - \frac{105e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.afsj.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{40e^z(2z-1)}{3z^5} - \frac{5(7z^4 + 20z^3 + 36z^2 + 24z - 24)}{9z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = 5$

07.25.03.afsk.01

$${}_2F_2\left(1, \frac{11}{2}; 5, 5; z\right) = -\frac{32(35z^3 + 90z^2 + 144z + 96)}{315z^4} + \frac{1024e^{z/2}(z+1)I_0\left(\frac{z}{2}\right)}{105z^4} + \frac{1024e^{z/2}I_1\left(\frac{z}{2}\right)}{105z^3}$$

07.25.03.afsl.01

$${}_2F_2\left(1, \frac{11}{2}; 5, \frac{11}{2}; z\right) = \frac{24e^z}{z^4} - \frac{4(z^3 + 3z^2 + 6z + 6)}{z^4}$$

07.25.03.afsm.01

$${}_2F_2\left(1, \frac{11}{2}; 5, 6; z\right) = -\frac{8(35z^3 + 120z^2 + 288z + 384)}{63z^4} + \frac{1024e^{z/2}I_0\left(\frac{z}{2}\right)}{21z^4} + \frac{1024e^{z/2}I_1\left(\frac{z}{2}\right)}{21z^4}$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = \frac{11}{2}$

07.25.03.afsn.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{945e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{32z^{9/2}} - \frac{9(8z^3 + 28z^2 + 70z + 105)}{16z^4}$$

07.25.03.afso.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{9(8z^3 - 28z^2 + 70z - 105)}{16z^4} + \frac{945e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.afsp.01

$${}_2F_2\left(1, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{120e^z}{z^5} - \frac{5(z^4 + 4z^3 + 12z^2 + 24z + 24)}{z^5}$$

For fixed z and $a_1 = 1, a_2 = \frac{11}{2}, b_1 = 6$

07.25.03.afsq.01

$${}_2F_2\left(1, \frac{11}{2}; 6, 6; z\right) = \frac{10240e^{z/2}I_0\left(\frac{z}{2}\right)}{21z^5} - \frac{10(35z^4 + 160z^3 + 576z^2 + 1536z + 3072)}{63z^5}$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = -\frac{11}{2}$

07.25.03.afsr.01

$${}_2F_2\left(1, 6; -\frac{11}{2}, 1; z\right) = \frac{1}{311850} (16z^{11} + 912z^{10} + 18872z^9 + 174540z^8 + 701145z^7 + 887040z^6 - 241920z^5 + 181440z^4 - 201600z^3 + 264600z^2 - 340200z + 311850) + \frac{1}{623700} e^z\sqrt{\pi} (32z^{23/2} + 1840z^{21/2} + 38640z^{19/2} + 367080z^{17/2} + 1560090z^{15/2} + 2340135z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afss.01

$${}_2F_2\left(1, 6; -\frac{11}{2}, 1; -z\right) = \frac{1}{311850} \left(-16z^{11} + 912z^{10} - 18872z^9 + 174540z^8 - 701145z^7 + 887040z^6 + 241920z^5 + 181440z^4 + 201600z^3 + 264600z^2 + 340200z + 311850\right) + \frac{1}{623700} e^{-z} \sqrt{\pi} \left(32z^{23/2} - 1840z^{21/2} + 38640z^{19/2} - 367080z^{17/2} + 1560090z^{15/2} - 2340135z^{13/2}\right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afst.01

$${}_2F_2\left(1, 6; -\frac{11}{2}, 2; z\right) = \frac{1}{155925} \left(8z^{10} + 364z^9 + 5618z^8 + 34071z^7 + 63360z^6 - 20160z^5 + 18144z^4 - 25200z^3 + 44100z^2 - 85050z + 155925\right) + \frac{e^z \sqrt{\pi} \left(16z^{21/2} + 736z^{19/2} + 11592z^{17/2} + 73416z^{15/2} + 156009z^{13/2}\right) \operatorname{erf}(\sqrt{z})}{311850}$$

07.25.03.afsu.01

$${}_2F_2\left(1, 6; -\frac{11}{2}, 2; -z\right) = \frac{1}{155925} \left(8z^{10} - 364z^9 + 5618z^8 - 34071z^7 + 63360z^6 + 20160z^5 + 18144z^4 + 25200z^3 + 44100z^2 + 85050z + 155925\right) + \frac{e^{-z} \sqrt{\pi} \left(-16z^{21/2} + 736z^{19/2} - 11592z^{17/2} + 73416z^{15/2} - 156009z^{13/2}\right) \operatorname{erfi}(\sqrt{z})}{311850}$$

07.25.03.afsv.01

$${}_2F_2\left(1, 6; -\frac{11}{2}, 3; z\right) = \frac{1}{155925} \left(16z^9 + 544z^8 + 5532z^7 + 15840z^6 - 5760z^5 + 6048z^4 - 10080z^3 + 22050z^2 - 56700z + 155925\right) + \frac{2e^z \sqrt{\pi} \left(8z^{19/2} + 276z^{17/2} + 2898z^{15/2} + 9177z^{13/2}\right) \operatorname{erf}(\sqrt{z})}{155925}$$

07.25.03.afsw.01

$${}_2F_2\left(1, 6; -\frac{11}{2}, 3; -z\right) = \frac{1}{155925} \left(-16z^9 + 544z^8 - 5532z^7 + 15840z^6 + 5760z^5 + 6048z^4 + 10080z^3 + 22050z^2 + 56700z + 155925\right) + \frac{2e^{-z} \sqrt{\pi} \left(8z^{19/2} - 276z^{17/2} + 2898z^{15/2} - 9177z^{13/2}\right) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.afsx.01

$${}_2F_2\left(1, 6; -\frac{11}{2}, 4; z\right) = \frac{16z^8 + 360z^7 + 1760z^6 - 720z^5 + 864z^4 - 1680z^3 + 4410z^2 - 14175z + 51975}{51975} + \frac{4e^z \sqrt{\pi} \left(4z^{17/2} + 92z^{15/2} + 483z^{13/2}\right) \operatorname{erf}(\sqrt{z})}{51975}$$

07.25.03.afsy.01

$${}_2F_2\left(1, 6; -\frac{11}{2}, 4; -z\right) = \frac{16z^8 - 360z^7 + 1760z^6 + 720z^5 + 864z^4 + 1680z^3 + 4410z^2 + 14175z + 51975}{51975} - \frac{4e^{-z}\sqrt{\pi}(4z^{17/2} - 92z^{15/2} + 483z^{13/2})\operatorname{erfi}(\sqrt{z})}{51975}$$

07.25.03.afsz.01

$${}_2F_2\left(1, 6; -\frac{11}{2}, 5; z\right) = \frac{64z^7 + 704z^6 - 320z^5 + 432z^4 - 960z^3 + 2940z^2 - 11340z + 51975}{51975} + \frac{32e^z\sqrt{\pi}(2z^{15/2} + 23z^{13/2})\operatorname{erf}(\sqrt{z})}{51975}$$

07.25.03.aft0.01

$${}_2F_2\left(1, 6; -\frac{11}{2}, 5; -z\right) = \frac{-64z^7 + 704z^6 + 320z^5 + 432z^4 + 960z^3 + 2940z^2 + 11340z + 51975}{51975} + \frac{32e^{-z}\sqrt{\pi}(2z^{15/2} - 23z^{13/2})\operatorname{erfi}(\sqrt{z})}{51975}$$

07.25.03.aft1.01

$${}_2F_2\left(1, 6; -\frac{11}{2}, 6; z\right) = \frac{64e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})z^{13/2}}{10395} + \frac{64z^6 - 32z^5 + 48z^4 - 120z^3 + 420z^2 - 1890z + 10395}{10395}$$

07.25.03.aft2.01

$${}_2F_2\left(1, 6; -\frac{11}{2}, 6; -z\right) = \frac{64z^6 + 32z^5 + 48z^4 + 120z^3 + 420z^2 + 1890z + 10395}{10395} - \frac{64e^{-z}\sqrt{\pi}z^{13/2}\operatorname{erfi}(\sqrt{z})}{10395}$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = -\frac{9}{2}$

07.25.03.aft3.01

$${}_2F_2\left(1, 6; -\frac{9}{2}, 1; z\right) = \frac{1}{56700}(-16z^{10} - 832z^9 - 15552z^8 - 128280z^7 - 451395z^6 - 483840z^5 + 120960z^4 - 80640z^3 + 75600z^2 - 75600z + 56700) + \frac{1}{113400}e^z\sqrt{\pi}(-32z^{21/2} - 1680z^{19/2} - 31920z^{17/2} - 271320z^{15/2} - 1017450z^{13/2} - 1322685z^{11/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aft4.01

$${}_2F_2\left(1, 6; -\frac{9}{2}, 1; -z\right) = \frac{1}{56700}(-16z^{10} + 832z^9 - 15552z^8 + 128280z^7 - 451395z^6 + 483840z^5 + 120960z^4 + 80640z^3 + 75600z^2 + 75600z + 56700) + \frac{1}{113400}e^{-z}\sqrt{\pi}(32z^{21/2} - 1680z^{19/2} + 31920z^{17/2} - 271320z^{15/2} + 1017450z^{13/2} - 1322685z^{11/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.af5.01

$${}_2F_2\left(1, 6; -\frac{9}{2}, 2; z\right) = \frac{1}{28350} \left(-8z^9 - 332z^8 - 4626z^7 - 24975z^6 - 40320z^5 + 12096z^4 - 10080z^3 + 12600z^2 - 18900z + 28350 \right) + \frac{e^z \sqrt{\pi} \left(-16z^{19/2} - 672z^{17/2} - 9576z^{15/2} - 54264z^{13/2} - 101745z^{11/2} \right) \operatorname{erf}(\sqrt{z})}{56700}$$

07.25.03.af6.01

$${}_2F_2\left(1, 6; -\frac{9}{2}, 2; -z\right) = \frac{1}{28350} \left(8z^9 - 332z^8 + 4626z^7 - 24975z^6 + 40320z^5 + 12096z^4 + 10080z^3 + 12600z^2 + 18900z + 28350 \right) + \frac{e^{-z} \sqrt{\pi} \left(-16z^{19/2} + 672z^{17/2} - 9576z^{15/2} + 54264z^{13/2} - 101745z^{11/2} \right) \operatorname{erfi}(\sqrt{z})}{56700}$$

07.25.03.af7.01

$${}_2F_2\left(1, 6; -\frac{9}{2}, 3; z\right) = \frac{-8z^8 - 248z^7 - 2274z^6 - 5760z^5 + 2016z^4 - 2016z^3 + 3150z^2 - 6300z + 14175}{14175} + \frac{e^z \sqrt{\pi} \left(-8z^{17/2} - 252z^{15/2} - 2394z^{13/2} - 6783z^{11/2} \right) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.af8.01

$${}_2F_2\left(1, 6; -\frac{9}{2}, 3; -z\right) = \frac{-8z^8 + 248z^7 - 2274z^6 + 5760z^5 + 2016z^4 + 2016z^3 + 3150z^2 + 6300z + 14175}{14175} + \frac{e^{-z} \sqrt{\pi} \left(8z^{17/2} - 252z^{15/2} + 2394z^{13/2} - 6783z^{11/2} \right) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.af9.01

$${}_2F_2\left(1, 6; -\frac{9}{2}, 4; z\right) = \frac{-8z^7 - 164z^6 - 720z^5 + 288z^4 - 336z^3 + 630z^2 - 1575z + 4725}{4725} - \frac{2e^z \sqrt{\pi} \left(4z^{15/2} + 84z^{13/2} + 399z^{11/2} \right) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.afta.01

$${}_2F_2\left(1, 6; -\frac{9}{2}, 4; -z\right) = \frac{8z^7 - 164z^6 + 720z^5 + 288z^4 + 336z^3 + 630z^2 + 1575z + 4725}{4725} - \frac{2e^{-z} \sqrt{\pi} \left(4z^{15/2} - 84z^{13/2} + 399z^{11/2} \right) \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.aftb.01

$${}_2F_2\left(1, 6; -\frac{9}{2}, 5; z\right) = \frac{-32z^6 - 320z^5 + 144z^4 - 192z^3 + 420z^2 - 1260z + 4725}{4725} - \frac{16e^z \sqrt{\pi} \left(2z^{13/2} + 21z^{11/2} \right) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.aftc.01

$${}_2F_2\left(1, 6; -\frac{9}{2}, 5; -z\right) = \frac{-32z^6 + 320z^5 + 144z^4 + 192z^3 + 420z^2 + 1260z + 4725}{4725} + \frac{16e^{-z} \sqrt{\pi} \left(2z^{13/2} - 21z^{11/2} \right) \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.aftd.01

$${}_2F_2\left(1, 6; -\frac{9}{2}, 6; z\right) = \frac{1}{945} (-32 z^5 + 16 z^4 - 24 z^3 + 60 z^2 - 210 z + 945) - \frac{32}{945} e^z \sqrt{\pi} z^{11/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.aftf.01

$${}_2F_2\left(1, 6; -\frac{9}{2}, 6; -z\right) = \frac{1}{945} (32 z^5 + 16 z^4 + 24 z^3 + 60 z^2 + 210 z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} z^{11/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = -\frac{7}{2}$

07.25.03.aftf.01

$${}_2F_2\left(1, 6; -\frac{7}{2}, 1; z\right) = \frac{1}{12600} (16 z^9 + 752 z^8 + 12552 z^7 + 90980 z^6 + 274845 z^5 + 241920 z^4 - 53760 z^3 + 30240 z^2 - 21600 z + 12600) + \frac{e^z \sqrt{\pi} (32 z^{19/2} + 1520 z^{17/2} + 25840 z^{15/2} + 193800 z^{13/2} + 629850 z^{11/2} + 692835 z^{9/2}) \operatorname{erf}(\sqrt{z})}{25200}$$

07.25.03.aftg.01

$${}_2F_2\left(1, 6; -\frac{7}{2}, 1; -z\right) = \frac{1}{12600} (-16 z^9 + 752 z^8 - 12552 z^7 + 90980 z^6 - 274845 z^5 + 241920 z^4 + 53760 z^3 + 30240 z^2 + 21600 z + 12600) + \frac{e^{-z} \sqrt{\pi} (32 z^{19/2} - 1520 z^{17/2} + 25840 z^{15/2} - 193800 z^{13/2} + 629850 z^{11/2} - 692835 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{25200}$$

07.25.03.aftf.01

$${}_2F_2\left(1, 6; -\frac{7}{2}, 2; z\right) = \frac{8 z^8 + 300 z^7 + 3730 z^6 + 17655 z^5 + 24192 z^4 - 6720 z^3 + 5040 z^2 - 5400 z + 6300}{6300} + \frac{e^z \sqrt{\pi} (16 z^{17/2} + 608 z^{15/2} + 7752 z^{13/2} + 38760 z^{11/2} + 62985 z^{9/2}) \operatorname{erf}(\sqrt{z})}{12600}$$

07.25.03.afti.01

$${}_2F_2\left(1, 6; -\frac{7}{2}, 2; -z\right) = \frac{8 z^8 - 300 z^7 + 3730 z^6 - 17655 z^5 + 24192 z^4 + 6720 z^3 + 5040 z^2 + 5400 z + 6300}{6300} + \frac{e^{-z} \sqrt{\pi} (-16 z^{17/2} + 608 z^{15/2} - 7752 z^{13/2} + 38760 z^{11/2} - 62985 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{12600}$$

07.25.03.aftj.01

$${}_2F_2\left(1, 6; -\frac{7}{2}, 3; z\right) = \frac{4 z^7 + 112 z^6 + 915 z^5 + 2016 z^4 - 672 z^3 + 630 z^2 - 900 z + 1575}{1575} + \frac{e^z \sqrt{\pi} (8 z^{15/2} + 228 z^{13/2} + 1938 z^{11/2} + 4845 z^{9/2}) \operatorname{erf}(\sqrt{z})}{3150}$$

07.25.03.aftk.01

$${}_2F_2\left(1, 6; -\frac{7}{2}, 3; -z\right) = \frac{-4z^7 + 112z^6 - 915z^5 + 2016z^4 + 672z^3 + 630z^2 + 900z + 1575}{1575} + \frac{e^{-z} \sqrt{\pi} (8z^{15/2} - 228z^{13/2} + 1938z^{11/2} - 4845z^{9/2}) \operatorname{erfi}(\sqrt{z})}{3150}$$

07.25.03.aftl.01

$${}_2F_2\left(1, 6; -\frac{7}{2}, 4; z\right) = \frac{1}{525} (4z^6 + 74z^5 + 288z^4 - 112z^3 + 126z^2 - 225z + 525) + \frac{1}{525} e^z \sqrt{\pi} (4z^{13/2} + 76z^{11/2} + 323z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aftm.01

$${}_2F_2\left(1, 6; -\frac{7}{2}, 4; -z\right) = \frac{1}{525} (4z^6 - 74z^5 + 288z^4 + 112z^3 + 126z^2 + 225z + 525) + \frac{1}{525} e^{-z} \sqrt{\pi} (-4z^{13/2} + 76z^{11/2} - 323z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aftn.01

$${}_2F_2\left(1, 6; -\frac{7}{2}, 5; z\right) = \frac{1}{525} (16z^5 + 144z^4 - 64z^3 + 84z^2 - 180z + 525) + \frac{8}{525} e^z \sqrt{\pi} (2z^{11/2} + 19z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afto.01

$${}_2F_2\left(1, 6; -\frac{7}{2}, 5; -z\right) = \frac{1}{525} (-16z^5 + 144z^4 + 64z^3 + 84z^2 + 180z + 525) + \frac{8}{525} e^{-z} \sqrt{\pi} (2z^{11/2} - 19z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aftp.01

$${}_2F_2\left(1, 6; -\frac{7}{2}, 6; z\right) = \frac{16}{105} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16z^4 - 8z^3 + 12z^2 - 30z + 105)$$

07.25.03.aftq.01

$${}_2F_2\left(1, 6; -\frac{7}{2}, 6; -z\right) = \frac{1}{105} (16z^4 + 8z^3 + 12z^2 + 30z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} z^{9/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = -\frac{5}{2}$

07.25.03.afr.01

$${}_2F_2\left(1, 6; -\frac{5}{2}, 1; z\right) = \frac{-16z^8 - 672z^7 - 9872z^6 - 61680z^5 - 155655z^4 - 107520z^3 + 20160z^2 - 8640z + 3600}{3600} + \frac{e^z \sqrt{\pi} (-32z^{17/2} - 1360z^{15/2} - 20400z^{13/2} - 132600z^{11/2} - 364650z^{9/2} - 328185z^{7/2}) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.afts.01

$${}_2F_2\left(1, 6; -\frac{5}{2}, 1; -z\right) = \frac{-16z^8 + 672z^7 - 9872z^6 + 61680z^5 - 155655z^4 + 107520z^3 + 20160z^2 + 8640z + 3600}{3600} + \frac{e^{-z} \sqrt{\pi} (32z^{17/2} - 1360z^{15/2} + 20400z^{13/2} - 132600z^{11/2} + 364650z^{9/2} - 328185z^{7/2}) \operatorname{erfi}(\sqrt{z})}{7200}$$

07.25.03.aftt.01

$${}_2F_2\left(1, 6; -\frac{5}{2}, 2; z\right) = \frac{-8z^7 - 268z^6 - 2930z^5 - 11919z^4 - 13440z^3 + 3360z^2 - 2160z + 1800}{1800} + \frac{e^z \sqrt{\pi} (-16z^{15/2} - 544z^{13/2} - 6120z^{11/2} - 26520z^{9/2} - 36465z^{7/2}) \operatorname{erf}(\sqrt{z})}{3600}$$

07.25.03.aftu.01

$${}_2F_2\left(1, 6; -\frac{5}{2}, 2; -z\right) = \frac{8z^7 - 268z^6 + 2930z^5 - 11919z^4 + 13440z^3 + 3360z^2 + 2160z + 1800}{1800} + \frac{e^{-z} \sqrt{\pi} (-16z^{15/2} + 544z^{13/2} - 6120z^{11/2} + 26520z^{9/2} - 36465z^{7/2}) \operatorname{erfi}(\sqrt{z})}{3600}$$

07.25.03.aftv.01

$${}_2F_2\left(1, 6; -\frac{5}{2}, 3; z\right) = \frac{1}{450} (-4z^6 - 100z^5 - 717z^4 - 1344z^3 + 420z^2 - 360z + 450) + \frac{1}{900} e^z \sqrt{\pi} (-8z^{13/2} - 204z^{11/2} - 1530z^{9/2} - 3315z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aftw.01

$${}_2F_2\left(1, 6; -\frac{5}{2}, 3; -z\right) = \frac{1}{450} (-4z^6 + 100z^5 - 717z^4 + 1344z^3 + 420z^2 + 360z + 450) + \frac{1}{900} e^{-z} \sqrt{\pi} (8z^{13/2} - 204z^{11/2} + 1530z^{9/2} - 3315z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aftx.01

$${}_2F_2\left(1, 6; -\frac{5}{2}, 4; z\right) = \frac{1}{75} (-2z^5 - 33z^4 - 112z^3 + 42z^2 - 45z + 75) + \frac{1}{150} e^z \sqrt{\pi} (-4z^{11/2} - 68z^{9/2} - 255z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afty.01

$${}_2F_2\left(1, 6; -\frac{5}{2}, 4; -z\right) = \frac{1}{75} (2z^5 - 33z^4 + 112z^3 + 42z^2 + 45z + 75) + \frac{1}{150} e^{-z} \sqrt{\pi} (-4z^{11/2} + 68z^{9/2} - 255z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aftz.01

$${}_2F_2\left(1, 6; -\frac{5}{2}, 5; z\right) = \frac{1}{75} (-8z^4 - 64z^3 + 28z^2 - 36z + 75) - \frac{4}{75} e^z \sqrt{\pi} (2z^{9/2} + 17z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afu0.01

$${}_2F_2\left(1, 6; -\frac{5}{2}, 5; -z\right) = \frac{1}{75} (-8z^4 + 64z^3 + 28z^2 + 36z + 75) + \frac{4}{75} e^{-z} \sqrt{\pi} (2z^{9/2} - 17z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afu1.01

$${}_2F_2\left(1, 6; -\frac{5}{2}, 6; z\right) = \frac{1}{15} (-8z^3 + 4z^2 - 6z + 15) - \frac{8}{15} e^z \sqrt{\pi} z^{7/2} \operatorname{erf}(\sqrt{z})$$

07.25.03.afu2.01

$${}_2F_2\left(1, 6; -\frac{5}{2}, 6; -z\right) = \frac{1}{15} (8z^3 + 4z^2 + 6z + 15) - \frac{8}{15} e^{-z} \sqrt{\pi} z^{7/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = -\frac{3}{2}$

07.25.03.afu3.01

$${}_2F_2\left(1, 6; -\frac{3}{2}, 1; z\right) = \frac{16z^7 + 592z^6 + 7512z^5 + 39420z^4 + 79905z^3 + 40320z^2 - 5760z + 1440}{1440} + \frac{e^z \sqrt{\pi} (32z^{15/2} + 1200z^{13/2} + 15600z^{11/2} + 85800z^{9/2} + 193050z^{7/2} + 135135z^{5/2}) \operatorname{erf}(\sqrt{z})}{2880}$$

07.25.03.afu4.01

$${}_2F_2\left(1, 6; -\frac{3}{2}, 1; -z\right) = \frac{-16z^7 + 592z^6 - 7512z^5 + 39420z^4 - 79905z^3 + 40320z^2 + 5760z + 1440}{1440} + \frac{e^{-z} \sqrt{\pi} (32z^{15/2} - 1200z^{13/2} + 15600z^{11/2} - 85800z^{9/2} + 193050z^{7/2} - 135135z^{5/2}) \operatorname{erfi}(\sqrt{z})}{2880}$$

07.25.03.afu5.01

$${}_2F_2\left(1, 6; -\frac{3}{2}, 2; z\right) = \frac{1}{720} (8z^6 + 236z^5 + 2226z^4 + 7575z^3 + 6720z^2 - 1440z + 720) + \frac{e^z \sqrt{\pi} (16z^{13/2} + 480z^{11/2} + 4680z^{9/2} + 17160z^{7/2} + 19305z^{5/2}) \operatorname{erf}(\sqrt{z})}{1440}$$

07.25.03.afu6.01

$${}_2F_2\left(1, 6; -\frac{3}{2}, 2; -z\right) = \frac{1}{720} (8z^6 - 236z^5 + 2226z^4 - 7575z^3 + 6720z^2 + 1440z + 720) + \frac{e^{-z} \sqrt{\pi} (-16z^{13/2} + 480z^{11/2} - 4680z^{9/2} + 17160z^{7/2} - 19305z^{5/2}) \operatorname{erfi}(\sqrt{z})}{1440}$$

07.25.03.afu7.01

$${}_2F_2\left(1, 6; -\frac{3}{2}, 3; z\right) = \frac{1}{180} (4z^5 + 88z^4 + 543z^3 + 840z^2 - 240z + 180) + \frac{1}{360} e^z \sqrt{\pi} (8z^{11/2} + 180z^{9/2} + 1170z^{7/2} + 2145z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afu8.01

$${}_2F_2\left(1, 6; -\frac{3}{2}, 3; -z\right) = \frac{1}{180} (-4z^5 + 88z^4 - 543z^3 + 840z^2 + 240z + 180) + \frac{1}{360} e^{-z} \sqrt{\pi} (8z^{11/2} - 180z^{9/2} + 1170z^{7/2} - 2145z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afu9.01

$${}_2F_2\left(1, 6; -\frac{3}{2}, 4; z\right) = \frac{1}{30} (2z^4 + 29z^3 + 84z^2 - 30z + 30) + \frac{1}{60} e^z \sqrt{\pi} (4z^{9/2} + 60z^{7/2} + 195z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afua.01

$${}_2F_2\left(1, 6; -\frac{3}{2}, 4; -z\right) = \frac{1}{30} (2z^4 - 29z^3 + 84z^2 + 30z + 30) + \frac{1}{60} e^{-z} \sqrt{\pi} (-4z^{9/2} + 60z^{7/2} - 195z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afub.01

$${}_2F_2\left(1, 6; -\frac{3}{2}, 5; z\right) = \frac{1}{15} (4z^3 + 28z^2 - 12z + 15) + \frac{2}{15} e^z \sqrt{\pi} (2z^{7/2} + 15z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afuc.01

$${}_2F_2\left(1, 6; -\frac{3}{2}, 5; -z\right) = \frac{1}{15} (-4z^3 + 28z^2 + 12z + 15) + \frac{2}{15} e^{-z} \sqrt{\pi} (2z^{7/2} - 15z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afud.01

$${}_2F_2\left(1, 6; -\frac{3}{2}, 6; z\right) = \frac{4}{3} e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (4z^2 - 2z + 3)$$

07.25.03.afue.01

$${}_2F_2\left(1, 6; -\frac{3}{2}, 6; -z\right) = \frac{1}{3} (4z^2 + 2z + 3) - \frac{4}{3} e^{-z} \sqrt{\pi} z^{5/2} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = -\frac{1}{2}$

07.25.03.afuf.01

$${}_2F_2\left(1, 6; -\frac{1}{2}, 1; z\right) = \frac{1}{960} (-16z^6 - 512z^5 - 5472z^4 - 23240z^3 - 35595z^2 - 11520z + 960) + \frac{e^z \sqrt{\pi} (-32z^{13/2} - 1040z^{11/2} - 11440z^{9/2} - 51480z^{7/2} - 90090z^{5/2} - 45045z^{3/2}) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.afug.01

$${}_2F_2\left(1, 6; -\frac{1}{2}, 1; -z\right) = \frac{1}{960} (-16z^6 + 512z^5 - 5472z^4 + 23240z^3 - 35595z^2 + 11520z + 960) + \frac{e^{-z} \sqrt{\pi} (32z^{13/2} - 1040z^{11/2} + 11440z^{9/2} - 51480z^{7/2} + 90090z^{5/2} - 45045z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.afuh.01

$${}_2F_2\left(1, 6; -\frac{1}{2}, 2; z\right) = \frac{1}{480} (-8z^5 - 204z^4 - 1618z^3 - 4431z^2 - 2880z + 480) + \frac{1}{960} e^z \sqrt{\pi} (-16z^{11/2} - 416z^{9/2} - 3432z^{7/2} - 10296z^{5/2} - 9009z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afui.01

$${}_2F_2\left(1, 6; -\frac{1}{2}, 2; -z\right) = \frac{1}{480} (8z^5 - 204z^4 + 1618z^3 - 4431z^2 + 2880z + 480) + \frac{1}{960} e^{-z} \sqrt{\pi} (-16z^{11/2} + 416z^{9/2} - 3432z^{7/2} + 10296z^{5/2} - 9009z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afuj.01

$${}_2F_2\left(1, 6; -\frac{1}{2}, 3; z\right) = \frac{1}{120} (-4z^4 - 76z^3 - 393z^2 - 480z + 120) + \frac{1}{240} e^z \sqrt{\pi} (-8z^{9/2} - 156z^{7/2} - 858z^{5/2} - 1287z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afuk.01

$${}_2F_2\left(1, 6; -\frac{1}{2}, 3; -z\right) = \frac{1}{120} (-4z^4 + 76z^3 - 393z^2 + 480z + 120) + \frac{1}{240} e^{-z} \sqrt{\pi} (8z^{9/2} - 156z^{7/2} + 858z^{5/2} - 1287z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aful.01

$${}_2F_2\left(1, 6; -\frac{1}{2}, 4; z\right) = \frac{1}{20} (-2z^3 - 25z^2 - 60z + 20) + \frac{1}{40} e^z \sqrt{\pi} (-4z^{7/2} - 52z^{5/2} - 143z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afum.01

$${}_2F_2\left(1, 6; -\frac{1}{2}, 4; -z\right) = \frac{1}{20} (2z^3 - 25z^2 + 60z + 20) + \frac{1}{40} e^{-z} \sqrt{\pi} (-4z^{7/2} + 52z^{5/2} - 143z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afun.01

$${}_2F_2\left(1, 6; -\frac{1}{2}, 5; z\right) = \frac{1}{5} (-2z^2 - 12z + 5) + \frac{1}{5} e^z \sqrt{\pi} (-2z^{5/2} - 13z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afuo.01

$${}_2F_2\left(1, 6; -\frac{1}{2}, 5; -z\right) = \frac{1}{5} (-2z^2 + 12z + 5) + \frac{1}{5} e^{-z} \sqrt{\pi} (2z^{5/2} - 13z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afup.01

$${}_2F_2\left(1, 6; -\frac{1}{2}, 6; z\right) = -2e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z}) z^{3/2} - 2z + 1$$

07.25.03.afuq.01

$${}_2F_2\left(1, 6; -\frac{1}{2}, 6; -z\right) = -2e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) z^{3/2} + 2z + 1$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = \frac{1}{2}$

07.25.03.afur.01

$${}_2F_2\left(1, 6; \frac{1}{2}, 1; z\right) = \frac{16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920}{1920} + \frac{e^z \sqrt{\pi} (32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z}) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.afus.01

$${}_2F_2\left(1, 6; \frac{1}{2}, 1; -z\right) = \frac{-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920}{1920} + \frac{e^{-z} \sqrt{\pi} (32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.afut.01

$${}_2F_2\left(1, 6; \frac{1}{2}, 2; z\right) = \frac{1}{960} (8z^4 + 172z^3 + 1106z^2 + 2295z + 960) + \frac{e^z \sqrt{\pi} (16z^{9/2} + 352z^{7/2} + 2376z^{5/2} + 5544z^{3/2} + 3465\sqrt{z}) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.afuu.01

$${}_2F_2\left(1, 6; \frac{1}{2}, 2; -z\right) = \frac{1}{960} (8z^4 - 172z^3 + 1106z^2 - 2295z + 960) + \frac{e^{-z} \sqrt{\pi} (-16z^{9/2} + 352z^{7/2} - 2376z^{5/2} + 5544z^{3/2} - 3465\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.afuv.01

$${}_2F_2\left(1, 6; \frac{1}{2}, 3; z\right) = \frac{1}{240} (4z^3 + 64z^2 + 267z + 240) + \frac{1}{480} e^z \sqrt{\pi} (8z^{7/2} + 132z^{5/2} + 594z^{3/2} + 693\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afuw.01

$${}_2F_2\left(1, 6; \frac{1}{2}, 3; -z\right) = \frac{1}{240} (-4z^3 + 64z^2 - 267z + 240) + \frac{1}{480} e^{-z} \sqrt{\pi} (8z^{7/2} - 132z^{5/2} + 594z^{3/2} - 693\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afux.01

$${}_2F_2\left(1, 6; \frac{1}{2}, 4; z\right) = \frac{1}{40} (2z^2 + 21z + 40) + \frac{1}{80} e^z \sqrt{\pi} (4z^{5/2} + 44z^{3/2} + 99\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afuy.01

$${}_2F_2\left(1, 6; \frac{1}{2}, 4; -z\right) = \frac{1}{40} (2z^2 - 21z + 40) + \frac{1}{80} e^{-z} \sqrt{\pi} (-4z^{5/2} + 44z^{3/2} - 99\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afuz.01

$${}_2F_2\left(1, 6; \frac{1}{2}, 5; z\right) = \frac{z+5}{5} + \frac{1}{10} e^z \sqrt{\pi} (2z^{3/2} + 11\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.afv0.01

$${}_2F_2\left(1, 6; \frac{1}{2}, 5; -z\right) = \frac{5-z}{5} + \frac{1}{10} e^{-z} \sqrt{\pi} (2z^{3/2} - 11\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.afv1.01

$${}_2F_2\left(1, 6; \frac{1}{2}, 6; z\right) = e^z \sqrt{\pi} \sqrt{z} \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.afv2.01

$${}_2F_2\left(1, 6; \frac{1}{2}, 6; -z\right) = 1 - e^{-z} \sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = 1$

07.25.03.afv3.01

$${}_2F_2(1, 6; 1, 1; z) = \frac{1}{120} e^z (z^5 + 25z^4 + 200z^3 + 600z^2 + 600z + 120)$$

07.25.03.afv4.01

$${}_2F_2\left(1, 6; 1, \frac{3}{2}; z\right) = \frac{16z^4 + 352z^3 + 2352z^2 + 5280z + 2895}{3840} + \frac{e^z \sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.afv5.01

$${}_2F_2\left(1, 6; 1, \frac{3}{2}; -z\right) = \frac{16z^4 - 352z^3 + 2352z^2 - 5280z + 2895}{3840} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945) \operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.afv6.01

$${}_2F_2(1, 6; 1, 2; z) = \frac{1}{120} e^z (z^4 + 20z^3 + 120z^2 + 240z + 120)$$

07.25.03.afv7.01

$${}_2F_2\left(1, 6; 1, \frac{5}{2}; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z \sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.afv8.01

$${}_2F_2\left(1, 6; 1, \frac{5}{2}; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z} \sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.afv9.01

$${}_2F_2(1, 6; 1, 3; z) = \frac{1}{60} e^z (z^3 + 15z^2 + 60z + 60)$$

07.25.03.afva.01

$${}_2F_2\left(1, 6; 1, \frac{7}{2}; z\right) = \frac{16z^4 + 192z^3 + 512z^2 + 120z - 45}{1024z^2} + \frac{e^z \sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.afvb.01

$${}_2F_2\left(1, 6; 1, \frac{7}{2}; -z\right) = \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.afvc.01

$${}_2F_2(1, 6; 1, 4; z) = \frac{1}{20} e^z (z^2 + 10z + 20)$$

07.25.03.afvd.01

$${}_2F_2\left(1, 6; 1, \frac{9}{2}; z\right) = \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z \sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.afve.01

$${}_2F_2\left(1, 6; 1, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.afvf.01

$${}_2F_2(1, 6; 1, 5; z) = \frac{1}{5} e^z (z + 5)$$

07.25.03.afvg.01

$${}_2F_2\left(1, 6; 1, \frac{11}{2}; z\right) = \frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z \sqrt{\pi} (32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105) \operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.afvh.01

$${}_2F_2\left(1, 6; 1, \frac{11}{2}; -z\right) = \frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z}\sqrt{\pi}(32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.afvi.01

$${}_2F_2(1, 6; 1, 6; z) = e^z$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = \frac{3}{2}$

07.25.03.afvj.01

$${}_2F_2\left(1, 6; \frac{3}{2}, 2; z\right) = \frac{8z^3 + 140z^2 + 690z + 975}{1920} + \frac{e^z\sqrt{\pi}(16z^4 + 288z^3 + 1512z^2 + 2520z + 945)\operatorname{erf}(\sqrt{z})}{3840\sqrt{z}}$$

07.25.03.afvk.01

$${}_2F_2\left(1, 6; \frac{3}{2}, 2; -z\right) = \frac{-8z^3 + 140z^2 - 690z + 975}{1920} + \frac{e^{-z}\sqrt{\pi}(16z^4 - 288z^3 + 1512z^2 - 2520z + 945)\operatorname{erfi}(\sqrt{z})}{3840\sqrt{z}}$$

07.25.03.afvl.01

$${}_2F_2\left(1, 6; \frac{3}{2}, 3; z\right) = \frac{1}{480}(4z^2 + 52z + 165) + \frac{e^z\sqrt{\pi}(8z^3 + 108z^2 + 378z + 315)\operatorname{erf}(\sqrt{z})}{960\sqrt{z}}$$

07.25.03.afvm.01

$${}_2F_2\left(1, 6; \frac{3}{2}, 3; -z\right) = \frac{1}{480}(4z^2 - 52z + 165) + \frac{e^{-z}\sqrt{\pi}(-8z^3 + 108z^2 - 378z + 315)\operatorname{erfi}(\sqrt{z})}{960\sqrt{z}}$$

07.25.03.afvn.01

$${}_2F_2\left(1, 6; \frac{3}{2}, 4; z\right) = \frac{1}{80}(2z + 17) + \frac{e^z\sqrt{\pi}(4z^2 + 36z + 63)\operatorname{erf}(\sqrt{z})}{160\sqrt{z}}$$

07.25.03.afvo.01

$${}_2F_2\left(1, 6; \frac{3}{2}, 4; -z\right) = \frac{1}{80}(17 - 2z) + \frac{e^{-z}\sqrt{\pi}(4z^2 - 36z + 63)\operatorname{erfi}(\sqrt{z})}{160\sqrt{z}}$$

07.25.03.afvp.01

$${}_2F_2\left(1, 6; \frac{3}{2}, 5; z\right) = \frac{e^z\sqrt{\pi}(2z + 9)\operatorname{erf}(\sqrt{z})}{20\sqrt{z}} + \frac{1}{10}$$

07.25.03.afvq.01

$${}_2F_2\left(1, 6; \frac{3}{2}, 5; -z\right) = \frac{e^{-z}\sqrt{\pi}(9 - 2z)\operatorname{erfi}(\sqrt{z})}{20\sqrt{z}} + \frac{1}{10}$$

07.25.03.afvr.01

$${}_2F_2\left(1, 6; \frac{3}{2}, 6; z\right) = \frac{e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{2\sqrt{z}}$$

07.25.03.afvs.01

$${}_2F_2\left(1, 6; \frac{3}{2}, 6; -z\right) = \frac{e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 \sqrt{z}}$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = 2$

07.25.03.afvt.01

$${}_2F_2(1, 6; 2, 2; z) = \frac{e^z (z^4 + 16z^3 + 72z^2 + 96z + 24)}{120z} - \frac{1}{5z}$$

07.25.03.afvu.01

$${}_2F_2\left(1, 6; 2, \frac{5}{2}; z\right) = \frac{8z^3 + 108z^2 + 370z - 105}{1280z} + \frac{e^z \sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{2560z^{3/2}}$$

07.25.03.afvv.01

$${}_2F_2\left(1, 6; 2, \frac{5}{2}; -z\right) = \frac{8z^3 - 108z^2 + 370z + 105}{1280z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 224z^3 - 840z^2 + 840z - 105) \operatorname{erfi}(\sqrt{z})}{2560z^{3/2}}$$

07.25.03.afvw.01

$${}_2F_2(1, 6; 2, 3; z) = \frac{e^z (z^3 + 12z^2 + 36z + 24)}{60z} - \frac{2}{5z}$$

07.25.03.afvx.01

$${}_2F_2\left(1, 6; 2, \frac{7}{2}; z\right) = \frac{8z^3 + 76z^2 - 110z + 15}{512z^2} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.afvy.01

$${}_2F_2\left(1, 6; 2, \frac{7}{2}; -z\right) = \frac{-8z^3 + 76z^2 + 110z + 15}{512z^2} + \frac{e^{-z} \sqrt{\pi} (16z^4 - 160z^3 + 360z^2 - 120z - 15) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.afvz.01

$${}_2F_2(1, 6; 2, 4; z) = \frac{e^z (z^2 + 8z + 12)}{20z} - \frac{3}{5z}$$

07.25.03.afw0.01

$${}_2F_2\left(1, 6; 2, \frac{9}{2}; z\right) = \frac{7(40z^3 - 292z^2 + 90z - 45)}{5120z^3} + \frac{7e^z \sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.afw1.01

$${}_2F_2\left(1, 6; 2, \frac{9}{2}; -z\right) = \frac{7(40z^3 + 292z^2 + 90z + 45)}{5120z^3} - \frac{7e^{-z} \sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.afw2.01

$${}_2F_2(1, 6; 2, 5; z) = \frac{e^z (z + 4)}{5z} - \frac{4}{5z}$$

07.25.03.afw3.01

$${}_2F_2\left(1, 6; 2, \frac{11}{2}; z\right) = \frac{63e^z \sqrt{\pi} (16z^4 + 32z^3 - 24z^2 + 24z - 15) \operatorname{erf}(\sqrt{z})}{4096z^{9/2}} - \frac{9(744z^3 - 420z^2 + 490z - 525)}{10240z^4}$$

07.25.03.afw4.01

$${}_2F_2\left(1, 6; 2, \frac{11}{2}; -z\right) = \frac{9(744z^3 + 420z^2 + 490z + 525)}{10240z^4} + \frac{63e^{-z}\sqrt{\pi}(16z^4 - 32z^3 - 24z^2 - 24z - 15)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.afw5.01

$${}_2F_2(1, 6; 2, 6; z) = \frac{e^z}{z} - \frac{1}{z}$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = \frac{5}{2}$

07.25.03.afw6.01

$${}_2F_2\left(1, 6; \frac{5}{2}, 3; z\right) = \frac{4z^2 + 40z - 105}{320z} + \frac{e^z\sqrt{\pi}(8z^3 + 84z^2 + 210z + 105)\operatorname{erf}(\sqrt{z})}{640z^{3/2}}$$

07.25.03.afw7.01

$${}_2F_2\left(1, 6; \frac{5}{2}, 3; -z\right) = \frac{-4z^2 + 40z + 105}{320z} + \frac{e^{-z}\sqrt{\pi}(8z^3 - 84z^2 + 210z - 105)\operatorname{erfi}(\sqrt{z})}{640z^{3/2}}$$

07.25.03.afw8.01

$${}_2F_2\left(1, 6; \frac{5}{2}, 4; z\right) = \frac{3(2z - 35)}{160z} + \frac{3e^z\sqrt{\pi}(4z^2 + 28z + 35)\operatorname{erf}(\sqrt{z})}{320z^{3/2}}$$

07.25.03.afw9.01

$${}_2F_2\left(1, 6; \frac{5}{2}, 4; -z\right) = \frac{3(2z + 35)}{160z} - \frac{3e^{-z}\sqrt{\pi}(4z^2 - 28z + 35)\operatorname{erfi}(\sqrt{z})}{320z^{3/2}}$$

07.25.03.afwa.01

$${}_2F_2\left(1, 6; \frac{5}{2}, 5; z\right) = \frac{3e^z\sqrt{\pi}(2z + 7)\operatorname{erf}(\sqrt{z})}{40z^{3/2}} - \frac{21}{20z}$$

07.25.03.afwb.01

$${}_2F_2\left(1, 6; \frac{5}{2}, 5; -z\right) = \frac{3e^{-z}\sqrt{\pi}(2z - 7)\operatorname{erfi}(\sqrt{z})}{40z^{3/2}} + \frac{21}{20z}$$

07.25.03.afwc.01

$${}_2F_2\left(1, 6; \frac{5}{2}, 6; z\right) = \frac{3e^z\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3}{2z}$$

07.25.03.afwd.01

$${}_2F_2\left(1, 6; \frac{5}{2}, 6; -z\right) = \frac{3}{2z} - \frac{3e^{-z}\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = 3$

07.25.03.afwe.01

$${}_2F_2(1, 6; 3, 3; z) = \frac{-4z - 1}{5z^2} + \frac{e^z(z^3 + 9z^2 + 18z + 6)}{30z^2}$$

07.25.03.afwf.01

$${}_2F_2\left(1, 6; 3, \frac{7}{2}; z\right) = \frac{4z^2 - 100z - 15}{128z^2} + \frac{e^z \sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.afwg.01

$${}_2F_2\left(1, 6; 3, \frac{7}{2}; -z\right) = \frac{4z^2 + 100z - 15}{128z^2} + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.afwh.01

$${}_2F_2(1, 6; 3, 4; z) = \frac{e^z (z^2 + 6z + 6)}{10z^2} - \frac{3(2z + 1)}{5z^2}$$

07.25.03.afwi.01

$${}_2F_2\left(1, 6; 3, \frac{9}{2}; z\right) = \frac{7e^z \sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{512z^{7/2}} - \frac{7(236z^2 + 80z - 15)}{1280z^3}$$

07.25.03.afwj.01

$${}_2F_2\left(1, 6; 3, \frac{9}{2}; -z\right) = \frac{7(236z^2 - 80z - 15)}{1280z^3} + \frac{7e^{-z} \sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{512z^{7/2}}$$

07.25.03.afwk.01

$${}_2F_2(1, 6; 3, 5; z) = \frac{2e^z (z + 3)}{5z^2} - \frac{2(4z + 3)}{5z^2}$$

07.25.03.afwl.01

$${}_2F_2\left(1, 6; 3, \frac{11}{2}; z\right) = \frac{63e^z \sqrt{\pi} (8z^3 + 12z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{1024z^{9/2}} - \frac{9(512z^3 + 308z^2 - 140z + 105)}{2560z^4}$$

07.25.03.afwm.01

$${}_2F_2\left(1, 6; 3, \frac{11}{2}; -z\right) = \frac{9(512z^3 - 308z^2 - 140z - 105)}{2560z^4} - \frac{63e^{-z} \sqrt{\pi} (8z^3 - 12z^2 - 6z - 3) \operatorname{erfi}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.afwn.01

$${}_2F_2(1, 6; 3, 6; z) = \frac{2e^z}{z^2} - \frac{2(z + 1)}{z^2}$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = \frac{7}{2}$

07.25.03.afwo.01

$${}_2F_2\left(1, 6; \frac{7}{2}, 4; z\right) = \frac{3e^z \sqrt{\pi} (4z^2 + 20z + 15) \operatorname{erf}(\sqrt{z})}{128z^{5/2}} - \frac{45(2z + 1)}{64z^2}$$

07.25.03.afwp.01

$${}_2F_2\left(1, 6; \frac{7}{2}, 4; -z\right) = \frac{45(2z - 1)}{64z^2} + \frac{3e^{-z} \sqrt{\pi} (4z^2 - 20z + 15) \operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.afwq.01

$${}_2F_2\left(1, 6; \frac{7}{2}, 5; z\right) = \frac{-16z - 15}{8z^2} + \frac{3e^z \sqrt{\pi} (2z + 5) \operatorname{erf}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.afwr.01

$${}_2F_2\left(1, 6; \frac{7}{2}, 5; -z\right) = \frac{16z - 15}{8z^2} - \frac{3e^{-z} \sqrt{\pi} (2z - 5) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.afws.01

$${}_2F_2\left(1, 6; \frac{7}{2}, 6; z\right) = \frac{15e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5(2z + 3)}{4z^2}$$

07.25.03.afwt.01

$${}_2F_2\left(1, 6; \frac{7}{2}, 6; -z\right) = \frac{5(2z - 3)}{4z^2} + \frac{15e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = 4$

07.25.03.afwu.01

$${}_2F_2(1, 6; 4, 4; z) = \frac{3e^z (z^2 + 4z + 2)}{10z^3} - \frac{3(3z^2 + 3z + 1)}{5z^3}$$

07.25.03.afwv.01

$${}_2F_2\left(1, 6; 4, \frac{9}{2}; z\right) = \frac{21e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{256z^{7/2}} - \frac{21(64z^2 + 70z + 15)}{640z^3}$$

07.25.03.afww.01

$${}_2F_2\left(1, 6; 4, \frac{9}{2}; -z\right) = \frac{21(64z^2 - 70z + 15)}{640z^3} - \frac{21e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.afwx.01

$${}_2F_2(1, 6; 4, 5; z) = \frac{6e^z (z + 2)}{5z^3} - \frac{6(2z^2 + 3z + 2)}{5z^3}$$

07.25.03.afwy.01

$${}_2F_2\left(1, 6; 4, \frac{11}{2}; z\right) = \frac{189e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{512z^{9/2}} - \frac{9(384z^3 + 672z^2 + 350z - 105)}{1280z^4}$$

07.25.03.afwz.01

$${}_2F_2\left(1, 6; 4, \frac{11}{2}; -z\right) = \frac{9(384z^3 - 672z^2 + 350z + 105)}{1280z^4} + \frac{189e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.afx0.01

$${}_2F_2(1, 6; 4, 6; z) = \frac{6e^z}{z^3} - \frac{3(z^2 + 2z + 2)}{z^3}$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = \frac{9}{2}$

07.25.03.afx1.01

$${}_2F_2\left(1, 6; \frac{9}{2}, 5; z\right) = \frac{21 e^z \sqrt{\pi} (2z+3) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}} - \frac{7(32z^2 + 60z + 45)}{80 z^3}$$

07.25.03.afx2.01

$${}_2F_2\left(1, 6; \frac{9}{2}, 5; -z\right) = \frac{7(32z^2 - 60z + 45)}{80 z^3} + \frac{21 e^{-z} \sqrt{\pi} (2z-3) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.afx3.01

$${}_2F_2\left(1, 6; \frac{9}{2}, 6; z\right) = \frac{105 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7(4z^2 + 10z + 15)}{8 z^3}$$

07.25.03.afx4.01

$${}_2F_2\left(1, 6; \frac{9}{2}, 6; -z\right) = \frac{7(4z^2 - 10z + 15)}{8 z^3} - \frac{105 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = 5$

07.25.03.afx5.01

$${}_2F_2(1, 6; 5, 5; z) = \frac{24 e^z (z+1)}{5 z^4} - \frac{4(4z^3 + 9z^2 + 12z + 6)}{5 z^4}$$

07.25.03.afx6.01

$${}_2F_2\left(1, 6; 5, \frac{11}{2}; z\right) = \frac{189 e^z \sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}} - \frac{9(64z^3 + 168z^2 + 280z + 105)}{160 z^4}$$

07.25.03.afx7.01

$${}_2F_2\left(1, 6; 5, \frac{11}{2}; -z\right) = \frac{9(64z^3 - 168z^2 + 280z - 105)}{160 z^4} - \frac{189 e^{-z} \sqrt{\pi} (2z-1) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.afx8.01

$${}_2F_2(1, 6; 5, 6; z) = \frac{24 e^z}{z^4} - \frac{4(z^3 + 3z^2 + 6z + 6)}{z^4}$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = \frac{11}{2}$

07.25.03.afx9.01

$${}_2F_2\left(1, 6; \frac{11}{2}, 6; z\right) = \frac{945 e^z \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9(8z^3 + 28z^2 + 70z + 105)}{16 z^4}$$

07.25.03.afxa.01

$${}_2F_2\left(1, 6; \frac{11}{2}, 6; -z\right) = \frac{9(8z^3 - 28z^2 + 70z - 105)}{16 z^4} + \frac{945 e^{-z} \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

For fixed z and $a_1 = 1, a_2 = 6, b_1 = 6$

07.25.03.afxb.01

$${}_2F_2(1, 6; 6, 6; z) = \frac{120 e^z}{z^5} - \frac{5(z^4 + 4z^3 + 12z^2 + 24z + 24)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}, a_2 \geq \frac{3}{2}$

For fixed z and $a_1 = \frac{3}{2}, a_2 = \frac{3}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{3}{2}, a_2 = \frac{3}{2}, b_1 = -\frac{11}{2}$

07.25.03.afxc.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{108056025} (e^z (16384z^{14} + 917504z^{13} + 19296256z^{12} + 193708032z^{11} + 976303104z^{10} + 2381352960z^9 + 2469600000z^8 + 790272000z^7 + 24696000z^6 + 3704400z^4 - 14817600z^3 + 47231100z^2 - 100018800z + 108056025))$$

07.25.03.afxd.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{9823275} (e^z (8192z^{13} + 397312z^{12} + 7065600z^{11} + 57993216z^{10} + 227182080z^9 + 395539200z^8 + 245952000z^7 + 26208000z^6 - 756000z^5 - 378000z^4 + 1285200z^3 - 4195800z^2 + 8930250z - 9823275))$$

07.25.03.afxe.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1091475} (e^z (4096z^{12} + 167936z^{11} + 2441216z^{10} + 15569920z^9 + 43526400z^8 + 45427200z^7 + 9408000z^6 - 1008000z^5 + 126000z^4 - 126000z^3 + 453600z^2 - 963900z + 1091475))$$

07.25.03.afxf.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{155925} (e^z (2048z^{11} + 68608z^{10} + 774656z^9 + 3524352z^8 + 5903616z^7 + 2050944z^6 - 423360z^5 + 131040z^4 - 2520z^3 - 64260z^2 + 130410z - 155925))$$

07.25.03.afxg.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{31185} (e^z (1024z^{10} + 26624z^9 + 214272z^8 + 583680z^7 + 325248z^6 - 112896z^5 + 70560z^4 - 40320z^3 + 18900z^2 - 22680z + 31185))$$

07.25.03.afxh.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{10395} e^z (512z^9 + 9472z^8 + 45568z^7 + 41216z^6 - 22848z^5 + 23520z^4 - 23520z^3 + 15120z^2 + 1890z - 10395)$$

07.25.03.afxi.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{e^z (256 z^8 + 2816 z^7 + 4480 z^6 - 4032 z^5 + 6720 z^4 - 11760 z^3 + 17640 z^2 - 18900 z + 10395)}{10395}$$

07.25.03.afxj.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, 1; z\right) = \frac{e^{z/2} (128 z^8 + 1024 z^7 + 640 z^6 - 352 z^5 + 576 z^4 - 1440 z^3 + 3936 z^2 - 9450 z + 10395) I_0\left(\frac{z}{2}\right) + 2 e^{z/2} (64 z^8 + 448 z^7 - 96 z^6 + 80 z^5 - 88 z^4 + 72 z^3 - 60 z^2 + 633 z) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.afxk.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13230 z + 10395)}{10395}$$

07.25.03.afxl.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (128 z^7 + 64 z^6 + 128 z^5 - 912 z^4 + 4176 z^3 - 13704 z^2 + 26460 z + 10395) I_0\left(\frac{z}{2}\right) + e^{z/2} (128 z^7 - 64 z^6 + 256 z^5 - 1328 z^4 + 6096 z^3 - 22584 z^2 + 63636 z - 135135) I_1\left(\frac{z}{2}\right)}{10395}$$

07.25.03.afxm.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (64 z^7 - 256 z^6 + 1328 z^5 - 6464 z^4 + 26988 z^3 - 90048 z^2 + 218505 z - 322560)}{3465 z} + \frac{512 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{3/2}}$$

07.25.03.afxn.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (64 z^7 + 256 z^6 + 1328 z^5 + 6464 z^4 + 26988 z^3 + 90048 z^2 + 218505 z + 322560)}{3465 z} - \frac{512 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{3/2}}$$

07.25.03.afxo.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 - 448 z^5 + 2928 z^4 - 16128 z^3 + 71544 z^2 - 238140 z + 509355) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 - 512 z^6 + 3472 z^5 - 19920 z^4 + 93912 z^3 - 347916 z^2 + 945945 z - 2027025) I_1\left(\frac{z}{2}\right)}{10395 z}$$

07.25.03.afxp.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (32 z^7 - 368 z^6 + 3056 z^5 - 20040 z^4 + 103674 z^3 - 407883 z^2 + 1128960 z - 1935360)}{693 z^2} + \frac{1280 \sqrt{\pi} (z + 12) \operatorname{erfi}(\sqrt{z})}{11 z^{5/2}}$$

07.25.03.afxq.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z}(-32z^7 - 368z^6 - 3056z^5 - 20040z^4 - 103674z^3 - 407883z^2 - 1128960z - 1935360)}{693z^2} - \frac{1280\sqrt{\pi}(z-12)\operatorname{erf}(\sqrt{z})}{11z^{5/2}}$$

07.25.03.afxr.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, 4; z\right) = \frac{4e^{z/2}(64z^6 - 928z^5 + 8912z^4 - 64352z^3 + 352800z^2 - 1406790z + 3828825)I_0\left(\frac{z}{2}\right)}{3465z} + \frac{1}{3465z^2} 4e^{z/2}(64z^7 - 992z^6 + 9936z^5 - 74848z^4 + 433808z^3 - 1891890z^2 + 5630625z - 15315300)I_1\left(\frac{z}{2}\right)$$

07.25.03.afxs.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^{-z}(16z^7 - 304z^6 + 3504z^5 - 29292z^4 + 183651z^3 - 846720z^2 + 2661120z - 5443200)}{99z^3} + \frac{2240\sqrt{\pi}(z^2 + 24z + 135)\operatorname{erfi}(\sqrt{z})}{11z^{7/2}}$$

07.25.03.afxt.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z}(16z^7 + 304z^6 + 3504z^5 + 29292z^4 + 183651z^3 + 846720z^2 + 2661120z + 5443200)}{99z^3} - \frac{2240\sqrt{\pi}(z^2 - 24z + 135)\operatorname{erf}(\sqrt{-z})}{11z^{7/2}}$$

07.25.03.afxu.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, 5; z\right) = \frac{32e^{z/2}(32z^6 - 704z^5 + 9008z^4 - 81144z^3 + 533610z^2 - 2450448z + 8729721)I_0\left(\frac{z}{2}\right)}{3465z^2} + \frac{1}{3465z^3} 64e^{z/2}(16z^7 - 368z^6 + 4880z^5 - 45652z^4 + 315315z^3 - 1612611z^2 + 4900896z - 17459442)I_1\left(\frac{z}{2}\right)$$

07.25.03.afxv.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z(8z^7 - 212z^6 + 3130z^5 - 31861z^4 + 235200z^3 - 1249920z^2 + 4334400z - 10584000)}{11z^4} + \frac{3360\sqrt{\pi}(z^3 + 36z^2 + 405z + 1575)\operatorname{erfi}(\sqrt{z})}{11z^{9/2}}$$

07.25.03.afxw.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z}(-8z^7 - 212z^6 - 3130z^5 - 31861z^4 - 235200z^3 - 1249920z^2 - 4334400z - 10584000)}{11z^4} - \frac{3360\sqrt{\pi}(z^3 - 36z^2 + 405z - 1575)\operatorname{erf}(\sqrt{-z})}{11z^{9/2}}$$

07.25.03.afxx.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^6 - 944 z^5 + 15120 z^4 - 163548 z^3 + 1268982 z^2 - 6235515 z + 29930472) I_0\left(\frac{z}{2}\right) + \frac{1}{693 z^4} 32 e^{z/2} (32 z^7 - 976 z^6 + 16112 z^5 - 180180 z^4 + 1433718 z^3 - 8817237 z^2 + 24942060 z - 119721888) I_1\left(\frac{z}{2}\right)}{693 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.afxy.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{893025} (e^z (4096 z^{12} + 172032 z^{11} + 2586624 z^{10} + 17356800 z^9 + 52842240 z^8 + 65664000 z^7 + 24480000 z^6 + 864000 z^5 + 54000 z^4 - 108000 z^3 + 372600 z^2 - 793800 z + 893025))$$

07.25.03.afxz.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{99225} (e^z (2048 z^{11} + 72704 z^{10} + 893440 z^9 + 4657920 z^8 + 10118400 z^7 + 7536000 z^6 + 936000 z^5 - 36000 z^4 + 9000 z^3 - 40500 z^2 + 85050 z - 99225))$$

07.25.03.afy0.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{14175} (e^z (1024 z^{10} + 29696 z^9 + 283392 z^8 + 1053696 z^7 + 1371264 z^6 + 339840 z^5 - 41760 z^4 + 2880 z^3 + 5940 z^2 - 11340 z + 14175))$$

07.25.03.afy1.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{2835} e^z (512 z^9 + 11520 z^8 + 78336 z^7 + 174336 z^6 + 75456 z^5 - 18720 z^4 + 7200 z^3 - 2160 z^2 + 1890 z - 2835)$$

07.25.03.afy2.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} e^z (256 z^8 + 4096 z^7 + 16640 z^6 + 12288 z^5 - 5280 z^4 + 3840 z^3 - 2160 z^2 + 945)$$

07.25.03.afy3.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{945} e^z (128 z^7 + 1216 z^6 + 1632 z^5 - 1200 z^4 + 1560 z^3 - 1980 z^2 + 1890 z - 945)$$

07.25.03.afy4.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-64 z^7 - 448 z^6 - 272 z^5 + 144 z^4 - 216 z^3 + 456 z^2 - 945 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-64 z^7 - 384 z^6 + 80 z^5 - 64 z^4 + 72 z^3 - 96 z^2 + 201 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.afy5.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)$$

07.25.03.afy6.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (-64 z^6 - 32 z^5 - 48 z^4 + 288 z^3 - 984 z^2 + 1890 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-64 z^6 + 32 z^5 - 112 z^4 + 480 z^3 - 1752 z^2 + 4926 z - 10395) I_1\left(\frac{z}{2}\right)$$

07.25.03.afy7.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{e^{-z} (-32 z^6 + 112 z^5 - 496 z^4 + 1992 z^3 - 6522 z^2 + 15675 z - 23040)}{315 z} + \frac{256 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.afy8.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (32 z^6 + 112 z^5 + 496 z^4 + 1992 z^3 + 6522 z^2 + 15675 z + 23040)}{315 z} - \frac{256 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.afy9.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, 3; z\right) = -\frac{8}{945} e^{z/2} (16 z^5 - 96 z^4 + 528 z^3 - 2352 z^2 + 7875 z - 17010) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (32 z^6 - 224 z^5 + 1296 z^4 - 6144 z^3 + 22866 z^2 - 62370 z + 135135) I_1\left(\frac{z}{2}\right)}{945 z}$$

07.25.03.afya.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (-16 z^6 + 160 z^5 - 1128 z^4 + 6072 z^3 - 24513 z^2 + 69120 z - 120960)}{63 z^2} + \frac{320 \sqrt{\pi} (2z + 21) \operatorname{erfi}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.afyb.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-16 z^6 - 160 z^5 - 1128 z^4 - 6072 z^3 - 24513 z^2 - 69120 z - 120960)}{63 z^2} - \frac{320 \sqrt{\pi} (2z - 21) \operatorname{erf}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.afyc.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, 4; z\right) = -\frac{4 e^{z/2} (32 z^5 - 400 z^4 + 3232 z^3 - 18900 z^2 + 78750 z - 225225) I_0\left(\frac{z}{2}\right)}{315 z} - \frac{4 e^{z/2} (32 z^6 - 432 z^5 + 3680 z^4 - 22828 z^3 + 103950 z^2 - 315315 z + 900900) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.afyd.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (-8 z^6 + 132 z^5 - 1290 z^4 + 8841 z^3 - 43200 z^2 + 141120 z - 302400)}{9 z^3} + \frac{160 \sqrt{\pi} (z^2 + 21z + 105) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.afye.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (8z^6 + 132z^5 + 1290z^4 + 8841z^3 + 43200z^2 + 141120z + 302400)}{9z^3} - \frac{160\sqrt{\pi} (z^2 - 21z + 105) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.afyf.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, 5; z\right) = -\frac{32e^{z/2} (16z^5 - 304z^4 + 3276z^3 - 23940z^2 + 117117z - 459459) I_0\left(\frac{z}{2}\right)}{315z^2} - \frac{32e^{z/2} (16z^6 - 320z^5 + 3604z^4 - 27720z^3 + 153153z^2 - 468468z + 1837836) I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.afyg.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{e^z (-4z^6 + 92z^5 - 1151z^4 + 9600z^3 - 55440z^2 + 201600z - 529200)}{z^4} + \frac{120\sqrt{\pi} (2z^3 + 63z^2 + 630z + 2205) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.afyh.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-4z^6 - 92z^5 - 1151z^4 - 9600z^3 - 55440z^2 - 201600z - 529200)}{z^4} - \frac{120\sqrt{\pi} (2z^3 - 63z^2 + 630z - 2205) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.afyi.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{9}{2}, 6; z\right) = -\frac{32e^{z/2} (112z^5 - 2856z^4 + 38556z^3 - 344916z^2 + 1772199z - 9976824) I_0\left(\frac{z}{2}\right)}{441z^3} - \frac{32e^{z/2} (112z^6 - 2968z^5 + 41580z^4 - 375804z^3 + 2626767z^2 - 7088796z + 39907296) I_1\left(\frac{z}{2}\right)}{441z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.afyj.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{11025} e^z (1024z^{10} + 30720z^9 + 308480z^8 + 1249280z^7 + 1936000z^6 + 864000z^5 + 36000z^4 + 4500z^2 - 9000z + 11025)$$

07.25.03.afyk.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{1575} e^z (512z^9 + 12544z^8 + 97792z^7 + 282368z^6 + 262080z^5 + 38880z^4 - 1440z^3 - 720z^2 + 1170z - 1575)$$

07.25.03.afyl.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} e^z (256z^8 + 4864z^7 + 27008z^6 + 46656z^5 + 14400z^4 - 2160z^3 + 360z^2 - 180z + 315)$$

07.25.03.afym.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{105} e^z (128 z^7 + 1728 z^6 + 5728 z^5 + 3280 z^4 - 1000 z^3 + 420 z^2 - 30 z - 105)$$

07.25.03.afyn.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (64 z^6 + 512 z^5 + 560 z^4 - 320 z^3 + 300 z^2 - 240 z + 105)$$

07.25.03.afyo.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (32 z^6 + 192 z^5 + 112 z^4 - 56 z^3 + 74 z^2 - 120 z + 105) I_0\left(\frac{z}{2}\right) + \frac{2}{105} e^{z/2} (16 z^6 + 80 z^5 - 16 z^4 + 12 z^3 - 13 z^2 + 17 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.afyp.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105)$$

07.25.03.afyq.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (32 z^5 + 16 z^4 + 16 z^3 - 76 z^2 + 150 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (32 z^5 - 16 z^4 + 48 z^3 - 164 z^2 + 454 z - 945) I_1\left(\frac{z}{2}\right)$$

07.25.03.afyr.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (16 z^5 - 48 z^4 + 176 z^3 - 556 z^2 + 1315 z - 1920)}{35 z} + \frac{192 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.afys.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (16 z^5 + 48 z^4 + 176 z^3 + 556 z^2 + 1315 z + 1920)}{35 z} - \frac{192 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.afyt.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (16 z^4 - 80 z^3 + 356 z^2 - 1200 z + 2625) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (16 z^5 - 96 z^4 + 460 z^3 - 1724 z^2 + 4725 z - 10395) I_1\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.afyu.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (8 z^5 - 68 z^4 + 394 z^3 - 1657 z^2 + 4800 z - 8640)}{7 z^2} + \frac{480 \sqrt{\pi} (z + 9) \operatorname{erfi}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.afyv.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-8 z^5 - 68 z^4 - 394 z^3 - 1657 z^2 - 4800 z - 8640)}{7 z^2} - \frac{480 \sqrt{\pi} (z - 9) \operatorname{erf}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.afyw.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 - 168 z^3 + 1100 z^2 - 4900 z + 15015) I_0\left(\frac{z}{2}\right)}{35 z} + \frac{4 e^{z/2} (16 z^5 - 184 z^4 + 1292 z^3 - 6300 z^2 + 19635 z - 60060) I_1\left(\frac{z}{2}\right)}{35 z^2}$$

07.25.03.afyx.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (4z^5 - 56z^4 + 449z^3 - 2400z^2 + 8280z - 18900)}{z^3} + \frac{30\sqrt{\pi} (4z^2 + 72z + 315) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.afyy.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (4z^5 + 56z^4 + 449z^3 + 2400z^2 + 8280z + 18900)}{z^3} - \frac{30\sqrt{\pi} (4z^2 - 72z + 315) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.afyz.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (8z^4 - 128z^3 + 1120z^2 - 6006z + 27027) I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{64 e^{z/2} (4z^5 - 68z^4 + 630z^3 - 3927z^2 + 12012z - 54054) I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.afz0.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (2z^5 - 39z^4 + 400z^3 - 2620z^2 + 10150z - 29400)}{z^4} + \frac{45\sqrt{\pi} (4z^3 + 108z^2 + 945z + 2940) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.afz1.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (2z^5 + 39z^4 + 400z^3 + 2620z^2 + 10150z + 29400)}{z^4} - \frac{45\sqrt{\pi} (4z^3 - 108z^2 + 945z - 2940) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.afz2.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (56z^4 - 1204z^3 + 13728z^2 - 73359z + 525096) I_0\left(\frac{z}{2}\right)}{49z^3} + \frac{32 e^{z/2} (56z^5 - 1260z^4 + 13992z^3 - 120549z^2 + 293436z - 2100384) I_1\left(\frac{z}{2}\right)}{49z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.afz3.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225} e^z (256z^8 + 5120z^7 + 30976z^6 + 63744z^5 + 35424z^4 + 1728z^3 + 144z^2 - 144z + 225)$$

07.25.03.afz4.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{45} e^z (128z^7 + 1984z^6 + 8544z^5 + 10512z^4 + 1944z^3 - 108z^2 + 18z - 45)$$

07.25.03.afz5.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (64z^6 + 704z^5 + 1808z^4 + 736z^3 - 132z^2 + 12z + 15)$$

07.25.03.afz6.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{15} e^z (32 z^5 + 208 z^4 + 176 z^3 - 72 z^2 + 42 z - 15)$$

07.25.03.afz7.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-16 z^5 - 80 z^4 - 44 z^3 + 20 z^2 - 21 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-16 z^5 - 64 z^4 + 12 z^3 - 8 z^2 + 7 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.afz8.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{15} e^z (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15)$$

07.25.03.afz9.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (-16 z^4 - 8 z^3 - 4 z^2 + 12 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-16 z^4 + 8 z^3 - 20 z^2 + 52 z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.afza.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (-8 z^4 + 20 z^3 - 58 z^2 + 133 z - 192)}{5 z} + \frac{96 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{5 z^{3/2}}$$

07.25.03.afzb.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (8 z^4 + 20 z^3 + 58 z^2 + 133 z + 192)}{5 z} - \frac{96 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{5 z^{3/2}}$$

07.25.03.afzc.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, 3; z\right) = -\frac{16}{15} e^{z/2} (2 z^3 - 8 z^2 + 27 z - 60) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8 z^4 - 40 z^3 + 152 z^2 - 420 z + 945) I_1\left(\frac{z}{2}\right)}{15 z}$$

07.25.03.afzd.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-4 z^4 + 28 z^3 - 127 z^2 + 384 z - 720)}{z^2} + \frac{24 \sqrt{\pi} (2 z + 15) \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.afze.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-4 z^4 - 28 z^3 - 127 z^2 - 384 z - 720)}{z^2} - \frac{24 \sqrt{\pi} (2 z - 15) \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.afzf.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, 4; z\right) = -\frac{4 e^{z/2} (8 z^3 - 68 z^2 + 340 z - 1155) I_0\left(\frac{z}{2}\right)}{5 z} - \frac{4 e^{z/2} (8 z^4 - 76 z^3 + 420 z^2 - 1365 z + 4620) I_1\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.afzg.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{21 \sqrt{\pi} (4 z^2 + 60 z + 225) \operatorname{erfi}(\sqrt{z})}{z^{7/2}} - \frac{7 e^z (2 z^4 - 23 z^3 + 144 z^2 - 540 z + 1350)}{z^3}$$

07.25.03.afzh.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (2 z^4 + 23 z^3 + 144 z^2 + 540 z + 1350)}{z^3} - \frac{21 \sqrt{\pi} (4 z^2 - 60 z + 225) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.afzi.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (20 z^3 - 260 z^2 + 1617 z - 9009) I_0\left(\frac{z}{2}\right)}{25 z^2} - \frac{32 e^{z/2} (20 z^4 - 280 z^3 + 2163 z^2 - 6468 z + 36036) I_1\left(\frac{z}{2}\right)}{25 z^3}$$

07.25.03.afzi.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63 \sqrt{\pi} (8 z^3 + 180 z^2 + 1350 z + 3675) \operatorname{erfi}(\sqrt{z})}{4 z^{9/2}} - \frac{63 e^z (2 z^4 - 32 z^3 + 260 z^2 - 1100 z + 3675)}{2 z^4}$$

07.25.03.afzk.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = -\frac{63 e^{-z} (2 z^4 + 32 z^3 + 260 z^2 + 1100 z + 3675)}{2 z^4} - \frac{63 \sqrt{\pi} (8 z^3 - 180 z^2 + 1350 z - 3675) \operatorname{erf}(\sqrt{z})}{4 z^{9/2}}$$

07.25.03.afzl.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (140 z^3 - 2706 z^2 + 14157 z - 154440) I_0\left(\frac{z}{2}\right)}{35 z^3} - \frac{32 e^{z/2} (140 z^4 - 2334 z^3 + 30129 z^2 - 56628 z + 617760) I_1\left(\frac{z}{2}\right)}{35 z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.afzm.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} e^z (64 z^6 + 768 z^5 + 2352 z^4 + 1728 z^3 + 108 z^2 + 9)$$

07.25.03.afzn.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{3} e^z (32 z^5 + 272 z^4 + 496 z^3 + 120 z^2 - 6 z - 3)$$

07.25.03.afzo.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (16 z^4 + 80 z^3 + 48 z^2 - 12 z + 3)$$

07.25.03.afzp.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (8 z^4 + 32 z^3 + 16 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} (4 z^4 + 12 z^3 - 2 z^2 + z) I_1\left(\frac{z}{2}\right)$$

07.25.03.afzq.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (8 z^3 + 12 z^2 - 6 z + 3)$$

07.25.03.afzr.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{3} e^{z/2} (8 z^3 + 4 z^2 + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (8 z^3 - 4 z^2 + 8 z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.afzs.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (4 z^3 - 8 z^2 + 17 z - 24)}{z} + \frac{12 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{3/2}}$$

07.25.03.afzt.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z}(4z^3 + 8z^2 + 17z + 24)}{z} - \frac{12\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{3/2}}$$

07.25.03.afzu.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, 3; z\right) = \frac{4}{3} e^{z/2} (4z^2 - 12z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4z^3 - 16z^2 + 45z - 105) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.afzv.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2z^3 - 11z^2 + 36z - 72)}{z^2} + \frac{30\sqrt{\pi} (z + 6) \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.afzw.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = -\frac{5 e^{-z} (2z^3 + 11z^2 + 36z + 72)}{z^2} - \frac{30\sqrt{\pi} (z - 6) \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.afzx.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (4z^2 - 26z + 105) I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (4z^3 - 30z^2 + 105z - 420) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.afzy.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (2z^3 - 18z^2 + 78z - 225)}{2z^3} + \frac{105\sqrt{\pi} (2z^2 + 24z + 75) \operatorname{erfi}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.afzz.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (2z^3 + 18z^2 + 78z + 225)}{2z^3} - \frac{105\sqrt{\pi} (2z^2 - 24z + 75) \operatorname{erf}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.ag00.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (10z^2 - 84z + 693) I_0\left(\frac{z}{2}\right)}{5z^2} + \frac{64 e^{z/2} (5z^3 - 63z^2 + 168z - 1386) I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.ag01.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{315 e^z (2z^3 - 26z^2 + 125z - 525)}{4z^4} + \frac{315\sqrt{\pi} (2z^3 + 36z^2 + 225z + 525) \operatorname{erfi}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.ag02.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = -\frac{315 e^{-z} (2z^3 + 26z^2 + 125z + 525)}{4z^4} - \frac{315\sqrt{\pi} (2z^3 - 36z^2 + 225z - 525) \operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.ag03.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{3}{2}, 6; z\right) = \frac{96 e^{z/2} (34z^2 - 99z + 3432) I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{32 e^{z/2} (38z^3 - 1695z^2 + 1188z - 41184) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.ag04.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = e^z (16z^4 + 96z^3 + 104z^2 + 8z + 1)$$

07.25.03.ag05.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -e^z (8z^3 + 28z^2 + 10z - 1)$$

07.25.03.ag06.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, 1; z\right) = e^{z/2} (-4z^3 - 12z^2 - 5z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} (-4z^3 - 8z^2 + z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ag07.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -e^z (4z^2 + 4z - 1)$$

07.25.03.ag08.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, 2; z\right) = e^{z/2} (-4z^2 - 2z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} (-4z^2 + 2z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.ag09.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{6\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{3/2}} - \frac{3e^z (2z^2 - 3z + 4)}{z}$$

07.25.03.ag0a.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3e^{-z} (2z^2 + 3z + 4)}{z} - \frac{6\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{3/2}}$$

07.25.03.ag0b.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, 3; z\right) = -8e^{z/2} (z - 2) I_0\left(\frac{z}{2}\right) - \frac{4e^{z/2} (2z^2 - 6z + 15) I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.ag0c.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{15\sqrt{\pi} (2z + 9) \operatorname{erfi}(\sqrt{z})}{2z^{5/2}} - \frac{15e^z (z^2 - 4z + 9)}{z^2}$$

07.25.03.ag0d.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = -\frac{15e^{-z} (z^2 + 4z + 9)}{z^2} - \frac{15\sqrt{\pi} (2z - 9) \operatorname{erf}(\sqrt{z})}{2z^{5/2}}$$

07.25.03.ag0e.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, 4; z\right) = -\frac{4e^{z/2} (6z - 35) I_0\left(\frac{z}{2}\right)}{z} - \frac{4e^{z/2} (6z^2 - 25z + 140) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.ag0f.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{105\sqrt{\pi} (2z^2 + 18z + 45) \operatorname{erfi}(\sqrt{z})}{8z^{7/2}} - \frac{105e^z (2z^2 - 12z + 45)}{4z^3}$$

07.25.03.ag0g.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105e^{-z} (2z^2 + 12z + 45)}{4z^3} - \frac{105\sqrt{\pi} (2z^2 - 18z + 45) \operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.ag0h.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, 5; z\right) = -\frac{224e^{z/2} (z - 27) I_0\left(\frac{z}{2}\right)}{5z^2} - \frac{32e^{z/2} (23z^2 - 28z + 756) I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.ag0i.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{315\sqrt{\pi}(4z^3 + 54z^2 + 270z + 525)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}} - \frac{315e^z(14z^2 - 80z + 525)}{16z^4}$$

07.25.03.ag0j.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{315e^{-z}(14z^2 + 80z + 525)}{16z^4} - \frac{315\sqrt{\pi}(4z^3 - 54z^2 + 270z - 525)\operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.ag0k.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; -\frac{1}{2}, 6; z\right) = \frac{32e^{z/2}(16z^2 + 135z + 2376)I_0\left(\frac{z}{2}\right)}{7z^3} - \frac{32e^{z/2}(16z^3 + 361z^2 + 540z + 9504)I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{1}{2}$

07.25.03.0103.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = e^z(4z^2 + 8z + 1)$$

07.25.03.0104.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, 1; z\right) = e^{z/2}\left((2z^2 + 4z + 1)I_0\left(\frac{z}{2}\right) + 2z(z + 1)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.ag0l.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = e^z(2z + 1)$$

07.25.03.0105.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, 2; z\right) = e^{z/2}\left((2z + 1)I_0\left(\frac{z}{2}\right) + (2z - 1)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.0106.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{3e^z(z - 1)}{z} + \frac{3\sqrt{\pi}}{2z^{3/2}}\operatorname{erfi}(\sqrt{z})$$

07.25.03.ag0m.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3e^{-z}(z + 1)}{z} - \frac{3\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{2z^{3/2}}$$

07.25.03.0107.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, 3; z\right) = \frac{4}{z}e^{z/2}\left(zI_0\left(\frac{z}{2}\right) + (z - 3)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.ag0n.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{15e^z(z - 3)}{2z^2} + \frac{15\sqrt{\pi}(z + 3)\operatorname{erfi}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.ag0o.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = -\frac{15e^{-z}(z + 3)}{2z^2} - \frac{15\sqrt{\pi}(z - 3)\operatorname{erf}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.ag0p.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, 4; z\right) = \frac{20 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z - 20) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.ag0q.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{315 e^z (2z - 15)}{32 z^3} + \frac{105 \sqrt{\pi} (4z^2 + 24z + 45) \operatorname{erfi}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.ag0r.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{315 e^{-z} (2z + 15)}{32 z^3} - \frac{105 \sqrt{\pi} (4z^2 - 24z + 45) \operatorname{erf}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.ag0s.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (2z + 21) I_0\left(\frac{z}{2}\right)}{5 z^2} - \frac{64 e^{z/2} (z^2 + 4z + 42) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.ag0t.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (4z^3 + 36z^2 + 135z + 210) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}} - \frac{315 e^z (2z^2 - 5z + 210)}{64 z^4}$$

07.25.03.ag0u.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{315 e^{-z} (2z^2 + 5z + 210)}{64 z^4} - \frac{315 \sqrt{\pi} (4z^3 - 36z^2 + 135z - 210) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.ag0v.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^2 + 39z + 216) I_0\left(\frac{z}{2}\right)}{7 z^3} - \frac{32 e^{z/2} (4z^3 + 43z^2 + 156z + 864) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = 1$

07.25.03.ag0w.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; 1, \frac{3}{2}; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{3}{2}$, $b_1 = \frac{3}{2}$

07.25.03.ag0x.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = e^z$$

07.25.03.ag0y.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.ag0z.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{3 e^z}{2z} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.ag10.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3e^{-z}}{2z}$$

07.25.03.ag11.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, 3; z\right) = \frac{4e^{z/2} I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.ag12.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{45e^z}{8z^2} - \frac{15\sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.ag13.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{15\sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45e^{-z}}{8z^2}$$

07.25.03.ag14.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, 4; z\right) = \frac{4e^{z/2} (z+4) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4e^{z/2} I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.ag15.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{105e^z (2z+15)}{64z^3} - \frac{105\sqrt{\pi} (4z^2+12z+15) \operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.ag16.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{105e^{-z} (2z-15)}{64z^3} + \frac{105\sqrt{\pi} (4z^2-12z+15) \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.ag17.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, 5; z\right) = \frac{32e^{z/2} (z^2+4z+12) I_1\left(\frac{z}{2}\right)}{5z^3} - \frac{32e^{z/2} (z+3) I_0\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.ag18.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{315e^z (4z^2+20z+105)}{256z^4} - \frac{315\sqrt{\pi} (8z^3+36z^2+90z+105) \operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ag19.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z} (4z^2-20z+105)}{256z^4} + \frac{315\sqrt{\pi} (8z^3-36z^2+90z-105) \operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ag1a.01

$${}_2F_2\left(\frac{3}{2}, \frac{3}{2}; \frac{3}{2}, 6; z\right) = \frac{32e^{z/2} (2z^3+11z^2+36z+96) I_1\left(\frac{z}{2}\right)}{7z^4} - \frac{32e^{z/2} (2z^2+9z+24) I_0\left(\frac{z}{2}\right)}{7z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = -\frac{11}{2}$

07.25.03.ag1b.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{108056025} (8192 z^{14} + 516096 z^{13} + 12390400 z^{12} + 144580608 z^{11} + 866571264 z^{10} + 2588113920 z^9 + 3412926720 z^8 + 1456358400 z^7 + 60540480 z^6 + 1995840 z^5 + 680400 z^4 + 756000 z^3 + 1984500 z^2 + 10716300 z + 108056025) + \frac{1}{108056025} (4096 e^z \sqrt{\pi} (2 z^{29/2} + 127 z^{27/2} + 3087 z^{25/2} + 36750 z^{23/2} + 227850 z^{21/2} + 723240 z^{19/2} + 1076040 z^{17/2} + 609840 z^{15/2} + 75600 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ag1c.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{108056025} (8192 z^{14} - 516096 z^{13} + 12390400 z^{12} - 144580608 z^{11} + 866571264 z^{10} - 2588113920 z^9 + 3412926720 z^8 - 1456358400 z^7 + 60540480 z^6 - 1995840 z^5 + 680400 z^4 - 756000 z^3 + 1984500 z^2 - 10716300 z + 108056025) - \frac{1}{108056025} (4096 e^{-z} \sqrt{\pi} (2 z^{29/2} - 127 z^{27/2} + 3087 z^{25/2} - 36750 z^{23/2} + 227850 z^{21/2} - 723240 z^{19/2} + 1076040 z^{17/2} - 609840 z^{15/2} + 75600 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ag1d.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9823275} (-4096 z^{13} - 225280 z^{12} - 4620288 z^{11} - 44676096 z^{10} - 211952640 z^9 - 463760640 z^8 - 382233600 z^7 - 60540480 z^6 + 1995840 z^5 + 226800 z^4 + 151200 z^3 + 283500 z^2 + 1190700 z + 9823275) - \frac{1}{9823275} (2048 e^z \sqrt{\pi} (2 z^{27/2} + 111 z^{25/2} + 2310 z^{23/2} + 22890 z^{21/2} + 113400 z^{19/2} + 269640 z^{17/2} + 267120 z^{15/2} + 75600 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ag1e.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{9823275} (4096 z^{13} - 225280 z^{12} + 4620288 z^{11} - 44676096 z^{10} + 211952640 z^9 - 463760640 z^8 + 382233600 z^7 - 60540480 z^6 - 1995840 z^5 + 226800 z^4 - 151200 z^3 + 283500 z^2 - 1190700 z + 9823275) - \frac{1}{9823275} (2048 e^{-z} \sqrt{\pi} (2 z^{27/2} - 111 z^{25/2} + 2310 z^{23/2} - 22890 z^{21/2} + 113400 z^{19/2} - 269640 z^{17/2} + 267120 z^{15/2} - 75600 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ag1f.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1091475} (2048 z^{12} + 96256 z^{11} + 1637376 z^{10} + 12559360 z^9 + 43887360 z^8 + 60963840 z^7 + 20180160 z^6 - 1995840 z^5 + 226800 z^4 + 50400 z^3 + 56700 z^2 + 170100 z + 1091475) + \frac{1}{1091475} 1024 e^z \sqrt{\pi} (2 z^{25/2} + 95 z^{23/2} + 1645 z^{21/2} + 13020 z^{19/2} + 48300 z^{17/2} + 76440 z^{15/2} + 37800 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ag1g.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1091475} (2048 z^{12} - 96256 z^{11} + 1637376 z^{10} - 12559360 z^9 + 43887360 z^8 - 60963840 z^7 + 20180160 z^6 + 1995840 z^5 + 226800 z^4 - 50400 z^3 + 56700 z^2 - 170100 z + 1091475) - \frac{1}{1091475} 1024 e^{-z} \sqrt{\pi} (2 z^{25/2} - 95 z^{23/2} + 1645 z^{21/2} - 13020 z^{19/2} + 48300 z^{17/2} - 76440 z^{15/2} + 37800 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ag1h.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{155925} (-1024 z^{11} - 39936 z^{10} - 539648 z^9 - 3060480 z^8 - 6865920 z^7 - 4036032 z^6 + 665280 z^5 - 226800 z^4 + 50400 z^3 + 18900 z^2 + 34020 z + 155925) - \frac{512 e^z \sqrt{\pi} (2 z^{23/2} + 79 z^{21/2} + 1092 z^{19/2} + 6468 z^{17/2} + 15960 z^{15/2} + 12600 z^{13/2}) \operatorname{erf}(\sqrt{z})}{155925}$$

07.25.03.ag1i.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{155925} (1024 z^{11} - 39936 z^{10} + 539648 z^9 - 3060480 z^8 + 6865920 z^7 - 4036032 z^6 - 665280 z^5 - 226800 z^4 - 50400 z^3 + 18900 z^2 - 34020 z + 155925) - \frac{512 e^{-z} \sqrt{\pi} (2 z^{23/2} - 79 z^{21/2} + 1092 z^{19/2} - 6468 z^{17/2} + 15960 z^{15/2} - 12600 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.ag1j.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{31185} (512 z^{10} + 15872 z^9 + 158976 z^8 + 583680 z^7 + 576576 z^6 - 133056 z^5 + 75600 z^4 - 50400 z^3 + 18900 z^2 + 11340 z + 31185) + \frac{256 e^z \sqrt{\pi} (2 z^{21/2} + 63 z^{19/2} + 651 z^{17/2} + 2562 z^{15/2} + 3150 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.ag1k.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{31185} (512 z^{10} - 15872 z^9 + 158976 z^8 - 583680 z^7 + 576576 z^6 + 133056 z^5 + 75600 z^4 + 50400 z^3 + 18900 z^2 - 11340 z + 31185) - \frac{256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 63 z^{19/2} + 651 z^{17/2} - 2562 z^{15/2} + 3150 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.ag1l.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{10395} (-256 z^9 - 5888 z^8 - 38400 z^7 - 64064 z^6 + 19008 z^5 - 15120 z^4 + 16800 z^3 - 18900 z^2 + 11340 z + 10395) - \frac{128 e^z \sqrt{\pi} (2 z^{19/2} + 47 z^{17/2} + 322 z^{15/2} + 630 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.ag1m.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{10395} (256 z^9 - 5888 z^8 + 38400 z^7 - 64064 z^6 - 19008 z^5 - 15120 z^4 - 16800 z^3 - 18900 z^2 - 11340 z + 10395) - \frac{128 e^{-z} \sqrt{\pi} (2 z^{19/2} - 47 z^{17/2} + 322 z^{15/2} - 630 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.ag1n.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{128 z^8 + 1920 z^7 + 5824 z^6 - 2112 z^5 + 2160 z^4 - 3360 z^3 + 6300 z^2 - 11340 z + 10395}{10395} + \frac{64 e^z \sqrt{\pi} (2 z^{17/2} + 31 z^{15/2} + 105 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.ag1o.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{128 z^8 - 1920 z^7 + 5824 z^6 + 2112 z^5 + 2160 z^4 + 3360 z^3 + 6300 z^2 + 11340 z + 10395}{10395} - \frac{64 e^{-z} \sqrt{\pi} (2 z^{17/2} - 31 z^{15/2} + 105 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.ag1p.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, 1; z\right) = \frac{e^z (128 z^8 + 1472 z^7 + 2464 z^6 - 2352 z^5 + 4200 z^4 - 7980 z^3 + 13230 z^2 - 16065 z + 10395)}{10395}$$

07.25.03.ag1q.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{32 e^z \sqrt{\pi} (2 z + 15) \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{64 z^7 + 448 z^6 - 192 z^5 + 240 z^4 - 480 z^3 + 1260 z^2 - 3780 z + 10395}{10395}$$

07.25.03.ag1r.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{32 e^{-z} \sqrt{\pi} (2 z - 15) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{10395} + \frac{-64 z^7 + 448 z^6 + 192 z^5 + 240 z^4 + 480 z^3 + 1260 z^2 + 3780 z + 10395}{10395}$$

07.25.03.ag1s.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, 2; z\right) = \frac{e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13230 z + 10395)}{10395}$$

07.25.03.ag1t.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{32z^7 - 32z^6 + 144z^5 - 800z^4 + 4020z^3 - 16884z^2 + 57225z - 161280}{3465z} + \frac{16e^z\sqrt{\pi}(2z^8 - z^7 + 7z^6 - 42z^5 + 210z^4 - 840z^3 + 2520z^2 - 5040z + 5040)\operatorname{erf}(\sqrt{z})}{3465z^{3/2}}$$

07.25.03.ag1u.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{32z^7 + 32z^6 + 144z^5 + 800z^4 + 4020z^3 + 16884z^2 + 57225z + 161280}{3465z} - \frac{16e^{-z}\sqrt{\pi}(2z^8 + z^7 + 7z^6 + 42z^5 + 210z^4 + 840z^3 + 2520z^2 + 5040z + 5040)\operatorname{erfi}(\sqrt{z})}{3465z^{3/2}}$$

07.25.03.ag1v.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, 3; z\right) = \frac{1}{10395z^2} 2e^z(128z^8 - 576z^7 + 3360z^6 - 18480z^5 + 88200z^4 - 343980z^3 + 1018710z^2 - 2027025z + 2027025) - \frac{390}{z^2}$$

07.25.03.ag1w.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{16z^7 - 144z^6 + 1088z^5 - 7020z^4 + 37908z^3 - 165963z^2 + 564480z - 1935360}{693z^2} + \frac{1}{693z^{5/2}} 8e^z\sqrt{\pi}(2z^8 - 17z^7 + 126z^6 - 798z^5 + 4200z^4 - 17640z^3 + 55440z^2 - 115920z + 120960)\operatorname{erf}(\sqrt{z})$$

07.25.03.ag1x.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{-16z^7 - 144z^6 - 1088z^5 - 7020z^4 - 37908z^3 - 165963z^2 - 564480z - 1935360}{693z^2} + \frac{1}{693z^{5/2}} 8e^{-z}\sqrt{\pi}(2z^8 + 17z^7 + 126z^6 + 798z^5 + 4200z^4 + 17640z^3 + 55440z^2 + 115920z + 120960)\operatorname{erfi}(\sqrt{z})$$

07.25.03.ag1y.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, 4; z\right) = \frac{1}{3465z^3} 2e^z(128z^8 - 1600z^7 + 14560z^6 - 105840z^5 + 617400z^4 - 2813580z^3 + 9459450z^2 - 20945925z + 22972950) - \frac{390(3z + 34)}{z^3}$$

07.25.03.ag1z.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{8z^7 - 136z^6 + 1500z^5 - 12588z^4 + 82851z^3 - 423360z^2 + 1451520z - 7257600}{99z^3} + \frac{1}{99z^{7/2}} 4e^z\sqrt{\pi}(2z^8 - 33z^7 + 357z^6 - 2940z^5 + 18900z^4 - 93240z^3 + 335160z^2 - 786240z + 907200)\operatorname{erf}(\sqrt{z})$$

07.25.03.ag20.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{8z^7 + 136z^6 + 1500z^5 + 12588z^4 + 82851z^3 + 423360z^2 + 1451520z + 7257600}{99z^3} - \frac{1}{99z^{7/2}} 4e^{-z}\sqrt{\pi}(2z^8 + 33z^7 + 357z^6 + 2940z^5 + 18900z^4 + 93240z^3 + 335160z^2 + 786240z + 907200)\operatorname{erfi}(\sqrt{z})$$

07.25.03.ag21.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, 5; z\right) = \frac{1}{3465 z^4} (8 e^z (128 z^8 - 2624 z^7 + 32928 z^6 - 303408 z^5 + 2134440 z^4 - 11351340 z^3 + 43513470 z^2 - 107972865 z + 130945815)) - \frac{156(15 z^2 + 340 z + 1938)}{z^4}$$

07.25.03.ag22.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{4 z^7 - 100 z^6 + 1452 z^5 - 15061 z^4 + 117600 z^3 - 725760 z^2 + 2016000 z - 16934400}{11 z^4} + \frac{1}{11 z^{9/2}} 2 e^z \sqrt{\pi} (2 z^8 - 49 z^7 + 700 z^6 - 7140 z^5 + 54600 z^4 - 311640 z^3 + 1270080 z^2 - 3326400 z + 4233600) \operatorname{erf}(\sqrt{z})$$

07.25.03.ag23.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{-4 z^7 - 100 z^6 - 1452 z^5 - 15061 z^4 - 117600 z^3 - 725760 z^2 - 2016000 z - 16934400}{11 z^4} + \frac{1}{11 z^{9/2}} 2 e^{-z} \sqrt{\pi} (2 z^8 + 49 z^7 + 700 z^6 + 7140 z^5 + 54600 z^4 + 311640 z^3 + 1270080 z^2 + 3326400 z + 4233600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ag24.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{11}{2}, 6; z\right) = \frac{1}{693 z^5} (8 e^z (128 z^8 - 3648 z^7 + 58464 z^6 - 654192 z^5 + 5405400 z^4 - 32972940 z^3 + 142432290 z^2 - 392837445 z + 523783260)) - \frac{780(5 z^3 + 170 z^2 + 1938 z + 7752)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = -\frac{9}{2}$

07.25.03.ag25.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{893025} (2048 z^{12} + 98304 z^{11} + 1721344 z^{10} + 13777920 z^9 + 51611904 z^8 + 82191360 z^7 + 41371200 z^6 + 1995840 z^5 + 75600 z^4 + 30240 z^3 + 40500 z^2 + 132300 z + 893025) + \frac{1}{893025} (1024 e^z \sqrt{\pi} (2 z^{25/2} + 97 z^{23/2} + 1728 z^{21/2} + 14250 z^{19/2} + 56400 z^{17/2} + 100440 z^{15/2} + 66240 z^{13/2} + 9360 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ag26.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{893025} (2048 z^{12} - 98304 z^{11} + 1721344 z^{10} - 13777920 z^9 + 51611904 z^8 - 82191360 z^7 + 41371200 z^6 - 1995840 z^5 + 75600 z^4 - 30240 z^3 + 40500 z^2 - 132300 z + 893025) - \frac{1}{893025} (1024 e^{-z} \sqrt{\pi} (2 z^{25/2} - 97 z^{23/2} + 1728 z^{21/2} - 14250 z^{19/2} + 56400 z^{17/2} - 100440 z^{15/2} + 66240 z^{13/2} - 9360 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ag27.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{99225} (-1024 z^{11} - 41984 z^{10} - 609280 z^9 - 3862272 z^8 - 10613760 z^7 - 10595520 z^6 - 1995840 z^5 + 75600 z^4 + 10080 z^3 + 8100 z^2 + 18900 z + 99225) - \frac{1}{99225} 512 e^z \sqrt{\pi} (2 z^{23/2} + 83 z^{21/2} + 1230 z^{19/2} + 8100 z^{17/2} + 24000 z^{15/2} + 28440 z^{13/2} + 9360 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ag28.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{99225} (1024 z^{11} - 41984 z^{10} + 609280 z^9 - 3862272 z^8 + 10613760 z^7 - 10595520 z^6 + 1995840 z^5 + 75600 z^4 - 10080 z^3 + 8100 z^2 - 18900 z + 99225) - \frac{1}{99225} 512 e^{-z} \sqrt{\pi} (2 z^{23/2} - 83 z^{21/2} + 1230 z^{19/2} - 8100 z^{17/2} + 24000 z^{15/2} - 28440 z^{13/2} + 9360 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ag29.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{14175} (512 z^{10} + 17408 z^9 + 200448 z^8 + 936960 z^7 + 1639872 z^6 + 665280 z^5 - 75600 z^4 + 10080 z^3 + 2700 z^2 + 3780 z + 14175) + \frac{256 e^z \sqrt{\pi} (2 z^{21/2} + 69 z^{19/2} + 816 z^{17/2} + 4020 z^{15/2} + 7920 z^{13/2} + 4680 z^{11/2}) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.ag2a.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{14175} (512 z^{10} - 17408 z^9 + 200448 z^8 - 936960 z^7 + 1639872 z^6 - 665280 z^5 - 75600 z^4 - 10080 z^3 + 2700 z^2 - 3780 z + 14175) - \frac{256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 69 z^{19/2} + 816 z^{17/2} - 4020 z^{15/2} + 7920 z^{13/2} - 4680 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.ag2b.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{2835} \left(-256 z^9 - 6912 z^8 - 58880 z^7 - 177216 z^6 - 133056 z^5 + 25200 z^4 - 10080 z^3 + 2700 z^2 + 1260 z + 2835 \right) - \frac{128 e^{-z} \sqrt{\pi} \left(2 z^{19/2} + 55 z^{17/2} + 486 z^{15/2} + 1590 z^{13/2} + 1560 z^{11/2} \right) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.ag2c.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{2835} \left(256 z^9 - 6912 z^8 + 58880 z^7 - 177216 z^6 + 133056 z^5 + 25200 z^4 + 10080 z^3 + 2700 z^2 - 1260 z + 2835 \right) - \frac{128 e^{-z} \sqrt{\pi} \left(2 z^{19/2} - 55 z^{17/2} + 486 z^{15/2} - 1590 z^{13/2} + 1560 z^{11/2} \right) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.ag2d.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} \left(128 z^8 + 2560 z^7 + 14144 z^6 + 19008 z^5 - 5040 z^4 + 3360 z^3 - 2700 z^2 + 1260 z + 945 \right) + \frac{64}{945} e^{-z} \sqrt{\pi} \left(2 z^{17/2} + 41 z^{15/2} + 240 z^{13/2} + 390 z^{11/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.ag2e.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945} \left(128 z^8 - 2560 z^7 + 14144 z^6 - 19008 z^5 - 5040 z^4 - 3360 z^3 - 2700 z^2 - 1260 z + 945 \right) - \frac{64}{945} e^{-z} \sqrt{\pi} \left(2 z^{17/2} - 41 z^{15/2} + 240 z^{13/2} - 390 z^{11/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ag2f.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945} \left(-64 z^7 - 832 z^6 - 2112 z^5 + 720 z^4 - 672 z^3 + 900 z^2 - 1260 z + 945 \right) - \frac{32}{945} e^{-z} \sqrt{\pi} \left(2 z^{15/2} + 27 z^{13/2} + 78 z^{11/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.ag2g.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} \left(64 z^7 - 832 z^6 + 2112 z^5 + 720 z^4 + 672 z^3 + 900 z^2 + 1260 z + 945 \right) - \frac{32}{945} e^{-z} \sqrt{\pi} \left(2 z^{15/2} - 27 z^{13/2} + 78 z^{11/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ag2h.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, 1; z\right) = -\frac{1}{945} e^{-z} \left(64 z^7 + 640 z^6 + 912 z^5 - 720 z^4 + 1020 z^3 - 1440 z^2 + 1575 z - 945 \right)$$

07.25.03.ag2i.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945} \left(-32 z^6 - 192 z^5 + 80 z^4 - 96 z^3 + 180 z^2 - 420 z + 945 \right) - \frac{16}{945} e^{-z} \sqrt{\pi} z^{11/2} (2z + 13) \operatorname{erf}(\sqrt{z})$$

07.25.03.ag2j.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{16}{945} e^{-z} \sqrt{\pi} (2z - 13) \operatorname{erfi}(\sqrt{z}) z^{11/2} + \frac{1}{945} \left(-32 z^6 + 192 z^5 + 80 z^4 + 96 z^3 + 180 z^2 + 420 z + 945 \right)$$

07.25.03.ag2k.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, 2; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)$$

07.25.03.ag2l.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-16 z^6 + 16 z^5 - 64 z^4 + 300 z^3 - 1236 z^2 + 4155 z - 11520}{315 z} - \frac{8 e^z \sqrt{\pi} (2 z^7 - z^6 + 6 z^5 - 30 z^4 + 120 z^3 - 360 z^2 + 720 z - 720) \operatorname{erfi}(\sqrt{z})}{315 z^{3/2}}$$

07.25.03.ag2m.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{16 z^6 + 16 z^5 + 64 z^4 + 300 z^3 + 1236 z^2 + 4155 z + 11520}{315 z} - \frac{8 e^{-z} \sqrt{\pi} (2 z^7 + z^6 + 6 z^5 + 30 z^4 + 120 z^3 + 360 z^2 + 720 z + 720) \operatorname{erfi}(\sqrt{z})}{315 z^{3/2}}$$

07.25.03.ag2n.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, 3; z\right) = -\frac{2 e^z (64 z^7 - 256 z^6 + 1296 z^5 - 6000 z^4 + 23100 z^3 - 68040 z^2 + 135135 z - 135135)}{945 z^2} - \frac{286}{z^2}$$

07.25.03.ag2o.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-8 z^6 + 64 z^5 - 420 z^4 + 2292 z^3 - 10113 z^2 + 34560 z - 120960}{63 z^2} - \frac{4 e^z \sqrt{\pi} (2 z^7 - 15 z^6 + 96 z^5 - 510 z^4 + 2160 z^3 - 6840 z^2 + 14400 z - 15120) \operatorname{erfi}(\sqrt{z})}{63 z^{5/2}}$$

07.25.03.ag2p.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{-8 z^6 - 64 z^5 - 420 z^4 - 2292 z^3 - 10113 z^2 - 34560 z - 120960}{63 z^2} + \frac{4 e^{-z} \sqrt{\pi} (2 z^7 + 15 z^6 + 96 z^5 + 510 z^4 + 2160 z^3 + 6840 z^2 + 14400 z + 15120) \operatorname{erfi}(\sqrt{z})}{63 z^{5/2}}$$

07.25.03.ag2q.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, 4; z\right) = \frac{858(z+10)}{z^3} - \frac{2 e^z (64 z^7 - 704 z^6 + 5520 z^5 - 33600 z^4 + 157500 z^3 - 540540 z^2 + 1216215 z - 1351350)}{315 z^3}$$

07.25.03.ag2r.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-4 z^6 + 60 z^5 - 572 z^4 + 4041 z^3 - 21600 z^2 + 73920 z - 403200}{9 z^3} - \frac{2 e^z \sqrt{\pi} (2 z^7 - 29 z^6 + 270 z^5 - 1860 z^4 + 9600 z^3 - 35640 z^2 + 85680 z - 100800) \operatorname{erfi}(\sqrt{z})}{9 z^{7/2}}$$

07.25.03.ag2s.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{4z^6 + 60z^5 + 572z^4 + 4041z^3 + 21600z^2 + 73920z + 403200}{9z^3} - \frac{2e^{-z}\sqrt{\pi}(2z^7 + 29z^6 + 270z^5 + 1860z^4 + 9600z^3 + 35640z^2 + 85680z + 100800)\operatorname{erfi}(\sqrt{z})}{9z^{7/2}}$$

07.25.03.ag2t.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, 5; z\right) = \frac{1716(z^2 + 20z + 102)}{z^4} - \frac{8e^z(64z^7 - 1152z^6 + 12432z^5 - 95760z^4 + 540540z^3 - 2162160z^2 + 5540535z - 6891885)}{315z^4}$$

07.25.03.ag2u.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-2z^6 + 44z^5 - 551z^4 + 4800z^3 - 32592z^2 + 80640z - 846720}{z^4} + \frac{e^z\sqrt{\pi}(-2z^7 + 43z^6 - 528z^5 + 4500z^4 - 27600z^3 + 118440z^2 - 322560z + 423360)\operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ag2v.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{-2z^6 - 44z^5 - 551z^4 - 4800z^3 - 32592z^2 - 80640z - 846720}{z^4} + \frac{e^{-z}\sqrt{\pi}(2z^7 + 43z^6 + 528z^5 + 4500z^4 + 27600z^3 + 118440z^2 + 322560z + 423360)\operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ag2w.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{9}{2}, 6; z\right) = -\frac{2860(7z^3 + 210z^2 + 2142z + 7752)}{7z^5} - \frac{1}{63z^5} 8e^z(64z^7 - 1600z^6 + 22032z^5 - 205920z^4 + 1364220z^3 - 6254820z^2 + 18050175z - 24942060)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = -\frac{7}{2}$

07.25.03.ag2x.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{11025}(512z^{10} + 17920z^9 + 215296z^8 + 1078272z^7 + 2159680z^6 + 1320000z^5 + 75600z^4 + 3360z^3 + 1620z^2 + 2700z + 11025) + \frac{1}{11025} 256e^z\sqrt{\pi}(2z^{21/2} + 71z^{19/2} + 875z^{17/2} + 4600z^{15/2} + 10200z^{13/2} + 8040z^{11/2} + 1320z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ag2y.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{11025}(512z^{10} - 17920z^9 + 215296z^8 - 1078272z^7 + 2159680z^6 - 1320000z^5 + 75600z^4 - 3360z^3 + 1620z^2 - 2700z + 11025) - \frac{1}{11025} 256e^{-z}\sqrt{\pi}(2z^{21/2} - 71z^{19/2} + 875z^{17/2} - 4600z^{15/2} + 10200z^{13/2} - 8040z^{11/2} + 1320z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ag2z.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{1575} (-256 z^9 - 7424 z^8 - 70656 z^7 - 259904 z^6 - 327360 z^5 - 75600 z^4 + 3360 z^3 + 540 z^2 + 540 z + 1575) - \frac{128 e^z \sqrt{\pi} (2 z^{19/2} + 59 z^{17/2} + 580 z^{15/2} + 2280 z^{13/2} + 3360 z^{11/2} + 1320 z^{9/2}) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.ag30.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{256 z^9 - 7424 z^8 + 70656 z^7 - 259904 z^6 + 327360 z^5 - 75600 z^4 - 3360 z^3 + 540 z^2 - 540 z + 1575}{1575} - \frac{128 e^{-z} \sqrt{\pi} (2 z^{19/2} - 59 z^{17/2} + 580 z^{15/2} - 2280 z^{13/2} + 3360 z^{11/2} - 1320 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.ag31.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} (128 z^8 + 2944 z^7 + 20672 z^6 + 48576 z^5 + 25200 z^4 - 3360 z^3 + 540 z^2 + 180 z + 315) + \frac{64}{315} e^z \sqrt{\pi} (2 z^{17/2} + 47 z^{15/2} + 345 z^{13/2} + 900 z^{11/2} + 660 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ag32.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{315} (128 z^8 - 2944 z^7 + 20672 z^6 - 48576 z^5 + 25200 z^4 + 3360 z^3 + 540 z^2 - 180 z + 315) - \frac{64}{315} e^{-z} \sqrt{\pi} (2 z^{17/2} - 47 z^{15/2} + 345 z^{13/2} - 900 z^{11/2} + 660 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ag33.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} (-64 z^7 - 1088 z^6 - 4928 z^5 - 5040 z^4 + 1120 z^3 - 540 z^2 + 180 z + 105) - \frac{32}{105} e^z \sqrt{\pi} (2 z^{15/2} + 35 z^{13/2} + 170 z^{11/2} + 220 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ag34.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} (64 z^7 - 1088 z^6 + 4928 z^5 - 5040 z^4 - 1120 z^3 - 540 z^2 - 180 z + 105) - \frac{32}{105} e^{-z} \sqrt{\pi} (2 z^{15/2} - 35 z^{13/2} + 170 z^{11/2} - 220 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ag35.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} (32 z^6 + 352 z^5 + 720 z^4 - 224 z^3 + 180 z^2 - 180 z + 105) + \frac{16}{105} e^z \sqrt{\pi} (2 z^{13/2} + 23 z^{11/2} + 55 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ag36.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} (32 z^6 - 352 z^5 + 720 z^4 + 224 z^3 + 180 z^2 + 180 z + 105) - \frac{16}{105} e^{-z} \sqrt{\pi} (2 z^{13/2} - 23 z^{11/2} + 55 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ag37.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, 1; z\right) = \frac{1}{105} e^z (32 z^6 + 272 z^5 + 320 z^4 - 200 z^3 + 210 z^2 - 195 z + 105)$$

07.25.03.ag38.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{8}{105} e^z \sqrt{\pi} (2 z + 11) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105)$$

07.25.03.ag39.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{8}{105} e^{-z} \sqrt{\pi} (2 z - 11) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} (-16 z^5 + 80 z^4 + 32 z^3 + 36 z^2 + 60 z + 105)$$

07.25.03.ag3a.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, 2; z\right) = \frac{1}{105} e^z (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105)$$

07.25.03.ag3b.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{8 z^5 - 8 z^4 + 28 z^3 - 108 z^2 + 355 z - 960}{35 z} + \frac{4 e^z \sqrt{\pi} (2 z^6 - z^5 + 5 z^4 - 20 z^3 + 60 z^2 - 120 z + 120) \operatorname{erf}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.ag3c.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{8 z^5 + 8 z^4 + 28 z^3 + 108 z^2 + 355 z + 960}{35 z} - \frac{4 e^{-z} \sqrt{\pi} (2 z^6 + z^5 + 5 z^4 + 20 z^3 + 60 z^2 + 120 z + 120) \operatorname{erfi}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.ag3d.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, 3; z\right) = \frac{2 e^z (32 z^6 - 112 z^5 + 480 z^4 - 1800 z^3 + 5250 z^2 - 10395 z + 10395)}{105 z^2} - \frac{198}{z^2}$$

07.25.03.ag3e.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{4 z^5 - 28 z^4 + 156 z^3 - 697 z^2 + 2400 z - 8640}{7 z^2} + \frac{2 e^z \sqrt{\pi} (2 z^6 - 13 z^5 + 70 z^4 - 300 z^3 + 960 z^2 - 2040 z + 2160) \operatorname{erf}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.ag3f.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{-4 z^5 - 28 z^4 - 156 z^3 - 697 z^2 - 2400 z - 8640}{7 z^2} + \frac{2 e^{-z} \sqrt{\pi} (2 z^6 + 13 z^5 + 70 z^4 + 300 z^3 + 960 z^2 + 2040 z + 2160) \operatorname{erfi}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.ag3g.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, 4; z\right) = \frac{2 e^z (32 z^6 - 304 z^5 + 2000 z^4 - 9800 z^3 + 34650 z^2 - 79695 z + 90090)}{35 z^3} - \frac{198(3z + 26)}{z^3}$$

07.25.03.ag3h.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{2 z^5 - 26 z^4 + 209 z^3 - 1200 z^2 + 4080 z - 25200}{z^3} + \frac{e^z \sqrt{\pi} (2 z^6 - 25 z^5 + 195 z^4 - 1080 z^3 + 4200 z^2 - 10440 z + 12600) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ag3i.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{2 z^5 + 26 z^4 + 209 z^3 + 1200 z^2 + 4080 z + 25200}{z^3} + \frac{e^{-z} \sqrt{\pi} (-2 z^6 - 25 z^5 - 195 z^4 - 1080 z^3 - 4200 z^2 - 10440 z - 12600) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ag3j.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, 5; z\right) = \frac{8 e^z (32 z^6 - 496 z^5 + 4480 z^4 - 27720 z^3 + 117810 z^2 - 315315 z + 405405)}{35 z^4} - \frac{396(3z^2 + 52z + 234)}{z^4}$$

07.25.03.ag3k.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9(z^5 - 19z^4 + 200z^3 - 1584z^2 + 3080z - 47040)}{z^4} + \frac{9 e^z \sqrt{\pi} (2 z^6 - 37 z^5 + 380 z^4 - 2600 z^3 + 12000 z^2 - 34440 z + 47040) \operatorname{erf}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.ag3l.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} \sqrt{\pi} (2 z^6 + 37 z^5 + 380 z^4 + 2600 z^3 + 12000 z^2 + 34440 z + 47040) \operatorname{erfi}(\sqrt{z})}{2 z^{9/2}} - \frac{9(z^5 + 19z^4 + 200z^3 + 1584z^2 + 3080z + 47040)}{z^4}$$

07.25.03.ag3m.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{7}{2}, 6; z\right) = \frac{8 e^z (32 z^6 - 688 z^5 + 7920 z^4 - 59400 z^3 + 296010 z^2 - 907335 z + 1312740)}{7 z^5} - \frac{1980(7z^3 + 182z^2 + 1638z + 5304)}{7 z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = -\frac{5}{2}$

07.25.03.ag3n.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225} (128 z^8 + 3072 z^7 + 23104 z^6 + 62016 z^5 + 47952 z^4 + 3360 z^3 + 180 z^2 + 108 z + 225) + \frac{64}{225} e^z \sqrt{\pi} (2 z^{17/2} + 49 z^{15/2} + 384 z^{13/2} + 1128 z^{11/2} + 1104 z^{9/2} + 216 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ag3o.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{225} (128 z^8 - 3072 z^7 + 23\,104 z^6 - 62\,016 z^5 + 47\,952 z^4 - 3360 z^3 + 180 z^2 - 108 z + 225) - \frac{64}{225} e^{-z} \sqrt{\pi} (2 z^{17/2} - 49 z^{15/2} + 384 z^{13/2} - 1128 z^{11/2} + 1104 z^{9/2} - 216 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ag3p.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} (-64 z^7 - 1216 z^6 - 6720 z^5 - 11\,376 z^4 - 3360 z^3 + 180 z^2 + 36 z + 45) - \frac{32}{45} e^z \sqrt{\pi} (2 z^{15/2} + 39 z^{13/2} + 228 z^{11/2} + 444 z^{9/2} + 216 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ag3q.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{45} (64 z^7 - 1216 z^6 + 6720 z^5 - 11\,376 z^4 + 3360 z^3 + 180 z^2 - 36 z + 45) - \frac{32}{45} e^{-z} \sqrt{\pi} (2 z^{15/2} - 39 z^{13/2} + 228 z^{11/2} - 444 z^{9/2} + 216 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ag3r.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} (32 z^6 + 448 z^5 + 1584 z^4 + 1120 z^3 - 180 z^2 + 36 z + 15) + \frac{16}{15} e^z \sqrt{\pi} (2 z^{13/2} + 29 z^{11/2} + 112 z^{9/2} + 108 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ag3s.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} (32 z^6 - 448 z^5 + 1584 z^4 - 1120 z^3 - 180 z^2 - 36 z + 15) - \frac{16}{15} e^{-z} \sqrt{\pi} (2 z^{13/2} - 29 z^{11/2} + 112 z^{9/2} - 108 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ag3t.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} (-16 z^5 - 144 z^4 - 224 z^3 + 60 z^2 - 36 z + 15) - \frac{8}{15} e^z \sqrt{\pi} (2 z^{11/2} + 19 z^{9/2} + 36 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ag3u.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15} (16 z^5 - 144 z^4 + 224 z^3 + 60 z^2 + 36 z + 15) - \frac{8}{15} e^{-z} \sqrt{\pi} (2 z^{11/2} - 19 z^{9/2} + 36 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ag3v.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, 1; z\right) = -\frac{1}{15} e^z (16 z^5 + 112 z^4 + 104 z^3 - 48 z^2 + 33 z - 15)$$

07.25.03.ag3w.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15} (-8 z^4 - 32 z^3 + 12 z^2 - 12 z + 15) - \frac{4}{15} e^z \sqrt{\pi} (2 z^{9/2} + 9 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ag3x.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} (-8 z^4 + 32 z^3 + 12 z^2 + 12 z + 15) + \frac{4}{15} e^{-z} \sqrt{\pi} (2 z^{9/2} - 9 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ag3y.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, 2; z\right) = -\frac{1}{15} e^z (16z^4 + 32z^3 - 24z^2 + 24z - 15)$$

07.25.03.ag3z.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-4z^4 + 4z^3 - 12z^2 + 37z - 96}{5z} - \frac{2e^z \sqrt{\pi} (2z^5 - z^4 + 4z^3 - 12z^2 + 24z - 24) \operatorname{erf}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.ag40.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{4z^4 + 4z^3 + 12z^2 + 37z + 96}{5z} - \frac{2e^{-z} \sqrt{\pi} (2z^5 + z^4 + 4z^3 + 12z^2 + 24z + 24) \operatorname{erfi}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.ag41.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, 3; z\right) = -\frac{2e^z (16z^5 - 48z^4 + 168z^3 - 480z^2 + 945z - 945)}{15z^2} - \frac{126}{z^2}$$

07.25.03.ag42.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-2z^4 + 12z^3 - 55z^2 + 192z - 720}{z^2} + \frac{e^z \sqrt{\pi} (-2z^5 + 11z^4 - 48z^3 + 156z^2 - 336z + 360) \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.ag43.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-2z^4 - 12z^3 - 55z^2 - 192z - 720}{z^2} + \frac{e^{-z} \sqrt{\pi} (2z^5 + 11z^4 + 48z^3 + 156z^2 + 336z + 360) \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.ag44.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, 4; z\right) = -\frac{126(3z + 22)}{z^3} - \frac{2e^z (16z^5 - 128z^4 + 680z^3 - 2520z^2 + 5985z - 6930)}{5z^3}$$

07.25.03.ag45.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7(z^4 - 11z^3 + 72z^2 - 240z + 1800)}{z^3} - \frac{7e^z \sqrt{\pi} (2z^5 - 21z^4 + 132z^3 - 552z^2 + 1440z - 1800) \operatorname{erf}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.ag46.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(z^4 + 11z^3 + 72z^2 + 240z + 1800)}{z^3} - \frac{7e^{-z} \sqrt{\pi} (2z^5 + 21z^4 + 132z^3 + 552z^2 + 1440z + 1800) \operatorname{erfi}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.ag47.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, 5; z\right) = -\frac{252(15z^2 + 220z + 858)}{5z^4} - \frac{8e^z (16z^5 - 208z^4 + 1512z^3 - 7056z^2 + 20097z - 27027)}{5z^4}$$

07.25.03.ag48.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{63(z^4 - 16z^3 + 168z^2 - 160z + 5880)}{2z^4} - \frac{63e^z\sqrt{\pi}(2z^5 - 31z^4 + 256z^3 - 1320z^2 + 4080z - 5880)\operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.ag49.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63e^{-z}\sqrt{\pi}(2z^5 + 31z^4 + 256z^3 + 1320z^2 + 4080z + 5880)\operatorname{erfi}(\sqrt{z})}{4z^{9/2}} - \frac{63(z^4 + 16z^3 + 168z^2 + 160z + 5880)}{2z^4}$$

07.25.03.ag4a.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{5}{2}, 6; z\right) = -\frac{36(35z^3 + 770z^2 + 6006z + 17160)}{z^5} - \frac{8e^z(16z^5 - 288z^4 + 2664z^3 - 15048z^2 + 50193z - 77220)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = -\frac{3}{2}$

07.25.03.ag4b.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9}(32z^6 + 480z^5 + 1936z^4 + 2016z^3 + 180z^2 + 12z + 9) + \frac{16}{9}e^z\sqrt{\pi}(2z^{13/2} + 31z^{11/2} + 135z^{9/2} + 174z^{7/2} + 42z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ag4c.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9}(32z^6 - 480z^5 + 1936z^4 - 2016z^3 + 180z^2 - 12z + 9) - \frac{16}{9}e^{-z}\sqrt{\pi}(2z^{13/2} - 31z^{11/2} + 135z^{9/2} - 174z^{7/2} + 42z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ag4d.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3}(-16z^5 - 176z^4 - 448z^3 - 180z^2 + 12z + 3) - \frac{8}{3}e^z\sqrt{\pi}(2z^{11/2} + 23z^{9/2} + 66z^{7/2} + 42z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ag4e.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3}(16z^5 - 176z^4 + 448z^3 - 180z^2 - 12z + 3) - \frac{8}{3}e^{-z}\sqrt{\pi}(2z^{11/2} - 23z^{9/2} + 66z^{7/2} - 42z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ag4f.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3}(8z^4 + 56z^3 + 60z^2 - 12z + 3) + \frac{4}{3}e^z\sqrt{\pi}(2z^{9/2} + 15z^{7/2} + 21z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ag4g.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3}(8z^4 - 56z^3 + 60z^2 + 12z + 3) - \frac{4}{3}e^{-z}\sqrt{\pi}(2z^{9/2} - 15z^{7/2} + 21z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ag4h.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, 1; z\right) = \frac{1}{3} e^z (8z^4 + 44z^3 + 30z^2 - 9z + 3)$$

07.25.03.ag4i.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3} (4z^3 + 12z^2 - 4z + 3) + \frac{2}{3} e^z \sqrt{\pi} (2z^{7/2} + 7z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ag4j.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{3} (-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3} e^{-z} \sqrt{\pi} (2z^{7/2} - 7z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ag4k.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, 2; z\right) = \frac{1}{3} e^z (8z^3 + 12z^2 - 6z + 3)$$

07.25.03.ag4l.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{2z^3 - 2z^2 + 5z - 12}{z} + \frac{e^z \sqrt{\pi} (2z^4 - z^3 + 3z^2 - 6z + 6) \operatorname{erf}(\sqrt{z})}{z^{3/2}}$$

07.25.03.ag4m.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{2z^3 + 2z^2 + 5z + 12}{z} + \frac{e^{-z} \sqrt{\pi} (-2z^4 - z^3 - 3z^2 - 6z - 6) \operatorname{erfi}(\sqrt{z})}{z^{3/2}}$$

07.25.03.ag4n.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, 3; z\right) = \frac{2e^z (8z^4 - 20z^3 + 54z^2 - 105z + 105)}{3z^2} - \frac{70}{z^2}$$

07.25.03.ag4o.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(z^3 - 5z^2 + 18z - 72)}{z^2} + \frac{5e^z \sqrt{\pi} (2z^4 - 9z^3 + 30z^2 - 66z + 72) \operatorname{erf}(\sqrt{z})}{2z^{5/2}}$$

07.25.03.ag4p.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (2z^4 + 9z^3 + 30z^2 + 66z + 72) \operatorname{erfi}(\sqrt{z})}{2z^{5/2}} - \frac{5(z^3 + 5z^2 + 18z + 72)}{z^2}$$

07.25.03.ag4q.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, 4; z\right) = \frac{2e^z (8z^4 - 52z^3 + 210z^2 - 525z + 630)}{z^3} - \frac{210(z + 6)}{z^3}$$

07.25.03.ag4r.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(z^3 - 9z^2 + 28z - 300)}{2z^3} + \frac{35e^z \sqrt{\pi} (2z^4 - 17z^3 + 81z^2 - 228z + 300) \operatorname{erf}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.ag4s.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(z^3 + 9z^2 + 28z + 300)}{2z^3} - \frac{35e^{-z} \sqrt{\pi} (2z^4 + 17z^3 + 81z^2 + 228z + 300) \operatorname{erfi}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.ag4t.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, 5; z\right) = \frac{8e^z (8z^4 - 84z^3 + 462z^2 - 1449z + 2079)}{z^4} - \frac{84(5z^2 + 60z + 198)}{z^4}$$

07.25.03.ag4u.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{315(z^3 - 20z^2 - 20z - 840)}{4z^4} + \frac{315e^z\sqrt{\pi}(2z^4 - 25z^3 + 156z^2 - 540z + 840)\operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.ag4v.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(2z^4 + 25z^3 + 156z^2 + 540z + 840)\operatorname{erfi}(\sqrt{z})}{8z^{9/2}} - \frac{315(z^3 + 20z^2 - 20z + 840)}{4z^4}$$

07.25.03.ag4w.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{3}{2}, 6; z\right) = \frac{40e^z(8z^4 - 116z^3 + 810z^2 - 3069z + 5148)}{z^5} - \frac{20(35z^3 + 630z^2 + 4158z + 10296)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = -\frac{1}{2}$

07.25.03.ag4x.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, -\frac{1}{2}; z\right) = 8z^4 + 64z^3 + 100z^2 + 12z + 4e^z\sqrt{\pi}(2z^{9/2} + 17z^{7/2} + 32z^{5/2} + 10z^{3/2})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.ag4y.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, -\frac{1}{2}; -z\right) = 8z^4 - 64z^3 + 100z^2 - 12z - 4e^{-z}\sqrt{\pi}(2z^{9/2} - 17z^{7/2} + 32z^{5/2} - 10z^{3/2})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.ag4z.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, \frac{1}{2}; z\right) = -4z^3 - 20z^2 - 12z - 2e^z\sqrt{\pi}(2z^{7/2} + 11z^{5/2} + 10z^{3/2})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.ag50.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, \frac{1}{2}; -z\right) = 4z^3 - 20z^2 + 12z - 2e^{-z}\sqrt{\pi}(2z^{7/2} - 11z^{5/2} + 10z^{3/2})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.ag51.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, 1; z\right) = -e^z(4z^3 + 16z^2 + 7z - 1)$$

07.25.03.ag52.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, \frac{3}{2}; z\right) = -2z^2 - e^z\sqrt{\pi}(2z + 5)\operatorname{erf}(\sqrt{z})z^{3/2} - 4z + 1$$

07.25.03.ag53.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, \frac{3}{2}; -z\right) = -2z^2 + e^{-z}\sqrt{\pi}(2z - 5)\operatorname{erfi}(\sqrt{z})z^{3/2} + 4z + 1$$

07.25.03.ag54.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, 2; z\right) = -e^z(4z^2 + 4z - 1)$$

07.25.03.ag55.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{3(z^2 - z + 2)}{z} - \frac{3e^z\sqrt{\pi}(2z^3 - z^2 + 2z - 2)\operatorname{erf}(\sqrt{z})}{2z^{3/2}}$$

07.25.03.ag56.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3(z^2 + z + 2)}{z} - \frac{3e^{-z}\sqrt{\pi}(2z^3 + z^2 + 2z + 2)\operatorname{erfi}(\sqrt{z})}{2z^{3/2}}$$

07.25.03.ag57.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, 3; z\right) = -\frac{2e^z(4z^3 - 8z^2 + 15z - 15)}{z^2} - \frac{30}{z^2}$$

07.25.03.ag58.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{15(z^2 - 4z + 18)}{2z^2} - \frac{15e^z\sqrt{\pi}(2z^3 - 7z^2 + 16z - 18)\operatorname{erf}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.ag59.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z}\sqrt{\pi}(2z^3 + 7z^2 + 16z + 18)\operatorname{erfi}(\sqrt{z})}{4z^{5/2}} - \frac{15(z^2 + 4z + 18)}{2z^2}$$

07.25.03.ag5a.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, 4; z\right) = -\frac{30(3z + 14)}{z^3} - \frac{6e^z(4z^3 - 20z^2 + 55z - 70)}{z^3}$$

07.25.03.ag5b.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{105(z^2 - 2z + 60)}{4z^3} - \frac{105e^z\sqrt{\pi}(2z^3 - 13z^2 + 42z - 60)\operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.ag5c.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105(z^2 + 2z + 60)}{4z^3} - \frac{105e^{-z}\sqrt{\pi}(2z^3 + 13z^2 + 42z + 60)\operatorname{erfi}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.ag5d.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, 5; z\right) = -\frac{12(15z^2 + 140z + 378)}{z^4} - \frac{24e^z(4z^3 - 32z^2 + 119z - 189)}{z^4}$$

07.25.03.ag5e.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{315(9z^2 + 40z + 420)}{8z^4} - \frac{945e^z\sqrt{\pi}(2z^3 - 19z^2 + 80z - 140)\operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.ag5f.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{945e^{-z}\sqrt{\pi}(2z^3 + 19z^2 + 80z + 140)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}} - \frac{315(9z^2 - 40z + 420)}{8z^4}$$

07.25.03.ag5g.01

$${}_2F_2\left(\frac{3}{2}, 2; -\frac{1}{2}, 6; z\right) = -\frac{120e^z(4z^3 - 44z^2 + 207z - 396)}{z^5} - \frac{60(5z^3 + 70z^2 + 378z + 792)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = \frac{1}{2}$

07.25.03.0108.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, \frac{1}{2}; z\right) = 1 + 2z^2 + 6z + e^z\sqrt{\pi}(2z^2 + 7z + 3)\operatorname{erf}(\sqrt{z})\sqrt{z}$$

07.25.03.ag5h.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, \frac{1}{2}; -z\right) = 2z^2 - 6z + e^{-z}\sqrt{\pi}(-2z^{5/2} + 7z^{3/2} - 3\sqrt{z})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.0109.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, 1; z\right) = e^z (2z^2 + 5z + 1)$$

07.25.03.ag5i.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, \frac{3}{2}; z\right) = z + \frac{1}{2} e^z \sqrt{\pi} (2z + 3) \operatorname{erf}(\sqrt{z}) \sqrt{z} + 1$$

07.25.03.ag5j.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, \frac{3}{2}; -z\right) = -z + \frac{1}{2} e^{-z} \sqrt{\pi} (2z - 3) \operatorname{erfi}(\sqrt{z}) \sqrt{z} + 1$$

07.25.03.ag5k.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, 2; z\right) = e^z (2z + 1)$$

07.25.03.0110.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{4z^{3/2}} \left(6\sqrt{z}(z-1) + 3e^z \sqrt{\pi} (2z^2 - z + 1) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ag5l.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3(z+1)}{2z} - \frac{3e^{-z} \sqrt{\pi} (2z^2 + z + 1) \operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.0111.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, 3; z\right) = \frac{1}{z^2} (e^z (4z^2 - 6z + 6) - 6)$$

07.25.03.ag5m.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{15(z-6)}{4z^2} + \frac{15e^z \sqrt{\pi} (2z^2 - 5z + 6) \operatorname{erf}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.ag5n.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15e^{-z} \sqrt{\pi} (2z^2 + 5z + 6) \operatorname{erfi}(\sqrt{z})}{8z^{5/2}} - \frac{15(z+6)}{4z^2}$$

07.25.03.ag5o.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, 4; z\right) = \frac{6e^z (2z^2 - 7z + 10)}{z^3} - \frac{6(3z + 10)}{z^3}$$

07.25.03.ag5p.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{105e^z \sqrt{\pi} (2z^2 - 9z + 15) \operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{105(z+15)}{8z^3}$$

07.25.03.ag5q.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, \frac{9}{2}; -z\right) = -\frac{105(z-15)}{8z^3} - \frac{105e^{-z} \sqrt{\pi} (2z^2 + 9z + 15) \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.ag5r.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, 5; z\right) = \frac{24e^z (2z^2 - 11z + 21)}{z^4} - \frac{12(3z^2 + 20z + 42)}{z^4}$$

07.25.03.ag5s.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} (2z^2 - 13z + 28) \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{63 (12z^2 + 85z + 420)}{16 z^4}$$

07.25.03.ag5t.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{945 e^{-z} \sqrt{\pi} (2z^2 + 13z + 28) \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}} - \frac{63 (12z^2 - 85z + 420)}{16 z^4}$$

07.25.03.ag5u.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{1}{2}, 6; z\right) = \frac{120 e^z (2z^2 - 15z + 36)}{z^5} - \frac{60 (z^3 + 10z^2 + 42z + 72)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = 1$

07.25.03.0112.01

$${}_2F_2\left(\frac{3}{2}, 2; 1, 1; z\right) = \frac{1}{2} e^{z/2} \left((2z^2 + 5z + 2) I_0\left(\frac{z}{2}\right) + z(2z + 3) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ag5v.01

$${}_2F_2\left(\frac{3}{2}, 2; 1, \frac{3}{2}; z\right) = e^z (z + 1)$$

07.25.03.ag5w.01

$${}_2F_2\left(\frac{3}{2}, 2; 1, 2; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.0113.01

$${}_2F_2\left(\frac{3}{2}, 2; 1, \frac{5}{2}; z\right) = \frac{3}{8 z^{3/2}} \left(2 e^z \sqrt{z} (2z - 1) + \sqrt{\pi} \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ag5x.01

$${}_2F_2\left(\frac{3}{2}, 2; 1, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (2z + 1)}{4z} - \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{3/2}}$$

07.25.03.0114.01

$${}_2F_2\left(\frac{3}{2}, 2; 1, 3; z\right) = \frac{2}{z} e^{z/2} \left(z I_0\left(\frac{z}{2}\right) + (z - 2) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ag5y.01

$${}_2F_2\left(\frac{3}{2}, 2; 1, \frac{7}{2}; z\right) = \frac{15 e^z (4z - 9)}{16 z^2} + \frac{15 \sqrt{\pi} (2z + 9) \operatorname{erfi}(\sqrt{z})}{32 z^{5/2}}$$

07.25.03.ag5z.01

$${}_2F_2\left(\frac{3}{2}, 2; 1, \frac{7}{2}; -z\right) = -\frac{15 e^{-z} (4z + 9)}{16 z^2} - \frac{15 \sqrt{\pi} (2z - 9) \operatorname{erf}(\sqrt{z})}{32 z^{5/2}}$$

07.25.03.ag60.01

$${}_2F_2\left(\frac{3}{2}, 2; 1, 4; z\right) = \frac{8 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z - 8) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.ag61.01

$${}_2F_2\left(\frac{3}{2}, 2; 1, \frac{9}{2}; z\right) = \frac{105 e^z (14z - 75)}{128 z^3} + \frac{105 \sqrt{\pi} (4z^2 + 36z + 75) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.ag62.01

$${}_2F_2\left(\frac{3}{2}, 2; 1, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (14z + 75)}{128 z^3} - \frac{105 \sqrt{\pi} (4z^2 - 36z + 75) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.ag63.01

$${}_2F_2\left(\frac{3}{2}, 2; 1, 5; z\right) = \frac{16 e^{z/2} (z + 18) I_0\left(\frac{z}{2}\right)}{5 z^2} - \frac{16 e^{z/2} (z^2 + 4z + 72) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.ag64.01

$${}_2F_2\left(\frac{3}{2}, 2; 1, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (8z^3 + 108z^2 + 450z + 735) \operatorname{erfi}(\sqrt{z})}{1024 z^{9/2}} - \frac{315 e^z (4z^2 - 40z + 735)}{512 z^4}$$

07.25.03.ag65.01

$${}_2F_2\left(\frac{3}{2}, 2; 1, \frac{11}{2}; -z\right) = -\frac{315 e^{-z} (4z^2 + 40z + 735)}{512 z^4} - \frac{315 \sqrt{\pi} (8z^3 - 108z^2 + 450z - 735) \operatorname{erf}(\sqrt{z})}{1024 z^{9/2}}$$

07.25.03.ag66.01

$${}_2F_2\left(\frac{3}{2}, 2; 1, 6; z\right) = \frac{32 e^{z/2} (z^2 + 15z + 96) I_0\left(\frac{z}{2}\right)}{7 z^3} - \frac{32 e^{z/2} (z^3 + 16z^2 + 60z + 384) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = \frac{3}{2}$

07.25.03.ag67.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4 \sqrt{z}} + \frac{1}{2}$$

07.25.03.ag68.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4 \sqrt{z}} + \frac{1}{2}$$

07.25.03.ag69.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{3}{2}, 2; z\right) = e^z$$

07.25.03.ag6a.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{8 z^{3/2}} + \frac{3}{4z}$$

07.25.03.ag6b.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3}{4z}$$

07.25.03.ag6c.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{3}{2}, 3; z\right) = \frac{2e^z(z-1)}{z^2} + \frac{2}{z^2}$$

07.25.03.ag6d.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{15e^z\sqrt{\pi}(2z-3)\operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45}{8z^2}$$

07.25.03.ag6e.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{45}{8z^2} - \frac{15e^{-z}\sqrt{\pi}(2z+3)\operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.ag6f.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{3}{2}, 4; z\right) = \frac{6e^z(z-2)}{z^3} + \frac{6(z+2)}{z^3}$$

07.25.03.ag6g.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(4z+15)}{16z^3} + \frac{105e^z\sqrt{\pi}(2z-5)\operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.ag6h.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(4z-15)}{16z^3} + \frac{105e^{-z}\sqrt{\pi}(2z+5)\operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.ag6i.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{3}{2}, 5; z\right) = \frac{24e^z(z-3)}{z^4} + \frac{12(z^2+4z+6)}{z^4}$$

07.25.03.ag6j.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{63(8z^2+40z+105)}{32z^4} + \frac{945e^z\sqrt{\pi}(2z-7)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.ag6k.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{63(8z^2-40z+105)}{32z^4} - \frac{945e^{-z}\sqrt{\pi}(2z+7)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.ag6l.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{3}{2}, 6; z\right) = \frac{120e^z(z-4)}{z^5} + \frac{20(z^3+6z^2+18z+24)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = 2$

07.25.03.ag6m.01

$${}_2F_2\left(\frac{3}{2}, 2; 2, 2; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.ag6n.01

$${}_2F_2\left(\frac{3}{2}, 2; 2, \frac{5}{2}; z\right) = \frac{3e^z}{2z} - \frac{3\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.ag6o.01

$${}_2F_2\left(\frac{3}{2}, 2; 2, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3e^{-z}}{2z}$$

07.25.03.ag6p.01

$${}_2F_2\left(\frac{3}{2}, 2; 2, 3; z\right) = \frac{4e^{z/2} I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.ag6q.01

$${}_2F_2\left(\frac{3}{2}, 2; 2, \frac{7}{2}; z\right) = \frac{45e^z}{8z^2} - \frac{15\sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.ag6r.01

$${}_2F_2\left(\frac{3}{2}, 2; 2, \frac{7}{2}; -z\right) = \frac{15\sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45e^{-z}}{8z^2}$$

07.25.03.ag6s.01

$${}_2F_2\left(\frac{3}{2}, 2; 2, 4; z\right) = \frac{4e^{z/2} (z+4) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4e^{z/2} I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.ag6t.01

$${}_2F_2\left(\frac{3}{2}, 2; 2, \frac{9}{2}; z\right) = \frac{105e^z (2z+15)}{64z^3} - \frac{105\sqrt{\pi} (4z^2+12z+15) \operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.ag6u.01

$${}_2F_2\left(\frac{3}{2}, 2; 2, \frac{9}{2}; -z\right) = \frac{105e^{-z} (2z-15)}{64z^3} + \frac{105\sqrt{\pi} (4z^2-12z+15) \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.ag6v.01

$${}_2F_2\left(\frac{3}{2}, 2; 2, 5; z\right) = \frac{32e^{z/2} (z^2+4z+12) I_1\left(\frac{z}{2}\right)}{5z^3} - \frac{32e^{z/2} (z+3) I_0\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.ag6w.01

$${}_2F_2\left(\frac{3}{2}, 2; 2, \frac{11}{2}; z\right) = \frac{315e^z (4z^2+20z+105)}{256z^4} - \frac{315\sqrt{\pi} (8z^3+36z^2+90z+105) \operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ag6x.01

$${}_2F_2\left(\frac{3}{2}, 2; 2, \frac{11}{2}; -z\right) = \frac{315e^{-z} (4z^2-20z+105)}{256z^4} + \frac{315\sqrt{\pi} (8z^3-36z^2+90z-105) \operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ag6y.01

$${}_2F_2\left(\frac{3}{2}, 2; 2, 6; z\right) = \frac{32e^{z/2} (2z^3+11z^2+36z+96) I_1\left(\frac{z}{2}\right)}{7z^4} - \frac{32e^{z/2} (2z^2+9z+24) I_0\left(\frac{z}{2}\right)}{7z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = \frac{5}{2}$

07.25.03.0115.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{5}{2}, 3; z\right) = -\frac{3}{z^2} \left(\sqrt{\pi} \sqrt{z} \operatorname{erfi}(\sqrt{z}) - 2e^z + 2 \right)$$

07.25.03.ag6z.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{5}{2}, 3; -z\right) = \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{3/2}} + \frac{6e^{-z}}{z^2} - \frac{6}{z^2}$$

07.25.03.ag70.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{5}{2}, 4; z\right) = \frac{6e^z(z+2)}{z^3} - \frac{6(3z+2)}{z^3} - \frac{6\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{3/2}}$$

07.25.03.ag71.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{5}{2}, 4; -z\right) = \frac{6e^{-z}(z-2)}{z^3} - \frac{6(3z-2)}{z^3} + \frac{6\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{3/2}}$$

07.25.03.ag72.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{5}{2}, 5; z\right) = \frac{24e^z(2z^2+z+9)}{5z^4} - \frac{12(15z^2+20z+18)}{5z^4} - \frac{48\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.ag73.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{5}{2}, 5; -z\right) = \frac{24e^{-z}(2z^2-z+9)}{5z^4} - \frac{12(15z^2-20z+18)}{5z^4} + \frac{48\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.ag74.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{5}{2}, 6; z\right) = \frac{24e^z(4z^3+2z^2+3z+60)}{7z^5} - \frac{12(35z^3+70z^2+126z+120)}{7z^5} - \frac{96\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7z^{3/2}}$$

07.25.03.ag75.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{5}{2}, 6; -z\right) = \frac{24e^{-z}(4z^3-2z^2+3z-60)}{7z^5} - \frac{12(35z^3-70z^2+126z-120)}{7z^5} + \frac{96\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7z^{3/2}}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = 3$

07.25.03.0116.01

$${}_2F_2\left(\frac{3}{2}, 2; 3, 3; z\right) = -\frac{8}{z^2} \left(e^{z/2} (z-2) I_0\left(\frac{z}{2}\right) - e^{z/2} z I_1\left(\frac{z}{2}\right) + 2 \right)$$

07.25.03.ag76.01

$${}_2F_2\left(\frac{3}{2}, 2; 3, \frac{7}{2}; z\right) = -\frac{15\sqrt{\pi} (2z-3) \operatorname{erfi}(\sqrt{z})}{4z^{5/2}} + \frac{15e^z}{2z^2} - \frac{30}{z^2}$$

07.25.03.ag77.01

$${}_2F_2\left(\frac{3}{2}, 2; 3, \frac{7}{2}; -z\right) = \frac{15\sqrt{\pi} (2z+3) \operatorname{erf}(\sqrt{z})}{4z^{5/2}} + \frac{15e^{-z}}{2z^2} - \frac{30}{z^2}$$

07.25.03.ag78.01

$${}_2F_2\left(\frac{3}{2}, 2; 3, 4; z\right) = -\frac{16 e^{z/2} (z-3) I_0\left(\frac{z}{2}\right)}{z^2} + \frac{16 e^{z/2} (z-2) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{48}{z^2}$$

07.25.03.ag79.01

$${}_2F_2\left(\frac{3}{2}, 2; 3, \frac{9}{2}; z\right) = \frac{105 e^z (2z-5)}{16 z^3} - \frac{105 \sqrt{\pi} (4z^2 - 12z - 5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}} - \frac{70}{z^2}$$

07.25.03.ag7a.01

$${}_2F_2\left(\frac{3}{2}, 2; 3, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (2z+5)}{16 z^3} + \frac{105 \sqrt{\pi} (4z^2 + 12z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}} - \frac{70}{z^2}$$

07.25.03.ag7b.01

$${}_2F_2\left(\frac{3}{2}, 2; 3, 5; z\right) = -\frac{64 e^{z/2} (2z-9) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{64 e^{z/2} (2z^2 - 7z - 6) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{96}{z^2}$$

07.25.03.ag7c.01

$${}_2F_2\left(\frac{3}{2}, 2; 3, \frac{11}{2}; z\right) = \frac{315 e^z (4z^2 - 16z - 21)}{64 z^4} - \frac{315 \sqrt{\pi} (8z^3 - 36z^2 - 30z - 21) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}} - \frac{126}{z^2}$$

07.25.03.ag7d.01

$${}_2F_2\left(\frac{3}{2}, 2; 3, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2 + 16z - 21)}{64 z^4} + \frac{315 \sqrt{\pi} (8z^3 + 36z^2 - 30z + 21) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}} - \frac{126}{z^2}$$

07.25.03.ag7e.01

$${}_2F_2\left(\frac{3}{2}, 2; 3, 6; z\right) = -\frac{256 e^{z/2} (z^2 - 6z - 2) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{128 e^{z/2} (2z^3 - 10z^2 - 13z - 16) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{160}{z^2}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = \frac{7}{2}$

07.25.03.ag7f.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{7}{2}, 4; z\right) = \frac{15 e^z (z-4)}{z^3} - \frac{30 (3z-2)}{z^3} - \frac{15 \sqrt{\pi} (2z-9) \operatorname{erfi}(\sqrt{z})}{2 z^{5/2}}$$

07.25.03.ag7g.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{7}{2}, 4; -z\right) = \frac{15 e^{-z} (z+4)}{z^3} - \frac{30 (3z+2)}{z^3} + \frac{15 \sqrt{\pi} (2z+9) \operatorname{erf}(\sqrt{z})}{2 z^{5/2}}$$

07.25.03.ag7h.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{7}{2}, 5; z\right) = \frac{24 e^z (z^2 - 7z - 3)}{z^4} - \frac{12 (15z^2 - 20z - 6)}{z^4} - \frac{12 \sqrt{\pi} (2z - 15) \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.ag7i.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{7}{2}, 5; -z\right) = \frac{24 e^{-z} (z^2 + 7z - 3)}{z^4} - \frac{12 (15z^2 + 20z - 6)}{z^4} + \frac{12 \sqrt{\pi} (2z + 15) \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.ag7j.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{7}{2}, 6; z\right) = \frac{120 e^z (2 z^3 - 20 z^2 - 9 z - 12)}{7 z^5} - \frac{60 (35 z^3 - 70 z^2 - 42 z - 24)}{7 z^5} - \frac{120 \sqrt{\pi} (2 z - 21) \operatorname{erfi}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.ag7k.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{7}{2}, 6; -z\right) = \frac{120 e^{-z} (2 z^3 + 20 z^2 - 9 z + 12)}{7 z^5} - \frac{60 (35 z^3 + 70 z^2 - 42 z + 24)}{7 z^5} + \frac{120 \sqrt{\pi} (2 z + 21) \operatorname{erf}(\sqrt{z})}{7 z^{5/2}}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = 4$

07.25.03.ag7l.01

$${}_2F_2\left(\frac{3}{2}, 2; 4, 4; z\right) = -\frac{48 (3 z - 4)}{z^3} - \frac{16 e^{z/2} (2 z^2 - 15 z + 12) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{16 e^{z/2} (2 z - 13) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.ag7m.01

$${}_2F_2\left(\frac{3}{2}, 2; 4, \frac{9}{2}; z\right) = -\frac{210 (z - 2)}{z^3} + \frac{105 e^z (2 z - 17)}{8 z^3} - \frac{105 \sqrt{\pi} (4 z^2 - 36 z + 15) \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.ag7n.01

$${}_2F_2\left(\frac{3}{2}, 2; 4, \frac{9}{2}; -z\right) = -\frac{210 (z + 2)}{z^3} + \frac{105 e^{-z} (2 z + 17)}{8 z^3} + \frac{105 \sqrt{\pi} (4 z^2 + 36 z + 15) \operatorname{erf}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.ag7o.01

$${}_2F_2\left(\frac{3}{2}, 2; 4, 5; z\right) = -\frac{96 (3 z - 8)}{z^3} - \frac{256 e^{z/2} (z^2 - 12 z + 15) I_0\left(\frac{z}{2}\right)}{5 z^3} + \frac{128 e^{z/2} (2 z^2 - 22 z + 9) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.ag7p.01

$${}_2F_2\left(\frac{3}{2}, 2; 4, \frac{11}{2}; z\right) = -\frac{126 (3 z - 10)}{z^3} + \frac{315 e^z (4 z^2 - 52 z + 21)}{32 z^4} - \frac{315 \sqrt{\pi} (8 z^3 - 108 z^2 + 90 z + 21) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ag7q.01

$${}_2F_2\left(\frac{3}{2}, 2; 4, \frac{11}{2}; -z\right) = -\frac{126 (3 z + 10)}{z^3} + \frac{315 e^{-z} (4 z^2 + 52 z + 21)}{32 z^4} + \frac{315 \sqrt{\pi} (8 z^3 + 108 z^2 + 90 z - 21) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ag7r.01

$${}_2F_2\left(\frac{3}{2}, 2; 4, 6; z\right) = -\frac{480 (z - 4)}{z^3} - \frac{128 e^{z/2} (4 z^2 - 66 z + 111) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{128 e^{z/2} (4 z^3 - 62 z^2 + 51 z + 24) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = \frac{9}{2}$

07.25.03.ag7s.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{9}{2}, 5; z\right) = \frac{21 e^z (2 z^2 - 29 z + 24)}{z^4} - \frac{84 (5 z^2 - 20 z + 6)}{z^4} - \frac{21 \sqrt{\pi} (4 z^2 - 60 z + 75) \operatorname{erfi}(\sqrt{z})}{2 z^{7/2}}$$

07.25.03.ag7t.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{9}{2}, 5; -z\right) = \frac{21 e^{-z} (2 z^2 + 29 z + 24)}{z^4} - \frac{84 (5 z^2 + 20 z + 6)}{z^4} + \frac{21 \sqrt{\pi} (4 z^2 + 60 z + 75) \operatorname{erf}(\sqrt{z})}{2 z^{7/2}}$$

07.25.03.ag7u.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{9}{2}, 6; z\right) = \frac{30 e^z (2 z^3 - 41 z^2 + 68 z + 16)}{z^5} - \frac{20 (35 z^3 - 210 z^2 + 126 z + 24)}{z^5} - \frac{15 \sqrt{\pi} (4 z^2 - 84 z + 175) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ag7v.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{9}{2}, 6; -z\right) = \frac{30 e^{-z} (2 z^3 + 41 z^2 + 68 z - 16)}{z^5} - \frac{20 (35 z^3 + 210 z^2 + 126 z - 24)}{z^5} + \frac{15 \sqrt{\pi} (4 z^2 + 84 z + 175) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = 5$

07.25.03.ag7w.01

$${}_2F_2\left(\frac{3}{2}, 2; 5, 5; z\right) = -\frac{192 (15 z^2 - 80 z + 48)}{5 z^4} - \frac{512 e^{z/2} (4 z^3 - 78 z^2 + 195 z - 90) I_0\left(\frac{z}{2}\right)}{25 z^4} + \frac{512 e^{z/2} (4 z^2 - 74 z + 123) I_1\left(\frac{z}{2}\right)}{25 z^3}$$

07.25.03.ag7x.01

$${}_2F_2\left(\frac{3}{2}, 2; 5, \frac{11}{2}; z\right) = -\frac{252 (3 z^2 - 20 z + 18)}{z^4} + \frac{63 e^z (4 z^2 - 88 z + 183)}{4 z^4} - \frac{63 \sqrt{\pi} (8 z^3 - 180 z^2 + 450 z - 105) \operatorname{erfi}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.ag7y.01

$${}_2F_2\left(\frac{3}{2}, 2; 5, \frac{11}{2}; -z\right) = -\frac{252 (3 z^2 + 20 z + 18)}{z^4} + \frac{63 e^{-z} (4 z^2 + 88 z + 183)}{4 z^4} + \frac{63 \sqrt{\pi} (8 z^3 + 180 z^2 + 450 z + 105) \operatorname{erf}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.ag7z.01

$${}_2F_2\left(\frac{3}{2}, 2; 5, 6; z\right) = -\frac{192 (5 z^2 - 40 z + 48)}{z^4} - \frac{1024 e^{z/2} (4 z^3 - 108 z^2 + 405 z - 315) I_0\left(\frac{z}{2}\right)}{35 z^4} + \frac{1024 e^{z/2} (4 z^3 - 104 z^2 + 303 z - 60) I_1\left(\frac{z}{2}\right)}{35 z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = \frac{11}{2}$

07.25.03.ag80.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{11}{2}, 6; z\right) = \frac{45 e^z (4 z^3 - 124 z^2 + 465 z - 192)}{2 z^5} - \frac{180 (7 z^3 - 70 z^2 + 126 z - 24)}{z^5} - \frac{45 \sqrt{\pi} (8 z^3 - 252 z^2 + 1050 z - 735) \operatorname{erfi}(\sqrt{z})}{4 z^{9/2}}$$

07.25.03.ag81.01

$${}_2F_2\left(\frac{3}{2}, 2; \frac{11}{2}, 6; -z\right) = \frac{45 e^{-z} (4 z^3 + 124 z^2 + 465 z + 192)}{2 z^5} - \frac{180 (7 z^3 + 70 z^2 + 126 z + 24)}{z^5} + \frac{45 \sqrt{\pi} (8 z^3 + 252 z^2 + 1050 z + 735) \operatorname{erf}(\sqrt{z})}{4 z^{9/2}}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 2$, $b_1 = 6$

07.25.03.ag82.01

$${}_2F_2\left(\frac{3}{2}, 2; 6, 6; z\right) = -\frac{320(35z^3 - 420z^2 + 1008z - 384)}{7z^5} - \frac{1024e^{z/2}(8z^4 - 300z^3 + 1748z^2 - 2625z + 840)I_0\left(\frac{z}{2}\right)}{49z^5} + \frac{1024e^{z/2}(8z^3 - 292z^2 + 1460z - 1303)I_1\left(\frac{z}{2}\right)}{49z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.ag83.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{324168075} \left(e^z (32768z^{15} + 2342912z^{14} + 65200128z^{13} + 908414976z^{12} + 6795307008z^{11} + 27217677312z^{10} + 54947612160z^9 + 48502944000z^8 + 13484016000z^7 + 370440000z^6 + 7408800z^5 + 11113200z^4 - 38896200z^3 + 130580100z^2 - 283981950z + 324168075) \right)$$

07.25.03.ag84.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{29469825} \left(e^z (16384z^{14} + 1032192z^{13} + 24858624z^{12} + 292626432z^{11} + 1788208128z^{10} + 5561902080z^9 + 8007148800z^8 + 4233600000z^7 + 391608000z^6 - 10584000z^5 - 1587600z^4 + 3175200z^3 - 11510100z^2 + 25004700z - 29469825) \right)$$

07.25.03.ag85.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{3274425} \left(e^z (8192z^{13} + 446464z^{12} + 9080832z^{11} + 87287808z^{10} + 414021120z^9 + 917856000z^8 + 791078400z^7 + 139104000z^6 - 12852000z^5 + 1134000z^4 - 226800z^3 + 1247400z^2 - 2636550z + 3274425) \right)$$

07.25.03.ag86.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{467775} \left(e^z (4096z^{12} + 188416z^{11} + 3127296z^{10} + 23316480z^9 + 78769920z^8 + 104463360z^7 + 29917440z^6 - 5241600z^5 + 1436400z^4 - 151200z^3 - 189000z^2 + 340200z - 467775) \right)$$

$$\begin{aligned}
 & \text{07.25.03.ag87.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{93555} \left(e^z (2048 z^{11} + 76800 z^{10} + 987648 z^9 + 5238528 z^8 + 10573056 z^7 + 4652928 z^6 - 1326528 z^5 + \right. \\
 & \quad \left. 695520 z^4 - 325080 z^3 + 86940 z^2 - 51030 z + 93555) \right) \\
 & \text{07.25.03.ag88.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \\
 & -\frac{1}{31185} \left(e^z (1024 z^{10} + 29696 z^9 + 271104 z^8 + 857088 z^7 + 572544 z^6 - 249984 z^5 + 211680 z^4 - 181440 z^3 + \right. \\
 & \quad \left. 109620 z^2 - 11340 z - 31185) \right) \\
 & \text{07.25.03.ag89.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \\
 & \frac{1}{31185} e^z (512 z^9 + 10496 z^8 + 56832 z^7 + 59136 z^6 - 38976 z^5 + 50400 z^4 - 70560 z^3 + 85680 z^2 - 73710 z + 31185) \\
 & \text{07.25.03.ag8a.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, 1; z\right) = \\
 & \frac{1}{31185} e^{z/2} (256 z^9 + 4352 z^8 + 17856 z^7 + 9408 z^6 - 4176 z^5 + 5040 z^4 - 9144 z^3 + 19368 z^2 - 36855 z + 31185) I_0\left(\frac{z}{2}\right) + \\
 & \frac{1}{31185} e^{z/2} (256 z^9 + 4096 z^8 + 13888 z^7 - 2688 z^6 + 2160 z^5 - 2880 z^4 + 4824 z^3 - 8784 z^2 + 14193 z) I_1\left(\frac{z}{2}\right) \\
 & \text{07.25.03.ag8b.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z (256 z^8 + 3072 z^7 + 5376 z^6 - 5376 z^5 + 10080 z^4 - 20160 z^3 + 35280 z^2 - 45360 z + 31185)}{31185} \\
 & \text{07.25.03.ag8c.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^{z/2} (256 z^8 + 2176 z^7 + 1344 z^6 - 576 z^5 + 240 z^4 + 1296 z^3 - 5832 z^2 + 7560 z + 31185) I_0\left(\frac{z}{2}\right)}{31185} + \\
 & \frac{1}{31185} e^{z/2} (256 z^8 + 1920 z^7 - 448 z^6 + 576 z^5 - 1680 z^4 + 6384 z^3 - 22824 z^2 + 66168 z - 135135) I_1\left(\frac{z}{2}\right) \\
 & \text{07.25.03.ag8d.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13230 z + 10395)}{10395} \\
 & \text{07.25.03.ag8e.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, 3; z\right) = \frac{32 e^{z/2} (16 z^7 + 72 z^5 - 480 z^4 + 2538 z^3 - 10656 z^2 + 33075 z - 62370) I_0\left(\frac{z}{2}\right)}{31185} + \\
 & \frac{1}{31185 z} 4 e^{z/2} (128 z^8 - 128 z^7 + 768 z^6 - 4800 z^5 + 26016 z^4 - 116496 z^3 + 411552 z^2 - 1081080 z + 2027025) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

07.25.03.ag8f.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{2079 z^2} e^z (64 z^8 - 320 z^7 + 2064 z^6 - 12576 z^5 + 67068 z^4 - 297396 z^3 + 1034271 z^2 - 2580480 z + 3870720) - \frac{10240 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{5/2}}$$

07.25.03.ag8g.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{2079 z^2} e^{-z} (64 z^8 + 320 z^7 + 2064 z^6 + 12576 z^5 + 67068 z^4 + 297396 z^3 + 1034271 z^2 + 2580480 z + 3870720) - \frac{10240 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{5/2}}$$

07.25.03.ag8h.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{10395 z} 4 e^{z/2} (128 z^7 - 1088 z^6 + 8640 z^5 - 58992 z^4 + 336144 z^3 - 1534680 z^2 + 5239080 z - 11486475) I_0\left(\frac{z}{2}\right) + \frac{1}{10395 z^2} \left(4 e^{z/2} (128 z^8 - 1216 z^7 + 9920 z^6 - 69648 z^5 + 412368 z^4 - 1997256 z^3 + 7567560 z^2 - 20945925 z + 45945900) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.ag8i.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{297 z^3} e^z (32 z^8 - 432 z^7 + 4272 z^6 - 34056 z^5 + 220842 z^4 - 1142487 z^3 + 4515840 z^2 - 12579840 z + 21772800) - \frac{8960 \sqrt{\pi} (4z + 45) \operatorname{erfi}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.ag8j.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{297 z^3} e^{-z} (-32 z^8 - 432 z^7 - 4272 z^6 - 34056 z^5 - 220842 z^4 - 1142487 z^3 - 4515840 z^2 - 12579840 z - 21772800) - \frac{8960 \sqrt{\pi} (4z - 45) \operatorname{erf}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.ag8k.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{10395 z^2} 32 e^{z/2} (64 z^7 - 1088 z^6 + 12432 z^5 - 109392 z^4 + 758520 z^3 - 4074840 z^2 + 16081065 z - 43648605) I_0\left(\frac{z}{2}\right) + \frac{1}{10395 z^3} \left(32 e^{z/2} (64 z^8 - 1152 z^7 + 13616 z^6 - 123648 z^5 + 890328 z^4 - 5045040 z^3 + 21756735 z^2 - 64324260 z + 174594420) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.ag8l.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{33 z^4} e^z (16 z^8 - 352 z^7 + 4776 z^6 - 48072 z^5 + 374817 z^4 - 2257920 z^3 + 10160640 z^2 - 31449600 z + 63504000) - \frac{20160 \sqrt{\pi} (4 z^2 + 90 z + 525) \operatorname{erfi}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.ag8m.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{33 z^4} e^{-z} (16 z^8 + 352 z^7 + 4776 z^6 + 48072 z^5 + 374817 z^4 + 2257920 z^3 + 10160640 z^2 + 31449600 z + 63504000) - \frac{20160 \sqrt{\pi} (4 z^2 - 90 z + 525) \operatorname{erf}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.ag8n.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{2079 z^3} 32 e^{z/2} (64 z^7 - 1632 z^6 + 24624 z^5 - 268128 z^4 + 2212056 z^3 - 13783770 z^2 + 61108047 z - 209513304) I_0\left(\frac{z}{2}\right) + \frac{1}{2079 z^4} \left(32 e^{z/2} (64 z^8 - 1696 z^7 + 26352 z^6 - 295392 z^5 + 2522520 z^4 - 16486470 z^3 + 81324243 z^2 - 244432188 z + 838053216) I_1\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.ag8o.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{2679075} \left(e^z (8192 z^{13} + 454656 z^{12} + 9474048 z^{11} + 94205952 z^{10} + 470177280 z^9 + 1135330560 z^8 + 1165248000 z^7 + 368928000 z^6 + 11340000 z^5 + 378000 z^4 - 226800 z^3 + 1020600 z^2 - 2182950 z + 2679075)\right)$$

07.25.03.ag8p.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{297675} \left(e^z (4096 z^{12} + 196608 z^{11} + 3459072 z^{10} + 28078080 z^9 + 108737280 z^8 + 187084800 z^7 + 114912000 z^6 + 12096000 z^5 - 378000 z^4 - 113400 z^2 + 226800 z - 297675) \right)$$

07.25.03.ag8q.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{42525} \left(e^z (2048 z^{11} + 82944 z^{10} + 1190400 z^9 + 7491840 z^8 + 20655360 z^7 + 21248640 z^6 + 4334400 z^5 - 453600 z^4 + 37800 z^3 + 18900 z^2 - 28350 z + 42525) \right)$$

07.25.03.ag8r.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{8505} \left(e^z (1024 z^{10} + 33792 z^9 + 375552 z^8 + 1680384 z^7 + 2765952 z^6 + 943488 z^5 - 191520 z^4 + 60480 z^3 - 11340 z^2 + 3780 z - 8505) \right)$$

07.25.03.ag8s.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{2835} e^z (512 z^9 + 13056 z^8 + 102912 z^7 + 274176 z^6 + 149184 z^5 - 50400 z^4 + 30240 z^3 - 15120 z^2 + 1890 z + 2835)$$

07.25.03.ag8t.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{e^z (256 z^8 + 4608 z^7 + 21504 z^6 + 18816 z^5 - 10080 z^4 + 10080 z^3 - 10080 z^2 + 7560 z - 2835)}{2835}$$

07.25.03.ag8u.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, 1; z\right) = \frac{e^{z/2} (-128 z^8 - 1920 z^7 - 6912 z^6 - 3456 z^5 + 1440 z^4 - 1584 z^3 + 2448 z^2 - 3780 z + 2835) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (32 z^8 + 448 z^7 + 1296 z^6 - 240 z^5 + 180 z^4 - 216 z^3 + 306 z^2 - 387 z) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.ag8v.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{e^z (128 z^7 + 1344 z^6 + 2016 z^5 - 1680 z^4 + 2520 z^3 - 3780 z^2 + 4410 z - 2835)}{2835}$$

07.25.03.ag8w.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (-128 z^7 - 960 z^6 - 576 z^5 + 240 z^4 - 144 z^3 - 72 z^2 + 2835) I_0\left(\frac{z}{2}\right) + e^{z/2} (-128 z^7 - 832 z^6 + 192 z^5 - 240 z^4 + 624 z^3 - 1944 z^2 + 5328 z - 10395) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.ag8x.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)$$

07.25.03.ag8y.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, 3; z\right) = -\frac{4 e^{z/2} (64 z^6 + 240 z^4 - 1344 z^3 + 5688 z^2 - 17640 z + 33075) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (64 z^7 - 64 z^6 + 336 z^5 - 1776 z^4 + 7896 z^3 - 27792 z^2 + 72765 z - 135135) I_1\left(\frac{z}{2}\right)}{2835 z}$$

07.25.03.ag8z.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (-32 z^7 + 144 z^6 - 816 z^5 + 4248 z^4 - 18666 z^3 + 64701 z^2 - 161280 z + 241920)}{189 z^2} - \frac{640 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.ag90.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (32 z^7 + 144 z^6 + 816 z^5 + 4248 z^4 + 18666 z^3 + 64701 z^2 + 161280 z + 241920)}{189 z^2} - \frac{640 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.ag91.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, 4; z\right) = -\frac{4 e^{z/2} (64 z^6 - 480 z^5 + 3312 z^4 - 19104 z^3 + 88200 z^2 - 304290 z + 675675) I_0\left(\frac{z}{2}\right) - \frac{1}{945 z^2} 4 e^{z/2} (64 z^7 - 544 z^6 + 3888 z^5 - 23328 z^4 + 114216 z^3 - 436590 z^2 + 1216215 z - 2702700) I_1\left(\frac{z}{2}\right)}{945 z}$$

07.25.03.ag92.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{e^z (-16 z^7 + 192 z^6 - 1656 z^5 + 11232 z^4 - 59877 z^3 + 241920 z^2 - 685440 z + 1209600)}{27 z^3} - \frac{2240 \sqrt{\pi} (z + 10) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ag93.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-16 z^7 - 192 z^6 - 1656 z^5 - 11232 z^4 - 59877 z^3 - 241920 z^2 - 685440 z - 1209600)}{27 z^3} - \frac{2240 \sqrt{\pi} (z - 10) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ag94.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, 5; z\right) = -\frac{32 e^{z/2} (32 z^6 - 480 z^5 + 4752 z^4 - 35280 z^3 + 198450 z^2 - 810810 z + 2297295) I_0\left(\frac{z}{2}\right) - \frac{1}{945 z^3} 64 e^{z/2} (16 z^7 - 256 z^6 + 2640 z^5 - 20424 z^4 + 121275 z^3 - 540540 z^2 + 1621620 z - 4594590) I_1\left(\frac{z}{2}\right)}{945 z^2}$$

$$\begin{aligned}
 & \text{07.25.03.ag95.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) &= \frac{e^z (-8z^7 + 156z^6 - 1842z^5 + 15747z^4 - 100800z^3 + 473760z^2 - 1512000z + 3175200)}{3z^4} - \\
 & \frac{5040\sqrt{\pi}(z^2 + 20z + 105)\operatorname{erfi}(\sqrt{z})}{z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ag96.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) &= \frac{e^{-z} (8z^7 + 156z^6 + 1842z^5 + 15747z^4 + 100800z^3 + 473760z^2 + 1512000z + 3175200)}{3z^4} - \\
 & \frac{5040\sqrt{\pi}(z^2 - 20z + 105)\operatorname{erf}(\sqrt{z})}{z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ag97.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{9}{2}, 6; z\right) &= -\frac{32e^{z/2}(32z^6 - 720z^5 + 9408z^4 - 86436z^3 + 579150z^2 - 2691117z + 9976824)I_0\left(\frac{z}{2}\right)}{189z^3} - \\
 & \frac{1}{189z^4} 32e^{z/2}(32z^7 - 752z^6 + 10176z^5 - 97020z^4 + 682110z^3 - 3563703z^2 + 10764468z - 39907296)I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.ag98.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) &= \\
 & \frac{1}{33075} (e^z (2048z^{11} + 84992z^{10} + 1262080z^9 + 8359680z^8 + 25109760z^7 + 30768000z^6 + 11304000z^5 + \\
 & 396000z^4 + 9000z^3 + 13500z^2 - 22950z + 33075))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ag99.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) &= \\
 & -\frac{1}{4725} (e^z (1024z^{10} + 35840z^9 + 433920z^8 + 2227200z^7 + 4759680z^6 + 3484800z^5 + 424800z^4 - \\
 & 14400z^3 - 2700z^2 + 2700z - 4725))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ag9a.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) &= \\
 & \frac{1}{945} e^z (512z^9 + 14592z^8 + 136704z^7 + 498432z^6 + 635328z^5 + 154080z^4 - 18720z^3 + 2160z^2 - 270z + 945)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ag9b.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) &= -\frac{1}{315} e^z (256z^8 + 5632z^7 + 37376z^6 + 81024z^5 + 34080z^4 - 8160z^3 + 2880z^2 - 360z - 315)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ag9c.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) &= \frac{1}{315} e^z (128z^7 + 1984z^6 + 7776z^5 + 5520z^4 - 2280z^3 + 1620z^2 - 990z + 315)
 \end{aligned}$$

07.25.03.ag9d.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (64 z^7 + 832 z^6 + 2576 z^5 + 1200 z^4 - 456 z^3 + 432 z^2 - 495 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (64 z^7 + 768 z^6 + 1840 z^5 - 320 z^4 + 216 z^3 - 216 z^2 + 207 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ag9e.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315)$$

07.25.03.ag9f.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (64 z^6 + 416 z^5 + 240 z^4 - 96 z^3 + 72 z^2 - 90 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (64 z^6 + 352 z^5 - 80 z^4 + 96 z^3 - 216 z^2 + 522 z - 945) I_1\left(\frac{z}{2}\right)$$

07.25.03.ag9g.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{105} e^z (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105)$$

07.25.03.ag9h.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, 3; z\right) = \frac{8}{315} e^{z/2} (16 z^5 + 48 z^3 - 216 z^2 + 675 z - 1260) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (32 z^6 - 32 z^5 + 144 z^4 - 624 z^3 + 2178 z^2 - 5670 z + 10395) I_1\left(\frac{z}{2}\right)}{315 z}$$

07.25.03.ag9i.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (16 z^6 - 64 z^5 + 312 z^4 - 1344 z^3 + 4629 z^2 - 11520 z + 17280)}{21 z^2} - \frac{2880 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.ag9j.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (16 z^6 + 64 z^5 + 312 z^4 + 1344 z^3 + 4629 z^2 + 11520 z + 17280)}{21 z^2} - \frac{2880 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.ag9k.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 - 208 z^4 + 1216 z^3 - 5700 z^2 + 19950 z - 45045) I_0\left(\frac{z}{2}\right)}{105 z} + \frac{4 e^{z/2} (32 z^6 - 240 z^5 + 1472 z^4 - 7324 z^3 + 28350 z^2 - 79695 z + 180180) I_1\left(\frac{z}{2}\right)}{105 z^2}$$

07.25.03.ag9l.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (8 z^6 - 84 z^5 + 618 z^4 - 3453 z^3 + 14400 z^2 - 41760 z + 75600)}{3 z^3} - \frac{360 \sqrt{\pi} (4 z + 35) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ag9m.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-8 z^6 - 84 z^5 - 618 z^4 - 3453 z^3 - 14400 z^2 - 41760 z - 75600)}{3 z^3} - \frac{360 \sqrt{\pi} (4 z - 35) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ag9n.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^5 - 208 z^4 + 1740 z^3 - 10500 z^2 + 45045 z - 135135) I_0\left(\frac{z}{2}\right)}{105 z^2} + \frac{32 e^{z/2} (16 z^6 - 224 z^5 + 1972 z^4 - 12600 z^3 + 58905 z^2 - 180180 z + 540540) I_1\left(\frac{z}{2}\right)}{105 z^3}$$

07.25.03.ag9o.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (4 z^6 - 68 z^5 + 683 z^4 - 4800 z^3 + 24000 z^2 - 79800 z + 176400)}{z^4} - \frac{540 \sqrt{\pi} (6 z^2 + 105 z + 490) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ag9p.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (4 z^6 + 68 z^5 + 683 z^4 + 4800 z^3 + 24000 z^2 + 79800 z + 176400)}{z^4} - \frac{540 \sqrt{\pi} (6 z^2 - 105 z + 490) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ag9q.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 312 z^4 + 3444 z^3 - 25740 z^2 + 127413 z - 525096) I_0\left(\frac{z}{2}\right)}{21 z^3} + \frac{32 e^{z/2} (16 z^6 - 328 z^5 + 3780 z^4 - 29700 z^3 + 168597 z^2 - 509652 z + 2100384) I_1\left(\frac{z}{2}\right)}{21 z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.ag9r.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{675} e^z (512 z^9 + 15104 z^8 + 148992 z^7 + 592128 z^6 + 899520 z^5 + 393120 z^4 + 15840 z^3 + 720 z^2 - 270 z + 675)$$

07.25.03.ag9s.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{135} e^z (256 z^8 + 6144 z^7 + 46848 z^6 + 132096 z^5 + 119520 z^4 + 17280 z^3 - 720 z^2 - 135)$$

07.25.03.ag9t.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{45} e^z (128 z^7 + 2368 z^6 + 12768 z^5 + 21360 z^4 + 6360 z^3 - 900 z^2 + 90 z + 45)$$

07.25.03.ag9u.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{45} e^z (64 z^6 + 832 z^5 + 2640 z^4 + 1440 z^3 - 420 z^2 + 180 z - 45)$$

07.25.03.ag9v.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{45} e^{z/2} (-32 z^6 - 352 z^5 - 912 z^4 - 384 z^3 + 126 z^2 - 90 z + 45) I_0\left(\frac{z}{2}\right) - \frac{2}{45} e^{z/2} (16 z^6 + 160 z^5 + 304 z^4 - 48 z^3 + 27 z^2 - 18 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ag9w.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{45} e^z (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45)$$

07.25.03.ag9x.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{45} e^{z/2} (-32 z^5 - 176 z^4 - 96 z^3 + 36 z^2 - 30 z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (-32 z^5 - 144 z^4 + 32 z^3 - 36 z^2 + 66 z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.ag9y.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{1}{15} e^z (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15)$$

07.25.03.ag9z.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, 3; z\right) = -\frac{4}{45} e^{z/2} (16 z^4 + 36 z^2 - 120 z + 225) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (16 z^5 - 16 z^4 + 60 z^3 - 204 z^2 + 525 z - 945) I_1\left(\frac{z}{2}\right)}{45 z}$$

07.25.03.aga0.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-8 z^5 + 28 z^4 - 114 z^3 + 387 z^2 - 960 z + 1440)}{3 z^2} - \frac{240 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aga1.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (8 z^5 + 28 z^4 + 114 z^3 + 387 z^2 + 960 z + 1440)}{3 z^2} - \frac{240 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aga2.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 - 88 z^3 + 420 z^2 - 1500 z + 3465) I_0\left(\frac{z}{2}\right)}{15 z} - \frac{4 e^{z/2} (16 z^5 - 104 z^4 + 532 z^3 - 2100 z^2 + 5985 z - 13860) I_1\left(\frac{z}{2}\right)}{15 z^2}$$

07.25.03.aga3.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7 e^z (4 z^5 - 36 z^4 + 219 z^3 - 960 z^2 + 2880 z - 5400)}{3 z^3} - \frac{420 \sqrt{\pi} (2 z + 15) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aga4.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = -\frac{7 e^{-z} (4 z^5 + 36 z^4 + 219 z^3 + 960 z^2 + 2880 z + 5400)}{3 z^3} - \frac{420 \sqrt{\pi} (2 z - 15) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aga5.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 - 88 z^3 + 600 z^2 - 2772 z + 9009) I_0\left(\frac{z}{2}\right)}{15 z^2} - \frac{128 e^{z/2} (2 z^5 - 24 z^4 + 175 z^3 - 882 z^2 + 2772 z - 9009) I_1\left(\frac{z}{2}\right)}{15 z^3}$$

07.25.03.aga6.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{21 e^z (2 z^5 - 29 z^4 + 240 z^3 - 1320 z^2 + 4650 z - 11 025)}{z^4} - \frac{945 \sqrt{\pi} (4 z^2 + 60 z + 245) \operatorname{erfi}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.aga7.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (2 z^5 + 29 z^4 + 240 z^3 + 1320 z^2 + 4650 z + 11 025)}{z^4} - \frac{945 \sqrt{\pi} (4 z^2 - 60 z + 245) \operatorname{erf}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.aga8.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{5}{2}, 6; z\right) = -\frac{32 e^{z/2} (8 z^4 - 132 z^3 + 1188 z^2 - 6435 z + 30 888) I_0\left(\frac{z}{2}\right)}{3 z^3} - \frac{32 e^{z/2} (8 z^5 - 140 z^4 + 1332 z^3 - 8613 z^2 + 25 740 z - 123 552) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.aga9.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{27} e^z (128 z^7 + 2496 z^6 + 14 688 z^5 + 29 328 z^4 + 15 768 z^3 + 756 z^2 + 18 z + 27)$$

07.25.03.agaa.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{9} e^z (64 z^6 + 960 z^5 + 3984 z^4 + 4704 z^3 + 828 z^2 - 36 z - 9)$$

07.25.03.agab.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{9} e^z (32 z^5 + 336 z^4 + 816 z^3 + 312 z^2 - 54 z + 9)$$

07.25.03.agac.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{9} e^{z/2} (16 z^5 + 144 z^4 + 300 z^3 + 108 z^2 - 27 z + 9) I_0\left(\frac{z}{2}\right) + \frac{1}{9} e^{z/2} (16 z^5 + 128 z^4 + 180 z^3 - 24 z^2 + 9 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.agad.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{9} e^z (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9)$$

07.25.03.agae.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{9} e^{z/2} (16 z^4 + 72 z^3 + 36 z^2 - 12 z + 9) I_0\left(\frac{z}{2}\right) + \frac{1}{9} e^{z/2} (16 z^4 + 56 z^3 - 12 z^2 + 12 z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.agaf.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{3} e^z (8z^3 + 12z^2 - 6z + 3)$$

07.25.03.agag.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, 3; z\right) = \frac{16}{9} e^{z/2} (2z^3 + 3z - 6) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8z^4 - 8z^3 + 24z^2 - 60z + 105) I_1\left(\frac{z}{2}\right)}{9z}$$

07.25.03.agah.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (4z^4 - 12z^3 + 39z^2 - 96z + 144)}{3z^2} - \frac{120 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.agai.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (4z^4 + 12z^3 + 39z^2 + 96z + 144)}{3z^2} - \frac{120 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.agaj.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 - 36z^2 + 132z - 315) I_0\left(\frac{z}{2}\right)}{3z} + \frac{4 e^{z/2} (8z^4 - 44z^3 + 180z^2 - 525z + 1260) I_1\left(\frac{z}{2}\right)}{3z^2}$$

07.25.03.agak.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (2z^4 - 15z^3 + 72z^2 - 228z + 450)}{3z^3} - \frac{105 \sqrt{\pi} (4z + 25) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.agal.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = -\frac{35 e^{-z} (2z^4 + 15z^3 + 72z^2 + 228z + 450)}{3z^3} - \frac{105 \sqrt{\pi} (4z - 25) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.agam.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^3 - 36z^2 + 189z - 693) I_0\left(\frac{z}{2}\right)}{3z^2} + \frac{32 e^{z/2} (4z^4 - 40z^3 + 231z^2 - 756z + 2772) I_1\left(\frac{z}{2}\right)}{3z^3}$$

07.25.03.agan.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{105 e^z (2z^4 - 24z^3 + 156z^2 - 600z + 1575)}{2z^4} - \frac{945 \sqrt{\pi} (4z^2 + 50z + 175) \operatorname{erfi}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.agao.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{105 e^{-z} (2z^4 + 24z^3 + 156z^2 + 600z + 1575)}{2z^4} - \frac{945 \sqrt{\pi} (4z^2 - 50z + 175) \operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.agap.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (20z^3 - 270z^2 + 1683z - 10296) I_0\left(\frac{z}{2}\right)}{3z^3} + \frac{32 e^{z/2} (20z^4 - 290z^3 + 2367z^2 - 6732z + 41184) I_1\left(\frac{z}{2}\right)}{3z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.agaq.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{3} e^z (32 z^5 + 368 z^4 + 1072 z^3 + 744 z^2 + 42 z + 3)$$

07.25.03.agar.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{3} e^z (16 z^4 + 128 z^3 + 216 z^2 + 48 z - 3)$$

07.25.03.agas.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{3} e^{z/2} (-8 z^4 - 56 z^3 - 88 z^2 - 24 z + 3) I_0\left(\frac{z}{2}\right) - \frac{4}{3} e^{z/2} (2 z^4 + 12 z^3 + 11 z^2 - z) I_1\left(\frac{z}{2}\right)$$

07.25.03.agat.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{3} e^z (8 z^3 + 36 z^2 + 18 z - 3)$$

07.25.03.agau.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{3} e^{z/2} (-8 z^3 - 28 z^2 - 12 z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (-8 z^3 - 20 z^2 + 4 z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.agav.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -e^z (4 z^2 + 4 z - 1)$$

07.25.03.agaw.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, 3; z\right) = -\frac{4}{3} e^{z/2} (4 z^2 + 3) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (4 z^3 - 4 z^2 + 9 z - 15) I_1\left(\frac{z}{2}\right)}{3 z}$$

07.25.03.agax.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{5 e^z (2 z^3 - 5 z^2 + 12 z - 18)}{z^2} - \frac{45 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.agay.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (2 z^3 + 5 z^2 + 12 z + 18)}{z^2} - \frac{45 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.agaz.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, 4; z\right) = -\frac{4 e^{z/2} (4 z^2 - 14 z + 35) I_0\left(\frac{z}{2}\right)}{z} - \frac{4 e^{z/2} (4 z^3 - 18 z^2 + 55 z - 140) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.agb0.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{35 e^z (z^3 - 6 z^2 + 21 z - 45)}{z^3} - \frac{315 \sqrt{\pi} (z + 5) \operatorname{erfi}(\sqrt{z})}{2 z^{7/2}}$$

07.25.03.agb1.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = -\frac{35 e^{-z} (z^3 + 6 z^2 + 21 z + 45)}{z^3} - \frac{315 \sqrt{\pi} (z - 5) \operatorname{erf}(\sqrt{z})}{2 z^{7/2}}$$

07.25.03.agb2.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, 5; z\right) = -\frac{32 e^{z/2} (2 z^2 - 14 z + 63) I_0\left(\frac{z}{2}\right)}{z^2} - \frac{64 e^{z/2} (z^3 - 8 z^2 + 28 z - 126) I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.agb3.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{315 e^z (4z^3 - 38z^2 + 170z - 525)}{8z^4} - \frac{945\sqrt{\pi} (6z^2 + 60z + 175) \operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.agb4.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^3 + 38z^2 + 170z + 525)}{8z^4} - \frac{945\sqrt{\pi} (6z^2 - 60z + 175) \operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.agb5.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; -\frac{1}{2}, 6; z\right) = -\frac{32 e^{z/2} (10z^2 - 81z + 792) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (10z^3 - 139z^2 + 324z - 3168) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{1}{2}$

07.25.03.0117.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3} e^z (8z^3 + 44z^2 + 42z + 3)$$

07.25.03.0118.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{3} e^{z/2} \left((4z^3 + 20z^2 + 21z + 3) I_0\left(\frac{z}{2}\right) + z(4z^2 + 16z + 7) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.agb6.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (4z^2 + 12z + 3)$$

07.25.03.0119.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{3} e^{z/2} \left((4z^2 + 10z + 3) I_0\left(\frac{z}{2}\right) + (4z^2 + 6z - 1) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.agb7.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = e^z (2z + 1)$$

07.25.03.0120.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, 3; z\right) = \frac{4}{3z} e^{z/2} \left(2I_0\left(\frac{z}{2}\right) z^2 + (2z^2 - 2z + 3) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.agb8.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (z^2 - 2z + 3)}{z^2} - \frac{15\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2z^{5/2}}$$

07.25.03.agb9.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (z^2 + 2z + 3)}{z^2} - \frac{15\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2z^{5/2}}$$

07.25.03.agba.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (2z - 5) I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (2z^2 - 7z + 20) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.agbb.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (4z^2 - 18z + 45)}{8z^3} - \frac{105 \sqrt{\pi} (4z + 15) \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.agbc.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = -\frac{35 e^{-z} (4z^2 + 18z + 45)}{8z^3} - \frac{105 \sqrt{\pi} (4z - 15) \operatorname{erf}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.agbd.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (z - 7) I_0\left(\frac{z}{2}\right)}{z^2} + \frac{32 e^{z/2} (z^2 - 4z + 28) I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.agbe.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{315 e^z (4z^2 - 25z + 105)}{16z^4} - \frac{945 \sqrt{\pi} (2z^2 + 15z + 35) \operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.agbf.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2 + 25z + 105)}{16z^4} - \frac{945 \sqrt{\pi} (2z^2 - 15z + 35) \operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.agbg.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (z - 72) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (9z^2 - 4z + 288) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 1$

07.25.03.agbh.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{3} e^{z/2} (2z^2 + 6z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} (z^2 + 2z) I_1\left(\frac{z}{2}\right)$$

07.25.03.agbi.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; 1, \frac{5}{2}; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{3}{2}$

07.25.03.agbj.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3} e^z (2z + 3)$$

07.25.03.agbk.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{3} e^{z/2} (2z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z + 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.agbl.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = e^z$$

07.25.03.agbm.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (z-1) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.agbn.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2z-3)}{4z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.agbo.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5 e^{-z} (2z+3)}{4z^2}$$

07.25.03.agbp.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z-4) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.agbq.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (4z-15)}{16z^3} + \frac{105 \sqrt{\pi} (2z+5) \operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.agbr.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z+15)}{16z^3} + \frac{105 \sqrt{\pi} (2z-5) \operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.agbs.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.agbt.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1575 e^z (2z-21)}{128z^4} + \frac{945 \sqrt{\pi} (4z^2+20z+35) \operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.agbu.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (4z^2-20z+35) \operatorname{erf}(\sqrt{z})}{256z^{9/2}} - \frac{1575 e^{-z} (2z+21)}{128z^4}$$

07.25.03.agbv.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (z+8) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (z^2+4z+32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 2$

07.25.03.agbw.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; 2, \frac{5}{2}; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{5}{2}$

07.25.03.agbx.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3e^z}{2z} - \frac{3\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.agby.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3e^{-z}}{2z}$$

07.25.03.agbz.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, 3; z\right) = \frac{4e^{z/2} I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.agc0.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{45e^z}{8z^2} - \frac{15\sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.agc1.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{15\sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45e^{-z}}{8z^2}$$

07.25.03.agc2.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, 4; z\right) = \frac{4e^{z/2} (z+4) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4e^{z/2} I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.agc3.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{105e^z (2z+15)}{64z^3} - \frac{105\sqrt{\pi} (4z^2+12z+15) \operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.agc4.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{105e^{-z} (2z-15)}{64z^3} + \frac{105\sqrt{\pi} (4z^2-12z+15) \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.agc5.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, 5; z\right) = \frac{32e^{z/2} (z^2+4z+12) I_1\left(\frac{z}{2}\right)}{5z^3} - \frac{32e^{z/2} (z+3) I_0\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.agc6.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{315e^z (4z^2+20z+105)}{256z^4} - \frac{315\sqrt{\pi} (8z^3+36z^2+90z+105) \operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.agc7.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z} (4z^2-20z+105)}{256z^4} + \frac{315\sqrt{\pi} (8z^3-36z^2+90z-105) \operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.agc8.01

$${}_2F_2\left(\frac{3}{2}, \frac{5}{2}; \frac{5}{2}, 6; z\right) = \frac{32e^{z/2} (2z^3+11z^2+36z+96) I_1\left(\frac{z}{2}\right)}{7z^4} - \frac{32e^{z/2} (2z^2+9z+24) I_0\left(\frac{z}{2}\right)}{7z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = -\frac{11}{2}$

07.25.03.agc9.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; z\right) =$$

$$\frac{1}{108056025} (4096 z^{15} + 325632 z^{14} + 10192896 z^{13} + 161996800 z^{12} + 1406410752 z^{11} + 6680623104 z^{10} +$$

$$16438356480 z^9 + 18313585920 z^8 + 6708441600 z^7 + 242161920 z^6 +$$

$$6985440 z^5 + 2041200 z^4 + 1890000 z^3 + 3969000 z^2 + 16074450 z + 108056025) +$$

$$\frac{1}{108056025} (1024 e^z \sqrt{\pi} (4 z^{3/2} + 320 z^{29/2} + 10111 z^{27/2} + 163023 z^{25/2} + 1447950 z^{23/2} +$$

$$7142730 z^{21/2} + 18786600 z^{19/2} + 23816520 z^{17/2} + 11738160 z^{15/2} + 1285200 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.agca.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; -z\right) =$$

$$\frac{1}{108056025} (-4096 z^{15} + 325632 z^{14} - 10192896 z^{13} + 161996800 z^{12} - 1406410752 z^{11} + 6680623104 z^{10} -$$

$$16438356480 z^9 + 18313585920 z^8 - 6708441600 z^7 + 242161920 z^6 -$$

$$6985440 z^5 + 2041200 z^4 - 1890000 z^3 + 3969000 z^2 - 16074450 z + 108056025) +$$

$$\frac{1}{108056025} (1024 e^{-z} \sqrt{\pi} (4 z^{3/2} - 320 z^{29/2} + 10111 z^{27/2} - 163023 z^{25/2} + 1447950 z^{23/2} -$$

$$7142730 z^{21/2} + 18786600 z^{19/2} - 23816520 z^{17/2} + 11738160 z^{15/2} - 1285200 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.agcb.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{9823275} (-2048 z^{14} - 144384 z^{13} - 3942400 z^{12} - 53471232 z^{11} - 384178176 z^{10} - 1441850880 z^9 - 2592334080 z^8 -$$

$$1797465600 z^7 - 242161920 z^6 + 6985440 z^5 + 680400 z^4 + 378000 z^3 + 567000 z^2 + 1786050 z + 9823275) -$$

$$\frac{1}{9823275} (512 e^z \sqrt{\pi} (4 z^{29/2} + 284 z^{27/2} + 7839 z^{25/2} + 108150 z^{23/2} + 799050 z^{21/2} +$$

$$3147480 z^{19/2} + 6196680 z^{17/2} + 5226480 z^{15/2} + 1285200 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.agcc.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{9823275} \left(-2048 z^{14} + 144384 z^{13} - 3942400 z^{12} + 53471232 z^{11} - 384178176 z^{10} + 1441850880 z^9 - 2592334080 z^8 + \right.$$

$$\left. 1797465600 z^7 - 242161920 z^6 - 6985440 z^5 + 680400 z^4 - 378000 z^3 + 567000 z^2 - 1786050 z + 9823275 \right) +$$

$$\frac{1}{9823275} \left(512 e^{-z} \sqrt{\pi} \left(4 z^{29/2} - 284 z^{27/2} + 7839 z^{25/2} - 108150 z^{23/2} + 799050 z^{21/2} - \right. \right.$$

$$\left. \left. 3147480 z^{19/2} + 6196680 z^{17/2} - 5226480 z^{15/2} + 1285200 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.agcd.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{1091475} \left(1024 z^{13} + 62976 z^{12} + 1467904 z^{11} + 16490496 z^{10} + 93806080 z^9 + 258574080 z^8 + 293690880 z^7 + \right.$$

$$\left. 80720640 z^6 - 6985440 z^5 + 680400 z^4 + 126000 z^3 + 113400 z^2 + 255150 z + 1091475 \right) +$$

$$\frac{1}{1091475} \left(256 e^z \sqrt{\pi} \left(4 z^{27/2} + 248 z^{25/2} + 5855 z^{23/2} + 67165 z^{21/2} + 396060 z^{19/2} + \right. \right.$$

$$\left. \left. 1167180 z^{17/2} + 1527960 z^{15/2} + 642600 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.agce.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{1091475} \left(-1024 z^{13} + 62976 z^{12} - 1467904 z^{11} + 16490496 z^{10} - 93806080 z^9 + 258574080 z^8 - 293690880 z^7 + \right.$$

$$\left. 80720640 z^6 + 6985440 z^5 + 680400 z^4 - 126000 z^3 + 113400 z^2 - 255150 z + 1091475 \right) +$$

$$\frac{1}{1091475} \left(256 e^{-z} \sqrt{\pi} \left(4 z^{27/2} - 248 z^{25/2} + 5855 z^{23/2} - 67165 z^{21/2} + 396060 z^{19/2} - \right. \right.$$

$$\left. \left. 1167180 z^{17/2} + 1527960 z^{15/2} - 642600 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.agcf.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{155925} \left(-512 z^{12} - 26880 z^{11} - 519168 z^{10} - 4623872 z^9 - 19388160 z^8 - 34122240 z^7 - 16144128 z^6 + \right.$$

$$\left. 2328480 z^5 - 680400 z^4 + 126000 z^3 + 37800 z^2 + 51030 z + 155925 \right) -$$

$$\frac{1}{155925} 128 e^z \sqrt{\pi} \left(4 z^{25/2} + 212 z^{23/2} + 4159 z^{21/2} + 38052 z^{19/2} + 167748 z^{17/2} + 328440 z^{15/2} + 214200 z^{13/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.agcg.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{155925} \left(-512 z^{12} + 26880 z^{11} - 519168 z^{10} + 4623872 z^9 - 19388160 z^8 + 34122240 z^7 - 16144128 z^6 - \right.$$

$$\left. 2328480 z^5 - 680400 z^4 - 126000 z^3 + 37800 z^2 - 51030 z + 155925 \right) +$$

$$\frac{1}{155925} 128 e^{-z} \sqrt{\pi} \left(4 z^{25/2} - 212 z^{23/2} + 4159 z^{21/2} - 38052 z^{19/2} + 167748 z^{17/2} - 328440 z^{15/2} + 214200 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agch.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{31185} (256 z^{11} + 11136 z^{10} + 170624 z^9 + 1122816 z^8 + 3029760 z^7 + 2306304 z^6 - 465696 z^5 + 226800 z^4 - 126000 z^3 + 37800 z^2 + 17010 z + 31185) + \frac{64 e^z \sqrt{\pi} (4 z^{23/2} + 176 z^{21/2} + 2751 z^{19/2} + 18795 z^{17/2} + 54978 z^{15/2} + 53550 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.agci.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{31185} (-256 z^{11} + 11136 z^{10} - 170624 z^9 + 1122816 z^8 - 3029760 z^7 + 2306304 z^6 + 465696 z^5 + 226800 z^4 + 126000 z^3 + 37800 z^2 - 17010 z + 31185) + \frac{64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 176 z^{21/2} + 2751 z^{19/2} - 18795 z^{17/2} + 54978 z^{15/2} - 53550 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.agcj.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{10395} (-128 z^{10} - 4416 z^9 - 50048 z^8 - 213120 z^7 - 256256 z^6 + 66528 z^5 - 45360 z^4 + 42000 z^3 - 37800 z^2 + 17010 z + 10395) - \frac{32 e^z \sqrt{\pi} (4 z^{21/2} + 140 z^{19/2} + 1631 z^{17/2} + 7378 z^{15/2} + 10710 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.agck.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{10395} (-128 z^{10} + 4416 z^9 - 50048 z^8 + 213120 z^7 - 256256 z^6 - 66528 z^5 - 45360 z^4 - 42000 z^3 - 37800 z^2 - 17010 z + 10395) + \frac{32 e^{-z} \sqrt{\pi} (4 z^{21/2} - 140 z^{19/2} + 1631 z^{17/2} - 7378 z^{15/2} + 10710 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.agcl.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{10395} (64 z^9 + 1632 z^8 + 12000 z^7 + 23296 z^6 - 7392 z^5 + 6480 z^4 - 8400 z^3 + 12600 z^2 - 17010 z + 10395) + \frac{16 e^z \sqrt{\pi} (4 z^{19/2} + 104 z^{17/2} + 799 z^{15/2} + 1785 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.agcm.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{10395} (-64 z^9 + 1632 z^8 - 12000 z^7 + 23296 z^6 + 7392 z^5 + 6480 z^4 + 8400 z^3 + 12600 z^2 + 17010 z + 10395) + \frac{16 e^{-z} \sqrt{\pi} (4 z^{19/2} - 104 z^{17/2} + 799 z^{15/2} - 1785 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.agcn.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, 1; z\right) = \frac{1}{20790} e^z (128 z^9 + 2752 z^8 + 15712 z^7 + 17360 z^6 - 12264 z^5 + 17220 z^4 - 26670 z^3 + 36855 z^2 - 37800 z + 20790)$$

07.25.03.agco.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{8 e^z \sqrt{\pi} (4 z^2 + 68 z + 255) \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{32 z^8 + 528 z^7 + 1792 z^6 - 672 z^5 + 720 z^4 - 1200 z^3 + 2520 z^2 - 5670 z + 10395}{10395}$$

07.25.03.agcp.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{32 z^8 - 528 z^7 + 1792 z^6 + 672 z^5 + 720 z^4 + 1200 z^3 + 2520 z^2 + 5670 z + 10395}{10395} - \frac{8 e^{-z} \sqrt{\pi} z^{13/2} (4 z^2 - 68 z + 255) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.agcq.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, 2; z\right) = \frac{e^z (128 z^8 + 1600 z^7 + 2912 z^6 - 3024 z^5 + 5880 z^4 - 12180 z^3 + 22050 z^2 - 29295 z + 20790)}{20790}$$

07.25.03.agcr.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{16 z^8 + 120 z^7 - 56 z^6 + 96 z^5 - 320 z^4 + 1320 z^3 - 5166 z^2 + 16905 z - 40320}{3465 z} + \frac{4 e^z \sqrt{\pi} (4 z^9 + 32 z^8 - z^7 + 7 z^6 - 42 z^5 + 210 z^4 - 840 z^3 + 2520 z^2 - 5040 z + 5040) \operatorname{erf}(\sqrt{z})}{3465 z^{3/2}}$$

07.25.03.agcs.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{-16 z^8 + 120 z^7 + 56 z^6 + 96 z^5 + 320 z^4 + 1320 z^3 + 5166 z^2 + 16905 z + 40320}{3465 z} + \frac{4 e^{-z} \sqrt{\pi} (4 z^9 - 32 z^8 - z^7 - 7 z^6 - 42 z^5 - 210 z^4 - 840 z^3 - 2520 z^2 - 5040 z - 5040) \operatorname{erfi}(\sqrt{z})}{3465 z^{3/2}}$$

07.25.03.agct.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, 3; z\right) = \frac{e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13230 z + 10395)}{10395}$$

07.25.03.agcu.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{8z^8 - 12z^7 + 72z^6 - 472z^5 + 2760z^4 - 13698z^3 + 55797z^2 - 181440z + 483840}{693z^2} + \frac{1}{693z^{5/2}} 2e^z \sqrt{\pi} (4z^9 - 4z^8 + 31z^7 - 210z^6 + 1218z^5 - 5880z^4 + 22680z^3 - 65520z^2 + 126000z - 120960) \operatorname{erf}(\sqrt{z})$$

07.25.03.agcv.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{8z^8 + 12z^7 + 72z^6 + 472z^5 + 2760z^4 + 13698z^3 + 55797z^2 + 181440z + 483840}{693z^2} - \frac{1}{693z^{5/2}} 2e^{-z} \sqrt{\pi} (4z^9 + 4z^8 + 31z^7 + 210z^6 + 1218z^5 + 5880z^4 + 22680z^3 + 65520z^2 + 126000z + 120960) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agcw.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, 4; z\right) = \frac{1}{3465z^3} (e^z (128z^9 - 704z^8 + 4960z^7 - 33040z^6 + 194040z^5 - 961380z^4 + 3832290z^3 - 11486475z^2 + 22972950z - 22972950)) + \frac{6630}{z^3}$$

07.25.03.agcx.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{4z^8 - 42z^7 + 374z^6 - 2880z^5 + 18918z^4 - 103629z^3 + 458640z^2 - 1572480z + 5443200}{99z^3} + \frac{1}{99z^{7/2}} (e^z \sqrt{\pi} (4z^9 - 40z^8 + 351z^7 - 2667z^6 + 17220z^5 - 91980z^4 + 390600z^3 - 1237320z^2 + 2600640z - 2721600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.agcy.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{-4z^8 - 42z^7 - 374z^6 - 2880z^5 - 18918z^4 - 103629z^3 - 458640z^2 - 1572480z - 5443200}{99z^3} + \frac{1}{99z^{7/2}} (e^{-z} \sqrt{\pi} (4z^9 + 40z^8 + 351z^7 + 2667z^6 + 17220z^5 + 91980z^4 + 390600z^3 + 1237320z^2 + 2600640z + 2721600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.agcz.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, 5; z\right) = \frac{5304(5z + 57)}{z^4} + \frac{1}{3465z^4} (4e^z (128z^9 - 1856z^8 + 19808z^7 - 171696z^6 + 1224216z^5 - 7082460z^4 + 32162130z^3 - 107972865z^2 + 238918680z - 261891630))$$

07.25.03.agd0.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{2z^8 - 39z^7 + 500z^6 - 4962z^5 + 39539z^4 - 252840z^3 + 1270080z^2 - 4334400z + 21168000}{11z^4} + \frac{1}{22z^{9/2}} \left(e^z \sqrt{\pi} (4z^9 - 76z^8 + 959z^7 - 9380z^6 + 73500z^5 - 459480z^4 + 2228520z^3 - 7922880z^2 + 18446400z - 21168000) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.agd1.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{2z^8 + 39z^7 + 500z^6 + 4962z^5 + 39539z^4 + 252840z^3 + 1270080z^2 + 4334400z + 21168000}{11z^4} + \frac{1}{22z^{9/2}} \left(e^{-z} \sqrt{\pi} (-4z^9 - 76z^8 - 959z^7 - 9380z^6 - 73500z^5 - 459480z^4 - 2228520z^3 - 7922880z^2 - 18446400z - 21168000) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.agd2.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{11}{2}, 6; z\right) = \frac{13260(5z^2 + 114z + 684)}{z^5} + \frac{1}{693z^5} \left(4e^z (128z^9 - 3008z^8 + 43872z^7 - 478800z^6 + 4097016z^5 - 27567540z^4 + 142432290z^3 - 535269735z^2 + 1309458150z - 1571349780) \right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = -\frac{9}{2}$

07.25.03.agd3.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{893025} (1024z^{13} + 64000z^{12} + 1523712z^{11} + 17624064z^{10} + 104655360z^9 + 309484800z^8 + 403776000z^7 + 170277120z^6 + 6985440z^5 + 226800z^4 + 75600z^3 + 81000z^2 + 198450z + 893025) + \frac{1}{893025} \left(256e^z \sqrt{\pi} (4z^{27/2} + 252z^{25/2} + 6075z^{23/2} + 71700z^{21/2} + 440550z^{19/2} + 1385280z^{17/2} + 2040840z^{15/2} + 1144800z^{13/2} + 140400z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.agd4.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{893025} (-1024z^{13} + 64000z^{12} - 1523712z^{11} + 17624064z^{10} - 104655360z^9 + 309484800z^8 - 403776000z^7 + 170277120z^6 - 6985440z^5 + 226800z^4 - 75600z^3 + 81000z^2 - 198450z + 893025) + \frac{1}{893025} \left(256e^{-z} \sqrt{\pi} (4z^{27/2} - 252z^{25/2} + 6075z^{23/2} - 71700z^{21/2} + 440550z^{19/2} - 1385280z^{17/2} + 2040840z^{15/2} - 1144800z^{13/2} + 140400z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.agd5.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{99225} \left(-512 z^{12} - 27904 z^{11} - 566784 z^{10} - 5424640 z^9 - 25455360 z^8 - 55042560 z^7 - 44778240 z^6 - 6985440 z^5 + 226800 z^4 + 25200 z^3 + 16200 z^2 + 28350 z + 99225 \right) - \frac{1}{99225} \left(128 e^z \sqrt{\pi} \left(4 z^{25/2} + 220 z^{23/2} + 4535 z^{21/2} + 44490 z^{19/2} + 218100 z^{17/2} + 512880 z^{15/2} + 502200 z^{13/2} + 140400 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.agd6.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{99225} \left(-512 z^{12} + 27904 z^{11} - 566784 z^{10} + 5424640 z^9 - 25455360 z^8 + 55042560 z^7 - 44778240 z^6 + 6985440 z^5 + 226800 z^4 - 25200 z^3 + 16200 z^2 - 28350 z + 99225 \right) + \frac{1}{99225} \left(128 e^{-z} \sqrt{\pi} \left(4 z^{25/2} - 220 z^{23/2} + 4535 z^{21/2} - 44490 z^{19/2} + 218100 z^{17/2} - 512880 z^{15/2} + 502200 z^{13/2} - 140400 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.agd7.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{14175} \left(256 z^{11} + 11904 z^{10} + 200192 z^9 + 1516800 z^8 + 5230080 z^7 + 7158528 z^6 + 2328480 z^5 - 226800 z^4 + 25200 z^3 + 5400 z^2 + 5670 z + 14175 \right) + \frac{1}{14175} 64 e^z \sqrt{\pi} \left(4 z^{23/2} + 188 z^{21/2} + 3219 z^{19/2} + 25176 z^{17/2} + 92220 z^{15/2} + 144000 z^{13/2} + 70200 z^{11/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.agd8.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{14175} \left(-256 z^{11} + 11904 z^{10} - 200192 z^9 + 1516800 z^8 - 5230080 z^7 + 7158528 z^6 - 2328480 z^5 - 226800 z^4 - 25200 z^3 + 5400 z^2 - 5670 z + 14175 \right) + \frac{1}{14175} 64 e^{-z} \sqrt{\pi} \left(4 z^{23/2} - 188 z^{21/2} + 3219 z^{19/2} - 25176 z^{17/2} + 92220 z^{15/2} - 144000 z^{13/2} + 70200 z^{11/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agd9.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{2835} \left(-128 z^{10} - 4928 z^9 - 65664 z^8 - 366720 z^7 - 808704 z^6 - 465696 z^5 + 75600 z^4 - 25200 z^3 + 5400 z^2 + 1890 z + 2835 \right) - \frac{32 e^z \sqrt{\pi} \left(4 z^{21/2} + 156 z^{19/2} + 2127 z^{17/2} + 12414 z^{15/2} + 30150 z^{13/2} + 23400 z^{11/2} \right) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.agda.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{2835} \left(-128 z^{10} + 4928 z^9 - 65664 z^8 + 366720 z^7 - 808704 z^6 + 465696 z^5 + 75600 z^4 + 25200 z^3 + 5400 z^2 - 1890 z + 2835 \right) + \frac{32 e^{-z} \sqrt{\pi} \left(4 z^{21/2} - 156 z^{19/2} + 2127 z^{17/2} - 12414 z^{15/2} + 30150 z^{13/2} - 23400 z^{11/2} \right) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.agdb.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} (64 z^9 + 1952 z^8 + 19200 z^7 + 69056 z^6 + 66528 z^5 - 15120 z^4 + 8400 z^3 - 5400 z^2 + 1890 z + 945) + \frac{16}{945} e^z \sqrt{\pi} (4 z^{19/2} + 124 z^{17/2} + 1259 z^{15/2} + 4860 z^{13/2} + 5850 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agdc.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945} (-64 z^9 + 1952 z^8 - 19200 z^7 + 69056 z^6 - 66528 z^5 - 15120 z^4 - 8400 z^3 - 5400 z^2 - 1890 z + 945) + \frac{16}{945} e^{-z} \sqrt{\pi} (4 z^{19/2} - 124 z^{17/2} + 1259 z^{15/2} - 4860 z^{13/2} + 5850 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agdd.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{945} (-32 z^8 - 720 z^7 - 4576 z^6 - 7392 z^5 + 2160 z^4 - 1680 z^3 + 1800 z^2 - 1890 z + 945) - \frac{8}{945} e^z \sqrt{\pi} (4 z^{17/2} + 92 z^{15/2} + 615 z^{13/2} + 1170 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agde.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} (-32 z^8 + 720 z^7 - 4576 z^6 + 7392 z^5 + 2160 z^4 + 1680 z^3 + 1800 z^2 + 1890 z + 945) + \frac{8}{945} e^{-z} \sqrt{\pi} (4 z^{17/2} - 92 z^{15/2} + 615 z^{13/2} - 1170 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agdf.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, 1; z\right) = -\frac{e^z (64 z^8 + 1216 z^7 + 6032 z^6 + 5664 z^5 - 3300 z^4 + 3660 z^3 - 4185 z^2 + 3780 z - 1890)}{1890}$$

07.25.03.agdg.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{945} (-16 z^7 - 232 z^6 - 672 z^5 + 240 z^4 - 240 z^3 + 360 z^2 - 630 z + 945) - \frac{4}{945} e^z \sqrt{\pi} z^{11/2} (4 z^2 + 60 z + 195) \operatorname{erf}(\sqrt{z})$$

07.25.03.agdh.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} (16 z^7 - 232 z^6 + 672 z^5 + 240 z^4 + 240 z^3 + 360 z^2 + 630 z + 945) - \frac{4}{945} e^{-z} \sqrt{\pi} z^{11/2} (4 z^2 - 60 z + 195) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agdi.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, 2; z\right) = -\frac{e^z (64 z^7 + 704 z^6 + 1104 z^5 - 960 z^4 + 1500 z^3 - 2340 z^2 + 2835 z - 1890)}{1890}$$

07.25.03.agdj.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-8z^7 - 52z^6 + 24z^5 - 40z^4 + 120z^3 - 414z^2 + 1275z - 2880}{315z} - \frac{2e^z \sqrt{\pi} (4z^8 + 28z^7 - z^6 + 6z^5 - 30z^4 + 120z^3 - 360z^2 + 720z - 720) \operatorname{erf}(\sqrt{z})}{315z^{3/2}}$$

07.25.03.agdk.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-8z^7 + 52z^6 + 24z^5 + 40z^4 + 120z^3 + 414z^2 + 1275z + 2880}{315z} + \frac{2e^{-z} \sqrt{\pi} (4z^8 - 28z^7 - z^6 - 6z^5 - 30z^4 - 120z^3 - 360z^2 - 720z - 720) \operatorname{erfi}(\sqrt{z})}{315z^{3/2}}$$

07.25.03.agdl.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, 3; z\right) = -\frac{1}{945} e^z (64z^6 + 192z^5 - 240z^4 + 480z^3 - 900z^2 + 1260z - 945)$$

07.25.03.agdm.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-4z^7 + 6z^6 - 32z^5 + 180z^4 - 882z^3 + 3567z^2 - 11520z + 30240}{63z^2} + \frac{e^z \sqrt{\pi} (-4z^8 + 4z^7 - 27z^6 + 156z^5 - 750z^4 + 2880z^3 - 8280z^2 + 15840z - 15120) \operatorname{erf}(\sqrt{z})}{63z^{5/2}}$$

07.25.03.agdn.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{4z^7 + 6z^6 + 32z^5 + 180z^4 + 882z^3 + 3567z^2 + 11520z + 30240}{63z^2} + \frac{e^{-z} \sqrt{\pi} (-4z^8 - 4z^7 - 27z^6 - 156z^5 - 750z^4 - 2880z^3 - 8280z^2 - 15840z - 15120) \operatorname{erfi}(\sqrt{z})}{63z^{5/2}}$$

07.25.03.agdo.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, 4; z\right) = \frac{1}{315z^3} e^z (-64z^8 + 320z^7 - 2000z^6 + 11520z^5 - 56700z^4 + 225540z^3 - 675675z^2 + 1351350z - 1351350) + \frac{4290}{z^3}$$

07.25.03.agdp.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-2z^7 + 19z^6 - 150z^5 + 1002z^4 - 5559z^3 + 24840z^2 - 85680z + 302400}{9z^3} + \frac{1}{18z^{7/2}} e^z \sqrt{\pi} (-4z^8 + 36z^7 - 279z^6 + 1830z^5 - 9900z^4 + 42480z^3 - 135720z^2 + 287280z - 302400) \operatorname{erf}(\sqrt{z})$$

07.25.03.agdq.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{-2z^7 - 19z^6 - 150z^5 - 1002z^4 - 5559z^3 - 24840z^2 - 85680z - 302400}{9z^3} + \frac{1}{18z^{7/2}} e^{-z} \sqrt{\pi} (4z^8 + 36z^7 + 279z^6 + 1830z^5 + 9900z^4 + 42480z^3 + 135720z^2 + 287280z + 302400) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agdr.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, 5; z\right) = \frac{3432(5z + 51)}{z^4} - \frac{1}{315z^4} 4e^z (64z^8 - 832z^7 + 7824z^6 - 58464z^5 + 349020z^4 - 1621620z^3 + 5540535z^2 - 12432420z + 13783770)$$

07.25.03.agds.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-2z^7 + 35z^6 - 396z^5 + 3398z^4 - 22800z^3 + 118440z^2 - 403200z + 2116800}{2z^4} + \frac{1}{4z^{9/2}} e^z \sqrt{\pi} (-4z^8 + 68z^7 - 755z^6 + 6360z^5 - 41700z^4 + 209280z^3 - 763560z^2 + 1814400z - 2116800) \operatorname{erf}(\sqrt{z})$$

07.25.03.agdt.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{2z^7 + 35z^6 + 396z^5 + 3398z^4 + 22800z^3 + 118440z^2 + 403200z + 2116800}{2z^4} + \frac{1}{4z^{9/2}} e^{-z} \sqrt{\pi} (-4z^8 - 68z^7 - 755z^6 - 6360z^5 - 41700z^4 - 209280z^3 - 763560z^2 - 1814400z - 2116800) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agdu.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{9}{2}, 6; z\right) = \frac{8580(35z^2 + 714z + 3876)}{7z^5} - \frac{1}{63z^5} 4e^z (64z^8 - 1344z^7 + 17232z^6 - 161856z^5 + 1158300z^4 - 6254820z^3 + 24304995z^2 - 61042410z + 74826180)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = -\frac{7}{2}$

07.25.03.agdv.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{11025} (256z^{11} + 12160z^{10} + 210560z^9 + 1665280z^8 + 6157824z^7 + 9667840z^6 + 4788960z^5 + 226800z^4 + 8400z^3 + 3240z^2 + 4050z + 11025) + \frac{1}{11025} (64e^z \sqrt{\pi} (4z^{23/2} + 192z^{21/2} + 3383z^{19/2} + 27575z^{17/2} + 107800z^{15/2} + 189480z^{13/2} + 123240z^{11/2} + 17160z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.agdw.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{11025} (-256z^{11} + 12160z^{10} - 210560z^9 + 1665280z^8 - 6157824z^7 + 9667840z^6 - 4788960z^5 + 226800z^4 - 8400z^3 + 3240z^2 - 4050z + 11025) + \frac{1}{11025} (64e^{-z} \sqrt{\pi} (4z^{23/2} - 192z^{21/2} + 3383z^{19/2} - 27575z^{17/2} + 107800z^{15/2} - 189480z^{13/2} + 123240z^{11/2} - 17160z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.agdx.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{1575} (-128 z^{10} - 5184 z^9 - 74\,240 z^8 - 463\,872 z^7 - 1\,254\,656 z^6 - 1\,230\,240 z^5 - 226\,800 z^4 + 8400 z^3 + 1080 z^2 + 810 z + 1575) - \frac{1}{1575} 32 e^z \sqrt{\pi} (4 z^{21/2} + 164 z^{19/2} + 2399 z^{17/2} + 15\,580 z^{15/2} + 45\,480 z^{13/2} + 53\,040 z^{11/2} + 17\,160 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agdy.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{1575} (-128 z^{10} + 5184 z^9 - 74\,240 z^8 + 463\,872 z^7 - 1\,254\,656 z^6 + 1\,230\,240 z^5 - 226\,800 z^4 - 8400 z^3 + 1080 z^2 - 810 z + 1575) + \frac{1}{1575} 32 e^{-z} \sqrt{\pi} (4 z^{21/2} - 164 z^{19/2} + 2399 z^{17/2} - 15\,580 z^{15/2} + 45\,480 z^{13/2} - 53\,040 z^{11/2} + 17\,160 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agdz.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{315} (64 z^9 + 2144 z^8 + 24\,288 z^7 + 111\,488 z^6 + 191\,136 z^5 + 75\,600 z^4 - 8400 z^3 + 1080 z^2 + 270 z + 315) + \frac{16}{315} e^z \sqrt{\pi} (4 z^{19/2} + 136 z^{17/2} + 1583 z^{15/2} + 7665 z^{13/2} + 14\,820 z^{11/2} + 8580 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.age0.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{315} (-64 z^9 + 2144 z^8 - 24\,288 z^7 + 111\,488 z^6 - 191\,136 z^5 + 75\,600 z^4 + 8400 z^3 + 1080 z^2 - 270 z + 315) + \frac{16}{315} e^{-z} \sqrt{\pi} (4 z^{19/2} - 136 z^{17/2} + 1583 z^{15/2} - 7665 z^{13/2} + 14\,820 z^{11/2} - 8580 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.age1.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} (-32 z^8 - 848 z^7 - 7072 z^6 - 20\,768 z^5 - 15\,120 z^4 + 2800 z^3 - 1080 z^2 + 270 z + 105) - \frac{8}{105} e^z \sqrt{\pi} (4 z^{17/2} + 108 z^{15/2} + 935 z^{13/2} + 2990 z^{11/2} + 2860 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.age2.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} (-32 z^8 + 848 z^7 - 7072 z^6 + 20\,768 z^5 - 15\,120 z^4 - 2800 z^3 - 1080 z^2 - 270 z + 105) + \frac{8}{105} e^{-z} \sqrt{\pi} (4 z^{17/2} - 108 z^{15/2} + 935 z^{13/2} - 2990 z^{11/2} + 2860 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.age3.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{105} (16 z^7 + 312 z^6 + 1672 z^5 + 2160 z^4 - 560 z^3 + 360 z^2 - 270 z + 105) + \frac{4}{105} e^z \sqrt{\pi} (4 z^{15/2} + 80 z^{13/2} + 455 z^{11/2} + 715 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.age4.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} (-16z^7 + 312z^6 - 1672z^5 + 2160z^4 + 560z^3 + 360z^2 + 270z + 105) + \frac{4}{105} e^{-z} \sqrt{\pi} (4z^{15/2} - 80z^{13/2} + 455z^{11/2} - 715z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.age5.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, 1; z\right) = \frac{1}{210} e^z (32z^7 + 528z^6 + 2224z^5 + 1720z^4 - 790z^3 + 645z^2 - 480z + 210)$$

07.25.03.age6.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{2}{105} e^z \sqrt{\pi} (4z^2 + 52z + 143) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (8z^6 + 100z^5 + 240z^4 - 80z^3 + 72z^2 - 90z + 105)$$

07.25.03.age7.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} (8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} z^{9/2} (4z^2 - 52z + 143) \operatorname{erfi}(\sqrt{z})$$

07.25.03.age8.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, 2; z\right) = \frac{1}{210} e^z (32z^6 + 304z^5 + 400z^4 - 280z^3 + 330z^2 - 345z + 210)$$

07.25.03.age9.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{4z^6 + 22z^5 - 10z^4 + 16z^3 - 42z^2 + 115z - 240}{35z} + \frac{e^z \sqrt{\pi} (4z^7 + 24z^6 - z^5 + 5z^4 - 20z^3 + 60z^2 - 120z + 120) \operatorname{erf}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.agea.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{-4z^6 + 22z^5 + 10z^4 + 16z^3 + 42z^2 + 115z + 240}{35z} + \frac{e^{-z} \sqrt{\pi} (4z^7 - 24z^6 - z^5 - 5z^4 - 20z^3 - 60z^2 - 120z - 120) \operatorname{erfi}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.ageb.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, 3; z\right) = \frac{1}{105} e^z (32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)$$

07.25.03.agec.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{2z^6 - 3z^5 + 14z^4 - 66z^3 + 263z^2 - 840z + 2160}{7z^2} + \frac{e^z \sqrt{\pi} (4z^7 - 4z^6 + 23z^5 - 110z^4 + 420z^3 - 1200z^2 + 2280z - 2160) \operatorname{erf}(\sqrt{z})}{14z^{5/2}}$$

07.25.03.aged.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{2z^6 + 3z^5 + 14z^4 + 66z^3 + 263z^2 + 840z + 2160}{7z^2} + \frac{e^{-z}\sqrt{\pi}(-4z^7 - 4z^6 - 23z^5 - 110z^4 - 420z^3 - 1200z^2 - 2280z - 2160)\operatorname{erfi}(\sqrt{z})}{14z^{5/2}}$$

07.25.03.agee.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, 4; z\right) = \frac{e^z(32z^7 - 144z^6 + 784z^5 - 3800z^4 + 15050z^3 - 45045z^2 + 90090z - 90090)}{35z^3} + \frac{2574}{z^3}$$

07.25.03.agef.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{2z^6 - 17z^5 + 117z^4 - 662z^3 + 3000z^2 - 10440z + 37800}{2z^3} + \frac{e^z\sqrt{\pi}(4z^7 - 32z^6 + 215z^5 - 1185z^4 + 5160z^3 - 16680z^2 + 35640z - 37800)\operatorname{erf}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.ageg.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-2z^6 - 17z^5 - 117z^4 - 662z^3 - 3000z^2 - 10440z - 37800}{2z^3} + \frac{e^{-z}\sqrt{\pi}(4z^7 + 32z^6 + 215z^5 + 1185z^4 + 5160z^3 + 16680z^2 + 35640z + 37800)\operatorname{erfi}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.ageh.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, 5; z\right) = \frac{10296(z+9)}{z^4} + \frac{4e^z(32z^7 - 368z^6 + 2992z^5 - 18760z^4 + 90090z^3 - 315315z^2 + 720720z - 810810)}{35z^4}$$

07.25.03.agei.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{9(2z^6 - 31z^5 + 304z^4 - 2200z^3 + 12000z^2 - 40600z + 235200)}{4z^4} + \frac{9e^z\sqrt{\pi}(4z^7 - 60z^6 + 575z^5 - 4060z^4 + 21400z^3 - 80880z^2 + 197400z - 235200)\operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.agej.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(2z^6 + 31z^5 + 304z^4 + 2200z^3 + 12000z^2 + 40600z + 235200)}{4z^4} - \frac{9e^{-z}\sqrt{\pi}(4z^7 + 60z^6 + 575z^5 + 4060z^4 + 21400z^3 + 80880z^2 + 197400z + 235200)\operatorname{erfi}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.agek.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{7}{2}, 6; z\right) = \frac{25740(7z^2 + 126z + 612)}{7z^5} + \frac{4e^z(32z^7 - 592z^6 + 6544z^5 - 51480z^4 + 296010z^3 - 1203345z^2 + 3127410z - 3938220)}{7z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = -\frac{5}{2}$

07.25.03.agel.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{225} (64 z^9 + 2208 z^8 + 26112 z^7 + 128512 z^6 + 252384 z^5 + 150768 z^4 + 8400 z^3 + 360 z^2 + 162 z + 225) + \frac{16}{225} e^z \sqrt{\pi} (4 z^{19/2} + 140 z^{17/2} + 1699 z^{15/2} + 8784 z^{13/2} + 19128 z^{11/2} + 14784 z^{9/2} + 2376 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agem.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{225} (-64 z^9 + 2208 z^8 - 26112 z^7 + 128512 z^6 - 252384 z^5 + 150768 z^4 - 8400 z^3 + 360 z^2 - 162 z + 225) + \frac{16}{225} e^{-z} \sqrt{\pi} (4 z^{19/2} - 140 z^{17/2} + 1699 z^{15/2} - 8784 z^{13/2} + 19128 z^{11/2} - 14784 z^{9/2} + 2376 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agen.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{45} (-32 z^8 - 912 z^7 - 8512 z^6 - 30624 z^5 - 37584 z^4 - 8400 z^3 + 360 z^2 + 54 z + 45) - \frac{8}{45} e^z \sqrt{\pi} (4 z^{17/2} + 116 z^{15/2} + 1119 z^{13/2} + 4308 z^{11/2} + 6204 z^{9/2} + 2376 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ageo.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{45} (-32 z^8 + 912 z^7 - 8512 z^6 + 30624 z^5 - 37584 z^4 + 8400 z^3 + 360 z^2 - 54 z + 45) + \frac{8}{45} e^{-z} \sqrt{\pi} (4 z^{17/2} - 116 z^{15/2} + 1119 z^{13/2} - 4308 z^{11/2} + 6204 z^{9/2} - 2376 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agep.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} (16 z^7 + 360 z^6 + 2464 z^5 + 5616 z^4 + 2800 z^3 - 360 z^2 + 54 z + 15) + \frac{4}{15} e^z \sqrt{\pi} (4 z^{15/2} + 92 z^{13/2} + 659 z^{11/2} + 1672 z^{9/2} + 1188 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ageq.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15} (-16 z^7 + 360 z^6 - 2464 z^5 + 5616 z^4 - 2800 z^3 - 360 z^2 - 54 z + 15) + \frac{4}{15} e^{-z} \sqrt{\pi} (4 z^{15/2} - 92 z^{13/2} + 659 z^{11/2} - 1672 z^{9/2} + 1188 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ager.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{15} (-8 z^6 - 132 z^5 - 576 z^4 - 560 z^3 + 120 z^2 - 54 z + 15) - \frac{2}{15} e^z \sqrt{\pi} (4 z^{13/2} + 68 z^{11/2} + 319 z^{9/2} + 396 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ages.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{15}(-8z^6 + 132z^5 - 576z^4 + 560z^3 + 120z^2 + 54z + 15) + \frac{2}{15}e^{-z}\sqrt{\pi}(4z^{13/2} - 68z^{11/2} + 319z^{9/2} - 396z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aget.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, 1; z\right) = -\frac{1}{30}e^z(16z^6 + 224z^5 + 776z^4 + 472z^3 - 159z^2 + 84z - 30)$$

07.25.03.ageu.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{15}(-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) - \frac{1}{15}e^z\sqrt{\pi}z^{7/2}(4z^2 + 44z + 99)\operatorname{erf}(\sqrt{z})$$

07.25.03.agev.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{15}(4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) - \frac{1}{15}e^{-z}\sqrt{\pi}z^{7/2}(4z^2 - 44z + 99)\operatorname{erfi}(\sqrt{z})$$

07.25.03.agew.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, 2; z\right) = -\frac{1}{30}e^z(16z^5 + 128z^4 + 136z^3 - 72z^2 + 57z - 30)$$

07.25.03.agex.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-2z^5 - 9z^4 + 4z^3 - 6z^2 + 13z - 24}{5z} + \frac{e^z\sqrt{\pi}(-4z^6 - 20z^5 + z^4 - 4z^3 + 12z^2 - 24z + 24)\operatorname{erf}(\sqrt{z})}{10z^{3/2}}$$

07.25.03.agey.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-2z^5 + 9z^4 + 4z^3 + 6z^2 + 13z + 24}{5z} + \frac{e^{-z}\sqrt{\pi}(4z^6 - 20z^5 - z^4 - 4z^3 - 12z^2 - 24z - 24)\operatorname{erfi}(\sqrt{z})}{10z^{3/2}}$$

07.25.03.agez.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, 3; z\right) = -\frac{1}{15}e^z(16z^4 + 32z^3 - 24z^2 + 24z - 15)$$

07.25.03.agf0.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-2z^5 + 3z^4 - 12z^3 + 46z^2 - 144z + 360}{2z^2} + \frac{e^z\sqrt{\pi}(-4z^6 + 4z^5 - 19z^4 + 72z^3 - 204z^2 + 384z - 360)\operatorname{erf}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.agf1.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{2z^5 + 3z^4 + 12z^3 + 46z^2 + 144z + 360}{2z^2} + \frac{e^{-z}\sqrt{\pi}(-4z^6 - 4z^5 - 19z^4 - 72z^3 - 204z^2 - 384z - 360)\operatorname{erfi}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.agf2.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, 4; z\right) = \frac{e^z(-16z^6 + 64z^5 - 296z^4 + 1160z^3 - 3465z^2 + 6930z - 6930)}{5z^3} + \frac{1386}{z^3}$$

07.25.03.agf3.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(2z^5 - 15z^4 + 88z^3 - 408z^2 + 1440z - 5400)}{4z^3} - \frac{7e^z \sqrt{\pi} (4z^6 - 28z^5 + 159z^4 - 708z^3 + 2328z^2 - 5040z + 5400) \operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.agf4.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (4z^6 + 28z^5 + 159z^4 + 708z^3 + 2328z^2 + 5040z + 5400) \operatorname{erfi}(\sqrt{z})}{8z^{7/2}} - \frac{7(2z^5 + 15z^4 + 88z^3 + 408z^2 + 1440z + 5400)}{4z^3}$$

07.25.03.agf5.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, 5; z\right) = \frac{5544(5z + 39)}{5z^4} - \frac{4e^z (16z^6 - 160z^5 + 1096z^4 - 5544z^3 + 20097z^2 - 47124z + 54054)}{5z^4}$$

07.25.03.agf6.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{63(2z^5 - 27z^4 + 224z^3 - 1320z^2 + 4400z - 29400)}{8z^4} - \frac{63e^z \sqrt{\pi} (4z^6 - 52z^5 + 419z^4 - 2384z^3 + 9480z^2 - 24000z + 29400) \operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.agf7.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63(2z^5 + 27z^4 + 224z^3 + 1320z^2 + 4400z + 29400)}{8z^4} - \frac{63e^{-z} \sqrt{\pi} (4z^6 + 52z^5 + 419z^4 + 2384z^3 + 9480z^2 + 24000z + 29400) \operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.agf8.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{5}{2}, 6; z\right) = \frac{396(35z^2 + 546z + 2340)}{z^5} - \frac{4e^z (16z^6 - 256z^5 + 2376z^4 - 15048z^3 + 65241z^2 - 177606z + 231660)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = -\frac{3}{2}$

07.25.03.agf9.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{9} (16z^7 + 376z^6 + 2760z^5 + 7200z^4 + 5376z^3 + 360z^2 + 18z + 9) + \frac{4}{9} e^z \sqrt{\pi} (4z^{15/2} + 96z^{13/2} + 735z^{11/2} + 2103z^{9/2} + 1998z^{7/2} + 378z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agfa.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{9} (-16z^7 + 376z^6 - 2760z^5 + 7200z^4 - 5376z^3 + 360z^2 - 18z + 9) + \frac{4}{9} e^{-z} \sqrt{\pi} (4z^{15/2} - 96z^{13/2} + 735z^{11/2} - 2103z^{9/2} + 1998z^{7/2} - 378z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agfb.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{3}(-8z^6 - 148z^5 - 792z^4 - 1288z^3 - 360z^2 + 18z + 3) - \frac{2}{3}e^z\sqrt{\pi}(4z^{13/2} + 76z^{11/2} + 431z^{9/2} + 810z^{7/2} + 378z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.agfc.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3}(-8z^6 + 148z^5 - 792z^4 + 1288z^3 - 360z^2 - 18z + 3) + \frac{2}{3}e^{-z}\sqrt{\pi}(4z^{13/2} - 76z^{11/2} + 431z^{9/2} - 810z^{7/2} + 378z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.agfd.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{3}(4z^5 + 54z^4 + 182z^3 + 120z^2 - 18z + 3) + \frac{1}{3}e^z\sqrt{\pi}(4z^{11/2} + 56z^{9/2} + 207z^{7/2} + 189z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.agfe.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{3}(-4z^5 + 54z^4 - 182z^3 + 120z^2 + 18z + 3) + \frac{1}{3}e^{-z}\sqrt{\pi}(4z^{11/2} - 56z^{9/2} + 207z^{7/2} - 189z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.agff.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, 1; z\right) = \frac{1}{6}e^z(8z^5 + 92z^4 + 250z^3 + 111z^2 - 24z + 6)$$

07.25.03.agfg.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3}(2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6}e^z\sqrt{\pi}(4z^{9/2} + 36z^{7/2} + 63z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.agfh.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{3}(2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6}e^{-z}\sqrt{\pi}(-4z^{9/2} + 36z^{7/2} - 63z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.agfi.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, 2; z\right) = \frac{1}{6}e^z(8z^4 + 52z^3 + 42z^2 - 15z + 6)$$

07.25.03.agfj.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{2z^4 + 7z^3 - 3z^2 + 4z - 6}{2z} + \frac{e^z\sqrt{\pi}(4z^5 + 16z^4 - z^3 + 3z^2 - 6z + 6)\operatorname{erf}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.agfk.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-2z^4 + 7z^3 + 3z^2 + 4z + 6}{2z} + \frac{e^{-z}\sqrt{\pi}(4z^5 - 16z^4 - z^3 - 3z^2 - 6z - 6)\operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.agfl.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, 3; z\right) = \frac{1}{3}e^z(8z^3 + 12z^2 - 6z + 3)$$

07.25.03.agfm.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(2z^4 - 3z^3 + 10z^2 - 30z + 72)}{4z^2} + \frac{5e^z\sqrt{\pi}(4z^5 - 4z^4 + 15z^3 - 42z^2 + 78z - 72)\operatorname{erf}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.agfn.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(2z^4 + 3z^3 + 10z^2 + 30z + 72)}{4z^2} - \frac{5e^{-z}\sqrt{\pi}(4z^5 + 4z^4 + 15z^3 + 42z^2 + 78z + 72)\operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.agfo.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, 4; z\right) = \frac{e^z(8z^5 - 28z^4 + 106z^3 - 315z^2 + 630z - 630)}{z^3} + \frac{630}{z^3}$$

07.25.03.agfp.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(2z^4 - 13z^3 + 63z^2 - 228z + 900)}{8z^3} + \frac{35e^z\sqrt{\pi}(4z^5 - 24z^4 + 111z^3 - 375z^2 + 828z - 900)\operatorname{erf}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.agfq.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(4z^5 + 24z^4 + 111z^3 + 375z^2 + 828z + 900)\operatorname{erfi}(\sqrt{z})}{16z^{7/2}} - \frac{35(2z^4 + 13z^3 + 63z^2 + 228z + 900)}{8z^3}$$

07.25.03.agfr.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, 5; z\right) = \frac{504(5z + 33)}{z^4} + \frac{4e^z(8z^5 - 68z^4 + 378z^3 - 1449z^2 + 3528z - 4158)}{z^4}$$

07.25.03.agfs.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{315(2z^4 - 23z^3 + 156z^2 - 500z + 4200)}{16z^4} + \frac{315e^z\sqrt{\pi}(4z^5 - 44z^4 + 287z^3 - 1236z^2 + 3300z - 4200)\operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.agft.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315(2z^4 + 23z^3 + 156z^2 + 500z + 4200)}{16z^4} - \frac{315e^{-z}\sqrt{\pi}(4z^5 + 44z^4 + 287z^3 + 1236z^2 + 3300z + 4200)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.agfu.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{3}{2}, 6; z\right) = \frac{180(35z^2 + 462z + 1716)}{z^5} + \frac{20e^z(8z^5 - 108z^4 + 810z^3 - 3879z^2 + 11286z - 15444)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = -\frac{1}{2}$

07.25.03.agfv.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, -\frac{1}{2}; z\right) = 4z^5 + 58z^4 + 224z^3 + 220z^2 + 18z + e^z\sqrt{\pi}(4z^{11/2} + 60z^{9/2} + 251z^{7/2} + 308z^{5/2} + 70z^{3/2})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.agfw.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, -\frac{1}{2}; -z\right) = -4z^5 + 58z^4 - 224z^3 + 220z^2 - 18z + e^{-z} \sqrt{\pi} (4z^{11/2} - 60z^{9/2} + 251z^{7/2} - 308z^{5/2} + 70z^{3/2}) \operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.agfx.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, \frac{1}{2}; z\right) = -2z^4 - 21z^3 - 50z^2 - 18z + \frac{1}{2} e^z \sqrt{\pi} (-4z^{9/2} - 44z^{7/2} - 119z^{5/2} - 70z^{3/2}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.agfy.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, \frac{1}{2}; -z\right) = -2z^4 + 21z^3 - 50z^2 + 18z + \frac{1}{2} e^{-z} \sqrt{\pi} (4z^{9/2} - 44z^{7/2} + 119z^{5/2} - 70z^{3/2}) \operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.agfz.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, 1; z\right) = -\frac{1}{2} e^z (4z^4 + 36z^3 + 71z^2 + 20z - 2)$$

07.25.03.agg0.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{2} (-2z^3 - 13z^2 - 12z + 2) - \frac{1}{4} e^z \sqrt{\pi} z^{3/2} (4z^2 + 28z + 35) \operatorname{erf}(\sqrt{z})$$

07.25.03.agg1.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{2} (2z^3 - 13z^2 + 12z + 2) - \frac{1}{4} e^{-z} \sqrt{\pi} z^{3/2} (4z^2 - 28z + 35) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agg2.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, 2; z\right) = -\frac{1}{2} e^z (4z^3 + 20z^2 + 11z - 2)$$

07.25.03.agg3.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{3(2z^3 + 5z^2 - 2z + 2)}{4z} - \frac{3e^z \sqrt{\pi} (4z^4 + 12z^3 - z^2 + 2z - 2) \operatorname{erf}(\sqrt{z})}{8z^{3/2}}$$

07.25.03.agg4.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3e^{-z} \sqrt{\pi} (4z^4 - 12z^3 - z^2 - 2z - 2) \operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3(2z^3 - 5z^2 - 2z - 2)}{4z}$$

07.25.03.agg5.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, 3; z\right) = -e^z (4z^2 + 4z - 1)$$

07.25.03.agg6.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{15(2z^3 - 3z^2 + 8z - 18)}{8z^2} - \frac{15e^z \sqrt{\pi} (4z^4 - 4z^3 + 11z^2 - 20z + 18) \operatorname{erf}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.agg7.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15(2z^3 + 3z^2 + 8z + 18)}{8z^2} - \frac{15e^{-z} \sqrt{\pi} (4z^4 + 4z^3 + 11z^2 + 20z + 18) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.agg8.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, 4; z\right) = \frac{210}{z^3} - \frac{3e^z (4z^4 - 12z^3 + 35z^2 - 70z + 70)}{z^3}$$

07.25.03.agg9.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{105(2z^3 - 11z^2 + 42z - 180)}{16z^3} - \frac{105e^z\sqrt{\pi}(4z^4 - 20z^3 + 71z^2 - 162z + 180)\operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.agg10.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105e^{-z}\sqrt{\pi}(4z^4 + 20z^3 + 71z^2 + 162z + 180)\operatorname{erfi}(\sqrt{z})}{32z^{7/2}} - \frac{105(2z^3 + 11z^2 + 42z + 180)}{16z^3}$$

07.25.03.agg11.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, 5; z\right) = \frac{168(5z + 27)}{z^4} - \frac{12e^z(4z^4 - 28z^3 + 119z^2 - 308z + 378)}{z^4}$$

07.25.03.agg12.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{315(6z^3 - 57z^2 + 160z - 2100)}{32z^4} - \frac{945e^z\sqrt{\pi}(4z^4 - 36z^3 + 179z^2 - 520z + 700)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.agg13.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315(6z^3 + 57z^2 + 160z + 2100)}{32z^4} - \frac{945e^{-z}\sqrt{\pi}(4z^4 + 36z^3 + 179z^2 + 520z + 700)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.agg14.01

$${}_2F_2\left(\frac{3}{2}, 3; -\frac{1}{2}, 6; z\right) = \frac{60(35z^2 + 378z + 1188)}{z^5} - \frac{60e^z(4z^4 - 44z^3 + 251z^2 - 810z + 1188)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = \frac{1}{2}$

07.25.03.0121.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{4}(4z^3 + 30z^2 + 42z + e^z\sqrt{\pi}(4z^3 + 32z^2 + 55z + 15)\operatorname{erf}(\sqrt{z})\sqrt{z} + 4)$$

07.25.03.aggf.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{2}(-2z^3 + 15z^2 - 21z + 2) + \frac{1}{4}e^{-z}\sqrt{\pi}(4z^{7/2} - 32z^{5/2} + 55z^{3/2} - 15\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.0122.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, 1; z\right) = \frac{1}{2}e^z(2z^3 + 13z^2 + 16z + 2)$$

07.25.03.aggg.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{4}(2z^2 + 9z + 4) + \frac{1}{8}e^z\sqrt{\pi}\sqrt{z}(4z^2 + 20z + 15)\operatorname{erf}(\sqrt{z})$$

07.25.03.agg15.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{4}(2z^2 - 9z + 4) - \frac{1}{8}e^{-z}\sqrt{\pi}\sqrt{z}(4z^2 - 20z + 15)\operatorname{erfi}(\sqrt{z})$$

07.25.03.0123.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, 2; z\right) = \frac{1}{2}e^z(2z^2 + 7z + 2)$$

07.25.03.0124.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{3}{16 z^{3/2}} \left(2 \sqrt{z} (2 z^2 + 3 z - 1) + e^z \sqrt{\pi} (4 z^3 + 8 z^2 - z + 1) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aggi.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (4 z^3 - 8 z^2 - z - 1) \operatorname{erfi}(\sqrt{z})}{16 z^{3/2}} - \frac{3(2 z^2 - 3 z - 1)}{8 z}$$

07.25.03.aggi.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, 3; z\right) = e^z (2 z + 1)$$

07.25.03.aggk.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{15(2 z^2 - 3 z + 6)}{16 z^2} + \frac{15 e^z \sqrt{\pi} (4 z^3 - 4 z^2 + 7 z - 6) \operatorname{erf}(\sqrt{z})}{32 z^{5/2}}$$

07.25.03.aggl.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{15(2 z^2 + 3 z + 6)}{16 z^2} - \frac{15 e^{-z} \sqrt{\pi} (4 z^3 + 4 z^2 + 7 z + 6) \operatorname{erfi}(\sqrt{z})}{32 z^{5/2}}$$

07.25.03.aggm.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, 4; z\right) = \frac{3 e^z (2 z^3 - 5 z^2 + 10 z - 10)}{z^3} + \frac{30}{z^3}$$

07.25.03.aggn.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{105(2 z^2 - 9 z + 45)}{32 z^3} + \frac{105 e^z \sqrt{\pi} (4 z^3 - 16 z^2 + 39 z - 45) \operatorname{erf}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.aggp.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105 e^{-z} \sqrt{\pi} (4 z^3 + 16 z^2 + 39 z + 45) \operatorname{erfi}(\sqrt{z})}{64 z^{7/2}} - \frac{105(2 z^2 + 9 z + 45)}{32 z^3}$$

07.25.03.aggp.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, 5; z\right) = \frac{24(5 z + 21)}{z^4} + \frac{12 e^z (2 z^3 - 11 z^2 + 32 z - 42)}{z^4}$$

07.25.03.aggq.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{315(6 z^2 - 5 z + 420)}{64 z^4} + \frac{945 e^z \sqrt{\pi} (4 z^3 - 28 z^2 + 95 z - 140) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.aggr.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315(6 z^2 + 5 z + 420)}{64 z^4} - \frac{945 e^{-z} \sqrt{\pi} (4 z^3 + 28 z^2 + 95 z + 140) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.aggs.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{1}{2}, 6; z\right) = \frac{60(5 z^2 + 42 z + 108)}{z^5} + \frac{60 e^z (2 z^3 - 17 z^2 + 66 z - 108)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = 1$

07.25.03.0125.01

$${}_2F_2\left(\frac{3}{2}, 3; 1, 1; z\right) = \frac{1}{4} e^{z/2} \left(2(z^3 + 6z^2 + 8z + 2) I_0\left(\frac{z}{2}\right) + z(2z^2 + 10z + 7) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.aggt.01

$${}_2F_2\left(\frac{3}{2}, 3; 1, \frac{3}{2}; z\right) = \frac{1}{2} e^z (z^2 + 4z + 2)$$

07.25.03.0126.01

$${}_2F_2\left(\frac{3}{2}, 3; 1, 2; z\right) = \frac{1}{4} e^{z/2} \left((2z^2 + 7z + 4) I_0\left(\frac{z}{2}\right) + z(2z + 5) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.0127.01

$${}_2F_2\left(\frac{3}{2}, 3; 1, \frac{5}{2}; z\right) = \frac{3}{32 z^{3/2}} \left(2 e^z \sqrt{z} (4z^2 + 6z - 1) + \sqrt{\pi} \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.aggu.01

$${}_2F_2\left(\frac{3}{2}, 3; 1, \frac{5}{2}; -z\right) = -\frac{3 e^{-z} (4z^2 - 6z - 1)}{16z} - \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.aggv.01

$${}_2F_2\left(\frac{3}{2}, 3; 1, 3; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.aggw.01

$${}_2F_2\left(\frac{3}{2}, 3; 1, \frac{7}{2}; z\right) = \frac{15 e^z (8z^2 - 8z + 9)}{64 z^2} + \frac{15 \sqrt{\pi} (2z - 9) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.aggx.01

$${}_2F_2\left(\frac{3}{2}, 3; 1, \frac{7}{2}; -z\right) = \frac{15 e^{-z} (8z^2 + 8z + 9)}{64 z^2} - \frac{15 \sqrt{\pi} (2z + 9) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.aggy.01

$${}_2F_2\left(\frac{3}{2}, 3; 1, 4; z\right) = \frac{e^{z/2} (3z - 4) I_0\left(\frac{z}{2}\right)}{z} + \frac{e^{z/2} (3z^2 - 8z + 16) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.aggz.01

$${}_2F_2\left(\frac{3}{2}, 3; 1, \frac{9}{2}; z\right) = \frac{105 e^z (32z^2 - 114z + 225)}{512 z^3} + \frac{105 \sqrt{\pi} (4z^2 - 36z - 225) \operatorname{erfi}(\sqrt{z})}{1024 z^{7/2}}$$

07.25.03.agh0.01

$${}_2F_2\left(\frac{3}{2}, 3; 1, \frac{9}{2}; -z\right) = -\frac{105 e^{-z} (32z^2 + 114z + 225)}{512 z^3} - \frac{105 \sqrt{\pi} (4z^2 + 36z - 225) \operatorname{erf}(\sqrt{z})}{1024 z^{7/2}}$$

07.25.03.agh1.01

$${}_2F_2\left(\frac{3}{2}, 3; 1, 5; z\right) = \frac{32 e^{z/2} (2z - 9) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{8 e^{z/2} (7z^2 - 32z + 144) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.agh2.01

$${}_2F_2\left(\frac{3}{2}, 3; 1, \frac{11}{2}; z\right) = \frac{315 e^z (188z^2 - 1100z + 3675)}{2048 z^4} + \frac{315 \sqrt{\pi} (8z^3 - 108z^2 - 1350z - 3675) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.agh3.01

$${}_2F_2\left(\frac{3}{2}, 3; 1, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (188 z^2 + 1100 z + 3675)}{2048 z^4} - \frac{315 \sqrt{\pi} (8 z^3 + 108 z^2 - 1350 z + 3675) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.agh4.01

$${}_2F_2\left(\frac{3}{2}, 3; 1, 6; z\right) = \frac{8 e^{z/2} (z^2 + 36 z - 576) I_0\left(\frac{z}{2}\right)}{7 z^3} - \frac{8 e^{z/2} (z^3 - 68 z^2 + 144 z - 2304) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = \frac{3}{2}$

07.25.03.agh5.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{8} (2z + 5) + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.agh6.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{8} (5 - 2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.agh7.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, 2; z\right) = \frac{1}{2} e^z (z + 2)$$

07.25.03.agh8.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{3(2z + 1)}{16z} + \frac{3 e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.agh9.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{3(2z - 1)}{16z} - \frac{3 e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.agha.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, 3; z\right) = e^z$$

07.25.03.aghb.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{15(2z - 3)}{32 z^2} + \frac{15 e^z \sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.aghc.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{15 e^{-z} \sqrt{\pi} (4z^2 + 4z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{5/2}} - \frac{15(2z + 3)}{32 z^2}$$

07.25.03.aghd.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, 4; z\right) = \frac{3 e^z (z^2 - 2z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.aghe.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{105(2z - 15)}{64 z^3} + \frac{105 e^z \sqrt{\pi} (4z^2 - 12z + 15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.aghf.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{105(2z+15)}{64z^3} - \frac{105e^{-z}\sqrt{\pi}(4z^2+12z+15)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.aghg.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, 5; z\right) = \frac{12e^z(z^2-4z+6)}{z^4} - \frac{24(z+3)}{z^4}$$

07.25.03.aghh.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{945e^z\sqrt{\pi}(4z^2-20z+35)\operatorname{erf}(\sqrt{z})}{256z^{9/2}} - \frac{1575(2z+21)}{128z^4}$$

07.25.03.aghi.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1575(2z-21)}{128z^4} + \frac{945e^{-z}\sqrt{\pi}(4z^2+20z+35)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.aghj.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{3}{2}, 6; z\right) = \frac{60e^z(z^2-6z+12)}{z^5} - \frac{60(z^2+6z+12)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = 2$

07.25.03.0128.01

$${}_2F_2\left(\frac{3}{2}, 3; 2, 2; z\right) = \frac{1}{2}e^{z/2}\left((z+2)I_0\left(\frac{z}{2}\right) + (z+1)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.0129.01

$${}_2F_2\left(\frac{3}{2}, 3; 2, \frac{5}{2}; z\right) = \frac{1}{16z^{3/2}}\left(6e^z\sqrt{z}(2z+1) - 3\sqrt{\pi}\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.aghk.01

$${}_2F_2\left(\frac{3}{2}, 3; 2, \frac{5}{2}; -z\right) = \frac{3e^{-z}(2z-1)}{8z} + \frac{3\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{16z^{3/2}}$$

07.25.03.aghl.01

$${}_2F_2\left(\frac{3}{2}, 3; 2, 3; z\right) = e^{z/2}I_0\left(\frac{z}{2}\right) + e^{z/2}I_1\left(\frac{z}{2}\right)$$

07.25.03.aghm.01

$${}_2F_2\left(\frac{3}{2}, 3; 2, \frac{7}{2}; z\right) = \frac{15e^z(4z-3)}{32z^2} - \frac{15\sqrt{\pi}(2z-3)\operatorname{erfi}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.aghn.01

$${}_2F_2\left(\frac{3}{2}, 3; 2, \frac{7}{2}; -z\right) = \frac{15\sqrt{\pi}(2z+3)\operatorname{erf}(\sqrt{z})}{64z^{5/2}} - \frac{15e^{-z}(4z+3)}{32z^2}$$

07.25.03.agho.01

$${}_2F_2\left(\frac{3}{2}, 3; 2, 4; z\right) = \frac{2e^{z/2}I_0\left(\frac{z}{2}\right)}{z} + \frac{4e^{z/2}(z-2)I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.aghp.01

$${}_2F_2\left(\frac{3}{2}, 3; 2, \frac{9}{2}; z\right) = \frac{945 e^z (2z - 5)}{256 z^3} - \frac{105 \sqrt{\pi} (4z^2 - 12z - 45) \operatorname{erfi}(\sqrt{z})}{512 z^{7/2}}$$

07.25.03.aghq.01

$${}_2F_2\left(\frac{3}{2}, 3; 2, \frac{9}{2}; -z\right) = \frac{945 e^{-z} (2z + 5)}{256 z^3} + \frac{105 \sqrt{\pi} (4z^2 + 12z - 45) \operatorname{erf}(\sqrt{z})}{512 z^{7/2}}$$

07.25.03.aghr.01

$${}_2F_2\left(\frac{3}{2}, 3; 2, 5; z\right) = \frac{8 e^{z/2} (z^2 + 4z - 48) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{8 e^{z/2} (z - 12) I_0\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.aghs.01

$${}_2F_2\left(\frac{3}{2}, 3; 2, \frac{11}{2}; z\right) = \frac{315 e^z (4z^2 + 80z - 525)}{1024 z^4} - \frac{315 \sqrt{\pi} (8z^3 - 36z^2 - 270z - 525) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.aght.01

$${}_2F_2\left(\frac{3}{2}, 3; 2, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2 - 80z - 525)}{1024 z^4} + \frac{315 \sqrt{\pi} (8z^3 + 36z^2 - 270z + 525) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.aghu.01

$${}_2F_2\left(\frac{3}{2}, 3; 2, 6; z\right) = \frac{16 e^{z/2} (z^3 - 5z^2 - 24z - 288) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{16 e^{z/2} (z^2 - 6z - 72) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = \frac{5}{2}$

07.25.03.aghv.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{5}{2}, 3; z\right) = \frac{3 e^z}{2z} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.aghw.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{5}{2}, 3; -z\right) = \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3 e^{-z}}{2z}$$

07.25.03.aghx.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{5}{2}, 4; z\right) = \frac{6 e^z (z - 1)}{z^3} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 z^{3/2}} + \frac{6}{z^3}$$

07.25.03.aghy.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{5}{2}, 4; -z\right) = \frac{6 e^{-z} (z + 1)}{z^3} + \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 z^{3/2}} - \frac{6}{z^3}$$

07.25.03.aghz.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{5}{2}, 5; z\right) = \frac{24 (5z + 9)}{5 z^4} + \frac{12 e^z (z^2 + 8z - 18)}{5 z^4} - \frac{12 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{5 z^{3/2}}$$

07.25.03.agj0.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{5}{2}, 5; -z\right) = -\frac{24(5z-9)}{5z^4} + \frac{12e^{-z}(z^2-8z-18)}{5z^4} + \frac{12\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{5z^{3/2}}$$

07.25.03.agj1.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{5}{2}, 6; z\right) = \frac{12(35z^2+126z+180)}{7z^5} + \frac{12e^z(2z^3+z^2+54z-180)}{7z^5} - \frac{24\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{7z^{3/2}}$$

07.25.03.agj2.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{5}{2}, 6; -z\right) = -\frac{12(35z^2-126z+180)}{7z^5} + \frac{12e^{-z}(2z^3-z^2+54z+180)}{7z^5} + \frac{24\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{7z^{3/2}}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = 3$

07.25.03.agj3.01

$${}_2F_2\left(\frac{3}{2}, 3; 3, 3; z\right) = \frac{4e^{z/2}I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.agj4.01

$${}_2F_2\left(\frac{3}{2}, 3; 3, \frac{7}{2}; z\right) = \frac{45e^z}{8z^2} - \frac{15\sqrt{\pi}(2z+3)\operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.agj5.01

$${}_2F_2\left(\frac{3}{2}, 3; 3, \frac{7}{2}; -z\right) = \frac{15\sqrt{\pi}(2z-3)\operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45e^{-z}}{8z^2}$$

07.25.03.agj6.01

$${}_2F_2\left(\frac{3}{2}, 3; 3, 4; z\right) = \frac{4e^{z/2}(z+4)I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4e^{z/2}I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.agj7.01

$${}_2F_2\left(\frac{3}{2}, 3; 3, \frac{9}{2}; z\right) = \frac{105e^z(2z+15)}{64z^3} - \frac{105\sqrt{\pi}(4z^2+12z+15)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.agj8.01

$${}_2F_2\left(\frac{3}{2}, 3; 3, \frac{9}{2}; -z\right) = \frac{105e^{-z}(2z-15)}{64z^3} + \frac{105\sqrt{\pi}(4z^2-12z+15)\operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.agj9.01

$${}_2F_2\left(\frac{3}{2}, 3; 3, 5; z\right) = \frac{32e^{z/2}(z^2+4z+12)I_1\left(\frac{z}{2}\right)}{5z^3} - \frac{32e^{z/2}(z+3)I_0\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.agja.01

$${}_2F_2\left(\frac{3}{2}, 3; 3, \frac{11}{2}; z\right) = \frac{315e^z(4z^2+20z+105)}{256z^4} - \frac{315\sqrt{\pi}(8z^3+36z^2+90z+105)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.agib.01

$${}_2F_2\left(\frac{3}{2}, 3; 3, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2 - 20z + 105)}{256 z^4} + \frac{315 \sqrt{\pi} (8z^3 - 36z^2 + 90z - 105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.agic.01

$${}_2F_2\left(\frac{3}{2}, 3; 3, 6; z\right) = \frac{32 e^{z/2} (2z^3 + 11z^2 + 36z + 96) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{32 e^{z/2} (2z^2 + 9z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = \frac{7}{2}$

07.25.03.agid.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{7}{2}, 4; z\right) = \frac{15 e^z (z + 8)}{4 z^3} - \frac{15 \sqrt{\pi} (2z + 9) \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}} - \frac{30}{z^3}$$

07.25.03.agie.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{7}{2}, 4; -z\right) = \frac{15 e^{-z} (z - 8)}{4 z^3} + \frac{15 \sqrt{\pi} (2z - 9) \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} + \frac{30}{z^3}$$

07.25.03.agif.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{7}{2}, 5; z\right) = -\frac{24 (5z + 3)}{z^4} + \frac{6 e^z (z^2 + 8z + 12)}{z^4} - \frac{3 \sqrt{\pi} (2z + 15) \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.agig.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{7}{2}, 5; -z\right) = \frac{24 (5z - 3)}{z^4} + \frac{6 e^{-z} (z^2 - 8z + 12)}{z^4} + \frac{3 \sqrt{\pi} (2z - 15) \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.agih.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{7}{2}, 6; z\right) = -\frac{60 (35z^2 + 42z + 36)}{7 z^5} + \frac{60 e^z (z^3 + 11z^2 + 6z + 36)}{7 z^5} - \frac{30 \sqrt{\pi} (2z + 21) \operatorname{erfi}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.agii.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{7}{2}, 6; -z\right) = \frac{60 (35z^2 - 42z + 36)}{7 z^5} + \frac{60 e^{-z} (z^3 - 11z^2 + 6z - 36)}{7 z^5} + \frac{30 \sqrt{\pi} (2z - 21) \operatorname{erf}(\sqrt{z})}{7 z^{5/2}}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = 4$

07.25.03.agji.01

$${}_2F_2\left(\frac{3}{2}, 3; 4, 4; z\right) = -\frac{8 e^{z/2} (z^2 + 6z - 12) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{8 e^{z/2} (z + 7) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{96}{z^3}$$

07.25.03.agik.01

$${}_2F_2\left(\frac{3}{2}, 3; 4, \frac{9}{2}; z\right) = \frac{105 e^z (2z + 19)}{32 z^3} - \frac{105 \sqrt{\pi} (4z^2 + 36z - 45) \operatorname{erfi}(\sqrt{z})}{64 z^{7/2}} - \frac{210}{z^3}$$

07.25.03.agil.01

$${}_2F_2\left(\frac{3}{2}, 3; 4, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (2z - 19)}{32 z^3} + \frac{105 \sqrt{\pi} (4z^2 - 36z - 45) \operatorname{erf}(\sqrt{z})}{64 z^{7/2}} + \frac{210}{z^3}$$

07.25.03.agim.01

$${}_2F_2\left(\frac{3}{2}, 3; 4, 5; z\right) = -\frac{32 e^{z/2} (2z^2 + 21z - 60) I_0\left(\frac{z}{2}\right)}{5 z^3} + \frac{32 e^{z/2} (2z^2 + 23z - 36) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{384}{z^3}$$

07.25.03.agin.01

$${}_2F_2\left(\frac{3}{2}, 3; 4, \frac{11}{2}; z\right) = \frac{315 e^z (4z^2 + 56z - 105)}{128 z^4} - \frac{315 \sqrt{\pi} (8z^3 + 108z^2 - 270z - 105) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}} - \frac{630}{z^3}$$

07.25.03.agio.01

$${}_2F_2\left(\frac{3}{2}, 3; 4, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2 - 56z - 105)}{128 z^4} + \frac{315 \sqrt{\pi} (8z^3 - 108z^2 - 270z + 105) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} + \frac{630}{z^3}$$

07.25.03.agip.01

$${}_2F_2\left(\frac{3}{2}, 3; 4, 6; z\right) = -\frac{64 e^{z/2} (2z^2 + 30z - 123) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{128 e^{z/2} (z^3 + 16z^2 - 45z - 36) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{960}{z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = \frac{9}{2}$

07.25.03.agiq.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{9}{2}, 5; z\right) = -\frac{168 (5z - 3)}{z^4} + \frac{21 e^z (2z^2 + 31z - 96)}{4 z^4} - \frac{21 \sqrt{\pi} (4z^2 + 60z - 225) \operatorname{erfi}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.agir.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{9}{2}, 5; -z\right) = \frac{168 (5z + 3)}{z^4} + \frac{21 e^{-z} (2z^2 - 31z - 96)}{4 z^4} + \frac{21 \sqrt{\pi} (4z^2 - 60z - 225) \operatorname{erf}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.agis.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{9}{2}, 6; z\right) = -\frac{60 (35z^2 - 42z - 12)}{z^5} + \frac{15 e^z (2z^3 + 43z^2 - 240z - 96)}{2 z^5} - \frac{15 \sqrt{\pi} (4z^2 + 84z - 525) \operatorname{erfi}(\sqrt{z})}{4 z^{7/2}}$$

07.25.03.agit.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{9}{2}, 6; -z\right) = \frac{60 (35z^2 + 42z - 12)}{z^5} + \frac{15 e^{-z} (2z^3 - 43z^2 - 240z + 96)}{2 z^5} + \frac{15 \sqrt{\pi} (4z^2 - 84z - 525) \operatorname{erf}(\sqrt{z})}{4 z^{7/2}}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = 5$

07.25.03.agiu.01

$${}_2F_2\left(\frac{3}{2}, 3; 5, 5; z\right) = -\frac{1536 (5z - 6)}{5 z^4} - \frac{512 e^{z/2} (z^3 + 18z^2 - 120z + 90) I_0\left(\frac{z}{2}\right)}{25 z^4} + \frac{256 e^{z/2} (2z^2 + 38z - 201) I_1\left(\frac{z}{2}\right)}{25 z^3}$$

07.25.03.agiv.01

$${}_2F_2\left(\frac{3}{2}, 3; 5, \frac{11}{2}; z\right) = -\frac{504 (5z - 9)}{z^4} + \frac{63 e^z (4z^2 + 92z - 627)}{16 z^4} - \frac{63 \sqrt{\pi} (8z^3 + 180z^2 - 1350z + 525) \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.agiw.01

$${}_2F_2\left(\frac{3}{2}, 3; 5, \frac{11}{2}; -z\right) = \frac{504(5z+9)}{z^4} + \frac{63e^{-z}(4z^2-92z-627)}{16z^4} + \frac{63\sqrt{\pi}(8z^3-180z^2-1350z-525)\operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.agix.01

$${}_2F_2\left(\frac{3}{2}, 3; 5, 6; z\right) = \frac{768(5z-12)}{z^4} - \frac{256e^{z/2}(4z^3+102z^2-1065z+1260)I_0\left(\frac{z}{2}\right)}{35z^4} + \frac{256e^{z/2}(4z^3+106z^2-957z+360)I_1\left(\frac{z}{2}\right)}{35z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = \frac{11}{2}$

07.25.03.agiy.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{11}{2}, 6; z\right) = -\frac{180(35z^2-126z+36)}{z^5} + \frac{45e^z(4z^3+128z^2-1509z+1152)}{8z^5} - \frac{45\sqrt{\pi}(8z^3+252z^2-3150z+3675)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.agiz.01

$${}_2F_2\left(\frac{3}{2}, 3; \frac{11}{2}, 6; -z\right) = \frac{180(35z^2+126z+36)}{z^5} + \frac{45e^{-z}(4z^3-128z^2-1509z-1152)}{8z^5} + \frac{45\sqrt{\pi}(8z^3-252z^2-3150z-3675)\operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 3$, $b_1 = 6$

07.25.03.agj0.01

$${}_2F_2\left(\frac{3}{2}, 3; 6, 6; z\right) = -\frac{1920(35z^2-168z+96)}{7z^5} - \frac{512e^{z/2}(4z^4+144z^3-2409z^2+5670z-2520)I_0\left(\frac{z}{2}\right)}{49z^5} + \frac{512e^{z/2}(4z^3+148z^2-2259z+3489)I_1\left(\frac{z}{2}\right)}{49z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.agj1.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{1620840375} \left(e^z (65536z^{16} + 5832704z^{15} + 207716352z^{14} + 3838033920z^{13} + 39934648320z^{12} + 237908643840z^{11} + 790337157120z^{10} + 1360800967680z^9 + 1045529856000z^8 + 256937184000z^7 + 6312297600z^6 + 133358400z^5 + 66679200z^4 - 166698000z^3 + 607257000z^2 - 1339537500z + 1620840375) \right)$$

$$\begin{aligned}
 & \text{07.25.03.agj2.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \\
 & -\frac{1}{147349125} \left(e^z (32768z^{15} + 2605056z^{14} + 81715200z^{13} + 1306152960z^{12} + 11477329920z^{11} + \right. \\
 & \quad \left. 55829007360z^{10} + 143938045440z^9 + 176617324800z^8 + 81221616000z^7 + 6636168000z^6 - \right. \\
 & \quad \left. 161935200z^5 - 14288400z^4 + 11907000z^3 - 53581500z^2 + 116093250z - 147349125) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agj3.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{16372125} \left(e^z (16384z^{14} + 1146880z^{13} + 31109120z^{12} + 419758080z^{11} + 3010237440z^{10} + 11358197760z^9 + \right. \\
 & \quad \left. 20857132800z^8 + 15308697600z^7 + 2339064000z^6 - \right. \\
 & \quad \left. 190512000z^5 + 14288400z^4 + 5953500z^2 - 11907000z + 16372125) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agj4.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \\
 & -\frac{1}{2338875} \left(e^z (8192z^{13} + 495616z^{12} + 11341824z^{11} + 124815360z^{10} + 693818880z^9 + 1863095040z^8 + 2044638720 \right. \\
 & \quad \left. z^7 + 498113280z^6 - 75751200z^5 + 18370800z^4 - 2041200z^3 - 1020600z^2 + 1445850z - 2338875) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agj5.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{467775} \left(e^z (4096z^{12} + 208896z^{11} + 3895296z^{10} + 33192960z^9 + 131155200z^8 + 210193920z^7 + \right. \\
 & \quad \left. 76446720z^6 - 18506880z^5 + 8391600z^4 - 3402000z^3 + 680400z^2 - 170100z + 467775) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agj6.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \\
 & -\frac{1}{155925} \left(e^z (2048z^{11} + 84992z^{10} + 1225216z^9 + 7407360z^8 + 17429760z^7 + 9233280z^6 - 3326400z^5 + \right. \\
 & \quad \left. 2388960z^4 - 1776600z^3 + 963900z^2 - 141750z - 155925) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agj7.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \\
 & \frac{1}{155925} \left(e^z (1024z^{10} + 32768z^9 + 334080z^8 + 1198080z^7 + 927360z^6 - 483840z^5 + 514080z^4 - 604800z^3 + \right. \\
 & \quad \left. 623700z^2 - 453600z + 155925) \right)
 \end{aligned}$$

07.25.03.agj8.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{155925} \left(e^{z/2} (512 z^{10} + 14336 z^9 + 123136 z^8 + 345984 z^7 + 157920 z^6 - 60480 z^5 + 61200 z^4 - 90000 z^3 + 151650 z^2 - 226800 z + 155925) I_0\left(\frac{z}{2}\right) + \frac{1}{155925} \left(2 e^{z/2} (256 z^{10} + 6912 z^9 + 54784 z^8 + 121408 z^7 - 21168 z^6 + 15120 z^5 - 18000 z^4 + 27000 z^3 - 42075 z^2 + 51075 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.agj9.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{155925} e^z (512 z^9 + 11520 z^8 + 69120 z^7 + 80640 z^6 - 60480 z^5 + 90720 z^4 - 151200 z^3 + 226800 z^2 - 255150 z + 155925)$$

07.25.03.agja.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{155925} e^{z/2} (512 z^9 + 9472 z^8 + 42240 z^7 + 22848 z^6 - 10080 z^5 + 10800 z^4 - 14400 z^3 + 21240 z^2 - 51030 z + 155925) I_0\left(\frac{z}{2}\right) + \frac{1}{155925} \left(e^{z/2} (512 z^9 + 8960 z^8 + 33536 z^7 - 6720 z^6 + 6048 z^5 - 10800 z^4 + 28800 z^3 - 86040 z^2 + 226890 z - 405405) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.agjb.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (256 z^8 + 3328 z^7 + 6272 z^6 - 6720 z^5 + 13440 z^4 - 28560 z^3 + 52920 z^2 - 71820 z + 51975)}{51975}$$

07.25.03.agjc.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, 3; z\right) = \frac{4 e^{z/2} (256 z^8 + 2304 z^7 + 1344 z^6 - 3600 z^4 + 21600 z^3 - 91080 z^2 + 272160 z - 467775) I_0\left(\frac{z}{2}\right) + \frac{1}{155925} \left(4 e^{z/2} (256 z^9 + 2048 z^8 - 576 z^7 + 1344 z^6 - 6480 z^5 + 32400 z^4 - 139320 z^3 + 477720 z^2 - 1216215 z + 2027025) I_1\left(\frac{z}{2}\right) \right)}{155925}$$

07.25.03.agjd.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13230 z + 10395)}{10395}$$

07.25.03.agje.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{51975 z}$$

$$4 e^{z/2} (256 z^8 - 128 z^7 + 2240 z^6 - 16320 z^5 + 99600 z^4 - 506640 z^3 + 2063880 z^2 - 6237000 z + 11486475) I_0\left(\frac{z}{2}\right) +$$

$$\frac{1}{51975 z^2} \left(4 e^{z/2} (256 z^9 - 384 z^8 + 2752 z^7 - 19520 z^6 + 121680 z^5 - 645360 z^4 +$$

$$2820360 z^3 - 9729720 z^2 + 24999975 z - 45945900) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.agjf.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) =$$

$$\frac{1}{1485 z^3} (e^z (64 z^9 - 384 z^8 + 2928 z^7 - 21120 z^6 + 135180 z^5 - 739080 z^4 + 3319245 z^3 - 11612160 z^2 +$$

$$29030400 z - 43545600)) + \frac{161280 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.agjg.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) =$$

$$\frac{1}{1485 z^3} (e^{-z} (64 z^9 + 384 z^8 + 2928 z^7 + 21120 z^6 + 135180 z^5 + 739080 z^4 + 3319245 z^3 + 11612160 z^2 +$$

$$29030400 z + 43545600)) - \frac{161280 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.agjh.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{51975 z^2}$$

$$\left(32 e^{z/2} (128 z^8 - 1280 z^7 + 11904 z^6 - 96288 z^5 + 664320 z^4 - 3810240 z^3 + 17463600 z^2 - 59729670 z + 130945815)$$

$$I_0\left(\frac{z}{2}\right) + \frac{1}{51975 z^3} (64 e^{z/2} (64 z^9 - 704 z^8 + 6688 z^7 - 55248 z^6 + 391656 z^5 -$$

$$2334120 z^4 + 11351340 z^3 - 43108065 z^2 + 119459340 z - 261891630) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.agji.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{165 z^4} (e^z (32 z^9 - 496 z^8 + 5680 z^7 - 53160 z^6 + 413130 z^5 - 2641755 z^4 + 13547520 z^3 - 53222400 z^2 +$$

$$147571200 z - 254016000)) + \frac{241920 \sqrt{\pi} (3z + 35) \operatorname{erfi}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.agjj.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{165 z^4} \left(e^{-z} (-32 z^9 - 496 z^8 - 5680 z^7 - 53160 z^6 - 413130 z^5 - 2641755 z^4 - 13547520 z^3 - 53222400 z^2 - 147571200 z - 254016000) \right) - \frac{241920 \sqrt{\pi} (3z - 35) \operatorname{erf}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.agjk.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{10395 z^3} \left(32 e^{z/2} (128 z^8 - 2496 z^7 + 33024 z^6 - 341904 z^5 + 2857680 z^4 - 19209960 z^3 + 101080980 z^2 - 392837445 z + 1047566520) I_0\left(\frac{z}{2}\right) + \frac{1}{10395 z^4} \left(32 e^{z/2} (128 z^9 - 2624 z^8 + 35712 z^7 - 379056 z^6 + 3257616 z^5 - 22702680 z^4 + 125945820 z^3 - 535269735 z^2 + 1571349780 z - 4190266080) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{3}{2}, a_2 = \frac{7}{2}, b_1 = -\frac{9}{2}$

07.25.03.agjl.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{13395375} \left(e^z (16384 z^{14} + 1163264 z^{13} + 32133120 z^{12} + 444211200 z^{11} + 3295503360 z^{10} + 13084738560 z^9 + 26172437760 z^8 + 22877568000 z^7 + 6294456000 z^6 + 170856000 z^5 + 4460400 z^4 - 453600 z^3 + 4819500 z^2 - 9922500 z + 13395375) \right)$$

07.25.03.agjm.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{1488375} \left(e^z (8192 z^{13} + 512000 z^{12} + 12226560 z^{11} + 142632960 z^{10} + 863270400 z^9 + 2657652480 z^8 + 3784435200 z^7 + 1977696000 z^6 + 180684000 z^5 - 4914000 z^4 - 226800 z^3 - 567000 z^2 + 992250 z - 1488375) \right)$$

07.25.03.agjn.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{212625} \left(e^z (4096 z^{12} + 221184 z^{11} + 4454400 z^{10} + 42362880 z^9 + 198639360 z^8 + 434949120 z^7 + 369895680 z^6 + 64108800 z^5 - 5821200 z^4 + 453600 z^3 + 113400 z^2 - 113400 z + 212625) \right)$$

$$\begin{aligned}
 & \text{07.25.03.agjo.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = & \\
 & -\frac{1}{42525} \left(e^z (2048 z^{11} + 93\,184 z^{10} + 1\,528\,320 z^9 + 11\,247\,360 z^8 + 37\,459\,200 z^7 + 48\,908\,160 z^6 + 13\,769\,280 z^5 - \right. \\
 & \left. 2\,368\,800 z^4 + 642\,600 z^3 - 94\,500 z^2 + 9\,450 z - 42\,525) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agjp.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = & \\
 & \frac{1}{14175} \left(e^z (1024 z^{10} + 37\,888 z^9 + 480\,000 z^8 + 2\,503\,680 z^7 + 4\,959\,360 z^6 + 2\,136\,960 z^5 - 594\,720 z^4 + \right. \\
 & \left. 302\,400 z^3 - 132\,300 z^2 + 18\,900 z + 14\,175) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agjq.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = & \\
 & -\frac{1}{14175} e^z (512 z^9 + 14\,592 z^8 + 130\,560 z^7 + 403\,200 z^6 + 262\,080 z^5 - 110\,880 z^4 + 90\,720 z^3 - 75\,600 z^2 + 47\,250 z - 14\,175)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agjr.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, 1; z\right) = & \\
 & \frac{1}{14175} \left(e^{z/2} (-256 z^9 - 6400 z^8 - 48\,576 z^7 - 120\,000 z^6 - 51\,120 z^5 + 18\,000 z^4 - 16\,200 z^3 + 19\,800 z^2 - 23\,625 z + 14\,175) \right. \\
 & \left. I_0\left(\frac{z}{2}\right) + \right. \\
 & \left. \frac{1}{14175} e^{z/2} (-256 z^9 - 6144 z^8 - 42\,560 z^7 - 80\,256 z^6 + 13\,200 z^5 - 8640 z^4 + 9000 z^3 - 10\,800 z^2 + 10\,575 z) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agjs.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = & \\
 & -\frac{1}{14175} e^z (256 z^8 + 5120 z^7 + 26\,880 z^6 + 26\,880 z^5 - 16\,800 z^4 + 20\,160 z^3 - 25\,200 z^2 + 25\,200 z - 14\,175)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agjt.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, 2; z\right) = & \frac{e^{z/2} (-256 z^8 - 4224 z^7 - 16\,704 z^6 - 8640 z^5 + 3600 z^4 - 3600 z^3 + 4680 z^2 - 7560 z + 14\,175) I_0\left(\frac{z}{2}\right)}{14175} + \\
 & \frac{1}{14175} e^{z/2} (-256 z^8 - 3968 z^7 - 12\,864 z^6 + 2496 z^5 - 2160 z^4 + 3600 z^3 - 8280 z^2 + 19\,080 z - 31\,185) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agju.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = & -\frac{e^z (128 z^7 + 1472 z^6 + 2400 z^5 - 2160 z^4 + 3480 z^3 - 5580 z^2 + 6930 z - 4725)}{4725}
 \end{aligned}$$

07.25.03.agjv.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, 3; z\right) = -\frac{32 e^{z/2} (16 z^7 + 128 z^6 + 72 z^5 - 150 z^3 + 720 z^2 - 2205 z + 3780) I_0\left(\frac{z}{2}\right)}{14175} - \frac{1}{14175 z} 4 e^{z/2} (128 z^8 + 896 z^7 - 256 z^6 + 576 z^5 - 2400 z^4 + 9840 z^3 - 33120 z^2 + 83160 z - 135135) I_1\left(\frac{z}{2}\right)$$

07.25.03.agjw.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)$$

07.25.03.agjx.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, 4; z\right) = -\frac{4 e^{z/2} (128 z^7 - 64 z^6 + 960 z^5 - 6000 z^4 + 30480 z^3 - 123480 z^2 + 370440 z - 675675) I_0\left(\frac{z}{2}\right)}{4725 z} - \frac{1}{4725 z^2} 4 e^{z/2} (128 z^8 - 192 z^7 + 1216 z^6 - 7440 z^5 + 39120 z^4 - 169800 z^3 + 582120 z^2 - 1486485 z + 2702700) I_1\left(\frac{z}{2}\right)$$

07.25.03.agjy.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{135 z^3} e^z (-32 z^8 + 176 z^7 - 1200 z^6 + 7560 z^5 - 41130 z^4 + 184455 z^3 - 645120 z^2 + 1612800 z - 2419200) + \frac{8960 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.agjz.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{135 z^3} e^{-z} (32 z^8 + 176 z^7 + 1200 z^6 + 7560 z^5 + 41130 z^4 + 184455 z^3 + 645120 z^2 + 1612800 z + 2419200) - \frac{8960 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.agk0.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, 5; z\right) = -\frac{1}{4725 z^2} 32 e^{z/2} (64 z^7 - 576 z^6 + 4752 z^5 - 33360 z^4 + 194040 z^3 - 899640 z^2 + 3108105 z - 6891885) I_0\left(\frac{z}{2}\right) - \frac{1}{4725 z^3} (32 e^{z/2} (64 z^8 - 640 z^7 + 5424 z^6 - 39168 z^5 + 236760 z^4 - 1164240 z^3 + 4459455 z^2 - 12432420 z + 27567540) I_1\left(\frac{z}{2}\right))$$

07.25.03.agk1.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{15 z^4} e^z (-16 z^8 + 224 z^7 - 2280 z^6 + 18600 z^5 - 122865 z^4 + 645120 z^3 - 2580480 z^2 + 7257600 z - 12700800) + \frac{20160 \sqrt{\pi} (2z + 21) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.agk2.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{15z^4} e^{-z} (-16z^8 - 224z^7 - 2280z^6 - 18600z^5 - 122865z^4 - 645120z^3 - 2580480z^2 - 7257600z - 12700800) - \\
 & \frac{20160\sqrt{\pi}(2z-21)\operatorname{erf}(\sqrt{z})}{z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agk3.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{9}{2}, 6; z\right) = \\
 & -\frac{1}{945z^3} 32e^{z/2} (64z^7 - 1120z^6 + 13104z^5 - 117600z^4 + 829080z^3 - 4517370z^2 + 18050175z - 49884120) I_0\left(\frac{z}{2}\right) - \\
 & \frac{1}{945z^4} \left(32e^{z/2} (64z^8 - 1184z^7 + 14320z^6 - 132576z^5 + \right. \\
 & \left. 970200z^4 - 5572710z^3 + 24304995z^2 - 72200700z + 199536480) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.agk4.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{165375} \left(e^z (4096z^{12} + 225280z^{11} + 4648960z^{10} + 45747200z^9 + 225772800z^8 + 538621440z^7 + \right. \\
 & \left. 545664000z^6 + 170352000z^5 + 5166000z^4 + 126000z^3 + 75600z^2 - 94500z + 165375) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agk5.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \\
 & -\frac{1}{23625} \left(e^z (2048z^{11} + 97280z^{10} + 1692160z^9 + 13566720z^8 + 51836160z^7 + 87884160z^6 + 53121600z^5 + \right. \\
 & \left. 5493600z^4 - 163800z^3 - 18900z^2 + 9450z - 23625) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agk6.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{4725} \left(e^z (1024z^{10} + 40960z^9 + 579840z^8 + 3594240z^7 + 9744000z^6 + 9838080z^5 + 1965600z^4 - \right. \\
 & \left. 201600z^3 + 18900z^2 + 4725) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agk7.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \\
 & -\frac{1}{1575} e^z (512z^9 + 16640z^8 + 181760z^7 + 797440z^6 + 1283520z^5 + 426720z^4 - 84000z^3 + 25200z^2 - 3150z - 1575)
 \end{aligned}$$

07.25.03.agk8.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{e^z (256 z^8 + 6400 z^7 + 49280 z^6 + 127680 z^5 + 67200 z^4 - 21840 z^3 + 12600 z^2 - 6300 z + 1575)}{1575}$$

07.25.03.agk9.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^{z/2} (128 z^8 + 2816 z^7 + 18560 z^6 + 39520 z^5 + 15360 z^4 - 4800 z^3 + 3600 z^2 - 3150 z + 1575) I_0\left(\frac{z}{2}\right) + 2 e^{z/2} (64 z^8 + 1344 z^7 + 7968 z^6 + 12400 z^5 - 1880 z^4 + 1080 z^3 - 900 z^2 + 675 z) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.agka.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575)}{1575}$$

07.25.03.agkb.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^{z/2} (128 z^7 + 1856 z^6 + 6400 z^5 + 3120 z^4 - 1200 z^3 + 1080 z^2 - 1260 z + 1575) I_0\left(\frac{z}{2}\right) + e^{z/2} (128 z^7 + 1728 z^6 + 4736 z^5 - 880 z^4 + 720 z^3 - 1080 z^2 + 1980 z - 2835) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.agkc.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{525} e^z (64 z^6 + 640 z^5 + 880 z^4 - 640 z^3 + 780 z^2 - 840 z + 525)$$

07.25.03.agkd.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 + 448 z^5 + 240 z^4 - 360 z^2 + 1260 z - 2205) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 + 384 z^6 - 112 z^5 + 240 z^4 - 840 z^3 + 2700 z^2 - 6615 z + 10395) I_1\left(\frac{z}{2}\right)}{1575 z}$$

07.25.03.agke.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{105} e^z (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105)$$

07.25.03.agkf.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^6 - 32 z^5 + 400 z^4 - 2080 z^3 + 8400 z^2 - 24990 z + 45045) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 - 96 z^6 + 528 z^5 - 2720 z^4 + 11680 z^3 - 39690 z^2 + 100485 z - 180180) I_1\left(\frac{z}{2}\right)}{525 z^2}$$

07.25.03.agkg.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (16 z^7 - 80 z^6 + 480 z^5 - 2580 z^4 + 11535 z^3 - 40320 z^2 + 100800 z - 151200)}{15 z^3} + \frac{5040 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.agkh.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (16z^7 + 80z^6 + 480z^5 + 2580z^4 + 11535z^3 + 40320z^2 + 100800z + 151200)}{15z^3} - \frac{5040\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.agki.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, 5; z\right) = \frac{32e^{z/2} (32z^6 - 256z^5 + 1840z^4 - 10920z^3 + 51450z^2 - 180180z + 405405) I_0\left(\frac{z}{2}\right)}{525z^2} + \frac{64e^{z/2} (16z^7 - 144z^6 + 1072z^5 - 6620z^4 + 33075z^3 - 128205z^2 + 360360z - 810810) I_1\left(\frac{z}{2}\right)}{525z^3}$$

07.25.03.agkj.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3e^z (8z^7 - 100z^6 + 890z^5 - 6185z^4 + 33600z^3 - 137760z^2 + 394800z - 705600)}{5z^4} + \frac{7560\sqrt{\pi} (3z + 28) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.agkk.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z} (8z^7 + 100z^6 + 890z^5 + 6185z^4 + 33600z^3 + 137760z^2 + 394800z + 705600)}{5z^4} - \frac{7560\sqrt{\pi} (3z - 28) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.agkl.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{7}{2}, 6; z\right) = \frac{32e^{z/2} (32z^6 - 496z^5 + 5040z^4 - 38220z^3 + 218790z^2 - 907335z + 2625480) I_0\left(\frac{z}{2}\right)}{105z^3} + \frac{1}{105z^4} (32e^{z/2} (32z^7 - 528z^6 + 5584z^5 - 44100z^4 + 266310z^3 - 1203345z^2 + 3629340z - 10501920) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = \frac{3}{2}, a_2 = \frac{7}{2}, b_1 = -\frac{5}{2}$

07.25.03.agkm.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{3375} (e^z (1024z^{10} + 41984z^9 + 615168z^8 + 4015104z^7 + 11865216z^6 + 14279040z^5 + 5142240z^4 + 175680z^3 + 5940z^2 - 540z + 3375))$$

07.25.03.agkn.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{675} e^z (512z^9 + 17664z^8 + 210432z^7 + 1060608z^6 + 2220480z^5 + 1588320z^4 + 188640z^3 - 6480z^2 - 270z - 675)$$

07.25.03.agko.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{225} e^z (256 z^8 + 7168 z^7 + 65792 z^6 + 234240 z^5 + 290400 z^4 + 68160 z^3 - 7920 z^2 + 720 z + 225)$$

07.25.03.agkp.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{225} e^z (128 z^7 + 2752 z^6 + 17760 z^5 + 37200 z^4 + 15000 z^3 - 3420 z^2 + 1170 z - 225)$$

07.25.03.agkq.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{225} e^{z/2} (-64 z^7 - 1216 z^6 - 6800 z^5 - 12144 z^4 - 4152 z^3 + 1080 z^2 - 585 z + 225) I_0\left(\frac{z}{2}\right) + \frac{1}{225} e^{z/2} (-64 z^7 - 1152 z^6 - 5680 z^5 - 6976 z^4 + 936 z^3 - 432 z^2 + 225 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.agkr.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{225} e^z (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225)$$

07.25.03.agks.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{225} e^{z/2} (-64 z^6 - 800 z^5 - 2352 z^4 - 1056 z^3 + 360 z^2 - 270 z + 225) I_0\left(\frac{z}{2}\right) + \frac{1}{225} e^{z/2} (-64 z^6 - 736 z^5 - 1648 z^4 + 288 z^3 - 216 z^2 + 270 z - 315) I_1\left(\frac{z}{2}\right)$$

07.25.03.agkt.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{1}{75} e^z (32 z^5 + 272 z^4 + 304 z^3 - 168 z^2 + 138 z - 75)$$

07.25.03.agku.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, 3; z\right) = -\frac{8}{225} e^{z/2} (16 z^5 + 96 z^4 + 48 z^3 - 45 z + 90) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (32 z^6 + 160 z^5 - 48 z^4 + 96 z^3 - 270 z^2 + 630 z - 945) I_1\left(\frac{z}{2}\right)}{225 z}$$

07.25.03.agkv.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{1}{15} e^z (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15)$$

07.25.03.agkw.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, 4; z\right) = -\frac{4 e^{z/2} (32 z^5 - 16 z^4 + 160 z^3 - 660 z^2 + 1950 z - 3465) I_0\left(\frac{z}{2}\right)}{75 z} - \frac{4 e^{z/2} (32 z^6 - 48 z^5 + 224 z^4 - 940 z^3 + 3150 z^2 - 7875 z + 13860) I_1\left(\frac{z}{2}\right)}{75 z^2}$$

07.25.03.agkx.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{2520 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}} - \frac{7 e^z (8 z^6 - 36 z^5 + 186 z^4 - 825 z^3 + 2880 z^2 - 7200 z + 10800)}{15 z^3}$$

07.25.03.agky.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (8 z^6 + 36 z^5 + 186 z^4 + 825 z^3 + 2880 z^2 + 7200 z + 10800)}{15 z^3} - \frac{2520 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.agkz.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, 5; z\right) = -\frac{32 e^{z/2} (16 z^5 - 112 z^4 + 684 z^3 - 3300 z^2 + 11781 z - 27027) I_0\left(\frac{z}{2}\right)}{75 z^2} - \frac{32 e^{z/2} (16 z^6 - 128 z^5 + 820 z^4 - 4200 z^3 + 16569 z^2 - 47124 z + 108108) I_1\left(\frac{z}{2}\right)}{75 z^3}$$

07.25.03.agl0.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1890 \sqrt{\pi} (6 z + 49) \operatorname{erfi}(\sqrt{z})}{z^{9/2}} - \frac{21 e^z (4 z^6 - 44 z^5 + 335 z^4 - 1920 z^3 + 8160 z^2 - 24000 z + 44100)}{5 z^4}$$

07.25.03.agl1.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (4 z^6 + 44 z^5 + 335 z^4 + 1920 z^3 + 8160 z^2 + 24000 z + 44100)}{5 z^4} - \frac{1890 \sqrt{\pi} (6 z - 49) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.agl2.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{5}{2}, 6; z\right) = -\frac{32 e^{z/2} (16 z^5 - 216 z^4 + 1860 z^3 - 11484 z^2 + 50193 z - 154440) I_0\left(\frac{z}{2}\right)}{15 z^3} - \frac{32 e^{z/2} (16 z^6 - 232 z^5 + 2100 z^4 - 13716 z^3 + 65241 z^2 - 200772 z + 617760) I_1\left(\frac{z}{2}\right)}{15 z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.agl3.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{135} e^z (256 z^8 + 7424 z^7 + 71808 z^6 + 278976 z^5 + 412800 z^4 + 174960 z^3 + 6840 z^2 + 180 z + 135)$$

07.25.03.agl4.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{45} e^z (128 z^7 + 3008 z^6 + 22368 z^5 + 61200 z^4 + 53400 z^3 + 7380 z^2 - 270 z - 45)$$

07.25.03.agl5.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{45} e^z (64 z^6 + 1152 z^5 + 6000 z^4 + 9600 z^3 + 2700 z^2 - 360 z + 45)$$

07.25.03.agl6.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{45} e^{z/2} (32 z^6 + 512 z^5 + 2352 z^4 + 3384 z^3 + 954 z^2 - 180 z + 45) I_0\left(\frac{z}{2}\right) + \frac{2}{45} e^{z/2} (16 z^6 + 240 z^5 + 944 z^4 + 852 z^3 - 93 z^2 + 27 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.agl7.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{45} e^z (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45)$$

07.25.03.agl8.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{45} e^{z/2} (32 z^5 + 336 z^4 + 816 z^3 + 324 z^2 - 90 z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (32 z^5 + 304 z^4 + 528 z^3 - 84 z^2 + 54 z - 45) I_1\left(\frac{z}{2}\right)$$

07.25.03.agl9.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{15} e^z (16 z^4 + 112 z^3 + 96 z^2 - 36 z + 15)$$

07.25.03.agla.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, 3; z\right) = \frac{4}{45} e^{z/2} (16 z^4 + 80 z^3 + 36 z^2 - 15) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (16 z^5 + 64 z^4 - 20 z^3 + 36 z^2 - 75 z + 105) I_1\left(\frac{z}{2}\right)}{45 z}$$

07.25.03.aglb.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{3} e^z (8 z^3 + 12 z^2 - 6 z + 3)$$

07.25.03.aglc.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 - 8 z^3 + 60 z^2 - 180 z + 315) I_0\left(\frac{z}{2}\right)}{15 z} + \frac{4 e^{z/2} (16 z^5 - 24 z^4 + 92 z^3 - 300 z^2 + 735 z - 1260) I_1\left(\frac{z}{2}\right)}{15 z^2}$$

07.25.03.agld.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4 z^5 - 16 z^4 + 69 z^3 - 240 z^2 + 600 z - 900)}{3 z^3} + \frac{1050 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.agle.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (4 z^5 + 16 z^4 + 69 z^3 + 240 z^2 + 600 z + 900)}{3 z^3} - \frac{1050 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aglf.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 - 48 z^3 + 240 z^2 - 882 z + 2079) I_0\left(\frac{z}{2}\right)}{15 z^2} + \frac{64 e^{z/2} (4 z^5 - 28 z^4 + 150 z^3 - 609 z^2 + 1764 z - 4158) I_1\left(\frac{z}{2}\right)}{15 z^3}$$

07.25.03.aglg.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{21 e^z (2 z^5 - 19 z^4 + 120 z^3 - 540 z^2 + 1650 z - 3150)}{z^4} + \frac{4725 \sqrt{\pi} (z + 7) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.aglh.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = -\frac{21 e^{-z} (2 z^5 + 19 z^4 + 120 z^3 + 540 z^2 + 1650 z + 3150)}{z^4} - \frac{4725 \sqrt{\pi} (z - 7) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.agli.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^4 - 92 z^3 + 648 z^2 - 3069 z + 10296) I_0\left(\frac{z}{2}\right) + 32 e^{z/2} (8 z^5 - 100 z^4 + 752 z^3 - 3879 z^2 + 12276 z - 41184) I_1\left(\frac{z}{2}\right)}{3 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.aglj.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} e^z (64 z^6 + 1216 z^5 + 6928 z^4 + 13280 z^3 + 6780 z^2 + 300 z + 15)$$

07.25.03.aglk.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{15} e^z (32 z^5 + 464 z^4 + 1840 z^3 + 2040 z^2 + 330 z - 15)$$

07.25.03.agll.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{15} e^{z/2} (-16 z^5 - 208 z^4 - 748 z^3 - 812 z^2 - 165 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-16 z^5 - 192 z^4 - 564 z^3 - 328 z^2 + 23 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aglm.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{15} e^z (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15)$$

07.25.03.agln.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (-16 z^4 - 136 z^3 - 260 z^2 - 84 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (-16 z^4 - 120 z^3 - 148 z^2 + 20 z - 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.aglo.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{1}{5} e^z (8 z^3 + 44 z^2 + 26 z - 5)$$

07.25.03.aglp.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, 3; z\right) = -\frac{16}{15} e^{z/2} (2 z^3 + 8 z^2 + 3 z) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8 z^4 + 24 z^3 - 8 z^2 + 12 z - 15) I_1\left(\frac{z}{2}\right)}{15 z}$$

07.25.03.aglq.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -e^z (4 z^2 + 4 z - 1)$$

07.25.03.aglr.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, 4; z\right) = -\frac{4 e^{z/2} (8 z^3 - 4 z^2 + 20 z - 35) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (8 z^4 - 12 z^3 + 36 z^2 - 85 z + 140) I_1\left(\frac{z}{2}\right)}{5 z}$$

07.25.03.agls.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{315 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}} - \frac{7 e^z (2 z^4 - 7 z^3 + 24 z^2 - 60 z + 90)}{z^3}$$

07.25.03.aglt.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}(2z^4 + 7z^3 + 24z^2 + 60z + 90)}{z^3} - \frac{315\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aglu.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, 5; z\right) = -\frac{32e^{z/2}(4z^3 - 20z^2 + 77z - 189)I_0\left(\frac{z}{2}\right)}{5z^2} - \frac{32e^{z/2}(4z^4 - 24z^3 + 103z^2 - 308z + 756)I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.aglv.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{945\sqrt{\pi}(6z + 35)\operatorname{erfi}(\sqrt{z})}{4z^{9/2}} - \frac{63e^z(2z^4 - 16z^3 + 80z^2 - 260z + 525)}{2z^4}$$

07.25.03.aglw.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{63e^{-z}(2z^4 + 16z^3 + 80z^2 + 260z + 525)}{2z^4} - \frac{945\sqrt{\pi}(6z - 35)\operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.aglx.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; -\frac{1}{2}, 6; z\right) = -\frac{32e^{z/2}(4z^3 - 38z^2 + 207z - 792)I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32e^{z/2}(4z^4 - 42z^3 + 251z^2 - 828z + 3168)I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{1}{2}$

07.25.03.agly.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{15}e^z(16z^4 + 176z^3 + 480z^2 + 300z + 15)$$

07.25.03.aglz.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{15}e^{z/2}(8z^4 + 80z^3 + 208z^2 + 150z + 15)I_0\left(\frac{z}{2}\right) + \frac{2}{15}e^{z/2}(4z^4 + 36z^3 + 70z^2 + 19z)I_1\left(\frac{z}{2}\right)$$

07.25.03.agm0.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{15}e^z(8z^3 + 60z^2 + 90z + 15)$$

07.25.03.agm1.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{15}e^{z/2}(8z^3 + 52z^2 + 72z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}(8z^3 + 44z^2 + 32z - 3)I_1\left(\frac{z}{2}\right)$$

07.25.03.agm2.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{5}e^z(4z^2 + 16z + 5)$$

07.25.03.agm3.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, 3; z\right) = \frac{4}{15}e^{z/2}(4z^2 + 12z + 3)I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2}(4z^3 + 8z^2 - 3z + 3)I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.agm4.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = e^z(2z + 1)$$

07.25.03.agm5.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (4 z^2 - 2 z + 5) I_0\left(\frac{z}{2}\right)}{5 z} + \frac{4 e^{z/2} (4 z^3 - 6 z^2 + 13 z - 20) I_1\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.agm6.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4 z^3 - 12 z^2 + 30 z - 45)}{4 z^3} + \frac{315 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.agm7.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (4 z^3 + 12 z^2 + 30 z + 45)}{4 z^3} - \frac{315 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.agm8.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (2 z^2 - 8 z + 21) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{64 e^{z/2} (z^3 - 5 z^2 + 16 z - 42) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.agm9.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (4 z^3 - 26 z^2 + 95 z - 210)}{8 z^4} + \frac{945 \sqrt{\pi} (3 z + 14) \operatorname{erfi}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.agma.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{63 e^{-z} (4 z^3 + 26 z^2 + 95 z + 210)}{8 z^4} - \frac{945 \sqrt{\pi} (3 z - 14) \operatorname{erf}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.agmb.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (2 z^2 - 15 z + 72) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (2 z^3 - 17 z^2 + 60 z - 288) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 1$

07.25.03.agmc.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{15} e^{z/2} (4 z^3 + 28 z^2 + 45 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4 z^3 + 24 z^2 + 23 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.agmd.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{5} e^{z/2} (2 z^2 + 8 z + 5) I_0\left(\frac{z}{2}\right) + \frac{2}{5} e^{z/2} (z^2 + 3 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.agme.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; 1, \frac{7}{2}; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{3}{2}$

07.25.03.agmf.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{15} e^z (4 z^2 + 20 z + 15)$$

07.25.03.agmg.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{15} e^{z/2} (4z^2 + 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^2 + 14z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.agmh.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{5} e^z (2z + 5)$$

07.25.03.agmi.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, 3; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2z^2 + 2z - 1) I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.agmj.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = e^z$$

07.25.03.agmk.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (2z - 1) I_0\left(\frac{z}{2}\right)}{5z} + \frac{4 e^{z/2} (2z^2 - 3z + 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.agml.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4z^2 - 10z + 15)}{8z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.agmm.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{7 e^{-z} (4z^2 + 10z + 15)}{8z^3}$$

07.25.03.agmn.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (z - 3) I_0\left(\frac{z}{2}\right)}{5z^2} + \frac{32 e^{z/2} (z^2 - 4z + 12) I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.agmo.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (8z^2 - 40z + 105)}{32z^4} - \frac{945 \sqrt{\pi} (2z + 7) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.agmp.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8z^2 + 40z + 105)}{32z^4} + \frac{945 \sqrt{\pi} (2z - 7) \operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.agmq.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (z - 8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 2$

07.25.03.agmr.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{5} e^{z/2} (2z + 5) I_0\left(\frac{z}{2}\right) + \frac{1}{5} e^{z/2} (2z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.agms.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; 2, \frac{7}{2}; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{5}{2}$

07.25.03.agmt.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3 e^z (z+1)}{5 z} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{10 z^{3/2}}$$

07.25.03.agmu.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} (z-1)}{5 z} + \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{10 z^{3/2}}$$

07.25.03.agmv.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, 3; z\right) = \frac{4}{5} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (z+1) I_1\left(\frac{z}{2}\right)}{5 z}$$

07.25.03.agmw.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{3 e^z}{2 z} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.agmx.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3 e^{-z}}{2 z}$$

07.25.03.agmy.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{5 z} + \frac{4 e^{z/2} (5 z - 4) I_1\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.agmz.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{105 e^z (2 z - 3)}{32 z^3} - \frac{21 \sqrt{\pi} (4 z^2 - 15) \operatorname{erfi}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.agn0.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (2 z + 3)}{32 z^3} + \frac{21 \sqrt{\pi} (4 z^2 - 15) \operatorname{erf}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.agn1.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, 5; z\right) = \frac{64 e^{z/2} (z^2 + 4 z - 18) I_1\left(\frac{z}{2}\right)}{25 z^3} - \frac{32 e^{z/2} (2 z - 9) I_0\left(\frac{z}{2}\right)}{25 z^2}$$

07.25.03.agn2.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (2 z^2 + 25 z - 105)}{64 z^4} - \frac{63 \sqrt{\pi} (4 z^3 - 45 z - 105) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.agn3.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (2z^2 - 25z - 105)}{64 z^4} + \frac{63 \sqrt{\pi} (4z^3 - 45z + 105) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.agn4.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 + z^2 - 12z - 480) I_1\left(\frac{z}{2}\right)}{35 z^4} - \frac{32 e^{z/2} (4z^2 - 3z - 120) I_0\left(\frac{z}{2}\right)}{35 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 3$

07.25.03.agn5.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; 3, \frac{7}{2}; z\right) = \frac{4 e^{z/2} I_1\left(\frac{z}{2}\right)}{z}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{7}{2}$

07.25.03.agn6.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{45 e^z}{8 z^2} - \frac{15 \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.agn7.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45 e^{-z}}{8 z^2}$$

07.25.03.agn8.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (z + 4) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.agn9.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{105 e^z (2z + 15)}{64 z^3} - \frac{105 \sqrt{\pi} (4z^2 + 12z + 15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.agna.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (2z - 15)}{64 z^3} + \frac{105 \sqrt{\pi} (4z^2 - 12z + 15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.agnb.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (z^2 + 4z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{32 e^{z/2} (z + 3) I_0\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.agnc.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{315 e^z (4z^2 + 20z + 105)}{256 z^4} - \frac{315 \sqrt{\pi} (8z^3 + 36z^2 + 90z + 105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.agnnd.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2 - 20z + 105)}{256 z^4} + \frac{315 \sqrt{\pi} (8z^3 - 36z^2 + 90z - 105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.agne.01

$${}_2F_2\left(\frac{3}{2}, \frac{7}{2}, \frac{7}{2}; 6; z\right) = \frac{32 e^{z/2} (2z^3 + 11z^2 + 36z + 96) I_1\left(\frac{z}{2}\right)}{7z^4} - \frac{32 e^{z/2} (2z^2 + 9z + 24) I_0\left(\frac{z}{2}\right)}{7z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = -\frac{11}{2}$

07.25.03.agnf.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{324168075} (4096z^{16} + 401408z^{15} + 15889408z^{14} + 330021888z^{13} + 3912652800z^{12} + 27003906048z^{11} + 106085578752z^{10} + 221648394240z^9 + 213469320960z^8 + 68400460800z^7 + 2179457280z^6 + 55883520z^5 + 14288400z^4 + 11340000z^3 + 19845000z^2 + 64297800z + 324168075) + \frac{1}{324168075} (512 e^z \sqrt{\pi} (8z^{33/2} + 788z^{31/2} + 31422z^{29/2} + 659709z^{27/2} + 7949613z^{25/2} + 56276010z^{23/2} + 230426910z^{21/2} + 517298040z^{19/2} + 571256280z^{17/2} + 249071760z^{15/2} + 24418800z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.agng.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{324168075} (4096z^{16} - 401408z^{15} + 15889408z^{14} - 330021888z^{13} + 3912652800z^{12} - 27003906048z^{11} + 106085578752z^{10} - 221648394240z^9 + 213469320960z^8 - 68400460800z^7 + 2179457280z^6 - 55883520z^5 + 14288400z^4 - 11340000z^3 + 19845000z^2 - 64297800z + 324168075) - \frac{1}{324168075} (512 e^{-z} \sqrt{\pi} (8z^{33/2} - 788z^{31/2} + 31422z^{29/2} - 659709z^{27/2} + 7949613z^{25/2} - 56276010z^{23/2} + 230426910z^{21/2} - 517298040z^{19/2} + 571256280z^{17/2} - 249071760z^{15/2} + 24418800z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.agnh.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{29469825} (-2048z^{15} - 180224z^{14} - 6323712z^{13} - 114508800z^{12} - 1157710848z^{11} - 6605826048z^{10} - 20474910720z^9 - 31191632640z^8 - 18632678400z^7 - 2179457280z^6 + 55883520z^5 + 4762800z^4 + 2268000z^3 + 2835000z^2 + 7144200z + 29469825) - \frac{1}{29469825} (256 e^z \sqrt{\pi} (8z^{31/2} + 708z^{29/2} + 25050z^{27/2} + 459309z^{25/2} + 4734450z^{23/2} + 27869310z^{21/2} + 91080360z^{19/2} + 152976600z^{17/2} + 112326480z^{15/2} + 24418800z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.agni.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{29469825} (2048 z^{15} - 180224 z^{14} + 6323712 z^{13} - 114508800 z^{12} + 1157710848 z^{11} - 6605826048 z^{10} +$$

$$20474910720 z^9 - 31191632640 z^8 + 18632678400 z^7 - 2179457280 z^6 -$$

$$55883520 z^5 + 4762800 z^4 - 2268000 z^3 + 2835000 z^2 - 7144200 z + 29469825) -$$

$$\frac{1}{29469825} \left(256 e^{-z} \sqrt{\pi} (8 z^{31/2} - 708 z^{29/2} + 25050 z^{27/2} - 459309 z^{25/2} + 4734450 z^{23/2} - 27869310 z^{21/2} +$$

$$91080360 z^{19/2} - 152976600 z^{17/2} + 112326480 z^{15/2} - 24418800 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.agnj.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{3274425} (1024 z^{14} + 79872 z^{13} + 2443520 z^{12} + 37744896 z^{11} + 315767808 z^{10} + 1424471040 z^9 + 3235472640 z^8 +$$

$$3101414400 z^7 + 726485760 z^6 - 55883520 z^5 + 4762800 z^4 + 756000 z^3 + 567000 z^2 + 1020600 z + 3274425) +$$

$$\frac{1}{3274425} \left(128 e^z \sqrt{\pi} (8 z^{29/2} + 628 z^{27/2} + 19398 z^{25/2} + 304125 z^{23/2} + 2605575 z^{21/2} +$$

$$12235860 z^{19/2} + 29901060 z^{17/2} + 33372360 z^{15/2} + 12209400 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.agnk.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{3274425} (1024 z^{14} - 79872 z^{13} + 2443520 z^{12} - 37744896 z^{11} + 315767808 z^{10} - 1424471040 z^9 + 3235472640 z^8 -$$

$$3101414400 z^7 + 726485760 z^6 + 55883520 z^5 + 4762800 z^4 - 756000 z^3 + 567000 z^2 - 1020600 z + 3274425) -$$

$$\frac{1}{3274425} \left(128 e^{-z} \sqrt{\pi} (8 z^{29/2} - 628 z^{27/2} + 19398 z^{25/2} - 304125 z^{23/2} + 2605575 z^{21/2} -$$

$$12235860 z^{19/2} + 29901060 z^{17/2} - 33372360 z^{15/2} + 12209400 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.agnl.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{467775} (-512 z^{13} - 34816 z^{12} - 908672 z^{11} - 11619840 z^{10} - 76958208 z^9 - 255310080 z^8 - 368640000 z^7 -$$

$$145297152 z^6 + 18627840 z^5 - 4762800 z^4 + 756000 z^3 + 189000 z^2 + 204120 z + 467775) -$$

$$\frac{1}{467775} \left(64 e^z \sqrt{\pi} (8 z^{27/2} + 548 z^{25/2} + 14466 z^{23/2} + 188397 z^{21/2} + 1286796 z^{19/2} +$$

$$4515084 z^{17/2} + 7325640 z^{15/2} + 4069800 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.agnm.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{467775} (512 z^{13} - 34816 z^{12} + 908672 z^{11} - 11619840 z^{10} + 76958208 z^9 - 255310080 z^8 + 368640000 z^7 - 145297152 z^6 - 18627840 z^5 - 4762800 z^4 - 756000 z^3 + 189000 z^2 - 204120 z + 467775) - \frac{1}{467775} (64 e^{-z} \sqrt{\pi} (8 z^{27/2} - 548 z^{25/2} + 14466 z^{23/2} - 188397 z^{21/2} + 1286796 z^{19/2} - 4515084 z^{17/2} + 7325640 z^{15/2} - 4069800 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.agnn.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{93555} (256 z^{12} + 14848 z^{11} + 320832 z^{10} + 3250368 z^9 + 15869568 z^8 + 33724800 z^7 + 20756736 z^6 - 3725568 z^5 + 1587600 z^4 - 756000 z^3 + 189000 z^2 + 68040 z + 93555) + \frac{1}{93555} (32 e^z \sqrt{\pi} (8 z^{25/2} + 468 z^{23/2} + 10254 z^{21/2} + 106365 z^{19/2} + 542241 z^{17/2} + 1261638 z^{15/2} + 1017450 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.agno.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{93555} (256 z^{12} - 14848 z^{11} + 320832 z^{10} - 3250368 z^9 + 15869568 z^8 - 33724800 z^7 + 20756736 z^6 + 3725568 z^5 + 1587600 z^4 + 756000 z^3 + 189000 z^2 - 68040 z + 93555) - \frac{1}{93555} (32 e^{-z} \sqrt{\pi} (8 z^{25/2} - 468 z^{23/2} + 10254 z^{21/2} - 106365 z^{19/2} + 542241 z^{17/2} - 1261638 z^{15/2} + 1017450 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.agnp.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{31185} (-128 z^{11} - 6144 z^{10} - 105184 z^9 - 786624 z^8 - 2473920 z^7 - 2306304 z^6 + 532224 z^5 - 317520 z^4 + 252000 z^3 - 189000 z^2 + 68040 z + 31185) - \frac{16 e^z \sqrt{\pi} (8 z^{23/2} + 388 z^{21/2} + 6762 z^{19/2} + 52269 z^{17/2} + 176358 z^{15/2} + 203490 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.agnq.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{31185} (128 z^{11} - 6144 z^{10} + 105184 z^9 - 786624 z^8 + 2473920 z^7 - 2306304 z^6 - 532224 z^5 - 317520 z^4 - 252000 z^3 - 189000 z^2 - 68040 z + 31185) - \frac{16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 388 z^{21/2} + 6762 z^{19/2} - 52269 z^{17/2} + 176358 z^{15/2} - 203490 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.agnr.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{31185} (64 z^{10} + 2432 z^9 + 30736 z^8 + 148560 z^7 + 209664 z^6 - 59136 z^5 + 45360 z^4 - 50400 z^3 + 63000 z^2 - 68040 z + 31185) + \frac{8 e^z \sqrt{\pi} (8 z^{21/2} + 308 z^{19/2} + 3990 z^{17/2} + 20349 z^{15/2} + 33915 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.agns.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{31185} (64 z^{10} - 2432 z^9 + 30736 z^8 - 148560 z^7 + 209664 z^6 + 59136 z^5 + 45360 z^4 + 50400 z^3 + 63000 z^2 + 68040 z + 31185) - \frac{8 e^{-z} \sqrt{\pi} (8 z^{21/2} - 308 z^{19/2} + 3990 z^{17/2} - 20349 z^{15/2} + 33915 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.agnt.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, 1; z\right) = \frac{1}{62370} (e^z (128 z^{10} + 4288 z^9 + 45984 z^8 + 174480 z^7 + 143976 z^6 - 80892 z^5 + 93870 z^4 - 123165 z^3 + 146475 z^2 - 130410 z + 62370))$$

07.25.03.agnu.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{4 e^z \sqrt{\pi} (8 z^3 + 228 z^2 + 1938 z + 4845) \operatorname{erf}(\sqrt{z}) z^{13/2}}{31185} + \frac{32 z^9 + 896 z^8 + 7320 z^7 + 16128 z^6 - 5376 z^5 + 5040 z^4 - 7200 z^3 + 12600 z^2 - 22680 z + 31185}{31185}$$

07.25.03.agnv.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{4 e^{-z} \sqrt{\pi} (8 z^3 - 228 z^2 + 1938 z - 4845) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{31185} + \frac{1}{31185} (-32 z^9 + 896 z^8 - 7320 z^7 + 16128 z^6 + 5376 z^5 + 5040 z^4 + 7200 z^3 + 12600 z^2 + 22680 z + 31185)$$

07.25.03.agnw.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, 2; z\right) = \frac{1}{62370} e^z (128 z^9 + 3008 z^8 + 18912 z^7 + 23184 z^6 - 18312 z^5 + 28980 z^4 - 51030 z^3 + 80955 z^2 - 96390 z + 62370)$$

07.25.03.agnx.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{16 z^9 + 288 z^8 + 1076 z^7 - 420 z^6 + 504 z^5 - 1080 z^4 + 3240 z^3 - 10584 z^2 + 30555 z - 60480}{10395 z} + \frac{1}{10395 z^{3/2}} \frac{2 e^z \sqrt{\pi} (8 z^{10} + 148 z^9 + 606 z^8 - 3 z^7 + 21 z^6 - 126 z^5 + 630 z^4 - 2520 z^3 + 7560 z^2 - 15120 z + 15120) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.agny.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{16z^9 - 288z^8 + 1076z^7 + 420z^6 + 504z^5 + 1080z^4 + 3240z^3 + 10584z^2 + 30555z + 60480}{10395z} - \frac{1}{10395z^{3/2}}$$

$$2e^{-z}\sqrt{\pi}\left(8z^{10} - 148z^9 + 606z^8 + 3z^7 + 21z^6 + 126z^5 + 630z^4 + 2520z^3 + 7560z^2 + 15120z + 15120\right)\operatorname{erfi}(\sqrt{z})$$

07.25.03.agnz.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, 3; z\right) = \frac{e^z(128z^8 + 1728z^7 + 3360z^6 - 3696z^5 + 7560z^4 - 16380z^3 + 30870z^2 - 42525z + 31185)}{31185}$$

07.25.03.ago0.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{8z^9 + 64z^8 - 34z^7 + 84z^6 - 396z^5 + 2040z^4 - 9432z^3 + 36351z^2 - 110880z + 241920}{2079z^2} + \frac{1}{2079z^{5/2}}$$

$$\left(e^z\sqrt{\pi}\left(8z^{10} + 68z^9 - 6z^8 + 45z^7 - 294z^6 + 1638z^5 - 7560z^4 + 27720z^3 - 75600z^2 + 136080z - 120960\right)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ago1.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{-8z^9 + 64z^8 + 34z^7 + 84z^6 + 396z^5 + 2040z^4 + 9432z^3 + 36351z^2 + 110880z + 241920}{2079z^2} + \frac{1}{2079z^{5/2}}$$

$$\left(e^{-z}\sqrt{\pi}\left(8z^{10} - 68z^9 - 6z^8 - 45z^7 - 294z^6 - 1638z^5 - 7560z^4 - 27720z^3 - 75600z^2 - 136080z - 120960\right)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ago2.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, 4; z\right) = \frac{e^z(128z^7 + 448z^6 - 672z^5 + 1680z^4 - 4200z^3 + 8820z^2 - 13230z + 10395)}{10395}$$

07.25.03.ago3.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{4z^9 - 8z^8 + 57z^7 - 423z^6 + 2820z^5 - 16308z^4 + 79713z^3 - 320040z^2 + 1028160z - 2721600}{297z^3} +$$

$$\frac{1}{594z^{7/2}}\left(e^z\sqrt{\pi}\left(8z^{10} - 12z^9 + 102z^8 - 771z^7 + 5103z^6 - 28980z^5 + 137340z^4 - 521640z^3 + 1489320z^2 - 2842560z + 2721600\right)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ago4.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{4z^9 + 8z^8 + 57z^7 + 423z^6 + 2820z^5 + 16308z^4 + 79713z^3 + 320040z^2 + 1028160z + 2721600}{297z^3} +$$

$$\frac{1}{594z^{7/2}}\left(e^{-z}\sqrt{\pi}\left(-8z^{10} - 12z^9 - 102z^8 - 771z^7 - 5103z^6 - 28980z^5 - 137340z^4 - 521640z^3 - 1489320z^2 - 2842560z - 2721600\right)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ago5.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, 5; z\right) = \frac{1}{10395 z^4} \left(4 e^z (128 z^{10} - 832 z^9 + 6816 z^8 - 52848 z^7 + 365736 z^6 - 2185596 z^5 + 10914750 z^4 - 43648605 z^3 + 130945815 z^2 - 261891630 z + 261891630)\right) - \frac{100776}{z^4}$$

07.25.03.ago6.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{66 z^4} (4 z^9 - 48 z^8 + 491 z^7 - 4380 z^6 + 33804 z^5 - 222246 z^4 + 1217160 z^3 - 5382720 z^2 + 18446400 z - 63504000) + \frac{1}{132 z^{9/2}} \left(e^z \sqrt{\pi} (8 z^{10} - 92 z^9 + 930 z^8 - 8211 z^7 + 62580 z^6 - 404460 z^5 + 2159640 z^4 - 9160200 z^3 + 28969920 z^2 - 60782400 z + 63504000) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ago7.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{66 z^4} (-4 z^9 - 48 z^8 - 491 z^7 - 4380 z^6 - 33804 z^5 - 222246 z^4 - 1217160 z^3 - 5382720 z^2 - 18446400 z - 63504000) + \frac{1}{132 z^{9/2}} \left(e^{-z} \sqrt{\pi} (8 z^{10} + 92 z^9 + 930 z^8 + 8211 z^7 + 62580 z^6 + 404460 z^5 + 2159640 z^4 + 9160200 z^3 + 28969920 z^2 + 60782400 z + 63504000) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ago8.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{11}{2}, 6; z\right) = \frac{1}{2079 z^5} \left(4 e^z (128 z^{10} - 2112 z^9 + 25824 z^8 - 259440 z^7 + 2181816 z^6 - 15276492 z^5 + 87297210 z^4 - 392837445 z^3 + 1309458150 z^2 - 2880807930 z + 3142699560)\right) - \frac{503880(z+12)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = -\frac{9}{2}$

07.25.03.ago9.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{2679075} (1024 z^{14} + 80896 z^{13} + 2515200 z^{12} + 39687168 z^{11} + 341893632 z^{10} + 1610496000 z^9 + 3926787840 z^8 + 4330828800 z^7 + 1568436480 z^6 + 55883520 z^5 + 1587600 z^4 + 453600 z^3 + 405000 z^2 + 793800 z + 2679075) + \frac{1}{2679075} \left(128 e^z \sqrt{\pi} (8 z^{29/2} + 636 z^{27/2} + 19962 z^{25/2} + 319575 z^{23/2} + 2817000 z^{21/2} + 13784310 z^{19/2} + 35943120 z^{17/2} + 45147240 z^{15/2} + 22032000 z^{13/2} + 2386800 z^{11/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.agoa.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{2679075} (1024 z^{14} - 80896 z^{13} + 2515200 z^{12} - 39687168 z^{11} + 341893632 z^{10} - 1610496000 z^9 + 3926787840 z^8 - 4330828800 z^7 + 1568436480 z^6 - 55883520 z^5 + 1587600 z^4 - 453600 z^3 + 405000 z^2 - 793800 z + 2679075) -$$

$$\frac{1}{2679075} \left(128 e^{-z} \sqrt{\pi} (8 z^{29/2} - 636 z^{27/2} + 19962 z^{25/2} - 319575 z^{23/2} + 2817000 z^{21/2} - 13784310 z^{19/2} + 35943120 z^{17/2} - 45147240 z^{15/2} + 22032000 z^{13/2} - 2386800 z^{11/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.agob.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{297675} (-512 z^{13} - 35840 z^{12} - 971136 z^{11} - 13062912 z^{10} - 93012480 z^9 - 345657600 z^8 - 614707200 z^7 - 420975360 z^6 - 55883520 z^5 + 1587600 z^4 + 151200 z^3 + 81000 z^2 + 113400 z + 297675) -$$

$$\frac{1}{297675} \left(64 e^z \sqrt{\pi} (8 z^{27/2} + 564 z^{25/2} + 15450 z^{23/2} + 211425 z^{21/2} + 1548450 z^{19/2} + 6042060 z^{17/2} + 11774880 z^{15/2} + 9822600 z^{13/2} + 2386800 z^{11/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.agoc.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{297675} (512 z^{13} - 35840 z^{12} + 971136 z^{11} - 13062912 z^{10} + 93012480 z^9 - 345657600 z^8 + 614707200 z^7 - 420975360 z^6 + 55883520 z^5 + 1587600 z^4 - 151200 z^3 + 81000 z^2 - 113400 z + 297675) -$$

$$\frac{1}{297675} \left(64 e^{-z} \sqrt{\pi} (8 z^{27/2} - 564 z^{25/2} + 15450 z^{23/2} - 211425 z^{21/2} + 1548450 z^{19/2} - 6042060 z^{17/2} + 11774880 z^{15/2} - 9822600 z^{13/2} + 2386800 z^{11/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.agod.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{42525} (256 z^{12} + 15616 z^{11} + 360768 z^{10} + 4013568 z^9 + 22586880 z^8 + 61516800 z^7 + 68919552 z^6 + 18627840 z^5 - 1587600 z^4 + 151200 z^3 + 27000 z^2 + 22680 z + 42525) +$$

$$\frac{1}{42525} \left(32 e^z \sqrt{\pi} (8 z^{25/2} + 492 z^{23/2} + 11514 z^{21/2} + 130827 z^{19/2} + 763488 z^{17/2} + 2224620 z^{15/2} + 2876400 z^{13/2} + 1193400 z^{11/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.agoe.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{42525} (256 z^{12} - 15616 z^{11} + 360768 z^{10} - 4013568 z^9 + 22586880 z^8 - 61516800 z^7 + 68919552 z^6 - 18627840 z^5 - 1587600 z^4 - 151200 z^3 + 27000 z^2 - 22680 z + 42525) - \frac{1}{42525} (32 e^{-z} \sqrt{\pi} (8 z^{25/2} - 492 z^{23/2} + 11514 z^{21/2} - 130827 z^{19/2} + 763488 z^{17/2} - 2224620 z^{15/2} + 2876400 z^{13/2} - 1193400 z^{11/2})) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agof.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{8505} (-128 z^{11} - 6656 z^{10} - 127200 z^9 - 1119552 z^8 - 4632000 z^7 - 8027136 z^6 - 3725568 z^5 + 529200 z^4 - 151200 z^3 + 27000 z^2 + 7560 z + 8505) - \frac{1}{8505} 16 e^z \sqrt{\pi} (8 z^{23/2} + 420 z^{21/2} + 8154 z^{19/2} + 73749 z^{17/2} + 320994 z^{15/2} + 619650 z^{13/2} + 397800 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agog.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{8505} (128 z^{11} - 6656 z^{10} + 127200 z^9 - 1119552 z^8 + 4632000 z^7 - 8027136 z^6 + 3725568 z^5 + 529200 z^4 + 151200 z^3 + 27000 z^2 - 7560 z + 8505) - \frac{1}{8505} 16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 420 z^{21/2} + 8154 z^{19/2} - 73749 z^{17/2} + 320994 z^{15/2} - 619650 z^{13/2} + 397800 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agoh.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{2835} (64 z^{10} + 2752 z^9 + 41616 z^8 + 269760 z^7 + 715104 z^6 + 532224 z^5 - 105840 z^4 + 50400 z^3 - 27000 z^2 + 7560 z + 2835) + \frac{8 e^z \sqrt{\pi} (8 z^{21/2} + 348 z^{19/2} + 5370 z^{17/2} + 36159 z^{15/2} + 104040 z^{13/2} + 99450 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.agoi.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2835} (64 z^{10} - 2752 z^9 + 41616 z^8 - 269760 z^7 + 715104 z^6 - 532224 z^5 - 105840 z^4 - 50400 z^3 - 27000 z^2 - 7560 z + 2835) - \frac{8 e^{-z} \sqrt{\pi} (8 z^{21/2} - 348 z^{19/2} + 5370 z^{17/2} - 36159 z^{15/2} + 104040 z^{13/2} - 99450 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.agoj.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{2835} (-32 z^9 - 1088 z^8 - 12120 z^7 - 50544 z^6 - 59136 z^5 + 15120 z^4 - 10080 z^3 + 9000 z^2 - 7560 z + 2835) - \frac{4 e^z \sqrt{\pi} (8 z^{19/2} + 276 z^{17/2} + 3162 z^{15/2} + 14025 z^{13/2} + 19890 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.agok.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{2835} (32z^9 - 1088z^8 + 12120z^7 - 50544z^6 + 59136z^5 + 15120z^4 + 10080z^3 + 9000z^2 + 7560z + 2835) - \frac{4e^{-z}\sqrt{\pi}(8z^{19/2} - 276z^{17/2} + 3162z^{15/2} - 14025z^{13/2} + 19890z^{11/2})\operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.agol.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, 1; z\right) = -\frac{1}{5670} e^z (64z^9 + 1920z^8 + 18192z^7 + 59952z^6 + 42012z^5 - 19440z^4 + 17775z^3 - 17145z^2 + 13230z - 5670)$$

07.25.03.agom.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{-16z^8 - 400z^7 - 2868z^6 - 5376z^5 + 1680z^4 - 1440z^3 + 1800z^2 - 2520z + 2835}{2835} - \frac{2e^z\sqrt{\pi}z^{11/2}(8z^3 + 204z^2 + 1530z + 3315)\operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.agon.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{2e^{-z}\sqrt{\pi}(8z^3 - 204z^2 + 1530z - 3315)\operatorname{erfi}(\sqrt{z})z^{11/2}}{2835} + \frac{-16z^8 + 400z^7 - 2868z^6 + 5376z^5 + 1680z^4 + 1440z^3 + 1800z^2 + 2520z + 2835}{2835}$$

07.25.03.agoo.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, 2; z\right) = -\frac{e^z(64z^8 + 1344z^7 + 7440z^6 + 7872z^5 - 5220z^4 + 6660z^3 - 8865z^2 + 9450z - 5670)}{5670}$$

07.25.03.agop.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-8z^8 - 128z^7 - 414z^6 + 156z^5 - 180z^4 + 360z^3 - 936z^2 + 2385z - 4320}{945z} + \frac{e^z\sqrt{\pi}(-8z^9 - 132z^8 - 474z^7 + 3z^6 - 18z^5 + 90z^4 - 360z^3 + 1080z^2 - 2160z + 2160)\operatorname{erf}(\sqrt{z})}{945z^{3/2}}$$

07.25.03.agoq.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{8z^8 - 128z^7 + 414z^6 + 156z^5 + 180z^4 + 360z^3 + 936z^2 + 2385z + 4320}{945z} + \frac{1}{945z^{3/2}} e^{-z}\sqrt{\pi}(-8z^9 + 132z^8 - 474z^7 - 3z^6 - 18z^5 - 90z^4 - 360z^3 - 1080z^2 - 2160z - 2160)\operatorname{erfi}(\sqrt{z})$$

07.25.03.agor.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, 3; z\right) = -\frac{e^z(64z^7 + 768z^6 + 1296z^5 - 1200z^4 + 1980z^3 - 3240z^2 + 4095z - 2835)}{2835}$$

07.25.03.agos.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-4z^8 - 28z^7 + 15z^6 - 36z^5 + 150z^4 - 648z^3 + 2421z^2 - 7200z + 15120}{189z^2} + \frac{1}{378z^{5/2}} e^z \sqrt{\pi} (-8z^9 - 60z^8 + 6z^7 - 39z^6 + 216z^5 - 990z^4 + 3600z^3 - 9720z^2 + 17280z - 15120) \operatorname{erf}(\sqrt{z})$$

07.25.03.agot.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{-4z^8 + 28z^7 + 15z^6 + 36z^5 + 150z^4 + 648z^3 + 2421z^2 + 7200z + 15120}{189z^2} + \frac{1}{378z^{5/2}} e^{-z} \sqrt{\pi} (8z^9 - 60z^8 - 6z^7 - 39z^6 - 216z^5 - 990z^4 - 3600z^3 - 9720z^2 - 17280z - 15120) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agou.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, 4; z\right) = -\frac{1}{945} e^z (64z^6 + 192z^5 - 240z^4 + 480z^3 - 900z^2 + 1260z - 945)$$

07.25.03.agov.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-4z^8 + 8z^7 - 51z^6 + 330z^5 - 1884z^4 + 9126z^3 - 36360z^2 + 115920z - 302400}{54z^3} + \frac{1}{108z^{7/2}} e^z \sqrt{\pi} (-8z^9 + 12z^8 - 90z^7 + 591z^6 - 3330z^5 + 15660z^4 - 59040z^3 + 167400z^2 - 317520z + 302400) \operatorname{erf}(\sqrt{z})$$

07.25.03.agow.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{4z^8 + 8z^7 + 51z^6 + 330z^5 + 1884z^4 + 9126z^3 + 36360z^2 + 115920z + 302400}{54z^3} + \frac{1}{108z^{7/2}} (e^{-z} \sqrt{\pi} (-8z^9 - 12z^8 - 90z^7 - 591z^6 - 3330z^5 - 15660z^4 - 59040z^3 - 167400z^2 - 317520z - 302400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.agox.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, 5; z\right) = -\frac{1}{945z^4} (4e^z (64z^9 - 384z^8 + 2832z^7 - 19344z^6 + 115164z^5 - 574560z^4 + 2297295z^3 - 6891885z^2 + 13783770z - 13783770)) - \frac{58344}{z^4}$$

07.25.03.agoy.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-4z^8 + 44z^7 - 405z^6 + 3192z^5 - 21312z^4 + 118080z^3 - 526680z^2 + 1814400z - 6350400}{12z^4} + \frac{1}{24z^{9/2}} (e^z \sqrt{\pi} (-8z^9 + 84z^8 - 762z^7 + 5925z^6 - 38880z^5 + 210060z^4 - 899280z^3 + 2865240z^2 - 6048000z + 6350400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.agoz.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{-4z^8 - 44z^7 - 405z^6 - 3192z^5 - 21312z^4 - 118080z^3 - 526680z^2 - 1814400z - 6350400}{12z^4} + \frac{1}{24z^{9/2}} (e^{-z} \sqrt{\pi} (8z^9 + 84z^8 + 762z^7 + 5925z^6 + 38880z^5 + 210060z^4 + 899280z^3 + 2865240z^2 + 6048000z + 6350400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.agp0.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{9}{2}, 6; z\right) = -\frac{291720(7z+76)}{7z^5} - \frac{1}{189z^5} (4e^z(64z^9 - 960z^8 + 10512z^7 - 92928z^6 + 672732z^5 - 3938220z^4 + 18050175z^3 - 61042410z^2 + 135868590z - 149652360))$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = -\frac{7}{2}$

07.25.03.agp1.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{33075} (256z^{12} + 15872z^{11} + 374592z^{10} + 4291520z^9 + 25217280z^8 + 73704960z^7 + 94897920z^6 + 39409920z^5 + 1587600z^4 + 50400z^3 + 16200z^2 + 16200z + 33075) + \frac{1}{33075} (32e^z\sqrt{\pi} (8z^{25/2} + 500z^{23/2} + 11950z^{21/2} + 139725z^{19/2} + 849825z^{17/2} + 2642760z^{15/2} + 3846600z^{13/2} + 2129400z^{11/2} + 257400z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.agp2.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{33075} (256z^{12} - 15872z^{11} + 374592z^{10} - 4291520z^9 + 25217280z^8 - 73704960z^7 + 94897920z^6 - 39409920z^5 + 1587600z^4 - 50400z^3 + 16200z^2 - 16200z + 33075) - \frac{1}{33075} (32e^{-z}\sqrt{\pi} (8z^{25/2} - 500z^{23/2} + 11950z^{21/2} - 139725z^{19/2} + 849825z^{17/2} - 2642760z^{15/2} + 3846600z^{13/2} - 2129400z^{11/2} + 257400z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.agp3.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{4725} (-128z^{11} - 6912z^{10} - 138976z^9 - 1315200z^8 - 6094080z^7 - 12989184z^6 - 10391040z^5 - 1587600z^4 + 50400z^3 + 5400z^2 + 3240z + 4725) - \frac{1}{4725} (16e^z\sqrt{\pi} (8z^{23/2} + 436z^{21/2} + 8898z^{19/2} + 86337z^{17/2} + 418140z^{15/2} + 970200z^{13/2} + 936000z^{11/2} + 257400z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.agp4.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{4725} (128 z^{11} - 6912 z^{10} + 138976 z^9 - 1315200 z^8 + 6094080 z^7 - 12989184 z^6 + 10391040 z^5 - 1587600 z^4 - 50400 z^3 + 5400 z^2 - 3240 z + 4725) - \frac{1}{4725} (16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 436 z^{21/2} + 8898 z^{19/2} - 86337 z^{17/2} + 418140 z^{15/2} - 970200 z^{13/2} + 936000 z^{11/2} - 257400 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.agp5.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} (64 z^{10} + 2944 z^9 + 48912 z^8 + 365520 z^7 + 1240512 z^6 + 1666368 z^5 + 529200 z^4 - 50400 z^3 + 5400 z^2 + 1080 z + 945) + \frac{8}{945} e^z \sqrt{\pi} (8 z^{21/2} + 372 z^{19/2} + 6294 z^{17/2} + 48573 z^{15/2} + 175275 z^{13/2} + 269100 z^{11/2} + 128700 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agp6.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{945} (64 z^{10} - 2944 z^9 + 48912 z^8 - 365520 z^7 + 1240512 z^6 - 1666368 z^5 + 529200 z^4 + 50400 z^3 + 5400 z^2 - 1080 z + 945) - \frac{8}{945} e^{-z} \sqrt{\pi} (8 z^{21/2} - 372 z^{19/2} + 6294 z^{17/2} - 48573 z^{15/2} + 175275 z^{13/2} - 269100 z^{11/2} + 128700 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agp7.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} (-32 z^9 - 1216 z^8 - 15960 z^7 - 87568 z^6 - 189024 z^5 - 105840 z^4 + 16800 z^3 - 5400 z^2 + 1080 z + 315) - \frac{4}{315} e^z \sqrt{\pi} (8 z^{19/2} + 308 z^{17/2} + 4138 z^{15/2} + 23745 z^{13/2} + 56550 z^{11/2} + 42900 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agp8.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{315} (32 z^9 - 1216 z^8 + 15960 z^7 - 87568 z^6 + 189024 z^5 - 105840 z^4 - 16800 z^3 - 5400 z^2 - 1080 z + 315) - \frac{4}{315} e^{-z} \sqrt{\pi} (8 z^{19/2} - 308 z^{17/2} + 4138 z^{15/2} - 23745 z^{13/2} + 56550 z^{11/2} - 42900 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agp9.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{315} (16 z^8 + 480 z^7 + 4628 z^6 + 16236 z^5 + 15120 z^4 - 3360 z^3 + 1800 z^2 - 1080 z + 315) + \frac{2}{315} e^z \sqrt{\pi} (8 z^{17/2} + 244 z^{15/2} + 2430 z^{13/2} + 9165 z^{11/2} + 10725 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agpa.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} (16z^8 - 480z^7 + 4628z^6 - 16236z^5 + 15120z^4 + 3360z^3 + 1800z^2 + 1080z + 315) - \frac{2}{315} e^{-z} \sqrt{\pi} (8z^{17/2} - 244z^{15/2} + 2430z^{13/2} - 9165z^{11/2} + 10725z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agpb.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, 1; z\right) = \frac{1}{630} e^z (32z^8 + 848z^7 + 6976z^6 + 19512z^5 + 11250z^4 - 4095z^3 + 2745z^2 - 1710z + 630)$$

07.25.03.agpc.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{315} e^z \sqrt{\pi} (8z^3 + 180z^2 + 1170z + 2145) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{315} (8z^7 + 176z^6 + 1086z^5 + 1680z^4 - 480z^3 + 360z^2 - 360z + 315)$$

07.25.03.agpd.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{315} e^{-z} \sqrt{\pi} (8z^3 - 180z^2 + 1170z - 2145) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{315} (-8z^7 + 176z^6 - 1086z^5 + 1680z^4 + 480z^3 + 360z^2 + 360z + 315)$$

07.25.03.agpe.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, 2; z\right) = \frac{1}{630} e^z (32z^7 + 592z^6 + 2832z^5 + 2520z^4 - 1350z^3 + 1305z^2 - 1170z + 630)$$

07.25.03.agpf.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{4z^7 + 56z^6 + 153z^5 - 55z^4 + 60z^3 - 108z^2 + 225z - 360}{105z} + \frac{e^z \sqrt{\pi} (8z^8 + 116z^7 + 358z^6 - 3z^5 + 15z^4 - 60z^3 + 180z^2 - 360z + 360) \operatorname{erf}(\sqrt{z})}{210z^{3/2}}$$

07.25.03.agpg.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{4z^7 - 56z^6 + 153z^5 + 55z^4 + 60z^3 + 108z^2 + 225z + 360}{105z} + \frac{e^{-z} \sqrt{\pi} (-8z^8 + 116z^7 - 358z^6 - 3z^5 - 15z^4 - 60z^3 - 180z^2 - 360z - 360) \operatorname{erfi}(\sqrt{z})}{210z^{3/2}}$$

07.25.03.agph.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, 3; z\right) = \frac{1}{315} e^z (32z^6 + 336z^5 + 480z^4 - 360z^3 + 450z^2 - 495z + 315)$$

07.25.03.agpi.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{4z^7 + 24z^6 - 13z^5 + 30z^4 - 108z^3 + 378z^2 - 1080z + 2160}{42z^2} + \frac{e^z \sqrt{\pi} (8z^8 + 52z^7 - 6z^6 + 33z^5 - 150z^4 + 540z^3 - 1440z^2 + 2520z - 2160) \operatorname{erf}(\sqrt{z})}{84z^{5/2}}$$

07.25.03.agpj.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{-4z^7 + 24z^6 + 13z^5 + 30z^4 + 108z^3 + 378z^2 + 1080z + 2160}{42z^2} + \frac{e^{-z}\sqrt{\pi}(8z^8 - 52z^7 - 6z^6 - 33z^5 - 150z^4 - 540z^3 - 1440z^2 - 2520z - 2160)\operatorname{erfi}(\sqrt{z})}{84z^{5/2}}$$

07.25.03.agpk.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, 4; z\right) = \frac{1}{105} e^z (32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)$$

07.25.03.agpl.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{4z^7 - 8z^6 + 45z^5 - 249z^4 + 1188z^3 - 4680z^2 + 14760z - 37800}{12z^3} + \frac{e^z\sqrt{\pi}(8z^8 - 12z^7 + 78z^6 - 435z^5 + 2025z^4 - 7560z^3 + 21240z^2 - 39960z + 37800)\operatorname{erf}(\sqrt{z})}{24z^{7/2}}$$

07.25.03.agpm.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{4z^7 + 8z^6 + 45z^5 + 249z^4 + 1188z^3 + 4680z^2 + 14760z + 37800}{12z^3} + \frac{1}{24z^{7/2}} e^{-z}\sqrt{\pi}(-8z^8 - 12z^7 - 78z^6 - 435z^5 - 2025z^4 - 7560z^3 - 21240z^2 - 39960z - 37800)\operatorname{erfi}(\sqrt{z})$$

07.25.03.agpn.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, 5; z\right) = \frac{4e^z(32z^8 - 176z^7 + 1152z^6 - 6792z^5 + 33810z^4 - 135135z^3 + 405405z^2 - 810810z + 810810)}{105z^4} - \frac{30888}{z^4}$$

07.25.03.agpo.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3(4z^7 - 40z^6 + 327z^5 - 2236z^4 + 12600z^3 - 56880z^2 + 197400z - 705600)}{8z^4} + \frac{1}{16z^{9/2}} 3e^z\sqrt{\pi}(8z^8 - 76z^7 + 610z^6 - 4095z^5 + 22500z^4 - 97560z^3 + 313920z^2 - 667800z + 705600)\operatorname{erf}(\sqrt{z})$$

07.25.03.agpp.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{16z^{9/2}} 3e^{-z}\sqrt{\pi}(8z^8 + 76z^7 + 610z^6 + 4095z^5 + 22500z^4 + 97560z^3 + 313920z^2 + 667800z + 705600)\operatorname{erfi}(\sqrt{z}) - \frac{3(4z^7 + 40z^6 + 327z^5 + 2236z^4 + 12600z^3 + 56880z^2 + 197400z + 705600)}{8z^4}$$

07.25.03.agpq.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{7}{2}, 6; z\right) = \frac{1}{21 z^5} 4 e^z (32 z^8 - 432 z^7 + 4176 z^6 - 31848 z^5 + 193050 z^4 - 907335 z^3 + 3127410 z^2 - 7065630 z + 7876440) - \frac{154440(7z + 68)}{7 z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = -\frac{5}{2}$

07.25.03.agpr.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{675} (64 z^{10} + 3008 z^9 + 51472 z^8 + 401664 z^7 + 1462656 z^6 + 2255616 z^5 + 1093392 z^4 + 50400 z^3 + 1800 z^2 + 648 z + 675) + \frac{8}{675} e^z \sqrt{\pi} (8 z^{21/2} + 380 z^{19/2} + 6618 z^{17/2} + 53247 z^{15/2} + 205152 z^{13/2} + 354744 z^{11/2} + 226512 z^{9/2} + 30888 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agps.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{675} (64 z^{10} - 3008 z^9 + 51472 z^8 - 401664 z^7 + 1462656 z^6 - 2255616 z^5 + 1093392 z^4 - 50400 z^3 + 1800 z^2 - 648 z + 675) - \frac{8}{675} e^{-z} \sqrt{\pi} (8 z^{21/2} - 380 z^{19/2} + 6618 z^{17/2} - 53247 z^{15/2} + 205152 z^{13/2} - 354744 z^{11/2} + 226512 z^{9/2} - 30888 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agpt.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{135} (-32 z^9 - 1280 z^8 - 18072 z^7 - 111072 z^6 - 294624 z^5 - 282096 z^4 - 50400 z^3 + 1800 z^2 + 216 z + 135) - \frac{4}{135} e^z \sqrt{\pi} (8 z^{19/2} + 324 z^{17/2} + 4674 z^{15/2} + 29877 z^{13/2} + 85644 z^{11/2} + 97812 z^{9/2} + 30888 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agpu.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{135} (32 z^9 - 1280 z^8 + 18072 z^7 - 111072 z^6 + 294624 z^5 - 282096 z^4 + 50400 z^3 + 1800 z^2 - 216 z + 135) - \frac{4}{135} e^{-z} \sqrt{\pi} (8 z^{19/2} - 324 z^{17/2} + 4674 z^{15/2} - 29877 z^{13/2} + 85644 z^{11/2} - 97812 z^{9/2} + 30888 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agpv.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{45} (16 z^8 + 528 z^7 + 5876 z^6 + 26400 z^5 + 44064 z^4 + 16800 z^3 - 1800 z^2 + 216 z + 45) + \frac{2}{45} e^z \sqrt{\pi} (8 z^{17/2} + 268 z^{15/2} + 3066 z^{13/2} + 14547 z^{11/2} + 27456 z^{9/2} + 15444 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agpw.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{45} (16 z^8 - 528 z^7 + 5876 z^6 - 26400 z^5 + 44064 z^4 - 16800 z^3 - 1800 z^2 - 216 z + 45) - \frac{2}{45} e^{-z} \sqrt{\pi} (8 z^{17/2} - 268 z^{15/2} + 3066 z^{13/2} - 14547 z^{11/2} + 27456 z^{9/2} - 15444 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agpx.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{45} (-8 z^7 - 208 z^6 - 1694 z^5 - 4824 z^4 - 3360 z^3 + 600 z^2 - 216 z + 45) + \frac{1}{45} e^z \sqrt{\pi} (-8 z^{15/2} - 212 z^{13/2} - 1794 z^{11/2} - 5577 z^{9/2} - 5148 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agpy.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{45} (8 z^7 - 208 z^6 + 1694 z^5 - 4824 z^4 + 3360 z^3 + 600 z^2 + 216 z + 45) + \frac{1}{45} e^{-z} \sqrt{\pi} (-8 z^{15/2} + 212 z^{13/2} - 1794 z^{11/2} + 5577 z^{9/2} - 5148 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agpz.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, 1; z\right) = -\frac{1}{90} e^z (16 z^7 + 368 z^6 + 2568 z^5 + 5904 z^4 + 2673 z^3 - 711 z^2 + 306 z - 90)$$

07.25.03.agq0.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{45} (-4 z^6 - 76 z^5 - 393 z^4 - 480 z^3 + 120 z^2 - 72 z + 45) - \frac{1}{90} e^z \sqrt{\pi} z^{7/2} (8 z^3 + 156 z^2 + 858 z + 1287) \operatorname{erf}(\sqrt{z})$$

07.25.03.agq1.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{90} e^{-z} \sqrt{\pi} (8 z^3 - 156 z^2 + 858 z - 1287) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{45} (-4 z^6 + 76 z^5 - 393 z^4 + 480 z^3 + 120 z^2 + 72 z + 45)$$

07.25.03.agq2.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, 2; z\right) = -\frac{1}{90} e^z (16 z^6 + 256 z^5 + 1032 z^4 + 744 z^3 - 303 z^2 + 198 z - 90)$$

07.25.03.agq3.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-4 z^6 - 48 z^5 - 107 z^4 + 36 z^3 - 36 z^2 + 54 z - 72}{30 z} + \frac{e^z \sqrt{\pi} (-8 z^7 - 100 z^6 - 258 z^5 + 3 z^4 - 12 z^3 + 36 z^2 - 72 z + 72) \operatorname{erf}(\sqrt{z})}{60 z^{3/2}}$$

07.25.03.agq4.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{4 z^6 - 48 z^5 + 107 z^4 + 36 z^3 + 36 z^2 + 54 z + 72}{30 z} + \frac{e^{-z} \sqrt{\pi} (-8 z^7 + 100 z^6 - 258 z^5 - 3 z^4 - 12 z^3 - 36 z^2 - 72 z - 72) \operatorname{erfi}(\sqrt{z})}{60 z^{3/2}}$$

07.25.03.agq5.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, 3; z\right) = -\frac{1}{45} e^z (16 z^5 + 144 z^4 + 168 z^3 - 96 z^2 + 81 z - 45)$$

07.25.03.agq6.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-4 z^6 - 20 z^5 + 11 z^4 - 24 z^3 + 72 z^2 - 192 z + 360}{12 z^2} + \frac{e^z \sqrt{\pi} (-8 z^7 - 44 z^6 + 6 z^5 - 27 z^4 + 96 z^3 - 252 z^2 + 432 z - 360) \operatorname{erf}(\sqrt{z})}{24 z^{5/2}}$$

07.25.03.agq7.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-4 z^6 + 20 z^5 + 11 z^4 + 24 z^3 + 72 z^2 + 192 z + 360}{12 z^2} + \frac{e^{-z} \sqrt{\pi} (8 z^7 - 44 z^6 - 6 z^5 - 27 z^4 - 96 z^3 - 252 z^2 - 432 z - 360) \operatorname{erfi}(\sqrt{z})}{24 z^{5/2}}$$

07.25.03.agq8.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, 4; z\right) = -\frac{1}{15} e^z (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15)$$

07.25.03.agq9.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(4 z^6 - 8 z^5 + 39 z^4 - 180 z^3 + 696 z^2 - 2160 z + 5400)}{24 z^3} - \frac{7 e^z \sqrt{\pi} (8 z^7 - 12 z^6 + 66 z^5 - 303 z^4 + 1116 z^3 - 3096 z^2 + 5760 z - 5400) \operatorname{erf}(\sqrt{z})}{48 z^{7/2}}$$

07.25.03.agqa.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(4 z^6 + 8 z^5 + 39 z^4 + 180 z^3 + 696 z^2 + 2160 z + 5400)}{24 z^3} - \frac{7 e^{-z} \sqrt{\pi} (8 z^7 + 12 z^6 + 66 z^5 + 303 z^4 + 1116 z^3 + 3096 z^2 + 5760 z + 5400) \operatorname{erfi}(\sqrt{z})}{48 z^{7/2}}$$

07.25.03.agqb.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, 5; z\right) = -\frac{4 e^z (16 z^7 - 80 z^6 + 456 z^5 - 2256 z^4 + 9009 z^3 - 27027 z^2 + 54054 z - 54054)}{15 z^4} - \frac{72072}{5 z^4}$$

07.25.03.agqc.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{21(4 z^6 - 36 z^5 + 257 z^4 - 1488 z^3 + 6840 z^2 - 24000 z + 88200)}{16 z^4} - \frac{21 e^z \sqrt{\pi} (8 z^7 - 68 z^6 + 474 z^5 - 2673 z^4 + 11808 z^3 - 38520 z^2 + 82800 z - 88200) \operatorname{erf}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.agqd.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} \sqrt{\pi} (8 z^7 + 68 z^6 + 474 z^5 + 2673 z^4 + 11 808 z^3 + 38 520 z^2 + 82 800 z + 88 200) \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}} - \frac{21 (4 z^6 + 36 z^5 + 257 z^4 + 1488 z^3 + 6840 z^2 + 24 000 z + 88 200)}{16 z^4}$$

07.25.03.agqe.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{5}{2}, 6; z\right) = \frac{10 296 (7 z + 60)}{z^5} - \frac{4 e^z (16 z^7 - 192 z^6 + 1608 z^5 - 10 296 z^4 + 50 193 z^3 - 177 606 z^2 + 409 266 z - 463 320)}{3 z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = -\frac{3}{2}$

07.25.03.agqf.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{27} (16 z^8 + 544 z^7 + 6324 z^6 + 30 492 z^5 + 58 392 z^4 + 33 768 z^3 + 1800 z^2 + 72 z + 27) + \frac{2}{27} e^z \sqrt{\pi} (8 z^{17/2} + 276 z^{15/2} + 3294 z^{13/2} + 16 701 z^{11/2} + 35 541 z^{9/2} + 26 730 z^{7/2} + 4158 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agqg.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{27} (16 z^8 - 544 z^7 + 6324 z^6 - 30 492 z^5 + 58 392 z^4 - 33 768 z^3 + 1800 z^2 - 72 z + 27) - \frac{2}{27} e^{-z} \sqrt{\pi} (8 z^{17/2} - 276 z^{15/2} + 3294 z^{13/2} - 16 701 z^{11/2} + 35 541 z^{9/2} - 26 730 z^{7/2} + 4158 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agqh.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{9} (-8 z^7 - 224 z^6 - 2046 z^5 - 7164 z^4 - 8484 z^3 - 1800 z^2 + 72 z + 9) + \frac{1}{9} e^z \sqrt{\pi} (-8 z^{15/2} - 228 z^{13/2} - 2154 z^{11/2} - 8085 z^{9/2} - 11 286 z^{7/2} - 4158 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agqi.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{9} (8 z^7 - 224 z^6 + 2046 z^5 - 7164 z^4 + 8484 z^3 - 1800 z^2 - 72 z + 9) + \frac{1}{9} e^{-z} \sqrt{\pi} (-8 z^{15/2} + 228 z^{13/2} - 2154 z^{11/2} + 8085 z^{9/2} - 11 286 z^{7/2} + 4158 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agqj.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{9} (4 z^6 + 88 z^5 + 585 z^4 + 1281 z^3 + 600 z^2 - 72 z + 9) + \frac{1}{18} e^z \sqrt{\pi} (8 z^{13/2} + 180 z^{11/2} + 1254 z^{9/2} + 3069 z^{7/2} + 2079 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agqk.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{9} (4 z^6 - 88 z^5 + 585 z^4 - 1281 z^3 + 600 z^2 + 72 z + 9) + \frac{1}{18} e^{-z} \sqrt{\pi} (-8 z^{13/2} + 180 z^{11/2} - 1254 z^{9/2} + 3069 z^{7/2} - 2079 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agql.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, 1; z\right) = \frac{1}{18} e^z (8z^6 + 156z^5 + 894z^4 + 1611z^3 + 531z^2 - 90z + 18)$$

07.25.03.agqm.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{18} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36} e^z \sqrt{\pi} (8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agqn.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{18} (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36} e^{-z} \sqrt{\pi} (8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agqo.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, 2; z\right) = \frac{1}{18} e^z (8z^5 + 108z^4 + 354z^3 + 195z^2 - 54z + 18)$$

07.25.03.agqp.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{4z^5 + 40z^4 + 69z^3 - 21z^2 + 18z - 18}{12z} + \frac{e^z \sqrt{\pi} (8z^6 + 84z^5 + 174z^4 - 3z^3 + 9z^2 - 18z + 18) \operatorname{erf}(\sqrt{z})}{24z^{3/2}}$$

07.25.03.agqq.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{4z^5 - 40z^4 + 69z^3 + 21z^2 + 18z + 18}{12z} + \frac{e^{-z} \sqrt{\pi} (-8z^6 + 84z^5 - 174z^4 - 3z^3 - 9z^2 - 18z - 18) \operatorname{erfi}(\sqrt{z})}{24z^{3/2}}$$

07.25.03.agqr.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, 3; z\right) = \frac{1}{9} e^z (8z^4 + 60z^3 + 54z^2 - 21z + 9)$$

07.25.03.agqs.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(4z^5 + 16z^4 - 9z^3 + 18z^2 - 42z + 72)}{24z^2} + \frac{5e^z \sqrt{\pi} (8z^6 + 36z^5 - 6z^4 + 21z^3 - 54z^2 + 90z - 72) \operatorname{erf}(\sqrt{z})}{48z^{5/2}}$$

07.25.03.agqt.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (8z^6 - 36z^5 - 6z^4 - 21z^3 - 54z^2 - 90z - 72) \operatorname{erfi}(\sqrt{z})}{48z^{5/2}} - \frac{5(4z^5 - 16z^4 - 9z^3 - 18z^2 - 42z - 72)}{24z^2}$$

07.25.03.agqu.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, 4; z\right) = \frac{1}{3} e^z (8z^3 + 12z^2 - 6z + 3)$$

07.25.03.agqv.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(4z^5 - 8z^4 + 33z^3 - 123z^2 + 372z - 900)}{48z^3} + \frac{35e^z\sqrt{\pi}(8z^6 - 12z^5 + 54z^4 - 195z^3 + 531z^2 - 972z + 900)\operatorname{erf}(\sqrt{z})}{96z^{7/2}}$$

07.25.03.agqw.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(4z^5 + 8z^4 + 33z^3 + 123z^2 + 372z + 900)}{48z^3} - \frac{35e^{-z}\sqrt{\pi}(8z^6 + 12z^5 + 54z^4 + 195z^3 + 531z^2 + 972z + 900)\operatorname{erfi}(\sqrt{z})}{96z^{7/2}}$$

07.25.03.agqx.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, 5; z\right) = \frac{4e^z(8z^6 - 36z^5 + 174z^4 - 693z^3 + 2079z^2 - 4158z + 4158)}{3z^4} - \frac{5544}{z^4}$$

07.25.03.agqy.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{105(4z^5 - 32z^4 + 195z^3 - 924z^2 + 3300z - 12600)}{32z^4} + \frac{105e^z\sqrt{\pi}(8z^6 - 60z^5 + 354z^4 - 1611z^3 + 5364z^2 - 11700z + 12600)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.agqz.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{105e^{-z}\sqrt{\pi}(8z^6 + 60z^5 + 354z^4 + 1611z^3 + 5364z^2 + 11700z + 12600)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}} - \frac{105(4z^5 + 32z^4 + 195z^3 + 924z^2 + 3300z + 12600)}{32z^4}$$

07.25.03.agr0.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{3}{2}, 6; z\right) = \frac{20e^z(8z^6 - 84z^5 + 594z^4 - 3069z^3 + 11286z^2 - 26730z + 30888)}{3z^5} - \frac{3960(7z + 52)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = -\frac{1}{2}$

07.25.03.agr1.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{3}(4z^6 + 92z^5 + 657z^4 + 1652z^3 + 1170z^2 + 72z + 3) + \frac{1}{6}e^z\sqrt{\pi}(8z^{13/2} + 188z^{11/2} + 1402z^{9/2} + 3879z^{7/2} + 3528z^{5/2} + 630z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.agr2.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3}(4z^6 - 92z^5 + 657z^4 - 1652z^3 + 1170z^2 - 72z + 3) + \frac{1}{6}e^{-z}\sqrt{\pi}(-8z^{13/2} + 188z^{11/2} - 1402z^{9/2} + 3879z^{7/2} - 3528z^{5/2} + 630z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.agr3.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{6}(-4z^5 - 72z^4 - 371z^3 - 570z^2 - 144z + 6) + \frac{1}{12}e^z\sqrt{\pi}(-8z^{11/2} - 148z^{9/2} - 810z^{7/2} - 1449z^{5/2} - 630z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.agr4.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{6}(4z^5 - 72z^4 + 371z^3 - 570z^2 + 144z + 6) + \frac{1}{12}e^{-z}\sqrt{\pi}(-8z^{11/2} + 148z^{9/2} - 810z^{7/2} + 1449z^{5/2} - 630z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.agr5.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, 1; z\right) = -\frac{1}{6}e^z(4z^5 + 64z^4 + 287z^3 + 375z^2 + 78z - 6)$$

07.25.03.agr6.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{12}(-4z^4 - 52z^3 - 165z^2 - 96z + 12) - \frac{1}{24}e^z\sqrt{\pi}z^{3/2}(8z^3 + 108z^2 + 378z + 315)\operatorname{erf}(\sqrt{z})$$

07.25.03.agr7.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{24}e^{-z}\sqrt{\pi}(8z^3 - 108z^2 + 378z - 315)\operatorname{erfi}(\sqrt{z})z^{3/2} + \frac{1}{12}(-4z^4 + 52z^3 - 165z^2 + 96z + 12)$$

07.25.03.agr8.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, 2; z\right) = -\frac{1}{6}e^z(4z^4 + 44z^3 + 111z^2 + 42z - 6)$$

07.25.03.agr9.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{-4z^4 - 32z^3 - 39z^2 + 10z - 6}{8z} + \frac{e^z\sqrt{\pi}(-8z^5 - 68z^4 - 106z^3 + 3z^2 - 6z + 6)\operatorname{erf}(\sqrt{z})}{16z^{3/2}}$$

07.25.03.agra.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{4z^4 - 32z^3 + 39z^2 + 10z + 6}{8z} + \frac{e^{-z}\sqrt{\pi}(-8z^5 + 68z^4 - 106z^3 - 3z^2 - 6z - 6)\operatorname{erfi}(\sqrt{z})}{16z^{3/2}}$$

07.25.03.agrb.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, 3; z\right) = -\frac{1}{3}e^z(4z^3 + 24z^2 + 15z - 3)$$

07.25.03.agrc.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{5(4z^4 + 12z^3 - 7z^2 + 12z - 18)}{16z^2} - \frac{5e^z\sqrt{\pi}(8z^5 + 28z^4 - 6z^3 + 15z^2 - 24z + 18)\operatorname{erf}(\sqrt{z})}{32z^{5/2}}$$

07.25.03.agrd.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}\sqrt{\pi}(8z^5 - 28z^4 - 6z^3 - 15z^2 - 24z - 18)\operatorname{erfi}(\sqrt{z})}{32z^{5/2}} - \frac{5(4z^4 - 12z^3 - 7z^2 - 12z - 18)}{16z^2}$$

07.25.03.agre.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, 4; z\right) = -e^z(4z^2 + 4z - 1)$$

07.25.03.agrf.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{35(4z^4 - 8z^3 + 27z^2 - 78z + 180)}{32z^3} - \frac{35e^z\sqrt{\pi}(8z^5 - 12z^4 + 42z^3 - 111z^2 + 198z - 180)\operatorname{erf}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.agrg.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35(4z^4 + 8z^3 + 27z^2 + 78z + 180)}{32z^3} - \frac{35e^{-z}\sqrt{\pi}(8z^5 + 12z^4 + 42z^3 + 111z^2 + 198z + 180)\operatorname{erfi}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.agrh.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, 5; z\right) = -\frac{4e^z(4z^5 - 16z^4 + 63z^3 - 189z^2 + 378z - 378)}{z^4} - \frac{1512}{z^4}$$

07.25.03.agri.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{315(4z^4 - 28z^3 + 141z^2 - 520z + 2100)}{64z^4} - \frac{315e^z\sqrt{\pi}(8z^5 - 52z^4 + 250z^3 - 861z^2 + 1920z - 2100)\operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.agrj.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(8z^5 + 52z^4 + 250z^3 + 861z^2 + 1920z + 2100)\operatorname{erfi}(\sqrt{z})}{128z^{9/2}} - \frac{315(4z^4 + 28z^3 + 141z^2 + 520z + 2100)}{64z^4}$$

07.25.03.agrk.01

$${}_2F_2\left(\frac{3}{2}, 4; -\frac{1}{2}, 6; z\right) = -\frac{1080(7z + 44)}{z^5} - \frac{20e^z(4z^5 - 36z^4 + 207z^3 - 810z^2 + 1998z - 2376)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = \frac{1}{2}$

07.25.03.agrl.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{12}(4z^4 + 56z^3 + 205z^2 + 183z + 12) + \frac{1}{24}e^z\sqrt{\pi}(8z^{9/2} + 116z^{7/2} + 462z^{5/2} + 525z^{3/2} + 105\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.agrm.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{12}(4z^4 - 56z^3 + 205z^2 - 183z + 12) + \frac{1}{24}e^{-z}\sqrt{\pi}(-8z^{9/2} + 116z^{7/2} - 462z^{5/2} + 525z^{3/2} - 105\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.agrn.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, 1; z\right) = \frac{1}{6}e^z(2z^4 + 25z^3 + 81z^2 + 66z + 6)$$

07.25.03.agro.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{24} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} e^z \sqrt{\pi} \sqrt{z} (8z^3 + 84z^2 + 210z + 105) \operatorname{erf}(\sqrt{z})$$

07.25.03.agrp.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{24} (-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48} e^{-z} \sqrt{\pi} \sqrt{z} (8z^3 - 84z^2 + 210z - 105) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agrq.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, 2; z\right) = \frac{1}{6} e^z (2z^3 + 17z^2 + 30z + 6)$$

07.25.03.agrr.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{4z^3 + 24z^2 + 17z - 3}{16z} + \frac{e^z \sqrt{\pi} (8z^4 + 52z^3 + 54z^2 - 3z + 3) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.agrs.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{4z^3 - 24z^2 + 17z + 3}{16z} + \frac{e^{-z} \sqrt{\pi} (-8z^4 + 52z^3 - 54z^2 - 3z - 3) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.agrt.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, 3; z\right) = \frac{1}{3} e^z (2z^2 + 9z + 3)$$

07.25.03.agru.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5(4z^3 + 8z^2 - 5z + 6)}{32z^2} + \frac{5e^z \sqrt{\pi} (8z^4 + 20z^3 - 6z^2 + 9z - 6) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.agrv.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (8z^4 - 20z^3 - 6z^2 - 9z - 6) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{5(4z^3 - 8z^2 - 5z - 6)}{32z^2}$$

07.25.03.agrw.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, 4; z\right) = e^z (2z + 1)$$

07.25.03.agrx.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(4z^3 - 8z^2 + 21z - 45)}{64z^3} + \frac{35e^z \sqrt{\pi} (8z^4 - 12z^3 + 30z^2 - 51z + 45) \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.agry.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35(4z^3 + 8z^2 + 21z + 45)}{64z^3} - \frac{35e^{-z} \sqrt{\pi} (8z^4 + 12z^3 + 30z^2 + 51z + 45) \operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.agrz.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, 5; z\right) = \frac{4e^z (2z^4 - 7z^3 + 21z^2 - 42z + 42)}{z^4} - \frac{168}{z^4}$$

07.25.03.ags0.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{315(4z^3 - 24z^2 + 95z - 420)}{128z^4} + \frac{315e^z \sqrt{\pi} (8z^4 - 44z^3 + 162z^2 - 375z + 420) \operatorname{erf}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.ags1.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} \sqrt{\pi} (8z^4 + 44z^3 + 162z^2 + 375z + 420) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}} - \frac{315 (4z^3 + 24z^2 + 95z + 420)}{128 z^4}$$

07.25.03.ags2.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{1}{2}, 6; z\right) = \frac{20 e^z (2z^4 - 15z^3 + 66z^2 - 174z + 216)}{z^5} - \frac{120 (7z + 36)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = 1$

07.25.03.ags3.01

$${}_2F_2\left(\frac{3}{2}, 4; 1, 1; z\right) = \frac{1}{24} e^{z/2} (4z^4 + 46z^3 + 143z^2 + 132z + 24) I_0\left(\frac{z}{2}\right) + \frac{1}{24} e^{z/2} (4z^4 + 42z^3 + 103z^2 + 46z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ags4.01

$${}_2F_2\left(\frac{3}{2}, 4; 1, \frac{3}{2}; z\right) = \frac{1}{6} e^z (z^3 + 9z^2 + 18z + 6)$$

07.25.03.ags5.01

$${}_2F_2\left(\frac{3}{2}, 4; 1, 2; z\right) = \frac{1}{6} e^{z/2} (z^3 + 8z^2 + 15z + 6) I_0\left(\frac{z}{2}\right) + \frac{1}{12} e^{z/2} (2z^3 + 14z^2 + 17z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ags6.01

$${}_2F_2\left(\frac{3}{2}, 4; 1, \frac{5}{2}; z\right) = \frac{e^z (8z^3 + 44z^2 + 34z - 3)}{32z} + \frac{3\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.ags7.01

$${}_2F_2\left(\frac{3}{2}, 4; 1, \frac{5}{2}; -z\right) = \frac{e^{-z} (8z^3 - 44z^2 + 34z + 3)}{32z} - \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.ags8.01

$${}_2F_2\left(\frac{3}{2}, 4; 1, 3; z\right) = \frac{1}{6} e^{z/2} (2z^2 + 9z + 6) I_0\left(\frac{z}{2}\right) + \frac{1}{6} e^{z/2} z (2z + 7) I_1\left(\frac{z}{2}\right)$$

07.25.03.ags9.01

$${}_2F_2\left(\frac{3}{2}, 4; 1, \frac{7}{2}; z\right) = \frac{5 e^z (16z^3 + 32z^2 - 12z + 9)}{128 z^2} + \frac{15\sqrt{\pi} (2z - 3) \operatorname{erfi}(\sqrt{z})}{256 z^{5/2}}$$

07.25.03.agsa.01

$${}_2F_2\left(\frac{3}{2}, 4; 1, \frac{7}{2}; -z\right) = -\frac{5 e^{-z} (16z^3 - 32z^2 - 12z - 9)}{128 z^2} - \frac{15\sqrt{\pi} (2z + 3) \operatorname{erf}(\sqrt{z})}{256 z^{5/2}}$$

07.25.03.agsb.01

$${}_2F_2\left(\frac{3}{2}, 4; 1, 4; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.agsc.01

$${}_2F_2\left(\frac{3}{2}, 4; 1, \frac{9}{2}; z\right) = \frac{35 e^z (64z^3 - 96z^2 + 186z - 225)}{1024 z^3} + \frac{105\sqrt{\pi} (4z^2 - 12z + 75) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.agsd.01

$${}_2F_2\left(\frac{3}{2}, 4; 1, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (64 z^3 + 96 z^2 + 186 z + 225)}{1024 z^3} - \frac{105 \sqrt{\pi} (4 z^2 + 12 z + 75) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.agse.01

$${}_2F_2\left(\frac{3}{2}, 4; 1, 5; z\right) = \frac{4 e^{z/2} (5 z^2 - 12 z + 24) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{4 e^{z/2} (5 z^3 - 18 z^2 + 48 z - 96) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.agsf.01

$${}_2F_2\left(\frac{3}{2}, 4; 1, \frac{11}{2}; z\right) = \frac{315 e^z (128 z^3 - 644 z^2 + 2000 z - 3675)}{4096 z^4} + \frac{315 \sqrt{\pi} (8 z^3 - 36 z^2 + 450 z + 3675) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.agsg.01

$${}_2F_2\left(\frac{3}{2}, 4; 1, \frac{11}{2}; -z\right) = -\frac{315 e^{-z} (128 z^3 + 644 z^2 + 2000 z + 3675)}{4096 z^4} - \frac{315 \sqrt{\pi} (8 z^3 + 36 z^2 + 450 z - 3675) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.agsh.01

$${}_2F_2\left(\frac{3}{2}, 4; 1, 6; z\right) = \frac{48 e^{z/2} (3 z^2 - 18 z + 64) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{8 e^{z/2} (17 z^3 - 120 z^2 + 432 z - 1536) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = \frac{3}{2}$

07.25.03.agsi.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{48} (4 z^2 + 28 z + 33) + \frac{e^z \sqrt{\pi} (8 z^3 + 60 z^2 + 90 z + 15) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.agsj.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{48} (4 z^2 - 28 z + 33) + \frac{e^{-z} \sqrt{\pi} (-8 z^3 + 60 z^2 - 90 z + 15) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.agsk.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{3}{2}, 2; z\right) = \frac{1}{6} e^z (z^2 + 6 z + 6)$$

07.25.03.agsl.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{4 z^2 + 16 z + 3}{32 z} + \frac{e^z \sqrt{\pi} (8 z^3 + 36 z^2 + 18 z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.agsm.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-4 z^2 + 16 z - 3}{32 z} + \frac{e^{-z} \sqrt{\pi} (8 z^3 - 36 z^2 + 18 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.agsn.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{3}{2}, 3; z\right) = \frac{1}{3} e^z (z + 3)$$

07.25.03.agso.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(4z^2 + 4z - 3)}{64z^2} + \frac{5e^z \sqrt{\pi} (8z^3 + 12z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.agsp.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^2 - 4z - 3)}{64z^2} - \frac{5e^{-z} \sqrt{\pi} (8z^3 - 12z^2 - 6z - 3) \operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.agsq.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{3}{2}, 4; z\right) = e^z$$

07.25.03.agsr.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(4z^2 - 8z + 15)}{128z^3} + \frac{35e^z \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.agss.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (8z^3 + 12z^2 + 18z + 15) \operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35(4z^2 + 8z + 15)}{128z^3}$$

07.25.03.agst.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{3}{2}, 5; z\right) = \frac{4e^z (z^3 - 3z^2 + 6z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.agsu.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{315(4z^2 - 20z + 105)}{256z^4} + \frac{315e^z \sqrt{\pi} (8z^3 - 36z^2 + 90z - 105) \operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.agsv.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315(4z^2 + 20z + 105)}{256z^4} - \frac{315e^{-z} \sqrt{\pi} (8z^3 + 36z^2 + 90z + 105) \operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.agsw.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{3}{2}, 6; z\right) = \frac{120(z + 4)}{z^5} + \frac{20e^z (z^3 - 6z^2 + 18z - 24)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = 2$

07.25.03.agsx.01

$${}_2F_2\left(\frac{3}{2}, 4; 2, 2; z\right) = \frac{1}{12} e^{z/2} (2z^2 + 11z + 12) I_0\left(\frac{z}{2}\right) + \frac{1}{12} e^{z/2} (2z^2 + 9z + 4) I_1\left(\frac{z}{2}\right)$$

07.25.03.agsy.01

$${}_2F_2\left(\frac{3}{2}, 4; 2, \frac{5}{2}; z\right) = \frac{e^z (4z^2 + 14z + 3)}{16z} - \frac{3\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.agsz.01

$${}_2F_2\left(\frac{3}{2}, 4; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (-4z^2 + 14z - 3)}{16z} + \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.agt0.01

$${}_2F_2\left(\frac{3}{2}, 4; 2, 3; z\right) = \frac{1}{3} e^{z/2} (z+3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (z+2) I_1\left(\frac{z}{2}\right)$$

07.25.03.agt1.01

$${}_2F_2\left(\frac{3}{2}, 4; 2, \frac{7}{2}; z\right) = \frac{5 e^z (8z^2 + 8z - 3)}{64 z^2} - \frac{15 \sqrt{\pi} (2z - 1) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.agt2.01

$${}_2F_2\left(\frac{3}{2}, 4; 2, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (8z^2 - 8z - 3)}{64 z^2} + \frac{15 \sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.agt3.01

$${}_2F_2\left(\frac{3}{2}, 4; 2, 4; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.agt4.01

$${}_2F_2\left(\frac{3}{2}, 4; 2, \frac{9}{2}; z\right) = \frac{35 e^z (32z^2 - 42z + 45)}{512 z^3} - \frac{105 \sqrt{\pi} (4z^2 - 4z + 15) \operatorname{erfi}(\sqrt{z})}{1024 z^{7/2}}$$

07.25.03.agt5.01

$${}_2F_2\left(\frac{3}{2}, 4; 2, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} (4z^2 + 4z + 15) \operatorname{erf}(\sqrt{z})}{1024 z^{7/2}} - \frac{35 e^{-z} (32z^2 + 42z + 45)}{512 z^3}$$

07.25.03.agt6.01

$${}_2F_2\left(\frac{3}{2}, 4; 2, 5; z\right) = \frac{16 e^{z/2} (z-2) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{8 e^{z/2} (3z^2 - 8z + 16) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.agt7.01

$${}_2F_2\left(\frac{3}{2}, 4; 2, \frac{11}{2}; z\right) = \frac{315 e^z (68z^2 - 260z + 525)}{2048 z^4} - \frac{315 \sqrt{\pi} (8z^3 - 12z^2 + 90z + 525) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.agt8.01

$${}_2F_2\left(\frac{3}{2}, 4; 2, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (68z^2 + 260z + 525)}{2048 z^4} + \frac{315 \sqrt{\pi} (8z^3 + 12z^2 + 90z - 525) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.agt9.01

$${}_2F_2\left(\frac{3}{2}, 4; 2, 6; z\right) = \frac{8 e^{z/2} (z^3 + 16z^2 - 80z + 384) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{8 e^{z/2} (z^2 - 20z + 96) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = \frac{5}{2}$

07.25.03.agta.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{5}{2}, 3; z\right) = \frac{e^z (2z+3)}{4z} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}}$$

07.25.03.agtb.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (2z-3)}{4z} + \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{3/2}}$$

07.25.03.agtc.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{5}{2}, 4; z\right) = \frac{3e^z}{2z} - \frac{3\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.agtd.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{5}{2}, 4; -z\right) = \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3e^{-z}}{2z}$$

07.25.03.agte.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{5}{2}, 5; z\right) = \frac{36e^z(z^2 - 2z + 2)}{5z^4} - \frac{6\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{5z^{3/2}} - \frac{72}{5z^4}$$

07.25.03.agtf.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{5}{2}, 5; -z\right) = \frac{36e^{-z}(z^2 + 2z + 2)}{5z^4} + \frac{6\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{5z^{3/2}} - \frac{72}{5z^4}$$

07.25.03.agtg.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{5}{2}, 6; z\right) = -\frac{72(7z + 20)}{7z^5} + \frac{12e^z(z^3 + 18z^2 - 78z + 120)}{7z^5} - \frac{12\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7z^{3/2}}$$

07.25.03.agth.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{5}{2}, 6; -z\right) = -\frac{72(7z - 20)}{7z^5} + \frac{12e^{-z}(z^3 - 18z^2 - 78z - 120)}{7z^5} + \frac{12\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7z^{3/2}}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = 3$

07.25.03.agti.01

$${}_2F_2\left(\frac{3}{2}, 4; 3, 3; z\right) = \frac{2}{3}e^{z/2}I_0\left(\frac{z}{2}\right) + \frac{2e^{z/2}(z+2)I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.agtj.01

$${}_2F_2\left(\frac{3}{2}, 4; 3, \frac{7}{2}; z\right) = \frac{5e^z(4z+3)}{16z^2} - \frac{15\sqrt{\pi}(2z+1)\operatorname{erfi}(\sqrt{z})}{32z^{5/2}}$$

07.25.03.agtk.01

$${}_2F_2\left(\frac{3}{2}, 4; 3, \frac{7}{2}; -z\right) = \frac{15\sqrt{\pi}(2z-1)\operatorname{erf}(\sqrt{z})}{32z^{5/2}} - \frac{5e^{-z}(4z-3)}{16z^2}$$

07.25.03.agtl.01

$${}_2F_2\left(\frac{3}{2}, 4; 3, 4; z\right) = \frac{4e^{z/2}I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.agtm.01

$${}_2F_2\left(\frac{3}{2}, 4; 3, \frac{9}{2}; z\right) = \frac{35e^z(22z-15)}{128z^3} - \frac{105\sqrt{\pi}(4z^2+4z-5)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.agtn.01

$${}_2F_2\left(\frac{3}{2}, 4; 3, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (22z + 15)}{128 z^3} + \frac{105 \sqrt{\pi} (4z^2 - 4z - 5) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.agto.01

$${}_2F_2\left(\frac{3}{2}, 4; 3, 5; z\right) = \frac{16 e^{z/2} (z^2 + 4z - 8) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{16 e^{z/2} (z - 2) I_0\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.agtp.01

$${}_2F_2\left(\frac{3}{2}, 4; 3, \frac{11}{2}; z\right) = \frac{315 e^z (4z^2 + 40z - 105)}{512 z^4} - \frac{315 \sqrt{\pi} (8z^3 + 12z^2 - 30z - 105) \operatorname{erfi}(\sqrt{z})}{1024 z^{9/2}}$$

07.25.03.agtq.01

$${}_2F_2\left(\frac{3}{2}, 4; 3, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2 - 40z - 105)}{512 z^4} + \frac{315 \sqrt{\pi} (8z^3 - 12z^2 - 30z + 105) \operatorname{erf}(\sqrt{z})}{1024 z^{9/2}}$$

07.25.03.agtr.01

$${}_2F_2\left(\frac{3}{2}, 4; 3, 6; z\right) = \frac{32 e^{z/2} (z^3 + 2z^2 + 4z - 64) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{32 e^{z/2} (z^2 + z - 16) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = \frac{7}{2}$

07.25.03.agts.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{7}{2}, 4; z\right) = \frac{45 e^z}{8 z^2} - \frac{15 \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.agtt.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{7}{2}, 4; -z\right) = \frac{15 \sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45 e^{-z}}{8 z^2}$$

07.25.03.agtu.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{7}{2}, 5; z\right) = \frac{3 e^z (z^2 + 8z - 8)}{z^4} - \frac{3 \sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{2 z^{5/2}} + \frac{24}{z^4}$$

07.25.03.agtv.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{7}{2}, 5; -z\right) = \frac{3 e^{-z} (z^2 - 8z - 8)}{z^4} + \frac{3 \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{2 z^{5/2}} + \frac{24}{z^4}$$

07.25.03.agtw.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{7}{2}, 6; z\right) = \frac{120 (7z + 12)}{7 z^5} + \frac{30 e^z (z^3 + 4z^2 + 20z - 48)}{7 z^5} - \frac{15 \sqrt{\pi} (2z + 7) \operatorname{erfi}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.agtx.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{7}{2}, 6; -z\right) = \frac{120 (7z - 12)}{7 z^5} + \frac{30 e^{-z} (z^3 - 4z^2 + 20z + 48)}{7 z^5} + \frac{15 \sqrt{\pi} (2z - 7) \operatorname{erf}(\sqrt{z})}{7 z^{5/2}}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = 4$

07.25.03.agty.01

$${}_2F_2\left(\frac{3}{2}, 4; 4, 4; z\right) = \frac{4 e^{z/2} (z+4) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.agtz.01

$${}_2F_2\left(\frac{3}{2}, 4; 4, \frac{9}{2}; z\right) = \frac{105 e^z (2z+15)}{64 z^3} - \frac{105 \sqrt{\pi} (4z^2+12z+15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.agu0.01

$${}_2F_2\left(\frac{3}{2}, 4; 4, \frac{9}{2}; -z\right) = \frac{105 e^{-z} (2z-15)}{64 z^3} + \frac{105 \sqrt{\pi} (4z^2-12z+15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.agu1.01

$${}_2F_2\left(\frac{3}{2}, 4; 4, 5; z\right) = \frac{32 e^{z/2} (z^2+4z+12) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{32 e^{z/2} (z+3) I_0\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.agu2.01

$${}_2F_2\left(\frac{3}{2}, 4; 4, \frac{11}{2}; z\right) = \frac{315 e^z (4z^2+20z+105)}{256 z^4} - \frac{315 \sqrt{\pi} (8z^3+36z^2+90z+105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.agu3.01

$${}_2F_2\left(\frac{3}{2}, 4; 4, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2-20z+105)}{256 z^4} + \frac{315 \sqrt{\pi} (8z^3-36z^2+90z-105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.agu4.01

$${}_2F_2\left(\frac{3}{2}, 4; 4, 6; z\right) = \frac{32 e^{z/2} (2z^3+11z^2+36z+96) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{32 e^{z/2} (2z^2+9z+24) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = \frac{9}{2}$

07.25.03.agu5.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{9}{2}, 5; z\right) = \frac{21 e^z (2z^2+11z+64)}{8 z^4} - \frac{21 \sqrt{\pi} (4z^2+20z+75) \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}} - \frac{168}{z^4}$$

07.25.03.agu6.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{9}{2}, 5; -z\right) = \frac{21 e^{-z} (2z^2-11z+64)}{8 z^4} + \frac{21 \sqrt{\pi} (4z^2-20z+75) \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{168}{z^4}$$

07.25.03.agu7.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{9}{2}, 6; z\right) = -\frac{120 (7z+4)}{z^5} + \frac{15 e^z (2z^3+15z^2+96z+128)}{4 z^5} - \frac{15 \sqrt{\pi} (4z^2+28z+175) \operatorname{erfi}(\sqrt{z})}{8 z^{7/2}}$$

07.25.03.agu8.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{9}{2}, 6; -z\right) = -\frac{120 (7z-4)}{z^5} + \frac{15 e^{-z} (2z^3-15z^2+96z-128)}{4 z^5} + \frac{15 \sqrt{\pi} (4z^2-28z+175) \operatorname{erf}(\sqrt{z})}{8 z^{7/2}}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = 5$

07.25.03.agu9.01

$${}_2F_2\left(\frac{3}{2}, 4; 5, 5; z\right) = -\frac{128 e^{z/2} (2z^3 + 11z^2 + 60z - 120) I_0\left(\frac{z}{2}\right)}{25z^4} + \frac{128 e^{z/2} (2z^2 + 13z + 74) I_1\left(\frac{z}{2}\right)}{25z^3} - \frac{3072}{5z^4}$$

07.25.03.agua.01

$${}_2F_2\left(\frac{3}{2}, 4; 5, \frac{11}{2}; z\right) = \frac{63 e^z (4z^2 + 32z + 243)}{32z^4} - \frac{63 \sqrt{\pi} (8z^3 + 60z^2 + 450z - 525) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}} - \frac{1512}{z^4}$$

07.25.03.agub.01

$${}_2F_2\left(\frac{3}{2}, 4; 5, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (4z^2 - 32z + 243)}{32z^4} + \frac{63 \sqrt{\pi} (8z^3 - 60z^2 + 450z + 525) \operatorname{erf}(\sqrt{z})}{64z^{9/2}} - \frac{1512}{z^4}$$

07.25.03.aguc.01

$${}_2F_2\left(\frac{3}{2}, 4; 5, 6; z\right) = -\frac{512 e^{z/2} (z^3 + 8z^2 + 75z - 210) I_0\left(\frac{z}{2}\right)}{35z^4} + \frac{256 e^{z/2} (2z^3 + 18z^2 + 169z - 240) I_1\left(\frac{z}{2}\right)}{35z^4} - \frac{3072}{z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = \frac{11}{2}$

07.25.03.agud.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{11}{2}, 6; z\right) = -\frac{1080(7z - 4)}{z^5} + \frac{45 e^z (4z^3 + 44z^2 + 549z - 1536)}{16z^5} - \frac{45 \sqrt{\pi} (8z^3 + 84z^2 + 1050z - 3675) \operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.ague.01

$${}_2F_2\left(\frac{3}{2}, 4; \frac{11}{2}, 6; -z\right) = -\frac{1080(7z + 4)}{z^5} + \frac{45 e^{-z} (4z^3 - 44z^2 + 549z + 1536)}{16z^5} + \frac{45 \sqrt{\pi} (8z^3 - 84z^2 + 1050z + 3675) \operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 4$, $b_1 = 6$

07.25.03.aguf.01

$${}_2F_2\left(\frac{3}{2}, 4; 6, 6; z\right) = -\frac{15360(7z - 8)}{7z^5} - \frac{256 e^{z/2} (4z^4 + 46z^3 + 727z^2 - 4620z + 3360) I_0\left(\frac{z}{2}\right)}{49z^5} + \frac{256 e^{z/2} (4z^3 + 50z^2 + 779z - 3812) I_1\left(\frac{z}{2}\right)}{49z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.agug.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{11\,345\,882\,625} (e^z (131\,072\,z^{17} + 14\,221\,312\,z^{16} + 631\,242\,752\,z^{15} + 14\,946\,140\,160\,z^{14} + 206\,524\,416\,000\,z^{13} + 1\,713\,791\,385\,600\,z^{12} + 8\,480\,024\,985\,600\,z^{11} + 24\,060\,705\,177\,600\,z^{10} + 36\,111\,083\,904\,000\,z^9 + 24\,561\,061\,056\,000\,z^8 + 5\,408\,305\,459\,200\,z^7 + 120\,200\,371\,200\,z^6 + 2\,400\,451\,200\,z^5 + 666\,792\,000\,z^4 - 952\,560\,000\,z^3 + 4\,000\,752\,000\,z^2 - 8\,814\,156\,750\,z + 11\,345\,882\,625))$$

07.25.03.aguh.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{1\,031\,443\,875} (e^z (65\,536\,z^{16} + 6\,422\,528\,z^{15} + 254\,607\,360\,z^{14} + 5\,308\,907\,520\,z^{13} + 63\,445\,401\,600\,z^{12} + 444\,500\,582\,400\,z^{11} + 1\,795\,259\,289\,600\,z^{10} + 3\,951\,685\,785\,600\,z^9 + 4\,224\,641\,702\,400\,z^8 + 1\,718\,926\,272\,000\,z^7 + 125\,763\,321\,600\,z^6 - 2\,781\,475\,200\,z^5 - 190\,512\,000\,z^4 + 47\,628\,000\,z^3 - 357\,210\,000\,z^2 + 750\,141\,000\,z - 1\,031\,443\,875))$$

07.25.03.agui.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{114\,604\,875} (e^z (32\,768\,z^{15} + 2\,867\,200\,z^{14} + 100\,065\,280\,z^{13} + 1\,803\,898\,880\,z^{12} + 18\,193\,459\,200\,z^{11} + 103\,992\,806\,400\,z^{10} + 325\,669\,209\,600\,z^9 + 510\,331\,449\,600\,z^8 + 326\,160\,777\,600\,z^7 + 44\,061\,192\,000\,z^6 - 3\,210\,127\,200\,z^5 + 214\,326\,000\,z^4 + 11\,907\,000\,z^3 + 41\,674\,500\,z^2 - 74\,418\,750\,z + 114\,604\,875))$$

07.25.03.aguj.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{16\,372\,125} (e^z (16\,384\,z^{14} + 1\,261\,568\,z^{13} + 38\,047\,744\,z^{12} + 578\,543\,616\,z^{11} + 4\,757\,652\,480\,z^{10} + 21\,071\,662\,080\,z^9 + 46\,940\,463\,360\,z^8 + 43\,933\,639\,680\,z^7 + 9\,312\,649\,920\,z^6 - 1\,251\,028\,800\,z^5 + 271\,479\,600\,z^4 - 28\,576\,800\,z^3 - 8\,334\,900\,z^2 + 8\,334\,900\,z - 16\,372\,125))$$

07.25.03.aguk.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{3\,274\,425} (e^z (8192\,z^{13} + 544\,768\,z^{12} + 13\,848\,576\,z^{11} + 171\,558\,912\,z^{10} + 1\,092\,134\,400\,z^9 + 3\,436\,957\,440\,z^8 + 4\,566\,965\,760\,z^7 + 1\,415\,473\,920\,z^6 - 297\,833\,760\,z^5 + 119\,070\,000\,z^4 - 42\,865\,200\,z^3 + 7\,144\,200\,z^2 - 595\,350\,z + 3\,274\,425))$$

07.25.03.agul.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{1\,091\,475} (e^z (4096\,z^{12} + 229\,376\,z^{11} + 4\,745\,216\,z^{10} + 45\,445\,120\,z^9 + 205\,228\,800\,z^8 + 384\,491\,520\,z^7 + 168\,779\,520\,z^6 - 51\,770\,880\,z^5 + 32\,281\,200\,z^4 - 21\,168\,000\,z^3 + 10\,319\,400\,z^2 - 1\,587\,600\,z - 1\,091\,475))$$

07.25.03.agum.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{1091475} (e^z (2048 z^{11} + 93184 z^{10} + 1487360 z^9 + 10080000 z^8 + 27014400 z^7 + 16652160 z^6 - 7197120 z^5 + 6501600 z^4 - 6615000 z^3 + 5953500 z^2 - 3770550 z + 1091475))$$

07.25.03.agun.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{1091475} \left(e^{z/2} (1024 z^{11} + 41984 z^{10} + 591104 z^9 + 3420928 z^8 + 7381248 z^7 + 2970240 z^6 - 1002960 z^5 + 882000 z^4 - 1102500 z^3 + 1543500 z^2 - 1885275 z + 1091475) I_0\left(\frac{z}{2}\right) + \frac{1}{1091475} \left(e^{z/2} (1024 z^{11} + 40960 z^{10} + 550656 z^9 + 2889728 z^8 + 4729088 z^7 - 749952 z^6 + 478800 z^5 - 504000 z^4 + 661500 z^3 - 882000 z^2 + 870975 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.aguo.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{1091475} (e^z (1024 z^{10} + 35840 z^9 + 403200 z^8 + 1612800 z^7 + 1411200 z^6 - 846720 z^5 + 1058400 z^4 - 1512000 z^3 + 1984500 z^2 - 1984500 z + 1091475))$$

07.25.03.agup.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{1091475} \left(e^{z/2} (1024 z^{10} + 31232 z^9 + 293632 z^8 + 903168 z^7 + 430080 z^6 - 171360 z^5 + 176400 z^4 - 252000 z^3 + 409500 z^2 - 708750 z + 1091475) I_0\left(\frac{z}{2}\right) + \frac{1}{1091475} \left(e^{z/2} (1024 z^{10} + 30208 z^9 + 263936 z^8 + 653312 z^7 - 118272 z^6 + 90720 z^5 - 126000 z^4 + 252000 z^3 - 598500 z^2 + 1338750 z - 2027025) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.aguq.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{363825} e^z (512 z^9 + 12544 z^8 + 82432 z^7 + 105728 z^6 - 87360 z^5 + 144480 z^4 - 265440 z^3 + 438480 z^2 - 542430 z + 363825)$$

07.25.03.agur.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{1091475} 8 e^{z/2} (256 z^9 + 5120 z^8 + 24576 z^7 + 13440 z^6 - 5040 z^5 + 25200 z^3 - 126000 z^2 + 382725 z - 623700) I_0\left(\frac{z}{2}\right) + \frac{1}{1091475 z} \left(4 e^{z/2} (512 z^{10} + 9728 z^9 + 39680 z^8 - 8448 z^7 + 10080 z^6 - 30240 z^5 + 126000 z^4 - 504000 z^3 + 1660050 z^2 - 4054050 z + 6081075) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.agus.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (256 z^8 + 3584 z^7 + 7168 z^6 - 8064 z^5 + 16800 z^4 - 36960 z^3 + 70560 z^2 - 98280 z + 72765)}{72765}$$

07.25.03.agut.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{363825 z} \left(4 e^{z/2} (512 z^9 + 4864 z^8 + 2560 z^7 + 2240 z^6 - 23520 z^5 + 142800 z^4 - 688800 z^3 + 2608200 z^2 - 7172550 z + 11486475) I_0\left(\frac{z}{2}\right)\right) + \frac{1}{363825 z^2} \left(4 e^{z/2} (512 z^{10} + 4352 z^9 - 1536 z^8 + 5440 z^7 - 32480 z^6 + 186480 z^5 - 924000 z^4 + 3775800 z^3 - 12162150 z^2 + 29054025 z - 45945900) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.aguu.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13230 z + 10395)}{10395}$$

07.25.03.aguv.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{363825 z^2} \left(32 e^{z/2} (256 z^9 - 256 z^8 + 3520 z^7 - 28224 z^6 + 195888 z^5 - 1170960 z^4 + 5874120 z^3 - 23700600 z^2 + 71216145 z - 130945815) I_0\left(\frac{z}{2}\right)\right) + \frac{1}{363825 z^3} \left(32 e^{z/2} (256 z^{10} - 512 z^9 + 4160 z^8 - 32896 z^7 + 232176 z^6 - 1428672 z^5 + 7488600 z^4 - 32432400 z^3 + 111216105 z^2 - 284864580 z + 523783260) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.aguw.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{1155 z^4} \left(e^z (64 z^{10} - 448 z^9 + 3920 z^8 - 32480 z^7 + 241500 z^6 - 1565340 z^5 + 8602755 z^4 - 38707200 z^3 + 135475200 z^2 - 338688000 z + 508032000)\right) - \frac{2419200 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.agux.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{1155 z^4} \left(e^{-z} (64 z^{10} + 448 z^9 + 3920 z^8 + 32480 z^7 + 241500 z^6 + 1565340 z^5 + 8602755 z^4 + 38707200 z^3 + \right. \\
 & \left. 135475200 z^2 + 338688000 z + 508032000) \right) - \frac{2419200 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aguy.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{11}{2}, 6; z\right) = \\
 & \frac{1}{72765 z^3} \left(32 e^{z/2} (256 z^9 - 2944 z^8 + 31296 z^7 - 291648 z^6 + 2354352 z^5 - 16193520 z^4 + 92557080 z^3 - \right. \\
 & \left. 422702280 z^2 + 1440403965 z - 3142699560) I_0\left(\frac{z}{2}\right) + \right. \\
 & \left. \frac{1}{72765 z^4} \left(32 e^{z/2} (256 z^{10} - 3200 z^9 + 34624 z^8 - 328128 z^7 + 2703792 z^6 - 19109328 z^5 + 113513400 z^4 - \right. \right. \\
 & \left. \left. 550269720 z^3 + 2083646565 z^2 - 5761615860 z + 12570798240) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.aguz.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \\
 & \frac{1}{93767625} \left(e^z (32768 z^{15} + 2899968 z^{14} + 102653952 z^{13} + 1884549120 z^{12} + 19473131520 z^{11} + 115148067840 z^{10} + \right. \\
 & \left. 379463339520 z^9 + 647721204480 z^8 + 493017840000 z^7 + 119936376000 z^6 + \right. \\
 & \left. 2913472800 z^5 + 65998800 z^4 + 3742200 z^3 + 33169500 z^2 - 62511750 z + 93767625) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agv0.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \\
 & -\frac{1}{10418625} \left(e^z (16384 z^{14} + 1294336 z^{13} + 40325120 z^{12} + 639836160 z^{11} + 5577630720 z^{10} + 26897064960 z^9 + \right. \\
 & \left. 68694877440 z^8 + 83428531200 z^7 + 37937592000 z^6 + 3061800000 z^5 - \right. \\
 & \left. 74163600 z^4 - 4082400 z^3 - 4252500 z^2 + 5953500 z - 10418625) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agv1.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{1488375} \\
 & \left(e^z (8192 z^{13} + 569344 z^{12} + 15323136 z^{11} + 204994560 z^{10} + 1456350720 z^9 + 5438603520 z^8 + 9873722880 z^7 + \right. \\
 & \left. 7156235520 z^6 + 1078207200 z^5 - 86410800 z^4 + 6123600 z^3 + 1020600 z^2 - 595350 z + 1488375) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agv2.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \\
 & -\frac{1}{297675} \left(e^z (4096 z^{12} + 245760 z^{11} + 5572608 z^{10} + 60702720 z^9 + 333607680 z^8 + 884459520 z^7 + \right. \\
 & \left. 956793600 z^6 + 229340160 z^5 - 34246800 z^4 + 8164800 z^3 - 1020600 z^2 - 297675) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agv3.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{99225} \left(e^z (2048 z^{11} + 103424 z^{10} + 1907200 z^9 + 16047360 z^8 + 62496000 z^7 + 98501760 z^6 + 35138880 z^5 - \right. \\
 & \left. 8316000 z^4 + 3666600 z^3 - 1417500 z^2 + 198450 z + 99225) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agv4.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \\
 & -\frac{1}{99225} \left(e^z (1024 z^{10} + 41984 z^9 + 596736 z^8 + 3548160 z^7 + 8184960 z^6 + 4233600 z^5 - 1481760 z^4 + \right. \\
 & \left. 1028160 z^3 - 737100 z^2 + 396900 z - 99225) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agv5.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, 1; z\right) = \\
 & \frac{1}{99225} \left(e^{z/2} (-512 z^{10} - 18944 z^9 - 238336 z^8 - 1220352 z^7 - 2317920 z^6 - 859680 z^5 + 262800 z^4 - 201600 z^3 + \right. \\
 & \left. 204750 z^2 - 198450 z + 99225) I_0\left(\frac{z}{2}\right) - \frac{1}{99225} \left(2 e^{z/2} (256 z^{10} + 9216 z^9 + 110080 z^8 + \right. \right. \\
 & \left. \left. 504448 z^7 + 701136 z^6 - 103680 z^5 + 59760 z^4 - 54000 z^3 + 55125 z^2 - 44100 z) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agv6.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{99225} \\
 & \left(e^z (512 z^9 + 16128 z^8 + 161280 z^7 + 564480 z^6 + 423360 z^5 - 211680 z^4 + 211680 z^3 - 226800 z^2 + 198450 z - 99225) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agv7.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{99225} \\
 & \left(e^{z/2} (-512 z^9 - 14080 z^8 - 118272 z^7 - 323520 z^6 - 145440 z^5 + 54000 z^4 - 50400 z^3 + 63000 z^2 - 85050 z + 99225) \right. \\
 & \left. I_0\left(\frac{z}{2}\right) + \frac{1}{99225} \left(e^{z/2} (-512 z^9 - 13568 z^8 - 104960 z^7 - 224832 z^6 + \right. \right. \\
 & \left. \left. 38880 z^5 - 28080 z^4 + 36000 z^3 - 63000 z^2 + 116550 z - 155925) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

07.25.03.agv8.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{33075} e^z (256 z^8 + 5632 z^7 + 32768 z^6 + 36480 z^5 - 25440 z^4 + 34080 z^3 - 47520 z^2 + 52920 z - 33075)$$

07.25.03.agv9.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, 3; z\right) = \frac{4 e^{z/2} (256 z^8 + 4608 z^7 + 19776 z^6 + 10368 z^5 - 3600 z^4 + 12600 z^2 - 45360 z + 76545) I_0\left(\frac{z}{2}\right) - \frac{1}{99225}}{99225} - \frac{1}{99225 z} \left(4 e^{z/2} (256 z^9 + 4352 z^8 + 15552 z^7 - 3264 z^6 + 3888 z^5 - 10800 z^4 + 37800 z^3 - 118440 z^2 + 280665 z - 405405) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.agva.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{e^z (128 z^7 + 1600 z^6 + 2784 z^5 - 2640 z^4 + 4440 z^3 - 7380 z^2 + 9450 z - 6615)}{6615}$$

07.25.03.agvb.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, 4; z\right) = -\frac{1}{33075 z} 4 e^{z/2} (256 z^8 + 2176 z^7 + 1088 z^6 + 960 z^5 - 8400 z^4 + 42000 z^3 - 158760 z^2 + 430920 z - 675675) I_0\left(\frac{z}{2}\right) - \frac{1}{33075 z^2} \left(4 e^{z/2} (256 z^9 + 1920 z^8 - 704 z^7 + 2368 z^6 - 12240 z^5 + 58800 z^4 - 236040 z^3 + 748440 z^2 - 1756755 z + 2702700) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.agvc.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)$$

07.25.03.agvd.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, 5; z\right) = -\frac{1}{33075 z^2} \left(32 e^{z/2} (128 z^8 - 128 z^7 + 1536 z^6 - 10752 z^5 + 63840 z^4 - 317520 z^3 + 1270080 z^2 - 3783780 z + 6891885) I_0\left(\frac{z}{2}\right) - \frac{1}{33075 z^3} \left(128 e^{z/2} (32 z^9 - 64 z^8 + 464 z^7 - 3216 z^6 + 19572 z^5 - 101640 z^4 + 436590 z^3 - 1486485 z^2 + 3783780 z - 6891885) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.agve.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{105 z^4} \left(e^z (-32 z^9 + 208 z^8 - 1648 z^7 + 12120 z^6 - 78330 z^5 + 430185 z^4 - 1935360 z^3 + 6773760 z^2 - 16934400 z + 25401600) - \frac{120960 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}\right)$$

$$\begin{aligned}
 & \text{07.25.03.agvf.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{105 z^4} \left(e^{-z} (32 z^9 + 208 z^8 + 1648 z^7 + 12\,120 z^6 + 78\,330 z^5 + 430\,185 z^4 + 1\,935\,360 z^3 + 6\,773\,760 z^2 + \right. \\
 & \left. 16\,934\,400 z + 25\,401\,600) \right) - \frac{120\,960 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agvg.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{9}{2}, 6; z\right) = \\
 & -\frac{1}{6615 z^3} \left(32 e^{z/2} (128 z^8 - 1344 z^7 + 12\,864 z^6 - 106\,032 z^5 + 740\,880 z^4 - 4\,286\,520 z^3 + 19\,768\,320 z^2 - \right. \\
 & \left. 67\,934\,295 z + 149\,652\,360) I_0\left(\frac{z}{2}\right) \right) - \\
 & \frac{1}{6615 z^4} \left(32 e^{z/2} (128 z^9 - 1472 z^8 + 14\,400 z^7 - 121\,296 z^6 + 871\,248 z^5 - 5\,239\,080 z^4 + \right. \\
 & \left. 25\,637\,040 z^3 - 97\,779\,825 z^2 + 271\,737\,180 z - 598\,609\,440) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.agvh.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{1\,157\,625} \\
 & \left(e^z (8192 z^{13} + 577\,536 z^{12} + 15\,831\,040 z^{11} + 217\,016\,320 z^{10} + 1\,595\,225\,600 z^9 + 6\,270\,017\,280 z^8 + 12\,402\,378\,240 z^7 + \right. \\
 & \left. 10\,708\,320\,000 z^6 + 2\,906\,316\,000 z^5 + 77\,742\,000 z^4 + 1\,789\,200 z^3 + 642\,600 z^2 - 519\,750 z + 1\,157\,625) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agvi.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \\
 & -\frac{1}{165\,375} \left(e^z (4096 z^{12} + 253\,952 z^{11} + 6\,010\,880 z^{10} + 69\,437\,440 z^9 + 415\,706\,880 z^8 + 1\,264\,327\,680 z^7 + \right. \\
 & \left. 1\,776\,042\,240 z^6 + 914\,054\,400 z^5 + 82\,076\,400 z^4 - 2\,167\,200 z^3 - 189\,000 z^2 + 37\,800 z - 165\,375) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agvj.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{33\,075} \left(e^z (2048 z^{11} + 109\,568 z^{10} + 2\,183\,680 z^9 + 20\,524\,800 z^8 + 94\,967\,040 z^7 + 204\,812\,160 z^6 + 171\,178\,560 z^5 + \right. \\
 & \left. 29\,080\,800 z^4 - 2\,583\,000 z^3 + 207\,900 z^2 + 9450 z + 33\,075) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agvk.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = & \\
 & -\frac{1}{11025} \left(e^z (1024 z^{10} + 46080 z^9 + 746240 z^8 + 5411840 z^7 + 17718400 z^6 + 22673280 z^5 + 6232800 z^4 - \right. \\
 & \left. 1041600 z^3 + 270900 z^2 - 31500 z - 11025) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agvl.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = & \frac{1}{11025} \\
 & \left(e^z (512 z^9 + 18688 z^8 + 232960 z^7 + 1191680 z^6 + 2304960 z^5 + 964320 z^4 - 258720 z^3 + 126000 z^2 - 53550 z + 11025) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agvm.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, 1; z\right) = & \\
 & \frac{1}{11025} \left(e^{z/2} (256 z^9 + 8448 z^8 + 93632 z^7 + 416960 z^6 + 683440 z^5 + 227760 z^4 - 60600 z^3 + 37800 z^2 - 26775 z + 11025) \right. \\
 & \left. I_0\left(\frac{z}{2}\right) + \right. \\
 & \left. \frac{1}{11025} e^{z/2} (256 z^9 + 8192 z^8 + 85568 z^7 + 335232 z^6 + 383600 z^5 - 51520 z^4 + 25560 z^3 - 18000 z^2 + 11025 z) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agvn.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = & \\
 & \frac{1}{11025} e^z (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agvo.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, 2; z\right) = & \\
 & \frac{1}{11025} e^{z/2} (256 z^8 + 6272 z^7 + 46400 z^6 + 111040 z^5 + 46320 z^4 - 15600 z^3 + 12600 z^2 - 12600 z + 11025) I_0\left(\frac{z}{2}\right) + \\
 & \frac{1}{11025} e^{z/2} (256 z^8 + 6016 z^7 + 40512 z^6 + 73280 z^5 - 11920 z^4 + 7920 z^3 - 9000 z^2 + 12600 z - 14175) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agvp.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = & \frac{e^z (128 z^7 + 2496 z^6 + 12640 z^5 + 11920 z^4 - 6760 z^3 + 6900 z^2 - 6510 z + 3675)}{3675}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agvq.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, 3; z\right) = & \frac{32 e^{z/2} (16 z^7 + 256 z^6 + 968 z^5 + 480 z^4 - 150 z^3 + 315 z - 630) I_0\left(\frac{z}{2}\right)}{11025} + \\
 & \frac{1}{11025 z} 4 e^{z/2} (128 z^8 + 1920 z^7 + 5888 z^6 - 1216 z^5 + 1440 z^4 - 3600 z^3 + 10080 z^2 - 22680 z + 31185) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.agvr.01} \\
 {}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = & \frac{1}{735} e^z (64 z^6 + 704 z^5 + 1040 z^4 - 800 z^3 + 1020 z^2 - 1140 z + 735)
 \end{aligned}$$

07.25.03.agvs.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (128 z^7 + 960 z^6 + 448 z^5 + 400 z^4 - 2800 z^3 + 10920 z^2 - 29400 z + 45045) I_0\left(\frac{z}{2}\right)}{3675 z} + \frac{1}{3675 z^2} 4 e^{z/2} (128 z^8 + 832 z^7 - 320 z^6 + 1008 z^5 - 4400 z^4 + 17080 z^3 - 52920 z^2 + 121275 z - 180180) I_1\left(\frac{z}{2}\right)$$

07.25.03.agvt.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{105} e^z (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105)$$

07.25.03.agvu.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (64 z^7 - 64 z^6 + 656 z^5 - 3920 z^4 + 19320 z^3 - 76440 z^2 + 225225 z - 405405) I_0\left(\frac{z}{2}\right)}{3675 z^2} + \frac{1}{3675 z^3} 32 e^{z/2} (64 z^8 - 128 z^7 + 816 z^6 - 4864 z^5 + 24920 z^4 - 105840 z^3 + 356895 z^2 - 900900 z + 1621620) I_1\left(\frac{z}{2}\right)$$

07.25.03.agvv.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (16 z^8 - 96 z^7 + 680 z^6 - 4360 z^5 + 23905 z^4 - 107520 z^3 + 376320 z^2 - 940800 z + 1411200)}{35 z^4} - \frac{60480 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.agvw.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{35 z^4} 3 e^{-z} (16 z^8 + 96 z^7 + 680 z^6 + 4360 z^5 + 23905 z^4 + 107520 z^3 + 376320 z^2 + 940800 z + 1411200) - \frac{60480 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.agvx.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{735 z^3} 32 e^{z/2} (64 z^7 - 608 z^6 + 5168 z^5 - 36960 z^4 + 217560 z^3 - 1016730 z^2 + 3532815 z - 7876440) I_0\left(\frac{z}{2}\right) + \frac{1}{735 z^4} (32 e^{z/2} (64 z^8 - 672 z^7 + 5872 z^6 - 43232 z^5 + 264600 z^4 - 1311750 z^3 + 5051475 z^2 - 14131260 z + 31505760) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.agvy.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{23625} (e^z (2048 z^{11} + 111616 z^{10} + 2279936 z^9 + 22179072 z^8 + 108047616 z^7 + 253997184 z^6 + 253028160 z^5 + 77484960 z^4 + 2295720 z^3 + 64260 z^2 + 1890 z + 23625))$$

07.25.03.agvz.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{4725} (e^z (1024 z^{10} + 48\,128 z^9 + 827\,136 z^8 + 6\,540\,288 z^7 + 24\,592\,512 z^6 + 40\,924\,800 z^5 + 24\,202\,080 z^4 + 2\,439\,360 z^3 - 71\,820 z^2 - 3\,780 z - 4725))$$

07.25.03.agw0.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{1575} e^z (512 z^9 + 20\,224 z^8 + 282\,112 z^7 + 1\,718\,528 z^6 + 4\,562\,880 z^5 + 4\,492\,320 z^4 + 870\,240 z^3 - 85\,680 z^2 + 6\,930 z + 1575)$$

07.25.03.agw1.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{1575} e^z (256 z^8 + 8192 z^7 + 87\,808 z^6 + 376\,320 z^5 + 588\,000 z^4 + 188\,160 z^3 - 35\,280 z^2 + 10\,080 z - 1575)$$

07.25.03.agw2.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{1575} e^{z/2} (-128 z^8 - 3712 z^7 - 35\,584 z^6 - 134\,720 z^5 - 185\,376 z^4 - 53\,328 z^3 + 11\,520 z^2 - 5040 z + 1575) I_0\left(\frac{z}{2}\right) - \frac{8 e^{z/2} (16 z^8 + 448 z^7 + 4008 z^6 + 13\,040 z^5 + 11\,738 z^4 - 1368 z^3 + 531 z^2 - 225 z) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.agw3.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{e^z (128 z^7 + 3136 z^6 + 23\,520 z^5 + 58\,800 z^4 + 29\,400 z^3 - 8820 z^2 + 4410 z - 1575)}{1575}$$

07.25.03.agw4.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, 2; z\right) = \frac{e^{z/2} (-128 z^7 - 2752 z^6 - 17\,600 z^5 - 36\,048 z^4 - 13\,584 z^3 + 3960 z^2 - 2520 z + 1575) I_0\left(\frac{z}{2}\right)}{1575} + \frac{e^{z/2} (-128 z^7 - 2624 z^6 - 15\,040 z^5 - 22\,192 z^4 + 3312 z^3 - 1944 z^2 + 1800 z - 1575) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.agw5.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{1}{525} e^z (64 z^6 + 1088 z^5 + 4688 z^4 + 3616 z^3 - 1572 z^2 + 1092 z - 525)$$

07.25.03.agw6.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, 3; z\right) = -\frac{4 e^{z/2} (64 z^6 + 896 z^5 + 2928 z^4 + 1344 z^3 - 360 z^2 + 315) I_0\left(\frac{z}{2}\right)}{1575} - \frac{4 e^{z/2} (64 z^7 + 832 z^6 + 2128 z^5 - 432 z^4 + 504 z^3 - 1080 z^2 + 2205 z - 2835) I_1\left(\frac{z}{2}\right)}{1575 z}$$

07.25.03.agw7.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{1}{105} e^z (32 z^5 + 304 z^4 + 368 z^3 - 216 z^2 + 186 z - 105)$$

07.25.03.agw8.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, 4; z\right) = -\frac{4 e^{z/2} (64 z^6 + 416 z^5 + 176 z^4 + 160 z^3 - 840 z^2 + 2310 z - 3465) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (64 z^7 + 352 z^6 - 144 z^5 + 416 z^4 - 1480 z^3 + 4410 z^2 - 9765 z + 13860) I_1\left(\frac{z}{2}\right)}{525 z^2}$$

07.25.03.agw9.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{1}{15} e^z (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15)$$

07.25.03.agwa.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, 5; z\right) = -\frac{32 e^{z/2} (32 z^6 - 32 z^5 + 272 z^4 - 1344 z^3 + 5250 z^2 - 15246 z + 27027) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (16 z^7 - 32 z^6 + 176 z^5 - 880 z^4 + 3675 z^3 - 12222 z^2 + 30492 z - 54054) I_1\left(\frac{z}{2}\right)}{525 z^3}$$

07.25.03.agwb.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (8 z^7 - 44 z^6 + 274 z^5 - 1495 z^4 + 6720 z^3 - 23520 z^2 + 58800 z - 88200)}{5 z^4} - \frac{26460 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.agwc.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (8 z^7 + 44 z^6 + 274 z^5 + 1495 z^4 + 6720 z^3 + 23520 z^2 + 58800 z + 88200)}{5 z^4} - \frac{26460 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.agwd.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{5}{2}, 6; z\right) = -\frac{32 e^{z/2} (32 z^6 - 272 z^5 + 2016 z^4 - 12180 z^3 + 58014 z^2 - 204633 z + 463320) I_0\left(\frac{z}{2}\right) - \frac{1}{105 z^4} 32 e^{z/2} (32 z^7 - 304 z^6 + 2336 z^5 - 14700 z^4 + 74286 z^3 - 289971 z^2 + 818532 z - 1853280) I_1\left(\frac{z}{2}\right)}{105 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.agwe.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} e^z (512 z^9 + 20736 z^8 + 299520 z^7 + 1922304 z^6 + 5568192 z^5 + 6541920 z^4 + 2288160 z^3 + 75600 z^2 + 1890 z + 945)$$

07.25.03.agwf.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{315} e^z (256 z^8 + 8704 z^7 + 101888 z^6 + 502656 z^5 + 1024800 z^4 + 708960 z^3 + 80640 z^2 - 2520 z - 315)$$

07.25.03.agwg.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{315} e^z (128 z^7 + 3520 z^6 + 31584 z^5 + 109200 z^4 + 130200 z^3 + 28980 z^2 - 3150 z + 315)$$

07.25.03.agwh.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (64 z^7 + 1600 z^6 + 12944 z^5 + 40368 z^4 + 44760 z^3 + 10368 z^2 - 1575 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (64 z^7 + 1536 z^6 + 11440 z^5 + 29632 z^4 + 19512 z^3 - 1800 z^2 + 423 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.agwi.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315)$$

07.25.03.agwj.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (64 z^6 + 1184 z^5 + 6384 z^4 + 10848 z^3 + 3528 z^2 - 810 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (64 z^6 + 1120 z^5 + 5296 z^4 + 6048 z^3 - 792 z^2 + 378 z - 225) I_1\left(\frac{z}{2}\right)$$

07.25.03.agwk.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{105} e^z (32 z^5 + 464 z^4 + 1648 z^3 + 984 z^2 - 294 z + 105)$$

07.25.03.agwl.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, 3; z\right) = \frac{8}{315} e^{z/2} (16 z^5 + 192 z^4 + 528 z^3 + 216 z^2 - 45 z) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (32 z^6 + 352 z^5 + 720 z^4 - 144 z^3 + 162 z^2 - 270 z + 315) I_1\left(\frac{z}{2}\right)}{315 z}$$

07.25.03.agwm.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{21} e^z (16 z^4 + 128 z^3 + 120 z^2 - 48 z + 21)$$

07.25.03.agwn.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 + 176 z^4 + 64 z^3 + 60 z^2 - 210 z + 315) I_0\left(\frac{z}{2}\right)}{105 z} + \frac{4 e^{z/2} (32 z^6 + 144 z^5 - 64 z^4 + 164 z^3 - 450 z^2 + 945 z - 1260) I_1\left(\frac{z}{2}\right)}{105 z^2}$$

07.25.03.agwo.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{3} e^z (8 z^3 + 12 z^2 - 6 z + 3)$$

07.25.03.agwp.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^5 - 16 z^4 + 108 z^3 - 420 z^2 + 1197 z - 2079) I_0\left(\frac{z}{2}\right)}{105 z^2} + \frac{32 e^{z/2} (16 z^6 - 32 z^5 + 148 z^4 - 600 z^3 + 1953 z^2 - 4788 z + 8316) I_1\left(\frac{z}{2}\right)}{105 z^3}$$

07.25.03.agwq.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (4 z^6 - 20 z^5 + 107 z^4 - 480 z^3 + 1680 z^2 - 4200 z + 6300)}{z^4} - \frac{9450 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.agwr.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (4 z^6 + 20 z^5 + 107 z^4 + 480 z^3 + 1680 z^2 + 4200 z + 6300)}{z^4} - \frac{9450 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.agws.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 120 z^4 + 756 z^3 - 3708 z^2 + 13365 z - 30888) I_0\left(\frac{z}{2}\right)}{21 z^3} + \frac{32 e^{z/2} (16 z^6 - 136 z^5 + 900 z^4 - 4692 z^3 + 18693 z^2 - 53460 z + 123552) I_1\left(\frac{z}{2}\right)}{21 z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.agwt.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} e^z (128 z^7 + 3648 z^6 + 34528 z^5 + 130480 z^4 + 186200 z^3 + 75180 z^2 + 2730 z + 105)$$

07.25.03.agwu.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{105} e^z (64 z^6 + 1472 z^5 + 10640 z^4 + 28000 z^3 + 23100 z^2 + 2940 z - 105)$$

07.25.03.agwv.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (-32 z^6 - 672 z^5 - 4432 z^4 - 10864 z^3 - 9074 z^2 - 1470 z + 105) I_0\left(\frac{z}{2}\right) - \frac{2}{105} e^{z/2} (16 z^6 + 320 z^5 + 1904 z^4 + 3672 z^3 + 1547 z^2 - 88 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.agww.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{105} e^z (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105)$$

07.25.03.agwx.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (-32 z^5 - 496 z^4 - 2176 z^3 - 2924 z^2 - 750 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (-32 z^5 - 464 z^4 - 1728 z^3 - 1396 z^2 + 146 z - 45) I_1\left(\frac{z}{2}\right)$$

07.25.03.agwy.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{1}{35} e^z (16 z^4 + 192 z^3 + 536 z^2 + 224 z - 35)$$

07.25.03.agwz.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, 3; z\right) = -\frac{4}{105} e^{z/2} (16z^4 + 160z^3 + 356z^2 + 120z - 15) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (16z^5 + 144z^4 + 220z^3 - 44z^2 + 45z - 45) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.agx0.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{1}{7} e^z (8z^3 + 52z^2 + 34z - 7)$$

07.25.03.agx1.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, 4; z\right) = -\frac{4 e^{z/2} (16z^4 + 72z^3 + 20z^2 + 20z - 35) I_0\left(\frac{z}{2}\right)}{35z} - \frac{4 e^{z/2} (16z^5 + 56z^4 - 28z^3 + 60z^2 - 115z + 140) I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.agx2.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -e^z (4z^2 + 4z - 1)$$

07.25.03.agx3.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, 5; z\right) = -\frac{32 e^{z/2} (8z^4 - 8z^3 + 40z^2 - 112z + 189) I_0\left(\frac{z}{2}\right)}{35z^2} - \frac{128 e^{z/2} (2z^5 - 4z^4 + 15z^3 - 47z^2 + 112z - 189) I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.agx4.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{9 e^z (2z^5 - 9z^4 + 40z^3 - 140z^2 + 350z - 525)}{z^4} - \frac{4725 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.agx5.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (2z^5 + 9z^4 + 40z^3 + 140z^2 + 350z + 525)}{z^4} - \frac{4725 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.agx6.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; -\frac{1}{2}, 6; z\right) = -\frac{32 e^{z/2} (8z^4 - 52z^3 + 268z^2 - 999z + 2376) I_0\left(\frac{z}{2}\right)}{7z^3} - \frac{32 e^{z/2} (8z^5 - 60z^4 + 332z^3 - 1369z^2 + 3996z - 9504) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{1}{2}$

07.25.03.agx7.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{105} e^z (32z^5 + 592z^4 + 3248z^3 + 5880z^2 + 2730z + 105)$$

07.25.03.agx8.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{105} e^{z/2} (16z^5 + 272z^4 + 1388z^3 + 2476z^2 + 1365z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (16z^5 + 256z^4 + 1140z^3 + 1448z^2 + 281z) I_1\left(\frac{z}{2}\right)$$

07.25.03.agx9.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (16z^4 + 224z^3 + 840z^2 + 840z + 105)$$

07.25.03.agxa.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (16z^4 + 200z^3 + 676z^2 + 660z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (16z^4 + 184z^3 + 500z^2 + 236z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.agxb.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{35} e^z (8z^3 + 76z^2 + 154z + 35)$$

07.25.03.agxc.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, 3; z\right) = \frac{16}{105} e^{z/2} (2z^3 + 16z^2 + 27z + 6) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8z^4 + 56z^3 + 56z^2 - 12z + 9) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.agxd.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (4z^2 + 20z + 7)$$

07.25.03.agxe.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 + 28z^2 + 4z + 5) I_0\left(\frac{z}{2}\right)}{35z} + \frac{4 e^{z/2} (8z^4 + 20z^3 - 12z^2 + 19z - 20) I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.agxf.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = e^z (2z + 1)$$

07.25.03.agxg.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^3 - 4z^2 + 13z - 21) I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{32 e^{z/2} (4z^4 - 8z^3 + 23z^2 - 52z + 84) I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.agxh.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (2z^4 - 8z^3 + 28z^2 - 70z + 105)}{2z^4} - \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.agxi.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (2z^4 + 8z^3 + 28z^2 + 70z + 105)}{2z^4} - \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.agxj.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 - 22z^2 + 87z - 216) I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{32 e^{z/2} (4z^4 - 26z^3 + 115z^2 - 348z + 864) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 1$

07.25.03.agxk.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{105} e^{z/2} (8z^4 + 104z^3 + 376z^2 + 420z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} (2z^4 + 24z^3 + 71z^2 + 44z) I_1\left(\frac{z}{2}\right)$$

07.25.03.agxl.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{35} e^{z/2} (4z^3 + 36z^2 + 77z + 35) I_0\left(\frac{z}{2}\right) + \frac{1}{35} e^{z/2} (4z^3 + 32z^2 + 47z) I_1\left(\frac{z}{2}\right)$$

07.25.03.agxm.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{7} e^{z/2} (2z^2 + 10z + 7) I_0\left(\frac{z}{2}\right) + \frac{2}{7} e^{z/2} (z^2 + 4z) I_1\left(\frac{z}{2}\right)$$

07.25.03.agxn.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; 1, \frac{9}{2}; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{3}{2}$

07.25.03.agxo.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{105} e^z (8z^3 + 84z^2 + 210z + 105)$$

07.25.03.agxp.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{105} e^{z/2} (8z^3 + 76z^2 + 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 + 68z^2 + 116z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.agxq.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{35} e^z (4z^2 + 28z + 35)$$

07.25.03.agxr.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 + 24z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4z^3 + 20z^2 + 9z - 3) I_1\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.agxs.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (2z + 7)$$

07.25.03.agxt.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (4z^2 + 10z - 1) I_0\left(\frac{z}{2}\right)}{35 z} + \frac{4 e^{z/2} (4z^3 + 6z^2 - 5z + 4) I_1\left(\frac{z}{2}\right)}{35 z^2}$$

07.25.03.agxu.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = e^z$$

07.25.03.agxv.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 - 2z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} + \frac{64 e^{z/2} (z^3 - 2z^2 + 4z - 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.agxw.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (8z^3 - 28z^2 + 70z - 105)}{16 z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.agxx.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9 e^{-z} (8z^3 + 28z^2 + 70z + 105)}{16 z^4}$$

07.25.03.agxy.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^2 - 9z + 24) I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{32 e^{z/2} (2z^3 - 11z^2 + 36z - 96) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 2$

07.25.03.agxz.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{35} e^{z/2} (4z^2 + 26z + 35) I_0\left(\frac{z}{2}\right) + \frac{1}{35} e^{z/2} (4z^2 + 22z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.agy0.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, z\right) = \frac{1}{7} e^{z/2} (2z + 7) I_0\left(\frac{z}{2}\right) + \frac{1}{7} e^{z/2} (2z + 5) I_1\left(\frac{z}{2}\right)$$

07.25.03.agy1.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; 2, \frac{9}{2}; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{5}{2}$

07.25.03.agy2.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3 e^z (2z^2 + 9z + 4)}{35z} - \frac{6 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{35 z^{3/2}}$$

07.25.03.agy3.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, -z\right) = \frac{6 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{35 z^{3/2}} - \frac{3 e^{-z} (2z^2 - 9z + 4)}{35z}$$

07.25.03.agy4.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, 3; z\right) = \frac{8}{35} e^{z/2} (z + 4) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2z^2 + 6z + 3) I_1\left(\frac{z}{2}\right)}{35z}$$

07.25.03.agy5.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, z\right) = \frac{3 e^z (z + 2)}{7z} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.agy6.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, -z\right) = \frac{3 e^{-z} (z - 2)}{7z} + \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7 z^{3/2}}$$

07.25.03.agy7.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (6z + 1) I_0\left(\frac{z}{2}\right)}{35z} + \frac{4 e^{z/2} (6z^2 + 11z - 4) I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.agy8.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{9}{2}, z\right) = \frac{3 e^z}{2z} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.agy9.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3e^{-z}}{2z}$$

07.25.03.agya.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, 5; z\right) = \frac{32e^{z/2}(7z-9)I_0\left(\frac{z}{2}\right)}{175z^2} + \frac{32e^{z/2}(23z^2-28z+36)I_1\left(\frac{z}{2}\right)}{175z^3}$$

07.25.03.agyb.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{63e^z(4z^2-10z+15)}{32z^4} - \frac{9\sqrt{\pi}(8z^3+105)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.agyc.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63e^{-z}(4z^2+10z+15)}{32z^4} + \frac{9\sqrt{\pi}(8z^3-105)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.agyd.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{5}{2}, 6; z\right) = \frac{32e^{z/2}(16z^3+109z^2-468z+1440)I_1\left(\frac{z}{2}\right)}{245z^4} - \frac{32e^{z/2}(16z^2-117z+360)I_0\left(\frac{z}{2}\right)}{245z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 3$

07.25.03.agye.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; 3, \frac{7}{2}; z\right) = \frac{4}{7}e^{z/2}I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2}(z+3)I_1\left(\frac{z}{2}\right)}{7z}$$

07.25.03.agyf.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; 3, \frac{9}{2}; z\right) = \frac{4e^{z/2}I_1\left(\frac{z}{2}\right)}{z}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{7}{2}$

07.25.03.agyg.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{15e^z(2z+3)}{28z^2} - \frac{15\sqrt{\pi}(4z+3)\operatorname{erfi}(\sqrt{z})}{56z^{5/2}}$$

07.25.03.agyh.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15\sqrt{\pi}(4z-3)\operatorname{erf}(\sqrt{z})}{56z^{5/2}} - \frac{15e^{-z}(2z-3)}{28z^2}$$

07.25.03.agyi.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, 4; z\right) = \frac{4e^{z/2}(7z+4)I_1\left(\frac{z}{2}\right)}{7z^2} - \frac{4e^{z/2}I_0\left(\frac{z}{2}\right)}{7z}$$

07.25.03.agyj.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{45e^z}{8z^2} - \frac{15\sqrt{\pi}(2z+3)\operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.agyk.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{15\sqrt{\pi}(2z-3)\operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45e^{-z}}{8z^2}$$

07.25.03.agyl.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, 5; z\right) = \frac{128e^{z/2}(z^2+4z-3)I_1\left(\frac{z}{2}\right)}{35z^3} - \frac{32e^{z/2}(4z-3)I_0\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.agym.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{45e^z(8z^2+70z-105)}{128z^4} - \frac{45\sqrt{\pi}(16z^3+36z^2-105)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.agyn.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{45e^{-z}(8z^2-70z-105)}{128z^4} + \frac{45\sqrt{\pi}(16z^3-36z^2+105)\operatorname{erf}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.agyo.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{7}{2}, 6; z\right) = \frac{32e^{z/2}(8z^3+23z^2+60z-288)I_1\left(\frac{z}{2}\right)}{49z^4} - \frac{32e^{z/2}(8z^2+15z-72)I_0\left(\frac{z}{2}\right)}{49z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 4$

07.25.03.agyp.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; 4, \frac{9}{2}; z\right) = \frac{4e^{z/2}(z+4)I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4e^{z/2}I_0\left(\frac{z}{2}\right)}{z}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{9}{2}$

07.25.03.agyq.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{105e^z(2z+15)}{64z^3} - \frac{105\sqrt{\pi}(4z^2+12z+15)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.agyr.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{105e^{-z}(2z-15)}{64z^3} + \frac{105\sqrt{\pi}(4z^2-12z+15)\operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.agys.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{9}{2}, 5; z\right) = \frac{32e^{z/2}(z^2+4z+12)I_1\left(\frac{z}{2}\right)}{5z^3} - \frac{32e^{z/2}(z+3)I_0\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.agyt.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{315e^z(4z^2+20z+105)}{256z^4} - \frac{315\sqrt{\pi}(8z^3+36z^2+90z+105)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.agyu.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}(4z^2-20z+105)}{256z^4} + \frac{315\sqrt{\pi}(8z^3-36z^2+90z-105)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.agyv.01

$${}_2F_2\left(\frac{3}{2}, \frac{9}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^3 + 11z^2 + 36z + 96) I_1\left(\frac{z}{2}\right)}{7z^4} - \frac{32 e^{z/2} (2z^2 + 9z + 24) I_0\left(\frac{z}{2}\right)}{7z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = -\frac{11}{2}$

07.25.03.agyw.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{324168075} (1024z^{17} + 121344z^{16} + 5928704z^{15} + 155945088z^{14} + 2420143488z^{13} + 22853940480z^{12} + 130759292160z^{11} + 437513674752z^{10} + 793478085120z^9 + 672289148160z^8 + 191226873600z^7 + 5448643200z^6 + 125737920z^5 + 28576800z^4 + 19845000z^3 + 29767500z^2 + 80372250z + 324168075) + \frac{1}{324168075} (64e^z \sqrt{\pi} (16z^{35/2} + 1904z^{33/2} + 93576z^{31/2} + 2482032z^{29/2} + 38989041z^{27/2} + 374889249z^{25/2} + 2205410130z^{23/2} + 7716976470z^{21/2} + 15109559640z^{19/2} + 14779550520z^{17/2} + 5777488080z^{15/2} + 512794800z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.agyx.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{324168075} (-1024z^{17} + 121344z^{16} - 5928704z^{15} + 155945088z^{14} - 2420143488z^{13} + 22853940480z^{12} - 130759292160z^{11} + 437513674752z^{10} - 793478085120z^9 + 672289148160z^8 - 191226873600z^7 + 5448643200z^6 - 125737920z^5 + 28576800z^4 - 19845000z^3 + 29767500z^2 - 80372250z + 324168075) + \frac{1}{324168075} (64e^{-z} \sqrt{\pi} (16z^{35/2} - 1904z^{33/2} + 93576z^{31/2} - 2482032z^{29/2} + 38989041z^{27/2} - 374889249z^{25/2} + 2205410130z^{23/2} - 7716976470z^{21/2} + 15109559640z^{19/2} - 14779550520z^{17/2} + 5777488080z^{15/2} - 512794800z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.agyy.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{29469825} (-512z^{16} - 55040z^{15} - 2414208z^{14} - 56271552z^{13} - 761040000z^{12} - 6125051520z^{11} - 28949534208z^{10} - 76333962240z^9 - 100763792640z^8 - 52802668800z^7 - 5448643200z^6 + 125737920z^5 + 9525600z^4 + 3969000z^3 + 4252500z^2 + 8930250z + 29469825) - \frac{1}{29469825} (32e^z \sqrt{\pi} (16z^{33/2} + 1728z^{31/2} + 76296z^{29/2} + 1795368z^{27/2} + 24626097z^{25/2} + 202506570z^{23/2} + 990370710z^{21/2} + 2765122920z^{19/2} + 4049067960z^{17/2} + 2632346640z^{15/2} + 512794800z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.agyz.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{29469825} \left(-512 z^{16} + 55040 z^{15} - 2414208 z^{14} + 56271552 z^{13} - 761040000 z^{12} + 6125051520 z^{11} - \right.$$

$$28949534208 z^{10} + 76333962240 z^9 - 100763792640 z^8 + 52802668800 z^7 - 5448643200 z^6 -$$

$$125737920 z^5 + 9525600 z^4 - 3969000 z^3 + 4252500 z^2 - 8930250 z + 29469825 \left. \right) +$$

$$\frac{1}{29469825} \left(32 e^{-z} \sqrt{\pi} \left(16 z^{33/2} - 1728 z^{31/2} + 76296 z^{29/2} - 1795368 z^{27/2} + 24626097 z^{25/2} - 202506570 z^{23/2} + \right. \right.$$

$$990370710 z^{21/2} - 2765122920 z^{19/2} + 4049067960 z^{17/2} - 2632346640 z^{15/2} + 512794800 z^{13/2} \left. \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agz0.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{3274425} \left(256 z^{15} + 24704 z^{14} + 960192 z^{13} + 19506080 z^{12} + 224921760 z^{11} + 1496734848 z^{10} + 5586364800 z^9 + \right.$$

$$10774333440 z^8 + 8919590400 z^7 + 1816214400 z^6 - 125737920 z^5 +$$

$$9525600 z^4 + 1323000 z^3 + 850500 z^2 + 1275750 z + 3274425 \left. \right) +$$

$$\frac{1}{3274425} \left(16 e^z \sqrt{\pi} \left(16 z^{31/2} + 1552 z^{29/2} + 60776 z^{27/2} + 1248384 z^{25/2} + 14639025 z^{23/2} + 100033395 z^{21/2} + \right. \right.$$

$$390170340 z^{19/2} + 814271220 z^{17/2} + 791983080 z^{15/2} + 256397400 z^{13/2} \left. \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.agz1.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{3274425} \left(-256 z^{15} + 24704 z^{14} - 960192 z^{13} + 19506080 z^{12} - 224921760 z^{11} + 1496734848 z^{10} - \right.$$

$$5586364800 z^9 + 10774333440 z^8 - 8919590400 z^7 + 1816214400 z^6 +$$

$$125737920 z^5 + 9525600 z^4 - 1323000 z^3 + 850500 z^2 - 1275750 z + 3274425 \left. \right) +$$

$$\frac{1}{3274425} \left(16 e^{-z} \sqrt{\pi} \left(16 z^{31/2} - 1552 z^{29/2} + 60776 z^{27/2} - 1248384 z^{25/2} + 14639025 z^{23/2} - 100033395 z^{21/2} + \right. \right.$$

$$390170340 z^{19/2} - 814271220 z^{17/2} + 791983080 z^{15/2} - 256397400 z^{13/2} \left. \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agz2.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{467775} \left(-128 z^{14} - 10944 z^{13} - 370720 z^{12} - 6421872 z^{11} - 61258176 z^{10} - 322355520 z^9 - 883140480 z^8 - \right.$$

$$1078876800 z^7 - 363242880 z^6 + 41912640 z^5 - 9525600 z^4 + 1323000 z^3 + 283500 z^2 + 255150 z + 467775 \left. \right) -$$

$$\frac{1}{467775} \left(8 e^z \sqrt{\pi} \left(16 z^{29/2} + 1376 z^{27/2} + 47016 z^{25/2} + 825240 z^{23/2} + 8037105 z^{21/2} + \right. \right.$$

$$43773660 z^{19/2} + 127528380 z^{17/2} + 176629320 z^{15/2} + 85465800 z^{13/2} \left. \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.agz3.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{467775} \left(-128 z^{14} + 10944 z^{13} - 370720 z^{12} + 6421872 z^{11} - 61258176 z^{10} + 322355520 z^9 - 883140480 z^8 + \right.$$

$$\left. 1078876800 z^7 - 363242880 z^6 - 41912640 z^5 - 9525600 z^4 - 1323000 z^3 + 283500 z^2 - 255150 z + 467775 \right) +$$

$$\frac{1}{467775} \left(8 e^{-z} \sqrt{\pi} \left(16 z^{29/2} - 1376 z^{27/2} + 47016 z^{25/2} - 825240 z^{23/2} + 8037105 z^{21/2} - \right. \right.$$

$$\left. \left. 43773660 z^{19/2} + 127528380 z^{17/2} - 176629320 z^{15/2} + 85465800 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.agz4.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{93555} \left(64 z^{13} + 4768 z^{12} + 137712 z^{11} + 1973832 z^{10} + 14901624 z^9 + 57701808 z^8 + 100882800 z^7 + \right.$$

$$\left. 51891840 z^6 - 8382528 z^5 + 3175200 z^4 - 1323000 z^3 + 283500 z^2 + 85050 z + 93555 \right) +$$

$$\frac{1}{93555} \left(4 e^z \sqrt{\pi} \left(16 z^{27/2} + 1200 z^{25/2} + 35016 z^{23/2} + 510096 z^{21/2} + 3956337 z^{19/2} + \right. \right.$$

$$\left. \left. 16079301 z^{17/2} + 31052574 z^{15/2} + 21366450 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.agz5.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{93555} \left(-64 z^{13} + 4768 z^{12} - 137712 z^{11} + 1973832 z^{10} - 14901624 z^9 + 57701808 z^8 - 100882800 z^7 + \right.$$

$$\left. 51891840 z^6 + 8382528 z^5 + 3175200 z^4 + 1323000 z^3 + 283500 z^2 - 85050 z + 93555 \right) +$$

$$\frac{1}{93555} \left(4 e^{-z} \sqrt{\pi} \left(16 z^{27/2} - 1200 z^{25/2} + 35016 z^{23/2} - 510096 z^{21/2} + 3956337 z^{19/2} - \right. \right.$$

$$\left. \left. 16079301 z^{17/2} + 31052574 z^{15/2} - 21366450 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.agz6.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{31185} \left(-32 z^{12} - 2032 z^{11} - 48552 z^{10} - 550924 z^9 - 3065304 z^8 - 7617240 z^7 - 5765760 z^6 + 1197504 z^5 - \right.$$

$$\left. 635040 z^4 + 441000 z^3 - 283500 z^2 + 85050 z + 31185 \right) - \frac{1}{31185}$$

$$\left(2 e^z \sqrt{\pi} \left(16 z^{25/2} + 1024 z^{23/2} + 24776 z^{21/2} + 287112 z^{19/2} + 1659441 z^{17/2} + 4463214 z^{15/2} + 4273290 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.agz7.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{31185} (-32z^{12} + 2032z^{11} - 48552z^{10} + 550924z^9 - 3065304z^8 + 7617240z^7 - 5765760z^6 - 1197504z^5 - 635040z^4 - 441000z^3 - 283500z^2 - 85050z + 31185) + \frac{1}{31185} (2e^{-z}\sqrt{\pi} (16z^{25/2} - 1024z^{23/2} + 24776z^{21/2} - 287112z^{19/2} + 1659441z^{17/2} - 4463214z^{15/2} + 4273290z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.agz8.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{31185} (16z^{11} + 840z^{10} + 15884z^9 + 132906z^8 + 476370z^7 + 524160z^6 - 133056z^5 + 90720z^4 - 88200z^3 + 94500z^2 - 85050z + 31185) + \frac{e^z\sqrt{\pi} (16z^{23/2} + 848z^{21/2} + 16296z^{19/2} + 140448z^{17/2} + 535857z^{15/2} + 712215z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.agz9.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{31185} (-16z^{11} + 840z^{10} - 15884z^9 + 132906z^8 - 476370z^7 + 524160z^6 + 133056z^5 + 90720z^4 + 88200z^3 + 94500z^2 + 85050z + 31185) + \frac{1}{31185} e^{-z}\sqrt{\pi} (16z^{23/2} - 848z^{21/2} + 16296z^{19/2} - 140448z^{17/2} + 535857z^{15/2} - 712215z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.agza.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, 1; z\right) = \frac{1}{249480} (e^z (128z^{11} + 6080z^{10} + 101728z^9 + 726288z^8 + 2063256z^7 + 1358868z^6 - 634158z^5 + 627795z^4 - 715680z^3 + 748440z^2 - 589680z + 249480))$$

07.25.03.agzb.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z\sqrt{\pi} (16z^4 + 672z^3 + 9576z^2 + 54264z + 101745) \operatorname{erf}(\sqrt{z}) z^{13/2}}{62370} + \frac{1}{31185} (8z^{10} + 332z^9 + 4626z^8 + 24975z^7 + 40320z^6 - 12096z^5 + 10080z^4 - 12600z^3 + 18900z^2 - 28350z + 31185)$$

07.25.03.agzc.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{31185} (8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185) - \frac{e^{-z}\sqrt{\pi} z^{13/2} (16z^4 - 672z^3 + 9576z^2 - 54264z + 101745) \operatorname{erfi}(\sqrt{z})}{62370}$$

07.25.03.agzd.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, 2; z\right) = \frac{1}{249480} (e^z (128 z^{10} + 4672 z^9 + 55008 z^8 + 231216 z^7 + 213528 z^6 - 135828 z^5 + 180810 z^4 - 276255 z^3 + 389340 z^2 - 419580 z + 249480))$$

07.25.03.agze.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{20790z} (8z^{10} + 244z^9 + 2190z^8 + 5377z^7 - 1869z^6 + 1890z^5 - 3150z^4 + 7200z^3 - 18900z^2 + 45990z - 75600) + \frac{1}{41580z^{3/2}} (e^z \sqrt{\pi} (16z^{11} + 496z^{10} + 4616z^9 + 12720z^8 - 15z^7 + 105z^6 - 630z^5 + 3150z^4 - 12600z^3 + 37800z^2 - 75600z + 75600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.agzf.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{20790z} (-8z^{10} + 244z^9 - 2190z^8 + 5377z^7 + 1869z^6 + 1890z^5 + 3150z^4 + 7200z^3 + 18900z^2 + 45990z + 75600) + \frac{1}{41580z^{3/2}} (e^{-z} \sqrt{\pi} (16z^{11} - 496z^{10} + 4616z^9 - 12720z^8 - 15z^7 - 105z^6 - 630z^5 - 3150z^4 - 12600z^3 - 37800z^2 - 75600z - 75600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.agzg.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, 3; z\right) = \frac{1}{124740} e^z (128 z^9 + 3264 z^8 + 22368 z^7 + 29904 z^6 - 25704 z^5 + 44100 z^4 - 83790 z^3 + 142695 z^2 - 181440 z + 124740)$$

07.25.03.agzh.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{8316z^2} (8z^{10} + 156z^9 + 634z^8 - 261z^7 + 378z^6 - 1134z^5 + 4680z^4 - 19440z^3 + 69804z^2 - 196560z + 362880) + \frac{1}{16632z^{5/2}} (e^z \sqrt{\pi} (16z^{11} + 320z^{10} + 1416z^9 - 24z^8 + 177z^7 - 1134z^6 + 6174z^5 - 27720z^4 + 98280z^3 - 257040z^2 + 438480z - 362880) \operatorname{erf}(\sqrt{z}))$$

07.25.03.agzi.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{8316 z^2} (8 z^{10} - 156 z^9 + 634 z^8 + 261 z^7 + 378 z^6 + 1134 z^5 + 4680 z^4 + 19440 z^3 + 69804 z^2 + 196560 z + 362880) + \frac{1}{16632 z^{5/2}} \left(e^{-z} \sqrt{\pi} (-16 z^{11} + 320 z^{10} - 1416 z^9 - 24 z^8 - 177 z^7 - 1134 z^6 - 6174 z^5 - 27720 z^4 - 98280 z^3 - 257040 z^2 - 438480 z - 362880) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.agzj.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, 4; z\right) = \frac{e^z (128 z^8 + 1856 z^7 + 3808 z^6 - 4368 z^5 + 9240 z^4 - 20580 z^3 + 39690 z^2 - 55755 z + 41580)}{41580}$$

07.25.03.agzk.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{2376 z^3} (8 z^{10} + 68 z^9 - 42 z^8 + 141 z^7 - 819 z^6 + 4860 z^5 - 25740 z^4 + 116064 z^3 - 430920 z^2 + 1270080 z - 2721600) + \frac{1}{4752 z^{7/2}} \left(e^z \sqrt{\pi} (16 z^{11} + 144 z^{10} - 24 z^9 + 192 z^8 - 1359 z^7 + 8379 z^6 - 44100 z^5 + 192780 z^4 - 672840 z^3 + 1761480 z^2 - 3084480 z + 2721600) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.agzl.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{2376 z^3} (-8 z^{10} + 68 z^9 + 42 z^8 + 141 z^7 + 819 z^6 + 4860 z^5 + 25740 z^4 + 116064 z^3 + 430920 z^2 + 1270080 z + 2721600) + \frac{1}{4752 z^{7/2}} \left(e^{-z} \sqrt{\pi} (16 z^{11} - 144 z^{10} - 24 z^9 - 192 z^8 - 1359 z^7 - 8379 z^6 - 44100 z^5 - 192780 z^4 - 672840 z^3 - 1761480 z^2 - 3084480 z - 2721600) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.agzm.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, 5; z\right) = \frac{e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13230 z + 10395)}{10395}$$

07.25.03.agzn.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{528 z^4} (8 z^{10} - 20 z^9 + 162 z^8 - 1337 z^7 + 10020 z^6 - 66420 z^5 + 381672 z^4 - 1857240 z^3 + 7439040 z^2 - 23889600 z + 63504000) + \frac{1}{1056 z^{9/2}} \left(e^z \sqrt{\pi} (16 z^{11} - 32 z^{10} + 296 z^9 - 2472 z^8 + 18417 z^7 - 120540 z^6 + 679140 z^5 - 3202920 z^4 + 12138840 z^3 - 34655040 z^2 + 66225600 z - 63504000) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.agzo.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{528 z^4} (8 z^{10} + 20 z^9 + 162 z^8 + 1337 z^7 + 10020 z^6 + 66420 z^5 + 381672 z^4 + 1857240 z^3 + 7439040 z^2 + 23889600 z + 63504000) + \frac{1}{1056 z^{9/2}} (e^{-z} \sqrt{\pi} (-16 z^{11} - 32 z^{10} - 296 z^9 - 2472 z^8 - 18417 z^7 - 120540 z^6 - 679140 z^5 - 3202920 z^4 - 12138840 z^3 - 34655040 z^2 - 66225600 z - 63504000) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.agzp.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{11}{2}, 6; z\right) = \frac{1}{2079 z^5} (e^z (128 z^{11} - 960 z^{10} + 8928 z^9 - 78672 z^8 + 625176 z^7 - 4367412 z^6 + 26191242 z^5 - 130945815 z^4 + 523783260 z^3 - 1571349780 z^2 + 3142699560 z - 3142699560)) + \frac{1511640}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = -\frac{9}{2}$

07.25.03.agzq.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{2679075} (256 z^{15} + 24960 z^{14} + 982592 z^{13} + 20287200 z^{12} + 238970880 z^{11} + 1637725632 z^{10} + 6384291840 z^9 + 13225075200 z^8 + 12614803200 z^7 + 3997468800 z^6 + 125737920 z^5 + 3175200 z^4 + 793800 z^3 + 607500 z^2 + 992250 z + 2679075) + \frac{1}{2679075} (16 e^z \sqrt{\pi} (16 z^{31/2} + 1568 z^{29/2} + 62184 z^{27/2} + 1297896 z^{25/2} + 15540825 z^{23/2} + 109261620 z^{21/2} + 444062610 z^{19/2} + 988872480 z^{17/2} + 1082450520 z^{15/2} + 467445600 z^{13/2} + 45349200 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.agzr.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{2679075} (-256 z^{15} + 24960 z^{14} - 982592 z^{13} + 20287200 z^{12} - 238970880 z^{11} + 1637725632 z^{10} - 6384291840 z^9 + 13225075200 z^8 - 12614803200 z^7 + 3997468800 z^6 - 125737920 z^5 + 3175200 z^4 - 793800 z^3 + 607500 z^2 - 992250 z + 2679075) + \frac{1}{2679075} (16 e^{-z} \sqrt{\pi} (16 z^{31/2} - 1568 z^{29/2} + 62184 z^{27/2} - 1297896 z^{25/2} + 15540825 z^{23/2} - 109261620 z^{21/2} + 444062610 z^{19/2} - 988872480 z^{17/2} + 1082450520 z^{15/2} - 467445600 z^{13/2} + 45349200 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.agzs.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{297675} \left(-128 z^{14} - 11200 z^{13} - 390560 z^{12} - 7024560 z^{11} - 70495392 z^{10} - 398963520 z^9 - 1225370880 z^8 - 1847606400 z^7 - 1090627200 z^6 - 125737920 z^5 + 3175200 z^4 + 264600 z^3 + 121500 z^2 + 141750 z + 297675 \right) - \frac{1}{297675} \left(8 e^z \sqrt{\pi} \left(16 z^{29/2} + 1408 z^{27/2} + 49512 z^{25/2} + 901800 z^{23/2} + 9228225 z^{21/2} + 53892270 z^{19/2} + 174601260 z^{17/2} + 290467440 z^{15/2} + 211048200 z^{13/2} + 45349200 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.agzt.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{297675} \left(-128 z^{14} + 11200 z^{13} - 390560 z^{12} + 7024560 z^{11} - 70495392 z^{10} + 398963520 z^9 - 1225370880 z^8 + 1847606400 z^7 - 1090627200 z^6 + 125737920 z^5 + 3175200 z^4 - 264600 z^3 + 121500 z^2 - 141750 z + 297675 \right) + \frac{1}{297675} \left(8 e^{-z} \sqrt{\pi} \left(16 z^{29/2} - 1408 z^{27/2} + 49512 z^{25/2} - 901800 z^{23/2} + 9228225 z^{21/2} - 53892270 z^{19/2} + 174601260 z^{17/2} - 290467440 z^{15/2} + 211048200 z^{13/2} - 45349200 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.agzu.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{42525} \left(64 z^{13} + 4960 z^{12} + 150672 z^{11} + 2309304 z^{10} + 19152000 z^9 + 85557600 z^8 + 192182400 z^7 + 181846080 z^6 + 41912640 z^5 - 3175200 z^4 + 264600 z^3 + 40500 z^2 + 28350 z + 42525 \right) + \frac{1}{42525} \left(4 e^z \sqrt{\pi} \left(16 z^{27/2} + 1248 z^{25/2} + 38280 z^{23/2} + 595560 z^{21/2} + 5059305 z^{19/2} + 23536440 z^{17/2} + 56919060 z^{15/2} + 62791200 z^{13/2} + 22674600 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.agzv.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{42525} \left(-64 z^{13} + 4960 z^{12} - 150672 z^{11} + 2309304 z^{10} - 19152000 z^9 + 85557600 z^8 - 192182400 z^7 + 181846080 z^6 - 41912640 z^5 - 3175200 z^4 - 264600 z^3 + 40500 z^2 - 28350 z + 42525 \right) + \frac{1}{42525} \left(4 e^{-z} \sqrt{\pi} \left(16 z^{27/2} - 1248 z^{25/2} + 38280 z^{23/2} - 595560 z^{21/2} + 5059305 z^{19/2} - 23536440 z^{17/2} + 56919060 z^{15/2} - 62791200 z^{13/2} + 22674600 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.agzw.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{8505} (-32 z^{12} - 2160 z^{11} - 55912 z^{10} - 708396 z^9 - 4642632 z^8 - 15216600 z^7 - 21659040 z^6 - 8382528 z^5 + 1058400 z^4 - 264600 z^3 + 40500 z^2 + 9450 z + 8505) - \frac{1}{8505} \left(2 e^z \sqrt{\pi} (16 z^{25/2} + 1088 z^{23/2} + 28488 z^{21/2} + 367656 z^{19/2} + 2485713 z^{17/2} + 8622162 z^{15/2} + 13808250 z^{13/2} + 7558200 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.agzx.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{8505} (-32 z^{12} + 2160 z^{11} - 55912 z^{10} + 708396 z^9 - 4642632 z^8 + 15216600 z^7 - 21659040 z^6 + 8382528 z^5 + 1058400 z^4 + 264600 z^3 + 40500 z^2 - 9450 z + 8505) + \frac{1}{8505} \left(2 e^{-z} \sqrt{\pi} (16 z^{25/2} - 1088 z^{23/2} + 28488 z^{21/2} - 367656 z^{19/2} + 2485713 z^{17/2} - 8622162 z^{15/2} + 13808250 z^{13/2} - 7558200 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.agzy.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{2835} (16 z^{11} + 920 z^{10} + 19684 z^9 + 197166 z^8 + 949920 z^7 + 1986660 z^6 + 1197504 z^5 - 211680 z^4 + 88200 z^3 - 40500 z^2 + 9450 z + 2835) + \frac{1}{2835} e^z \sqrt{\pi} (16 z^{23/2} + 928 z^{21/2} + 20136 z^{19/2} + 206568 z^{17/2} + 1039737 z^{15/2} + 2383740 z^{13/2} + 1889550 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.agzz.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2835} (-16 z^{11} + 920 z^{10} - 19684 z^9 + 197166 z^8 - 949920 z^7 + 1986660 z^6 - 1197504 z^5 - 211680 z^4 - 88200 z^3 - 40500 z^2 - 9450 z + 2835) + \frac{1}{2835} \left(e^{-z} \sqrt{\pi} (16 z^{23/2} - 928 z^{21/2} + 20136 z^{19/2} - 206568 z^{17/2} + 1039737 z^{15/2} - 2383740 z^{13/2} + 1889550 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ah00.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{2835} (-8 z^{10} - 380 z^9 - 6426 z^8 - 47355 z^7 - 146250 z^6 - 133056 z^5 + 30240 z^4 - 17640 z^3 + 13500 z^2 - 9450 z + 2835) + \frac{1}{5670} e^z \sqrt{\pi} (-16 z^{21/2} - 768 z^{19/2} - 13224 z^{17/2} - 100776 z^{15/2} - 334305 z^{13/2} - 377910 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ah01.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{2835} (-8z^{10} + 380z^9 - 6426z^8 + 47355z^7 - 146250z^6 + 133056z^5 + 30240z^4 + 17640z^3 + 13500z^2 + 9450z + 2835) + \frac{1}{5670} e^{-z} \sqrt{\pi} (16z^{21/2} - 768z^{19/2} + 13224z^{17/2} - 100776z^{15/2} + 334305z^{13/2} - 377910z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah02.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, 1; z\right) = -\frac{1}{22680} (e^z (64z^{10} + 2752z^9 + 41232z^8 + 260064z^7 + 641532z^6 + 358668z^5 - 137745z^4 + 107280z^3 - 89640z^2 + 60480z - 22680))$$

07.25.03.ah03.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{-8z^9 - 300z^8 - 3730z^7 - 17655z^6 - 24192z^5 + 6720z^4 - 5040z^3 + 5400z^2 - 6300z + 5670}{5670} - \frac{e^z \sqrt{\pi} z^{11/2} (16z^4 + 608z^3 + 7752z^2 + 38760z + 62985) \operatorname{erf}(\sqrt{z})}{11340}$$

07.25.03.ah04.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670}{5670} - \frac{e^{-z} \sqrt{\pi} z^{11/2} (16z^4 - 608z^3 + 7752z^2 - 38760z + 62985) \operatorname{erfi}(\sqrt{z})}{11340}$$

07.25.03.ah05.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, 2; z\right) = -\frac{1}{22680} e^z (64z^9 + 2112z^8 + 22224z^7 + 82272z^6 + 65628z^5 - 35100z^4 + 37755z^3 - 43740z^2 + 41580z - 22680)$$

07.25.03.ah06.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-8z^9 - 220z^8 - 1754z^7 - 3723z^6 + 1230z^5 - 1170z^4 + 1800z^3 - 3600z^2 + 7380z - 10800}{3780z} + \frac{1}{7560z^{3/2}} (e^z \sqrt{\pi} (-16z^{10} - 448z^9 - 3720z^8 - 9000z^7 + 15z^6 - 90z^5 + 450z^4 - 1800z^3 + 5400z^2 - 10800z + 10800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ah07.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{-8z^9 + 220z^8 - 1754z^7 + 3723z^6 + 1230z^5 + 1170z^4 + 1800z^3 + 3600z^2 + 7380z + 10800}{3780z} + \frac{1}{7560z^{3/2}} (e^{-z} \sqrt{\pi} (16z^{10} - 448z^9 + 3720z^8 - 9000z^7 - 15z^6 - 90z^5 - 450z^4 - 1800z^3 - 5400z^2 - 10800z - 10800) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ah08.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, 3; z\right) = -\frac{e^z (64 z^8 + 1472 z^7 + 8976 z^6 + 10464 z^5 - 7620 z^4 + 10620 z^3 - 15345 z^2 + 17640 z - 11340)}{11340}$$

07.25.03.ah09.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-8 z^9 - 140 z^8 - 498 z^7 + 201 z^6 - 288 z^5 + 810 z^4 - 2880 z^3 + 9648 z^2 - 25920 z + 45360}{1512 z^2} + \frac{1}{3024 z^{5/2}} \left(e^z \sqrt{\pi} (-16 z^{10} - 288 z^9 - 1128 z^8 + 24 z^7 - 153 z^6 + 828 z^5 - 3690 z^4 + 12960 z^3 - 33480 z^2 + 56160 z - 45360) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ah0a.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{8 z^9 - 140 z^8 + 498 z^7 + 201 z^6 + 288 z^5 + 810 z^4 + 2880 z^3 + 9648 z^2 + 25920 z + 45360}{1512 z^2} + \frac{1}{3024 z^{5/2}} \left(e^{-z} \sqrt{\pi} (-16 z^{10} + 288 z^9 - 1128 z^8 - 24 z^7 - 153 z^6 - 828 z^5 - 3690 z^4 - 12960 z^3 - 33480 z^2 - 56160 z - 45360) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ah0b.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, 4; z\right) = -\frac{e^z (64 z^7 + 832 z^6 + 1488 z^5 - 1440 z^4 + 2460 z^3 - 4140 z^2 + 5355 z - 3780)}{3780}$$

07.25.03.ah0c.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-8 z^9 - 60 z^8 + 38 z^7 - 123 z^6 + 630 z^5 - 3180 z^4 + 13968 z^3 - 50760 z^2 + 146160 z - 302400}{432 z^3} + \frac{1}{864 z^{7/2}} \left(e^z \sqrt{\pi} (-16 z^{10} - 128 z^9 + 24 z^8 - 168 z^7 + 1023 z^6 - 5310 z^5 + 22860 z^4 - 78480 z^3 + 201960 z^2 - 347760 z + 302400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ah0d.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{-8 z^9 + 60 z^8 + 38 z^7 + 123 z^6 + 630 z^5 + 3180 z^4 + 13968 z^3 + 50760 z^2 + 146160 z + 302400}{432 z^3} + \frac{1}{864 z^{7/2}} \left(e^{-z} \sqrt{\pi} (16 z^{10} - 128 z^9 - 24 z^8 - 168 z^7 - 1023 z^6 - 5310 z^5 - 22860 z^4 - 78480 z^3 - 201960 z^2 - 347760 z - 302400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ah0e.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, 5; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)$$

07.25.03.ah0f.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{96z^4} (-8z^9 + 20z^8 - 146z^7 + 1065z^6 - 6960z^5 + 39564z^4 - 190800z^3 + 758520z^2 - 2419200z + 6350400) + \frac{1}{192z^{9/2}} \left(e^z \sqrt{\pi} (-16z^{10} + 32z^9 - 264z^8 + 1944z^7 - 12585z^6 + 70200z^5 - 328140z^4 + 1234080z^3 - 3500280z^2 + 6652800z - 6350400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ah0g.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{96z^4} (8z^9 + 20z^8 + 146z^7 + 1065z^6 + 6960z^5 + 39564z^4 + 190800z^3 + 758520z^2 + 2419200z + 6350400) + \frac{1}{192z^{9/2}} \left(e^{-z} \sqrt{\pi} (-16z^{10} - 32z^9 - 264z^8 - 1944z^7 - 12585z^6 - 70200z^5 - 328140z^4 - 1234080z^3 - 3500280z^2 - 6652800z - 6350400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ah0h.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{9}{2}, 6; z\right) = \frac{1}{189z^5} \left(e^z (-64z^{10} + 448z^9 - 3792z^8 + 29856z^7 - 208092z^6 + 1247292z^5 - 6235515z^4 + 24942060z^3 - 74826180z^2 + 149652360z - 149652360) + \frac{5542680}{7z^5} \right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = -\frac{7}{2}$

07.25.03.ah0i.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{33075} (64z^{13} + 5024z^{12} + 155120z^{11} + 2428872z^{10} + 20746040z^9 + 96793920z^8 + 233461440z^7 + 254280000z^6 + 90731520z^5 + 3175200z^4 + 88200z^3 + 24300z^2 + 20250z + 33075) + \frac{1}{33075} \left(4e^z \sqrt{\pi} (16z^{27/2} + 1264z^{25/2} + 39400z^{23/2} + 626000z^{21/2} + 5472225z^{19/2} + 26531145z^{17/2} + 68476680z^{15/2} + 85037400z^{13/2} + 40973400z^{11/2} + 4375800z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ah0j.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{33075} \left(-64 z^{13} + 5024 z^{12} - 155120 z^{11} + 2428872 z^{10} - 20746040 z^9 + 96793920 z^8 - 233461440 z^7 + \right.$$

$$\left. 254280000 z^6 - 90731520 z^5 + 3175200 z^4 - 88200 z^3 + 24300 z^2 - 20250 z + 33075 \right) +$$

$$\frac{1}{33075} \left(4 e^{-z} \sqrt{\pi} \left(16 z^{27/2} - 1264 z^{25/2} + 39400 z^{23/2} - 626000 z^{21/2} + 5472225 z^{19/2} - 26531145 z^{17/2} + \right. \right.$$

$$\left. \left. 68476680 z^{15/2} - 85037400 z^{13/2} + 40973400 z^{11/2} - 4375800 z^{9/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ah0k.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{4725} \left(-32 z^{12} - 2224 z^{11} - 59784 z^{10} - 797020 z^9 - 5618160 z^8 - 20639520 z^7 - 36216960 z^6 - 24409440 z^5 - \right.$$

$$\left. 3175200 z^4 + 88200 z^3 + 8100 z^2 + 4050 z + 4725 \right) -$$

$$\frac{1}{4725} \left(2 e^z \sqrt{\pi} \left(16 z^{25/2} + 1120 z^{23/2} + 30440 z^{21/2} + 412920 z^{19/2} + 2994705 z^{17/2} + \right. \right.$$

$$\left. \left. 11557620 z^{15/2} + 22246200 z^{13/2} + 18298800 z^{11/2} + 4375800 z^{9/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ah0l.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{4725} \left(-32 z^{12} + 2224 z^{11} - 59784 z^{10} + 797020 z^9 - 5618160 z^8 + 20639520 z^7 - 36216960 z^6 + 24409440 z^5 - \right.$$

$$\left. 3175200 z^4 - 88200 z^3 + 8100 z^2 - 4050 z + 4725 \right) +$$

$$\frac{1}{4725} \left(2 e^{-z} \sqrt{\pi} \left(16 z^{25/2} - 1120 z^{23/2} + 30440 z^{21/2} - 412920 z^{19/2} + 2994705 z^{17/2} - \right. \right.$$

$$\left. \left. 11557620 z^{15/2} + 22246200 z^{13/2} - 18298800 z^{11/2} + 4375800 z^{9/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ah0m.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{945} \left(16 z^{11} + 968 z^{10} + 22156 z^9 + 243882 z^8 + 1355730 z^7 + 3639480 z^6 + 4006728 z^5 + 1058400 z^4 - \right.$$

$$\left. 88200 z^3 + 8100 z^2 + 1350 z + 945 \right) + \frac{1}{945} e^z \sqrt{\pi} \left(16 z^{23/2} + 976 z^{21/2} + 22632 z^{19/2} + \right.$$

$$\left. 254496 z^{17/2} + 1467729 z^{15/2} + 4218975 z^{13/2} + 5370300 z^{11/2} + 2187900 z^{9/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.ah0n.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{945}(-16z^{11} + 968z^{10} - 22156z^9 + 243882z^8 - 1355730z^7 + 3639480z^6 - 4006728z^5 + 1058400z^4 + 88200z^3 + 8100z^2 - 1350z + 945) + \frac{1}{945}e^{-z}\sqrt{\pi}(16z^{23/2} - 976z^{21/2} + 22632z^{19/2} - 254496z^{17/2} + 1467729z^{15/2} - 4218975z^{13/2} + 5370300z^{11/2} - 2187900z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ah0o.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{315}(-8z^{10} - 412z^9 - 7786z^8 - 67635z^7 - 275470z^6 - 468204z^5 - 211680z^4 + 29400z^3 - 8100z^2 + 1350z + 315) + \frac{1}{630}e^z\sqrt{\pi}(-16z^{21/2} - 832z^{19/2} - 15976z^{17/2} - 142664z^{15/2} - 611745z^{13/2} - 1160250z^{11/2} - 729300z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ah0p.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{315}(-8z^{10} + 412z^9 - 7786z^8 + 67635z^7 - 275470z^6 + 468204z^5 - 211680z^4 - 29400z^3 - 8100z^2 - 1350z + 315) + \frac{1}{630}e^{-z}\sqrt{\pi}(16z^{21/2} - 832z^{19/2} + 15976z^{17/2} - 142664z^{15/2} + 611745z^{13/2} - 1160250z^{11/2} + 729300z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ah0q.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{630}(8z^9 + 340z^8 + 5070z^7 + 32305z^6 + 83787z^5 + 60480z^4 - 11760z^3 + 5400z^2 - 2700z + 630) + \frac{e^z\sqrt{\pi}(16z^{19/2} + 688z^{17/2} + 10472z^{15/2} + 69360z^{13/2} + 195585z^{11/2} + 182325z^{9/2})\operatorname{erf}(\sqrt{z})}{1260}$$

07.25.03.ah0r.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{630}(-8z^9 + 340z^8 - 5070z^7 + 32305z^6 - 83787z^5 + 60480z^4 + 11760z^3 + 5400z^2 + 2700z + 630) + \frac{e^{-z}\sqrt{\pi}(16z^{19/2} - 688z^{17/2} + 10472z^{15/2} - 69360z^{13/2} + 195585z^{11/2} - 182325z^{9/2})\operatorname{erfi}(\sqrt{z})}{1260}$$

07.25.03.ah0s.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, 1; z\right) = \frac{1}{2520}e^z(32z^9 + 1232z^8 + 16304z^7 + 89272z^6 + 186858z^5 + 85905z^4 - 25920z^3 + 14760z^2 - 7920z + 2520)$$

07.25.03.ah0t.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (16 z^4 + 544 z^3 + 6120 z^2 + 26520 z + 36465) \operatorname{erf}(\sqrt{z}) z^{9/2}}{2520} + \frac{8 z^8 + 268 z^7 + 2930 z^6 + 11919 z^5 + 13440 z^4 - 3360 z^3 + 2160 z^2 - 1800 z + 1260}{1260}$$

07.25.03.ah0u.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{8 z^8 - 268 z^7 + 2930 z^6 - 11919 z^5 + 13440 z^4 + 3360 z^3 + 2160 z^2 + 1800 z + 1260}{1260} - \frac{e^{-z} \sqrt{\pi} z^{9/2} (16 z^4 - 544 z^3 + 6120 z^2 - 26520 z + 36465) \operatorname{erfi}(\sqrt{z})}{2520}$$

07.25.03.ah0v.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, 2; z\right) = \frac{e^z (32 z^8 + 944 z^7 + 8752 z^6 + 28008 z^5 + 18810 z^4 - 8145 z^3 + 6660 z^2 - 5220 z + 2520)}{2520}$$

07.25.03.ah0w.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{8 z^8 + 196 z^7 + 1366 z^6 + 2445 z^5 - 755 z^4 + 660 z^3 - 900 z^2 + 1440 z - 1800}{840 z} + \frac{1}{1680 z^{3/2}} e^z \sqrt{\pi} (16 z^9 + 400 z^8 + 2920 z^7 + 6080 z^6 - 15 z^5 + 75 z^4 - 300 z^3 + 900 z^2 - 1800 z + 1800) \operatorname{erf}(\sqrt{z})$$

07.25.03.ah0x.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{-8 z^8 + 196 z^7 - 1366 z^6 + 2445 z^5 + 755 z^4 + 660 z^3 + 900 z^2 + 1440 z + 1800}{840 z} + \frac{1}{1680 z^{3/2}} e^{-z} \sqrt{\pi} (16 z^9 - 400 z^8 + 2920 z^7 - 6080 z^6 - 15 z^5 - 75 z^4 - 300 z^3 - 900 z^2 - 1800 z - 1800) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah0y.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, 3; z\right) = \frac{e^z (32 z^7 + 656 z^6 + 3504 z^5 + 3480 z^4 - 2070 z^3 + 2205 z^2 - 2160 z + 1260)}{1260}$$

07.25.03.ah0z.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{8 z^8 + 124 z^7 + 378 z^6 - 149 z^5 + 210 z^4 - 540 z^3 + 1584 z^2 - 3960 z + 6480}{336 z^2} + \frac{1}{672 z^{5/2}} e^z \sqrt{\pi} (16 z^9 + 256 z^8 + 872 z^7 - 24 z^6 + 129 z^5 - 570 z^4 + 1980 z^3 - 5040 z^2 + 8280 z - 6480) \operatorname{erf}(\sqrt{z})$$

07.25.03.ah10.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{8 z^8 - 124 z^7 + 378 z^6 + 149 z^5 + 210 z^4 + 540 z^3 + 1584 z^2 + 3960 z + 6480}{336 z^2} + \frac{1}{672 z^{5/2}} e^{-z} \sqrt{\pi} (-16 z^9 + 256 z^8 - 872 z^7 - 24 z^6 - 129 z^5 - 570 z^4 - 1980 z^3 - 5040 z^2 - 8280 z - 6480) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah11.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, 4; z\right) = \frac{1}{420} e^z (32 z^6 + 368 z^5 + 560 z^4 - 440 z^3 + 570 z^2 - 645 z + 420)$$

07.25.03.ah12.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{8z^8 + 52z^7 - 34z^6 + 105z^5 - 465z^4 + 1944z^3 - 6840z^2 + 19080z - 37800}{96z^3} + \frac{1}{192z^{7/2}} e^z \sqrt{\pi} (16z^9 + 112z^8 - 24z^7 + 144z^6 - 735z^5 + 3105z^4 - 10440z^3 + 26280z^2 - 44280z + 37800) \operatorname{erf}(\sqrt{z})$$

07.25.03.ah13.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-8z^8 + 52z^7 + 34z^6 + 105z^5 + 465z^4 + 1944z^3 + 6840z^2 + 19080z + 37800}{96z^3} + \frac{1}{192z^{7/2}} e^{-z} \sqrt{\pi} (16z^9 - 112z^8 - 24z^7 - 144z^6 - 735z^5 - 3105z^4 - 10440z^3 - 26280z^2 - 44280z - 37800) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah14.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, 5; z\right) = \frac{1}{105} e^z (32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)$$

07.25.03.ah15.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3(8z^8 - 20z^7 + 130z^6 - 825z^5 + 4612z^4 - 21960z^3 + 86400z^2 - 273000z + 705600)}{64z^4} + \frac{1}{128z^{9/2}} (3e^z \sqrt{\pi} (16z^9 - 32z^8 + 232z^7 - 1480z^6 + 8145z^5 - 37620z^4 + 140040z^3 - 393840z^2 + 743400z - 705600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ah16.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3(8z^8 + 20z^7 + 130z^6 + 825z^5 + 4612z^4 + 21960z^3 + 86400z^2 + 273000z + 705600)}{64z^4} - \frac{1}{128z^{9/2}} (3e^{-z} \sqrt{\pi} (16z^9 + 32z^8 + 232z^7 + 1480z^6 + 8145z^5 + 37620z^4 + 140040z^3 + 393840z^2 + 743400z + 705600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ah17.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{7}{2}, 6; z\right) = \frac{1}{21z^5} e^z (32z^9 - 208z^8 + 1584z^7 - 10968z^6 + 65658z^5 - 328185z^4 + 1312740z^3 - 3938220z^2 + 7876440z - 7876440) + \frac{2625480}{7z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = -\frac{5}{2}$

07.25.03.ah18.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{675} (16z^{11} + 984z^{10} + 23012z^9 + 260910z^8 + 1514880z^7 + 4366128z^6 + 5528160z^5 + 2248560z^4 + 88200z^3 + 2700z^2 + 810z + 675) + \frac{1}{675} e^z \sqrt{\pi} (16z^{23/2} + 992z^{21/2} + 23496z^{19/2} + 271944z^{17/2} + 1634985z^{15/2} + 5017680z^{13/2} + 7193160z^{11/2} + 3912480z^{9/2} + 463320z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ah19.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{675}(-16z^{11} + 984z^{10} - 23012z^9 + 260910z^8 - 1514880z^7 + 4366128z^6 - 5528160z^5 + 2248560z^4 - 88200z^3 + 2700z^2 - 810z + 675) + \frac{1}{675}e^{-z}\sqrt{\pi}(16z^{23/2} - 992z^{21/2} + 23496z^{19/2} - 271944z^{17/2} + 1634985z^{15/2} - 5017680z^{13/2} + 7193160z^{11/2} - 3912480z^{9/2} + 463320z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ah1a.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{135}(-8z^{10} - 428z^9 - 8514z^8 - 79575z^7 - 363324z^6 - 760716z^5 - 595080z^4 - 88200z^3 + 2700z^2 + 270z + 135) + \frac{1}{270}e^z\sqrt{\pi}(-16z^{21/2} - 864z^{19/2} - 17448z^{17/2} - 167256z^{15/2} - 798705z^{13/2} - 1822860z^{11/2} - 1724580z^{9/2} - 463320z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ah1b.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{135}(-8z^{10} + 428z^9 - 8514z^8 + 79575z^7 - 363324z^6 + 760716z^5 - 595080z^4 + 88200z^3 + 2700z^2 - 270z + 135) + \frac{1}{270}e^{-z}\sqrt{\pi}(16z^{21/2} - 864z^{19/2} + 17448z^{17/2} - 167256z^{15/2} + 798705z^{13/2} - 1822860z^{11/2} + 1724580z^{9/2} - 463320z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ah1c.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{90}(8z^9 + 364z^8 + 5970z^7 + 43927z^6 + 146256z^5 + 191700z^4 + 58800z^3 - 5400z^2 + 540z + 90) + \frac{1}{180}e^z\sqrt{\pi}(16z^{19/2} + 736z^{17/2} + 12296z^{15/2} + 93480z^{13/2} + 331305z^{11/2} + 497640z^{9/2} + 231660z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ah1d.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{90}(-8z^9 + 364z^8 - 5970z^7 + 43927z^6 - 146256z^5 + 191700z^4 - 58800z^3 - 5400z^2 - 540z + 90) + \frac{1}{180}e^{-z}\sqrt{\pi}(16z^{19/2} - 736z^{17/2} + 12296z^{15/2} - 93480z^{13/2} + 331305z^{11/2} - 497640z^{9/2} + 231660z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ah1e.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{180}(-8z^8 - 300z^7 - 3874z^6 - 20823z^5 - 43740z^4 - 23520z^3 + 3600z^2 - 1080z + 180) + \frac{1}{360}e^z\sqrt{\pi}(-16z^{17/2} - 608z^{15/2} - 8040z^{13/2} - 45240z^{11/2} - 105105z^{9/2} - 77220z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ah1f.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{180} (-8z^8 + 300z^7 - 3874z^6 + 20823z^5 - 43740z^4 + 23520z^3 + 3600z^2 + 1080z + 180) + \frac{1}{360} e^{-z} \sqrt{\pi} (16z^{17/2} - 608z^{15/2} + 8040z^{13/2} - 45240z^{11/2} + 105105z^{9/2} - 77220z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah1g.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, 1; z\right) = -\frac{1}{360} e^z (16z^8 + 544z^7 + 6248z^6 + 29016z^5 + 49905z^4 + 18000z^3 - 3960z^2 + 1440z - 360)$$

07.25.03.ah1h.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{360} (-8z^7 - 236z^6 - 2226z^5 - 7575z^4 - 6720z^3 + 1440z^2 - 720z + 360) - \frac{1}{720} e^z \sqrt{\pi} z^{7/2} (16z^4 + 480z^3 + 4680z^2 + 17160z + 19305) \operatorname{erf}(\sqrt{z})$$

07.25.03.ah1i.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{360} (8z^7 - 236z^6 + 2226z^5 - 7575z^4 + 6720z^3 + 1440z^2 + 720z + 360) - \frac{1}{720} e^{-z} \sqrt{\pi} z^{7/2} (16z^4 - 480z^3 + 4680z^2 - 17160z + 19305) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah1j.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, 2; z\right) = -\frac{1}{360} e^z (16z^7 + 416z^6 + 3336z^5 + 9000z^4 + 4905z^3 - 1620z^2 + 900z - 360)$$

07.25.03.ah1k.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-8z^7 - 172z^6 - 1026z^5 - 1495z^4 + 420z^3 - 324z^2 + 360z - 360}{240z} + \frac{e^z \sqrt{\pi} (-16z^8 - 352z^7 - 2216z^6 - 3864z^5 + 15z^4 - 60z^3 + 180z^2 - 360z + 360) \operatorname{erf}(\sqrt{z})}{480z^{3/2}}$$

07.25.03.ah1l.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-8z^7 + 172z^6 - 1026z^5 + 1495z^4 + 420z^3 + 324z^2 + 360z + 360}{240z} + \frac{e^{-z} \sqrt{\pi} (16z^8 - 352z^7 + 2216z^6 - 3864z^5 - 15z^4 - 60z^3 - 180z^2 - 360z - 360) \operatorname{erfi}(\sqrt{z})}{480z^{3/2}}$$

07.25.03.ah1m.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, 3; z\right) = -\frac{1}{180} e^z (16z^6 + 288z^5 + 1320z^4 + 1080z^3 - 495z^2 + 360z - 180)$$

07.25.03.ah1n.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-8z^7 - 108z^6 - 274z^5 + 105z^4 - 144z^3 + 324z^2 - 720z + 1080}{96z^2} + \frac{e^z \sqrt{\pi} (-16z^8 - 224z^7 - 648z^6 + 24z^5 - 105z^4 + 360z^3 - 900z^2 + 1440z - 1080) \operatorname{erf}(\sqrt{z})}{192z^{5/2}}$$

07.25.03.ah1o.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{8z^7 - 108z^6 + 274z^5 + 105z^4 + 144z^3 + 324z^2 + 720z + 1080}{96z^2} + \frac{e^{-z}\sqrt{\pi}(-16z^8 + 224z^7 - 648z^6 - 24z^5 - 105z^4 - 360z^3 - 900z^2 - 1440z - 1080)\operatorname{erfi}(\sqrt{z})}{192z^{5/2}}$$

07.25.03.ah1p.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, 4; z\right) = -\frac{1}{60}e^z(16z^5 + 160z^4 + 200z^3 - 120z^2 + 105z - 60)$$

07.25.03.ah1q.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(8z^7 + 44z^6 - 30z^5 + 87z^4 - 324z^3 + 1080z^2 - 2880z + 5400)}{192z^3} - \frac{7e^z\sqrt{\pi}(16z^8 + 96z^7 - 24z^6 + 120z^5 - 495z^4 + 1620z^3 - 3960z^2 + 6480z - 5400)\operatorname{erf}(\sqrt{z})}{384z^{7/2}}$$

07.25.03.ah1r.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}\sqrt{\pi}(16z^8 - 96z^7 - 24z^6 - 120z^5 - 495z^4 - 1620z^3 - 3960z^2 - 6480z - 5400)\operatorname{erfi}(\sqrt{z})}{384z^{7/2}} - \frac{7(8z^7 - 44z^6 - 30z^5 - 87z^4 - 324z^3 - 1080z^2 - 2880z - 5400)}{192z^3}$$

07.25.03.ah1s.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, 5; z\right) = -\frac{1}{15}e^z(16z^4 + 32z^3 - 24z^2 + 24z - 15)$$

07.25.03.ah1t.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{21(8z^7 - 20z^6 + 114z^5 - 617z^4 + 2880z^3 - 11160z^2 + 34800z - 88200)}{128z^4} - \frac{1}{256z^{9/2}}21e^z\sqrt{\pi}(16z^8 - 32z^7 + 200z^6 - 1080z^5 + 4905z^4 - 18000z^3 + 50040z^2 - 93600z + 88200)\operatorname{erf}(\sqrt{z})$$

07.25.03.ah1u.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21(8z^7 + 20z^6 + 114z^5 + 617z^4 + 2880z^3 + 11160z^2 + 34800z + 88200)}{128z^4} - \frac{1}{256z^{9/2}}21e^{-z}\sqrt{\pi}(16z^8 + 32z^7 + 200z^6 + 1080z^5 + 4905z^4 + 18000z^3 + 50040z^2 + 93600z + 88200)\operatorname{erfi}(\sqrt{z})$$

07.25.03.ah1v.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{5}{2}, 6; z\right) = \frac{e^z(-16z^8 + 96z^7 - 648z^6 + 3864z^5 - 19305z^4 + 77220z^3 - 231660z^2 + 463320z - 463320)}{3z^5} + \frac{154440}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = -\frac{3}{2}$

07.25.03.ah1w.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{54} (8z^9 + 372z^8 + 6286z^7 + 48321z^6 + 172755z^5 + 260298z^4 + 122346z^3 + 5400z^2 + 180z + 54) + \frac{1}{108} e^z \sqrt{\pi} (16z^{19/2} + 752z^{17/2} + 12936z^{15/2} + 102576z^{13/2} + 388401z^{11/2} + 657657z^{9/2} + 409266z^{7/2} + 54054z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah1x.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{54} (-8z^9 + 372z^8 - 6286z^7 + 48321z^6 - 172755z^5 + 260298z^4 - 122346z^3 + 5400z^2 - 180z + 54) + \frac{1}{108} e^{-z} \sqrt{\pi} (16z^{19/2} - 752z^{17/2} + 12936z^{15/2} - 102576z^{13/2} + 388401z^{11/2} - 657657z^{9/2} + 409266z^{7/2} - 54054z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah1y.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{36} (-8z^8 - 316z^7 - 4394z^6 - 26499z^5 - 68598z^4 - 63546z^3 - 10800z^2 + 360z + 36) + \frac{1}{72} e^z \sqrt{\pi} (-16z^{17/2} - 640z^{15/2} - 9096z^{13/2} - 57096z^{11/2} - 160017z^{9/2} - 177606z^{7/2} - 54054z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah1z.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{36} (-8z^8 + 316z^7 - 4394z^6 + 26499z^5 - 68598z^4 + 63546z^3 - 10800z^2 - 360z + 36) + \frac{1}{72} e^{-z} \sqrt{\pi} (16z^{17/2} - 640z^{15/2} + 9096z^{13/2} - 57096z^{11/2} + 160017z^{9/2} - 177606z^{7/2} + 54054z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah20.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{72} (8z^7 + 260z^6 + 2838z^5 + 12429z^4 + 20013z^3 + 7200z^2 - 720z + 72) + \frac{1}{144} e^z \sqrt{\pi} (16z^{15/2} + 528z^{13/2} + 5928z^{11/2} + 27456z^{9/2} + 50193z^{7/2} + 27027z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah21.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{72} (-8z^7 + 260z^6 - 2838z^5 + 12429z^4 - 20013z^3 + 7200z^2 + 720z + 72) + \frac{1}{144} e^{-z} \sqrt{\pi} (16z^{15/2} - 528z^{13/2} + 5928z^{11/2} - 27456z^{9/2} + 50193z^{7/2} - 27027z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah22.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, 1; z\right) = \frac{1}{72} e^z (8z^7 + 236z^6 + 2298z^5 + 8763z^4 + 11808z^3 + 3096z^2 - 432z + 72)$$

07.25.03.ah23.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{144} (8z^6 + 204z^5 + 1618z^4 + 4431z^3 + 2880z^2 - 480z + 144) + \frac{1}{288} e^z \sqrt{\pi} (16z^{13/2} + 416z^{11/2} + 3432z^{9/2} + 10296z^{7/2} + 9009z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah24.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{144} (8z^6 - 204z^5 + 1618z^4 - 4431z^3 + 2880z^2 + 480z + 144) + \frac{1}{288} e^{-z} \sqrt{\pi} (-16z^{13/2} + 416z^{11/2} - 3432z^{9/2} + 10296z^{7/2} - 9009z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah25.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, 2; z\right) = \frac{1}{72} e^z (8z^6 + 180z^5 + 1218z^4 + 2673z^3 + 1116z^2 - 252z + 72)$$

07.25.03.ah26.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{8z^6 + 148z^5 + 734z^4 + 825z^3 - 201z^2 + 126z - 90}{96z} + \frac{e^z \sqrt{\pi} (16z^7 + 304z^6 + 1608z^5 + 2256z^4 - 15z^3 + 45z^2 - 90z + 90) \operatorname{erf}(\sqrt{z})}{192z^{3/2}}$$

07.25.03.ah27.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-8z^6 + 148z^5 - 734z^4 + 825z^3 + 201z^2 + 126z + 90}{96z} + \frac{e^{-z} \sqrt{\pi} (16z^7 - 304z^6 + 1608z^5 - 2256z^4 - 15z^3 - 45z^2 - 90z - 90) \operatorname{erfi}(\sqrt{z})}{192z^{3/2}}$$

07.25.03.ah28.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, 3; z\right) = \frac{1}{36} e^z (8z^5 + 124z^4 + 474z^3 + 303z^2 - 96z + 36)$$

07.25.03.ah29.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(8z^6 + 92z^5 + 186z^4 - 69z^3 + 90z^2 - 162z + 216)}{192z^2} + \frac{5e^z \sqrt{\pi} (16z^7 + 192z^6 + 456z^5 - 24z^4 + 81z^3 - 198z^2 + 306z - 216) \operatorname{erf}(\sqrt{z})}{384z^{5/2}}$$

07.25.03.ah2a.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(8z^6 - 92z^5 + 186z^4 + 69z^3 + 90z^2 + 162z + 216)}{192z^2} - \frac{5e^{-z} \sqrt{\pi} (16z^7 - 192z^6 + 456z^5 + 24z^4 + 81z^3 + 198z^2 + 306z + 216) \operatorname{erfi}(\sqrt{z})}{384z^{5/2}}$$

07.25.03.ah2b.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, 4; z\right) = \frac{1}{12} e^z (8z^4 + 68z^3 + 66z^2 - 27z + 12)$$

07.25.03.ah2c.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(8z^6 + 36z^5 - 26z^4 + 69z^3 - 207z^2 + 516z - 900)}{384z^3} + \frac{35e^z \sqrt{\pi} (16z^7 + 80z^6 - 24z^5 + 96z^4 - 303z^3 + 711z^2 - 1116z + 900) \operatorname{erf}(\sqrt{z})}{768z^{7/2}}$$

07.25.03.ah2d.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} \sqrt{\pi} (16 z^7 - 80 z^6 - 24 z^5 - 96 z^4 - 303 z^3 - 711 z^2 - 1116 z - 900) \operatorname{erfi}(\sqrt{z})}{768 z^{7/2}} - \frac{35 (8 z^6 - 36 z^5 - 26 z^4 - 69 z^3 - 207 z^2 - 516 z - 900)}{384 z^3}$$

07.25.03.ah2e.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, 5; z\right) = \frac{1}{3} e^z (8 z^3 + 12 z^2 - 6 z + 3)$$

07.25.03.ah2f.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{105 (8 z^6 - 20 z^5 + 98 z^4 - 441 z^3 + 1668 z^2 - 5100 z + 12600)}{256 z^4} + \frac{105 e^z \sqrt{\pi} (16 z^7 - 32 z^6 + 168 z^5 - 744 z^4 + 2673 z^3 - 7308 z^2 + 13500 z - 12600) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ah2g.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{105 (8 z^6 + 20 z^5 + 98 z^4 + 441 z^3 + 1668 z^2 + 5100 z + 12600)}{256 z^4} - \frac{105 e^{-z} \sqrt{\pi} (16 z^7 + 32 z^6 + 168 z^5 + 744 z^4 + 2673 z^3 + 7308 z^2 + 13500 z + 12600) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ah2h.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{3}{2}, 6; z\right) = \frac{5 e^z (8 z^7 - 44 z^6 + 258 z^5 - 1287 z^4 + 5148 z^3 - 15444 z^2 + 30888 z - 30888)}{3 z^5} + \frac{51480}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = -\frac{1}{2}$

07.25.03.ah2i.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{24} (8 z^7 + 268 z^6 + 3058 z^5 + 14391 z^4 + 26656 z^3 + 14670 z^2 + 720 z + 24) + \frac{1}{48} e^z \sqrt{\pi} (16 z^{15/2} + 544 z^{13/2} + 6376 z^{11/2} + 31592 z^{9/2} + 65241 z^{7/2} + 47124 z^{5/2} + 6930 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ah2j.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{24} (-8 z^7 + 268 z^6 - 3058 z^5 + 14391 z^4 - 26656 z^3 + 14670 z^2 - 720 z + 24) + \frac{1}{48} e^{-z} \sqrt{\pi} (16 z^{15/2} - 544 z^{13/2} + 6376 z^{11/2} - 31592 z^{9/2} + 65241 z^{7/2} - 47124 z^{5/2} + 6930 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah2k.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{48} (-8 z^6 - 220 z^5 - 1962 z^4 - 6643 z^3 - 7470 z^2 - 1440 z + 48) + \frac{1}{96} e^z \sqrt{\pi} (-16 z^{13/2} - 448 z^{11/2} - 4136 z^{9/2} - 15048 z^{7/2} - 20097 z^{5/2} - 6930 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ah2l.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{48} (-8z^6 + 220z^5 - 1962z^4 + 6643z^3 - 7470z^2 + 1440z + 48) + \frac{1}{96} e^{-z} \sqrt{\pi} (16z^{13/2} - 448z^{11/2} + 4136z^{9/2} - 15048z^{7/2} + 20097z^{5/2} - 6930z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah2m.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, 1; z\right) = -\frac{1}{24} e^z (4z^6 + 100z^5 + 799z^4 + 2384z^3 + 2328z^2 + 384z - 24)$$

07.25.03.ah2n.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{96} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) - \frac{1}{192} e^z \sqrt{\pi} z^{3/2} (16z^4 + 352z^3 + 2376z^2 + 5544z + 3465) \operatorname{erf}(\sqrt{z})$$

07.25.03.ah2o.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{96} (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) - \frac{1}{192} e^{-z} \sqrt{\pi} z^{3/2} (16z^4 - 352z^3 + 2376z^2 - 5544z + 3465) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah2p.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, 2; z\right) = -\frac{1}{24} e^z (4z^5 + 76z^4 + 419z^3 + 708z^2 + 204z - 24)$$

07.25.03.ah2q.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{-8z^5 - 124z^4 - 490z^3 - 387z^2 + 74z - 30}{64z} + \frac{e^z \sqrt{\pi} (-16z^6 - 256z^5 - 1096z^4 - 1160z^3 + 15z^2 - 30z + 30) \operatorname{erf}(\sqrt{z})}{128z^{3/2}}$$

07.25.03.ah2r.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{-8z^5 + 124z^4 - 490z^3 + 387z^2 + 74z + 30}{64z} + \frac{e^{-z} \sqrt{\pi} (16z^6 - 256z^5 + 1096z^4 - 1160z^3 - 15z^2 - 30z - 30) \operatorname{erfi}(\sqrt{z})}{128z^{3/2}}$$

07.25.03.ah2s.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, 3; z\right) = -\frac{1}{12} e^z (4z^4 + 52z^3 + 159z^2 + 72z - 12)$$

07.25.03.ah2t.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{5(8z^5 + 76z^4 + 114z^3 - 41z^2 + 48z - 54)}{128z^2} - \frac{5e^z \sqrt{\pi} (16z^6 + 160z^5 + 296z^4 - 24z^3 + 57z^2 - 84z + 54) \operatorname{erf}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.ah2u.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5(8z^5 - 76z^4 + 114z^3 + 41z^2 + 48z + 54)}{128z^2} - \frac{5e^{-z}\sqrt{\pi}(16z^6 - 160z^5 + 296z^4 + 24z^3 + 57z^2 + 84z + 54)\operatorname{erfi}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.ah2v.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, 4; z\right) = -\frac{1}{4}e^z(4z^3 + 28z^2 + 19z - 4)$$

07.25.03.ah2w.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(8z^5 + 28z^4 - 22z^3 + 51z^2 - 114z + 180)}{256z^3} - \frac{35e^z\sqrt{\pi}(16z^6 + 64z^5 - 24z^4 + 72z^3 - 159z^2 + 234z - 180)\operatorname{erf}(\sqrt{z})}{512z^{7/2}}$$

07.25.03.ah2x.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(16z^6 - 64z^5 - 24z^4 - 72z^3 - 159z^2 - 234z - 180)\operatorname{erfi}(\sqrt{z})}{512z^{7/2}} - \frac{35(8z^5 - 28z^4 - 22z^3 - 51z^2 - 114z - 180)}{256z^3}$$

07.25.03.ah2y.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, 5; z\right) = -e^z(4z^2 + 4z - 1)$$

07.25.03.ah2z.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{315(8z^5 - 20z^4 + 82z^3 - 297z^2 + 880z - 2100)}{512z^4} - \frac{315e^z\sqrt{\pi}(16z^6 - 32z^5 + 136z^4 - 472z^3 + 1257z^2 - 2280z + 2100)\operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.ah30.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315(8z^5 + 20z^4 + 82z^3 + 297z^2 + 880z + 2100)}{512z^4} - \frac{315e^{-z}\sqrt{\pi}(16z^6 + 32z^5 + 136z^4 + 472z^3 + 1257z^2 + 2280z + 2100)\operatorname{erfi}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.ah31.01

$${}_2F_2\left(\frac{3}{2}, 5; -\frac{1}{2}, 6; z\right) = \frac{11880}{z^5} - \frac{5e^z(4z^6 - 20z^5 + 99z^4 - 396z^3 + 1188z^2 - 2376z + 2376)}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = \frac{1}{2}$

07.25.03.ah32.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{96} (8z^5 + 180z^4 + 1246z^3 + 2985z^2 + 1935z + 96) + \frac{1}{192} e^z \sqrt{\pi} (16z^{11/2} + 368z^{9/2} + 2664z^{7/2} + 7056z^{5/2} + 5985z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ah33.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{96} (-8z^5 + 180z^4 - 1246z^3 + 2985z^2 - 1935z + 96) + \frac{1}{192} e^{-z} \sqrt{\pi} (16z^{11/2} - 368z^{9/2} + 2664z^{7/2} - 7056z^{5/2} + 5985z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah34.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, 1; z\right) = \frac{1}{24} e^z (2z^5 + 41z^4 + 256z^3 + 552z^2 + 336z + 24)$$

07.25.03.ah35.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{192} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} e^z \sqrt{\pi} \sqrt{z} (16z^4 + 288z^3 + 1512z^2 + 2520z + 945) \operatorname{erf}(\sqrt{z})$$

07.25.03.ah36.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{192} (8z^4 - 140z^3 + 690z^2 - 975z + 192) - \frac{1}{384} e^{-z} \sqrt{\pi} \sqrt{z} (16z^4 - 288z^3 + 1512z^2 - 2520z + 945) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ah37.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, 2; z\right) = \frac{1}{24} e^z (2z^4 + 31z^3 + 132z^2 + 156z + 24)$$

07.25.03.ah38.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{8z^4 + 100z^3 + 294z^2 + 133z - 15}{128z} + \frac{e^z \sqrt{\pi} (16z^5 + 208z^4 + 680z^3 + 480z^2 - 15z + 15) \operatorname{erf}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.ah39.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{-8z^4 + 100z^3 - 294z^2 + 133z + 15}{128z} + \frac{e^{-z} \sqrt{\pi} (16z^5 - 208z^4 + 680z^3 - 480z^2 - 15z - 15) \operatorname{erfi}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.ah3a.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, 3; z\right) = \frac{1}{12} e^z (2z^3 + 21z^2 + 48z + 12)$$

07.25.03.ah3b.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5(8z^4 + 60z^3 + 58z^2 - 21z + 18)}{256z^2} + \frac{5e^z \sqrt{\pi} (16z^5 + 128z^4 + 168z^3 - 24z^2 + 33z - 18) \operatorname{erf}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.ah3c.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5(8z^4 - 60z^3 + 58z^2 + 21z + 18)}{256z^2} - \frac{5e^{-z} \sqrt{\pi} (16z^5 - 128z^4 + 168z^3 + 24z^2 + 33z + 18) \operatorname{erfi}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.ah3d.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, 4; z\right) = \frac{1}{4} e^z (2z^2 + 11z + 4)$$

07.25.03.ah3e.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(8z^4 + 20z^3 - 18z^2 + 33z - 45)}{512z^3} + \frac{35e^z \sqrt{\pi} (16z^5 + 48z^4 - 24z^3 + 48z^2 - 63z + 45) \operatorname{erf}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.ah3f.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (16z^5 - 48z^4 - 24z^3 - 48z^2 - 63z - 45) \operatorname{erfi}(\sqrt{z})}{1024z^{7/2}} - \frac{35(8z^4 - 20z^3 - 18z^2 - 33z - 45)}{512z^3}$$

07.25.03.ah3g.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, 5; z\right) = e^z (2z + 1)$$

07.25.03.ah3h.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{315(8z^4 - 20z^3 + 66z^2 - 185z + 420)}{1024z^4} + \frac{315e^z \sqrt{\pi} (16z^5 - 32z^4 + 104z^3 - 264z^2 + 465z - 420) \operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.ah3i.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315(8z^4 + 20z^3 + 66z^2 + 185z + 420)}{1024z^4} - \frac{315e^{-z} \sqrt{\pi} (16z^5 + 32z^4 + 104z^3 + 264z^2 + 465z + 420) \operatorname{erfi}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.ah3j.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{1}{2}, 6; z\right) = \frac{5e^z (2z^5 - 9z^4 + 36z^3 - 108z^2 + 216z - 216)}{z^5} + \frac{1080}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = 1$

07.25.03.ah3k.01

$${}_2F_2\left(\frac{3}{2}, 5; 1, 1; z\right) = \frac{1}{96} e^{z/2} (4z^5 + 76z^4 + 445z^3 + 947z^2 + 672z + 96) I_0\left(\frac{z}{2}\right) + \frac{1}{96} e^{z/2} (4z^5 + 72z^4 + 375z^3 + 604z^2 + 196z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah3l.01

$${}_2F_2\left(\frac{3}{2}, 5; 1, \frac{3}{2}; z\right) = \frac{1}{24} e^z (z^4 + 16z^3 + 72z^2 + 96z + 24)$$

07.25.03.ah3m.01

$${}_2F_2\left(\frac{3}{2}, 5; 1, 2; z\right) = \frac{1}{96} e^{z/2} (4z^4 + 58z^3 + 239z^2 + 312z + 96) I_0\left(\frac{z}{2}\right) + \frac{1}{96} e^{z/2} (4z^4 + 54z^3 + 187z^2 + 148z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah3n.01

$${}_2F_2\left(\frac{3}{2}, 5; 1, \frac{5}{2}; z\right) = \frac{e^z (16z^4 + 184z^3 + 508z^2 + 266z - 15)}{256z} + \frac{15\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.ah3o.01

$${}_2F_2\left(\frac{3}{2}, 5; 1, \frac{5}{2}; -z\right) = \frac{e^{-z} (-16z^4 + 184z^3 - 508z^2 + 266z + 15)}{256z} - \frac{15\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.ah3p.01

$${}_2F_2\left(\frac{3}{2}, 5; 1, 3; z\right) = \frac{1}{12} e^{z/2} (z^3 + 10z^2 + 24z + 12) I_0\left(\frac{z}{2}\right) + \frac{1}{24} e^{z/2} z (2z^2 + 18z + 31) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah3q.01

$${}_2F_2\left(\frac{3}{2}, 5; 1, \frac{7}{2}; z\right) = \frac{5e^z (32z^4 + 224z^3 + 232z^2 - 48z + 27)}{1024z^2} + \frac{15\sqrt{\pi} (10z - 9) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.ah3r.01

$${}_2F_2\left(\frac{3}{2}, 5; 1, \frac{7}{2}; -z\right) = \frac{5e^{-z} (32z^4 - 224z^3 + 232z^2 + 48z + 27)}{1024z^2} - \frac{15\sqrt{\pi} (10z + 9) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.ah3s.01

$${}_2F_2\left(\frac{3}{2}, 5; 1, 4; z\right) = \frac{1}{8} e^{z/2} (2z^2 + 11z + 8) I_0\left(\frac{z}{2}\right) + \frac{1}{8} e^{z/2} z (2z + 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah3t.01

$${}_2F_2\left(\frac{3}{2}, 5; 1, \frac{9}{2}; z\right) = \frac{35e^z (128z^4 + 320z^3 - 192z^2 + 258z - 225)}{8192z^3} + \frac{105\sqrt{\pi} (20z^2 - 36z + 75) \operatorname{erfi}(\sqrt{z})}{16384z^{7/2}}$$

07.25.03.ah3u.01

$${}_2F_2\left(\frac{3}{2}, 5; 1, \frac{9}{2}; -z\right) = -\frac{35e^{-z} (128z^4 - 320z^3 - 192z^2 - 258z - 225)}{8192z^3} - \frac{105\sqrt{\pi} (20z^2 + 36z + 75) \operatorname{erf}(\sqrt{z})}{16384z^{7/2}}$$

07.25.03.ah3v.01

$${}_2F_2\left(\frac{3}{2}, 5; 1, 5; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

07.25.03.ah3w.01

$${}_2F_2\left(\frac{3}{2}, 5; 1, \frac{11}{2}; z\right) = \frac{315e^z (256z^4 - 512z^3 + 1388z^2 - 2900z + 3675)}{32768z^4} + \frac{315\sqrt{\pi} (40z^3 - 108z^2 + 450z - 3675) \operatorname{erfi}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.ah3x.01

$${}_2F_2\left(\frac{3}{2}, 5; 1, \frac{11}{2}; -z\right) = \frac{315e^{-z} (256z^4 + 512z^3 + 1388z^2 + 2900z + 3675)}{32768z^4} - \frac{315\sqrt{\pi} (40z^3 + 108z^2 + 450z + 3675) \operatorname{erf}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.ah3y.01

$${}_2F_2\left(\frac{3}{2}, 5; 1, 6; z\right) = \frac{e^{z/2} (35z^3 - 120z^2 + 384z - 768) I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{e^{z/2} (35z^4 - 160z^3 + 576z^2 - 1536z + 3072) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = \frac{3}{2}$

07.25.03.ah3z.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{384} (8z^3 + 108z^2 + 370z + 279) + \frac{e^z \sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.ah40.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{384} (-8z^3 + 108z^2 - 370z + 279) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.ah41.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{3}{2}, 2; z\right) = \frac{1}{24} e^z (z^3 + 12z^2 + 36z + 24)$$

07.25.03.ah42.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.ah43.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.ah44.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{3}{2}, 3; z\right) = \frac{1}{12} e^z (z^2 + 8z + 12)$$

07.25.03.ah45.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5e^z \sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.ah46.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.ah47.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{3}{2}, 4; z\right) = \frac{1}{4} e^z (z + 4)$$

07.25.03.ah48.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35e^z \sqrt{\pi} (16z^4 + 32z^3 - 24z^2 + 24z - 15) \operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.ah49.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35e^{-z} \sqrt{\pi} (16z^4 - 32z^3 - 24z^2 - 24z - 15) \operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.ah4a.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{3}{2}, 5; z\right) = e^z$$

07.25.03.ah4b.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{315(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315e^z \sqrt{\pi} (16z^4 - 32z^3 + 72z^2 - 120z + 105) \operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.ah4c.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} \sqrt{\pi} (16 z^4 + 32 z^3 + 72 z^2 + 120 z + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315 (8 z^3 + 20 z^2 + 50 z + 105)}{2048 z^4}$$

07.25.03.ah4d.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{3}{2}, 6; z\right) = \frac{5 e^z (z^4 - 4 z^3 + 12 z^2 - 24 z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = 2$

07.25.03.ah4e.01

$${}_2F_2\left(\frac{3}{2}, 5; 2, 2; z\right) = \frac{1}{48} e^{z/2} (2 z^3 + 22 z^2 + 63 z + 48) I_0\left(\frac{z}{2}\right) + \frac{1}{24} e^{z/2} (z^3 + 10 z^2 + 22 z + 6) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah4f.01

$${}_2F_2\left(\frac{3}{2}, 5; 2, \frac{5}{2}; z\right) = \frac{e^z (8 z^3 + 68 z^2 + 118 z + 15)}{128 z} - \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{256 z^{3/2}}$$

07.25.03.ah4g.01

$${}_2F_2\left(\frac{3}{2}, 5; 2, \frac{5}{2}; -z\right) = \frac{e^{-z} (8 z^3 - 68 z^2 + 118 z - 15)}{128 z} + \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{256 z^{3/2}}$$

07.25.03.ah4h.01

$${}_2F_2\left(\frac{3}{2}, 5; 2, 3; z\right) = \frac{1}{24} e^{z/2} (2 z^2 + 15 z + 24) I_0\left(\frac{z}{2}\right) + \frac{1}{24} e^{z/2} (2 z^2 + 13 z + 12) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah4i.01

$${}_2F_2\left(\frac{3}{2}, 5; 2, \frac{7}{2}; z\right) = \frac{5 e^z (16 z^3 + 80 z^2 + 36 z - 9)}{512 z^2} - \frac{15 \sqrt{\pi} (10 z - 3) \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.ah4j.01

$${}_2F_2\left(\frac{3}{2}, 5; 2, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} (10 z + 3) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}} - \frac{5 e^{-z} (16 z^3 - 80 z^2 + 36 z + 9)}{512 z^2}$$

07.25.03.ah4k.01

$${}_2F_2\left(\frac{3}{2}, 5; 2, 4; z\right) = \frac{1}{4} e^{z/2} (z + 4) I_0\left(\frac{z}{2}\right) + \frac{1}{4} e^{z/2} (z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah4l.01

$${}_2F_2\left(\frac{3}{2}, 5; 2, \frac{9}{2}; z\right) = \frac{35 e^z (64 z^3 + 96 z^2 - 66 z + 45)}{4096 z^3} - \frac{105 \sqrt{\pi} (20 z^2 - 12 z + 15) \operatorname{erfi}(\sqrt{z})}{8192 z^{7/2}}$$

07.25.03.ah4m.01

$${}_2F_2\left(\frac{3}{2}, 5; 2, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (64 z^3 - 96 z^2 - 66 z - 45)}{4096 z^3} + \frac{105 \sqrt{\pi} (20 z^2 + 12 z + 15) \operatorname{erf}(\sqrt{z})}{8192 z^{7/2}}$$

07.25.03.ah4n.01

$${}_2F_2\left(\frac{3}{2}, 5; 2, 5; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

07.25.03.ah4o.01

$${}_2F_2\left(\frac{3}{2}, 5; 2, \frac{11}{2}; z\right) = \frac{315 e^z (128 z^3 - 236 z^2 + 440 z - 525)}{16384 z^4} - \frac{315 \sqrt{\pi} (40 z^3 - 36 z^2 + 90 z - 525) \operatorname{erfi}(\sqrt{z})}{32768 z^{9/2}}$$

07.25.03.ah4p.01

$${}_2F_2\left(\frac{3}{2}, 5; 2, \frac{11}{2}; -z\right) = \frac{315 \sqrt{\pi} (40 z^3 + 36 z^2 + 90 z + 525) \operatorname{erf}(\sqrt{z})}{32768 z^{9/2}} - \frac{315 e^{-z} (128 z^3 + 236 z^2 + 440 z + 525)}{16384 z^4}$$

07.25.03.ah4q.01

$${}_2F_2\left(\frac{3}{2}, 5; 2, 6; z\right) = \frac{6 e^{z/2} (5 z^2 - 16 z + 32) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{8 e^{z/2} (5 z^3 - 18 z^2 + 48 z - 96) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = \frac{5}{2}$

07.25.03.ah4r.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{5}{2}, 3; z\right) = \frac{e^z (4 z^2 + 22 z + 15)}{32 z} - \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.ah4s.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{5}{2}, 3; -z\right) = \frac{e^{-z} (-4 z^2 + 22 z - 15)}{32 z} + \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.ah4t.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{5}{2}, 4; z\right) = \frac{3 e^z (2 z + 5)}{16 z} - \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.ah4u.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{5}{2}, 4; -z\right) = \frac{3 e^{-z} (2 z - 5)}{16 z} + \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.ah4v.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{5}{2}, 5; z\right) = \frac{3 e^z}{2 z} - \frac{3 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{3/2}}$$

07.25.03.ah4w.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{5}{2}, 5; -z\right) = \frac{3 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{3/2}} - \frac{3 e^{-z}}{2 z}$$

07.25.03.ah4x.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{5}{2}, 6; z\right) = \frac{60 e^z (z^3 - 3 z^2 + 6 z - 6)}{7 z^5} - \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{14 z^{3/2}} + \frac{360}{7 z^5}$$

07.25.03.ah4y.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{5}{2}, 6; -z\right) = \frac{60 e^{-z} (z^3 + 3 z^2 + 6 z + 6)}{7 z^5} + \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{14 z^{3/2}} - \frac{360}{7 z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = 3$

07.25.03.ah4z.01

$${}_2F_2\left(\frac{3}{2}, 5; 3, 3; z\right) = \frac{1}{6} e^{z/2} (z+5) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (z^2 + 4z + 4) I_1\left(\frac{z}{2}\right)}{6z}$$

07.25.03.ah50.01

$${}_2F_2\left(\frac{3}{2}, 5; 3, \frac{7}{2}; z\right) = \frac{5 e^z (8z^2 + 24z + 9)}{128z^2} - \frac{15\sqrt{\pi} (10z + 3) \operatorname{erfi}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.ah51.01

$${}_2F_2\left(\frac{3}{2}, 5; 3, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (8z^2 - 24z + 9)}{128z^2} + \frac{15\sqrt{\pi} (10z - 3) \operatorname{erf}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.ah52.01

$${}_2F_2\left(\frac{3}{2}, 5; 3, 4; z\right) = \frac{1}{2} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (z+4) I_1\left(\frac{z}{2}\right)}{2z}$$

07.25.03.ah53.01

$${}_2F_2\left(\frac{3}{2}, 5; 3, \frac{9}{2}; z\right) = \frac{35 e^z (32z^2 + 46z - 15)}{1024z^3} - \frac{105\sqrt{\pi} (20z^2 + 12z - 5) \operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.ah54.01

$${}_2F_2\left(\frac{3}{2}, 5; 3, \frac{9}{2}; -z\right) = \frac{105\sqrt{\pi} (20z^2 - 12z - 5) \operatorname{erf}(\sqrt{z})}{2048z^{7/2}} - \frac{35 e^{-z} (32z^2 - 46z - 15)}{1024z^3}$$

07.25.03.ah55.01

$${}_2F_2\left(\frac{3}{2}, 5; 3, 5; z\right) = \frac{4 e^{z/2} I_1\left(\frac{z}{2}\right)}{z}$$

07.25.03.ah56.01

$${}_2F_2\left(\frac{3}{2}, 5; 3, \frac{11}{2}; z\right) = \frac{315 e^z (84z^2 - 100z + 105)}{4096z^4} - \frac{315\sqrt{\pi} (40z^3 + 36z^2 - 30z + 105) \operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ah57.01

$${}_2F_2\left(\frac{3}{2}, 5; 3, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (84z^2 + 100z + 105)}{4096z^4} + \frac{315\sqrt{\pi} (40z^3 - 36z^2 - 30z - 105) \operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ah58.01

$${}_2F_2\left(\frac{3}{2}, 5; 3, 6; z\right) = \frac{4 e^{z/2} (5z^3 + 24z^2 - 64z + 128) I_1\left(\frac{z}{2}\right)}{7z^4} - \frac{4 e^{z/2} (5z^2 - 16z + 32) I_0\left(\frac{z}{2}\right)}{7z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = \frac{7}{2}$

07.25.03.ah59.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{7}{2}, 4; z\right) = \frac{15 e^z (4z + 9)}{64z^2} - \frac{15\sqrt{\pi} (10z + 9) \operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.ah5a.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{7}{2}, 4; -z\right) = \frac{15\sqrt{\pi}(10z-9)\operatorname{erf}(\sqrt{z})}{128z^{5/2}} - \frac{15e^{-z}(4z-9)}{64z^2}$$

07.25.03.ah5b.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{7}{2}, 5; z\right) = \frac{45e^z}{8z^2} - \frac{15\sqrt{\pi}(2z+3)\operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.ah5c.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{7}{2}, 5; -z\right) = \frac{15\sqrt{\pi}(2z-3)\operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45e^{-z}}{8z^2}$$

07.25.03.ah5d.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{7}{2}, 6; z\right) = \frac{15e^z(5z^3+48z^2-96z+96)}{28z^5} - \frac{15\sqrt{\pi}(10z+21)\operatorname{erfi}(\sqrt{z})}{56z^{5/2}} - \frac{360}{7z^5}$$

07.25.03.ah5e.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{7}{2}, 6; -z\right) = \frac{15e^{-z}(5z^3-48z^2-96z-96)}{28z^5} + \frac{15\sqrt{\pi}(10z-21)\operatorname{erf}(\sqrt{z})}{56z^{5/2}} + \frac{360}{7z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = 4$

07.25.03.ah5f.01

$${}_2F_2\left(\frac{3}{2}, 5; 4, 4; z\right) = \frac{4e^{z/2}(z+1)I_1\left(\frac{z}{2}\right)}{z^2} - \frac{e^{z/2}I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.ah5g.01

$${}_2F_2\left(\frac{3}{2}, 5; 4, \frac{9}{2}; z\right) = \frac{105e^z(26z+15)}{512z^3} - \frac{105\sqrt{\pi}(20z^2+36z+15)\operatorname{erfi}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.ah5h.01

$${}_2F_2\left(\frac{3}{2}, 5; 4, \frac{9}{2}; -z\right) = \frac{105e^{-z}(26z-15)}{512z^3} + \frac{105\sqrt{\pi}(20z^2-36z+15)\operatorname{erf}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.ah5i.01

$${}_2F_2\left(\frac{3}{2}, 5; 4, 5; z\right) = \frac{4e^{z/2}(z+4)I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4e^{z/2}I_0\left(\frac{z}{2}\right)}{z}$$

07.25.03.ah5j.01

$${}_2F_2\left(\frac{3}{2}, 5; 4, \frac{11}{2}; z\right) = \frac{1575e^z(4z^2+32z-21)}{2048z^4} - \frac{315\sqrt{\pi}(40z^3+108z^2+90z-105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.ah5k.01

$${}_2F_2\left(\frac{3}{2}, 5; 4, \frac{11}{2}; -z\right) = \frac{1575e^{-z}(4z^2-32z-21)}{2048z^4} + \frac{315\sqrt{\pi}(40z^3-108z^2+90z+105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.ah5l.01

$${}_2F_2\left(\frac{3}{2}, 5; 4, 6; z\right) = \frac{8 e^{z/2} (5 z^3 + 17 z^2 + 48 z - 96) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{8 e^{z/2} (5 z^2 + 12 z - 24) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = \frac{9}{2}$

07.25.03.ah5m.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{9}{2}, 5; z\right) = \frac{105 e^z (2 z + 15)}{64 z^3} - \frac{105 \sqrt{\pi} (4 z^2 + 12 z + 15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.ah5n.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{9}{2}, 5; -z\right) = \frac{105 e^{-z} (2 z - 15)}{64 z^3} + \frac{105 \sqrt{\pi} (4 z^2 - 12 z + 15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.ah5o.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{9}{2}, 6; z\right) = \frac{15 e^z (10 z^3 + 47 z^2 + 256 z - 256)}{32 z^5} - \frac{15 \sqrt{\pi} (20 z^2 + 84 z + 175) \operatorname{erfi}(\sqrt{z})}{64 z^{7/2}} + \frac{120}{z^5}$$

07.25.03.ah5p.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{9}{2}, 6; -z\right) = \frac{15 e^{-z} (10 z^3 - 47 z^2 + 256 z + 256)}{32 z^5} + \frac{15 \sqrt{\pi} (20 z^2 - 84 z + 175) \operatorname{erf}(\sqrt{z})}{64 z^{7/2}} - \frac{120}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = 5$

07.25.03.ah5q.01

$${}_2F_2\left(\frac{3}{2}, 5; 5, 5; z\right) = \frac{32 e^{z/2} (z^2 + 4 z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{32 e^{z/2} (z + 3) I_0\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.ah5r.01

$${}_2F_2\left(\frac{3}{2}, 5; 5, \frac{11}{2}; z\right) = \frac{315 e^z (4 z^2 + 20 z + 105)}{256 z^4} - \frac{315 \sqrt{\pi} (8 z^3 + 36 z^2 + 90 z + 105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ah5s.01

$${}_2F_2\left(\frac{3}{2}, 5; 5, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4 z^2 - 20 z + 105)}{256 z^4} + \frac{315 \sqrt{\pi} (8 z^3 - 36 z^2 + 90 z - 105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ah5t.01

$${}_2F_2\left(\frac{3}{2}, 5; 5, 6; z\right) = \frac{32 e^{z/2} (2 z^3 + 11 z^2 + 36 z + 96) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{32 e^{z/2} (2 z^2 + 9 z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 5$, $b_1 = \frac{11}{2}$

07.25.03.ah5u.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{11}{2}, 6; z\right) = \frac{45 e^z (20 z^3 + 136 z^2 + 603 z + 3072)}{128 z^5} - \frac{45 \sqrt{\pi} (40 z^3 + 252 z^2 + 1050 z + 3675) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}} - \frac{1080}{z^5}$$

07.25.03.ah5v.01

$${}_2F_2\left(\frac{3}{2}, 5; \frac{11}{2}, 6; -z\right) = \frac{45 e^{-z} (20 z^3 - 136 z^2 + 603 z - 3072)}{128 z^5} + \frac{45 \sqrt{\pi} (40 z^3 - 252 z^2 + 1050 z - 3675) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} + \frac{1080}{z^5}$$

For fixed z and $a_1 = \frac{3}{2}, a_2 = 5, b_1 = 6$

07.25.03.ah5w.01

$${}_2F_2\left(\frac{3}{2}, 5; 6, 6; z\right) = \frac{64 e^{z/2} (10 z^4 + 66 z^3 + 323 z^2 + 1680 z - 3360) I_0\left(\frac{z}{2}\right)}{49 z^5} + \frac{128 e^{z/2} (5 z^3 + 38 z^2 + 202 z + 1066) I_1\left(\frac{z}{2}\right)}{49 z^4} - \frac{30720}{7 z^5}$$

For fixed z and $a_1 = \frac{3}{2}, a_2 = \frac{11}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{3}{2}, a_2 = \frac{11}{2}, b_1 = -\frac{11}{2}$

07.25.03.ah5x.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{102112943625} (e^z (262144 z^{18} + 34078720 z^{17} + 1845559296 z^{16} + 54510747648 z^{15} + 966056017920 z^{14} + 10655937331200 z^{13} + 73515165696000 z^{12} + 311002184908800 z^{11} + 769982617958400 z^{10} + 1024121387520000 z^9 + 624843137318400 z^8 + 124631426304000 z^7 + 2529008697600 z^6 + 46942156800 z^5 + 9430344000 z^4 - 6286896000 z^3 + 34381462500 z^2 - 74263959000 z + 102112943625))$$

07.25.03.ah5y.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9282994875} (e^z (131072 z^{17} + 15532032 z^{16} + 759693312 z^{15} + 20038287360 z^{14} + 312702566400 z^{13} + 2982699417600 z^{12} + 17370036633600 z^{11} + 59965890969600 z^{10} + 115144799616000 z^9 + 109053895104000 z^8 + 39786830899200 z^7 + 2635466803200 z^6 - 53229052800 z^5 - 3143448000 z^4 - 3143448000 z^2 + 6188663250 z - 9282994875))$$

07.25.03.ah5z.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1031443875} (e^z (65536 z^{16} + 7012352 z^{15} + 306216960 z^{14} + 7110082560 z^{13} + 95915581440 z^{12} + 771982848000 z^{11} + 3667129804800 z^{10} + 9813731558400 z^9 + 13410607795200 z^8 + 7589820268800 z^7 + 918864777600 z^6 - 60563764800 z^5 + 3667356000 z^4 + 261954000 z^3 + 392931000 z^2 - 589396500 z + 1031443875))$$

07.25.03.ah60.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{147349125} \left(e^z (32768 z^{15} + 3129344 z^{14} + 120250368 z^{13} + 2412662784 z^{12} + 27450157056 z^{11} + 180115246080 z^{10} + 662815802880 z^9 + 1261378863360 z^8 + 1029099012480 z^7 + 193063590720 z^6 - 23226588000 z^5 + 4557999600 z^4 - 445321800 z^3 - 91683900 z^2 + 58939650 z - 147349125) \right)$$

07.25.03.ah61.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{29469825} \left(e^z (16384 z^{14} + 1376256 z^{13} + 45674496 z^{12} + 772423680 z^{11} + 7159477248 z^{10} + 36361543680 z^9 + 95057867520 z^8 + 107871160320 z^7 + 29129284800 z^6 - 5420701440 z^5 + 1938459600 z^4 - 628689600 z^3 + 91683900 z^2 + 29469825) \right)$$

07.25.03.ah62.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{9823275} \left(e^z (8192 z^{13} + 593920 z^{12} + 16601088 z^{11} + 228501504 z^{10} + 1637475840 z^9 + 5899703040 z^8 + 9180864000 z^7 + 3440828160 z^6 - 919084320 z^5 + 506444400 z^4 - 296881200 z^3 + 130977000 z^2 - 19646550 z - 9823275) \right)$$

07.25.03.ah63.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{9823275} \left(e^z (4096 z^{12} + 249856 z^{11} + 5677056 z^{10} + 60318720 z^9 + 306028800 z^8 + 654635520 z^7 + 335301120 z^6 - 123742080 z^5 + 97297200 z^4 - 87318000 z^3 + 69854400 z^2 - 39293100 z + 9823275) \right)$$

07.25.03.ah64.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{9823275} \left(e^z (2048 z^{12} + 114688 z^{11} + 2359296 z^{10} + 22270464 z^9 + 97633536 z^8 + 171988992 z^7 + 61850880 z^6 - 18678240 z^5 + 14553000 z^4 - 15876000 z^3 + 19051200 z^2 - 19646550 z + 9823275) I_0\left(\frac{z}{2}\right) + \frac{1}{9823275} \left(2 e^{z/2} (1024 z^{12} + 56320 z^{11} + 1123840 z^{10} + 10038528 z^9 + 39287040 z^8 + 50765568 z^7 - 7386624 z^6 + 4258800 z^5 - 4000500 z^4 + 4630500 z^3 - 5358150 z^2 + 4465125 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ah65.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{9823275} \left(e^z (2048 z^{11} + 101376 z^{10} + 1774080 z^9 + 13305600 z^8 + 39916800 z^7 + 27941760 z^6 - 13970880 z^5 + 14968800 z^4 - 18711000 z^3 + 21829500 z^2 - 19646550 z + 9823275) \right)$$

07.25.03.ah66.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{9823275} \left(e^{z/2} (2048 z^{11} + 91136 z^{10} + 1400832 z^9 + 8897280 z^8 + 21084672 z^7 + 8951040 z^6 - 3205440 z^5 + 2998800 z^4 - 3969000 z^3 + 5953500 z^2 - 8731800 z + 9823275) I_0\left(\frac{z}{2}\right) + \frac{1}{9823275} \left(e^{z/2} (2048 z^{11} + 89088 z^{10} + 1312768 z^9 + 7627008 z^8 + 14031360 z^7 - 2327808 z^6 + 1592640 z^5 - 1890000 z^4 + 3087000 z^3 - 5953500 z^2 + 11113200 z - 14189175) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ah67.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{3274425} \left(e^z (1024 z^{10} + 38912 z^9 + 478464 z^8 + 2107392 z^7 + 2045568 z^6 - 1370880 z^5 + 1925280 z^4 - 3104640 z^3 + 4615380 z^2 - 5239080 z + 3274425) \right)$$

07.25.03.ah68.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{9823275} \left(4 e^{z/2} (1024 z^{10} + 33792 z^9 + 344832 z^8 + 1148928 z^7 + 564480 z^6 - 221760 z^5 + 176400 z^4 - 850500 z^2 + 3118500 z - 5145525) I_0\left(\frac{z}{2}\right) + \frac{1}{9823275 z} \left(4 e^{z/2} (1024 z^{11} + 32768 z^{10} + 312576 z^9 + 851712 z^8 - 160512 z^7 + 141120 z^6 - 277200 z^5 + 882000 z^4 - 3118500 z^3 + 9639000 z^2 - 22297275 z + 30405375) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ah69.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{654885} \left(e^z (512 z^9 + 13568 z^8 + 96768 z^7 + 134400 z^6 - 119616 z^5 + 211680 z^4 - 413280 z^3 + 720720 z^2 - 935550 z + 654885) \right)$$

07.25.03.ah6a.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{3274425 z} \left(4 e^{z/2} (1024 z^{10} + 22016 z^9 + 112896 z^8 + 61440 z^7 - 13440 z^6 - 70560 z^5 + 529200 z^4 - 2570400 z^3 + 935500 z^2 - 24012450 z + 34459425) I_0\left(\frac{z}{2}\right) + \frac{1}{3274425 z^2} \left(4 e^{z/2} (1024 z^{11} + 20992 z^{10} + 92416 z^9 - 21504 z^8 + 36480 z^7 - 157920 z^6 + 811440 z^5 - 3780000 z^4 + 14647500 z^3 - 44594550 z^2 + 99324225 z - 137837700) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ah6b.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (256 z^8 + 3840 z^7 + 8064 z^6 - 9408 z^5 + 20160 z^4 - 45360 z^3 + 88200 z^2 - 124740 z + 93555)}{93555}$$

07.25.03.ah6c.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{3274425 z^2} \left(32 e^{z/2} (512 z^{10} + 5120 z^9 + 2304 z^8 + 5760 z^7 - 51744 z^6 + 338688 z^5 - 1859760 z^4 + 8482320 z^3 - 30873150 z^2 + 82702620 z - 130945815) I_0\left(\frac{z}{2}\right) + \frac{1}{3274425 z^3} \left(64 e^{z/2} (256 z^{11} + 2304 z^{10} - 1024 z^9 + 4800 z^8 - 32688 z^7 + 209328 z^6 - 1176336 z^5 + 5632200 z^4 - 22297275 z^3 + 70135065 z^2 - 165405240 z + 261891630) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ah6d.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13230 z + 10395)}{10395}$$

07.25.03.ah6e.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{654885 z^3} \left(32 e^{z/2} (512 z^{10} - 768 z^9 + 9984 z^8 - 87744 z^7 + 683424 z^6 - 4696272 z^5 + 27941760 z^4 - 139958280 z^3 + 565134570 z^2 - 1702295595 z + 3142699560) I_0\left(\frac{z}{2}\right) + \frac{1}{654885 z^4} \left(32 e^{z/2} (512 z^{11} - 1280 z^{10} + 11520 z^9 - 100416 z^8 + 792480 z^7 - 5561136 z^6 + 34086528 z^5 - 178378200 z^4 + 772701930 z^3 - 2653375725 z^2 + 6809182380 z - 12570798240) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.ah6f.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{843908625} \left(e^z (65536 z^{16} + 7077888 z^{15} + 312606720 z^{14} + 7361986560 z^{13} + 101136384000 z^{12} + 833963212800 z^{11} + 4098220646400 z^{10} + 11540952576000 z^9 + 17179065792000 z^8 + 11579283072000 z^7 + 2524490841600 z^6 + 55487980800 z^5 + 1129464000 z^4 + 122472000 z^3 + 306180000 z^2 - 500094000 z + 843908625) \right)$$

07.25.03.ah6g.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{93767625} \left(e^z (32768 z^{15} + 3194880 z^{14} + 125952000 z^{13} + 2610401280 z^{12} + 30990182400 z^{11} + 215545420800 z^{10} + 863610508800 z^9 + 1884228998400 z^8 + 1994731401600 z^7 + 802813032000 z^6 + 58025872800 z^5 - 1268946000 z^4 - 69741000 z^3 - 43375500 z^2 + 44651250 z - 93767625) \right)$$

07.25.03.ah6h.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{13395375} \left(e^z (16384 z^{14} + 1425408 z^{13} + 49434624 z^{12} + 885006336 z^{11} + 8857543680 z^{10} + 50198676480 z^9 + 155712533760 z^8 + 241408097280 z^7 + 152437360320 z^6 + 20313115200 z^5 - 1456736400 z^4 + 93895200 z^3 + 12077100 z^2 - 3572100 z + 13395375) \right)$$

07.25.03.ah6i.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{2679075} \left(e^z (8192 z^{13} + 626688 z^{12} + 18763776 z^{11} + 283011072 z^{10} + 2306188800 z^9 + 10109111040 z^8 + 22256156160 z^7 + 20551345920 z^6 + 4288969440 z^5 - 565866000 z^4 + 120430800 z^3 - 13267800 z^2 - 595350 z - 2679075) \right)$$

07.25.03.ah6j.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{893025} \left(e^z (4096 z^{12} + 270336 z^{11} + 6813696 z^{10} + 83589120 z^9 + 526176000 z^8 + 1634411520 z^7 + 2138814720 z^6 + 651006720 z^5 - 134038800 z^4 + 52164000 z^3 - 18030600 z^2 + 2381400 z + 893025) \right)$$

07.25.03.ah6k.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{893025} \left(e^z (2048 z^{11} + 113664 z^{10} + 2327040 z^9 + 22014720 z^8 + 97977600 z^7 + 180351360 z^6 + 77474880 z^5 - 23133600 z^4 + 13948200 z^3 - 8788500 z^2 + 4167450 z - 893025) \right)$$

07.25.03.ah6l.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{893025} \left(e^{z/2} (-1024 z^{11} - 52224 z^{10} - 969984 z^9 - 8187648 z^8 - 31788288 z^7 - 49328640 z^6 - 16190640 z^5 + 4374000 z^4 - 2929500 z^3 + 2551500 z^2 - 2083725 z + 893025) I_0\left(\frac{z}{2}\right) + \frac{1}{893025} \left(e^{z/2} (-1024 z^{11} - 51200 z^{10} - 919296 z^9 - 7292928 z^8 - 24907008 z^7 - 27295488 z^6 + 3668400 z^5 - 1886400 z^4 + 1498500 z^3 - 1323000 z^2 + 893025 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ah6m.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{893025} \left(e^z (1024 z^{10} + 46080 z^9 + 725760 z^8 + 4838400 z^7 + 12700800 z^6 + 7620480 z^5 - 3175200 z^4 + 2721600 z^3 - 2551500 z^2 + 1984500 z - 893025) \right)$$

07.25.03.ah6n.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{893025} \left(e^{z/2} (-1024 z^{10} - 41472 z^9 - 575232 z^8 - 3268608 z^7 - 6900480 z^6 - 2737440 z^5 + 903600 z^4 - 756000 z^3 + 850500 z^2 - 992250 z + 893025) I_0\left(\frac{z}{2}\right) + \frac{1}{893025} \left(e^{z/2} (-1024 z^{10} - 40448 z^9 - 535296 z^8 - 2752512 z^7 - 4378368 z^6 + 686880 z^5 - 435600 z^4 + 468000 z^3 - 661500 z^2 + 992250 z - 1091475) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ah6o.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{297675} \left(e^z (512 z^9 + 17664 z^8 + 195072 z^7 + 761088 z^6 + 642240 z^5 - 364320 z^4 + 416160 z^3 - 511920 z^2 + 515970 z - 297675) \right)$$

07.25.03.ah6p.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, 3; z\right) = -\frac{1}{893025} 8 e^{z/2} (256 z^9 + 7680 z^8 + 70656 z^7 + 211200 z^6 + 98640 z^5 - 36000 z^4 + 25200 z^3 - 70875 z + 141750) I_0\left(\frac{z}{2}\right) - \frac{1}{893025 z} \left(4 e^{z/2} (512 z^{10} + 14848 z^9 + 126720 z^8 + 302592 z^7 - 55200 z^6 + 47520 z^5 - 90000 z^4 + 252000 z^3 - 708750 z^2 + 1559250 z - 2027025) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ah6q.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{1}{59535} e^z (256 z^8 + 6144 z^7 + 39168 z^6 + 47616 z^5 - 36000 z^4 + 51840 z^3 - 77040 z^2 + 90720 z - 59535)$$

07.25.03.ah6r.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = -\frac{1}{297675 z} \left(4 e^{z/2} (512 z^9 + 9984 z^8 + 46080 z^7 + 24000 z^6 - 4320 z^5 - 25200 z^4 + 151200 z^3 - 567000 z^2 + 1445850 z - 2027025) I_0\left(\frac{z}{2}\right) - \frac{1}{297675 z^2} \left(4 e^{z/2} (512 z^{10} + 9472 z^9 + 36864 z^8 - 8640 z^7 + 14880 z^6 - 58320 z^5 + 252000 z^4 - 945000 z^3 + 2806650 z^2 - 6081075 z + 8108100) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ah6s.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{e^z (128 z^7 + 1728 z^6 + 3168 z^5 - 3120 z^4 + 5400 z^3 - 9180 z^2 + 11970 z - 8505)}{8505}$$

$$\begin{aligned}
 & \text{07.25.03.ah6t.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, 5; z\right) = \\
 & -\frac{1}{297\,675\,z^2} \left(32 e^{z/2} (256 z^9 + 2304 z^8 + 960 z^7 + 2496 z^6 - 19\,152 z^5 + 105\,840 z^4 - 476\,280 z^3 + 1\,701\,000 z^2 - \right. \\
 & \quad \left. 4\,459\,455 z + 6\,891\,885) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{297\,675\,z^3} \left(32 e^{z/2} (256 z^{10} + 2048 z^9 - 960 z^8 + 4224 z^7 - 25\,104 z^6 + 137\,088 z^5 - 642\,600 z^4 + \right. \right. \\
 & \quad \left. \left. 2\,494\,800 z^3 - 7\,702\,695 z^2 + 17\,837\,820 z - 27\,567\,540) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ah6u.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ah6v.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = \\
 & -\frac{1}{59\,535\,z^3} \left(32 e^{z/2} (256 z^9 - 384 z^8 + 4416 z^7 - 34\,368 z^6 + 233\,712 z^5 - 1\,375\,920 z^4 + 6\,826\,680 z^3 - 27\,335\,880 z^2 + \right. \\
 & \quad \left. 81\,718\,065 z - 149\,652\,360) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{59\,535\,z^4} \left(32 e^{z/2} (256 z^{10} - 640 z^9 + 5184 z^8 - 40\,128 z^7 + 277\,872 z^6 - 1\,684\,368 z^5 + 8\,731\,800 z^4 - \right. \right. \\
 & \quad \left. \left. 37\,528\,920 z^3 + 128\,050\,065 z^2 - 326\,872\,260 z + 598\,609\,440) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.ah6w.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{10\,418\,625} \left(e^z (16\,384 z^{14} + 1\,441\,792 z^{13} + 50\,720\,768 z^{12} + 924\,794\,880 z^{11} + 9\,483\,924\,480 z^{10} + 55\,611\,125\,760 z^9 + \right. \\
 & \quad \left. 181\,555\,188\,480 z^8 + 306\,671\,339\,520 z^7 + 230\,687\,352\,000 z^6 + 55\,375\,488\,000 z^5 + \right. \\
 & \quad \left. 1\,325\,192\,400 z^4 + 28\,123\,200 z^3 + 7\,314\,300 z^2 - 3\,402\,000 z + 10\,418\,625) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ah6x.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{1\,488\,375} \\
 & \left(e^z (8192 z^{13} + 643\,072 z^{12} + 19\,894\,272 z^{11} + 313\,190\,400 z^{10} + 2\,706\,224\,640 z^9 + 12\,921\,327\,360 z^8 + 32\,631\,621\,120 z^7 + \right. \\
 & \quad \left. 39\,124\,995\,840 z^6 + 17\,531\,186\,400 z^5 + 1\,390\,964\,400 z^4 - 32\,886\,000 z^3 - 2\,381\,400 z^2 + 85\,050 z - 1\,488\,375) \right)
 \end{aligned}$$

07.25.03.ah6y.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{297675} (e^z (4096 z^{12} + 282624 z^{11} + 7544832 z^{10} + 100008960 z^9 + 703054080 z^8 + 2593866240 z^7 + 4643412480 z^6 + 3310554240 z^5 + 489207600 z^4 - 38329200 z^3 + 2721600 z^2 + 170100 z + 297675))$$

07.25.03.ah6z.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{99225} (e^z (2048 z^{11} + 121856 z^{10} + 2736640 z^9 + 29479680 z^8 + 159909120 z^7 + 417432960 z^6 + 443257920 z^5 + 103874400 z^4 - 15082200 z^3 + 3458700 z^2 - 368550 z - 99225))$$

07.25.03.ah70.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{99225} (e^z (1024 z^{10} + 51200 z^9 + 933120 z^8 + 7741440 z^7 + 29635200 z^6 + 45722880 z^5 + 15876000 z^4 - 3628800 z^3 + 1530900 z^2 - 567000 z + 99225))$$

07.25.03.ah71.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{99225} \left(e^{z/2} (512 z^{10} + 23552 z^9 + 390400 z^8 + 2905728 z^7 + 9823200 z^6 + 13161600 z^5 + 3836880 z^4 - 889200 z^3 + 475650 z^2 - 283500 z + 99225) I_0\left(\frac{z}{2}\right) + \frac{1}{99225} \left(2 e^{z/2} (256 z^{10} + 11520 z^9 + 183808 z^8 + 1274560 z^7 + 3718224 z^6 + 3348720 z^5 - 403920 z^4 + 176040 z^3 - 106875 z^2 + 55125 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ah72.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{99225} (e^z (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + 408240 z^2 - 255150 z + 99225))$$

07.25.03.ah73.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{99225} \left(e^{z/2} (512 z^9 + 18688 z^8 + 231168 z^7 + 1158720 z^6 + 2144160 z^5 + 779760 z^4 - 230400 z^3 + 163800 z^2 - 141750 z + 99225) I_0\left(\frac{z}{2}\right) + \frac{1}{99225} \left(e^{z/2} (512 z^9 + 18176 z^8 + 213248 z^7 + 954048 z^6 + 1280160 z^5 - 186480 z^4 + 106560 z^3 - 99000 z^2 + 110250 z - 99225) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ah74.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{33075} e^z (256 z^8 + 7936 z^7 + 77696 z^6 + 264000 z^5 + 189120 z^4 - 87600 z^3 + 76680 z^2 - 64260 z + 33075)$$

07.25.03.ah75.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, 3; z\right) = \frac{4 e^{z/2} (256 z^8 + 6912 z^7 + 56640 z^6 + 149760 z^5 + 65520 z^4 - 21600 z^3 + 12600 z^2 - 14175) I_0\left(\frac{z}{2}\right) + \frac{1}{99225 z} \left(4 e^{z/2} (256 z^9 + 6656 z^8 + 50112 z^7 + 102720 z^6 - 18000 z^5 + 15120 z^4 - 27000 z^3 + 63000 z^2 - 127575 z + 155925) I_1\left(\frac{z}{2}\right)\right)}{99225}$$

07.25.03.ah76.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (128 z^7 + 2752 z^6 + 15456 z^5 + 16080 z^4 - 9960 z^3 + 10980 z^2 - 11070 z + 6615)}{6615}$$

07.25.03.ah77.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{33075 z} 4 e^{z/2} (256 z^8 + 4480 z^7 + 18368 z^6 + 9024 z^5 - 1200 z^4 - 8400 z^3 + 37800 z^2 - 98280 z + 135135) I_0\left(\frac{z}{2}\right) + \frac{1}{33075 z^2} \left(4 e^{z/2} (256 z^9 + 4224 z^8 + 14272 z^7 - 3392 z^6 + 5904 z^5 - 20400 z^4 + 71400 z^3 - 204120 z^2 + 426195 z - 540540) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.ah78.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{945} e^z (64 z^6 + 768 z^5 + 1200 z^4 - 960 z^3 + 1260 z^2 - 1440 z + 945)$$

07.25.03.ah79.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{33075 z^2} \left(32 e^{z/2} (128 z^8 + 1024 z^7 + 384 z^6 + 1056 z^5 - 6720 z^4 + 30240 z^3 - 105840 z^2 + 270270 z - 405405) I_0\left(\frac{z}{2}\right) + \frac{1}{33075 z^3} 64 e^{z/2} (64 z^9 + 448 z^8 - 224 z^7 + 912 z^6 - 4632 z^5 + 21000 z^4 - 79380 z^3 + 239085 z^2 - 540540 z + 810810) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.ah7a.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{105} e^z (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105)$$

07.25.03.ah7b.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{6615 z^3} \left(32 e^{z/2} (128 z^8 - 192 z^7 + 1920 z^6 - 13008 z^5 + 75600 z^4 - 370440 z^3 + 1467180 z^2 - 4343625 z + 7876440) I_0\left(\frac{z}{2}\right) + \frac{1}{6615 z^4} \left(32 e^{z/2} (128 z^9 - 320 z^8 + 2304 z^7 - 15600 z^6 + 93072 z^5 - 476280 z^4 + 2025540 z^3 - 6853275 z^2 + 17374500 z - 31505760) I_1\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.ah7c.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{212625} \left(e^z (4096 z^{12} + 286720 z^{11} + 7796736 z^{10} + 105916416 z^9 + 770572032 z^8 + 2993089536 z^7 + 5839997184 z^6 + 4962504960 z^5 + 1321835760 z^4 + 34564320 z^3 + 839160 z^2 + 68040 z + 212625) \right)$$

07.25.03.ah7d.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{42525} \left(e^z (2048 z^{11} + 125952 z^{10} + 2953728 z^9 + 33758976 z^8 + 199611648 z^7 + 598292352 z^6 + 825975360 z^5 + 416314080 z^4 + 36446760 z^3 - 941220 z^2 - 51030 z - 42525) \right)$$

07.25.03.ah7e.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{14175} \left(e^z (1024 z^{10} + 54272 z^9 + 1069824 z^8 + 9925632 z^7 + 45214848 z^6 + 95679360 z^5 + 78109920 z^4 + 12882240 z^3 - 1099980 z^2 + 79380 z + 14175) \right)$$

07.25.03.ah7f.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{14175} \left(e^z (512 z^9 + 22784 z^8 + 364032 z^7 + 2596608 z^6 + 8326080 z^5 + 10372320 z^4 + 2751840 z^3 - 438480 z^2 + 107730 z - 14175) \right)$$

07.25.03.ah7g.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{14175} \left(e^{z/2} (-256 z^9 - 10496 z^8 - 153024 z^7 - 986304 z^6 - 2838960 z^5 - 3193776 z^4 - 792648 z^3 + 146520 z^2 - 53865 z + 14175) I_0\left(\frac{z}{2}\right) + \frac{1}{14175} \left(e^{z/2} (-256 z^9 - 10240 z^8 - 142912 z^7 - 848256 z^6 - 2052720 z^5 - 1450944 z^4 + 149544 z^3 - 49968 z^2 + 17775 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ah7h.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{14175} e^z (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175)$$

07.25.03.ah7i.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{14175} e^{z/2} (-256 z^8 - 8320 z^7 - 90432 z^6 - 392640 z^5 - 623088 z^4 - 201744 z^3 + 50760 z^2 - 27720 z + 14175) I_0\left(\frac{z}{2}\right) + \frac{1}{14175} e^{z/2} (-256 z^8 - 8064 z^7 - 82496 z^6 - 313920 z^5 - 343152 z^4 + 45072 z^3 - 22104 z^2 + 16200 z - 11025) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah7j.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{e^z (128 z^7 + 3520 z^6 + 30048 z^5 + 86928 z^4 + 51096 z^3 - 18252 z^2 + 10962 z - 4725)}{4725}$$

07.25.03.ah7k.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = -\frac{32 e^{z/2} (16 z^7 + 384 z^6 + 2760 z^5 + 6336 z^4 + 2538 z^3 - 720 z^2 + 315 z) I_0\left(\frac{z}{2}\right)}{14175} - \frac{1}{14175 z} 4 e^{z/2} (128 z^8 + 2944 z^7 + 19200 z^6 + 32832 z^5 - 5472 z^4 + 4464 z^3 - 7200 z^2 + 12600 z - 14175) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah7l.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 1216 z^5 + 5904 z^4 + 5088 z^3 - 2436 z^2 + 1836 z - 945)$$

07.25.03.ah7m.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = -\frac{4 e^{z/2} (128 z^7 + 1984 z^6 + 7104 z^5 + 3216 z^4 - 240 z^3 - 2520 z^2 + 7560 z - 10395) I_0\left(\frac{z}{2}\right)}{4725 z} - \frac{1}{4725 z^2} 4 e^{z/2} (128 z^8 + 1856 z^7 + 5312 z^6 - 1296 z^5 + 2256 z^4 - 6600 z^3 + 17640 z^2 - 34965 z + 41580) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah7n.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{1}{135} e^z (32 z^5 + 336 z^4 + 432 z^3 - 264 z^2 + 234 z - 135)$$

07.25.03.ah7o.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, 5; z\right) = -\frac{32 e^{z/2} (64 z^7 + 448 z^6 + 144 z^5 + 432 z^4 - 2184 z^3 + 7560 z^2 - 18711 z + 27027) I_0\left(\frac{z}{2}\right)}{4725 z^2} - \frac{1}{4725 z^3} 32 e^{z/2} (64 z^8 + 384 z^7 - 208 z^6 + 768 z^5 - 3240 z^4 + 11760 z^3 - 34209 z^2 + 74844 z - 108108) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah7p.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{1}{15} e^z (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15)$$

07.25.03.ah7q.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{5}{2}, 6; z\right) = -\frac{32 e^{z/2} (64 z^7 - 96 z^6 + 816 z^5 - 4704 z^4 + 22680 z^3 - 88506 z^2 + 258687 z - 463320) I_0\left(\frac{z}{2}\right)}{945 z^3} - \frac{1}{945 z^4} 32 e^{z/2} (64 z^8 - 160 z^7 + 1008 z^6 - 5856 z^5 + 29400 z^4 - 123174 z^3 + 411939 z^2 - 1034748 z + 1853280) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.ah7r.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{8505} \left(e^z (1024 z^{10} + 55296 z^9 + 1117440 z^8 + 10733568 z^7 + 51504768 z^6 + 118879488 z^5 + 115788960 z^4 + \right. \\
 & \quad \left. 34473600 z^3 + 986580 z^2 + 22680 z + 8505) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ah7s.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \\
 & -\frac{1}{2835} \left(e^z (512 z^9 + 23808 z^8 + 403968 z^7 + 3144960 z^6 + 11600064 z^5 + 18839520 z^4 + 10795680 z^3 + \right. \\
 & \quad \left. 1043280 z^2 - 28350 z - 2835) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ah7t.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \\
 & \frac{1}{2835} e^z (256 z^8 + 9984 z^7 + 137088 z^6 + 818496 z^5 + 2116800 z^4 + 2010960 z^3 + 370440 z^2 - 34020 z + 2835)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ah7u.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \\
 & \frac{1}{2835} e^{z/2} (128 z^8 + 4608 z^7 + 57984 z^6 + 315936 z^5 + 750528 z^4 + 679968 z^3 + 133632 z^2 - 17010 z + 2835) I_0\left(\frac{z}{2}\right) + \\
 & \frac{1}{2835} 2 e^{z/2} (64 z^8 + 2240 z^7 + 26784 z^6 + 132240 z^5 + 254376 z^4 + 131112 z^3 - 10476 z^2 + 2061 z) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ah7v.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835)}{2835}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ah7w.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^{z/2} (128 z^7 + 3648 z^6 + 34176 z^5 + 125424 z^4 + 165456 z^3 + 45432 z^2 - 8820 z + 2835) I_0\left(\frac{z}{2}\right)}{2835} + \\
 & \frac{e^{z/2} (128 z^7 + 3520 z^6 + 30720 z^5 + 96336 z^4 + 81360 z^3 - 9144 z^2 + 3492 z - 1575) I_1\left(\frac{z}{2}\right)}{2835}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ah7x.01} \\
 & {}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{945} e^z (64 z^6 + 1536 z^5 + 11184 z^4 + 26688 z^3 + 12204 z^2 - 3024 z + 945)
 \end{aligned}$$

07.25.03.ah7y.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 + 1344 z^5 + 8304 z^4 + 16128 z^3 + 5688 z^2 - 1260 z + 315) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 + 1280 z^6 + 7056 z^5 + 9648 z^4 - 1512 z^3 + 1188 z^2 - 1575 z + 1575) I_1\left(\frac{z}{2}\right)}{2835 z}$$

07.25.03.ah7z.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{189} e^z (32 z^5 + 528 z^4 + 2160 z^3 + 1464 z^2 - 486 z + 189)$$

07.25.03.ah80.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^6 + 864 z^5 + 2640 z^4 + 1056 z^3 - 630 z + 945) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 + 800 z^6 + 1872 z^5 - 480 z^4 + 816 z^3 - 1890 z^2 + 3465 z - 3780) I_1\left(\frac{z}{2}\right)}{945 z^2}$$

07.25.03.ah81.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{27} e^z (16 z^4 + 144 z^3 + 144 z^2 - 60 z + 27)$$

07.25.03.ah82.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 + 192 z^5 + 48 z^4 + 168 z^3 - 630 z^2 + 1512 z - 2079) I_0\left(\frac{z}{2}\right) + 64 e^{z/2} (16 z^7 + 80 z^6 - 48 z^5 + 156 z^4 - 525 z^3 + 1449 z^2 - 3024 z + 4158) I_1\left(\frac{z}{2}\right)}{945 z^3}$$

07.25.03.ah83.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{3} e^z (8 z^3 + 12 z^2 - 6 z + 3)$$

07.25.03.ah84.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^6 - 48 z^5 + 336 z^4 - 1596 z^3 + 6102 z^2 - 17523 z + 30888) I_0\left(\frac{z}{2}\right) + 32 e^{z/2} (32 z^7 - 80 z^6 + 432 z^5 - 2100 z^4 + 8598 z^3 - 28269 z^2 + 70092 z - 123552) I_1\left(\frac{z}{2}\right)}{189 z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.ah85.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} e^z (256 z^8 + 10240 z^7 + 145664 z^6 + 916992 z^5 + 2590560 z^4 + 2943360 z^3 + 982800 z^2 + 30240 z + 945)$$

07.25.03.ah86.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{945} e^z (128 z^7 + 4288 z^6 + 49248 z^5 + 236880 z^4 + 466200 z^3 + 306180 z^2 + 32130 z - 945)$$

07.25.03.ah87.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (-64 z^7 - 1984 z^6 - 21\,008 z^5 - 93\,552 z^4 - 175\,128 z^3 - 119\,256 z^2 - 16\,065 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-64 z^7 - 1920 z^6 - 19\,120 z^5 - 75\,328 z^4 - 107\,640 z^3 - 35\,328 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah88.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 1728 z^5 + 15\,120 z^4 + 50\,400 z^3 + 56\,700 z^2 + 11\,340 z - 945)$$

07.25.03.ah89.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (-64 z^6 - 1568 z^5 - 12\,336 z^4 - 36\,960 z^3 - 38\,616 z^2 - 8190 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (-64 z^6 - 1504 z^5 - 10\,864 z^4 - 26\,784 z^3 - 15\,960 z^2 + 1374 z - 315) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah8a.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{1}{315} e^z (32 z^5 + 656 z^4 + 3952 z^3 + 7416 z^2 + 2394 z - 315)$$

07.25.03.ah8b.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = -\frac{8}{945} e^{z/2} (16 z^5 + 288 z^4 + 1488 z^3 + 2352 z^2 + 675 z - 90) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (32 z^6 + 544 z^5 + 2448 z^4 + 2496 z^3 - 366 z^2 + 270 z - 225) I_1\left(\frac{z}{2}\right)}{945 z}$$

07.25.03.ah8c.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{1}{63} e^z (16 z^4 + 224 z^3 + 744 z^2 + 360 z - 63)$$

07.25.03.ah8d.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = -\frac{4 e^{z/2} (32 z^5 + 368 z^4 + 928 z^3 + 300 z^2 + 30 z - 105) I_0\left(\frac{z}{2}\right)}{315 z} - \frac{4 e^{z/2} (32 z^6 + 336 z^5 + 608 z^4 - 172 z^3 + 270 z^2 - 435 z + 420) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.ah8e.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{1}{9} e^z (8 z^3 + 60 z^2 + 42 z - 9)$$

07.25.03.ah8f.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = -\frac{32 e^{z/2} (16 z^5 + 80 z^4 + 12 z^3 + 60 z^2 - 147 z + 189) I_0\left(\frac{z}{2}\right)}{315 z^2} - \frac{32 e^{z/2} (16 z^6 + 64 z^5 - 44 z^4 + 120 z^3 - 303 z^2 + 588 z - 756) I_1\left(\frac{z}{2}\right)}{315 z^3}$$

07.25.03.ah8g.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -e^z (4 z^2 + 4 z - 1)$$

07.25.03.ah8h.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = -\frac{32 e^{z/2} (16 z^5 - 24 z^4 + 132 z^3 - 492 z^2 + 1377 z - 2376) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (16 z^6 - 40 z^5 + 180 z^4 - 708 z^3 + 2265 z^2 - 5508 z + 9504) I_1\left(\frac{z}{2}\right)}{63 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{1}{2}$

07.25.03.ah8i.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (64 z^6 + 1792 z^5 + 16560 z^4 + 60480 z^3 + 81900 z^2 + 30240 z + 945)$$

07.25.03.ah8j.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (32 z^6 + 832 z^5 + 7152 z^4 + 24744 z^3 + 33834 z^2 + 15120 z + 945) I_0\left(\frac{z}{2}\right) + \frac{2}{945} e^{z/2} (16 z^6 + 400 z^5 + 3184 z^4 + 9372 z^3 + 8787 z^2 + 1317 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah8k.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945)$$

07.25.03.ah8l.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (32 z^5 + 656 z^4 + 4176 z^3 + 9684 z^2 + 7350 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (32 z^5 + 624 z^4 + 3568 z^3 + 6396 z^2 + 2214 z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah8m.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (16 z^4 + 272 z^3 + 1296 z^2 + 1764 z + 315)$$

07.25.03.ah8n.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, 3; z\right) = \frac{4}{945} e^{z/2} (16 z^4 + 240 z^3 + 996 z^2 + 1200 z + 225) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (16 z^5 + 224 z^4 + 780 z^3 + 516 z^2 - 75 z + 45) I_1\left(\frac{z}{2}\right)}{945 z}$$

07.25.03.ah8o.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (8 z^3 + 92 z^2 + 234 z + 63)$$

07.25.03.ah8p.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 + 152 z^3 + 300 z^2 + 60 z + 15) I_0\left(\frac{z}{2}\right)}{315 z} + \frac{4 e^{z/2} (16 z^5 + 136 z^4 + 172 z^3 - 60 z^2 + 75 z - 60) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.ah8q.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{9} e^z (4z^2 + 24z + 9)$$

07.25.03.ah8r.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (8z^4 + 32z^3 + 18z - 21) I_0\left(\frac{z}{2}\right) + 64 e^{z/2} (4z^5 + 12z^4 - 10z^3 + 21z^2 - 36z + 42) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.ah8s.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = e^z (2z + 1)$$

07.25.03.ah8t.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (8z^4 - 12z^3 + 48z^2 - 129z + 216) I_0\left(\frac{z}{2}\right) + 32 e^{z/2} (8z^5 - 20z^4 + 72z^3 - 219z^2 + 516z - 864) I_1\left(\frac{z}{2}\right)}{63 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 1$

07.25.03.ah8u.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{945} e^{z/2} (16z^5 + 336z^4 + 2220z^3 + 5484z^2 + 4725z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^5 + 320z^4 + 1908z^3 + 3720z^2 + 1689z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah8v.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{315} e^{z/2} (8z^4 + 128z^3 + 592z^2 + 882z + 315) I_0\left(\frac{z}{2}\right) + \frac{2}{315} e^{z/2} (4z^4 + 60z^3 + 238z^2 + 229z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah8w.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{63} e^{z/2} (4z^3 + 44z^2 + 117z + 63) I_0\left(\frac{z}{2}\right) + \frac{1}{63} e^{z/2} (4z^3 + 40z^2 + 79z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah8x.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{9} e^{z/2} (2z^2 + 12z + 9) I_0\left(\frac{z}{2}\right) + \frac{2}{9} e^{z/2} (z^2 + 5z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah8y.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; 1, \frac{11}{2}; z\right) = e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{3}{2}$

07.25.03.ah8z.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (16z^4 + 288z^3 + 1512z^2 + 2520z + 945)$$

07.25.03.ah90.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (16z^4 + 264z^3 + 1284z^2 + 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^4 + 248z^3 + 1044z^2 + 1164z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah91.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (8z^3 + 108z^2 + 378z + 315)$$

07.25.03.ah92.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{16}{945} e^{z/2} (2z^3 + 24z^2 + 75z + 60) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8z^4 + 88z^3 + 216z^2 + 60z - 15) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.ah93.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (4z^2 + 36z + 63)$$

07.25.03.ah94.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 + 60z^2 + 84z - 3) I_0\left(\frac{z}{2}\right)}{315z} + \frac{4 e^{z/2} (8z^4 + 52z^3 + 36z^2 - 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.ah95.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2z + 9)$$

07.25.03.ah96.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^3 + 12z^2 - 3z + 3) I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{32 e^{z/2} (4z^4 + 8z^3 - 9z^2 + 12z - 12) I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.ah97.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = e^z$$

07.25.03.ah98.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 - 6z^2 + 15z - 24) I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{32 e^{z/2} (4z^4 - 10z^3 + 27z^2 - 60z + 96) I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 2$

07.25.03.ah99.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{315} e^{z/2} (8z^3 + 100z^2 + 336z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (8z^3 + 92z^2 + 248z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah9a.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{63} e^{z/2} (4z^2 + 34z + 63) I_0\left(\frac{z}{2}\right) + \frac{1}{63} e^{z/2} (4z^2 + 30z + 35) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah9b.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{9} e^{z/2} (2z + 9) I_0\left(\frac{z}{2}\right) + \frac{1}{9} e^{z/2} (2z + 7) I_1\left(\frac{z}{2}\right)$$

07.25.03.ah9c.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; 2, \frac{11}{2}; z\right) = e^{z/2} I_0\left(\frac{z}{2}\right) + e^{z/2} I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{5}{2}$

07.25.03.ah9d.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (4z^3 + 40z^2 + 89z + 24)}{105z} - \frac{4\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.ah9e.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} (4z^3 - 40z^2 + 89z - 24)}{105z} + \frac{4\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{35z^{3/2}}$$

07.25.03.ah9f.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{4}{315} e^{z/2} (4z^2 + 36z + 75) I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2} (4z^3 + 32z^2 + 45z + 15) I_1\left(\frac{z}{2}\right)}{315z}$$

07.25.03.ah9g.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (2z^2 + 13z + 12)}{21z} - \frac{2\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7z^{3/2}}$$

07.25.03.ah9h.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-2z^2 + 13z - 12)}{21z} + \frac{2\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7z^{3/2}}$$

07.25.03.ah9i.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{4e^{z/2} (4z^2 + 22z + 1) I_0\left(\frac{z}{2}\right)}{105z} + \frac{4e^{z/2} (4z^3 + 18z^2 + 17z - 4) I_1\left(\frac{z}{2}\right)}{105z^2}$$

07.25.03.ah9j.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (z + 3)}{3z} - \frac{\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2z^{3/2}}$$

07.25.03.ah9k.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (z - 3)}{3z} + \frac{\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2z^{3/2}}$$

07.25.03.ah9l.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{32e^{z/2} (10z^2 + 4z - 3) I_0\left(\frac{z}{2}\right)}{525z^2} + \frac{64e^{z/2} (5z^3 + 13z^2 - 8z + 6) I_1\left(\frac{z}{2}\right)}{525z^3}$$

07.25.03.ah9m.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{3e^z}{2z} - \frac{3\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.ah9n.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3e^{-z}}{2z}$$

07.25.03.ah9o.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{32e^{z/2}(38z^2 - 81z + 120)I_0\left(\frac{z}{2}\right)}{735z^3} + \frac{32e^{z/2}(102z^3 - 167z^2 + 324z - 480)I_1\left(\frac{z}{2}\right)}{735z^4}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 3$

07.25.03.ah9p.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{8}{63}e^{z/2}(z+6)I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2}(2z^2 + 10z + 15)I_1\left(\frac{z}{2}\right)}{63z}$$

07.25.03.ah9q.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{4}{9}e^{z/2}I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2}(z+5)I_1\left(\frac{z}{2}\right)}{9z}$$

07.25.03.ah9r.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; 3, \frac{11}{2}; z\right) = \frac{4e^{z/2}I_1\left(\frac{z}{2}\right)}{z}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{7}{2}$

07.25.03.ah9s.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5e^z(z^2 + 4z + 3)}{21z^2} - \frac{5\sqrt{\pi}(2z+1)\operatorname{erfi}(\sqrt{z})}{14z^{5/2}}$$

07.25.03.ah9t.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}(z^2 - 4z + 3)}{21z^2} + \frac{5\sqrt{\pi}(2z-1)\operatorname{erf}(\sqrt{z})}{14z^{5/2}}$$

07.25.03.ah9u.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{4e^{z/2}(2z-1)I_0\left(\frac{z}{2}\right)}{21z} + \frac{4e^{z/2}(2z^2 + 13z + 4)I_1\left(\frac{z}{2}\right)}{21z^2}$$

07.25.03.ah9v.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{5e^z(z+3)}{6z^2} - \frac{5\sqrt{\pi}(z+1)\operatorname{erfi}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.ah9w.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5\sqrt{\pi}(z-1)\operatorname{erf}(\sqrt{z})}{4z^{5/2}} - \frac{5e^{-z}(z-3)}{6z^2}$$

07.25.03.ah9x.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{32e^{z/2}(13z^2 + 12z - 4)I_1\left(\frac{z}{2}\right)}{105z^3} - \frac{32e^{z/2}(3z-1)I_0\left(\frac{z}{2}\right)}{105z^2}$$

07.25.03.ah9y.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{45 e^z}{8 z^2} - \frac{15 \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.ah9z.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{15 \sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45 e^{-z}}{8 z^2}$$

07.25.03.aha0.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^3 + 67 z^2 - 76 z + 96) I_1\left(\frac{z}{2}\right)}{147 z^4} - \frac{32 e^{z/2} (16 z^2 - 19 z + 24) I_0\left(\frac{z}{2}\right)}{147 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 4$

07.25.03.aha1.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; 4, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (3z + 4) I_1\left(\frac{z}{2}\right)}{3 z^2} - \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{3 z}$$

07.25.03.aha2.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; 4, \frac{11}{2}; z\right) = \frac{4 e^{z/2} (z + 4) I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{9}{2}$

07.25.03.aha3.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (14z + 15)}{96 z^3} - \frac{35 \sqrt{\pi} (4z^2 + 8z + 5) \operatorname{erfi}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.aha4.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (14z - 15)}{96 z^3} + \frac{35 \sqrt{\pi} (4z^2 - 8z + 5) \operatorname{erf}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.aha5.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{64 e^{z/2} (z^2 + 4z + 2) I_1\left(\frac{z}{2}\right)}{15 z^3} - \frac{32 e^{z/2} (2z + 1) I_0\left(\frac{z}{2}\right)}{15 z^2}$$

07.25.03.aha6.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{105 e^z (2z + 15)}{64 z^3} - \frac{105 \sqrt{\pi} (4z^2 + 12z + 15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.aha7.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{105 e^{-z} (2z - 15)}{64 z^3} + \frac{105 \sqrt{\pi} (4z^2 - 12z + 15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.aha8.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 + 15z^2 + 44z - 32) I_1\left(\frac{z}{2}\right)}{21 z^4} - \frac{32 e^{z/2} (4z^2 + 11z - 8) I_0\left(\frac{z}{2}\right)}{21 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 5$

07.25.03.aha9.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; 5, \frac{11}{2}; z\right) = \frac{32 e^{z/2} (z^2 + 4z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{32 e^{z/2} (z + 3) I_0\left(\frac{z}{2}\right)}{5 z^2}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{11}{2}$

07.25.03.ahaa.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{315 e^z (4z^2 + 20z + 105)}{256 z^4} - \frac{315 \sqrt{\pi} (8z^3 + 36z^2 + 90z + 105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ahab.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (4z^2 - 20z + 105)}{256 z^4} + \frac{315 \sqrt{\pi} (8z^3 - 36z^2 + 90z - 105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ahac.01

$${}_2F_2\left(\frac{3}{2}, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^3 + 11z^2 + 36z + 96) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{32 e^{z/2} (2z^2 + 9z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = -\frac{11}{2}$

07.25.03.ahad.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{1620840375} (1024 z^{18} + 144384 z^{17} + 8537088 z^{16} + 277424128 z^{15} + 5458255296 z^{14} + 67555494720 z^{13} + 529663236480 z^{12} + 2586035168640 z^{11} + 7529716938240 z^{10} + 12054584424960 z^9 + 9109518163200 z^8 + 2327541350400 z^7 + 59935075200 z^6 + 1257379200 z^5 + 257191200 z^4 + 158760000 z^3 + 208372500 z^2 + 482233500 z + 1620840375) + \frac{1}{1620840375} (32 e^z \sqrt{\pi} (32 z^{37/2} + 4528 z^{35/2} + 269024 z^{33/2} + 8800680 z^{31/2} + 174777330 z^{29/2} + 2192373015 z^{27/2} + 17531943975 z^{25/2} + 88212487230 z^{23/2} + 269445389850 z^{21/2} + 467736330600 z^{19/2} + 410602840200 z^{17/2} + 145462791600 z^{15/2} + 11794280400 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahae.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; -z\right) =$$

$$\frac{1}{1620840375} \left(1024 z^{18} - 144384 z^{17} + 8537088 z^{16} - 277424128 z^{15} + 5458255296 z^{14} - 67555494720 z^{13} + \right.$$

$$529663236480 z^{12} - 2586035168640 z^{11} + 7529716938240 z^{10} - 1205458424960 z^9 +$$

$$9109518163200 z^8 - 2327541350400 z^7 + 59935075200 z^6 - 1257379200 z^5 +$$

$$257191200 z^4 - 158760000 z^3 + 208372500 z^2 - 482233500 z + 1620840375 \Big) -$$

$$\frac{1}{1620840375} \left(32 e^{-z} \sqrt{\pi} \left(32 z^{37/2} - 4528 z^{35/2} + 269024 z^{33/2} - 8800680 z^{31/2} + 174777330 z^{29/2} - \right. \right.$$

$$2192373015 z^{27/2} + 17531943975 z^{25/2} - 88212487230 z^{23/2} + 269445389850 z^{21/2} -$$

$$\left. \left. 467736330600 z^{19/2} + 410602840200 z^{17/2} - 145462791600 z^{15/2} + 11794280400 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ahaf.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{147349125} \left(-512 z^{17} - 66048 z^{16} - 3542272 z^{15} - 103321728 z^{14} - 1800923040 z^{13} - 19417890240 z^{12} - \right.$$

$$129692687040 z^{11} - 522726946560 z^{10} - 1198245646080 z^9 - 1394164396800 z^8 - 650041459200 z^7 -$$

$$59935075200 z^6 + 1257379200 z^5 + 85730400 z^4 + 31752000 z^3 + 29767500 z^2 + 53581500 z + 147349125 \Big) -$$

$$\frac{1}{147349125} \left(16 e^z \sqrt{\pi} \left(32 z^{35/2} + 4144 z^{33/2} + 223440 z^{31/2} + 6566280 z^{29/2} + 115680810 z^{27/2} + \right. \right.$$

$$1266926535 z^{25/2} + 8663458230 z^{23/2} + 36231737850 z^{21/2} + 88286700600 z^{19/2} +$$

$$\left. \left. 114589528200 z^{17/2} + 66834255600 z^{15/2} + 11794280400 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ahag.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{147349125} \left(512 z^{17} - 66048 z^{16} + 3542272 z^{15} - 103321728 z^{14} + 1800923040 z^{13} - 19417890240 z^{12} + \right.$$

$$129692687040 z^{11} - 522726946560 z^{10} + 1198245646080 z^9 - 1394164396800 z^8 + 650041459200 z^7 -$$

$$59935075200 z^6 - 1257379200 z^5 + 85730400 z^4 - 31752000 z^3 + 29767500 z^2 - 53581500 z + 147349125 \Big) -$$

$$\frac{1}{147349125} \left(16 e^{-z} \sqrt{\pi} \left(32 z^{35/2} - 4144 z^{33/2} + 223440 z^{31/2} - 6566280 z^{29/2} + 115680810 z^{27/2} - \right. \right.$$

$$1266926535 z^{25/2} + 8663458230 z^{23/2} - 36231737850 z^{21/2} + 88286700600 z^{19/2} -$$

$$\left. \left. 114589528200 z^{17/2} + 66834255600 z^{15/2} - 11794280400 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ahah.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{16372125} (256 z^{16} + 29952 z^{15} + 1441792 z^{14} + 37257600 z^{13} + 565827760 z^{12} + 5199282480 z^{11} + 28693748160 z^{10} + 91237446720 z^9 + 152738064000 z^8 + 111137443200 z^7 + 19978358400 z^6 - 1257379200 z^5 + 85730400 z^4 + 10584000 z^3 + 5953500 z^2 + 7654500 z + 16372125) + \frac{1}{16372125} (8 e^z \sqrt{\pi} (32 z^{33/2} + 3760 z^{31/2} + 182080 z^{29/2} + 4745480 z^{27/2} + 72971490 z^{25/2} + 683154615 z^{23/2} + 3881375925 z^{21/2} + 12943482300 z^{19/2} + 23569289100 z^{17/2} + 20312371800 z^{15/2} + 5897140200 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahai.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{16372125} (256 z^{16} - 29952 z^{15} + 1441792 z^{14} - 37257600 z^{13} + 565827760 z^{12} - 5199282480 z^{11} + 28693748160 z^{10} - 91237446720 z^9 + 152738064000 z^8 - 111137443200 z^7 + 19978358400 z^6 + 1257379200 z^5 + 85730400 z^4 - 10584000 z^3 + 5953500 z^2 - 7654500 z + 16372125) - \frac{1}{16372125} (8 e^{-z} \sqrt{\pi} (32 z^{33/2} - 3760 z^{31/2} + 182080 z^{29/2} - 4745480 z^{27/2} + 72971490 z^{25/2} - 683154615 z^{23/2} + 3881375925 z^{21/2} - 12943482300 z^{19/2} + 23569289100 z^{17/2} - 20312371800 z^{15/2} + 5897140200 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahaj.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{2338875} (-128 z^{15} - 13440 z^{14} - 573120 z^{13} - 12904160 z^{12} - 167046792 z^{11} - 1269061920 z^{10} - 5533204320 z^9 - 12893860800 z^8 - 13630248000 z^7 - 3995671680 z^6 + 419126400 z^5 - 85730400 z^4 + 10584000 z^3 + 1984500 z^2 + 1530900 z + 2338875) - \frac{1}{2338875} (4 e^z \sqrt{\pi} (32 z^{31/2} + 3376 z^{29/2} + 144944 z^{27/2} + 3296040 z^{25/2} + 43307130 z^{23/2} + 336697575 z^{21/2} + 1524492900 z^{19/2} + 3796524900 z^{17/2} + 4586664600 z^{15/2} + 1965713400 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahak.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{2338875} (128 z^{15} - 13440 z^{14} + 573120 z^{13} - 12904160 z^{12} + 167046792 z^{11} - 1269061920 z^{10} + 5533204320 z^9 - 12893860800 z^8 + 13630248000 z^7 - 3995671680 z^6 - 419126400 z^5 - 85730400 z^4 - 10584000 z^3 + 1984500 z^2 - 1530900 z + 2338875) - \frac{1}{2338875} (4 e^{-z} \sqrt{\pi} (32 z^{31/2} - 3376 z^{29/2} + 144944 z^{27/2} - 3296040 z^{25/2} + 43307130 z^{23/2} - 336697575 z^{21/2} + 1524492900 z^{19/2} - 3796524900 z^{17/2} + 4586664600 z^{15/2} - 1965713400 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahal.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{467775} (64 z^{14} + 5952 z^{13} + 221120 z^{12} + 4243776 z^{11} + 45432828 z^{10} + 272939940 z^9 + 874333800 z^8 + 1296059400 z^7 + 570810240 z^6 - 83825280 z^5 + 28576800 z^4 - 10584000 z^3 + 1984500 z^2 + 510300 z + 467775) + \frac{1}{467775} \left(2 e^z \sqrt{\pi} (32 z^{29/2} + 2992 z^{27/2} + 112032 z^{25/2} + 2175720 z^{23/2} + 23725650 z^{21/2} + 146892375 z^{19/2} + 496246275 z^{17/2} + 819047250 z^{15/2} + 491428350 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aham.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{467775} (64 z^{14} - 5952 z^{13} + 221120 z^{12} - 4243776 z^{11} + 45432828 z^{10} - 272939940 z^9 + 874333800 z^8 - 1296059400 z^7 + 570810240 z^6 + 83825280 z^5 + 28576800 z^4 + 10584000 z^3 + 1984500 z^2 - 510300 z + 467775) - \frac{1}{467775} \left(2 e^{-z} \sqrt{\pi} (32 z^{29/2} - 2992 z^{27/2} + 112032 z^{25/2} - 2175720 z^{23/2} + 23725650 z^{21/2} - 146892375 z^{19/2} + 496246275 z^{17/2} - 819047250 z^{15/2} + 491428350 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ahan.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{155925} (-32 z^{13} - 2592 z^{12} - 82064 z^{11} - 1302504 z^{10} - 11031818 z^9 - 48775380 z^8 - 99953460 z^7 - 63423360 z^6 + 11975040 z^5 - 5715360 z^4 + 3528000 z^3 - 1984500 z^2 + 510300 z + 155925) + \frac{1}{155925} \left(e^z \sqrt{\pi} (-32 z^{27/2} - 2608 z^{25/2} - 83344 z^{23/2} - 1342280 z^{21/2} - 11645130 z^{19/2} - 53731335 z^{17/2} - 120126930 z^{15/2} - 98285670 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ahao.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{155925} (32 z^{13} - 2592 z^{12} + 82064 z^{11} - 1302504 z^{10} + 11031818 z^9 - 48775380 z^8 + 99953460 z^7 - 63423360 z^6 - 11975040 z^5 - 5715360 z^4 - 3528000 z^3 - 1984500 z^2 - 510300 z + 155925) + \frac{1}{155925} \left(e^{-z} \sqrt{\pi} (-32 z^{27/2} + 2608 z^{25/2} - 83344 z^{23/2} + 1342280 z^{21/2} - 11645130 z^{19/2} + 53731335 z^{17/2} - 120126930 z^{15/2} + 98285670 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ahap.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{155925} (16z^{12} + 1104z^{11} + 28896z^{10} + 362824z^9 + 2263635z^8 + 6428655z^7 + 5765760z^6 - 1330560z^5 + 816480z^4 - 705600z^3 + 661500z^2 - 510300z + 155925) + \frac{1}{311850} (e^z \sqrt{\pi} (32z^{25/2} + 2224z^{23/2} + 58880z^{21/2} + 753480z^{19/2} + 4863810z^{17/2} + 14820855z^{15/2} + 16380945z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahaq.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{155925} (16z^{12} - 1104z^{11} + 28896z^{10} - 362824z^9 + 2263635z^8 - 6428655z^7 + 5765760z^6 + 1330560z^5 + 816480z^4 + 705600z^3 + 661500z^2 + 510300z + 155925) + \frac{1}{311850} (e^{-z} \sqrt{\pi} (-32z^{25/2} + 2224z^{23/2} - 58880z^{21/2} + 753480z^{19/2} - 4863810z^{17/2} + 14820855z^{15/2} - 16380945z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahar.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, 1; z\right) = \frac{1}{1247400} (e^z (128z^{12} + 8128z^{11} + 192928z^{10} + 2150480z^9 + 11505000z^8 + 26117940z^7 + 14313390z^6 - 5713785z^5 + 4934475z^4 - 4977000z^3 + 4649400z^2 - 3288600z + 1247400))$$

07.25.03.ahas.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (32z^5 + 1840z^4 + 38640z^3 + 367080z^2 + 1560090z + 2340135) \operatorname{erf}(\sqrt{z}) z^{13/2}}{623700} + \frac{1}{311850} (16z^{11} + 912z^{10} + 18872z^9 + 174540z^8 + 701145z^7 + 887040z^6 - 241920z^5 + 181440z^4 - 201600z^3 + 264600z^2 - 340200z + 311850)$$

07.25.03.ahat.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32z^5 - 1840z^4 + 38640z^3 - 367080z^2 + 1560090z - 2340135) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{623700} + \frac{1}{311850} (-16z^{11} + 912z^{10} - 18872z^9 + 174540z^8 - 701145z^7 + 887040z^6 + 241920z^5 + 181440z^4 + 201600z^3 + 264600z^2 + 340200z + 311850)$$

07.25.03.ahau.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, 2; z\right) = \frac{1}{1247400} (e^z (128z^{11} + 6592z^{10} + 120416z^9 + 946320z^8 + 2988120z^7 + 2212980z^6 - 1177470z^5 + 1351035z^4 - 1820700z^3 + 2305800z^2 - 2268000z + 1247400))$$

07.25.03.ahav.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{207900z} (16z^{11} + 720z^{10} + 10960z^9 + 65280z^8 + 118279z^7 - 37275z^6 + 33390z^5 - 47250z^4 + 88200z^3 - 189000z^2 + 384300z - 529200) + \frac{1}{415800z^{3/2}} (e^z \sqrt{\pi} (32z^{12} + 1456z^{11} + 22624z^{10} + 140840z^9 + 292530z^8 - 105z^7 + 735z^6 - 4410z^5 + 22050z^4 - 88200z^3 + 264600z^2 - 529200z + 529200) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahaw.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{207900z} (16z^{11} - 720z^{10} + 10960z^9 - 65280z^8 + 118279z^7 + 37275z^6 + 33390z^5 + 47250z^4 + 88200z^3 + 189000z^2 + 384300z + 529200) + \frac{1}{415800z^{3/2}} (e^{-z} \sqrt{\pi} (-32z^{12} + 1456z^{11} - 22624z^{10} + 140840z^9 - 292530z^8 - 105z^7 - 735z^6 - 4410z^5 - 22050z^4 - 88200z^3 - 264600z^2 - 529200z - 529200) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahax.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, 3; z\right) = \frac{1}{623700} (e^z (128z^{10} + 5056z^9 + 64800z^8 + 298320z^7 + 303240z^6 - 212940z^5 + 313110z^4 - 527625z^3 + 817425z^2 - 963900z + 623700))$$

07.25.03.ahay.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{83160z^2} (16z^{11} + 528z^{10} + 5160z^9 + 13924z^8 - 5043z^7 + 5670z^6 - 11970z^5 + 37800z^4 - 135000z^3 + 441000z^2 - 1134000z + 1814400) + \frac{1}{166320z^{5/2}} (e^z \sqrt{\pi} (32z^{12} + 1072z^{11} + 10832z^{10} + 32520z^9 - 150z^8 + 1095z^7 - 6930z^6 + 37170z^5 - 163800z^4 + 567000z^3 - 1436400z^2 + 2343600z - 1814400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahaz.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{83160z^2} (-16z^{11} + 528z^{10} - 5160z^9 + 13924z^8 + 5043z^7 + 5670z^6 + 11970z^5 + 37800z^4 + 135000z^3 + 441000z^2 + 1134000z + 1814400) + \frac{1}{166320z^{5/2}} (e^{-z} \sqrt{\pi} (32z^{12} - 1072z^{11} + 10832z^{10} - 32520z^9 - 150z^8 - 1095z^7 - 6930z^6 - 37170z^5 - 163800z^4 - 567000z^3 - 1436400z^2 - 2343600z - 1814400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahb0.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, 4; z\right) = \frac{1}{207900} e^z (128 z^9 + 3520 z^8 + 26080 z^7 + 37520 z^6 - 34440 z^5 + 62580 z^4 - 124950 z^3 + 222075 z^2 - 292950 z + 207900)$$

07.25.03.ahb1.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{23760 z^3} (16 z^{11} + 336 z^{10} + 1472 z^9 - 648 z^8 + 1179 z^7 - 4725 z^6 + 23940 z^5 - 116100 z^4 + 487800 z^3 - 1685880 z^2 + 4536000 z - 8164800) + \frac{1}{47520 z^{7/2}} (e^z \sqrt{\pi} (32 z^{12} + 688 z^{11} + 3264 z^{10} - 120 z^9 + 930 z^8 - 6345 z^7 + 37485 z^6 - 187740 z^5 + 774900 z^4 - 2532600 z^3 + 6161400 z^2 - 9979200 z + 8164800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahb2.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{23760 z^3} (16 z^{11} - 336 z^{10} + 1472 z^9 + 648 z^8 + 1179 z^7 + 4725 z^6 + 23940 z^5 + 116100 z^4 + 487800 z^3 + 1685880 z^2 + 4536000 z + 8164800) + \frac{1}{47520 z^{7/2}} (e^{-z} \sqrt{\pi} (-32 z^{12} + 688 z^{11} - 3264 z^{10} - 120 z^9 - 930 z^8 - 6345 z^7 - 37485 z^6 - 187740 z^5 - 774900 z^4 - 2532600 z^3 - 6161400 z^2 - 9979200 z - 8164800) \operatorname{erfi}(\sqrt{-z}))$$

07.25.03.ahb3.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, 5; z\right) = \frac{e^z (128 z^8 + 1984 z^7 + 4256 z^6 - 5040 z^5 + 10920 z^4 - 24780 z^3 + 48510 z^2 - 68985 z + 51975)}{51975}$$

07.25.03.ahb4.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{5280 z^4} (16 z^{11} + 144 z^{10} - 104 z^9 + 444 z^8 - 2975 z^7 + 19740 z^6 - 117900 z^5 + 613800 z^4 - 2719080 z^3 + 9979200 z^2 - 29332800 z + 63504000) + \frac{1}{10560 z^{9/2}} (e^z \sqrt{\pi} (32 z^{12} + 304 z^{11} - 80 z^{10} + 680 z^9 - 5190 z^8 + 35175 z^7 - 208740 z^6 + 1064700 z^5 - 4548600 z^4 + 15661800 z^3 - 40824000 z^2 + 71668800 z - 63504000) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahb5.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{5280 z^4} (-16 z^{11} + 144 z^{10} + 104 z^9 + 444 z^8 + 2975 z^7 + 19740 z^6 + 117900 z^5 + 613800 z^4 + 2719080 z^3 + 9979200 z^2 + 29332800 z + 63504000) + \frac{1}{10560 z^{9/2}} (e^{-z} \sqrt{\pi} (32 z^{12} - 304 z^{11} - 80 z^{10} - 680 z^9 - 5190 z^8 - 35175 z^7 - 208740 z^6 - 1064700 z^5 - 4548600 z^4 - 15661800 z^3 - 40824000 z^2 - 71668800 z - 63504000) \operatorname{erfi}(\sqrt{-z}))$$

07.25.03.ahb6.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{11}{2}, 6; z\right) = \frac{e^z (128 z^7 + 448 z^6 - 672 z^5 + 1680 z^4 - 4200 z^3 + 8820 z^2 - 13\,230 z + 10\,395)}{10\,395}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = -\frac{9}{2}$

07.25.03.ahb7.01

$$\begin{aligned} &{}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; z\right) = \\ &\frac{1}{13\,395\,375} (256 z^{16} + 30\,208 z^{15} + 1\,469\,184 z^{14} + 38\,452\,992 z^{13} + 593\,535\,600 z^{12} + 5\,571\,720\,000 z^{11} + \\ &\quad 31\,670\,886\,240 z^{10} + 105\,202\,045\,440 z^9 + 189\,245\,185\,920 z^8 + 158\,856\,768\,000 z^7 + 44\,697\,744\,000 z^6 + \\ &\quad 1\,257\,379\,200 z^5 + 28\,576\,800 z^4 + 6\,350\,400 z^3 + 4\,252\,500 z^2 + 5\,953\,500 z + 13\,395\,375) + \\ &\frac{1}{13\,395\,375} \left(8 e^z \sqrt{\pi} (32 z^{33/2} + 3792 z^{31/2} + 185\,520 z^{29/2} + 4\,896\,600 z^{27/2} + 76\,508\,010 z^{25/2} + \right. \\ &\quad 731\,370\,465 z^{23/2} + 4\,275\,235\,440 z^{21/2} + 14\,855\,560\,650 z^{19/2} + 28\,864\,458\,000 z^{17/2} + \\ &\quad \left. 27\,996\,154\,200 z^{15/2} + 10\,841\,947\,200 z^{13/2} + 952\,333\,200 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right) \end{aligned}$$

07.25.03.ahb8.01

$$\begin{aligned} &{}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \\ &\frac{1}{13\,395\,375} (256 z^{16} - 30\,208 z^{15} + 1\,469\,184 z^{14} - 38\,452\,992 z^{13} + 593\,535\,600 z^{12} - 5\,571\,720\,000 z^{11} + \\ &\quad 31\,670\,886\,240 z^{10} - 105\,202\,045\,440 z^9 + 189\,245\,185\,920 z^8 - 158\,856\,768\,000 z^7 + 44\,697\,744\,000 z^6 - \\ &\quad 1\,257\,379\,200 z^5 + 28\,576\,800 z^4 - 6\,350\,400 z^3 + 4\,252\,500 z^2 - 5\,953\,500 z + 13\,395\,375) - \\ &\frac{1}{13\,395\,375} \left(8 e^{-z} \sqrt{\pi} (32 z^{33/2} - 3792 z^{31/2} + 185\,520 z^{29/2} - 4\,896\,600 z^{27/2} + 76\,508\,010 z^{25/2} - \right. \\ &\quad 731\,370\,465 z^{23/2} + 4\,275\,235\,440 z^{21/2} - 14\,855\,560\,650 z^{19/2} + 28\,864\,458\,000 z^{17/2} - \\ &\quad \left. 27\,996\,154\,200 z^{15/2} + 10\,841\,947\,200 z^{13/2} - 952\,333\,200 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right) \end{aligned}$$

07.25.03.ahb9.01

$$\begin{aligned} &{}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; z\right) = \\ &\frac{1}{14\,888\,375} (-128 z^{15} - 13\,696 z^{14} - 597\,696 z^{13} - 13\,853\,920 z^{12} - 186\,218\,760 z^{11} - 1\,488\,569\,040 z^{10} - 6\,982\,299\,360 z^9 - \\ &\quad 18\,253\,560\,960 z^8 - 23\,859\,662\,400 z^7 - 12\,359\,692\,800 z^6 - 1\,257\,379\,200 z^5 + \\ &\quad 28\,576\,800 z^4 + 2\,116\,800 z^3 + 850\,500 z^2 + 850\,500 z + 14\,888\,375) - \\ &\frac{1}{14\,888\,375} \left(4 e^z \sqrt{\pi} (32 z^{31/2} + 3440 z^{29/2} + 151\,120 z^{27/2} + 3\,536\,520 z^{25/2} + 48\,215\,850 z^{23/2} + 393\,859\,515 z^{21/2} + \right. \\ &\quad \left. 1\,912\,078\,350 z^{19/2} + 5\,295\,168\,900 z^{17/2} + 7\,683\,782\,400 z^{15/2} + 4\,944\,807\,000 z^{13/2} + 952\,333\,200 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right) \end{aligned}$$

07.25.03.ahba.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1488375} (128 z^{15} - 13696 z^{14} + 597696 z^{13} - 13853920 z^{12} + 186218760 z^{11} - 1488569040 z^{10} + 6982299360 z^9 - 18253560960 z^8 + 23859662400 z^7 - 12359692800 z^6 + 1257379200 z^5 + 28576800 z^4 - 2116800 z^3 + 850500 z^2 - 850500 z + 1488375) - \frac{1}{1488375} (4 e^{-z} \sqrt{\pi} (32 z^{3/2} - 3440 z^{29/2} + 151120 z^{27/2} - 3536520 z^{25/2} + 48215850 z^{23/2} - 393859515 z^{21/2} + 1912078350 z^{19/2} - 5295168900 z^{17/2} + 7683782400 z^{15/2} - 4944807000 z^{13/2} + 952333200 z^{11/2})) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahbb.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{212625} (64 z^{14} + 6144 z^{13} + 237440 z^{12} + 4792992 z^{11} + 54876780 z^{10} + 362273760 z^9 + 1339925040 z^8 + 2557353600 z^7 + 2091005280 z^6 + 419126400 z^5 - 28576800 z^4 + 2116800 z^3 + 283500 z^2 + 170100 z + 212625) + \frac{1}{212625} (2 e^z \sqrt{\pi} (32 z^{29/2} + 3088 z^{27/2} + 120240 z^{25/2} + 2454360 z^{23/2} + 28580970 z^{21/2} + 193792725 z^{19/2} + 749322000 z^{17/2} + 1548558900 z^{15/2} + 1489546800 z^{13/2} + 476166600 z^{11/2})) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahbc.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{212625} (64 z^{14} - 6144 z^{13} + 237440 z^{12} - 4792992 z^{11} + 54876780 z^{10} - 362273760 z^9 + 1339925040 z^8 - 2557353600 z^7 + 2091005280 z^6 - 419126400 z^5 - 28576800 z^4 - 2116800 z^3 + 283500 z^2 - 170100 z + 212625) - \frac{1}{212625} (2 e^{-z} \sqrt{\pi} (32 z^{29/2} - 3088 z^{27/2} + 120240 z^{25/2} - 2454360 z^{23/2} + 28580970 z^{21/2} - 193792725 z^{19/2} + 749322000 z^{17/2} - 1548558900 z^{15/2} + 1489546800 z^{13/2} - 476166600 z^{11/2})) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahbd.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{42525} (-32 z^{13} - 2720 z^{12} - 91536 z^{11} - 1573992 z^{10} - 14888970 z^9 - 77598540 z^8 - 210215700 z^7 - 253365840 z^6 - 83825280 z^5 + 9525600 z^4 - 2116800 z^3 + 283500 z^2 + 56700 z + 42525) + \frac{1}{42525} (e^z \sqrt{\pi} (-32 z^{27/2} - 2736 z^{25/2} - 92880 z^{23/2} - 1618440 z^{21/2} - 15633450 z^{19/2} - 84358575 z^{17/2} - 243170550 z^{15/2} - 332706150 z^{13/2} - 158722200 z^{11/2})) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahbe.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{42525} (32z^{13} - 2720z^{12} + 91536z^{11} - 1573992z^{10} + 14888970z^9 - 77598540z^8 + 210215700z^7 - 253365840z^6 + 83825280z^5 + 9525600z^4 + 2116800z^3 + 283500z^2 - 56700z + 42525) + \frac{1}{42525} \left(e^{-z} \sqrt{\pi} (-32z^{27/2} + 2736z^{25/2} - 92880z^{23/2} + 1618440z^{21/2} - 15633450z^{19/2} + 84358575z^{17/2} - 243170550z^{15/2} + 332706150z^{13/2} - 158722200z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ahbf.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{14175} (16z^{12} + 1184z^{11} + 33936z^{10} + 482144z^9 + 3602895z^8 + 13782780z^7 + 23742810z^6 + 11975040z^5 - 1905120z^4 + 705600z^3 - 283500z^2 + 56700z + 14175) + \frac{1}{28350} \left(e^z \sqrt{\pi} (32z^{25/2} + 2384z^{23/2} + 69040z^{21/2} + 997080z^{19/2} + 7656810z^{17/2} + 30760905z^{15/2} + 58605120z^{13/2} + 39680550z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ahbg.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{14175} (16z^{12} - 1184z^{11} + 33936z^{10} - 482144z^9 + 3602895z^8 - 13782780z^7 + 23742810z^6 - 11975040z^5 - 1905120z^4 + 705600z^3 - 283500z^2 - 56700z + 14175) + \frac{1}{28350} \left(e^{-z} \sqrt{\pi} (-32z^{25/2} + 2384z^{23/2} - 69040z^{21/2} + 997080z^{19/2} - 7656810z^{17/2} + 30760905z^{15/2} - 58605120z^{13/2} + 39680550z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ahbh.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{28350} (-16z^{11} - 1008z^{10} - 23864z^9 - 267852z^8 - 1470825z^7 - 3595410z^6 - 2661120z^5 + 544320z^4 - 282240z^3 + 189000z^2 - 113400z + 28350) + \frac{1}{56700} \left(e^z \sqrt{\pi} (-32z^{23/2} - 2032z^{21/2} - 48720z^{19/2} - 558600z^{17/2} - 3188010z^{15/2} - 8444835z^{13/2} - 7936110z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ahbi.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{28350} (16z^{11} - 1008z^{10} + 23864z^9 - 267852z^8 + 1470825z^7 - 3595410z^6 + 2661120z^5 + 544320z^4 + 282240z^3 + 189000z^2 + 113400z + 28350) + \frac{1}{56700} (e^{-z} \sqrt{\pi} (-32z^{23/2} + 2032z^{21/2} - 48720z^{19/2} + 558600z^{17/2} - 3188010z^{15/2} + 8444835z^{13/2} - 7936110z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahbj.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, 1; z\right) = -\frac{1}{113400} (e^z (64z^{11} + 3712z^{10} + 79760z^9 + 796080z^8 + 3762300z^7 + 7415520z^6 + 3448935z^5 - 1132425z^4 + 768600z^3 - 567000z^2 + 340200z - 113400))$$

07.25.03.ahbk.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{56700} (-16z^{10} - 832z^9 - 15552z^8 - 128280z^7 - 451395z^6 - 483840z^5 + 120960z^4 - 80640z^3 + 75600z^2 - 75600z + 56700) - \frac{e^z \sqrt{\pi} z^{11/2} (32z^5 + 1680z^4 + 31920z^3 + 271320z^2 + 1017450z + 1322685) \operatorname{erf}(\sqrt{z})}{113400}$$

07.25.03.ahbl.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32z^5 - 1680z^4 + 31920z^3 - 271320z^2 + 1017450z - 1322685) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{113400} + \frac{1}{56700} (-16z^{10} + 832z^9 - 15552z^8 + 128280z^7 - 451395z^6 + 483840z^5 + 120960z^4 + 80640z^3 + 75600z^2 + 75600z + 56700)$$

07.25.03.ahbm.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, 2; z\right) = -\frac{1}{113400} (e^z (64z^{10} + 3008z^9 + 49680z^8 + 348960z^7 + 970620z^6 + 621180z^5 - 278145z^4 + 258300z^3 - 264600z^2 + 226800z - 113400))$$

07.25.03.ahbn.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{37800z} (-16z^{10} - 656z^9 - 9000z^8 - 47588z^7 - 74445z^6 + 22050z^5 - 18270z^4 + 23400z^3 - 37800z^2 + 63000z - 75600) + \frac{1}{75600z^{3/2}} (e^z \sqrt{\pi} (-32z^{11} - 1328z^{10} - 18640z^9 - 103560z^8 - 188970z^7 + 105z^6 - 630z^5 + 3150z^4 - 12600z^3 + 37800z^2 - 75600z + 75600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahbo.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{1}{37800z} (16z^{10} - 656z^9 + 9000z^8 - 47588z^7 + 74445z^6 + 22050z^5 + 18270z^4 + 23400z^3 + 37800z^2 + 63000z + 75600) + \frac{1}{75600z^{3/2}} \left(e^{-z} \sqrt{\pi} (-32z^{11} + 1328z^{10} - 18640z^9 + 103560z^8 - 188970z^7 - 105z^6 - 630z^5 - 3150z^4 - 12600z^3 - 37800z^2 - 75600z - 75600) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ahbp.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, 3; z\right) = -\frac{1}{56700} e^z (64z^9 + 2304z^8 + 26640z^7 + 109200z^6 + 97020z^5 - 57960z^4 + 69615z^3 - 89775z^2 + 94500z - 56700)$$

07.25.03.ahbq.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{15120z^2} (-16z^{10} - 480z^9 - 4208z^8 - 9936z^7 + 3465z^6 - 3780z^5 + 7650z^4 - 21600z^3 + 63000z^2 - 151200z + 226800) + \frac{1}{30240z^{5/2}} \left(e^z \sqrt{\pi} (-32z^{11} - 976z^{10} - 8880z^9 - 23640z^8 + 150z^7 - 945z^6 + 5040z^5 - 22050z^4 + 75600z^3 - 189000z^2 + 302400z - 226800) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ahbr.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{1}{15120z^2} (-16z^{10} + 480z^9 - 4208z^8 + 9936z^7 + 3465z^6 + 3780z^5 + 7650z^4 + 21600z^3 + 63000z^2 + 151200z + 226800) + \frac{1}{30240z^{5/2}} \left(e^{-z} \sqrt{\pi} (32z^{11} - 976z^{10} + 8880z^9 - 23640z^8 - 150z^7 - 945z^6 - 5040z^5 - 22050z^4 - 75600z^3 - 189000z^2 - 302400z - 226800) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ahbs.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, 4; z\right) = -\frac{e^z (64z^8 + 1600z^7 + 10640z^6 + 13440z^5 - 10500z^4 + 15540z^3 - 23625z^2 + 28350z - 18900)}{18900}$$

07.25.03.ahbt.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{4320z^3} (-16z^{10} - 304z^9 - 1176z^8 + 516z^7 - 945z^6 + 3510z^5 - 15300z^4 + 61200z^3 - 204120z^2 + 529200z - 907200) + \frac{1}{8640z^{7/2}} \left(e^z \sqrt{\pi} (-32z^{11} - 624z^{10} - 2640z^9 + 120z^8 - 810z^7 + 4725z^6 - 23310z^5 + 94500z^4 - 302400z^3 + 718200z^2 - 1134000z + 907200) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ahbu.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{4320 z^3} (16 z^{10} - 304 z^9 + 1176 z^8 + 516 z^7 + 945 z^6 + 3510 z^5 + 15300 z^4 + 61200 z^3 + 204120 z^2 + 529200 z + 907200) + \frac{1}{8640 z^{7/2}} \left(e^{-z} \sqrt{\pi} (-32 z^{11} + 624 z^{10} - 2640 z^9 - 120 z^8 - 810 z^7 - 4725 z^6 - 23310 z^5 - 94500 z^4 - 302400 z^3 - 718200 z^2 - 1134000 z - 907200) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ahbv.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, 5; z\right) = -\frac{e^z (64 z^7 + 896 z^6 + 1680 z^5 - 1680 z^4 + 2940 z^3 - 5040 z^2 + 6615 z - 4725)}{4725}$$

07.25.03.ahbw.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{960 z^4} (-16 z^{10} - 128 z^9 + 96 z^8 - 392 z^7 + 2325 z^6 - 13320 z^5 + 67500 z^4 - 292320 z^3 + 1050840 z^2 - 3024000 z + 6350400) + \frac{1}{1920 z^{9/2}} \left(e^z \sqrt{\pi} (-32 z^{11} - 272 z^{10} + 80 z^9 - 600 z^8 + 3990 z^7 - 23205 z^6 + 115920 z^5 - 485100 z^4 + 1638000 z^3 - 4195800 z^2 + 7257600 z - 6350400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ahbx.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{960 z^4} (-16 z^{10} + 128 z^9 + 96 z^8 + 392 z^7 + 2325 z^6 + 13320 z^5 + 67500 z^4 + 292320 z^3 + 1050840 z^2 + 3024000 z + 6350400) + \frac{1}{1920 z^{9/2}} \left(e^{-z} \sqrt{\pi} (32 z^{11} - 272 z^{10} - 80 z^9 - 600 z^8 - 3990 z^7 - 23205 z^6 - 115920 z^5 - 485100 z^4 - 1638000 z^3 - 4195800 z^2 - 7257600 z - 6350400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ahby.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{9}{2}, 6; z\right) = -\frac{1}{945} e^z (64 z^6 + 192 z^5 - 240 z^4 + 480 z^3 - 900 z^2 + 1260 z - 945)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = -\frac{7}{2}$

07.25.03.ahbz.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{165375} (64 z^{14} + 6208 z^{13} + 243008 z^{12} + 4985920 z^{11} + 58321980 z^{10} + 396569140 z^9 + 1532227680 z^8 + 3141686880 z^7 + 2960973600 z^6 + 924818400 z^5 + 28576800 z^4 + 705600 z^3 + 170100 z^2 + 121500 z + 165375) + \frac{1}{165375} \left(2 e^z \sqrt{\pi} (32 z^{29/2} + 3120 z^{27/2} + 123040 z^{25/2} + 2552200 z^{23/2} + 30350450 z^{21/2} + 211756815 z^{19/2} + 853294275 z^{17/2} + 1881991800 z^{15/2} + 2037807000 z^{13/2} + 869193000 z^{11/2} + 83140200 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ahc0.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{165375} (64z^{14} - 6208z^{13} + 243008z^{12} - 4985920z^{11} + 58321980z^{10} - 396569140z^9 + 1532227680z^8 - 3141686880z^7 + 2960973600z^6 - 924818400z^5 + 28576800z^4 - 705600z^3 + 170100z^2 - 121500z + 165375) - \frac{1}{165375} \left(2e^{-z}\sqrt{\pi} (32z^{29/2} - 3120z^{27/2} + 123040z^{25/2} - 2552200z^{23/2} + 30350450z^{21/2} - 211756815z^{19/2} + 853294275z^{17/2} - 1881991800z^{15/2} + 2037807000z^{13/2} - 869193000z^{11/2} + 83140200z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ahc1.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{23625} (-32z^{13} - 2784z^{12} - 96464z^{11} - 1722600z^{10} - 17147690z^9 - 96151320z^8 - 292166640z^7 - 434984160z^6 - 252846000z^5 - 28576800z^4 + 705600z^3 + 56700z^2 + 24300z + 23625) + \frac{1}{23625} \left(e^z\sqrt{\pi} (-32z^{27/2} - 2800z^{25/2} - 97840z^{23/2} - 1769480z^{21/2} - 17964090z^{19/2} - 103972275z^{17/2} - 333432900z^{15/2} - 548260200z^{13/2} - 393026400z^{11/2} - 83140200z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ahc2.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{23625} (32z^{13} - 2784z^{12} + 96464z^{11} - 1722600z^{10} + 17147690z^9 - 96151320z^8 + 292166640z^7 - 434984160z^6 + 252846000z^5 - 28576800z^4 - 705600z^3 + 56700z^2 - 24300z + 23625) + \frac{1}{23625} \left(e^{-z}\sqrt{\pi} (-32z^{27/2} + 2800z^{25/2} - 97840z^{23/2} + 1769480z^{21/2} - 17964090z^{19/2} + 103972275z^{17/2} - 333432900z^{15/2} + 548260200z^{13/2} - 393026400z^{11/2} + 83140200z^{9/2}) \operatorname{erfi}(\sqrt{-z}) \right)$$

07.25.03.ahc3.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{4725} (16z^{12} + 1232z^{11} + 37152z^{10} + 564680z^9 + 4638195z^8 + 20487735z^7 + 45404580z^6 + 42255180z^5 + 9525600z^4 - 705600z^3 + 56700z^2 + 8100z + 4725) + \frac{1}{9450} \left(e^z\sqrt{\pi} (32z^{25/2} + 2480z^{23/2} + 75520z^{21/2} + 1165320z^{19/2} + 9806850z^{17/2} + 45131175z^{15/2} + 107777025z^{13/2} + 117152100z^{11/2} + 41570100z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ahc4.01

$$\begin{aligned}
 {}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; -z\right) = & \\
 \frac{1}{4725} & (16z^{12} - 1232z^{11} + 37152z^{10} - 564680z^9 + 4638195z^8 - 20487735z^7 + 45404580z^6 - 42255180z^5 + \\
 & 9525600z^4 + 705600z^3 + 56700z^2 - 8100z + 4725) + \\
 \frac{1}{9450} & (e^{-z}\sqrt{\pi}(-32z^{25/2} + 2480z^{23/2} - 75520z^{21/2} + 1165320z^{19/2} - 9806850z^{17/2} + \\
 & 45131175z^{15/2} - 107777025z^{13/2} + 117152100z^{11/2} - 41570100z^{9/2})\operatorname{erfi}(\sqrt{z}))
 \end{aligned}$$

07.25.03.ahc5.01

$$\begin{aligned}
 {}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; z\right) = & \\
 \frac{1}{3150} & (-16z^{11} - 1072z^{10} - 27512z^9 - 345100z^8 - 2234985z^7 - 7220590z^6 - 10093380z^5 - 3810240z^4 + \\
 & 470400z^3 - 113400z^2 + 16200z + 3150) + \frac{1}{6300} (e^z\sqrt{\pi}(-32z^{23/2} - 2160z^{21/2} - 56080z^{19/2} - \\
 & 716680z^{17/2} - 479090z^{15/2} - 16390635z^{13/2} - 25823850z^{11/2} - 13856700z^{9/2})\operatorname{erf}(\sqrt{z}))
 \end{aligned}$$

07.25.03.ahc6.01

$$\begin{aligned}
 {}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; -z\right) = & \\
 \frac{1}{3150} & (16z^{11} - 1072z^{10} + 27512z^9 - 345100z^8 + 2234985z^7 - 7220590z^6 + 10093380z^5 - 3810240z^4 - \\
 & 470400z^3 - 113400z^2 - 16200z + 3150) + \frac{1}{6300} (e^{-z}\sqrt{\pi}(-32z^{23/2} + 2160z^{21/2} - 56080z^{19/2} + \\
 & 716680z^{17/2} - 479090z^{15/2} + 16390635z^{13/2} - 25823850z^{11/2} + 13856700z^{9/2})\operatorname{erfi}(\sqrt{z}))
 \end{aligned}$$

07.25.03.ahc7.01

$$\begin{aligned}
 {}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, \frac{1}{2}; z\right) = & \frac{1}{6300} (16z^{10} + 912z^9 + 19312z^8 + 191040z^7 + \\
 & 906295z^6 + 1858065z^5 + 1088640z^4 - 188160z^3 + 75600z^2 - 32400z + 6300) + \frac{1}{12600} \\
 & (e^z\sqrt{\pi}(32z^{21/2} + 1840z^{19/2} + 39520z^{17/2} + 400520z^{15/2} + 1986450z^{13/2} + 4471935z^{11/2} + 3464175z^{9/2})\operatorname{erf}(\sqrt{z}))
 \end{aligned}$$

07.25.03.ahc8.01

$$\begin{aligned}
 {}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, \frac{1}{2}; -z\right) = & \frac{1}{6300} (16z^{10} - 912z^9 + 19312z^8 - 191040z^7 + \\
 & 906295z^6 - 1858065z^5 + 1088640z^4 + 188160z^3 + 75600z^2 + 32400z + 6300) + \frac{1}{12600} \\
 & (e^{-z}\sqrt{\pi}(-32z^{21/2} + 1840z^{19/2} - 39520z^{17/2} + 400520z^{15/2} - 1986450z^{13/2} + 4471935z^{11/2} - 3464175z^{9/2})\operatorname{erfi}(\sqrt{z}))
 \end{aligned}$$

07.25.03.ahc9.01

$$\begin{aligned}
 {}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, 1; z\right) = & \frac{1}{12600} (e^z(32z^{10} + 1680z^9 + 32320z^8 + 284920z^7 + \\
 & 1168850z^6 + 1954485z^5 + 747225z^4 - 192600z^3 + 95400z^2 - 45000z + 12600))
 \end{aligned}$$

07.25.03.ahca.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (32 z^5 + 1520 z^4 + 25\,840 z^3 + 193\,800 z^2 + 629\,850 z + 692\,835) \operatorname{erf}(\sqrt{z}) z^{9/2}}{25\,200} + \frac{1}{12\,600} (16 z^9 + 752 z^8 + 12\,552 z^7 + 90\,980 z^6 + 274\,845 z^5 + 241\,920 z^4 - 53\,760 z^3 + 30\,240 z^2 - 21\,600 z + 12\,600)$$

07.25.03.ahcb.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32 z^5 - 1520 z^4 + 25\,840 z^3 - 193\,800 z^2 + 629\,850 z - 692\,835) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{25\,200} + \frac{1}{12\,600} (-16 z^9 + 752 z^8 - 12\,552 z^7 + 90\,980 z^6 - 274\,845 z^5 + 241\,920 z^4 + 53\,760 z^3 + 30\,240 z^2 + 21\,600 z + 12\,600)$$

07.25.03.ahcc.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, 2; z\right) = \frac{1}{12\,600} e^z (32 z^9 + 1360 z^8 + 20\,080 z^7 + 124\,280 z^6 + 298\,890 z^5 + 161\,145 z^4 - 58\,500 z^3 + 41\,400 z^2 - 28\,800 z + 12\,600)$$

07.25.03.ahcd.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{16 z^9 + 592 z^8 + 7232 z^7 + 33\,400 z^6 + 43\,995 z^5 - 12\,005 z^4 + 8940 z^3 - 9900 z^2 + 12\,600 z - 12\,600}{8400 z} + \frac{1}{16\,800 z^{3/2}} (e^z \sqrt{\pi} (32 z^{10} + 1200 z^9 + 15\,040 z^8 + 73\,480 z^7 + 115\,490 z^6 - 105 z^5 + 525 z^4 - 2100 z^3 + 6300 z^2 - 12\,600 z + 12\,600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahce.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{16 z^9 - 592 z^8 + 7232 z^7 - 33\,400 z^6 + 43\,995 z^5 + 12\,005 z^4 + 8940 z^3 + 9900 z^2 + 12\,600 z + 12\,600}{8400 z} + \frac{1}{16\,800 z^{3/2}} (e^{-z} \sqrt{\pi} (-32 z^{10} + 1200 z^9 - 15\,040 z^8 + 73\,480 z^7 - 115\,490 z^6 - 105 z^5 - 525 z^4 - 2100 z^3 - 6300 z^2 - 12\,600 z - 12\,600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahcf.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, 3; z\right) = \frac{e^z (32 z^8 + 1040 z^7 + 10\,720 z^6 + 38\,520 z^5 + 29\,250 z^4 - 14\,355 z^3 + 13\,275 z^2 - 11\,700 z + 6300)}{6300}$$

07.25.03.ahcg.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{16 z^9 + 432 z^8 + 3352 z^7 + 6780 z^6 - 2255 z^5 + 2370 z^4 - 4500 z^3 + 10\,800 z^2 - 23\,400 z + 32\,400}{3360 z^2} + \frac{1}{6720 z^{5/2}} (e^z \sqrt{\pi} (32 z^{10} + 880 z^9 + 7120 z^8 + 16\,520 z^7 - 150 z^6 + 795 z^5 - 3450 z^4 + 11\,700 z^3 - 28\,800 z^2 + 45\,000 z - 32\,400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahch.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{-16z^9 + 432z^8 - 3352z^7 + 6780z^6 + 2255z^5 + 2370z^4 + 4500z^3 + 10800z^2 + 23400z + 32400}{3360z^2} + \frac{1}{6720z^{5/2}} \left(e^{-z} \sqrt{\pi} (32z^{10} - 880z^9 + 7120z^8 - 16520z^7 - 150z^6 - 795z^5 - 3450z^4 - 11700z^3 - 28800z^2 - 45000z - 32400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ahci.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, 4; z\right) = \frac{e^z (32z^7 + 720z^6 + 4240z^5 + 4600z^4 - 2950z^3 + 3345z^2 - 3450z + 2100)}{2100}$$

07.25.03.ahcj.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{16z^9 + 272z^8 + 912z^7 - 400z^6 + 735z^5 - 2475z^4 + 9000z^3 - 28440z^2 + 70200z - 113400}{960z^3} + \frac{1}{1920z^{7/2}} \left(e^z \sqrt{\pi} (32z^{10} + 560z^9 + 2080z^8 - 120z^7 + 690z^6 - 3345z^5 + 13275z^4 - 41400z^3 + 95400z^2 - 145800z + 113400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ahck.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{16z^9 - 272z^8 + 912z^7 + 400z^6 + 735z^5 + 2475z^4 + 9000z^3 + 28440z^2 + 70200z + 113400}{960z^3} + \frac{1}{1920z^{7/2}} \left(e^{-z} \sqrt{\pi} (-32z^{10} + 560z^9 - 2080z^8 - 120z^7 - 690z^6 - 3345z^5 - 13275z^4 - 41400z^3 - 95400z^2 - 145800z - 113400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ahcl.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, 5; z\right) = \frac{1}{525} e^z (32z^6 + 400z^5 + 640z^4 - 520z^3 + 690z^2 - 795z + 525)$$

07.25.03.ahcm.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{640z^4} 3(16z^9 + 112z^8 - 88z^7 + 340z^6 - 1755z^5 + 8500z^4 - 35640z^3 + 124560z^2 - 348600z + 705600) + \frac{1}{1280z^{9/2}} \left(3e^z \sqrt{\pi} (32z^{10} + 240z^9 - 80z^8 + 520z^7 - 2950z^6 + 14355z^5 - 58500z^4 + 192600z^3 - 482400z^2 + 819000z - 705600) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ahcn.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{1280z^{9/2}} \left(3e^{-z} \sqrt{\pi} (32z^{10} - 240z^9 - 80z^8 - 520z^7 - 2950z^6 - 14355z^5 - 58500z^4 - 192600z^3 - 482400z^2 - 819000z - 705600) \operatorname{erfi}(\sqrt{z}) \right) - \frac{1}{640z^4} 3(16z^9 - 112z^8 - 88z^7 - 340z^6 - 1755z^5 - 8500z^4 - 35640z^3 - 124560z^2 - 348600z - 705600)$$

07.25.03.ahco.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{7}{2}, 6; z\right) = \frac{1}{105} e^z (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = -\frac{5}{2}$

07.25.03.ahcp.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{3375} (16 z^{12} + 1248 z^{11} + 38256 z^{10} + 594112 z^9 + 5026815 z^8 + 23196240 z^7 + 55220568 z^6 + 59194080 z^5 + 20700360 z^4 + 705600 z^3 + 18900 z^2 + 4860 z + 3375) + \frac{1}{6750} (e^z \sqrt{\pi} (32 z^{25/2} + 2512 z^{23/2} + 77744 z^{21/2} + 1225272 z^{19/2} + 10612458 z^{17/2} + 50909985 z^{15/2} + 129792960 z^{13/2} + 158881320 z^{11/2} + 75263760 z^{9/2} + 7876440 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahcq.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{3375} (16 z^{12} - 1248 z^{11} + 38256 z^{10} - 594112 z^9 + 5026815 z^8 - 23196240 z^7 + 55220568 z^6 - 59194080 z^5 + 20700360 z^4 - 705600 z^3 + 18900 z^2 - 4860 z + 3375) + \frac{1}{6750} (e^{-z} \sqrt{\pi} (-32 z^{25/2} + 2512 z^{23/2} - 77744 z^{21/2} + 1225272 z^{19/2} - 10612458 z^{17/2} + 50909985 z^{15/2} - 129792960 z^{13/2} + 158881320 z^{11/2} - 75263760 z^{9/2} + 7876440 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahcr.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{1350} (-16 z^{11} - 1104 z^{10} - 29432 z^9 - 388620 z^8 - 2708505 z^7 - 9815988 z^6 - 16938900 z^5 - 11174760 z^4 - 1411200 z^3 + 37800 z^2 + 3240 z + 1350) + \frac{1}{2700} (e^z \sqrt{\pi} (-32 z^{23/2} - 2224 z^{21/2} - 59952 z^{19/2} - 805608 z^{17/2} - 5778810 z^{15/2} - 22015935 z^{13/2} - 41729220 z^{11/2} - 33693660 z^{9/2} - 7876440 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahcs.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{1350} (16 z^{11} - 1104 z^{10} + 29432 z^9 - 388620 z^8 + 2708505 z^7 - 9815988 z^6 + 16938900 z^5 - 11174760 z^4 + 1411200 z^3 + 37800 z^2 - 3240 z + 1350) + \frac{1}{2700} (e^{-z} \sqrt{\pi} (-32 z^{23/2} + 2224 z^{21/2} - 59952 z^{19/2} + 805608 z^{17/2} - 5778810 z^{15/2} + 22015935 z^{13/2} - 41729220 z^{11/2} + 33693660 z^{9/2} - 7876440 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahct.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{900} (16z^{10} + 960z^9 + 21760z^8 + 236760z^7 + 1297699z^6 + 3422760z^5 + 3682260z^4 + 940800z^3 - 75600z^2 + 6480z + 900) + \frac{1}{1800} (e^z \sqrt{\pi} (32z^{21/2} + 1936z^{19/2} + 44464z^{17/2} + 494360z^{15/2} + 2812650z^{13/2} + 7952685z^{11/2} + 9918480z^{9/2} + 3938220z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahcu.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{900} (16z^{10} - 960z^9 + 21760z^8 - 236760z^7 + 1297699z^6 - 3422760z^5 + 3682260z^4 - 940800z^3 - 75600z^2 - 6480z + 900) + \frac{1}{1800} (e^{-z} \sqrt{\pi} (-32z^{21/2} + 1936z^{19/2} - 44464z^{17/2} + 494360z^{15/2} - 2812650z^{13/2} + 7952685z^{11/2} - 9918480z^{9/2} + 3938220z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahcv.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{1800} (-16z^9 - 816z^8 - 15240z^7 - 130468z^6 - 521565z^5 - 864540z^4 - 376320z^3 + 50400z^2 - 12960z + 1800) + \frac{1}{3600} (e^z \sqrt{\pi} (-32z^{19/2} - 1648z^{17/2} - 31280z^{15/2} - 275400z^{13/2} - 1160250z^{11/2} - 2151435z^{9/2} - 1312740z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahcw.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{1800} (16z^9 - 816z^8 + 15240z^7 - 130468z^6 + 521565z^5 - 864540z^4 + 376320z^3 + 50400z^2 + 12960z + 1800) + \frac{1}{3600} (e^{-z} \sqrt{\pi} (-32z^{19/2} + 1648z^{17/2} - 31280z^{15/2} + 275400z^{13/2} - 1160250z^{11/2} + 2151435z^{9/2} - 1312740z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahcx.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, 1; z\right) = -\frac{1}{1800} e^z (16z^9 + 752z^8 + 12776z^7 + 97744z^6 + 340065z^5 + 467145z^4 + 140040z^3 - 26280z^2 + 8280z - 1800)$$

07.25.03.ahcy.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{-16z^8 - 672z^7 - 9872z^6 - 61680z^5 - 155655z^4 - 107520z^3 + 20160z^2 - 8640z + 3600}{3600} - \frac{e^z \sqrt{\pi} z^{7/2} (32z^5 + 1360z^4 + 20400z^3 + 132600z^2 + 364650z + 328185) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.ahcz.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32 z^5 - 1360 z^4 + 20400 z^3 - 132600 z^2 + 364650 z - 328185) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{7200} + \frac{-16 z^8 + 672 z^7 - 9872 z^6 + 61680 z^5 - 155655 z^4 + 107520 z^3 + 20160 z^2 + 8640 z + 3600}{3600}$$

07.25.03.ahd0.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, 2; z\right) = -\frac{e^z (16 z^8 + 608 z^7 + 7912 z^6 + 42360 z^5 + 85905 z^4 + 37620 z^3 - 10440 z^2 + 5040 z - 1800)}{1800}$$

07.25.03.ahd1.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-16 z^8 - 528 z^7 - 5656 z^6 - 22332 z^5 - 23905 z^4 + 5820 z^3 - 3708 z^2 + 3240 z - 2520}{2400 z} + \frac{1}{4800 z^{3/2}} e^z \sqrt{\pi} (-32 z^9 - 1072 z^8 - 11824 z^7 - 49832 z^6 - 65658 z^5 + 105 z^4 - 420 z^3 + 1260 z^2 - 2520 z + 2520) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahd2.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{16 z^8 - 528 z^7 + 5656 z^6 - 22332 z^5 + 23905 z^4 + 5820 z^3 + 3708 z^2 + 3240 z + 2520}{2400 z} + \frac{1}{4800 z^{3/2}} e^{-z} \sqrt{\pi} (-32 z^9 + 1072 z^8 - 11824 z^7 + 49832 z^6 - 65658 z^5 - 105 z^4 - 420 z^3 - 1260 z^2 - 2520 z - 2520) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahd3.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, 3; z\right) = -\frac{1}{900} e^z (16 z^7 + 464 z^6 + 4200 z^5 + 12960 z^4 + 8145 z^3 - 3105 z^2 + 1980 z - 900)$$

07.25.03.ahd4.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-16 z^8 - 384 z^7 - 2592 z^6 - 4360 z^5 + 1365 z^4 - 1368 z^3 + 2340 z^2 - 4320 z + 5400}{960 z^2} + \frac{1}{1920 z^{5/2}} e^z \sqrt{\pi} (-32 z^9 - 784 z^8 - 5552 z^7 - 10968 z^6 + 150 z^5 - 645 z^4 + 2160 z^3 - 5220 z^2 + 7920 z - 5400) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahd5.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-16 z^8 + 384 z^7 - 2592 z^6 + 4360 z^5 + 1365 z^4 + 1368 z^3 + 2340 z^2 + 4320 z + 5400}{960 z^2} + \frac{1}{1920 z^{5/2}} e^{-z} \sqrt{\pi} (32 z^9 - 784 z^8 + 5552 z^7 - 10968 z^6 - 150 z^5 - 645 z^4 - 2160 z^3 - 5220 z^2 - 7920 z - 5400) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahd6.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, 4; z\right) = -\frac{1}{300} e^z (16 z^6 + 320 z^5 + 1640 z^4 + 1480 z^3 - 735 z^2 + 570 z - 300)$$

07.25.03.ahd7.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(16 z^8 + 240 z^7 + 680 z^6 - 300 z^5 + 549 z^4 - 1620 z^3 + 4680 z^2 - 10800 z + 16200)}{1920 z^3} - \frac{1}{3840 z^{7/2}} 7 e^z \sqrt{\pi} (32 z^9 + 496 z^8 + 1584 z^7 - 120 z^6 + 570 z^5 - 2205 z^4 + 6660 z^3 - 14760 z^2 + 21600 z - 16200) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahd8.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(16z^8 - 240z^7 + 680z^6 + 300z^5 + 549z^4 + 1620z^3 + 4680z^2 + 10800z + 16200)}{1920z^3} - \frac{1}{3840z^{7/2}} 7e^{-z}\sqrt{\pi}(32z^9 - 496z^8 + 1584z^7 + 120z^6 + 570z^5 + 2205z^4 + 6660z^3 + 14760z^2 + 21600z + 16200)\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahd9.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, 5; z\right) = -\frac{1}{75}e^z(16z^5 + 176z^4 + 232z^3 - 144z^2 + 129z - 75)$$

07.25.03.ahda.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{21(16z^8 + 96z^7 - 80z^6 + 288z^5 - 1265z^4 + 5040z^3 - 16920z^2 + 45600z - 88200)}{1280z^4} - \frac{1}{2560z^{9/2}} 21e^z\sqrt{\pi}(32z^9 + 208z^8 - 80z^7 + 440z^6 - 2070z^5 + 8145z^4 - 25920z^3 + 63000z^2 - 104400z + 88200)\operatorname{erf}(\sqrt{z})$$

07.25.03.ahdb.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{2560z^{9/2}} 21e^{-z}\sqrt{\pi}(32z^9 - 208z^8 - 80z^7 - 440z^6 - 2070z^5 - 8145z^4 - 25920z^3 - 63000z^2 - 104400z - 88200)\operatorname{erfi}(\sqrt{z}) - \frac{21(16z^8 - 96z^7 - 80z^6 - 288z^5 - 1265z^4 - 5040z^3 - 16920z^2 - 45600z - 88200)}{1280z^4}$$

07.25.03.ahdc.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{5}{2}, 6; z\right) = -\frac{1}{15}e^z(16z^4 + 32z^3 - 24z^2 + 24z - 15)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = -\frac{3}{2}$

07.25.03.ahdd.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{540}(16z^{10} + 976z^9 + 22608z^8 + 253440z^7 + 1451463z^6 + 4112757z^5 + 5094630z^4 + 2011590z^3 + 75600z^2 + 2160z + 540) + \frac{1}{1080}(e^z\sqrt{\pi}(32z^{21/2} + 1968z^{19/2} + 46176z^{17/2} + 528552z^{15/2} + 3136050z^{13/2} + 9471735z^{11/2} + 13314015z^{9/2} + 7065630z^{7/2} + 810810z^{5/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.ahde.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{540}(16z^{10} - 976z^9 + 22608z^8 - 253440z^7 + 1451463z^6 - 4112757z^5 + 5094630z^4 - 2011590z^3 + 75600z^2 - 2160z + 540) + \frac{1}{1080}(e^{-z}\sqrt{\pi}(-32z^{21/2} + 1968z^{19/2} - 46176z^{17/2} + 528552z^{15/2} - 3136050z^{13/2} + 9471735z^{11/2} - 13314015z^{9/2} + 7065630z^{7/2} - 810810z^{5/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahdf.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{360}(-16z^9 - 848z^8 - 16680z^7 - 153764z^6 - 689997z^5 - 1412370z^4 - 1070790z^3 - 151200z^2 + 4320z + 360) + \frac{1}{720}e^z\sqrt{\pi}(-32z^{19/2} - 1712z^{17/2} - 34192z^{15/2} - 323400z^{13/2} - 1519050z^{11/2} - 3395535z^{9/2} - 3127410z^{7/2} - 810810z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ahdg.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{360}(16z^9 - 848z^8 + 16680z^7 - 153764z^6 + 689997z^5 - 1412370z^4 + 1070790z^3 - 151200z^2 - 4320z + 360) + \frac{1}{720}e^{-z}\sqrt{\pi}(-32z^{19/2} + 1712z^{17/2} - 34192z^{15/2} + 323400z^{13/2} - 1519050z^{11/2} + 3395535z^{9/2} - 3127410z^{7/2} + 810810z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahdh.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{720}(16z^8 + 720z^7 + 11648z^6 + 84216z^5 + 273915z^4 + 347235z^3 + 100800z^2 - 8640z + 720) + \frac{1}{1440}e^z\sqrt{\pi}(32z^{17/2} + 1456z^{15/2} + 24000z^{13/2} + 179400z^{11/2} + 622050z^{9/2} + 907335z^{7/2} + 405405z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ahdi.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{720}(16z^8 - 720z^7 + 11648z^6 - 84216z^5 + 273915z^4 - 347235z^3 + 100800z^2 + 8640z + 720) + \frac{1}{1440}e^{-z}\sqrt{\pi}(-32z^{17/2} + 1456z^{15/2} - 24000z^{13/2} + 179400z^{11/2} - 622050z^{9/2} + 907335z^{7/2} - 405405z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahdj.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, 1; z\right) = \frac{1}{360}e^z(8z^8 + 332z^7 + 4894z^6 + 31743z^5 + 90675z^4 + 97560z^3 + 21240z^2 - 2520z + 360)$$

07.25.03.ahdk.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{16z^7 + 592z^6 + 7512z^5 + 39420z^4 + 79905z^3 + 40320z^2 - 5760z + 1440}{1440} + \frac{e^z\sqrt{\pi}(32z^{15/2} + 1200z^{13/2} + 15600z^{11/2} + 85800z^{9/2} + 193050z^{7/2} + 135135z^{5/2})\operatorname{erf}(\sqrt{z})}{2880}$$

07.25.03.ahdl.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{-16z^7 + 592z^6 - 7512z^5 + 39420z^4 - 79905z^3 + 40320z^2 + 5760z + 1440}{1440} + \frac{e^{-z}\sqrt{\pi}(32z^{15/2} - 1200z^{13/2} + 15600z^{11/2} - 85800z^{9/2} + 193050z^{7/2} - 135135z^{5/2})\operatorname{erfi}(\sqrt{z})}{2880}$$

07.25.03.ahdm.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, 2; z\right) = \frac{1}{360}e^z(8z^7 + 268z^6 + 3018z^5 + 13635z^4 + 22500z^3 + 7560z^2 - 1440z + 360)$$

07.25.03.ahdn.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{16z^7 + 464z^6 + 4272z^5 + 14000z^4 + 11535z^3 - 2367z^2 + 1170z - 630}{960z} + \frac{e^z \sqrt{\pi} (32z^8 + 944z^7 + 8992z^6 + 31848z^5 + 33810z^4 - 105z^3 + 315z^2 - 630z + 630) \operatorname{erf}(\sqrt{z})}{1920z^{3/2}}$$

07.25.03.ahdo.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{16z^7 - 464z^6 + 4272z^5 - 14000z^4 + 11535z^3 + 2367z^2 + 1170z + 630}{960z} + \frac{1}{1920z^{3/2}} e^{-z} \sqrt{\pi} (-32z^8 + 944z^7 - 8992z^6 + 31848z^5 - 33810z^4 - 105z^3 - 315z^2 - 630z - 630) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahdp.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, 3; z\right) = \frac{1}{180} e^z (8z^6 + 204z^5 + 1590z^4 + 4095z^3 + 2025z^2 - 540z + 180)$$

07.25.03.ahdq.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{16z^7 + 336z^6 + 1928z^5 + 2580z^4 - 747z^3 + 702z^2 - 990z + 1080}{384z^2} + \frac{e^z \sqrt{\pi} (32z^8 + 688z^7 + 4176z^6 + 6792z^5 - 150z^4 + 495z^3 - 1170z^2 + 1710z - 1080) \operatorname{erf}(\sqrt{z})}{768z^{5/2}}$$

07.25.03.ahdr.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{-16z^7 + 336z^6 - 1928z^5 + 2580z^4 + 747z^3 + 702z^2 + 990z + 1080}{384z^2} + \frac{e^{-z} \sqrt{\pi} (32z^8 - 688z^7 + 4176z^6 - 6792z^5 - 150z^4 - 495z^3 - 1170z^2 - 1710z - 1080) \operatorname{erfi}(\sqrt{z})}{768z^{5/2}}$$

07.25.03.ahds.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, 4; z\right) = \frac{1}{60} e^z (8z^5 + 140z^4 + 610z^3 + 435z^2 - 150z + 60)$$

07.25.03.ahdt.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(16z^7 + 208z^6 + 480z^5 - 216z^4 + 387z^3 - 945z^2 + 1980z - 2700)}{768z^3} + \frac{7e^z \sqrt{\pi} (32z^8 + 432z^7 + 1152z^6 - 120z^5 + 450z^4 - 1305z^3 + 2745z^2 - 3780z + 2700) \operatorname{erf}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.ahdu.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7(16z^7 - 208z^6 + 480z^5 + 216z^4 + 387z^3 + 945z^2 + 1980z + 2700)}{768z^3} - \frac{1}{1536z^{7/2}} 7e^{-z} \sqrt{\pi} (32z^8 - 432z^7 + 1152z^6 + 120z^5 + 450z^4 + 1305z^3 + 2745z^2 + 3780z + 2700) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahdv.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, 5; z\right) = \frac{1}{15} e^z (8z^4 + 76z^3 + 78z^2 - 33z + 15)$$

07.25.03.ahdw.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{21(16z^7 + 80z^6 - 72z^5 + 236z^4 - 855z^3 + 2700z^2 - 6900z + 12600)}{512z^4} + \frac{1}{1024z^{9/2}} 21e^z \sqrt{\pi} (32z^8 + 176z^7 - 80z^6 + 360z^5 - 1350z^4 + 4095z^3 - 9540z^2 + 15300z - 12600) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahdx.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{1024z^{9/2}} 21e^{-z} \sqrt{\pi} (32z^8 - 176z^7 - 80z^6 - 360z^5 - 1350z^4 - 4095z^3 - 9540z^2 - 15300z - 12600) \operatorname{erfi}(\sqrt{z}) - \frac{21(16z^7 - 80z^6 - 72z^5 - 236z^4 - 855z^3 - 2700z^2 - 6900z - 12600)}{512z^4}$$

07.25.03.ahdy.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{3}{2}, 6; z\right) = \frac{1}{3} e^z (8z^3 + 12z^2 - 6z + 3)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = -\frac{1}{2}$

07.25.03.ahdz.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{240} (16z^8 + 736z^7 + 12272z^6 + 92752z^5 + 324279z^4 + 473620z^3 + 212310z^2 + 8640z + 240) + \frac{1}{480} e^z \sqrt{\pi} (32z^{17/2} + 1488z^{15/2} + 25264z^{13/2} + 197080z^{11/2} + 730730z^{9/2} + 1203345z^{7/2} + 720720z^{5/2} + 90090z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahd0.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{240} (16z^8 - 736z^7 + 12272z^6 - 92752z^5 + 324279z^4 - 473620z^3 + 212310z^2 - 8640z + 240) + \frac{1}{480} e^{-z} \sqrt{\pi} (-32z^{17/2} + 1488z^{15/2} - 25264z^{13/2} + 197080z^{11/2} - 730730z^{9/2} + 1203345z^{7/2} - 720720z^{5/2} + 90090z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahd1.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{480} (-16z^7 - 624z^6 - 8536z^5 - 50364z^4 - 126385z^3 - 111510z^2 - 17280z + 480) + \frac{1}{960} e^z \sqrt{\pi} (-32z^{15/2} - 1264z^{13/2} - 17680z^{11/2} - 108680z^{9/2} - 296010z^{7/2} - 315315z^{5/2} - 90090z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahd2.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{480} (16z^7 - 624z^6 + 8536z^5 - 50364z^4 + 126385z^3 - 111510z^2 + 17280z + 480) + \frac{1}{960} e^{-z} \sqrt{\pi} (-32z^{15/2} + 1264z^{13/2} - 17680z^{11/2} + 108680z^{9/2} - 296010z^{7/2} + 315315z^{5/2} - 90090z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahd3.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, 1; z\right) = -\frac{1}{120} e^z (4z^7 + 144z^6 + 1799z^5 + 9575z^4 + 21400z^3 + 16680z^2 + 2280z - 120)$$

07.25.03.ah4.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{960} (-16z^6 - 512z^5 - 5472z^4 - 23240z^3 - 35595z^2 - 11520z + 960) - \frac{e^z \sqrt{\pi} z^{3/2} (32z^5 + 1040z^4 + 11440z^3 + 51480z^2 + 90090z + 45045) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.ah5.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32z^5 - 1040z^4 + 11440z^3 - 51480z^2 + 90090z - 45045) \operatorname{erfi}(\sqrt{z}) z^{3/2}}{1920} + \frac{1}{960} (-16z^6 + 512z^5 - 5472z^4 + 23240z^3 - 35595z^2 + 11520z + 960)$$

07.25.03.ah6.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, 2; z\right) = -\frac{1}{120} e^z (4z^6 + 116z^5 + 1103z^4 + 4060z^3 + 5160z^2 + 1200z - 120)$$

07.25.03.ah7.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{-16z^6 - 400z^5 - 3080z^4 - 8020z^3 - 4629z^2 + 710z - 210}{640z} + \frac{e^z \sqrt{\pi} (-32z^7 - 816z^6 - 6544z^5 - 18760z^4 - 15050z^3 + 105z^2 - 210z + 210) \operatorname{erf}(\sqrt{z})}{1280z^{3/2}}$$

07.25.03.ah8.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{16z^6 - 400z^5 + 3080z^4 - 8020z^3 + 4629z^2 + 710z + 210}{640z} + \frac{e^{-z} \sqrt{\pi} (-32z^7 + 816z^6 - 6544z^5 + 18760z^4 - 15050z^3 - 105z^2 - 210z - 210) \operatorname{erfi}(\sqrt{z})}{1280z^{3/2}}$$

07.25.03.ah9.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, 3; z\right) = -\frac{1}{60} e^z (4z^5 + 88z^4 + 575z^3 + 1185z^2 + 420z - 60)$$

07.25.03.ah10.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{-16z^6 - 288z^5 - 1360z^4 - 1344z^3 + 353z^2 - 300z + 270}{256z^2} + \frac{e^z \sqrt{\pi} (-32z^7 - 592z^6 - 2992z^5 - 3800z^4 + 150z^3 - 345z^2 + 480z - 270) \operatorname{erf}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.ah11.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{-16z^6 + 288z^5 - 1360z^4 + 1344z^3 + 353z^2 + 300z + 270}{256z^2} + \frac{e^{-z} \sqrt{\pi} (32z^7 - 592z^6 + 2992z^5 - 3800z^4 - 150z^3 - 345z^2 - 480z - 270) \operatorname{erfi}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.ah12.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, 4; z\right) = -\frac{1}{20} e^z (4z^4 + 60z^3 + 215z^2 + 110z - 20)$$

07.25.03.ahed.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{7(16z^6 + 176z^5 + 312z^4 - 148z^3 + 249z^2 - 450z + 540)}{512z^3} - \frac{7e^z \sqrt{\pi} (32z^7 + 368z^6 + 784z^5 - 120z^4 + 330z^3 - 645z^2 + 810z - 540) \operatorname{erf}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.ahee.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7(16z^6 - 176z^5 + 312z^4 + 148z^3 + 249z^2 + 450z + 540)}{512z^3} - \frac{7e^{-z} \sqrt{\pi} (32z^7 - 368z^6 + 784z^5 + 120z^4 + 330z^3 + 645z^2 + 810z + 540) \operatorname{erfi}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.ahef.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, 5; z\right) = -\frac{1}{5} e^z (4z^3 + 32z^2 + 23z - 5)$$

07.25.03.aheg.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{63(16z^6 + 64z^5 - 64z^4 + 184z^3 - 525z^2 + 1240z - 2100)}{1024z^4} - \frac{63e^z \sqrt{\pi} (32z^7 + 144z^6 - 80z^5 + 280z^4 - 790z^3 + 1725z^2 - 2640z + 2100) \operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.aheh.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63e^{-z} \sqrt{\pi} (32z^7 - 144z^6 - 80z^5 - 280z^4 - 790z^3 - 1725z^2 - 2640z - 2100) \operatorname{erfi}(\sqrt{z})}{2048z^{9/2}} - \frac{63(16z^6 - 64z^5 - 64z^4 - 184z^3 - 525z^2 - 1240z - 2100)}{1024z^4}$$

07.25.03.ahel.01

$${}_2F_2\left(\frac{3}{2}, 6; -\frac{1}{2}, 6; z\right) = -e^z (4z^2 + 4z - 1)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = \frac{1}{2}$

07.25.03.ahej.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{960} (16z^6 + 528z^5 + 5904z^4 + 26992z^3 + 47775z^2 + 24165z + 960) + \frac{1}{1920} e^z \sqrt{\pi} (32z^{13/2} + 1072z^{11/2} + 12320z^{9/2} + 59400z^{7/2} + 117810z^{5/2} + 79695z^{3/2} + 10395\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahek.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{960} (16z^6 - 528z^5 + 5904z^4 - 26992z^3 + 47775z^2 - 24165z + 960) + \frac{1}{1920} e^{-z} \sqrt{\pi} (-32z^{13/2} + 1072z^{11/2} - 12320z^{9/2} + 59400z^{7/2} - 117810z^{5/2} + 79695z^{3/2} - 10395\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahel.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, 1; z\right) = \frac{1}{120} e^z (2z^6 + 61z^5 + 625z^4 + 2600z^3 + 4200z^2 + 2040z + 120)$$

07.25.03.ahem.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920}{1920} + \frac{e^z \sqrt{\pi} \sqrt{z} (32z^5 + 880z^4 + 7920z^3 + 27720z^2 + 34650z + 10395) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.ahen.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920}{1920} + \frac{e^{-z} \sqrt{\pi} \sqrt{z} (32z^5 - 880z^4 + 7920z^3 - 27720z^2 + 34650z - 10395) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.aheo.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, 2; z\right) = \frac{1}{120} e^z (2z^5 + 49z^4 + 380z^3 + 1080z^2 + 960z + 120)$$

07.25.03.ahep.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{16z^5 + 336z^4 + 2080z^3 + 4008z^2 + 1315z - 105}{1280z} + \frac{e^z \sqrt{\pi} (32z^6 + 688z^5 + 4480z^4 + 9800z^3 + 5250z^2 - 105z + 105) \operatorname{erf}(\sqrt{z})}{2560z^{3/2}}$$

07.25.03.aheq.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{16z^5 - 336z^4 + 2080z^3 - 4008z^2 + 1315z + 105}{1280z} + \frac{e^{-z} \sqrt{\pi} (-32z^6 + 688z^5 - 4480z^4 + 9800z^3 - 5250z^2 - 105z - 105) \operatorname{erfi}(\sqrt{z})}{2560z^{3/2}}$$

07.25.03.aher.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, 3; z\right) = \frac{1}{60} e^z (2z^4 + 37z^3 + 195z^2 + 300z + 60)$$

07.25.03.ahes.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{16z^5 + 240z^4 + 888z^3 + 556z^2 - 135z + 90}{512z^2} + \frac{e^z \sqrt{\pi} (32z^6 + 496z^5 + 2000z^4 + 1800z^3 - 150z^2 + 195z - 90) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.ahet.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{-16z^5 + 240z^4 - 888z^3 + 556z^2 + 135z + 90}{512z^2} + \frac{e^{-z} \sqrt{\pi} (32z^6 - 496z^5 + 2000z^4 - 1800z^3 - 150z^2 - 195z - 90) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.ahew.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, 4; z\right) = \frac{1}{20} e^z (2z^3 + 25z^2 + 70z + 20)$$

07.25.03.ahew.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7(16z^5 + 144z^4 + 176z^3 - 96z^2 + 135z - 135)}{1024z^3} + \frac{7e^z \sqrt{\pi} (32z^6 + 304z^5 + 480z^4 - 120z^3 + 210z^2 - 225z + 135) \operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.ahew.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7(16z^5 - 144z^4 + 176z^3 + 96z^2 + 135z + 135)}{1024z^3} - \frac{7e^{-z} \sqrt{\pi} (32z^6 - 304z^5 + 480z^4 + 120z^3 + 210z^2 + 225z + 135) \operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.ahex.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, 5; z\right) = \frac{1}{5} e^z (2z^2 + 13z + 5)$$

07.25.03.ahex.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{63(16z^5 + 48z^4 - 56z^3 + 132z^2 - 275z + 420)}{2048z^4} + \frac{63e^z \sqrt{\pi} (32z^6 + 112z^5 - 80z^4 + 200z^3 - 390z^2 + 555z - 420) \operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.ahex.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63e^{-z} \sqrt{\pi} (32z^6 - 112z^5 - 80z^4 - 200z^3 - 390z^2 - 555z - 420) \operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{63(16z^5 - 48z^4 - 56z^3 - 132z^2 - 275z - 420)}{2048z^4}$$

07.25.03.ahf0.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{1}{2}, 6; z\right) = e^z (2z + 1)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = 1$

07.25.03.ahf1.01

$${}_2F_2\left(\frac{3}{2}, 6; 1, 1; z\right) = \frac{1}{960} e^{z/2} (8z^6 + 228z^5 + 2188z^4 + 8671z^3 + 14126z^2 + 8160z + 960) I_0\left(\frac{z}{2}\right) + \frac{1}{960} e^{z/2} (8z^6 + 220z^5 + 1972z^4 + 6801z^3 + 8116z^2 + 2056z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ahf2.01

$${}_2F_2\left(\frac{3}{2}, 6; 1, \frac{3}{2}; z\right) = \frac{1}{120} e^z (z^5 + 25z^4 + 200z^3 + 600z^2 + 600z + 120)$$

07.25.03.ahf3.01

$${}_2F_2\left(\frac{3}{2}, 6; 1, 2; z\right) = \frac{1}{480} e^{z/2} (4z^5 + 92z^4 + 677z^3 + 1903z^2 + 1920z + 480) I_0\left(\frac{z}{2}\right) + \frac{1}{480} e^{z/2} (4z^5 + 88z^4 + 591z^3 + 1352z^2 + 788z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ahf4.01

$${}_2F_2\left(\frac{3}{2}, 6; 1, \frac{5}{2}; z\right) = \frac{e^z (32z^5 + 624z^4 + 3592z^3 + 6628z^2 + 2630z - 105)}{2560z} + \frac{21\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{1024z^{3/2}}$$

07.25.03.ahf5.01

$${}_2F_2\left(\frac{3}{2}, 6; 1, \frac{5}{2}; -z\right) = \frac{e^{-z} (32z^5 - 624z^4 + 3592z^3 - 6628z^2 + 2630z + 105)}{2560z} - \frac{21\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{1024z^{3/2}}$$

07.25.03.ahf6.01

$${}_2F_2\left(\frac{3}{2}, 6; 1, 3; z\right) = \frac{1}{240} e^{z/2} (4z^4 + 70z^3 + 359z^2 + 600z + 240) I_0\left(\frac{z}{2}\right) + \frac{1}{240} e^{z/2} z (4z^3 + 66z^2 + 295z + 334) I_1\left(\frac{z}{2}\right)$$

07.25.03.ahf7.01

$${}_2F_2\left(\frac{3}{2}, 6; 1, \frac{7}{2}; z\right) = \frac{e^z (64z^5 + 896z^4 + 3152z^3 + 2224z^2 - 300z + 135)}{2048z^2} + \frac{15\sqrt{\pi} (14z - 9) \operatorname{erfi}(\sqrt{z})}{4096z^{5/2}}$$

07.25.03.ahf8.01

$${}_2F_2\left(\frac{3}{2}, 6; 1, \frac{7}{2}; -z\right) = \frac{e^{-z} (-64z^5 + 896z^4 - 3152z^3 + 2224z^2 + 300z + 135)}{2048z^2} - \frac{15\sqrt{\pi} (14z + 9) \operatorname{erf}(\sqrt{z})}{4096z^{5/2}}$$

07.25.03.ahf9.01

$${}_2F_2\left(\frac{3}{2}, 6; 1, 4; z\right) = \frac{1}{20} e^{z/2} (z^3 + 12z^2 + 35z + 20) I_0\left(\frac{z}{2}\right) + \frac{1}{40} e^{z/2} z (2z^2 + 22z + 49) I_1\left(\frac{z}{2}\right)$$

07.25.03.ahfa.01

$${}_2F_2\left(\frac{3}{2}, 6; 1, \frac{9}{2}; z\right) = \frac{7e^z (256z^5 + 2176z^4 + 2816z^3 - 960z^2 + 990z - 675)}{16384z^3} + \frac{105\sqrt{\pi} (28z^2 - 36z + 45) \operatorname{erfi}(\sqrt{z})}{32768z^{7/2}}$$

07.25.03.ahfb.01

$${}_2F_2\left(\frac{3}{2}, 6; 1, \frac{9}{2}; -z\right) = \frac{7e^{-z} (256z^5 - 2176z^4 + 2816z^3 + 960z^2 + 990z + 675)}{16384z^3} - \frac{105\sqrt{\pi} (28z^2 + 36z + 45) \operatorname{erf}(\sqrt{z})}{32768z^{7/2}}$$

07.25.03.ahfc.01

$${}_2F_2\left(\frac{3}{2}, 6; 1, 5; z\right) = \frac{1}{10} e^{z/2} (2z^2 + 13z + 10) I_0\left(\frac{z}{2}\right) + \frac{1}{10} e^{z/2} z (2z + 11) I_1\left(\frac{z}{2}\right)$$

07.25.03.ahfd.01

$${}_2F_2\left(\frac{3}{2}, 6; 1, \frac{11}{2}; z\right) = \frac{63e^z (512z^5 + 1536z^4 - 1280z^3 + 2420z^2 - 3800z + 3675)}{65536z^4} + \frac{315\sqrt{\pi} (56z^3 - 108z^2 + 270z - 735) \operatorname{erfi}(\sqrt{z})}{131072z^{9/2}}$$

07.25.03.ahfe.01

$${}_2F_2\left(\frac{3}{2}, 6; 1, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (512 z^5 - 1536 z^4 - 1280 z^3 - 2420 z^2 - 3800 z - 3675)}{65\,536 z^4} - \frac{315 \sqrt{\pi} (56 z^3 + 108 z^2 + 270 z + 735) \operatorname{erf}(\sqrt{z})}{131\,072 z^{9/2}}$$

07.25.03.ahff.01

$${}_2F_2\left(\frac{3}{2}, 6; 1, 6; z\right) = e^{z/2} (z+1) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = \frac{3}{2}$

07.25.03.ahfg.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{16 z^4 + 352 z^3 + 2352 z^2 + 5280 z + 2895}{3840} + \frac{e^z \sqrt{\pi} (32 z^5 + 720 z^4 + 5040 z^3 + 12\,600 z^2 + 9450 z + 945) \operatorname{erfi}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.ahfh.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{16 z^4 - 352 z^3 + 2352 z^2 - 5280 z + 2895}{3840} + \frac{e^{-z} \sqrt{\pi} (-32 z^5 + 720 z^4 - 5040 z^3 + 12\,600 z^2 - 9450 z + 945) \operatorname{erfi}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.ahfi.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, 2; z\right) = \frac{1}{120} e^z (z^4 + 20 z^3 + 120 z^2 + 240 z + 120)$$

07.25.03.ahfj.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{16 z^4 + 272 z^3 + 1272 z^2 + 1580 z + 105}{2560 z} + \frac{e^z \sqrt{\pi} (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105) \operatorname{erfi}(\sqrt{z})}{5120 z^{3/2}}$$

07.25.03.ahfk.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-16 z^4 + 272 z^3 - 1272 z^2 + 1580 z - 105}{2560 z} + \frac{e^{-z} \sqrt{\pi} (32 z^5 - 560 z^4 + 2800 z^3 - 4200 z^2 + 1050 z + 105) \operatorname{erfi}(\sqrt{z})}{5120 z^{3/2}}$$

07.25.03.ahfl.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, 3; z\right) = \frac{1}{60} e^z (z^3 + 15 z^2 + 60 z + 60)$$

07.25.03.ahfm.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{16 z^4 + 192 z^3 + 512 z^2 + 120 z - 45}{1024 z^2} + \frac{e^z \sqrt{\pi} (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45) \operatorname{erfi}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.ahfn.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z}\sqrt{\pi}(-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45)\operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.ahfo.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, 4; z\right) = \frac{1}{20} e^z (z^2 + 10z + 20)$$

07.25.03.ahfp.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z\sqrt{\pi}(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)\operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.ahfq.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}\sqrt{\pi}(32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45)\operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.ahfr.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, 5; z\right) = \frac{1}{5} e^z (z + 5)$$

07.25.03.ahfs.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z\sqrt{\pi}(32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ahft.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z}\sqrt{\pi}(32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ahfu.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{3}{2}, 6; z\right) = e^z$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = 2$

07.25.03.ahfv.01

$${}_2F_2\left(\frac{3}{2}, 6; 2, 2; z\right) = \frac{1}{480} e^{z/2} (4z^4 + 74z^3 + 415z^2 + 816z + 480) I_0\left(\frac{z}{2}\right) + \frac{1}{480} e^{z/2} (4z^4 + 70z^3 + 347z^2 + 500z + 96) I_1\left(\frac{z}{2}\right)$$

07.25.03.ahfw.01

$${}_2F_2\left(\frac{3}{2}, 6; 2, \frac{5}{2}; z\right) = \frac{e^z(16z^4 + 248z^3 + 1052z^2 + 1210z + 105)}{1280z} - \frac{21\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.ahfx.01

$${}_2F_2\left(\frac{3}{2}, 6; 2, \frac{5}{2}; -z\right) = \frac{e^{-z}(-16z^4 + 248z^3 - 1052z^2 + 1210z - 105)}{1280z} + \frac{21\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.ahfy.01

$${}_2F_2\left(\frac{3}{2}, 6; 2, 3; z\right) = \frac{1}{60}e^{z/2}(z^3 + 14z^2 + 54z + 60)I_0\left(\frac{z}{2}\right) + \frac{1}{120}e^{z/2}(2z^3 + 26z^2 + 83z + 48)I_1\left(\frac{z}{2}\right)$$

07.25.03.ahfz.01

$${}_2F_2\left(\frac{3}{2}, 6; 2, \frac{7}{2}; z\right) = \frac{e^z(32z^4 + 352z^3 + 872z^2 + 240z - 45)}{1024z^2} - \frac{15\sqrt{\pi}(14z - 3)\operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.ahg0.01

$${}_2F_2\left(\frac{3}{2}, 6; 2, \frac{7}{2}; -z\right) = \frac{e^{-z}(32z^4 - 352z^3 + 872z^2 - 240z - 45)}{1024z^2} + \frac{15\sqrt{\pi}(14z + 3)\operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.ahg1.01

$${}_2F_2\left(\frac{3}{2}, 6; 2, 4; z\right) = \frac{1}{40}e^{z/2}(2z^2 + 19z + 40)I_0\left(\frac{z}{2}\right) + \frac{1}{40}e^{z/2}(2z^2 + 17z + 24)I_1\left(\frac{z}{2}\right)$$

07.25.03.ahg2.01

$${}_2F_2\left(\frac{3}{2}, 6; 2, \frac{9}{2}; z\right) = \frac{7e^z(128z^4 + 832z^3 + 576z^2 - 270z + 135)}{8192z^3} - \frac{105\sqrt{\pi}(28z^2 - 12z + 9)\operatorname{erfi}(\sqrt{z})}{16384z^{7/2}}$$

07.25.03.ahg3.01

$${}_2F_2\left(\frac{3}{2}, 6; 2, \frac{9}{2}; -z\right) = \frac{105\sqrt{\pi}(28z^2 + 12z + 9)\operatorname{erf}(\sqrt{z})}{16384z^{7/2}} - \frac{7e^{-z}(128z^4 - 832z^3 + 576z^2 + 270z + 135)}{8192z^3}$$

07.25.03.ahg4.01

$${}_2F_2\left(\frac{3}{2}, 6; 2, 5; z\right) = \frac{1}{5}e^{z/2}(z + 5)I_0\left(\frac{z}{2}\right) + \frac{1}{5}e^{z/2}(z + 4)I_1\left(\frac{z}{2}\right)$$

07.25.03.ahg5.01

$${}_2F_2\left(\frac{3}{2}, 6; 2, \frac{11}{2}; z\right) = \frac{63e^z(256z^4 + 512z^3 - 500z^2 + 620z - 525)}{32768z^4} - \frac{315\sqrt{\pi}(56z^3 - 36z^2 + 54z - 105)\operatorname{erfi}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.ahg6.01

$${}_2F_2\left(\frac{3}{2}, 6; 2, \frac{11}{2}; -z\right) = \frac{63e^{-z}(256z^4 - 512z^3 - 500z^2 - 620z - 525)}{32768z^4} + \frac{315\sqrt{\pi}(56z^3 + 36z^2 + 54z + 105)\operatorname{erf}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.ahg7.01

$${}_2F_2\left(\frac{3}{2}, 6; 2, 6; z\right) = e^{z/2}I_0\left(\frac{z}{2}\right) + e^{z/2}I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = \frac{5}{2}$

07.25.03.ahg8.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{5}{2}, 3; z\right) = \frac{e^z(8z^3 + 92z^2 + 250z + 105)}{320z} - \frac{21\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{128z^{3/2}}$$

07.25.03.ahg9.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{5}{2}, 3; -z\right) = \frac{e^{-z}(8z^3 - 92z^2 + 250z - 105)}{320z} + \frac{21\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{128z^{3/2}}$$

07.25.03.ahga.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{5}{2}, 4; z\right) = \frac{3e^z(4z^2 + 30z + 35)}{160z} - \frac{21\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.ahgb.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{5}{2}, 4; -z\right) = \frac{21\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{64z^{3/2}} - \frac{3e^{-z}(4z^2 - 30z + 35)}{160z}$$

07.25.03.ahgc.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{5}{2}, 5; z\right) = \frac{3e^z(2z + 7)}{20z} - \frac{21\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{40z^{3/2}}$$

07.25.03.ahgd.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{5}{2}, 5; -z\right) = \frac{3e^{-z}(2z - 7)}{20z} + \frac{21\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{40z^{3/2}}$$

07.25.03.ahge.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{5}{2}, 6; z\right) = \frac{3e^z}{2z} - \frac{3\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4z^{3/2}}$$

07.25.03.ahgf.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{5}{2}, 6; -z\right) = \frac{3\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{3/2}} - \frac{3e^{-z}}{2z}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = 3$

07.25.03.ahgg.01

$${}_2F_2\left(\frac{3}{2}, 6; 3, 3; z\right) = \frac{1}{60} e^{z/2} (2z^2 + 21z + 54) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (2z^3 + 19z^2 + 36z + 24) I_1\left(\frac{z}{2}\right)}{60z}$$

07.25.03.ahgh.01

$${}_2F_2\left(\frac{3}{2}, 6; 3, \frac{7}{2}; z\right) = \frac{e^z(16z^3 + 128z^2 + 180z + 45)}{256z^2} - \frac{15\sqrt{\pi} (14z + 3) \operatorname{erfi}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.ahgi.01

$${}_2F_2\left(\frac{3}{2}, 6; 3, \frac{7}{2}; -z\right) = \frac{e^{-z}(-16z^3 + 128z^2 - 180z + 45)}{256z^2} + \frac{15\sqrt{\pi} (14z - 3) \operatorname{erf}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.ahgj.01

$${}_2F_2\left(\frac{3}{2}, 6; 3, 4; z\right) = \frac{1}{10} e^{z/2} (z + 7) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (z^2 + 6z + 12) I_1\left(\frac{z}{2}\right)}{10z}$$

07.25.03.ahgk.01

$${}_2F_2\left(\frac{3}{2}, 6; 3, \frac{9}{2}; z\right) = \frac{7 e^z (64 z^3 + 288 z^2 + 210 z - 45)}{2048 z^3} - \frac{105 \sqrt{\pi} (28 z^2 + 12 z - 3) \operatorname{erfi}(\sqrt{z})}{4096 z^{7/2}}$$

07.25.03.ahgl.01

$${}_2F_2\left(\frac{3}{2}, 6; 3, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (64 z^3 - 288 z^2 + 210 z + 45)}{2048 z^3} + \frac{105 \sqrt{\pi} (28 z^2 - 12 z - 3) \operatorname{erf}(\sqrt{z})}{4096 z^{7/2}}$$

07.25.03.ahgm.01

$${}_2F_2\left(\frac{3}{2}, 6; 3, 5; z\right) = \frac{2}{5} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{2 e^{z/2} (z + 6) I_1\left(\frac{z}{2}\right)}{5 z}$$

07.25.03.ahgn.01

$${}_2F_2\left(\frac{3}{2}, 6; 3, \frac{11}{2}; z\right) = \frac{63 e^z (128 z^3 + 268 z^2 - 160 z + 105)}{8192 z^4} - \frac{315 \sqrt{\pi} (56 z^3 + 36 z^2 - 18 z + 21) \operatorname{erfi}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.ahgo.01

$${}_2F_2\left(\frac{3}{2}, 6; 3, \frac{11}{2}; -z\right) = \frac{315 \sqrt{\pi} (56 z^3 - 36 z^2 - 18 z - 21) \operatorname{erf}(\sqrt{z})}{16384 z^{9/2}} - \frac{63 e^{-z} (128 z^3 - 268 z^2 - 160 z - 105)}{8192 z^4}$$

07.25.03.ahgp.01

$${}_2F_2\left(\frac{3}{2}, 6; 3, 6; z\right) = \frac{4 e^{z/2} I_1\left(\frac{z}{2}\right)}{z}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = \frac{7}{2}$

07.25.03.ahgq.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{7}{2}, 4; z\right) = \frac{3 e^z (8 z^2 + 40 z + 45)}{128 z^2} - \frac{15 \sqrt{\pi} (14 z + 9) \operatorname{erfi}(\sqrt{z})}{256 z^{5/2}}$$

07.25.03.ahgr.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{7}{2}, 4; -z\right) = \frac{3 e^{-z} (8 z^2 - 40 z + 45)}{128 z^2} + \frac{15 \sqrt{\pi} (14 z - 9) \operatorname{erf}(\sqrt{z})}{256 z^{5/2}}$$

07.25.03.ahgs.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{7}{2}, 5; z\right) = \frac{3 e^z (4 z + 15)}{16 z^2} - \frac{3 \sqrt{\pi} (14 z + 15) \operatorname{erfi}(\sqrt{z})}{32 z^{5/2}}$$

07.25.03.ahgt.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{7}{2}, 5; -z\right) = \frac{3 \sqrt{\pi} (14 z - 15) \operatorname{erf}(\sqrt{z})}{32 z^{5/2}} - \frac{3 e^{-z} (4 z - 15)}{16 z^2}$$

07.25.03.ahgu.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{7}{2}, 6; z\right) = \frac{45 e^z}{8 z^2} - \frac{15 \sqrt{\pi} (2 z + 3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.ahgv.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{7}{2}, 6; -z\right) = \frac{15\sqrt{\pi}(2z-3)\operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45e^{-z}}{8z^2}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = 4$

07.25.03.ahgw.01

$${}_2F_2\left(\frac{3}{2}, 6; 4, 4; z\right) = \frac{e^{z/2}(3z-4)I_0\left(\frac{z}{2}\right)}{10z} + \frac{e^{z/2}(3z^2+28z+16)I_1\left(\frac{z}{2}\right)}{10z^2}$$

07.25.03.ahgx.01

$${}_2F_2\left(\frac{3}{2}, 6; 4, \frac{9}{2}; z\right) = \frac{21e^z(32z^2+150z+45)}{1024z^3} - \frac{105\sqrt{\pi}(28z^2+36z+9)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.ahgy.01

$${}_2F_2\left(\frac{3}{2}, 6; 4, \frac{9}{2}; -z\right) = \frac{105\sqrt{\pi}(28z^2-36z+9)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}} - \frac{21e^{-z}(32z^2-150z+45)}{1024z^3}$$

07.25.03.ahgz.01

$${}_2F_2\left(\frac{3}{2}, 6; 4, 5; z\right) = \frac{4e^{z/2}(5z+8)I_1\left(\frac{z}{2}\right)}{5z^2} - \frac{8e^{z/2}I_0\left(\frac{z}{2}\right)}{5z}$$

07.25.03.ahh0.01

$${}_2F_2\left(\frac{3}{2}, 6; 4, \frac{11}{2}; z\right) = \frac{63e^z(332z^2+340z-105)}{4096z^4} - \frac{315\sqrt{\pi}(56z^3+108z^2+54z-21)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ahh1.01

$${}_2F_2\left(\frac{3}{2}, 6; 4, \frac{11}{2}; -z\right) = \frac{63e^{-z}(332z^2-340z-105)}{4096z^4} + \frac{315\sqrt{\pi}(56z^3-108z^2+54z+21)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ahh2.01

$${}_2F_2\left(\frac{3}{2}, 6; 4, 6; z\right) = \frac{4e^{z/2}(z+4)I_1\left(\frac{z}{2}\right)}{z^2} - \frac{4e^{z/2}I_0\left(\frac{z}{2}\right)}{z}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = \frac{9}{2}$

07.25.03.ahh3.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{9}{2}, 5; z\right) = \frac{315e^z(2z+3)}{128z^3} - \frac{21\sqrt{\pi}(28z^2+60z+45)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.ahh4.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{9}{2}, 5; -z\right) = \frac{315e^{-z}(2z-3)}{128z^3} + \frac{21\sqrt{\pi}(28z^2-60z+45)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.ahh5.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{9}{2}, 6; z\right) = \frac{105e^z(2z+15)}{64z^3} - \frac{105\sqrt{\pi}(4z^2+12z+15)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.ahh6.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{9}{2}, 6; -z\right) = \frac{105 e^{-z} (2z - 15)}{64 z^3} + \frac{105 \sqrt{\pi} (4z^2 - 12z + 15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = 5$

07.25.03.ahh7.01

$${}_2F_2\left(\frac{3}{2}, 6; 5, 5; z\right) = \frac{16 e^{z/2} (7z^2 + 28z + 24) I_1\left(\frac{z}{2}\right)}{25 z^3} - \frac{16 e^{z/2} (7z + 6) I_0\left(\frac{z}{2}\right)}{25 z^2}$$

07.25.03.ahh8.01

$${}_2F_2\left(\frac{3}{2}, 6; 5, \frac{11}{2}; z\right) = \frac{63 e^z (28z^2 + 200z + 105)}{512 z^4} - \frac{63 \sqrt{\pi} (56z^3 + 180z^2 + 270z + 105) \operatorname{erfi}(\sqrt{z})}{1024 z^{9/2}}$$

07.25.03.ahh9.01

$${}_2F_2\left(\frac{3}{2}, 6; 5, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (28z^2 - 200z + 105)}{512 z^4} + \frac{63 \sqrt{\pi} (56z^3 - 180z^2 + 270z - 105) \operatorname{erf}(\sqrt{z})}{1024 z^{9/2}}$$

07.25.03.ahha.01

$${}_2F_2\left(\frac{3}{2}, 6; 5, 6; z\right) = \frac{32 e^{z/2} (z^2 + 4z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{32 e^{z/2} (z + 3) I_0\left(\frac{z}{2}\right)}{5 z^2}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = \frac{11}{2}$

07.25.03.ahhb.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{11}{2}, 6; z\right) = \frac{315 e^z (4z^2 + 20z + 105)}{256 z^4} - \frac{315 \sqrt{\pi} (8z^3 + 36z^2 + 90z + 105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ahhc.01

$${}_2F_2\left(\frac{3}{2}, 6; \frac{11}{2}, 6; -z\right) = \frac{315 e^{-z} (4z^2 - 20z + 105)}{256 z^4} + \frac{315 \sqrt{\pi} (8z^3 - 36z^2 + 90z - 105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

For fixed z and $a_1 = \frac{3}{2}$, $a_2 = 6$, $b_1 = 6$

07.25.03.ahhd.01

$${}_2F_2\left(\frac{3}{2}, 6; 6, 6; z\right) = \frac{32 e^{z/2} (2z^3 + 11z^2 + 36z + 96) I_1\left(\frac{z}{2}\right)}{7 z^4} - \frac{32 e^{z/2} (2z^2 + 9z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3}$$

For fixed z and $a_1 = 2$, $a_2 \geq 2$

For fixed z and $a_1 = 2$, $a_2 = 2$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 2$, $a_2 = 2$, $b_1 = -\frac{11}{2}$

07.25.03.ahhe.01

$${}_2F_2\left(2, 2; -\frac{11}{2}, 1; z\right) = \frac{64 z^8 + 992 z^7 + 3136 z^6 - 1152 z^5 + 1200 z^4 - 1920 z^3 + 3780 z^2 - 7560 z + 10395}{10395} + \frac{16 e^z \sqrt{\pi} (4 z^{17/2} + 64 z^{15/2} + 225 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.ahhf.01

$${}_2F_2\left(2, 2; -\frac{11}{2}, 1; -z\right) = \frac{64 z^8 - 992 z^7 + 3136 z^6 + 1152 z^5 + 1200 z^4 + 1920 z^3 + 3780 z^2 + 7560 z + 10395}{10395} - \frac{16 e^{-z} \sqrt{\pi} (4 z^{17/2} - 64 z^{15/2} + 225 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.ahhg.01

$${}_2F_2\left(2, 2; -\frac{11}{2}, 2; z\right) = \frac{64 z^7 + 448 z^6 - 192 z^5 + 240 z^4 - 480 z^3 + 1260 z^2 - 3780 z + 10395}{10395} + \frac{32 e^z \sqrt{\pi} (2 z^{15/2} + 15 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.ahhh.01

$${}_2F_2\left(2, 2; -\frac{11}{2}, 2; -z\right) = \frac{-64 z^7 + 448 z^6 + 192 z^5 + 240 z^4 + 480 z^3 + 1260 z^2 + 3780 z + 10395}{10395} + \frac{32 e^{-z} \sqrt{\pi} (2 z^{15/2} - 15 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

For fixed z and $a_1 = 2, a_2 = 2, b_1 = -\frac{9}{2}$

07.25.03.ahhi.01

$${}_2F_2\left(2, 2; -\frac{9}{2}, 1; z\right) = \frac{1}{945} (-32 z^7 - 432 z^6 - 1152 z^5 + 400 z^4 - 384 z^3 + 540 z^2 - 840 z + 945) - \frac{8}{945} e^z \sqrt{\pi} (4 z^{15/2} + 56 z^{13/2} + 169 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahhj.01

$${}_2F_2\left(2, 2; -\frac{9}{2}, 1; -z\right) = \frac{1}{945} (32 z^7 - 432 z^6 + 1152 z^5 + 400 z^4 + 384 z^3 + 540 z^2 + 840 z + 945) - \frac{8}{945} e^{-z} \sqrt{\pi} (4 z^{15/2} - 56 z^{13/2} + 169 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahhk.01

$${}_2F_2\left(2, 2; -\frac{9}{2}, 2; z\right) = \frac{1}{945} (-32 z^6 - 192 z^5 + 80 z^4 - 96 z^3 + 180 z^2 - 420 z + 945) - \frac{16}{945} e^z \sqrt{\pi} (2 z^{13/2} + 13 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahhl.01

$${}_2F_2\left(2, 2; -\frac{9}{2}, 2; -z\right) = \frac{1}{945} (-32 z^6 + 192 z^5 + 80 z^4 + 96 z^3 + 180 z^2 + 420 z + 945) + \frac{16}{945} e^{-z} \sqrt{\pi} (2 z^{13/2} - 13 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 2, b_1 = -\frac{7}{2}$

07.25.03.ahhm.01

$${}_2F_2\left(2, 2; -\frac{7}{2}, 1; z\right) = \frac{1}{105} (16z^6 + 184z^5 + 400z^4 - 128z^3 + 108z^2 - 120z + 105) + \frac{4}{105} e^z \sqrt{\pi} (4z^{13/2} + 48z^{11/2} + 121z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahhn.01

$${}_2F_2\left(2, 2; -\frac{7}{2}, 1; -z\right) = \frac{1}{105} (16z^6 - 184z^5 + 400z^4 + 128z^3 + 108z^2 + 120z + 105) - \frac{4}{105} e^{-z} \sqrt{\pi} (4z^{13/2} - 48z^{11/2} + 121z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahho.01

$${}_2F_2\left(2, 2; -\frac{7}{2}, 2; z\right) = \frac{1}{105} (16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105) + \frac{8}{105} e^z \sqrt{\pi} (2z^{11/2} + 11z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahhp.01

$${}_2F_2\left(2, 2; -\frac{7}{2}, 2; -z\right) = \frac{1}{105} (-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105) + \frac{8}{105} e^{-z} \sqrt{\pi} (2z^{11/2} - 11z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 2, b_1 = -\frac{5}{2}$

07.25.03.ahhq.01

$${}_2F_2\left(2, 2; -\frac{5}{2}, 1; z\right) = \frac{1}{15} (-8z^5 - 76z^4 - 128z^3 + 36z^2 - 24z + 15) - \frac{2}{15} e^z \sqrt{\pi} (4z^{11/2} + 40z^{9/2} + 81z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahhr.01

$${}_2F_2\left(2, 2; -\frac{5}{2}, 1; -z\right) = \frac{1}{15} (8z^5 - 76z^4 + 128z^3 + 36z^2 + 24z + 15) - \frac{2}{15} e^{-z} \sqrt{\pi} (4z^{11/2} - 40z^{9/2} + 81z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahhs.01

$${}_2F_2\left(2, 2; -\frac{5}{2}, 2; z\right) = \frac{1}{15} (-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15} e^z \sqrt{\pi} (2z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahht.01

$${}_2F_2\left(2, 2; -\frac{5}{2}, 2; -z\right) = \frac{1}{15} (-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15} e^{-z} \sqrt{\pi} (2z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 2, b_1 = -\frac{3}{2}$

07.25.03.ahhu.01

$${}_2F_2\left(2, 2; -\frac{3}{2}, 1; z\right) = \frac{1}{3} (4z^4 + 30z^3 + 36z^2 - 8z + 3) + \frac{1}{3} e^z \sqrt{\pi} (4z^{9/2} + 32z^{7/2} + 49z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahhv.01

$${}_2F_2\left(2, 2; -\frac{3}{2}, 1; -z\right) = \frac{1}{3} (4z^4 - 30z^3 + 36z^2 + 8z + 3) + \frac{1}{3} e^{-z} \sqrt{\pi} (-4z^{9/2} + 32z^{7/2} - 49z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahhw.01

$${}_2F_2\left(2, 2; -\frac{3}{2}, 2; z\right) = \frac{1}{3} (4z^3 + 12z^2 - 4z + 3) + \frac{2}{3} e^z \sqrt{\pi} (2z^{7/2} + 7z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahhx.01

$${}_2F_2\left(2, 2; -\frac{3}{2}, 2; -z\right) = \frac{1}{3}(-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3}e^{-z}\sqrt{\pi}(2z^{7/2} - 7z^{5/2})\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 2, b_1 = -\frac{1}{2}$

07.25.03.ahhy.01

$${}_2F_2\left(2, 2; -\frac{1}{2}, 1; z\right) = -2z^3 - 11z^2 - 8z + \frac{1}{2}e^z\sqrt{\pi}(-4z^{7/2} - 24z^{5/2} - 25z^{3/2})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.ahhz.01

$${}_2F_2\left(2, 2; -\frac{1}{2}, 1; -z\right) = 2z^3 - 11z^2 + 8z + \frac{1}{2}e^{-z}\sqrt{\pi}(-4z^{7/2} + 24z^{5/2} - 25z^{3/2})\operatorname{erfi}(\sqrt{z}) + 1$$

07.25.03.ahi0.01

$${}_2F_2\left(2, 2; -\frac{1}{2}, 2; z\right) = -2z^2 - 4z + e^z\sqrt{\pi}(-2z^{5/2} - 5z^{3/2})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.ahi1.01

$${}_2F_2\left(2, 2; -\frac{1}{2}, 2; -z\right) = -2z^2 + 4z + e^{-z}\sqrt{\pi}(2z^{5/2} - 5z^{3/2})\operatorname{erfi}(\sqrt{z}) + 1$$

For fixed z and $a_1 = 2, a_2 = 2, b_1 = \frac{1}{2}$

07.25.03.0130.01

$${}_2F_2\left(2, 2; \frac{1}{2}, 1; z\right) = 1 + \frac{7z}{2} + z^2 + \frac{1}{4}e^z\sqrt{\pi}(4z^2 + 16z + 9)\operatorname{erf}(\sqrt{z})\sqrt{z}$$

07.25.03.ahi2.01

$${}_2F_2\left(2, 2; \frac{1}{2}, 1; -z\right) = \frac{1}{2}(2z^2 - 7z + 2) + \frac{1}{4}e^{-z}\sqrt{\pi}(-4z^{5/2} + 16z^{3/2} - 9\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahi3.01

$${}_2F_2\left(2, 2; \frac{1}{2}, 2; z\right) = z + \frac{1}{2}e^z\sqrt{\pi}(2z^{3/2} + 3\sqrt{z})\operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.ahi4.01

$${}_2F_2\left(2, 2; \frac{1}{2}, 2; -z\right) = -z + \frac{1}{2}e^{-z}\sqrt{\pi}(2z^{3/2} - 3\sqrt{z})\operatorname{erfi}(\sqrt{z}) + 1$$

For fixed z and $a_1 = 2, a_2 = 2, b_1 = 1$

07.25.03.0131.01

$${}_2F_2(2, 2; 1, 1; z) = e^z(z^2 + 3z + 1)$$

07.25.03.0132.01

$${}_2F_2\left(2, 2; 1, \frac{3}{2}; z\right) = \frac{1}{8\sqrt{z}}\left(2\sqrt{z}(2z + 3) + e^z\sqrt{\pi}(4z^2 + 8z + 1)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ahi5.01

$${}_2F_2\left(2, 2; 1, \frac{3}{2}; -z\right) = \frac{1}{4}(3 - 2z) + \frac{e^{-z}\sqrt{\pi}(4z^2 - 8z + 1)\operatorname{erfi}(\sqrt{z})}{8\sqrt{z}}$$

07.25.03.ahi6.01

$${}_2F_2(2, 2; 1, 2; z) = e^z (z + 1)$$

07.25.03.0133.01

$${}_2F_2\left(2, 2; 1, \frac{5}{2}; z\right) = \frac{3}{16 z^{3/2}} \left(2 \sqrt{z} (2z - 1) + e^z \sqrt{\pi} (4z^2 + 1) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ahi7.01

$${}_2F_2\left(2, 2; 1, \frac{5}{2}; -z\right) = \frac{3(2z + 1)}{8z} - \frac{3 e^{-z} \sqrt{\pi} (4z^2 + 1) \operatorname{erfi}(\sqrt{z})}{16 z^{3/2}}$$

07.25.03.0134.01

$${}_2F_2(2, 2; 1, 3; z) = \frac{2}{z^2} (e^z (z^2 - z + 1) - 1)$$

07.25.03.ahi8.01

$${}_2F_2\left(2, 2; 1, \frac{7}{2}; z\right) = \frac{15(2z - 9)}{16 z^2} + \frac{15 e^z \sqrt{\pi} (4z^2 - 8z + 9) \operatorname{erf}(\sqrt{z})}{32 z^{5/2}}$$

07.25.03.ahi9.01

$${}_2F_2\left(2, 2; 1, \frac{7}{2}; -z\right) = \frac{15 e^{-z} \sqrt{\pi} (4z^2 + 8z + 9) \operatorname{erfi}(\sqrt{z})}{32 z^{5/2}} - \frac{15(2z + 9)}{16 z^2}$$

07.25.03.ahia.01

$${}_2F_2(2, 2; 1, 4; z) = \frac{6 e^z (z^2 - 3z + 4)}{z^3} - \frac{6(z + 4)}{z^3}$$

07.25.03.ahib.01

$${}_2F_2\left(2, 2; 1, \frac{9}{2}; z\right) = \frac{105 e^z \sqrt{\pi} (4z^2 - 16z + 25) \operatorname{erf}(\sqrt{z})}{64 z^{7/2}} - \frac{35(2z + 75)}{32 z^3}$$

07.25.03.ahic.01

$${}_2F_2\left(2, 2; 1, \frac{9}{2}; -z\right) = -\frac{35(2z - 75)}{32 z^3} - \frac{105 e^{-z} \sqrt{\pi} (4z^2 + 16z + 25) \operatorname{erfi}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.ahid.01

$${}_2F_2(2, 2; 1, 5; z) = \frac{24 e^z (z^2 - 5z + 9)}{z^4} - \frac{12(z^2 + 8z + 18)}{z^4}$$

07.25.03.ahie.01

$${}_2F_2\left(2, 2; 1, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} (4z^2 - 24z + 49) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}} - \frac{63(16z^2 + 130z + 735)}{64 z^4}$$

07.25.03.ahif.01

$${}_2F_2\left(2, 2; 1, \frac{11}{2}; -z\right) = \frac{945 e^{-z} \sqrt{\pi} (4z^2 + 24z + 49) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}} - \frac{63(16z^2 - 130z + 735)}{64 z^4}$$

07.25.03.ahig.01

$${}_2F_2(2, 2; 1, 6; z) = \frac{120 e^z (z^2 - 7z + 16)}{z^5} - \frac{20(z^3 + 12z^2 + 54z + 96)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = 2, b_1 = \frac{3}{2}$

07.25.03.ahih.01

$${}_2F_2\left(2, 2; \frac{3}{2}, 2; z\right) = \frac{e^z \sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4 \sqrt{z}} + \frac{1}{2}$$

07.25.03.ahii.01

$${}_2F_2\left(2, 2; \frac{3}{2}, 2; -z\right) = \frac{e^{-z} \sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4 \sqrt{z}} + \frac{1}{2}$$

For fixed z and $a_1 = 2, a_2 = 2, b_1 = 2$

07.25.03.ahij.01

$${}_2F_2(2, 2; 2, 2; z) = e^z$$

07.25.03.ahik.01

$${}_2F_2\left(2, 2; 2, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{8 z^{3/2}} + \frac{3}{4z}$$

07.25.03.ahil.01

$${}_2F_2\left(2, 2; 2, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3}{4z}$$

07.25.03.ahim.01

$${}_2F_2(2, 2; 2, 3; z) = \frac{2 e^z (z - 1)}{z^2} + \frac{2}{z^2}$$

07.25.03.ahin.01

$${}_2F_2\left(2, 2; 2, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45}{8 z^2}$$

07.25.03.ahio.01

$${}_2F_2\left(2, 2; 2, \frac{7}{2}; -z\right) = \frac{45}{8 z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.ahip.01

$${}_2F_2(2, 2; 2, 4; z) = \frac{6 e^z (z - 2)}{z^3} + \frac{6 (z + 2)}{z^3}$$

07.25.03.ahiq.01

$${}_2F_2\left(2, 2; 2, \frac{9}{2}; z\right) = \frac{35 (4z + 15)}{16 z^3} + \frac{105 e^z \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ahir.01

$${}_2F_2\left(2, 2; 2, \frac{9}{2}; -z\right) = \frac{35 (4z - 15)}{16 z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ahis.01

$${}_2F_2(2, 2; 2, 5; z) = \frac{24 e^z (z - 3)}{z^4} + \frac{12 (z^2 + 4z + 6)}{z^4}$$

07.25.03.ahit.01

$${}_2F_2\left(2, 2; 2, \frac{11}{2}; z\right) = \frac{63 (8z^2 + 40z + 105)}{32z^4} + \frac{945 e^z \sqrt{\pi} (2z - 7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ahiu.01

$${}_2F_2\left(2, 2; 2, \frac{11}{2}; -z\right) = \frac{63 (8z^2 - 40z + 105)}{32z^4} - \frac{945 e^{-z} \sqrt{\pi} (2z + 7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ahiv.01

$${}_2F_2(2, 2; 2, 6; z) = \frac{120 e^z (z - 4)}{z^5} + \frac{20 (z^3 + 6z^2 + 18z + 24)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = 2, b_1 = 3$

07.25.03.0135.01

$${}_2F_2(2, 2; 3, 3; z) = \frac{2}{z^2} \left(-2 \operatorname{Ei}(z) + 2 e^z - \log\left(\frac{1}{z}\right) + \log(z) + 2\gamma - 2 \right)$$

07.25.03.ahiw.01

$${}_2F_2(2, 2; 3, 4; z) = \frac{12 (\gamma z - 2z - 2)}{z^3} - \frac{12 \operatorname{Ei}(z)}{z^2} - \frac{6 \log\left(\frac{1}{z}\right)}{z^2} + \frac{6 \log(z)}{z^2} + \frac{24 e^z}{z^3}$$

07.25.03.ahix.01

$${}_2F_2(2, 2; 3, 5; z) = \frac{24 e^z (z + 3)}{z^4} + \frac{12 (2\gamma z^2 - 5z^2 - 8z - 6)}{z^4} - \frac{24 \operatorname{Ei}(z)}{z^2} - \frac{12 \log\left(\frac{1}{z}\right)}{z^2} + \frac{12 \log(z)}{z^2}$$

07.25.03.ahiy.01

$${}_2F_2(2, 2; 3, 6; z) = \frac{40 e^z (z^2 + z + 8)}{z^5} + \frac{20 (6\gamma z^3 - 17z^3 - 36z^2 - 54z - 48)}{3z^5} - \frac{40 \operatorname{Ei}(z)}{z^2} - \frac{20 \log\left(\frac{1}{z}\right)}{z^2} + \frac{20 \log(z)}{z^2}$$

For fixed z and $a_1 = 2, a_2 = 2, b_1 = 4$

07.25.03.ahiz.01

$${}_2F_2(2, 2; 4, 4; z) = \frac{36 (\gamma z - 3z - 2\gamma - 1)}{z^3} - \frac{36 (z - 2) \operatorname{Ei}(z)}{z^3} - \frac{18 (z - 2) \log\left(\frac{1}{z}\right)}{z^3} + \frac{18 (z - 2) \log(z)}{z^3} + \frac{36 e^z}{z^3}$$

07.25.03.ahj0.01

$${}_2F_2(2, 2; 4, 5; z) = \frac{72 e^z (z - 3)}{z^4} + \frac{36 (2\gamma z^2 - 7z^2 - 8\gamma z + 4z + 6)}{z^4} - \frac{72 (z - 4) \operatorname{Ei}(z)}{z^3} - \frac{36 (z - 4) \log\left(\frac{1}{z}\right)}{z^3} + \frac{36 (z - 4) \log(z)}{z^3}$$

07.25.03.ahj1.01

$${}_2F_2(2, 2; 4, 6; z) = \frac{120 e^z (z^2 - 5z - 4)}{z^5} + \frac{20(6\gamma z^3 - 23z^3 - 36\gamma z^2 + 36z^2 + 54z + 24)}{z^5} - \frac{120(z-6)\text{Ei}(z)}{z^3} - \frac{60(z-6)\log\left(\frac{1}{z}\right)}{z^3} + \frac{60(z-6)\log(z)}{z^3}$$

For fixed z and $a_1 = 2, a_2 = 2, b_1 = 5$

07.25.03.ahj2.01

$${}_2F_2(2, 2; 5, 5; z) = \frac{144 e^z (z-7)}{z^4} + \frac{144(\gamma z^2 - 4z^2 - 8\gamma z + 12z + 6\gamma + 7)}{z^4} - \frac{144(z^2 - 8z + 6)\text{Ei}(z)}{z^4} - \frac{72(z^2 - 8z + 6)\log\left(\frac{1}{z}\right)}{z^4} + \frac{72(z^2 - 8z + 6)\log(z)}{z^4}$$

07.25.03.ahj3.01

$${}_2F_2(2, 2; 5, 6; z) = \frac{240 e^z (z^2 - 11z + 8)}{z^5} + \frac{80(3\gamma z^3 - 13z^3 - 36\gamma z^2 + 72z^2 + 54\gamma z + 9z - 24)}{z^5} - \frac{240(z^2 - 12z + 18)\text{Ei}(z)}{z^4} - \frac{120(z^2 - 12z + 18)\log\left(\frac{1}{z}\right)}{z^4} + \frac{120(z^2 - 12z + 18)\log(z)}{z^4}$$

For fixed z and $a_1 = 2, a_2 = 2, b_1 = 6$

07.25.03.ahj4.01

$${}_2F_2(2, 2; 6, 6; z) = \frac{400 e^z (z^2 - 17z + 38)}{z^5} + \frac{400(3\gamma z^3 - 14z^3 - 54\gamma z^2 + 135z^2 + 162\gamma z - 135z - 72\gamma - 114)}{3z^5} - \frac{400(z^3 - 18z^2 + 54z - 24)\text{Ei}(z)}{z^5} - \frac{200(z^3 - 18z^2 + 54z - 24)\log\left(\frac{1}{z}\right)}{z^5} + \frac{200(z^3 - 18z^2 + 54z - 24)\log(z)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = -\frac{11}{2}$

07.25.03.ahj5.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{324168075} (16384 z^{15} + 1294336 z^{14} + 40255488 z^{13} + 635596800 z^{12} + 5481062400 z^{11} + 25855921152 z^{10} + 63165312000 z^9 + 69841416960 z^8 + 25377408000 z^7 + 908107200 z^6 + 25945920 z^5 + 7484400 z^4 + 6804000 z^3 + 13891500 z^2 + 53581500 z + 324168075) + \frac{1}{324168075} (8192 e^z \sqrt{\pi} (2 z^{31/2} + 159 z^{29/2} + 4992 z^{27/2} + 79968 z^{25/2} + 705600 z^{23/2} + 3457440 z^{21/2} + 9031680 z^{19/2} + 11370240 z^{17/2} + 5564160 z^{15/2} + 604800 z^{13/2}) \text{erf}(\sqrt{z}))$$

07.25.03.ahj6.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; -z\right) =$$

$$\frac{1}{324\,168\,075} \left(-16\,384 z^{15} + 1\,294\,336 z^{14} - 40\,255\,488 z^{13} + 635\,596\,800 z^{12} - 5\,481\,062\,400 z^{11} + 25\,855\,921\,152 z^{10} - \right.$$

$$63\,165\,312\,000 z^9 + 69\,841\,416\,960 z^8 - 25\,377\,408\,000 z^7 + 908\,107\,200 z^6 -$$

$$25\,945\,920 z^5 + 7\,484\,400 z^4 - 6\,804\,000 z^3 + 13\,891\,500 z^2 - 53\,581\,500 z + 324\,168\,075 \Big) +$$

$$\frac{1}{324\,168\,075} \left(8192 e^{-z} \sqrt{\pi} \left(2 z^{3/2} - 159 z^{29/2} + 4992 z^{27/2} - 79\,968 z^{25/2} + 705\,600 z^{23/2} - 3\,457\,440 z^{21/2} + \right. \right.$$

$$\left. \left. 9\,031\,680 z^{19/2} - 11\,370\,240 z^{17/2} + 5\,564\,160 z^{15/2} - 604\,800 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ahj7.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{29\,469\,825} \left(-8192 z^{14} - 573\,440 z^{13} - 15\,544\,320 z^{12} - 209\,264\,640 z^{11} - 1\,492\,036\,608 z^{10} - 5\,555\,450\,880 z^9 - \right.$$

$$9\,905\,575\,680 z^8 - 6\,807\,628\,800 z^7 - 908\,107\,200 z^6 + 25\,945\,920 z^5 +$$

$$2\,494\,800 z^4 + 1\,360\,800 z^3 + 1\,984\,500 z^2 + 5\,953\,500 z + 29\,469\,825 \Big) -$$

$$\frac{1}{29\,469\,825} \left(4096 e^z \sqrt{\pi} \left(2 z^{29/2} + 141 z^{27/2} + 3864 z^{25/2} + 52\,920 z^{23/2} + 388\,080 z^{21/2} + \right. \right.$$

$$\left. \left. 1\,517\,040 z^{19/2} + 2\,963\,520 z^{17/2} + 2\,479\,680 z^{15/2} + 604\,800 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ahj8.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{29\,469\,825} \left(-8192 z^{14} + 573\,440 z^{13} - 15\,544\,320 z^{12} + 209\,264\,640 z^{11} - 1\,492\,036\,608 z^{10} + 5\,555\,450\,880 z^9 - \right.$$

$$9\,905\,575\,680 z^8 + 6\,807\,628\,800 z^7 - 908\,107\,200 z^6 - 25\,945\,920 z^5 +$$

$$2\,494\,800 z^4 - 1\,360\,800 z^3 + 1\,984\,500 z^2 - 5\,953\,500 z + 29\,469\,825 \Big) +$$

$$\frac{1}{29\,469\,825} \left(4096 e^{-z} \sqrt{\pi} \left(2 z^{29/2} - 141 z^{27/2} + 3864 z^{25/2} - 52\,920 z^{23/2} + 388\,080 z^{21/2} - \right. \right.$$

$$\left. \left. 1\,517\,040 z^{19/2} + 2\,963\,520 z^{17/2} - 2\,479\,680 z^{15/2} + 604\,800 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ahj9.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{3\,274\,425} \left(4096 z^{13} + 249\,856 z^{12} + 5\,775\,360 z^{11} + 64\,324\,608 z^{10} + 362\,664\,960 z^9 + 990\,408\,960 z^8 + 1\,113\,799\,680 z^7 + \right.$$

$$302\,702\,400 z^6 - 25\,945\,920 z^5 + 2\,494\,800 z^4 + 453\,600 z^3 + 396\,900 z^2 + 850\,500 z + 3\,274\,425 \Big) +$$

$$\frac{1}{3\,274\,425} \left(2048 e^z \sqrt{\pi} \left(2 z^{27/2} + 123 z^{25/2} + 2880 z^{23/2} + 32\,760 z^{21/2} + 191\,520 z^{19/2} + \right. \right.$$

$$\left. \left. 559\,440 z^{17/2} + 725\,760 z^{15/2} + 302\,400 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ahja.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{3274425} (-4096 z^{13} + 249856 z^{12} - 5775360 z^{11} + 64324608 z^{10} - 362664960 z^9 + 990408960 z^8 - 1113799680 z^7 + 302702400 z^6 + 25945920 z^5 + 2494800 z^4 - 453600 z^3 + 396900 z^2 - 850500 z + 3274425) + \frac{1}{3274425} (2048 e^{-z} \sqrt{\pi} (2 z^{27/2} - 123 z^{25/2} + 2880 z^{23/2} - 32760 z^{21/2} + 191520 z^{19/2} - 559440 z^{17/2} + 725760 z^{15/2} - 302400 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahjb.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{467775} (-2048 z^{12} - 106496 z^{11} - 2036736 z^{10} - 17955840 z^9 - 74492160 z^8 - 129623040 z^7 - 60540480 z^6 + 8648640 z^5 - 2494800 z^4 + 453600 z^3 + 132300 z^2 + 170100 z + 467775) - \frac{1}{467775} 1024 e^z \sqrt{\pi} (2 z^{25/2} + 105 z^{23/2} + 2040 z^{21/2} + 18480 z^{19/2} + 80640 z^{17/2} + 156240 z^{15/2} + 100800 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahjc.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{467775} (-2048 z^{12} + 106496 z^{11} - 2036736 z^{10} + 17955840 z^9 - 74492160 z^8 + 129623040 z^7 - 60540480 z^6 - 8648640 z^5 - 2494800 z^4 - 453600 z^3 + 132300 z^2 - 170100 z + 467775) + \frac{1}{467775} 1024 e^{-z} \sqrt{\pi} (2 z^{25/2} - 105 z^{23/2} + 2040 z^{21/2} - 18480 z^{19/2} + 80640 z^{17/2} - 156240 z^{15/2} + 100800 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahjd.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{93555} (1024 z^{11} + 44032 z^{10} + 666624 z^9 + 4332288 z^8 + 11535360 z^7 + 8648640 z^6 - 1729728 z^5 + 831600 z^4 - 453600 z^3 + 132300 z^2 + 56700 z + 93555) + \frac{512 e^z \sqrt{\pi} (2 z^{23/2} + 87 z^{21/2} + 1344 z^{19/2} + 9072 z^{17/2} + 26208 z^{15/2} + 25200 z^{13/2}) \operatorname{erf}(\sqrt{z})}{93555}$$

07.25.03.ahje.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{93555} (-1024 z^{11} + 44032 z^{10} - 666624 z^9 + 4332288 z^8 - 11535360 z^7 + 8648640 z^6 + 1729728 z^5 + 831600 z^4 + 453600 z^3 + 132300 z^2 - 56700 z + 93555) + \frac{512 e^{-z} \sqrt{\pi} (2 z^{23/2} - 87 z^{21/2} + 1344 z^{19/2} - 9072 z^{17/2} + 26208 z^{15/2} - 25200 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{93555}$$

07.25.03.ahjf.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{31185} (-512 z^{10} - 17408 z^9 - 194304 z^8 - 814080 z^7 - 960960 z^6 + 247104 z^5 - 166320 z^4 + 151200 z^3 - 132300 z^2 + 56700 z + 31185) - \frac{256 e^z \sqrt{\pi} (2 z^{21/2} + 69 z^{19/2} + 792 z^{17/2} + 3528 z^{15/2} + 5040 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.ahjg.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{31185} (-512 z^{10} + 17408 z^9 - 194304 z^8 + 814080 z^7 - 960960 z^6 - 247104 z^5 - 166320 z^4 - 151200 z^3 - 132300 z^2 - 56700 z + 31185) + \frac{256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 69 z^{19/2} + 792 z^{17/2} - 3528 z^{15/2} + 5040 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.ahjh.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{31185} (256 z^9 + 6400 z^8 + 46080 z^7 + 87360 z^6 - 27456 z^5 + 23760 z^4 - 30240 z^3 + 44100 z^2 - 56700 z + 31185) + \frac{128 e^z \sqrt{\pi} (2 z^{19/2} + 51 z^{17/2} + 384 z^{15/2} + 840 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.ahji.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{31185} (-256 z^9 + 6400 z^8 - 46080 z^7 + 87360 z^6 + 27456 z^5 + 23760 z^4 + 30240 z^3 + 44100 z^2 + 56700 z + 31185) + \frac{128 e^{-z} \sqrt{\pi} (2 z^{19/2} - 51 z^{17/2} + 384 z^{15/2} - 840 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.ahjj.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{31185} e^z (256 z^9 + 5376 z^8 + 29952 z^7 + 32256 z^6 - 22176 z^5 + 30240 z^4 - 45360 z^3 + 60480 z^2 - 59535 z + 31185)$$

07.25.03.ahjk.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{64 e^z \sqrt{\pi} (2 z^2 + 33 z + 120) \operatorname{erf}(\sqrt{z}) z^{13/2}}{31185} + \frac{128 z^8 + 2048 z^7 + 6720 z^6 - 2496 z^5 + 2640 z^4 - 4320 z^3 + 8820 z^2 - 18900 z + 31185}{31185}$$

07.25.03.ahjl.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{128 z^8 - 2048 z^7 + 6720 z^6 + 2496 z^5 + 2640 z^4 + 4320 z^3 + 8820 z^2 + 18900 z + 31185}{31185} - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} (2 z^2 - 33 z + 120) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.ahjm.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, 2; z\right) = \frac{e^z (256 z^8 + 3072 z^7 + 5376 z^6 - 5376 z^5 + 10080 z^4 - 20160 z^3 + 35280 z^2 - 45360 z + 31185)}{31185}$$

07.25.03.ahjn.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{32 e^z \sqrt{\pi} (2 z + 15) \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{64 z^7 + 448 z^6 - 192 z^5 + 240 z^4 - 480 z^3 + 1260 z^2 - 3780 z + 10395}{10395}$$

07.25.03.ahjo.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{32 e^{-z} \sqrt{\pi} (2 z - 15) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{10395} + \frac{-64 z^7 + 448 z^6 + 192 z^5 + 240 z^4 + 480 z^3 + 1260 z^2 + 3780 z + 10395}{10395}$$

07.25.03.ahjp.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{31185 z^2} 2 e^z (256 z^9 + 768 z^8 - 768 z^7 + 10080 z^5 - 70560 z^4 + 317520 z^3 - 997920 z^2 + 2027025 z - 2027025) + \frac{130}{z^2}$$

07.25.03.ahjq.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{32 z^8 - 64 z^7 + 432 z^6 - 2976 z^5 + 18060 z^4 - 92700 z^3 + 389151 z^2 - 1290240 z + 3870720}{2079 z^2} + \frac{1}{2079 z^{5/2}} 16 e^z \sqrt{\pi} (2 z^9 - 3 z^8 + 24 z^7 - 168 z^6 + 1008 z^5 - 5040 z^4 + 20160 z^3 - 60480 z^2 + 120960 z - 120960) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahjr.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{32 z^8 + 64 z^7 + 432 z^6 + 2976 z^5 + 18060 z^4 + 92700 z^3 + 389151 z^2 + 1290240 z + 3870720}{2079 z^2} - \frac{1}{2079 z^{5/2}} 16 e^{-z} \sqrt{\pi} (2 z^9 + 3 z^8 + 24 z^7 + 168 z^6 + 1008 z^5 + 5040 z^4 + 20160 z^3 + 60480 z^2 + 120960 z + 120960) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahjs.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, 4; z\right) = \frac{390(z+34)}{z^3} + \frac{1}{10395 z^3} (2 e^z (256 z^9 - 1536 z^8 + 11520 z^7 - 80640 z^6 + 493920 z^5 - 2540160 z^4 + 10478160 z^3 - 32432400 z^2 + 66891825 z - 68918850))$$

07.25.03.ahjt.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{297 z^3} (16 z^8 - 176 z^7 + 1632 z^6 - 13\,020 z^5 + 88\,260 z^4 - 497\,367 z^3 + 2\,257\,920 z^2 - 7\,741\,440 z + 29\,030\,400) + \frac{1}{297 z^{7/2}} (8 e^z \sqrt{\pi} (2 z^9 - 21 z^8 + 192 z^7 - 1512 z^6 + 10\,080 z^5 - 55\,440 z^4 + 241\,920 z^3 - 786\,240 z^2 + 1\,693\,440 z - 1\,814\,400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahju.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{297 z^3} (-16 z^8 - 176 z^7 - 1632 z^6 - 13\,020 z^5 - 88\,260 z^4 - 497\,367 z^3 - 2\,257\,920 z^2 - 7\,741\,440 z - 29\,030\,400) + \frac{1}{297 z^{7/2}} (8 e^{-z} \sqrt{\pi} (2 z^9 + 21 z^8 + 192 z^7 + 1512 z^6 + 10\,080 z^5 + 55\,440 z^4 + 241\,920 z^3 + 786\,240 z^2 + 1\,693\,440 z + 1\,814\,400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahjv.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, 5; z\right) = \frac{780 (z^2 + 68 z + 646)}{z^4} + \frac{1}{10\,395 z^4} (8 e^z (256 z^9 - 3840 z^8 + 42\,240 z^7 - 376\,320 z^6 + 2\,751\,840 z^5 - 16\,299\,360 z^4 + 75\,675\,600 z^3 - 259\,459\,200 z^2 + 585\,810\,225 z - 654\,729\,075))$$

07.25.03.ahjw.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{33 z^4} (8 z^8 - 160 z^7 + 2100 z^6 - 21\,300 z^5 + 173\,217 z^4 - 1\,128\,960 z^3 + 5\,806\,080 z^2 - 19\,353\,600 z + 101\,606\,400) + \frac{1}{33 z^{9/2}} (4 e^z \sqrt{\pi} (2 z^9 - 39 z^8 + 504 z^7 - 5040 z^6 + 40\,320 z^5 - 257\,040 z^4 + 1\,270\,080 z^3 - 4\,596\,480 z^2 + 10\,886\,400 z - 12\,700\,800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahjx.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{33 z^4} (8 z^8 + 160 z^7 + 2100 z^6 + 21\,300 z^5 + 173\,217 z^4 + 1\,128\,960 z^3 + 5\,806\,080 z^2 + 19\,353\,600 z + 101\,606\,400) - \frac{1}{33 z^{9/2}} (4 e^{-z} \sqrt{\pi} (2 z^9 + 39 z^8 + 504 z^7 + 5040 z^6 + 40\,320 z^5 + 257\,040 z^4 + 1\,270\,080 z^3 + 4\,596\,480 z^2 + 10\,886\,400 z + 12\,700\,800) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahjy.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{11}{2}, 6; z\right) = \frac{260(5z^3 + 510z^2 + 9690z + 54264)}{z^5} + \frac{1}{2079z^5} (8e^z(256z^9 - 6144z^8 + 91392z^7 - 1016064z^6 + 8848224z^5 - 60540480z^4 + 317837520z^3 - 1212971760z^2 + 3011753745z - 3666482820))$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = -\frac{9}{2}$

07.25.03.ahjz.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{2679075} (4096z^{13} + 253952z^{12} + 5996544z^{11} + 68774912z^{10} + 404843520z^9 + 1186327296z^8 + 1532912640z^7 + 639737280z^6 + 25945920z^5 + 831600z^4 + 272160z^3 + 283500z^2 + 661500z + 2679075) + \frac{1}{2679075} (2048e^z\sqrt{\pi}(2z^{27/2} + 125z^{25/2} + 2989z^{23/2} + 34986z^{21/2} + 213150z^{19/2} + 664440z^{17/2} + 970200z^{15/2} + 539280z^{13/2} + 65520z^{11/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.ahk0.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{2679075} (-4096z^{13} + 253952z^{12} - 5996544z^{11} + 68774912z^{10} - 404843520z^9 + 1186327296z^8 - 1532912640z^7 + 639737280z^6 - 25945920z^5 + 831600z^4 - 272160z^3 + 283500z^2 - 661500z + 2679075) + \frac{1}{2679075} (2048e^{-z}\sqrt{\pi}(2z^{27/2} - 125z^{25/2} + 2989z^{23/2} - 34986z^{21/2} + 213150z^{19/2} - 664440z^{17/2} + 970200z^{15/2} - 539280z^{13/2} + 65520z^{11/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahk1.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{297675} (-2048z^{12} - 110592z^{11} - 2225152z^{10} - 21089280z^9 - 97959168z^8 - 209556480z^7 - 168517440z^6 - 25945920z^5 + 831600z^4 + 90720z^3 + 56700z^2 + 94500z + 297675) - \frac{1}{297675} (1024e^z\sqrt{\pi}(2z^{25/2} + 109z^{23/2} + 2226z^{21/2} + 21630z^{19/2} + 105000z^{17/2} + 244440z^{15/2} + 236880z^{13/2} + 65520z^{11/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.ahk2.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{297\,675} \left(-2048 z^{12} + 110\,592 z^{11} - 2\,225\,152 z^{10} + 21\,089\,280 z^9 - 97\,959\,168 z^8 + 209\,556\,480 z^7 - 168\,517\,440 z^6 + 25\,945\,920 z^5 + 831\,600 z^4 - 90\,720 z^3 + 56\,700 z^2 - 94\,500 z + 297\,675\right) + \frac{1}{297\,675} \left(1024 e^{-z} \sqrt{\pi} (2 z^{25/2} - 109 z^{23/2} + 2226 z^{21/2} - 21\,630 z^{19/2} + 105\,000 z^{17/2} - 244\,440 z^{15/2} + 236\,880 z^{13/2} - 65\,520 z^{11/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ahk3.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{42\,525} \left(1024 z^{11} + 47\,104 z^{10} + 783\,360 z^9 + 5\,866\,752 z^8 + 19\,983\,360 z^7 + 26\,994\,240 z^6 + 8\,648\,640 z^5 - 831\,600 z^4 + 90\,720 z^3 + 18\,900 z^2 + 18\,900 z + 42\,525\right) + \frac{1}{42\,525} 512 e^z \sqrt{\pi} (2 z^{23/2} + 93 z^{21/2} + 1575 z^{19/2} + 12\,180 z^{17/2} + 44\,100 z^{15/2} + 68\,040 z^{13/2} + 32\,760 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahk4.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{42\,525} \left(-1024 z^{11} + 47\,104 z^{10} - 783\,360 z^9 + 5\,866\,752 z^8 - 19\,983\,360 z^7 + 26\,994\,240 z^6 - 8\,648\,640 z^5 - 831\,600 z^4 - 90\,720 z^3 + 18\,900 z^2 - 18\,900 z + 42\,525\right) + \frac{1}{42\,525} 512 e^{-z} \sqrt{\pi} (2 z^{23/2} - 93 z^{21/2} + 1575 z^{19/2} - 12\,180 z^{17/2} + 44\,100 z^{15/2} - 68\,040 z^{13/2} + 32\,760 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahk5.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{8505} \left(-512 z^{10} - 19\,456 z^9 - 255\,744 z^8 - 1\,408\,000 z^7 - 3\,057\,600 z^6 - 1\,729\,728 z^5 + 277\,200 z^4 - 90\,720 z^3 + 18\,900 z^2 + 6300 z + 8505\right) - \frac{256 e^z \sqrt{\pi} (2 z^{21/2} + 77 z^{19/2} + 1036 z^{17/2} + 5964 z^{15/2} + 14\,280 z^{13/2} + 10\,920 z^{11/2}) \operatorname{erf}(\sqrt{z})}{8505}$$

07.25.03.ahk6.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{8505} \left(-512 z^{10} + 19\,456 z^9 - 255\,744 z^8 + 1\,408\,000 z^7 - 3\,057\,600 z^6 + 1\,729\,728 z^5 + 277\,200 z^4 + 90\,720 z^3 + 18\,900 z^2 - 6300 z + 8505\right) + \frac{256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 77 z^{19/2} + 1036 z^{17/2} - 5964 z^{15/2} + 14\,280 z^{13/2} - 10\,920 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{8505}$$

07.25.03.ahk7.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{2835} (256 z^9 + 7680 z^8 + 74240 z^7 + 262080 z^6 + 247104 z^5 - 55440 z^4 + 30240 z^3 - 18900 z^2 + 6300 z + 2835) + \frac{128 e^z \sqrt{\pi} (2 z^{19/2} + 61 z^{17/2} + 609 z^{15/2} + 2310 z^{13/2} + 2730 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.ahk8.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2835} (-256 z^9 + 7680 z^8 - 74240 z^7 + 262080 z^6 - 247104 z^5 - 55440 z^4 - 30240 z^3 - 18900 z^2 - 6300 z + 2835) + \frac{128 e^{-z} \sqrt{\pi} (2 z^{19/2} - 61 z^{17/2} + 609 z^{15/2} - 2310 z^{13/2} + 2730 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.ahk9.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{-128 z^8 - 2816 z^7 - 17472 z^6 - 27456 z^5 + 7920 z^4 - 6048 z^3 + 6300 z^2 - 6300 z + 2835}{2835} - \frac{64 e^z \sqrt{\pi} (2 z^{17/2} + 45 z^{15/2} + 294 z^{13/2} + 546 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.ahka.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{-128 z^8 + 2816 z^7 - 17472 z^6 + 27456 z^5 + 7920 z^4 + 6048 z^3 + 6300 z^2 + 6300 z + 2835}{2835} + \frac{64 e^{-z} \sqrt{\pi} (2 z^{17/2} - 45 z^{15/2} + 294 z^{13/2} - 546 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.ahkb.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, 1; z\right) = -\frac{e^z (128 z^8 + 2368 z^7 + 11424 z^6 + 10416 z^5 - 5880 z^4 + 6300 z^3 - 6930 z^2 + 5985 z - 2835)}{2835}$$

07.25.03.ahkc.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{-64 z^7 - 896 z^6 - 2496 z^5 + 880 z^4 - 864 z^3 + 1260 z^2 - 2100 z + 2835}{2835} - \frac{32 e^z \sqrt{\pi} z^{11/2} (2 z^2 + 29 z + 91) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.ahkd.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{64 z^7 - 896 z^6 + 2496 z^5 + 880 z^4 + 864 z^3 + 1260 z^2 + 2100 z + 2835}{2835} - \frac{32 e^{-z} \sqrt{\pi} z^{11/2} (2 z^2 - 29 z + 91) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.ahke.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, 2; z\right) = -\frac{e^z (128 z^7 + 1344 z^6 + 2016 z^5 - 1680 z^4 + 2520 z^3 - 3780 z^2 + 4410 z - 2835)}{2835}$$

07.25.03.ahkf.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{945} (-32 z^6 - 192 z^5 + 80 z^4 - 96 z^3 + 180 z^2 - 420 z + 945) - \frac{16}{945} e^z \sqrt{\pi} z^{11/2} (2 z + 13) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahkg.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{16}{945} e^{-z} \sqrt{\pi} (2 z - 13) \operatorname{erfi}(\sqrt{z}) z^{11/2} + \frac{1}{945} (-32 z^6 + 192 z^5 + 80 z^4 + 96 z^3 + 180 z^2 + 420 z + 945)$$

07.25.03.ahkh.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, 3; z\right) = \frac{286}{3 z^2} - \frac{2 e^z (128 z^8 + 320 z^7 - 224 z^6 - 336 z^5 + 4200 z^4 - 20580 z^3 + 66150 z^2 - 135135 z + 135135)}{2835 z^2}$$

07.25.03.ahki.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-16 z^7 + 32 z^6 - 192 z^5 + 1140 z^4 - 5820 z^3 + 24381 z^2 - 80640 z + 241920}{189 z^2} - \frac{8 e^z \sqrt{\pi} (2 z^8 - 3 z^7 + 21 z^6 - 126 z^5 + 630 z^4 - 2520 z^3 + 7560 z^2 - 15120 z + 15120) \operatorname{erf}(\sqrt{z})}{189 z^{5/2}}$$

07.25.03.ahkj.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{16 z^7 + 32 z^6 + 192 z^5 + 1140 z^4 + 5820 z^3 + 24381 z^2 + 80640 z + 241920}{189 z^2} - \frac{8 e^{-z} \sqrt{\pi} (2 z^8 + 3 z^7 + 21 z^6 + 126 z^5 + 630 z^4 + 2520 z^3 + 7560 z^2 + 15120 z + 15120) \operatorname{erfi}(\sqrt{z})}{189 z^{5/2}}$$

07.25.03.ahkk.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, 4; z\right) = \frac{286(z+30)}{z^3} - \frac{1}{945 z^3} 2 e^z (128 z^8 - 704 z^7 + 4704 z^6 - 28560 z^5 + 147000 z^4 - 608580 z^3 + 1891890 z^2 - 3918915 z + 4054050)$$

07.25.03.ahkl.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-8 z^7 + 80 z^6 - 660 z^5 + 4580 z^4 - 26277 z^3 + 120960 z^2 - 416640 z + 1612800}{27 z^3} - \frac{1}{27 z^{7/2}} 4 e^z \sqrt{\pi} (2 z^8 - 19 z^7 + 154 z^6 - 1050 z^5 + 5880 z^4 - 26040 z^3 + 85680 z^2 - 186480 z + 201600) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahkm.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{-8 z^7 - 80 z^6 - 660 z^5 - 4580 z^4 - 26277 z^3 - 120960 z^2 - 416640 z - 1612800}{27 z^3} + \frac{1}{27 z^{7/2}} 4 e^{-z} \sqrt{\pi} (2 z^8 + 19 z^7 + 154 z^6 + 1050 z^5 + 5880 z^4 + 26040 z^3 + 85680 z^2 + 186480 z + 201600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahkn.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, 5; z\right) = \frac{572(z^2 + 60z + 510)}{z^4} - \frac{1}{945z^4}$$

$$8e^z(128z^8 - 1728z^7 + 16800z^6 - 129360z^5 + 793800z^4 - 3783780z^3 + 13243230z^2 - 30405375z + 34459425)$$

07.25.03.ahko.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-4z^7 + 72z^6 - 836z^5 + 7347z^4 - 50400z^3 + 269472z^2 - 887040z + 5080320}{3z^4} -$$

$$\frac{1}{3z^{9/2}} 2e^z \sqrt{\pi} (2z^8 - 35z^7 + 399z^6 - 3444z^5 + 23100z^4 - 118440z^3 + 441000z^2 - 1068480z + 1270080) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahkp.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{4z^7 + 72z^6 + 836z^5 + 7347z^4 + 50400z^3 + 269472z^2 + 887040z + 5080320}{3z^4} -$$

$$\frac{1}{3z^{9/2}} 2e^{-z} \sqrt{\pi} (2z^8 + 35z^7 + 399z^6 + 3444z^5 + 23100z^4 + 118440z^3 + 441000z^2 + 1068480z + 1270080) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahkq.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{9}{2}, 6; z\right) =$$

$$\frac{2860(z^3 + 90z^2 + 1530z + 7752)}{3z^5} - \frac{1}{189z^5} (8e^z(128z^8 - 2752z^7 + 36064z^6 - 345744z^5 + 2522520z^4 -$$

$$13873860z^3 + 54864810z^2 - 140134995z + 174594420))$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = -\frac{7}{2}$

07.25.03.ahkr.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{33075} (1024z^{11} + 48128z^{10} + 824320z^9 + 6445824z^8 + 23553024z^7 + 36511680z^6 + 17835840z^5 +$$

$$831600z^4 + 30240z^3 + 11340z^2 + 13500z + 33075) + \frac{1}{33075}$$

$$(512e^z \sqrt{\pi} (2z^{23/2} + 95z^{21/2} + 1656z^{19/2} + 13350z^{17/2} + 51600z^{15/2} + 89640z^{13/2} + 57600z^{11/2} + 7920z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahks.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{33075} (-1024z^{11} + 48128z^{10} - 824320z^9 + 6445824z^8 - 23553024z^7 + 36511680z^6 - 17835840z^5 +$$

$$831600z^4 - 30240z^3 + 11340z^2 - 13500z + 33075) + \frac{1}{33075}$$

$$(512e^{-z} \sqrt{\pi} (2z^{23/2} - 95z^{21/2} + 1656z^{19/2} - 13350z^{17/2} + 51600z^{15/2} - 89640z^{13/2} + 57600z^{11/2} - 7920z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahkt.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{4725} (-512 z^{10} - 20480 z^9 - 289536 z^8 - 1784832 z^7 - 4758720 z^6 - 4593600 z^5 - 831600 z^4 + 30240 z^3 + 3780 z^2 + 2700 z + 4725) - \frac{1}{4725} 256 e^z \sqrt{\pi} (2 z^{21/2} + 81 z^{19/2} + 1170 z^{17/2} + 7500 z^{15/2} + 21600 z^{13/2} + 24840 z^{11/2} + 7920 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahku.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{4725} (-512 z^{10} + 20480 z^9 - 289536 z^8 + 1784832 z^7 - 4758720 z^6 + 4593600 z^5 - 831600 z^4 - 30240 z^3 + 3780 z^2 - 2700 z + 4725) + \frac{1}{4725} 256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 81 z^{19/2} + 1170 z^{17/2} - 7500 z^{15/2} + 21600 z^{13/2} - 24840 z^{11/2} + 7920 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahkv.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} (256 z^9 + 8448 z^8 + 94208 z^7 + 425280 z^6 + 715968 z^5 + 277200 z^4 - 30240 z^3 + 3780 z^2 + 900 z + 945) + \frac{128}{945} e^z \sqrt{\pi} (2 z^{19/2} + 67 z^{17/2} + 768 z^{15/2} + 3660 z^{13/2} + 6960 z^{11/2} + 3960 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahkw.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{945} (-256 z^9 + 8448 z^8 - 94208 z^7 + 425280 z^6 - 715968 z^5 + 277200 z^4 + 30240 z^3 + 3780 z^2 - 900 z + 945) + \frac{128}{945} e^{-z} \sqrt{\pi} (2 z^{19/2} - 67 z^{17/2} + 768 z^{15/2} - 3660 z^{13/2} + 6960 z^{11/2} - 3960 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahkx.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} (-128 z^8 - 3328 z^7 - 27200 z^6 - 78144 z^5 - 55440 z^4 + 10080 z^3 - 3780 z^2 + 900 z + 315) - \frac{64}{315} e^z \sqrt{\pi} (2 z^{17/2} + 53 z^{15/2} + 450 z^{13/2} + 1410 z^{11/2} + 1320 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahky.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{315} (-128 z^8 + 3328 z^7 - 27200 z^6 + 78144 z^5 - 55440 z^4 - 10080 z^3 - 3780 z^2 - 900 z + 315) + \frac{64}{315} e^{-z} \sqrt{\pi} (2 z^{17/2} - 53 z^{15/2} + 450 z^{13/2} - 1410 z^{11/2} + 1320 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahkz.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{315} (64 z^7 + 1216 z^6 + 6336 z^5 + 7920 z^4 - 2016 z^3 + 1260 z^2 - 900 z + 315) + \frac{32}{315} e^z \sqrt{\pi} (2 z^{15/2} + 39 z^{13/2} + 216 z^{11/2} + 330 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahl0.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} (-64 z^7 + 1216 z^6 - 6336 z^5 + 7920 z^4 + 2016 z^3 + 1260 z^2 + 900 z + 315) + \frac{32}{315} e^{-z} \sqrt{\pi} (2 z^{15/2} - 39 z^{13/2} + 216 z^{11/2} - 330 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahl1.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{315} e^z (64 z^7 + 1024 z^6 + 4176 z^5 + 3120 z^4 - 1380 z^3 + 1080 z^2 - 765 z + 315)$$

07.25.03.ahl2.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{16}{315} e^z \sqrt{\pi} (2 z^2 + 25 z + 66) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{315} (32 z^6 + 384 z^5 + 880 z^4 - 288 z^3 + 252 z^2 - 300 z + 315)$$

07.25.03.ahl3.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{315} (32 z^6 - 384 z^5 + 880 z^4 + 288 z^3 + 252 z^2 + 300 z + 315) - \frac{16}{315} e^{-z} \sqrt{\pi} z^{9/2} (2 z^2 - 25 z + 66) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahl4.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{315} e^z (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315)$$

07.25.03.ahl5.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{8}{105} e^z \sqrt{\pi} (2 z + 11) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105)$$

07.25.03.ahl6.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{8}{105} e^{-z} \sqrt{\pi} (2 z - 11) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} (-16 z^5 + 80 z^4 + 32 z^3 + 36 z^2 + 60 z + 105)$$

07.25.03.ahl7.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, 3; z\right) = \frac{2 e^z (64 z^7 + 128 z^6 - 48 z^5 - 240 z^4 + 1500 z^3 - 5040 z^2 + 10395 z - 10395)}{315 z^2} + \frac{66}{z^2}$$

07.25.03.ahl8.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{8 z^6 - 16 z^5 + 84 z^4 - 420 z^3 + 1749 z^2 - 5760 z + 17280}{21 z^2} + \frac{4 e^z \sqrt{\pi} (2 z^7 - 3 z^6 + 18 z^5 - 90 z^4 + 360 z^3 - 1080 z^2 + 2160 z - 2160) \operatorname{erf}(\sqrt{z})}{21 z^{5/2}}$$

07.25.03.ahl9.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{8 z^6 + 16 z^5 + 84 z^4 + 420 z^3 + 1749 z^2 + 5760 z + 17280}{21 z^2} - \frac{4 e^{-z} \sqrt{\pi} (2 z^7 + 3 z^6 + 18 z^5 + 90 z^4 + 360 z^3 + 1080 z^2 + 2160 z + 2160) \operatorname{erfi}(\sqrt{z})}{21 z^{5/2}}$$

07.25.03.ahla.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, 4; z\right) = \frac{198(z+26)}{z^3} + \frac{2e^z(64z^7 - 320z^6 + 1872z^5 - 9600z^4 + 39900z^3 - 124740z^2 + 259875z - 270270)}{105z^3}$$

07.25.03.ahlb.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{4z^6 - 36z^5 + 260z^4 - 1533z^3 + 7200z^2 - 24960z + 100800}{3z^3} + \frac{2e^z\sqrt{\pi}(2z^7 - 17z^6 + 120z^5 - 690z^4 + 3120z^3 - 10440z^2 + 23040z - 25200)\operatorname{erf}(\sqrt{z})}{3z^{7/2}}$$

07.25.03.ahlc.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-4z^6 - 36z^5 - 260z^4 - 1533z^3 - 7200z^2 - 24960z - 100800}{3z^3} + \frac{2e^{-z}\sqrt{\pi}(2z^7 + 17z^6 + 120z^5 + 690z^4 + 3120z^3 + 10440z^2 + 23040z + 25200)\operatorname{erfi}(\sqrt{z})}{3z^{7/2}}$$

07.25.03.ahld.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, 5; z\right) = \frac{396(z^2 + 52z + 390)}{z^4} + \frac{8e^z(64z^7 - 768z^6 + 6480z^5 - 42000z^4 + 207900z^3 - 748440z^2 + 1756755z - 2027025)}{105z^4}$$

07.25.03.ahle.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3(2z^6 - 32z^5 + 323z^4 - 2400z^3 + 13584z^2 - 43680z + 282240)}{z^4} + \frac{3e^z\sqrt{\pi}(2z^7 - 31z^6 + 306z^5 - 2220z^4 + 12000z^3 - 46440z^2 + 115920z - 141120)\operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ahlf.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3(2z^6 + 32z^5 + 323z^4 + 2400z^3 + 13584z^2 + 43680z + 282240)}{z^4} - \frac{3e^{-z}\sqrt{\pi}(2z^7 + 31z^6 + 306z^5 + 2220z^4 + 12000z^3 + 46440z^2 + 115920z + 141120)\operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ahlg.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{7}{2}, 6; z\right) = \frac{660(z^3 + 78z^2 + 1170z + 5304)}{z^5} + \frac{1}{21z^5} 8e^z(64z^7 - 1216z^6 + 13776z^5 - 110880z^4 + 651420z^3 - 2702700z^2 + 7162155z - 9189180)$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = -\frac{5}{2}$

07.25.03.ahlh.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{675} (256 z^9 + 8704 z^8 + 101\,376 z^7 + 490\,944 z^6 + 947\,520 z^5 + 555\,120 z^4 + 30\,240 z^3 + 1260 z^2 + 540 z + 675) + \frac{128}{675} e^z \sqrt{\pi} (2 z^{19/2} + 69 z^{17/2} + 825 z^{15/2} + 4200 z^{13/2} + 9000 z^{11/2} + 6840 z^{9/2} + 1080 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahli.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{675} (-256 z^9 + 8704 z^8 - 101\,376 z^7 + 490\,944 z^6 - 947\,520 z^5 + 555\,120 z^4 - 30\,240 z^3 + 1260 z^2 - 540 z + 675) + \frac{128}{675} e^{-z} \sqrt{\pi} (2 z^{19/2} - 69 z^{17/2} + 825 z^{15/2} - 4200 z^{13/2} + 9000 z^{11/2} - 6840 z^{9/2} + 1080 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahlj.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{135} (-128 z^8 - 3584 z^7 - 32\,832 z^6 - 115\,776 z^5 - 138\,960 z^4 - 30\,240 z^3 + 1260 z^2 + 180 z + 135) - \frac{64}{135} e^z \sqrt{\pi} (2 z^{17/2} + 57 z^{15/2} + 540 z^{13/2} + 2040 z^{11/2} + 2880 z^{9/2} + 1080 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahlk.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{135} (-128 z^8 + 3584 z^7 - 32\,832 z^6 + 115\,776 z^5 - 138\,960 z^4 + 30\,240 z^3 + 1260 z^2 - 180 z + 135) + \frac{64}{135} e^{-z} \sqrt{\pi} (2 z^{17/2} - 57 z^{15/2} + 540 z^{13/2} - 2040 z^{11/2} + 2880 z^{9/2} - 1080 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahlI.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{45} (64 z^7 + 1408 z^6 + 9408 z^5 + 20\,880 z^4 + 10\,080 z^3 - 1260 z^2 + 180 z + 45) + \frac{32}{45} e^z \sqrt{\pi} (2 z^{15/2} + 45 z^{13/2} + 315 z^{11/2} + 780 z^{9/2} + 540 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahlm.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{45} (-64 z^7 + 1408 z^6 - 9408 z^5 + 20\,880 z^4 - 10\,080 z^3 - 1260 z^2 - 180 z + 45) + \frac{32}{45} e^{-z} \sqrt{\pi} (2 z^{15/2} - 45 z^{13/2} + 315 z^{11/2} - 780 z^{9/2} + 540 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahln.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{45} (-32 z^6 - 512 z^5 - 2160 z^4 - 2016 z^3 + 420 z^2 - 180 z + 45) - \frac{16}{45} e^z \sqrt{\pi} (2 z^{13/2} + 33 z^{11/2} + 150 z^{9/2} + 180 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahlo.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{45} (-32z^6 + 512z^5 - 2160z^4 + 2016z^3 + 420z^2 + 180z + 45) + \frac{16}{45} e^{-z} \sqrt{\pi} (2z^{13/2} - 33z^{11/2} + 150z^{9/2} - 180z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahlp.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, 1; z\right) = -\frac{1}{45} e^z (32z^6 + 432z^5 + 1440z^4 + 840z^3 - 270z^2 + 135z - 45)$$

07.25.03.ahliq.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{45} (-16z^5 - 160z^4 - 288z^3 + 84z^2 - 60z + 45) - \frac{8}{45} e^z \sqrt{\pi} z^{7/2} (2z^2 + 21z + 45) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahlr.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{45} (16z^5 - 160z^4 + 288z^3 + 84z^2 + 60z + 45) - \frac{8}{45} e^{-z} \sqrt{\pi} z^{7/2} (2z^2 - 21z + 45) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahls.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, 2; z\right) = -\frac{1}{45} e^z (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)$$

07.25.03.ahlt.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{15} (-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15} e^z \sqrt{\pi} z^{7/2} (2z + 9) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahlu.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{4}{15} e^{-z} \sqrt{\pi} (2z - 9) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{15} (-8z^4 + 32z^3 + 12z^2 + 12z + 15)$$

07.25.03.ahlv.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, 3; z\right) = \frac{42}{z^2} - \frac{2e^z (32z^6 + 48z^5 - 120z^3 + 450z^2 - 945z + 945)}{45z^2}$$

07.25.03.ahlw.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-4z^5 + 8z^4 - 36z^3 + 147z^2 - 480z + 1440}{3z^2} - \frac{2e^z \sqrt{\pi} (2z^6 - 3z^5 + 15z^4 - 60z^3 + 180z^2 - 360z + 360) \operatorname{erf}(\sqrt{z})}{3z^{5/2}}$$

07.25.03.ahlx.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{4z^5 + 8z^4 + 36z^3 + 147z^2 + 480z + 1440}{3z^2} - \frac{2e^{-z} \sqrt{\pi} (2z^6 + 3z^5 + 15z^4 + 60z^3 + 180z^2 + 360z + 360) \operatorname{erfi}(\sqrt{z})}{3z^{5/2}}$$

07.25.03.ahly.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, 4; z\right) = \frac{126(z + 22)}{z^3} - \frac{2e^z (32z^6 - 144z^5 + 720z^4 - 3000z^3 + 9450z^2 - 19845z + 20790)}{15z^3}$$

07.25.03.ahlz.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(2z^5 - 16z^4 + 99z^3 - 480z^2 + 1680z - 7200)}{3z^3} - \frac{7e^z \sqrt{\pi} (2z^6 - 15z^5 + 90z^4 - 420z^3 + 1440z^2 - 3240z + 3600) \operatorname{erf}(\sqrt{z})}{3z^{7/2}}$$

07.25.03.ahm0.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (2z^6 + 15z^5 + 90z^4 + 420z^3 + 1440z^2 + 3240z + 3600) \operatorname{erfi}(\sqrt{z})}{3z^{7/2}} - \frac{7(2z^5 + 16z^4 + 99z^3 + 480z^2 + 1680z + 7200)}{3z^3}$$

07.25.03.ahm1.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, 5; z\right) = \frac{252(z^2 + 44z + 286)}{z^4} - \frac{8e^z (32z^6 - 336z^5 + 2400z^4 - 12600z^3 + 47250z^2 - 114345z + 135135)}{15z^4}$$

07.25.03.ahm2.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{21(z^5 - 14z^4 + 120z^3 - 744z^2 + 2280z - 17640)}{z^4} - \frac{21e^z \sqrt{\pi} (2z^6 - 27z^5 + 225z^4 - 1320z^3 + 5400z^2 - 14040z + 17640) \operatorname{erf}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.ahm3.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21(z^5 + 14z^4 + 120z^3 + 744z^2 + 2280z + 17640)}{z^4} - \frac{21e^{-z} \sqrt{\pi} (2z^6 + 27z^5 + 225z^4 + 1320z^3 + 5400z^2 + 14040z + 17640) \operatorname{erfi}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.ahm4.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{5}{2}, 6; z\right) = \frac{420(z^3 + 66z^2 + 858z + 3432)}{z^5} - \frac{8e^z (32z^6 - 528z^5 + 5040z^4 - 32760z^3 + 145530z^2 - 405405z + 540540)}{3z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = -\frac{3}{2}$

07.25.03.ahm5.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{27} (64z^7 + 1472z^6 + 10560z^5 + 26864z^4 + 19488z^3 + 1260z^2 + 60z + 27) + \frac{32}{27} e^z \sqrt{\pi} (2z^{15/2} + 47z^{13/2} + 352z^{11/2} + 984z^{9/2} + 912z^{7/2} + 168z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahm6.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{27} (-64 z^7 + 1472 z^6 - 10560 z^5 + 26864 z^4 - 19488 z^3 + 1260 z^2 - 60 z + 27) + \frac{32}{27} e^{-z} \sqrt{\pi} (2 z^{15/2} - 47 z^{13/2} + 352 z^{11/2} - 984 z^{9/2} + 912 z^{7/2} - 168 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahm7.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{9} (-32 z^6 - 576 z^5 - 2992 z^4 - 4704 z^3 - 1260 z^2 + 60 z + 9) - \frac{16}{9} e^z \sqrt{\pi} (2 z^{13/2} + 37 z^{11/2} + 204 z^{9/2} + 372 z^{7/2} + 168 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahm8.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{9} (-32 z^6 + 576 z^5 - 2992 z^4 + 4704 z^3 - 1260 z^2 - 60 z + 9) + \frac{16}{9} e^{-z} \sqrt{\pi} (2 z^{13/2} - 37 z^{11/2} + 204 z^{9/2} - 372 z^{7/2} + 168 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahm9.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{9} (16 z^5 + 208 z^4 + 672 z^3 + 420 z^2 - 60 z + 9) + \frac{8}{9} e^z \sqrt{\pi} (2 z^{11/2} + 27 z^{9/2} + 96 z^{7/2} + 84 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahma.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{9} (-16 z^5 + 208 z^4 - 672 z^3 + 420 z^2 + 60 z + 9) + \frac{8}{9} e^{-z} \sqrt{\pi} (2 z^{11/2} - 27 z^{9/2} + 96 z^{7/2} - 84 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahmb.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{9} e^z (16 z^5 + 176 z^4 + 456 z^3 + 192 z^2 - 39 z + 9)$$

07.25.03.ahmc.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{4}{9} e^z \sqrt{\pi} (2 z^2 + 17 z + 28) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{9} (8 z^4 + 64 z^3 + 84 z^2 - 20 z + 9)$$

07.25.03.ahmd.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{9} (8 z^4 - 64 z^3 + 84 z^2 + 20 z + 9) - \frac{4}{9} e^{-z} \sqrt{\pi} z^{5/2} (2 z^2 - 17 z + 28) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahme.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{9} e^z (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9)$$

07.25.03.ahmf.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{2}{3} e^z \sqrt{\pi} (2 z + 7) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (4 z^3 + 12 z^2 - 4 z + 3)$$

07.25.03.ahmg.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{2}{3} e^{-z} \sqrt{\pi} (2 z - 7) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{3} (-4 z^3 + 12 z^2 + 4 z + 3)$$

07.25.03.ahmh.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, 3; z\right) = \frac{2 e^z (16 z^5 + 16 z^4 + 8 z^3 - 48 z^2 + 105 z - 105)}{9 z^2} + \frac{70}{3 z^2}$$

07.25.03.ahmi.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(2 z^4 - 4 z^3 + 15 z^2 - 48 z + 144)}{3 z^2} + \frac{5 e^z \sqrt{\pi} (2 z^5 - 3 z^4 + 12 z^3 - 36 z^2 + 72 z - 72) \operatorname{erf}(\sqrt{z})}{3 z^{5/2}}$$

07.25.03.ahmj.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(2 z^4 + 4 z^3 + 15 z^2 + 48 z + 144)}{3 z^2} - \frac{5 e^{-z} \sqrt{\pi} (2 z^5 + 3 z^4 + 12 z^3 + 36 z^2 + 72 z + 72) \operatorname{erfi}(\sqrt{z})}{3 z^{5/2}}$$

07.25.03.ahmk.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, 4; z\right) = \frac{70(z + 18)}{z^3} + \frac{2 e^z (16 z^5 - 64 z^4 + 264 z^3 - 840 z^2 + 1785 z - 1890)}{3 z^3}$$

07.25.03.ahml.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(z^4 - 7 z^3 + 36 z^2 - 128 z + 600)}{3 z^3} + \frac{35 e^z \sqrt{\pi} (2 z^5 - 13 z^4 + 64 z^3 - 228 z^2 + 528 z - 600) \operatorname{erf}(\sqrt{z})}{6 z^{7/2}}$$

07.25.03.ahmm.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} \sqrt{\pi} (2 z^5 + 13 z^4 + 64 z^3 + 228 z^2 + 528 z + 600) \operatorname{erfi}(\sqrt{z})}{6 z^{7/2}} - \frac{35(z^4 + 7 z^3 + 36 z^2 + 128 z + 600)}{3 z^3}$$

07.25.03.ahmn.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, 5; z\right) = \frac{140(z^2 + 36 z + 198)}{z^4} + \frac{8 e^z (16 z^5 - 144 z^4 + 840 z^3 - 3360 z^2 + 8505 z - 10395)}{3 z^4}$$

07.25.03.ahmo.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{105(z^4 - 12 z^3 + 88 z^2 - 240 z + 2520)}{2 z^4} + \frac{105 e^z \sqrt{\pi} (2 z^5 - 23 z^4 + 156 z^3 - 696 z^2 + 1920 z - 2520) \operatorname{erf}(\sqrt{z})}{4 z^{9/2}}$$

07.25.03.ahmp.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{105(z^4 + 12 z^3 + 88 z^2 + 240 z + 2520)}{2 z^4} - \frac{105 e^{-z} \sqrt{\pi} (2 z^5 + 23 z^4 + 156 z^3 + 696 z^2 + 1920 z + 2520) \operatorname{erfi}(\sqrt{z})}{4 z^{9/2}}$$

07.25.03.ahmq.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{3}{2}, 6; z\right) = \frac{140(5 z^3 + 270 z^2 + 2970 z + 10296)}{3 z^5} + \frac{40 e^z (16 z^5 - 224 z^4 + 1736 z^3 - 8568 z^2 + 25641 z - 36036)}{3 z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = -\frac{1}{2}$

07.25.03.ahmr.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{3}(16z^5 + 224z^4 + 832z^3 + 780z^2 + 60z + 3) + \frac{8}{3}e^z\sqrt{\pi}(2z^{11/2} + 29z^{9/2} + 117z^{7/2} + 138z^{5/2} + 30z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ahms.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3}(-16z^5 + 224z^4 - 832z^3 + 780z^2 - 60z + 3) + \frac{8}{3}e^{-z}\sqrt{\pi}(2z^{11/2} - 29z^{9/2} + 117z^{7/2} - 138z^{5/2} + 30z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahmt.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3}(-8z^4 - 80z^3 - 180z^2 - 60z + 3) - \frac{4}{3}e^z\sqrt{\pi}(2z^{9/2} + 21z^{7/2} + 54z^{5/2} + 30z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ahmu.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{3}(-8z^4 + 80z^3 - 180z^2 + 60z + 3) + \frac{4}{3}e^{-z}\sqrt{\pi}(2z^{9/2} - 21z^{7/2} + 54z^{5/2} - 30z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahmv.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, 1; z\right) = -\frac{1}{3}e^z(8z^4 + 68z^3 + 126z^2 + 33z - 3)$$

07.25.03.ahmw.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3}(-4z^3 - 24z^2 - 20z + 3) - \frac{2}{3}e^z\sqrt{\pi}(2z^{7/2} + 13z^{5/2} + 15z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ahmx.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{3}(4z^3 - 24z^2 + 20z + 3) - \frac{2}{3}e^{-z}\sqrt{\pi}(2z^{7/2} - 13z^{5/2} + 15z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahmy.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, 2; z\right) = -\frac{1}{3}e^z(8z^3 + 36z^2 + 18z - 3)$$

07.25.03.ahmz.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -2z^2 - e^z\sqrt{\pi}(2z + 5)\operatorname{erf}(\sqrt{z})z^{3/2} - 4z + 1$$

07.25.03.ahn0.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = -2z^2 + e^{-z}\sqrt{\pi}(2z - 5)\operatorname{erfi}(\sqrt{z})z^{3/2} + 4z + 1$$

07.25.03.ahn1.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, 3; z\right) = \frac{10}{z^2} - \frac{2e^z(8z^4 + 4z^3 + 6z^2 - 15z + 15)}{3z^2}$$

07.25.03.ahn2.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{5(z^3 - 2z^2 + 6z - 18)}{z^2} - \frac{5e^z\sqrt{\pi}(2z^4 - 3z^3 + 9z^2 - 18z + 18)\operatorname{erf}(\sqrt{z})}{2z^{5/2}}$$

07.25.03.ahn3.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5(z^3 + 2z^2 + 6z + 18)}{z^2} - \frac{5e^{-z}\sqrt{\pi}(2z^4 + 3z^3 + 9z^2 + 18z + 18)\operatorname{erfi}(\sqrt{z})}{2z^{5/2}}$$

07.25.03.ahn4.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, 4; z\right) = \frac{30(z + 14)}{z^3} - \frac{2e^z(8z^4 - 28z^3 + 90z^2 - 195z + 210)}{z^3}$$

07.25.03.ahn5.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{35(z^3 - 6z^2 + 22z - 120)}{2z^3} - \frac{35e^z\sqrt{\pi}(2z^4 - 11z^3 + 42z^2 - 102z + 120)\operatorname{erf}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.ahn6.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(2z^4 + 11z^3 + 42z^2 + 102z + 120)\operatorname{erfi}(\sqrt{z})}{4z^{7/2}} - \frac{35(z^3 + 6z^2 + 22z + 120)}{2z^3}$$

07.25.03.ahn7.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, 5; z\right) = \frac{60(z^2 + 28z + 126)}{z^4} - \frac{8e^z(8z^4 - 60z^3 + 270z^2 - 735z + 945)}{z^4}$$

07.25.03.ahn8.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{315(z^3 - 11z^2 + 20z - 420)}{4z^4} - \frac{315e^z\sqrt{\pi}(2z^4 - 19z^3 + 99z^2 - 300z + 420)\operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.ahn9.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315(z^3 + 11z^2 + 20z + 420)}{4z^4} - \frac{315e^{-z}\sqrt{\pi}(2z^4 + 19z^3 + 99z^2 + 300z + 420)\operatorname{erfi}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.ahna.01

$${}_2F_2\left(2, \frac{5}{2}; -\frac{1}{2}, 6; z\right) = \frac{20(5z^3 + 210z^2 + 1890z + 5544)}{z^5} - \frac{40e^z(8z^4 - 92z^3 + 546z^2 - 1827z + 2772)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = \frac{1}{2}$

07.25.03.0136.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3}(4z^3 + 28z^2 + 36z + 2e^z\sqrt{\pi}(2z^3 + 15z^2 + 24z + 6)\operatorname{erf}(\sqrt{z})\sqrt{z} + 3)$$

07.25.03.ahn.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{3}(-4z^3 + 28z^2 - 36z + 3) + \frac{2}{3}e^{-z}\sqrt{\pi}(2z^{7/2} - 15z^{5/2} + 24z^{3/2} - 6\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.0137.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{3}e^z(4z^3 + 24z^2 + 27z + 3)$$

07.25.03.0138.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3}(2z^2 + 8z + e^z\sqrt{\pi}(2z^2 + 9z + 6)\operatorname{erf}(\sqrt{z})\sqrt{z} + 3)$$

07.25.03.ahnc.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{3} (2z^2 - 8z + 3) - \frac{1}{3} e^{-z} \sqrt{\pi} \sqrt{z} (2z^2 - 9z + 6) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahnd.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{3} e^z (4z^2 + 12z + 3)$$

07.25.03.ahne.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = z + \frac{1}{2} e^z \sqrt{\pi} (2z + 3) \operatorname{erf}(\sqrt{z}) \sqrt{z} + 1$$

07.25.03.ahnf.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = -z + \frac{1}{2} e^{-z} \sqrt{\pi} (2z - 3) \operatorname{erfi}(\sqrt{z}) \sqrt{z} + 1$$

07.25.03.0139.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, 3; z\right) = \frac{1}{3z^2} (e^z (8z^3 + 6z - 6) + 6)$$

07.25.03.ahng.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5(z^2 - 2z + 6)}{2z^2} + \frac{5e^z \sqrt{\pi} (2z^3 - 3z^2 + 6z - 6) \operatorname{erf}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.ahnh.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5(z^2 + 2z + 6)}{2z^2} - \frac{5e^{-z} \sqrt{\pi} (2z^3 + 3z^2 + 6z + 6) \operatorname{erfi}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.ahni.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, 4; z\right) = \frac{6(z + 10)}{z^3} + \frac{2e^z (4z^3 - 12z^2 + 27z - 30)}{z^3}$$

07.25.03.ahnj.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(z^2 - 4z + 30)}{4z^3} + \frac{35e^z \sqrt{\pi} (2z^3 - 9z^2 + 24z - 30) \operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.ahnk.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (2z^3 + 9z^2 + 24z + 30) \operatorname{erfi}(\sqrt{z})}{8z^{7/2}} - \frac{35(z^2 + 4z + 30)}{4z^3}$$

07.25.03.ahnl.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, 5; z\right) = \frac{12(z^2 + 20z + 70)}{z^4} + \frac{8e^z (4z^3 - 24z^2 + 75z - 105)}{z^4}$$

07.25.03.ahnm.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{63(7z^2 + 10z + 420)}{8z^4} + \frac{315e^z \sqrt{\pi} (2z^3 - 15z^2 + 54z - 84) \operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.ahn.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63(7z^2 - 10z + 420)}{8z^4} - \frac{315e^{-z} \sqrt{\pi} (2z^3 + 15z^2 + 54z + 84) \operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.ahno.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{1}{2}, 6; z\right) = \frac{20(z^3 + 30z^2 + 210z + 504)}{z^5} + \frac{40e^z(4z^3 - 36z^2 + 147z - 252)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = 1$

07.25.03.0140.01

$${}_2F_2\left(2, \frac{5}{2}; 1, 1; z\right) = \frac{1}{6}e^{z/2}\left((4z^3 + 22z^2 + 27z + 6)I_0\left(\frac{z}{2}\right) + z(4z^2 + 18z + 11)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.0141.01

$${}_2F_2\left(2, \frac{5}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{3}e^z(2z^2 + 7z + 3)$$

07.25.03.ahnp.01

$${}_2F_2\left(2, \frac{5}{2}; 1, 2; z\right) = \frac{1}{3}e^{z/2}(2z^2 + 6z + 3)I_0\left(\frac{z}{2}\right) + \frac{2}{3}e^{z/2}(z^2 + 2z)I_1\left(\frac{z}{2}\right)$$

07.25.03.ahnq.01

$${}_2F_2\left(2, \frac{5}{2}; 1, \frac{5}{2}; z\right) = e^z(z + 1)$$

07.25.03.0142.01

$${}_2F_2\left(2, \frac{5}{2}; 1, 3; z\right) = \frac{2}{3z}e^{z/2}\left(z(2z + 1)I_0\left(\frac{z}{2}\right) + (2z^2 - z + 2)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.ahnr.01

$${}_2F_2\left(2, \frac{5}{2}; 1, \frac{7}{2}; z\right) = \frac{5e^z(4z^2 - 6z + 9)}{8z^2} - \frac{45\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.ahns.01

$${}_2F_2\left(2, \frac{5}{2}; 1, \frac{7}{2}; -z\right) = \frac{5e^{-z}(4z^2 + 6z + 9)}{8z^2} - \frac{45\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.ahnnt.01

$${}_2F_2\left(2, \frac{5}{2}; 1, 4; z\right) = \frac{4e^{z/2}(z - 2)I_0\left(\frac{z}{2}\right)}{z} + \frac{4e^{z/2}(z^2 - 3z + 8)I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.ahnv.01

$${}_2F_2\left(2, \frac{5}{2}; 1, \frac{9}{2}; z\right) = \frac{35e^z(8z^2 - 32z + 75)}{32z^3} - \frac{105\sqrt{\pi}(6z + 25)\operatorname{erfi}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.ahnv.01

$${}_2F_2\left(2, \frac{5}{2}; 1, \frac{9}{2}; -z\right) = -\frac{35e^{-z}(8z^2 + 32z + 75)}{32z^3} - \frac{105\sqrt{\pi}(6z - 25)\operatorname{erf}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.ahnw.01

$${}_2F_2\left(2, \frac{5}{2}; 1, 5; z\right) = \frac{16e^{z/2}(z - 6)I_0\left(\frac{z}{2}\right)}{z^2} + \frac{16e^{z/2}(z^2 - 4z + 24)I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.ahnx.01

$${}_2F_2\left(2, \frac{5}{2}; 1, \frac{11}{2}; z\right) = \frac{315 e^z (32 z^2 - 190 z + 735)}{256 z^4} - \frac{945 \sqrt{\pi} (12 z^2 + 100 z + 245) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ahnny.01

$${}_2F_2\left(2, \frac{5}{2}; 1, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (32 z^2 + 190 z + 735)}{256 z^4} - \frac{945 \sqrt{\pi} (12 z^2 - 100 z + 245) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ahnz.01

$${}_2F_2\left(2, \frac{5}{2}; 1, 6; z\right) = \frac{32 e^{z/2} (z - 32) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{128 e^{z/2} (z^2 - z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = \frac{3}{2}$

07.25.03.0143.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{6 \sqrt{z}} \left(2 \sqrt{z} (z + 2) + e^z \sqrt{\pi} (2 z^2 + 5 z + 1) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aho0.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{2 - z}{3} + \frac{e^{-z} \sqrt{\pi} (2 z^2 - 5 z + 1) \operatorname{erfi}(\sqrt{z})}{6 \sqrt{z}}$$

07.25.03.aho1.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{3} e^z (2 z + 3)$$

07.25.03.aho2.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z \sqrt{\pi} (2 z + 1) \operatorname{erf}(\sqrt{z})}{4 \sqrt{z}} + \frac{1}{2}$$

07.25.03.aho3.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (1 - 2 z) \operatorname{erfi}(\sqrt{z})}{4 \sqrt{z}} + \frac{1}{2}$$

07.25.03.0144.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{3}{2}, 3; z\right) = \frac{2}{3 z^2} (e^z (2 z^2 - z + 1) - 1)$$

07.25.03.aho4.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(z-3)}{4 z^2} + \frac{5 e^z \sqrt{\pi} (2 z^2 - 3 z + 3) \operatorname{erf}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.aho5.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} \sqrt{\pi} (2 z^2 + 3 z + 3) \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}} - \frac{5(z+3)}{4 z^2}$$

07.25.03.aho6.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{3}{2}, 4; z\right) = \frac{2e^z(2z^2 - 5z + 6)}{z^3} - \frac{2(z+6)}{z^3}$$

07.25.03.aho7.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(z-30)}{24z^3} + \frac{35e^z\sqrt{\pi}(2z^2 - 7z + 10)\operatorname{erf}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.aho8.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(z+30)}{24z^3} - \frac{35e^{-z}\sqrt{\pi}(2z^2 + 7z + 10)\operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.aho9.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{3}{2}, 5; z\right) = \frac{8e^z(2z^2 - 9z + 15)}{z^4} - \frac{4(z^2 + 12z + 30)}{z^4}$$

07.25.03.ahoa.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{315e^z\sqrt{\pi}(2z^2 - 11z + 21)\operatorname{erf}(\sqrt{z})}{32z^{9/2}} - \frac{21(4z^2 + 45z + 315)}{16z^4}$$

07.25.03.ahob.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(2z^2 + 11z + 21)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}} - \frac{21(4z^2 - 45z + 315)}{16z^4}$$

07.25.03.ahoc.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{3}{2}, 6; z\right) = \frac{40e^z(2z^2 - 13z + 28)}{z^5} - \frac{20(z^3 + 18z^2 + 90z + 168)}{3z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = 2$

07.25.03.ahod.01

$${}_2F_2\left(2, \frac{5}{2}; 2, 2; z\right) = \frac{1}{3}e^{z/2}(2z+3)I_0\left(\frac{z}{2}\right) + \frac{1}{3}e^{z/2}(2z+1)I_1\left(\frac{z}{2}\right)$$

07.25.03.ahoe.01

$${}_2F_2\left(2, \frac{5}{2}; 2, \frac{5}{2}; z\right) = e^z$$

07.25.03.ahof.01

$${}_2F_2\left(2, \frac{5}{2}; 2, 3; z\right) = \frac{4}{3}e^{z/2}I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2}(z-1)I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.ahog.01

$${}_2F_2\left(2, \frac{5}{2}; 2, \frac{7}{2}; z\right) = \frac{5e^z(2z-3)}{4z^2} + \frac{15\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.ahoh.01

$${}_2F_2\left(2, \frac{5}{2}; 2, \frac{7}{2}; -z\right) = \frac{15\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5e^{-z}(2z+3)}{4z^2}$$

07.25.03.ahoi.01

$${}_2F_2\left(2, \frac{5}{2}; 2, 4; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z-4) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.ahoj.01

$${}_2F_2\left(2, \frac{5}{2}; 2, \frac{9}{2}; z\right) = \frac{35 e^z (4z-15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z+5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ahok.01

$${}_2F_2\left(2, \frac{5}{2}; 2, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z+15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z-5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ahol.01

$${}_2F_2\left(2, \frac{5}{2}; 2, 5; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.ahom.01

$${}_2F_2\left(2, \frac{5}{2}; 2, \frac{11}{2}; z\right) = \frac{1575 e^z (2z-21)}{128 z^4} + \frac{945 \sqrt{\pi} (4z^2+20z+35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.ahon.01

$${}_2F_2\left(2, \frac{5}{2}; 2, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (4z^2-20z+35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 e^{-z} (2z+21)}{128 z^4}$$

07.25.03.ahoo.01

$${}_2F_2\left(2, \frac{5}{2}; 2, 6; z\right) = \frac{32 e^{z/2} (z+8) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (z^2+4z+32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = \frac{5}{2}$

07.25.03.ahop.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (2z-1) \operatorname{erf}(\sqrt{z})}{8 z^{3/2}} + \frac{3}{4z}$$

07.25.03.ahoq.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z+1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3}{4z}$$

07.25.03.ahor.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{5}{2}, 3; z\right) = \frac{2 e^z (z-1)}{z^2} + \frac{2}{z^2}$$

07.25.03.ahos.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45}{8 z^2}$$

07.25.03.ahot.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{45}{8z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.ahou.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{5}{2}, 4; z\right) = \frac{6 e^z (z-2)}{z^3} + \frac{6(z+2)}{z^3}$$

07.25.03.ahov.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{35(4z+15)}{16z^3} + \frac{105 e^z \sqrt{\pi} (2z-5) \operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.ahow.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{35(4z-15)}{16z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z+5) \operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.ahox.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{5}{2}, 5; z\right) = \frac{24 e^z (z-3)}{z^4} + \frac{12(z^2+4z+6)}{z^4}$$

07.25.03.ahoy.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{63(8z^2+40z+105)}{32z^4} + \frac{945 e^z \sqrt{\pi} (2z-7) \operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.ahoz.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63(8z^2-40z+105)}{32z^4} - \frac{945 e^{-z} \sqrt{\pi} (2z+7) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.ahp0.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{5}{2}, 6; z\right) = \frac{120 e^z (z-4)}{z^5} + \frac{20(z^3+6z^2+18z+24)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = 3$

07.25.03.0145.01

$${}_2F_2\left(2, \frac{5}{2}; 3, 3; z\right) = \frac{8}{3z^2} \left(e^{z/2} (z-2) I_0\left(\frac{z}{2}\right) + e^{z/2} z I_1\left(\frac{z}{2}\right) + 2 \right)$$

07.25.03.ahp1.01

$${}_2F_2\left(2, \frac{5}{2}; 3, \frac{7}{2}; z\right) = -\frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2z^{5/2}} + \frac{5 e^z}{z^2} + \frac{10}{z^2}$$

07.25.03.ahp2.01

$${}_2F_2\left(2, \frac{5}{2}; 3, \frac{7}{2}; -z\right) = -\frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2z^{5/2}} + \frac{5 e^{-z}}{z^2} + \frac{10}{z^2}$$

07.25.03.ahp3.01

$${}_2F_2\left(2, \frac{5}{2}; 3, 4; z\right) = -\frac{16 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} + \frac{32 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^2} + \frac{16}{z^2}$$

07.25.03.ahp4.01

$${}_2F_2\left(2, \frac{5}{2}; 3, \frac{9}{2}; z\right) = -\frac{35\sqrt{\pi}(6z+5)\operatorname{erfi}(\sqrt{z})}{8z^{7/2}} + \frac{70}{3z^2} + \frac{175e^z}{4z^3}$$

07.25.03.ahp5.01

$${}_2F_2\left(2, \frac{5}{2}; 3, \frac{9}{2}; -z\right) = -\frac{35\sqrt{\pi}(6z-5)\operatorname{erf}(\sqrt{z})}{8z^{7/2}} + \frac{70}{3z^2} - \frac{175e^{-z}}{4z^3}$$

07.25.03.ahp6.01

$${}_2F_2\left(2, \frac{5}{2}; 3, 5; z\right) = -\frac{64e^{z/2}I_0\left(\frac{z}{2}\right)}{z^2} + \frac{64e^{z/2}(z+2)I_1\left(\frac{z}{2}\right)}{z^3} + \frac{32}{z^2}$$

07.25.03.ahp7.01

$${}_2F_2\left(2, \frac{5}{2}; 3, \frac{11}{2}; z\right) = \frac{945e^z(2z+7)}{32z^4} - \frac{315\sqrt{\pi}(12z^2+20z+21)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}} + \frac{42}{z^2}$$

07.25.03.ahp8.01

$${}_2F_2\left(2, \frac{5}{2}; 3, \frac{11}{2}; -z\right) = -\frac{945e^{-z}(2z-7)}{32z^4} - \frac{315\sqrt{\pi}(12z^2-20z+21)\operatorname{erf}(\sqrt{z})}{64z^{9/2}} + \frac{42}{z^2}$$

07.25.03.ahp9.01

$${}_2F_2\left(2, \frac{5}{2}; 3, 6; z\right) = -\frac{128e^{z/2}(3z+4)I_0\left(\frac{z}{2}\right)}{3z^3} + \frac{128e^{z/2}(3z^2+7z+16)I_1\left(\frac{z}{2}\right)}{3z^4} + \frac{160}{3z^2}$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = \frac{7}{2}$

07.25.03.ahpa.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{7}{2}, 4; z\right) = \frac{30(z-2)}{z^3} - \frac{45\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{z^{5/2}} + \frac{60e^z}{z^3}$$

07.25.03.ahpb.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{7}{2}, 4; -z\right) = \frac{30(z+2)}{z^3} - \frac{45\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{z^{5/2}} - \frac{60e^{-z}}{z^3}$$

07.25.03.ahpc.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{7}{2}, 5; z\right) = \frac{120e^z(z+1)}{z^4} + \frac{60(z^2-4z-2)}{z^4} - \frac{120\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.ahpd.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{7}{2}, 5; -z\right) = -\frac{120e^{-z}(z-1)}{z^4} + \frac{60(z^2+4z-2)}{z^4} - \frac{120\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.ahpe.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{7}{2}, 6; z\right) = \frac{120e^z(2z^2+z+4)}{z^5} + \frac{20(5z^3-30z^2-30z-24)}{z^5} - \frac{240\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.ahpf.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{7}{2}, 6; -z\right) = -\frac{120 e^{-z} (2z^2 - z + 4)}{z^5} + \frac{20(5z^3 + 30z^2 - 30z + 24)}{z^5} - \frac{240\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = 4$

07.25.03.ahpg.01

$${}_2F_2\left(2, \frac{5}{2}; 4, 4; z\right) = \frac{48(z-4)}{z^3} - \frac{48 e^{z/2} (3z-4) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{144 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.ahph.01

$${}_2F_2\left(2, \frac{5}{2}; 4, \frac{9}{2}; z\right) = \frac{70(z-6)}{z^3} - \frac{105\sqrt{\pi} (6z-5) \operatorname{erfi}(\sqrt{z})}{4z^{7/2}} + \frac{315 e^z}{2z^3}$$

07.25.03.ahpi.01

$${}_2F_2\left(2, \frac{5}{2}; 4, \frac{9}{2}; -z\right) = \frac{70(z+6)}{z^3} - \frac{105\sqrt{\pi} (6z+5) \operatorname{erf}(\sqrt{z})}{4z^{7/2}} - \frac{315 e^{-z}}{2z^3}$$

07.25.03.ahpj.01

$${}_2F_2\left(2, \frac{5}{2}; 4, 5; z\right) = \frac{96(z-8)}{z^3} - \frac{384 e^{z/2} (z-2) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{384 e^{z/2} (z-1) I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.ahpk.01

$${}_2F_2\left(2, \frac{5}{2}; 4, \frac{11}{2}; z\right) = \frac{126(z-10)}{z^3} + \frac{945 e^z (6z-7)}{16z^4} - \frac{945\sqrt{\pi} (12z^2 - 20z - 7) \operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.ahpl.01

$${}_2F_2\left(2, \frac{5}{2}; 4, \frac{11}{2}; -z\right) = \frac{126(z+10)}{z^3} - \frac{945 e^{-z} (6z+7)}{16z^4} - \frac{945\sqrt{\pi} (12z^2 + 20z - 7) \operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.ahpm.01

$${}_2F_2\left(2, \frac{5}{2}; 4, 6; z\right) = \frac{160(z-12)}{z^3} - \frac{128 e^{z/2} (6z-17) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{128 e^{z/2} (6z^2 - 11z - 8) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = \frac{9}{2}$

07.25.03.ahpn.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{9}{2}, 5; z\right) = \frac{420 e^z (z-2)}{z^4} + \frac{140(z^2 - 12z + 6)}{z^4} - \frac{210\sqrt{\pi} (2z-5) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ahpo.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{9}{2}, 5; -z\right) = -\frac{420 e^{-z} (z+2)}{z^4} + \frac{140(z^2 + 12z + 6)}{z^4} - \frac{210\sqrt{\pi} (2z+5) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ahpp.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{9}{2}, 6; z\right) = \frac{280 e^z (3z^2 - 11z - 4)}{z^5} + \frac{140(5z^3 - 90z^2 + 90z + 24)}{3z^5} - \frac{140\sqrt{\pi} (6z-25) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ahpq.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{9}{2}, 6; -z\right) = -\frac{280 e^{-z} (3 z^2 + 11 z - 4)}{z^5} + \frac{140 (5 z^3 + 90 z^2 + 90 z - 24)}{3 z^5} - \frac{140 \sqrt{\pi} (6 z + 25) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = 5$

07.25.03.ahpr.01

$${}_2F_2\left(2, \frac{5}{2}; 5, 5; z\right) = \frac{192 (z^2 - 16 z + 16)}{z^4} - \frac{512 e^{z/2} (2 z^2 - 9 z + 6) I_0\left(\frac{z}{2}\right)}{z^4} + \frac{512 e^{z/2} (2 z - 7) I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.ahps.01

$${}_2F_2\left(2, \frac{5}{2}; 5, \frac{11}{2}; z\right) = \frac{945 e^z (2 z - 9)}{2 z^4} + \frac{252 (z^2 - 20 z + 30)}{z^4} - \frac{945 \sqrt{\pi} (4 z^2 - 20 z + 7) \operatorname{erfi}(\sqrt{z})}{4 z^{9/2}}$$

07.25.03.ahpt.01

$${}_2F_2\left(2, \frac{5}{2}; 5, \frac{11}{2}; -z\right) = -\frac{945 e^{-z} (2 z + 9)}{2 z^4} + \frac{252 (z^2 + 20 z + 30)}{z^4} - \frac{945 \sqrt{\pi} (4 z^2 + 20 z + 7) \operatorname{erf}(\sqrt{z})}{4 z^{9/2}}$$

07.25.03.ahpu.01

$${}_2F_2\left(2, \frac{5}{2}; 5, 6; z\right) = \frac{320 (z^2 - 24 z + 48)}{z^4} - \frac{1024 e^{z/2} (2 z^2 - 14 z + 15) I_0\left(\frac{z}{2}\right)}{z^4} + \frac{2048 e^{z/2} (z^2 - 6 z + 2) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = \frac{11}{2}$

07.25.03.ahpv.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{11}{2}, 6; z\right) = \frac{315 e^z (6 z^2 - 47 z + 32)}{z^5} + \frac{420 (z^3 - 30 z^2 + 90 z - 24)}{z^5} - \frac{315 \sqrt{\pi} (12 z^2 - 100 z + 105) \operatorname{erfi}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.ahpw.01

$${}_2F_2\left(2, \frac{5}{2}; \frac{11}{2}, 6; -z\right) = -\frac{315 e^{-z} (6 z^2 + 47 z + 32)}{z^5} + \frac{420 (z^3 + 30 z^2 + 90 z + 24)}{z^5} - \frac{315 \sqrt{\pi} (12 z^2 + 100 z + 105) \operatorname{erf}(\sqrt{z})}{2 z^{9/2}}$$

For fixed z and $a_1 = 2, a_2 = \frac{5}{2}, b_1 = 6$

07.25.03.ahpx.01

$${}_2F_2\left(2, \frac{5}{2}; 6, 6; z\right) = \frac{320 (5 z^3 - 180 z^2 + 720 z - 384)}{3 z^5} - \frac{1024 e^{z/2} (12 z^3 - 134 z^2 + 285 z - 120) I_0\left(\frac{z}{2}\right)}{3 z^5} + \frac{1024 e^{z/2} (12 z^2 - 122 z + 169) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = 2, a_2 = 3, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 2, a_2 = 3, b_1 = -\frac{11}{2}$

07.25.03.ahpy.01

$${}_2F_2\left(2, 3; -\frac{11}{2}, 1; z\right) = \frac{32 z^9 + 832 z^8 + 6264 z^7 + 12544 z^6 - 4032 z^5 + 3600 z^4 - 4800 z^3 + 7560 z^2 - 11340 z + 10395}{10395} + \frac{4 e^z \sqrt{\pi} (8 z^{19/2} + 212 z^{17/2} + 1666 z^{15/2} + 3825 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.ahpz.01

$${}_2F_2\left(2, 3; -\frac{11}{2}, 1; -z\right) = \frac{-32 z^9 + 832 z^8 - 6264 z^7 + 12544 z^6 + 4032 z^5 + 3600 z^4 + 4800 z^3 + 7560 z^2 + 11340 z + 10395}{10395} + \frac{4 e^{-z} \sqrt{\pi} (8 z^{19/2} - 212 z^{17/2} + 1666 z^{15/2} - 3825 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.ahq0.01

$${}_2F_2\left(2, 3; -\frac{11}{2}, 2; z\right) = \frac{32 z^8 + 528 z^7 + 1792 z^6 - 672 z^5 + 720 z^4 - 1200 z^3 + 2520 z^2 - 5670 z + 10395}{10395} + \frac{8 e^z \sqrt{\pi} (4 z^{17/2} + 68 z^{15/2} + 255 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.ahq1.01

$${}_2F_2\left(2, 3; -\frac{11}{2}, 2; -z\right) = \frac{32 z^8 - 528 z^7 + 1792 z^6 + 672 z^5 + 720 z^4 + 1200 z^3 + 2520 z^2 + 5670 z + 10395}{10395} - \frac{8 e^{-z} \sqrt{\pi} (4 z^{17/2} - 68 z^{15/2} + 255 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.ahq2.01

$${}_2F_2\left(2, 3; -\frac{11}{2}, 3; z\right) = \frac{64 z^7 + 448 z^6 - 192 z^5 + 240 z^4 - 480 z^3 + 1260 z^2 - 3780 z + 10395}{10395} + \frac{32 e^z \sqrt{\pi} (2 z^{15/2} + 15 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.ahq3.01

$${}_2F_2\left(2, 3; -\frac{11}{2}, 3; -z\right) = \frac{-64 z^7 + 448 z^6 + 192 z^5 + 240 z^4 + 480 z^3 + 1260 z^2 + 3780 z + 10395}{10395} + \frac{32 e^{-z} \sqrt{\pi} (2 z^{15/2} - 15 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

For fixed z and $a_1 = 2, a_2 = 3, b_1 = -\frac{9}{2}$

07.25.03.ahq4.01

$${}_2F_2\left(2, 3; -\frac{9}{2}, 1; z\right) = \frac{1}{945} (-16 z^8 - 368 z^7 - 2404 z^6 - 4032 z^5 + 1200 z^4 - 960 z^3 + 1080 z^2 - 1260 z + 945) - \frac{2}{945} e^z \sqrt{\pi} (8 z^{17/2} + 188 z^{15/2} + 1290 z^{13/2} + 2535 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahq5.01

$${}_2F_2\left(2, 3; -\frac{9}{2}, 1; -z\right) = \frac{1}{945} (-16z^8 + 368z^7 - 2404z^6 + 4032z^5 + 1200z^4 + 960z^3 + 1080z^2 + 1260z + 945) + \frac{2}{945} e^{-z} \sqrt{\pi} (8z^{17/2} - 188z^{15/2} + 1290z^{13/2} - 2535z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahq6.01

$${}_2F_2\left(2, 3; -\frac{9}{2}, 2; z\right) = \frac{1}{945} (-16z^7 - 232z^6 - 672z^5 + 240z^4 - 240z^3 + 360z^2 - 630z + 945) - \frac{4}{945} e^z \sqrt{\pi} (4z^{15/2} + 60z^{13/2} + 195z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahq7.01

$${}_2F_2\left(2, 3; -\frac{9}{2}, 2; -z\right) = \frac{1}{945} (16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945) - \frac{4}{945} e^{-z} \sqrt{\pi} (4z^{15/2} - 60z^{13/2} + 195z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahq8.01

$${}_2F_2\left(2, 3; -\frac{9}{2}, 3; z\right) = \frac{1}{945} (-32z^6 - 192z^5 + 80z^4 - 96z^3 + 180z^2 - 420z + 945) - \frac{16}{945} e^z \sqrt{\pi} (2z^{13/2} + 13z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahq9.01

$${}_2F_2\left(2, 3; -\frac{9}{2}, 3; -z\right) = \frac{1}{945} (-32z^6 + 192z^5 + 80z^4 + 96z^3 + 180z^2 + 420z + 945) + \frac{16}{945} e^{-z} \sqrt{\pi} (2z^{13/2} - 13z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 3, b_1 = -\frac{7}{2}$

07.25.03.ahqa.01

$${}_2F_2\left(2, 3; -\frac{7}{2}, 1; z\right) = \frac{1}{105} (8z^7 + 160z^6 + 886z^5 + 1200z^4 - 320z^3 + 216z^2 - 180z + 105) + \frac{1}{105} e^z \sqrt{\pi} (8z^{15/2} + 164z^{13/2} + 962z^{11/2} + 1573z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahqb.01

$${}_2F_2\left(2, 3; -\frac{7}{2}, 1; -z\right) = \frac{1}{105} (-8z^7 + 160z^6 - 886z^5 + 1200z^4 + 320z^3 + 216z^2 + 180z + 105) + \frac{1}{105} e^{-z} \sqrt{\pi} (8z^{15/2} - 164z^{13/2} + 962z^{11/2} - 1573z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahqc.01

$${}_2F_2\left(2, 3; -\frac{7}{2}, 2; z\right) = \frac{1}{105} (8z^6 + 100z^5 + 240z^4 - 80z^3 + 72z^2 - 90z + 105) + \frac{2}{105} e^z \sqrt{\pi} (4z^{13/2} + 52z^{11/2} + 143z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahqd.01

$${}_2F_2\left(2, 3; -\frac{7}{2}, 2; -z\right) = \frac{1}{105} (8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} (4z^{13/2} - 52z^{11/2} + 143z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahqe.01

$${}_2F_2\left(2, 3; -\frac{7}{2}, 3; z\right) = \frac{1}{105} (16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105) + \frac{8}{105} e^z \sqrt{\pi} (2z^{11/2} + 11z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahqf.01

$${}_2F_2\left(2, 3; -\frac{7}{2}, 3; -z\right) = \frac{1}{105} (-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105) + \frac{8}{105} e^{-z} \sqrt{\pi} (2z^{11/2} - 11z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 3, b_1 = -\frac{5}{2}$

07.25.03.ahqg.01

$${}_2F_2\left(2, 3; -\frac{5}{2}, 1; z\right) = \frac{1}{15} (-4z^6 - 68z^5 - 309z^4 - 320z^3 + 72z^2 - 36z + 15) + \frac{1}{30} e^z \sqrt{\pi} (-8z^{13/2} - 140z^{11/2} - 682z^{9/2} - 891z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahqh.01

$${}_2F_2\left(2, 3; -\frac{5}{2}, 1; -z\right) = \frac{1}{15} (-4z^6 + 68z^5 - 309z^4 + 320z^3 + 72z^2 + 36z + 15) + \frac{1}{30} e^{-z} \sqrt{\pi} (8z^{13/2} - 140z^{11/2} + 682z^{9/2} - 891z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahqi.01

$${}_2F_2\left(2, 3; -\frac{5}{2}, 2; z\right) = \frac{1}{15} (-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) + \frac{1}{15} e^z \sqrt{\pi} (-4z^{11/2} - 44z^{9/2} - 99z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahqj.01

$${}_2F_2\left(2, 3; -\frac{5}{2}, 2; -z\right) = \frac{1}{15} (4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) + \frac{1}{15} e^{-z} \sqrt{\pi} (-4z^{11/2} + 44z^{9/2} - 99z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahqk.01

$${}_2F_2\left(2, 3; -\frac{5}{2}, 3; z\right) = \frac{1}{15} (-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15} e^z \sqrt{\pi} (2z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahql.01

$${}_2F_2\left(2, 3; -\frac{5}{2}, 3; -z\right) = \frac{1}{15} (-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15} e^{-z} \sqrt{\pi} (2z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 3, b_1 = -\frac{3}{2}$

07.25.03.ahqm.01

$${}_2F_2\left(2, 3; -\frac{3}{2}, 1; z\right) = \frac{1}{6} (4z^5 + 56z^4 + 199z^3 + 144z^2 - 24z + 6) + \frac{1}{12} e^z \sqrt{\pi} (8z^{11/2} + 116z^{9/2} + 450z^{7/2} + 441z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahqn.01

$${}_2F_2\left(2, 3; -\frac{3}{2}, 1; -z\right) = \frac{1}{6} (-4z^5 + 56z^4 - 199z^3 + 144z^2 + 24z + 6) + \frac{1}{12} e^{-z} \sqrt{\pi} (8z^{11/2} - 116z^{9/2} + 450z^{7/2} - 441z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahqp.01

$${}_2F_2\left(2, 3; -\frac{3}{2}, 2; z\right) = \frac{1}{3} (2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6} e^z \sqrt{\pi} (4z^{9/2} + 36z^{7/2} + 63z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahqp.01

$${}_2F_2\left(2, 3; -\frac{3}{2}, 2; -z\right) = \frac{1}{3} (2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6} e^{-z} \sqrt{\pi} (-4z^{9/2} + 36z^{7/2} - 63z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahqq.01

$${}_2F_2\left(2, 3; -\frac{3}{2}, 3; z\right) = \frac{1}{3} (4z^3 + 12z^2 - 4z + 3) + \frac{2}{3} e^z \sqrt{\pi} (2z^{7/2} + 7z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahqr.01

$${}_2F_2\left(2, 3; -\frac{3}{2}, 3; -z\right) = \frac{1}{3} (-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3} e^{-z} \sqrt{\pi} (2z^{7/2} - 7z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 3, b_1 = -\frac{1}{2}$

07.25.03.ahqs.01

$${}_2F_2\left(2, 3; -\frac{1}{2}, 1; z\right) = \frac{1}{4} (-4z^4 - 44z^3 - 113z^2 - 48z + 4) + \frac{1}{8} e^z \sqrt{\pi} (-8z^{9/2} - 92z^{7/2} - 266z^{5/2} - 175z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahqt.01

$${}_2F_2\left(2, 3; -\frac{1}{2}, 1; -z\right) = \frac{1}{4} (-4z^4 + 44z^3 - 113z^2 + 48z + 4) + \frac{1}{8} e^{-z} \sqrt{\pi} (8z^{9/2} - 92z^{7/2} + 266z^{5/2} - 175z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahqu.01

$${}_2F_2\left(2, 3; -\frac{1}{2}, 2; z\right) = \frac{1}{2} (-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4} e^z \sqrt{\pi} (-4z^{7/2} - 28z^{5/2} - 35z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahqv.01

$${}_2F_2\left(2, 3; -\frac{1}{2}, 2; -z\right) = \frac{1}{2} (2z^3 - 13z^2 + 12z + 2) + \frac{1}{4} e^{-z} \sqrt{\pi} (-4z^{7/2} + 28z^{5/2} - 35z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahqw.01

$${}_2F_2\left(2, 3; -\frac{1}{2}, 3; z\right) = -2z^2 - 4z + e^z \sqrt{\pi} (-2z^{5/2} - 5z^{3/2}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.ahqx.01

$${}_2F_2\left(2, 3; -\frac{1}{2}, 3; -z\right) = -2z^2 + 4z + e^{-z} \sqrt{\pi} (2z^{5/2} - 5z^{3/2}) \operatorname{erfi}(\sqrt{z}) + 1$$

For fixed z and $a_1 = 2, a_2 = 3, b_1 = \frac{1}{2}$

07.25.03.0146.01

$${}_2F_2\left(2, 3; \frac{1}{2}, 1; z\right) = \frac{1}{16} (2(4z^3 + 32z^2 + 51z + 8) + e^z \sqrt{\pi} \sqrt{z} (8z^3 + 68z^2 + 130z + 45)) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahqy.01

$${}_2F_2\left(2, 3; \frac{1}{2}, 1; -z\right) = \frac{1}{8} (-4z^3 + 32z^2 - 51z + 8) + \frac{1}{16} e^{-z} \sqrt{\pi} (8z^{7/2} - 68z^{5/2} + 130z^{3/2} - 45\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahqz.01

$${}_2F_2\left(2, 3; \frac{1}{2}, 2; z\right) = \frac{1}{4} (2z^2 + 9z + 4) + \frac{1}{8} e^z \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahr0.01

$${}_2F_2\left(2, 3; \frac{1}{2}, 2; -z\right) = \frac{1}{4} (2z^2 - 9z + 4) + \frac{1}{8} e^{-z} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahr1.01

$${}_2F_2\left(2, 3; \frac{1}{2}, 3; z\right) = z + \frac{1}{2} e^z \sqrt{\pi} (2z^{3/2} + 3\sqrt{z}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.ahr2.01

$${}_2F_2\left(2, 3; \frac{1}{2}, 3; -z\right) = -z + \frac{1}{2} e^{-z} \sqrt{\pi} (2z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z}) + 1$$

For fixed z and $a_1 = 2, a_2 = 3, b_1 = 1$

07.25.03.0147.01

$${}_2F_2(2, 3; 1, 1; z) = \frac{1}{2} e^z (z^3 + 7z^2 + 10z + 2)$$

07.25.03.0148.01

$${}_2F_2\left(2, 3; 1, \frac{3}{2}; z\right) = \frac{1}{32\sqrt{z}} (2\sqrt{z} (4z^2 + 20z + 13) + e^z \sqrt{\pi} (8z^3 + 44z^2 + 42z + 3) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahr3.01

$${}_2F_2\left(2, 3; 1, \frac{3}{2}; -z\right) = \frac{1}{16} (4z^2 - 20z + 13) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 44z^2 - 42z + 3) \operatorname{erfi}(\sqrt{z})}{32\sqrt{z}}$$

07.25.03.ahr4.01

$${}_2F_2(2, 3; 1, 2; z) = \frac{1}{2} e^z (z^2 + 4z + 2)$$

07.25.03.0149.01

$${}_2F_2\left(2, 3; 1, \frac{5}{2}; z\right) = \frac{3}{64z^{3/2}} (2\sqrt{z} (4z^2 + 8z - 1) + e^z \sqrt{\pi} (8z^3 + 20z^2 + 2z + 1) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahr5.01

$${}_2F_2\left(2, 3; 1, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (8z^3 - 20z^2 + 2z - 1) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}} - \frac{3(4z^2 - 8z - 1)}{32z}$$

07.25.03.ahr6.01

$${}_2F_2(2, 3; 1, 3; z) = e^z (z + 1)$$

07.25.03.ahr7.01

$${}_2F_2\left(2, 3; 1, \frac{7}{2}; z\right) = \frac{15(4z^2 - 4z + 9)}{64z^2} + \frac{15 e^z \sqrt{\pi} (8z^3 - 4z^2 + 10z - 9) \operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.ahr8.01

$${}_2F_2\left(2, 3; 1, \frac{7}{2}; -z\right) = \frac{15(4z^2 + 4z + 9)}{64z^2} - \frac{15 e^{-z} \sqrt{\pi} (8z^3 + 4z^2 + 10z + 9) \operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.ahr9.01

$${}_2F_2(2, 3; 1, 4; z) = \frac{3 e^z (z^3 - 2z^2 + 4z - 4)}{z^3} + \frac{12}{z^3}$$

07.25.03.ahra.01

$${}_2F_2\left(2, 3; 1, \frac{9}{2}; z\right) = \frac{105(4z^2 - 16z + 75)}{128z^3} + \frac{105e^z\sqrt{\pi}(8z^3 - 28z^2 + 66z - 75)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.ahrb.01

$${}_2F_2\left(2, 3; 1, \frac{9}{2}; -z\right) = \frac{105e^{-z}\sqrt{\pi}(8z^3 + 28z^2 + 66z + 75)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{105(4z^2 + 16z + 75)}{128z^3}$$

07.25.03.ahrc.01

$${}_2F_2(2, 3; 1, 5; z) = \frac{24(2z + 9)}{z^4} + \frac{12e^z(z^3 - 5z^2 + 14z - 18)}{z^4}$$

07.25.03.ahrd.01

$${}_2F_2\left(2, 3; 1, \frac{11}{2}; z\right) = \frac{315(12z^2 - 20z + 735)}{256z^4} + \frac{945e^z\sqrt{\pi}(8z^3 - 52z^2 + 170z - 245)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ahre.01

$${}_2F_2\left(2, 3; 1, \frac{11}{2}; -z\right) = \frac{315(12z^2 + 20z + 735)}{256z^4} - \frac{945e^{-z}\sqrt{\pi}(8z^3 + 52z^2 + 170z + 245)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ahrf.01

$${}_2F_2(2, 3; 1, 6; z) = \frac{120(z^2 + 9z + 24)}{z^5} + \frac{60e^z(z^3 - 8z^2 + 30z - 48)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = 3, b_1 = \frac{3}{2}$

07.25.03.ahrg.01

$${}_2F_2\left(2, 3; \frac{3}{2}, 2; z\right) = \frac{1}{8}(2z + 5) + \frac{e^z\sqrt{\pi}(4z^2 + 12z + 3)\operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.ahrh.01

$${}_2F_2\left(2, 3; \frac{3}{2}, 2; -z\right) = \frac{1}{8}(5 - 2z) + \frac{e^{-z}\sqrt{\pi}(4z^2 - 12z + 3)\operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.ahri.01

$${}_2F_2\left(2, 3; \frac{3}{2}, 3; z\right) = \frac{e^z\sqrt{\pi}(2z + 1)\operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.ahrj.01

$${}_2F_2\left(2, 3; \frac{3}{2}, 3; -z\right) = \frac{e^{-z}\sqrt{\pi}(1 - 2z)\operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

For fixed z and $a_1 = 2, a_2 = 3, b_1 = 2$

07.25.03.ahrk.01

$${}_2F_2(2, 3; 2, 2; z) = \frac{1}{2}e^z(z + 2)$$

07.25.03.ahrl.01

$${}_2F_2\left(2, 3; 2, \frac{5}{2}; z\right) = \frac{3(2z+1)}{16z} + \frac{3e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.ahrm.01

$${}_2F_2\left(2, 3; 2, \frac{5}{2}; -z\right) = \frac{3(2z-1)}{16z} - \frac{3e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.ahrn.01

$${}_2F_2(2, 3; 2, 3; z) = e^z$$

07.25.03.ahro.01

$${}_2F_2\left(2, 3; 2, \frac{7}{2}; z\right) = \frac{15(2z-3)}{32z^2} + \frac{15e^z \sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.ahrp.01

$${}_2F_2\left(2, 3; 2, \frac{7}{2}; -z\right) = \frac{15e^{-z} \sqrt{\pi} (4z^2 + 4z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15(2z+3)}{32z^2}$$

07.25.03.ahrq.01

$${}_2F_2(2, 3; 2, 4; z) = \frac{3e^z(z^2 - 2z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.ahrr.01

$${}_2F_2\left(2, 3; 2, \frac{9}{2}; z\right) = \frac{105(2z-15)}{64z^3} + \frac{105e^z \sqrt{\pi} (4z^2 - 12z + 15) \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.ahrs.01

$${}_2F_2\left(2, 3; 2, \frac{9}{2}; -z\right) = \frac{105(2z+15)}{64z^3} - \frac{105e^{-z} \sqrt{\pi} (4z^2 + 12z + 15) \operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.ahrt.01

$${}_2F_2(2, 3; 2, 5; z) = \frac{12e^z(z^2 - 4z + 6)}{z^4} - \frac{24(z+3)}{z^4}$$

07.25.03.ahru.01

$${}_2F_2\left(2, 3; 2, \frac{11}{2}; z\right) = \frac{945e^z \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256z^{9/2}} - \frac{1575(2z+21)}{128z^4}$$

07.25.03.ahrv.01

$${}_2F_2\left(2, 3; 2, \frac{11}{2}; -z\right) = \frac{1575(2z-21)}{128z^4} + \frac{945e^{-z} \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.ahrw.01

$${}_2F_2(2, 3; 2, 6; z) = \frac{60e^z(z^2 - 6z + 12)}{z^5} - \frac{60(z^2 + 6z + 12)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = 3, b_1 = \frac{5}{2}$

07.25.03.ahrx.01

$${}_2F_2\left(2, 3; \frac{5}{2}, 3; z\right) = \frac{3 e^z \sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{8 z^{3/2}} + \frac{3}{4z}$$

07.25.03.ahry.01

$${}_2F_2\left(2, 3; \frac{5}{2}, 3; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3}{4z}$$

For fixed z and $a_1 = 2, a_2 = 3, b_1 = 3$

07.25.03.ahrz.01

$${}_2F_2(2, 3; 3, 3; z) = \frac{2 e^z (z - 1)}{z^2} + \frac{2}{z^2}$$

07.25.03.ahs0.01

$${}_2F_2\left(2, 3; 3, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45}{8z^2}$$

07.25.03.ahs1.01

$${}_2F_2\left(2, 3; 3, \frac{7}{2}; -z\right) = \frac{45}{8z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.ahs2.01

$${}_2F_2(2, 3; 3, 4; z) = \frac{6 e^z (z - 2)}{z^3} + \frac{6(z + 2)}{z^3}$$

07.25.03.ahs3.01

$${}_2F_2\left(2, 3; 3, \frac{9}{2}; z\right) = \frac{35(4z + 15)}{16 z^3} + \frac{105 e^z \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ahs4.01

$${}_2F_2\left(2, 3; 3, \frac{9}{2}; -z\right) = \frac{35(4z - 15)}{16 z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ahs5.01

$${}_2F_2(2, 3; 3, 5; z) = \frac{24 e^z (z - 3)}{z^4} + \frac{12(z^2 + 4z + 6)}{z^4}$$

07.25.03.ahs6.01

$${}_2F_2\left(2, 3; 3, \frac{11}{2}; z\right) = \frac{63(8z^2 + 40z + 105)}{32 z^4} + \frac{945 e^z \sqrt{\pi} (2z - 7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ahs7.01

$${}_2F_2\left(2, 3; 3, \frac{11}{2}; -z\right) = \frac{63(8z^2 - 40z + 105)}{32 z^4} - \frac{945 e^{-z} \sqrt{\pi} (2z + 7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ahs8.01

$${}_2F_2(2, 3; 3, 6; z) = \frac{120 e^z (z - 4)}{z^5} + \frac{20(z^3 + 6z^2 + 18z + 24)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = 3, b_1 = 4$

07.25.03.ahs9.01

$${}_2F_2(2, 3; 4, 4; z) = \frac{18(z + 2\gamma - 1)}{z^3} - \frac{36 \operatorname{Ei}(z)}{z^3} - \frac{18 \log\left(\frac{1}{z}\right)}{z^3} + \frac{18 \log(z)}{z^3} + \frac{18 e^z}{z^3}$$

07.25.03.ahsa.01

$${}_2F_2(2, 3; 4, 5; z) = \frac{36(z^2 + 4\gamma z - 6z - 6)}{z^4} - \frac{144 \operatorname{Ei}(z)}{z^3} - \frac{72 \log\left(\frac{1}{z}\right)}{z^3} + \frac{72 \log(z)}{z^3} + \frac{216 e^z}{z^4}$$

07.25.03.ahsb.01

$${}_2F_2(2, 3; 4, 6; z) = \frac{360 e^z (z + 2)}{z^5} + \frac{60(z^3 + 6\gamma z^2 - 12z^2 - 18z - 12)}{z^5} - \frac{360 \operatorname{Ei}(z)}{z^3} - \frac{180 \log\left(\frac{1}{z}\right)}{z^3} + \frac{180 \log(z)}{z^3}$$

For fixed z and $a_1 = 2, a_2 = 3, b_1 = 5$

07.25.03.ahsc.01

$${}_2F_2(2, 3; 5, 5; z) = \frac{72(z^2 + 8\gamma z - 20z - 12\gamma - 8)}{z^4} - \frac{288(2z - 3) \operatorname{Ei}(z)}{z^4} - \frac{144(2z - 3) \log\left(\frac{1}{z}\right)}{z^4} + \frac{144(2z - 3) \log(z)}{z^4} + \frac{576 e^z}{z^4}$$

07.25.03.ahsd.01

$${}_2F_2(2, 3; 5, 6; z) = \frac{1440 e^z (z - 2)}{z^5} + \frac{120(z^3 + 12\gamma z^2 - 36z^2 - 36\gamma z + 12z + 24)}{z^5} - \frac{1440(z - 3) \operatorname{Ei}(z)}{z^4} - \frac{720(z - 3) \log\left(\frac{1}{z}\right)}{z^4} + \frac{720(z - 3) \log(z)}{z^4}$$

For fixed z and $a_1 = 2, a_2 = 3, b_1 = 6$

07.25.03.ahse.01

$${}_2F_2(2, 3; 6, 6; z) = \frac{3600 e^z (z - 5)}{z^5} + \frac{200(z^3 + 18\gamma z^2 - 63z^2 - 108\gamma z + 144z + 72\gamma + 90)}{z^5} - \frac{3600(z^2 - 6z + 4) \operatorname{Ei}(z)}{z^5} - \frac{1800(z^2 - 6z + 4) \log\left(\frac{1}{z}\right)}{z^5} + \frac{1800(z^2 - 6z + 4) \log(z)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = -\frac{11}{2}$

07.25.03.ahsf.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) =$$

$$\frac{1}{1620840375} (32768 z^{16} + 3178496 z^{15} + 124502016 z^{14} + 2558115840 z^{13} + 29992857600 z^{12} + 204635381760 z^{11} + 794373073920 z^{10} + 1639092188160 z^9 + 1557832953600 z^8 + 492079795200 z^7 + 15437822400 z^6 + 389188800 z^5 + 97297200 z^4 + 74844000 z^3 + 125023500 z^2 + 375070500 z + 1620840375) +$$

$$\frac{1}{1620840375} (16384 e^z \sqrt{\pi} (2 z^{33/2} + 195 z^{31/2} + 7695 z^{29/2} + 159840 z^{27/2} + 1905120 z^{25/2} + 13335840 z^{23/2} + 53978400 z^{21/2} + 119750400 z^{19/2} + 130636800 z^{17/2} + 56246400 z^{15/2} + 5443200 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahsg.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; -z\right) =$$

$$\frac{1}{1620840375} (32768 z^{16} - 3178496 z^{15} + 124502016 z^{14} - 2558115840 z^{13} + 29992857600 z^{12} - 204635381760 z^{11} + 794373073920 z^{10} - 1639092188160 z^9 + 1557832953600 z^8 - 492079795200 z^7 + 15437822400 z^6 - 389188800 z^5 + 97297200 z^4 - 74844000 z^3 + 125023500 z^2 - 375070500 z + 1620840375) -$$

$$\frac{1}{1620840375} (16384 e^{-z} \sqrt{\pi} (2 z^{33/2} - 195 z^{31/2} + 7695 z^{29/2} - 159840 z^{27/2} + 1905120 z^{25/2} - 13335840 z^{23/2} + 53978400 z^{21/2} - 119750400 z^{19/2} + 130636800 z^{17/2} - 56246400 z^{15/2} + 5443200 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahsh.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{147349125} (-16384 z^{15} - 1425408 z^{14} - 49430528 z^{13} - 884305920 z^{12} - 8829296640 z^{11} - 49728506880 z^{10} - 152052526080 z^9 - 228330627840 z^8 - 134299468800 z^7 - 15437822400 z^6 + 389188800 z^5 + 32432400 z^4 + 14968800 z^3 + 17860500 z^2 + 41674500 z + 147349125) -$$

$$\frac{1}{147349125} (8192 e^z \sqrt{\pi} (2 z^{31/2} + 175 z^{29/2} + 6120 z^{27/2} + 110880 z^{25/2} + 1128960 z^{23/2} + 6562080 z^{21/2} + 21168000 z^{19/2} + 35078400 z^{17/2} + 25401600 z^{15/2} + 5443200 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahsi.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{147349125} (16384 z^{15} - 1425408 z^{14} + 49430528 z^{13} - 884305920 z^{12} + 8829296640 z^{11} - 49728506880 z^{10} + 152052526080 z^9 - 228330627840 z^8 + 134299468800 z^7 - 15437822400 z^6 - 389188800 z^5 + 32432400 z^4 - 14968800 z^3 + 17860500 z^2 - 41674500 z + 147349125) -$$

$$\frac{1}{147349125} (8192 e^{-z} \sqrt{\pi} (2 z^{31/2} - 175 z^{29/2} + 6120 z^{27/2} - 110880 z^{25/2} + 1128960 z^{23/2} - 6562080 z^{21/2} + 21168000 z^{19/2} - 35078400 z^{17/2} + 25401600 z^{15/2} - 5443200 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahsj.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{16372125} (8192 z^{14} + 630784 z^{13} + 19042304 z^{12} + 290119680 z^{11} + 2392581120 z^{10} + 10632760320 z^9 +$$

$$23771301120 z^8 + 22400824320 z^7 + 5145940800 z^6 - 389188800 z^5 +$$

$$32432400 z^4 + 4989600 z^3 + 3572100 z^2 + 5953500 z + 16372125) +$$

$$\frac{1}{16372125} (4096 e^z \sqrt{\pi} (2 z^{29/2} + 155 z^{27/2} + 4725 z^{25/2} + 73080 z^{23/2} + 617400 z^{21/2} +$$

$$2857680 z^{19/2} + 6879600 z^{17/2} + 7560000 z^{15/2} + 2721600 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahsk.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{16372125} (8192 z^{14} - 630784 z^{13} + 19042304 z^{12} - 290119680 z^{11} + 2392581120 z^{10} - 10632760320 z^9 +$$

$$23771301120 z^8 - 22400824320 z^7 + 5145940800 z^6 + 389188800 z^5 +$$

$$32432400 z^4 - 4989600 z^3 + 3572100 z^2 - 5953500 z + 16372125) -$$

$$\frac{1}{16372125} (4096 e^{-z} \sqrt{\pi} (2 z^{29/2} - 155 z^{27/2} + 4725 z^{25/2} - 73080 z^{23/2} + 617400 z^{21/2} -$$

$$2857680 z^{19/2} + 6879600 z^{17/2} - 7560000 z^{15/2} + 2721600 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahsl.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{2338875} (-4096 z^{13} - 274432 z^{12} - 7053312 z^{11} - 88765440 z^{10} - 578135040 z^9 - 1884314880 z^8 - 2669276160 z^7 -$$

$$1029188160 z^6 + 129729600 z^5 - 32432400 z^4 + 4989600 z^3 + 1190700 z^2 + 1190700 z + 2338875) -$$

$$\frac{1}{2338875} (2048 e^z \sqrt{\pi} (2 z^{27/2} + 135 z^{25/2} + 3510 z^{23/2} + 45000 z^{21/2} + 302400 z^{19/2} +$$

$$1043280 z^{17/2} + 1663200 z^{15/2} + 907200 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahsm.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{2338875} (4096 z^{13} - 274432 z^{12} + 7053312 z^{11} - 88765440 z^{10} + 578135040 z^9 - 1884314880 z^8 + 2669276160 z^7 -$$

$$1029188160 z^6 - 129729600 z^5 - 32432400 z^4 - 4989600 z^3 + 1190700 z^2 - 1190700 z + 2338875) -$$

$$\frac{1}{2338875} (2048 e^{-z} \sqrt{\pi} (2 z^{27/2} - 135 z^{25/2} + 3510 z^{23/2} - 45000 z^{21/2} + 302400 z^{19/2} -$$

$$1043280 z^{17/2} + 1663200 z^{15/2} - 907200 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahsn.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{467775} (2048 z^{12} + 116736 z^{11} + 2477056 z^{10} + 24622080 z^9 + 117815040 z^8 + 244976640 z^7 + 147026880 z^6 - 25945920 z^5 + 10810800 z^4 - 4989600 z^3 + 1190700 z^2 + 396900 z + 467775) + \frac{1}{467775} 1024 e^z \sqrt{\pi} (2 z^{25/2} + 115 z^{23/2} + 2475 z^{21/2} + 25200 z^{19/2} + 126000 z^{17/2} + 287280 z^{15/2} + 226800 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahso.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{467775} (2048 z^{12} - 116736 z^{11} + 2477056 z^{10} - 24622080 z^9 + 117815040 z^8 - 244976640 z^7 + 147026880 z^6 + 25945920 z^5 + 10810800 z^4 + 4989600 z^3 + 1190700 z^2 - 396900 z + 467775) - \frac{1}{467775} 1024 e^{-z} \sqrt{\pi} (2 z^{25/2} - 115 z^{23/2} + 2475 z^{21/2} - 25200 z^{19/2} + 126000 z^{17/2} - 287280 z^{15/2} + 226800 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahsp.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{155925} (-1024 z^{11} - 48128 z^{10} - 805888 z^9 - 5886720 z^8 - 18048000 z^7 - 16336320 z^6 + 3706560 z^5 - 2162160 z^4 + 1663200 z^3 - 1190700 z^2 + 396900 z + 155925) - \frac{512 e^z \sqrt{\pi} (2 z^{23/2} + 95 z^{21/2} + 1620 z^{19/2} + 12240 z^{17/2} + 40320 z^{15/2} + 45360 z^{13/2}) \operatorname{erf}(\sqrt{z})}{155925}$$

07.25.03.ahsq.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{155925} (1024 z^{11} - 48128 z^{10} + 805888 z^9 - 5886720 z^8 + 18048000 z^7 - 16336320 z^6 - 3706560 z^5 - 2162160 z^4 - 1663200 z^3 - 1190700 z^2 - 396900 z + 155925) - \frac{512 e^{-z} \sqrt{\pi} (2 z^{23/2} - 95 z^{21/2} + 1620 z^{19/2} - 12240 z^{17/2} + 40320 z^{15/2} - 45360 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.ahsr.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{155925} (512 z^{10} + 18944 z^9 + 232704 z^8 + 1090560 z^7 + 1485120 z^6 - 411840 z^5 + 308880 z^4 - 332640 z^3 + 396900 z^2 - 396900 z + 155925) + \frac{256 e^z \sqrt{\pi} (2 z^{21/2} + 75 z^{19/2} + 945 z^{17/2} + 4680 z^{15/2} + 7560 z^{13/2}) \operatorname{erf}(\sqrt{z})}{155925}$$

07.25.03.ahss.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{155925} (512 z^{10} - 18944 z^9 + 232704 z^8 - 1090560 z^7 + 1485120 z^6 + 411840 z^5 + 308880 z^4 + 332640 z^3 + 396900 z^2 + 396900 z + 155925) - \frac{256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 75 z^{19/2} + 945 z^{17/2} - 4680 z^{15/2} + 7560 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.ahst.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{155925} (e^z (512 z^{10} + 16640 z^9 + 172800 z^8 + 633600 z^7 + 504000 z^6 - 272160 z^5 + 302400 z^4 - 378000 z^3 + 425250 z^2 - 354375 z + 155925))$$

07.25.03.ahsu.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{128 e^z \sqrt{\pi} (2 z^3 + 55 z^2 + 450 z + 1080) \operatorname{erf}(\sqrt{z}) z^{13/2}}{155925} + \frac{1}{155925} (256 z^9 + 6912 z^8 + 54272 z^7 + 114240 z^6 - 37440 z^5 + 34320 z^4 - 47520 z^3 + 79380 z^2 - 132300 z + 155925)$$

07.25.03.ahsv.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{128 e^{-z} \sqrt{\pi} (2 z^3 - 55 z^2 + 450 z - 1080) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{155925} + \frac{1}{155925} (-256 z^9 + 6912 z^8 - 54272 z^7 + 114240 z^6 + 37440 z^5 + 34320 z^4 + 47520 z^3 + 79380 z^2 + 132300 z + 155925)$$

07.25.03.ahsw.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{155925} e^z (512 z^9 + 11520 z^8 + 69120 z^7 + 80640 z^6 - 60480 z^5 + 90720 z^4 - 151200 z^3 + 226800 z^2 - 255150 z + 155925)$$

07.25.03.ahsx.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{64 e^z \sqrt{\pi} (2 z^2 + 35 z + 135) \operatorname{erf}(\sqrt{z}) z^{13/2}}{51975} + \frac{128 z^8 + 2176 z^7 + 7616 z^6 - 2880 z^5 + 3120 z^4 - 5280 z^3 + 11340 z^2 - 26460 z + 51975}{51975}$$

07.25.03.ahsy.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{128 z^8 - 2176 z^7 + 7616 z^6 + 2880 z^5 + 3120 z^4 + 5280 z^3 + 11340 z^2 + 26460 z + 51975}{51975} - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} (2 z^2 - 35 z + 135) \operatorname{erfi}(\sqrt{z})}{51975}$$

07.25.03.ahsz.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{155925 z^2} (2 e^z (512 z^{10} + 6400 z^9 + 11520 z^8 - 11520 z^7 + 20160 z^6 - 30240 z^5 + 226800 z^3 - 935550 z^2 + 2027025 z - 2027025)) + \frac{26}{z^2}$$

07.25.03.aht0.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{32 e^z \sqrt{\pi} (2z + 15) \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{64 z^7 + 448 z^6 - 192 z^5 + 240 z^4 - 480 z^3 + 1260 z^2 - 3780 z + 10395}{10395}$$

07.25.03.aht1.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{32 e^{-z} \sqrt{\pi} (2z - 15) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{10395} + \frac{-64 z^7 + 448 z^6 + 192 z^5 + 240 z^4 + 480 z^3 + 1260 z^2 + 3780 z + 10395}{10395}$$

07.25.03.aht2.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, 4; z\right) = \frac{78(z - 34)}{z^3} + \frac{1}{51975 z^3} (2 e^z (512 z^{10} + 1280 z^9 - 11520 z^7 + 100800 z^6 - 635040 z^5 + 3175200 z^4 - 12474000 z^3 + 36486450 z^2 - 70945875 z + 68918850))$$

07.25.03.aht3.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{1485 z^3} (32 z^9 - 96 z^8 + 784 z^7 - 6240 z^6 + 44100 z^5 - 269220 z^4 + 1383885 z^3 - 5806080 z^2 + 19353600 z - 58060800) + \frac{1}{1485 z^{7/2}} (16 e^z \sqrt{\pi} (2 z^{10} - 5 z^9 + 45 z^8 - 360 z^7 + 2520 z^6 - 15120 z^5 + 75600 z^4 - 302400 z^3 + 907200 z^2 - 1814400 z + 1814400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aht4.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{1485 z^3} (32 z^9 + 96 z^8 + 784 z^7 + 6240 z^6 + 44100 z^5 + 269220 z^4 + 1383885 z^3 + 5806080 z^2 + 19353600 z + 58060800) - \frac{1}{1485 z^{7/2}} (16 e^{-z} \sqrt{\pi} (2 z^{10} + 5 z^9 + 45 z^8 + 360 z^7 + 2520 z^6 + 15120 z^5 + 75600 z^4 + 302400 z^3 + 907200 z^2 + 1814400 z + 1814400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aht5.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, 5; z\right) = \frac{156(z^2 - 68z - 1938)}{z^4} + \frac{1}{51975z^4} (8e^z(512z^{10} - 3840z^9 + 34560z^8 - 288000z^7 + 2116800z^6 - 13335840z^5 + 69854400z^4 - 291891600z^3 + 912161250z^2 - 1895268375z + 1964187225))$$

07.25.03.aht6.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{165z^4} (16z^9 - 208z^8 + 2272z^7 - 21420z^6 + 173460z^5 - 1190235z^4 + 6773760z^3 - 30965760z^2 + 106444800z - 406425600) + \frac{1}{165z^{9/2}} (8e^z\sqrt{\pi}(2z^{10} - 25z^9 + 270z^8 - 2520z^7 + 20160z^6 - 136080z^5 + 756000z^4 - 3326400z^3 + 10886400z^2 - 23587200z + 25401600)\operatorname{erf}(\sqrt{z}))$$

07.25.03.aht7.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{165z^4} (-16z^9 - 208z^8 - 2272z^7 - 21420z^6 - 173460z^5 - 1190235z^4 - 6773760z^3 - 30965760z^2 - 106444800z - 406425600) + \frac{1}{165z^{9/2}} (8e^{-z}\sqrt{\pi}(2z^{10} + 25z^9 + 270z^8 + 2520z^7 + 20160z^6 + 136080z^5 + 756000z^4 + 3326400z^3 + 10886400z^2 + 23587200z + 25401600)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aht8.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{11}{2}, 6; z\right) = \frac{260(z^3 - 102z^2 - 5814z - 54264)}{z^5} + \frac{1}{10395z^5} (8e^z(512z^{10} - 8960z^9 + 115200z^8 - 1209600z^7 + 10584000z^6 - 76839840z^5 + 454053600z^4 - 2108106000z^3 + 7236479250z^2 - 16368226875z + 18332414100))$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = -\frac{9}{2}$

07.25.03.aht9.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{13395375} (8192z^{14} + 638976z^{13} + 19607552z^{12} + 305209344z^{11} + 2592435200z^{10} + 12032947200z^9 + 28886812416z^8 + 31334231040z^7 + 11143903680z^6 + 389188800z^5 + 10810800z^4 + 2993760z^3 + 2551500z^2 + 4630500z + 13395375) + \frac{1}{13395375} (4096e^z\sqrt{\pi}(2z^{29/2} + 157z^{27/2} + 4864z^{25/2} + 76832z^{23/2} + 667968z^{21/2} + 3222240z^{19/2} + 8279040z^{17/2} + 10241280z^{15/2} + 4919040z^{13/2} + 524160z^{11/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.ahta.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{13395375} (8192 z^{14} - 638976 z^{13} + 19607552 z^{12} - 305209344 z^{11} + 2592435200 z^{10} - 12032947200 z^9 +$$

$$28886812416 z^8 - 31334231040 z^7 + 11143903680 z^6 - 389188800 z^5 +$$

$$10810800 z^4 - 2993760 z^3 + 2551500 z^2 - 4630500 z + 13395375) -$$

$$\frac{1}{13395375} (4096 e^{-z} \sqrt{\pi} (2 z^{29/2} - 157 z^{27/2} + 4864 z^{25/2} - 76832 z^{23/2} + 667968 z^{21/2} - 3222240 z^{19/2} +$$

$$8279040 z^{17/2} - 10241280 z^{15/2} + 4919040 z^{13/2} - 524160 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahtb.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{1488375} (-4096 z^{13} - 282624 z^{12} - 7544832 z^{11} - 99927040 z^{10} - 700093440 z^9 - 2557755648 z^8 - 4466703360 z^7 -$$

$$2998981440 z^6 - 389188800 z^5 + 10810800 z^4 + 997920 z^3 + 510300 z^2 + 661500 z + 1488375) -$$

$$\frac{1}{1488375} (2048 e^z \sqrt{\pi} (2 z^{27/2} + 139 z^{25/2} + 3752 z^{23/2} + 50568 z^{21/2} + 364560 z^{19/2} +$$

$$1399440 z^{17/2} + 2681280 z^{15/2} + 2197440 z^{13/2} + 524160 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahtc.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{1488375} (4096 z^{13} - 282624 z^{12} + 7544832 z^{11} - 99927040 z^{10} + 700093440 z^9 - 2557755648 z^8 + 4466703360 z^7 -$$

$$2998981440 z^6 + 389188800 z^5 + 10810800 z^4 - 997920 z^3 + 510300 z^2 - 661500 z + 1488375) -$$

$$\frac{1}{1488375} (2048 e^{-z} \sqrt{\pi} (2 z^{27/2} - 139 z^{25/2} + 3752 z^{23/2} - 50568 z^{21/2} + 364560 z^{19/2} -$$

$$1399440 z^{17/2} + 2681280 z^{15/2} - 2197440 z^{13/2} + 524160 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahtd.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{212625} (2048 z^{12} + 122880 z^{11} + 2790400 z^{10} + 30489600 z^9 + 168360192 z^8 + 449356800 z^7 + 492448320 z^6 +$$

$$129729600 z^5 - 10810800 z^4 + 997920 z^3 + 170100 z^2 + 132300 z + 212625) + \frac{1}{212625} (1024 e^z \sqrt{\pi}$$

$$(2 z^{25/2} + 121 z^{23/2} + 2784 z^{21/2} + 31080 z^{19/2} + 178080 z^{17/2} + 509040 z^{15/2} + 645120 z^{13/2} + 262080 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahte.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{212\,625} (2048 z^{12} - 122\,880 z^{11} + 2\,790\,400 z^{10} - 30\,489\,600 z^9 + 168\,360\,192 z^8 - 449\,356\,800 z^7 + 492\,448\,320 z^6 - 129\,729\,600 z^5 - 10\,810\,800 z^4 - 997\,920 z^3 + 170\,100 z^2 - 132\,300 z + 212\,625) - \frac{1}{212\,625} (1024 e^{-z} \sqrt{\pi} (2 z^{25/2} - 121 z^{23/2} + 2784 z^{21/2} - 31\,080 z^{19/2} + 178\,080 z^{17/2} - 509\,040 z^{15/2} + 645\,120 z^{13/2} - 262\,080 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahtf.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{42\,525} (-1024 z^{11} - 52\,224 z^{10} - 977\,920 z^9 - 8\,424\,192 z^8 - 34\,063\,360 z^7 - 57\,570\,240 z^6 - 25\,945\,920 z^5 + 3\,603\,600 z^4 - 997\,920 z^3 + 170\,100 z^2 + 44\,100 z + 42\,525) - \frac{1}{42\,525} 512 e^z \sqrt{\pi} (2 z^{23/2} + 103 z^{21/2} + 1960 z^{19/2} + 17\,360 z^{17/2} + 73\,920 z^{15/2} + 139\,440 z^{13/2} + 87\,360 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahtg.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{42\,525} (1024 z^{11} - 52\,224 z^{10} + 977\,920 z^9 - 8\,424\,192 z^8 + 34\,063\,360 z^7 - 57\,570\,240 z^6 + 25\,945\,920 z^5 + 3\,603\,600 z^4 + 997\,920 z^3 + 170\,100 z^2 - 44\,100 z + 42\,525) - \frac{1}{42\,525} 512 e^{-z} \sqrt{\pi} (2 z^{23/2} - 103 z^{21/2} + 1960 z^{19/2} - 17\,360 z^{17/2} + 73\,920 z^{15/2} - 139\,440 z^{13/2} + 87\,360 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahtth.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{14\,175} (512 z^{10} + 21\,504 z^9 + 317\,184 z^8 + 2\,001\,920 z^7 + 5\,154\,240 z^6 + 3\,706\,560 z^5 - 720\,720 z^4 + 332\,640 z^3 - 170\,100 z^2 + 44\,100 z + 14\,175) + \frac{256 e^z \sqrt{\pi} (2 z^{21/2} + 85 z^{19/2} + 1280 z^{17/2} + 8400 z^{15/2} + 23\,520 z^{13/2} + 21\,840 z^{11/2}) \operatorname{erf}(\sqrt{z})}{14\,175}$$

07.25.03.ahti.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{14\,175} (512 z^{10} - 21\,504 z^9 + 317\,184 z^8 - 2\,001\,920 z^7 + 5\,154\,240 z^6 - 3\,706\,560 z^5 - 720\,720 z^4 - 332\,640 z^3 - 170\,100 z^2 - 44\,100 z + 14\,175) - \frac{256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 85 z^{19/2} + 1280 z^{17/2} - 8400 z^{15/2} + 23\,520 z^{13/2} - 21\,840 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{14\,175}$$

07.25.03.ahtj.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{14175} (-256 z^9 - 8448 z^8 - 91136 z^7 - 366912 z^6 - 411840 z^5 + 102960 z^4 - 66528 z^3 + 56700 z^2 - 44100 z + 14175) - \frac{128 e^z \sqrt{\pi} (2 z^{19/2} + 67 z^{17/2} + 744 z^{15/2} + 3192 z^{13/2} + 4368 z^{11/2}) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.ahtk.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{14175} (256 z^9 - 8448 z^8 + 91136 z^7 - 366912 z^6 + 411840 z^5 + 102960 z^4 + 66528 z^3 + 56700 z^2 + 44100 z + 14175) - \frac{128 e^{-z} \sqrt{\pi} (2 z^{19/2} - 67 z^{17/2} + 744 z^{15/2} - 3192 z^{13/2} + 4368 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.ahtl.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, 1; z\right) = -\frac{1}{14175} e^z (256 z^9 + 7424 z^8 + 67840 z^7 + 215040 z^6 + 144480 z^5 - 63840 z^4 + 55440 z^3 - 50400 z^2 + 36225 z - 14175)$$

07.25.03.ahtm.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{-128 z^8 - 3072 z^7 - 21056 z^6 - 37440 z^5 + 11440 z^4 - 9504 z^3 + 11340 z^2 - 14700 z + 14175}{14175} - \frac{64 e^z \sqrt{\pi} z^{11/2} (2 z^3 + 49 z^2 + 352 z + 728) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.ahtn.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{64 e^{-z} \sqrt{\pi} (2 z^3 - 49 z^2 + 352 z - 728) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{14175} + \frac{-128 z^8 + 3072 z^7 - 21056 z^6 + 37440 z^5 + 11440 z^4 + 9504 z^3 + 11340 z^2 + 14700 z + 14175}{14175}$$

07.25.03.ahto.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, 2; z\right) = -\frac{1}{14175} e^z (256 z^8 + 5120 z^7 + 26880 z^6 + 26880 z^5 - 16800 z^4 + 20160 z^3 - 25200 z^2 + 25200 z - 14175)$$

07.25.03.ahtp.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-64 z^7 - 960 z^6 - 2880 z^5 + 1040 z^4 - 1056 z^3 + 1620 z^2 - 2940 z + 4725}{4725} - \frac{32 e^z \sqrt{\pi} z^{11/2} (2 z^2 + 31 z + 104) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.ahtq.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{64z^7 - 960z^6 + 2880z^5 + 1040z^4 + 1056z^3 + 1620z^2 + 2940z + 4725}{4725} - \frac{32e^{-z}\sqrt{\pi}z^{11/2}(2z^2 - 31z + 104)\operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.ahtr.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, 3; z\right) = \frac{286}{15z^2} - \frac{1}{14175z^2} 2e^z(256z^9 + 2816z^8 + 4352z^7 - 3584z^6 + 4704z^5 - 3360z^4 - 11760z^3 + 60480z^2 - 135135z + 135135)$$

07.25.03.ahts.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{945}(-32z^6 - 192z^5 + 80z^4 - 96z^3 + 180z^2 - 420z + 945) - \frac{16}{945}e^z\sqrt{\pi}z^{11/2}(2z + 13)\operatorname{erf}(\sqrt{z})$$

07.25.03.ahtt.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{16}{945}e^{-z}\sqrt{\pi}(2z - 13)\operatorname{erfi}(\sqrt{z})z^{11/2} + \frac{1}{945}(-32z^6 + 192z^5 + 80z^4 + 96z^3 + 180z^2 + 420z + 945)$$

07.25.03.ahtu.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, 4; z\right) = \frac{286(z - 30)}{5z^3} - \frac{1}{4725z^3} 2e^z(256z^9 + 512z^8 + 256z^7 - 5376z^6 + 36960z^5 - 188160z^4 + 740880z^3 - 2162160z^2 + 4189185z - 4054050)$$

07.25.03.ahtv.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-16z^8 + 48z^7 - 352z^6 + 2460z^5 - 14980z^4 + 76935z^3 - 322560z^2 + 1075200z - 3225600}{135z^3} - \frac{1}{135z^{7/2}} 8e^z\sqrt{\pi}(2z^9 - 5z^8 + 40z^7 - 280z^6 + 1680z^5 - 8400z^4 + 33600z^3 - 100800z^2 + 201600z - 201600)\operatorname{erf}(\sqrt{z})$$

07.25.03.ahtw.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{16z^8 + 48z^7 + 352z^6 + 2460z^5 + 14980z^4 + 76935z^3 + 322560z^2 + 1075200z + 3225600}{135z^3} - \frac{1}{135z^{7/2}} 8e^{-z}\sqrt{\pi}(2z^9 + 5z^8 + 40z^7 + 280z^6 + 1680z^5 + 8400z^4 + 33600z^3 + 100800z^2 + 201600z + 201600)\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahtx.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, 5; z\right) = \frac{572(z^2 - 60z - 1530)}{5z^4} - \frac{1}{4725z^4} (8e^z(256z^9 - 1792z^8 + 14592z^7 - 107520z^6 + 682080z^5 - 3598560z^4 + 15135120z^3 - 47567520z^2 + 99324225z - 103378275))$$

07.25.03.ahty.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-8z^8 + 96z^7 - 948z^6 + 7924z^5 - 55665z^4 + 322560z^3 - 1494528z^2 + 5160960z - 20321280}{15z^4} - \frac{1}{15z^{9/2}} \left(4e^z \sqrt{\pi} (2z^9 - 23z^8 + 224z^7 - 1848z^6 + 12768z^5 - 72240z^4 + 322560z^3 - 1068480z^2 + 2338560z - 2540160) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ahtz.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{-8z^8 - 96z^7 - 948z^6 - 7924z^5 - 55665z^4 - 322560z^3 - 1494528z^2 - 5160960z - 20321280}{15z^4} + \frac{1}{15z^{9/2}} \left(4e^{-z} \sqrt{\pi} (2z^9 + 23z^8 + 224z^7 + 1848z^6 + 12768z^5 + 72240z^4 + 322560z^3 + 1068480z^2 + 2338560z + 2540160) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ahu0.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{9}{2}, 6; z\right) = \frac{572(z^3 - 90z^2 - 4590z - 38760)}{3z^5} - \frac{1}{945z^5} \left(8e^z (256z^9 - 4096z^8 + 47360z^7 - 439040z^6 + 3316320z^5 - 20180160z^4 + 95855760z^3 - 335134800z^2 + 769593825z - 872972100)\right)$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = -\frac{7}{2}$

07.25.03.ahu1.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{165375} (2048z^{12} + 124928z^{11} + 2898944z^{10} + 32629760z^9 + 188200704z^8 + 539298816z^7 + 679680960z^6 + 275647680z^5 + 10810800z^4 + 332640z^3 + 102060z^2 + 94500z + 165375) + \frac{1}{165375} \left(1024e^z \sqrt{\pi} (2z^{25/2} + 123z^{23/2} + 2891z^{21/2} + 33222z^{19/2} + 198450z^{17/2} + 605640z^{15/2} + 864360z^{13/2} + 468720z^{11/2} + 55440z^{9/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ahu2.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{165375} (2048z^{12} - 124928z^{11} + 2898944z^{10} - 32629760z^9 + 188200704z^8 - 539298816z^7 + 679680960z^6 - 275647680z^5 + 10810800z^4 - 332640z^3 + 102060z^2 - 94500z + 165375) - \frac{1}{165375} \left(1024e^{-z} \sqrt{\pi} (2z^{25/2} - 123z^{23/2} + 2891z^{21/2} - 33222z^{19/2} + 198450z^{17/2} - 605640z^{15/2} + 864360z^{13/2} - 468720z^{11/2} + 55440z^{9/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ahu3.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{23625} (-1024 z^{11} - 54272 z^{10} - 1070080 z^9 - 9920256 z^8 - 44971008 z^7 - 93616320 z^6 - 72959040 z^5 - 10810800 z^4 + 332640 z^3 + 34020 z^2 + 18900 z + 23625) - \frac{1}{23625} (512 e^z \sqrt{\pi} (2 z^{23/2} + 107 z^{21/2} + 2142 z^{19/2} + 20370 z^{17/2} + 96600 z^{15/2} + 219240 z^{13/2} + 206640 z^{11/2} + 55440 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ahu4.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{23625} (1024 z^{11} - 54272 z^{10} + 1070080 z^9 - 9920256 z^8 + 44971008 z^7 - 93616320 z^6 + 72959040 z^5 - 10810800 z^4 - 332640 z^3 + 34020 z^2 - 18900 z + 23625) - \frac{1}{23625} (512 e^{-z} \sqrt{\pi} (2 z^{23/2} - 107 z^{21/2} + 2142 z^{19/2} - 20370 z^{17/2} + 96600 z^{15/2} - 219240 z^{13/2} + 206640 z^{11/2} - 55440 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahu5.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{4725} (512 z^{10} + 23040 z^9 + 374016 z^8 + 2726912 z^7 + 9011520 z^6 + 11753280 z^5 + 3603600 z^4 - 332640 z^3 + 34020 z^2 + 6300 z + 4725) + \frac{1}{4725} 256 e^z \sqrt{\pi} (2 z^{21/2} + 91 z^{19/2} + 1505 z^{17/2} + 11340 z^{15/2} + 39900 z^{13/2} + 59640 z^{11/2} + 27720 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahu6.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{4725} (512 z^{10} - 23040 z^9 + 374016 z^8 - 2726912 z^7 + 9011520 z^6 - 11753280 z^5 + 3603600 z^4 + 332640 z^3 + 34020 z^2 - 6300 z + 4725) - \frac{1}{4725} 256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 91 z^{19/2} + 1505 z^{17/2} - 11340 z^{15/2} + 39900 z^{13/2} - 59640 z^{11/2} + 27720 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahu7.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{1575} (-256 z^9 - 9472 z^8 - 120832 z^7 - 642880 z^6 - 1341120 z^5 - 720720 z^4 + 110880 z^3 - 34020 z^2 + 6300 z + 1575) - \frac{128 e^z \sqrt{\pi} (2 z^{19/2} + 75 z^{17/2} + 980 z^{15/2} + 5460 z^{13/2} + 12600 z^{11/2} + 9240 z^{9/2}) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.ahu8.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{1575} (256 z^9 - 9472 z^8 + 120832 z^7 - 642880 z^6 + 1341120 z^5 - 720720 z^4 - 110880 z^3 - 34020 z^2 - 6300 z + 1575) - \frac{128 e^{-z} \sqrt{\pi} (2 z^{19/2} - 75 z^{17/2} + 980 z^{15/2} - 5460 z^{13/2} + 12600 z^{11/2} - 9240 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.ahu9.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{128 z^8 + 3712 z^7 + 34496 z^6 + 116160 z^5 + 102960 z^4 - 22176 z^3 + 11340 z^2 - 6300 z + 1575}{1575} + \frac{64 e^z \sqrt{\pi} (2 z^{17/2} + 59 z^{15/2} + 567 z^{13/2} + 2058 z^{11/2} + 2310 z^{9/2}) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.ahua.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{128 z^8 - 3712 z^7 + 34496 z^6 - 116160 z^5 + 102960 z^4 + 22176 z^3 + 11340 z^2 + 6300 z + 1575}{1575} - \frac{64 e^{-z} \sqrt{\pi} (2 z^{17/2} - 59 z^{15/2} + 567 z^{13/2} - 2058 z^{11/2} + 2310 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.ahub.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, 1; z\right) = \frac{e^z (128 z^8 + 3264 z^7 + 25760 z^6 + 68880 z^5 + 37800 z^4 - 13020 z^3 + 8190 z^2 - 4725 z + 1575)}{1575}$$

07.25.03.ahuc.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{32 e^z \sqrt{\pi} (2 z^3 + 43 z^2 + 266 z + 462) \operatorname{erf}(\sqrt{z}) z^{9/2}}{1575} + \frac{64 z^7 + 1344 z^6 + 7872 z^5 + 11440 z^4 - 3168 z^3 + 2268 z^2 - 2100 z + 1575}{1575}$$

07.25.03.ahud.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{32 e^{-z} \sqrt{\pi} (2 z^3 - 43 z^2 + 266 z - 462) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{1575} + \frac{-64 z^7 + 1344 z^6 - 7872 z^5 + 11440 z^4 + 3168 z^3 + 2268 z^2 + 2100 z + 1575}{1575}$$

07.25.03.ahue.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^z (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575)}{1575}$$

07.25.03.ahuf.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{16}{525} e^z \sqrt{\pi} (2 z^2 + 27 z + 77) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{525} (32 z^6 + 416 z^5 + 1040 z^4 - 352 z^3 + 324 z^2 - 420 z + 525)$$

07.25.03.ahug.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{1}{525} (32 z^6 - 416 z^5 + 1040 z^4 + 352 z^3 + 324 z^2 + 420 z + 525) - \frac{16}{525} e^{-z} \sqrt{\pi} z^{9/2} (2 z^2 - 27 z + 77) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahuh.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, 3; z\right) = \frac{2 e^z (128 z^8 + 1216 z^7 + 1568 z^6 - 1008 z^5 + 840 z^4 + 420 z^3 - 4410 z^2 + 10395 z - 10395)}{1575 z^2} + \frac{66}{5 z^2}$$

07.25.03.ahui.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{8}{105} e^z \sqrt{\pi} (2z + 11) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105)$$

07.25.03.ahuj.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{8}{105} e^{-z} \sqrt{\pi} (2z - 11) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} (-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105)$$

07.25.03.ahuk.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, 4; z\right) = \frac{198(z - 26)}{5z^3} + \frac{1}{525z^3} 2e^z (128z^8 + 192z^7 + 224z^6 - 2352z^5 + 12600z^4 - 49980z^3 + 145530z^2 - 280665z + 270270)$$

07.25.03.ahul.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{8z^7 - 24z^6 + 156z^5 - 940z^4 + 4815z^3 - 20160z^2 + 67200z - 201600}{15z^3} + \frac{4e^z \sqrt{\pi} (2z^8 - 5z^7 + 35z^6 - 210z^5 + 1050z^4 - 4200z^3 + 12600z^2 - 25200z + 25200) \operatorname{erf}(\sqrt{z})}{15z^{7/2}}$$

07.25.03.ahum.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{8z^7 + 24z^6 + 156z^5 + 940z^4 + 4815z^3 + 20160z^2 + 67200z + 201600}{15z^3} - \frac{1}{15z^{7/2}} 4e^{-z} \sqrt{\pi} (2z^8 + 5z^7 + 35z^6 + 210z^5 + 1050z^4 + 4200z^3 + 12600z^2 + 25200z + 25200) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahun.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, 5; z\right) = \frac{396(z^2 - 52z - 1170)}{5z^4} + \frac{1}{525z^4} 8e^z (128z^8 - 832z^7 + 6048z^6 - 38640z^5 + 205800z^4 - 873180z^3 + 2765070z^2 - 5810805z + 6081075)$$

07.25.03.ahuo.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3(4z^7 - 44z^6 + 388z^5 - 2825z^4 + 16800z^3 - 79296z^2 + 275520z - 1128960)}{5z^4} + \frac{1}{5z^{9/2}} 6e^z \sqrt{\pi} (2z^8 - 21z^7 + 182z^6 - 1302z^5 + 7560z^4 - 34440z^3 + 115920z^2 - 257040z + 282240) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahup.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{5z^{9/2}} 6e^{-z} \sqrt{\pi} (2z^8 + 21z^7 + 182z^6 + 1302z^5 + 7560z^4 + 34440z^3 + 115920z^2 + 257040z + 282240) \operatorname{erfi}(\sqrt{z}) - \frac{3(4z^7 + 44z^6 + 388z^5 + 2825z^4 + 16800z^3 + 79296z^2 + 275520z + 1128960)}{5z^4}$$

07.25.03.ahuq.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{7}{2}, 6; z\right) = \frac{132(z^3 - 78z^2 - 3510z - 26520)}{z^5} + \frac{1}{105z^5}$$

$$8e^z(128z^8 - 1856z^7 + 19040z^6 - 152880z^5 + 970200z^4 - 4753980z^3 + 17027010z^2 - 39864825z + 45945900)$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = -\frac{5}{2}$

07.25.03.ahur.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{3375}(512z^{10} + 23552z^9 + 393984z^8 + 3001344z^7 +$$

$$10650048z^6 + 15963840z^5 + 7493040z^4 + 332640z^3 + 11340z^2 + 3780z + 3375) + \frac{1}{3375}$$

$$(256e^z\sqrt{\pi}(2z^{21/2} + 93z^{19/2} + 1584z^{17/2} + 12450z^{15/2} + 46800z^{13/2} + 78840z^{11/2} + 48960z^{9/2} + 6480z^{7/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.ahus.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{3375}(512z^{10} - 23552z^9 + 393984z^8 - 3001344z^7 +$$

$$10650048z^6 - 15963840z^5 + 7493040z^4 - 332640z^3 + 11340z^2 - 3780z + 3375) - \frac{1}{3375}$$

$$(256e^{-z}\sqrt{\pi}(2z^{21/2} - 93z^{19/2} + 1584z^{17/2} - 12450z^{15/2} + 46800z^{13/2} - 78840z^{11/2} + 48960z^{9/2} - 6480z^{7/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.ahut.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{675}(-256z^9 - 9984z^8 - 137216z^7 - 819264z^6 - 2105280z^5 - 1944720z^4 - 332640z^3 + 11340z^2 + 1260z + 675) -$$

$$\frac{128}{675}e^z\sqrt{\pi}(2z^{19/2} + 79z^{17/2} + 1110z^{15/2} + 6900z^{13/2} + 19200z^{11/2} + 21240z^{9/2} + 6480z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ahuu.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{675}(256z^9 - 9984z^8 + 137216z^7 - 819264z^6 + 2105280z^5 - 1944720z^4 + 332640z^3 + 11340z^2 - 1260z + 675) -$$

$$\frac{128}{675}e^{-z}\sqrt{\pi}(2z^{19/2} - 79z^{17/2} + 1110z^{15/2} - 6900z^{13/2} + 19200z^{11/2} - 21240z^{9/2} + 6480z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahuv.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{225}(128z^8 + 4096z^7 + 44096z^6 + 191040z^5 + 306000z^4 + 110880z^3 - 11340z^2 + 1260z + 225) +$$

$$\frac{64}{225}e^z\sqrt{\pi}(2z^{17/2} + 65z^{15/2} + 720z^{13/2} + 3300z^{11/2} + 6000z^{9/2} + 3240z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ahuw.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{225} (128 z^8 - 4096 z^7 + 44096 z^6 - 191040 z^5 + 306000 z^4 - 110880 z^3 - 11340 z^2 - 1260 z + 225) - \frac{64}{225} e^{-z} \sqrt{\pi} (2 z^{17/2} - 65 z^{15/2} + 720 z^{13/2} - 3300 z^{11/2} + 6000 z^{9/2} - 3240 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahux.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{225} (-64 z^7 - 1600 z^6 - 12480 z^5 - 33840 z^4 - 22176 z^3 + 3780 z^2 - 1260 z + 225) - \frac{32}{225} e^z \sqrt{\pi} (2 z^{15/2} + 51 z^{13/2} + 414 z^{11/2} + 1230 z^{9/2} + 1080 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahuy.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{225} (64 z^7 - 1600 z^6 + 12480 z^5 - 33840 z^4 + 22176 z^3 + 3780 z^2 + 1260 z + 225) - \frac{32}{225} e^{-z} \sqrt{\pi} (2 z^{15/2} - 51 z^{13/2} + 414 z^{11/2} - 1230 z^{9/2} + 1080 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahuz.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, 1; z\right) = -\frac{1}{225} e^z (64 z^7 + 1408 z^6 + 9360 z^5 + 20400 z^4 + 8700 z^3 - 2160 z^2 + 855 z - 225)$$

07.25.03.ahv0.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{225} (-32 z^6 - 576 z^5 - 2800 z^4 - 3168 z^3 + 756 z^2 - 420 z + 225) - \frac{16}{225} e^z \sqrt{\pi} z^{7/2} (2 z^3 + 37 z^2 + 192 z + 270) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahv1.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{16}{225} e^{-z} \sqrt{\pi} (2 z^3 - 37 z^2 + 192 z - 270) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{225} (-32 z^6 + 576 z^5 - 2800 z^4 + 3168 z^3 + 756 z^2 + 420 z + 225)$$

07.25.03.ahv2.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, 2; z\right) = -\frac{1}{225} e^z (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225)$$

07.25.03.ahv3.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{75} (-16 z^5 - 176 z^4 - 352 z^3 + 108 z^2 - 84 z + 75) - \frac{8}{75} e^z \sqrt{\pi} z^{7/2} (2 z^2 + 23 z + 54) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahv4.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{75} (16 z^5 - 176 z^4 + 352 z^3 + 108 z^2 + 84 z + 75) - \frac{8}{75} e^{-z} \sqrt{\pi} z^{7/2} (2 z^2 - 23 z + 54) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahv5.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, 3; z\right) = \frac{42}{5 z^2} - \frac{2 e^z (64 z^7 + 512 z^6 + 528 z^5 - 240 z^4 + 60 z^3 + 360 z^2 - 945 z + 945)}{225 z^2}$$

07.25.03.ahv6.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{15}(-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15}e^z \sqrt{\pi} z^{7/2} (2z + 9) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahv7.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{4}{15}e^{-z} \sqrt{\pi} (2z - 9) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{15}(-8z^4 + 32z^3 + 12z^2 + 12z + 15)$$

07.25.03.ahv8.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, 4; z\right) = \frac{126(z - 22)}{5z^3} - \frac{2e^z(64z^7 + 64z^6 + 144z^5 - 960z^4 + 3900z^3 - 11340z^2 + 21735z - 20790)}{75z^3}$$

07.25.03.ahv9.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(4z^6 - 12z^5 + 68z^4 - 345z^3 + 1440z^2 - 4800z + 14400)}{15z^3} - \frac{14e^z \sqrt{\pi} (2z^7 - 5z^6 + 30z^5 - 150z^4 + 600z^3 - 1800z^2 + 3600z - 3600) \operatorname{erf}(\sqrt{z})}{15z^{7/2}}$$

07.25.03.ahva.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(4z^6 + 12z^5 + 68z^4 + 345z^3 + 1440z^2 + 4800z + 14400)}{15z^3} - \frac{14e^{-z} \sqrt{\pi} (2z^7 + 5z^6 + 30z^5 + 150z^4 + 600z^3 + 1800z^2 + 3600z + 3600) \operatorname{erfi}(\sqrt{z})}{15z^{7/2}}$$

07.25.03.ahvb.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, 5; z\right) = \frac{252(z^2 - 44z - 858)}{5z^4} - \frac{8e^z(64z^7 - 384z^6 + 2448z^5 - 13200z^4 + 56700z^3 - 181440z^2 + 384615z - 405405)}{75z^4}$$

07.25.03.ahvc.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{21(2z^6 - 20z^5 + 155z^4 - 960z^3 + 4656z^2 - 16320z + 70560)}{5z^4} - \frac{21e^z \sqrt{\pi} (2z^7 - 19z^6 + 144z^5 - 870z^4 + 4080z^3 - 14040z^2 + 31680z - 35280) \operatorname{erf}(\sqrt{z})}{5z^{9/2}}$$

07.25.03.ahvd.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z} \sqrt{\pi} (2z^7 + 19z^6 + 144z^5 + 870z^4 + 4080z^3 + 14040z^2 + 31680z + 35280) \operatorname{erfi}(\sqrt{z})}{5z^{9/2}} - \frac{21(2z^6 + 20z^5 + 155z^4 + 960z^3 + 4656z^2 + 16320z + 70560)}{5z^4}$$

07.25.03.ahve.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{5}{2}, 6; z\right) = \frac{84(z^3 - 66z^2 - 2574z - 17160)}{z^5} - \frac{8e^z(64z^7 - 832z^6 + 7440z^5 - 50400z^4 + 258300z^3 - 956340z^2 + 2297295z - 2702700)}{15z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = -\frac{3}{2}$

07.25.03.ahvf.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{135}(128z^8 + 4224z^7 + 47552z^6 + 221376z^5 + 407600z^4 + 225120z^3 + 11340z^2 + 420z + 135) + \frac{64}{135}e^z\sqrt{\pi}(2z^{17/2} + 67z^{15/2} + 775z^{13/2} + 3800z^{11/2} + 7800z^{9/2} + 5640z^{7/2} + 840z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ahvg.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{135}(128z^8 - 4224z^7 + 47552z^6 - 221376z^5 + 407600z^4 - 225120z^3 + 11340z^2 - 420z + 135) - \frac{64}{135}e^{-z}\sqrt{\pi}(2z^{17/2} - 67z^{15/2} + 775z^{13/2} - 3800z^{11/2} + 7800z^{9/2} - 5640z^{7/2} + 840z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahvh.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{45}(-64z^7 - 1728z^6 - 15168z^5 - 50800z^4 - 57120z^3 - 11340z^2 + 420z + 45) - \frac{32}{45}e^z\sqrt{\pi}(2z^{15/2} + 55z^{13/2} + 500z^{11/2} + 1800z^{9/2} + 2400z^{7/2} + 840z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ahvi.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{45}(64z^7 - 1728z^6 + 15168z^5 - 50800z^4 + 57120z^3 - 11340z^2 - 420z + 45) - \frac{32}{45}e^{-z}\sqrt{\pi}(2z^{15/2} - 55z^{13/2} + 500z^{11/2} - 1800z^{9/2} + 2400z^{7/2} - 840z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahvj.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{45}(32z^6 + 672z^5 + 4240z^4 + 8736z^3 + 3780z^2 - 420z + 45) + \frac{16}{45}e^z\sqrt{\pi}(2z^{13/2} + 43z^{11/2} + 285z^{9/2} + 660z^{7/2} + 420z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ahvk.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{45}(32z^6 - 672z^5 + 4240z^4 - 8736z^3 + 3780z^2 + 420z + 45) - \frac{16}{45}e^{-z}\sqrt{\pi}(2z^{13/2} - 43z^{11/2} + 285z^{9/2} - 660z^{7/2} + 420z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahvl.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{45}e^z(32z^6 + 592z^5 + 3200z^4 + 5400z^3 + 1650z^2 - 255z + 45)$$

07.25.03.ahvm.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{8}{45} e^z \sqrt{\pi} (2z^3 + 31z^2 + 130z + 140) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{45} (16z^5 + 240z^4 + 928z^3 + 756z^2 - 140z + 45)$$

07.25.03.ahvn.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{8}{45} e^{-z} \sqrt{\pi} (2z^3 - 31z^2 + 130z - 140) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{45} (-16z^5 + 240z^4 - 928z^3 + 756z^2 + 140z + 45)$$

07.25.03.ahvo.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{45} e^z (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45)$$

07.25.03.ahvp.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{4}{15} e^z \sqrt{\pi} (2z^2 + 19z + 35) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{15} (8z^4 + 72z^3 + 108z^2 - 28z + 15)$$

07.25.03.ahvq.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{15} (8z^4 - 72z^3 + 108z^2 + 28z + 15) - \frac{4}{15} e^{-z} \sqrt{\pi} z^{5/2} (2z^2 - 19z + 35) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahvr.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, 3; z\right) = \frac{2e^z(32z^6 + 208z^5 + 160z^4 - 40z^3 - 30z^2 + 105z - 105)}{45z^2} + \frac{14}{3z^2}$$

07.25.03.ahvs.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{2}{3} e^z \sqrt{\pi} (2z + 7) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (4z^3 + 12z^2 - 4z + 3)$$

07.25.03.ahvt.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{2}{3} e^{-z} \sqrt{\pi} (2z - 7) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{3} (-4z^3 + 12z^2 + 4z + 3)$$

07.25.03.ahvu.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, 4; z\right) = \frac{14(z-18)}{z^3} + \frac{2e^z(32z^6 + 16z^5 + 80z^4 - 360z^3 + 1050z^2 - 1995z + 1890)}{15z^3}$$

07.25.03.ahvv.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(2z^5 - 6z^4 + 29z^3 - 120z^2 + 400z - 1200)}{3z^3} + \frac{7e^z \sqrt{\pi} (2z^6 - 5z^5 + 25z^4 - 100z^3 + 300z^2 - 600z + 600) \operatorname{erf}(\sqrt{z})}{3z^{7/2}}$$

07.25.03.ahvw.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7(2z^5 + 6z^4 + 29z^3 + 120z^2 + 400z + 1200)}{3z^3} - \frac{7e^{-z} \sqrt{\pi} (2z^6 + 5z^5 + 25z^4 + 100z^3 + 300z^2 + 600z + 600) \operatorname{erfi}(\sqrt{z})}{3z^{7/2}}$$

07.25.03.ahvx.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, 5; z\right) = \frac{28(z^2 - 36z - 594)}{z^4} + \frac{8e^z(32z^6 - 176z^5 + 960z^4 - 4200z^3 + 13650z^2 - 29295z + 31185)}{15z^4}$$

07.25.03.ahvy.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{21(z^5 - 9z^4 + 60z^3 - 304z^2 + 1080z - 5040)}{z^4} + \frac{21e^z\sqrt{\pi}(2z^6 - 17z^5 + 110z^4 - 540z^3 + 1920z^2 - 4440z + 5040)\operatorname{erf}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.ahvz.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z}\sqrt{\pi}(2z^6 + 17z^5 + 110z^4 + 540z^3 + 1920z^2 + 4440z + 5040)\operatorname{erfi}(\sqrt{z})}{2z^{9/2}} - \frac{21(z^5 + 9z^4 + 60z^3 + 304z^2 + 1080z + 5040)}{z^4}$$

07.25.03.ahw0.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{3}{2}, 6; z\right) = \frac{140(z^3 - 54z^2 - 1782z - 10296)}{3z^5} + \frac{8e^z(32z^6 - 368z^5 + 2800z^4 - 15400z^3 + 59850z^2 - 148995z + 180180)}{3z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = -\frac{1}{2}$

07.25.03.ahw1.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{15}(32z^6 + 704z^5 + 4784z^4 + 11360z^3 + 7500z^2 + 420z + 15) + \frac{16}{15}e^z\sqrt{\pi}(2z^{13/2} + 45z^{11/2} + 320z^{9/2} + 840z^{7/2} + 720z^{5/2} + 120z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ahw2.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{15}(32z^6 - 704z^5 + 4784z^4 - 11360z^3 + 7500z^2 - 420z + 15) - \frac{16}{15}e^{-z}\sqrt{\pi}(2z^{13/2} - 45z^{11/2} + 320z^{9/2} - 840z^{7/2} + 720z^{5/2} - 120z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahw3.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{15}(-16z^5 - 272z^4 - 1312z^3 - 1860z^2 - 420z + 15) - \frac{8}{15}e^z\sqrt{\pi}(2z^{11/2} + 35z^{9/2} + 180z^{7/2} + 300z^{5/2} + 120z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ahw4.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{15}(16z^5 - 272z^4 + 1312z^3 - 1860z^2 + 420z + 15) - \frac{8}{15}e^{-z}\sqrt{\pi}(2z^{11/2} - 35z^{9/2} + 180z^{7/2} - 300z^{5/2} + 120z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahw5.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, 1; z\right) = -\frac{1}{15} e^z (16z^5 + 240z^4 + 1000z^3 + 1200z^2 + 225z - 15)$$

07.25.03.ahw6.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{15} (-8z^4 - 96z^3 - 276z^2 - 140z + 15) - \frac{4}{15} e^z \sqrt{\pi} (2z^{9/2} + 25z^{7/2} + 80z^{5/2} + 60z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahw7.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} (-8z^4 + 96z^3 - 276z^2 + 140z + 15) + \frac{4}{15} e^{-z} \sqrt{\pi} (2z^{9/2} - 25z^{7/2} + 80z^{5/2} - 60z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahw8.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, 2; z\right) = -\frac{1}{15} e^z (16z^4 + 160z^3 + 360z^2 + 120z - 15)$$

07.25.03.ahw9.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{5} (-4z^3 - 28z^2 - 28z + 5) - \frac{2}{5} e^z \sqrt{\pi} z^{3/2} (2z^2 + 15z + 20) \operatorname{erf}(\sqrt{z})$$

07.25.03.ahwa.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{5} (4z^3 - 28z^2 + 28z + 5) - \frac{2}{5} e^{-z} \sqrt{\pi} z^{3/2} (2z^2 - 15z + 20) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ahwb.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, 3; z\right) = \frac{2}{z^2} - \frac{2 e^z (16z^5 + 80z^4 + 40z^3 - 15z + 15)}{15z^2}$$

07.25.03.ahwc.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -2z^2 - e^z \sqrt{\pi} (2z + 5) \operatorname{erf}(\sqrt{z}) z^{3/2} - 4z + 1$$

07.25.03.ahwd.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = -2z^2 + e^{-z} \sqrt{\pi} (2z - 5) \operatorname{erfi}(\sqrt{z}) z^{3/2} + 4z + 1$$

07.25.03.ahwe.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, 4; z\right) = \frac{6(z - 14)}{z^3} - \frac{2 e^z (16z^5 + 40z^3 - 120z^2 + 225z - 210)}{5z^3}$$

07.25.03.ahwf.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{7(z^4 - 3z^3 + 12z^2 - 40z + 120)}{z^3} - \frac{7 e^z \sqrt{\pi} (2z^5 - 5z^4 + 20z^3 - 60z^2 + 120z - 120) \operatorname{erf}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.ahwg.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7(z^4 + 3z^3 + 12z^2 + 40z + 120)}{z^3} - \frac{7 e^{-z} \sqrt{\pi} (2z^5 + 5z^4 + 20z^3 + 60z^2 + 120z + 120) \operatorname{erfi}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.ahwh.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, 5; z\right) = \frac{12(z^2 - 28z - 378)}{z^4} - \frac{8 e^z (16z^5 - 80z^4 + 360z^3 - 1200z^2 + 2625z - 2835)}{5z^4}$$

07.25.03.ahwi.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{63(z^4 - 8z^3 + 44z^2 - 160z + 840)}{2z^4} - \frac{63e^z\sqrt{\pi}(2z^5 - 15z^4 + 80z^3 - 300z^2 + 720z - 840)\operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.ahwj.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63e^{-z}\sqrt{\pi}(2z^5 + 15z^4 + 80z^3 + 300z^2 + 720z + 840)\operatorname{erfi}(\sqrt{z})}{4z^{9/2}} - \frac{63(z^4 + 8z^3 + 44z^2 + 160z + 840)}{2z^4}$$

07.25.03.ahwk.01

$${}_2F_2\left(2, \frac{7}{2}; -\frac{1}{2}, 6; z\right) = \frac{20(z^3 - 42z^2 - 1134z - 5544)}{z^5} - \frac{8e^z(16z^5 - 160z^4 + 1000z^3 - 4200z^2 + 11025z - 13860)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = \frac{1}{2}$

07.25.03.ahwl.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{15}(8z^4 + 104z^3 + 348z^2 + 276z + 15) + \frac{4}{15}e^z\sqrt{\pi}(2z^{9/2} + 27z^{7/2} + 99z^{5/2} + 102z^{3/2} + 18\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.ahwm.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{15}(8z^4 - 104z^3 + 348z^2 - 276z + 15) - \frac{4}{15}e^{-z}\sqrt{\pi}(2z^{9/2} - 27z^{7/2} + 99z^{5/2} - 102z^{3/2} + 18\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahwn.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{15}e^z(8z^4 + 92z^3 + 270z^2 + 195z + 15)$$

07.25.03.ahwo.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{15}(4z^3 + 36z^2 + 68z + 15) + \frac{2}{15}e^z\sqrt{\pi}\sqrt{z}(2z^3 + 19z^2 + 42z + 18)\operatorname{erf}(\sqrt{z})$$

07.25.03.ahwp.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{15}(-4z^3 + 36z^2 - 68z + 15) + \frac{2}{15}e^{-z}\sqrt{\pi}\sqrt{z}(2z^3 - 19z^2 + 42z - 18)\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahwq.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{15}e^z(8z^3 + 60z^2 + 90z + 15)$$

07.25.03.ahwr.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{5}(2z^2 + 10z + 5) + \frac{1}{5}e^z\sqrt{\pi}\sqrt{z}(2z^2 + 11z + 9)\operatorname{erf}(\sqrt{z})$$

07.25.03.ahws.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{5}(2z^2 - 10z + 5) - \frac{1}{5}e^{-z}\sqrt{\pi}\sqrt{z}(2z^2 - 11z + 9)\operatorname{erfi}(\sqrt{z})$$

07.25.03.ahwt.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, 3; z\right) = \frac{2e^z(8z^4 + 28z^3 + 6z^2 + 3z - 3)}{15z^2} + \frac{2}{5z^2}$$

07.25.03.ahwu.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = z + \frac{1}{2}e^z\sqrt{\pi}(2z + 3)\operatorname{erf}(\sqrt{z})\sqrt{z} + 1$$

07.25.03.ahvw.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = -z + \frac{1}{2}e^{-z}\sqrt{\pi}(2z - 3)\operatorname{erfi}(\sqrt{z})\sqrt{z} + 1$$

07.25.03.ahww.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, 4; z\right) = \frac{6(z - 10)}{5z^3} + \frac{2e^z(8z^4 - 4z^3 + 18z^2 - 33z + 30)}{5z^3}$$

07.25.03.ahwx.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7(z^3 - 3z^2 + 10z - 30)}{2z^3} + \frac{7e^z\sqrt{\pi}(2z^4 - 5z^3 + 15z^2 - 30z + 30)\operatorname{erf}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.ahwy.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7(z^3 + 3z^2 + 10z + 30)}{2z^3} - \frac{7e^{-z}\sqrt{\pi}(2z^4 + 5z^3 + 15z^2 + 30z + 30)\operatorname{erfi}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.ahwz.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, 5; z\right) = \frac{12(z^2 - 20z - 210)}{5z^4} + \frac{8e^z(8z^4 - 36z^3 + 126z^2 - 285z + 315)}{5z^4}$$

07.25.03.ahx0.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{63(5z^3 - 34z^2 + 130z - 840)}{20z^4} + \frac{63e^z\sqrt{\pi}(2z^4 - 13z^3 + 54z^2 - 138z + 168)\operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.ahx1.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63e^{-z}\sqrt{\pi}(2z^4 + 13z^3 + 54z^2 + 138z + 168)\operatorname{erfi}(\sqrt{z})}{8z^{9/2}} - \frac{63(5z^3 + 34z^2 + 130z + 840)}{20z^4}$$

07.25.03.ahx2.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{1}{2}, 6; z\right) = \frac{4(z^3 - 30z^2 - 630z - 2520)}{z^5} + \frac{8e^z(8z^4 - 68z^3 + 330z^2 - 945z + 1260)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = 1$

07.25.03.ahx3.01

$${}_2F_2\left(2, \frac{7}{2}; 1, 1; z\right) = \frac{1}{30}e^{z/2}(8z^4 + 84z^3 + 236z^2 + 195z + 30)I_0\left(\frac{z}{2}\right) + \frac{1}{30}e^{z/2}(8z^4 + 76z^3 + 164z^2 + 61z)I_1\left(\frac{z}{2}\right)$$

07.25.03.ahx4.01

$${}_2F_2\left(2, \frac{7}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{15}e^z(4z^3 + 32z^2 + 55z + 15)$$

07.25.03.ahx5.01

$${}_2F_2\left(2, \frac{7}{2}; 1, 2; z\right) = \frac{1}{15} e^{z/2} (4z^3 + 28z^2 + 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^3 + 24z^2 + 23z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ahx6.01

$${}_2F_2\left(2, \frac{7}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{5} e^z (2z^2 + 9z + 5)$$

07.25.03.ahx7.01

$${}_2F_2\left(2, \frac{7}{2}; 1, 3; z\right) = \frac{2}{15} e^{z/2} (4z^2 + 14z + 7) I_0\left(\frac{z}{2}\right) + \frac{2 e^{z/2} (4z^3 + 10z^2 - z + 2) I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.ahx8.01

$${}_2F_2\left(2, \frac{7}{2}; 1, \frac{7}{2}; z\right) = e^z (z + 1)$$

07.25.03.ahx9.01

$${}_2F_2\left(2, \frac{7}{2}; 1, 4; z\right) = \frac{8 e^{z/2} (z^2 + 1) I_0\left(\frac{z}{2}\right)}{5z} + \frac{4 e^{z/2} (2z^3 - 2z^2 + 5z - 8) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.ahxa.01

$${}_2F_2\left(2, \frac{7}{2}; 1, \frac{9}{2}; z\right) = \frac{7 e^z (8z^3 - 20z^2 + 50z - 75)}{16z^3} + \frac{525 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.ahxb.01

$${}_2F_2\left(2, \frac{7}{2}; 1, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (8z^3 + 20z^2 + 50z + 75)}{16z^3} - \frac{525 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.ahxc.01

$${}_2F_2\left(2, \frac{7}{2}; 1, 5; z\right) = \frac{16 e^{z/2} (2z^2 - 7z + 18) I_0\left(\frac{z}{2}\right)}{5z^2} + \frac{16 e^{z/2} (2z^3 - 9z^2 + 28z - 72) I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.ahxd.01

$${}_2F_2\left(2, \frac{7}{2}; 1, \frac{11}{2}; z\right) = \frac{63 e^z (16z^3 - 96z^2 + 340z - 735)}{64z^4} + \frac{945 \sqrt{\pi} (10z + 49) \operatorname{erfi}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.ahxe.01

$${}_2F_2\left(2, \frac{7}{2}; 1, \frac{11}{2}; -z\right) = -\frac{63 e^{-z} (16z^3 + 96z^2 + 340z + 735)}{64z^4} - \frac{945 \sqrt{\pi} (10z - 49) \operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.ahxf.01

$${}_2F_2\left(2, \frac{7}{2}; 1, 6; z\right) = \frac{32 e^{z/2} (z^2 - 7z + 32) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^3 - 8z^2 + 28z - 128) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = \frac{3}{2}$

07.25.03.ahxg.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{15} (2z^2 + 12z + 11) + \frac{e^z \sqrt{\pi} (2z^3 + 13z^2 + 16z + 2) \operatorname{erf}(\sqrt{z})}{15\sqrt{z}}$$

07.25.03.ahxh.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{15} (2z^2 - 12z + 11) + \frac{e^{-z} \sqrt{\pi} (-2z^3 + 13z^2 - 16z + 2) \operatorname{erfi}(\sqrt{z})}{15 \sqrt{z}}$$

07.25.03.ahxi.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{15} e^z (4z^2 + 20z + 15)$$

07.25.03.ahxj.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{z+3}{5} + \frac{e^z \sqrt{\pi} (2z^2 + 7z + 2) \operatorname{erf}(\sqrt{z})}{10 \sqrt{z}}$$

07.25.03.ahxk.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{3-z}{5} + \frac{e^{-z} \sqrt{\pi} (2z^2 - 7z + 2) \operatorname{erfi}(\sqrt{z})}{10 \sqrt{z}}$$

07.25.03.ahxl.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{3}{2}, 3; z\right) = \frac{2e^z (4z^3 + 8z^2 - z + 1)}{15z^2} - \frac{2}{15z^2}$$

07.25.03.ahxm.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z \sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4 \sqrt{z}} + \frac{1}{2}$$

07.25.03.ahxn.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4 \sqrt{z}} + \frac{1}{2}$$

07.25.03.ahxo.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{3}{2}, 4; z\right) = \frac{2e^z (4z^3 - 4z^2 + 7z - 6)}{5z^3} - \frac{2(z-6)}{5z^3}$$

07.25.03.ahxp.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(3z^2 - 10z + 30)}{12z^3} + \frac{7e^z \sqrt{\pi} (2z^3 - 5z^2 + 10z - 10) \operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.ahxq.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (2z^3 + 5z^2 + 10z + 10) \operatorname{erfi}(\sqrt{z})}{8z^{7/2}} - \frac{7(3z^2 + 10z + 30)}{12z^3}$$

07.25.03.ahxr.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{3}{2}, 5; z\right) = \frac{8e^z (4z^3 - 16z^2 + 39z - 45)}{5z^4} - \frac{4(z^2 - 12z - 90)}{5z^4}$$

07.25.03.ahxs.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{21(13z^2 - 60z + 630)}{40z^4} + \frac{63e^z \sqrt{\pi} (2z^3 - 11z^2 + 32z - 42) \operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.ahxt.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21(13z^2 + 60z + 630)}{40z^4} - \frac{63e^{-z}\sqrt{\pi}(2z^3 + 11z^2 + 32z + 42)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.ahxu.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{3}{2}, 6; z\right) = \frac{8e^z(4z^3 - 28z^2 + 95z - 140)}{z^5} - \frac{4(z^3 - 18z^2 - 270z - 840)}{3z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = 2$

07.25.03.ahxv.01

$${}_2F_2\left(2, \frac{7}{2}; 2, 2; z\right) = \frac{1}{15}e^{z/2}(4z^2 + 18z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}(4z^2 + 14z + 3)I_1\left(\frac{z}{2}\right)$$

07.25.03.ahxw.01

$${}_2F_2\left(2, \frac{7}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{5}e^z(2z + 5)$$

07.25.03.ahxx.01

$${}_2F_2\left(2, \frac{7}{2}; 2, 3; z\right) = \frac{8}{15}e^{z/2}(z + 2)I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2}(2z^2 + 2z - 1)I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.ahxy.01

$${}_2F_2\left(2, \frac{7}{2}; 2, \frac{7}{2}; z\right) = e^z$$

07.25.03.ahxz.01

$${}_2F_2\left(2, \frac{7}{2}; 2, 4; z\right) = \frac{4e^{z/2}(2z - 1)I_0\left(\frac{z}{2}\right)}{5z} + \frac{4e^{z/2}(2z^2 - 3z + 4)I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.ahy0.01

$${}_2F_2\left(2, \frac{7}{2}; 2, \frac{9}{2}; z\right) = \frac{7e^z(4z^2 - 10z + 15)}{8z^3} - \frac{105\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.ahy1.01

$${}_2F_2\left(2, \frac{7}{2}; 2, \frac{9}{2}; -z\right) = \frac{105\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{7e^{-z}(4z^2 + 10z + 15)}{8z^3}$$

07.25.03.ahy2.01

$${}_2F_2\left(2, \frac{7}{2}; 2, 5; z\right) = \frac{32e^{z/2}(z - 3)I_0\left(\frac{z}{2}\right)}{5z^2} + \frac{32e^{z/2}(z^2 - 4z + 12)I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.ahy3.01

$${}_2F_2\left(2, \frac{7}{2}; 2, \frac{11}{2}; z\right) = \frac{63e^z(8z^2 - 40z + 105)}{32z^4} - \frac{945\sqrt{\pi}(2z + 7)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.ahy4.01

$${}_2F_2\left(2, \frac{7}{2}; 2, \frac{11}{2}; -z\right) = \frac{63e^{-z}(8z^2 + 40z + 105)}{32z^4} + \frac{945\sqrt{\pi}(2z - 7)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.ahy5.01

$${}_2F_2\left(2, \frac{7}{2}; 2, 6; z\right) = \frac{32 e^{z/2} (z-8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = \frac{5}{2}$

07.25.03.ahy6.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3(z+1)}{10z} + \frac{3 e^z \sqrt{\pi} (2z^2 + 3z - 1) \operatorname{erf}(\sqrt{z})}{20 z^{3/2}}$$

07.25.03.ahy7.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3(z-1)}{10z} - \frac{3 e^{-z} \sqrt{\pi} (2z^2 - 3z - 1) \operatorname{erfi}(\sqrt{z})}{20 z^{3/2}}$$

07.25.03.ahy8.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{5}{2}, 3; z\right) = \frac{2 e^z (2z^2 + z - 1)}{5z^2} + \frac{2}{5z^2}$$

07.25.03.ahy9.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{8 z^{3/2}} + \frac{3}{4z}$$

07.25.03.ahya.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3}{4z}$$

07.25.03.ahyb.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{5}{2}, 4; z\right) = \frac{6(z-2)}{5z^3} + \frac{6 e^z (2z^2 - 3z + 2)}{5z^3}$$

07.25.03.ahyc.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{35(z-3)}{8z^3} + \frac{21 e^z \sqrt{\pi} (2z^2 - 5z + 5) \operatorname{erf}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.ahyd.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{35(z+3)}{8z^3} - \frac{21 e^{-z} \sqrt{\pi} (2z^2 + 5z + 5) \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.ahye.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{5}{2}, 5; z\right) = \frac{12(z^2 - 4z - 18)}{5z^4} + \frac{24 e^z (2z^2 - 7z + 9)}{5z^4}$$

07.25.03.ahyf.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{63(4z^2 - 5z - 210)}{80z^4} + \frac{189 e^z \sqrt{\pi} (2z^2 - 9z + 14) \operatorname{erf}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.ahyg.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63(4z^2 + 5z - 210)}{80z^4} + \frac{189e^{-z}\sqrt{\pi}(2z^2 + 9z + 14)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.ahyh.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{5}{2}, 6; z\right) = \frac{24e^z(2z^2 - 11z + 20)}{z^5} + \frac{4(z^3 - 6z^2 - 54z - 120)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = 3$

07.25.03.ahyi.01

$${}_2F_2\left(2, \frac{7}{2}; 3, 3; z\right) = \frac{8e^{z/2}(2z^2 + z - 2)I_0\left(\frac{z}{2}\right)}{15z^2} + \frac{8e^{z/2}(2z - 1)I_1\left(\frac{z}{2}\right)}{15z} + \frac{16}{15z^2}$$

07.25.03.ahyj.01

$${}_2F_2\left(2, \frac{7}{2}; 3, \frac{7}{2}; z\right) = \frac{2e^z(z - 1)}{z^2} + \frac{2}{z^2}$$

07.25.03.ahyk.01

$${}_2F_2\left(2, \frac{7}{2}; 3, 4; z\right) = \frac{16e^{z/2}(z - 1)I_0\left(\frac{z}{2}\right)}{5z^2} + \frac{16e^{z/2}(z - 2)I_1\left(\frac{z}{2}\right)}{5z^2} + \frac{16}{5z^2}$$

07.25.03.ahyl.01

$${}_2F_2\left(2, \frac{7}{2}; 3, \frac{9}{2}; z\right) = \frac{7e^z(2z - 5)}{2z^3} + \frac{35\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{4z^{7/2}} + \frac{14}{3z^2}$$

07.25.03.ahym.01

$${}_2F_2\left(2, \frac{7}{2}; 3, \frac{9}{2}; -z\right) = \frac{7e^{-z}(2z + 5)}{2z^3} - \frac{35\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{4z^{7/2}} + \frac{14}{3z^2}$$

07.25.03.ahyn.01

$${}_2F_2\left(2, \frac{7}{2}; 3, 5; z\right) = \frac{64e^{z/2}I_0\left(\frac{z}{2}\right)}{5z^2} + \frac{64e^{z/2}(z - 6)I_1\left(\frac{z}{2}\right)}{5z^3} + \frac{32}{5z^2}$$

07.25.03.ahyo.01

$${}_2F_2\left(2, \frac{7}{2}; 3, \frac{11}{2}; z\right) = \frac{63e^z(4z - 21)}{8z^4} + \frac{63\sqrt{\pi}(10z + 21)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}} + \frac{42}{5z^2}$$

07.25.03.ahyp.01

$${}_2F_2\left(2, \frac{7}{2}; 3, \frac{11}{2}; -z\right) = -\frac{63e^{-z}(4z + 21)}{8z^4} - \frac{63\sqrt{\pi}(10z - 21)\operatorname{erf}(\sqrt{z})}{16z^{9/2}} + \frac{42}{5z^2}$$

07.25.03.ahyq.01

$${}_2F_2\left(2, \frac{7}{2}; 3, 6; z\right) = \frac{512e^{z/2}I_0\left(\frac{z}{2}\right)}{3z^3} - \frac{128e^{z/2}(z + 16)I_1\left(\frac{z}{2}\right)}{3z^4} + \frac{32}{3z^2}$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = \frac{7}{2}$

07.25.03.ahyr.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{15 e^z \sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45}{8 z^2}$$

07.25.03.ahys.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{45}{8 z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.ahyt.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{7}{2}, 4; z\right) = \frac{6 e^z (z-2)}{z^3} + \frac{6(z+2)}{z^3}$$

07.25.03.ahyu.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{35(4z+15)}{16 z^3} + \frac{105 e^z \sqrt{\pi} (2z-5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ahyv.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{35(4z-15)}{16 z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z+5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ahyw.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{7}{2}, 5; z\right) = \frac{24 e^z (z-3)}{z^4} + \frac{12(z^2+4z+6)}{z^4}$$

07.25.03.ahyx.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{63(8z^2+40z+105)}{32 z^4} + \frac{945 e^z \sqrt{\pi} (2z-7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ahyy.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{63(8z^2-40z+105)}{32 z^4} - \frac{945 e^{-z} \sqrt{\pi} (2z+7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ahyz.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{7}{2}, 6; z\right) = \frac{120 e^z (z-4)}{z^5} + \frac{20(z^3+6z^2+18z+24)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = 4$

07.25.03.ahz0.01

$${}_2F_2\left(2, \frac{7}{2}; 4, 4; z\right) = \frac{48(z+4)}{5 z^3} + \frac{48 e^{z/2} (z-4) I_0\left(\frac{z}{2}\right)}{5 z^3} + \frac{48 e^{z/2} I_1\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.ahz1.01

$${}_2F_2\left(2, \frac{7}{2}; 4, \frac{9}{2}; z\right) = \frac{14(z+6)}{z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 z^{7/2}} + \frac{21 e^z}{z^3}$$

07.25.03.ahz2.01

$${}_2F_2\left(2, \frac{7}{2}; 4, \frac{9}{2}; -z\right) = \frac{14(z-6)}{z^3} + \frac{105\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{2z^{7/2}} - \frac{21e^{-z}}{z^3}$$

07.25.03.ahz3.01

$${}_2F_2\left(2, \frac{7}{2}; 4, 5; z\right) = \frac{96(z+8)}{5z^3} - \frac{768e^{z/2}I_0\left(\frac{z}{2}\right)}{5z^3} + \frac{1152e^{z/2}I_1\left(\frac{z}{2}\right)}{5z^3}$$

07.25.03.ahz4.01

$${}_2F_2\left(2, \frac{7}{2}; 4, \frac{11}{2}; z\right) = \frac{126(z+10)}{5z^3} - \frac{189\sqrt{\pi}(10z+7)\operatorname{erfi}(\sqrt{z})}{8z^{9/2}} + \frac{1323e^z}{4z^4}$$

07.25.03.ahz5.01

$${}_2F_2\left(2, \frac{7}{2}; 4, \frac{11}{2}; -z\right) = \frac{126(z-10)}{5z^3} + \frac{189\sqrt{\pi}(10z-7)\operatorname{erf}(\sqrt{z})}{8z^{9/2}} + \frac{1323e^{-z}}{4z^4}$$

07.25.03.ahz6.01

$${}_2F_2\left(2, \frac{7}{2}; 4, 6; z\right) = \frac{32(z+12)}{z^3} - \frac{640e^{z/2}I_0\left(\frac{z}{2}\right)}{z^3} + \frac{128e^{z/2}(5z+8)I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = \frac{9}{2}$

07.25.03.ahz7.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{9}{2}, 5; z\right) = \frac{28(z^2+12z-18)}{z^4} - \frac{420\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{z^{7/2}} + \frac{504e^z}{z^4}$$

07.25.03.ahz8.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{9}{2}, 5; -z\right) = \frac{28(z^2-12z-18)}{z^4} + \frac{420\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{z^{7/2}} + \frac{504e^{-z}}{z^4}$$

07.25.03.ahz9.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{9}{2}, 6; z\right) = \frac{280e^z(5z+4)}{z^5} + \frac{140(z^3+18z^2-54z-24)}{3z^5} - \frac{1400\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ahza.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{9}{2}, 6; -z\right) = \frac{280e^{-z}(5z-4)}{z^5} + \frac{140(z^3-18z^2-54z+24)}{3z^5} + \frac{1400\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = 5$

07.25.03.ahzb.01

$${}_2F_2\left(2, \frac{7}{2}; 5, 5; z\right) = \frac{192(z^2+16z-48)}{5z^4} - \frac{1536e^{z/2}(5z-6)I_0\left(\frac{z}{2}\right)}{5z^4} + \frac{1536e^{z/2}I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.ahzc.01

$${}_2F_2\left(2, \frac{7}{2}; 5, \frac{11}{2}; z\right) = \frac{252(z^2+20z-90)}{5z^4} - \frac{189\sqrt{\pi}(10z-7)\operatorname{erfi}(\sqrt{z})}{z^{9/2}} + \frac{1890e^z}{z^4}$$

07.25.03.ahzd.01

$${}_2F_2\left(2, \frac{7}{2}; 5, \frac{11}{2}; -z\right) = \frac{252(z^2 - 20z - 90)}{5z^4} + \frac{189\sqrt{\pi}(10z + 7)\operatorname{erf}(\sqrt{z})}{z^{9/2}} + \frac{1890e^{-z}}{z^4}$$

07.25.03.ahze.01

$${}_2F_2\left(2, \frac{7}{2}; 5, 6; z\right) = \frac{64(z^2 + 24z - 144)}{z^4} - \frac{1024e^{z/2}(5z - 9)I_0\left(\frac{z}{2}\right)}{z^4} + \frac{1024e^{z/2}(5z - 4)I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = \frac{11}{2}$

07.25.03.ahzf.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{11}{2}, 6; z\right) = \frac{1260e^z(5z - 8)}{z^5} + \frac{84(z^3 + 30z^2 - 270z + 120)}{z^5} - \frac{630\sqrt{\pi}(10z - 21)\operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ahzg.01

$${}_2F_2\left(2, \frac{7}{2}; \frac{11}{2}, 6; -z\right) = \frac{1260e^{-z}(5z + 8)}{z^5} + \frac{84(z^3 - 30z^2 - 270z - 120)}{z^5} + \frac{630\sqrt{\pi}(10z + 21)\operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

For fixed z and $a_1 = 2, a_2 = \frac{7}{2}, b_1 = 6$

07.25.03.ahzh.01

$${}_2F_2\left(2, \frac{7}{2}; 6, 6; z\right) = \frac{320(z^3 + 36z^2 - 432z + 384)}{3z^5} - \frac{5120e^{z/2}(10z^2 - 39z + 24)I_0\left(\frac{z}{2}\right)}{3z^5} + \frac{5120e^{z/2}(10z - 29)I_1\left(\frac{z}{2}\right)}{3z^4}$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = -\frac{11}{2}$

07.25.03.ahzi.01

$${}_2F_2\left(2, 4; -\frac{11}{2}, 1; z\right) = \frac{1}{31185} \frac{(32z^{10} + 1232z^9 + 15816z^8 + 77940z^7 + 112896z^6 - 32256z^5 + 25200z^4 - 28800z^3 + 37800z^2 - 45360z + 31185) + 2e^z\sqrt{\pi}(16z^{21/2} + 624z^{19/2} + 8208z^{17/2} + 42636z^{15/2} + 72675z^{13/2})\operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.ahzj.01

$${}_2F_2\left(2, 4; -\frac{11}{2}, 1; -z\right) = \frac{1}{31185} \frac{(32z^{10} - 1232z^9 + 15816z^8 - 77940z^7 + 112896z^6 + 32256z^5 + 25200z^4 + 28800z^3 + 37800z^2 + 45360z + 31185) - 2e^{-z}\sqrt{\pi}(16z^{21/2} - 624z^{19/2} + 8208z^{17/2} - 42636z^{15/2} + 72675z^{13/2})\operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.ahzk.01

$${}_2F_2\left(2, 4; -\frac{11}{2}, 2; z\right) = \frac{32z^9 + 896z^8 + 7320z^7 + 16128z^6 - 5376z^5 + 5040z^4 - 7200z^3 + 12600z^2 - 22680z + 31185}{31185} + \frac{4e^z\sqrt{\pi}(8z^{19/2} + 228z^{17/2} + 1938z^{15/2} + 4845z^{13/2})\operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.ahzl.01

$${}_2F_2\left(2, 4; -\frac{11}{2}, 2; -z\right) = \frac{-32z^9 + 896z^8 - 7320z^7 + 16128z^6 + 5376z^5 + 5040z^4 + 7200z^3 + 12600z^2 + 22680z + 31185}{31185} + \frac{4e^{-z}\sqrt{\pi}(8z^{19/2} - 228z^{17/2} + 1938z^{15/2} - 4845z^{13/2})\operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.ahzm.01

$${}_2F_2\left(2, 4; -\frac{11}{2}, 3; z\right) = \frac{64z^8 + 1120z^7 + 4032z^6 - 1536z^5 + 1680z^4 - 2880z^3 + 6300z^2 - 15120z + 31185}{31185} + \frac{16e^z\sqrt{\pi}(4z^{17/2} + 72z^{15/2} + 285z^{13/2})\operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.ahzn.01

$${}_2F_2\left(2, 4; -\frac{11}{2}, 3; -z\right) = \frac{64z^8 - 1120z^7 + 4032z^6 + 1536z^5 + 1680z^4 + 2880z^3 + 6300z^2 + 15120z + 31185}{31185} - \frac{16e^{-z}\sqrt{\pi}(4z^{17/2} - 72z^{15/2} + 285z^{13/2})\operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.ahzo.01

$${}_2F_2\left(2, 4; -\frac{11}{2}, 4; z\right) = \frac{64z^7 + 448z^6 - 192z^5 + 240z^4 - 480z^3 + 1260z^2 - 3780z + 10395}{10395} + \frac{32e^z\sqrt{\pi}(2z^{15/2} + 15z^{13/2})\operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.ahzp.01

$${}_2F_2\left(2, 4; -\frac{11}{2}, 4; -z\right) = \frac{-64z^7 + 448z^6 + 192z^5 + 240z^4 + 480z^3 + 1260z^2 + 3780z + 10395}{10395} + \frac{32e^{-z}\sqrt{\pi}(2z^{15/2} - 15z^{13/2})\operatorname{erfi}(\sqrt{z})}{10395}$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = -\frac{9}{2}$

07.25.03.ahzq.01

$${}_2F_2\left(2, 4; -\frac{9}{2}, 1; z\right) = \frac{-16z^9 - 552z^8 - 6260z^7 - 26706z^6 - 32256z^5 + 8400z^4 - 5760z^3 + 5400z^2 - 5040z + 2835}{2835} + \frac{e^z\sqrt{\pi}(-16z^{19/2} - 560z^{17/2} - 6528z^{15/2} - 29580z^{13/2} - 43095z^{11/2})\operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.ahzr.01

$${}_2F_2\left(2, 4; -\frac{9}{2}, 1; -z\right) = \frac{16z^9 - 552z^8 + 6260z^7 - 26706z^6 + 32256z^5 + 8400z^4 + 5760z^3 + 5400z^2 + 5040z + 2835}{2835} + \frac{e^{-z}\sqrt{\pi}(-16z^{19/2} + 560z^{17/2} - 6528z^{15/2} + 29580z^{13/2} - 43095z^{11/2})\operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.ahzs.01

$${}_2F_2\left(2, 4; -\frac{9}{2}, 2; z\right) = \frac{-16z^8 - 400z^7 - 2868z^6 - 5376z^5 + 1680z^4 - 1440z^3 + 1800z^2 - 2520z + 2835}{2835} - \frac{2e^z\sqrt{\pi}(8z^{17/2} + 204z^{15/2} + 1530z^{13/2} + 3315z^{11/2})\operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.ahzt.01

$${}_2F_2\left(2, 4; -\frac{9}{2}, 2; -z\right) = \frac{-16z^8 + 400z^7 - 2868z^6 + 5376z^5 + 1680z^4 + 1440z^3 + 1800z^2 + 2520z + 2835}{2835} + \frac{2e^{-z}\sqrt{\pi}(8z^{17/2} - 204z^{15/2} + 1530z^{13/2} - 3315z^{11/2})\operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.ahzu.01

$${}_2F_2\left(2, 4; -\frac{9}{2}, 3; z\right) = \frac{-32z^7 - 496z^6 - 1536z^5 + 560z^4 - 576z^3 + 900z^2 - 1680z + 2835}{2835} - \frac{8e^z\sqrt{\pi}(4z^{15/2} + 64z^{13/2} + 221z^{11/2})\operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.ahzv.01

$${}_2F_2\left(2, 4; -\frac{9}{2}, 3; -z\right) = \frac{32z^7 - 496z^6 + 1536z^5 + 560z^4 + 576z^3 + 900z^2 + 1680z + 2835}{2835} - \frac{8e^{-z}\sqrt{\pi}(4z^{15/2} - 64z^{13/2} + 221z^{11/2})\operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.ahzw.01

$${}_2F_2\left(2, 4; -\frac{9}{2}, 4; z\right) = \frac{1}{945}(-32z^6 - 192z^5 + 80z^4 - 96z^3 + 180z^2 - 420z + 945) - \frac{16}{945}e^z\sqrt{\pi}(2z^{13/2} + 13z^{11/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ahzx.01

$${}_2F_2\left(2, 4; -\frac{9}{2}, 4; -z\right) = \frac{1}{945}(-32z^6 + 192z^5 + 80z^4 + 96z^3 + 180z^2 + 420z + 945) + \frac{16}{945}e^{-z}\sqrt{\pi}(2z^{13/2} - 13z^{11/2})\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = -\frac{7}{2}$

07.25.03.ahzy.01

$${}_2F_2\left(2, 4; -\frac{7}{2}, 1; z\right) = \frac{1}{315}(8z^8 + 244z^7 + 2402z^6 + 8661z^5 + 8400z^4 - 1920z^3 + 1080z^2 - 720z + 315) + \frac{1}{630}e^z\sqrt{\pi}(16z^{17/2} + 496z^{15/2} + 5040z^{13/2} + 19500z^{11/2} + 23595z^{9/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ahzz.01

$${}_2F_2\left(2, 4; -\frac{7}{2}, 1; -z\right) = \frac{1}{315} (8z^8 - 244z^7 + 2402z^6 - 8661z^5 + 8400z^4 + 1920z^3 + 1080z^2 + 720z + 315) + \frac{1}{630} e^{-z} \sqrt{\pi} (-16z^{17/2} + 496z^{15/2} - 5040z^{13/2} + 19500z^{11/2} - 23595z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai00.01

$${}_2F_2\left(2, 4; -\frac{7}{2}, 2; z\right) = \frac{1}{315} (8z^7 + 176z^6 + 1086z^5 + 1680z^4 - 480z^3 + 360z^2 - 360z + 315) + \frac{1}{315} e^z \sqrt{\pi} (8z^{15/2} + 180z^{13/2} + 1170z^{11/2} + 2145z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai01.01

$${}_2F_2\left(2, 4; -\frac{7}{2}, 2; -z\right) = \frac{1}{315} (-8z^7 + 176z^6 - 1086z^5 + 1680z^4 + 480z^3 + 360z^2 + 360z + 315) + \frac{1}{315} e^{-z} \sqrt{\pi} (8z^{15/2} - 180z^{13/2} + 1170z^{11/2} - 2145z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai02.01

$${}_2F_2\left(2, 4; -\frac{7}{2}, 3; z\right) = \frac{1}{315} (16z^6 + 216z^5 + 560z^4 - 192z^3 + 180z^2 - 240z + 315) + \frac{4}{315} e^z \sqrt{\pi} (4z^{13/2} + 56z^{11/2} + 165z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai03.01

$${}_2F_2\left(2, 4; -\frac{7}{2}, 3; -z\right) = \frac{1}{315} (16z^6 - 216z^5 + 560z^4 + 192z^3 + 180z^2 + 240z + 315) - \frac{4}{315} e^{-z} \sqrt{\pi} (4z^{13/2} - 56z^{11/2} + 165z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai04.01

$${}_2F_2\left(2, 4; -\frac{7}{2}, 4; z\right) = \frac{1}{105} (16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105) + \frac{8}{105} e^z \sqrt{\pi} (2z^{11/2} + 11z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai05.01

$${}_2F_2\left(2, 4; -\frac{7}{2}, 4; -z\right) = \frac{1}{105} (-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105) + \frac{8}{105} e^{-z} \sqrt{\pi} (2z^{11/2} - 11z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = -\frac{5}{2}$

07.25.03.ai06.01

$${}_2F_2\left(2, 4; -\frac{5}{2}, 1; z\right) = \frac{1}{90} (-8z^7 - 212z^6 - 1770z^5 - 5217z^4 - 3840z^3 + 720z^2 - 288z + 90) + \frac{1}{180} e^z \sqrt{\pi} (-16z^{15/2} - 432z^{13/2} - 3744z^{11/2} - 12012z^{9/2} - 11583z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai07.01

$${}_2F_2\left(2, 4; -\frac{5}{2}, 1; -z\right) = \frac{1}{90} (8z^7 - 212z^6 + 1770z^5 - 5217z^4 + 3840z^3 + 720z^2 + 288z + 90) + \frac{1}{180} e^{-z} \sqrt{\pi} (-16z^{15/2} + 432z^{13/2} - 3744z^{11/2} + 12012z^{9/2} - 11583z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai08.01

$${}_2F_2\left(2, 4; -\frac{5}{2}, 2; z\right) = \frac{1}{45}(-4z^6 - 76z^5 - 393z^4 - 480z^3 + 120z^2 - 72z + 45) + \frac{1}{90}e^z\sqrt{\pi}(-8z^{13/2} - 156z^{11/2} - 858z^{9/2} - 1287z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ai09.01

$${}_2F_2\left(2, 4; -\frac{5}{2}, 2; -z\right) = \frac{1}{45}(-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45) + \frac{1}{90}e^{-z}\sqrt{\pi}(8z^{13/2} - 156z^{11/2} + 858z^{9/2} - 1287z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ai0a.01

$${}_2F_2\left(2, 4; -\frac{5}{2}, 3; z\right) = \frac{1}{45}(-8z^5 - 92z^4 - 192z^3 + 60z^2 - 48z + 45) - \frac{2}{45}e^z\sqrt{\pi}(4z^{11/2} + 48z^{9/2} + 117z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ai0b.01

$${}_2F_2\left(2, 4; -\frac{5}{2}, 3; -z\right) = \frac{1}{45}(8z^5 - 92z^4 + 192z^3 + 60z^2 + 48z + 45) - \frac{2}{45}e^{-z}\sqrt{\pi}(4z^{11/2} - 48z^{9/2} + 117z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ai0c.01

$${}_2F_2\left(2, 4; -\frac{5}{2}, 4; z\right) = \frac{1}{15}(-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15}e^z\sqrt{\pi}(2z^{9/2} + 9z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ai0d.01

$${}_2F_2\left(2, 4; -\frac{5}{2}, 4; -z\right) = \frac{1}{15}(-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15}e^{-z}\sqrt{\pi}(2z^{9/2} - 9z^{7/2})\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = -\frac{3}{2}$

07.25.03.ai0e.01

$${}_2F_2\left(2, 4; -\frac{3}{2}, 1; z\right) = \frac{1}{36}(8z^6 + 180z^5 + 1234z^4 + 2829z^3 + 1440z^2 - 192z + 36) + \frac{1}{72}e^z\sqrt{\pi}(16z^{13/2} + 368z^{11/2} + 2640z^{9/2} + 6732z^{7/2} + 4851z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ai0f.01

$${}_2F_2\left(2, 4; -\frac{3}{2}, 1; -z\right) = \frac{1}{36}(8z^6 - 180z^5 + 1234z^4 - 2829z^3 + 1440z^2 + 192z + 36) + \frac{1}{72}e^{-z}\sqrt{\pi}(-16z^{13/2} + 368z^{11/2} - 2640z^{9/2} + 6732z^{7/2} - 4851z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ai0g.01

$${}_2F_2\left(2, 4; -\frac{3}{2}, 2; z\right) = \frac{1}{18}(4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36}e^z\sqrt{\pi}(8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ai0h.01

$${}_2F_2\left(2, 4; -\frac{3}{2}, 2; -z\right) = \frac{1}{18}(-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36}e^{-z}\sqrt{\pi}(8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ai0i.01

$${}_2F_2\left(2, 4; -\frac{3}{2}, 3; z\right) = \frac{1}{9}(4z^4 + 38z^3 + 60z^2 - 16z + 9) + \frac{1}{9}e^z\sqrt{\pi}(4z^{9/2} + 40z^{7/2} + 77z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ai0j.01

$${}_2F_2\left(2, 4; -\frac{3}{2}, 3; -z\right) = \frac{1}{9}(4z^4 - 38z^3 + 60z^2 + 16z + 9) + \frac{1}{9}e^{-z}\sqrt{\pi}(-4z^{9/2} + 40z^{7/2} - 77z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ai0k.01

$${}_2F_2\left(2, 4; -\frac{3}{2}, 4; z\right) = \frac{1}{3}(4z^3 + 12z^2 - 4z + 3) + \frac{2}{3}e^z\sqrt{\pi}(2z^{7/2} + 7z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ai0l.01

$${}_2F_2\left(2, 4; -\frac{3}{2}, 4; -z\right) = \frac{1}{3}(-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3}e^{-z}\sqrt{\pi}(2z^{7/2} - 7z^{5/2})\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = -\frac{1}{2}$

07.25.03.ai0m.01

$${}_2F_2\left(2, 4; -\frac{1}{2}, 1; z\right) = \frac{1}{24}(-8z^5 - 148z^4 - 794z^3 - 1305z^2 - 384z + 24) + \frac{1}{48}e^z\sqrt{\pi}(-16z^{11/2} - 304z^{9/2} - 1728z^{7/2} - 3276z^{5/2} - 1575z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ai0n.01

$${}_2F_2\left(2, 4; -\frac{1}{2}, 1; -z\right) = \frac{1}{24}(8z^5 - 148z^4 + 794z^3 - 1305z^2 + 384z + 24) + \frac{1}{48}e^{-z}\sqrt{\pi}(-16z^{11/2} + 304z^{9/2} - 1728z^{7/2} + 3276z^{5/2} - 1575z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ai0o.01

$${}_2F_2\left(2, 4; -\frac{1}{2}, 2; z\right) = \frac{1}{12}(-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24}e^z\sqrt{\pi}(-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ai0p.01

$${}_2F_2\left(2, 4; -\frac{1}{2}, 2; -z\right) = \frac{1}{12}(-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24}e^{-z}\sqrt{\pi}(8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ai0q.01

$${}_2F_2\left(2, 4; -\frac{1}{2}, 3; z\right) = \frac{1}{3}(-2z^3 - 15z^2 - 16z + 3) + \frac{1}{6}e^z\sqrt{\pi}(-4z^{7/2} - 32z^{5/2} - 45z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ai0r.01

$${}_2F_2\left(2, 4; -\frac{1}{2}, 3; -z\right) = \frac{1}{3}(2z^3 - 15z^2 + 16z + 3) + \frac{1}{6}e^{-z}\sqrt{\pi}(-4z^{7/2} + 32z^{5/2} - 45z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ai0s.01

$${}_2F_2\left(2, 4; -\frac{1}{2}, 4; z\right) = -2z^2 - 4z + e^z \sqrt{\pi} (-2z^{5/2} - 5z^{3/2}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.ai0t.01

$${}_2F_2\left(2, 4; -\frac{1}{2}, 4; -z\right) = -2z^2 + 4z + e^{-z} \sqrt{\pi} (2z^{5/2} - 5z^{3/2}) \operatorname{erfi}(\sqrt{z}) + 1$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = \frac{1}{2}$

07.25.03.ai0u.01

$${}_2F_2\left(2, 4; \frac{1}{2}, 1; z\right) = \frac{1}{48} (8z^4 + 116z^3 + 450z^2 + 453z + 48) + \frac{1}{96} e^z \sqrt{\pi} (16z^{9/2} + 240z^{7/2} + 1008z^{5/2} + 1260z^{3/2} + 315\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai0v.01

$${}_2F_2\left(2, 4; \frac{1}{2}, 1; -z\right) = \frac{1}{48} (8z^4 - 116z^3 + 450z^2 - 453z + 48) + \frac{1}{96} e^{-z} \sqrt{\pi} (-16z^{9/2} + 240z^{7/2} - 1008z^{5/2} + 1260z^{3/2} - 315\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai0w.01

$${}_2F_2\left(2, 4; \frac{1}{2}, 2; z\right) = \frac{1}{24} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} e^z \sqrt{\pi} (8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai0x.01

$${}_2F_2\left(2, 4; \frac{1}{2}, 2; -z\right) = \frac{1}{24} (-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48} e^{-z} \sqrt{\pi} (8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai0y.01

$${}_2F_2\left(2, 4; \frac{1}{2}, 3; z\right) = \frac{1}{6} (2z^2 + 11z + 6) + \frac{1}{12} e^z \sqrt{\pi} (4z^{5/2} + 24z^{3/2} + 21\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai0z.01

$${}_2F_2\left(2, 4; \frac{1}{2}, 3; -z\right) = \frac{1}{6} (2z^2 - 11z + 6) + \frac{1}{12} e^{-z} \sqrt{\pi} (-4z^{5/2} + 24z^{3/2} - 21\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai10.01

$${}_2F_2\left(2, 4; \frac{1}{2}, 4; z\right) = z + \frac{1}{2} e^z \sqrt{\pi} (2z^{3/2} + 3\sqrt{z}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.ai11.01

$${}_2F_2\left(2, 4; \frac{1}{2}, 4; -z\right) = -z + \frac{1}{2} e^{-z} \sqrt{\pi} (2z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z}) + 1$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = 1$

07.25.03.ai12.01

$${}_2F_2(2, 4; 1, 1; z) = \frac{1}{6} e^z (z^4 + 13z^3 + 45z^2 + 42z + 6)$$

07.25.03.ai13.01

$${}_2F_2\left(2, 4; 1, \frac{3}{2}; z\right) = \frac{1}{96} (8z^3 + 84z^2 + 202z + 81) + \frac{e^z \sqrt{\pi} (16z^4 + 176z^3 + 480z^2 + 300z + 15) \operatorname{erf}(\sqrt{z})}{192 \sqrt{z}}$$

07.25.03.ai14.01

$${}_2F_2\left(2, 4; 1, \frac{3}{2}; -z\right) = \frac{1}{96} (-8z^3 + 84z^2 - 202z + 81) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 176z^3 + 480z^2 - 300z + 15) \operatorname{erfi}(\sqrt{z})}{192 \sqrt{z}}$$

07.25.03.ai15.01

$${}_2F_2(2, 4; 1, 2; z) = \frac{1}{6} e^z (z^3 + 9z^2 + 18z + 6)$$

07.25.03.ai16.01

$${}_2F_2\left(2, 4; 1, \frac{5}{2}; z\right) = \frac{8z^3 + 52z^2 + 50z - 3}{64z} + \frac{e^z \sqrt{\pi} (16z^4 + 112z^3 + 144z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{3/2}}$$

07.25.03.ai17.01

$${}_2F_2\left(2, 4; 1, \frac{5}{2}; -z\right) = \frac{8z^3 - 52z^2 + 50z + 3}{64z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 112z^3 - 144z^2 + 12z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{3/2}}$$

07.25.03.ai18.01

$${}_2F_2(2, 4; 1, 3; z) = \frac{1}{3} e^z (z^2 + 5z + 3)$$

07.25.03.ai19.01

$${}_2F_2\left(2, 4; 1, \frac{7}{2}; z\right) = \frac{5(8z^3 + 20z^2 - 6z + 9)}{128z^2} + \frac{5e^z \sqrt{\pi} (16z^4 + 48z^3 + 12z - 9) \operatorname{erf}(\sqrt{z})}{256 z^{5/2}}$$

07.25.03.ai1a.01

$${}_2F_2\left(2, 4; 1, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^4 - 48z^3 - 12z - 9) \operatorname{erfi}(\sqrt{z})}{256 z^{5/2}} - \frac{5(8z^3 - 20z^2 - 6z - 9)}{128z^2}$$

07.25.03.ai1b.01

$${}_2F_2(2, 4; 1, 4; z) = e^z (z + 1)$$

07.25.03.ai1c.01

$${}_2F_2\left(2, 4; 1, \frac{9}{2}; z\right) = \frac{35(8z^3 - 12z^2 + 34z - 75)}{256z^3} + \frac{35e^z \sqrt{\pi} (16z^4 - 16z^3 + 48z^2 - 84z + 75) \operatorname{erf}(\sqrt{z})}{512 z^{7/2}}$$

07.25.03.ai1d.01

$${}_2F_2\left(2, 4; 1, \frac{9}{2}; -z\right) = \frac{35(8z^3 + 12z^2 + 34z + 75)}{256z^3} - \frac{35e^{-z} \sqrt{\pi} (16z^4 + 16z^3 + 48z^2 + 84z + 75) \operatorname{erfi}(\sqrt{z})}{512 z^{7/2}}$$

07.25.03.ai1e.01

$${}_2F_2(2, 4; 1, 5; z) = \frac{4e^z (z^4 - 3z^3 + 9z^2 - 18z + 18)}{z^4} - \frac{72}{z^4}$$

07.25.03.ai1f.01

$${}_2F_2\left(2, 4; 1, \frac{11}{2}; z\right) = \frac{315(8z^3 - 44z^2 + 170z - 735)}{512z^4} + \frac{315e^z \sqrt{\pi} (16z^4 - 80z^3 + 288z^2 - 660z + 735) \operatorname{erf}(\sqrt{z})}{1024 z^{9/2}}$$

07.25.03.ai1g.01

$${}_2F_2\left(2, 4; 1, \frac{11}{2}; -z\right) = \frac{315 e^{-z} \sqrt{\pi} (16 z^4 + 80 z^3 + 288 z^2 + 660 z + 735) \operatorname{erfi}(\sqrt{z})}{1024 z^{9/2}} - \frac{315 (8 z^3 + 44 z^2 + 170 z + 735)}{512 z^4}$$

07.25.03.ai1h.01

$${}_2F_2(2, 4; 1, 6; z) = \frac{20 e^z (z^4 - 7 z^3 + 30 z^2 - 78 z + 96)}{z^5} - \frac{120 (3 z + 16)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = \frac{3}{2}$

07.25.03.ai1i.01

$${}_2F_2\left(2, 4; \frac{3}{2}, 2; z\right) = \frac{1}{48} (4 z^2 + 28 z + 33) + \frac{e^z \sqrt{\pi} (8 z^3 + 60 z^2 + 90 z + 15) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.ai1j.01

$${}_2F_2\left(2, 4; \frac{3}{2}, 2; -z\right) = \frac{1}{48} (4 z^2 - 28 z + 33) + \frac{e^{-z} \sqrt{\pi} (-8 z^3 + 60 z^2 - 90 z + 15) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.ai1k.01

$${}_2F_2\left(2, 4; \frac{3}{2}, 3; z\right) = \frac{1}{12} (2 z + 7) + \frac{e^z \sqrt{\pi} (4 z^2 + 16 z + 5) \operatorname{erf}(\sqrt{z})}{24 \sqrt{z}}$$

07.25.03.ai1l.01

$${}_2F_2\left(2, 4; \frac{3}{2}, 3; -z\right) = \frac{1}{12} (7 - 2 z) + \frac{e^{-z} \sqrt{\pi} (4 z^2 - 16 z + 5) \operatorname{erfi}(\sqrt{z})}{24 \sqrt{z}}$$

07.25.03.ai1m.01

$${}_2F_2\left(2, 4; \frac{3}{2}, 4; z\right) = \frac{e^z \sqrt{\pi} (2 z + 1) \operatorname{erf}(\sqrt{z})}{4 \sqrt{z}} + \frac{1}{2}$$

07.25.03.ai1n.01

$${}_2F_2\left(2, 4; \frac{3}{2}, 4; -z\right) = \frac{e^{-z} \sqrt{\pi} (1 - 2 z) \operatorname{erfi}(\sqrt{z})}{4 \sqrt{z}} + \frac{1}{2}$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = 2$

07.25.03.ai1o.01

$${}_2F_2(2, 4; 2, 2; z) = \frac{1}{6} e^z (z^2 + 6 z + 6)$$

07.25.03.ai1p.01

$${}_2F_2\left(2, 4; 2, \frac{5}{2}; z\right) = \frac{4 z^2 + 16 z + 3}{32 z} + \frac{e^z \sqrt{\pi} (8 z^3 + 36 z^2 + 18 z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.ai1q.01

$${}_2F_2\left(2, 4; 2, \frac{5}{2}; -z\right) = \frac{-4 z^2 + 16 z - 3}{32 z} + \frac{e^{-z} \sqrt{\pi} (8 z^3 - 36 z^2 + 18 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.ai1r.01

$${}_2F_2(2, 4; 2, 3; z) = \frac{1}{3} e^z (z + 3)$$

07.25.03.ai1s.01

$${}_2F_2\left(2, 4; 2, \frac{7}{2}; z\right) = \frac{5(4z^2 + 4z - 3)}{64z^2} + \frac{5e^z \sqrt{\pi} (8z^3 + 12z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.ai1t.01

$${}_2F_2\left(2, 4; 2, \frac{7}{2}; -z\right) = \frac{5(4z^2 - 4z - 3)}{64z^2} - \frac{5e^{-z} \sqrt{\pi} (8z^3 - 12z^2 - 6z - 3) \operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.ai1u.01

$${}_2F_2(2, 4; 2, 4; z) = e^z$$

07.25.03.ai1v.01

$${}_2F_2\left(2, 4; 2, \frac{9}{2}; z\right) = \frac{35(4z^2 - 8z + 15)}{128z^3} + \frac{35e^z \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.ai1w.01

$${}_2F_2\left(2, 4; 2, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (8z^3 + 12z^2 + 18z + 15) \operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35(4z^2 + 8z + 15)}{128z^3}$$

07.25.03.ai1x.01

$${}_2F_2(2, 4; 2, 5; z) = \frac{4e^z (z^3 - 3z^2 + 6z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.ai1y.01

$${}_2F_2\left(2, 4; 2, \frac{11}{2}; z\right) = \frac{315(4z^2 - 20z + 105)}{256z^4} + \frac{315e^z \sqrt{\pi} (8z^3 - 36z^2 + 90z - 105) \operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ai1z.01

$${}_2F_2\left(2, 4; 2, \frac{11}{2}; -z\right) = \frac{315(4z^2 + 20z + 105)}{256z^4} - \frac{315e^{-z} \sqrt{\pi} (8z^3 + 36z^2 + 90z + 105) \operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ai20.01

$${}_2F_2(2, 4; 2, 6; z) = \frac{120(z + 4)}{z^5} + \frac{20e^z (z^3 - 6z^2 + 18z - 24)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = \frac{5}{2}$

07.25.03.ai21.01

$${}_2F_2\left(2, 4; \frac{5}{2}, 3; z\right) = \frac{2z + 3}{8z} + \frac{e^z \sqrt{\pi} (4z^2 + 8z - 3) \operatorname{erf}(\sqrt{z})}{16z^{3/2}}$$

07.25.03.ai22.01

$${}_2F_2\left(2, 4; \frac{5}{2}, 3; -z\right) = \frac{2z - 3}{8z} + \frac{e^{-z} \sqrt{\pi} (-4z^2 + 8z + 3) \operatorname{erfi}(\sqrt{z})}{16z^{3/2}}$$

07.25.03.ai23.01

$${}_2F_2\left(2, 4; \frac{5}{2}, 4; z\right) = \frac{3 e^z \sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{8 z^{3/2}} + \frac{3}{4z}$$

07.25.03.ai24.01

$${}_2F_2\left(2, 4; \frac{5}{2}, 4; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3}{4z}$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = 3$

07.25.03.ai25.01

$${}_2F_2(2, 4; 3, 3; z) = \frac{2 e^z (z^2 + z - 1)}{3 z^2} + \frac{2}{3 z^2}$$

07.25.03.ai26.01

$${}_2F_2\left(2, 4; 3, \frac{7}{2}; z\right) = \frac{5(2z + 3)}{16 z^2} + \frac{5 e^z \sqrt{\pi} (4z^2 - 3) \operatorname{erf}(\sqrt{z})}{32 z^{5/2}}$$

07.25.03.ai27.01

$${}_2F_2\left(2, 4; 3, \frac{7}{2}; -z\right) = \frac{5 e^{-z} \sqrt{\pi} (4z^2 - 3) \operatorname{erfi}(\sqrt{z})}{32 z^{5/2}} - \frac{5(2z - 3)}{16 z^2}$$

07.25.03.ai28.01

$${}_2F_2(2, 4; 3, 4; z) = \frac{2 e^z (z - 1)}{z^2} + \frac{2}{z^2}$$

07.25.03.ai29.01

$${}_2F_2\left(2, 4; 3, \frac{9}{2}; z\right) = \frac{35(14z - 15)}{96 z^3} + \frac{35 e^z \sqrt{\pi} (4z^2 - 8z + 5) \operatorname{erf}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.ai2a.01

$${}_2F_2\left(2, 4; 3, \frac{9}{2}; -z\right) = \frac{35(14z + 15)}{96 z^3} - \frac{35 e^{-z} \sqrt{\pi} (4z^2 + 8z + 5) \operatorname{erfi}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.ai2b.01

$${}_2F_2(2, 4; 3, 5; z) = \frac{4(z^2 - 6)}{z^4} + \frac{8 e^z (z^2 - 3z + 3)}{z^4}$$

07.25.03.ai2c.01

$${}_2F_2\left(2, 4; 3, \frac{11}{2}; z\right) = \frac{21(16z^2 + 30z - 315)}{64 z^4} + \frac{315 e^z \sqrt{\pi} (4z^2 - 16z + 21) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.ai2d.01

$${}_2F_2\left(2, 4; 3, \frac{11}{2}; -z\right) = \frac{21(16z^2 - 30z - 315)}{64 z^4} + \frac{315 e^{-z} \sqrt{\pi} (4z^2 + 16z + 21) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.ai2e.01

$${}_2F_2(2, 4; 3, 6; z) = \frac{40 e^z (z^2 - 5z + 8)}{z^5} + \frac{20(z^3 - 18z - 48)}{3 z^5}$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = \frac{7}{2}$

07.25.03.ai2f.01

$${}_2F_2\left(2, 4; \frac{7}{2}, 4; z\right) = \frac{15 e^z \sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45}{8 z^2}$$

07.25.03.ai2g.01

$${}_2F_2\left(2, 4; \frac{7}{2}, 4; -z\right) = \frac{45}{8 z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = 4$

07.25.03.ai2h.01

$${}_2F_2(2, 4; 4, 4; z) = \frac{6 e^z (z - 2)}{z^3} + \frac{6 (z + 2)}{z^3}$$

07.25.03.ai2i.01

$${}_2F_2\left(2, 4; 4, \frac{9}{2}; z\right) = \frac{35 (4z + 15)}{16 z^3} + \frac{105 e^z \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ai2j.01

$${}_2F_2\left(2, 4; 4, \frac{9}{2}; -z\right) = \frac{35 (4z - 15)}{16 z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ai2k.01

$${}_2F_2(2, 4; 4, 5; z) = \frac{24 e^z (z - 3)}{z^4} + \frac{12 (z^2 + 4z + 6)}{z^4}$$

07.25.03.ai2l.01

$${}_2F_2\left(2, 4; 4, \frac{11}{2}; z\right) = \frac{63 (8z^2 + 40z + 105)}{32 z^4} + \frac{945 e^z \sqrt{\pi} (2z - 7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ai2m.01

$${}_2F_2\left(2, 4; 4, \frac{11}{2}; -z\right) = \frac{63 (8z^2 - 40z + 105)}{32 z^4} - \frac{945 e^{-z} \sqrt{\pi} (2z + 7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ai2n.01

$${}_2F_2(2, 4; 4, 6; z) = \frac{120 e^z (z - 4)}{z^5} + \frac{20 (z^3 + 6z^2 + 18z + 24)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = 5$

07.25.03.ai2o.01

$${}_2F_2(2, 4; 5, 5; z) = \frac{24 (z^2 + 8z + 12\gamma - 4)}{z^4} - \frac{288 \operatorname{Ei}(z)}{z^4} - \frac{144 \log\left(\frac{1}{z}\right)}{z^4} + \frac{144 \log(z)}{z^4} + \frac{96 e^z}{z^4}$$

07.25.03.ai2p.01

$${}_2F_2(2, 4; 5, 6; z) = \frac{40(z^3 + 12z^2 + 36\gamma z - 48z - 48)}{z^5} - \frac{1440 \operatorname{Ei}(z)}{z^4} - \frac{720 \log\left(\frac{1}{z}\right)}{z^4} + \frac{720 \log(z)}{z^4} + \frac{1920 e^z}{z^5}$$

For fixed z and $a_1 = 2, a_2 = 4, b_1 = 6$

07.25.03.ai2q.01

$${}_2F_2(2, 4; 6, 6; z) = \frac{200(z^3 + 18z^2 + 108\gamma z - 252z - 144\gamma - 108)}{3z^5} - \frac{2400(3z - 4) \operatorname{Ei}(z)}{z^5} - \frac{1200(3z - 4) \log\left(\frac{1}{z}\right)}{z^5} + \frac{1200(3z - 4) \log(z)}{z^5} + \frac{7200 e^z}{z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = -\frac{11}{2}$

07.25.03.ai2r.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{11345882625} (65536z^{17} + 7667712z^{16} + 369754112z^{15} + 9595207680z^{14} + 146844794880z^{13} + 1366767390720z^{12} + 7703190282240z^{11} + 25372054103040z^{10} + 45258011366400z^9 + 37673239968000z^8 + 10512038476800z^7 + 293318625600z^6 + 6616209600z^5 + 1459458000z^4 + 972972000z^3 + 1375258500z^2 + 3375634500z + 11345882625) + \frac{1}{11345882625} (32768 e^z \sqrt{\pi} (2z^{35/2} + 235z^{33/2} + 11400z^{31/2} + 298350z^{29/2} + 4622400z^{27/2} + 43817760z^{25/2} + 254016000z^{23/2} + 875448000z^{21/2} + 1687392000z^{19/2} + 1623888000z^{17/2} + 624153600z^{15/2} + 54432000z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ai2s.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{11345882625} (-65536z^{17} + 7667712z^{16} - 369754112z^{15} + 9595207680z^{14} - 146844794880z^{13} + 1366767390720z^{12} - 7703190282240z^{11} + 25372054103040z^{10} - 45258011366400z^9 + 37673239968000z^8 - 10512038476800z^7 + 293318625600z^6 - 6616209600z^5 + 1459458000z^4 - 972972000z^3 + 1375258500z^2 - 3375634500z + 11345882625) + \frac{1}{11345882625} (32768 e^{-z} \sqrt{\pi} (2z^{35/2} - 235z^{33/2} + 11400z^{31/2} - 298350z^{29/2} + 4622400z^{27/2} - 43817760z^{25/2} + 254016000z^{23/2} - 875448000z^{21/2} + 1687392000z^{19/2} - 1623888000z^{17/2} + 624153600z^{15/2} - 54432000z^{13/2}) \operatorname{erfi}(\sqrt{-z}))$$

07.25.03.ai2t.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{1031443875} \left(-32768z^{16} - 3473408z^{15} - 150159360z^{14} - 3447865344z^{13} - 45910364160z^{12} - 363562721280z^{11} - 1689486197760z^{10} - 4376037657600z^9 - 5667784254720z^8 - 2909470233600z^7 - 293318625600z^6 + 6616209600z^5 + 486486000z^4 + 194594400z^3 + 196465500z^2 + 375070500z + 1031443875 \right) - \frac{1}{1031443875} \left(16384e^z\sqrt{\pi} \left(2z^{33/2} + 213z^{31/2} + 9270z^{29/2} + 214920z^{27/2} + 2903040z^{25/2} + 23496480z^{23/2} + 113037120z^{21/2} + 310262400z^{19/2} + 446342400z^{17/2} + 284860800z^{15/2} + 54432000z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ai2u.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{1031443875} \left(-32768z^{16} + 3473408z^{15} - 150159360z^{14} + 3447865344z^{13} - 45910364160z^{12} + 363562721280z^{11} - 1689486197760z^{10} + 4376037657600z^9 - 5667784254720z^8 + 2909470233600z^7 - 293318625600z^6 - 6616209600z^5 + 486486000z^4 - 194594400z^3 + 196465500z^2 - 375070500z + 1031443875 \right) + \frac{1}{1031443875} \left(16384e^{-z}\sqrt{\pi} \left(2z^{33/2} - 213z^{31/2} + 9270z^{29/2} - 214920z^{27/2} + 2903040z^{25/2} - 23496480z^{23/2} + 113037120z^{21/2} - 310262400z^{19/2} + 446342400z^{17/2} - 284860800z^{15/2} + 54432000z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ai2v.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{114604875} \left(16384z^{15} + 1556480z^{14} + 59523072z^{13} + 1188982784z^{12} + 13471211520z^{11} + 88009804800z^{10} + 322176691200z^9 + 608671445760z^8 + 492712657920z^7 + 97772875200z^6 - 6616209600z^5 + 486486000z^4 + 64864800z^3 + 39293100z^2 + 53581500z + 114604875 \right) + \frac{1}{114604875} \left(8192e^z\sqrt{\pi} \left(2z^{31/2} + 191z^{29/2} + 7360z^{27/2} + 148680z^{25/2} + 1713600z^{23/2} + 11501280z^{21/2} + 44029440z^{19/2} + 90115200z^{17/2} + 85881600z^{15/2} + 27216000z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ai2w.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{114604875} \left(-16384z^{15} + 1556480z^{14} - 59523072z^{13} + 1188982784z^{12} - 13471211520z^{11} + 88009804800z^{10} - 322176691200z^9 + 608671445760z^8 - 492712657920z^7 + 97772875200z^6 + 6616209600z^5 + 486486000z^4 - 64864800z^3 + 39293100z^2 - 53581500z + 114604875 \right) + \frac{1}{114604875} \left(8192e^{-z}\sqrt{\pi} \left(2z^{31/2} - 191z^{29/2} + 7360z^{27/2} - 148680z^{25/2} + 1713600z^{23/2} - 11501280z^{21/2} + 44029440z^{19/2} - 90115200z^{17/2} + 85881600z^{15/2} - 27216000z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ai2x.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{16372125} (-8192 z^{14} - 688128 z^{13} - 22884352 z^{12} - 388866048 z^{11} - 3635297280 z^{10} - 18726650880 z^9 -$$

$$50151709440 z^8 - 59770690560 z^7 - 19554575040 z^6 + 2205403200 z^5 -$$

$$486486000 z^4 + 64864800 z^3 + 13097700 z^2 + 10716300 z + 16372125) -$$

$$\frac{1}{16372125} (4096 e^z \sqrt{\pi} (2 z^{29/2} + 169 z^{27/2} + 5670 z^{25/2} + 97650 z^{23/2} + 932400 z^{21/2} +$$

$$4974480 z^{19/2} + 14182560 z^{17/2} + 19202400 z^{15/2} + 9072000 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ai2y.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{16372125} (-8192 z^{14} + 688128 z^{13} - 22884352 z^{12} + 388866048 z^{11} - 3635297280 z^{10} + 18726650880 z^9 -$$

$$50151709440 z^8 + 59770690560 z^7 - 19554575040 z^6 - 2205403200 z^5 -$$

$$486486000 z^4 - 64864800 z^3 + 13097700 z^2 - 10716300 z + 16372125) +$$

$$\frac{1}{16372125} (4096 e^{-z} \sqrt{\pi} (2 z^{29/2} - 169 z^{27/2} + 5670 z^{25/2} - 97650 z^{23/2} + 932400 z^{21/2} -$$

$$4974480 z^{19/2} + 14182560 z^{17/2} - 19202400 z^{15/2} + 9072000 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ai2z.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{3274425} (4096 z^{13} + 299008 z^{12} + 8454144 z^{11} + 118490112 z^{10} + 873600000 z^9 + 3298095360 z^8 + 5608995840 z^7 +$$

$$2793510720 z^6 - 441080640 z^5 + 162162000 z^4 - 64864800 z^3 + 13097700 z^2 + 3572100 z + 3274425) +$$

$$\frac{1}{3274425} (2048 e^z \sqrt{\pi} (2 z^{27/2} + 147 z^{25/2} + 4200 z^{23/2} + 59850 z^{21/2} + 453600 z^{19/2} +$$

$$1799280 z^{17/2} + 3386880 z^{15/2} + 2268000 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ai30.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{3274425} (-4096 z^{13} + 299008 z^{12} - 8454144 z^{11} + 118490112 z^{10} - 873600000 z^9 + 3298095360 z^8 - 5608995840 z^7 +$$

$$2793510720 z^6 + 441080640 z^5 + 162162000 z^4 + 64864800 z^3 + 13097700 z^2 - 3572100 z + 3274425) +$$

$$\frac{1}{3274425} (2048 e^{-z} \sqrt{\pi} (2 z^{27/2} - 147 z^{25/2} + 4200 z^{23/2} - 59850 z^{21/2} + 453600 z^{19/2} -$$

$$1799280 z^{17/2} + 3386880 z^{15/2} - 2268000 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ai31.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{1091475} (-2048 z^{12} - 126976 z^{11} - 2958336 z^{10} - 32680960 z^9 - 176682240 z^8 - 425456640 z^7 - 310390080 z^6 + 63011520 z^5 - 32432400 z^4 + 21621600 z^3 - 13097700 z^2 + 3572100 z + 1091475) - \frac{1}{1091475} 1024 e^z \sqrt{\pi} (2 z^{25/2} + 125 z^{23/2} + 2950 z^{21/2} + 33300 z^{19/2} + 187200 z^{17/2} + 488880 z^{15/2} + 453600 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai32.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{1091475} (-2048 z^{12} + 126976 z^{11} - 2958336 z^{10} + 32680960 z^9 - 176682240 z^8 + 425456640 z^7 - 310390080 z^6 - 63011520 z^5 - 32432400 z^4 - 21621600 z^3 - 13097700 z^2 - 3572100 z + 1091475) + \frac{1}{1091475} 1024 e^{-z} \sqrt{\pi} (2 z^{25/2} - 125 z^{23/2} + 2950 z^{21/2} - 33300 z^{19/2} + 187200 z^{17/2} - 488880 z^{15/2} + 453600 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai33.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{1091475} (1024 z^{11} + 52224 z^{10} + 957440 z^9 + 7748352 z^8 + 26772480 z^7 + 28217280 z^6 - 7001280 z^5 + 4633200 z^4 - 4324320 z^3 + 4365900 z^2 - 3572100 z + 1091475) + \frac{512 e^z \sqrt{\pi} (2 z^{23/2} + 103 z^{21/2} + 1920 z^{19/2} + 16020 z^{17/2} + 59040 z^{15/2} + 75600 z^{13/2}) \operatorname{erf}(\sqrt{z})}{1091475}$$

07.25.03.ai34.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{1091475} (-1024 z^{11} + 52224 z^{10} - 957440 z^9 + 7748352 z^8 - 26772480 z^7 + 28217280 z^6 + 7001280 z^5 + 4633200 z^4 + 4324320 z^3 + 4365900 z^2 + 3572100 z + 1091475) + \frac{512 e^{-z} \sqrt{\pi} (2 z^{23/2} - 103 z^{21/2} + 1920 z^{19/2} - 16020 z^{17/2} + 59040 z^{15/2} - 75600 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{1091475}$$

07.25.03.ai35.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{1091475} (e^z (1024 z^{11} + 47104 z^{10} + 761600 z^9 + 5241600 z^8 + 14313600 z^7 + 9031680 z^6 - 4021920 z^5 + 3780000 z^4 - 4063500 z^3 + 3969000 z^2 - 2877525 z + 1091475))$$

07.25.03.ai36.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{256 e^z \sqrt{\pi} (2z^4 + 81z^3 + 1110z^2 + 6030z + 10800) \operatorname{erf}(\sqrt{z}) z^{13/2}}{1091475} + \frac{1}{1091475} (512z^{10} + 20480z^9 + 274176z^8 + 1416192z^7 + 2170560z^6 - 636480z^5 + 514800z^4 - 617760z^3 + 873180z^2 - 1190700z + 1091475)$$

07.25.03.ai37.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{1091475} (512z^{10} - 20480z^9 + 274176z^8 - 1416192z^7 + 2170560z^6 + 636480z^5 + 514800z^4 + 617760z^3 + 873180z^2 + 1190700z + 1091475) - \frac{256 e^{-z} \sqrt{\pi} z^{13/2} (2z^4 - 81z^3 + 1110z^2 - 6030z + 10800) \operatorname{erfi}(\sqrt{z})}{1091475}$$

07.25.03.ai38.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{1091475} (e^z (1024z^{10} + 35840z^9 + 403200z^8 + 1612800z^7 + 1411200z^6 - 846720z^5 + 1058400z^4 - 1512000z^3 + 1984500z^2 - 1984500z + 1091475))$$

07.25.03.ai39.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{128 e^z \sqrt{\pi} (2z^3 + 59z^2 + 520z + 1350) \operatorname{erf}(\sqrt{z}) z^{13/2}}{363825} + \frac{1}{363825} (256z^9 + 7424z^8 + 62976z^7 + 144704z^6 - 48960z^5 + 46800z^4 - 68640z^3 + 124740z^2 - 238140z + 363825)$$

07.25.03.ai3a.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{128 e^{-z} \sqrt{\pi} (2z^3 - 59z^2 + 520z - 1350) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{363825} + \frac{1}{363825} (-256z^9 + 7424z^8 - 62976z^7 + 144704z^6 + 48960z^5 + 46800z^4 + 68640z^3 + 124740z^2 + 238140z + 363825)$$

07.25.03.ai3b.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{1091475 z^2} (2 e^z (1024z^{11} + 24576z^{10} + 157440z^9 + 195840z^8 - 155520z^7 + 241920z^6 - 393120z^5 + 453600z^4 + 170100z^3 - 2494800z^2 + 6081075z - 6081075)) + \frac{78}{7z^2}$$

07.25.03.ai3c.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{64 e^z \sqrt{\pi} (2z^2 + 37z + 150) \operatorname{erf}(\sqrt{z}) z^{13/2}}{72765} + \frac{128z^8 + 2304z^7 + 8512z^6 - 3264z^5 + 3600z^4 - 6240z^3 + 13860z^2 - 34020z + 72765}{72765}$$

07.25.03.ai3d.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{128 z^8 - 2304 z^7 + 8512 z^6 + 3264 z^5 + 3600 z^4 + 6240 z^3 + 13860 z^2 + 34020 z + 72765}{72765} - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} (2 z^2 - 37 z + 150) \operatorname{erfi}(\sqrt{z})}{72765}$$

07.25.03.ai3e.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, 4; z\right) = \frac{78(3z-34)}{7z^3} + \frac{1}{363825z^3} (2e^z(1024z^{11} + 13312z^{10} + 24320z^9 - 23040z^8 + 28800z^7 + 40320z^6 - 635040z^5 + 3628800z^4 - 14345100z^3 + 40540500z^2 - 74999925z + 68918850))$$

07.25.03.ai3f.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{32 e^z \sqrt{\pi} (2z + 15) \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{64 z^7 + 448 z^6 - 192 z^5 + 240 z^4 - 480 z^3 + 1260 z^2 - 3780 z + 10395}{10395}$$

07.25.03.ai3g.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{32 e^{-z} \sqrt{\pi} (2z - 15) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{10395} + \frac{-64 z^7 + 448 z^6 + 192 z^5 + 240 z^4 + 480 z^3 + 1260 z^2 + 3780 z + 10395}{10395}$$

07.25.03.ai3h.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, 5; z\right) = \frac{156(3z^2 - 68z + 1938)}{7z^4} + \frac{1}{363825z^4} (8e^z(1024z^{11} + 2048z^{10} + 3840z^9 - 57600z^8 + 489600z^7 - 3386880z^6 + 19686240z^5 - 94802400z^4 + 364864500z^3 - 1054053000z^2 + 2033106075z - 1964187225))$$

07.25.03.ai3i.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{1155z^4} (32z^{10} - 128z^9 + 1200z^8 - 10784z^7 + 86940z^6 - 616140z^5 + 3764355z^4 - 19353600z^3 + 81285120z^2 - 270950400z + 812851200) + \frac{1}{1155z^{9/2}} (16e^z \sqrt{\pi} (2z^{11} - 7z^{10} + 70z^9 - 630z^8 + 5040z^7 - 35280z^6 + 211680z^5 - 1058400z^4 + 4233600z^3 - 12700800z^2 + 25401600z - 25401600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ai3j.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{1155 z^4} (32 z^{10} + 128 z^9 + 1200 z^8 + 10784 z^7 + 86940 z^6 + 616140 z^5 + 3764355 z^4 + 19353600 z^3 + 81285120 z^2 + 270950400 z + 812851200) - \frac{1}{1155 z^{9/2}} (16 e^{-z} \sqrt{\pi} (2 z^{11} + 7 z^{10} + 70 z^9 + 630 z^8 + 5040 z^7 + 35280 z^6 + 211680 z^5 + 1058400 z^4 + 4233600 z^3 + 12700800 z^2 + 25401600 z + 25401600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ai3k.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{11}{2}, 6; z\right) = \frac{780(z^3 - 34z^2 + 1938z + 54264)}{7z^5} + \frac{1}{72765 z^5} (8 e^z (1024 z^{11} - 9216 z^{10} + 96000 z^9 - 921600 z^8 + 7862400 z^7 - 58423680 z^6 + 370228320 z^5 - 1945944000 z^4 + 8148640500 z^3 - 25499974500 z^2 + 53033055075 z - 54997242300))$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = -\frac{9}{2}$

07.25.03.ai3l.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{93767625} (16384 z^{15} + 1572864 z^{14} + 60932096 z^{13} + 1237241856 z^{12} + 14323064832 z^{11} + 96392340480 z^{10} + 368645575680 z^9 + 748293251328 z^8 + 698315627520 z^7 + 216028088640 z^6 + 6616209600 z^5 + 162162000 z^4 + 38918880 z^3 + 28066500 z^2 + 41674500 z + 93767625) + \frac{1}{93767625} (8192 e^z \sqrt{\pi} (2 z^{31/2} + 193 z^{29/2} + 7533 z^{27/2} + 154656 z^{25/2} + 1820448 z^{23/2} + 12573792 z^{21/2} + 50168160 z^{19/2} + 109589760 z^{17/2} + 117573120 z^{15/2} + 49714560 z^{13/2} + 4717440 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ai3m.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{93767625} (-16384 z^{15} + 1572864 z^{14} - 60932096 z^{13} + 1237241856 z^{12} - 14323064832 z^{11} + 96392340480 z^{10} - 368645575680 z^9 + 748293251328 z^8 - 698315627520 z^7 + 216028088640 z^6 - 6616209600 z^5 + 162162000 z^4 - 38918880 z^3 + 28066500 z^2 - 41674500 z + 93767625) + \frac{1}{93767625} (8192 e^{-z} \sqrt{\pi} (2 z^{31/2} - 193 z^{29/2} + 7533 z^{27/2} - 154656 z^{25/2} + 1820448 z^{23/2} - 12573792 z^{21/2} + 50168160 z^{19/2} - 109589760 z^{17/2} + 117573120 z^{15/2} - 49714560 z^{13/2} + 4717440 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ai3n.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{10418625} \left(-8192 z^{14} - 704512 z^{13} - 24129536 z^{12} - 425926656 z^{11} - 4191267840 z^{10} - 23234442240 z^9 - \right.$$

$$69810902784 z^8 - 102801484800 z^7 - 59127606720 z^6 - 6616209600 z^5 +$$

$$162162000 z^4 + 12972960 z^3 + 5613300 z^2 + 5953500 z + 10418625 \left. \right) -$$

$$\frac{1}{10418625} \left(4096 e^z \sqrt{\pi} \left(2 z^{29/2} + 173 z^{27/2} + 5976 z^{25/2} + 106848 z^{23/2} + 1072512 z^{21/2} + 6138720 z^{19/2} + \right. \right.$$

$$\left. \left. 19474560 z^{17/2} + 31691520 z^{15/2} + 22498560 z^{13/2} + 4717440 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ai3o.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{10418625} \left(-8192 z^{14} + 704512 z^{13} - 24129536 z^{12} + 425926656 z^{11} - 4191267840 z^{10} + 23234442240 z^9 - \right.$$

$$69810902784 z^8 + 102801484800 z^7 - 59127606720 z^6 + 6616209600 z^5 +$$

$$162162000 z^4 - 12972960 z^3 + 5613300 z^2 - 5953500 z + 10418625 \left. \right) +$$

$$\frac{1}{10418625} \left(4096 e^{-z} \sqrt{\pi} \left(2 z^{29/2} - 173 z^{27/2} + 5976 z^{25/2} - 106848 z^{23/2} + 1072512 z^{21/2} - 6138720 z^{19/2} + \right. \right.$$

$$\left. \left. 19474560 z^{17/2} - 31691520 z^{15/2} + 22498560 z^{13/2} - 4717440 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ai3p.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{1488375} \left(4096 z^{13} + 311296 z^{12} + 9265152 z^{11} + 138992640 z^{10} + 1126947840 z^9 + 4914798336 z^8 + 10757698560 z^7 + \right.$$

$$9893257920 z^6 + 2205403200 z^5 - 162162000 z^4 + 12972960 z^3 + 1871100 z^2 + 1190700 z + 1488375 \left. \right) +$$

$$\frac{1}{1488375} \left(2048 e^z \sqrt{\pi} \left(2 z^{27/2} + 153 z^{25/2} + 4599 z^{23/2} + 70056 z^{21/2} + 582120 z^{19/2} + \right. \right.$$

$$\left. \left. 2646000 z^{17/2} + 6244560 z^{15/2} + 6713280 z^{13/2} + 2358720 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ai3q.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{1488375} \left(-4096 z^{13} + 311296 z^{12} - 9265152 z^{11} + 138992640 z^{10} - 1126947840 z^9 + 4914798336 z^8 - 10757698560 z^7 + \right.$$

$$9893257920 z^6 - 2205403200 z^5 - 162162000 z^4 - 12972960 z^3 + 1871100 z^2 - 1190700 z + 1488375 \left. \right) +$$

$$\frac{1}{1488375} \left(2048 e^{-z} \sqrt{\pi} \left(2 z^{27/2} - 153 z^{25/2} + 4599 z^{23/2} - 70056 z^{21/2} + 582120 z^{19/2} - \right. \right.$$

$$\left. \left. 2646000 z^{17/2} + 6244560 z^{15/2} - 6713280 z^{13/2} + 2358720 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ai3r.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{297\,675} \left(-2048 z^{12} - 135\,168 z^{11} - 3\,417\,088 z^{10} - 42\,224\,640 z^9 - 269\,450\,496 z^8 - 858\,117\,120 z^7 - 1\,183\,291\,200 z^6 - 441\,080\,640 z^5 + 54\,054\,000 z^4 - 12\,972\,960 z^3 + 1\,871\,100 z^2 + 396\,900 z + 297\,675\right) - \frac{1}{297\,675} \left(1024 e^z \sqrt{\pi} (2 z^{25/2} + 133 z^{23/2} + 3402 z^{21/2} + 42\,840 z^{19/2} + 282\,240 z^{17/2} + 952\,560 z^{15/2} + 1\,481\,760 z^{13/2} + 786\,240 z^{11/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ai3s.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{297\,675} \left(-2048 z^{12} + 135\,168 z^{11} - 3\,417\,088 z^{10} + 42\,224\,640 z^9 - 269\,450\,496 z^8 + 858\,117\,120 z^7 - 1\,183\,291\,200 z^6 + 441\,080\,640 z^5 + 54\,054\,000 z^4 + 12\,972\,960 z^3 + 1\,871\,100 z^2 - 396\,900 z + 297\,675\right) + \frac{1}{297\,675} \left(1024 e^{-z} \sqrt{\pi} (2 z^{25/2} - 133 z^{23/2} + 3402 z^{21/2} - 42\,840 z^{19/2} + 282\,240 z^{17/2} - 952\,560 z^{15/2} + 1\,481\,760 z^{13/2} - 786\,240 z^{11/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ai3t.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{99\,225} \left(1024 z^{11} + 57\,344 z^{10} + 1\,192\,960 z^9 + 11\,596\,032 z^8 + 54\,082\,560 z^7 + 109\,112\,640 z^6 + 63\,011\,520 z^5 - 10\,810\,800 z^4 + 4\,324\,320 z^3 - 1\,871\,100 z^2 + 396\,900 z + 99\,225\right) + \frac{1}{99\,225} 512 e^z \sqrt{\pi} (2 z^{23/2} + 113 z^{21/2} + 2385 z^{19/2} + 23\,760 z^{17/2} + 115\,920 z^{15/2} + 257\,040 z^{13/2} + 196\,560 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai3u.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{99\,225} \left(-1024 z^{11} + 57\,344 z^{10} - 1\,192\,960 z^9 + 11\,596\,032 z^8 - 54\,082\,560 z^7 + 109\,112\,640 z^6 - 63\,011\,520 z^5 - 10\,810\,800 z^4 - 4\,324\,320 z^3 - 1\,871\,100 z^2 - 396\,900 z + 99\,225\right) + \frac{1}{99\,225} 512 e^{-z} \sqrt{\pi} (2 z^{23/2} - 113 z^{21/2} + 2385 z^{19/2} - 23\,760 z^{17/2} + 115\,920 z^{15/2} - 257\,040 z^{13/2} + 196\,560 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai3v.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{99\,225} \left(-512 z^{10} - 23\,552 z^9 - 384\,768 z^8 - 2\,731\,008 z^7 - 8\,089\,536 z^6 - 7\,001\,280 z^5 + 1\,544\,400 z^4 - 864\,864 z^3 + 623\,700 z^2 - 396\,900 z + 99\,225\right) - \frac{256 e^z \sqrt{\pi} (2 z^{21/2} + 93 z^{19/2} + 1548 z^{17/2} + 11\,376 z^{15/2} + 36\,288 z^{13/2} + 39\,312 z^{11/2}) \operatorname{erf}(\sqrt{z})}{99\,225}$$

07.25.03.ai3w.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{99225} (-512 z^{10} + 23552 z^9 - 384768 z^8 + 2731008 z^7 - 8089536 z^6 + 7001280 z^5 + 1544400 z^4 + 864864 z^3 + 623700 z^2 + 396900 z + 99225) + \frac{256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 93 z^{19/2} + 1548 z^{17/2} - 11376 z^{15/2} + 36288 z^{13/2} - 39312 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{99225}$$

07.25.03.ai3x.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{99225} (e^z (512 z^{10} + 21248 z^9 + 306432 z^8 + 1854720 z^7 + 4374720 z^6 + 2328480 z^5 - 846720 z^4 + 619920 z^3 - 481950 z^2 + 297675 z - 99225))$$

07.25.03.ai3y.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{99225} (-256 z^9 - 9216 z^8 - 109568 z^7 - 493248 z^6 - 636480 z^5 + 171600 z^4 - 123552 z^3 + 124740 z^2 - 132300 z + 99225) - \frac{128 e^z \sqrt{\pi} z^{11/2} (2 z^4 + 73 z^3 + 891 z^2 + 4248 z + 6552) \operatorname{erf}(\sqrt{z})}{99225}$$

07.25.03.ai3z.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{99225} (256 z^9 - 9216 z^8 + 109568 z^7 - 493248 z^6 + 636480 z^5 + 171600 z^4 + 123552 z^3 + 124740 z^2 + 132300 z + 99225) - \frac{128 e^{-z} \sqrt{\pi} z^{11/2} (2 z^4 - 73 z^3 + 891 z^2 - 4248 z + 6552) \operatorname{erfi}(\sqrt{z})}{99225}$$

07.25.03.ai40.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, 2; z\right) = -\frac{1}{99225} (e^z (512 z^9 + 16128 z^8 + 161280 z^7 + 564480 z^6 + 423360 z^5 - 211680 z^4 + 211680 z^3 - 226800 z^2 + 198450 z - 99225))$$

07.25.03.ai41.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-128 z^8 - 3328 z^7 - 24896 z^6 - 48960 z^5 + 15600 z^4 - 13728 z^3 + 17820 z^2 - 26460 z + 33075}{33075} - \frac{64 e^z \sqrt{\pi} z^{11/2} (2 z^3 + 53 z^2 + 414 z + 936) \operatorname{erf}(\sqrt{z})}{33075}$$

07.25.03.ai42.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{64 e^{-z} \sqrt{\pi} (2 z^3 - 53 z^2 + 414 z - 936) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{33075} + \frac{-128 z^8 + 3328 z^7 - 24896 z^6 + 48960 z^5 + 15600 z^4 + 13728 z^3 + 17820 z^2 + 26460 z + 33075}{33075}$$

$$\begin{aligned}
 & \text{07.25.03.ai43.01} \\
 & {}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, 3; z\right) = \\
 & \frac{286}{35 z^2} - \frac{1}{99225 z^2} (2 e^z (512 z^{10} + 11008 z^9 + 62208 z^8 + 66816 z^7 - 44352 z^6 + 54432 z^5 - 60480 z^4 + 15120 z^3 + \\
 & \quad 153090 z^2 - 405405 z + 405405))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ai44.01} \\
 & {}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \\
 & \frac{-64 z^7 - 1024 z^6 - 3264 z^5 + 1200 z^4 - 1248 z^3 + 1980 z^2 - 3780 z + 6615}{6615} - \frac{32 e^z \sqrt{\pi} z^{11/2} (2 z^2 + 33 z + 117) \operatorname{erf}(\sqrt{z})}{6615}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ai45.01} \\
 & {}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \\
 & \frac{64 z^7 - 1024 z^6 + 3264 z^5 + 1200 z^4 + 1248 z^3 + 1980 z^2 + 3780 z + 6615}{6615} - \frac{32 e^{-z} \sqrt{\pi} z^{11/2} (2 z^2 - 33 z + 117) \operatorname{erfi}(\sqrt{z})}{6615}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ai46.01} \\
 & {}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, 4; z\right) = \\
 & \frac{858(z-10)}{35 z^3} - \frac{1}{33075 z^3} (2 e^z (512 z^{10} + 5888 z^9 + 9216 z^8 - 6912 z^7 + 4032 z^6 + 30240 z^5 - 211680 z^4 + 861840 z^3 - \\
 & \quad 2432430 z^2 + 4459455 z - 4054050))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ai47.01} \\
 & {}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{945} (-32 z^6 - 192 z^5 + 80 z^4 - 96 z^3 + 180 z^2 - 420 z + 945) - \frac{16}{945} e^z \sqrt{\pi} z^{11/2} (2 z + 13) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ai48.01} \\
 & {}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{16}{945} e^{-z} \sqrt{\pi} (2 z - 13) \operatorname{erfi}(\sqrt{z}) z^{11/2} + \frac{1}{945} (-32 z^6 + 192 z^5 + 80 z^4 + 96 z^3 + 180 z^2 + 420 z + 945)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ai49.01} \\
 & {}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, 5; z\right) = \\
 & \frac{1716(z^2 - 20 z + 510)}{35 z^4} - \frac{1}{33075 z^4} (8 e^z (512 z^{10} + 768 z^9 + 2304 z^8 - 25344 z^7 + 181440 z^6 - 1058400 z^5 + \\
 & \quad 5080320 z^4 - 19459440 z^3 + 55945890 z^2 - 107432325 z + 103378275))
 \end{aligned}$$

07.25.03.ai4a.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{105 z^4} (-16 z^9 + 64 z^8 - 544 z^7 + 4356 z^6 - 30828 z^5 + 188265 z^4 - 967680 z^3 + 4064256 z^2 - 13547520 z + 40642560) - \frac{1}{105 z^{9/2}} \left(8 e^z \sqrt{\pi} (2 z^{10} - 7 z^9 + 63 z^8 - 504 z^7 + 3528 z^6 - 21168 z^5 + 105840 z^4 - 423360 z^3 + 1270080 z^2 - 2540160 z + 2540160) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ai4b.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{105 z^4} (16 z^9 + 64 z^8 + 544 z^7 + 4356 z^6 + 30828 z^5 + 188265 z^4 + 967680 z^3 + 4064256 z^2 + 13547520 z + 40642560) - \frac{1}{105 z^{9/2}} \left(8 e^{-z} \sqrt{\pi} (2 z^{10} + 7 z^9 + 63 z^8 + 504 z^7 + 3528 z^6 + 21168 z^5 + 105840 z^4 + 423360 z^3 + 1270080 z^2 + 2540160 z + 2540160) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ai4c.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{9}{2}, 6; z\right) = \frac{572(z^3 - 30z^2 + 1530z + 38760)}{7z^5} - \frac{1}{6615z^5} (8 e^z (512 z^{10} - 4352 z^9 + 41472 z^8 - 357120 z^7 + 2681280 z^6 - 17146080 z^5 + 90810720 z^4 - 382702320 z^3 + 1204052850 z^2 - 2515538025 z + 2618916300))$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = -\frac{7}{2}$

07.25.03.ai4d.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{1157625} (4096 z^{13} + 315392 z^{12} + 9543680 z^{11} + 146310144 z^{10} + 1222169600 z^9 + 5568966912 z^8 + 13095484416 z^7 + 13873876800 z^6 + 4799551680 z^5 + 162162000 z^4 + 4324320 z^3 + 1122660 z^2 + 850500 z + 1157625) + \frac{1}{1157625} \left(2048 e^z \sqrt{\pi} (2 z^{27/2} + 155 z^{25/2} + 4736 z^{23/2} + 73696 z^{21/2} + 630336 z^{19/2} + 2987040 z^{17/2} + 7526400 z^{15/2} + 9112320 z^{13/2} + 4273920 z^{11/2} + 443520 z^{9/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ai4e.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{1157625} \left(-4096 z^{13} + 315392 z^{12} - 9543680 z^{11} + 146310144 z^{10} - 1222169600 z^9 + 5568966912 z^8 - 13095484416 z^7 + 13873876800 z^6 - 4799551680 z^5 + 162162000 z^4 - 4324320 z^3 + 1122660 z^2 - 850500 z + 1157625 \right) +$$

$$\frac{1}{1157625} \left(2048 e^{-z} \sqrt{\pi} \left(2 z^{27/2} - 155 z^{25/2} + 4736 z^{23/2} - 73696 z^{21/2} + 630336 z^{19/2} - 2987040 z^{17/2} + 7526400 z^{15/2} - 9112320 z^{13/2} + 4273920 z^{11/2} - 443520 z^{9/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ai4f.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{165375} \left(-2048 z^{12} - 139264 z^{11} - 3658752 z^{10} - 47610880 z^9 - 327084288 z^8 - 1168892928 z^7 - 1990309440 z^6 - 1297074240 z^5 - 162162000 z^4 + 4324320 z^3 + 374220 z^2 + 170100 z + 165375 \right) -$$

$$\frac{1}{165375} \left(1024 e^z \sqrt{\pi} \left(2 z^{25/2} + 137 z^{23/2} + 3640 z^{21/2} + 48216 z^{19/2} + 341040 z^{17/2} + 1281840 z^{15/2} + 2399040 z^{13/2} + 1915200 z^{11/2} + 443520 z^{9/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ai4g.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{165375} \left(-2048 z^{12} + 139264 z^{11} - 3658752 z^{10} + 47610880 z^9 - 327084288 z^8 + 1168892928 z^7 - 1990309440 z^6 + 1297074240 z^5 - 162162000 z^4 - 4324320 z^3 + 374220 z^2 - 170100 z + 165375 \right) +$$

$$\frac{1}{165375} \left(1024 e^{-z} \sqrt{\pi} \left(2 z^{25/2} - 137 z^{23/2} + 3640 z^{21/2} - 48216 z^{19/2} + 341040 z^{17/2} - 1281840 z^{15/2} + 2399040 z^{13/2} - 1915200 z^{11/2} + 443520 z^{9/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ai4h.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{33075} \left(1024 z^{11} + 60416 z^{10} + 1346560 z^9 + 14408448 z^8 + 77693952 z^7 + 201754560 z^6 + 213998400 z^5 + 54054000 z^4 - 4324320 z^3 + 374220 z^2 + 56700 z + 33075 \right) +$$

$$\frac{1}{33075} \left(512 e^z \sqrt{\pi} \left(2 z^{23/2} + 119 z^{21/2} + 2688 z^{19/2} + 29400 z^{17/2} + 164640 z^{15/2} + 458640 z^{13/2} + 564480 z^{11/2} + 221760 z^{9/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ai4i.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{33075} (-1024 z^{11} + 60416 z^{10} - 1346560 z^9 + 14408448 z^8 - 77693952 z^7 + 201754560 z^6 - 213998400 z^5 + 54054000 z^4 + 4324320 z^3 + 374220 z^2 - 56700 z + 33075) + \frac{1}{33075} (512 e^{-z} \sqrt{\pi} (2 z^{23/2} - 119 z^{21/2} + 2688 z^{19/2} - 29400 z^{17/2} + 164640 z^{15/2} - 458640 z^{13/2} + 564480 z^{11/2} - 221760 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ai4j.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{11025} (-512 z^{10} - 25600 z^9 - 468736 z^8 - 3935232 z^7 - 15440320 z^6 - 25164480 z^5 - 10810800 z^4 + 1441440 z^3 - 374220 z^2 + 56700 z + 11025) - \frac{1}{11025} 256 e^z \sqrt{\pi} (2 z^{21/2} + 101 z^{19/2} + 1880 z^{17/2} + 16240 z^{15/2} + 67200 z^{13/2} + 122640 z^{11/2} + 73920 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai4k.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{11025} (-512 z^{10} + 25600 z^9 - 468736 z^8 + 3935232 z^7 - 15440320 z^6 + 25164480 z^5 - 10810800 z^4 - 1441440 z^3 - 374220 z^2 - 56700 z + 11025) + \frac{1}{11025} 256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 101 z^{19/2} + 1880 z^{17/2} - 16240 z^{15/2} + 67200 z^{13/2} - 122640 z^{11/2} + 73920 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai4l.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{11025} (256 z^9 + 10496 z^8 + 150528 z^7 + 918848 z^6 + 2270400 z^5 + 1544400 z^4 - 288288 z^3 + 124740 z^2 - 56700 z + 11025) + \frac{128 e^z \sqrt{\pi} (2 z^{19/2} + 83 z^{17/2} + 1216 z^{15/2} + 7728 z^{13/2} + 20832 z^{11/2} + 18480 z^{9/2}) \operatorname{erf}(\sqrt{z})}{11025}$$

07.25.03.ai4m.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{11025} (-256 z^9 + 10496 z^8 - 150528 z^7 + 918848 z^6 - 2270400 z^5 + 1544400 z^4 + 288288 z^3 + 124740 z^2 + 56700 z + 11025) + \frac{128 e^{-z} \sqrt{\pi} (2 z^{19/2} - 83 z^{17/2} + 1216 z^{15/2} - 7728 z^{13/2} + 20832 z^{11/2} - 18480 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{11025}$$

07.25.03.ai4n.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{11025} e^z (256 z^9 + 9472 z^8 + 120064 z^7 + 627200 z^6 + 1246560 z^5 + 540960 z^4 - 152880 z^3 + 80640 z^2 - 39375 z + 11025)$$

07.25.03.ai4o.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{64 e^z \sqrt{\pi} (2z^4 + 65z^3 + 696z^2 + 2856z + 3696) \operatorname{erf}(\sqrt{z}) z^{9/2}}{11025} + \frac{128z^8 + 4096z^7 + 42560z^6 + 163392z^5 + 171600z^4 - 41184z^3 + 24948z^2 - 18900z + 11025}{11025}$$

07.25.03.ai4p.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{128z^8 - 4096z^7 + 42560z^6 - 163392z^5 + 171600z^4 + 41184z^3 + 24948z^2 + 18900z + 11025}{11025} - \frac{64 e^{-z} \sqrt{\pi} z^{9/2} (2z^4 - 65z^3 + 696z^2 - 2856z + 3696) \operatorname{erfi}(\sqrt{z})}{11025}$$

07.25.03.ai4q.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{11025} e^z (256z^8 + 7168z^7 + 62720z^6 + 188160z^5 + 117600z^4 - 47040z^3 + 35280z^2 - 25200z + 11025)$$

07.25.03.ai4r.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{32 e^z \sqrt{\pi} (2z^3 + 47z^2 + 320z + 616) \operatorname{erf}(\sqrt{z}) z^{9/2}}{3675} + \frac{64z^7 + 1472z^6 + 9536z^5 + 15600z^4 - 4576z^3 + 3564z^2 - 3780z + 3675}{3675}$$

07.25.03.ai4s.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{32 e^{-z} \sqrt{\pi} (2z^3 - 47z^2 + 320z - 616) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{3675} + \frac{-64z^7 + 1472z^6 - 9536z^5 + 15600z^4 + 4576z^3 + 3564z^2 + 3780z + 3675}{3675}$$

07.25.03.ai4t.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{11025 z^2} \left(2 e^z (256z^9 + 4864z^8 + 23808z^7 + 21504z^6 - 11424z^5 + 10080z^4 - 5040z^3 - 10080z^2 + 31185z - 31185) + \frac{198}{35 z^2} \right)$$

07.25.03.ai4u.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{16}{735} e^z \sqrt{\pi} (2z^2 + 29z + 88) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{735} (32z^6 + 448z^5 + 1200z^4 - 416z^3 + 396z^2 - 540z + 735)$$

07.25.03.ai4v.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{1}{735} (32z^6 - 448z^5 + 1200z^4 + 416z^3 + 396z^2 + 540z + 735) - \frac{16}{735} e^{-z} \sqrt{\pi} z^{9/2} (2z^2 - 29z + 88) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai4w.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, 4; z\right) = \frac{198(3z-26)}{35z^3} + \frac{1}{3675z^3} 2e^z (256z^9 + 2560z^8 + 3328z^7 - 1792z^6 - 672z^5 + 13440z^4 - 58800z^3 + 166320z^2 - 301455z + 270270)$$

07.25.03.ai4x.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{8}{105} e^z \sqrt{\pi} (2z+11) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105)$$

07.25.03.ai4y.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{8}{105} e^{-z} \sqrt{\pi} (2z-11) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} (-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105)$$

07.25.03.ai4z.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, 5; z\right) = \frac{396(3z^2 - 52z + 1170)}{35z^4} + \frac{1}{3675z^4} (8e^z (256z^9 + 256z^8 + 1280z^7 - 10752z^6 + 63840z^5 - 305760z^4 + 1164240z^3 - 3326400z^2 + 6351345z - 6081075))$$

07.25.03.ai50.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3(8z^8 - 32z^7 + 244z^6 - 1716z^5 + 10465z^4 - 53760z^3 + 225792z^2 - 752640z + 2257920)}{35z^4} + \frac{1}{35z^{9/2}} 12e^z \sqrt{\pi} (2z^9 - 7z^8 + 56z^7 - 392z^6 + 2352z^5 - 11760z^4 + 47040z^3 - 141120z^2 + 282240z - 282240) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai51.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3(8z^8 + 32z^7 + 244z^6 + 1716z^5 + 10465z^4 + 53760z^3 + 225792z^2 + 752640z + 2257920)}{35z^4} - \frac{1}{35z^{9/2}} (12e^{-z} \sqrt{\pi} (2z^9 + 7z^8 + 56z^7 + 392z^6 + 2352z^5 + 11760z^4 + 47040z^3 + 141120z^2 + 282240z + 282240) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ai52.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{7}{2}, 6; z\right) = \frac{396(z^3 - 26z^2 + 1170z + 26520)}{7z^5} + \frac{1}{735z^5} (8e^z (256z^9 - 2048z^8 + 17664z^7 - 134400z^6 + 870240z^5 - 4656960z^4 + 19792080z^3 - 62702640z^2 + 131756625z - 137837700))$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = -\frac{5}{2}$

07.25.03.ai53.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{23625} (1024 z^{11} + 61440 z^{10} + 1399808 z^9 + 15436032 z^8 + 86989824 z^7 + 242716992 z^6 + 296452800 z^5 + 115713360 z^4 + 4324320 z^3 + 124740 z^2 + 34020 z + 23625) + \frac{1}{23625} (512 e^z \sqrt{\pi} (2 z^{23/2} + 121 z^{21/2} + 2793 z^{19/2} + 31458 z^{17/2} + 183750 z^{15/2} + 546840 z^{13/2} + 758520 z^{11/2} + 398160 z^{9/2} + 45360 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ai54.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{23625} (-1024 z^{11} + 61440 z^{10} - 1399808 z^9 + 15436032 z^8 - 86989824 z^7 + 242716992 z^6 - 296452800 z^5 + 115713360 z^4 - 4324320 z^3 + 124740 z^2 - 34020 z + 23625) + \frac{1}{23625} (512 e^{-z} \sqrt{\pi} (2 z^{23/2} - 121 z^{21/2} + 2793 z^{19/2} - 31458 z^{17/2} + 183750 z^{15/2} - 546840 z^{13/2} + 758520 z^{11/2} - 398160 z^{9/2} + 45360 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ai55.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{4725} (-512 z^{10} - 26624 z^9 - 513792 z^8 - 4647936 z^7 - 20481216 z^6 - 41227200 z^5 - 30829680 z^4 - 4324320 z^3 + 124740 z^2 + 11340 z + 4725) - \frac{1}{4725} (256 e^z \sqrt{\pi} (2 z^{21/2} + 105 z^{19/2} + 2058 z^{17/2} + 19110 z^{15/2} + 88200 z^{13/2} + 194040 z^{11/2} + 176400 z^{9/2} + 45360 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ai56.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{4725} (-512 z^{10} + 26624 z^9 - 513792 z^8 + 4647936 z^7 - 20481216 z^6 + 41227200 z^5 - 30829680 z^4 + 4324320 z^3 + 124740 z^2 - 11340 z + 4725) + \frac{1}{4725} (256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 105 z^{19/2} + 2058 z^{17/2} - 19110 z^{15/2} + 88200 z^{13/2} - 194040 z^{11/2} + 176400 z^{9/2} - 45360 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ai57.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{1575} (256 z^9 + 11264 z^8 + 178176 z^7 + 1260224 z^6 + 4015680 z^5 + 5004720 z^4 + 1441440 z^3 - 124740 z^2 + 11340 z + 1575) + \frac{1}{1575} 128 e^z \sqrt{\pi} (2 z^{19/2} + 89 z^{17/2} + 1435 z^{15/2} + 10500 z^{13/2} + 35700 z^{11/2} + 51240 z^{9/2} + 22680 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai58.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{1575} (-256 z^9 + 11\,264 z^8 - 178\,176 z^7 + 1\,260\,224 z^6 - 4\,015\,680 z^5 + 5\,004\,720 z^4 - 1\,441\,440 z^3 - 124\,740 z^2 - 11\,340 z + 1575) + \frac{1}{1575} 128 e^{-z} \sqrt{\pi} (2 z^{19/2} - 89 z^{17/2} + 1435 z^{15/2} - 10\,500 z^{13/2} + 35\,700 z^{11/2} - 51\,240 z^{9/2} + 22\,680 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai59.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{-128 z^8 - 4608 z^7 - 56\,896 z^6 - 290\,880 z^5 - 576\,720 z^4 - 288\,288 z^3 + 41\,580 z^2 - 11\,340 z + 1575}{1575} - \frac{64 e^z \sqrt{\pi} (2 z^{17/2} + 73 z^{15/2} + 924 z^{13/2} + 4956 z^{11/2} + 10\,920 z^{9/2} + 7560 z^{7/2}) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.ai5a.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{-128 z^8 + 4608 z^7 - 56\,896 z^6 + 290\,880 z^5 - 576\,720 z^4 + 288\,288 z^3 + 41\,580 z^2 + 11\,340 z + 1575}{1575} + \frac{64 e^{-z} \sqrt{\pi} (2 z^{17/2} - 73 z^{15/2} + 924 z^{13/2} - 4956 z^{11/2} + 10\,920 z^{9/2} - 7560 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.ai5b.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, 1; z\right) = -\frac{1}{1575} e^z (128 z^8 + 4160 z^7 + 45\,472 z^6 + 199\,920 z^5 + 323\,400 z^4 + 108\,780 z^3 - 22\,050 z^2 + 7245 z - 1575)$$

07.25.03.ai5c.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{-64 z^7 - 1792 z^6 - 15\,936 z^5 - 50\,640 z^4 - 41\,184 z^3 + 8316 z^2 - 3780 z + 1575}{1575} - \frac{32 e^z \sqrt{\pi} z^{7/2} (2 z^4 + 57 z^3 + 525 z^2 + 1806 z + 1890) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.ai5d.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{64 z^7 - 1792 z^6 + 15\,936 z^5 - 50\,640 z^4 + 41\,184 z^3 + 8316 z^2 + 3780 z + 1575}{1575} - \frac{32 e^{-z} \sqrt{\pi} z^{7/2} (2 z^4 - 57 z^3 + 525 z^2 - 1806 z + 1890) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.ai5e.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, 2; z\right) = -\frac{e^z (128 z^7 + 3136 z^6 + 23\,520 z^5 + 58\,800 z^4 + 29\,400 z^3 - 8820 z^2 + 4410 z - 1575)}{1575}$$

07.25.03.ai5f.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{525} (-32 z^6 - 640 z^5 - 3504 z^4 - 4576 z^3 + 1188 z^2 - 756 z + 525) - \frac{16}{525} e^z \sqrt{\pi} z^{7/2} (2 z^3 + 41 z^2 + 238 z + 378) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai5g.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{16}{525} e^{-z} \sqrt{\pi} (2z^3 - 41z^2 + 238z - 378) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{525} (-32z^6 + 640z^5 - 3504z^4 + 4576z^3 + 1188z^2 + 756z + 525)$$

07.25.03.ai5h.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, 3; z\right) = \frac{18}{5z^2} - \frac{2e^z (128z^8 + 2112z^7 + 8736z^6 + 6384z^5 - 2520z^4 + 1260z^3 + 630z^2 - 2835z + 2835)}{1575z^2}$$

07.25.03.ai5i.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{105} (-16z^5 - 192z^4 - 416z^3 + 132z^2 - 108z + 105) - \frac{8}{105} e^z \sqrt{\pi} z^{7/2} (2z^2 + 25z + 63) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai5j.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{105} (16z^5 - 192z^4 + 416z^3 + 132z^2 + 108z + 105) - \frac{8}{105} e^{-z} \sqrt{\pi} z^{7/2} (2z^2 - 25z + 63) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai5k.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, 4; z\right) = \frac{18(3z - 22)}{5z^3} - \frac{2e^z (128z^8 + 1088z^7 + 1120z^6 - 336z^5 - 840z^4 + 4620z^3 - 13230z^2 + 23625z - 20790)}{525z^3}$$

07.25.03.ai5l.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{15} (-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15} e^z \sqrt{\pi} z^{7/2} (2z + 9) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai5m.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{4}{15} e^{-z} \sqrt{\pi} (2z - 9) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{15} (-8z^4 + 32z^3 + 12z^2 + 12z + 15)$$

07.25.03.ai5n.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, 5; z\right) = \frac{36(3z^2 - 44z + 858)}{5z^4} - \frac{8e^z (128z^8 + 64z^7 + 672z^6 - 4368z^5 + 21000z^4 - 79380z^3 + 224910z^2 - 426195z + 405405)}{525z^4}$$

07.25.03.ai5o.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{3(4z^7 - 16z^6 + 108z^5 - 655z^4 + 3360z^3 - 14112z^2 + 47040z - 141120)}{5z^4} - \frac{6e^z \sqrt{\pi} (2z^8 - 7z^7 + 49z^6 - 294z^5 + 1470z^4 - 5880z^3 + 17640z^2 - 35280z + 35280) \operatorname{erf}(\sqrt{z})}{5z^{9/2}}$$

07.25.03.ai5p.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3(4z^7 + 16z^6 + 108z^5 + 655z^4 + 3360z^3 + 14112z^2 + 47040z + 141120)}{5z^4} - \frac{1}{5z^{9/2}} 6e^{-z} \sqrt{\pi} (2z^8 + 7z^7 + 49z^6 + 294z^5 + 1470z^4 + 5880z^3 + 17640z^2 + 35280z + 35280) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai5q.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{5}{2}, 6; z\right) = \frac{36(z^3 - 22z^2 + 858z + 17160)}{z^5} - \frac{1}{105z^5} 8e^z (128z^8 - 960z^7 + 7392z^6 - 48720z^5 + 264600z^4 - 1137780z^3 + 3638250z^2 - 7702695z + 8108100)$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = -\frac{3}{2}$

07.25.03.ai5r.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} (256z^9 + 11520z^8 + 187904z^7 + 1389888z^6 + 4761792z^5 + 6835920z^4 + 3034080z^3 + 124740z^2 + 3780z + 945) + \frac{128}{945} e^z \sqrt{\pi} (2z^{19/2} + 91z^{17/2} + 1512z^{15/2} + 11550z^{13/2} + 42000z^{11/2} + 68040z^{9/2} + 40320z^{7/2} + 5040z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai5s.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{945} (-256z^9 + 11520z^8 - 187904z^7 + 1389888z^6 - 4761792z^5 + 6835920z^4 - 3034080z^3 + 124740z^2 - 3780z + 945) + \frac{128}{945} e^{-z} \sqrt{\pi} (2z^{19/2} - 91z^{17/2} + 1512z^{15/2} - 11550z^{13/2} + 42000z^{11/2} - 68040z^{9/2} + 40320z^{7/2} - 5040z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai5t.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} (-128z^8 - 4864z^7 - 64832z^6 - 373056z^5 - 915600z^4 - 796320z^3 - 124740z^2 + 3780z + 315) - \frac{64}{315} e^z \sqrt{\pi} (2z^{17/2} + 77z^{15/2} + 1050z^{13/2} + 6300z^{11/2} + 16800z^{9/2} + 17640z^{7/2} + 5040z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai5u.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{315} (-128z^8 + 4864z^7 - 64832z^6 + 373056z^5 - 915600z^4 + 796320z^3 - 124740z^2 - 3780z + 315) + \frac{64}{315} e^{-z} \sqrt{\pi} (2z^{17/2} - 77z^{15/2} + 1050z^{13/2} - 6300z^{11/2} + 16800z^{9/2} - 17640z^{7/2} + 5040z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai5v.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{315} (64z^7 + 1984z^6 + 20544z^5 + 84720z^4 + 127008z^3 + 41580z^2 - 3780z + 315) + \frac{32}{315} e^z \sqrt{\pi} (2z^{15/2} + 63z^{13/2} + 672z^{11/2} + 2940z^{9/2} + 5040z^{7/2} + 2520z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai5w.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} (-64 z^7 + 1984 z^6 - 20544 z^5 + 84720 z^4 - 127008 z^3 + 41580 z^2 + 3780 z + 315) + \frac{32}{315} e^{-z} \sqrt{\pi} (2 z^{15/2} - 63 z^{13/2} + 672 z^{11/2} - 2940 z^{9/2} + 5040 z^{7/2} - 2520 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai5x.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{315} e^z (64 z^7 + 1792 z^6 + 16464 z^5 + 58800 z^4 + 73500 z^3 + 17640 z^2 - 2205 z + 315)$$

07.25.03.ai5y.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{16}{315} e^z \sqrt{\pi} (2 z^4 + 49 z^3 + 378 z^2 + 1050 z + 840) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{315} (32 z^6 + 768 z^5 + 5680 z^4 + 14304 z^3 + 8316 z^2 - 1260 z + 315)$$

07.25.03.ai5z.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{315} (32 z^6 - 768 z^5 + 5680 z^4 - 14304 z^3 + 8316 z^2 + 1260 z + 315) - \frac{16}{315} e^{-z} \sqrt{\pi} z^{5/2} (2 z^4 - 49 z^3 + 378 z^2 - 1050 z + 840) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai60.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{315} e^z (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315)$$

07.25.03.ai61.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{8}{105} e^z \sqrt{\pi} (2 z^3 + 35 z^2 + 168 z + 210) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{105} (16 z^5 + 272 z^4 + 1216 z^3 + 1188 z^2 - 252 z + 105)$$

07.25.03.ai62.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{8}{105} e^{-z} \sqrt{\pi} (2 z^3 - 35 z^2 + 168 z - 210) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{105} (-16 z^5 + 272 z^4 - 1216 z^3 + 1188 z^2 + 252 z + 105)$$

07.25.03.ai63.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, 3; z\right) = \frac{2 e^z (64 z^7 + 896 z^6 + 3024 z^5 + 1680 z^4 - 420 z^3 + 315 z - 315)}{315 z^2} + \frac{2}{z^2}$$

07.25.03.ai64.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{4}{21} e^z \sqrt{\pi} (2 z^2 + 21 z + 42) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{21} (8 z^4 + 80 z^3 + 132 z^2 - 36 z + 21)$$

07.25.03.ai65.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{21} (8 z^4 - 80 z^3 + 132 z^2 + 36 z + 21) - \frac{4}{21} e^{-z} \sqrt{\pi} z^{5/2} (2 z^2 - 21 z + 42) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai66.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, 4; z\right) = \frac{6(z-6)}{z^3} + \frac{2 e^z (64 z^7 + 448 z^6 + 336 z^5 - 420 z^3 + 1260 z^2 - 2205 z + 1890)}{105 z^3}$$

07.25.03.ai67.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{2}{3} e^z \sqrt{\pi} (2z + 7) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (4z^3 + 12z^2 - 4z + 3)$$

07.25.03.ai68.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{2}{3} e^{-z} \sqrt{\pi} (2z - 7) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{3} (-4z^3 + 12z^2 + 4z + 3)$$

07.25.03.ai69.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, 5; z\right) = \frac{12(z^2 - 12z + 198)}{z^4} + \frac{8e^z(64z^7 + 336z^5 - 1680z^4 + 6300z^3 - 17640z^2 + 33075z - 31185)}{105z^4}$$

07.25.03.ai6a.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{3(2z^6 - 8z^5 + 47z^4 - 240z^3 + 1008z^2 - 3360z + 10080)}{z^4} + \frac{3e^z \sqrt{\pi} (2z^7 - 7z^6 + 42z^5 - 210z^4 + 840z^3 - 2520z^2 + 5040z - 5040) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ai6b.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3(2z^6 + 8z^5 + 47z^4 + 240z^3 + 1008z^2 + 3360z + 10080)}{z^4} - \frac{3e^{-z} \sqrt{\pi} (2z^7 + 7z^6 + 42z^5 + 210z^4 + 840z^3 + 2520z^2 + 5040z + 5040) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ai6c.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{3}{2}, 6; z\right) = \frac{20(z^3 - 18z^2 + 594z + 10296)}{z^5} + \frac{8e^z(64z^7 - 448z^6 + 3024z^5 - 16800z^4 + 73500z^3 - 238140z^2 + 509355z - 540540)}{21z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = -\frac{1}{2}$

07.25.03.ai6d.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} (64z^7 + 2048z^6 + 22208z^5 + 98640z^4 + 170720z^3 + 86340z^2 + 3780z + 105) + \frac{32}{105} e^z \sqrt{\pi} (2z^{15/2} + 65z^{13/2} + 725z^{11/2} + 3400z^{9/2} + 6600z^{7/2} + 4440z^{5/2} + 600z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai6e.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} (-64z^7 + 2048z^6 - 22208z^5 + 98640z^4 - 170720z^3 + 86340z^2 - 3780z + 105) + \frac{32}{105} e^{-z} \sqrt{\pi} (2z^{15/2} - 65z^{13/2} + 725z^{11/2} - 3400z^{9/2} + 6600z^{7/2} - 4440z^{5/2} + 600z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai6f.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{105} (-32 z^6 - 832 z^5 - 6960 z^4 - 21\,856 z^3 - 22\,380 z^2 - 3780 z + 105) - \frac{16}{105} e^z \sqrt{\pi} (2 z^{13/2} + 53 z^{11/2} + 460 z^{9/2} + 1560 z^{7/2} + 1920 z^{5/2} + 600 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai6g.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} (-32 z^6 + 832 z^5 - 6960 z^4 + 21\,856 z^3 - 22\,380 z^2 + 3780 z + 105) + \frac{16}{105} e^{-z} \sqrt{\pi} (2 z^{13/2} - 53 z^{11/2} + 460 z^{9/2} - 1560 z^{7/2} + 1920 z^{5/2} - 600 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai6h.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, 1; z\right) = -\frac{1}{105} e^z (32 z^6 + 752 z^5 + 5600 z^4 + 15\,400 z^3 + 13\,650 z^2 + 1995 z - 105)$$

07.25.03.ai6i.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{105} (-16 z^5 - 320 z^4 - 1888 z^3 - 3516 z^2 - 1260 z + 105) - \frac{8}{105} e^z \sqrt{\pi} z^{3/2} (2 z^4 + 41 z^3 + 255 z^2 + 540 z + 300) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai6j.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} (16 z^5 - 320 z^4 + 1888 z^3 - 3516 z^2 + 1260 z + 105) - \frac{8}{105} e^{-z} \sqrt{\pi} z^{3/2} (2 z^4 - 41 z^3 + 255 z^2 - 540 z + 300) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai6k.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, 2; z\right) = -\frac{1}{105} e^z (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105)$$

07.25.03.ai6l.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{35} (-8 z^4 - 112 z^3 - 388 z^2 - 252 z + 35) - \frac{4}{35} e^z \sqrt{\pi} z^{3/2} (2 z^3 + 29 z^2 + 110 z + 100) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai6m.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{4}{35} e^{-z} \sqrt{\pi} (2 z^3 - 29 z^2 + 110 z - 100) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{35} (-8 z^4 + 112 z^3 - 388 z^2 + 252 z + 35)$$

07.25.03.ai6n.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, 3; z\right) = \frac{6}{7 z^2} - \frac{2 e^z (32 z^6 + 368 z^5 + 960 z^4 + 360 z^3 - 30 z^2 - 45 z + 45)}{105 z^2}$$

07.25.03.ai6o.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{7} (-4 z^3 - 32 z^2 - 36 z + 7) - \frac{2}{7} e^z \sqrt{\pi} z^{3/2} (2 z^2 + 17 z + 25) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai6p.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{7} (4 z^3 - 32 z^2 + 36 z + 7) - \frac{2}{7} e^{-z} \sqrt{\pi} z^{3/2} (2 z^2 - 17 z + 25) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai6q.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, 4; z\right) = \frac{6(3z - 14)}{7z^3} - \frac{2e^z(32z^6 + 176z^5 + 80z^4 + 40z^3 - 150z^2 + 255z - 210)}{35z^3}$$

07.25.03.ai6r.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -2z^2 - e^z \sqrt{\pi} (2z + 5) \operatorname{erf}(\sqrt{z}) z^{3/2} - 4z + 1$$

07.25.03.ai6s.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = -2z^2 + e^{-z} \sqrt{\pi} (2z - 5) \operatorname{erfi}(\sqrt{z}) z^{3/2} + 4z + 1$$

07.25.03.ai6t.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, 5; z\right) = \frac{12(3z^2 - 28z + 378)}{7z^4} - \frac{8e^z(32z^6 - 16z^5 + 160z^4 - 600z^3 + 1650z^2 - 3045z + 2835)}{35z^4}$$

07.25.03.ai6u.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{9(z^5 - 4z^4 + 20z^3 - 84z^2 + 280z - 840)}{z^4} - \frac{9e^z \sqrt{\pi} (2z^6 - 7z^5 + 35z^4 - 140z^3 + 420z^2 - 840z + 840) \operatorname{erf}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.ai6v.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{9(z^5 + 4z^4 + 20z^3 + 84z^2 + 280z + 840)}{z^4} - \frac{9e^{-z} \sqrt{\pi} (2z^6 + 7z^5 + 35z^4 + 140z^3 + 420z^2 + 840z + 840) \operatorname{erfi}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.ai6w.01

$${}_2F_2\left(2, \frac{9}{2}; -\frac{1}{2}, 6; z\right) = \frac{60(z^3 - 14z^2 + 378z + 5544)}{7z^5} - \frac{8e^z(32z^6 - 208z^5 + 1200z^4 - 5400z^3 + 17850z^2 - 38745z + 41580)}{7z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = \frac{1}{2}$

07.25.03.ai6x.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{105} (16z^5 + 336z^4 + 2144z^3 + 4644z^2 + 2628z + 105) + \frac{8}{105} e^z \sqrt{\pi} (2z^{11/2} + 43z^{9/2} + 288z^{7/2} + 696z^{5/2} + 528z^{3/2} + 72\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai6y.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} (-16z^5 + 336z^4 - 2144z^3 + 4644z^2 - 2628z + 105) + \frac{8}{105} e^{-z} \sqrt{\pi} (2z^{11/2} - 43z^{9/2} + 288z^{7/2} - 696z^{5/2} + 528z^{3/2} - 72\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai6z.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{105} e^z (16z^5 + 304z^4 + 1736z^3 + 3360z^2 + 1785z + 105)$$

07.25.03.ai70.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{105} (8z^4 + 128z^3 + 564z^2 + 684z + 105) + \frac{4}{105} e^z \sqrt{\pi} \sqrt{z} (2z^4 + 33z^3 + 156z^2 + 228z + 72) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai71.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} (8z^4 - 128z^3 + 564z^2 - 684z + 105) - \frac{4}{105} e^{-z} \sqrt{\pi} \sqrt{z} (2z^4 - 33z^3 + 156z^2 - 228z + 72) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai72.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{105} e^z (16z^4 + 224z^3 + 840z^2 + 840z + 105)$$

07.25.03.ai73.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{35} (4z^3 + 44z^2 + 108z + 35) + \frac{2}{35} e^z \sqrt{\pi} \sqrt{z} (2z^3 + 23z^2 + 64z + 36) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai74.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{35} (-4z^3 + 44z^2 - 108z + 35) + \frac{2}{35} e^{-z} \sqrt{\pi} \sqrt{z} (2z^3 - 23z^2 + 64z - 36) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai75.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, 3; z\right) = \frac{2e^z (16z^5 + 144z^4 + 264z^3 + 48z^2 + 9z - 9)}{105z^2} + \frac{6}{35z^2}$$

07.25.03.ai76.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{7} (2z^2 + 12z + 7) + \frac{1}{7} e^z \sqrt{\pi} \sqrt{z} (2z^2 + 13z + 12) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai77.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{7} (2z^2 - 12z + 7) - \frac{1}{7} e^{-z} \sqrt{\pi} \sqrt{z} (2z^2 - 13z + 12) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai78.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, 4; z\right) = \frac{6(3z - 10)}{35z^3} + \frac{2e^z (16z^5 + 64z^4 + 8z^3 + 24z^2 - 39z + 30)}{35z^3}$$

07.25.03.ai79.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = z + \frac{1}{2} e^z \sqrt{\pi} (2z + 3) \operatorname{erf}(\sqrt{z}) \sqrt{z} + 1$$

07.25.03.ai7a.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = -z + \frac{1}{2} e^{-z} \sqrt{\pi} (2z - 3) \operatorname{erfi}(\sqrt{z}) \sqrt{z} + 1$$

07.25.03.ai7b.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, 5; z\right) = \frac{12(3z^2 - 20z + 210)}{35z^4} + \frac{8e^z (16z^5 - 16z^4 + 72z^3 - 192z^2 + 345z - 315)}{35z^4}$$

07.25.03.ai7c.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{9(5z^4 - 20z^3 + 84z^2 - 280z + 840)}{10z^4} + \frac{9e^z \sqrt{\pi} (2z^5 - 7z^4 + 28z^3 - 84z^2 + 168z - 168) \operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.ai7d.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{9(5z^4 + 20z^3 + 84z^2 + 280z + 840)}{10z^4} - \frac{9e^{-z}\sqrt{\pi}(2z^5 + 7z^4 + 28z^3 + 84z^2 + 168z + 168)\operatorname{erfi}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.ai7e.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{1}{2}, 6; z\right) = \frac{12(z^3 - 10z^2 + 210z + 2520)}{7z^5} + \frac{8e^z(16z^5 - 96z^4 + 456z^3 - 1560z^2 + 3465z - 3780)}{7z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = 1$

07.25.03.ai7f.01

$${}_2F_2\left(2, \frac{9}{2}; 1, 1; z\right) = \frac{1}{210}e^{z/2}(16z^5 + 280z^4 + 1492z^3 + 2852z^2 + 1785z + 210)I_0\left(\frac{z}{2}\right) + \frac{1}{210}e^{z/2}(16z^5 + 264z^4 + 1236z^3 + 1732z^2 + 457z)I_1\left(\frac{z}{2}\right)$$

07.25.03.ai7g.01

$${}_2F_2\left(2, \frac{9}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{105}e^z(8z^4 + 116z^3 + 462z^2 + 525z + 105)$$

07.25.03.ai7h.01

$${}_2F_2\left(2, \frac{9}{2}; 1, 2; z\right) = \frac{1}{105}e^{z/2}(8z^4 + 104z^3 + 376z^2 + 420z + 105)I_0\left(\frac{z}{2}\right) + \frac{4}{105}e^{z/2}(2z^4 + 24z^3 + 71z^2 + 44z)I_1\left(\frac{z}{2}\right)$$

07.25.03.ai7i.01

$${}_2F_2\left(2, \frac{9}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{35}e^z(4z^3 + 40z^2 + 91z + 35)$$

07.25.03.ai7j.01

$${}_2F_2\left(2, \frac{9}{2}; 1, 3; z\right) = \frac{2}{105}e^{z/2}(8z^3 + 68z^2 + 132z + 51)I_0\left(\frac{z}{2}\right) + \frac{2e^{z/2}(8z^4 + 60z^3 + 76z^2 - 3z + 6)I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.ai7k.01

$${}_2F_2\left(2, \frac{9}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{7}e^z(2z^2 + 11z + 7)$$

07.25.03.ai7l.01

$${}_2F_2\left(2, \frac{9}{2}; 1, 4; z\right) = \frac{4e^{z/2}(4z^3 + 16z^2 + 7z + 2)I_0\left(\frac{z}{2}\right)}{35z} + \frac{4e^{z/2}(4z^4 + 12z^3 - 3z^2 + 7z - 8)I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.ai7m.01

$${}_2F_2\left(2, \frac{9}{2}; 1, \frac{9}{2}; z\right) = e^z(z + 1)$$

07.25.03.ai7n.01

$${}_2F_2\left(2, \frac{9}{2}; 1, 5; z\right) = \frac{16e^{z/2}(4z^3 - 2z^2 + 11z - 18)I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{16e^{z/2}(4z^4 - 6z^3 + 19z^2 - 44z + 72)I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.ai7o.01

$${}_2F_2\left(2, \frac{9}{2}; 1, \frac{11}{2}; z\right) = \frac{9e^z(16z^4 - 56z^3 + 196z^2 - 490z + 735)}{32z^4} - \frac{6615\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.ai7p.01

$${}_2F_2\left(2, \frac{9}{2}; 1, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (16 z^4 + 56 z^3 + 196 z^2 + 490 z + 735)}{32 z^4} - \frac{6615 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ai7q.01

$${}_2F_2\left(2, \frac{9}{2}; 1, 6; z\right) = \frac{32 e^{z/2} (2 z^3 - 10 z^2 + 39 z - 96) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{64 e^{z/2} (z^4 - 6 z^3 + 26 z^2 - 78 z + 192) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = \frac{3}{2}$

07.25.03.ai7r.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{105} (4 z^3 + 48 z^2 + 140 z + 81) + \frac{2 e^z \sqrt{\pi} (2 z^4 + 25 z^3 + 81 z^2 + 66 z + 6) \operatorname{erf}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.ai7s.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} (-4 z^3 + 48 z^2 - 140 z + 81) + \frac{2 e^{-z} \sqrt{\pi} (2 z^4 - 25 z^3 + 81 z^2 - 66 z + 6) \operatorname{erfi}(\sqrt{z})}{105 \sqrt{z}}$$

07.25.03.ai7t.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{105} e^z (8 z^3 + 84 z^2 + 210 z + 105)$$

07.25.03.ai7u.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{35} (2 z^2 + 16 z + 23) + \frac{e^z \sqrt{\pi} (2 z^3 + 17 z^2 + 30 z + 6) \operatorname{erf}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.ai7v.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{35} (2 z^2 - 16 z + 23) + \frac{e^{-z} \sqrt{\pi} (-2 z^3 + 17 z^2 - 30 z + 6) \operatorname{erfi}(\sqrt{z})}{35 \sqrt{z}}$$

07.25.03.ai7w.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{3}{2}, 3; z\right) = \frac{2 e^z (8 z^4 + 52 z^3 + 54 z^2 - 3 z + 3)}{105 z^2} - \frac{2}{35 z^2}$$

07.25.03.ai7x.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{z+4}{7} + \frac{e^z \sqrt{\pi} (2 z^2 + 9 z + 3) \operatorname{erf}(\sqrt{z})}{14 \sqrt{z}}$$

07.25.03.ai7y.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{4-z}{7} + \frac{e^{-z} \sqrt{\pi} (2 z^2 - 9 z + 3) \operatorname{erfi}(\sqrt{z})}{14 \sqrt{z}}$$

07.25.03.ai7z.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{3}{2}, 4; z\right) = \frac{2 e^z (8 z^4 + 20 z^3 - 6 z^2 + 9 z - 6)}{35 z^3} - \frac{6(z-2)}{35 z^3}$$

07.25.03.ai80.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z \sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.ai81.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (1-2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.ai82.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{3}{2}, 5; z\right) = \frac{8e^z(8z^4 - 12z^3 + 30z^2 - 51z + 45)}{35z^4} - \frac{12(z^2 - 4z + 30)}{35z^4}$$

07.25.03.ai83.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{9(5z^3 - 21z^2 + 70z - 210)}{20z^4} + \frac{9e^z \sqrt{\pi} (2z^4 - 7z^3 + 21z^2 - 42z + 42) \operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.ai84.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{9e^{-z} \sqrt{\pi} (2z^4 + 7z^3 + 21z^2 + 42z + 42) \operatorname{erfi}(\sqrt{z})}{8z^{9/2}} - \frac{9(5z^3 + 21z^2 + 70z + 210)}{20z^4}$$

07.25.03.ai85.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{3}{2}, 6; z\right) = \frac{8e^z(8z^4 - 44z^3 + 162z^2 - 375z + 420)}{7z^5} - \frac{4(z^3 - 6z^2 + 90z + 840)}{7z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = 2$

07.25.03.ai86.01

$${}_2F_2\left(2, \frac{9}{2}; 2, 2; z\right) = \frac{1}{105} e^{z/2} (8z^3 + 76z^2 + 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 + 68z^2 + 116z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.ai87.01

$${}_2F_2\left(2, \frac{9}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{35} e^z (4z^2 + 28z + 35)$$

07.25.03.ai88.01

$${}_2F_2\left(2, \frac{9}{2}; 2, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 + 24z + 27) I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2} (4z^3 + 20z^2 + 9z - 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.ai89.01

$${}_2F_2\left(2, \frac{9}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{7} e^z (2z + 7)$$

07.25.03.ai8a.01

$${}_2F_2\left(2, \frac{9}{2}; 2, 4; z\right) = \frac{4e^{z/2} (4z^2 + 10z - 1) I_0\left(\frac{z}{2}\right)}{35z} + \frac{4e^{z/2} (4z^3 + 6z^2 - 5z + 4) I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.ai8b.01

$${}_2F_2\left(2, \frac{9}{2}; 2, \frac{9}{2}; z\right) = e^z$$

07.25.03.ai8c.01

$${}_2F_2\left(2, \frac{9}{2}; 2, 5; z\right) = \frac{32 e^{z/2} (2z^2 - 2z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} + \frac{64 e^{z/2} (z^3 - 2z^2 + 4z - 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.ai8d.01

$${}_2F_2\left(2, \frac{9}{2}; 2, \frac{11}{2}; z\right) = \frac{9 e^z (8z^3 - 28z^2 + 70z - 105)}{16 z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.ai8e.01

$${}_2F_2\left(2, \frac{9}{2}; 2, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9 e^{-z} (8z^3 + 28z^2 + 70z + 105)}{16 z^4}$$

07.25.03.ai8f.01

$${}_2F_2\left(2, \frac{9}{2}; 2, 6; z\right) = \frac{32 e^{z/2} (2z^2 - 9z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{32 e^{z/2} (2z^3 - 11z^2 + 36z - 96) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = \frac{5}{2}$

07.25.03.ai8g.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3(z^2 + 5z + 2)}{35 z} + \frac{3 e^z \sqrt{\pi} (2z^3 + 11z^2 + 8z - 2) \operatorname{erf}(\sqrt{z})}{70 z^{3/2}}$$

07.25.03.ai8h.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z^3 - 11z^2 + 8z + 2) \operatorname{erfi}(\sqrt{z})}{70 z^{3/2}} - \frac{3(z^2 - 5z + 2)}{35 z}$$

07.25.03.ai8i.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{5}{2}, 3; z\right) = \frac{2 e^z (4z^3 + 16z^2 + 3z - 3)}{35 z^2} + \frac{6}{35 z^2}$$

07.25.03.ai8j.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{3(z+2)}{14 z} + \frac{3 e^z \sqrt{\pi} (2z^2 + 5z - 2) \operatorname{erf}(\sqrt{z})}{28 z^{3/2}}$$

07.25.03.ai8k.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{3(z-2)}{14 z} - \frac{3 e^{-z} \sqrt{\pi} (2z^2 - 5z - 2) \operatorname{erfi}(\sqrt{z})}{28 z^{3/2}}$$

07.25.03.ai8l.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{5}{2}, 4; z\right) = \frac{6(3z-2)}{35 z^3} + \frac{6 e^z (4z^3 + 4z^2 - 5z + 2)}{35 z^3}$$

07.25.03.ai8m.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{3 e^z \sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{8 z^{3/2}} + \frac{3}{4 z}$$

07.25.03.ai8n.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (2z+1) \operatorname{erfi}(\sqrt{z})}{8 z^{3/2}} - \frac{3}{4z}$$

07.25.03.ai8o.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{5}{2}, 5; z\right) = \frac{12(3z^2 - 4z + 18)}{35 z^4} + \frac{24 e^z (4z^3 - 8z^2 + 11z - 9)}{35 z^4}$$

07.25.03.ai8p.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{63(3z^2 - 10z + 30)}{40 z^4} + \frac{27 e^z \sqrt{\pi} (2z^3 - 7z^2 + 14z - 14) \operatorname{erf}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.ai8q.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63(3z^2 + 10z + 30)}{40 z^4} - \frac{27 e^{-z} \sqrt{\pi} (2z^3 + 7z^2 + 14z + 14) \operatorname{erfi}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.ai8r.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{5}{2}, 6; z\right) = \frac{12(z^3 - 2z^2 + 18z + 120)}{7 z^5} + \frac{24 e^z (4z^3 - 20z^2 + 51z - 60)}{7 z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = 3$

07.25.03.ai8s.01

$${}_2F_2\left(2, \frac{9}{2}; 3, 3; z\right) = \frac{8 e^{z/2} (4z^3 + 14z^2 + 3z - 6) I_0\left(\frac{z}{2}\right)}{105 z^2} + \frac{8 e^{z/2} (4z^2 + 10z - 5) I_1\left(\frac{z}{2}\right)}{105 z} + \frac{16}{35 z^2}$$

07.25.03.ai8t.01

$${}_2F_2\left(2, \frac{9}{2}; 3, \frac{7}{2}; z\right) = \frac{2 e^z (2z^2 + 3z - 3)}{7 z^2} + \frac{6}{7 z^2}$$

07.25.03.ai8u.01

$${}_2F_2\left(2, \frac{9}{2}; 3, 4; z\right) = \frac{16 e^{z/2} (2z^2 + 2z - 3) I_0\left(\frac{z}{2}\right)}{35 z^2} + \frac{32 e^{z/2} (z^2 - 1) I_1\left(\frac{z}{2}\right)}{35 z^2} + \frac{48}{35 z^2}$$

07.25.03.ai8v.01

$${}_2F_2\left(2, \frac{9}{2}; 3, \frac{9}{2}; z\right) = \frac{2 e^z (z - 1)}{z^2} + \frac{2}{z^2}$$

07.25.03.ai8w.01

$${}_2F_2\left(2, \frac{9}{2}; 3, 5; z\right) = \frac{64 e^{z/2} (2z - 3) I_0\left(\frac{z}{2}\right)}{35 z^2} + \frac{64 e^{z/2} (2z^2 - 5z + 6) I_1\left(\frac{z}{2}\right)}{35 z^3} + \frac{96}{35 z^2}$$

07.25.03.ai8x.01

$${}_2F_2\left(2, \frac{9}{2}; 3, \frac{11}{2}; z\right) = \frac{9 e^z (4z^2 - 14z + 21)}{4 z^4} - \frac{189 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{9/2}} + \frac{18}{5 z^2}$$

07.25.03.ai8y.01

$${}_2F_2\left(2, \frac{9}{2}; 3, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (4z^2 + 14z + 21)}{4 z^4} - \frac{189 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{9/2}} + \frac{18}{5 z^2}$$

07.25.03.ai8z.01

$${}_2F_2\left(2, \frac{9}{2}; 3, 6; z\right) = \frac{128 e^{z/2} (z-4) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{128 e^{z/2} (z^2 - 5z + 16) I_1\left(\frac{z}{2}\right)}{7 z^4} + \frac{32}{7 z^2}$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = \frac{7}{2}$

07.25.03.ai90.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{15(z+3)}{28 z^2} + \frac{15 e^z \sqrt{\pi} (2z^2 + z - 3) \operatorname{erf}(\sqrt{z})}{56 z^{5/2}}$$

07.25.03.ai91.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15 e^{-z} \sqrt{\pi} (2z^2 - z - 3) \operatorname{erfi}(\sqrt{z})}{56 z^{5/2}} - \frac{15(z-3)}{28 z^2}$$

07.25.03.ai92.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{7}{2}, 4; z\right) = \frac{6(3z+2)}{7 z^3} + \frac{6 e^z (2z^2 - z - 2)}{7 z^3}$$

07.25.03.ai93.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{15 e^z \sqrt{\pi} (2z-3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45}{8 z^2}$$

07.25.03.ai94.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{45}{8 z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z+3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

07.25.03.ai95.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{7}{2}, 5; z\right) = \frac{24 e^z (2z^2 - 5z + 3)}{7 z^4} + \frac{12(3z^2 + 4z - 6)}{7 z^4}$$

07.25.03.ai96.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{9(12z^2 + 35z - 105)}{16 z^4} + \frac{135 e^z \sqrt{\pi} (2z^2 - 7z + 7) \operatorname{erf}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.ai97.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9(12z^2 - 35z - 105)}{16 z^4} + \frac{135 e^{-z} \sqrt{\pi} (2z^2 + 7z + 7) \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.ai98.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{7}{2}, 6; z\right) = \frac{120 e^z (2z^2 - 9z + 12)}{7 z^5} + \frac{60(z^3 + 2z^2 - 6z - 24)}{7 z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = 4$

07.25.03.ai99.01

$${}_2F_2\left(2, \frac{9}{2}; 4, 4; z\right) = \frac{48(3z+4)}{35 z^3} + \frac{48 e^{z/2} (2z^2 - z - 4) I_0\left(\frac{z}{2}\right)}{35 z^3} + \frac{48 e^{z/2} (2z-3) I_1\left(\frac{z}{2}\right)}{35 z^2}$$

07.25.03.ai9a.01

$${}_2F_2\left(2, \frac{9}{2}; 4, \frac{9}{2}; z\right) = \frac{6 e^z (z-2)}{z^3} + \frac{6 (z+2)}{z^3}$$

07.25.03.ai9b.01

$${}_2F_2\left(2, \frac{9}{2}; 4, 5; z\right) = \frac{96 (3z+8)}{35 z^3} + \frac{384 e^{z/2} (z-2) I_0\left(\frac{z}{2}\right)}{35 z^3} + \frac{384 e^{z/2} (z-3) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.ai9c.01

$${}_2F_2\left(2, \frac{9}{2}; 4, \frac{11}{2}; z\right) = \frac{27 e^z (2z-7)}{2 z^4} + \frac{18 (3z+10)}{5 z^3} + \frac{189 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{9/2}}$$

07.25.03.ai9d.01

$${}_2F_2\left(2, \frac{9}{2}; 4, \frac{11}{2}; -z\right) = -\frac{27 e^{-z} (2z+7)}{2 z^4} + \frac{18 (3z-10)}{5 z^3} + \frac{189 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{9/2}}$$

07.25.03.ai9e.01

$${}_2F_2\left(2, \frac{9}{2}; 4, 6; z\right) = \frac{96 (z+4)}{7 z^3} + \frac{384 e^{z/2} I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{384 e^{z/2} (z-8) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = \frac{9}{2}$

07.25.03.ai9f.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 (4z+15)}{16 z^3} + \frac{105 e^z \sqrt{\pi} (2z-5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ai9g.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 (4z-15)}{16 z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z+5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ai9h.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{9}{2}, 5; z\right) = \frac{24 e^z (z-3)}{z^4} + \frac{12 (z^2+4z+6)}{z^4}$$

07.25.03.ai9i.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{63 (8z^2+40z+105)}{32 z^4} + \frac{945 e^z \sqrt{\pi} (2z-7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ai9j.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{63 (8z^2-40z+105)}{32 z^4} - \frac{945 e^{-z} \sqrt{\pi} (2z+7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ai9k.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{9}{2}, 6; z\right) = \frac{120 e^z (z-4)}{z^5} + \frac{20 (z^3+6z^2+18z+24)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = 5$

07.25.03.ai9l.01

$${}_2F_2\left(2, \frac{9}{2}; 5, 5; z\right) = \frac{192(3z^2 + 16z + 48)}{35z^4} + \frac{1536e^{z/2}(z-6)I_0\left(\frac{z}{2}\right)}{35z^4} + \frac{1536e^{z/2}I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.ai9m.01

$${}_2F_2\left(2, \frac{9}{2}; 5, \frac{11}{2}; z\right) = \frac{36(3z^2 + 20z + 90)}{5z^4} - \frac{378\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{z^{9/2}} + \frac{108e^z}{z^4}$$

07.25.03.ai9n.01

$${}_2F_2\left(2, \frac{9}{2}; 5, \frac{11}{2}; -z\right) = \frac{36(3z^2 - 20z + 90)}{5z^4} - \frac{378\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{z^{9/2}} + \frac{108e^{-z}}{z^4}$$

07.25.03.ai9o.01

$${}_2F_2\left(2, \frac{9}{2}; 5, 6; z\right) = \frac{192(z^2 + 8z + 48)}{7z^4} - \frac{9216e^{z/2}I_0\left(\frac{z}{2}\right)}{7z^4} + \frac{12288e^{z/2}I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = \frac{11}{2}$

07.25.03.ai9p.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{11}{2}, 6; z\right) = \frac{36(z^3 + 10z^2 + 90z - 120)}{z^5} - \frac{3780\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{z^{9/2}} + \frac{4320e^z}{z^5}$$

07.25.03.ai9q.01

$${}_2F_2\left(2, \frac{9}{2}; \frac{11}{2}, 6; -z\right) = \frac{36(z^3 - 10z^2 + 90z + 120)}{z^5} - \frac{3780\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{z^{9/2}} - \frac{4320e^{-z}}{z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{9}{2}, b_1 = 6$

07.25.03.ai9r.01

$${}_2F_2\left(2, \frac{9}{2}; 6, 6; z\right) = \frac{320(z^3 + 12z^2 + 144z - 384)}{7z^5} - \frac{15360e^{z/2}(7z-8)I_0\left(\frac{z}{2}\right)}{7z^5} + \frac{15360e^{z/2}I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = -\frac{11}{2}$

07.25.03.ai9s.01

$$\begin{aligned} {}_2F_2\left(2, 5; -\frac{11}{2}, 1; z\right) &= \frac{1}{62370} (16z^{11} + 848z^{10} + 16216z^9 + 137532z^8 + \\ &\quad 501345z^7 + 564480z^6 - 145152z^5 + 100800z^4 - 100800z^3 + 113400z^2 - 113400z + 62370) + \\ &\quad \frac{1}{124740} e^z \sqrt{\pi} (32z^{23/2} + 1712z^{21/2} + 33264z^{19/2} + 290472z^{17/2} + 1125978z^{15/2} + 1526175z^{13/2}) \operatorname{erf}(\sqrt{z}) \end{aligned}$$

07.25.03.ai9t.01

$${}_2F_2\left(2, 5; -\frac{11}{2}, 1; -z\right) = \frac{1}{62370} (-16z^{11} + 848z^{10} - 16216z^9 + 137532z^8 - 501345z^7 + 564480z^6 + 145152z^5 + 100800z^4 + 100800z^3 + 113400z^2 + 113400z + 62370) + \frac{1}{124740} e^{-z} \sqrt{\pi} (32z^{23/2} - 1712z^{21/2} + 33264z^{19/2} - 290472z^{17/2} + 1125978z^{15/2} - 1526175z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai9u.01

$${}_2F_2\left(2, 5; -\frac{11}{2}, 2; z\right) = \frac{1}{31185} (8z^{10} + 332z^9 + 4626z^8 + 24975z^7 + 40320z^6 - 12096z^5 + 10080z^4 - 12600z^3 + 18900z^2 - 28350z + 31185) + \frac{e^z \sqrt{\pi} (16z^{21/2} + 672z^{19/2} + 9576z^{17/2} + 54264z^{15/2} + 101745z^{13/2}) \operatorname{erf}(\sqrt{z})}{62370}$$

07.25.03.ai9v.01

$${}_2F_2\left(2, 5; -\frac{11}{2}, 2; -z\right) = \frac{1}{31185} (8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185) + \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 672z^{19/2} - 9576z^{17/2} + 54264z^{15/2} - 101745z^{13/2}) \operatorname{erfi}(\sqrt{z})}{62370}$$

07.25.03.ai9w.01

$${}_2F_2\left(2, 5; -\frac{11}{2}, 3; z\right) = \frac{16z^9 + 480z^8 + 4220z^7 + 10080z^6 - 3456z^5 + 3360z^4 - 5040z^3 + 9450z^2 - 18900z + 31185}{31185} + \frac{2e^z \sqrt{\pi} (8z^{19/2} + 244z^{17/2} + 2226z^{15/2} + 5985z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.ai9x.01

$${}_2F_2\left(2, 5; -\frac{11}{2}, 3; -z\right) = \frac{-16z^9 + 480z^8 - 4220z^7 + 10080z^6 + 3456z^5 + 3360z^4 + 5040z^3 + 9450z^2 + 18900z + 31185}{31185} + \frac{2e^{-z} \sqrt{\pi} (8z^{19/2} - 244z^{17/2} + 2226z^{15/2} - 5985z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.ai9y.01

$${}_2F_2\left(2, 5; -\frac{11}{2}, 4; z\right) = \frac{16z^8 + 296z^7 + 1120z^6 - 432z^5 + 480z^4 - 840z^3 + 1890z^2 - 4725z + 10395}{10395} + \frac{4e^z \sqrt{\pi} (4z^{17/2} + 76z^{15/2} + 315z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.ai9z.01

$${}_2F_2\left(2, 5; -\frac{11}{2}, 4; -z\right) = \frac{16z^8 - 296z^7 + 1120z^6 + 432z^5 + 480z^4 + 840z^3 + 1890z^2 + 4725z + 10395}{10395} - \frac{4e^{-z}\sqrt{\pi}(4z^{17/2} - 76z^{15/2} + 315z^{13/2})\operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.aia0.01

$${}_2F_2\left(2, 5; -\frac{11}{2}, 5; z\right) = \frac{64z^7 + 448z^6 - 192z^5 + 240z^4 - 480z^3 + 1260z^2 - 3780z + 10395}{10395} + \frac{32e^z\sqrt{\pi}(2z^{15/2} + 15z^{13/2})\operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.aia1.01

$${}_2F_2\left(2, 5; -\frac{11}{2}, 5; -z\right) = \frac{-64z^7 + 448z^6 + 192z^5 + 240z^4 + 480z^3 + 1260z^2 + 3780z + 10395}{10395} + \frac{32e^{-z}\sqrt{\pi}(2z^{15/2} - 15z^{13/2})\operatorname{erfi}(\sqrt{z})}{10395}$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = -\frac{9}{2}$

07.25.03.aia2.01

$${}_2F_2\left(2, 5; -\frac{9}{2}, 1; z\right) = \frac{1}{11340}(-16z^{10} - 768z^9 - 13152z^8 - 98440z^7 - 310155z^6 - 290304z^5 + 67200z^4 - 40320z^3 + 32400z^2 - 25200z + 11340) + \frac{1}{22680}e^z\sqrt{\pi}(-32z^{21/2} - 1552z^{19/2} - 27056z^{17/2} - 209304z^{15/2} - 707370z^{13/2} - 818805z^{11/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aia3.01

$${}_2F_2\left(2, 5; -\frac{9}{2}, 1; -z\right) = \frac{1}{11340}(-16z^{10} + 768z^9 - 13152z^8 + 98440z^7 - 310155z^6 + 290304z^5 + 67200z^4 + 40320z^3 + 32400z^2 + 25200z + 11340) + \frac{1}{22680}e^{-z}\sqrt{\pi}(32z^{21/2} - 1552z^{19/2} + 27056z^{17/2} - 209304z^{15/2} + 707370z^{13/2} - 818805z^{11/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aia4.01

$${}_2F_2\left(2, 5; -\frac{9}{2}, 2; z\right) = \frac{-8z^9 - 300z^8 - 3730z^7 - 17655z^6 - 24192z^5 + 6720z^4 - 5040z^3 + 5400z^2 - 6300z + 5670}{5670} + \frac{e^z\sqrt{\pi}(-16z^{19/2} - 608z^{17/2} - 7752z^{15/2} - 38760z^{13/2} - 62985z^{11/2})\operatorname{erf}(\sqrt{z})}{11340}$$

07.25.03.aia5.01

$${}_2F_2\left(2, 5; -\frac{9}{2}, 2; -z\right) = \frac{8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670}{5670} + \frac{e^{-z}\sqrt{\pi}(-16z^{19/2} + 608z^{17/2} - 7752z^{15/2} + 38760z^{13/2} - 62985z^{11/2})\operatorname{erfi}(\sqrt{z})}{11340}$$

07.25.03.aia6.01

$${}_2F_2\left(2, 5; -\frac{9}{2}, 3; z\right) = \frac{-8z^8 - 216z^7 - 1682z^6 - 3456z^5 + 1120z^4 - 1008z^3 + 1350z^2 - 2100z + 2835}{2835} + \frac{e^z \sqrt{\pi} (-8z^{17/2} - 220z^{15/2} - 1786z^{13/2} - 4199z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.aia7.01

$${}_2F_2\left(2, 5; -\frac{9}{2}, 3; -z\right) = \frac{-8z^8 + 216z^7 - 1682z^6 + 3456z^5 + 1120z^4 + 1008z^3 + 1350z^2 + 2100z + 2835}{2835} + \frac{e^{-z} \sqrt{\pi} (8z^{17/2} - 220z^{15/2} + 1786z^{13/2} - 4199z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.aia8.01

$${}_2F_2\left(2, 5; -\frac{9}{2}, 4; z\right) = \frac{1}{945} (-8z^7 - 132z^6 - 432z^5 + 160z^4 - 168z^3 + 270z^2 - 525z + 945) - \frac{2}{945} e^z \sqrt{\pi} (4z^{15/2} + 68z^{13/2} + 247z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aia9.01

$${}_2F_2\left(2, 5; -\frac{9}{2}, 4; -z\right) = \frac{1}{945} (8z^7 - 132z^6 + 432z^5 + 160z^4 + 168z^3 + 270z^2 + 525z + 945) - \frac{2}{945} e^{-z} \sqrt{\pi} (4z^{15/2} - 68z^{13/2} + 247z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiaa.01

$${}_2F_2\left(2, 5; -\frac{9}{2}, 5; z\right) = \frac{1}{945} (-32z^6 - 192z^5 + 80z^4 - 96z^3 + 180z^2 - 420z + 945) - \frac{16}{945} e^z \sqrt{\pi} (2z^{13/2} + 13z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiab.01

$${}_2F_2\left(2, 5; -\frac{9}{2}, 5; -z\right) = \frac{1}{945} (-32z^6 + 192z^5 + 80z^4 + 96z^3 + 180z^2 + 420z + 945) + \frac{16}{945} e^{-z} \sqrt{\pi} (2z^{13/2} - 13z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = -\frac{7}{2}$

07.25.03.aiac.01

$${}_2F_2\left(2, 5; -\frac{7}{2}, 1; z\right) = \frac{1}{2520} (16z^9 + 688z^8 + 10408z^7 + 67540z^6 + 179493z^5 + 134400z^4 - 26880z^3 + 12960z^2 - 7200z + 2520) + \frac{e^z \sqrt{\pi} (32z^{19/2} + 1392z^{17/2} + 21488z^{15/2} + 144840z^{13/2} + 417690z^{11/2} + 401115z^{9/2}) \operatorname{erf}(\sqrt{z})}{5040}$$

07.25.03.aiad.01

$${}_2F_2\left(2, 5; -\frac{7}{2}, 1; -z\right) = \frac{1}{2520} \left(-16 z^9 + 688 z^8 - 10\,408 z^7 + 67\,540 z^6 - 179\,493 z^5 + 134\,400 z^4 + 26\,880 z^3 + 12\,960 z^2 + 7200 z + 2520\right) + \frac{1}{5040} e^{-z} \sqrt{\pi} \left(32 z^{19/2} - 1392 z^{17/2} + 21\,488 z^{15/2} - 144\,840 z^{13/2} + 417\,690 z^{11/2} - 401\,115 z^{9/2}\right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiae.01

$${}_2F_2\left(2, 5; -\frac{7}{2}, 2; z\right) = \frac{8 z^8 + 268 z^7 + 2930 z^6 + 11\,919 z^5 + 13\,440 z^4 - 3360 z^3 + 2160 z^2 - 1800 z + 1260}{1260} + \frac{e^z \sqrt{\pi} \left(16 z^{17/2} + 544 z^{15/2} + 6120 z^{13/2} + 26\,520 z^{11/2} + 36\,465 z^{9/2}\right) \operatorname{erf}(\sqrt{z})}{2520}$$

07.25.03.aiaf.01

$${}_2F_2\left(2, 5; -\frac{7}{2}, 2; -z\right) = \frac{8 z^8 - 268 z^7 + 2930 z^6 - 11\,919 z^5 + 13\,440 z^4 + 3360 z^3 + 2160 z^2 + 1800 z + 1260}{1260} + \frac{e^{-z} \sqrt{\pi} \left(-16 z^{17/2} + 544 z^{15/2} - 6120 z^{13/2} + 26\,520 z^{11/2} - 36\,465 z^{9/2}\right) \operatorname{erfi}(\sqrt{z})}{2520}$$

07.25.03.aiag.01

$${}_2F_2\left(2, 5; -\frac{7}{2}, 3; z\right) = \frac{1}{315} \left(4 z^7 + 96 z^6 + 651 z^5 + 1120 z^4 - 336 z^3 + 270 z^2 - 300 z + 315\right) + \frac{1}{630} e^z \sqrt{\pi} \left(8 z^{15/2} + 196 z^{13/2} + 1394 z^{11/2} + 2805 z^{9/2}\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiah.01

$${}_2F_2\left(2, 5; -\frac{7}{2}, 3; -z\right) = \frac{1}{315} \left(-4 z^7 + 96 z^6 - 651 z^5 + 1120 z^4 + 336 z^3 + 270 z^2 + 300 z + 315\right) + \frac{1}{630} e^{-z} \sqrt{\pi} \left(8 z^{15/2} - 196 z^{13/2} + 1394 z^{11/2} - 2805 z^{9/2}\right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiai.01

$${}_2F_2\left(2, 5; -\frac{7}{2}, 4; z\right) = \frac{1}{105} \left(4 z^6 + 58 z^5 + 160 z^4 - 56 z^3 + 54 z^2 - 75 z + 105\right) + \frac{1}{105} e^z \sqrt{\pi} \left(4 z^{13/2} + 60 z^{11/2} + 187 z^{9/2}\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiaj.01

$${}_2F_2\left(2, 5; -\frac{7}{2}, 4; -z\right) = \frac{1}{105} \left(4 z^6 - 58 z^5 + 160 z^4 + 56 z^3 + 54 z^2 + 75 z + 105\right) + \frac{1}{105} e^{-z} \sqrt{\pi} \left(-4 z^{13/2} + 60 z^{11/2} - 187 z^{9/2}\right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiak.01

$${}_2F_2\left(2, 5; -\frac{7}{2}, 5; z\right) = \frac{1}{105} \left(16 z^5 + 80 z^4 - 32 z^3 + 36 z^2 - 60 z + 105\right) + \frac{8}{105} e^z \sqrt{\pi} \left(2 z^{11/2} + 11 z^{9/2}\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.aial.01

$${}_2F_2\left(2, 5; -\frac{7}{2}, 5; -z\right) = \frac{1}{105} \left(-16 z^5 + 80 z^4 + 32 z^3 + 36 z^2 + 60 z + 105\right) + \frac{8}{105} e^{-z} \sqrt{\pi} \left(2 z^{11/2} - 11 z^{9/2}\right) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = -\frac{5}{2}$

07.25.03.aiam.01

$${}_2F_2\left(2, 5; -\frac{5}{2}, 1; z\right) = \frac{1}{720} (-16 z^8 - 608 z^7 - 7984 z^6 - 43 872 z^5 - 95 055 z^4 - 53 760 z^3 + 8640 z^2 - 2880 z + 720) + \frac{e^z \sqrt{\pi} (-32 z^{17/2} - 1232 z^{15/2} - 16 560 z^{13/2} - 95 160 z^{11/2} - 227 370 z^{9/2} - 173 745 z^{7/2}) \operatorname{erf}(\sqrt{z})}{1440}$$

07.25.03.aian.01

$${}_2F_2\left(2, 5; -\frac{5}{2}, 1; -z\right) = \frac{1}{720} (-16 z^8 + 608 z^7 - 7984 z^6 + 43 872 z^5 - 95 055 z^4 + 53 760 z^3 + 8640 z^2 + 2880 z + 720) + \frac{e^{-z} \sqrt{\pi} (32 z^{17/2} - 1232 z^{15/2} + 16 560 z^{13/2} - 95 160 z^{11/2} + 227 370 z^{9/2} - 173 745 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{1440}$$

07.25.03.aiao.01

$${}_2F_2\left(2, 5; -\frac{5}{2}, 2; z\right) = \frac{1}{360} (-8 z^7 - 236 z^6 - 2226 z^5 - 7575 z^4 - 6720 z^3 + 1440 z^2 - 720 z + 360) + \frac{1}{720} e^z \sqrt{\pi} (-16 z^{15/2} - 480 z^{13/2} - 4680 z^{11/2} - 17 160 z^{9/2} - 19 305 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiap.01

$${}_2F_2\left(2, 5; -\frac{5}{2}, 2; -z\right) = \frac{1}{360} (8 z^7 - 236 z^6 + 2226 z^5 - 7575 z^4 + 6720 z^3 + 1440 z^2 + 720 z + 360) + \frac{1}{720} e^{-z} \sqrt{\pi} (-16 z^{15/2} + 480 z^{13/2} - 4680 z^{11/2} + 17 160 z^{9/2} - 19 305 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiaq.01

$${}_2F_2\left(2, 5; -\frac{5}{2}, 3; z\right) = \frac{1}{90} (-4 z^6 - 84 z^5 - 485 z^4 - 672 z^3 + 180 z^2 - 120 z + 90) + \frac{1}{180} e^z \sqrt{\pi} (-8 z^{13/2} - 172 z^{11/2} - 1050 z^{9/2} - 1755 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiar.01

$${}_2F_2\left(2, 5; -\frac{5}{2}, 3; -z\right) = \frac{1}{90} (-4 z^6 + 84 z^5 - 485 z^4 + 672 z^3 + 180 z^2 + 120 z + 90) + \frac{1}{180} e^{-z} \sqrt{\pi} (8 z^{13/2} - 172 z^{11/2} + 1050 z^{9/2} - 1755 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aias.01

$${}_2F_2\left(2, 5; -\frac{5}{2}, 4; z\right) = \frac{1}{15} (-2 z^5 - 25 z^4 - 56 z^3 + 18 z^2 - 15 z + 15) + \frac{1}{30} e^z \sqrt{\pi} (-4 z^{11/2} - 52 z^{9/2} - 135 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiat.01

$${}_2F_2\left(2, 5; -\frac{5}{2}, 4; -z\right) = \frac{1}{15} (2 z^5 - 25 z^4 + 56 z^3 + 18 z^2 + 15 z + 15) + \frac{1}{30} e^{-z} \sqrt{\pi} (-4 z^{11/2} + 52 z^{9/2} - 135 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiau.01

$${}_2F_2\left(2, 5; -\frac{5}{2}, 5; z\right) = \frac{1}{15} (-8 z^4 - 32 z^3 + 12 z^2 - 12 z + 15) - \frac{4}{15} e^z \sqrt{\pi} (2 z^{9/2} + 9 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiav.01

$${}_2F_2\left(2, 5; -\frac{5}{2}, 5; -z\right) = \frac{1}{15}(-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15}e^{-z}\sqrt{\pi}(2z^{9/2} - 9z^{7/2})\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = -\frac{3}{2}$

07.25.03.aiaw.01

$${}_2F_2\left(2, 5; -\frac{3}{2}, 1; z\right) = \frac{1}{288}(16z^7 + 528z^6 + 5880z^5 + 26476z^4 + 44457z^3 + 17280z^2 - 1920z + 288) + \frac{1}{576}e^z\sqrt{\pi}(32z^{15/2} + 1072z^{13/2} + 12272z^{11/2} + 58344z^{9/2} + 110682z^{7/2} + 63063z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aiax.01

$${}_2F_2\left(2, 5; -\frac{3}{2}, 1; -z\right) = \frac{1}{288}(-16z^7 + 528z^6 - 5880z^5 + 26476z^4 - 44457z^3 + 17280z^2 + 1920z + 288) + \frac{1}{576}e^{-z}\sqrt{\pi}(32z^{15/2} - 1072z^{13/2} + 12272z^{11/2} - 58344z^{9/2} + 110682z^{7/2} - 63063z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aiay.01

$${}_2F_2\left(2, 5; -\frac{3}{2}, 2; z\right) = \frac{1}{144}(8z^6 + 204z^5 + 1618z^4 + 4431z^3 + 2880z^2 - 480z + 144) + \frac{1}{288}e^z\sqrt{\pi}(16z^{13/2} + 416z^{11/2} + 3432z^{9/2} + 10296z^{7/2} + 9009z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aiaz.01

$${}_2F_2\left(2, 5; -\frac{3}{2}, 2; -z\right) = \frac{1}{144}(8z^6 - 204z^5 + 1618z^4 - 4431z^3 + 2880z^2 + 480z + 144) + \frac{1}{288}e^{-z}\sqrt{\pi}(-16z^{13/2} + 416z^{11/2} - 3432z^{9/2} + 10296z^{7/2} - 9009z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aib0.01

$${}_2F_2\left(2, 5; -\frac{3}{2}, 3; z\right) = \frac{1}{36}(4z^5 + 72z^4 + 343z^3 + 360z^2 - 80z + 36) + \frac{1}{72}e^z\sqrt{\pi}(8z^{11/2} + 148z^{9/2} + 754z^{7/2} + 1001z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aib1.01

$${}_2F_2\left(2, 5; -\frac{3}{2}, 3; -z\right) = \frac{1}{36}(-4z^5 + 72z^4 - 343z^3 + 360z^2 + 80z + 36) + \frac{1}{72}e^{-z}\sqrt{\pi}(8z^{11/2} - 148z^{9/2} + 754z^{7/2} - 1001z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aib2.01

$${}_2F_2\left(2, 5; -\frac{3}{2}, 4; z\right) = \frac{1}{6}(2z^4 + 21z^3 + 36z^2 - 10z + 6) + \frac{1}{12}e^z\sqrt{\pi}(4z^{9/2} + 44z^{7/2} + 91z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aib3.01

$${}_2F_2\left(2, 5; -\frac{3}{2}, 4; -z\right) = \frac{1}{6}(2z^4 - 21z^3 + 36z^2 + 10z + 6) + \frac{1}{12}e^{-z}\sqrt{\pi}(-4z^{9/2} + 44z^{7/2} - 91z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aib4.01

$${}_2F_2\left(2, 5; -\frac{3}{2}, 5; z\right) = \frac{1}{3} (4z^3 + 12z^2 - 4z + 3) + \frac{2}{3} e^z \sqrt{\pi} (2z^{7/2} + 7z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aib5.01

$${}_2F_2\left(2, 5; -\frac{3}{2}, 5; -z\right) = \frac{1}{3} (-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3} e^{-z} \sqrt{\pi} (2z^{7/2} - 7z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = -\frac{1}{2}$

07.25.03.aib6.01

$${}_2F_2\left(2, 5; -\frac{1}{2}, 1; z\right) = \frac{1}{192} (-16z^6 - 448z^5 - 4096z^4 - 14392z^3 - 17235z^2 - 3840z + 192) + \frac{1}{384} e^z \sqrt{\pi} (-32z^{13/2} - 912z^{11/2} - 8624z^{9/2} - 32472z^{7/2} - 45738z^{5/2} - 17325z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aib7.01

$${}_2F_2\left(2, 5; -\frac{1}{2}, 1; -z\right) = \frac{1}{192} (-16z^6 + 448z^5 - 4096z^4 + 14392z^3 - 17235z^2 + 3840z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (32z^{13/2} - 912z^{11/2} + 8624z^{9/2} - 32472z^{7/2} + 45738z^{5/2} - 17325z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aib8.01

$${}_2F_2\left(2, 5; -\frac{1}{2}, 2; z\right) = \frac{1}{96} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) + \frac{1}{192} e^z \sqrt{\pi} (-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aib9.01

$${}_2F_2\left(2, 5; -\frac{1}{2}, 2; -z\right) = \frac{1}{96} (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) + \frac{1}{192} e^{-z} \sqrt{\pi} (-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiba.01

$${}_2F_2\left(2, 5; -\frac{1}{2}, 3; z\right) = \frac{1}{24} (-4z^4 - 60z^3 - 225z^2 - 160z + 24) + \frac{1}{48} e^z \sqrt{\pi} (-8z^{9/2} - 124z^{7/2} - 506z^{5/2} - 495z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aibb.01

$${}_2F_2\left(2, 5; -\frac{1}{2}, 3; -z\right) = \frac{1}{24} (-4z^4 + 60z^3 - 225z^2 + 160z + 24) + \frac{1}{48} e^{-z} \sqrt{\pi} (8z^{9/2} - 124z^{7/2} + 506z^{5/2} - 495z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aibc.01

$${}_2F_2\left(2, 5; -\frac{1}{2}, 4; z\right) = \frac{1}{4} (-2z^3 - 17z^2 - 20z + 4) + \frac{1}{8} e^z \sqrt{\pi} (-4z^{7/2} - 36z^{5/2} - 55z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aibd.01

$${}_2F_2\left(2, 5; -\frac{1}{2}, 4; -z\right) = \frac{1}{4} (2z^3 - 17z^2 + 20z + 4) + \frac{1}{8} e^{-z} \sqrt{\pi} (-4z^{7/2} + 36z^{5/2} - 55z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aibe.01

$${}_2F_2\left(2, 5; -\frac{1}{2}, 5; z\right) = -2z^2 - 4z + e^z \sqrt{\pi} (-2z^{5/2} - 5z^{3/2}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.aibf.01

$${}_2F_2\left(2, 5; -\frac{1}{2}, 5; -z\right) = -2z^2 + 4z + e^{-z} \sqrt{\pi} (2z^{5/2} - 5z^{3/2}) \operatorname{erfi}(\sqrt{z}) + 1$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = \frac{1}{2}$

07.25.03.aibg.01

$${}_2F_2\left(2, 5; \frac{1}{2}, 1; z\right) = \frac{1}{384} (16z^5 + 368z^4 + 2632z^3 + 6660z^2 + 4845z + 384) + \frac{1}{768} e^z \sqrt{\pi} (32z^{11/2} + 752z^{9/2} + 5616z^{7/2} + 15624z^{5/2} + 14490z^{3/2} + 2835\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aibh.01

$${}_2F_2\left(2, 5; \frac{1}{2}, 1; -z\right) = \frac{1}{384} (-16z^5 + 368z^4 - 2632z^3 + 6660z^2 - 4845z + 384) + \frac{1}{768} e^{-z} \sqrt{\pi} (32z^{11/2} - 752z^{9/2} + 5616z^{7/2} - 15624z^{5/2} + 14490z^{3/2} - 2835\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aibi.01

$${}_2F_2\left(2, 5; \frac{1}{2}, 2; z\right) = \frac{1}{192} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} e^z \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aibj.01

$${}_2F_2\left(2, 5; \frac{1}{2}, 2; -z\right) = \frac{1}{192} (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aibk.01

$${}_2F_2\left(2, 5; \frac{1}{2}, 3; z\right) = \frac{1}{48} (4z^3 + 48z^2 + 131z + 48) + \frac{1}{96} e^z \sqrt{\pi} (8z^{7/2} + 100z^{5/2} + 306z^{3/2} + 189\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aibl.01

$${}_2F_2\left(2, 5; \frac{1}{2}, 3; -z\right) = \frac{1}{48} (-4z^3 + 48z^2 - 131z + 48) + \frac{1}{96} e^{-z} \sqrt{\pi} (8z^{7/2} - 100z^{5/2} + 306z^{3/2} - 189\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aibm.01

$${}_2F_2\left(2, 5; \frac{1}{2}, 4; z\right) = \frac{1}{8} (2z^2 + 13z + 8) + \frac{1}{16} e^z \sqrt{\pi} (4z^{5/2} + 28z^{3/2} + 27\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aibn.01

$${}_2F_2\left(2, 5; \frac{1}{2}, 4; -z\right) = \frac{1}{8} (2z^2 - 13z + 8) + \frac{1}{16} e^{-z} \sqrt{\pi} (-4z^{5/2} + 28z^{3/2} - 27\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aibo.01

$${}_2F_2\left(2, 5; \frac{1}{2}, 5; z\right) = z + \frac{1}{2} e^z \sqrt{\pi} (2z^{3/2} + 3\sqrt{z}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.aibp.01

$${}_2F_2\left(2, 5; \frac{1}{2}, 5; -z\right) = -z + \frac{1}{2} e^{-z} \sqrt{\pi} (2z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z}) + 1$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = 1$

07.25.03.aibq.01

$${}_2F_2(2, 5; 1, 1; z) = \frac{1}{24} e^z (z^5 + 21 z^4 + 136 z^3 + 312 z^2 + 216 z + 24)$$

07.25.03.aibr.01

$${}_2F_2\left(2, 5; 1, \frac{3}{2}; z\right) = \frac{1}{768} (16 z^4 + 288 z^3 + 1488 z^2 + 2320 z + 663) + \frac{e^z \sqrt{\pi} (32 z^5 + 592 z^4 + 3248 z^3 + 5880 z^2 + 2730 z + 105) \operatorname{erfi}(\sqrt{z})}{1536 \sqrt{z}}$$

07.25.03.aibs.01

$${}_2F_2\left(2, 5; 1, \frac{3}{2}; -z\right) = \frac{1}{768} (16 z^4 - 288 z^3 + 1488 z^2 - 2320 z + 663) + \frac{e^{-z} \sqrt{\pi} (-32 z^5 + 592 z^4 - 3248 z^3 + 5880 z^2 - 2730 z + 105) \operatorname{erfi}(\sqrt{z})}{1536 \sqrt{z}}$$

07.25.03.aibt.01

$${}_2F_2(2, 5; 1, 2; z) = \frac{1}{24} e^z (z^4 + 16 z^3 + 72 z^2 + 96 z + 24)$$

07.25.03.aibu.01

$${}_2F_2\left(2, 5; 1, \frac{5}{2}; z\right) = \frac{16 z^4 + 208 z^3 + 664 z^2 + 412 z - 15}{512 z} + \frac{e^z \sqrt{\pi} (32 z^5 + 432 z^4 + 1520 z^3 + 1320 z^2 + 90 z + 15) \operatorname{erfi}(\sqrt{z})}{1024 z^{3/2}}$$

07.25.03.aibv.01

$${}_2F_2\left(2, 5; 1, \frac{5}{2}; -z\right) = \frac{-16 z^4 + 208 z^3 - 664 z^2 + 412 z + 15}{512 z} + \frac{e^{-z} \sqrt{\pi} (32 z^5 - 432 z^4 + 1520 z^3 - 1320 z^2 + 90 z - 15) \operatorname{erfi}(\sqrt{z})}{1024 z^{3/2}}$$

07.25.03.aibw.01

$${}_2F_2(2, 5; 1, 3; z) = \frac{1}{12} e^z (z^3 + 11 z^2 + 28 z + 12)$$

07.25.03.aibx.01

$${}_2F_2\left(2, 5; 1, \frac{7}{2}; z\right) = \frac{5(16 z^4 + 128 z^3 + 160 z^2 - 24 z + 27)}{1024 z^2} + \frac{5 e^z \sqrt{\pi} (32 z^5 + 272 z^4 + 432 z^3 + 24 z^2 + 42 z - 27) \operatorname{erfi}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.aiby.01

$${}_2F_2\left(2, 5; 1, \frac{7}{2}; -z\right) = \frac{5(16 z^4 - 128 z^3 + 160 z^2 + 24 z + 27)}{1024 z^2} - \frac{5 e^{-z} \sqrt{\pi} (32 z^5 - 272 z^4 + 432 z^3 - 24 z^2 + 42 z + 27) \operatorname{erfi}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.aibz.01

$${}_2F_2(2, 5; 1, 4; z) = \frac{1}{4} e^z (z^2 + 6 z + 4)$$

07.25.03.aic0.01

$${}_2F_2\left(2, 5; 1, \frac{9}{2}; z\right) = \frac{35(16z^4 + 48z^3 - 24z^2 + 52z - 75)}{2048z^3} + \frac{35e^z\sqrt{\pi}(32z^5 + 112z^4 - 16z^3 + 72z^2 - 102z + 75)\operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.aic1.01

$${}_2F_2\left(2, 5; 1, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(32z^5 - 112z^4 - 16z^3 - 72z^2 - 102z - 75)\operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{35(16z^4 - 48z^3 - 24z^2 - 52z - 75)}{2048z^3}$$

07.25.03.aic2.01

$${}_2F_2(2, 5; 1, 5; z) = e^z(z + 1)$$

07.25.03.aic3.01

$${}_2F_2\left(2, 5; 1, \frac{11}{2}; z\right) = \frac{315(16z^4 - 32z^3 + 112z^2 - 320z + 735)}{4096z^4} + \frac{315e^z\sqrt{\pi}(32z^5 - 48z^4 + 176z^3 - 456z^2 + 810z - 735)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.aic4.01

$${}_2F_2\left(2, 5; 1, \frac{11}{2}; -z\right) = \frac{315(16z^4 + 32z^3 + 112z^2 + 320z + 735)}{4096z^4} - \frac{315e^{-z}\sqrt{\pi}(32z^5 + 48z^4 + 176z^3 + 456z^2 + 810z + 735)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.aic5.01

$${}_2F_2(2, 5; 1, 6; z) = \frac{5e^z(z^5 - 4z^4 + 16z^3 - 48z^2 + 96z - 96)}{z^5} + \frac{480}{z^5}$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = \frac{3}{2}$

07.25.03.aic6.01

$${}_2F_2\left(2, 5; \frac{3}{2}, 2; z\right) = \frac{1}{384}(8z^3 + 108z^2 + 370z + 279) + \frac{e^z\sqrt{\pi}(16z^4 + 224z^3 + 840z^2 + 840z + 105)\operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.aic7.01

$${}_2F_2\left(2, 5; \frac{3}{2}, 2; -z\right) = \frac{1}{384}(-8z^3 + 108z^2 - 370z + 279) + \frac{e^{-z}\sqrt{\pi}(16z^4 - 224z^3 + 840z^2 - 840z + 105)\operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.aic8.01

$${}_2F_2\left(2, 5; \frac{3}{2}, 3; z\right) = \frac{1}{96}(4z^2 + 36z + 61) + \frac{e^z\sqrt{\pi}(8z^3 + 76z^2 + 154z + 35)\operatorname{erf}(\sqrt{z})}{192\sqrt{z}}$$

07.25.03.aic9.01

$${}_2F_2\left(2, 5; \frac{3}{2}, 3; -z\right) = \frac{1}{96}(4z^2 - 36z + 61) + \frac{e^{-z}\sqrt{\pi}(-8z^3 + 76z^2 - 154z + 35)\operatorname{erfi}(\sqrt{z})}{192\sqrt{z}}$$

07.25.03.aica.01

$${}_2F_2\left(2, 5; \frac{3}{2}, 4; z\right) = \frac{1}{16} (2z+9) + \frac{e^z \sqrt{\pi} (4z^2 + 20z + 7) \operatorname{erf}(\sqrt{z})}{32 \sqrt{z}}$$

07.25.03.aicb.01

$${}_2F_2\left(2, 5; \frac{3}{2}, 4; -z\right) = \frac{1}{16} (9-2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 20z + 7) \operatorname{erfi}(\sqrt{z})}{32 \sqrt{z}}$$

07.25.03.aicc.01

$${}_2F_2\left(2, 5; \frac{3}{2}, 5; z\right) = \frac{e^z \sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{4 \sqrt{z}} + \frac{1}{2}$$

07.25.03.aicd.01

$${}_2F_2\left(2, 5; \frac{3}{2}, 5; -z\right) = \frac{e^{-z} \sqrt{\pi} (1-2z) \operatorname{erfi}(\sqrt{z})}{4 \sqrt{z}} + \frac{1}{2}$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = 2$

07.25.03.aice.01

$${}_2F_2(2, 5; 2, 2; z) = \frac{1}{24} e^z (z^3 + 12z^2 + 36z + 24)$$

07.25.03.aicf.01

$${}_2F_2\left(2, 5; 2, \frac{5}{2}; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.aicg.01

$${}_2F_2\left(2, 5; 2, \frac{5}{2}; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.aich.01

$${}_2F_2(2, 5; 2, 3; z) = \frac{1}{12} e^z (z^2 + 8z + 12)$$

07.25.03.aici.01

$${}_2F_2\left(2, 5; 2, \frac{7}{2}; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5e^z \sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.aicj.01

$${}_2F_2\left(2, 5; 2, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.aick.01

$${}_2F_2(2, 5; 2, 4; z) = \frac{1}{4} e^z (z+4)$$

07.25.03.aicl.01

$${}_2F_2\left(2, 5; 2, \frac{9}{2}; z\right) = \frac{35(8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35e^z \sqrt{\pi} (16z^4 + 32z^3 - 24z^2 + 24z - 15) \operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.aicm.01

$${}_2F_2\left(2, 5; 2, \frac{9}{2}; -z\right) = \frac{35(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35e^{-z}\sqrt{\pi}(16z^4 - 32z^3 - 24z^2 - 24z - 15)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.aicn.01

$${}_2F_2(2, 5; 2, 5; z) = e^z$$

07.25.03.aico.01

$${}_2F_2\left(2, 5; 2, \frac{11}{2}; z\right) = \frac{315(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315e^z\sqrt{\pi}(16z^4 - 32z^3 + 72z^2 - 120z + 105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.aicp.01

$${}_2F_2\left(2, 5; 2, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(16z^4 + 32z^3 + 72z^2 + 120z + 105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315(8z^3 + 20z^2 + 50z + 105)}{2048z^4}$$

07.25.03.aicq.01

$${}_2F_2(2, 5; 2, 6; z) = \frac{5e^z(z^4 - 4z^3 + 12z^2 - 24z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = \frac{5}{2}$

07.25.03.aicr.01

$${}_2F_2\left(2, 5; \frac{5}{2}, 3; z\right) = \frac{4z^2 + 24z + 15}{64z} + \frac{e^z\sqrt{\pi}(8z^3 + 52z^2 + 50z - 15)\operatorname{erf}(\sqrt{z})}{128z^{3/2}}$$

07.25.03.aics.01

$${}_2F_2\left(2, 5; \frac{5}{2}, 3; -z\right) = \frac{-4z^2 + 24z - 15}{64z} + \frac{e^{-z}\sqrt{\pi}(8z^3 - 52z^2 + 50z + 15)\operatorname{erfi}(\sqrt{z})}{128z^{3/2}}$$

07.25.03.aict.01

$${}_2F_2\left(2, 5; \frac{5}{2}, 4; z\right) = \frac{3(2z + 5)}{32z} + \frac{3e^z\sqrt{\pi}(4z^2 + 12z - 5)\operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.aicu.01

$${}_2F_2\left(2, 5; \frac{5}{2}, 4; -z\right) = \frac{3(2z - 5)}{32z} - \frac{3e^{-z}\sqrt{\pi}(4z^2 - 12z - 5)\operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.aicv.01

$${}_2F_2\left(2, 5; \frac{5}{2}, 5; z\right) = \frac{3e^z\sqrt{\pi}(2z - 1)\operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3}{4z}$$

07.25.03.aicw.01

$${}_2F_2\left(2, 5; \frac{5}{2}, 5; -z\right) = \frac{3e^{-z}\sqrt{\pi}(2z + 1)\operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3}{4z}$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = 3$

07.25.03.aicx.01

$${}_2F_2(2, 5; 3, 3; z) = \frac{e^z (z^3 + 5z^2 + 2z - 2)}{6z^2} + \frac{1}{3z^2}$$

07.25.03.aicy.01

$${}_2F_2\left(2, 5; 3, \frac{7}{2}; z\right) = \frac{5(4z^2 + 12z + 9)}{128z^2} + \frac{5e^z \sqrt{\pi} (8z^3 + 28z^2 - 6z - 9) \operatorname{erf}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.aicz.01

$${}_2F_2\left(2, 5; 3, \frac{7}{2}; -z\right) = \frac{5(4z^2 - 12z + 9)}{128z^2} - \frac{5e^{-z} \sqrt{\pi} (8z^3 - 28z^2 - 6z + 9) \operatorname{erfi}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.aid0.01

$${}_2F_2(2, 5; 3, 4; z) = \frac{e^z (z^2 + 2z - 2)}{2z^2} + \frac{1}{z^2}$$

07.25.03.aid1.01

$${}_2F_2\left(2, 5; 3, \frac{9}{2}; z\right) = \frac{35(12z^2 + 32z - 15)}{768z^3} + \frac{35e^z \sqrt{\pi} (8z^3 + 4z^2 - 14z + 5) \operatorname{erf}(\sqrt{z})}{512z^{7/2}}$$

07.25.03.aid2.01

$${}_2F_2\left(2, 5; 3, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (8z^3 - 4z^2 - 14z - 5) \operatorname{erfi}(\sqrt{z})}{512z^{7/2}} - \frac{35(12z^2 - 32z - 15)}{768z^3}$$

07.25.03.aid3.01

$${}_2F_2(2, 5; 3, 5; z) = \frac{2e^z (z - 1)}{z^2} + \frac{2}{z^2}$$

07.25.03.aid4.01

$${}_2F_2\left(2, 5; 3, \frac{11}{2}; z\right) = \frac{21(124z^2 - 180z + 315)}{512z^4} + \frac{315e^z \sqrt{\pi} (8z^3 - 20z^2 + 26z - 21) \operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.aid5.01

$${}_2F_2\left(2, 5; 3, \frac{11}{2}; -z\right) = \frac{21(124z^2 + 180z + 315)}{512z^4} - \frac{315e^{-z} \sqrt{\pi} (8z^3 + 20z^2 + 26z + 21) \operatorname{erfi}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.aid6.01

$${}_2F_2(2, 5; 3, 6; z) = \frac{10(z^3 + 24)}{3z^5} + \frac{10e^z (z^3 - 4z^2 + 8z - 8)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = \frac{7}{2}$

07.25.03.aid7.01

$${}_2F_2\left(2, 5; \frac{7}{2}, 4; z\right) = \frac{15(2z + 9)}{64z^2} + \frac{15e^z \sqrt{\pi} (4z^2 + 4z - 9) \operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.aid8.01

$${}_2F_2\left(2, 5; \frac{7}{2}, 4; -z\right) = \frac{15 e^{-z} \sqrt{\pi} (4z^2 - 4z - 9) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}} - \frac{15(2z - 9)}{64 z^2}$$

07.25.03.aid9.01

$${}_2F_2\left(2, 5; \frac{7}{2}, 5; z\right) = \frac{15 e^z \sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{16 z^{5/2}} + \frac{45}{8 z^2}$$

07.25.03.aida.01

$${}_2F_2\left(2, 5; \frac{7}{2}, 5; -z\right) = \frac{45}{8 z^2} - \frac{15 e^{-z} \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16 z^{5/2}}$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = 4$

07.25.03.aidb.01

$${}_2F_2(2, 5; 4, 4; z) = \frac{3(z + 1)}{z^3} + \frac{3 e^z (z^2 - 2)}{2 z^3}$$

07.25.03.aidc.01

$${}_2F_2\left(2, 5; 4, \frac{9}{2}; z\right) = \frac{35(22z + 15)}{128 z^3} + \frac{105 e^z \sqrt{\pi} (4z^2 - 4z - 5) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.aidd.01

$${}_2F_2\left(2, 5; 4, \frac{9}{2}; -z\right) = \frac{35(22z - 15)}{128 z^3} - \frac{105 e^{-z} \sqrt{\pi} (4z^2 + 4z - 5) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.aide.01

$${}_2F_2(2, 5; 4, 5; z) = \frac{6 e^z (z - 2)}{z^3} + \frac{6(z + 2)}{z^3}$$

07.25.03.aidf.01

$${}_2F_2\left(2, 5; 4, \frac{11}{2}; z\right) = \frac{63(32z^2 + 110z - 105)}{256 z^4} + \frac{945 e^z \sqrt{\pi} (4z^2 - 12z + 7) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.aidg.01

$${}_2F_2\left(2, 5; 4, \frac{11}{2}; -z\right) = \frac{63(32z^2 - 110z - 105)}{256 z^4} + \frac{945 e^{-z} \sqrt{\pi} (4z^2 + 12z + 7) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.aidh.01

$${}_2F_2(2, 5; 4, 6; z) = \frac{30 e^z (z^2 - 4z + 4)}{z^5} + \frac{10(z^3 + 3z^2 - 12)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = \frac{9}{2}$

07.25.03.aidi.01

$${}_2F_2\left(2, 5; \frac{9}{2}, 5; z\right) = \frac{35(4z + 15)}{16 z^3} + \frac{105 e^z \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.aidj.01

$${}_2F_2\left(2, 5; \frac{9}{2}, 5; -z\right) = \frac{35(4z-15)}{16z^3} + \frac{105 e^{-z} \sqrt{\pi} (2z+5) \operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = 5$

07.25.03.aidk.01

$${}_2F_2(2, 5; 5, 5; z) = \frac{24 e^z (z-3)}{z^4} + \frac{12(z^2+4z+6)}{z^4}$$

07.25.03.aidl.01

$${}_2F_2\left(2, 5; 5, \frac{11}{2}; z\right) = \frac{63(8z^2+40z+105)}{32z^4} + \frac{945 e^z \sqrt{\pi} (2z-7) \operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.aidm.01

$${}_2F_2\left(2, 5; 5, \frac{11}{2}; -z\right) = \frac{63(8z^2-40z+105)}{32z^4} - \frac{945 e^{-z} \sqrt{\pi} (2z+7) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.aidn.01

$${}_2F_2(2, 5; 5, 6; z) = \frac{120 e^z (z-4)}{z^5} + \frac{20(z^3+6z^2+18z+24)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = 5, b_1 = 6$

07.25.03.aido.01

$${}_2F_2(2, 5; 6, 6; z) = \frac{100(z^3+9z^2+54z+72\gamma-18)}{3z^5} - \frac{2400 \operatorname{Ei}(z)}{z^5} - \frac{1200 \log\left(\frac{1}{z}\right)}{z^5} + \frac{1200 \log(z)}{z^5} + \frac{600 e^z}{z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = -\frac{11}{2}$

07.25.03.aidp.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{102112943625} (131072z^{18} + 18219008z^{17} + 1061486592z^{16} + 33973075968z^{15} + 657956290560z^{14} + 8011208540160z^{13} + 61750516469760z^{12} + 296172258877440z^{11} + 846374491100160z^{10} + 1328389430860800z^9 + 982735529529600z^8 + 245344140518400z^7 + 6159691137600z^6 + 125707982400z^5 + 24810786000z^4 + 14594580000z^3 + 17878360500z^2 + 37131979500z + 102112943625) + \frac{1}{102112943625} (65536 e^z \sqrt{\pi} (2z^{37/2} + 279z^{35/2} + 16335z^{33/2} + 526350z^{31/2} + 10291050z^{29/2} + 127020960z^{27/2} + 998917920z^{25/2} + 4939704000z^{23/2} + 14819112000z^{21/2} + 25247376000z^{19/2} + 21734697600z^{17/2} + 7544275200z^{15/2} + 598752000z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aidq.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; -z\right) =$$

$$\frac{1}{102\,112\,943\,625} \left(131\,072\,z^{18} - 18\,219\,008\,z^{17} + 1\,061\,486\,592\,z^{16} - 33\,973\,075\,968\,z^{15} + 657\,956\,290\,560\,z^{14} - \right.$$

$$8\,011\,208\,540\,160\,z^{13} + 61\,750\,516\,469\,760\,z^{12} - 296\,172\,258\,877\,440\,z^{11} + 846\,374\,491\,100\,160\,z^{10} -$$

$$1\,328\,389\,430\,860\,800\,z^9 + 982\,735\,529\,529\,600\,z^8 - 245\,344\,140\,518\,400\,z^7 + 6\,159\,691\,137\,600\,z^6 -$$

$$125\,707\,982\,400\,z^5 + 24\,810\,786\,000\,z^4 - 14\,594\,580\,000\,z^3 + 17\,878\,360\,500\,z^2 - 37\,131\,979\,500\,z + 102\,112\,943\,625 \Big) -$$

$$\frac{1}{102\,112\,943\,625} \left(65\,536\,e^{-z}\sqrt{\pi} \left(2z^{37/2} - 279z^{35/2} + 16\,335z^{33/2} - 526\,350z^{31/2} + 10\,291\,050z^{29/2} - \right. \right.$$

$$127\,020\,960z^{27/2} + 998\,917\,920z^{25/2} - 4\,939\,704\,000z^{23/2} + 14\,819\,112\,000z^{21/2} -$$

$$\left. \left. 25\,247\,376\,000z^{19/2} + 21\,734\,697\,600z^{17/2} - 7\,544\,275\,200z^{15/2} + 598\,752\,000z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aidr.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{9\,282\,994\,875} \left(-65\,536z^{17} - 8\,323\,072z^{16} - 439\,222\,272z^{15} - 12\,598\,394\,880z^{14} - 215\,802\,101\,760z^{13} - \right.$$

$$2\,284\,974\,673\,920z^{12} - 14\,974\,444\,707\,840z^{11} - 59\,161\,778\,058\,240z^{10} - 132\,778\,764\,518\,400z^9 -$$

$$151\,028\,925\,062\,400z^8 - 68\,701\,443\,148\,800z^7 - 6\,159\,691\,137\,600z^6 + 125\,707\,982\,400z^5 +$$

$$8\,270\,262\,000z^4 + 2\,918\,916\,000z^3 + 2\,554\,051\,500z^2 + 4\,125\,775\,500z + 9\,282\,994\,875 \Big) - \frac{1}{9\,282\,994\,875}$$

$$\left(32\,768\,e^z\sqrt{\pi} \left(2z^{35/2} + 255z^{33/2} + 13\,530z^{31/2} + 391\,050z^{29/2} + 6\,771\,600z^{27/2} + 72\,848\,160z^{25/2} + 488\,980\,800z^{23/2} + \right. \right.$$

$$\left. \left. 2\,005\,819\,200z^{21/2} + 4\,790\,016\,000z^{19/2} + 6\,087\,312\,000z^{17/2} + 3\,472\,761\,600z^{15/2} + 598\,752\,000z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aids.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{9\,282\,994\,875} \left(65\,536z^{17} - 8\,323\,072z^{16} + 439\,222\,272z^{15} - 12\,598\,394\,880z^{14} + 215\,802\,101\,760z^{13} - \right.$$

$$2\,284\,974\,673\,920z^{12} + 14\,974\,444\,707\,840z^{11} - 59\,161\,778\,058\,240z^{10} + 132\,778\,764\,518\,400z^9 -$$

$$151\,028\,925\,062\,400z^8 + 68\,701\,443\,148\,800z^7 - 6\,159\,691\,137\,600z^6 - 125\,707\,982\,400z^5 +$$

$$8\,270\,262\,000z^4 - 2\,918\,916\,000z^3 + 2\,554\,051\,500z^2 - 4\,125\,775\,500z + 9\,282\,994\,875 \Big) - \frac{1}{9\,282\,994\,875}$$

$$\left(32\,768\,e^{-z}\sqrt{\pi} \left(2z^{35/2} - 255z^{33/2} + 13\,530z^{31/2} - 391\,050z^{29/2} + 6\,771\,600z^{27/2} - 72\,848\,160z^{25/2} + 488\,980\,800z^{23/2} - \right. \right.$$

$$\left. \left. 2\,005\,819\,200z^{21/2} + 4\,790\,016\,000z^{19/2} - 6\,087\,312\,000z^{17/2} + 3\,472\,761\,600z^{15/2} - 598\,752\,000z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aidt.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{1031443875} (32768 z^{16} + 3768320 z^{15} + 178176000 z^{14} + 4519280640 z^{13} + 67312054272 z^{12} + 606044528640 z^{11} + 3273662684160 z^{10} + 10175218099200 z^9 + 16623870278400 z^8 + 11778298076160 z^7 + 2053230379200 z^6 - 125707982400 z^5 + 8270262000 z^4 + 972972000 z^3 + 510810300 z^2 + 589396500 z + 1031443875) + \frac{1}{1031443875} (16384 e^z \sqrt{\pi} (2 z^{33/2} + 231 z^{31/2} + 10989 z^{29/2} + 281160 z^{27/2} + 4241160 z^{25/2} + 38918880 z^{23/2} + 216548640 z^{21/2} + 706527360 z^{19/2} + 1257379200 z^{17/2} + 1057795200 z^{15/2} + 299376000 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aidu.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{1031443875} (32768 z^{16} - 3768320 z^{15} + 178176000 z^{14} - 4519280640 z^{13} + 67312054272 z^{12} - 606044528640 z^{11} + 3273662684160 z^{10} - 10175218099200 z^9 + 16623870278400 z^8 - 11778298076160 z^7 + 2053230379200 z^6 + 125707982400 z^5 + 8270262000 z^4 - 972972000 z^3 + 510810300 z^2 - 589396500 z + 1031443875) - \frac{1}{1031443875} (16384 e^{-z} \sqrt{\pi} (2 z^{33/2} - 231 z^{31/2} + 10989 z^{29/2} - 281160 z^{27/2} + 4241160 z^{25/2} - 38918880 z^{23/2} + 216548640 z^{21/2} - 706527360 z^{19/2} + 1257379200 z^{17/2} - 1057795200 z^{15/2} + 299376000 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aidv.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{147349125} (-16384 z^{15} - 1687552 z^{14} - 70533120 z^{13} - 1555132416 z^{12} - 19693068288 z^{11} - 146174561280 z^{10} - 621803105280 z^9 - 1411098796800 z^8 - 1449043706880 z^7 - 410646075840 z^6 + 41902660800 z^5 - 8270262000 z^4 + 972972000 z^3 + 170270100 z^2 + 117879300 z + 147349125) - \frac{1}{147349125} (8192 e^z \sqrt{\pi} (2 z^{31/2} + 207 z^{29/2} + 8712 z^{27/2} + 194040 z^{25/2} + 2494800 z^{23/2} + 18960480 z^{21/2} + 83825280 z^{19/2} + 203575680 z^{17/2} + 239500800 z^{15/2} + 99792000 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aidw.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{147349125} (16384 z^{15} - 1687552 z^{14} + 70533120 z^{13} - 1555132416 z^{12} + 19693068288 z^{11} - 146174561280 z^{10} + 621803105280 z^9 - 1411098796800 z^8 + 1449043706880 z^7 - 410646075840 z^6 - 41902660800 z^5 - 8270262000 z^4 - 972972000 z^3 + 170270100 z^2 - 117879300 z + 147349125) - \frac{1}{147349125} (8192 e^{-z} \sqrt{\pi} (2 z^{31/2} - 207 z^{29/2} + 8712 z^{27/2} - 194040 z^{25/2} + 2494800 z^{23/2} - 18960480 z^{21/2} + 83825280 z^{19/2} - 203575680 z^{17/2} + 239500800 z^{15/2} - 99792000 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aidx.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{29469825} \left(8192 z^{14} + 745472 z^{13} + 27070464 z^{12} + 507224064 z^{11} + 5294158848 z^{10} + 30957050880 z^9 + \right.$$

$$96325044480 z^8 + 138296632320 z^7 + 58663725120 z^6 - 8380532160 z^5 +$$

$$2756754000 z^4 - 972972000 z^3 + 170270100 z^2 + 39293100 z + 29469825 \left. \right) +$$

$$\frac{1}{29469825} \left(4096 e^z \sqrt{\pi} \left(2 z^{29/2} + 183 z^{27/2} + 6699 z^{25/2} + 127050 z^{23/2} + 1351350 z^{21/2} + \right. \right.$$

$$8149680 z^{19/2} + 26777520 z^{17/2} + 42910560 z^{15/2} + 24948000 z^{13/2} \left. \right) \operatorname{erf}(\sqrt{z}) \left. \right)$$

07.25.03.aidy.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{29469825} \left(8192 z^{14} - 745472 z^{13} + 27070464 z^{12} - 507224064 z^{11} + 5294158848 z^{10} - 30957050880 z^9 + \right.$$

$$96325044480 z^8 - 138296632320 z^7 + 58663725120 z^6 + 8380532160 z^5 +$$

$$2756754000 z^4 + 972972000 z^3 + 170270100 z^2 - 39293100 z + 29469825 \left. \right) -$$

$$\frac{1}{29469825} \left(4096 e^{-z} \sqrt{\pi} \left(2 z^{29/2} - 183 z^{27/2} + 6699 z^{25/2} - 127050 z^{23/2} + 1351350 z^{21/2} - \right. \right.$$

$$8149680 z^{19/2} + 26777520 z^{17/2} - 42910560 z^{15/2} + 24948000 z^{13/2} \left. \right) \operatorname{erfi}(\sqrt{z}) \left. \right)$$

07.25.03.aidz.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{9823275}$$

$$\left(-4096 z^{13} - 323584 z^{12} - 9977856 z^{11} - 153990144 z^{10} - 1265771520 z^9 - 541828240 z^8 - 10714475520 z^7 - \right.$$

$$6518191680 z^6 + 1197218880 z^5 - 551350800 z^4 + 324324000 z^3 - 170270100 z^2 + 39293100 z + 9823275 \left. \right) -$$

$$\frac{1}{9823275} \left(2048 e^z \sqrt{\pi} \left(2 z^{27/2} + 159 z^{25/2} + 4950 z^{23/2} + 77550 z^{21/2} + 653400 z^{19/2} + \right. \right.$$

$$2922480 z^{17/2} + 6320160 z^{15/2} + 4989600 z^{13/2} \left. \right) \operatorname{erf}(\sqrt{z}) \left. \right)$$

07.25.03.aie0.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{9823275} \left(4096 z^{13} - 323584 z^{12} + 9977856 z^{11} - 153990144 z^{10} + 1265771520 z^9 - 541828240 z^8 + 10714475520 z^7 - \right.$$

$$6518191680 z^6 - 1197218880 z^5 - 551350800 z^4 - 324324000 z^3 - 170270100 z^2 - 39293100 z + 9823275 \left. \right) -$$

$$\frac{1}{9823275} \left(2048 e^{-z} \sqrt{\pi} \left(2 z^{27/2} - 159 z^{25/2} + 4950 z^{23/2} - 77550 z^{21/2} + 653400 z^{19/2} - \right. \right.$$

$$2922480 z^{17/2} + 6320160 z^{15/2} - 4989600 z^{13/2} \left. \right) \operatorname{erfi}(\sqrt{z}) \left. \right)$$

07.25.03.aie1.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{9823275} (2048 z^{12} + 137216 z^{11} + 3480576 z^{10} + 42255360 z^9 + 254165760 z^8 + 693181440 z^7 + 592562880 z^6 - 133024320 z^5 + 78764400 z^4 - 64864800 z^3 + 56756700 z^2 - 39293100 z + 9823275) + \frac{1}{9823275} 1024 e^z \sqrt{\pi} (2 z^{25/2} + 135 z^{23/2} + 3465 z^{21/2} + 42900 z^{19/2} + 267300 z^{17/2} + 784080 z^{15/2} + 831600 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aie2.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{9823275} (2048 z^{12} - 137216 z^{11} + 3480576 z^{10} - 42255360 z^9 + 254165760 z^8 - 693181440 z^7 + 592562880 z^6 + 133024320 z^5 + 78764400 z^4 + 64864800 z^3 + 56756700 z^2 + 39293100 z + 9823275) - \frac{1}{9823275} 1024 e^{-z} \sqrt{\pi} (2 z^{25/2} - 135 z^{23/2} + 3465 z^{21/2} - 42900 z^{19/2} + 267300 z^{17/2} - 784080 z^{15/2} + 831600 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aie3.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{9823275} (e^z (2048 z^{12} + 125952 z^{11} + 2889216 z^{10} + 31046400 z^9 + 159667200 z^8 + 347276160 z^7 + 181621440 z^6 - 68856480 z^5 + 56133000 z^4 - 53014500 z^3 + 45841950 z^2 - 29469825 z + 9823275))$$

07.25.03.aie4.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{512 e^z \sqrt{\pi} (2 z^5 + 111 z^4 + 2244 z^3 + 20460 z^2 + 83160 z + 118800) \operatorname{erf}(\sqrt{z}) z^{13/2}}{9823275} + \frac{1}{9823275} (1024 z^{11} + 56320 z^{10} + 1121280 z^9 + 9941760 z^8 + 38102016 z^7 + 45581760 z^6 - 12093120 z^5 + 8751600 z^4 - 9266400 z^3 + 11351340 z^2 - 13097700 z + 9823275)$$

07.25.03.aie5.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{512 e^{-z} \sqrt{\pi} (2 z^5 - 111 z^4 + 2244 z^3 - 20460 z^2 + 83160 z - 118800) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{9823275} + \frac{1}{9823275} (-1024 z^{11} + 56320 z^{10} - 1121280 z^9 + 9941760 z^8 - 38102016 z^7 + 45581760 z^6 + 12093120 z^5 + 8751600 z^4 + 9266400 z^3 + 11351340 z^2 + 13097700 z + 9823275)$$

07.25.03.aie6.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{9823275} (e^z (2048 z^{11} + 101376 z^{10} + 1774080 z^9 + 13305600 z^8 + 39916800 z^7 + 27941760 z^6 - 13970880 z^5 + 14968800 z^4 - 18711000 z^3 + 21829500 z^2 - 19646550 z + 9823275))$$

07.25.03.aie7.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{256 e^z \sqrt{\pi} (2 z^4 + 87 z^3 + 1287 z^2 + 7590 z + 14850) \operatorname{erf}(\sqrt{z}) z^{13/2}}{3274425} + \frac{1}{3274425} (512 z^{10} + 22016 z^9 + 318720 z^8 + 1794048 z^7 + 3038784 z^6 - 930240 z^5 + 795600 z^4 - 1029600 z^3 + 1621620 z^2 - 2619540 z + 3274425)$$

07.25.03.aie8.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{3274425} (512 z^{10} - 22016 z^9 + 318720 z^8 - 1794048 z^7 + 3038784 z^6 + 930240 z^5 + 795600 z^4 + 1029600 z^3 + 1621620 z^2 + 2619540 z + 3274425) - \frac{256 e^{-z} \sqrt{\pi} z^{13/2} (2 z^4 - 87 z^3 + 1287 z^2 - 7590 z + 14850) \operatorname{erfi}(\sqrt{z})}{3274425}$$

07.25.03.aie9.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{9823275 z^2} (2 e^z (2048 z^{12} + 76800 z^{11} + 929280 z^{10} + 4012800 z^9 + 3801600 z^8 - 2471040 z^7 + 3326400 z^6 - 4989600 z^5 + 6237000 z^4 - 3118500 z^3 - 10291050 z^2 + 30405375 z - 30405375)) + \frac{130}{21 z^2}$$

07.25.03.aiea.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{128 e^z \sqrt{\pi} (2 z^3 + 63 z^2 + 594 z + 1650) \operatorname{erf}(\sqrt{z}) z^{13/2}}{654885} + \frac{1}{654885} (256 z^9 + 7936 z^8 + 72192 z^7 + 178752 z^6 - 62016 z^5 + 61200 z^4 - 93600 z^3 + 180180 z^2 - 374220 z + 654885)$$

07.25.03.aieb.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{128 e^{-z} \sqrt{\pi} (2 z^3 - 63 z^2 + 594 z - 1650) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{654885} + \frac{1}{654885} (-256 z^9 + 7936 z^8 - 72192 z^7 + 178752 z^6 + 62016 z^5 + 61200 z^4 + 93600 z^3 + 180180 z^2 + 374220 z + 654885)$$

07.25.03.aiec.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, 4; z\right) = \frac{26(5z - 34)}{7z^3} + \frac{1}{3274425 z^3} (2 e^z (2048 z^{12} + 52224 z^{11} + 354816 z^{10} + 464640 z^9 - 380160 z^8 + 570240 z^7 - 665280 z^6 - 997920 z^5 + 11226600 z^4 - 48024900 z^3 + 133783650 z^2 - 237161925 z + 206756550))$$

07.25.03.aied.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{64 e^z \sqrt{\pi} (2z^2 + 39z + 165) \operatorname{erf}(\sqrt{z}) z^{13/2}}{93555} + \frac{128 z^8 + 2432 z^7 + 9408 z^6 - 3648 z^5 + 4080 z^4 - 7200 z^3 + 16380 z^2 - 41580 z + 93555}{93555}$$

07.25.03.aiee.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{128 z^8 - 2432 z^7 + 9408 z^6 + 3648 z^5 + 4080 z^4 + 7200 z^3 + 16380 z^2 + 41580 z + 93555}{93555} - \frac{64 e^{-z} \sqrt{\pi} z^{13/2} (2z^2 - 39z + 165) \operatorname{erfi}(\sqrt{z})}{93555}$$

07.25.03.aief.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = \frac{52(5z^2 - 68z + 646)}{7z^4} + \frac{1}{3274425z^4} (8e^z(2048z^{12} + 27648z^{11} + 50688z^{10} - 42240z^9 + 570240z^7 - 4656960z^6 + 26943840z^5 - 123492600z^4 + 445945500z^3 - 1204052850z^2 + 2170943775z - 1964187225))$$

07.25.03.aieg.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{32 e^z \sqrt{\pi} (2z + 15) \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{64 z^7 + 448 z^6 - 192 z^5 + 240 z^4 - 480 z^3 + 1260 z^2 - 3780 z + 10395}{10395}$$

07.25.03.aieh.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{32 e^{-z} \sqrt{\pi} (2z - 15) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{10395} + \frac{-64 z^7 + 448 z^6 + 192 z^5 + 240 z^4 + 480 z^3 + 1260 z^2 + 3780 z + 10395}{10395}$$

07.25.03.aiei.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \frac{260(5z^3 - 102z^2 + 1938z - 54264)}{21z^5} + \frac{1}{654885z^5} (8e^z(2048z^{12} + 3072z^{11} + 16896z^{10} - 211200z^9 + 1900800z^8 - 14636160z^7 + 97796160z^6 - 559833120z^5 + 2675673000z^4 - 10256746500z^3 + 29566186650z^2 - 56961429525z + 54997242300))$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = -\frac{9}{2}$

07.25.03.aiej.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{843\,908\,625} (32\,768 z^{16} + 3\,801\,088 z^{15} + 181\,616\,640 z^{14} + 4\,666\,507\,264 z^{13} + 70\,655\,201\,280 z^{12} + 650\,024\,017\,920 z^{11} + 3\,617\,333\,007\,360 z^{10} + 11\,748\,949\,171\,200 z^9 + 20\,633\,649\,281\,280 z^8 + 16\,875\,782\,784\,000 z^7 + 4\,613\,880\,398\,400 z^6 + 125\,707\,982\,400 z^5 + 2\,756\,754\,000 z^4 + 583\,783\,200 z^3 + 364\,864\,500 z^2 + 458\,419\,500 z + 843\,908\,625) + \frac{1}{843\,908\,625} (16\,384 e^z \sqrt{\pi} (2 z^{33/2} + 233 z^{31/2} + 11\,200 z^{29/2} + 290\,250 z^{27/2} + 4\,449\,600 z^{25/2} + 41\,700\,960 z^{23/2} + 238\,775\,040 z^{21/2} + 811\,944\,000 z^{19/2} + 1\,542\,240\,000 z^{17/2} + 1\,460\,592\,000 z^{15/2} + 551\,577\,600 z^{13/2} + 47\,174\,400 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aiek.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{843\,908\,625} (32\,768 z^{16} - 3\,801\,088 z^{15} + 181\,616\,640 z^{14} - 4\,666\,507\,264 z^{13} + 70\,655\,201\,280 z^{12} - 650\,024\,017\,920 z^{11} + 3\,617\,333\,007\,360 z^{10} - 11\,748\,949\,171\,200 z^9 + 20\,633\,649\,281\,280 z^8 - 16\,875\,782\,784\,000 z^7 + 4\,613\,880\,398\,400 z^6 - 125\,707\,982\,400 z^5 + 2\,756\,754\,000 z^4 - 583\,783\,200 z^3 + 364\,864\,500 z^2 - 458\,419\,500 z + 843\,908\,625) - \frac{1}{843\,908\,625} (16\,384 e^{-z} \sqrt{\pi} (2 z^{33/2} - 233 z^{31/2} + 11\,200 z^{29/2} - 290\,250 z^{27/2} + 4\,449\,600 z^{25/2} - 41\,700\,960 z^{23/2} + 238\,775\,040 z^{21/2} - 811\,944\,000 z^{19/2} + 1\,542\,240\,000 z^{17/2} - 1\,460\,592\,000 z^{15/2} + 551\,577\,600 z^{13/2} - 47\,174\,400 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aiel.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{93\,767\,625} (-16\,384 z^{15} - 1\,720\,320 z^{14} - 73\,613\,312 z^{13} - 1\,671\,573\,504 z^{12} - 21\,989\,744\,640 z^{11} - 171\,835\,161\,600 z^{10} - 786\,865\,536\,000 z^9 - 2\,004\,889\,501\,440 z^8 - 2\,548\,742\,353\,920 z^7 - 1\,280\,325\,009\,600 z^6 - 125\,707\,982\,400 z^5 + 2\,756\,754\,000 z^4 + 194\,594\,400 z^3 + 72\,972\,900 z^2 + 65\,488\,500 z + 93\,767\,625) - \frac{1}{93\,767\,625} (8192 e^z \sqrt{\pi} (2 z^{31/2} + 211 z^{29/2} + 9090 z^{27/2} + 208\,440 z^{25/2} + 2\,782\,080 z^{23/2} + 22\,226\,400 z^{21/2} + 105\,416\,640 z^{19/2} + 284\,860\,800 z^{17/2} + 402\,796\,800 z^{15/2} + 252\,201\,600 z^{13/2} + 47\,174\,400 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aiem.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{93\,767\,625} (16\,384 z^{15} - 1\,720\,320 z^{14} + 73\,613\,312 z^{13} - 1\,671\,573\,504 z^{12} + 21\,989\,744\,640 z^{11} - 171\,835\,161\,600 z^{10} + 786\,865\,536\,000 z^9 - 2\,004\,889\,501\,440 z^8 + 2\,548\,742\,353\,920 z^7 - 1\,280\,325\,009\,600 z^6 + 125\,707\,982\,400 z^5 + 2\,756\,754\,000 z^4 - 194\,594\,400 z^3 + 72\,972\,900 z^2 - 65\,488\,500 z + 93\,767\,625) - \frac{1}{93\,767\,625} (8192 e^{-z} \sqrt{\pi} (2 z^{31/2} - 211 z^{29/2} + 9090 z^{27/2} - 208\,440 z^{25/2} + 2\,782\,080 z^{23/2} - 22\,226\,400 z^{21/2} + 105\,416\,640 z^{19/2} - 284\,860\,800 z^{17/2} + 402\,796\,800 z^{15/2} - 252\,201\,600 z^{13/2} + 47\,174\,400 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aien.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{13\,395\,375} (8192 z^{14} + 770\,048 z^{13} + 29\,110\,272 z^{12} + 574\,169\,088 z^{11} + 6\,415\,150\,080 z^{10} + 41\,265\,607\,680 z^9 +$$

$$148\,447\,676\,160 z^8 + 274\,924\,661\,760 z^7 + 217\,419\,733\,440 z^6 + 41\,902\,660\,800 z^5 -$$

$$2\,756\,754\,000 z^4 + 194\,594\,400 z^3 + 24\,324\,300 z^2 + 13\,097\,700 z + 13\,395\,375) +$$

$$\frac{1}{13\,395\,375} (4096 e^z \sqrt{\pi} (2 z^{29/2} + 189 z^{27/2} + 7200 z^{25/2} + 143\,640 z^{23/2} + 1\,632\,960 z^{21/2} + 10\,795\,680 z^{19/2} +$$

$$40\,642\,560 z^{17/2} + 81\,648\,000 z^{15/2} + 76\,204\,800 z^{13/2} + 23\,587\,200 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aieo.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{13\,395\,375} (8192 z^{14} - 770\,048 z^{13} + 29\,110\,272 z^{12} - 574\,169\,088 z^{11} + 6\,415\,150\,080 z^{10} - 41\,265\,607\,680 z^9 +$$

$$148\,447\,676\,160 z^8 - 274\,924\,661\,760 z^7 + 217\,419\,733\,440 z^6 - 41\,902\,660\,800 z^5 -$$

$$2\,756\,754\,000 z^4 - 194\,594\,400 z^3 + 24\,324\,300 z^2 - 13\,097\,700 z + 13\,395\,375) -$$

$$\frac{1}{13\,395\,375} (4096 e^{-z} \sqrt{\pi} (2 z^{29/2} - 189 z^{27/2} + 7200 z^{25/2} - 143\,640 z^{23/2} + 1\,632\,960 z^{21/2} - 10\,795\,680 z^{19/2} +$$

$$40\,642\,560 z^{17/2} - 81\,648\,000 z^{15/2} + 76\,204\,800 z^{13/2} - 23\,587\,200 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aiep.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{2\,679\,075}$$

$$(-4096 z^{13} - 339\,968 z^{12} - 11\,157\,504 z^{11} - 186\,831\,872 z^{10} - 1\,718\,092\,800 z^9 - 8\,687\,105\,280 z^8 - 22\,771\,338\,240 z^7 -$$

$$26\,459\,334\,720 z^6 - 8\,380\,532\,160 z^5 + 918\,918\,000 z^4 - 194\,594\,400 z^3 + 24\,324\,300 z^2 + 4\,365\,900 z + 2\,679\,075) -$$

$$\frac{1}{2\,679\,075} (2048 e^z \sqrt{\pi} (2 z^{27/2} + 167 z^{25/2} + 5530 z^{23/2} + 93\,870 z^{21/2} + 882\,000 z^{19/2} +$$

$$4\,621\,680 z^{17/2} + 12\,912\,480 z^{15/2} + 17\,085\,600 z^{13/2} + 7\,862\,400 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aieq.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{2\,679\,075}$$

$$(4096 z^{13} - 339\,968 z^{12} + 11\,157\,504 z^{11} - 186\,831\,872 z^{10} + 1\,718\,092\,800 z^9 - 8\,687\,105\,280 z^8 + 22\,771\,338\,240 z^7 -$$

$$26\,459\,334\,720 z^6 + 8\,380\,532\,160 z^5 + 918\,918\,000 z^4 + 194\,594\,400 z^3 + 24\,324\,300 z^2 - 4\,365\,900 z + 2\,679\,075) -$$

$$\frac{1}{2\,679\,075} (2048 e^{-z} \sqrt{\pi} (2 z^{27/2} - 167 z^{25/2} + 5530 z^{23/2} - 93\,870 z^{21/2} + 882\,000 z^{19/2} -$$

$$4\,621\,680 z^{17/2} + 12\,912\,480 z^{15/2} - 17\,085\,600 z^{13/2} + 7\,862\,400 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aier.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{893025} (2048 z^{12} + 147456 z^{11} + 4105216 z^{10} + 56540160 z^9 + 408602880 z^8 + 1507107840 z^7 + 2492642880 z^6 + 1197218880 z^5 - 183783600 z^4 + 64864800 z^3 - 24324300 z^2 + 4365900 z + 893025) + \frac{1}{893025} (1024 e^z \sqrt{\pi} (2 z^{25/2} + 145 z^{23/2} + 4080 z^{21/2} + 57150 z^{19/2} + 424800 z^{17/2} + 1648080 z^{15/2} + 3024000 z^{13/2} + 1965600 z^{11/2})) \operatorname{erf}(\sqrt{z})$$

07.25.03.aies.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{893025} (2048 z^{12} - 147456 z^{11} + 4105216 z^{10} - 56540160 z^9 + 408602880 z^8 - 1507107840 z^7 + 2492642880 z^6 - 1197218880 z^5 - 183783600 z^4 - 64864800 z^3 - 24324300 z^2 - 4365900 z + 893025) - \frac{1}{893025} (1024 e^{-z} \sqrt{\pi} (2 z^{25/2} - 145 z^{23/2} + 4080 z^{21/2} - 57150 z^{19/2} + 424800 z^{17/2} - 1648080 z^{15/2} + 3024000 z^{13/2} - 1965600 z^{11/2})) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiet.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{893025} (-1024 z^{11} - 62464 z^{10} - 1428480 z^9 - 15443712 z^8 - 81392640 z^7 - 190008000 z^6 - 133024320 z^5 + 26254800 z^4 - 12972960 z^3 + 8108100 z^2 - 4365900 z + 893025) - \frac{1}{893025} 512 e^z \sqrt{\pi} (2 z^{23/2} + 123 z^{21/2} + 2850 z^{19/2} + 31500 z^{17/2} + 172800 z^{15/2} + 438480 z^{13/2} + 393120 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aieü.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{893025} (1024 z^{11} - 62464 z^{10} + 1428480 z^9 - 15443712 z^8 + 81392640 z^7 - 190008000 z^6 + 133024320 z^5 + 26254800 z^4 + 12972960 z^3 + 8108100 z^2 + 4365900 z + 893025) - \frac{1}{893025} 512 e^{-z} \sqrt{\pi} (2 z^{23/2} - 123 z^{21/2} + 2850 z^{19/2} - 31500 z^{17/2} + 172800 z^{15/2} - 438480 z^{13/2} + 393120 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiev.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, 1; z\right) = -\frac{1}{893025} (e^z (1024 z^{11} + 57344 z^{10} + 1186560 z^9 + 11370240 z^8 + 51408000 z^7 + 96526080 z^6 + 42547680 z^5 - 13154400 z^4 + 8334900 z^3 - 5670000 z^2 + 3075975 z - 893025))$$

07.25.03.aiew.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{893025} \left(-512 z^{10} - 25600 z^9 - 458496 z^8 - 3607552 z^7 - 12035520 z^6 - 12093120 z^5 + 2917200 z^4 - 1853280 z^3 + 1621620 z^2 - 1455300 z + 893025 \right) - \frac{256 e^z \sqrt{\pi} z^{11/2} (2 z^5 + 101 z^4 + 1840 z^3 + 14940 z^2 + 53280 z + 65520) \operatorname{erf}(\sqrt{z})}{893025}$$

07.25.03.aiox.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{256 e^{-z} \sqrt{\pi} (2 z^5 - 101 z^4 + 1840 z^3 - 14940 z^2 + 53280 z - 65520) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{893025} + \frac{1}{893025} \left(-512 z^{10} + 25600 z^9 - 458496 z^8 + 3607552 z^7 - 12035520 z^6 + 12093120 z^5 + 2917200 z^4 + 1853280 z^3 + 1621620 z^2 + 1455300 z + 893025 \right)$$

07.25.03.aiey.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, 2; z\right) = -\frac{1}{893025} \left(e^z (1024 z^{10} + 46080 z^9 + 725760 z^8 + 4838400 z^7 + 12700800 z^6 + 7620480 z^5 - 3175200 z^4 + 2721600 z^3 - 2551500 z^2 + 1984500 z - 893025) \right)$$

07.25.03.aiez.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{297675} \left(-256 z^9 - 9984 z^8 - 129536 z^7 - 642624 z^6 - 930240 z^5 + 265200 z^4 - 205920 z^3 + 231660 z^2 - 291060 z + 297675 \right) - \frac{128 e^z \sqrt{\pi} z^{11/2} (2 z^4 + 79 z^3 + 1050 z^2 + 5490 z + 9360) \operatorname{erf}(\sqrt{z})}{297675}$$

07.25.03.aif0.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{1}{297675} \left(256 z^9 - 9984 z^8 + 129536 z^7 - 642624 z^6 + 930240 z^5 + 265200 z^4 + 205920 z^3 + 231660 z^2 + 291060 z + 297675 \right) - \frac{128 e^{-z} \sqrt{\pi} z^{11/2} (2 z^4 - 79 z^3 + 1050 z^2 - 5490 z + 9360) \operatorname{erfi}(\sqrt{z})}{297675}$$

07.25.03.aif1.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, 3; z\right) = \frac{286}{63 z^2} - \frac{1}{893025 z^2} \left(2 e^z (1024 z^{11} + 34816 z^{10} + 377600 z^9 + 1440000 z^8 + 1180800 z^7 - 645120 z^6 + 695520 z^5 - 756000 z^4 + 472500 z^3 + 567000 z^2 - 2027025 z + 2027025) \right)$$

07.25.03.aif2.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-128 z^8 - 3584 z^7 - 28992 z^6 - 62016 z^5 + 20400 z^4 - 18720 z^3 + 25740 z^2 - 41580 z + 59535}{59535} - \frac{64 e^z \sqrt{\pi} z^{11/2} (2 z^3 + 57 z^2 + 480 z + 1170) \operatorname{erf}(\sqrt{z})}{59535}$$

07.25.03.aif3.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{64 e^{-z} \sqrt{\pi} (2 z^3 - 57 z^2 + 480 z - 1170) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{59535} + \frac{-128 z^8 + 3584 z^7 - 28992 z^6 + 62016 z^5 + 20400 z^4 + 18720 z^3 + 25740 z^2 + 41580 z + 59535}{59535}$$

07.25.03.aif4.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = \frac{286(z-6)}{21 z^3} - \frac{1}{297675 z^3} (2 e^z (1024 z^{11} + 23552 z^{10} + 142080 z^9 + 161280 z^8 - 109440 z^7 + 120960 z^6 - 30240 z^5 - 604800 z^4 + 2891700 z^3 - 8108100 z^2 + 14189175 z - 12162150))$$

07.25.03.aif5.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-64 z^7 - 1088 z^6 - 3648 z^5 + 1360 z^4 - 1440 z^3 + 2340 z^2 - 4620 z + 8505}{8505} - \frac{32 e^z \sqrt{\pi} z^{11/2} (2 z^2 + 35 z + 130) \operatorname{erf}(\sqrt{z})}{8505}$$

07.25.03.aif6.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{64 z^7 - 1088 z^6 + 3648 z^5 + 1360 z^4 + 1440 z^3 + 2340 z^2 + 4620 z + 8505}{8505} - \frac{32 e^{-z} \sqrt{\pi} z^{11/2} (2 z^2 - 35 z + 130) \operatorname{erfi}(\sqrt{z})}{8505}$$

07.25.03.aif7.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, 5; z\right) = \frac{572(z^2 - 12z + 102)}{21 z^4} - \frac{1}{297675 z^4} (8 e^z (1024 z^{11} + 12288 z^{10} + 19200 z^9 - 11520 z^8 - 17280 z^7 + 241920 z^6 - 1481760 z^5 + 6804000 z^4 - 24324300 z^3 + 64864800 z^2 - 115540425 z + 103378275))$$

07.25.03.aif8.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{945} (-32 z^6 - 192 z^5 + 80 z^4 - 96 z^3 + 180 z^2 - 420 z + 945) - \frac{16}{945} e^z \sqrt{\pi} z^{11/2} (2 z + 13) \operatorname{erf}(\sqrt{z})$$

07.25.03.aif9.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{16}{945} e^{-z} \sqrt{\pi} (2 z - 13) \operatorname{erfi}(\sqrt{z}) z^{11/2} + \frac{1}{945} (-32 z^6 + 192 z^5 + 80 z^4 + 96 z^3 + 180 z^2 + 420 z + 945)$$

07.25.03.aifa.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = \frac{2860(z^3 - 18z^2 + 306z - 7752)}{63z^5} - \frac{1}{59535z^5} (8e^z(1024z^{11} + 1024z^{10} + 8960z^9 - 92160z^8 + 720000z^7 - 4798080z^6 + 27306720z^5 - 129729600z^4 + 494594100z^3 - 1418917500z^2 + 2722294575z - 2618916300))$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = -\frac{7}{2}$

07.25.03.aifb.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{10418625} (8192z^{14} + 778240z^{13} + 29806592z^{12} + 597712896z^{11} + 6824850432z^{10} + 45233495040z^9 + 170052307200z^8 + 338520204288z^7 + 308857389120z^6 + 93008139840z^5 + 2756754000z^4 + 64864800z^3 + 14594580z^2 + 9355500z + 10418625) + \frac{1}{10418625} (4096e^z\sqrt{\pi} (2z^{29/2} + 191z^{27/2} + 7371z^{25/2} + 149472z^{23/2} + 1735776z^{21/2} + 11811744z^{19/2} + 46357920z^{17/2} + 99429120z^{15/2} + 104509440z^{13/2} + 43182720z^{11/2} + 3991680z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aifc.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{10418625} (8192z^{14} - 778240z^{13} + 29806592z^{12} - 597712896z^{11} + 6824850432z^{10} - 45233495040z^9 + 170052307200z^8 - 338520204288z^7 + 308857389120z^6 - 93008139840z^5 + 2756754000z^4 - 64864800z^3 + 14594580z^2 - 9355500z + 10418625) - \frac{1}{10418625} (4096e^{-z}\sqrt{\pi} (2z^{29/2} - 191z^{27/2} + 7371z^{25/2} - 149472z^{23/2} + 1735776z^{21/2} - 11811744z^{19/2} + 46357920z^{17/2} - 99429120z^{15/2} + 104509440z^{13/2} - 43182720z^{11/2} + 3991680z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aifd.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{1488375} (-4096z^{13} - 348160z^{12} - 11771904z^{11} - 204850176z^{10} - 1983943680z^9 - 1080231520z^8 - 31797771264z^7 - 45718827840z^6 - 25552739520z^5 - 2756754000z^4 + 64864800z^3 + 4864860z^2 + 1871100z + 1488375) - \frac{1}{1488375} (2048e^z\sqrt{\pi} (2z^{27/2} + 171z^{25/2} + 5832z^{23/2} + 102816z^{21/2} + 1016064z^{19/2} + 5715360z^{17/2} + 17781120z^{15/2} + 28304640z^{13/2} + 19595520z^{11/2} + 3991680z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aife.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{1488375} (4096z^{13} - 348160z^{12} + 11771904z^{11} - 204850176z^{10} + 1983943680z^9 - 10802315520z^8 + 31797771264z^7 - 45718827840z^6 + 25552739520z^5 - 2756754000z^4 - 64864800z^3 + 4864860z^2 - 1871100z + 1488375) - \frac{1}{1488375} (2048e^{-z}\sqrt{\pi} (2z^{27/2} - 171z^{25/2} + 5832z^{23/2} - 102816z^{21/2} + 1016064z^{19/2} - 5715360z^{17/2} + 17781120z^{15/2} - 28304640z^{13/2} + 19595520z^{11/2} - 3991680z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aiff.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{297675} (2048z^{12} + 153600z^{11} + 4504576z^{10} + 66462720z^9 + 528802560z^8 + 2256608256z^7 + 4814873280z^6 + 4293051840z^5 + 918918000z^4 - 64864800z^3 + 4864860z^2 + 623700z + 297675) + \frac{1}{297675} (1024e^z\sqrt{\pi} (2z^{25/2} + 151z^{23/2} + 4473z^{21/2} + 67032z^{19/2} + 546840z^{17/2} + 2434320z^{15/2} + 5609520z^{13/2} + 5866560z^{11/2} + 1995840z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aifg.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{297675} (2048z^{12} - 153600z^{11} + 4504576z^{10} - 66462720z^9 + 528802560z^8 - 2256608256z^7 + 4814873280z^6 - 4293051840z^5 + 918918000z^4 + 64864800z^3 + 4864860z^2 - 623700z + 297675) - \frac{1}{297675} (1024e^{-z}\sqrt{\pi} (2z^{25/2} - 151z^{23/2} + 4473z^{21/2} - 67032z^{19/2} + 546840z^{17/2} - 2434320z^{15/2} + 5609520z^{13/2} - 5866560z^{11/2} + 1995840z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aifh.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{99225} (-1024z^{11} - 66560z^{10} - 1653760z^9 - 20033280z^8 - 124916736z^7 - 387038400z^6 - 515972160z^5 - 183783600z^4 + 21621600z^3 - 4864860z^2 + 623700z + 99225) - \frac{1}{99225} (512e^z\sqrt{\pi} (2z^{23/2} + 131z^{21/2} + 3294z^{19/2} + 40680z^{17/2} + 262080z^{15/2} + 861840z^{13/2} + 1300320z^{11/2} + 665280z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aifi.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{99225} (1024z^{11} - 66560z^{10} + 1653760z^9 - 20033280z^8 + 124916736z^7 - 387038400z^6 + 515972160z^5 - 183783600z^4 - 21621600z^3 - 4864860z^2 - 623700z + 99225) - \frac{1}{99225} (512e^{-z}\sqrt{\pi} (2z^{23/2} - 131z^{21/2} + 3294z^{19/2} - 40680z^{17/2} + 262080z^{15/2} - 861840z^{13/2} + 1300320z^{11/2} - 665280z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aifj.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{99225} (512 z^{10} + 28160 z^9 + 573696 z^8 + 5440512 z^7 + 24628800 z^6 + 47868480 z^5 + 26254800 z^4 - 4324320 z^3 + 1621620 z^2 - 623700 z + 99225) + \frac{1}{99225} 256 e^z \sqrt{\pi} (2 z^{21/2} + 111 z^{19/2} + 2295 z^{17/2} + 22320 z^{15/2} + 105840 z^{13/2} + 226800 z^{11/2} + 166320 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aifk.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{99225} (512 z^{10} - 28160 z^9 + 573696 z^8 - 5440512 z^7 + 24628800 z^6 - 47868480 z^5 + 26254800 z^4 + 4324320 z^3 + 1621620 z^2 + 623700 z + 99225) - \frac{1}{99225} 256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 111 z^{19/2} + 2295 z^{17/2} - 22320 z^{15/2} + 105840 z^{13/2} - 226800 z^{11/2} + 166320 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aifl.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{99225} (e^z (512 z^{10} + 25856 z^9 + 476928 z^8 + 4015872 z^7 + 15664320 z^6 + 24766560 z^5 + 8890560 z^4 - 2131920 z^3 + 969570 z^2 - 411075 z + 99225))$$

07.25.03.aifm.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{128 e^z \sqrt{\pi} (2 z^5 + 91 z^4 + 1476 z^3 + 10512 z^2 + 32256 z + 33264) \operatorname{erf}(\sqrt{z}) z^{9/2}}{99225} + \frac{1}{99225} (256 z^9 + 11520 z^8 + 183296 z^7 + 1259328 z^6 + 3577536 z^5 + 2917200 z^4 - 617760 z^3 + 324324 z^2 - 207900 z + 99225)$$

07.25.03.aifn.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{128 e^{-z} \sqrt{\pi} (2 z^5 - 91 z^4 + 1476 z^3 - 10512 z^2 + 32256 z - 33264) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{99225} + \frac{1}{99225} (-256 z^9 + 11520 z^8 - 183296 z^7 + 1259328 z^6 - 3577536 z^5 + 2917200 z^4 + 617760 z^3 + 324324 z^2 + 207900 z + 99225)$$

07.25.03.aifo.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{99225} (e^z (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + 408240 z^2 - 255150 z + 99225))$$

07.25.03.aifp.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{64 e^z \sqrt{\pi} (2 z^4 + 71 z^3 + 837 z^2 + 3816 z + 5544) \operatorname{erf}(\sqrt{z}) z^{9/2}}{33075} + \frac{128 z^8 + 4480 z^7 + 51392 z^6 + 220608 z^5 + 265200 z^4 - 68640 z^3 + 46332 z^2 - 41580 z + 33075}{33075}$$

07.25.03.aifq.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{128 z^8 - 4480 z^7 + 51392 z^6 - 220608 z^5 + 265200 z^4 + 68640 z^3 + 46332 z^2 + 41580 z + 33075}{33075} - \frac{64 e^{-z} \sqrt{\pi} z^{9/2} (2 z^4 - 71 z^3 + 837 z^2 - 3816 z + 5544) \operatorname{erfi}(\sqrt{z})}{33075}$$

07.25.03.aifr.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{99225 z^2} (2 e^z (512 z^{10} + 15616 z^9 + 149760 z^8 + 495360 z^7 + 342720 z^6 - 151200 z^5 + 120960 z^4 - 75600 z^3 - 28350 z^2 + 155925 z - 155925)) + \frac{22}{7 z^2}$$

07.25.03.aifs.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{32 e^z \sqrt{\pi} (2 z^3 + 51 z^2 + 378 z + 792) \operatorname{erf}(\sqrt{z}) z^{9/2}}{6615} + \frac{64 z^7 + 1600 z^6 + 11328 z^5 + 20400 z^4 - 6240 z^3 + 5148 z^2 - 5940 z + 6615}{6615}$$

07.25.03.aift.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{32 e^{-z} \sqrt{\pi} (2 z^3 - 51 z^2 + 378 z - 792) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{6615} + \frac{-64 z^7 + 1600 z^6 - 11328 z^5 + 20400 z^4 + 6240 z^3 + 5148 z^2 + 5940 z + 6615}{6615}$$

07.25.03.aifu.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = \frac{66(5z - 26)}{35 z^3} + \frac{1}{33075 z^3} (2 e^z (512 z^{10} + 10496 z^9 + 55296 z^8 + 52992 z^7 - 28224 z^6 + 18144 z^5 + 30240 z^4 - 196560 z^3 + 561330 z^2 - 966735 z + 810810))$$

07.25.03.aifv.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{16}{945} e^z \sqrt{\pi} (2 z^2 + 31 z + 99) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{945} (32 z^6 + 480 z^5 + 1360 z^4 - 480 z^3 + 468 z^2 - 660 z + 945)$$

07.25.03.aifw.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{945} (32 z^6 - 480 z^5 + 1360 z^4 + 480 z^3 + 468 z^2 + 660 z + 945) - \frac{16}{945} e^{-z} \sqrt{\pi} z^{9/2} (2 z^2 - 31 z + 99) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aifx.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = \frac{132(5z^2 - 52z + 390)}{35z^4} + \frac{1}{33075z^4} (8e^z(512z^{10} + 5376z^9 + 6912z^8 - 2304z^7 - 12096z^6 + 90720z^5 - 423360z^4 + 1496880z^3 - 3929310z^2 + 6891885z - 6081075))$$

07.25.03.aify.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{8}{105} e^z \sqrt{\pi} (2z + 11) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105)$$

07.25.03.aifz.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{8}{105} e^{-z} \sqrt{\pi} (2z - 11) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{105} (-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105)$$

07.25.03.aig0.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{7}{2}, 6; z\right) = \frac{44(5z^3 - 78z^2 + 1170z - 26520)}{7z^5} + \frac{1}{6615z^5} (8e^z(512z^{10} + 256z^9 + 4608z^8 - 39168z^7 + 262080z^6 - 1481760z^5 + 6985440z^4 - 26444880z^3 + 75405330z^2 - 143918775z + 137837700))$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = -\frac{5}{2}$

07.25.03.aig1.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{212625} (2048z^{12} + 155648z^{11} + 4641792z^{10} + 70007808z^9 + 574060800z^8 + 2560730112z^7 + 5873781312z^6 + 6040319040z^5 + 2013575760z^4 + 64864800z^3 + 1621620z^2 + 374220z + 212625) + \frac{1}{212625} (1024e^z \sqrt{\pi} (2z^{25/2} + 153z^{23/2} + 4608z^{21/2} + 70560z^{19/2} + 592704z^{17/2} + 2751840z^{15/2} + 6773760z^{13/2} + 7983360z^{11/2} + 3628800z^{9/2} + 362880z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aig2.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{212625} (2048z^{12} - 155648z^{11} + 4641792z^{10} - 70007808z^9 + 574060800z^8 - 2560730112z^7 + 5873781312z^6 - 6040319040z^5 + 2013575760z^4 - 64864800z^3 + 1621620z^2 - 374220z + 212625) - \frac{1}{212625} (1024e^{-z} \sqrt{\pi} (2z^{25/2} - 153z^{23/2} + 4608z^{21/2} - 70560z^{19/2} + 592704z^{17/2} - 2751840z^{15/2} + 6773760z^{13/2} - 7983360z^{11/2} + 3628800z^{9/2} - 362880z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aig3.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{42525} (-1024 z^{11} - 68608 z^{10} - 1772544 z^9 - 22629120 z^8 - 152060928 z^7 - 529454016 z^6 - 873633600 z^5 - 547328880 z^4 - 64864800 z^3 + 1621620 z^2 + 124740 z + 42525) - \frac{1}{42525} (512 e^z \sqrt{\pi} (2 z^{23/2} + 135 z^{21/2} + 3528 z^{19/2} + 45864 z^{17/2} + 317520 z^{15/2} + 1164240 z^{13/2} + 2116800 z^{11/2} + 1632960 z^{9/2} + 362880 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aig4.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{42525} (1024 z^{11} - 68608 z^{10} + 1772544 z^9 - 22629120 z^8 + 152060928 z^7 - 529454016 z^6 + 873633600 z^5 - 547328880 z^4 + 64864800 z^3 + 1621620 z^2 - 124740 z + 42525) - \frac{1}{42525} (512 e^{-z} \sqrt{\pi} (2 z^{23/2} - 135 z^{21/2} + 3528 z^{19/2} - 45864 z^{17/2} + 317520 z^{15/2} - 1164240 z^{13/2} + 2116800 z^{11/2} - 1632960 z^{9/2} + 362880 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aig5.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{14175} (512 z^{10} + 29696 z^9 + 648960 z^8 + 6786048 z^7 + 35603904 z^6 + 89415360 z^5 + 90886320 z^4 + 21621600 z^3 - 1621620 z^2 + 124740 z + 14175) + \frac{1}{14175} (256 e^z \sqrt{\pi} (2 z^{21/2} + 117 z^{19/2} + 2592 z^{17/2} + 27720 z^{15/2} + 151200 z^{13/2} + 408240 z^{11/2} + 483840 z^{9/2} + 181440 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aig6.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{14175} (512 z^{10} - 29696 z^9 + 648960 z^8 - 6786048 z^7 + 35603904 z^6 - 89415360 z^5 + 90886320 z^4 - 21621600 z^3 - 1621620 z^2 - 124740 z + 14175) - \frac{1}{14175} (256 e^{-z} \sqrt{\pi} (2 z^{21/2} - 117 z^{19/2} + 2592 z^{17/2} - 27720 z^{15/2} + 151200 z^{13/2} - 408240 z^{11/2} + 483840 z^{9/2} - 181440 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aig7.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{14175} (-256 z^9 - 12544 z^8 - 224256 z^7 - 1829184 z^6 - 6924480 z^5 - 10771920 z^4 - 4324320 z^3 + 540540 z^2 - 124740 z + 14175) - \frac{1}{14175} (128 e^z \sqrt{\pi} (2 z^{19/2} + 99 z^{17/2} + 1800 z^{15/2} + 15120 z^{13/2} + 60480 z^{11/2} + 105840 z^{9/2} + 60480 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aig8.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{14175} (256 z^9 - 12544 z^8 + 224256 z^7 - 1829184 z^6 + 6924480 z^5 - 10771920 z^4 + 4324320 z^3 + 540540 z^2 + 124740 z + 14175) - \frac{1}{14175} 128 e^{-z} \sqrt{\pi} (2 z^{19/2} - 99 z^{17/2} + 1800 z^{15/2} - 15120 z^{13/2} + 60480 z^{11/2} - 105840 z^{9/2} + 60480 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aig9.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, 1; z\right) = -\frac{1}{14175} (e^z (256 z^9 + 11520 z^8 + 186624 z^7 + 1354752 z^6 + 4445280 z^5 + 5715360 z^4 + 1587600 z^3 - 272160 z^2 + 76545 z - 14175))$$

07.25.03.aiga.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{14175} (-128 z^8 - 5120 z^7 - 71232 z^6 - 418368 z^5 - 981840 z^4 - 617760 z^3 + 108108 z^2 - 41580 z + 14175) - \frac{64 e^z \sqrt{\pi} z^{7/2} (2 z^5 + 81 z^4 + 1152 z^3 + 7056 z^2 + 18144 z + 15120) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.aigb.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{64 e^{-z} \sqrt{\pi} (2 z^5 - 81 z^4 + 1152 z^3 - 7056 z^2 + 18144 z - 15120) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{14175} + \frac{1}{14175} (-128 z^8 + 5120 z^7 - 71232 z^6 + 418368 z^5 - 981840 z^4 + 617760 z^3 + 108108 z^2 + 41580 z + 14175)$$

07.25.03.aigc.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, 2; z\right) = -\frac{1}{14175} e^z (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175)$$

07.25.03.aigd.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-64 z^7 - 1984 z^6 - 19776 z^5 - 71664 z^4 - 68640 z^3 + 15444 z^2 - 8316 z + 4725}{4725} - \frac{32 e^z \sqrt{\pi} z^{7/2} (2 z^4 + 63 z^3 + 648 z^2 + 2520 z + 3024) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.aige.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{64 z^7 - 1984 z^6 + 19776 z^5 - 71664 z^4 + 68640 z^3 + 15444 z^2 + 8316 z + 4725}{4725} - \frac{32 e^{-z} \sqrt{\pi} z^{7/2} (2 z^4 - 63 z^3 + 648 z^2 - 2520 z + 3024) \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.aigf.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = \frac{2}{z^2} - \frac{1}{14175 z^2} 2 e^z (256 z^9 + 6912 z^8 + 57600 z^7 + 161280 z^6 + 90720 z^5 - 30240 z^4 + 15120 z^3 - 14175 z + 14175)$$

07.25.03.aigg.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{945} (-32 z^6 - 704 z^5 - 4272 z^4 - 6240 z^3 + 1716 z^2 - 1188 z + 945) - \frac{16}{945} e^z \sqrt{\pi} z^{7/2} (2 z^3 + 45 z^2 + 288 z + 504) \operatorname{erf}(\sqrt{z})$$

07.25.03.aigh.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{16}{945} e^{-z} \sqrt{\pi} (2 z^3 - 45 z^2 + 288 z - 504) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{945} (-32 z^6 + 704 z^5 - 4272 z^4 + 6240 z^3 + 1716 z^2 + 1188 z + 945)$$

07.25.03.aigi.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = \frac{6(5z - 22)}{5z^3} - \frac{1}{4725 z^3} 2 e^z (256 z^9 + 4608 z^8 + 20736 z^7 + 16128 z^6 - 6048 z^5 + 15120 z^3 - 45360 z^2 + 76545 z - 62370)$$

07.25.03.aigj.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{135} (-16 z^5 - 208 z^4 - 480 z^3 + 156 z^2 - 132 z + 135) - \frac{8}{135} e^z \sqrt{\pi} z^{7/2} (2 z^2 + 27 z + 72) \operatorname{erf}(\sqrt{z})$$

07.25.03.aigk.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{135} (16 z^5 - 208 z^4 + 480 z^3 + 156 z^2 + 132 z + 135) - \frac{8}{135} e^{-z} \sqrt{\pi} z^{7/2} (2 z^2 - 27 z + 72) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aigl.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, 5; z\right) = \frac{12(5z^2 - 44z + 286)}{5z^4} - \frac{1}{4725 z^4} 8 e^z (256 z^9 + 2304 z^8 + 2304 z^7 - 6048 z^5 + 30240 z^4 - 105840 z^3 + 272160 z^2 - 467775 z + 405405)$$

07.25.03.aigm.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{15} (-8 z^4 - 32 z^3 + 12 z^2 - 12 z + 15) - \frac{4}{15} e^z \sqrt{\pi} z^{7/2} (2 z + 9) \operatorname{erf}(\sqrt{z})$$

07.25.03.aign.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{4}{15} e^{-z} \sqrt{\pi} (2 z - 9) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{15} (-8 z^4 + 32 z^3 + 12 z^2 + 12 z + 15)$$

07.25.03.aigo.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{5}{2}, 6; z\right) = \frac{4(5z^3 - 66z^2 + 858z - 17160)}{z^5} - \frac{1}{945z^5} 8e^z (256z^9 + 2304z^7 - 16128z^6 + 90720z^5 - 423360z^4 + 1587600z^3 - 4490640z^2 + 8513505z - 8108100)$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = -\frac{3}{2}$

07.25.03.aigp.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{8505} (512z^{10} + 30208z^9 + 675072z^8 + 7278592z^7 + 39939648z^6 + 107892288z^5 + 126532560z^4 + 46801440z^3 + 1621620z^2 + 41580z + 8505) + \frac{1}{8505} (256e^z \sqrt{\pi} (2z^{21/2} + 119z^{19/2} + 2695z^{17/2} + 29694z^{15/2} + 169050z^{13/2} + 488040z^{11/2} + 652680z^{9/2} + 327600z^{7/2} + 35280z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aigq.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{8505} (512z^{10} - 30208z^9 + 675072z^8 - 7278592z^7 + 39939648z^6 - 107892288z^5 + 126532560z^4 - 46801440z^3 + 1621620z^2 - 41580z + 8505) - \frac{1}{8505} (256e^{-z} \sqrt{\pi} (2z^{21/2} - 119z^{19/2} + 2695z^{17/2} - 29694z^{15/2} + 169050z^{13/2} - 488040z^{11/2} + 652680z^{9/2} - 327600z^{7/2} + 35280z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aigr.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{2835} (-256z^9 - 13056z^8 - 246272z^7 - 2167872z^6 - 9238464z^5 - 17823120z^4 - 12589920z^3 - 1621620z^2 + 41580z + 2835) - \frac{1}{2835} (128e^z \sqrt{\pi} (2z^{19/2} + 103z^{17/2} + 1974z^{15/2} + 17850z^{13/2} + 79800z^{11/2} + 168840z^{9/2} + 146160z^{7/2} + 35280z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aigs.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2835} (256z^9 - 13056z^8 + 246272z^7 - 2167872z^6 + 9238464z^5 - 17823120z^4 + 12589920z^3 - 1621620z^2 - 41580z + 2835) - \frac{1}{2835} (128e^{-z} \sqrt{\pi} (2z^{19/2} - 103z^{17/2} + 1974z^{15/2} - 17850z^{13/2} + 79800z^{11/2} - 168840z^{9/2} + 146160z^{7/2} - 35280z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aigt.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{2835} (128 z^8 + 5504 z^7 + 84672 z^6 + 578496 z^5 + 1762800 z^4 + 2066400 z^3 + 540540 z^2 - 41580 z + 2835) + \frac{1}{2835} 64 e^z \sqrt{\pi} (2 z^{17/2} + 87 z^{15/2} + 1365 z^{13/2} + 9660 z^{11/2} + 31500 z^{9/2} + 42840 z^{7/2} + 17640 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aigu.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{2835} (128 z^8 - 5504 z^7 + 84672 z^6 - 578496 z^5 + 1762800 z^4 - 2066400 z^3 + 540540 z^2 + 41580 z + 2835) - \frac{1}{2835} 64 e^{-z} \sqrt{\pi} (2 z^{17/2} - 87 z^{15/2} + 1365 z^{13/2} - 9660 z^{11/2} + 31500 z^{9/2} - 42840 z^{7/2} + 17640 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aigv.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{2835} e^z (128 z^8 + 5056 z^7 + 70560 z^6 + 430416 z^5 + 1146600 z^4 + 1137780 z^3 + 224910 z^2 - 23625 z + 2835)$$

07.25.03.aigw.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{32 e^z \sqrt{\pi} (2 z^5 + 71 z^4 + 868 z^3 + 4452 z^2 + 9240 z + 5880) \operatorname{erf}(\sqrt{z}) z^{5/2}}{2835} + \frac{64 z^7 + 2240 z^6 + 26688 z^5 + 130160 z^4 + 241440 z^3 + 108108 z^2 - 13860 z + 2835}{2835}$$

07.25.03.aigx.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{32 e^{-z} \sqrt{\pi} (2 z^5 - 71 z^4 + 868 z^3 - 4452 z^2 + 9240 z - 5880) \operatorname{erfi}(\sqrt{z}) z^{5/2}}{2835} + \frac{-64 z^7 + 2240 z^6 - 26688 z^5 + 130160 z^4 - 241440 z^3 + 108108 z^2 + 13860 z + 2835}{2835}$$

07.25.03.aigy.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{e^z (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835)}{2835}$$

07.25.03.aigz.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{16}{945} e^z \sqrt{\pi} (2 z^4 + 55 z^3 + 483 z^2 + 1554 z + 1470) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{945} (32 z^6 + 864 z^5 + 7312 z^4 + 21600 z^3 + 15444 z^2 - 2772 z + 945)$$

07.25.03.aih0.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{945} (32 z^6 - 864 z^5 + 7312 z^4 - 21600 z^3 + 15444 z^2 + 2772 z + 945) - \frac{16}{945} e^{-z} \sqrt{\pi} z^{5/2} (2 z^4 - 55 z^3 + 483 z^2 - 1554 z + 1470) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aih1.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{2 e^z (128 z^8 + 3008 z^7 + 21280 z^6 + 48720 z^5 + 21000 z^4 - 4620 z^3 + 630 z^2 + 1575 z - 1575)}{2835 z^2} + \frac{10}{9 z^2}$$

07.25.03.aih2.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{8}{189} e^z \sqrt{\pi} (2 z^3 + 39 z^2 + 210 z + 294) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{189} (16 z^5 + 304 z^4 + 1536 z^3 + 1716 z^2 - 396 z + 189)$$

07.25.03.aih3.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{8}{189} e^{-z} \sqrt{\pi} (2 z^3 - 39 z^2 + 210 z - 294) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{189} (-16 z^5 + 304 z^4 - 1536 z^3 + 1716 z^2 + 396 z + 189)$$

07.25.03.aih4.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \frac{2(5z - 18)}{3z^3} + \frac{2 e^z (128 z^8 + 1984 z^7 + 7392 z^6 + 4368 z^5 - 840 z^4 - 1260 z^3 + 4410 z^2 - 7245 z + 5670)}{945 z^3}$$

07.25.03.aih5.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{4}{27} e^z \sqrt{\pi} (2 z^2 + 23 z + 49) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{27} (8 z^4 + 88 z^3 + 156 z^2 - 44 z + 27)$$

07.25.03.aih6.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{27} (8 z^4 - 88 z^3 + 156 z^2 + 44 z + 27) - \frac{4}{27} e^{-z} \sqrt{\pi} z^{5/2} (2 z^2 - 23 z + 49) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aih7.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = \frac{4(5z^2 - 36z + 198)}{3z^4} + \frac{8 e^z (128 z^8 + 960 z^7 + 672 z^6 + 336 z^5 - 2520 z^4 + 8820 z^3 - 22050 z^2 + 36855 z - 31185)}{945 z^4}$$

07.25.03.aih8.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{2}{3} e^z \sqrt{\pi} (2 z + 7) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (4 z^3 + 12 z^2 - 4 z + 3)$$

07.25.03.aih9.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{2}{3} e^{-z} \sqrt{\pi} (2 z - 7) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{3} (-4 z^3 + 12 z^2 + 4 z + 3)$$

07.25.03.aiha.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{3}{2}, 6; z\right) = \frac{20(5z^3 - 54z^2 + 594z - 10296)}{9z^5} + \frac{1}{189z^5} 8 e^z (128 z^8 - 64 z^7 + 1120 z^6 - 6384 z^5 + 29400 z^4 - 108780 z^3 + 304290 z^2 - 571725 z + 540540)$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = -\frac{1}{2}$

07.25.03.aihb.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} (128 z^8 + 5632 z^7 + 89408 z^6 + 639552 z^5 + 2099280 z^4 + 2844960 z^3 + 1160820 z^2 + 41580 z + 945) + \frac{64}{945} e^z \sqrt{\pi} (2 z^{17/2} + 89 z^{15/2} + 1440 z^{13/2} + 10650 z^{11/2} + 37200 z^{9/2} + 57240 z^{7/2} + 31680 z^{5/2} + 3600 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aihc.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945} (128 z^8 - 5632 z^7 + 89408 z^6 - 639552 z^5 + 2099280 z^4 - 2844960 z^3 + 1160820 z^2 - 41580 z + 945) - \frac{64}{945} e^{-z} \sqrt{\pi} (2 z^{17/2} - 89 z^{15/2} + 1440 z^{13/2} - 10650 z^{11/2} + 37200 z^{9/2} - 57240 z^{7/2} + 31680 z^{5/2} - 3600 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aihd.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{945} (-64 z^7 - 2368 z^6 - 30528 z^5 - 168240 z^4 - 389280 z^3 - 310140 z^2 - 41580 z + 945) - \frac{32}{945} e^z \sqrt{\pi} (2 z^{15/2} + 75 z^{13/2} + 990 z^{11/2} + 5700 z^{9/2} + 14400 z^{7/2} + 14040 z^{5/2} + 3600 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aihe.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} (64 z^7 - 2368 z^6 + 30528 z^5 - 168240 z^4 + 389280 z^3 - 310140 z^2 + 41580 z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} (2 z^{15/2} - 75 z^{13/2} + 990 z^{11/2} - 5700 z^{9/2} + 14400 z^{7/2} - 14040 z^{5/2} + 3600 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aihf.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = -\frac{1}{945} e^z (64 z^7 + 2176 z^6 + 25488 z^5 + 126000 z^4 + 258300 z^3 + 181440 z^2 + 21735 z - 945)$$

07.25.03.aihg.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{945} (-32 z^6 - 960 z^5 - 9520 z^4 - 36960 z^3 - 50508 z^2 - 13860 z + 945) - \frac{16}{945} e^z \sqrt{\pi} z^{3/2} (2 z^5 + 61 z^4 + 624 z^3 + 2580 z^2 + 4080 z + 1800) \operatorname{erf}(\sqrt{z})$$

07.25.03.aihh.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{16}{945} e^{-z} \sqrt{\pi} (2 z^5 - 61 z^4 + 624 z^3 - 2580 z^2 + 4080 z - 1800) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{945} (-32 z^6 + 960 z^5 - 9520 z^4 + 36960 z^3 - 50508 z^2 + 13860 z + 945)$$

07.25.03.aihi.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = -\frac{1}{945} e^z (64 z^6 + 1728 z^5 + 15120 z^4 + 50400 z^3 + 56700 z^2 + 11340 z - 945)$$

07.25.03.aihj.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{315} (-16z^5 - 368z^4 - 2560z^3 - 5844z^2 - 2772z + 315) - \frac{8}{315} e^z \sqrt{\pi} z^{3/2} (2z^4 + 47z^3 + 342z^2 + 870z + 600) \operatorname{erf}(\sqrt{z})$$

07.25.03.aihk.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{315} (16z^5 - 368z^4 + 2560z^3 - 5844z^2 + 2772z + 315) - \frac{8}{315} e^{-z} \sqrt{\pi} z^{3/2} (2z^4 - 47z^3 + 342z^2 - 870z + 600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aihl.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = \frac{10}{21z^2} - \frac{2e^z(64z^7 + 1280z^6 + 7440z^5 + 13200z^4 + 3900z^3 - 360z^2 - 225z + 225)}{945z^2}$$

07.25.03.aihm.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{63} (-8z^4 - 128z^3 - 516z^2 - 396z + 63) - \frac{4}{63} e^z \sqrt{\pi} z^{3/2} (2z^3 + 33z^2 + 144z + 150) \operatorname{erf}(\sqrt{z})$$

07.25.03.aihn.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{4}{63} e^{-z} \sqrt{\pi} (2z^3 - 33z^2 + 144z - 150) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{63} (-8z^4 + 128z^3 - 516z^2 + 396z + 63)$$

07.25.03.aiho.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = \frac{2(5z - 14)}{7z^3} - \frac{2e^z(64z^7 + 832z^6 + 2448z^5 + 960z^4 + 60z^3 - 540z^2 + 855z - 630)}{315z^3}$$

07.25.03.aihp.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{9} (-4z^3 - 36z^2 - 44z + 9) - \frac{2}{9} e^z \sqrt{\pi} z^{3/2} (2z^2 + 19z + 30) \operatorname{erf}(\sqrt{z})$$

07.25.03.aihq.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{9} (4z^3 - 36z^2 + 44z + 9) - \frac{2}{9} e^{-z} \sqrt{\pi} z^{3/2} (2z^2 - 19z + 30) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aihr.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = \frac{4(5z^2 - 28z + 126)}{7z^4} - \frac{8e^z(64z^7 + 384z^6 + 144z^5 + 240z^4 - 900z^3 + 2160z^2 - 3465z + 2835)}{315z^4}$$

07.25.03.aihs.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -2z^2 - e^z \sqrt{\pi} (2z + 5) \operatorname{erf}(\sqrt{z}) z^{3/2} - 4z + 1$$

07.25.03.aiht.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -2z^2 + e^{-z} \sqrt{\pi} (2z - 5) \operatorname{erfi}(\sqrt{z}) z^{3/2} + 4z + 1$$

07.25.03.aihu.01

$${}_2F_2\left(2, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = \frac{20(5z^3 - 42z^2 + 378z - 5544)}{21z^5} - \frac{8e^z(64z^7 - 64z^6 + 528z^5 - 2400z^4 + 8700z^3 - 23940z^2 + 44415z - 41580)}{63z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = \frac{1}{2}$

07.25.03.aihv.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{945} (32 z^6 + 992 z^5 + 10320 z^4 + 43296 z^3 + 68820 z^2 + 30060 z + 945) + \frac{16}{945} e^z \sqrt{\pi} (2 z^{13/2} + 63 z^{11/2} + 675 z^{9/2} + 3000 z^{7/2} + 5400 z^{5/2} + 3240 z^{3/2} + 360 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aihw.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} (32 z^6 - 992 z^5 + 10320 z^4 - 43296 z^3 + 68820 z^2 - 30060 z + 945) - \frac{16}{945} e^{-z} \sqrt{\pi} (2 z^{13/2} - 63 z^{11/2} + 675 z^{9/2} - 3000 z^{7/2} + 5400 z^{5/2} - 3240 z^{3/2} + 360 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aihx.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{945} e^z (32 z^6 + 912 z^5 + 8640 z^4 + 32760 z^3 + 47250 z^2 + 19845 z + 945)$$

07.25.03.aihy.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{945} (16 z^5 + 400 z^4 + 3168 z^3 + 9156 z^2 + 8100 z + 945) + \frac{8}{945} e^z \sqrt{\pi} \sqrt{z} (2 z^5 + 51 z^4 + 420 z^3 + 1320 z^2 + 1440 z + 360) \operatorname{erf}(\sqrt{z})$$

07.25.03.aihz.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} (-16 z^5 + 400 z^4 - 3168 z^3 + 9156 z^2 - 8100 z + 945) + \frac{8}{945} e^{-z} \sqrt{\pi} \sqrt{z} (2 z^5 - 51 z^4 + 420 z^3 - 1320 z^2 + 1440 z - 360) \operatorname{erfi}(\sqrt{z})$$

07.25.03.iii0.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{945} e^z (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945)$$

07.25.03.iii1.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{315} (8 z^4 + 152 z^3 + 828 z^2 + 1332 z + 315) + \frac{4}{315} e^z \sqrt{\pi} \sqrt{z} (2 z^4 + 39 z^3 + 225 z^2 + 420 z + 180) \operatorname{erf}(\sqrt{z})$$

07.25.03.iii2.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{315} (8 z^4 - 152 z^3 + 828 z^2 - 1332 z + 315) - \frac{4}{315} e^{-z} \sqrt{\pi} \sqrt{z} (2 z^4 - 39 z^3 + 225 z^2 - 420 z + 180) \operatorname{erfi}(\sqrt{z})$$

07.25.03.iii3.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, 3; z\right) = \frac{2 e^z (32 z^6 + 528 z^5 + 2400 z^4 + 3000 z^3 + 450 z^2 + 45 z - 45)}{945 z^2} + \frac{2}{21 z^2}$$

07.25.03.aii4.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{63} (4z^3 + 52z^2 + 156z + 63) + \frac{2}{63} e^z \sqrt{\pi} \sqrt{z} (2z^3 + 27z^2 + 90z + 60) \operatorname{erf}(\sqrt{z})$$

07.25.03.aii5.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{63} (-4z^3 + 52z^2 - 156z + 63) + \frac{2}{63} e^{-z} \sqrt{\pi} \sqrt{z} (2z^3 - 27z^2 + 90z - 60) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aii6.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, 4; z\right) = \frac{2(z-2)}{7z^3} + \frac{2e^z(32z^6 + 336z^5 + 720z^4 + 120z^3 + 90z^2 - 135z + 90)}{315z^3}$$

07.25.03.aii7.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{9} (2z^2 + 14z + 9) + \frac{1}{9} e^z \sqrt{\pi} \sqrt{z} (2z^2 + 15z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.aii8.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{9} (2z^2 - 14z + 9) - \frac{1}{9} e^{-z} \sqrt{\pi} \sqrt{z} (2z^2 - 15z + 15) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aii9.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{4(z^2 - 4z + 14)}{7z^4} + \frac{8e^z(32z^6 + 144z^5 + 120z^3 - 270z^2 + 405z - 315)}{315z^4}$$

07.25.03.aiaa.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = z + \frac{1}{2} e^z \sqrt{\pi} (2z + 3) \operatorname{erf}(\sqrt{z}) \sqrt{z} + 1$$

07.25.03.aiaa.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = -z + \frac{1}{2} e^{-z} \sqrt{\pi} (2z - 3) \operatorname{erfi}(\sqrt{z}) \sqrt{z} + 1$$

07.25.03.aiaa.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \frac{20(z^3 - 6z^2 + 42z - 504)}{21z^5} + \frac{8e^z(32z^6 - 48z^5 + 240z^4 - 840z^3 + 2250z^2 - 4095z + 3780)}{63z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = 1$

07.25.03.aiaa.01

$${}_2F_2\left(2, \frac{11}{2}; 1, 1; z\right) = \frac{e^{z/2} (32z^6 + 848z^5 + 7488z^4 + 26964z^3 + 39318z^2 + 19845z + 1890) I_0\left(\frac{z}{2}\right)}{1890} + \frac{e^{z/2} (32z^6 + 816z^5 + 6688z^4 + 20652z^3 + 21294z^2 + 4323z) I_1\left(\frac{z}{2}\right)}{1890}$$

07.25.03.aiaa.01

$${}_2F_2\left(2, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{945} e^z (16z^5 + 368z^4 + 2664z^3 + 7056z^2 + 5985z + 945)$$

07.25.03.aiif.01

$${}_2F_2\left(2, \frac{11}{2}; 1, 2; z\right) = \frac{1}{945} e^{z/2} (16z^5 + 336z^4 + 2220z^3 + 5484z^2 + 4725z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^5 + 320z^4 + 1908z^3 + 3720z^2 + 1689z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aiig.01

$${}_2F_2\left(2, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{315} e^z (8z^4 + 140z^3 + 702z^2 + 1071z + 315)$$

07.25.03.aiih.01

$${}_2F_2\left(2, \frac{11}{2}; 1, 3; z\right) = \frac{2}{945} e^{z/2} (16z^4 + 248z^3 + 1092z^2 + 1500z + 465) I_0\left(\frac{z}{2}\right) + \frac{2 e^{z/2} (16z^5 + 232z^4 + 868z^3 + 732z^2 - 15z + 30) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.aiii.01

$${}_2F_2\left(2, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{63} e^z (4z^3 + 48z^2 + 135z + 63)$$

07.25.03.aiij.01

$${}_2F_2\left(2, \frac{11}{2}; 1, 4; z\right) = \frac{8 e^{z/2} (4z^4 + 40z^3 + 90z^2 + 36z + 3) I_0\left(\frac{z}{2}\right)}{315z} + \frac{4 e^{z/2} (8z^5 + 72z^4 + 112z^3 - 12z^2 + 27z - 24) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.aiik.01

$${}_2F_2\left(2, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2z^2 + 13z + 9)$$

07.25.03.aiil.01

$${}_2F_2\left(2, \frac{11}{2}; 1, 5; z\right) = \frac{16 e^{z/2} (8z^4 + 36z^3 + 12z^2 + 15z - 18) I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{16 e^{z/2} (8z^5 + 28z^4 - 12z^3 + 33z^2 - 60z + 72) I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.aiim.01

$${}_2F_2\left(2, \frac{11}{2}; 1, \frac{11}{2}; z\right) = e^z (z + 1)$$

07.25.03.aiin.01

$${}_2F_2\left(2, \frac{11}{2}; 1, 6; z\right) = \frac{32 e^{z/2} (4z^4 - 4z^3 + 21z^2 - 57z + 96) I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{32 e^{z/2} (4z^5 - 8z^4 + 31z^3 - 96z^2 + 228z - 384) I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = \frac{3}{2}$

07.25.03.aiio.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{945} (8z^4 + 160z^3 + 948z^2 + 1804z + 753) + \frac{4 e^z \sqrt{\pi} (2z^5 + 41z^4 + 256z^3 + 552z^2 + 336z + 24) \operatorname{erf}(\sqrt{z})}{945 \sqrt{z}}$$

07.25.03.aiip.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} (8z^4 - 160z^3 + 948z^2 - 1804z + 753) - \frac{4e^{-z}\sqrt{\pi}(2z^5 - 41z^4 + 256z^3 - 552z^2 + 336z - 24)\operatorname{erfi}(\sqrt{z})}{945\sqrt{z}}$$

07.25.03.aiiq.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{945} e^z (16z^4 + 288z^3 + 1512z^2 + 2520z + 945)$$

07.25.03.aiir.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{315} (4z^3 + 60z^2 + 236z + 219) + \frac{2e^z\sqrt{\pi}(2z^4 + 31z^3 + 132z^2 + 156z + 24)\operatorname{erf}(\sqrt{z})}{315\sqrt{z}}$$

07.25.03.aiis.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{315} (-4z^3 + 60z^2 - 236z + 219) + \frac{2e^{-z}\sqrt{\pi}(2z^4 - 31z^3 + 132z^2 - 156z + 24)\operatorname{erfi}(\sqrt{z})}{315\sqrt{z}}$$

07.25.03.aait.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{2e^z(16z^5 + 208z^4 + 680z^3 + 480z^2 - 15z + 15)}{945z^2} - \frac{2}{63z^2}$$

07.25.03.aiiu.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{63} (2z^2 + 20z + 39) + \frac{e^z\sqrt{\pi}(2z^3 + 21z^2 + 48z + 12)\operatorname{erf}(\sqrt{z})}{63\sqrt{z}}$$

07.25.03.aiiv.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{63} (2z^2 - 20z + 39) + \frac{e^{-z}\sqrt{\pi}(-2z^3 + 21z^2 - 48z + 12)\operatorname{erfi}(\sqrt{z})}{63\sqrt{z}}$$

07.25.03.aiiw.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{2e^z(16z^5 + 128z^4 + 168z^3 - 24z^2 + 33z - 18)}{315z^3} - \frac{2(5z - 6)}{105z^3}$$

07.25.03.aiix.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{z+5}{9} + \frac{e^z\sqrt{\pi}(2z^2 + 11z + 4)\operatorname{erf}(\sqrt{z})}{18\sqrt{z}}$$

07.25.03.aiiy.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{5-z}{9} + \frac{e^{-z}\sqrt{\pi}(2z^2 - 11z + 4)\operatorname{erfi}(\sqrt{z})}{18\sqrt{z}}$$

07.25.03.aiiz.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \frac{8e^z(16z^5 + 48z^4 - 24z^3 + 48z^2 - 63z + 45)}{315z^4} - \frac{4(5z^2 - 12z + 30)}{105z^4}$$

07.25.03.aij0.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z \sqrt{\pi} (2z+1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.aij1.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (1-2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.aij2.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \frac{8e^z(16z^5 - 32z^4 + 104z^3 - 264z^2 + 465z - 420)}{63z^5} - \frac{4(5z^3 - 18z^2 + 90z - 840)}{63z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = 2$

07.25.03.aij3.01

$${}_2F_2\left(2, \frac{11}{2}; 2, 2; z\right) = \frac{1}{945} e^{z/2} (16z^4 + 264z^3 + 1284z^2 + 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^4 + 248z^3 + 1044z^2 + 1164z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.aij4.01

$${}_2F_2\left(2, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{315} e^z (8z^3 + 108z^2 + 378z + 315)$$

07.25.03.aij5.01

$${}_2F_2\left(2, \frac{11}{2}; 2, 3; z\right) = \frac{16}{945} e^{z/2} (2z^3 + 24z^2 + 75z + 60) I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2} (8z^4 + 88z^3 + 216z^2 + 60z - 15) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.aij6.01

$${}_2F_2\left(2, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{63} e^z (4z^2 + 36z + 63)$$

07.25.03.aij7.01

$${}_2F_2\left(2, \frac{11}{2}; 2, 4; z\right) = \frac{4e^{z/2} (8z^3 + 60z^2 + 84z - 3) I_0\left(\frac{z}{2}\right)}{315z} + \frac{4e^{z/2} (8z^4 + 52z^3 + 36z^2 - 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.aij8.01

$${}_2F_2\left(2, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2z + 9)$$

07.25.03.aij9.01

$${}_2F_2\left(2, \frac{11}{2}; 2, 5; z\right) = \frac{32e^{z/2} (4z^3 + 12z^2 - 3z + 3) I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{32e^{z/2} (4z^4 + 8z^3 - 9z^2 + 12z - 12) I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.aija.01

$${}_2F_2\left(2, \frac{11}{2}; 2, \frac{11}{2}; z\right) = e^z$$

07.25.03.aijb.01

$${}_2F_2\left(2, \frac{11}{2}; 2, 6; z\right) = \frac{32e^{z/2} (4z^3 - 6z^2 + 15z - 24) I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{32e^{z/2} (4z^4 - 10z^3 + 27z^2 - 60z + 96) I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = \frac{5}{2}$

07.25.03.aijc.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{2z^3 + 22z^2 + 53z + 12}{105z} + \frac{e^z \sqrt{\pi} (2z^4 + 23z^3 + 63z^2 + 30z - 6) \operatorname{erf}(\sqrt{z})}{105z^{3/2}}$$

07.25.03.aijd.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{2z^3 - 22z^2 + 53z - 12}{105z} + \frac{e^{-z} \sqrt{\pi} (-2z^4 + 23z^3 - 63z^2 + 30z + 6) \operatorname{erfi}(\sqrt{z})}{105z^{3/2}}$$

07.25.03.aije.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{2e^z (8z^4 + 76z^3 + 150z^2 + 15z - 15)}{315z^2} + \frac{2}{21z^2}$$

07.25.03.aijf.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{z^2 + 7z + 6}{21z} + \frac{e^z \sqrt{\pi} (2z^3 + 15z^2 + 18z - 6) \operatorname{erf}(\sqrt{z})}{42z^{3/2}}$$

07.25.03.aijg.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-z^2 + 7z - 6}{21z} + \frac{e^{-z} \sqrt{\pi} (2z^3 - 15z^2 + 18z + 6) \operatorname{erfi}(\sqrt{z})}{42z^{3/2}}$$

07.25.03.aijh.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{2(5z - 2)}{35z^3} + \frac{2e^z (8z^4 + 44z^3 + 18z^2 - 21z + 6)}{105z^3}$$

07.25.03.aiji.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{z + 3}{6z} + \frac{e^z \sqrt{\pi} (2z^2 + 7z - 3) \operatorname{erf}(\sqrt{z})}{12z^{3/2}}$$

07.25.03.aijj.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{z - 3}{6z} + \frac{e^{-z} \sqrt{\pi} (-2z^2 + 7z + 3) \operatorname{erfi}(\sqrt{z})}{12z^{3/2}}$$

07.25.03.aijk.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{4(5z^2 - 4z + 6)}{35z^4} + \frac{8e^z (8z^4 + 12z^3 - 18z^2 + 15z - 9)}{105z^4}$$

07.25.03.aijl.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{3e^z \sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3}{4z}$$

07.25.03.aijm.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z} \sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3}{4z}$$

07.25.03.aijn.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{4(5z^3 - 6z^2 + 18z - 120)}{21z^5} + \frac{8e^z(8z^4 - 20z^3 + 42z^2 - 69z + 60)}{21z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = 3$

07.25.03.aijo.01

$${}_2F_2\left(2, \frac{11}{2}; 3, 3; z\right) = \frac{8e^{z/2}(8z^4 + 68z^3 + 124z^2 + 15z - 30)I_0\left(\frac{z}{2}\right)}{945z^2} + \frac{8e^{z/2}(8z^3 + 60z^2 + 68z - 31)I_1\left(\frac{z}{2}\right)}{945z} + \frac{16}{63z^2}$$

07.25.03.aijp.01

$${}_2F_2\left(2, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{2e^z(4z^3 + 24z^2 + 15z - 15)}{63z^2} + \frac{10}{21z^2}$$

07.25.03.aijq.01

$${}_2F_2\left(2, \frac{11}{2}; 3, 4; z\right) = \frac{16e^{z/2}(4z^3 + 20z^2 + 9z - 15)I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{16e^{z/2}(4z^3 + 16z^2 - 5z - 6)I_1\left(\frac{z}{2}\right)}{315z^2} + \frac{16}{21z^2}$$

07.25.03.aijr.01

$${}_2F_2\left(2, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{2e^z(2z^2 + 5z - 5)}{9z^2} + \frac{10}{9z^2}$$

07.25.03.aijs.01

$${}_2F_2\left(2, \frac{11}{2}; 3, 5; z\right) = \frac{64e^{z/2}(4z^2 + 6z - 9)I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{64e^{z/2}(4z^3 + 2z^2 - 9z + 6)I_1\left(\frac{z}{2}\right)}{315z^3} + \frac{32}{21z^2}$$

07.25.03.aijt.01

$${}_2F_2\left(2, \frac{11}{2}; 3, \frac{11}{2}; z\right) = \frac{2e^z(z - 1)}{z^2} + \frac{2}{z^2}$$

07.25.03.aiju.01

$${}_2F_2\left(2, \frac{11}{2}; 3, 6; z\right) = \frac{256e^{z/2}(z^2 - 2z + 2)I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{128e^{z/2}(2z^3 - 6z^2 + 11z - 16)I_1\left(\frac{z}{2}\right)}{63z^4} + \frac{160}{63z^2}$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = \frac{7}{2}$

07.25.03.aijv.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5(z^2 + 4z + 6)}{42z^2} + \frac{5e^z\sqrt{\pi}(2z^3 + 9z^2 - 6)\operatorname{erf}(\sqrt{z})}{84z^{5/2}}$$

07.25.03.aijw.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5(z^2 - 4z + 6)}{42z^2} - \frac{5e^{-z}\sqrt{\pi}(2z^3 - 9z^2 + 6)\operatorname{erfi}(\sqrt{z})}{84z^{5/2}}$$

07.25.03.aijx.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{2(5z + 2)}{7z^3} + \frac{2e^z(4z^3 + 12z^2 - 9z - 6)}{21z^3}$$

07.25.03.aijy.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{5(z+6)}{12z^2} + \frac{5e^z \sqrt{\pi} (2z^2 + 3z - 6) \operatorname{erf}(\sqrt{z})}{24z^{5/2}}$$

07.25.03.aijz.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (2z^2 - 3z - 6) \operatorname{erfi}(\sqrt{z})}{24z^{5/2}} - \frac{5(z-6)}{12z^2}$$

07.25.03.aik0.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{4(5z^2 + 4z - 2)}{7z^4} + \frac{8e^z (4z^3 - 9z + 3)}{21z^4}$$

07.25.03.aik1.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{15e^z \sqrt{\pi} (2z - 3) \operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45}{8z^2}$$

07.25.03.aik2.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{45}{8z^2} - \frac{15e^{-z} \sqrt{\pi} (2z + 3) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.aik3.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \frac{40e^z (4z^3 - 12z^2 + 15z - 12)}{21z^5} + \frac{20(5z^3 + 6z^2 - 6z + 24)}{21z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = 4$

07.25.03.aik4.01

$${}_2F_2\left(2, \frac{11}{2}; 4, 4; z\right) = \frac{16(5z+4)}{35z^3} + \frac{16e^{z/2} (4z^3 + 10z^2 - 9z - 12) I_0\left(\frac{z}{2}\right)}{105z^3} + \frac{16e^{z/2} (4z^2 + 6z - 13) I_1\left(\frac{z}{2}\right)}{105z^2}$$

07.25.03.aik5.01

$${}_2F_2\left(2, \frac{11}{2}; 4, \frac{9}{2}; z\right) = \frac{2(5z+6)}{3z^3} + \frac{2e^z (2z^2 + z - 6)}{3z^3}$$

07.25.03.aik6.01

$${}_2F_2\left(2, \frac{11}{2}; 4, 5; z\right) = \frac{32(5z+8)}{35z^3} + \frac{256e^{z/2} (z^2 - 3) I_0\left(\frac{z}{2}\right)}{105z^3} + \frac{128e^{z/2} (2z^2 - 2z - 3) I_1\left(\frac{z}{2}\right)}{105z^3}$$

07.25.03.aik7.01

$${}_2F_2\left(2, \frac{11}{2}; 4, \frac{11}{2}; z\right) = \frac{6e^z (z-2)}{z^3} + \frac{6(z+2)}{z^3}$$

07.25.03.aik8.01

$${}_2F_2\left(2, \frac{11}{2}; 4, 6; z\right) = \frac{32(5z+12)}{21z^3} + \frac{128e^{z/2} (2z-5) I_0\left(\frac{z}{2}\right)}{21z^3} + \frac{128e^{z/2} (2z^2 - 7z + 8) I_1\left(\frac{z}{2}\right)}{21z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = \frac{9}{2}$

07.25.03.aik9.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{35(13z+15)}{72z^3} + \frac{35e^z\sqrt{\pi}(2z^2-z-5)\operatorname{erf}(\sqrt{z})}{48z^{7/2}}$$

07.25.03.aika.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35(13z-15)}{72z^3} - \frac{35e^{-z}\sqrt{\pi}(2z^2+z-5)\operatorname{erfi}(\sqrt{z})}{48z^{7/2}}$$

07.25.03.aikb.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{8e^z(2z^2-3z-3)}{3z^4} + \frac{4(5z^2+12z+6)}{3z^4}$$

07.25.03.aikc.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{35(4z+15)}{16z^3} + \frac{105e^z\sqrt{\pi}(2z-5)\operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.aikd.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{35(4z-15)}{16z^3} + \frac{105e^{-z}\sqrt{\pi}(2z+5)\operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.aike.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{40e^z(2z^2-7z+4)}{3z^5} + \frac{20(5z^3+18z^2+18z-24)}{9z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = 5$

07.25.03.aikf.01

$${}_2F_2\left(2, \frac{11}{2}; 5, 5; z\right) = \frac{64(5z^2+16z+16)}{35z^4} + \frac{512e^{z/2}(2z^2-3z-6)I_0\left(\frac{z}{2}\right)}{105z^4} + \frac{512e^{z/2}(2z-5)I_1\left(\frac{z}{2}\right)}{105z^3}$$

07.25.03.aikg.01

$${}_2F_2\left(2, \frac{11}{2}; 5, \frac{11}{2}; z\right) = \frac{24e^z(z-3)}{z^4} + \frac{12(z^2+4z+6)}{z^4}$$

07.25.03.aikh.01

$${}_2F_2\left(2, \frac{11}{2}; 5, 6; z\right) = \frac{64(5z^2+24z+48)}{21z^4} + \frac{1024e^{z/2}(z-3)I_0\left(\frac{z}{2}\right)}{21z^4} + \frac{1024e^{z/2}(z-4)I_1\left(\frac{z}{2}\right)}{21z^4}$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = \frac{11}{2}$

07.25.03.aiki.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{63(8z^2+40z+105)}{32z^4} + \frac{945e^z\sqrt{\pi}(2z-7)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.aikj.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{63(8z^2-40z+105)}{32z^4} - \frac{945e^{-z}\sqrt{\pi}(2z+7)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.aikk.01

$${}_2F_2\left(2, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{120 e^z (z-4)}{z^5} + \frac{20(z^3 + 6z^2 + 18z + 24)}{z^5}$$

For fixed z and $a_1 = 2, a_2 = \frac{11}{2}, b_1 = 6$

07.25.03.aikl.01

$${}_2F_2\left(2, \frac{11}{2}; 6, 6; z\right) = \frac{320(5z^3 + 36z^2 + 144z + 384)}{63z^5} + \frac{5120 e^{z/2} (z-8) I_0\left(\frac{z}{2}\right)}{21z^5} + \frac{5120 e^{z/2} I_1\left(\frac{z}{2}\right)}{21z^4}$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = -\frac{11}{2}$

07.25.03.aikm.01

$${}_2F_2\left(2, 6; -\frac{11}{2}, 1; z\right) = \frac{1}{623700} (32z^{12} + 2224z^{11} + 58704z^{10} + 744520z^9 + 4701810z^8 + 13558455z^7 + 12418560z^6 - 2903040z^5 + 1814400z^4 - 1612800z^3 + 1587600z^2 - 1360800z + 623700) + \frac{1}{1247400} (e^z \sqrt{\pi} (64z^{25/2} + 4480z^{23/2} + 119600z^{21/2} + 1545600z^{19/2} + 10094700z^{17/2} + 31201800z^{15/2} + 35102025z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aikn.01

$${}_2F_2\left(2, 6; -\frac{11}{2}, 1; -z\right) = \frac{1}{623700} (32z^{12} - 2224z^{11} + 58704z^{10} - 744520z^9 + 4701810z^8 - 13558455z^7 + 12418560z^6 + 2903040z^5 + 1814400z^4 + 1612800z^3 + 1587600z^2 + 1360800z + 623700) + \frac{1}{1247400} (e^{-z} \sqrt{\pi} (-64z^{25/2} + 4480z^{23/2} - 119600z^{21/2} + 1545600z^{19/2} - 10094700z^{17/2} + 31201800z^{15/2} - 35102025z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aiko.01

$${}_2F_2\left(2, 6; -\frac{11}{2}, 2; z\right) = \frac{1}{311850} (16z^{11} + 912z^{10} + 18872z^9 + 174540z^8 + 701145z^7 + 887040z^6 - 241920z^5 + 181440z^4 - 201600z^3 + 264600z^2 - 340200z + 311850) + \frac{1}{623700} e^z \sqrt{\pi} (32z^{23/2} + 1840z^{21/2} + 38640z^{19/2} + 367080z^{17/2} + 1560090z^{15/2} + 2340135z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aikp.01

$${}_2F_2\left(2, 6; -\frac{11}{2}, 2; -z\right) = \frac{1}{311\,850} (-16z^{11} + 912z^{10} - 18\,872z^9 + 174\,540z^8 - 701\,145z^7 + 887\,040z^6 + 241\,920z^5 + 181\,440z^4 + 201\,600z^3 + 264\,600z^2 + 340\,200z + 311\,850) + \frac{1}{623\,700} e^{-z} \sqrt{\pi} (32z^{23/2} - 1840z^{21/2} + 38\,640z^{19/2} - 367\,080z^{17/2} + 1\,560\,090z^{15/2} - 2\,340\,135z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aikq.01

$${}_2F_2\left(2, 6; -\frac{11}{2}, 3; z\right) = \frac{1}{155\,925} (16z^{10} + 712z^9 + 10\,692z^8 + 62\,610z^7 + 110\,880z^6 - 34\,560z^5 + 30\,240z^4 - 40\,320z^3 + 66\,150z^2 - 113\,400z + 155\,925) + \frac{e^z \sqrt{\pi} (16z^{21/2} + 720z^{19/2} + 11\,040z^{17/2} + 67\,620z^{15/2} + 137\,655z^{13/2}) \operatorname{erf}(\sqrt{z})}{155\,925}$$

07.25.03.aikr.01

$${}_2F_2\left(2, 6; -\frac{11}{2}, 3; -z\right) = \frac{1}{155\,925} (16z^{10} - 712z^9 + 10\,692z^8 - 62\,610z^7 + 110\,880z^6 + 34\,560z^5 + 30\,240z^4 + 40\,320z^3 + 66\,150z^2 + 113\,400z + 155\,925) + \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 720z^{19/2} - 11\,040z^{17/2} + 67\,620z^{15/2} - 137\,655z^{13/2}) \operatorname{erfi}(\sqrt{z})}{155\,925}$$

07.25.03.aiks.01

$${}_2F_2\left(2, 6; -\frac{11}{2}, 4; z\right) = \frac{16z^9 + 512z^8 + 4812z^7 + 12\,320z^6 - 4320z^5 + 4320z^4 - 6720z^3 + 13\,230z^2 - 28\,350z + 51\,975}{51\,975} + \frac{2e^z \sqrt{\pi} (8z^{19/2} + 260z^{17/2} + 2530z^{15/2} + 7245z^{13/2}) \operatorname{erf}(\sqrt{z})}{51\,975}$$

07.25.03.aikt.01

$${}_2F_2\left(2, 6; -\frac{11}{2}, 4; -z\right) = \frac{-16z^9 + 512z^8 - 4812z^7 + 12\,320z^6 + 4320z^5 + 4320z^4 + 6720z^3 + 13\,230z^2 + 28\,350z + 51\,975}{51\,975} + \frac{2e^{-z} \sqrt{\pi} (8z^{19/2} - 260z^{17/2} + 2530z^{15/2} - 7245z^{13/2}) \operatorname{erfi}(\sqrt{z})}{51\,975}$$

07.25.03.aiku.01

$${}_2F_2\left(2, 6; -\frac{11}{2}, 5; z\right) = \frac{64z^8 + 1248z^7 + 4928z^6 - 1920z^5 + 2160z^4 - 3840z^3 + 8820z^2 - 22\,680z + 51\,975}{51\,975} + \frac{16e^z \sqrt{\pi} (4z^{17/2} + 80z^{15/2} + 345z^{13/2}) \operatorname{erf}(\sqrt{z})}{51\,975}$$

07.25.03.aikv.01

$${}_2F_2\left(2, 6; -\frac{11}{2}, 5; -z\right) = \frac{64 z^8 - 1248 z^7 + 4928 z^6 + 1920 z^5 + 2160 z^4 + 3840 z^3 + 8820 z^2 + 22\,680 z + 51\,975}{51\,975} - \frac{16 e^{-z} \sqrt{\pi} (4 z^{17/2} - 80 z^{15/2} + 345 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{51\,975}$$

07.25.03.aikw.01

$${}_2F_2\left(2, 6; -\frac{11}{2}, 6; z\right) = \frac{64 z^7 + 448 z^6 - 192 z^5 + 240 z^4 - 480 z^3 + 1260 z^2 - 3780 z + 10\,395}{10\,395} + \frac{32 e^z \sqrt{\pi} (2 z^{15/2} + 15 z^{13/2}) \operatorname{erf}(\sqrt{z})}{10\,395}$$

07.25.03.aikx.01

$${}_2F_2\left(2, 6; -\frac{11}{2}, 6; -z\right) = \frac{-64 z^7 + 448 z^6 + 192 z^5 + 240 z^4 + 480 z^3 + 1260 z^2 + 3780 z + 10\,395}{10\,395} + \frac{32 e^{-z} \sqrt{\pi} (2 z^{15/2} - 15 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10\,395}$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = -\frac{9}{2}$

07.25.03.aiky.01

$${}_2F_2\left(2, 6; -\frac{9}{2}, 1; z\right) = \frac{1}{113\,400} (-32 z^{11} - 2032 z^{10} - 48\,560 z^9 - 551\,256 z^8 - 3\,069\,930 z^7 - 7\,642\,215 z^6 - 5\,806\,080 z^5 + 1\,209\,600 z^4 - 645\,120 z^3 + 453\,600 z^2 - 302\,400 z + 113\,400) + \frac{1}{226\,800} (e^z \sqrt{\pi} (-64 z^{23/2} - 4096 z^{21/2} - 99\,120 z^{19/2} - 1\,149\,120 z^{17/2} - 6\,647\,340 z^{15/2} - 17\,907\,120 z^{13/2} - 17\,194\,905 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aikz.01

$${}_2F_2\left(2, 6; -\frac{9}{2}, 1; -z\right) = \frac{1}{113\,400} (32 z^{11} - 2032 z^{10} + 48\,560 z^9 - 551\,256 z^8 + 3\,069\,930 z^7 - 7\,642\,215 z^6 + 5\,806\,080 z^5 + 1\,209\,600 z^4 + 645\,120 z^3 + 453\,600 z^2 + 302\,400 z + 113\,400) + \frac{1}{226\,800} (e^{-z} \sqrt{\pi} (-64 z^{23/2} + 4096 z^{21/2} - 99\,120 z^{19/2} + 1\,149\,120 z^{17/2} - 6\,647\,340 z^{15/2} + 17\,907\,120 z^{13/2} - 17\,194\,905 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aio.01

$${}_2F_2\left(2, 6; -\frac{9}{2}, 2; z\right) = \frac{1}{56\,700} (-16 z^{10} - 832 z^9 - 15\,552 z^8 - 128\,280 z^7 - 451\,395 z^6 - 483\,840 z^5 + 120\,960 z^4 - 80\,640 z^3 + 75\,600 z^2 - 75\,600 z + 56\,700) + \frac{1}{113\,400} e^z \sqrt{\pi} (-32 z^{21/2} - 1680 z^{19/2} - 31\,920 z^{17/2} - 271\,320 z^{15/2} - 1\,017\,450 z^{13/2} - 1\,322\,685 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai1.01

$${}_2F_2\left(2, 6; -\frac{9}{2}, 2; -z\right) = \frac{1}{56700} (-16z^{10} + 832z^9 - 15552z^8 + 128280z^7 - 451395z^6 + 483840z^5 + 120960z^4 + 80640z^3 + 75600z^2 + 75600z + 56700) + \frac{1}{113400} e^{-z} \sqrt{\pi} (32z^{21/2} - 1680z^{19/2} + 31920z^{17/2} - 271320z^{15/2} + 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai2.01

$${}_2F_2\left(2, 6; -\frac{9}{2}, 3; z\right) = \frac{-8z^9 - 324z^8 - 4378z^7 - 22701z^6 - 34560z^5 + 10080z^4 - 8064z^3 + 9450z^2 - 12600z + 14175}{14175} + \frac{e^z \sqrt{\pi} (-16z^{19/2} - 656z^{17/2} - 9072z^{15/2} - 49476z^{13/2} - 88179z^{11/2}) \operatorname{erf}(\sqrt{z})}{28350}$$

07.25.03.ai3.01

$${}_2F_2\left(2, 6; -\frac{9}{2}, 3; -z\right) = \frac{8z^9 - 324z^8 + 4378z^7 - 22701z^6 + 34560z^5 + 10080z^4 + 8064z^3 + 9450z^2 + 12600z + 14175}{14175} + \frac{e^{-z} \sqrt{\pi} (-16z^{19/2} + 656z^{17/2} - 9072z^{15/2} + 49476z^{13/2} - 88179z^{11/2}) \operatorname{erfi}(\sqrt{z})}{28350}$$

07.25.03.ai4.01

$${}_2F_2\left(2, 6; -\frac{9}{2}, 4; z\right) = \frac{-8z^8 - 232z^7 - 1946z^6 - 4320z^5 + 1440z^4 - 1344z^3 + 1890z^2 - 3150z + 4725}{4725} + \frac{e^z \sqrt{\pi} (-8z^{17/2} - 236z^{15/2} - 2058z^{13/2} - 5187z^{11/2}) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.ai5.01

$${}_2F_2\left(2, 6; -\frac{9}{2}, 4; -z\right) = \frac{-8z^8 + 232z^7 - 1946z^6 + 4320z^5 + 1440z^4 + 1344z^3 + 1890z^2 + 3150z + 4725}{4725} + \frac{e^{-z} \sqrt{\pi} (8z^{17/2} - 236z^{15/2} + 2058z^{13/2} - 5187z^{11/2}) \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.ai6.01

$${}_2F_2\left(2, 6; -\frac{9}{2}, 5; z\right) = \frac{-32z^7 - 560z^6 - 1920z^5 + 720z^4 - 768z^3 + 1260z^2 - 2520z + 4725}{4725} - \frac{8e^z \sqrt{\pi} (4z^{15/2} + 72z^{13/2} + 273z^{11/2}) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.ai7.01

$${}_2F_2\left(2, 6; -\frac{9}{2}, 5; -z\right) = \frac{32z^7 - 560z^6 + 1920z^5 + 720z^4 + 768z^3 + 1260z^2 + 2520z + 4725}{4725} - \frac{8e^{-z} \sqrt{\pi} (4z^{15/2} - 72z^{13/2} + 273z^{11/2}) \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.ai8.01

$${}_2F_2\left(2, 6; -\frac{9}{2}, 6; z\right) = \frac{1}{945} (-32z^6 - 192z^5 + 80z^4 - 96z^3 + 180z^2 - 420z + 945) - \frac{16}{945} e^z \sqrt{\pi} (2z^{13/2} + 13z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ail9.01

$${}_2F_2\left(2, 6; -\frac{9}{2}, 6; -z\right) = \frac{1}{945} (-32 z^6 + 192 z^5 + 80 z^4 + 96 z^3 + 180 z^2 + 420 z + 945) + \frac{16}{945} e^{-z} \sqrt{\pi} (2 z^{13/2} - 13 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = -\frac{7}{2}$

07.25.03.aila.01

$${}_2F_2\left(2, 6; -\frac{7}{2}, 1; z\right) = \frac{1}{25200} (32 z^{10} + 1840 z^9 + 39376 z^8 + 394632 z^7 + 1903570 z^6 + 3990975 z^5 + 2419200 z^4 - 430080 z^3 + 181440 z^2 - 86400 z + 25200) + \frac{1}{50400} (e^z \sqrt{\pi} (64 z^{21/2} + 3712 z^{19/2} + 80560 z^{17/2} + 826880 z^{15/2} + 4166700 z^{13/2} + 9573720 z^{11/2} + 7621185 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ailb.01

$${}_2F_2\left(2, 6; -\frac{7}{2}, 1; -z\right) = \frac{1}{25200} (32 z^{10} - 1840 z^9 + 39376 z^8 - 394632 z^7 + 1903570 z^6 - 3990975 z^5 + 2419200 z^4 + 430080 z^3 + 181440 z^2 + 86400 z + 25200) + \frac{1}{50400} (e^{-z} \sqrt{\pi} (-64 z^{21/2} + 3712 z^{19/2} - 80560 z^{17/2} + 826880 z^{15/2} - 4166700 z^{13/2} + 9573720 z^{11/2} - 7621185 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ailc.01

$${}_2F_2\left(2, 6; -\frac{7}{2}, 2; z\right) = \frac{1}{12600} (16 z^9 + 752 z^8 + 12552 z^7 + 90980 z^6 + 274845 z^5 + 241920 z^4 - 53760 z^3 + 30240 z^2 - 21600 z + 12600) + \frac{e^z \sqrt{\pi} (32 z^{19/2} + 1520 z^{17/2} + 25840 z^{15/2} + 193800 z^{13/2} + 629850 z^{11/2} + 692835 z^{9/2}) \operatorname{erf}(\sqrt{z})}{25200}$$

07.25.03.aild.01

$${}_2F_2\left(2, 6; -\frac{7}{2}, 2; -z\right) = \frac{1}{12600} (-16 z^9 + 752 z^8 - 12552 z^7 + 90980 z^6 - 274845 z^5 + 241920 z^4 + 53760 z^3 + 30240 z^2 + 21600 z + 12600) + \frac{1}{25200} e^{-z} \sqrt{\pi} (32 z^{19/2} - 1520 z^{17/2} + 25840 z^{15/2} - 193800 z^{13/2} + 629850 z^{11/2} - 692835 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aile.01

$${}_2F_2\left(2, 6; -\frac{7}{2}, 3; z\right) = \frac{8 z^8 + 292 z^7 + 3506 z^6 + 15825 z^5 + 20160 z^4 - 5376 z^3 + 3780 z^2 - 3600 z + 3150}{3150} + \frac{e^z \sqrt{\pi} (16 z^{17/2} + 592 z^{15/2} + 7296 z^{13/2} + 34884 z^{11/2} + 53295 z^{9/2}) \operatorname{erf}(\sqrt{z})}{6300}$$

07.25.03.ailf.01

$${}_2F_2\left(2, 6; -\frac{7}{2}, 3; -z\right) = \frac{8 z^8 - 292 z^7 + 3506 z^6 - 15825 z^5 + 20160 z^4 + 5376 z^3 + 3780 z^2 + 3600 z + 3150}{3150} + \frac{e^{-z} \sqrt{\pi} (-16 z^{17/2} + 592 z^{15/2} - 7296 z^{13/2} + 34884 z^{11/2} - 53295 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{6300}$$

07.25.03.ailg.01

$${}_2F_2\left(2, 6; -\frac{7}{2}, 4; z\right) = \frac{1}{525} (4z^7 + 104z^6 + 767z^5 + 1440z^4 - 448z^3 + 378z^2 - 450z + 525) + \frac{e^z \sqrt{\pi} (8z^{15/2} + 212z^{13/2} + 1634z^{11/2} + 3553z^{9/2}) \operatorname{erf}(\sqrt{z})}{1050}$$

07.25.03.ailh.01

$${}_2F_2\left(2, 6; -\frac{7}{2}, 4; -z\right) = \frac{1}{525} (-4z^7 + 104z^6 - 767z^5 + 1440z^4 + 448z^3 + 378z^2 + 450z + 525) + \frac{e^{-z} \sqrt{\pi} (8z^{15/2} - 212z^{13/2} + 1634z^{11/2} - 3553z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1050}$$

07.25.03.aiii.01

$${}_2F_2\left(2, 6; -\frac{7}{2}, 5; z\right) = \frac{1}{525} (16z^6 + 248z^5 + 720z^4 - 256z^3 + 252z^2 - 360z + 525) + \frac{4}{525} e^z \sqrt{\pi} (4z^{13/2} + 64z^{11/2} + 209z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiij.01

$${}_2F_2\left(2, 6; -\frac{7}{2}, 5; -z\right) = \frac{1}{525} (16z^6 - 248z^5 + 720z^4 + 256z^3 + 252z^2 + 360z + 525) - \frac{4}{525} e^{-z} \sqrt{\pi} (4z^{13/2} - 64z^{11/2} + 209z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aik.01

$${}_2F_2\left(2, 6; -\frac{7}{2}, 6; z\right) = \frac{1}{105} (16z^5 + 80z^4 - 32z^3 + 36z^2 - 60z + 105) + \frac{8}{105} e^z \sqrt{\pi} (2z^{11/2} + 11z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aill.01

$${}_2F_2\left(2, 6; -\frac{7}{2}, 6; -z\right) = \frac{1}{105} (-16z^5 + 80z^4 + 32z^3 + 36z^2 + 60z + 105) + \frac{8}{105} e^{-z} \sqrt{\pi} (2z^{11/2} - 11z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = -\frac{5}{2}$

07.25.03.ailm.01

$${}_2F_2\left(2, 6; -\frac{5}{2}, 1; z\right) = \frac{1}{7200} (-32z^9 - 1648z^8 - 31152z^7 - 270808z^6 - 1104810z^5 - 1884735z^4 - 860160z^3 + 120960z^2 - 34560z + 7200) + \frac{1}{14400} (e^z \sqrt{\pi} (-64z^{19/2} - 3328z^{17/2} - 63920z^{15/2} - 571200z^{13/2} - 2453100z^{11/2} - 4667520z^{9/2} - 2953665z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.a1ln.01

$${}_2F_2\left(2, 6; -\frac{5}{2}, 1; -z\right) = \frac{1}{7200} (32 z^9 - 1648 z^8 + 31152 z^7 - 270808 z^6 + 1104810 z^5 - 1884735 z^4 + 860160 z^3 + 120960 z^2 + 34560 z + 7200) + \frac{1}{14400} (e^{-z} \sqrt{\pi} (-64 z^{19/2} + 3328 z^{17/2} - 63920 z^{15/2} + 571200 z^{13/2} - 2453100 z^{11/2} + 4667520 z^{9/2} - 2953665 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.a1lo.01

$${}_2F_2\left(2, 6; -\frac{5}{2}, 2; z\right) = \frac{-16 z^8 - 672 z^7 - 9872 z^6 - 61680 z^5 - 155655 z^4 - 107520 z^3 + 20160 z^2 - 8640 z + 3600}{3600} + \frac{e^z \sqrt{\pi} (-32 z^{17/2} - 1360 z^{15/2} - 20400 z^{13/2} - 132600 z^{11/2} - 364650 z^{9/2} - 328185 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{7200}$$

07.25.03.a1lp.01

$${}_2F_2\left(2, 6; -\frac{5}{2}, 2; -z\right) = \frac{-16 z^8 + 672 z^7 - 9872 z^6 + 61680 z^5 - 155655 z^4 + 107520 z^3 + 20160 z^2 + 8640 z + 3600}{3600} + \frac{e^{-z} \sqrt{\pi} (32 z^{17/2} - 1360 z^{15/2} + 20400 z^{13/2} - 132600 z^{11/2} + 364650 z^{9/2} - 328185 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{7200}$$

07.25.03.a1lq.01

$${}_2F_2\left(2, 6; -\frac{5}{2}, 3; z\right) = \frac{1}{900} (-8 z^7 - 260 z^6 - 2730 z^5 - 10485 z^4 - 10752 z^3 + 2520 z^2 - 1440 z + 900) + \frac{e^z \sqrt{\pi} (-16 z^{15/2} - 528 z^{13/2} - 5712 z^{11/2} - 23460 z^{9/2} - 29835 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{1800}$$

07.25.03.a1lr.01

$${}_2F_2\left(2, 6; -\frac{5}{2}, 3; -z\right) = \frac{1}{900} (8 z^7 - 260 z^6 + 2730 z^5 - 10485 z^4 + 10752 z^3 + 2520 z^2 + 1440 z + 900) + \frac{e^{-z} \sqrt{\pi} (-16 z^{15/2} + 528 z^{13/2} - 5712 z^{11/2} + 23460 z^{9/2} - 29835 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{1800}$$

07.25.03.a1ls.01

$${}_2F_2\left(2, 6; -\frac{5}{2}, 4; z\right) = \frac{1}{150} (-4 z^6 - 92 z^5 - 585 z^4 - 896 z^3 + 252 z^2 - 180 z + 150) + \frac{1}{300} e^z \sqrt{\pi} (-8 z^{13/2} - 188 z^{11/2} - 1258 z^{9/2} - 2295 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.a1lt.01

$${}_2F_2\left(2, 6; -\frac{5}{2}, 4; -z\right) = \frac{1}{150} (-4 z^6 + 92 z^5 - 585 z^4 + 896 z^3 + 252 z^2 + 180 z + 150) + \frac{1}{300} e^{-z} \sqrt{\pi} (8 z^{13/2} - 188 z^{11/2} + 1258 z^{9/2} - 2295 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ailu.01

$${}_2F_2\left(2, 6; -\frac{5}{2}, 5; z\right) = \frac{1}{75} (-8z^5 - 108z^4 - 256z^3 + 84z^2 - 72z + 75) - \frac{2}{75} e^z \sqrt{\pi} (4z^{11/2} + 56z^{9/2} + 153z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiv.01

$${}_2F_2\left(2, 6; -\frac{5}{2}, 5; -z\right) = \frac{1}{75} (8z^5 - 108z^4 + 256z^3 + 84z^2 + 72z + 75) - \frac{2}{75} e^{-z} \sqrt{\pi} (4z^{11/2} - 56z^{9/2} + 153z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiv.01

$${}_2F_2\left(2, 6; -\frac{5}{2}, 6; z\right) = \frac{1}{15} (-8z^4 - 32z^3 + 12z^2 - 12z + 15) - \frac{4}{15} e^z \sqrt{\pi} (2z^{9/2} + 9z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aix.01

$${}_2F_2\left(2, 6; -\frac{5}{2}, 6; -z\right) = \frac{1}{15} (-8z^4 + 32z^3 + 12z^2 + 12z + 15) + \frac{4}{15} e^{-z} \sqrt{\pi} (2z^{9/2} - 9z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = -\frac{3}{2}$

07.25.03.aiz.01

$${}_2F_2\left(2, 6; -\frac{3}{2}, 1; z\right) = \frac{32z^8 + 1456z^7 + 23888z^6 + 175944z^5 + 587250z^4 + 774375z^3 + 241920z^2 - 23040z + 2880}{2880} + \frac{1}{5760} e^z \sqrt{\pi} (64z^{17/2} + 2944z^{15/2} + 49200z^{13/2} + 374400z^{11/2} + 1329900z^{9/2} + 2007720z^{7/2} + 945945z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiz.01

$${}_2F_2\left(2, 6; -\frac{3}{2}, 1; -z\right) = \frac{32z^8 - 1456z^7 + 23888z^6 - 175944z^5 + 587250z^4 - 774375z^3 + 241920z^2 + 23040z + 2880}{2880} + \frac{1}{5760} (e^{-z} \sqrt{\pi} (-64z^{17/2} + 2944z^{15/2} - 49200z^{13/2} + 374400z^{11/2} - 1329900z^{9/2} + 2007720z^{7/2} - 945945z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aim0.01

$${}_2F_2\left(2, 6; -\frac{3}{2}, 2; z\right) = \frac{16z^7 + 592z^6 + 7512z^5 + 39420z^4 + 79905z^3 + 40320z^2 - 5760z + 1440}{1440} + \frac{e^z \sqrt{\pi} (32z^{15/2} + 1200z^{13/2} + 15600z^{11/2} + 85800z^{9/2} + 193050z^{7/2} + 135135z^{5/2}) \operatorname{erf}(\sqrt{z})}{2880}$$

07.25.03.aim1.01

$${}_2F_2\left(2, 6; -\frac{3}{2}, 2; -z\right) = \frac{-16z^7 + 592z^6 - 7512z^5 + 39420z^4 - 79905z^3 + 40320z^2 + 5760z + 1440}{1440} + \frac{e^{-z} \sqrt{\pi} (32z^{15/2} - 1200z^{13/2} + 15600z^{11/2} - 85800z^{9/2} + 193050z^{7/2} - 135135z^{5/2}) \operatorname{erfi}(\sqrt{z})}{2880}$$

07.25.03.aim2.01

$${}_2F_2\left(2, 6; -\frac{3}{2}, 3; z\right) = \frac{1}{360} (8z^6 + 228z^5 + 2050z^4 + 6489z^3 + 5040z^2 - 960z + 360) + \frac{1}{720} e^z \sqrt{\pi} (16z^{13/2} + 464z^{11/2} + 4320z^{9/2} + 14820z^{7/2} + 15015z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aim3.01

$${}_2F_2\left(2, 6; -\frac{3}{2}, 3; -z\right) = \frac{1}{360} (8z^6 - 228z^5 + 2050z^4 - 6489z^3 + 5040z^2 + 960z + 360) + \frac{1}{720} e^{-z} \sqrt{\pi} (-16z^{13/2} + 464z^{11/2} - 4320z^{9/2} + 14820z^{7/2} - 15015z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aim4.01

$${}_2F_2\left(2, 6; -\frac{3}{2}, 4; z\right) = \frac{1}{60} (4z^5 + 80z^4 + 427z^3 + 504z^2 - 120z + 60) + \frac{1}{120} e^z \sqrt{\pi} (8z^{11/2} + 164z^{9/2} + 930z^{7/2} + 1365z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aim5.01

$${}_2F_2\left(2, 6; -\frac{3}{2}, 4; -z\right) = \frac{1}{60} (-4z^5 + 80z^4 - 427z^3 + 504z^2 + 120z + 60) + \frac{1}{120} e^{-z} \sqrt{\pi} (8z^{11/2} - 164z^{9/2} + 930z^{7/2} - 1365z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aim6.01

$${}_2F_2\left(2, 6; -\frac{3}{2}, 5; z\right) = \frac{1}{15} (4z^4 + 46z^3 + 84z^2 - 24z + 15) + \frac{1}{15} e^z \sqrt{\pi} (4z^{9/2} + 48z^{7/2} + 105z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aim7.01

$${}_2F_2\left(2, 6; -\frac{3}{2}, 5; -z\right) = \frac{1}{15} (4z^4 - 46z^3 + 84z^2 + 24z + 15) + \frac{1}{15} e^{-z} \sqrt{\pi} (-4z^{9/2} + 48z^{7/2} - 105z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aim8.01

$${}_2F_2\left(2, 6; -\frac{3}{2}, 6; z\right) = \frac{1}{3} (4z^3 + 12z^2 - 4z + 3) + \frac{2}{3} e^z \sqrt{\pi} (2z^{7/2} + 7z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aim9.01

$${}_2F_2\left(2, 6; -\frac{3}{2}, 6; -z\right) = \frac{1}{3} (-4z^3 + 12z^2 + 4z + 3) + \frac{2}{3} e^{-z} \sqrt{\pi} (2z^{7/2} - 7z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = -\frac{1}{2}$

07.25.03.aima.01

$${}_2F_2\left(2, 6; -\frac{1}{2}, 1; z\right) = \frac{-32z^7 - 1264z^6 - 17584z^5 - 106200z^4 - 276010z^3 - 258615z^2 - 46080z + 1920}{1920} + \frac{1}{3840} e^z \sqrt{\pi} (-64z^{15/2} - 2560z^{13/2} - 36400z^{11/2} - 228800z^{9/2} - 643500z^{7/2} - 720720z^{5/2} - 225225z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aimb.01

$${}_2F_2\left(2, 6; -\frac{1}{2}, 1; -z\right) = \frac{32z^7 - 1264z^6 + 17584z^5 - 106200z^4 + 276010z^3 - 258615z^2 + 46080z + 1920}{1920} + \frac{1}{3840} e^{-z} \sqrt{\pi} (-64z^{15/2} + 2560z^{13/2} - 36400z^{11/2} + 228800z^{9/2} - 643500z^{7/2} + 720720z^{5/2} - 225225z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aimc.01

$${}_2F_2\left(2, 6; -\frac{1}{2}, 2; z\right) = \frac{1}{960} (-16 z^6 - 512 z^5 - 5472 z^4 - 23\,240 z^3 - 35\,595 z^2 - 11\,520 z + 960) + \frac{e^z \sqrt{\pi} (-32 z^{13/2} - 1040 z^{11/2} - 11\,440 z^{9/2} - 51\,480 z^{7/2} - 90\,090 z^{5/2} - 45\,045 z^{3/2}) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.aimd.01

$${}_2F_2\left(2, 6; -\frac{1}{2}, 2; -z\right) = \frac{1}{960} (-16 z^6 + 512 z^5 - 5472 z^4 + 23\,240 z^3 - 35\,595 z^2 + 11\,520 z + 960) + \frac{e^{-z} \sqrt{\pi} (32 z^{13/2} - 1040 z^{11/2} + 11\,440 z^{9/2} - 51\,480 z^{7/2} + 90\,090 z^{5/2} - 45\,045 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.aimf.01

$${}_2F_2\left(2, 6; -\frac{1}{2}, 3; z\right) = \frac{1}{240} (-8 z^5 - 196 z^4 - 1466 z^3 - 3645 z^2 - 1920 z + 240) + \frac{1}{480} e^z \sqrt{\pi} (-16 z^{11/2} - 400 z^{9/2} - 3120 z^{7/2} - 8580 z^{5/2} - 6435 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aimf.01

$${}_2F_2\left(2, 6; -\frac{1}{2}, 3; -z\right) = \frac{1}{240} (8 z^5 - 196 z^4 + 1466 z^3 - 3645 z^2 + 1920 z + 240) + \frac{1}{480} e^{-z} \sqrt{\pi} (-16 z^{11/2} + 400 z^{9/2} - 3120 z^{7/2} + 8580 z^{5/2} - 6435 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aimg.01

$${}_2F_2\left(2, 6; -\frac{1}{2}, 4; z\right) = \frac{1}{40} (-4 z^4 - 68 z^3 - 293 z^2 - 240 z + 40) + \frac{1}{80} e^z \sqrt{\pi} (-8 z^{9/2} - 140 z^{7/2} - 650 z^{5/2} - 715 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aimh.01

$${}_2F_2\left(2, 6; -\frac{1}{2}, 4; -z\right) = \frac{1}{40} (-4 z^4 + 68 z^3 - 293 z^2 + 240 z + 40) + \frac{1}{80} e^{-z} \sqrt{\pi} (8 z^{9/2} - 140 z^{7/2} + 650 z^{5/2} - 715 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aimi.01

$${}_2F_2\left(2, 6; -\frac{1}{2}, 5; z\right) = \frac{1}{5} (-2 z^3 - 19 z^2 - 24 z + 5) + \frac{1}{10} e^z \sqrt{\pi} (-4 z^{7/2} - 40 z^{5/2} - 65 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aimj.01

$${}_2F_2\left(2, 6; -\frac{1}{2}, 5; -z\right) = \frac{1}{5} (2 z^3 - 19 z^2 + 24 z + 5) + \frac{1}{10} e^{-z} \sqrt{\pi} (-4 z^{7/2} + 40 z^{5/2} - 65 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aimk.01

$${}_2F_2\left(2, 6; -\frac{1}{2}, 6; z\right) = -2 z^2 - 4 z + e^z \sqrt{\pi} (-2 z^{5/2} - 5 z^{3/2}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.aiml.01

$${}_2F_2\left(2, 6; -\frac{1}{2}, 6; -z\right) = -2 z^2 + 4 z + e^{-z} \sqrt{\pi} (2 z^{5/2} - 5 z^{3/2}) \operatorname{erfi}(\sqrt{z}) + 1$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = \frac{1}{2}$

07.25.03.aimm.01

$${}_2F_2\left(2, 6; \frac{1}{2}, 1; z\right) = \frac{32 z^6 + 1072 z^5 + 12240 z^4 + 57736 z^3 + 107730 z^2 + 60975 z + 3840}{3840} + \frac{1}{7680} e^z \sqrt{\pi} (64 z^{13/2} + 2176 z^{11/2} + 25520 z^{9/2} + 126720 z^{7/2} + 263340 z^{5/2} + 194040 z^{3/2} + 31185 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aimn.01

$${}_2F_2\left(2, 6; \frac{1}{2}, 1; -z\right) = \frac{32 z^6 - 1072 z^5 + 12240 z^4 - 57736 z^3 + 107730 z^2 - 60975 z + 3840}{3840} + \frac{1}{7680} e^{-z} \sqrt{\pi} (-64 z^{13/2} + 2176 z^{11/2} - 25520 z^{9/2} + 126720 z^{7/2} - 263340 z^{5/2} + 194040 z^{3/2} - 31185 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aimo.01

$${}_2F_2\left(2, 6; \frac{1}{2}, 2; z\right) = \frac{16 z^5 + 432 z^4 + 3752 z^3 + 12180 z^2 + 12645 z + 1920}{1920} + \frac{e^z \sqrt{\pi} (32 z^{11/2} + 880 z^{9/2} + 7920 z^{7/2} + 27720 z^{5/2} + 34650 z^{3/2} + 10395 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.aimp.01

$${}_2F_2\left(2, 6; \frac{1}{2}, 2; -z\right) = \frac{-16 z^5 + 432 z^4 - 3752 z^3 + 12180 z^2 - 12645 z + 1920}{1920} + \frac{e^{-z} \sqrt{\pi} (32 z^{11/2} - 880 z^{9/2} + 7920 z^{7/2} - 27720 z^{5/2} + 34650 z^{3/2} - 10395 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.aimq.01

$${}_2F_2\left(2, 6; \frac{1}{2}, 3; z\right) = \frac{1}{480} (8 z^4 + 164 z^3 + 978 z^2 + 1761 z + 480) + \frac{1}{960} e^z \sqrt{\pi} (16 z^{9/2} + 336 z^{7/2} + 2112 z^{5/2} + 4356 z^{3/2} + 2079 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aimr.01

$${}_2F_2\left(2, 6; \frac{1}{2}, 3; -z\right) = \frac{1}{480} (8 z^4 - 164 z^3 + 978 z^2 - 1761 z + 480) + \frac{1}{960} e^{-z} \sqrt{\pi} (-16 z^{9/2} + 336 z^{7/2} - 2112 z^{5/2} + 4356 z^{3/2} - 2079 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aims.01

$${}_2F_2\left(2, 6; \frac{1}{2}, 4; z\right) = \frac{1}{80} (4 z^3 + 56 z^2 + 183 z + 80) + \frac{1}{160} e^z \sqrt{\pi} (8 z^{7/2} + 116 z^{5/2} + 418 z^{3/2} + 297 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aimt.01

$${}_2F_2\left(2, 6; \frac{1}{2}, 4; -z\right) = \frac{1}{80} (-4 z^3 + 56 z^2 - 183 z + 80) + \frac{1}{160} e^{-z} \sqrt{\pi} (8 z^{7/2} - 116 z^{5/2} + 418 z^{3/2} - 297 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aimu.01

$${}_2F_2\left(2, 6; \frac{1}{2}, 5; z\right) = \frac{1}{10} (2 z^2 + 15 z + 10) + \frac{1}{20} e^z \sqrt{\pi} (4 z^{5/2} + 32 z^{3/2} + 33 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aimv.01

$${}_2F_2\left(2, 6; \frac{1}{2}, 5; -z\right) = \frac{1}{10} (2 z^2 - 15 z + 10) + \frac{1}{20} e^{-z} \sqrt{\pi} (-4 z^{5/2} + 32 z^{3/2} - 33 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aimw.01

$${}_2F_2\left(2, 6; \frac{1}{2}, 6; z\right) = z + \frac{1}{2} e^z \sqrt{\pi} (2z^{3/2} + 3\sqrt{z}) \operatorname{erf}(\sqrt{z}) + 1$$

07.25.03.aimx.01

$${}_2F_2\left(2, 6; \frac{1}{2}, 6; -z\right) = -z + \frac{1}{2} e^{-z} \sqrt{\pi} (2z^{3/2} - 3\sqrt{z}) \operatorname{erfi}(\sqrt{z}) + 1$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = 1$

07.25.03.aimy.01

$${}_2F_2(2, 6; 1, 1; z) = \frac{1}{120} e^z (z^6 + 31z^5 + 325z^4 + 1400z^3 + 2400z^2 + 1320z + 120)$$

07.25.03.aimz.01

$${}_2F_2\left(2, 6; 1, \frac{3}{2}; z\right) = \frac{32z^5 + 880z^4 + 7856z^3 + 26712z^2 + 30570z + 6735}{7680} + \frac{e^z \sqrt{\pi} (64z^6 + 1792z^5 + 16560z^4 + 60480z^3 + 81900z^2 + 30240z + 945) \operatorname{erf}(\sqrt{z})}{15360\sqrt{z}}$$

07.25.03.ain0.01

$${}_2F_2\left(2, 6; 1, \frac{3}{2}; -z\right) = \frac{-32z^5 + 880z^4 - 7856z^3 + 26712z^2 - 30570z + 6735}{7680} + \frac{e^{-z} \sqrt{\pi} (64z^6 - 1792z^5 + 16560z^4 - 60480z^3 + 81900z^2 - 30240z + 945) \operatorname{erfi}(\sqrt{z})}{15360\sqrt{z}}$$

07.25.03.ain1.01

$${}_2F_2(2, 6; 1, 2; z) = \frac{1}{120} e^z (z^5 + 25z^4 + 200z^3 + 600z^2 + 600z + 120)$$

07.25.03.ain2.01

$${}_2F_2\left(2, 6; 1, \frac{5}{2}; z\right) = \frac{32z^5 + 688z^4 + 4432z^3 + 9288z^2 + 4210z - 105}{5120z} + \frac{e^z \sqrt{\pi} (64z^6 + 1408z^5 + 9520z^4 + 22400z^3 + 14700z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{10240z^{3/2}}$$

07.25.03.ain3.01

$${}_2F_2\left(2, 6; 1, \frac{5}{2}; -z\right) = \frac{32z^5 - 688z^4 + 4432z^3 - 9288z^2 + 4210z + 105}{5120z} + \frac{e^{-z} \sqrt{\pi} (-64z^6 + 1408z^5 - 9520z^4 + 22400z^3 - 14700z^2 + 840z - 105) \operatorname{erfi}(\sqrt{z})}{10240z^{3/2}}$$

07.25.03.ain4.01

$${}_2F_2(2, 6; 1, 3; z) = \frac{1}{60} e^z (z^4 + 19z^3 + 105z^2 + 180z + 60)$$

07.25.03.ain5.01

$${}_2F_2\left(2, 6; 1, \frac{7}{2}; z\right) = \frac{32 z^5 + 496 z^4 + 1968 z^3 + 1624 z^2 - 150 z + 135}{2048 z^2} + \frac{e^z \sqrt{\pi} (64 z^6 + 1024 z^5 + 4400 z^4 + 4800 z^3 + 300 z^2 + 240 z - 135) \operatorname{erf}(\sqrt{z})}{4096 z^{5/2}}$$

07.25.03.ain6.01

$${}_2F_2\left(2, 6; 1, \frac{7}{2}; -z\right) = \frac{-32 z^5 + 496 z^4 - 1968 z^3 + 1624 z^2 + 150 z + 135}{2048 z^2} + \frac{e^{-z} \sqrt{\pi} (64 z^6 - 1024 z^5 + 4400 z^4 - 4800 z^3 + 300 z^2 - 240 z - 135) \operatorname{erfi}(\sqrt{z})}{4096 z^{5/2}}$$

07.25.03.ain7.01

$${}_2F_2(2, 6; 1, 4; z) = \frac{1}{20} e^z (z^3 + 13 z^2 + 40 z + 20)$$

07.25.03.ain8.01

$${}_2F_2\left(2, 6; 1, \frac{9}{2}; z\right) = \frac{7(32 z^5 + 304 z^4 + 464 z^3 - 120 z^2 + 210 z - 225)}{4096 z^3} + \frac{7 e^z \sqrt{\pi} (64 z^6 + 640 z^5 + 1200 z^4 + 300 z^2 - 360 z + 225) \operatorname{erf}(\sqrt{z})}{8192 z^{7/2}}$$

07.25.03.ain9.01

$${}_2F_2\left(2, 6; 1, \frac{9}{2}; -z\right) = \frac{7(32 z^5 - 304 z^4 + 464 z^3 + 120 z^2 + 210 z + 225)}{4096 z^3} - \frac{7 e^{-z} \sqrt{\pi} (64 z^6 - 640 z^5 + 1200 z^4 + 300 z^2 + 360 z + 225) \operatorname{erfi}(\sqrt{z})}{8192 z^{7/2}}$$

07.25.03.aina.01

$${}_2F_2(2, 6; 1, 5; z) = \frac{1}{5} e^z (z^2 + 7 z + 5)$$

07.25.03.ainb.01

$${}_2F_2\left(2, 6; 1, \frac{11}{2}; z\right) = \frac{63(32 z^5 + 112 z^4 - 80 z^3 + 216 z^2 - 470 z + 735)}{8192 z^4} + \frac{63 e^z \sqrt{\pi} (64 z^6 + 256 z^5 - 80 z^4 + 320 z^3 - 660 z^2 + 960 z - 735) \operatorname{erf}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.ainc.01

$${}_2F_2\left(2, 6; 1, \frac{11}{2}; -z\right) = \frac{63 e^{-z} \sqrt{\pi} (64 z^6 - 256 z^5 - 80 z^4 - 320 z^3 - 660 z^2 - 960 z - 735) \operatorname{erfi}(\sqrt{z})}{16384 z^{9/2}} - \frac{63(32 z^5 - 112 z^4 - 80 z^3 - 216 z^2 - 470 z - 735)}{8192 z^4}$$

07.25.03.aind.01

$${}_2F_2(2, 6; 1, 6; z) = e^z (z + 1)$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = \frac{3}{2}$

07.25.03.aine.01

$${}_2F_2\left(2, 6; \frac{3}{2}, 2; z\right) = \frac{16z^4 + 352z^3 + 2352z^2 + 5280z + 2895}{3840} + \frac{e^z \sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.ainf.01

$${}_2F_2\left(2, 6; \frac{3}{2}, 2; -z\right) = \frac{16z^4 - 352z^3 + 2352z^2 - 5280z + 2895}{3840} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945) \operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.aing.01

$${}_2F_2\left(2, 6; \frac{3}{2}, 3; z\right) = \frac{1}{960} (8z^3 + 132z^2 + 586z + 645) + \frac{e^z \sqrt{\pi} (16z^4 + 272z^3 + 1296z^2 + 1764z + 315) \operatorname{erf}(\sqrt{z})}{1920\sqrt{z}}$$

07.25.03.ainh.01

$${}_2F_2\left(2, 6; \frac{3}{2}, 3; -z\right) = \frac{1}{960} (-8z^3 + 132z^2 - 586z + 645) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 272z^3 + 1296z^2 - 1764z + 315) \operatorname{erfi}(\sqrt{z})}{1920\sqrt{z}}$$

07.25.03.aini.01

$${}_2F_2\left(2, 6; \frac{3}{2}, 4; z\right) = \frac{1}{160} (4z^2 + 44z + 97) + \frac{e^z \sqrt{\pi} (8z^3 + 92z^2 + 234z + 63) \operatorname{erf}(\sqrt{z})}{320\sqrt{z}}$$

07.25.03.ainj.01

$${}_2F_2\left(2, 6; \frac{3}{2}, 4; -z\right) = \frac{1}{160} (4z^2 - 44z + 97) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 92z^2 - 234z + 63) \operatorname{erfi}(\sqrt{z})}{320\sqrt{z}}$$

07.25.03.aink.01

$${}_2F_2\left(2, 6; \frac{3}{2}, 5; z\right) = \frac{1}{20} (2z + 11) + \frac{e^z \sqrt{\pi} (4z^2 + 24z + 9) \operatorname{erf}(\sqrt{z})}{40\sqrt{z}}$$

07.25.03.ainl.01

$${}_2F_2\left(2, 6; \frac{3}{2}, 5; -z\right) = \frac{1}{20} (11 - 2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 24z + 9) \operatorname{erfi}(\sqrt{z})}{40\sqrt{z}}$$

07.25.03.ainm.01

$${}_2F_2\left(2, 6; \frac{3}{2}, 6; z\right) = \frac{e^z \sqrt{\pi} (2z + 1) \operatorname{erf}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

07.25.03.ainn.01

$${}_2F_2\left(2, 6; \frac{3}{2}, 6; -z\right) = \frac{e^{-z} \sqrt{\pi} (1 - 2z) \operatorname{erfi}(\sqrt{z})}{4\sqrt{z}} + \frac{1}{2}$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = 2$

07.25.03.aino.01

$${}_2F_2(2, 6; 2, 2; z) = \frac{1}{120} e^z (z^4 + 20z^3 + 120z^2 + 240z + 120)$$

07.25.03.ainp.01

$${}_2F_2\left(2, 6; 2, \frac{5}{2}; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z \sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.ainq.01

$${}_2F_2\left(2, 6; 2, \frac{5}{2}; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z} \sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.ainr.01

$${}_2F_2(2, 6; 2, 3; z) = \frac{1}{60} e^z (z^3 + 15z^2 + 60z + 60)$$

07.25.03.ains.01

$${}_2F_2\left(2, 6; 2, \frac{7}{2}; z\right) = \frac{16z^4 + 192z^3 + 512z^2 + 120z - 45}{1024z^2} + \frac{e^z \sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.aint.01

$${}_2F_2\left(2, 6; 2, \frac{7}{2}; -z\right) = \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.ainu.01

$${}_2F_2(2, 6; 2, 4; z) = \frac{1}{20} e^z (z^2 + 10z + 20)$$

07.25.03.ainv.01

$${}_2F_2\left(2, 6; 2, \frac{9}{2}; z\right) = \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z \sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.ainw.01

$${}_2F_2\left(2, 6; 2, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.ainx.01

$${}_2F_2(2, 6; 2, 5; z) = \frac{1}{5} e^z (z + 5)$$

07.25.03.ainy.01

$${}_2F_2\left(2, 6; 2, \frac{11}{2}; z\right) = \frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z\sqrt{\pi}(32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ainz.01

$${}_2F_2\left(2, 6; 2, \frac{11}{2}; -z\right) = \frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z}\sqrt{\pi}(32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.aio0.01

$${}_2F_2(2, 6; 2, 6; z) = e^z$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = \frac{5}{2}$

07.25.03.aio1.01

$${}_2F_2\left(2, 6; \frac{5}{2}, 3; z\right) = \frac{8z^3 + 100z^2 + 290z + 105}{640z} + \frac{e^z\sqrt{\pi}(16z^4 + 208z^3 + 672z^2 + 420z - 105)\operatorname{erf}(\sqrt{z})}{1280z^{3/2}}$$

07.25.03.aio2.01

$${}_2F_2\left(2, 6; \frac{5}{2}, 3; -z\right) = \frac{8z^3 - 100z^2 + 290z - 105}{640z} + \frac{e^{-z}\sqrt{\pi}(-16z^4 + 208z^3 - 672z^2 + 420z + 105)\operatorname{erfi}(\sqrt{z})}{1280z^{3/2}}$$

07.25.03.aio3.01

$${}_2F_2\left(2, 6; \frac{5}{2}, 4; z\right) = \frac{3(4z^2 + 32z + 35)}{320z} + \frac{3e^z\sqrt{\pi}(8z^3 + 68z^2 + 98z - 35)\operatorname{erf}(\sqrt{z})}{640z^{3/2}}$$

07.25.03.aio4.01

$${}_2F_2\left(2, 6; \frac{5}{2}, 4; -z\right) = \frac{3e^{-z}\sqrt{\pi}(8z^3 - 68z^2 + 98z + 35)\operatorname{erfi}(\sqrt{z})}{640z^{3/2}} - \frac{3(4z^2 - 32z + 35)}{320z}$$

07.25.03.aio5.01

$${}_2F_2\left(2, 6; \frac{5}{2}, 5; z\right) = \frac{3(2z + 7)}{40z} + \frac{3e^z\sqrt{\pi}(4z^2 + 16z - 7)\operatorname{erf}(\sqrt{z})}{80z^{3/2}}$$

07.25.03.aio6.01

$${}_2F_2\left(2, 6; \frac{5}{2}, 5; -z\right) = \frac{3(2z - 7)}{40z} - \frac{3e^{-z}\sqrt{\pi}(4z^2 - 16z - 7)\operatorname{erfi}(\sqrt{z})}{80z^{3/2}}$$

07.25.03.aio7.01

$${}_2F_2\left(2, 6; \frac{5}{2}, 6; z\right) = \frac{3e^z\sqrt{\pi}(2z - 1)\operatorname{erf}(\sqrt{z})}{8z^{3/2}} + \frac{3}{4z}$$

07.25.03.aio8.01

$${}_2F_2\left(2, 6; \frac{5}{2}, 6; -z\right) = \frac{3e^{-z}\sqrt{\pi}(2z + 1)\operatorname{erfi}(\sqrt{z})}{8z^{3/2}} - \frac{3}{4z}$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = 3$

07.25.03.aio9.01

$${}_2F_2(2, 6; 3, 3; z) = \frac{e^z (z^4 + 11z^3 + 27z^2 + 6z - 6)}{30z^2} + \frac{1}{5z^2}$$

07.25.03.aioa.01

$${}_2F_2\left(2, 6; 3, \frac{7}{2}; z\right) = \frac{8z^3 + 68z^2 + 90z + 45}{256z^2} + \frac{e^z \sqrt{\pi} (16z^4 + 144z^3 + 240z^2 - 60z - 45) \operatorname{erf}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.aiob.01

$${}_2F_2\left(2, 6; 3, \frac{7}{2}; -z\right) = \frac{-8z^3 + 68z^2 - 90z + 45}{256z^2} + \frac{e^{-z} \sqrt{\pi} (16z^4 - 144z^3 + 240z^2 + 60z - 45) \operatorname{erfi}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.aioc.01

$${}_2F_2(2, 6; 3, 4; z) = \frac{e^z (z^3 + 7z^2 + 6z - 6)}{10z^2} + \frac{3}{5z^2}$$

07.25.03.aiod.01

$${}_2F_2\left(2, 6; 3, \frac{9}{2}; z\right) = \frac{7(8z^3 + 36z^2 + 50z - 15)}{512z^3} + \frac{7e^z \sqrt{\pi} (16z^4 + 80z^3 - 60z + 15) \operatorname{erf}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.aioe.01

$${}_2F_2\left(2, 6; 3, \frac{9}{2}; -z\right) = \frac{7(8z^3 - 36z^2 + 50z + 15)}{512z^3} - \frac{7e^{-z} \sqrt{\pi} (16z^4 - 80z^3 + 60z + 15) \operatorname{erfi}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.aiof.01

$${}_2F_2(2, 6; 3, 5; z) = \frac{2e^z (z^2 + 3z - 3)}{5z^2} + \frac{6}{5z^2}$$

07.25.03.aiog.01

$${}_2F_2\left(2, 6; 3, \frac{11}{2}; z\right) = \frac{63(40z^3 + 148z^2 - 110z + 105)}{5120z^4} + \frac{63e^z \sqrt{\pi} (16z^4 + 16z^3 - 48z^2 + 36z - 21) \operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.aioh.01

$${}_2F_2\left(2, 6; 3, \frac{11}{2}; -z\right) = \frac{63e^{-z} \sqrt{\pi} (16z^4 - 16z^3 - 48z^2 - 36z - 21) \operatorname{erfi}(\sqrt{z})}{2048z^{9/2}} - \frac{63(40z^3 - 148z^2 - 110z - 105)}{5120z^4}$$

07.25.03.aioi.01

$${}_2F_2(2, 6; 3, 6; z) = \frac{2e^z (z - 1)}{z^2} + \frac{2}{z^2}$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = \frac{7}{2}$

07.25.03.aioj.01

$${}_2F_2\left(2, 6; \frac{7}{2}, 4; z\right) = \frac{3(4z^2 + 20z + 45)}{128z^2} + \frac{3e^z \sqrt{\pi} (8z^3 + 44z^2 + 10z - 45) \operatorname{erf}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.aiok.01

$${}_2F_2\left(2, 6; \frac{7}{2}, 4; -z\right) = \frac{3(4z^2 - 20z + 45)}{128z^2} - \frac{3e^{-z}\sqrt{\pi}(8z^3 - 44z^2 + 10z + 45)\operatorname{erfi}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.aiol.01

$${}_2F_2\left(2, 6; \frac{7}{2}, 5; z\right) = \frac{3(2z + 15)}{16z^2} + \frac{3e^z\sqrt{\pi}(4z^2 + 8z - 15)\operatorname{erf}(\sqrt{z})}{32z^{5/2}}$$

07.25.03.aiom.01

$${}_2F_2\left(2, 6; \frac{7}{2}, 5; -z\right) = \frac{3e^{-z}\sqrt{\pi}(4z^2 - 8z - 15)\operatorname{erfi}(\sqrt{z})}{32z^{5/2}} - \frac{3(2z - 15)}{16z^2}$$

07.25.03.aion.01

$${}_2F_2\left(2, 6; \frac{7}{2}, 6; z\right) = \frac{15e^z\sqrt{\pi}(2z - 3)\operatorname{erf}(\sqrt{z})}{16z^{5/2}} + \frac{45}{8z^2}$$

07.25.03.aioo.01

$${}_2F_2\left(2, 6; \frac{7}{2}, 6; -z\right) = \frac{45}{8z^2} - \frac{15e^{-z}\sqrt{\pi}(2z + 3)\operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = 4$

07.25.03.aiop.01

$${}_2F_2(2, 6; 4, 4; z) = \frac{3(3z + 2)}{5z^3} + \frac{3e^z(z^3 + 4z^2 - 2z - 4)}{10z^3}$$

07.25.03.aioq.01

$${}_2F_2\left(2, 6; 4, \frac{9}{2}; z\right) = \frac{21(4z^2 + 40z + 15)}{256z^3} + \frac{21e^z\sqrt{\pi}(8z^3 + 20z^2 - 30z - 15)\operatorname{erf}(\sqrt{z})}{512z^{7/2}}$$

07.25.03.aior.01

$${}_2F_2\left(2, 6; 4, \frac{9}{2}; -z\right) = \frac{21e^{-z}\sqrt{\pi}(8z^3 - 20z^2 - 30z + 15)\operatorname{erfi}(\sqrt{z})}{512z^{7/2}} - \frac{21(4z^2 - 40z + 15)}{256z^3}$$

07.25.03.aios.01

$${}_2F_2(2, 6; 4, 5; z) = \frac{6(3z + 4)}{5z^3} + \frac{6e^z(z^2 + z - 4)}{5z^3}$$

07.25.03.aiot.01

$${}_2F_2\left(2, 6; 4, \frac{11}{2}; z\right) = \frac{63(252z^2 + 260z - 105)}{2560z^4} + \frac{189e^z\sqrt{\pi}(8z^3 - 4z^2 - 22z + 7)\operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.aiou.01

$${}_2F_2\left(2, 6; 4, \frac{11}{2}; -z\right) = \frac{63(252z^2 - 260z - 105)}{2560z^4} - \frac{189e^{-z}\sqrt{\pi}(8z^3 + 4z^2 - 22z - 7)\operatorname{erfi}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.aiov.01

$${}_2F_2(2, 6; 4, 6; z) = \frac{6e^z(z - 2)}{z^3} + \frac{6(z + 2)}{z^3}$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = \frac{9}{2}$

07.25.03.aiow.01

$${}_2F_2\left(2, 6; \frac{9}{2}, 5; z\right) = \frac{105(2z+3)}{32z^3} + \frac{21e^z\sqrt{\pi}(4z^2-15)\operatorname{erf}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.aiox.01

$${}_2F_2\left(2, 6; \frac{9}{2}, 5; -z\right) = \frac{105(2z-3)}{32z^3} - \frac{21e^{-z}\sqrt{\pi}(4z^2-15)\operatorname{erfi}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.aioy.01

$${}_2F_2\left(2, 6; \frac{9}{2}, 6; z\right) = \frac{35(4z+15)}{16z^3} + \frac{105e^z\sqrt{\pi}(2z-5)\operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.aioz.01

$${}_2F_2\left(2, 6; \frac{9}{2}, 6; -z\right) = \frac{35(4z-15)}{16z^3} + \frac{105e^{-z}\sqrt{\pi}(2z+5)\operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = 5$

07.25.03.aip0.01

$${}_2F_2(2, 6; 5, 5; z) = \frac{24e^z(z^2-z-3)}{5z^4} + \frac{12(3z^2+8z+6)}{5z^4}$$

07.25.03.aip1.01

$${}_2F_2\left(2, 6; 5, \frac{11}{2}; z\right) = \frac{63(48z^2+190z+105)}{320z^4} + \frac{189e^z\sqrt{\pi}(4z^2-8z-7)\operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.aip2.01

$${}_2F_2\left(2, 6; 5, \frac{11}{2}; -z\right) = \frac{63(48z^2-190z+105)}{320z^4} + \frac{189e^{-z}\sqrt{\pi}(4z^2+8z-7)\operatorname{erfi}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.aip3.01

$${}_2F_2(2, 6; 5, 6; z) = \frac{24e^z(z-3)}{z^4} + \frac{12(z^2+4z+6)}{z^4}$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = \frac{11}{2}$

07.25.03.aip4.01

$${}_2F_2\left(2, 6; \frac{11}{2}, 6; z\right) = \frac{63(8z^2+40z+105)}{32z^4} + \frac{945e^z\sqrt{\pi}(2z-7)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.aip5.01

$${}_2F_2\left(2, 6; \frac{11}{2}, 6; -z\right) = \frac{63(8z^2-40z+105)}{32z^4} - \frac{945e^{-z}\sqrt{\pi}(2z+7)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

For fixed z and $a_1 = 2, a_2 = 6, b_1 = 6$

07.25.03.aip6.01

$${}_2F_2(2, 6; 6, 6; z) = \frac{120 e^z (z - 4)}{z^5} + \frac{20 (z^3 + 6 z^2 + 18 z + 24)}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}, a_2 \geq \frac{5}{2}$

For fixed z and $a_1 = \frac{5}{2}, a_2 = \frac{5}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{5}{2}, a_2 = \frac{5}{2}, b_1 = -\frac{11}{2}$

07.25.03.aip7.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{972504225} (e^z (65536 z^{16} + 5767168 z^{15} + 203030528 z^{14} + 3707633664 z^{13} + 38117818368 z^{12} + 224318029824 z^{11} + 735901802496 z^{10} + 1250905743360 z^9 + 948523968000 z^8 + 229969152000 z^7 + 5571417600 z^6 + 118540800 z^5 + 44452800 z^4 - 88905600 z^3 + 346096800 z^2 - 771573600 z + 972504225))$$

07.25.03.aip8.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{88409475} (e^z (32768 z^{15} + 2572288 z^{14} + 79650816 z^{13} + 1256435712 z^{12} + 10892077056 z^{11} + 52252591104 z^{10} + 132814241280 z^9 + 160603027200 z^8 + 72754416000 z^7 + 5852952000 z^6 - 140767200 z^5 - 11113200 z^4 + 5556600 z^3 - 30561300 z^2 + 66083850 z - 88409475))$$

07.25.03.aip9.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{9823275} (e^z (16384 z^{14} + 1130496 z^{13} + 30216192 z^{12} + 401596416 z^{11} + 2835661824 z^{10} + 10530155520 z^9 + 19021420800 z^8 + 13726540800 z^7 + 2060856000 z^6 - 164808000 z^5 + 12020400 z^4 + 453600 z^3 + 3458700 z^2 - 6633900 z + 9823275))$$

07.25.03.aipa.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{1403325} (e^z (8192 z^{13} + 487424 z^{12} + 10964992 z^{11} + 118560768 z^{10} + 647185920 z^9 + 1705555200 z^8 + 1835712000 z^7 + 438278400 z^6 - 65268000 z^5 + 15498000 z^4 - 1738800 z^3 - 642600 z^2 + 765450 z - 1403325))$$

07.25.03.aipb.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{280665} (e^z (4096 z^{12} + 204800 z^{11} + 3741696 z^{10} + 31217664 z^9 + 120678144 z^8 + 189047808 z^7 + 67140864 z^6 - 15853824 z^5 + 7000560 z^4 - 2751840 z^3 + 506520 z^2 - 68040 z + 280665))$$

07.25.03.aipc.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{93555} (e^z (2048 z^{11} + 82944 z^{10} + 1165824 z^9 + 6865152 z^8 + 15715584 z^7 + 8088192 z^6 - 2826432 z^5 + 1965600 z^4 - 1413720 z^3 + 744660 z^2 - 119070 z - 93555))$$

07.25.03.aipd.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{93555} (e^z (1024 z^{10} + 31744 z^9 + 313088 z^8 + 1084416 z^7 + 809088 z^6 - 405888 z^5 + 413280 z^4 - 463680 z^3 + 452340 z^2 - 306180 z + 93555))$$

07.25.03.aipe.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{93555} (e^{z/2} (512 z^{10} + 13824 z^9 + 114432 z^8 + 310272 z^7 + 139104 z^6 - 52128 z^5 + 51120 z^4 - 71712 z^3 + 112914 z^2 - 153090 z + 93555) I_0\left(\frac{z}{2}\right) + \frac{1}{93555} (2 e^{z/2} (256 z^{10} + 6656 z^9 + 50688 z^8 + 107520 z^7 - 18480 z^6 + 12960 z^5 - 15120 z^4 + 22176 z^3 - 33291 z^2 + 36882 z) I_1\left(\frac{z}{2}\right)))$$

07.25.03.aipf.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{93555} e^z (512 z^9 + 11008 z^8 + 62976 z^7 + 69888 z^6 - 49728 z^5 + 70560 z^4 - 110880 z^3 + 156240 z^2 - 164430 z + 93555)$$

07.25.03.aipg.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{93555} e^{z/2} (512 z^9 + 8960 z^8 + 37888 z^7 + 20160 z^6 - 8928 z^5 + 10320 z^4 - 16992 z^3 + 32904 z^2 - 66150 z + 93555) I_0\left(\frac{z}{2}\right) + \frac{1}{93555} e^{z/2} (512 z^9 + 8448 z^8 + 29696 z^7 - 5824 z^6 + 4896 z^5 - 7440 z^4 + 16032 z^3 - 40392 z^2 + 94554 z - 135135) I_1\left(\frac{z}{2}\right)$$

07.25.03.aiph.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z (256 z^8 + 3072 z^7 + 5376 z^6 - 5376 z^5 + 10080 z^4 - 20160 z^3 + 35280 z^2 - 45360 z + 31185)}{31185}$$

07.25.03.aipi.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{93555} 4 e^{z/2} (256 z^8 + 2048 z^7 + 1344 z^6 - 1152 z^5 + 4080 z^4 - 19008 z^3 + 79416 z^2 - 257040 z + 530145) I_0\left(\frac{z}{2}\right) + \frac{1}{93555 z} \left(4 e^{z/2} (256 z^9 + 1792 z^8 - 320 z^7 - 192 z^6 + 3120 z^5 - 19632 z^4 + 93672 z^3 - 345384 z^2 + 945945 z - 2027025) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.aipj.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{6237 z^2} e^z (128 z^9 + 320 z^8 - 32 z^7 - 2448 z^6 + 20952 z^5 - 125316 z^4 + 581562 z^3 - 2058147 z^2 + 5160960 z - 7741440) + \frac{20480 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{33 z^{5/2}}$$

07.25.03.aipk.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{6237 z^2} e^{-z} (-128 z^9 + 320 z^8 + 32 z^7 - 2448 z^6 - 20952 z^5 - 125316 z^4 - 581562 z^3 - 2058147 z^2 - 5160960 z + 7741440) + \frac{20480 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{33 z^{5/2}}$$

07.25.03.aipl.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{31185 z} \left(4 e^{z/2} (256 z^8 - 384 z^7 + 4416 z^6 - 33600 z^5 + 217584 z^4 - 1178928 z^3 + 5133240 z^2 - 16715160 z + 34459425) I_0\left(\frac{z}{2}\right) + \frac{1}{31185 z^2} \left(4 e^{z/2} (256 z^9 - 640 z^8 + 5184 z^7 - 39360 z^6 + 260976 z^5 - 1470096 z^4 + 6814872 z^3 - 24864840 z^2 + 66891825 z - 137837700) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.aipm.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{891 z^3} \left(e^z (64 z^9 - 448 z^8 + 3792 z^7 - 29664 z^6 + 203292 z^5 - 1180764 z^4 + 5604219 z^3 - 20643840 z^2 + 54190080 z - 87091200) + \frac{35840 \sqrt{\pi} (2z + 45) \operatorname{erfi}(\sqrt{z})}{33 z^{7/2}}\right)$$

07.25.03.aipn.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) =$$

$$\frac{1}{891 z^3} \left(e^{-z} (64 z^9 + 448 z^8 + 3792 z^7 + 29664 z^6 + 203292 z^5 + 1180764 z^4 + 5604219 z^3 + 20643840 z^2 + 54190080 z + 87091200) \right) + \frac{35840 \sqrt{\pi} (2z - 45) \operatorname{erf}(\sqrt{z})}{33 z^{7/2}}$$

07.25.03.aipo.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, 5; z\right) =$$

$$\frac{1}{31185 z^2} \left(32 e^{z/2} (128 z^8 - 1408 z^7 + 14080 z^6 - 121152 z^5 + 883104 z^4 - 5327280 z^3 + 25613280 z^2 - 91891800 z + 218243025) I_0\left(\frac{z}{2}\right) \right) +$$

$$\frac{1}{31185 z^3} \left(128 e^{z/2} (32 z^9 - 384 z^8 + 3920 z^7 - 34432 z^6 + 257652 z^5 - 1612224 z^4 + 8198190 z^3 - 32432400 z^2 + 91891800 z - 218243025) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.aipp.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{99 z^4} \left(e^z (32 z^9 - 528 z^8 + 6384 z^7 - 62712 z^6 + 509274 z^5 - 3391389 z^4 + 18063360 z^3 - 73543680 z^2 + 210470400 z - 381024000) \right) + \frac{13440 \sqrt{\pi} (4z^2 + 180z + 1575) \operatorname{erfi}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.aipq.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{99 z^4} \left(e^{-z} (-32 z^9 - 528 z^8 - 6384 z^7 - 62712 z^6 - 509274 z^5 - 3391389 z^4 - 18063360 z^3 - 73543680 z^2 - 210470400 z + 381024000) \right) + \frac{13440 \sqrt{\pi} (4z^2 - 180z + 1575) \operatorname{erf}(\sqrt{z})}{11 z^{9/2}}$$

$$\begin{aligned}
 & \text{07.25.03.aipr.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{11}{2}, 6; z\right) = \\
 & \frac{1}{6237 z^3} \left(32 e^{z/2} (128 z^8 - 2624 z^7 + 36288 z^6 - 391152 z^5 + 3393936 z^4 - 23634072 z^3 + 128648520 z^2 - \right. \\
 & \quad \left. 515053539 z + 1466593128) I_0\left(\frac{z}{2}\right) + \right. \\
 & \frac{1}{6237 z^4} \left(32 e^{z/2} (128 z^9 - 2752 z^8 + 39104 z^7 - 431760 z^6 + 3848400 z^5 - 27747720 z^4 + \right. \\
 & \quad \left. 158918760 z^3 - 697918221 z^2 + 2060214156 z - 5866372512) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

For fixed z and $a_1 = \frac{5}{2}, a_2 = \frac{5}{2}, b_1 = -\frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.aips.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{8037225} \\
 & \left(e^z (16384 z^{14} + 1146880 z^{13} + 31223808 z^{12} + 425263104 z^{11} + 3107091456 z^{10} + 12144384000 z^9 + 23901776640 \right. \\
 & \quad \left. z^8 + 20547072000 z^7 + 5556600000 z^6 + 148176000 z^5 + 3704400 z^4 + 2778300 z^2 - 5556600 z + 8037225) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aipt.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \\
 & -\frac{1}{893025} \left(e^z (8192 z^{13} + 503808 z^{12} + 11833344 z^{11} + 135714816 z^{10} + 807114240 z^9 + 2440177920 z^8 + 3410265600 \right. \\
 & \quad \left. z^7 + 1747872000 z^6 + 156492000 z^5 - 4158000 z^4 - 226800 z^3 - 340200 z^2 + 538650 z - 893025) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aipu.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{127575} \left(e^z (4096 z^{12} + 217088 z^{11} + 4288512 z^{10} + 39982080 z^9 + 183655680 z^8 + 393638400 z^7 + \right. \\
 & \quad \left. 327398400 z^6 + 55440000 z^5 - 4914000 z^4 + 378000 z^3 + 75600 z^2 - 56700 z + 127575) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aipv.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \\
 & -\frac{1}{25515} \left(e^z (2048 z^{11} + 91136 z^{10} + 1460736 z^9 + 10496256 z^8 + 34098432 z^7 + 43376256 z^6 + 11882304 z^5 - \right. \\
 & \quad \left. 1985760 z^4 + 521640 z^3 - 71820 z^2 + 1890 z - 25515) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aipw.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{8505} \left(e^z (1024 z^{10} + 36864 z^9 + 453888 z^8 + 2297856 z^7 + \right. \\
 & \quad \left. 4411008 z^6 + 1838592 z^5 - 493920 z^4 + 241920 z^3 - 102060 z^2 + 15120 z + 8505) \right)
 \end{aligned}$$

07.25.03.aipx.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{8505} e^z (512 z^9 + 14080 z^8 + 121344 z^7 + 360192 z^6 + 224448 z^5 - 90720 z^4 + 70560 z^3 - 55440 z^2 + 32130 z - 8505)$$

07.25.03.aipy.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{8505} \left(e^{z/2} (-256 z^9 - 6144 z^8 - 44736 z^7 - 106176 z^6 - 44208 z^5 + 15120 z^4 - 13032 z^3 + 14904 z^2 - 16065 z + 8505) I_0\left(\frac{z}{2}\right) + \frac{1}{8505} e^{z/2} (-256 z^9 - 5888 z^8 - 38976 z^7 - 69888 z^6 + 11280 z^5 - 7200 z^4 + 7272 z^3 - 8352 z^2 + 7479 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.aipz.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{e^z (256 z^8 + 4864 z^7 + 24192 z^6 + 22848 z^5 - 13440 z^4 + 15120 z^3 - 17640 z^2 + 16380 z - 8505)}{8505}$$

07.25.03.aiq0.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, 2; z\right) = \frac{e^{z/2} (-256 z^8 - 3968 z^7 - 14784 z^6 - 7488 z^5 + 3120 z^4 - 3312 z^3 + 4824 z^2 - 7560 z + 8505) I_0\left(\frac{z}{2}\right) + \frac{1}{8505} e^{z/2} (-256 z^8 - 3712 z^7 - 11200 z^6 + 2112 z^5 - 1680 z^4 + 2352 z^3 - 4392 z^2 + 8424 z - 10395) I_1\left(\frac{z}{2}\right)}{8505}$$

07.25.03.aiq1.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{e^z (128 z^7 + 1344 z^6 + 2016 z^5 - 1680 z^4 + 2520 z^3 - 3780 z^2 + 4410 z - 2835)}{2835}$$

07.25.03.aiq2.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, 3; z\right) = -\frac{8 e^{z/2} (64 z^7 + 448 z^6 + 288 z^5 - 240 z^4 + 744 z^3 - 2808 z^2 + 8820 z - 17955) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (128 z^8 + 768 z^7 - 128 z^6 - 96 z^5 + 1152 z^4 - 5952 z^3 + 22464 z^2 - 62370 z + 135135) I_1\left(\frac{z}{2}\right)}{8505 z}$$

07.25.03.aiq3.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{e^z (-64 z^8 - 128 z^7 - 48 z^6 + 1152 z^5 - 7596 z^4 + 36072 z^3 - 128457 z^2 + 322560 z - 483840)}{567 z^2} + \frac{1280 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{3 z^{5/2}}$$

07.25.03.aiq4.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-64 z^8 + 128 z^7 - 48 z^6 - 1152 z^5 - 7596 z^4 - 36072 z^3 - 128457 z^2 - 322560 z - 483840)}{567 z^2} + \frac{1280 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{3 z^{5/2}}$$

07.25.03.aiq5.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, 4; z\right) = -\frac{1}{2835 z} 4 e^{z/2} (128 z^7 - 192 z^6 + 1920 z^5 - 12\,624 z^4 + 68\,688 z^3 - 299\,880 z^2 + 979\,020 z - 2\,027\,025) I_0\left(\frac{z}{2}\right) - \frac{1}{2835 z^2} 4 e^{z/2} (128 z^8 - 320 z^7 + 2304 z^6 - 15\,216 z^5 + 85\,776 z^4 - 398\,232 z^3 + 1\,455\,300 z^2 - 3\,918\,915 z + 8\,108\,100) I_1\left(\frac{z}{2}\right)$$

07.25.03.aiq6.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{81 z^3} e^z (-32 z^8 + 208 z^7 - 1584 z^6 + 10\,872 z^5 - 63\,594 z^4 + 304\,209 z^3 - 1\,128\,960 z^2 + 2\,983\,680 z - 4\,838\,400) + \frac{4480 \sqrt{\pi} (z + 20) \operatorname{erfi}(\sqrt{z})}{3 z^{7/2}}$$

07.25.03.aiq7.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{81 z^3} e^{-z} (32 z^8 + 208 z^7 + 1584 z^6 + 10\,872 z^5 + 63\,594 z^4 + 304\,209 z^3 + 1\,128\,960 z^2 + 2\,983\,680 z + 4\,838\,400) + \frac{4480 \sqrt{\pi} (z - 20) \operatorname{erf}(\sqrt{z})}{3 z^{7/2}}$$

07.25.03.aiq8.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, 5; z\right) = -\frac{1}{2835 z^2} 32 e^{z/2} (64 z^7 - 640 z^6 + 5712 z^5 - 42\,864 z^4 + 264\,600 z^3 - 1\,296\,540 z^2 + 4\,729\,725 z - 11\,486\,475) I_0\left(\frac{z}{2}\right) - \frac{1}{2835 z^3} (32 e^{z/2} (64 z^8 - 704 z^7 + 6448 z^6 - 49\,728 z^5 + 318\,456 z^4 - 1\,649\,340 z^3 + 6\,621\,615 z^2 - 18\,918\,900 z + 45\,945\,900) I_1\left(\frac{z}{2}\right))$$

07.25.03.aiq9.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{9 z^4} e^z (-16 z^8 + 240 z^7 - 2592 z^6 + 22\,284 z^5 - 154\,359 z^4 + 846\,720 z^3 - 3\,528\,000 z^2 + 10\,281\,600 z - 19\,051\,200) + \frac{3360 \sqrt{\pi} (z^2 + 40 z + 315) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.aiqa.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{9z^4} e^{-z} (-16z^8 - 240z^7 - 2592z^6 - 22284z^5 - 154359z^4 - 846720z^3 - 3528000z^2 - 10281600z - 19051200) + \frac{3360\sqrt{\pi}(z^2 - 40z + 315)\operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.aiqb.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{9}{2}, 6; z\right) = -\frac{1}{567z^3} 32e^{z/2} (64z^7 - 1184z^6 + 14544z^5 - 136416z^4 + 1001952z^3 - 5675670z^2 + 23432409z - 69837768) I_0\left(\frac{z}{2}\right) - \frac{1}{567z^4} (32e^{z/2} (64z^8 - 1248z^7 + 15824z^6 - 152928z^5 + 1164240z^4 - 6936930z^3 + 31432401z^2 - 93729636z + 279351072) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.aiqc.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{99225} (e^z (4096z^{12} + 221184z^{11} + 4478976z^{10} + 43223040z^9 + 209053440z^8 + 488401920z^7 + 484128000z^6 + 147744000z^5 + 4374000z^4 + 108000z^3 + 48600z^2 - 48600z + 99225))$$

07.25.03.aiqd.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{14175} (e^z (2048z^{11} + 95232z^{10} + 1620480z^9 + 12698880z^8 + 47381760z^7 + 78364800z^6 + 46152000z^5 + 4644000z^4 - 135000z^3 - 13500z^2 + 4050z - 14175))$$

07.25.03.aiqe.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{2835} (e^z (1024z^{10} + 39936z^9 + 550656z^8 + 3320832z^7 + 8747136z^6 + 8567424z^5 + 1657440z^4 - 164160z^3 + 14580z^2 + 540z + 2835))$$

07.25.03.aiqf.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{945} e^z (512z^9 + 16128z^8 + 170496z^7 + 722688z^6 + 1121472z^5 + 358560z^4 - 67680z^3 + 19440z^2 - 2430z - 945)$$

07.25.03.aiqg.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (256 z^8 + 6144 z^7 + 45312 z^6 + 112128 z^5 + 56160 z^4 - 17280 z^3 + 9360 z^2 - 4320 z + 945)$$

07.25.03.aiqh.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (128 z^8 + 2688 z^7 + 16896 z^6 + 34368 z^5 + 12960 z^4 - 3888 z^3 + 2736 z^2 - 2160 z + 945) I_0\left(\frac{z}{2}\right) + \frac{8}{945} e^{z/2} (16 z^8 + 320 z^7 + 1800 z^6 + 2640 z^5 - 390 z^4 + 216 z^3 - 171 z^2 + 117 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aiqi.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (128 z^7 + 2112 z^6 + 8928 z^5 + 6960 z^4 - 3240 z^3 + 2700 z^2 - 2070 z + 945)$$

07.25.03.aiqj.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (128 z^7 + 1728 z^6 + 5568 z^5 + 2640 z^4 - 1008 z^3 + 936 z^2 - 1080 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (128 z^7 + 1600 z^6 + 4032 z^5 - 720 z^4 + 528 z^3 - 648 z^2 + 936 z - 945) I_1\left(\frac{z}{2}\right)$$

07.25.03.aiqk.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315)$$

07.25.03.aiql.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, 3; z\right) = \frac{4}{945} e^{z/2} (64 z^6 + 384 z^5 + 240 z^4 - 192 z^3 + 504 z^2 - 1440 z + 2835) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (64 z^7 + 320 z^6 - 48 z^5 - 48 z^4 + 408 z^3 - 1656 z^2 + 4725 z - 10395) I_1\left(\frac{z}{2}\right)}{945 z}$$

07.25.03.aiqm.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (32 z^7 + 48 z^6 + 48 z^5 - 504 z^4 + 2538 z^3 - 9153 z^2 + 23040 z - 34560)}{63 z^2} + \frac{1920 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.aiqn.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-32 z^7 + 48 z^6 - 48 z^5 - 504 z^4 - 2538 z^3 - 9153 z^2 - 23040 z - 34560)}{63 z^2} + \frac{1920 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{7 z^{5/2}}$$

07.25.03.aiqo.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^6 - 96 z^5 + 816 z^4 - 4512 z^3 + 19800 z^2 - 64890 z + 135135) I_0\left(\frac{z}{2}\right)}{315 z} + \frac{4 e^{z/2} (64 z^7 - 160 z^6 + 1008 z^5 - 5664 z^4 + 26328 z^3 - 96390 z^2 + 259875 z - 540540) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.aiqp.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (16z^7 - 96z^6 + 648z^5 - 3816z^4 + 18441z^3 - 69120z^2 + 184320z - 302400)}{9z^3} + \frac{480\sqrt{\pi} (2z + 35) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aiqq.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (16z^7 + 96z^6 + 648z^5 + 3816z^4 + 18441z^3 + 69120z^2 + 184320z + 302400)}{9z^3} + \frac{480\sqrt{\pi} (2z - 35) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aiqr.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, 5; z\right) = \frac{32e^{z/2} (32z^6 - 288z^5 + 2256z^4 - 14400z^3 + 72450z^2 - 270270z + 675675) I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{64e^{z/2} (16z^7 - 160z^6 + 1296z^5 - 8592z^4 + 45675z^3 - 187110z^2 + 540540z - 1351350) I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.aiqs.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{e^z (8z^7 - 108z^6 + 1026z^5 - 7551z^4 + 43200z^3 - 185760z^2 + 554400z - 1058400)}{z^4} + \frac{2160\sqrt{\pi} (z^2 + 35z + 245) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.aiqt.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-8z^7 - 108z^6 - 1026z^5 - 7551z^4 - 43200z^3 - 185760z^2 - 554400z - 1058400)}{z^4} + \frac{2160\sqrt{\pi} (z^2 - 35z + 245) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.aiqu.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{7}{2}, 6; z\right) = \frac{32e^{z/2} (32z^6 - 528z^5 + 5664z^4 - 45108z^3 + 270270z^2 - 1162161z + 3675672) I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{1}{63z^4} 32e^{z/2} (32z^7 - 560z^6 + 6240z^5 - 51660z^4 + 325710z^3 - 1540539z^2 + 4648644z - 14702688) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.aiqv.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{2025} (e^z (1024z^{10} + 40960z^9 + 584960z^8 + 3717120z^7 + 10680960z^6 + 12480000z^5 + 4356000z^4 + 144000z^3 + 4500z^2 + 2025))$$

07.25.03.aiqw.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{405} e^z (512 z^9 + 17152 z^8 + 198144 z^7 + 966912 z^6 + 1956288 z^5 + 1349280 z^4 + 154080 z^3 - 5040 z^2 - 270 z - 405)$$

07.25.03.aiqx.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{135} e^z (256 z^8 + 6912 z^7 + 61056 z^6 + 208704 z^5 + 247680 z^4 + 55440 z^3 - 6120 z^2 + 540 z + 135)$$

07.25.03.aiqy.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{135} e^z (128 z^7 + 2624 z^6 + 16096 z^5 + 31920 z^4 + 12120 z^3 - 2580 z^2 + 810 z - 135)$$

07.25.03.aiqz.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{135} e^{z/2} (-64 z^7 - 1152 z^6 - 6096 z^5 - 10320 z^4 - 3384 z^3 + 828 z^2 - 405 z + 135) I_0\left(\frac{z}{2}\right) + \frac{1}{135} e^{z/2} (-64 z^7 - 1088 z^6 - 5040 z^5 - 5760 z^4 + 744 z^3 - 324 z^2 + 153 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.air0.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{135} e^z (64 z^6 + 896 z^5 + 3120 z^4 + 1920 z^3 - 660 z^2 + 360 z - 135)$$

07.25.03.air1.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{135} e^{z/2} (-64 z^6 - 736 z^5 - 2000 z^4 - 864 z^3 + 288 z^2 - 210 z + 135) I_0\left(\frac{z}{2}\right) + \frac{1}{135} e^{z/2} (-64 z^6 - 672 z^5 - 1360 z^4 + 224 z^3 - 144 z^2 + 138 z - 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.air2.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{1}{45} e^z (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45)$$

07.25.03.air3.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, 3; z\right) = -\frac{8}{135} e^{z/2} (16 z^5 + 80 z^4 + 48 z^3 - 36 z^2 + 75 z - 135) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (32 z^6 + 128 z^5 - 16 z^4 - 24 z^3 + 138 z^2 - 420 z + 945) I_1\left(\frac{z}{2}\right)}{135 z}$$

07.25.03.air4.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (-16 z^6 - 16 z^5 - 32 z^4 + 204 z^3 - 759 z^2 + 1920 z - 2880)}{9 z^2} + \frac{160 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.air5.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} (-16 z^6 + 16 z^5 - 32 z^4 - 204 z^3 - 759 z^2 - 1920 z - 2880)}{9 z^2} + \frac{160 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

07.25.03.air6.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, 4; z\right) = -\frac{4 e^{z/2} (32 z^5 - 48 z^4 + 336 z^3 - 1500 z^2 + 4950 z - 10395) I_0\left(\frac{z}{2}\right)}{45 z} - \frac{4 e^{z/2} (32 z^6 - 80 z^5 + 432 z^4 - 2004 z^3 + 7350 z^2 - 19845 z + 41580) I_1\left(\frac{z}{2}\right)}{45 z^2}$$

07.25.03.air7.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{560 \sqrt{\pi} (z + 15) \operatorname{erfi}(\sqrt{z})}{z^{7/2}} - \frac{7 e^{-z} (8 z^6 - 44 z^5 + 258 z^4 - 1263 z^3 + 4800 z^2 - 12960 z + 21600)}{9 z^3}$$

07.25.03.air8.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (8 z^6 + 44 z^5 + 258 z^4 + 1263 z^3 + 4800 z^2 + 12960 z + 21600)}{9 z^3} + \frac{560 \sqrt{\pi} (z - 15) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.air9.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, 5; z\right) = -\frac{32 e^{z/2} (16 z^5 - 128 z^4 + 860 z^3 - 4500 z^2 + 17325 z - 45045) I_0\left(\frac{z}{2}\right)}{45 z^2} - \frac{32 e^{z/2} (16 z^6 - 144 z^5 + 1012 z^4 - 5600 z^3 + 23625 z^2 - 69300 z + 180180) I_1\left(\frac{z}{2}\right)}{45 z^3}$$

07.25.03.aira.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{315 \sqrt{\pi} (4 z^2 + 120 z + 735) \operatorname{erfi}(\sqrt{z})}{z^{9/2}} - \frac{7 e^{-z} (4 z^6 - 48 z^5 + 393 z^4 - 2400 z^3 + 10800 z^2 - 33300 z + 66150)}{z^4}$$

07.25.03.airb.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{315 \sqrt{\pi} (4 z^2 - 120 z + 735) \operatorname{erf}(\sqrt{z})}{z^{9/2}} - \frac{7 e^{-z} (4 z^6 + 48 z^5 + 393 z^4 + 2400 z^3 + 10800 z^2 + 33300 z + 66150)}{z^4}$$

07.25.03.airc.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{5}{2}, 6; z\right) = -\frac{32 e^{z/2} (16 z^5 - 232 z^4 + 2124 z^3 - 13860 z^2 + 63063 z - 216216) I_0\left(\frac{z}{2}\right)}{9 z^3} - \frac{32 e^{z/2} (16 z^6 - 248 z^5 + 2380 z^4 - 16380 z^3 + 82467 z^2 - 252252 z + 864864) I_1\left(\frac{z}{2}\right)}{9 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.aird.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{81} e^z (256 z^8 + 7168 z^7 + 66816 z^6 + 249600 z^5 + 354144 z^4 + 143424 z^3 + 5328 z^2 + 144 z + 81)$$

07.25.03.air.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{27} e^z (128 z^7 + 2880 z^6 + 20448 z^5 + 53232 z^4 + 43992 z^3 + 5724 z^2 - 198 z - 27)$$

07.25.03.airf.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{27} e^z (64 z^6 + 1088 z^5 + 5328 z^4 + 7968 z^3 + 2076 z^2 - 252 z + 27)$$

07.25.03.airg.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{27} e^{z/2} (32 z^6 + 480 z^5 + 2064 z^4 + 2784 z^3 + 738 z^2 - 126 z + 27) I_0\left(\frac{z}{2}\right) + \frac{2}{27} e^{z/2} (16 z^6 + 224 z^5 + 816 z^4 + 672 z^3 - 69 z^2 + 18 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.airh.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{27} e^z (32 z^5 + 368 z^4 + 1008 z^3 + 456 z^2 - 102 z + 27)$$

07.25.03.airi.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{27} e^{z/2} (32 z^5 + 304 z^4 + 672 z^3 + 252 z^2 - 66 z + 27) I_0\left(\frac{z}{2}\right) + \frac{1}{27} e^{z/2} (32 z^5 + 272 z^4 + 416 z^3 - 60 z^2 + 30 z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.airj.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{9} e^z (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9)$$

07.25.03.airk.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, 3; z\right) = \frac{4}{27} e^{z/2} (16 z^4 + 64 z^3 + 36 z^2 - 24 z + 33) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (16 z^5 + 48 z^4 - 4 z^3 - 12 z^2 + 45 z - 105) I_1\left(\frac{z}{2}\right)}{27 z}$$

07.25.03.airl.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (8 z^5 + 4 z^4 + 18 z^3 - 75 z^2 + 192 z - 288)}{9 z^2} + \frac{80 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.airm.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{80 \sqrt{\pi} \operatorname{erf}(\sqrt{-z})}{z^{5/2}} - \frac{5 e^{-z} (8 z^5 - 4 z^4 + 18 z^3 + 75 z^2 + 192 z + 288)}{9 z^2}$$

07.25.03.airn.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 - 24 z^3 + 132 z^2 - 444 z + 945) I_0\left(\frac{z}{2}\right)}{9 z} + \frac{4 e^{z/2} (16 z^5 - 40 z^4 + 180 z^3 - 660 z^2 + 1785 z - 3780) I_1\left(\frac{z}{2}\right)}{9 z^2}$$

07.25.03.aio.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (4 z^5 - 20 z^4 + 99 z^3 - 384 z^2 + 1056 z - 1800)}{9 z^3} + \frac{140 \sqrt{\pi} (2 z + 25) \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.airp.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4 z^5 + 20 z^4 + 99 z^3 + 384 z^2 + 1056 z + 1800)}{9 z^3} + \frac{140 \sqrt{\pi} (2 z - 25) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.airq.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 - 56 z^3 + 312 z^2 - 1260 z + 3465) I_0\left(\frac{z}{2}\right)}{9 z^2} + \frac{128 e^{z/2} (2 z^5 - 16 z^4 + 95 z^3 - 420 z^2 + 1260 z - 3465) I_1\left(\frac{z}{2}\right)}{9 z^3}$$

07.25.03.airr.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{35 e^z (2 z^5 - 21 z^4 + 144 z^3 - 696 z^2 + 2250 z - 4725)}{z^4} + \frac{315 \sqrt{\pi} (4 z^2 + 100 z + 525) \operatorname{erfi}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.airs.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315 \sqrt{\pi} (4 z^2 - 100 z + 525) \operatorname{erf}(\sqrt{z})}{2 z^{9/2}} - \frac{35 e^{-z} (2 z^5 + 21 z^4 + 144 z^3 + 696 z^2 + 2250 z + 4725)}{z^4}$$

07.25.03.airt.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (40 z^4 - 500 z^3 + 3780 z^2 - 18711 z + 72072) I_0\left(\frac{z}{2}\right)}{9 z^3} + \frac{32 e^{z/2} (40 z^5 - 540 z^4 + 4340 z^3 - 24129 z^2 + 74844 z - 288288) I_1\left(\frac{z}{2}\right)}{9 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.airu.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{9} e^z (64 z^6 + 1152 z^5 + 6192 z^4 + 11136 z^3 + 5292 z^2 + 216 z + 9)$$

07.25.03.airv.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{9} e^z (32 z^5 + 432 z^4 + 1584 z^3 + 1608 z^2 + 234 z - 9)$$

07.25.03.airw.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{9} e^{z/2} (-16 z^5 - 192 z^4 - 636 z^3 - 636 z^2 - 117 z + 9) I_0\left(\frac{z}{2}\right) + \frac{1}{9} e^{z/2} (-16 z^5 - 176 z^4 - 468 z^3 - 240 z^2 + 15 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.airx.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{9} e^z (16 z^4 + 144 z^3 + 288 z^2 + 84 z - 9)$$

07.25.03.airy.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{9} e^{z/2} (-16 z^4 - 120 z^3 - 204 z^2 - 60 z + 9) I_0\left(\frac{z}{2}\right) + \frac{1}{9} e^{z/2} (-16 z^4 - 104 z^3 - 108 z^2 + 12 z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.airz.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{1}{3} e^z (8z^3 + 36z^2 + 18z - 3)$$

07.25.03.ais0.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, 3; z\right) = -\frac{8}{9} e^{z/2} (4z^3 + 12z^2 + 6z - 3) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (8z^4 + 16z^3 - 6z + 15) I_1\left(\frac{z}{2}\right)}{9z}$$

07.25.03.ais1.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{30 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}} - \frac{5 e^z (4z^4 + 9z^2 - 24z + 36)}{3z^2}$$

07.25.03.ais2.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{30 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}} - \frac{5 e^{-z} (4z^4 + 9z^2 + 24z + 36)}{3z^2}$$

07.25.03.ais3.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, 4; z\right) = -\frac{4 e^{z/2} (8z^3 - 12z^2 + 48z - 105) I_0\left(\frac{z}{2}\right)}{3z} - \frac{4 e^{z/2} (8z^4 - 20z^3 + 72z^2 - 195z + 420) I_1\left(\frac{z}{2}\right)}{3z^2}$$

07.25.03.ais4.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{105 \sqrt{\pi} (z + 10) \operatorname{erfi}(\sqrt{z})}{z^{7/2}} - \frac{35 e^z (2z^4 - 9z^3 + 36z^2 - 102z + 180)}{3z^3}$$

07.25.03.ais5.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (2z^4 + 9z^3 + 36z^2 + 102z + 180)}{3z^3} + \frac{105 \sqrt{\pi} (z - 10) \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ais6.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, 5; z\right) = -\frac{32 e^{z/2} (4z^3 - 24z^2 + 105z - 315) I_0\left(\frac{z}{2}\right)}{3z^2} - \frac{32 e^{z/2} (4z^4 - 28z^3 + 135z^2 - 420z + 1260) I_1\left(\frac{z}{2}\right)}{3z^3}$$

07.25.03.ais7.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{945 \sqrt{\pi} (2z^2 + 40z + 175) \operatorname{erfi}(\sqrt{z})}{8z^{9/2}} - \frac{105 e^z (4z^4 - 36z^3 + 198z^2 - 690z + 1575)}{4z^4}$$

07.25.03.ais8.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (2z^2 - 40z + 175) \operatorname{erf}(\sqrt{z})}{8z^{9/2}} - \frac{105 e^{-z} (4z^4 + 36z^3 + 198z^2 + 690z + 1575)}{4z^4}$$

07.25.03.ais9.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (20z^3 - 210z^2 + 1197z - 5544) I_0\left(\frac{z}{2}\right)}{3z^3} - \frac{32 e^{z/2} (20z^4 - 230z^3 + 1533z^2 - 4788z + 22176) I_1\left(\frac{z}{2}\right)}{3z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{1}{2}$

07.25.03.0150.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{9} e^z (16z^4 + 160z^3 + 392z^2 + 216z + 9)$$

07.25.03.0151.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{9} e^{z/2} \left((8z^4 + 72z^3 + 168z^2 + 108z + 9) I_0\left(\frac{z}{2}\right) + 4z(2z^3 + 16z^2 + 27z + 6) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.0152.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{9} e^z (8z^3 + 52z^2 + 66z + 9)$$

07.25.03.0153.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{9} e^{z/2} \left((8z^3 + 44z^2 + 52z + 9) I_0\left(\frac{z}{2}\right) + (8z^3 + 36z^2 + 20z - 1) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.aisa.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{3} e^z (4z^2 + 12z + 3)$$

07.25.03.0154.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, 3; z\right) = \frac{4}{9z} e^{z/2} \left(z(4z^2 + 8z + 3) I_0\left(\frac{z}{2}\right) + (4z^3 + 4z^2 + z - 3) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.aisb.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2z^3 - z^2 + 4z - 6)}{3z^2} + \frac{5\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aisc.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}} - \frac{5 e^{-z} (2z^3 + z^2 + 4z + 6)}{3z^2}$$

07.25.03.aisd.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (4z^2 - 6z + 15) I_0\left(\frac{z}{2}\right)}{3z} + \frac{4 e^{z/2} (4z^3 - 10z^2 + 27z - 60) I_1\left(\frac{z}{2}\right)}{3z^2}$$

07.25.03.aise.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (2z^3 - 8z^2 + 24z - 45)}{6z^3} + \frac{35\sqrt{\pi} (2z + 15) \operatorname{erfi}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.aisf.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (2z^3 + 8z^2 + 24z + 45)}{6z^3} + \frac{35\sqrt{\pi} (2z - 15) \operatorname{erf}(\sqrt{z})}{4z^{7/2}}$$

07.25.03.aisg.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 - 10z + 35) I_0\left(\frac{z}{2}\right)}{3z^2} + \frac{64 e^{z/2} (z^3 - 6z^2 + 20z - 70) I_1\left(\frac{z}{2}\right)}{3z^3}$$

07.25.03.aish.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{105 e^z (4z^3 - 30z^2 + 120z - 315)}{8z^4} + \frac{315\sqrt{\pi} (2z^2 + 30z + 105) \operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.aisi.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315\sqrt{\pi}(2z^2 - 30z + 105)\operatorname{erf}(\sqrt{z})}{16z^{9/2}} - \frac{105e^{-z}(4z^3 + 30z^2 + 120z + 315)}{8z^4}$$

07.25.03.aisj.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{1}{2}, 6; z\right) = \frac{32e^{z/2}(10z^2 - 77z + 504)I_0\left(\frac{z}{2}\right)}{3z^3} + \frac{32e^{z/2}(10z^3 - 103z^2 + 308z - 2016)I_1\left(\frac{z}{2}\right)}{3z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 1$

07.25.03.0155.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{9}e^{z/2}\left((4z^3 + 24z^2 + 33z + 9)I_0\left(\frac{z}{2}\right) + z(4z^2 + 20z + 15)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.aisk.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{3}e^{z/2}(2z^2 + 6z + 3)I_0\left(\frac{z}{2}\right) + \frac{2}{3}e^{z/2}(z^2 + 2z)I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{3}{2}$

07.25.03.aisl.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{9}e^z(4z^2 + 16z + 9)$$

07.25.03.0156.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{9}e^{z/2}\left((4z^2 + 14z + 9)I_0\left(\frac{z}{2}\right) + (4z^2 + 10z + 1)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.aism.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{3}e^z(2z + 3)$$

07.25.03.0157.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, 3; z\right) = \frac{4}{9z}e^{z/2}\left(2z(z+1)I_0\left(\frac{z}{2}\right) + (2z^2 + 1)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.aisn.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{5e^z(2z^2 - 2z + 3)}{6z^2} - \frac{5\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.aiso.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z}(2z^2 + 2z + 3)}{6z^2} - \frac{5\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{4z^{5/2}}$$

07.25.03.aisp.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, 4; z\right) = \frac{4e^{z/2}(2z - 3)I_0\left(\frac{z}{2}\right)}{3z} + \frac{4e^{z/2}(2z^2 - 5z + 12)I_1\left(\frac{z}{2}\right)}{3z^2}$$

07.25.03.aisq.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (2z^2 - 7z + 15)}{12z^3} - \frac{35 \sqrt{\pi} (z+5) \operatorname{erfi}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.aisr.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = -\frac{35 e^{-z} (2z^2 + 7z + 15)}{12z^3} - \frac{35 \sqrt{\pi} (z-5) \operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.aiss.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (z-5) I_0\left(\frac{z}{2}\right)}{3z^2} + \frac{32 e^{z/2} (z^2 - 4z + 20) I_1\left(\frac{z}{2}\right)}{3z^3}$$

07.25.03.aist.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{105 e^z (16z^2 - 90z + 315)}{64z^4} - \frac{315 \sqrt{\pi} (4z^2 + 40z + 105) \operatorname{erfi}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.aisu.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{105 e^{-z} (16z^2 + 90z + 315)}{64z^4} - \frac{315 \sqrt{\pi} (4z^2 - 40z + 105) \operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.aisv.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (3z - 56) I_0\left(\frac{z}{2}\right)}{3z^3} + \frac{32 e^{z/2} (7z^2 - 12z + 224) I_1\left(\frac{z}{2}\right)}{3z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = 2$

07.25.03.aisw.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{3} e^{z/2} (2z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z + 1) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{5}{2}$, $b_1 = \frac{5}{2}$

07.25.03.aisx.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = e^z$$

07.25.03.aisy.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (z-1) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.aisz.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2z - 3)}{4z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.ait0.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5 e^{-z} (2z + 3)}{4z^2}$$

07.25.03.ait1.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z-4) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.ait2.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (4z-15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z+5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ait3.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z+15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z-5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ait4.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.ait5.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{1575 e^z (2z-21)}{128 z^4} + \frac{945 \sqrt{\pi} (4z^2+20z+35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.ait6.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (4z^2-20z+35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 e^{-z} (2z+21)}{128 z^4}$$

07.25.03.ait7.01

$${}_2F_2\left(\frac{5}{2}, \frac{5}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (z+8) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (z^2+4z+32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = -\frac{11}{2}$

07.25.03.ait8.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{324 168 075} (8192 z^{16} + 790 528 z^{15} + 30 801 920 z^{14} + 629 465 088 z^{13} + 7 339 315 200 z^{12} + 49 788 579 840 z^{11} + 192 129 288 192 z^{10} + 393 981 719 040 z^9 + 371 997 884 160 z^8 + 116 675 596 800 z^7 + 3 632 428 800 z^6 + 90 810 720 z^5 + 22 453 200 z^4 + 17 010 000 z^3 + 27 783 000 z^2 + 80 372 250 z + 324 168 075) + \frac{1}{324 168 075} (2048 e^z \sqrt{\pi} (4 z^{33/2} + 388 z^{31/2} + 15 231 z^{29/2} + 314 688 z^{27/2} + 3 730 272 z^{25/2} + 25 966 080 z^{23/2} + 104 499 360 z^{21/2} + 230 469 120 z^{19/2} + 249 903 360 z^{17/2} + 106 928 640 z^{15/2} + 10 281 600 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ait9.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, -\frac{11}{2}; -z\right) =$$

$$\frac{1}{324\,168\,075} (8192 z^{16} - 790\,528 z^{15} + 30\,801\,920 z^{14} - 629\,465\,088 z^{13} + 7\,339\,315\,200 z^{12} - 49\,788\,579\,840 z^{11} +$$

$$192\,129\,288\,192 z^{10} - 393\,981\,719\,040 z^9 + 371\,997\,884\,160 z^8 - 116\,675\,596\,800 z^7 + 3\,632\,428\,800 z^6 -$$

$$90\,810\,720 z^5 + 22\,453\,200 z^4 - 17\,010\,000 z^3 + 27\,783\,000 z^2 - 80\,372\,250 z + 324\,168\,075) -$$

$$\frac{1}{324\,168\,075} \left(2048 e^{-z} \sqrt{\pi} (4 z^{33/2} - 388 z^{31/2} + 15\,231 z^{29/2} - 314\,688 z^{27/2} + 3\,730\,272 z^{25/2} - 25\,966\,080 z^{23/2} +$$

$$104\,499\,360 z^{21/2} - 230\,469\,120 z^{19/2} + 249\,903\,360 z^{17/2} - 106\,928\,640 z^{15/2} + 10\,281\,600 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aita.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{29\,469\,825} (-4096 z^{15} - 354\,304 z^{14} - 12\,214\,272 z^{13} - 217\,190\,400 z^{12} - 2\,155\,008\,000 z^{11} - 12\,059\,117\,568 z^{10} -$$

$$36\,624\,268\,800 z^9 - 54\,606\,263\,040 z^8 - 31\,872\,960\,000 z^7 - 3\,632\,428\,800 z^6 +$$

$$90\,810\,720 z^5 + 7\,484\,400 z^4 + 3\,402\,000 z^3 + 3\,969\,000 z^2 + 8\,930\,250 z + 29\,469\,825) -$$

$$\frac{1}{29\,469\,825} \left(1024 e^z \sqrt{\pi} (4 z^{31/2} + 348 z^{29/2} + 12\,099 z^{27/2} + 217\,896 z^{25/2} + 2\,205\,000 z^{23/2} + 12\,736\,080 z^{21/2} +$$

$$40\,818\,960 z^{19/2} + 67\,193\,280 z^{17/2} + 48\,323\,520 z^{15/2} + 10\,281\,600 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aitb.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{29\,469\,825} (4096 z^{15} - 354\,304 z^{14} + 12\,214\,272 z^{13} - 217\,190\,400 z^{12} + 2\,155\,008\,000 z^{11} - 12\,059\,117\,568 z^{10} +$$

$$36\,624\,268\,800 z^9 - 54\,606\,263\,040 z^8 + 31\,872\,960\,000 z^7 - 3\,632\,428\,800 z^6 -$$

$$90\,810\,720 z^5 + 7\,484\,400 z^4 - 3\,402\,000 z^3 + 3\,969\,000 z^2 - 8\,930\,250 z + 29\,469\,825) -$$

$$\frac{1}{29\,469\,825} \left(1024 e^{-z} \sqrt{\pi} (4 z^{31/2} - 348 z^{29/2} + 12\,099 z^{27/2} - 217\,896 z^{25/2} + 2\,205\,000 z^{23/2} - 12\,736\,080 z^{21/2} +$$

$$40\,818\,960 z^{19/2} - 67\,193\,280 z^{17/2} + 48\,323\,520 z^{15/2} - 10\,281\,600 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aitc.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{3\,274\,425} (2048 z^{14} + 156\,672 z^{13} + 4\,698\,112 z^{12} + 71\,086\,080 z^{11} + 582\,064\,128 z^{10} + 2\,567\,523\,840 z^9 +$$

$$5\,695\,223\,040 z^8 + 5\,321\,756\,160 z^7 + 1\,210\,809\,600 z^6 - 90\,810\,720 z^5 +$$

$$7\,484\,400 z^4 + 1\,134\,000 z^3 + 793\,800 z^2 + 1\,275\,750 z + 3\,274\,425) +$$

$$\frac{1}{3\,274\,425} \left(512 e^z \sqrt{\pi} (4 z^{29/2} + 308 z^{27/2} + 9327 z^{25/2} + 143\,280 z^{23/2} + 1\,202\,040 z^{21/2} +$$

$$5\,523\,840 z^{19/2} + 13\,199\,760 z^{17/2} + 14\,394\,240 z^{15/2} + 5\,140\,800 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aitd.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{3274425} (2048 z^{14} - 156672 z^{13} + 4698112 z^{12} - 71086080 z^{11} + 582064128 z^{10} - 2567523840 z^9 + 5695223040 z^8 - 5321756160 z^7 + 1210809600 z^6 + 90810720 z^5 + 7484400 z^4 - 1134000 z^3 + 793800 z^2 - 1275750 z + 3274425) - \frac{1}{3274425} (512 e^{-z} \sqrt{\pi} (4 z^{29/2} - 308 z^{27/2} + 9327 z^{25/2} - 143280 z^{23/2} + 1202040 z^{21/2} - 5523840 z^{19/2} + 13199760 z^{17/2} - 14394240 z^{15/2} + 5140800 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aite.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{467775} (-1024 z^{13} - 68096 z^{12} - 1736704 z^{11} - 21682176 z^{10} - 140044800 z^9 - 452455680 z^8 - 634913280 z^7 - 242161920 z^6 + 30270240 z^5 - 7484400 z^4 + 1134000 z^3 + 264600 z^2 + 255150 z + 467775) - \frac{1}{467775} (256 e^z \sqrt{\pi} (4 z^{27/2} + 268 z^{25/2} + 6915 z^{23/2} + 87960 z^{21/2} + 586320 z^{19/2} + 2005920 z^{17/2} + 3170160 z^{15/2} + 1713600 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aitf.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{467775} (1024 z^{13} - 68096 z^{12} + 1736704 z^{11} - 21682176 z^{10} + 140044800 z^9 - 452455680 z^8 + 634913280 z^7 - 242161920 z^6 - 30270240 z^5 - 7484400 z^4 - 1134000 z^3 + 264600 z^2 - 255150 z + 467775) - \frac{1}{467775} (256 e^{-z} \sqrt{\pi} (4 z^{27/2} - 268 z^{25/2} + 6915 z^{23/2} - 87960 z^{21/2} + 586320 z^{19/2} - 2005920 z^{17/2} + 3170160 z^{15/2} - 1713600 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aitg.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{93555} (512 z^{12} + 28928 z^{11} + 608256 z^{10} + 5988864 z^9 + 28370688 z^8 + 58360320 z^7 + 34594560 z^6 - 6054048 z^5 + 2494800 z^4 - 1134000 z^3 + 264600 z^2 + 85050 z + 93555) + \frac{1}{93555} 128 e^z \sqrt{\pi} (4 z^{25/2} + 228 z^{23/2} + 4863 z^{21/2} + 49056 z^{19/2} + 242928 z^{17/2} + 548352 z^{15/2} + 428400 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aitb.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{93555} (512 z^{12} - 28928 z^{11} + 608256 z^{10} - 5988864 z^9 + 28370688 z^8 - 58360320 z^7 + 34594560 z^6 + 6054048 z^5 + 2494800 z^4 + 1134000 z^3 + 264600 z^2 - 85050 z + 93555) - \frac{1}{93555} 128 e^{-z} \sqrt{\pi} (4 z^{25/2} - 228 z^{23/2} + 4863 z^{21/2} - 49056 z^{19/2} + 242928 z^{17/2} - 548352 z^{15/2} + 428400 z^{13/2}) \operatorname{erfi}(\sqrt{-z})$$

07.25.03.aitc.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{31185} (-256 z^{11} - 11904 z^{10} - 197120 z^9 - 1423104 z^8 - 4308480 z^7 - 3843840 z^6 + 864864 z^5 - 498960 z^4 + 378000 z^3 - 264600 z^2 + 85050 z + 31185) - \frac{64 e^z \sqrt{\pi} (4 z^{23/2} + 188 z^{21/2} + 3171 z^{19/2} + 23688 z^{17/2} + 77112 z^{15/2} + 85680 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.aitd.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{31185} (256 z^{11} - 11904 z^{10} + 197120 z^9 - 1423104 z^8 + 4308480 z^7 - 3843840 z^6 - 864864 z^5 - 498960 z^4 - 378000 z^3 - 264600 z^2 - 85050 z + 31185) - \frac{64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 188 z^{21/2} + 3171 z^{19/2} - 23688 z^{17/2} + 77112 z^{15/2} - 85680 z^{13/2}) \operatorname{erfi}(\sqrt{-z})}{31185}$$

07.25.03.aitk.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{31185} (128 z^{10} + 4672 z^9 + 56576 z^8 + 261120 z^7 + 349440 z^6 - 96096 z^5 + 71280 z^4 - 75600 z^3 + 88200 z^2 - 85050 z + 31185) + \frac{32 e^z \sqrt{\pi} (4 z^{21/2} + 148 z^{19/2} + 1839 z^{17/2} + 8976 z^{15/2} + 14280 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.aitl.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{31185} (128 z^{10} - 4672 z^9 + 56576 z^8 - 261120 z^7 + 349440 z^6 + 96096 z^5 + 71280 z^4 + 75600 z^3 + 88200 z^2 + 85050 z + 31185) - \frac{32 e^{-z} \sqrt{\pi} (4 z^{21/2} - 148 z^{19/2} + 1839 z^{17/2} - 8976 z^{15/2} + 14280 z^{13/2}) \operatorname{erfi}(\sqrt{-z})}{31185}$$

07.25.03.aitm.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, 1; z\right) = \frac{1}{62370} (e^z (256 z^{10} + 8192 z^9 + 83712 z^8 + 301824 z^7 + 235872 z^6 - 124992 z^5 + 136080 z^4 - 166320 z^3 + 182385 z^2 - 147420 z + 62370))$$

07.25.03.aitn.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{16 e^z \sqrt{\pi} (4 z^3 + 108 z^2 + 867 z + 2040) \operatorname{erf}(\sqrt{z}) z^{13/2}}{31185} + \frac{1}{31185} (64 z^9 + 1696 z^8 + 13056 z^7 + 26880 z^6 - 8736 z^5 + 7920 z^4 - 10800 z^3 + 17640 z^2 - 28350 z + 31185)$$

07.25.03.aito.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{16 e^{-z} \sqrt{\pi} (4 z^3 - 108 z^2 + 867 z - 2040) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{31185} + \frac{1}{31185} (-64 z^9 + 1696 z^8 - 13056 z^7 + 26880 z^6 + 8736 z^5 + 7920 z^4 + 10800 z^3 + 17640 z^2 + 28350 z + 31185)$$

07.25.03.aitp.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, 2; z\right) = \frac{1}{62370} e^z (256 z^9 + 5632 z^8 + 33024 z^7 + 37632 z^6 - 27552 z^5 + 40320 z^4 - 65520 z^3 + 95760 z^2 - 104895 z + 62370)$$

07.25.03.aitq.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{8 e^z \sqrt{\pi} (4 z^2 + 68 z + 255) \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{32 z^8 + 528 z^7 + 1792 z^6 - 672 z^5 + 720 z^4 - 1200 z^3 + 2520 z^2 - 5670 z + 10395}{10395}$$

07.25.03.aitr.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{32 z^8 - 528 z^7 + 1792 z^6 + 672 z^5 + 720 z^4 + 1200 z^3 + 2520 z^2 + 5670 z + 10395}{10395} - \frac{8 e^{-z} \sqrt{\pi} z^{13/2} (4 z^2 - 68 z + 255) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.aits.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, 3; z\right) = \frac{e^z (256 z^8 + 3072 z^7 + 5376 z^6 - 5376 z^5 + 10080 z^4 - 20160 z^3 + 35280 z^2 - 45360 z + 31185)}{31185}$$

07.25.03.aitt.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{16 z^9 + 104 z^8 - 32 z^7 - 48 z^6 + 624 z^5 - 4200 z^4 + 22230 z^3 - 94689 z^2 + 322560 z - 967680}{2079 z^2} + \frac{1}{2079 z^{5/2}} (4 e^z \sqrt{\pi} (4 z^{10} + 28 z^9 + 3 z^8 - 24 z^7 + 168 z^6 - 1008 z^5 + 5040 z^4 - 20160 z^3 + 60480 z^2 - 120960 z + 120960) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aitu.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{-16z^9 + 104z^8 + 32z^7 - 48z^6 - 624z^5 - 4200z^4 - 22230z^3 - 94689z^2 - 322560z - 967680}{2079z^2} + \frac{1}{2079z^{5/2}} \left(4e^{-z}\sqrt{\pi} (4z^{10} - 28z^9 + 3z^8 + 24z^7 + 168z^6 + 1008z^5 + 5040z^4 + 20160z^3 + 60480z^2 + 120960z + 120960)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.aitv.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, 4; z\right) = \frac{1}{10395z^3} \left(e^z(256z^{10} + 512z^9 + 768z^8 - 11520z^7 + 90720z^6 - 564480z^5 + 2857680z^4 - 11476080z^3 + 34459425z^2 - 68918850z + 68918850)\right) - \frac{6630}{z^3}$$

07.25.03.aitw.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{297z^3} (8z^9 - 28z^8 + 240z^7 - 1968z^6 + 14280z^5 - 89370z^4 + 470313z^3 - 2016000z^2 + 6773760z - 21772800) + \frac{1}{297z^{7/2}} \left(2e^z\sqrt{\pi} (4z^{10} - 12z^9 + 111z^8 - 912z^7 + 6552z^6 - 40320z^5 + 206640z^4 - 846720z^3 + 2600640z^2 - 5322240z + 5443200)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aitx.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{297z^3} (8z^9 + 28z^8 + 240z^7 + 1968z^6 + 14280z^5 + 89370z^4 + 470313z^3 + 2016000z^2 + 6773760z + 21772800) - \frac{1}{297z^{7/2}} \left(2e^{-z}\sqrt{\pi} (4z^{10} + 12z^9 + 111z^8 + 912z^7 + 6552z^6 + 40320z^5 + 206640z^4 + 846720z^3 + 2600640z^2 + 5322240z + 5443200)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.aity.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, 5; z\right) = \frac{1}{10395z^4} \left(4e^z(256z^{10} - 2048z^9 + 19200z^8 - 165120z^7 + 1246560z^6 - 8043840z^5 + 43076880z^4 - 183783600z^3 + 585810225z^2 - 1240539300z + 1309458150)\right) - \frac{26520(z+19)}{z^4}$$

07.25.03.aitz.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, \frac{11}{2}; z\right) =$$

$$\frac{1}{33z^4} (4z^9 - 54z^8 + 608z^7 - 5880z^6 + 48690z^5 - 340863z^4 + 1975680z^3 - 9192960z^2 + 31449600z - 127008000) +$$

$$\frac{1}{33z^{9/2}} \left(e^z \sqrt{\pi} (4z^{10} - 52z^9 + 579z^8 - 5544z^7 + 45360z^6 - 312480z^5 +$$

$$1769040z^4 - 7922880z^3 + 26369280z^2 - 58060800z + 63504000) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aiu0.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{33z^4} (-4z^9 - 54z^8 - 608z^7 - 5880z^6 - 48690z^5 - 340863z^4 - 1975680z^3 - 9192960z^2 - 31449600z - 127008000) +$$

$$\frac{1}{33z^{9/2}} \left(e^{-z} \sqrt{\pi} (4z^{10} + 52z^9 + 579z^8 + 5544z^7 + 45360z^6 + 312480z^5 +$$

$$1769040z^4 + 7922880z^3 + 26369280z^2 + 58060800z + 63504000) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aiu1.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{11}{2}, 6; z\right) =$$

$$\frac{1}{2079z^5} (4e^z (256z^{10} - 4608z^9 + 60672z^8 - 650496z^7 + 5800032z^6 - 42844032z^5 + 257297040z^4 -$$

$$1212971760z^3 + 4224725505z^2 - 9689990310z + 10999448460)) - \frac{13260(5z^2 + 190z + 1596)}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = -\frac{9}{2}$

07.25.03.aiu2.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{2679075} (2048z^{14} + 158720z^{13} + 4838400z^{12} + 74803200z^{11} + 630915072z^{10} + 2907025920z^9 + 6925121280z^8 +$$

$$7450329600z^7 + 2626041600z^6 + 90810720z^5 + 2494800z^4 + 680400z^3 + 567000z^2 + 992250z + 2679075) +$$

$$\frac{1}{2679075} \left(512e^z \sqrt{\pi} (4z^{29/2} + 312z^{27/2} + 9603z^{25/2} + 150675z^{23/2} + 1300950z^{21/2} + 6231330z^{19/2} +$$

$$15893640z^{17/2} + 19512360z^{15/2} + 9298800z^{13/2} + 982800z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aiu3.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{2679075} (2048 z^{14} - 158720 z^{13} + 4838400 z^{12} - 74803200 z^{11} + 630915072 z^{10} - 2907025920 z^9 + 6925121280 z^8 - 7450329600 z^7 + 2626041600 z^6 - 90810720 z^5 + 2494800 z^4 - 680400 z^3 + 567000 z^2 - 992250 z + 2679075) - \frac{1}{2679075} (512 e^{-z} \sqrt{\pi} (4 z^{29/2} - 312 z^{27/2} + 9603 z^{25/2} - 150675 z^{23/2} + 1300950 z^{21/2} - 6231330 z^{19/2} + 15893640 z^{17/2} - 19512360 z^{15/2} + 9298800 z^{13/2} - 982800 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aiu4.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{297675} (-1024 z^{13} - 70144 z^{12} - 1858560 z^{11} - 24425472 z^{10} - 169751040 z^9 - 614949120 z^8 - 1064286720 z^7 - 707616000 z^6 - 90810720 z^5 + 2494800 z^4 + 226800 z^3 + 113400 z^2 + 141750 z + 297675) - \frac{1}{297675} (256 e^z \sqrt{\pi} (4 z^{27/2} + 276 z^{25/2} + 7395 z^{23/2} + 98910 z^{21/2} + 707490 z^{19/2} + 2693880 z^{17/2} + 5118120 z^{15/2} + 4158000 z^{13/2} + 982800 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aiu5.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{297675} (1024 z^{13} - 70144 z^{12} + 1858560 z^{11} - 24425472 z^{10} + 169751040 z^9 - 614949120 z^8 + 1064286720 z^7 - 707616000 z^6 + 90810720 z^5 + 2494800 z^4 - 226800 z^3 + 113400 z^2 - 141750 z + 297675) - \frac{1}{297675} (256 e^{-z} \sqrt{\pi} (4 z^{27/2} - 276 z^{25/2} + 7395 z^{23/2} - 98910 z^{21/2} + 707490 z^{19/2} - 2693880 z^{17/2} + 5118120 z^{15/2} - 4158000 z^{13/2} + 982800 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aiu6.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{42525} (512 z^{12} + 30464 z^{11} + 685824 z^{10} + 7426560 z^9 + 40623360 z^8 + 107343360 z^7 + 116363520 z^6 + 30270240 z^5 - 2494800 z^4 + 226800 z^3 + 37800 z^2 + 28350 z + 42525) + \frac{1}{42525} (128 e^z \sqrt{\pi} (4 z^{25/2} + 240 z^{23/2} + 5475 z^{21/2} + 60585 z^{19/2} + 343980 z^{17/2} + 973980 z^{15/2} + 1222200 z^{13/2} + 491400 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aiu7.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{42525} (512 z^{12} - 30464 z^{11} + 685824 z^{10} - 7426560 z^9 + 40623360 z^8 - 107343360 z^7 + 116363520 z^6 - 30270240 z^5 - 2494800 z^4 - 226800 z^3 + 37800 z^2 - 28350 z + 42525) - \frac{1}{42525} (128 e^{-z} \sqrt{\pi} (4 z^{25/2} - 240 z^{23/2} + 5475 z^{21/2} - 60585 z^{19/2} + 343980 z^{17/2} - 973980 z^{15/2} + 1222200 z^{13/2} - 491400 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aiu8.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{8505} (-256 z^{11} - 12928 z^{10} - 239616 z^9 - 2042112 z^8 - 8163840 z^7 - 13628160 z^6 - 6054048 z^5 + 831600 z^4 - 226800 z^3 + 37800 z^2 + 9450 z + 8505) - \frac{1}{8505} 64 e^z \sqrt{\pi} (4 z^{23/2} + 204 z^{21/2} + 3843 z^{19/2} + 33684 z^{17/2} + 141876 z^{15/2} + 264600 z^{13/2} + 163800 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiu9.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{8505} (256 z^{11} - 12928 z^{10} + 239616 z^9 - 2042112 z^8 + 8163840 z^7 - 13628160 z^6 + 6054048 z^5 + 831600 z^4 + 226800 z^3 + 37800 z^2 - 9450 z + 8505) - \frac{1}{8505} 64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 204 z^{21/2} + 3843 z^{19/2} - 33684 z^{17/2} + 141876 z^{15/2} - 264600 z^{13/2} + 163800 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiua.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{2835} (128 z^{10} + 5312 z^9 + 77376 z^8 + 481920 z^7 + 1223040 z^6 + 864864 z^5 - 166320 z^4 + 75600 z^3 - 37800 z^2 + 9450 z + 2835) + \frac{32 e^z \sqrt{\pi} (4 z^{21/2} + 168 z^{19/2} + 2499 z^{17/2} + 16191 z^{15/2} + 44730 z^{13/2} + 40950 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.aiub.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2835} (128 z^{10} - 5312 z^9 + 77376 z^8 - 481920 z^7 + 1223040 z^6 - 864864 z^5 - 166320 z^4 - 75600 z^3 - 37800 z^2 - 9450 z + 2835) - \frac{32 e^{-z} \sqrt{\pi} (4 z^{21/2} - 168 z^{19/2} + 2499 z^{17/2} - 16191 z^{15/2} + 44730 z^{13/2} - 40950 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.aiuc.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{2835} (-64 z^9 - 2080 z^8 - 22080 z^7 - 87360 z^6 - 96096 z^5 + 23760 z^4 - 15120 z^3 + 12600 z^2 - 9450 z + 2835) - \frac{16 e^z \sqrt{\pi} (4 z^{19/2} + 132 z^{17/2} + 1443 z^{15/2} + 6090 z^{13/2} + 8190 z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.aiud.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{2835} (64 z^9 - 2080 z^8 + 22080 z^7 - 87360 z^6 + 96096 z^5 + 23760 z^4 + 15120 z^3 + 12600 z^2 + 9450 z + 2835) - \frac{16 e^{-z} \sqrt{\pi} (4 z^{19/2} - 132 z^{17/2} + 1443 z^{15/2} - 6090 z^{13/2} + 8190 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.aiue.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, 1; z\right) = -\frac{1}{5670} e^z (128 z^9 + 3648 z^8 + 32736 z^7 + 101808 z^6 + 67032 z^5 - 28980 z^4 + 24570 z^3 - 21735 z^2 + 15120 z - 5670)$$

07.25.03.aiuf.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{-32 z^8 - 752 z^7 - 5040 z^6 - 8736 z^5 + 2640 z^4 - 2160 z^3 + 2520 z^2 - 3150 z + 2835}{2835} - \frac{8 e^z \sqrt{\pi} z^{11/2} (4 z^3 + 96 z^2 + 675 z + 1365) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.aiug.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{8 e^{-z} \sqrt{\pi} (4 z^3 - 96 z^2 + 675 z - 1365) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{2835} + \frac{-32 z^8 + 752 z^7 - 5040 z^6 + 8736 z^5 + 2640 z^4 + 2160 z^3 + 2520 z^2 + 3150 z + 2835}{2835}$$

07.25.03.aiuh.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, 2; z\right) = -\frac{e^z (128 z^8 + 2496 z^7 + 12768 z^6 + 12432 z^5 - 7560 z^4 + 8820 z^3 - 10710 z^2 + 10395 z - 5670)}{5670}$$

07.25.03.aiui.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{945} (-16 z^7 - 232 z^6 - 672 z^5 + 240 z^4 - 240 z^3 + 360 z^2 - 630 z + 945) - \frac{4}{945} e^z \sqrt{\pi} z^{11/2} (4 z^2 + 60 z + 195) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiuj.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{1}{945} (16 z^7 - 232 z^6 + 672 z^5 + 240 z^4 + 240 z^3 + 360 z^2 + 630 z + 945) - \frac{4}{945} e^{-z} \sqrt{\pi} z^{11/2} (4 z^2 - 60 z + 195) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiuk.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, 3; z\right) = -\frac{e^z (128 z^7 + 1344 z^6 + 2016 z^5 - 1680 z^4 + 2520 z^3 - 3780 z^2 + 4410 z - 2835)}{2835}$$

07.25.03.aiul.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-8z^8 - 44z^7 + 12z^6 + 24z^5 - 240z^4 + 1350z^3 - 5859z^2 + 20160z - 60480}{189z^2} - \frac{1}{189z^{5/2}} 2e^z \sqrt{\pi} (4z^9 + 24z^8 + 3z^7 - 21z^6 + 126z^5 - 630z^4 + 2520z^3 - 7560z^2 + 15120z - 15120) \operatorname{erf}(\sqrt{z})$$

07.25.03.aium.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{-8z^8 + 44z^7 + 12z^6 - 24z^5 - 240z^4 - 1350z^3 - 5859z^2 - 20160z - 60480}{189z^2} + \frac{1}{189z^{5/2}} 2e^{-z} \sqrt{\pi} (4z^9 - 24z^8 + 3z^7 + 21z^6 + 126z^5 + 630z^4 + 2520z^3 + 7560z^2 + 15120z + 15120) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiun.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, 4; z\right) = \frac{1}{945z^3} e^z (-128z^9 - 192z^8 - 480z^7 + 5040z^6 - 32760z^5 + 167580z^4 - 674730z^3 + 2027025z^2 - 4054050z + 4054050) - \frac{4290}{z^3}$$

07.25.03.aiuo.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-4z^8 + 14z^7 - 108z^6 + 780z^5 - 4890z^4 + 25803z^3 - 110880z^2 + 372960z - 1209600}{27z^3} + \frac{1}{27z^{7/2}} e^z \sqrt{\pi} (-4z^9 + 12z^8 - 99z^7 + 714z^6 - 4410z^5 + 22680z^4 - 93240z^3 + 287280z^2 - 589680z + 604800) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiup.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{4z^8 + 14z^7 + 108z^6 + 780z^5 + 4890z^4 + 25803z^3 + 110880z^2 + 372960z + 1209600}{27z^3} + \frac{1}{27z^{7/2}} (e^{-z} \sqrt{\pi} (-4z^9 - 12z^8 - 99z^7 - 714z^6 - 4410z^5 - 22680z^4 - 93240z^3 - 287280z^2 - 589680z - 604800) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aiuq.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, 5; z\right) = -\frac{17160(z+17)}{z^4} - \frac{1}{945z^4} (4e^z (128z^9 - 960z^8 + 8160z^7 - 62160z^6 + 405720z^5 - 2196180z^4 + 9459450z^3 - 30405375z^2 + 64864800z - 68918850))$$

07.25.03.aiur.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-2z^8 + 25z^7 - 255z^6 + 2190z^5 - 15753z^4 + 93240z^3 - 441000z^2 + 1512000z - 6350400}{3z^4} + \frac{1}{6z^{9/2}} (e^z \sqrt{\pi} (-4z^9 + 48z^8 - 483z^7 + 4095z^6 - 28980z^5 + 167580z^4 - 763560z^3 + 2577960z^2 - 5745600z + 6350400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aius.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{-2z^8 - 25z^7 - 255z^6 - 2190z^5 - 15753z^4 - 93240z^3 - 441000z^2 - 1512000z - 6350400}{3z^4} + \frac{1}{6z^{9/2}} \left(e^{-z} \sqrt{\pi} (4z^9 + 48z^8 + 483z^7 + 4095z^6 + 28980z^5 + 167580z^4 + 763560z^3 + 2577960z^2 + 5745600z + 6350400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aiut.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{9}{2}, 6; z\right) = -\frac{8580(5z^2 + 170z + 1292)}{z^5} - \frac{1}{189z^5} (4e^z(128z^9 - 2112z^8 + 25056z^7 - 237552z^6 + 1831032z^5 - 11351340z^4 + 54864810z^3 - 194999805z^2 + 454864410z - 523783260))$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = -\frac{7}{2}$

07.25.03.aiuu.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{33075} (512z^{12} + 30976z^{11} + 712704z^{10} + 7951360z^9 + 45438720z^8 + 128936448z^7 + 160792320z^6 + 64452960z^5 + 2494800z^4 + 75600z^3 + 22680z^2 + 20250z + 33075) + \frac{1}{33075} (128e^z \sqrt{\pi} (4z^{25/2} + 244z^{23/2} + 5687z^{21/2} + 64788z^{19/2} + 383550z^{17/2} + 1159680z^{15/2} + 1639080z^{13/2} + 879840z^{11/2} + 102960z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aiuv.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{33075} (512z^{12} - 30976z^{11} + 712704z^{10} - 7951360z^9 + 45438720z^8 - 128936448z^7 + 160792320z^6 - 64452960z^5 + 2494800z^4 - 75600z^3 + 22680z^2 - 20250z + 33075) - \frac{1}{33075} (128e^{-z} \sqrt{\pi} (4z^{25/2} - 244z^{23/2} + 5687z^{21/2} - 64788z^{19/2} + 383550z^{17/2} - 1159680z^{15/2} + 1639080z^{13/2} - 879840z^{11/2} + 102960z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aiuw.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{4725} (-256z^{11} - 13440z^{10} - 262400z^9 - 2407680z^8 - 10796544z^7 - 22214400z^6 - 17091360z^5 - 2494800z^4 + 75600z^3 + 7560z^2 + 4050z + 4725) - \frac{1}{4725} (64e^z \sqrt{\pi} (4z^{23/2} + 212z^{21/2} + 4203z^{19/2} + 39570z^{17/2} + 185700z^{15/2} + 416880z^{13/2} + 388440z^{11/2} + 102960z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aiux.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{4725} (256 z^{11} - 13\,440 z^{10} + 262\,400 z^9 - 2\,407\,680 z^8 + 10\,796\,544 z^7 - 22\,214\,400 z^6 + 17\,091\,360 z^5 - 2\,494\,800 z^4 - 75\,600 z^3 + 7560 z^2 - 4050 z + 4725) - \frac{1}{4725} (64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 212 z^{21/2} + 4203 z^{19/2} - 39\,570 z^{17/2} + 185\,700 z^{15/2} - 416\,880 z^{13/2} + 388\,440 z^{11/2} - 102\,960 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aiuy.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} (128 z^{10} + 5696 z^9 + 91\,392 z^8 + 658\,176 z^7 + 2\,146\,560 z^6 + 2\,759\,328 z^5 + 831\,600 z^4 - 75\,600 z^3 + 7560 z^2 + 1350 z + 945) + \frac{32}{945} e^z \sqrt{\pi} (4 z^{21/2} + 180 z^{19/2} + 2943 z^{17/2} + 21\,912 z^{15/2} + 76\,140 z^{13/2} + 112\,320 z^{11/2} + 51\,480 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiuz.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{945} (128 z^{10} - 5696 z^9 + 91\,392 z^8 - 658\,176 z^7 + 2\,146\,560 z^6 - 2\,759\,328 z^5 + 831\,600 z^4 + 75\,600 z^3 + 7560 z^2 - 1350 z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} (4 z^{21/2} - 180 z^{19/2} + 2943 z^{17/2} - 21\,912 z^{15/2} + 76\,140 z^{13/2} - 112\,320 z^{11/2} + 51\,480 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiv0.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} (-64 z^9 - 2336 z^8 - 29\,376 z^7 - 153\,920 z^6 - 315\,744 z^5 - 166\,320 z^4 + 25\,200 z^3 - 7560 z^2 + 1350 z + 315) - \frac{16}{315} e^z \sqrt{\pi} (4 z^{19/2} + 148 z^{17/2} + 1907 z^{15/2} + 10\,470 z^{13/2} + 23\,790 z^{11/2} + 17\,160 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiv1.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{315} (64 z^9 - 2336 z^8 + 29\,376 z^7 - 153\,920 z^6 + 315\,744 z^5 - 166\,320 z^4 - 25\,200 z^3 - 7560 z^2 - 1350 z + 315) - \frac{16}{315} e^{-z} \sqrt{\pi} (4 z^{19/2} - 148 z^{17/2} + 1907 z^{15/2} - 10\,470 z^{13/2} + 23\,790 z^{11/2} - 17\,160 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiv2.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{315} (32 z^8 + 912 z^7 + 8320 z^6 + 27\,456 z^5 + 23\,760 z^4 - 5040 z^3 + 2520 z^2 - 1350 z + 315) + \frac{8}{315} e^z \sqrt{\pi} (4 z^{17/2} + 116 z^{15/2} + 1095 z^{13/2} + 3900 z^{11/2} + 4290 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aiv3.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} (32 z^8 - 912 z^7 + 8320 z^6 - 27456 z^5 + 23760 z^4 + 5040 z^3 + 2520 z^2 + 1350 z + 315) - \frac{8}{315} e^{-z} \sqrt{\pi} (4 z^{17/2} - 116 z^{15/2} + 1095 z^{13/2} - 3900 z^{11/2} + 4290 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiv4.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, 1; z\right) = \frac{1}{630} e^z (64 z^8 + 1600 z^7 + 12368 z^6 + 32352 z^5 + 17340 z^4 - 5820 z^3 + 3555 z^2 - 1980 z + 630)$$

07.25.03.aiv5.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{4}{315} e^z \sqrt{\pi} (4 z^3 + 84 z^2 + 507 z + 858) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{315} (16 z^7 + 328 z^6 + 1872 z^5 + 2640 z^4 - 720 z^3 + 504 z^2 - 450 z + 315)$$

07.25.03.aiv6.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{4}{315} e^{-z} \sqrt{\pi} (4 z^3 - 84 z^2 + 507 z - 858) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{315} (-16 z^7 + 328 z^6 - 1872 z^5 + 2640 z^4 + 720 z^3 + 504 z^2 + 450 z + 315)$$

07.25.03.aiv7.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, 2; z\right) = \frac{1}{630} e^z (64 z^7 + 1088 z^6 + 4752 z^5 + 3840 z^4 - 1860 z^3 + 1620 z^2 - 1305 z + 630)$$

07.25.03.aiv8.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{2}{105} e^z \sqrt{\pi} (4 z^2 + 52 z + 143) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (8 z^6 + 100 z^5 + 240 z^4 - 80 z^3 + 72 z^2 - 90 z + 105)$$

07.25.03.aiv9.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{1}{105} (8 z^6 - 100 z^5 + 240 z^4 + 80 z^3 + 72 z^2 + 90 z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} z^{9/2} (4 z^2 - 52 z + 143) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiva.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, 3; z\right) = \frac{1}{315} e^z (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315)$$

07.25.03.aivb.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{4 z^7 + 18 z^6 - 4 z^5 - 12 z^4 + 90 z^3 - 411 z^2 + 1440 z - 4320}{21 z^2} + \frac{e^z \sqrt{\pi} (4 z^8 + 20 z^7 + 3 z^6 - 18 z^5 + 90 z^4 - 360 z^3 + 1080 z^2 - 2160 z + 2160) \operatorname{erf}(\sqrt{z})}{21 z^{5/2}}$$

07.25.03.aivc.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{-4z^7 + 18z^6 + 4z^5 - 12z^4 - 90z^3 - 411z^2 - 1440z - 4320}{21z^2} + \frac{e^{-z} \sqrt{\pi} (4z^8 - 20z^7 + 3z^6 + 18z^5 + 90z^4 + 360z^3 + 1080z^2 + 2160z + 2160) \operatorname{erfi}(\sqrt{z})}{21z^{5/2}}$$

07.25.03.aivd.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, 4; z\right) = \frac{e^z (64z^8 + 64z^7 + 272z^6 - 2112z^5 + 11100z^4 - 44940z^3 + 135135z^2 - 270270z + 270270)}{105z^3} - \frac{2574}{z^3}$$

07.25.03.aive.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{2z^7 - 7z^6 + 48z^5 - 300z^4 + 1587z^3 - 6840z^2 + 23040z - 75600}{3z^3} + \frac{1}{6z^{7/2}} e^z \sqrt{\pi} (4z^8 - 12z^7 + 87z^6 - 540z^5 + 2790z^4 - 11520z^3 + 35640z^2 - 73440z + 75600) \operatorname{erf}(\sqrt{z})$$

07.25.03.aivf.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{2z^7 + 7z^6 + 48z^5 + 300z^4 + 1587z^3 + 6840z^2 + 23040z + 75600}{3z^3} + \frac{1}{6z^{7/2}} e^{-z} \sqrt{\pi} (-4z^8 - 12z^7 - 87z^6 - 540z^5 - 2790z^4 - 11520z^3 - 35640z^2 - 73440z - 75600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aivg.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, 5; z\right) = \frac{1}{105z^4} 4e^z (64z^8 - 448z^7 + 3408z^6 - 22560z^5 + 123900z^4 - 540540z^3 + 1756755z^2 - 3783780z + 4054050) - \frac{10296(z + 15)}{z^4}$$

07.25.03.aivh.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3(2z^7 - 23z^6 + 210z^5 - 1574z^4 + 9600z^3 - 46440z^2 + 159600z - 705600)}{2z^4} + \frac{1}{4z^{9/2}} 3e^z \sqrt{\pi} (4z^8 - 44z^7 + 395z^6 - 2910z^5 + 17340z^4 - 80880z^3 + 278280z^2 - 630000z + 705600) \operatorname{erf}(\sqrt{z})$$

07.25.03.aivi.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{4z^{9/2}} 3e^{-z} \sqrt{\pi} (4z^8 + 44z^7 + 395z^6 + 2910z^5 + 17340z^4 + 80880z^3 + 278280z^2 + 630000z + 705600) \operatorname{erfi}(\sqrt{z}) - \frac{3(2z^7 + 23z^6 + 210z^5 + 1574z^4 + 9600z^3 + 46440z^2 + 159600z + 705600)}{2z^4}$$

07.25.03.aivj.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{7}{2}, 6; z\right) = \frac{1}{21 z^5} 4 e^z (64 z^8 - 960 z^7 + 10\,128 z^6 - 83\,328 z^5 + 540\,540 z^4 - 2\,702\,700 z^3 + 9\,864\,855 z^2 - 23\,513\,490 z + 27\,567\,540) - \frac{25\,740(z^2 + 30z + 204)}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = -\frac{5}{2}$

07.25.03.aivk.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{675} (128 z^{10} + 5824 z^9 + 96\,320 z^8 + 724\,992 z^7 + 2\,539\,776 z^6 + 3\,754\,080 z^5 + 1\,734\,480 z^4 + 75\,600 z^3 + 2\,520 z^2 + 810 z + 675) + \frac{32}{675} e^z \sqrt{\pi} (4 z^{21/2} + 184 z^{19/2} + 3099 z^{17/2} + 24\,075 z^{15/2} + 89\,400 z^{13/2} + 148\,680 z^{11/2} + 91\,080 z^{9/2} + 11\,880 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aivl.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{675} (128 z^{10} - 5824 z^9 + 96\,320 z^8 - 724\,992 z^7 + 2\,539\,776 z^6 - 3\,754\,080 z^5 + 1\,734\,480 z^4 - 75\,600 z^3 + 2\,520 z^2 - 810 z + 675) - \frac{32}{675} e^{-z} \sqrt{\pi} (4 z^{21/2} - 184 z^{19/2} + 3099 z^{17/2} - 24\,075 z^{15/2} + 89\,400 z^{13/2} - 148\,680 z^{11/2} + 91\,080 z^{9/2} - 11\,880 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aivm.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{135} (-64 z^9 - 2464 z^8 - 33\,408 z^7 - 196\,608 z^6 - 497\,376 z^5 - 451\,440 z^4 - 75\,600 z^3 + 2\,520 z^2 + 270 z + 135) - \frac{16}{135} e^z \sqrt{\pi} (4 z^{19/2} + 156 z^{17/2} + 2163 z^{15/2} + 13\,260 z^{13/2} + 36\,360 z^{11/2} + 39\,600 z^{9/2} + 11\,880 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aivn.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{135} (64 z^9 - 2464 z^8 + 33\,408 z^7 - 196\,608 z^6 + 497\,376 z^5 - 451\,440 z^4 + 75\,600 z^3 + 2\,520 z^2 - 270 z + 135) - \frac{16}{135} e^{-z} \sqrt{\pi} (4 z^{19/2} - 156 z^{17/2} + 2163 z^{15/2} - 13\,260 z^{13/2} + 36\,360 z^{11/2} - 39\,600 z^{9/2} + 11\,880 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aivo.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{45} (32 z^8 + 1008 z^7 + 10\,672 z^6 + 45\,408 z^5 + 71\,280 z^4 + 25\,200 z^3 - 2\,520 z^2 + 270 z + 45) + \frac{8}{45} e^z \sqrt{\pi} (4 z^{17/2} + 128 z^{15/2} + 1395 z^{13/2} + 6285 z^{11/2} + 11\,220 z^{9/2} + 5940 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aivp.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{45} (32 z^8 - 1008 z^7 + 10672 z^6 - 45408 z^5 + 71280 z^4 - 25200 z^3 - 2520 z^2 - 270 z + 45) - \frac{8}{45} e^{-z} \sqrt{\pi} (4 z^{17/2} - 128 z^{15/2} + 1395 z^{13/2} - 6285 z^{11/2} + 11220 z^{9/2} - 5940 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aivq.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{45} (-16 z^7 - 392 z^6 - 2992 z^5 - 7920 z^4 - 5040 z^3 + 840 z^2 - 270 z + 45) - \frac{4}{45} e^z \sqrt{\pi} (4 z^{15/2} + 100 z^{13/2} + 795 z^{11/2} + 2310 z^{9/2} + 1980 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aivr.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{45} (16 z^7 - 392 z^6 + 2992 z^5 - 7920 z^4 + 5040 z^3 + 840 z^2 + 270 z + 45) - \frac{4}{45} e^{-z} \sqrt{\pi} (4 z^{15/2} - 100 z^{13/2} + 795 z^{11/2} - 2310 z^{9/2} + 1980 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aivs.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, 1; z\right) = -\frac{1}{90} e^z (32 z^7 + 688 z^6 + 4464 z^5 + 9480 z^4 + 3930 z^3 - 945 z^2 + 360 z - 90)$$

07.25.03.aivt.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{45} (-8 z^6 - 140 z^5 - 660 z^4 - 720 z^3 + 168 z^2 - 90 z + 45) - \frac{2}{45} e^z \sqrt{\pi} z^{7/2} (4 z^3 + 72 z^2 + 363 z + 495) \operatorname{erf}(\sqrt{z})$$

07.25.03.aivu.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{2}{45} e^{-z} \sqrt{\pi} (4 z^3 - 72 z^2 + 363 z - 495) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{45} (-8 z^6 + 140 z^5 - 660 z^4 + 720 z^3 + 168 z^2 + 90 z + 45)$$

07.25.03.aivv.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, 2; z\right) = -\frac{1}{90} e^z (32 z^6 + 464 z^5 + 1680 z^4 + 1080 z^3 - 390 z^2 + 225 z - 90)$$

07.25.03.aivw.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{15} (-4 z^5 - 42 z^4 - 80 z^3 + 24 z^2 - 18 z + 15) - \frac{1}{15} e^z \sqrt{\pi} z^{7/2} (4 z^2 + 44 z + 99) \operatorname{erf}(\sqrt{z})$$

07.25.03.aivx.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{15} (4 z^5 - 42 z^4 + 80 z^3 + 24 z^2 + 18 z + 15) - \frac{1}{15} e^{-z} \sqrt{\pi} z^{7/2} (4 z^2 - 44 z + 99) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aivy.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, 3; z\right) = -\frac{1}{45} e^z (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45)$$

07.25.03.aivz.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-2z^6 - 7z^5 + z^4 + 6z^3 - 33z^2 + 120z - 360}{3z^2} + \frac{e^z \sqrt{\pi} (-4z^7 - 16z^6 - 3z^5 + 15z^4 - 60z^3 + 180z^2 - 360z + 360) \operatorname{erf}(\sqrt{z})}{6z^{5/2}}$$

07.25.03.aiw0.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-2z^6 + 7z^5 + z^4 - 6z^3 - 33z^2 - 120z - 360}{3z^2} + \frac{e^{-z} \sqrt{\pi} (4z^7 - 16z^6 + 3z^5 + 15z^4 + 60z^3 + 180z^2 + 360z + 360) \operatorname{erfi}(\sqrt{z})}{6z^{5/2}}$$

07.25.03.aiw1.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, 4; z\right) = \frac{e^z (-32z^7 - 16z^6 - 144z^5 + 840z^4 - 3450z^3 + 10395z^2 - 20790z + 20790)}{15z^3} - \frac{1386}{z^3}$$

07.25.03.aiw2.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(2z^6 - 7z^5 + 42z^4 - 222z^3 + 960z^2 - 3240z + 10800)}{6z^3} - \frac{7e^z \sqrt{\pi} (4z^7 - 12z^6 + 75z^5 - 390z^4 + 1620z^3 - 5040z^2 + 10440z - 10800) \operatorname{erf}(\sqrt{z})}{12z^{7/2}}$$

07.25.03.aiw3.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(2z^6 + 7z^5 + 42z^4 + 222z^3 + 960z^2 + 3240z + 10800)}{6z^3} - \frac{7e^{-z} \sqrt{\pi} (4z^7 + 12z^6 + 75z^5 + 390z^4 + 1620z^3 + 5040z^2 + 10440z + 10800) \operatorname{erfi}(\sqrt{z})}{12z^{7/2}}$$

07.25.03.aiw4.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, 5; z\right) = -\frac{5544(z+13)}{z^4} - \frac{4e^z (32z^7 - 208z^6 + 1392z^5 - 7800z^4 + 34650z^3 - 114345z^2 + 249480z - 270270)}{15z^4}$$

07.25.03.aiw5.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{21(2z^6 - 21z^5 + 169z^4 - 1080z^3 + 5400z^2 - 18600z + 88200)}{4z^4} - \frac{21e^z \sqrt{\pi} (4z^7 - 40z^6 + 315z^5 - 1965z^4 + 9480z^3 - 33480z^2 + 77400z - 88200) \operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.aiw6.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z} \sqrt{\pi} (4z^7 + 40z^6 + 315z^5 + 1965z^4 + 9480z^3 + 33480z^2 + 77400z + 88200) \operatorname{erfi}(\sqrt{z})}{8z^{9/2}} - \frac{21(2z^6 + 21z^5 + 169z^4 + 1080z^3 + 5400z^2 + 18600z + 88200)}{4z^4}$$

07.25.03.aiw7.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{5}{2}, 6; z\right) = \frac{13860(z^2 + 26z + 156)}{z^5} - \frac{4e^z(32z^7 - 432z^6 + 3984z^5 - 27720z^4 + 145530z^3 - 550935z^2 + 1351350z - 1621620)}{3z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = -\frac{3}{2}$

07.25.03.aiw8.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{27}(32z^8 + 1040z^7 + 11520z^6 + 52704z^5 + 95184z^4 + 51408z^3 + 2520z^2 + 90z + 27) + \frac{8}{27}e^z\sqrt{\pi}(4z^{17/2} + 132z^{15/2} + 1503z^{13/2} + 7248z^{11/2} + 14616z^{9/2} + 10368z^{7/2} + 1512z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aiw9.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{27}(32z^8 - 1040z^7 + 11520z^6 - 52704z^5 + 95184z^4 - 51408z^3 + 2520z^2 - 90z + 27) - \frac{8}{27}e^{-z}\sqrt{\pi}(4z^{17/2} - 132z^{15/2} + 1503z^{13/2} - 7248z^{11/2} + 14616z^{9/2} - 10368z^{7/2} + 1512z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aiwa.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{9}(-16z^7 - 424z^6 - 3648z^5 - 11952z^4 - 13104z^3 - 2520z^2 + 90z + 9) - \frac{4}{9}e^z\sqrt{\pi}(4z^{15/2} + 108z^{13/2} + 963z^{11/2} + 3396z^{9/2} + 4428z^{7/2} + 1512z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aiwb.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{9}(16z^7 - 424z^6 + 3648z^5 - 11952z^4 + 13104z^3 - 2520z^2 - 90z + 9) - \frac{4}{9}e^{-z}\sqrt{\pi}(4z^{15/2} - 108z^{13/2} + 963z^{11/2} - 3396z^{9/2} + 4428z^{7/2} - 1512z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aiwc.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{9}(8z^6 + 164z^5 + 1008z^4 + 2016z^3 + 840z^2 - 90z + 9) + \frac{2}{9}e^z\sqrt{\pi}(4z^{13/2} + 84z^{11/2} + 543z^{9/2} + 1224z^{7/2} + 756z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aiwd.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{9}(8z^6 - 164z^5 + 1008z^4 - 2016z^3 + 840z^2 + 90z + 9) - \frac{2}{9}e^{-z}\sqrt{\pi}(4z^{13/2} - 84z^{11/2} + 543z^{9/2} - 1224z^{7/2} + 756z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aiwe.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, 1; z\right) = \frac{1}{18}e^z(16z^6 + 288z^5 + 1512z^4 + 2472z^3 + 729z^2 - 108z + 18)$$

07.25.03.aiwf.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{9} e^z \sqrt{\pi} (4z^3 + 60z^2 + 243z + 252) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{9} (4z^5 + 58z^4 + 216z^3 + 168z^2 - 30z + 9)$$

07.25.03.aiwg.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{9} e^{-z} \sqrt{\pi} (4z^3 - 60z^2 + 243z - 252) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{9} (-4z^5 + 58z^4 - 216z^3 + 168z^2 + 30z + 9)$$

07.25.03.aiwh.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, 2; z\right) = \frac{1}{18} e^z (16z^5 + 192z^4 + 552z^3 + 264z^2 - 63z + 18)$$

07.25.03.aiwi.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{6} e^z \sqrt{\pi} (4z^2 + 36z + 63) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (2z^4 + 17z^3 + 24z^2 - 6z + 3)$$

07.25.03.aiwj.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{3} (2z^4 - 17z^3 + 24z^2 + 6z + 3) - \frac{1}{6} e^{-z} \sqrt{\pi} z^{5/2} (4z^2 - 36z + 63) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aiwk.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, 3; z\right) = \frac{1}{9} e^z (16z^4 + 96z^3 + 72z^2 - 24z + 9)$$

07.25.03.aiwl.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(2z^5 + 5z^4 - 6z^2 + 24z - 72)}{6z^2} + \frac{5e^z \sqrt{\pi} (4z^6 + 12z^5 + 3z^4 - 12z^3 + 36z^2 - 72z + 72) \operatorname{erf}(\sqrt{z})}{12z^{5/2}}$$

07.25.03.aiwm.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (4z^6 - 12z^5 + 3z^4 + 12z^3 + 36z^2 + 72z + 72) \operatorname{erfi}(\sqrt{z})}{12z^{5/2}} - \frac{5(2z^5 - 5z^4 + 6z^2 + 24z + 72)}{6z^2}$$

07.25.03.aiwn.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, 4; z\right) = \frac{e^z (16z^6 + 72z^4 - 312z^3 + 945z^2 - 1890z + 1890)}{3z^3} - \frac{630}{z^3}$$

07.25.03.aiwo.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(2z^5 - 7z^4 + 36z^3 - 156z^2 + 528z - 1800)}{12z^3} + \frac{35e^z \sqrt{\pi} (4z^6 - 12z^5 + 63z^4 - 264z^3 + 828z^2 - 1728z + 1800) \operatorname{erf}(\sqrt{z})}{24z^{7/2}}$$

07.25.03.aiwp.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(2z^5 + 7z^4 + 36z^3 + 156z^2 + 528z + 1800)}{12z^3} - \frac{35e^{-z} \sqrt{\pi} (4z^6 + 12z^5 + 63z^4 + 264z^3 + 828z^2 + 1728z + 1800) \operatorname{erfi}(\sqrt{z})}{24z^{7/2}}$$

07.25.03.aiwq.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, 5; z\right) = \frac{4e^z (16z^6 - 96z^5 + 552z^4 - 2520z^3 + 8505z^2 - 18900z + 20790)}{3z^4} - \frac{2520(z + 11)}{z^4}$$

07.25.03.aiwr.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{105(2z^5 - 19z^4 + 132z^3 - 696z^2 + 2400z - 12600)}{8z^4} + \frac{105e^z\sqrt{\pi}(4z^6 - 36z^5 + 243z^4 - 1236z^3 + 4536z^2 - 10800z + 12600)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.aiws.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{105e^{-z}\sqrt{\pi}(4z^6 + 36z^5 + 243z^4 + 1236z^3 + 4536z^2 + 10800z + 12600)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}} - \frac{105(2z^5 + 19z^4 + 132z^3 + 696z^2 + 2400z + 12600)}{8z^4}$$

07.25.03.aiwt.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{3}{2}, 6; z\right) = \frac{20e^z(16z^6 - 192z^5 + 1512z^4 - 8568z^3 + 34209z^2 - 87318z + 108108)}{3z^5} - \frac{1260(5z^2 + 110z + 572)}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = -\frac{1}{2}$

07.25.03.aiwu.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{3}(8z^6 + 172z^5 + 1140z^4 + 2632z^3 + 1680z^2 + 90z + 3) + \frac{2}{3}e^z\sqrt{\pi}(4z^{13/2} + 88z^{11/2} + 611z^{9/2} + 1563z^{7/2} + 1302z^{5/2} + 210z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aiwv.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3}(8z^6 - 172z^5 + 1140z^4 - 2632z^3 + 1680z^2 - 90z + 3) - \frac{2}{3}e^{-z}\sqrt{\pi}(4z^{13/2} - 88z^{11/2} + 611z^{9/2} - 1563z^{7/2} + 1302z^{5/2} - 210z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aiww.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{3}(-4z^5 - 66z^4 - 308z^3 - 420z^2 - 90z + 3) + \frac{1}{3}e^z\sqrt{\pi}(-4z^{11/2} - 68z^{9/2} - 339z^{7/2} - 546z^{5/2} - 210z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aiwx.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{3}(4z^5 - 66z^4 + 308z^3 - 420z^2 + 90z + 3) + \frac{1}{3}e^{-z}\sqrt{\pi}(-4z^{11/2} + 68z^{9/2} - 339z^{7/2} + 546z^{5/2} - 210z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aiwy.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, 1; z\right) = -\frac{1}{6}e^z(8z^5 + 116z^4 + 466z^3 + 537z^2 + 96z - 6)$$

07.25.03.aiwz.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3}(-2z^4 - 23z^3 - 63z^2 - 30z + 3) + \frac{1}{6}e^z \sqrt{\pi} (-4z^{9/2} - 48z^{7/2} - 147z^{5/2} - 105z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aix0.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{3}(-2z^4 + 23z^3 - 63z^2 + 30z + 3) + \frac{1}{6}e^{-z} \sqrt{\pi} (4z^{9/2} - 48z^{7/2} + 147z^{5/2} - 105z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aix1.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, 2; z\right) = -\frac{1}{6}e^z (8z^4 + 76z^3 + 162z^2 + 51z - 6)$$

07.25.03.aix2.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{2}(-2z^3 - 13z^2 - 12z + 2) - \frac{1}{4}e^z \sqrt{\pi} z^{3/2} (4z^2 + 28z + 35) \operatorname{erf}(\sqrt{z})$$

07.25.03.aix3.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{2}(2z^3 - 13z^2 + 12z + 2) - \frac{1}{4}e^{-z} \sqrt{\pi} z^{3/2} (4z^2 - 28z + 35) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aix4.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, 3; z\right) = -\frac{1}{3}e^z (8z^3 + 36z^2 + 18z - 3)$$

07.25.03.aix5.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{5(2z^4 + 3z^3 + z^2 - 6z + 18)}{4z^2} - \frac{5e^z \sqrt{\pi} (4z^5 + 8z^4 + 3z^3 - 9z^2 + 18z - 18) \operatorname{erf}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.aix6.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (4z^5 - 8z^4 + 3z^3 + 9z^2 + 18z + 18) \operatorname{erfi}(\sqrt{z})}{8z^{5/2}} - \frac{5(2z^4 - 3z^3 + z^2 + 6z + 18)}{4z^2}$$

07.25.03.aix7.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, 4; z\right) = \frac{e^z (-8z^5 + 4z^4 - 34z^3 + 105z^2 - 210z + 210)}{z^3} - \frac{210}{z^3}$$

07.25.03.aix8.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(2z^4 - 7z^3 + 30z^2 - 102z + 360)}{8z^3} - \frac{35e^z \sqrt{\pi} (4z^5 - 12z^4 + 51z^3 - 162z^2 + 342z - 360) \operatorname{erf}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.aix9.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35(2z^4 + 7z^3 + 30z^2 + 102z + 360)}{8z^3} - \frac{35e^{-z} \sqrt{\pi} (4z^5 + 12z^4 + 51z^3 + 162z^2 + 342z + 360) \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.aixa.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, 5; z\right) = -\frac{840(z + 9)}{z^4} - \frac{4e^z (8z^5 - 44z^4 + 210z^3 - 735z^2 + 1680z - 1890)}{z^4}$$

07.25.03.aixb.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{315(2z^4 - 17z^3 + 99z^2 - 340z + 2100)}{16z^4} - \frac{315e^z\sqrt{\pi}(4z^5 - 32z^4 + 179z^3 - 699z^2 + 1740z - 2100)\operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.aixc.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(4z^5 + 32z^4 + 179z^3 + 699z^2 + 1740z + 2100)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}} - \frac{315(2z^4 + 17z^3 + 99z^2 + 340z + 2100)}{16z^4}$$

07.25.03.aixd.01

$${}_2F_2\left(\frac{5}{2}, 3; -\frac{1}{2}, 6; z\right) = -\frac{420(5z^2 + 90z + 396)}{z^5} - \frac{20e^z(8z^5 - 84z^4 + 546z^3 - 2373z^2 + 6426z - 8316)}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = \frac{1}{2}$

07.25.03.0158.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{6}\left(2(2z^4 + 25z^3 + 80z^2 + 60z + 3) + e^z\sqrt{\pi}\sqrt{z}(4z^4 + 52z^3 + 183z^2 + 180z + 30)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aixe.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{3}\left(2z^4 - 25z^3 + 80z^2 - 60z + 3\right) + \frac{1}{6}e^{-z}\sqrt{\pi}\left(-4z^{9/2} + 52z^{7/2} - 183z^{5/2} + 180z^{3/2} - 30\sqrt{z}\right)\operatorname{erfi}(\sqrt{z})$$

07.25.03.0159.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, 1; z\right) = \frac{1}{6}e^z(4z^4 + 44z^3 + 123z^2 + 84z + 6)$$

07.25.03.0160.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{12}\left(4z^3 + 34z^2 + 60z + e^z\sqrt{\pi}(4z^3 + 36z^2 + 75z + 30)\operatorname{erf}(\sqrt{z})\sqrt{z} + 12\right)$$

07.25.03.aixf.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{6}\left(-2z^3 + 17z^2 - 30z + 6\right) + \frac{1}{12}e^{-z}\sqrt{\pi}\sqrt{z}(4z^3 - 36z^2 + 75z - 30)\operatorname{erfi}(\sqrt{z})$$

07.25.03.0161.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, 2; z\right) = \frac{1}{6}e^z(4z^3 + 28z^2 + 39z + 6)$$

07.25.03.aixg.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{4}\left(2z^2 + 9z + 4\right) + \frac{1}{8}e^z\sqrt{\pi}\sqrt{z}(4z^2 + 20z + 15)\operatorname{erf}(\sqrt{z})$$

07.25.03.aixh.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{4}\left(2z^2 - 9z + 4\right) - \frac{1}{8}e^{-z}\sqrt{\pi}\sqrt{z}(4z^2 - 20z + 15)\operatorname{erfi}(\sqrt{z})$$

07.25.03.aixi.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, 3; z\right) = \frac{1}{3} e^z (4z^2 + 12z + 3)$$

07.25.03.aixj.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5(2z^3 + z^2 + 2z - 6)}{8z^2} + \frac{5e^z \sqrt{\pi} (4z^4 + 4z^3 + 3z^2 - 6z + 6) \operatorname{erf}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.aixk.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (4z^4 - 4z^3 + 3z^2 + 6z + 6) \operatorname{erfi}(\sqrt{z})}{16z^{5/2}} - \frac{5(2z^3 - z^2 + 2z + 6)}{8z^2}$$

07.25.03.aixl.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, 4; z\right) = \frac{e^z (4z^4 - 4z^3 + 15z^2 - 30z + 30)}{z^3} - \frac{30}{z^3}$$

07.25.03.aixm.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(2z^3 - 7z^2 + 24z - 90)}{16z^3} + \frac{35e^z \sqrt{\pi} (4z^4 - 12z^3 + 39z^2 - 84z + 90) \operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.aixn.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35(2z^3 + 7z^2 + 24z + 90)}{16z^3} - \frac{35e^{-z} \sqrt{\pi} (4z^4 + 12z^3 + 39z^2 + 84z + 90) \operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.aixo.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, 5; z\right) = \frac{4e^z (4z^4 - 20z^3 + 75z^2 - 180z + 210)}{z^4} - \frac{120(z + 7)}{z^4}$$

07.25.03.aixp.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{315(2z^3 - 15z^2 + 50z - 420)}{32z^4} + \frac{315e^z \sqrt{\pi} (4z^4 - 28z^3 + 123z^2 - 330z + 420) \operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.aixq.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z} \sqrt{\pi} (4z^4 + 28z^3 + 123z^2 + 330z + 420) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}} - \frac{315(2z^3 + 15z^2 + 50z + 420)}{32z^4}$$

07.25.03.aixr.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{1}{2}, 6; z\right) = \frac{20e^z (4z^4 - 36z^3 + 183z^2 - 546z + 756)}{z^5} - \frac{60(5z^2 + 70z + 252)}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = 1$

07.25.03.0162.01

$${}_2F_2\left(\frac{5}{2}, 3; 1, 1; z\right) = \frac{1}{12} e^{z/2} \left((4z^4 + 40z^3 + 107z^2 + 84z + 12) I_0\left(\frac{z}{2}\right) + z(4z^3 + 36z^2 + 73z + 25) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.0163.01

$${}_2F_2\left(\frac{5}{2}, 3; 1, \frac{3}{2}; z\right) = \frac{1}{6} e^z (2z^3 + 15z^2 + 24z + 6)$$

07.25.03.0164.01

$${}_2F_2\left(\frac{5}{2}, 3; 1, 2; z\right) = \frac{1}{12} e^{z/2} \left((4z^3 + 26z^2 + 39z + 12) I_0\left(\frac{z}{2}\right) + z(4z^2 + 22z + 19) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.aixs.01

$${}_2F_2\left(\frac{5}{2}, 3; 1, \frac{5}{2}; z\right) = \frac{1}{2} e^z (z^2 + 4z + 2)$$

07.25.03.aixt.01

$${}_2F_2\left(\frac{5}{2}, 3; 1, 3; z\right) = \frac{1}{3} e^{z/2} (2z^2 + 6z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} z(z + 2) I_1\left(\frac{z}{2}\right)$$

07.25.03.aixu.01

$${}_2F_2\left(\frac{5}{2}, 3; 1, \frac{7}{2}; z\right) = \frac{5 e^z (8z^3 + 4z^2 + 6z - 9)}{32 z^2} + \frac{45 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.aixv.01

$${}_2F_2\left(\frac{5}{2}, 3; 1, \frac{7}{2}; -z\right) = \frac{45 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{64 z^{5/2}} - \frac{5 e^{-z} (8z^3 - 4z^2 + 6z + 9)}{32 z^2}$$

07.25.03.aixw.01

$${}_2F_2\left(\frac{5}{2}, 3; 1, 4; z\right) = \frac{e^{z/2} (2z^2 - z + 4) I_0\left(\frac{z}{2}\right)}{z} + \frac{e^{z/2} (2z^3 - 3z^2 + 8z - 16) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.aixx.01

$${}_2F_2\left(\frac{5}{2}, 3; 1, \frac{9}{2}; z\right) = \frac{35 e^z (16z^3 - 48z^2 + 132z - 225)}{128 z^3} + \frac{315 \sqrt{\pi} (2z + 25) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.aixy.01

$${}_2F_2\left(\frac{5}{2}, 3; 1, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (16z^3 + 48z^2 + 132z + 225)}{128 z^3} + \frac{315 \sqrt{\pi} (2z - 25) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.aixz.01

$${}_2F_2\left(\frac{5}{2}, 3; 1, 5; z\right) = \frac{8 e^{z/2} (z^2 - 4z + 12) I_0\left(\frac{z}{2}\right)}{z^2} + \frac{8 e^{z/2} (z^3 - 5z^2 + 16z - 48) I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.aiy0.01

$${}_2F_2\left(\frac{5}{2}, 3; 1, \frac{11}{2}; z\right) = \frac{315 e^z (64z^3 - 416z^2 + 1550z - 3675)}{1024 z^4} + \frac{945 \sqrt{\pi} (12z^2 + 300z + 1225) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.aiy1.01

$${}_2F_2\left(\frac{5}{2}, 3; 1, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (12z^2 - 300z + 1225) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}} - \frac{315 e^{-z} (64z^3 + 416z^2 + 1550z + 3675)}{1024 z^4}$$

07.25.03.aiy2.01

$${}_2F_2\left(\frac{5}{2}, 3; 1, 6; z\right) = \frac{8 e^{z/2} (5z^2 - 36z + 192) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{8 e^{z/2} (5z^3 - 44z^2 + 144z - 768) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = \frac{3}{2}$

07.25.03.0165.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{24\sqrt{z}} \left(2\sqrt{z} (2z^2 + 11z + 9) + e^z \sqrt{\pi} (4z^3 + 24z^2 + 27z + 3) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aiy3.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{12} (2z^2 - 11z + 9) + \frac{e^{-z} \sqrt{\pi} (-4z^3 + 24z^2 - 27z + 3) \operatorname{erfi}(\sqrt{z})}{24\sqrt{z}}$$

07.25.03.0166.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{3}{2}, 2; z\right) = \frac{1}{6} e^z (2z^2 + 9z + 6)$$

07.25.03.aiy4.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{8} (2z + 5) + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.aiy5.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{8} (5 - 2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.aiy6.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{3}{2}, 3; z\right) = \frac{1}{3} e^z (2z + 3)$$

07.25.03.aiy7.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(2z^2 - z + 3)}{16z^2} + \frac{5e^z \sqrt{\pi} (4z^3 + 3z - 3) \operatorname{erf}(\sqrt{z})}{32z^{5/2}}$$

07.25.03.aiy8.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(2z^2 + z + 3)}{16z^2} - \frac{5e^{-z} \sqrt{\pi} (4z^3 + 3z + 3) \operatorname{erfi}(\sqrt{z})}{32z^{5/2}}$$

07.25.03.aiy9.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{3}{2}, 4; z\right) = \frac{e^z (2z^3 - 3z^2 + 6z - 6)}{z^3} + \frac{6}{z^3}$$

07.25.03.aiya.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(2z^2 - 7z + 30)}{32z^3} + \frac{35e^z \sqrt{\pi} (4z^3 - 12z^2 + 27z - 30) \operatorname{erf}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.aiyb.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (4z^3 + 12z^2 + 27z + 30) \operatorname{erfi}(\sqrt{z})}{64z^{7/2}} - \frac{35(2z^2 + 7z + 30)}{32z^3}$$

07.25.03.aiyc.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{3}{2}, 5; z\right) = \frac{24(z + 5)}{z^4} + \frac{4e^z (2z^3 - 9z^2 + 24z - 30)}{z^4}$$

07.25.03.aiyd.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{315(2z^2 - 5z + 105)}{64z^4} + \frac{315e^z\sqrt{\pi}(4z^3 - 24z^2 + 75z - 105)\operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.aiye.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{315(2z^2 + 5z + 105)}{64z^4} - \frac{315e^{-z}\sqrt{\pi}(4z^3 + 24z^2 + 75z + 105)\operatorname{erfi}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.aiyf.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{3}{2}, 6; z\right) = \frac{60(z^2 + 10z + 28)}{z^5} + \frac{20e^z(2z^3 - 15z^2 + 54z - 84)}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = 2$

07.25.03.0167.01

$${}_2F_2\left(\frac{5}{2}, 3; 2, 2; z\right) = \frac{1}{6}e^{z/2}\left(2(z^2 + 4z + 3)I_0\left(\frac{z}{2}\right) + (2z^2 + 6z + 1)I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.aiyg.01

$${}_2F_2\left(\frac{5}{2}, 3; 2, \frac{5}{2}; z\right) = \frac{1}{2}e^z(z + 2)$$

07.25.03.aiyh.01

$${}_2F_2\left(\frac{5}{2}, 3; 2, 3; z\right) = \frac{1}{3}e^{z/2}(2z + 3)I_0\left(\frac{z}{2}\right) + \frac{1}{3}e^{z/2}(2z + 1)I_1\left(\frac{z}{2}\right)$$

07.25.03.aiyi.01

$${}_2F_2\left(\frac{5}{2}, 3; 2, \frac{7}{2}; z\right) = \frac{5e^z(4z^2 - 2z + 3)}{16z^2} - \frac{15\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{32z^{5/2}}$$

07.25.03.aiyj.01

$${}_2F_2\left(\frac{5}{2}, 3; 2, \frac{7}{2}; -z\right) = \frac{5e^{-z}(4z^2 + 2z + 3)}{16z^2} - \frac{15\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{32z^{5/2}}$$

07.25.03.aiyk.01

$${}_2F_2\left(\frac{5}{2}, 3; 2, 4; z\right) = \frac{2e^{z/2}(z - 1)I_0\left(\frac{z}{2}\right)}{z} + \frac{2e^{z/2}(z^2 - 2z + 4)I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.aiyl.01

$${}_2F_2\left(\frac{5}{2}, 3; 2, \frac{9}{2}; z\right) = \frac{35e^z(8z^2 - 24z + 45)}{64z^3} - \frac{105\sqrt{\pi}(2z + 15)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.aiym.01

$${}_2F_2\left(\frac{5}{2}, 3; 2, \frac{9}{2}; -z\right) = -\frac{35e^{-z}(8z^2 + 24z + 45)}{64z^3} - \frac{105\sqrt{\pi}(2z - 15)\operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.aiyn.01

$${}_2F_2\left(\frac{5}{2}, 3; 2, 5; z\right) = \frac{8e^{z/2}(z - 4)I_0\left(\frac{z}{2}\right)}{z^2} + \frac{8e^{z/2}(z^2 - 4z + 16)I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.aiyo.01

$${}_2F_2\left(\frac{5}{2}, 3; 2, \frac{11}{2}; z\right) = \frac{315 e^z (32 z^2 - 170 z + 525)}{512 z^4} - \frac{945 \sqrt{\pi} (4 z^2 + 60 z + 175) \operatorname{erfi}(\sqrt{z})}{1024 z^{9/2}}$$

07.25.03.aiyp.01

$${}_2F_2\left(\frac{5}{2}, 3; 2, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (32 z^2 + 170 z + 525)}{512 z^4} - \frac{945 \sqrt{\pi} (4 z^2 - 60 z + 175) \operatorname{erf}(\sqrt{z})}{1024 z^{9/2}}$$

07.25.03.aiyq.01

$${}_2F_2\left(\frac{5}{2}, 3; 2, 6; z\right) = \frac{32 e^{z/2} (z - 12) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{16 e^{z/2} (3 z^2 - 8 z + 96) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = \frac{5}{2}$

07.25.03.aiyr.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3(2z+1)}{16z} + \frac{3 e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.aiys.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3(2z-1)}{16z} - \frac{3 e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.aiyt.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{5}{2}, 3; z\right) = e^z$$

07.25.03.aiyu.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{15(2z-3)}{32 z^2} + \frac{15 e^z \sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.aiyv.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{15 e^{-z} \sqrt{\pi} (4z^2 + 4z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{5/2}} - \frac{15(2z+3)}{32 z^2}$$

07.25.03.aiyw.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{5}{2}, 4; z\right) = \frac{3 e^z (z^2 - 2z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.aiyx.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{105(2z-15)}{64 z^3} + \frac{105 e^z \sqrt{\pi} (4z^2 - 12z + 15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.aiyy.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{105(2z+15)}{64 z^3} - \frac{105 e^{-z} \sqrt{\pi} (4z^2 + 12z + 15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.aiyz.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{5}{2}, 5; z\right) = \frac{12 e^z (z^2 - 4z + 6)}{z^4} - \frac{24(z + 3)}{z^4}$$

07.25.03.aiz0.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575(2z + 21)}{128 z^4}$$

07.25.03.aiz1.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1575(2z - 21)}{128 z^4} + \frac{945 e^{-z} \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.aiz2.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{5}{2}, 6; z\right) = \frac{60 e^z (z^2 - 6z + 12)}{z^5} - \frac{60(z^2 + 6z + 12)}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = 3$

07.25.03.aiz3.01

$${}_2F_2\left(\frac{5}{2}, 3; 3, 3; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (z - 1) I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.aiz4.01

$${}_2F_2\left(\frac{5}{2}, 3; 3, \frac{7}{2}; z\right) = \frac{5 e^z (2z - 3)}{4 z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.aiz5.01

$${}_2F_2\left(\frac{5}{2}, 3; 3, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5 e^{-z} (2z + 3)}{4 z^2}$$

07.25.03.aiz6.01

$${}_2F_2\left(\frac{5}{2}, 3; 3, 4; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z - 4) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.aiz7.01

$${}_2F_2\left(\frac{5}{2}, 3; 3, \frac{9}{2}; z\right) = \frac{35 e^z (4z - 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.aiz8.01

$${}_2F_2\left(\frac{5}{2}, 3; 3, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z + 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.aiz9.01

$${}_2F_2\left(\frac{5}{2}, 3; 3, 5; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.aiza.01

$${}_2F_2\left(\frac{5}{2}, 3; 3, \frac{11}{2}; z\right) = \frac{1575 e^z (2z - 21)}{128 z^4} + \frac{945 \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.aizb.01

$${}_2F_2\left(\frac{5}{2}, 3; 3, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 e^{-z} (2z + 21)}{128 z^4}$$

07.25.03.aizc.01

$${}_2F_2\left(\frac{5}{2}, 3; 3, 6; z\right) = \frac{32 e^{z/2} (z + 8) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (z^2 + 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = \frac{7}{2}$

07.25.03.aizd.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{7}{2}, 4; z\right) = \frac{15 e^z (z - 4)}{2 z^3} + \frac{45 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{5/2}} + \frac{30}{z^3}$$

07.25.03.aize.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{7}{2}, 4; -z\right) = \frac{15 e^{-z} (z + 4)}{2 z^3} + \frac{45 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{5/2}} - \frac{30}{z^3}$$

07.25.03.aizf.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{7}{2}, 5; z\right) = \frac{120 (z + 1)}{z^4} + \frac{30 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}} - \frac{120 e^z}{z^4}$$

07.25.03.aizg.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{7}{2}, 5; -z\right) = -\frac{120 (z - 1)}{z^4} + \frac{30 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}} - \frac{120 e^{-z}}{z^4}$$

07.25.03.aizh.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{7}{2}, 6; z\right) = -\frac{60 e^z (z^2 - 2z + 12)}{z^5} + \frac{60 (5z^2 + 10z + 12)}{z^5} + \frac{60 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.aizi.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{7}{2}, 6; -z\right) = \frac{60 e^{-z} (z^2 + 2z + 12)}{z^5} - \frac{60 (5z^2 - 10z + 12)}{z^5} + \frac{60 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = 4$

07.25.03.aizj.01

$${}_2F_2\left(\frac{5}{2}, 3; 4, 4; z\right) = \frac{48 e^{z/2} (z - 2) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{24 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^2} + \frac{96}{z^3}$$

07.25.03.aizk.01

$${}_2F_2\left(\frac{5}{2}, 3; 4, \frac{9}{2}; z\right) = \frac{315\sqrt{\pi}(2z-5)\operatorname{erfi}(\sqrt{z})}{16z^{7/2}} - \frac{105e^z}{8z^3} + \frac{210}{z^3}$$

07.25.03.aizl.01

$${}_2F_2\left(\frac{5}{2}, 3; 4, \frac{9}{2}; -z\right) = \frac{315\sqrt{\pi}(2z+5)\operatorname{erf}(\sqrt{z})}{16z^{7/2}} + \frac{105e^{-z}}{8z^3} - \frac{210}{z^3}$$

07.25.03.aizm.01

$${}_2F_2\left(\frac{5}{2}, 3; 4, 5; z\right) = \frac{96e^{z/2}(z-4)I_0\left(\frac{z}{2}\right)}{z^3} - \frac{96e^{z/2}(z-4)I_1\left(\frac{z}{2}\right)}{z^3} + \frac{384}{z^3}$$

07.25.03.aizn.01

$${}_2F_2\left(\frac{5}{2}, 3; 4, \frac{11}{2}; z\right) = -\frac{945e^z(6z-35)}{64z^4} + \frac{945\sqrt{\pi}(12z^2-60z-35)\operatorname{erfi}(\sqrt{z})}{128z^{9/2}} + \frac{630}{z^3}$$

07.25.03.aizo.01

$${}_2F_2\left(\frac{5}{2}, 3; 4, \frac{11}{2}; -z\right) = \frac{945e^{-z}(6z+35)}{64z^4} + \frac{945\sqrt{\pi}(12z^2+60z-35)\operatorname{erf}(\sqrt{z})}{128z^{9/2}} - \frac{630}{z^3}$$

07.25.03.aizp.01

$${}_2F_2\left(\frac{5}{2}, 3; 4, 6; z\right) = \frac{192e^{z/2}(z-7)I_0\left(\frac{z}{2}\right)}{z^3} - \frac{192e^{z/2}(z^2-6z-8)I_1\left(\frac{z}{2}\right)}{z^4} + \frac{960}{z^3}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = \frac{9}{2}$

07.25.03.aizq.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{9}{2}, 5; z\right) = -\frac{105e^z(z-8)}{z^4} + \frac{105\sqrt{\pi}(2z-15)\operatorname{erfi}(\sqrt{z})}{2z^{7/2}} + \frac{840(z-1)}{z^4}$$

07.25.03.aizr.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{9}{2}, 5; -z\right) = -\frac{840(z+1)}{z^4} + \frac{105e^{-z}(z+8)}{z^4} + \frac{105\sqrt{\pi}(2z+15)\operatorname{erf}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.aizs.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{9}{2}, 6; z\right) = -\frac{210e^z(z^2-12z-8)}{z^5} + \frac{420(5z^2-10z-4)}{z^5} + \frac{105\sqrt{\pi}(2z-25)\operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aizt.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{9}{2}, 6; -z\right) = \frac{210e^{-z}(z^2+12z-8)}{z^5} - \frac{420(5z^2+10z-4)}{z^5} + \frac{105\sqrt{\pi}(2z+25)\operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = 5$

07.25.03.aizu.01

$${}_2F_2\left(\frac{5}{2}, 3; 5, 5; z\right) = \frac{1536(z-2)}{z^4} + \frac{256e^{z/2}(z^2-12z+12)I_0\left(\frac{z}{2}\right)}{z^4} - \frac{256e^{z/2}(z-11)I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.aizv.01

$${}_2F_2\left(\frac{5}{2}, 3; 5, \frac{11}{2}; z\right) = \frac{2520(z-3)}{z^4} - \frac{945 e^z (2z-29)}{8z^4} + \frac{945 \sqrt{\pi} (4z^2 - 60z + 35) \operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.aizw.01

$${}_2F_2\left(\frac{5}{2}, 3; 5, \frac{11}{2}; -z\right) = -\frac{2520(z+3)}{z^4} + \frac{945 e^{-z} (2z+29)}{8z^4} + \frac{945 \sqrt{\pi} (4z^2 + 60z + 35) \operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.aizx.01

$${}_2F_2\left(\frac{5}{2}, 3; 5, 6; z\right) = \frac{3840(z-4)}{z^4} + \frac{256 e^{z/2} (2z^2 - 39z + 60) I_0\left(\frac{z}{2}\right)}{z^4} - \frac{256 e^{z/2} (2z^2 - 37z + 24) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = \frac{11}{2}$

07.25.03.aizy.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{11}{2}, 6; z\right) = -\frac{945 e^z (2z^2 - 49z + 64)}{4z^5} + \frac{1260(5z^2 - 30z + 12)}{z^5} + \frac{945 \sqrt{\pi} (4z^2 - 100z + 175) \operatorname{erfi}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.aizz.01

$${}_2F_2\left(\frac{5}{2}, 3; \frac{11}{2}, 6; -z\right) = \frac{945 e^{-z} (2z^2 + 49z + 64)}{4z^5} - \frac{1260(5z^2 + 30z + 12)}{z^5} + \frac{945 \sqrt{\pi} (4z^2 + 100z + 175) \operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 3$, $b_1 = 6$

07.25.03.aj00.01

$${}_2F_2\left(\frac{5}{2}, 3; 6, 6; z\right) = \frac{1920(5z^2 - 40z + 32)}{z^5} + \frac{1024 e^{z/2} (z^3 - 32z^2 + 105z - 60) I_0\left(\frac{z}{2}\right)}{z^5} - \frac{512 e^{z/2} (2z^2 - 62z + 149) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.aj01.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{4862521125} \left(e^z (131072z^{17} + 13959168z^{16} + 607911936z^{15} + 14115274752z^{14} + 191172280320z^{13} + 1554052792320z^{12} + 7528390410240z^{11} + 20899356549120z^{10} + 30667880033280z^9 + 20378941632000z^8 + 4380556723200z^7 + 94951180800z^6 + 1867017600z^5 + 400075200z^4 - 285768000z^3 + 1571724000z^2 - 3456006750z + 4862521125) \right)$$

07.25.03.aj02.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{442047375} \left(e^z (65536z^{16} + 6291456z^{15} + 244187136z^{14} + 4982046720z^{13} + 58220789760z^{12} + 398591262720z^{11} + 1571943260160z^{10} + 3375933603840z^9 + 3518172403200z^8 + 1394039808000z^7 + 99218649600z^6 - 2133734400z^5 - 133358400z^4 - 142884000z^2 + 285768000z - 442047375) \right)$$

07.25.03.aj03.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{49116375} \left(e^z (32768z^{15} + 2801664z^{14} + 95477760z^{13} + 1679462400z^{12} + 16514426880z^{11} + 91951856640z^{10} + 280236418560z^9 + 426902918400z^8 + 264925987200z^7 + 34704936000z^6 - 2448079200z^5 + 157172400z^4 + 11907000z^3 + 17860500z^2 - 26790750z + 49116375) \right)$$

07.25.03.aj04.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{7016625} \left(e^z (16384z^{14} + 1228800z^{13} + 36065280z^{12} + 533176320z^{11} + 4258391040z^{10} + 18296386560z^9 + 39488083200z^8 + 35755084800z^7 + 7320196800z^6 - 948024000z^5 + 197996400z^4 - 20412000z^3 - 4252500z^2 + 2551500z - 7016625) \right)$$

07.25.03.aj05.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{1403325} \left(e^z (8192z^{13} + 528384z^{12} + 13012992z^{11} + 155977728z^{10} + 959362560z^9 + 2912336640z^8 + 3726190080z^7 + 1109687040z^6 - 223806240z^5 + 85503600z^4 - 29257200z^3 + 4422600z^2 + 85050z + 1403325) \right)$$

07.25.03.aj06.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{467775} \left(e^z (4096z^{12} + 221184z^{11} + 4405248z^{10} + 40544256z^9 + 175599360z^8 + 314772480z^7 + 131846400z^6 - 38465280z^5 + 22725360z^4 - 14061600z^3 + 6463800z^2 - 1020600z - 467775) \right)$$

07.25.03.aj07.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{467775} \left(e^z (2048z^{11} + 89088z^{10} + 1356288z^9 + 8743680z^8 + 22222080z^7 + 12942720z^6 - 5261760z^5 + 4445280z^4 - 4195800z^3 + 3458700z^2 - 1956150z + 467775) \right)$$

07.25.03.aj08.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{467775} \left(e^{z/2} (1024 z^{11} + 39936 z^{10} + 533760 z^9 + 2928384 z^8 + 5997312 z^7 + 2338560 z^6 - 761040 z^5 + 637200 z^4 - 742500 z^3 + 936900 z^2 - 978075 z + 467775) I_0\left(\frac{z}{2}\right) + \frac{1}{467775} \left(e^{z/2} (1024 z^{11} + 38912 z^{10} + 495360 z^9 + 2451456 z^8 + 3757824 z^7 - 580608 z^6 + 357840 z^5 - 360000 z^4 + 445500 z^3 - 545400 z^2 + 462375 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.aj09.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{467775} \left(e^z (1024 z^{10} + 33792 z^9 + 357120 z^8 + 1336320 z^7 + 1088640 z^6 - 604800 z^5 + 695520 z^4 - 907200 z^3 + 1077300 z^2 - 963900 z + 467775) \right)$$

07.25.03.aj0a.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{467775} \left(e^{z/2} (1024 z^{10} + 29184 z^9 + 255744 z^8 + 734208 z^7 + 338688 z^6 - 131040 z^5 + 133200 z^4 - 194400 z^3 + 324540 z^2 - 504630 z + 467775) I_0\left(\frac{z}{2}\right) + \frac{1}{467775} \left(e^{z/2} (1024 z^{10} + 28160 z^9 + 228096 z^8 + 519168 z^7 - 91392 z^6 + 66528 z^5 - 82800 z^4 + 136800 z^3 - 254340 z^2 + 431190 z - 405405) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.aj0b.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{155925} e^z (512 z^9 + 11520 z^8 + 69120 z^7 + 80640 z^6 - 60480 z^5 + 90720 z^4 - 151200 z^3 + 226800 z^2 - 255150 z + 155925)$$

07.25.03.aj0c.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{467775} \left(8 e^{z/2} (256 z^9 + 4608 z^8 + 19968 z^7 + 10752 z^6 - 5040 z^5 + 7200 z^4 - 18000 z^3 + 56160 z^2 - 161595 z + 311850) I_0\left(\frac{z}{2}\right) + \frac{1}{467775} \left(4 e^{z/2} (512 z^{10} + 8704 z^9 + 31488 z^8 - 6144 z^7 + 4704 z^6 - 4320 z^5 - 3600 z^4 + 53280 z^3 - 250830 z^2 + 810810 z - 2027025) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.aj0d.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z (256 z^8 + 3072 z^7 + 5376 z^6 - 5376 z^5 + 10080 z^4 - 20160 z^3 + 35280 z^2 - 45360 z + 31185)}{31185}$$

07.25.03.aj0e.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{155925 z} \left(4 e^{z/2} (512 z^9 + 3840 z^8 + 3072 z^7 - 6720 z^6 + 41760 z^5 - 255600 z^4 + 1337760 z^3 - 5647320 z^2 + 17775450 z - 34459425) I_0\left(\frac{z}{2}\right) + \frac{1}{155925 z^2} \left(4 e^{z/2} (512 z^{10} + 3328 z^9 - 5568 z^7 + 45600 z^6 - 300240 z^5 + 1657440 z^4 - 7505640 z^3 + 26756730 z^2 - 70945875 z + 137837700) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.aj0f.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{4455 z^3} \left(e^z (128 z^{10} + 192 z^9 + 864 z^8 - 10032 z^7 + 80280 z^6 - 531900 z^5 + 2943090 z^4 - 13266585 z^3 + 46448640 z^2 - 116121600 z + 174182400) - \frac{215040 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{7/2}} \right)$$

07.25.03.aj0g.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{4455 z^3} \left(e^{-z} (-128 z^{10} + 192 z^9 - 864 z^8 - 10032 z^7 - 80280 z^6 - 531900 z^5 - 2943090 z^4 - 13266585 z^3 - 46448640 z^2 - 116121600 z - 174182400) + \frac{215040 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{7/2}} \right)$$

07.25.03.aj0h.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{155925 z^2} \left(32 e^{z/2} (256 z^9 - 768 z^8 + 8640 z^7 - 75840 z^6 + 581040 z^5 - 3828240 z^4 + 21115080 z^3 - 93555000 z^2 + 310134825 z - 654729075) I_0\left(\frac{z}{2}\right) + \frac{1}{155925 z^3} \left(32 e^{z/2} (256 z^{10} - 1024 z^9 + 9792 z^8 - 86400 z^7 + 674160 z^6 - 4561920 z^5 + 26161560 z^4 - 123243120 z^3 + 456080625 z^2 - 1240539300 z + 2618916300) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.aj0i.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{495 z^4} \left(e^z (64 z^{10} - 576 z^9 + 5904 z^8 - 55200 z^7 + 454140 z^6 - 3217860 z^5 + 19169775 z^4 - 92897280 z^3 + 348364800 z^2 - 928972800 z + 1524096000) \right) - \frac{483840 \sqrt{\pi} (2z + 35) \operatorname{erfi}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.aj0j.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{495 z^4} \left(e^{-z} (64 z^{10} + 576 z^9 + 5904 z^8 + 55200 z^7 + 454140 z^6 + 3217860 z^5 + 19169775 z^4 + 92897280 z^3 + 348364800 z^2 + 928972800 z + 1524096000) \right) + \frac{483840 \sqrt{\pi} (2z - 35) \operatorname{erf}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.aj0k.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{31185 z^3} \left(32 e^{z/2} (256 z^9 - 3456 z^8 + 41280 z^7 - 423744 z^6 + 3721968 z^5 - 27624240 z^4 + 169396920 z^3 - 827026200 z^2 + 3011753745 z - 7332965640) I_0\left(\frac{z}{2}\right) + \frac{1}{31185 z^4} \left(32 e^{z/2} (256 z^{10} - 3712 z^9 + 45120 z^8 - 470976 z^7 + 4220016 z^6 - 32139792 z^5 + 204324120 z^4 - 1054053000 z^3 + 4224725505 z^2 - 12047014980 z + 29331862560) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.aj0l.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{40186125} \left(e^z (32768 z^{15} + 2834432 z^{14} + 98000896 z^{13} + 1756016640 z^{12} + 17696286720 z^{11} + 101966054400 z^{10} + 327124385280 z^9 + 543031453440 z^8 + 401507568000 z^7 + 94758552000 z^6 + 2230048800 z^5 + 48157200 z^4 + 5556600 z^3 + 13891500 z^2 - 22821750 z + 40186125) \right)$$

07.25.03.aj0m.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{4465125} \left(e^z (16384 z^{14} + 1261568 z^{13} + 38277120 z^{12} + 590929920 z^{11} + 5007098880 z^{10} + 23443983360 z^9 + 58064267520 z^8 + 68290790400 z^7 + 30026808000 z^6 + 2339064000 z^5 - 54507600 z^4 - 3175200 z^3 - 1984500 z^2 + 1984500 z - 4465125) \right)$$

$$\begin{aligned}
 & \text{07.25.03.aj0n.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) &= \frac{1}{637875} \\
 & \left(e^z (8192 z^{13} + 552960 z^{12} + 14438400 z^{11} + 187176960 z^{10} + 1286899200 z^9 + 4644046080 z^8 + 8133926400 z^7 + \right. \\
 & \left. 5676652800 z^6 + 821772000 z^5 - 63126000 z^4 + 4309200 z^3 + 567000 z^2 - 141750 z + 637875)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aj0o.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) &= \\
 & -\frac{1}{127575} \left(e^z (4096 z^{12} + 237568 z^{11} + 5199872 z^{10} + 54589440 z^9 + 288618240 z^8 + 734622720 z^7 + \right. \\
 & \left. 761160960 z^6 + 174263040 z^5 - 24771600 z^4 + 5594400 z^3 - 642600 z^2 - 37800 z - 127575)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aj0p.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) &= \\
 & \frac{1}{42525} \left(e^z (2048 z^{11} + 99328 z^{10} + 1755648 z^9 + 14127360 z^8 + 52481280 z^7 + 78664320 z^6 + 26591040 z^5 - \right. \\
 & \left. 5937120 z^4 + 2457000 z^3 - 888300 z^2 + 122850 z + 42525)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aj0q.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) &= \\
 & -\frac{1}{42525} \left(e^z (1024 z^{10} + 39936 z^9 + 538368 z^8 + 3025920 z^7 + 6572160 z^6 + 3185280 z^5 - 1038240 z^4 + \right. \\
 & \left. 665280 z^3 - 434700 z^2 + 207900 z - 42525)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aj0r.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, 1; z\right) &= \\
 & \frac{1}{42525} \left(e^{z/2} (-512 z^{10} - 17920 z^9 - 212736 z^8 - 1026048 z^7 - 1837920 z^6 - 655200 z^5 + 190800 z^4 - 136800 z^3 + \right. \\
 & \left. 125550 z^2 - 103950 z + 42525) I_0\left(\frac{z}{2}\right) - \frac{1}{42525} \left(2 e^{z/2} (256 z^{10} + 8704 z^9 + 97792 z^8 + \right. \right. \\
 & \left. \left. 419328 z^7 + 540624 z^6 - 77280 z^5 + 42480 z^4 - 36000 z^3 + 33525 z^2 - 22950 z) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aj0s.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) &= -\frac{1}{42525} \\
 & \left(e^z (512 z^9 + 15104 z^8 + 140800 z^7 + 456960 z^6 + 315840 z^5 - 144480 z^4 + 131040 z^3 - 126000 z^2 + 97650 z - 42525)\right)
 \end{aligned}$$

07.25.03.aj0t.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{42525} \left(e^{z/2} (-512 z^9 - 13056 z^8 - 101376 z^7 - 256704 z^6 - 110880 z^5 + 39600 z^4 - 36000 z^3 + 44280 z^2 - 54810 z + 42525) \right. \\ \left. I_0\left(\frac{z}{2}\right) + \frac{1}{42525} \left(e^{z/2} (-512 z^9 - 12544 z^8 - 89088 z^7 - 173376 z^6 + 28896 z^5 - 19440 z^4 + 21600 z^3 - 29880 z^2 + 40230 z - 31185) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.aj0u.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{14175} e^z (256 z^8 + 5120 z^7 + 26880 z^6 + 26880 z^5 - 16800 z^4 + 20160 z^3 - 25200 z^2 + 25200 z - 14175)$$

07.25.03.aj0v.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, 3; z\right) = -\frac{1}{42525} 4 e^{z/2} (256 z^8 + 4096 z^7 + 15680 z^6 + 8064 z^5 - 3600 z^4 + 4800 z^3 - 10440 z^2 + 25200 z - 44415) I_0\left(\frac{z}{2}\right) - \\ \frac{1}{42525 z} 4 e^{z/2} (256 z^9 + 3840 z^8 + 11968 z^7 - 2240 z^6 + 1584 z^5 - 1200 z^4 - 1560 z^3 + 14040 z^2 - 51975 z + 135135) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj0w.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{e^z (128 z^7 + 1344 z^6 + 2016 z^5 - 1680 z^4 + 2520 z^3 - 3780 z^2 + 4410 z - 2835)}{2835}$$

07.25.03.aj0x.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, 4; z\right) = -\frac{1}{14175 z} 4 e^{z/2} (256 z^8 + 1664 z^7 + 1344 z^6 - 2880 z^5 + 15600 z^4 - 79920 z^3 + 335160 z^2 - 1050840 z + 2027025) I_0\left(\frac{z}{2}\right) - \\ \frac{1}{14175 z^2} \left(4 e^{z/2} (256 z^9 + 1408 z^8 + 64 z^7 - 2496 z^6 + 17520 z^5 - 97680 z^4 + 443160 z^3 - 1580040 z^2 + 4189185 z - 8108100) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.aj0y.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{405 z^3} e^z (-64 z^9 - 64 z^8 - 464 z^7 + 4320 z^6 - 29340 z^5 + 163260 z^4 - 736875 z^3 + 2580480 z^2 - 6451200 z + 9676800) - \\ \frac{35840 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{3 z^{7/2}}$$

07.25.03.aj0z.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{405 z^3} e^{-z} (-64 z^9 + 64 z^8 - 464 z^7 - 4320 z^6 - 29340 z^5 - 163260 z^4 - 736875 z^3 - 2580480 z^2 - 6451200 z - 9676800) + \frac{35840 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{3 z^{7/2}}$$

07.25.03.aj10.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, 5; z\right) = -\frac{1}{14175 z^2} \left(32 e^{z/2} (128 z^8 - 384 z^7 + 3840 z^6 - 29760 z^5 + 197280 z^4 - 1093680 z^3 + 4868640 z^2 - 16216200 z + 34459425) I_0\left(\frac{z}{2}\right) - \frac{1}{14175 z^3} \left(128 e^{z/2} (32 z^9 - 128 z^8 + 1104 z^7 - 8640 z^6 + 58740 z^5 - 338400 z^4 + 1600830 z^3 - 5945940 z^2 + 16216200 z - 34459425) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.aj11.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{45 z^4} \left(e^z (-32 z^9 + 272 z^8 - 2544 z^7 + 21240 z^6 - 152730 z^5 + 921645 z^4 - 4515840 z^3 + 17095680 z^2 - 45964800 z + 76204800) - \frac{13440 \sqrt{\pi} (4z + 63) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}\right)$$

07.25.03.aj12.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{45 z^4} \left(e^{-z} (32 z^9 + 272 z^8 + 2544 z^7 + 21240 z^6 + 152730 z^5 + 921645 z^4 + 4515840 z^3 + 17095680 z^2 + 45964800 z + 76204800) + \frac{13440 \sqrt{\pi} (4z - 63) \operatorname{erf}(\sqrt{z})}{z^{9/2}}\right)$$

07.25.03.aj13.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{9}{2}, 6; z\right) = -\frac{1}{2835 z^3} \left(32 e^{z/2} (128 z^8 - 1600 z^7 + 17344 z^6 - 158448 z^5 + 1211280 z^4 - 7602840 z^3 + 37837800 z^2 - 140134995 z + 349188840) I_0\left(\frac{z}{2}\right) - \frac{1}{2835 z^4} \left(32 e^{z/2} (128 z^9 - 1728 z^8 + 19136 z^7 - 178576 z^6 + 1401552 z^5 - 9119880 z^4 + 47927880 z^3 - 194999805 z^2 + 560539980 z - 1396755360) I_1\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.aj14.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) &= \frac{1}{496125} \\
 & \left(e^z (8192 z^{13} + 561152 z^{12} + 14929920 z^{11} + 198420480 z^{10} + 1412236800 z^9 + 5366926080 z^8 + 10247892480 z^7 + \right. \\
 & \left. 8525664000 z^6 + 2224908000 z^5 + 57078000 z^4 + 1285200 z^3 + 340200 z^2 - 141750 z + 496125)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aj15.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) &= \\
 & -\frac{1}{70875} \left(e^z (4096 z^{12} + 245760 z^{11} + 5621760 z^{10} + 62668800 z^9 + 361440000 z^8 + 1056983040 z^7 + \right. \\
 & \left. 1424505600 z^6 + 701568000 z^5 + 60102000 z^4 - 1512000 z^3 - 113400 z^2 - 70875)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aj16.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) &= \\
 & \frac{1}{14175} \left(e^z (2048 z^{11} + 105472 z^{10} + 2019840 z^9 + 18205440 z^8 + 80590080 z^7 + 165836160 z^6 + 131826240 z^5 + \right. \\
 & \left. 21218400 z^4 - 1776600 z^3 + 132300 z^2 + 9450 z + 14175)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aj17.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) &= \\
 & -\frac{1}{4725} \left(e^z (1024 z^{10} + 44032 z^9 + 679680 z^8 + 4684800 z^7 + 14528640 z^6 + 17539200 z^5 + 4525920 z^4 - \right. \\
 & \left. 705600 z^3 + 170100 z^2 - 18900 z - 4725)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aj18.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) &= \\
 & \frac{1}{4725} e^z (512 z^9 + 17664 z^8 + 207360 z^7 + 994560 z^6 + 1794240 z^5 + 695520 z^4 - 171360 z^3 + 75600 z^2 - 28350 z + 4725)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aj19.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, 1; z\right) &= \frac{1}{4725} \left(e^{z/2} \right. \\
 & \left. (256 z^9 + 7936 z^8 + 82368 z^7 + 342720 z^6 + 525360 z^5 + 166320 z^4 - 41400 z^3 + 23400 z^2 - 14175 z + 4725) I_0\left(\frac{z}{2}\right) + \right. \\
 & \left. \frac{1}{4725} e^{z/2} (256 z^9 + 7680 z^8 + 74816 z^7 + 271488 z^6 + 284400 z^5 - 36480 z^4 + 16920 z^3 - 10800 z^2 + 5625 z) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aj1a.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) &= \frac{e^z (256 z^8 + 6656 z^7 + 53760 z^6 + 147840 z^5 + 84000 z^4 - 30240 z^3 + 20160 z^2 - 12600 z + 4725)}{4725}
 \end{aligned}$$

07.25.03.aj1b.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{4725} e^{z/2} (256 z^8 + 5760 z^7 + 38976 z^6 + 85440 z^5 + 33840 z^4 - 10800 z^3 + 8280 z^2 - 7560 z + 4725) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (256 z^8 + 5504 z^7 + 33600 z^6 + 54336 z^5 - 8400 z^4 + 5040 z^3 - 4680 z^2 + 4680 z - 2835) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.aj1c.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575)}{1575}$$

07.25.03.aj1d.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, 3; z\right) = \frac{16 e^{z/2} (32 z^7 + 448 z^6 + 1488 z^5 + 720 z^4 - 300 z^3 + 360 z^2 - 630 z + 945) I_0\left(\frac{z}{2}\right)}{4725} + \frac{4 e^{z/2} (128 z^8 + 1664 z^7 + 4352 z^6 - 768 z^5 + 480 z^4 - 240 z^3 - 720 z^2 + 3780 z - 10395) I_1\left(\frac{z}{2}\right)}{4725 z}$$

07.25.03.aj1e.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315)$$

07.25.03.aj1f.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (128 z^7 + 704 z^6 + 576 z^5 - 1200 z^4 + 5520 z^3 - 22680 z^2 + 70560 z - 135135) I_0\left(\frac{z}{2}\right)}{1575 z} + \frac{1}{1575 z^2} 4 e^{z/2} (128 z^8 + 576 z^7 + 64 z^6 - 1104 z^5 + 6480 z^4 - 29640 z^3 + 105840 z^2 - 280665 z + 540540) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj1g.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (32 z^8 + 16 z^7 + 240 z^6 - 1800 z^5 + 10170 z^4 - 46035 z^3 + 161280 z^2 - 403200 z + 604800)}{45 z^3} - \frac{6720 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aj1h.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} (-32 z^8 + 16 z^7 - 240 z^6 - 1800 z^5 - 10170 z^4 - 46035 z^3 - 161280 z^2 - 403200 z - 604800)}{45 z^3} + \frac{6720 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aj1i.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (64 z^7 - 192 z^6 + 1680 z^5 - 11280 z^4 + 63000 z^3 - 282240 z^2 + 945945 z - 2027025) I_0\left(\frac{z}{2}\right)}{1575 z^2} + \frac{1}{1575 z^3} 32 e^{z/2} (64 z^8 - 256 z^7 + 1968 z^6 - 13440 z^5 + 77880 z^4 - 370440 z^3 + 1382535 z^2 - 3783780 z + 8108100) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj1j.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{5z^4} e^z (16z^8 - 128z^7 + 1080z^6 - 7920z^5 + 48645z^4 - 241920z^3 + 927360z^2 - 2520000z + 4233600) - \frac{30240\sqrt{\pi}(z+14)\operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.aj1k.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{5z^4} e^{-z} (16z^8 + 128z^7 + 1080z^6 + 7920z^5 + 48645z^4 + 241920z^3 + 927360z^2 + 2520000z + 4233600) + \frac{30240\sqrt{\pi}(z-14)\operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.aj1l.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{315z^3} 32e^{z/2} (64z^7 - 736z^6 + 7152z^5 - 57120z^4 + 370440z^3 - 1891890z^2 + 7162155z - 18378360) I_0\left(\frac{z}{2}\right) + \frac{1}{315z^4} (32e^{z/2} (64z^8 - 800z^7 + 7984z^6 - 65568z^5 + 441000z^4 - 2376990z^3 + 9864855z^2 - 28648620z + 73513440) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = \frac{5}{2}, a_2 = \frac{7}{2}, b_1 = -\frac{5}{2}$

07.25.03.aj1m.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{10125} (e^z (2048z^{11} + 107520z^{10} + 2112000z^9 + 19718400z^8 + 91987200z^7 + 206536320z^6 + 195912000z^5 + 56916000z^4 + 1593000z^3 + 40500z^2 + 4050z + 10125))$$

07.25.03.aj1n.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{2025} (e^z (1024z^{10} + 46080z^9 + 756480z^8 + 5698560z^7 + 20350080z^6 + 32042880z^5 + 17848800z^4 + 1684800z^3 - 45900z^2 - 2700z - 2025))$$

07.25.03.aj1o.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{675} e^z (512z^9 + 19200z^8 + 253440z^7 + 1455360z^6 + 3625920z^5 + 3330720z^4 + 597600z^3 - 54000z^2 + 4050z + 675)$$

07.25.03.aj1p.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{675} e^z (256 z^8 + 7680 z^7 + 76800 z^6 + 305280 z^5 + 439200 z^4 + 128160 z^3 - 21600 z^2 + 5400 z - 675)$$

07.25.03.aj1q.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{675} e^{z/2} (-128 z^8 - 3456 z^7 - 30720 z^6 - 107520 z^5 - 136800 z^4 - 36720 z^3 + 7200 z^2 - 2700 z + 675) I_0\left(\frac{z}{2}\right) - \frac{4}{675} e^{z/2} (32 z^8 + 832 z^7 + 6864 z^6 + 20400 z^5 + 16500 z^4 - 1800 z^3 + 630 z^2 - 225 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj1r.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{675} e^z (128 z^7 + 2880 z^6 + 19680 z^5 + 44400 z^4 + 19800 z^3 - 5220 z^2 + 2250 z - 675)$$

07.25.03.aj1s.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{675} e^{z/2} (-128 z^7 - 2496 z^6 - 14400 z^5 - 26640 z^4 - 9360 z^3 + 2520 z^2 - 1440 z + 675) I_0\left(\frac{z}{2}\right) + \frac{1}{675} e^{z/2} (-128 z^7 - 2368 z^6 - 12096 z^5 - 15600 z^4 + 2160 z^3 - 1080 z^2 + 720 z - 315) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj1t.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{1}{225} e^z (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225)$$

07.25.03.aj1u.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, 3; z\right) = -\frac{4}{675} e^{z/2} (64 z^6 + 768 z^5 + 2160 z^4 + 960 z^3 - 360 z^2 + 360 z - 405) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (64 z^7 + 704 z^6 + 1488 z^5 - 240 z^4 + 120 z^3 - 315 z + 945) I_1\left(\frac{z}{2}\right)}{675 z}$$

07.25.03.aj1v.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{1}{45} e^z (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45)$$

07.25.03.aj1w.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, 4; z\right) = -\frac{4 e^{z/2} (64 z^6 + 288 z^5 + 240 z^4 - 480 z^3 + 1800 z^2 - 5490 z + 10395) I_0\left(\frac{z}{2}\right)}{225 z} - \frac{4 e^{z/2} (64 z^7 + 224 z^6 + 48 z^5 - 480 z^4 + 2280 z^3 - 8190 z^2 + 21735 z - 41580) I_1\left(\frac{z}{2}\right)}{225 z^2}$$

07.25.03.aj1x.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7 e^z (16 z^7 + 120 z^5 - 720 z^4 + 3285 z^3 - 11520 z^2 + 28800 z - 43200)}{45 z^3} - \frac{3360 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aj1y.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{3360 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}} - \frac{7 e^{-z} (16 z^7 + 120 z^5 + 720 z^4 + 3285 z^3 + 11520 z^2 + 28800 z + 43200)}{45 z^3}$$

07.25.03.aj1z.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, 5; z\right) = -\frac{32 e^{z/2} (32 z^6 - 96 z^5 + 720 z^4 - 4080 z^3 + 18450 z^2 - 62370 z + 135135) I_0\left(\frac{z}{2}\right)}{225 z^2} - \frac{64 e^{z/2} (16 z^7 - 64 z^6 + 432 z^5 - 2520 z^4 + 12075 z^3 - 45360 z^2 + 124740 z - 270270) I_1\left(\frac{z}{2}\right)}{225 z^3}$$

07.25.03.aj20.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{7 e^z (8 z^7 - 60 z^6 + 450 z^5 - 2835 z^4 + 14400 z^3 - 56160 z^2 + 154800 z - 264600)}{5 z^4} - \frac{3780 \sqrt{\pi} (4 z + 49) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.aj21.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{7 e^{-z} (8 z^7 + 60 z^6 + 450 z^5 + 2835 z^4 + 14400 z^3 + 56160 z^2 + 154800 z + 264600)}{5 z^4} + \frac{3780 \sqrt{\pi} (4 z - 49) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.aj22.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{5}{2}, 6; z\right) = -\frac{32 e^{z/2} (32 z^6 - 336 z^5 + 2880 z^4 - 19620 z^3 + 103950 z^2 - 405405 z + 1081080) I_0\left(\frac{z}{2}\right)}{45 z^3} - \frac{1}{45 z^4} 32 e^{z/2} (32 z^7 - 368 z^6 + 3264 z^5 - 23100 z^4 + 129150 z^3 - 550935 z^2 + 1621620 z - 4324320) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.aj23.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{405} e^z (512 z^9 + 19712 z^8 + 269824 z^7 + 1635072 z^6 + 4452288 z^5 + 4890720 z^4 + 1588320 z^3 + 48240 z^2 + 1170 z + 405)$$

07.25.03.aj24.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{135} e^z (256 z^8 + 8192 z^7 + 89856 z^6 + 413184 z^5 + 780000 z^4 + 495360 z^3 + 51120 z^2 - 1440 z - 135)$$

07.25.03.aj25.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{135} e^z (128 z^7 + 3264 z^6 + 26976 z^5 + 85200 z^4 + 91800 z^3 + 18180 z^2 - 1710 z + 135)$$

07.25.03.aj26.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{135} e^{z/2} (64 z^7 + 1472 z^6 + 10896 z^5 + 30960 z^4 + 31224 z^3 + 6552 z^2 - 855 z + 135) I_0\left(\frac{z}{2}\right) + \frac{1}{135} e^{z/2} (64 z^7 + 1408 z^6 + 9520 z^5 + 22080 z^4 + 12696 z^3 - 1056 z^2 + 207 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj27.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{135} e^z (64 z^6 + 1216 z^5 + 6800 z^4 + 12000 z^3 + 3900 z^2 - 660 z + 135)$$

07.25.03.aj28.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{135} e^{z/2} (64 z^6 + 1056 z^5 + 5040 z^4 + 7584 z^3 + 2232 z^2 - 450 z + 135) I_0\left(\frac{z}{2}\right) + \frac{1}{135} e^{z/2} (64 z^6 + 992 z^5 + 4080 z^4 + 3936 z^3 - 456 z^2 + 162 z - 45) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj29.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{45} e^z (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45)$$

07.25.03.aj2a.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, 3; z\right) = \frac{8}{135} e^{z/2} (16 z^5 + 160 z^4 + 368 z^3 + 144 z^2 - 45 z + 30) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (32 z^6 + 288 z^5 + 464 z^4 - 64 z^3 + 18 z^2 + 30 z - 105) I_1\left(\frac{z}{2}\right)}{135 z}$$

07.25.03.aj2b.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{9} e^z (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9)$$

07.25.03.aj2c.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 + 112 z^4 + 96 z^3 - 180 z^2 + 510 z - 945) I_0\left(\frac{z}{2}\right)}{45 z} + \frac{4 e^{z/2} (32 z^6 + 80 z^5 + 32 z^4 - 204 z^3 + 750 z^2 - 1995 z + 3780) I_1\left(\frac{z}{2}\right)}{45 z^2}$$

07.25.03.aj2d.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (8 z^6 - 4 z^5 + 58 z^4 - 273 z^3 + 960 z^2 - 2400 z + 3600)}{9 z^3} - \frac{1400 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aj2e.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1400 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}} - \frac{7 e^{-z} (8 z^6 + 4 z^5 + 58 z^4 + 273 z^3 + 960 z^2 + 2400 z + 3600)}{9 z^3}$$

07.25.03.aj2f.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^5 - 48 z^4 + 300 z^3 - 1380 z^2 + 4725 z - 10395) I_0\left(\frac{z}{2}\right)}{45 z^2} + \frac{32 e^{z/2} (16 z^6 - 64 z^5 + 372 z^4 - 1800 z^3 + 6825 z^2 - 18900 z + 41580) I_1\left(\frac{z}{2}\right)}{45 z^3}$$

07.25.03.aj2g.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{7 e^z (4 z^6 - 28 z^5 + 183 z^4 - 960 z^3 + 3840 z^2 - 10800 z + 18900)}{z^4} - \frac{3150 \sqrt{\pi} (2 z + 21) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.aj2h.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{7 e^{-z} (4 z^6 + 28 z^5 + 183 z^4 + 960 z^3 + 3840 z^2 + 10800 z + 18900)}{z^4} + \frac{3150 \sqrt{\pi} (2 z - 21) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.aj2i.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 - 152 z^4 + 1124 z^3 - 6300 z^2 + 25641 z - 72072) I_0\left(\frac{z}{2}\right)}{9 z^3} + \frac{32 e^{z/2} (16 z^6 - 168 z^5 + 1300 z^4 - 7700 z^3 + 34209 z^2 - 102564 z + 288288) I_1\left(\frac{z}{2}\right)}{9 z^4}$$

For fixed z and $a_1 = \frac{5}{2}, a_2 = \frac{7}{2}, b_1 = -\frac{1}{2}$

07.25.03.aj2j.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{45} e^z (128 z^7 + 3392 z^6 + 29664 z^5 + 102768 z^4 + 133080 z^3 + 48060 z^2 + 1530 z + 45)$$

07.25.03.aj2k.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{45} e^z (64 z^6 + 1344 z^5 + 8784 z^4 + 20640 z^3 + 14940 z^2 + 1620 z - 45)$$

07.25.03.aj2l.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{45} e^{z/2} (-32 z^6 - 608 z^5 - 3600 z^4 - 7872 z^3 - 5826 z^2 - 810 z + 45) I_0\left(\frac{z}{2}\right) - \frac{2}{45} e^{z/2} (16 z^6 + 288 z^5 + 1520 z^4 + 2544 z^3 + 891 z^2 - 42 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj2m.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{45} e^z (32 z^5 + 496 z^4 + 2160 z^3 + 2760 z^2 + 570 z - 45)$$

07.25.03.aj2n.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{45} e^{z/2} (-32 z^5 - 432 z^4 - 1632 z^3 - 1884 z^2 - 414 z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (-32 z^5 - 400 z^4 - 1248 z^3 - 804 z^2 + 66 z - 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj2o.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{1}{15} e^z (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15)$$

07.25.03.aj2p.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, 3; z\right) = -\frac{4}{45} e^{z/2} (16 z^4 + 128 z^3 + 228 z^2 + 72 z - 15) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (16 z^5 + 112 z^4 + 124 z^3 - 12 z^2 - 3 z + 15) I_1\left(\frac{z}{2}\right)}{45 z}$$

07.25.03.aj2q.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{1}{3} e^z (8z^3 + 36z^2 + 18z - 3)$$

07.25.03.aj2r.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (16z^4 + 40z^3 + 36z^2 - 60z + 105) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (16z^5 + 24z^4 + 20z^3 - 84z^2 + 225z - 420) I_1\left(\frac{z}{2}\right)}{15z - 15z^2}$$

07.25.03.aj2s.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{7 e^z (4z^5 - 4z^4 + 27z^3 - 96z^2 + 240z - 360)}{3z^3} - \frac{420 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.aj2t.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{420 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}} - \frac{7 e^{-z} (4z^5 + 4z^4 + 27z^3 + 96z^2 + 240z + 360)}{3z^3}$$

07.25.03.aj2u.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (8z^4 - 24z^3 + 120z^2 - 420z + 945) I_0\left(\frac{z}{2}\right) - 128 e^{z/2} (2z^5 - 8z^4 + 39z^3 - 150z^2 + 420z - 945) I_1\left(\frac{z}{2}\right)}{15z^2 - 15z^3}$$

07.25.03.aj2v.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{21 e^z (2z^5 - 13z^4 + 72z^3 - 300z^2 + 870z - 1575)}{z^4} - \frac{945 \sqrt{\pi} (4z + 35) \operatorname{erfi}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.aj2w.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (2z^5 + 13z^4 + 72z^3 + 300z^2 + 870z + 1575)}{z^4} + \frac{945 \sqrt{\pi} (4z - 35) \operatorname{erf}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.aj2x.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; -\frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (8z^4 - 68z^3 + 420z^2 - 1827z + 5544) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (8z^5 - 76z^4 + 500z^3 - 2373z^2 + 7308z - 22176) I_1\left(\frac{z}{2}\right)}{3z^3 - 3z^4}$$

For fixed z and $a_1 = \frac{5}{2}, a_2 = \frac{7}{2}, b_1 = \frac{1}{2}$

07.25.03.aj2y.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{45} e^z (32z^5 + 528z^4 + 2544z^3 + 3960z^2 + 1530z + 45)$$

07.25.03.aj2z.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}, \frac{1}{2}; 1; z\right) = \frac{1}{45} e^{z/2} (16z^5 + 240z^4 + 1068z^3 + 1644z^2 + 765z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (16z^5 + 224z^4 + 852z^3 + 888z^2 + 129z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj30.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}, \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{45} e^z (16z^4 + 192z^3 + 600z^2 + 480z + 45)$$

07.25.03.aj31.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}, \frac{1}{2}, 2; z\right) = \frac{1}{45} e^{z/2} (16z^4 + 168z^3 + 468z^2 + 372z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (16z^4 + 152z^3 + 324z^2 + 108z - 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj32.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}, \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{15} e^z (8z^3 + 60z^2 + 90z + 15)$$

07.25.03.aj33.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}, \frac{1}{2}, 3; z\right) = \frac{16}{45} e^{z/2} (2z^3 + 12z^2 + 15z + 3) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8z^4 + 40z^3 + 24z^2 - 3) I_1\left(\frac{z}{2}\right)}{45z}$$

07.25.03.aj34.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}, \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{3} e^z (4z^2 + 12z + 3)$$

07.25.03.aj35.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}, \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 + 12z^2 + 12z - 15) I_0\left(\frac{z}{2}\right)}{15z} + \frac{4 e^{z/2} (8z^4 + 4z^3 + 12z^2 - 33z + 60) I_1\left(\frac{z}{2}\right)}{15z^2}$$

07.25.03.aj36.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}, \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (2z^4 - 3z^3 + 12z^2 - 30z + 45)}{3z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.aj37.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}, \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2z^{7/2}} - \frac{7 e^{-z} (2z^4 + 3z^3 + 12z^2 + 30z + 45)}{3z^3}$$

07.25.03.aj38.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}, \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^3 - 12z^2 + 45z - 105) I_0\left(\frac{z}{2}\right)}{15z^2} + \frac{32 e^{z/2} (4z^4 - 16z^3 + 63z^2 - 180z + 420) I_1\left(\frac{z}{2}\right)}{15z^3}$$

07.25.03.aj39.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}, \frac{1}{2}, \frac{11}{2}; z\right) = \frac{21 e^z (2z^4 - 12z^3 + 54z^2 - 165z + 315)}{2z^4} - \frac{945 \sqrt{\pi} (z + 7) \operatorname{erfi}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.aj3a.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}, \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (2z^4 + 12z^3 + 54z^2 + 165z + 315)}{2z^4} + \frac{945 \sqrt{\pi} (z - 7) \operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.aj3b.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (4 z^3 - 30 z^2 + 147 z - 504) I_0\left(\frac{z}{2}\right)}{3 z^3} + \frac{32 e^{z/2} (4 z^4 - 34 z^3 + 183 z^2 - 588 z + 2016) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 1$

07.25.03.aj3c.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{45} e^{z/2} (8 z^4 + 88 z^3 + 264 z^2 + 240 z + 45) I_0\left(\frac{z}{2}\right) + \frac{4}{45} e^{z/2} (2 z^4 + 20 z^3 + 47 z^2 + 21 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj3d.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{15} e^{z/2} (4 z^3 + 28 z^2 + 45 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4 z^3 + 24 z^2 + 23 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj3e.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{3} e^{z/2} (2 z^2 + 6 z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} (z^2 + 2 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{3}{2}$

07.25.03.aj3f.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{45} e^z (8 z^3 + 68 z^2 + 130 z + 45)$$

07.25.03.aj3g.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{45} e^{z/2} (8 z^3 + 60 z^2 + 108 z + 45) I_0\left(\frac{z}{2}\right) + \frac{1}{45} e^{z/2} (8 z^3 + 52 z^2 + 60 z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj3h.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{15} e^z (4 z^2 + 20 z + 15)$$

07.25.03.aj3i.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, 3; z\right) = \frac{4}{45} e^{z/2} (4 z^2 + 16 z + 11) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4 z^3 + 12 z^2 + z + 1) I_1\left(\frac{z}{2}\right)}{45 z}$$

07.25.03.aj3j.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{3} e^z (2 z + 3)$$

07.25.03.aj3k.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (4 z^2 + 2 z + 3) I_0\left(\frac{z}{2}\right)}{15 z} + \frac{4 e^{z/2} (4 z^3 - 2 z^2 + 7 z - 12) I_1\left(\frac{z}{2}\right)}{15 z^2}$$

07.25.03.aj3l.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (2 z^3 - 4 z^2 + 10 z - 15)}{6 z^3} + \frac{35 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{7/2}}$$

07.25.03.aj3m.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (2 z^3 + 4 z^2 + 10 z + 15)}{6 z^3} - \frac{35 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{7/2}}$$

07.25.03.aj3n.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (2 z^2 - 6 z + 15) I_0\left(\frac{z}{2}\right)}{15 z^2} + \frac{64 e^{z/2} (z^3 - 4 z^2 + 12 z - 30) I_1\left(\frac{z}{2}\right)}{15 z^3}$$

07.25.03.aj3o.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{21 e^z (8 z^3 - 44 z^2 + 150 z - 315)}{16 z^4} + \frac{315 \sqrt{\pi} (4 z + 21) \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.aj3p.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = -\frac{21 e^{-z} (8 z^3 + 44 z^2 + 150 z + 315)}{16 z^4} - \frac{315 \sqrt{\pi} (4 z - 21) \operatorname{erf}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.aj3q.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (2 z^2 - 13 z + 56) I_0\left(\frac{z}{2}\right)}{3 z^3} + \frac{32 e^{z/2} (2 z^3 - 15 z^2 + 52 z - 224) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 2$

07.25.03.aj3r.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{15} e^{z/2} (4 z^2 + 18 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4 z^2 + 14 z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj3s.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{3} e^{z/2} (2 z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2 z + 1) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{5}{2}$

07.25.03.aj3t.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{5} e^z (2 z + 5)$$

07.25.03.aj3u.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, 3; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2 z^2 + 2 z - 1) I_1\left(\frac{z}{2}\right)}{15 z}$$

07.25.03.aj3v.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = e^z$$

07.25.03.aj3w.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (2 z - 1) I_0\left(\frac{z}{2}\right)}{5 z} + \frac{4 e^{z/2} (2 z^2 - 3 z + 4) I_1\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.aj3x.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4 z^2 - 10 z + 15)}{8 z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.aj3y.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7 e^{-z} (4 z^2 + 10 z + 15)}{8 z^3}$$

07.25.03.aj3z.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (z-3) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{32 e^{z/2} (z^2 - 4 z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.aj40.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (8 z^2 - 40 z + 105)}{32 z^4} - \frac{945 \sqrt{\pi} (2 z + 7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.aj41.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8 z^2 + 40 z + 105)}{32 z^4} + \frac{945 \sqrt{\pi} (2 z - 7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.aj42.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (z-8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4 z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 3$

07.25.03.aj43.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; 3, \frac{7}{2}; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (z-1) I_1\left(\frac{z}{2}\right)}{3 z}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{7}{2}$

07.25.03.aj44.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2 z - 3)}{4 z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.aj45.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5 e^{-z} (2 z + 3)}{4 z^2}$$

07.25.03.aj46.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z-4) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.aj47.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (4 z - 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2 z + 5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.aj48.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z + 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.aj49.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.aj4a.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{1575 e^z (2z - 21)}{128 z^4} + \frac{945 \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.aj4b.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 e^{-z} (2z + 21)}{128 z^4}$$

07.25.03.aj4c.01

$${}_2F_2\left(\frac{5}{2}, \frac{7}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (z + 8) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (z^2 + 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = -\frac{11}{2}$

07.25.03.aj4d.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{972504225} (8192 z^{17} + 950272 z^{16} + 45422592 z^{15} + 1168113664 z^{14} + 17711038464 z^{13} + 163268259840 z^{12} + 911054807040 z^{11} + 2969681504256 z^{10} + 5239582709760 z^9 + 4310966580480 z^8 + 1187812684800 z^7 + 32691859200 z^6 + 726485760 z^5 + 157172400 z^4 + 102060000 z^3 + 138915000 z^2 + 321489000 z + 972504225) + \frac{1}{972504225} (1024 e^z \sqrt{\pi} (8 z^{35/2} + 932 z^{33/2} + 44818 z^{31/2} + 1162461 z^{29/2} + 17845248 z^{27/2} + 167570592 z^{25/2} + 962015040 z^{23/2} + 3282420960 z^{21/2} + 6261534720 z^{19/2} + 5961634560 z^{17/2} + 2266064640 z^{15/2} + 195350400 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aj4e.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{972504225} (-8192 z^{17} + 950272 z^{16} - 45422592 z^{15} + 1168113664 z^{14} - 17711038464 z^{13} + 163268259840 z^{12} - 911054807040 z^{11} + 2969681504256 z^{10} - 5239582709760 z^9 + 4310966580480 z^8 - 1187812684800 z^7 + 32691859200 z^6 - 726485760 z^5 + 157172400 z^4 - 102060000 z^3 + 138915000 z^2 - 321489000 z + 972504225) + \frac{1}{972504225} (1024 e^{-z} \sqrt{\pi} (8 z^{35/2} - 932 z^{33/2} + 44818 z^{31/2} - 1162461 z^{29/2} + 17845248 z^{27/2} - 167570592 z^{25/2} + 962015040 z^{23/2} - 3282420960 z^{21/2} + 6261534720 z^{19/2} - 5961634560 z^{17/2} + 2266064640 z^{15/2} - 195350400 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aj4f.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{88409475} (-4096 z^{16} - 430080 z^{15} - 18412544 z^{14} - 418553856 z^{13} - 5515776000 z^{12} - 43211857920 z^{11} - 198567143424 z^{10} - 508297144320 z^9 - 650152177920 z^8 - 329257958400 z^7 - 32691859200 z^6 + 726485760 z^5 + 52390800 z^4 + 20412000 z^3 + 19845000 z^2 + 35721000 z + 88409475) - \frac{1}{88409475} (512 e^z \sqrt{\pi} (8 z^{33/2} + 844 z^{31/2} + 36378 z^{29/2} + 835059 z^{27/2} + 11164776 z^{25/2} + 89417160 z^{23/2} + 425512080 z^{21/2} + 1154860560 z^{19/2} + 1642092480 z^{17/2} + 1035357120 z^{15/2} + 195350400 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aj4g.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{88409475} (-4096 z^{16} + 430080 z^{15} - 18412544 z^{14} + 418553856 z^{13} - 5515776000 z^{12} + 43211857920 z^{11} - 198567143424 z^{10} + 508297144320 z^9 - 650152177920 z^8 + 329257958400 z^7 - 32691859200 z^6 - 726485760 z^5 + 52390800 z^4 - 20412000 z^3 + 19845000 z^2 - 35721000 z + 88409475) + \frac{1}{88409475} (512 e^{-z} \sqrt{\pi} (8 z^{33/2} - 844 z^{31/2} + 36378 z^{29/2} - 835059 z^{27/2} + 11164776 z^{25/2} - 89417160 z^{23/2} + 425512080 z^{21/2} - 1154860560 z^{19/2} + 1642092480 z^{17/2} - 1035357120 z^{15/2} + 195350400 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aj4h.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{9823275} (2048 z^{15} + 192512 z^{14} + 7282176 z^{13} + 143831040 z^{12} + 1610649600 z^{11} + 10395039744 z^{10} + 37568563200 z^9 + 70017304320 z^8 + 55849651200 z^7 + 10897286400 z^6 - 726485760 z^5 + 52390800 z^4 + 6804000 z^3 + 3969000 z^2 + 5103000 z + 9823275) + \frac{1}{9823275} (256 e^z \sqrt{\pi} (8 z^{31/2} + 756 z^{29/2} + 28818 z^{27/2} + 575697 z^{25/2} + 6559200 z^{23/2} + 43502760 z^{21/2} + 164495520 z^{19/2} + 332382960 z^{17/2} + 312560640 z^{15/2} + 97675200 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aj4i.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{9823275} \left(-2048 z^{15} + 192512 z^{14} - 7282176 z^{13} + 143831040 z^{12} - 1610649600 z^{11} + 10395039744 z^{10} - \right.$$

$$37568563200 z^9 + 70017304320 z^8 - 55849651200 z^7 + 10897286400 z^6 +$$

$$726485760 z^5 + 52390800 z^4 - 6804000 z^3 + 3969000 z^2 - 5103000 z + 9823275 \left. \right) +$$

$$\frac{1}{9823275} \left(256 e^{-z} \sqrt{\pi} \left(8 z^{31/2} - 756 z^{29/2} + 28818 z^{27/2} - 575697 z^{25/2} + 6559200 z^{23/2} - 43502760 z^{21/2} + \right. \right.$$

$$164495520 z^{19/2} - 332382960 z^{17/2} + 312560640 z^{15/2} - 97675200 z^{13/2} \left. \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aj4j.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{1403325} \left(-1024 z^{14} - 84992 z^{13} - 2791680 z^{12} - 46831616 z^{11} - 431966208 z^{10} - 2194053120 z^9 - \right.$$

$$5788573440 z^8 - 6787814400 z^7 - 2179457280 z^6 + 242161920 z^5 -$$

$$52390800 z^4 + 6804000 z^3 + 1323000 z^2 + 1020600 z + 1403325 \left. \right) -$$

$$\frac{1}{1403325} \left(128 e^z \sqrt{\pi} \left(8 z^{29/2} + 668 z^{27/2} + 22138 z^{25/2} + 376455 z^{23/2} + 3547560 z^{21/2} + \right. \right.$$

$$18669840 z^{19/2} + 52476480 z^{17/2} + 70000560 z^{15/2} + 32558400 z^{13/2} \left. \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.aj4k.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{1403325} \left(-1024 z^{14} + 84992 z^{13} - 2791680 z^{12} + 46831616 z^{11} - 431966208 z^{10} + 2194053120 z^9 - \right.$$

$$5788573440 z^8 + 6787814400 z^7 - 2179457280 z^6 - 242161920 z^5 -$$

$$52390800 z^4 - 6804000 z^3 + 1323000 z^2 - 1020600 z + 1403325 \left. \right) +$$

$$\frac{1}{1403325} \left(128 e^{-z} \sqrt{\pi} \left(8 z^{29/2} - 668 z^{27/2} + 22138 z^{25/2} - 376455 z^{23/2} + 3547560 z^{21/2} - \right. \right.$$

$$18669840 z^{19/2} + 52476480 z^{17/2} - 70000560 z^{15/2} + 32558400 z^{13/2} \left. \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aj4l.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{280665} \left(512 z^{13} + 36864 z^{12} + 1027456 z^{11} + 14186496 z^{10} + 102961152 z^9 + 382266624 z^8 + 638438400 z^7 + \right.$$

$$311351040 z^6 - 48432384 z^5 + 17463600 z^4 - 6804000 z^3 + 1323000 z^2 + 340200 z + 280665 \left. \right) +$$

$$\frac{1}{280665} \left(64 e^z \sqrt{\pi} \left(8 z^{27/2} + 580 z^{25/2} + 16338 z^{23/2} + 229413 z^{21/2} + 1712256 z^{19/2} + \right. \right.$$

$$6684048 z^{17/2} + 12372192 z^{15/2} + 8139600 z^{13/2} \left. \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.aj4m.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{280665} \left(-512 z^{13} + 36864 z^{12} - 1027456 z^{11} + 14186496 z^{10} - 102961152 z^9 + 382266624 z^8 - 638438400 z^7 + 311351040 z^6 + 48432384 z^5 + 17463600 z^4 + 6804000 z^3 + 1323000 z^2 - 340200 z + 280665 \right) + \frac{1}{280665} \left(64 e^{-z} \sqrt{\pi} \left(8 z^{27/2} - 580 z^{25/2} + 16338 z^{23/2} - 229413 z^{21/2} + 1712256 z^{19/2} - 6684048 z^{17/2} + 12372192 z^{15/2} - 8139600 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aj4n.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{93555} \left(-256 z^{12} - 15616 z^{11} - 357696 z^{10} - 3881472 z^9 - 20589312 z^8 - 48568320 z^7 - 34594560 z^6 + 6918912 z^5 - 3492720 z^4 + 2268000 z^3 - 1323000 z^2 + 340200 z + 93555 \right) - \frac{1}{93555} \left(32 e^z \sqrt{\pi} \left(8 z^{25/2} + 492 z^{23/2} + 11418 z^{21/2} + 126651 z^{19/2} + 699048 z^{17/2} + 1790712 z^{15/2} + 1627920 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aj4o.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{93555} \left(-256 z^{12} + 15616 z^{11} - 357696 z^{10} + 3881472 z^9 - 20589312 z^8 + 48568320 z^7 - 34594560 z^6 - 6918912 z^5 - 3492720 z^4 - 2268000 z^3 - 1323000 z^2 - 340200 z + 93555 \right) + \frac{1}{93555} \left(32 e^{-z} \sqrt{\pi} \left(8 z^{25/2} - 492 z^{23/2} + 11418 z^{21/2} - 126651 z^{19/2} + 699048 z^{17/2} - 1790712 z^{15/2} + 1627920 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aj4p.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{93555} \left(128 z^{11} + 6400 z^{10} + 114912 z^9 + 909568 z^8 + 3068160 z^7 + 3144960 z^6 - 768768 z^5 + 498960 z^4 - 453600 z^3 + 441000 z^2 - 340200 z + 93555 \right) + \frac{16 e^z \sqrt{\pi} \left(8 z^{23/2} + 404 z^{21/2} + 7378 z^{19/2} + 60249 z^{17/2} + 217056 z^{15/2} + 271320 z^{13/2} \right) \operatorname{erf}(\sqrt{z})}{93555}$$

07.25.03.aj4q.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{93555} \left(-128 z^{11} + 6400 z^{10} - 114912 z^9 + 909568 z^8 - 3068160 z^7 + 3144960 z^6 + 768768 z^5 + 498960 z^4 + 453600 z^3 + 441000 z^2 + 340200 z + 93555 \right) + \frac{16 e^{-z} \sqrt{\pi} \left(8 z^{23/2} - 404 z^{21/2} + 7378 z^{19/2} - 60249 z^{17/2} + 217056 z^{15/2} - 271320 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})}{93555}$$

07.25.03.aj4r.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, 1; z\right) = \frac{1}{187110} \left(e^z (256 z^{11} + 11520 z^{10} + 182016 z^9 + 1222656 z^8 + 3254112 z^7 + 1997856 z^6 - 863856 z^5 + 786240 z^4 - 815535 z^3 + 764505 z^2 - 527310 z + 187110) \right)$$

07.25.03.aj4s.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{8 e^z \sqrt{\pi} (8 z^4 + 316 z^3 + 4218 z^2 + 22287 z + 38760) \operatorname{erf}(\sqrt{z}) z^{13/2}}{93555} + \frac{1}{93555} (64 z^{10} + 2496 z^9 + 32528 z^8 + 163200 z^7 + 241920 z^6 - 69888 z^5 + 55440 z^4 - 64800 z^3 + 88200 z^2 - 113400 z + 93555)$$

07.25.03.aj4t.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{93555} (64 z^{10} - 2496 z^9 + 32528 z^8 - 163200 z^7 + 241920 z^6 + 69888 z^5 + 55440 z^4 + 64800 z^3 + 88200 z^2 + 113400 z + 93555) - \frac{8 e^{-z} \sqrt{\pi} z^{13/2} (8 z^4 - 316 z^3 + 4218 z^2 - 22287 z + 38760) \operatorname{erfi}(\sqrt{z})}{93555}$$

07.25.03.aj4u.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, 2; z\right) = \frac{1}{187110} \left(e^z (256 z^{10} + 8704 z^9 + 94976 z^8 + 367872 z^7 + 311136 z^6 - 180096 z^5 + 216720 z^4 - 297360 z^3 + 373905 z^2 - 357210 z + 187110) \right)$$

07.25.03.aj4v.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{4 e^z \sqrt{\pi} (8 z^3 + 228 z^2 + 1938 z + 4845) \operatorname{erf}(\sqrt{z}) z^{13/2}}{31185} + \frac{32 z^9 + 896 z^8 + 7320 z^7 + 16128 z^6 - 5376 z^5 + 5040 z^4 - 7200 z^3 + 12600 z^2 - 22680 z + 31185}{31185}$$

07.25.03.aj4w.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{4 e^{-z} \sqrt{\pi} (8 z^3 - 228 z^2 + 1938 z - 4845) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{31185} + \frac{1}{31185} (-32 z^9 + 896 z^8 - 7320 z^7 + 16128 z^6 + 5376 z^5 + 5040 z^4 + 7200 z^3 + 12600 z^2 + 22680 z + 31185)$$

07.25.03.aj4x.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, 3; z\right) = \frac{1}{93555} e^z (256 z^9 + 5888 z^8 + 36096 z^7 + 43008 z^6 - 32928 z^5 + 50400 z^4 - 85680 z^3 + 131040 z^2 - 150255 z + 93555)$$

07.25.03.aj4y.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{6237 z^2} (16 z^{10} + 272 z^9 + 948 z^8 - 352 z^7 + 336 z^6 - 288 z^5 - 840 z^4 + 8280 z^3 - 42147 z^2 + 161280 z - 483840) + \frac{1}{6237 z^{5/2}} (2 e^z \sqrt{\pi} (8 z^{11} + 140 z^{10} + 538 z^9 + 3 z^8 - 24 z^7 + 168 z^6 - 1008 z^5 + 5040 z^4 - 20160 z^3 + 60480 z^2 - 120960 z + 120960) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aj4z.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{6237 z^2} (16 z^{10} - 272 z^9 + 948 z^8 + 352 z^7 + 336 z^6 + 288 z^5 - 840 z^4 - 8280 z^3 - 42147 z^2 - 161280 z - 483840) - \frac{1}{6237 z^{5/2}} (2 e^{-z} \sqrt{\pi} (8 z^{11} - 140 z^{10} + 538 z^9 - 3 z^8 - 24 z^7 - 168 z^6 - 1008 z^5 - 5040 z^4 - 20160 z^3 - 60480 z^2 - 120960 z - 120960) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aj50.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, 4; z\right) = \frac{e^z (256 z^8 + 3072 z^7 + 5376 z^6 - 5376 z^5 + 10080 z^4 - 20160 z^3 + 35280 z^2 - 45360 z + 31185)}{31185}$$

07.25.03.aj51.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{891 z^3} (8 z^{10} + 48 z^9 - 2 z^8 - 144 z^7 + 1296 z^6 - 9240 z^5 + 55800 z^4 - 282501 z^3 + 1169280 z^2 - 3870720 z + 10886400) + \frac{1}{891 z^{7/2}} (e^z \sqrt{\pi} (8 z^{11} + 52 z^{10} + 18 z^9 - 159 z^8 + 1248 z^7 - 8568 z^6 + 50400 z^5 - 246960 z^4 + 967680 z^3 - 2842560 z^2 + 5564160 z - 5443200) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aj52.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{891 z^3} (-8 z^{10} + 48 z^9 + 2 z^8 - 144 z^7 - 1296 z^6 - 9240 z^5 - 55800 z^4 - 282501 z^3 - 1169280 z^2 - 3870720 z - 10886400) + \frac{1}{891 z^{7/2}} (e^{-z} \sqrt{\pi} (8 z^{11} - 52 z^{10} + 18 z^9 + 159 z^8 + 1248 z^7 + 8568 z^6 + 50400 z^5 + 246960 z^4 + 967680 z^3 + 2842560 z^2 + 5564160 z + 5443200) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aj53.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, 5; z\right) = \frac{1}{31185z^4} (4e^z(256z^{11} + 256z^{10} + 2816z^9 - 30720z^8 + 255840z^7 - 1811040z^6 + 10901520z^5 - 54552960z^4 + 218243025z^3 - 654729075z^2 + 1309458150z - 1309458150)) + \frac{167960}{z^4}$$

07.25.03.aj54.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{99z^4} (4z^{10} - 20z^9 + 201z^8 - 1896z^7 + 15960z^6 - 117720z^5 + 746451z^4 - 3971520z^3 + 17176320z^2 - 58060800z + 190512000) + \frac{1}{198z^{9/2}} (e^z\sqrt{\pi}(8z^{11} - 36z^{10} + 378z^9 - 3561z^8 + 29736z^7 - 216720z^6 + 1350720z^5 - 7000560z^4 + 28969920z^3 - 89752320z^2 + 185068800z - 190512000)\operatorname{erf}(\sqrt{z}))$$

07.25.03.aj55.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{99z^4} (4z^{10} + 20z^9 + 201z^8 + 1896z^7 + 15960z^6 + 117720z^5 + 746451z^4 + 3971520z^3 + 17176320z^2 + 58060800z + 190512000) + \frac{1}{198z^{9/2}} (e^{-z}\sqrt{\pi}(-8z^{11} - 36z^{10} - 378z^9 - 3561z^8 - 29736z^7 - 216720z^6 - 1350720z^5 - 7000560z^4 - 28969920z^3 - 89752320z^2 - 185068800z - 190512000)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aj56.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{11}{2}, 6; z\right) = \frac{167960(5z + 84)}{z^5} + \frac{1}{6237z^5} (4e^z(256z^{11} - 2560z^{10} + 28416z^9 - 286464z^8 + 2547552z^7 - 19643904z^6 + 128764944z^5 - 698377680z^4 + 3011753745z^3 - 9689990310z^2 + 20689438770z - 21998896920))$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = -\frac{9}{2}$

07.25.03.aj57.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{8037225} (2048 z^{15} + 194560 z^{14} + 7456256 z^{13} + 149721600 z^{12} + 1713331200 z^{11} + 11392336896 z^{10} + 43021854720 z^9 + 86166662400 z^8 + 79264281600 z^7 + 24137568000 z^6 + 726485760 z^5 + 17463600 z^4 + 4082400 z^3 + 2835000 z^2 + 3969000 z + 8037225) + \frac{1}{8037225} (256 e^z \sqrt{\pi} (8 z^{31/2} + 764 z^{29/2} + 29502 z^{27/2} + 599043 z^{25/2} + 6971475 z^{23/2} + 47588310 z^{21/2} + 187570530 z^{19/2} + 404578440 z^{17/2} + 428357160 z^{15/2} + 178642800 z^{13/2} + 16707600 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aj58.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{8037225} (-2048 z^{15} + 194560 z^{14} - 7456256 z^{13} + 149721600 z^{12} - 1713331200 z^{11} + 11392336896 z^{10} - 43021854720 z^9 + 86166662400 z^8 - 79264281600 z^7 + 24137568000 z^6 - 726485760 z^5 + 17463600 z^4 - 4082400 z^3 + 2835000 z^2 - 3969000 z + 8037225) + \frac{1}{8037225} (256 e^{-z} \sqrt{\pi} (8 z^{31/2} - 764 z^{29/2} + 29502 z^{27/2} - 599043 z^{25/2} + 6971475 z^{23/2} - 47588310 z^{21/2} + 187570530 z^{19/2} - 404578440 z^{17/2} + 428357160 z^{15/2} - 178642800 z^{13/2} + 16707600 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aj59.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{893025} (-1024 z^{14} - 87040 z^{13} - 2945280 z^{12} - 51340800 z^{11} - 498648576 z^{10} - 2726645760 z^9 - 8074679040 z^8 - 11707315200 z^7 - 6620140800 z^6 - 726485760 z^5 + 17463600 z^4 + 1360800 z^3 + 567000 z^2 + 567000 z + 893025) - \frac{1}{893025} (128 e^z \sqrt{\pi} (8 z^{29/2} + 684 z^{27/2} + 23346 z^{25/2} + 412275 z^{23/2} + 4085550 z^{21/2} + 23075010 z^{19/2} + 72195480 z^{17/2} + 115796520 z^{15/2} + 80967600 z^{13/2} + 16707600 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aj5a.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{893025} (-1024 z^{14} + 87040 z^{13} - 2945280 z^{12} + 51340800 z^{11} - 498648576 z^{10} + 2726645760 z^9 - 8074679040 z^8 + 11707315200 z^7 - 6620140800 z^6 + 726485760 z^5 + 17463600 z^4 - 1360800 z^3 + 567000 z^2 - 567000 z + 893025) + \frac{1}{893025} (128 e^{-z} \sqrt{\pi} (8 z^{29/2} - 684 z^{27/2} + 23346 z^{25/2} - 412275 z^{23/2} + 4085550 z^{21/2} - 23075010 z^{19/2} + 72195480 z^{17/2} - 115796520 z^{15/2} + 80967600 z^{13/2} - 16707600 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aj5b.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{127575} (512 z^{13} + 38400 z^{12} + 1127296 z^{11} + 16670592 z^{10} + 133148160 z^9 + 571526400 z^8 + 1229875200 z^7 + 1110170880 z^6 + 242161920 z^5 - 17463600 z^4 + 1360800 z^3 + 189000 z^2 + 113400 z + 127575) + \frac{1}{127575} (64 e^z \sqrt{\pi} (8 z^{27/2} + 604 z^{25/2} + 17910 z^{23/2} + 268995 z^{21/2} + 2202585 z^{19/2} + 9859500 z^{17/2} + 22897980 z^{15/2} + 24204600 z^{13/2} + 8353800 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aj5c.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{127575} (-512 z^{13} + 38400 z^{12} - 1127296 z^{11} + 16670592 z^{10} - 133148160 z^9 + 571526400 z^8 - 1229875200 z^7 + 1110170880 z^6 - 242161920 z^5 - 17463600 z^4 - 1360800 z^3 + 189000 z^2 - 113400 z + 127575) + \frac{1}{127575} (64 e^{-z} \sqrt{\pi} (8 z^{27/2} - 604 z^{25/2} + 17910 z^{23/2} - 268995 z^{21/2} + 2202585 z^{19/2} - 9859500 z^{17/2} + 22897980 z^{15/2} - 24204600 z^{13/2} + 8353800 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aj5d.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{25515} (-256 z^{12} - 16640 z^{11} - 414016 z^{10} - 5031168 z^9 - 31543296 z^8 - 98572800 z^7 - 133136640 z^6 - 48432384 z^5 + 5821200 z^4 - 1360800 z^3 + 189000 z^2 + 37800 z + 25515) - \frac{1}{25515} (32 e^z \sqrt{\pi} (8 z^{25/2} + 524 z^{23/2} + 13194 z^{21/2} + 163443 z^{19/2} + 1058484 z^{17/2} + 3508596 z^{15/2} + 5355000 z^{13/2} + 2784600 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aj5e.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{25515} (-256 z^{12} + 16640 z^{11} - 414016 z^{10} + 5031168 z^9 - 31543296 z^8 + 98572800 z^7 - 133136640 z^6 + 48432384 z^5 + 5821200 z^4 + 1360800 z^3 + 189000 z^2 - 37800 z + 25515) + \frac{1}{25515} (32 e^{-z} \sqrt{\pi} (8 z^{25/2} - 524 z^{23/2} + 13194 z^{21/2} - 163443 z^{19/2} + 1058484 z^{17/2} - 3508596 z^{15/2} + 5355000 z^{13/2} - 2784600 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aj5f.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{8505} (128 z^{11} + 7040 z^{10} + 143\,712 z^9 + 1\,369\,248 z^8 + 6\,250\,560 z^7 + 12\,317\,760 z^6 + 6\,918\,912 z^5 - 1\,164\,240 z^4 + 453\,600 z^3 - 189\,000 z^2 + 37\,800 z + 8505) + \frac{1}{8505} 16 e^z \sqrt{\pi} (8 z^{23/2} + 444 z^{21/2} + 9198 z^{19/2} + 89\,859 z^{17/2} + 429\,471 z^{15/2} + 931\,770 z^{13/2} + 696\,150 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aj5g.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{8505} (-128 z^{11} + 7040 z^{10} - 143\,712 z^9 + 1\,369\,248 z^8 - 6\,250\,560 z^7 + 12\,317\,760 z^6 - 6\,918\,912 z^5 - 1\,164\,240 z^4 - 453\,600 z^3 - 189\,000 z^2 - 37\,800 z + 8505) + \frac{1}{8505} 16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 444 z^{21/2} + 9198 z^{19/2} - 89\,859 z^{17/2} + 429\,471 z^{15/2} - 931\,770 z^{13/2} + 696\,150 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aj5h.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{8505} (-64 z^{10} - 2880 z^9 - 45\,968 z^8 - 318\,240 z^7 - 917\,280 z^6 - 768\,768 z^5 + 166\,320 z^4 - 90\,720 z^3 + 63\,000 z^2 - 37\,800 z + 8505) - \frac{8 e^z \sqrt{\pi} (8 z^{21/2} + 364 z^{19/2} + 5922 z^{17/2} + 42\,483 z^{15/2} + 132\,090 z^{13/2} + 139\,230 z^{11/2}) \operatorname{erf}(\sqrt{z})}{8505}$$

07.25.03.aj5i.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{8505} (-64 z^{10} + 2880 z^9 - 45\,968 z^8 + 318\,240 z^7 - 917\,280 z^6 + 768\,768 z^5 + 166\,320 z^4 + 90\,720 z^3 + 63\,000 z^2 + 37\,800 z + 8505) + \frac{8 e^{-z} \sqrt{\pi} (8 z^{21/2} - 364 z^{19/2} + 5922 z^{17/2} - 42\,483 z^{15/2} + 132\,090 z^{13/2} - 139\,230 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{8505}$$

07.25.03.aj5j.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, 1; z\right) = -\frac{1}{17010} (e^z (128 z^{10} + 5184 z^9 + 72\,864 z^8 + 429\,168 z^7 + 983\,304 z^6 + 507\,276 z^5 - 178\,290 z^4 + 125\,685 z^3 - 93\,555 z^2 + 54\,810 z - 17010))$$

07.25.03.aj5k.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{8505} (-32 z^9 - 1120 z^8 - 12\,920 z^7 - 56\,280 z^6 - 69\,888 z^5 + 18\,480 z^4 - 12\,960 z^3 + 12\,600 z^2 - 12\,600 z + 8505) - \frac{4 e^z \sqrt{\pi} z^{11/2} (8 z^4 + 284 z^3 + 3366 z^2 + 15\,555 z + 23\,205) \operatorname{erf}(\sqrt{z})}{8505}$$

07.25.03.aj5l.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{8505} (32z^9 - 1120z^8 + 12920z^7 - 56280z^6 + 69888z^5 + 18480z^4 + 12960z^3 + 12600z^2 + 12600z + 8505) - \frac{4e^{-z}\sqrt{\pi}z^{11/2}(8z^4 - 284z^3 + 3366z^2 - 15555z + 23205)\operatorname{erfi}(\sqrt{z})}{8505}$$

07.25.03.aj5m.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, 2; z\right) = -\frac{1}{17010} e^z (128z^9 + 3904z^8 + 37728z^7 + 127344z^6 + 91896z^5 - 44100z^4 + 42210z^3 - 43155z^2 + 35910z - 17010)$$

07.25.03.aj5n.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-16z^8 - 400z^7 - 2868z^6 - 5376z^5 + 1680z^4 - 1440z^3 + 1800z^2 - 2520z + 2835}{2835} - \frac{2e^z\sqrt{\pi}z^{11/2}(8z^3 + 204z^2 + 1530z + 3315)\operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.aj5o.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{2e^{-z}\sqrt{\pi}(8z^3 - 204z^2 + 1530z - 3315)\operatorname{erfi}(\sqrt{z})z^{11/2}}{2835} + \frac{-16z^8 + 400z^7 - 2868z^6 + 5376z^5 + 1680z^4 + 1440z^3 + 1800z^2 + 2520z + 2835}{2835}$$

07.25.03.aj5p.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, 3; z\right) = -\frac{e^z(128z^8 + 2624z^7 + 14112z^6 + 14448z^5 - 9240z^4 + 11340z^3 - 14490z^2 + 14805z - 8505)}{8505}$$

07.25.03.aj5q.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-8z^9 - 120z^8 - 358z^7 + 126z^6 - 108z^5 + 60z^4 + 360z^3 - 2457z^2 + 10080z - 30240}{567z^2} + \frac{1}{567z^{5/2}} e^z\sqrt{\pi}(-8z^{10} - 124z^9 - 414z^8 - 3z^7 + 21z^6 - 126z^5 + 630z^4 - 2520z^3 + 7560z^2 - 15120z + 15120)\operatorname{erf}(\sqrt{z})$$

07.25.03.aj5r.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{8z^9 - 120z^8 + 358z^7 + 126z^6 + 108z^5 + 60z^4 - 360z^3 - 2457z^2 - 10080z - 30240}{567z^2} + \frac{1}{567z^{5/2}} e^{-z}\sqrt{\pi}(-8z^{10} + 124z^9 - 414z^8 + 3z^7 + 21z^6 + 126z^5 + 630z^4 + 2520z^3 + 7560z^2 + 15120z + 15120)\operatorname{erfi}(\sqrt{z})$$

07.25.03.aj5s.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, 4; z\right) = -\frac{e^z(128z^7 + 1344z^6 + 2016z^5 - 1680z^4 + 2520z^3 - 3780z^2 + 4410z - 2835)}{2835}$$

07.25.03.aj5t.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-4z^9 - 20z^8 - z^7 + 66z^6 - 510z^5 + 3120z^4 - 15831z^3 + 65520z^2 - 216720z + 604800}{81z^3} + \frac{1}{162z^{7/2}} \left(e^z \sqrt{\pi} (-8z^{10} - 44z^9 - 18z^8 + 141z^7 - 966z^6 + 5670z^5 - 27720z^4 + 108360z^3 - 317520z^2 + 619920z - 604800) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aj5u.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{-4z^9 + 20z^8 - z^7 - 66z^6 - 510z^5 - 3120z^4 - 15831z^3 - 65520z^2 - 216720z - 604800}{81z^3} + \frac{1}{162z^{7/2}} \left(e^{-z} \sqrt{\pi} (8z^{10} - 44z^9 + 18z^8 + 141z^7 + 966z^6 + 5670z^5 + 27720z^4 + 108360z^3 + 317520z^2 + 619920z + 604800) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aj5v.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, 5; z\right) = \frac{97240}{z^4} - \frac{1}{2835z^4} (4e^z (128z^{10} + 64z^9 + 1440z^8 - 13200z^7 + 94920z^6 - 573300z^5 + 2870910z^4 - 11486475z^3 + 34459425z^2 - 68918850z + 68918850))$$

07.25.03.aj5w.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{18z^4} (-4z^9 + 20z^8 - 183z^7 + 1545z^6 - 11460z^5 + 73062z^4 - 390600z^3 + 1695960z^2 - 5745600z + 19051200) + \frac{1}{36z^{9/2}} \left(e^z \sqrt{\pi} (-8z^{10} + 36z^9 - 342z^8 + 2877z^7 - 21105z^6 + 132300z^5 - 689220z^4 + 2865240z^3 - 8913240z^2 + 18446400z - 19051200) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aj5x.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{18z^4} (4z^9 + 20z^8 + 183z^7 + 1545z^6 + 11460z^5 + 73062z^4 + 390600z^3 + 1695960z^2 + 5745600z + 19051200) + \frac{1}{36z^{9/2}} \left(e^{-z} \sqrt{\pi} (-8z^{10} - 36z^9 - 342z^8 - 2877z^7 - 21105z^6 - 132300z^5 - 689220z^4 - 2865240z^3 - 8913240z^2 - 18446400z - 19051200) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aj5y.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{9}{2}, 6; z\right) = \frac{97240(5z + 76)}{z^5} - \frac{1}{567z^5} (4e^z (128z^{10} - 1216z^9 + 12384z^8 - 112272z^7 + 880824z^6 - 5858244z^5 + 32162130z^4 - 140134995z^3 + 454864410z^2 - 978647670z + 1047566520))$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.aj5z.01} \\
 & {}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{99225} (512 z^{13} + 38912 z^{12} + 1161600 z^{11} + 17558016 z^{10} + 144510720 z^9 + 648264960 z^8 + 1499166720 z^7 + \\
 & 1559750400 z^6 + 528802560 z^5 + 17463600 z^4 + 453600 z^3 + 113400 z^2 + 81000 z + 99225) + \\
 & \frac{1}{99225} \left(64 e^z \sqrt{\pi} (8 z^{27/2} + 612 z^{25/2} + 18450 z^{23/2} + 283125 z^{21/2} + 2386800 z^{19/2} + 11141010 z^{17/2} + \right. \\
 & \left. 27631440 z^{15/2} + 32902200 z^{13/2} + 15163200 z^{11/2} + 1544400 z^{9/2}) \operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aj60.01} \\
 & {}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \\
 & \frac{1}{99225} (-512 z^{13} + 38912 z^{12} - 1161600 z^{11} + 17558016 z^{10} - 144510720 z^9 + 648264960 z^8 - 1499166720 z^7 + \\
 & 1559750400 z^6 - 528802560 z^5 + 17463600 z^4 - 453600 z^3 + 113400 z^2 - 81000 z + 99225) + \\
 & \frac{1}{99225} \left(64 e^{-z} \sqrt{\pi} (8 z^{27/2} - 612 z^{25/2} + 18450 z^{23/2} - 283125 z^{21/2} + 2386800 z^{19/2} - 11141010 z^{17/2} + \right. \\
 & \left. 27631440 z^{15/2} - 32902200 z^{13/2} + 15163200 z^{11/2} - 1544400 z^{9/2}) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aj61.01} \\
 & {}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{14175} (-256 z^{12} - 17152 z^{11} - 443712 z^{10} - 5681280 z^9 - 38369280 z^8 - 134645760 z^7 - 224789760 z^6 - \\
 & 143320320 z^5 - 17463600 z^4 + 453600 z^3 + 37800 z^2 + 16200 z + 14175) - \\
 & \frac{1}{14175} \left(32 e^z \sqrt{\pi} (8 z^{25/2} + 540 z^{23/2} + 14130 z^{21/2} + 184215 z^{19/2} + 1281510 z^{17/2} + \right. \\
 & \left. 4733460 z^{15/2} + 8697600 z^{13/2} + 6809400 z^{11/2} + 1544400 z^{9/2}) \operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aj62.01} \\
 & {}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \\
 & \frac{1}{14175} (-256 z^{12} + 17152 z^{11} - 443712 z^{10} + 5681280 z^9 - 38369280 z^8 + 134645760 z^7 - 224789760 z^6 + \\
 & 143320320 z^5 - 17463600 z^4 - 453600 z^3 + 37800 z^2 - 16200 z + 14175) + \\
 & \frac{1}{14175} \left(32 e^{-z} \sqrt{\pi} (8 z^{25/2} - 540 z^{23/2} + 14130 z^{21/2} - 184215 z^{19/2} + 1281510 z^{17/2} - \right. \\
 & \left. 4733460 z^{15/2} + 8697600 z^{13/2} - 6809400 z^{11/2} + 1544400 z^{9/2}) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

07.25.03.aj63.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{2835} (128 z^{11} + 7424 z^{10} + 162528 z^9 + 1706496 z^8 + 9018240 z^7 + 22913280 z^6 + 23721984 z^5 + 5821200 z^4 - 453600 z^3 + 37800 z^2 + 5400 z + 2835) + \frac{1}{2835} (16 e^z \sqrt{\pi} (8 z^{23/2} + 468 z^{21/2} + 10386 z^{19/2} + 111513 z^{17/2} + 612432 z^{15/2} + 1671300 z^{13/2} + 2012400 z^{11/2} + 772200 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aj64.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{2835} (-128 z^{11} + 7424 z^{10} - 162528 z^9 + 1706496 z^8 - 9018240 z^7 + 22913280 z^6 - 23721984 z^5 + 5821200 z^4 + 453600 z^3 + 37800 z^2 - 5400 z + 2835) + \frac{1}{2835} (16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 468 z^{21/2} + 10386 z^{19/2} - 111513 z^{17/2} + 612432 z^{15/2} - 1671300 z^{13/2} + 2012400 z^{11/2} - 772200 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aj65.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} (-64 z^{10} - 3136 z^9 - 56208 z^8 - 461280 z^7 - 1765920 z^6 - 2800512 z^5 - 1164240 z^4 + 151200 z^3 - 37800 z^2 + 5400 z + 945) - \frac{8}{945} e^z \sqrt{\pi} (8 z^{21/2} + 396 z^{19/2} + 7218 z^{17/2} + 60987 z^{15/2} + 246510 z^{13/2} + 438750 z^{11/2} + 257400 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aj66.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945} (-64 z^{10} + 3136 z^9 - 56208 z^8 + 461280 z^7 - 1765920 z^6 + 2800512 z^5 - 1164240 z^4 - 151200 z^3 - 37800 z^2 - 5400 z + 945) + \frac{8}{945} e^{-z} \sqrt{\pi} (8 z^{21/2} - 396 z^{19/2} + 7218 z^{17/2} - 60987 z^{15/2} + 246510 z^{13/2} - 438750 z^{11/2} + 257400 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aj67.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{945} (32 z^9 + 1280 z^8 + 17880 z^7 + 106080 z^6 + 253968 z^5 + 166320 z^4 - 30240 z^3 + 12600 z^2 - 5400 z + 945) + \frac{4}{945} e^z \sqrt{\pi} (8 z^{19/2} + 324 z^{17/2} + 4626 z^{15/2} + 28605 z^{13/2} + 74880 z^{11/2} + 64350 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aj68.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} (-32 z^9 + 1280 z^8 - 17880 z^7 + 106080 z^6 - 253968 z^5 + 166320 z^4 + 30240 z^3 + 12600 z^2 + 5400 z + 945) + \frac{4}{945} e^{-z} \sqrt{\pi} (8 z^{19/2} - 324 z^{17/2} + 4626 z^{15/2} - 28605 z^{13/2} + 74880 z^{11/2} - 64350 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aj69.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, 1; z\right) = \frac{1}{1890} e^z (64 z^9 + 2304 z^8 + 28368 z^7 + 143664 z^6 + 276156 z^5 + 115560 z^4 - 31365 z^3 + 15795 z^2 - 7290 z + 1890)$$

07.25.03.aj6a.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{2}{945} e^z \sqrt{\pi} (8 z^4 + 252 z^3 + 2610 z^2 + 10335 z + 12870) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{945} (16 z^8 + 496 z^7 + 4980 z^6 + 18408 z^5 + 18480 z^4 - 4320 z^3 + 2520 z^2 - 1800 z + 945)$$

07.25.03.aj6b.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} (16 z^8 - 496 z^7 + 4980 z^6 - 18408 z^5 + 18480 z^4 + 4320 z^3 + 2520 z^2 + 1800 z + 945) - \frac{2}{945} e^{-z} \sqrt{\pi} z^{9/2} (8 z^4 - 252 z^3 + 2610 z^2 - 10335 z + 12870) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aj6c.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, 2; z\right) = \frac{e^z (64 z^8 + 1728 z^7 + 14544 z^6 + 41856 z^5 + 25020 z^4 - 9540 z^3 + 6795 z^2 - 4590 z + 1890)}{1890}$$

07.25.03.aj6d.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z \sqrt{\pi} (8 z^3 + 180 z^2 + 1170 z + 2145) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{315} (8 z^7 + 176 z^6 + 1086 z^5 + 1680 z^4 - 480 z^3 + 360 z^2 - 360 z + 315)$$

07.25.03.aj6e.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{1}{315} e^{-z} \sqrt{\pi} (8 z^3 - 180 z^2 + 1170 z - 2145) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{315} (-8 z^7 + 176 z^6 - 1086 z^5 + 1680 z^4 + 480 z^3 + 360 z^2 + 360 z + 315)$$

07.25.03.aj6f.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, 3; z\right) = \frac{1}{945} e^z (64 z^7 + 1152 z^6 + 5328 z^5 + 4560 z^4 - 2340 z^3 + 2160 z^2 - 1845 z + 945)$$

07.25.03.aj6g.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{4z^8 + 52z^7 + 129z^6 - 42z^5 + 30z^4 - 153z^2 + 720z - 2160}{63z^2} + \frac{e^z \sqrt{\pi} (8z^9 + 108z^8 + 306z^7 + 3z^6 - 18z^5 + 90z^4 - 360z^3 + 1080z^2 - 2160z + 2160) \operatorname{erfi}(\sqrt{z})}{126z^{5/2}}$$

07.25.03.aj6h.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{4z^8 - 52z^7 + 129z^6 + 42z^5 + 30z^4 - 153z^2 - 720z - 2160}{63z^2} + \frac{1}{126z^{5/2}} e^{-z} \sqrt{\pi} (-8z^9 + 108z^8 - 306z^7 + 3z^6 + 18z^5 + 90z^4 + 360z^3 + 1080z^2 + 2160z + 2160) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aj6i.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, 4; z\right) = \frac{1}{315} e^z (64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)$$

07.25.03.aj6j.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{4z^8 + 16z^7 + 3z^6 - 60z^5 + 390z^4 - 1998z^3 + 8280z^2 - 27360z + 75600}{18z^3} + \frac{1}{36z^{7/2}} e^z \sqrt{\pi} (8z^9 + 36z^8 + 18z^7 - 123z^6 + 720z^5 - 3510z^4 + 13680z^3 - 39960z^2 + 77760z - 75600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aj6k.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-4z^8 + 16z^7 - 3z^6 - 60z^5 - 390z^4 - 1998z^3 - 8280z^2 - 27360z - 75600}{18z^3} + \frac{1}{36z^{7/2}} e^{-z} \sqrt{\pi} (8z^9 - 36z^8 + 18z^7 + 123z^6 + 720z^5 + 3510z^4 + 13680z^3 + 39960z^2 + 77760z + 75600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aj6l.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, 5; z\right) = \frac{1}{315z^4} 4e^z (64z^9 + 720z^7 - 5520z^6 + 33660z^5 - 168840z^4 + 675675z^3 - 2027025z^2 + 4054050z - 4054050) + \frac{51480}{z^4}$$

07.25.03.aj6m.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{4z^8 - 20z^7 + 165z^6 - 1230z^5 + 7896z^4 - 42480z^3 + 185400z^2 - 630000z + 2116800}{4z^4} + \frac{1}{8z^{9/2}} \left(e^z \sqrt{\pi} (8z^9 - 36z^8 + 306z^7 - 2265z^6 + 14310z^5 - 75060z^4 + 313920z^3 - 981720z^2 + 2041200z - 2116800) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aj6n.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{4z^8 + 20z^7 + 165z^6 + 1230z^5 + 7896z^4 + 42480z^3 + 185400z^2 + 630000z + 2116800}{4z^4} + \frac{1}{8z^{9/2}} \left(e^{-z} \sqrt{\pi} (-8z^9 - 36z^8 - 306z^7 - 2265z^6 - 14310z^5 - 75060z^4 - 313920z^3 - 981720z^2 - 2041200z - 2116800) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aj6o.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{7}{2}, 6; z\right) = \frac{51480(5z+68)}{z^5} + \frac{1}{63z^5} (4e^z(64z^9 - 576z^8 + 5328z^7 - 42816z^6 + 290556z^5 - 1621620z^4 + 7162155z^3 - 23513490z^2 + 51081030z - 55135080))$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = -\frac{5}{2}$

07.25.03.aj6p.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{2025} (128z^{11} + 7552z^{10} + 169056z^9 + 1829920z^8 + 10110720z^7 + 27615744z^6 + 32947200z^5 + 12521520z^4 + 453600z^3 + 12600z^2 + 3240z + 2025) + \frac{1}{2025} (16e^z\sqrt{\pi}(8z^{23/2} + 476z^{21/2} + 10798z^{19/2} + 119427z^{17/2} + 684375z^{15/2} + 1995960z^{13/2} + 2709720z^{11/2} + 1389960z^{9/2} + 154440z^{7/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.aj6q.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{2025} (-128z^{11} + 7552z^{10} - 169056z^9 + 1829920z^8 - 10110720z^7 + 27615744z^6 - 32947200z^5 + 12521520z^4 - 453600z^3 + 12600z^2 - 3240z + 2025) + \frac{1}{2025} (16e^{-z}\sqrt{\pi}(8z^{23/2} - 476z^{21/2} + 10798z^{19/2} - 119427z^{17/2} + 684375z^{15/2} - 1995960z^{13/2} + 2709720z^{11/2} - 1389960z^{9/2} + 154440z^{7/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.aj6r.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{405} (-64z^{10} - 3264z^9 - 61712z^8 - 546240z^7 - 2351232z^6 - 4612608z^5 - 3350160z^4 - 453600z^3 + 12600z^2 + 1080z + 405) - \frac{8}{405} e^z\sqrt{\pi} (8z^{21/2} + 412z^{19/2} + 7914z^{17/2} + 71943z^{15/2} + 324660z^{13/2} + 697320z^{11/2} + 617760z^{9/2} + 154440z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aj6s.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{405} (-64z^{10} + 3264z^9 - 61712z^8 + 546240z^7 - 2351232z^6 + 4612608z^5 - 3350160z^4 + 453600z^3 + 12600z^2 - 1080z + 405) + \frac{8}{405} e^{-z}\sqrt{\pi} (8z^{21/2} - 412z^{19/2} + 7914z^{17/2} - 71943z^{15/2} + 324660z^{13/2} - 697320z^{11/2} + 617760z^{9/2} - 154440z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aj6t.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{135} (32 z^9 + 1376 z^8 + 21\,240 z^7 + 146\,328 z^6 + 453\,024 z^5 + 546\,480 z^4 + 151\,200 z^3 - 12\,600 z^2 + 1080 z + 135) + \frac{4}{135} e^z \sqrt{\pi} (8 z^{19/2} + 348 z^{17/2} + 5478 z^{15/2} + 39\,075 z^{13/2} + 129\,285 z^{11/2} + 180\,180 z^{9/2} + 77\,220 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aj6u.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{135} (-32 z^9 + 1376 z^8 - 21\,240 z^7 + 146\,328 z^6 - 453\,024 z^5 + 546\,480 z^4 - 151\,200 z^3 - 12\,600 z^2 - 1080 z + 135) + \frac{4}{135} e^{-z} \sqrt{\pi} (8 z^{19/2} - 348 z^{17/2} + 5478 z^{15/2} - 39\,075 z^{13/2} + 129\,285 z^{11/2} - 180\,180 z^{9/2} + 77\,220 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aj6v.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{135} (-16 z^8 - 560 z^7 - 6708 z^6 - 33\,176 z^5 - 63\,360 z^4 - 30\,240 z^3 + 4200 z^2 - 1080 z + 135) - \frac{2}{135} e^z \sqrt{\pi} (8 z^{17/2} + 284 z^{15/2} + 3490 z^{13/2} + 18\,135 z^{11/2} + 38\,610 z^{9/2} + 25\,740 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aj6w.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{135} (-16 z^8 + 560 z^7 - 6708 z^6 + 33\,176 z^5 - 63\,360 z^4 + 30\,240 z^3 + 4200 z^2 + 1080 z + 135) + \frac{2}{135} e^{-z} \sqrt{\pi} (8 z^{17/2} - 284 z^{15/2} + 3490 z^{13/2} - 18\,135 z^{11/2} + 38\,610 z^{9/2} - 25\,740 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aj6x.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, 1; z\right) = -\frac{1}{270} e^z (32 z^8 + 1008 z^7 + 10\,656 z^6 + 45\,192 z^5 + 70\,290 z^4 + 22\,635 z^3 - 4365 z^2 + 1350 z - 270)$$

07.25.03.aj6y.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{135} (-8 z^7 - 216 z^6 - 1846 z^5 - 5610 z^4 - 4320 z^3 + 840 z^2 - 360 z + 135) - \frac{1}{135} e^z \sqrt{\pi} z^{7/2} (8 z^4 + 220 z^3 + 1950 z^2 + 6435 z + 6435) \operatorname{erf}(\sqrt{z})$$

07.25.03.aj6z.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{135} (8 z^7 - 216 z^6 + 1846 z^5 - 5610 z^4 + 4320 z^3 + 840 z^2 + 360 z + 135) - \frac{1}{135} e^{-z} \sqrt{\pi} z^{7/2} (8 z^4 - 220 z^3 + 1950 z^2 - 6435 z + 6435) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aj70.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, 2; z\right) = -\frac{1}{270} e^z (32 z^7 + 752 z^6 + 5392 z^5 + 12\,840 z^4 + 6090 z^3 - 1725 z^2 + 810 z - 270)$$

07.25.03.aj71.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{45}(-4z^6 - 76z^5 - 393z^4 - 480z^3 + 120z^2 - 72z + 45) - \frac{1}{90}e^z\sqrt{\pi}z^{7/2}(8z^3 + 156z^2 + 858z + 1287)\operatorname{erf}(\sqrt{z})$$

07.25.03.aj72.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{90}e^{-z}\sqrt{\pi}(8z^3 - 156z^2 + 858z - 1287)\operatorname{erfi}(\sqrt{z})z^{7/2} + \frac{1}{45}(-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45)$$

07.25.03.aj73.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, 3; z\right) = -\frac{1}{135}e^z(32z^6 + 496z^5 + 1920z^4 + 1320z^3 - 510z^2 + 315z - 135)$$

07.25.03.aj74.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-4z^7 - 44z^6 - 87z^5 + 25z^4 - 12z^3 - 18z^2 + 120z - 360}{18z^2} + \frac{e^z\sqrt{\pi}(-8z^8 - 92z^7 - 214z^6 - 3z^5 + 15z^4 - 60z^3 + 180z^2 - 360z + 360)\operatorname{erf}(\sqrt{z})}{36z^{5/2}}$$

07.25.03.aj75.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{4z^7 - 44z^6 + 87z^5 + 25z^4 + 12z^3 - 18z^2 - 120z - 360}{18z^2} + \frac{e^{-z}\sqrt{\pi}(-8z^8 + 92z^7 - 214z^6 + 3z^5 + 15z^4 + 60z^3 + 180z^2 + 360z + 360)\operatorname{erfi}(\sqrt{z})}{36z^{5/2}}$$

07.25.03.aj76.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, 4; z\right) = -\frac{1}{45}e^z(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)$$

07.25.03.aj77.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(4z^7 + 12z^6 + 5z^5 - 54z^4 + 288z^3 - 1200z^2 + 3960z - 10800)}{36z^3} - \frac{7e^z\sqrt{\pi}(8z^8 + 28z^7 + 18z^6 - 105z^5 + 510z^4 - 1980z^3 + 5760z^2 - 11160z + 10800)\operatorname{erf}(\sqrt{z})}{72z^{7/2}}$$

07.25.03.aj78.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}\sqrt{\pi}(8z^8 - 28z^7 + 18z^6 + 105z^5 + 510z^4 + 1980z^3 + 5760z^2 + 11160z + 10800)\operatorname{erfi}(\sqrt{z})}{72z^{7/2}} - \frac{7(4z^7 - 12z^6 + 5z^5 + 54z^4 + 288z^3 + 1200z^2 + 3960z + 10800)}{36z^3}$$

07.25.03.aj79.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, 5; z\right) = \frac{24024}{z^4} - \frac{4e^z(32z^8 - 16z^7 + 352z^6 - 2232z^5 + 11250z^4 - 45045z^3 + 135135z^2 - 270270z + 270270)}{45z^4}$$

07.25.03.aj7a.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{7(4z^7 - 20z^6 + 147z^5 - 951z^4 + 5160z^3 - 22680z^2 + 77400z - 264600)}{8z^4} - \frac{1}{16z^{9/2}} 7e^z\sqrt{\pi}(8z^8 - 36z^7 + 270z^6 - 1725z^5 + 9135z^4 - 38520z^3 + 121320z^2 - 253800z + 264600)\operatorname{erf}(\sqrt{z})$$

07.25.03.aj7b.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{7(4z^7 + 20z^6 + 147z^5 + 951z^4 + 5160z^3 + 22680z^2 + 77400z + 264600)}{8z^4} - \frac{1}{16z^{9/2}} 7e^{-z}\sqrt{\pi}(8z^8 + 36z^7 + 270z^6 + 1725z^5 + 9135z^4 + 38520z^3 + 121320z^2 + 253800z + 264600)\operatorname{erfi}(\sqrt{z})$$

07.25.03.aj7c.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{5}{2}, 6; z\right) = \frac{120120(z+12)}{z^5} - \frac{1}{9z^5} 4e^z(32z^8 - 272z^7 + 2256z^6 - 15768z^5 + 90090z^4 - 405405z^3 + 1351350z^2 - 2972970z + 3243240)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = -\frac{3}{2}$

07.25.03.aj7d.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{81}(32z^9 + 1408z^8 + 22424z^7 + 161664z^6 + 538560z^5 + 749232z^4 + 320544z^3 + 12600z^2 + 360z + 81) + \frac{4}{81}e^z\sqrt{\pi}(8z^{19/2} + 356z^{17/2} + 5778z^{15/2} + 43053z^{13/2} + 152448z^{11/2} + 239976z^{9/2} + 137808z^{7/2} + 16632z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aj7e.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{81}(-32z^9 + 1408z^8 - 22424z^7 + 161664z^6 - 538560z^5 + 749232z^4 - 320544z^3 + 12600z^2 - 360z + 81) + \frac{4}{81}e^{-z}\sqrt{\pi}(8z^{19/2} - 356z^{17/2} + 5778z^{15/2} - 43053z^{13/2} + 152448z^{11/2} - 239976z^{9/2} + 137808z^{7/2} - 16632z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aj7f.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{27}(-16z^8 - 592z^7 - 7668z^6 - 42768z^5 - 101376z^4 - 84672z^3 - 12600z^2 + 360z + 27) - \frac{2}{27}e^z\sqrt{\pi}(8z^{17/2} + 300z^{15/2} + 3978z^{13/2} + 23163z^{11/2} + 59796z^{9/2} + 60588z^{7/2} + 16632z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aj7g.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{27} (-16z^8 + 592z^7 - 7668z^6 + 42768z^5 - 101376z^4 + 84672z^3 - 12600z^2 - 360z + 27) + \frac{2}{27} e^{-z} \sqrt{\pi} (8z^{17/2} - 300z^{15/2} + 3978z^{13/2} - 23163z^{11/2} + 59796z^{9/2} - 60588z^{7/2} + 16632z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aj7h.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{27} (8z^7 + 240z^6 + 2398z^5 + 9504z^4 + 13608z^3 + 4200z^2 - 360z + 27) + \frac{1}{27} e^z \sqrt{\pi} (8z^{15/2} + 244z^{13/2} + 2514z^{11/2} + 10593z^{9/2} + 17424z^{7/2} + 8316z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aj7i.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{27} (-8z^7 + 240z^6 - 2398z^5 + 9504z^4 - 13608z^3 + 4200z^2 + 360z + 27) + \frac{1}{27} e^{-z} \sqrt{\pi} (8z^{15/2} - 244z^{13/2} + 2514z^{11/2} - 10593z^{9/2} + 17424z^{7/2} - 8316z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aj7j.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, 1; z\right) = \frac{1}{54} e^z (16z^7 + 432z^6 + 3816z^5 + 13056z^4 + 15561z^3 + 3537z^2 - 414z + 54)$$

07.25.03.aj7k.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{54} e^z \sqrt{\pi} (8z^4 + 188z^3 + 1386z^2 + 3663z + 2772) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{27} (4z^6 + 92z^5 + 649z^4 + 1548z^3 + 840z^2 - 120z + 27)$$

07.25.03.aj7l.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{27} (4z^6 - 92z^5 + 649z^4 - 1548z^3 + 840z^2 + 120z + 27) - \frac{1}{54} e^{-z} \sqrt{\pi} z^{5/2} (8z^4 - 188z^3 + 1386z^2 - 3663z + 2772) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aj7m.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, 2; z\right) = \frac{1}{54} e^z (16z^6 + 320z^5 + 1896z^4 + 3576z^3 + 1257z^2 - 234z + 54)$$

07.25.03.aj7n.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{36} e^z \sqrt{\pi} (8z^3 + 132z^2 + 594z + 693) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{18} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18)$$

07.25.03.aj7o.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{36} e^{-z} \sqrt{\pi} (8z^3 - 132z^2 + 594z - 693) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{18} (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18)$$

07.25.03.aj7p.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, 3; z\right) = \frac{1}{27} e^z (16z^5 + 208z^4 + 648z^3 + 336z^2 - 87z + 27)$$

07.25.03.aj7q.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(4z^6 + 36z^5 + 53z^4 - 12z^3 + 24z - 72)}{36z^2} + \frac{5e^z\sqrt{\pi}(8z^7 + 76z^6 + 138z^5 + 3z^4 - 12z^3 + 36z^2 - 72z + 72)\operatorname{erf}(\sqrt{z})}{72z^{5/2}}$$

07.25.03.aj7r.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^6 - 36z^5 + 53z^4 + 12z^3 - 24z - 72)}{36z^2} - \frac{5e^{-z}\sqrt{\pi}(8z^7 - 76z^6 + 138z^5 - 3z^4 - 12z^3 - 36z^2 - 72z - 72)\operatorname{erfi}(\sqrt{z})}{72z^{5/2}}$$

07.25.03.aj7s.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, 4; z\right) = \frac{1}{9}e^z(16z^4 + 96z^3 + 72z^2 - 24z + 9)$$

07.25.03.aj7t.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(4z^6 + 8z^5 + 7z^4 - 48z^3 + 204z^2 - 672z + 1800)}{72z^3} + \frac{35e^z\sqrt{\pi}(8z^7 + 20z^6 + 18z^5 - 87z^4 + 336z^3 - 972z^2 + 1872z - 1800)\operatorname{erf}(\sqrt{z})}{144z^{7/2}}$$

07.25.03.aj7u.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(8z^7 - 20z^6 + 18z^5 + 87z^4 + 336z^3 + 972z^2 + 1872z + 1800)\operatorname{erfi}(\sqrt{z})}{144z^{7/2}} - \frac{35(4z^6 - 8z^5 + 7z^4 + 48z^3 + 204z^2 + 672z + 1800)}{72z^3}$$

07.25.03.aj7v.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, 5; z\right) = \frac{4e^z(16z^7 - 16z^6 + 168z^5 - 864z^4 + 3465z^3 - 10395z^2 + 20790z - 20790)}{9z^4} + \frac{9240}{z^4}$$

07.25.03.aj7w.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{35(4z^6 - 20z^5 + 129z^4 - 708z^3 + 3144z^2 - 10800z + 37800)}{16z^4} + \frac{35e^z\sqrt{\pi}(8z^7 - 36z^6 + 234z^5 - 1257z^4 + 5364z^3 - 17064z^2 + 36000z - 37800)\operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.aj7x.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{35(4z^6 + 20z^5 + 129z^4 + 708z^3 + 3144z^2 + 10800z + 37800)}{16z^4} - \frac{35e^{-z}\sqrt{\pi}(8z^7 + 36z^6 + 234z^5 + 1257z^4 + 5364z^3 + 17064z^2 + 36000z + 37800)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.aj7y.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{3}{2}, 6; z\right) = \frac{9240(5z + 52)}{z^5} + \frac{20e^z(16z^7 - 128z^6 + 936z^5 - 5544z^4 + 25641z^3 - 87318z^2 + 195426z - 216216)}{9z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = -\frac{1}{2}$

07.25.03.aj7z.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{9}(8z^7 + 248z^6 + 2598z^5 + 11106z^4 + 18396z^3 + 8820z^2 + 360z + 9) + \frac{1}{9}e^z\sqrt{\pi}(8z^{15/2} + 252z^{13/2} + 2718z^{11/2} + 12291z^{9/2} + 22923z^{7/2} + 14742z^{5/2} + 1890z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aj80.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{9}(-8z^7 + 248z^6 - 2598z^5 + 11106z^4 - 18396z^3 + 8820z^2 - 360z + 9) + \frac{1}{9}e^{-z}\sqrt{\pi}(8z^{15/2} - 252z^{13/2} + 2718z^{11/2} - 12291z^{9/2} + 22923z^{7/2} - 14742z^{5/2} + 1890z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aj81.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{9}(-4z^6 - 100z^5 - 801z^4 - 2394z^3 - 2310z^2 - 360z + 9) + \frac{1}{18}e^z\sqrt{\pi}(-8z^{13/2} - 204z^{11/2} - 1698z^{9/2} - 5499z^{7/2} - 6426z^{5/2} - 1890z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aj82.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{9}(-4z^6 + 100z^5 - 801z^4 + 2394z^3 - 2310z^2 + 360z + 9) + \frac{1}{18}e^{-z}\sqrt{\pi}(8z^{13/2} - 204z^{11/2} + 1698z^{9/2} - 5499z^{7/2} + 6426z^{5/2} - 1890z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aj83.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, 1; z\right) = -\frac{1}{18}e^z(8z^6 + 180z^5 + 1278z^4 + 3333z^3 + 2781z^2 + 378z - 18)$$

07.25.03.aj84.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{18}(-4z^5 - 76z^4 - 423z^3 - 735z^2 - 240z + 18) + \frac{1}{36}e^z\sqrt{\pi}(-8z^{11/2} - 156z^{9/2} - 918z^{7/2} - 1827z^{5/2} - 945z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.aj85.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{18}(4z^5 - 76z^4 + 423z^3 - 735z^2 + 240z + 18) + \frac{1}{36}e^{-z}\sqrt{\pi}(-8z^{11/2} + 156z^{9/2} - 918z^{7/2} + 1827z^{5/2} - 945z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aj86.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, 2; z\right) = -\frac{1}{18}e^z(8z^5 + 132z^4 + 618z^3 + 861z^2 + 198z - 18)$$

07.25.03.aj87.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{12}(-4z^4 - 52z^3 - 165z^2 - 96z + 12) - \frac{1}{24}e^z\sqrt{\pi}z^{3/2}(8z^3 + 108z^2 + 378z + 315)\operatorname{erf}(\sqrt{z})$$

07.25.03.aj88.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{24}e^{-z}\sqrt{\pi}(8z^3 - 108z^2 + 378z - 315)\operatorname{erfi}(\sqrt{z})z^{3/2} + \frac{1}{12}(-4z^4 + 52z^3 - 165z^2 + 96z + 12)$$

07.25.03.aj89.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, 3; z\right) = -\frac{1}{9}e^z(8z^4 + 84z^3 + 198z^2 + 69z - 9)$$

07.25.03.aj8a.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{5(4z^5 + 28z^4 + 27z^3 - 3z^2 - 6z + 18)}{24z^2} - \frac{5e^z\sqrt{\pi}(8z^6 + 60z^5 + 78z^4 + 3z^3 - 9z^2 + 18z - 18)\operatorname{erf}(\sqrt{z})}{48z^{5/2}}$$

07.25.03.aj8b.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^5 - 28z^4 + 27z^3 + 3z^2 - 6z - 18)}{24z^2} - \frac{5e^{-z}\sqrt{\pi}(8z^6 - 60z^5 + 78z^4 - 3z^3 - 9z^2 - 18z - 18)\operatorname{erfi}(\sqrt{z})}{48z^{5/2}}$$

07.25.03.aj8c.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, 4; z\right) = -\frac{1}{3}e^z(8z^3 + 36z^2 + 18z - 3)$$

07.25.03.aj8d.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(4z^5 + 4z^4 + 9z^3 - 42z^2 + 138z - 360)}{48z^3} - \frac{35e^z\sqrt{\pi}(8z^6 + 12z^5 + 18z^4 - 69z^3 + 198z^2 - 378z + 360)\operatorname{erf}(\sqrt{z})}{96z^{7/2}}$$

07.25.03.aj8e.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(8z^6 - 12z^5 + 18z^4 + 69z^3 + 198z^2 + 378z + 360)\operatorname{erfi}(\sqrt{z})}{96z^{7/2}} - \frac{35(4z^5 - 4z^4 + 9z^3 + 42z^2 + 138z + 360)}{48z^3}$$

07.25.03.aj8f.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, 5; z\right) = \frac{2520}{z^4} - \frac{4e^z(8z^6 - 12z^5 + 78z^4 - 315z^3 + 945z^2 - 1890z + 1890)}{3z^4}$$

07.25.03.aj8g.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{105(4z^5 - 20z^4 + 111z^3 - 501z^2 + 1740z - 6300)}{32z^4} - \frac{105e^z\sqrt{\pi}(8z^6 - 36z^5 + 198z^4 - 861z^3 + 2781z^2 - 5940z + 6300)\operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.aj8h.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{105(4z^5 + 20z^4 + 111z^3 + 501z^2 + 1740z + 6300)}{32z^4} - \frac{105e^{-z}\sqrt{\pi}(8z^6 + 36z^5 + 198z^4 + 861z^3 + 2781z^2 + 5940z + 6300)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.aj8i.01

$${}_2F_2\left(\frac{5}{2}, 4; -\frac{1}{2}, 6; z\right) = \frac{2520(5z + 44)}{z^5} - \frac{20e^z(8z^6 - 60z^5 + 378z^4 - 1827z^3 + 6426z^2 - 14742z + 16632)}{3z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = \frac{1}{2}$

07.25.03.aj8j.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{18}(4z^5 + 80z^4 + 483z^3 + 980z^2 + 510z + 18) + \frac{1}{36}e^z\sqrt{\pi}(8z^{11/2} + 164z^{9/2} + 1042z^{7/2} + 2373z^{5/2} + 1680z^{3/2} + 210\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.aj8k.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{18}(-4z^5 + 80z^4 - 483z^3 + 980z^2 - 510z + 18) + \frac{1}{36}e^{-z}\sqrt{\pi}(8z^{11/2} - 164z^{9/2} + 1042z^{7/2} - 2373z^{5/2} + 1680z^{3/2} - 210\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.aj8l.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, 1; z\right) = \frac{1}{18}e^z(4z^5 + 72z^4 + 387z^3 + 699z^2 + 342z + 18)$$

07.25.03.aj8m.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{36}(4z^4 + 60z^3 + 245z^2 + 270z + 36) + \frac{1}{72}e^z\sqrt{\pi}\sqrt{z}(8z^4 + 124z^3 + 546z^2 + 735z + 210)\operatorname{erf}(\sqrt{z})$$

07.25.03.aj8n.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{36}(4z^4 - 60z^3 + 245z^2 - 270z + 36) - \frac{1}{72}e^{-z}\sqrt{\pi}\sqrt{z}(8z^4 - 124z^3 + 546z^2 - 735z + 210)\operatorname{erfi}(\sqrt{z})$$

07.25.03.aj8o.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, 2; z\right) = \frac{1}{18}e^z(4z^4 + 52z^3 + 179z^2 + 162z + 18)$$

07.25.03.aj8p.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{24}(4z^3 + 40z^2 + 87z + 24) + \frac{1}{48}e^z\sqrt{\pi}\sqrt{z}(8z^3 + 84z^2 + 210z + 105)\operatorname{erf}(\sqrt{z})$$

07.25.03.aj8q.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{24}(-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48}e^{-z}\sqrt{\pi}\sqrt{z}(8z^3 - 84z^2 + 210z - 105)\operatorname{erfi}(\sqrt{z})$$

07.25.03.aj8r.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, 3; z\right) = \frac{1}{9}e^z(4z^3 + 32z^2 + 51z + 9)$$

07.25.03.aj8s.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5(4z^4 + 20z^3 + 9z^2 + 2z - 6)}{48z^2} + \frac{5e^z\sqrt{\pi}(8z^5 + 44z^4 + 34z^3 + 3z^2 - 6z + 6)\operatorname{erf}(\sqrt{z})}{96z^{5/2}}$$

07.25.03.aj8t.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^4 - 20z^3 + 9z^2 - 2z - 6)}{48z^2} - \frac{5e^{-z}\sqrt{\pi}(8z^5 - 44z^4 + 34z^3 - 3z^2 - 6z - 6)\operatorname{erfi}(\sqrt{z})}{96z^{5/2}}$$

07.25.03.aj8u.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, 4; z\right) = \frac{1}{3}e^z(4z^2 + 12z + 3)$$

07.25.03.aj8v.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(4z^4 + 11z^2 - 36z + 90)}{96z^3} + \frac{35e^z\sqrt{\pi}(8z^5 + 4z^4 + 18z^3 - 51z^2 + 96z - 90)\operatorname{erf}(\sqrt{z})}{192z^{7/2}}$$

07.25.03.aj8w.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(8z^5 - 4z^4 + 18z^3 + 51z^2 + 96z + 90)\operatorname{erfi}(\sqrt{z})}{192z^{7/2}} - \frac{35(4z^4 + 11z^2 + 36z + 90)}{96z^3}$$

07.25.03.aj8x.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, 5; z\right) = \frac{4e^z(4z^5 - 8z^4 + 35z^3 - 105z^2 + 210z - 210)}{3z^4} + \frac{280}{z^4}$$

07.25.03.aj8y.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{105(4z^4 - 20z^3 + 93z^2 - 330z + 1260)}{64z^4} + \frac{105e^z\sqrt{\pi}(8z^5 - 36z^4 + 162z^3 - 537z^2 + 1170z - 1260)\operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.aj8z.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{105(4z^4 + 20z^3 + 93z^2 + 330z + 1260)}{64z^4} - \frac{105e^{-z}\sqrt{\pi}(8z^5 + 36z^4 + 162z^3 + 537z^2 + 1170z + 1260)\operatorname{erfi}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.aj90.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{1}{2}, 6; z\right) = \frac{280(5z + 36)}{z^5} + \frac{20e^z(4z^5 - 28z^4 + 147z^3 - 546z^2 + 1302z - 1512)}{3z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = 1$

07.25.03.aj91.01

$${}_2F_2\left(\frac{5}{2}, 4; 1, 1; z\right) = \frac{1}{72} e^{z/2} (8z^5 + 132z^4 + 660z^3 + 1179z^2 + 684z + 72) I_0\left(\frac{z}{2}\right) + \frac{1}{72} e^{z/2} (8z^5 + 124z^4 + 540z^3 + 693z^2 + 162z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj92.01

$${}_2F_2\left(\frac{5}{2}, 4; 1, \frac{3}{2}; z\right) = \frac{1}{18} e^z (2z^4 + 27z^3 + 99z^2 + 102z + 18)$$

07.25.03.aj93.01

$${}_2F_2\left(\frac{5}{2}, 4; 1, 2; z\right) = \frac{1}{36} e^{z/2} (4z^4 + 48z^3 + 159z^2 + 162z + 36) I_0\left(\frac{z}{2}\right) + \frac{1}{36} e^{z/2} (4z^4 + 44z^3 + 117z^2 + 63z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj94.01

$${}_2F_2\left(\frac{5}{2}, 4; 1, \frac{5}{2}; z\right) = \frac{1}{6} e^z (z^3 + 9z^2 + 18z + 6)$$

07.25.03.aj95.01

$${}_2F_2\left(\frac{5}{2}, 4; 1, 3; z\right) = \frac{1}{18} e^{z/2} (4z^3 + 30z^2 + 51z + 18) I_0\left(\frac{z}{2}\right) + \frac{1}{18} e^{z/2} z (4z^2 + 26z + 27) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj96.01

$${}_2F_2\left(\frac{5}{2}, 4; 1, \frac{7}{2}; z\right) = \frac{5e^z (16z^4 + 72z^3 + 36z^2 + 6z - 9)}{192z^2} + \frac{15\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.aj97.01

$${}_2F_2\left(\frac{5}{2}, 4; 1, \frac{7}{2}; -z\right) = \frac{5e^{-z} (16z^4 - 72z^3 + 36z^2 - 6z - 9)}{192z^2} + \frac{15\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.aj98.01

$${}_2F_2\left(\frac{5}{2}, 4; 1, 4; z\right) = \frac{1}{3} e^{z/2} (2z^2 + 6z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} z (z + 2) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj99.01

$${}_2F_2\left(\frac{5}{2}, 4; 1, \frac{9}{2}; z\right) = \frac{35e^z (32z^4 + 72z^2 - 168z + 225)}{768z^3} + \frac{105\sqrt{\pi} (2z - 25) \operatorname{erfi}(\sqrt{z})}{512z^{7/2}}$$

07.25.03.aj9a.01

$${}_2F_2\left(\frac{5}{2}, 4; 1, \frac{9}{2}; -z\right) = \frac{105\sqrt{\pi} (2z + 25) \operatorname{erf}(\sqrt{z})}{512z^{7/2}} - \frac{35e^{-z} (32z^4 + 72z^2 + 168z + 225)}{768z^3}$$

07.25.03.aj9b.01

$${}_2F_2\left(\frac{5}{2}, 4; 1, 5; z\right) = \frac{4e^{z/2} (2z^3 - 3z^2 + 12z - 24) I_0\left(\frac{z}{2}\right)}{3z^2} + \frac{4e^{z/2} (2z^4 - 5z^3 + 18z^2 - 48z + 96) I_1\left(\frac{z}{2}\right)}{3z^3}$$

07.25.03.aj9c.01

$${}_2F_2\left(\frac{5}{2}, 4; 1, \frac{11}{2}; z\right) = \frac{105 e^z (128 z^4 - 576 z^3 + 2304 z^2 - 6450 z + 11025)}{2048 z^4} + \frac{945 \sqrt{\pi} (4 z^2 - 100 z - 1225) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.aj9d.01

$${}_2F_2\left(\frac{5}{2}, 4; 1, \frac{11}{2}; -z\right) = \frac{105 e^{-z} (128 z^4 + 576 z^3 + 2304 z^2 + 6450 z + 11025)}{2048 z^4} + \frac{945 \sqrt{\pi} (4 z^2 + 100 z - 1225) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.aj9e.01

$${}_2F_2\left(\frac{5}{2}, 4; 1, 6; z\right) = \frac{8 e^{z/2} (5 z^3 - 30 z^2 + 132 z - 384) I_0\left(\frac{z}{2}\right)}{3 z^3} + \frac{8 e^{z/2} (5 z^4 - 35 z^3 + 168 z^2 - 528 z + 1536) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = \frac{3}{2}$

07.25.03.aj9f.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{72} (4 z^3 + 44 z^2 + 115 z + 57) + \frac{e^z \sqrt{\pi} (8 z^4 + 92 z^3 + 270 z^2 + 195 z + 15) \operatorname{erf}(\sqrt{z})}{144 \sqrt{z}}$$

07.25.03.aj9g.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{72} (-4 z^3 + 44 z^2 - 115 z + 57) + \frac{e^{-z} \sqrt{\pi} (8 z^4 - 92 z^3 + 270 z^2 - 195 z + 15) \operatorname{erfi}(\sqrt{z})}{144 \sqrt{z}}$$

07.25.03.aj9h.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{3}{2}, 2; z\right) = \frac{1}{18} e^z (2 z^3 + 19 z^2 + 42 z + 18)$$

07.25.03.aj9i.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{48} (4 z^2 + 28 z + 33) + \frac{e^z \sqrt{\pi} (8 z^3 + 60 z^2 + 90 z + 15) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.aj9j.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{48} (4 z^2 - 28 z + 33) + \frac{e^{-z} \sqrt{\pi} (-8 z^3 + 60 z^2 - 90 z + 15) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.aj9k.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{3}{2}, 3; z\right) = \frac{1}{9} e^z (2 z^2 + 11 z + 9)$$

07.25.03.aj9l.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{5 (4 z^3 + 12 z^2 - z + 3)}{96 z^2} + \frac{5 e^z \sqrt{\pi} (8 z^4 + 28 z^3 + 6 z^2 + 3 z - 3) \operatorname{erf}(\sqrt{z})}{192 z^{5/2}}$$

07.25.03.aj9m.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} \sqrt{\pi} (8 z^4 - 28 z^3 + 6 z^2 - 3 z - 3) \operatorname{erfi}(\sqrt{z})}{192 z^{5/2}} - \frac{5 (4 z^3 - 12 z^2 - z - 3)}{96 z^2}$$

07.25.03.aj9n.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{3}{2}, 4; z\right) = \frac{1}{3} e^z (2z + 3)$$

07.25.03.aj9o.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(4z^3 - 4z^2 + 13z - 30)}{192z^3} + \frac{35e^z \sqrt{\pi} (8z^4 - 4z^3 + 18z^2 - 33z + 30) \operatorname{erf}(\sqrt{z})}{384z^{7/2}}$$

07.25.03.aj9p.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(4z^3 + 4z^2 + 13z + 30)}{192z^3} - \frac{35e^{-z} \sqrt{\pi} (8z^4 + 4z^3 + 18z^2 + 33z + 30) \operatorname{erfi}(\sqrt{z})}{384z^{7/2}}$$

07.25.03.aj9q.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{3}{2}, 5; z\right) = \frac{4e^z (2z^4 - 5z^3 + 15z^2 - 30z + 30)}{3z^4} - \frac{40}{z^4}$$

07.25.03.aj9r.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{105(4z^3 - 20z^2 + 75z - 315)}{128z^4} + \frac{105e^z \sqrt{\pi} (8z^4 - 36z^3 + 126z^2 - 285z + 315) \operatorname{erf}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.aj9s.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{105e^{-z} \sqrt{\pi} (8z^4 + 36z^3 + 126z^2 + 285z + 315) \operatorname{erfi}(\sqrt{z})}{256z^{9/2}} - \frac{105(4z^3 + 20z^2 + 75z + 315)}{128z^4}$$

07.25.03.aj9t.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{3}{2}, 6; z\right) = \frac{20e^z (2z^4 - 13z^3 + 54z^2 - 138z + 168)}{3z^5} - \frac{40(5z + 28)}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = 2$

07.25.03.aj9u.01

$${}_2F_2\left(\frac{5}{2}, 4; 2, 2; z\right) = \frac{1}{36} e^{z/2} (4z^3 + 34z^2 + 71z + 36) I_0\left(\frac{z}{2}\right) + \frac{1}{36} e^{z/2} (4z^3 + 30z^2 + 43z + 4) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj9v.01

$${}_2F_2\left(\frac{5}{2}, 4; 2, \frac{5}{2}; z\right) = \frac{1}{6} e^z (z^2 + 6z + 6)$$

07.25.03.aj9w.01

$${}_2F_2\left(\frac{5}{2}, 4; 2, 3; z\right) = \frac{1}{9} e^{z/2} (2z^2 + 10z + 9) I_0\left(\frac{z}{2}\right) + \frac{2}{9} e^{z/2} (z^2 + 4z + 1) I_1\left(\frac{z}{2}\right)$$

07.25.03.aj9x.01

$${}_2F_2\left(\frac{5}{2}, 4; 2, \frac{7}{2}; z\right) = \frac{5e^z (8z^3 + 20z^2 - 2z + 3)}{96z^2} - \frac{5\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.aj9y.01

$${}_2F_2\left(\frac{5}{2}, 4; 2, \frac{7}{2}; -z\right) = -\frac{5e^{-z} (8z^3 - 20z^2 - 2z - 3)}{96z^2} - \frac{5\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.aj9z.01

$${}_2F_2\left(\frac{5}{2}, 4; 2, 4; z\right) = \frac{1}{3} e^{z/2} (2z+3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z+1) I_1\left(\frac{z}{2}\right)$$

07.25.03.aja0.01

$${}_2F_2\left(\frac{5}{2}, 4; 2, \frac{9}{2}; z\right) = \frac{35 e^z (16z^3 - 16z^2 + 36z - 45)}{384 z^3} - \frac{35 \sqrt{\pi} (2z - 15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.aja1.01

$${}_2F_2\left(\frac{5}{2}, 4; 2, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (16z^3 + 16z^2 + 36z + 45)}{384 z^3} - \frac{35 \sqrt{\pi} (2z + 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.aja2.01

$${}_2F_2\left(\frac{5}{2}, 4; 2, 5; z\right) = \frac{8 e^{z/2} (z^2 - 2z + 4) I_0\left(\frac{z}{2}\right)}{3 z^2} + \frac{8 e^{z/2} (z^3 - 3z^2 + 8z - 16) I_1\left(\frac{z}{2}\right)}{3 z^3}$$

07.25.03.aja3.01

$${}_2F_2\left(\frac{5}{2}, 4; 2, \frac{11}{2}; z\right) = \frac{105 e^z (64z^3 - 288z^2 + 870z - 1575)}{1024 z^4} - \frac{315 \sqrt{\pi} (4z^2 - 60z - 525) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.aja4.01

$${}_2F_2\left(\frac{5}{2}, 4; 2, \frac{11}{2}; -z\right) = -\frac{105 e^{-z} (64z^3 + 288z^2 + 870z + 1575)}{1024 z^4} - \frac{315 \sqrt{\pi} (4z^2 + 60z - 525) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.aja5.01

$${}_2F_2\left(\frac{5}{2}, 4; 2, 6; z\right) = \frac{8 e^{z/2} (5z^2 - 28z + 96) I_0\left(\frac{z}{2}\right)}{3 z^3} + \frac{8 e^{z/2} (5z^3 - 32z^2 + 112z - 384) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = \frac{5}{2}$

07.25.03.aja6.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{4z^2 + 16z + 3}{32z} + \frac{e^z \sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.aja7.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-4z^2 + 16z - 3}{32z} + \frac{e^{-z} \sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.aja8.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{5}{2}, 3; z\right) = \frac{1}{3} e^z (z + 3)$$

07.25.03.aja9.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{5(4z^2 + 4z - 3)}{64 z^2} + \frac{5 e^z \sqrt{\pi} (8z^3 + 12z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.ajaa.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^2 - 4z - 3)}{64z^2} - \frac{5e^{-z}\sqrt{\pi}(8z^3 - 12z^2 - 6z - 3)\operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.ajab.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{5}{2}, 4; z\right) = e^z$$

07.25.03.ajac.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{35(4z^2 - 8z + 15)}{128z^3} + \frac{35e^z\sqrt{\pi}(8z^3 - 12z^2 + 18z - 15)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.ajad.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(8z^3 + 12z^2 + 18z + 15)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35(4z^2 + 8z + 15)}{128z^3}$$

07.25.03.ajae.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{5}{2}, 5; z\right) = \frac{4e^z(z^3 - 3z^2 + 6z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.ajaf.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{315(4z^2 - 20z + 105)}{256z^4} + \frac{315e^z\sqrt{\pi}(8z^3 - 36z^2 + 90z - 105)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ajag.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{315(4z^2 + 20z + 105)}{256z^4} - \frac{315e^{-z}\sqrt{\pi}(8z^3 + 36z^2 + 90z + 105)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ajah.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{5}{2}, 6; z\right) = \frac{120(z + 4)}{z^5} + \frac{20e^z(z^3 - 6z^2 + 18z - 24)}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = 3$

07.25.03.ajai.01

$${}_2F_2\left(\frac{5}{2}, 4; 3, 3; z\right) = \frac{2}{9}e^{z/2}(2z + 5)I_0\left(\frac{z}{2}\right) + \frac{2e^{z/2}(2z^2 + 3z - 2)I_1\left(\frac{z}{2}\right)}{9z}$$

07.25.03.ajaj.01

$${}_2F_2\left(\frac{5}{2}, 4; 3, \frac{7}{2}; z\right) = \frac{5e^z(4z^2 + 2z - 3)}{24z^2} + \frac{5\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.ajak.01

$${}_2F_2\left(\frac{5}{2}, 4; 3, \frac{7}{2}; -z\right) = \frac{5e^{-z}(4z^2 - 2z - 3)}{24z^2} + \frac{5\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.ajal.01

$${}_2F_2\left(\frac{5}{2}, 4; 3, 4; z\right) = \frac{4}{3}e^{z/2}I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2}(z - 1)I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.ajam.01

$${}_2F_2\left(\frac{5}{2}, 4; 3, \frac{9}{2}; z\right) = \frac{35 e^z (8z^2 - 16z + 15)}{96 z^3} + \frac{35 \sqrt{\pi} (2z - 5) \operatorname{erfi}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.ajan.01

$${}_2F_2\left(\frac{5}{2}, 4; 3, \frac{9}{2}; -z\right) = \frac{35 \sqrt{\pi} (2z + 5) \operatorname{erf}(\sqrt{z})}{64 z^{7/2}} - \frac{35 e^{-z} (8z^2 + 16z + 15)}{96 z^3}$$

07.25.03.ajao.01

$${}_2F_2\left(\frac{5}{2}, 4; 3, 5; z\right) = \frac{16 e^{z/2} (z - 2) I_0\left(\frac{z}{2}\right)}{3 z^2} + \frac{16 e^{z/2} (z^2 - 4z + 8) I_1\left(\frac{z}{2}\right)}{3 z^3}$$

07.25.03.ajap.01

$${}_2F_2\left(\frac{5}{2}, 4; 3, \frac{11}{2}; z\right) = \frac{105 e^z (32z^2 - 150z + 315)}{256 z^4} + \frac{315 \sqrt{\pi} (4z^2 - 20z - 105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ajaq.01

$${}_2F_2\left(\frac{5}{2}, 4; 3, \frac{11}{2}; -z\right) = \frac{105 e^{-z} (32z^2 + 150z + 315)}{256 z^4} + \frac{315 \sqrt{\pi} (4z^2 + 20z - 105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ajar.01

$${}_2F_2\left(\frac{5}{2}, 4; 3, 6; z\right) = \frac{32 e^{z/2} (3z - 16) I_0\left(\frac{z}{2}\right)}{3 z^3} + \frac{64 e^{z/2} (z^2 - 6z + 32) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = \frac{7}{2}$

07.25.03.ajas.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{7}{2}, 4; z\right) = \frac{5 e^z (2z - 3)}{4 z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.ajat.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{7}{2}, 4; -z\right) = \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5 e^{-z} (2z + 3)}{4 z^2}$$

07.25.03.ajau.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{7}{2}, 5; z\right) = \frac{10 e^z (z^2 - 4z + 4)}{z^4} + \frac{5 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}} - \frac{40}{z^4}$$

07.25.03.ajav.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{7}{2}, 5; -z\right) = \frac{10 e^{-z} (z^2 + 4z + 4)}{z^4} + \frac{5 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{5/2}} - \frac{40}{z^4}$$

07.25.03.ajaw.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{7}{2}, 6; z\right) = -\frac{40 (5z + 12)}{z^5} + \frac{40 e^z (z^2 - 7z + 12)}{z^5} + \frac{10 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{5/2}}$$

07.25.03.ajax.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{7}{2}, 6; -z\right) = -\frac{40(5z-12)}{z^5} - \frac{40e^{-z}(z^2+7z+12)}{z^5} + \frac{10\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{z^{5/2}}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = 4$

07.25.03.ajay.01

$${}_2F_2\left(\frac{5}{2}, 4; 4, 4; z\right) = \frac{4e^{z/2}I_0\left(\frac{z}{2}\right)}{z} + \frac{4e^{z/2}(z-4)I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.ajaz.01

$${}_2F_2\left(\frac{5}{2}, 4; 4, \frac{9}{2}; z\right) = \frac{35e^z(4z-15)}{16z^3} + \frac{105\sqrt{\pi}(2z+5)\operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.ajb0.01

$${}_2F_2\left(\frac{5}{2}, 4; 4, \frac{9}{2}; -z\right) = \frac{35e^{-z}(4z+15)}{16z^3} + \frac{105\sqrt{\pi}(2z-5)\operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.ajb1.01

$${}_2F_2\left(\frac{5}{2}, 4; 4, 5; z\right) = \frac{32e^{z/2}I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128e^{z/2}I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.ajb2.01

$${}_2F_2\left(\frac{5}{2}, 4; 4, \frac{11}{2}; z\right) = \frac{1575e^z(2z-21)}{128z^4} + \frac{945\sqrt{\pi}(4z^2+20z+35)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.ajb3.01

$${}_2F_2\left(\frac{5}{2}, 4; 4, \frac{11}{2}; -z\right) = \frac{945\sqrt{\pi}(4z^2-20z+35)\operatorname{erf}(\sqrt{z})}{256z^{9/2}} - \frac{1575e^{-z}(2z+21)}{128z^4}$$

07.25.03.ajb4.01

$${}_2F_2\left(\frac{5}{2}, 4; 4, 6; z\right) = \frac{32e^{z/2}(z+8)I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32e^{z/2}(z^2+4z+32)I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = \frac{9}{2}$

07.25.03.ajb5.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{9}{2}, 5; z\right) = \frac{35e^z(z-16)}{2z^4} + \frac{35\sqrt{\pi}(2z+15)\operatorname{erfi}(\sqrt{z})}{4z^{7/2}} + \frac{280}{z^4}$$

07.25.03.ajb6.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{9}{2}, 5; -z\right) = -\frac{35e^{-z}(z+16)}{2z^4} + \frac{35\sqrt{\pi}(2z-15)\operatorname{erf}(\sqrt{z})}{4z^{7/2}} + \frac{280}{z^4}$$

07.25.03.ajb7.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{9}{2}, 6; z\right) = \frac{280(5z+4)}{z^5} - \frac{35e^z(z^2+8z+32)}{z^5} + \frac{35\sqrt{\pi}(2z+25)\operatorname{erfi}(\sqrt{z})}{2z^{7/2}}$$

07.25.03.ajb8.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{9}{2}, 6; -z\right) = \frac{280(5z-4)}{z^5} + \frac{35e^{-z}(z^2-8z+32)}{z^5} + \frac{35\sqrt{\pi}(2z-25)\operatorname{erf}(\sqrt{z})}{2z^{7/2}}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = 5$

07.25.03.ajb9.01

$${}_2F_2\left(\frac{5}{2}, 4; 5, 5; z\right) = \frac{128e^{z/2}(z^2+12z-24)I_0\left(\frac{z}{2}\right)}{3z^4} - \frac{128e^{z/2}(z+10)I_1\left(\frac{z}{2}\right)}{3z^3} + \frac{1024}{z^4}$$

07.25.03.ajba.01

$${}_2F_2\left(\frac{5}{2}, 4; 5, \frac{11}{2}; z\right) = -\frac{315e^z(2z+23)}{16z^4} + \frac{315\sqrt{\pi}(4z^2+60z-105)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}} + \frac{2520}{z^4}$$

07.25.03.ajbb.01

$${}_2F_2\left(\frac{5}{2}, 4; 5, \frac{11}{2}; -z\right) = \frac{315e^{-z}(2z-23)}{16z^4} + \frac{315\sqrt{\pi}(4z^2-60z-105)\operatorname{erf}(\sqrt{z})}{32z^{9/2}} + \frac{2520}{z^4}$$

07.25.03.ajbc.01

$${}_2F_2\left(\frac{5}{2}, 4; 5, 6; z\right) = \frac{256e^{z/2}(z^2+18z-60)I_0\left(\frac{z}{2}\right)}{3z^4} - \frac{256e^{z/2}(z^2+19z-48)I_1\left(\frac{z}{2}\right)}{3z^4} + \frac{5120}{z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = \frac{11}{2}$

07.25.03.ajbd.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{11}{2}, 6; z\right) = \frac{2520(5z-4)}{z^5} - \frac{315e^z(2z^2+51z-256)}{8z^5} + \frac{315\sqrt{\pi}(4z^2+100z-525)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.ajbe.01

$${}_2F_2\left(\frac{5}{2}, 4; \frac{11}{2}, 6; -z\right) = \frac{2520(5z+4)}{z^5} + \frac{315e^{-z}(2z^2-51z-256)}{8z^5} + \frac{315\sqrt{\pi}(4z^2-100z-525)\operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 4$, $b_1 = 6$

07.25.03.ajbf.01

$${}_2F_2\left(\frac{5}{2}, 4; 6, 6; z\right) = \frac{5120(5z-8)}{z^5} + \frac{256e^{z/2}(2z^3+61z^2-540z+480)I_0\left(\frac{z}{2}\right)}{3z^5} - \frac{256e^{z/2}(2z^2+63z-476)I_1\left(\frac{z}{2}\right)}{3z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.ajbg.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{34\,037\,647\,875} \left(e^z (262\,144\,z^{18} + 33\,292\,288\,z^{17} + 1\,760\,231\,424\,z^{16} + 50\,723\,291\,136\,z^{15} + 876\,379\,176\,960\,z^{14} + 9\,416\,790\,835\,200\,z^{13} + 63\,232\,417\,382\,400\,z^{12} + 260\,122\,034\,995\,200\,z^{11} + 625\,618\,386\,892\,800\,z^{10} + 807\,454\,884\,096\,000\,z^9 + 477\,476\,770\,982\,400\,z^8 + 92\,181\,593\,548\,800\,z^7 + 1\,807\,806\,470\,400\,z^6 + 32\,539\,449\,600\,z^5 + 5\,429\,592\,000\,z^4 - 571\,536\,000\,z^3 + 10\,376\,950\,500\,z^2 - 21\,379\,018\,500\,z + 34\,037\,647\,875) \right)$$

07.25.03.ajbh.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{3\,094\,331\,625} \left(e^z (131\,072\,z^{17} + 15\,138\,816\,z^{16} + 721\,158\,144\,z^{15} + 18\,510\,643\,200\,z^{14} + 280\,849\,121\,280\,z^{13} + 2\,602\,027\,008\,000\,z^{12} + 14\,703\,033\,139\,200\,z^{11} + 49\,194\,335\,232\,000\,z^{10} + 91\,434\,684\,902\,400\,z^9 + 83\,706\,044\,889\,600\,z^8 + 29\,473\,273\,267\,200\,z^7 + 1\,880\,886\,873\,600\,z^6 - 36\,540\,201\,600\,z^5 - 2\,000\,376\,000\,z^4 - 285\,768\,000\,z^3 - 1\,000\,188\,000\,z^2 + 1\,687\,817\,250\,z - 3\,094\,331\,625) \right)$$

07.25.03.ajbi.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{343\,814\,625} \left(e^z (65\,536\,z^{16} + 6\,815\,744\,z^{15} + 289\,013\,760\,z^{14} + 6\,509\,690\,880\,z^{13} + 85\,092\,188\,160\,z^{12} + 662\,822\,092\,800\,z^{11} + 3\,043\,172\,966\,400\,z^{10} + 7\,859\,716\,300\,800\,z^9 + 10\,348\,619\,097\,600\,z^8 + 5\,632\,855\,603\,200\,z^7 + 654\,497\,625\,600\,z^6 - 41\,303\,001\,600\,z^5 + 2\,381\,400\,000\,z^4 + 190\,512\,000\,z^3 + 142\,884\,000\,z^2 - 142\,884\,000\,z + 343\,814\,625) \right)$$

07.25.03.ajbj.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{49\,116\,375} \left(e^z (32\,768\,z^{15} + 3\,031\,040\,z^{14} + 112\,680\,960\,z^{13} + 2\,184\,376\,320\,z^{12} + 23\,978\,895\,360\,z^{11} + 151\,569\,331\,200\,z^{10} + 536\,385\,830\,400\,z^9 + 979\,736\,083\,200\,z^8 + 765\,497\,174\,400\,z^7 + 137\,187\,691\,200\,z^6 - 15\,720\,415\,200\,z^5 + 2\,929\,122\,000\,z^4 - 273\,861\,000\,z^3 - 41\,674\,500\,z^2 + 8\,930\,250\,z - 49\,116\,375) \right)$$

07.25.03.ajbk.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{9\,823\,275} \left(e^z (16\,384\,z^{14} + 1\,327\,104\,z^{13} + 42\,405\,888\,z^{12} + 689\,332\,224\,z^{11} + 6\,130\,123\,776\,z^{10} + 29\,808\,737\,280\,z^9 + 74\,436\,122\,880\,z^8 + 80\,469\,365\,760\,z^7 + 20\,636\,441\,280\,z^6 - 3\,633\,698\,880\,z^5 + 1\,224\,039\,600\,z^4 - 371\,498\,400\,z^3 + 48\,818\,700\,z^2 + 3\,572\,100\,z + 9\,823\,275) \right)$$

07.25.03.ajbl.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{3\,274\,425} \left(e^z (8\,192\,z^{13} + 569\,344\,z^{12} + 15\,224\,832\,z^{11} + 200\,030\,208\,z^{10} + 1\,364\,805\,120\,z^9 + 4\,668\,330\,240\,z^8 + 6\,873\,914\,880\,z^7 + 2\,428\,151\,040\,z^6 - 608\,459\,040\,z^5 + 312\,757\,200\,z^4 - 169\,873\,200\,z^3 + 69\,060\,600\,z^2 - 10\,120\,950\,z - 3\,274\,425) \right)$$

07.25.03.ajbm.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{3274425} \left(e^z (4096 z^{12} + 237568 z^{11} + 5117952 z^{10} + 51394560 z^9 + 245548800 z^8 + 492549120 z^7 + 235388160 z^6 - 80559360 z^5 + 58287600 z^4 - 47628000 z^3 + 34133400 z^2 - 16669800 z + 3274425) \right)$$

07.25.03.ajbn.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{3274425} \left(e^{z/2} (2048 z^{12} + 108544 z^{11} + 2107392 z^{10} + 18723840 z^9 + 77107968 z^8 + 127701504 z^7 + 44029440 z^6 - 12660480 z^5 + 9261000 z^4 - 9261000 z^3 + 9790200 z^2 - 8334900 z + 3274425) I_0\left(\frac{z}{2}\right) + \frac{1}{3274425} \left(4 e^{z/2} (512 z^{12} + 26624 z^{11} + 500480 z^{10} + 4193280 z^9 + 15308928 z^8 + 18289152 z^7 - 2568384 z^6 + 1411200 z^5 - 1244250 z^4 + 1323000 z^3 - 1356075 z^2 + 926100 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajbo.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{3274425} \left(e^z (2048 z^{11} + 95232 z^{10} + 1559040 z^9 + 10886400 z^8 + 30240000 z^7 + 19474560 z^6 - 8890560 z^5 + 8618400 z^4 - 9639000 z^3 + 9922500 z^2 - 7739550 z + 3274425) \right)$$

07.25.03.ajbp.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{3274425} \left(e^{z/2} (2048 z^{11} + 84992 z^{10} + 1213440 z^9 + 7135488 z^8 + 15665664 z^7 + 6370560 z^6 - 2177280 z^5 + 1940400 z^4 - 2457000 z^3 + 3496500 z^2 - 4479300 z + 3274425) I_0\left(\frac{z}{2}\right) + \frac{1}{3274425} \left(e^{z/2} (2048 z^{11} + 82944 z^{10} + 1131520 z^9 + 6043392 z^8 + 10111488 z^7 - 1618176 z^6 + 1048320 z^5 - 1134000 z^4 + 1575000 z^3 - 2362500 z^2 + 3080700 z - 2027025) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajbq.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{1091475} \left(e^z (1024 z^{10} + 35840 z^9 + 403200 z^8 + 1612800 z^7 + 1411200 z^6 - 846720 z^5 + 1058400 z^4 - 1512000 z^3 + 1984500 z^2 - 1984500 z + 1091475) \right)$$

07.25.03.ajbr.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{3274425} \left(4 e^{z/2} (1024 z^{10} + 30720 z^9 + 283392 z^8 + 854016 z^7 + 403200 z^6 - 161280 z^5 + 176400 z^4 - 302400 z^3 + 661500 z^2 - 1474200 z + 2338875) I_0\left(\frac{z}{2}\right) + \frac{1}{3274425 z} \left(4 e^{z/2} (1024 z^{11} + 29696 z^{10} + 254208 z^9 + 613632 z^8 - 109824 z^7 + 80640 z^6 - 95760 z^5 + 126000 z^4 - 94500 z^3 - 321300 z^2 + 2027025 z - 6081075) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajbs.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{218295} e^z (512 z^9 + 12032 z^8 + 75264 z^7 + 91392 z^6 - 71232 z^5 + 110880 z^4 - 191520 z^3 + 297360 z^2 - 345870 z + 218295)$$

07.25.03.ajbt.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{1091475 z} \left(4 e^{z/2} (1024 z^{10} + 18944 z^9 + 83712 z^8 + 46080 z^7 - 26880 z^6 + 70560 z^5 - 327600 z^4 + 1562400 z^3 - 6293700 z^2 + 19022850 z - 34459425) I_0\left(\frac{z}{2}\right) + \frac{1}{1091475 z^2} \left(4 e^{z/2} (1024 z^{11} + 17920 z^{10} + 66304 z^9 - 12288 z^8 + 3840 z^7 + 36960 z^6 - 307440 z^5 + 1764000 z^4 - 8007300 z^3 + 28378350 z^2 - 74999925 z + 137837700) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajbu.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z (256 z^8 + 3072 z^7 + 5376 z^6 - 5376 z^5 + 10080 z^4 - 20160 z^3 + 35280 z^2 - 45360 z + 31185)}{31185}$$

07.25.03.ajbv.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{1091475 z^2} \left(32 e^{z/2} (512 z^{10} + 3584 z^9 + 3840 z^8 - 15360 z^7 + 117600 z^6 - 836640 z^5 + 5166000 z^4 - 26762400 z^3 + 111330450 z^2 - 344594250 z + 654729075) I_0\left(\frac{z}{2}\right) + \frac{1}{1091475 z^3} \left(64 e^{z/2} (256 z^{11} + 1536 z^{10} + 512 z^9 - 7680 z^8 + 66000 z^7 - 487200 z^6 + 3109680 z^5 - 16833600 z^4 + 74999925 z^3 - 263513250 z^2 + 689188500 z - 1309458150) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajbw.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{3465 z^4} (e^z (128 z^{11} + 64 z^{10} + 2016 z^9 - 21\,840 z^8 + 190\,680 z^7 - 1\,440\,180 z^6 + 9\,378\,810 z^5 - 51\,606\,135 z^4 + 232\,243\,200 z^3 - 812\,851\,200 z^2 + 2\,032\,128\,000 z - 3\,048\,192\,000)) + \frac{4\,838\,400 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.ajbx.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{3465 z^4} (e^{-z} (-128 z^{11} + 64 z^{10} - 2016 z^9 - 21\,840 z^8 - 190\,680 z^7 - 1\,440\,180 z^6 - 9\,378\,810 z^5 - 51\,606\,135 z^4 - 232\,243\,200 z^3 - 812\,851\,200 z^2 - 2\,032\,128\,000 z - 3\,048\,192\,000)) + \frac{4\,838\,400 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.ajby.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{218\,295 z^3} (32 e^{z/2} (512 z^{10} - 2304 z^9 + 27\,648 z^8 - 275\,520 z^7 + 2\,433\,312 z^6 - 18\,822\,384 z^5 + 125\,102\,880 z^4 - 695\,300\,760 z^3 + 3\,101\,348\,250 z^2 - 10\,344\,719\,385 z + 21\,998\,896\,920) I_0\left(\frac{z}{2}\right) + \frac{1}{218\,295 z^4} (32 e^{z/2} (512 z^{11} - 2816 z^{10} + 30\,720 z^9 - 308\,160 z^8 + 2\,761\,248 z^7 - 21\,783\,888 z^6 + 148\,742\,496 z^5 - 859\,458\,600 z^4 + 4\,074\,320\,250 z^3 - 15\,155\,255\,115 z^2 + 41\,378\,877\,540 z - 87\,995\,587\,680) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = \frac{5}{2}, a_2 = \frac{9}{2}, b_1 = -\frac{9}{2}$

07.25.03.ajbz.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{281\,302\,875} (e^z (65\,536 z^{16} + 6\,881\,280 z^{15} + 295\,206\,912 z^{14} + 6\,746\,062\,848 z^{13} + 89\,829\,089\,280 z^{12} + 717\,124\,423\,680 z^{11} + 3\,407\,332\,239\,360 z^{10} + 9\,264\,172\,538\,880 z^9 + 13\,292\,738\,565\,120 z^8 + 8\,621\,176\,032\,000 z^7 + 1\,804\,872\,585\,600 z^6 + 38\,007\,144\,000 z^5 + 733\,471\,200 z^4 + 100\,018\,800 z^3 + 107\,163\,000 z^2 - 125\,023\,500 z + 281\,302\,875))$$

07.25.03.ajc0.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{31\,255\,875} (e^z (32\,768 z^{15} + 3\,096\,576 z^{14} + 118\,185\,984 z^{13} + 2\,368\,450\,560 z^{12} + 27\,151\,165\,440 z^{11} + 182\,079\,636\,480 z^{10} + 702\,228\,119\,040 z^9 + 1\,472\,059\,733\,760 z^8 + 1\,494\,160\,214\,400 z^7 + 575\,187\,480\,000 z^6 + 39\,655\,072\,800 z^5 - 823\,964\,400 z^4 - 45\,246\,600 z^3 - 17\,860\,500 z^2 + 8\,930\,250 z - 31\,255\,875))$$

07.25.03.ajc1.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{4465125} \left(e^z (16384 z^{14} + 1376256 z^{13} + 46018560 z^{12} + 793067520 z^{11} + 7627576320 z^{10} + 41460572160 z^9 + 123080912640 z^8 + 182165760000 z^7 + 109499947200 z^6 + 13843872000 z^5 - 938271600 z^4 + 57153600 z^3 + 5953500 z^2 + 4465125) \right)$$

07.25.03.ajc2.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{893025} \left(e^z (8192 z^{13} + 602112 z^{12} + 17289216 z^{11} + 249575424 z^{10} + 1941972480 z^9 + 8107464960 z^8 + 16949399040 z^7 + 14810584320 z^6 + 2912928480 z^5 - 360385200 z^4 + 71442000 z^3 - 7144200 z^2 - 595350 z - 893025) \right)$$

07.25.03.ajc3.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{297675} \left(e^z (4096 z^{12} + 258048 z^{11} + 6193152 z^{10} + 72145920 z^9 + 429891840 z^8 + 1259435520 z^7 + 1547804160 z^6 + 440173440 z^5 - 84142800 z^4 + 30164400 z^3 - 9525600 z^2 + 1190700 z + 297675) \right)$$

07.25.03.ajc4.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{297675} \left(e^z (2048 z^{11} + 107520 z^{10} + 2075136 z^9 + 18434304 z^8 + 76688640 z^7 + 131241600 z^6 + 52073280 z^5 - 14243040 z^4 + 7779240 z^3 - 4365900 z^2 + 1786050 z - 297675) \right)$$

07.25.03.ajc5.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{297675} \left(e^{z/2} (-1024 z^{11} - 49152 z^{10} - 856320 z^9 - 6757632 z^8 - 24466176 z^7 - 35421120 z^6 - 11032560 z^5 + 2797200 z^4 - 1719900 z^3 + 1323000 z^2 - 893025 z + 297675) I_0\left(\frac{z}{2}\right) + \frac{1}{297675} \left(e^{z/2} (-1024 z^{11} - 48128 z^{10} - 808704 z^9 - 5971968 z^8 - 18853632 z^7 - 18881856 z^6 + 2424240 z^5 - 1169280 z^4 + 850500 z^3 - 661500 z^2 + 363825 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajc6.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{297675} \left(e^z (1024 z^{10} + 43008 z^9 + 628992 z^8 + 3870720 z^7 + 9313920 z^6 + 5080320 z^5 - 1905120 z^4 + 1451520 z^3 - 1190700 z^2 + 793800 z - 297675) \right)$$

$$\begin{aligned}
 & \text{07.25.03.ajc7.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, 2; z\right) = & \\
 & \frac{1}{297675} \left(e^{z/2} (-1024 z^{10} - 38400 z^9 - 490752 z^8 - 2558976 z^7 - 4959360 z^6 - 1864800 z^5 + 579600 z^4 - \right. \\
 & \quad \left. 453600 z^3 + 472500 z^2 - 481950 z + 297675) I_0\left(\frac{z}{2}\right) + \right. \\
 & \frac{1}{297675} \left(e^{z/2} (-1024 z^{10} - 37376 z^9 - 453888 z^8 - 2122752 z^7 - 3029376 z^6 + 453600 z^5 - \right. \\
 & \quad \left. 267120 z^4 + 252000 z^3 - 283500 z^2 + 292950 z - 155925) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajc8.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = & -\frac{1}{99225} \\
 & \left(e^z (512 z^9 + 16128 z^8 + 161280 z^7 + 564480 z^6 + 423360 z^5 - 211680 z^4 + 211680 z^3 - 226800 z^2 + 198450 z - 99225) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajc9.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, 3; z\right) = & \\
 & -\frac{1}{297675} \left(8 e^{z/2} (256 z^9 + 6912 z^8 + 56832 z^7 + 151872 z^6 + 67536 z^5 - 25200 z^4 + 25200 z^3 - 37800 z^2 + 65205 z - 87885) \right. \\
 & \quad \left. I_0\left(\frac{z}{2}\right) - \frac{1}{297675 z} \left(4 e^{z/2} (512 z^{10} + 13312 z^9 + 100608 z^8 + 209280 z^7 - \right. \right. \\
 & \quad \left. \left. 35616 z^6 + 24192 z^5 - 25200 z^4 + 25200 z^3 + 1890 z^2 - 124740 z + 405405) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajca.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = & \\
 & -\frac{1}{19845} e^z (256 z^8 + 5376 z^7 + 29568 z^6 + 30912 z^5 - 20160 z^4 + 25200 z^3 - 32760 z^2 + 34020 z - 19845)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajcb.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, 4; z\right) = & \\
 & -\frac{1}{99225 z} \left(4 e^{z/2} (512 z^9 + 8448 z^8 + 33024 z^7 + 17472 z^6 - 10080 z^5 + 25200 z^4 - 100800 z^3 + 385560 z^2 - \right. \\
 & \quad \left. 1139670 z + 2027025) I_0\left(\frac{z}{2}\right) - \right. \\
 & \frac{1}{99225 z^2} \left(4 e^{z/2} (512 z^{10} + 7936 z^9 + 25344 z^8 - 4416 z^7 + 672 z^6 + 15120 z^5 - 100800 z^4 + \right. \\
 & \quad \left. 471240 z^3 - 1683990 z^2 + 4459455 z - 8108100) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajcc.01} \\
 {}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = & -\frac{e^z (128 z^7 + 1344 z^6 + 2016 z^5 - 1680 z^4 + 2520 z^3 - 3780 z^2 + 4410 z - 2835)}{2835}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajcd.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, 5; z\right) = \\
 & -\frac{1}{99225 z^2} \left(32 e^{z/2} (256 z^9 + 1536 z^8 + 1728 z^7 - 6720 z^6 + 45360 z^5 - 277200 z^4 + 1428840 z^3 - 5919480 z^2 + \right. \\
 & \quad \left. 18243225 z - 34459425) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{99225 z^3} \left(32 e^{z/2} (256 z^{10} + 1280 z^9 + 576 z^8 - 6912 z^7 + 52080 z^6 - 332640 z^5 + 1796760 z^4 - \right. \right. \\
 & \quad \left. \left. 7983360 z^3 + 27972945 z^2 - 72972900 z + 137837700) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajce.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{315 z^4} \left(e^z (-64 z^{10} - 1008 z^8 + 9408 z^7 - 71820 z^6 + 468720 z^5 - 2580165 z^4 + 11612160 z^3 - 40642560 z^2 + \right. \\
 & \quad \left. 101606400 z - 152409600) + \frac{241920 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajcf.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{315 z^4} \left(e^{-z} (-64 z^{10} - 1008 z^8 - 9408 z^7 - 71820 z^6 - 468720 z^5 - 2580165 z^4 - 11612160 z^3 - 40642560 z^2 - \right. \\
 & \quad \left. 101606400 z - 152409600) + \frac{241920 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajcg.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{9}{2}, 6; z\right) = \\
 & -\frac{1}{19845 z^3} \left(32 e^{z/2} (256 z^9 - 1152 z^8 + 12480 z^7 - 111552 z^6 + 869904 z^5 - 5821200 z^4 + 32545800 z^3 - \right. \\
 & \quad \left. 145945800 z^2 + 489323835 z - 1047566520) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{19845 z^4} \left(32 e^{z/2} (256 z^{10} - 1408 z^9 + 14016 z^8 - 126528 z^7 + 1005648 z^6 - 6911856 z^5 + 40166280 z^4 - \right. \right. \\
 & \quad \left. \left. 191351160 z^3 + 714729015 z^2 - 1957295340 z + 4190266080) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.ajch.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{3472875} \left(e^z (16384 z^{14} + 1392640 z^{13} + 47255552 z^{12} + 829808640 z^{11} + 8181826560 z^{10} + 46039772160 z^9 + 143935084800 z^8 + 232257070080 z^7 + 166437432000 z^6 + 37937592000 z^5 + 858740400 z^4 + 17388000 z^3 + 3458700 z^2 - 283500 z + 3472875) \right)$$

07.25.03.ajci.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{496125} \left(e^z (8192 z^{13} + 618496 z^{12} + 18370560 z^{11} + 277125120 z^{10} + 2289600000 z^9 + 10427086080 z^8 + 25045655040 z^7 + 28468742400 z^6 + 12046860000 z^5 + 898506000 z^4 - 19882800 z^3 - 1247400 z^2 - 141750 z - 496125) \right)$$

07.25.03.ajcj.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{99225} \left(e^z (4096 z^{12} + 270336 z^{11} + 6887424 z^{10} + 86906880 z^9 + 579905280 z^8 + 2024064000 z^7 + 3414539520 z^6 + 2283482880 z^5 + 314722800 z^4 - 22831200 z^3 + 1474200 z^2 + 113400 z + 99225) \right)$$

07.25.03.ajck.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{33075} \left(e^z (2048 z^{11} + 115712 z^{10} + 2460160 z^9 + 25002240 z^8 + 127438080 z^7 + 311122560 z^6 + 307218240 z^5 + 66477600 z^4 - 8832600 z^3 + 1833300 z^2 - 179550 z - 33075) \right)$$

07.25.03.ajcl.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{33075} \left(e^z (1024 z^{10} + 48128 z^9 + 820992 z^8 + 6343680 z^7 + 22485120 z^6 + 31893120 z^5 + 10090080 z^4 - 2076480 z^3 + 774900 z^2 - 245700 z + 33075) \right)$$

07.25.03.ajcm.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{33075} \left(e^{z/2} (512 z^{10} + 22016 z^9 + 339712 z^8 + 2343936 z^7 + 7321440 z^6 + 9060960 z^5 + 2470320 z^4 - 525600 z^3 + 248850 z^2 - 122850 z + 33075) I_0\left(\frac{z}{2}\right) + \frac{1}{33075} \left(2 e^{z/2} (256 z^{10} + 10752 z^9 + 159232 z^8 + 1017856 z^7 + 2712528 z^6 + 2197920 z^5 - 249360 z^4 + 99360 z^3 - 52875 z^2 + 22050 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajcn.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{33075} (e^z (512 z^9 + 19200 z^8 + 247296 z^7 + 1317120 z^6 + 2681280 z^5 + 1199520 z^4 - 352800 z^3 + 196560 z^2 - 103950 z + 33075))$$

07.25.03.ajco.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{33075} (e^{z/2} (512 z^9 + 17152 z^8 + 193536 z^7 + 880320 z^6 + 1477920 z^5 + 501840 z^4 - 136800 z^3 + 88200 z^2 - 66150 z + 33075) I_0\left(\frac{z}{2}\right) + \frac{1}{33075} (e^{z/2} (512 z^9 + 16640 z^8 + 177152 z^7 + 710976 z^6 + 840480 z^5 - 114960 z^4 + 59040 z^3 - 45000 z^2 + 34650 z - 14175) I_1\left(\frac{z}{2}\right)))$$

07.25.03.ajcp.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{11025} e^z (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025)$$

07.25.03.ajcq.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{33075} 4 e^{z/2} (256 z^8 + 6144 z^7 + 44352 z^6 + 103296 z^5 + 42480 z^4 - 14400 z^3 + 12600 z^2 - 15120 z + 16065) I_0\left(\frac{z}{2}\right) + \frac{1}{33075} 4 e^{z/2} (256 z^9 + 5888 z^8 + 38592 z^7 + 67392 z^6 - 10704 z^5 + 6480 z^4 - 5400 z^3 + 2520 z^2 + 8505 z - 31185) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajcr.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (128 z^7 + 2368 z^6 + 11232 z^5 + 9840 z^4 - 5160 z^3 + 4860 z^2 - 4230 z + 2205)}{2205}$$

07.25.03.ajcs.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{11025 z} 4 e^{z/2} (256 z^8 + 3712 z^7 + 12608 z^6 + 6336 z^5 - 3600 z^4 + 8400 z^3 - 27720 z^2 + 78120 z - 135135) I_0\left(\frac{z}{2}\right) + \frac{1}{11025 z^2} 4 e^{z/2} (256 z^9 + 3456 z^8 + 9280 z^7 - 1472 z^6 - 144 z^5 + 6000 z^4 - 31080 z^3 + 113400 z^2 - 301455 z + 540540) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajct.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315)$$

07.25.03.ajcu.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{11025 z^2} 32 e^{z/2} (128 z^8 + 640 z^7 + 768 z^6 - 2880 z^5 + 16800 z^4 - 85680 z^3 + 352800 z^2 - 1081080 z + 2027025) I_0\left(\frac{z}{2}\right) + \frac{1}{11025 z^3} (128 e^{z/2} (32 z^9 + 128 z^8 + 80 z^7 - 768 z^6 + 4980 z^5 - 26880 z^4 + 119070 z^3 - 415800 z^2 + 1081080 z - 2027025) I_1\left(\frac{z}{2}\right))$$

07.25.03.ajcv.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{35 z^4} e^z (32 z^9 - 16 z^8 + 496 z^7 - 3960 z^6 + 26010 z^5 - 143325 z^4 + 645120 z^3 - 2257920 z^2 + 5644800 z - 8467200) + \frac{120960 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ajcw.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{35 z^4} e^{-z} (-32 z^9 - 16 z^8 - 496 z^7 - 3960 z^6 - 26010 z^5 - 143325 z^4 - 645120 z^3 - 2257920 z^2 - 5644800 z - 8467200) + \frac{120960 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ajcx.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{2205 z^3} (32 e^{z/2} (128 z^8 - 576 z^7 + 5568 z^6 - 44016 z^5 + 297360 z^4 - 1675800 z^3 + 7567560 z^2 - 25540515 z + 55135080) I_0\left(\frac{z}{2}\right) + \frac{1}{2205 z^4} (32 e^{z/2} (128 z^9 - 704 z^8 + 6336 z^7 - 50832 z^6 + 352464 z^5 - 2063880 z^4 + 9896040 z^3 - 37162125 z^2 + 102162060 z - 220540320) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.ajcy.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{70875} (e^z (4096 z^{12} + 274432 z^{11} + 7127040 z^{10} + 92236800 z^9 + 637497600 z^8 + 2344803840 z^7 + 4316014080 z^6 + 3444336000 z^5 + 856926000 z^4 + 20790000 z^3 + 453600 z^2 + 56700 z + 70875))$$

07.25.03.ajcz.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{14175} \left(e^z (2048 z^{11} + 119808 z^{10} + 2664960 z^9 + 28796160 z^8 + 160369920 z^7 + 450737280 z^6 + 580426560 z^5 + 271101600 z^4 + 21810600 z^3 - 510300 z^2 - 28350 z - 14175) \right)$$

07.25.03.ajd0.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{4725} \left(e^z (1024 z^{10} + 51200 z^9 + 948480 z^8 + 8232960 z^7 + 34903680 z^6 + 68302080 z^5 + 51156000 z^4 + 7660800 z^3 - 585900 z^2 + 37800 z + 4725) \right)$$

07.25.03.ajd1.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{4725} \left(e^z (512 z^9 + 21248 z^8 + 314880 z^7 + 2069760 z^6 + 6068160 z^5 + 6844320 z^4 + 1622880 z^3 - 226800 z^2 + 47250 z - 4725) \right)$$

07.25.03.ajd2.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{4725} \left(e^{z/2} (-256 z^9 - 9728 z^8 - 130752 z^7 - 772800 z^6 - 2030640 z^5 - 2081520 z^4 - 472680 z^3 + 77400 z^2 - 23625 z + 4725) I_0\left(\frac{z}{2}\right) + \frac{1}{4725} e^{z/2} (-256 z^9 - 9472 z^8 - 121408 z^7 - 655872 z^6 - 1426800 z^5 - 887520 z^4 + 83880 z^3 - 24480 z^2 + 6975 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ajd3.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{4725} e^z (256 z^8 + 8448 z^7 + 94080 z^6 + 423360 z^5 + 705600 z^4 + 246960 z^3 - 52920 z^2 + 18900 z - 4725)$$

07.25.03.ajd4.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{4725} e^{z/2} (-256 z^8 - 7552 z^7 - 73920 z^6 - 287040 z^5 - 406800 z^4 - 120240 z^3 + 27000 z^2 - 12600 z + 4725) I_0\left(\frac{z}{2}\right) + \frac{1}{4725} e^{z/2} (-256 z^8 - 7296 z^7 - 66752 z^6 - 223680 z^5 - 210000 z^4 + 25200 z^3 - 10440 z^2 + 5400 z - 1575) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajd5.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{e^z (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575)}{1575}$$

07.25.03.ajd6.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, 3; z\right) = -\frac{8 e^{z/2} (64 z^7 + 1344 z^6 + 8352 z^5 + 16560 z^4 + 6120 z^3 - 1800 z^2 + 1260 z - 945) I_0\left(\frac{z}{2}\right)}{4725} - \frac{4 e^{z/2} (128 z^8 + 2560 z^7 + 14208 z^6 + 20064 z^5 - 2880 z^4 + 1440 z^3 - 720 z^2 - 630 z + 2835) I_1\left(\frac{z}{2}\right)}{4725 z}$$

07.25.03.ajd7.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{1}{315} (64 z^6 + 1024 z^5 + 4080 z^4 + 2880 z^3 - 1140 z^2 + 720 z - 315)$$

07.25.03.ajd8.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, 4; z\right) = -\frac{4 e^{z/2} (128 z^7 + 1600 z^6 + 4608 z^5 + 2160 z^4 - 1200 z^3 + 2520 z^2 - 6300 z + 10395) I_0\left(\frac{z}{2}\right)}{1575 z} - \frac{4 e^{z/2} (128 z^8 + 1472 z^7 + 3200 z^6 - 432 z^5 - 240 z^4 + 2280 z^3 - 8820 z^2 + 23625 z - 41580) I_1\left(\frac{z}{2}\right)}{1575 z^2}$$

07.25.03.ajd9.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{1}{45} e^z (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45)$$

07.25.03.ajda.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, 5; z\right) = -\frac{32 e^{z/2} (64 z^7 + 256 z^6 + 336 z^5 - 1200 z^4 + 5880 z^3 - 23940 z^2 + 72765 z - 135135) I_0\left(\frac{z}{2}\right)}{1575 z^2} - \frac{1}{1575 z^3} 32 e^{z/2} (64 z^8 + 192 z^7 + 176 z^6 - 1344 z^5 + 7320 z^4 - 32340 z^3 + 112455 z^2 - 291060 z + 540540) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajdb.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{e^z (-16 z^8 + 16 z^7 - 240 z^6 + 1620 z^5 - 8955 z^4 + 40320 z^3 - 141120 z^2 + 352800 z - 529200)}{5 z^4} + \frac{52920 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ajdc.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-16 z^8 - 16 z^7 - 240 z^6 - 1620 z^5 - 8955 z^4 - 40320 z^3 - 141120 z^2 - 352800 z - 529200)}{5 z^4} + \frac{52920 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ajdd.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{5}{2}, 6; z\right) = -\frac{1}{315 z^3} 32 e^{z/2} (64 z^7 - 288 z^6 + 2448 z^5 - 16800 z^4 + 95760 z^3 - 436590 z^2 + 1486485 z - 3243240) I_0\left(\frac{z}{2}\right) - \frac{1}{315 z^4} 32 e^{z/2} (64 z^8 - 352 z^7 + 2832 z^6 - 19872 z^5 + 117600 z^4 - 568890 z^3 + 2151765 z^2 - 5945940 z + 12972960) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.ajde.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{2835} \left(e^z (1024 z^{10} + 52224 z^9 + 993024 z^8 + 8936448 z^7 + 39970944 z^6 + 85470336 z^5 + 76537440 z^4 + 20744640 z^3 + 532980 z^2 + 11340 z + 2835) \right)$$

07.25.03.ajdf.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{945} e^z (512 z^9 + 22272 z^8 + 351744 z^7 + 2533632 z^6 + 8584128 z^5 + 12690720 z^4 + 6541920 z^3 + 559440 z^2 - 13230 z - 945)$$

07.25.03.ajdg.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{945} e^z (256 z^8 + 9216 z^7 + 115968 z^6 + 628992 z^5 + 1461600 z^4 + 1229760 z^3 + 196560 z^2 - 15120 z + 945)$$

07.25.03.ajdh.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{945} e^{z/2} (128 z^8 + 4224 z^7 + 48384 z^6 + 238272 z^5 + 508320 z^4 + 411408 z^3 + 71424 z^2 - 7560 z + 945) I_0\left(\frac{z}{2}\right) + \frac{8}{945} e^{z/2} (16 z^8 + 512 z^7 + 5544 z^6 + 24480 z^5 + 41370 z^4 + 18144 z^3 - 1269 z^2 + 198 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajdi.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{945} e^z (128 z^7 + 3648 z^6 + 34272 z^5 + 126000 z^4 + 163800 z^3 + 41580 z^2 - 5670 z + 945)$$

07.25.03.ajdj.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{945} e^{z/2} (128 z^7 + 3264 z^6 + 27072 z^5 + 87120 z^4 + 100368 z^3 + 24264 z^2 - 3960 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (128 z^7 + 3136 z^6 + 24000 z^5 + 64560 z^4 + 45072 z^3 - 4392 z^2 + 1224 z - 225) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajdk.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315)$$

07.25.03.ajdl.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, 3; z\right) = \frac{4}{945} e^{z/2} (64 z^6 + 1152 z^5 + 6000 z^4 + 9792 z^3 + 3096 z^2 - 720 z + 315) I_0\left(\frac{z}{2}\right) + \frac{4}{945} e^{z/2} (64 z^7 + 1088 z^6 + 4944 z^5 + 5328 z^4 - 648 z^3 + 216 z^2 + 45 z - 315) I_1\left(\frac{z}{2}\right)$$

945 z

07.25.03.ajdm.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (32 z^5 + 432 z^4 + 1392 z^3 + 744 z^2 - 198 z + 63)$$

07.25.03.ajdn.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^6 + 672 z^5 + 1584 z^4 + 672 z^3 - 360 z^2 + 630 z - 945) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 + 608 z^6 + 1008 z^5 - 96 z^4 - 168 z^3 + 810 z^2 - 2205 z + 3780) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.ajdo.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{9} e^z (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9)$$

07.25.03.ajdp.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 + 96 z^5 + 144 z^4 - 480 z^3 + 1890 z^2 - 5670 z + 10395) I_0\left(\frac{z}{2}\right) + 64 e^{z/2} (16 z^7 + 32 z^6 + 48 z^5 - 288 z^4 + 1275 z^3 - 4410 z^2 + 11340 z - 20790) I_1\left(\frac{z}{2}\right)}{315 z^3}$$

07.25.03.ajdq.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z (8 z^7 - 12 z^6 + 114 z^5 - 639 z^4 + 2880 z^3 - 10080 z^2 + 25200 z - 37800)}{z^4} + \frac{18900 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ajdr.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (-8 z^7 - 12 z^6 - 114 z^5 - 639 z^4 - 2880 z^3 - 10080 z^2 - 25200 z - 37800)}{z^4} + \frac{18900 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ajds.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^6 - 144 z^5 + 1056 z^4 - 6132 z^3 + 28350 z^2 - 97713 z + 216216) I_0\left(\frac{z}{2}\right) + 32 e^{z/2} (32 z^7 - 176 z^6 + 1248 z^5 - 7500 z^4 + 36750 z^3 - 140427 z^2 + 390852 z - 864864) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.ajdt.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} e^z (256 z^8 + 9472 z^7 + 123776 z^6 + 709824 z^5 + 1807680 z^4 + 1826160 z^3 + 531720 z^2 + 13860 z + 315)$$

07.25.03.ajdu.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{315} e^z (128 z^7 + 3904 z^6 + 40416 z^5 + 173040 z^4 + 298200 z^3 + 167580 z^2 + 14490 z - 315)$$

07.25.03.ajdv.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (-64 z^7 - 1792 z^6 - 16976 z^5 - 66960 z^4 - 109944 z^3 - 64812 z^2 - 7245 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-64 z^7 - 1728 z^6 - 15280 z^5 - 52480 z^4 - 63576 z^3 - 16764 z^2 + 633 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajdw.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{315} e^z (64 z^6 + 1536 z^5 + 11760 z^4 + 33600 z^3 + 31500 z^2 + 5040 z - 315)$$

07.25.03.ajdx.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (-64 z^6 - 1376 z^5 - 9360 z^4 - 23904 z^3 - 21072 z^2 - 3690 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (-64 z^6 - 1312 z^5 - 8080 z^4 - 16416 z^3 - 7584 z^2 + 498 z - 45) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajdy.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{1}{105} e^z (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105)$$

07.25.03.ajdz.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, 3; z\right) = -\frac{8}{315} e^{z/2} (16 z^5 + 240 z^4 + 1008 z^3 + 1284 z^2 + 315 z - 45) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (32 z^6 + 448 z^5 + 1584 z^4 + 1176 z^3 - 102 z^2 + 45) I_1\left(\frac{z}{2}\right)}{315 z}$$

07.25.03.aje0.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{1}{21} e^z (16 z^4 + 176 z^3 + 432 z^2 + 156 z - 21)$$

07.25.03.aje1.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 + 272 z^4 + 496 z^3 + 180 z^2 - 90 z + 105) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (32 z^6 + 240 z^5 + 272 z^4 - 4 z^3 - 90 z^2 + 255 z - 420) I_1\left(\frac{z}{2}\right)}{105 z - 105 z^2}$$

07.25.03.aje2.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{1}{3} e^z (8 z^3 + 36 z^2 + 18 z - 3)$$

07.25.03.aje3.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, 5; z\right) = -\frac{32 e^{z/2} (16 z^5 + 32 z^4 + 60 z^3 - 180 z^2 + 525 z - 945) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (16 z^6 + 16 z^5 + 52 z^4 - 240 z^3 + 825 z^2 - 2100 z + 3780) I_1\left(\frac{z}{2}\right)}{105 z^2 - 105 z^3}$$

07.25.03.aje4.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{4725 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}} - \frac{3 e^z (4 z^6 - 8 z^5 + 53 z^4 - 240 z^3 + 840 z^2 - 2100 z + 3150)}{z^4}$$

07.25.03.aje5.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{4725 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}} - \frac{3 e^{-z} (4 z^6 + 8 z^5 + 53 z^4 + 240 z^3 + 840 z^2 + 2100 z + 3150)}{z^4}$$

07.25.03.aje6.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; -\frac{1}{2}, 6; z\right) = -\frac{32 e^{z/2} (16 z^5 - 72 z^4 + 444 z^3 - 2100 z^2 + 7371 z - 16632) I_0\left(\frac{z}{2}\right)}{21 z^3} - \frac{32 e^{z/2} (16 z^6 - 88 z^5 + 540 z^4 - 2700 z^3 + 10479 z^2 - 29484 z + 66528) I_1\left(\frac{z}{2}\right)}{21 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{1}{2}$

07.25.03.aje7.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 1600 z^5 + 13008 z^4 + 40992 z^3 + 46620 z^2 + 13860 z + 315)$$

07.25.03.aje8.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{315} e^{z/2} (32 z^6 + 736 z^5 + 5520 z^4 + 16416 z^3 + 18978 z^2 + 6930 z + 315) I_0\left(\frac{z}{2}\right) + \frac{2}{315} e^{z/2} (16 z^6 + 352 z^5 + 2416 z^4 + 5952 z^3 + 4443 z^2 + 474 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aje9.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{315} e^z (32 z^5 + 624 z^4 + 3696 z^3 + 7560 z^2 + 4410 z + 315)$$

07.25.03.ajea.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (32 z^5 + 560 z^4 + 2976 z^3 + 5628 z^2 + 3390 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (32 z^5 + 528 z^4 + 2464 z^3 + 3396 z^2 + 798 z - 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajeb.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{105} e^z (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105)$$

07.25.03.ajec.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, 3; z\right) = \frac{4}{315} e^{z/2} (16 z^4 + 192 z^3 + 612 z^2 + 552 z + 81) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (16 z^5 + 176 z^4 + 444 z^3 + 180 z^2 - 3 z - 9) I_1\left(\frac{z}{2}\right)}{315 z}$$

07.25.03.ajed.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{21} e^z (8 z^3 + 68 z^2 + 114 z + 21)$$

07.25.03.ajee.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 + 104 z^3 + 132 z^2 + 36 z - 15) I_0\left(\frac{z}{2}\right)}{105 z} + \frac{4 e^{z/2} (16 z^5 + 88 z^4 + 52 z^3 + 12 z^2 - 39 z + 60) I_1\left(\frac{z}{2}\right)}{105 z^2}$$

07.25.03.ajef.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{3} e^z (4z^2 + 12z + 3)$$

07.25.03.ajeg.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (8z^4 + 8z^3 + 24z^2 - 60z + 105) I_0\left(\frac{z}{2}\right)}{105 z^2} + \frac{128 e^{z/2} (2z^5 + 7z^3 - 24z^2 + 60z - 105) I_1\left(\frac{z}{2}\right)}{105 z^3}$$

07.25.03.ajeh.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (2z^5 - 5z^4 + 24z^3 - 84z^2 + 210z - 315)}{z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.ajej.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 z^{9/2}} - \frac{3 e^{-z} (2z^5 + 5z^4 + 24z^3 + 84z^2 + 210z + 315)}{z^4}$$

07.25.03.ajej.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (8z^4 - 36z^3 + 180z^2 - 651z + 1512) I_0\left(\frac{z}{2}\right)}{21 z^3} + \frac{32 e^{z/2} (8z^5 - 44z^4 + 228z^3 - 909z^2 + 2604z - 6048) I_1\left(\frac{z}{2}\right)}{21 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 1$

07.25.03.ajek.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{315} e^{z/2} (16z^5 + 288z^4 + 1596z^3 + 3228z^2 + 2205z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (16z^5 + 272z^4 + 1332z^3 + 2016z^2 + 633z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajel.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{105} e^{z/2} (8z^4 + 104z^3 + 376z^2 + 420z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} (2z^4 + 24z^3 + 71z^2 + 44z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajem.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{21} e^{z/2} (4z^3 + 32z^2 + 57z + 21) I_0\left(\frac{z}{2}\right) + \frac{1}{21} e^{z/2} (4z^3 + 28z^2 + 31z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajen.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{3} e^{z/2} (2z^2 + 6z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} (z^2 + 2z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{3}{2}$

07.25.03.ajeo.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{315} e^z (16z^4 + 240z^3 + 1008z^2 + 1260z + 315)$$

07.25.03.ajep.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{315} e^{z/2} (16z^4 + 216z^3 + 828z^2 + 1020z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{315} e^{z/2} (16z^4 + 200z^3 + 636z^2 + 468z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajeq.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{105} e^z (8z^3 + 84z^2 + 210z + 105)$$

07.25.03.ajer.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, 3; z\right) = \frac{8}{315} e^{z/2} (4z^3 + 36z^2 + 78z + 39) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8z^4 + 64z^3 + 96z^2 + 6z + 3) I_1\left(\frac{z}{2}\right)}{315z}$$

07.25.03.ajes.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{21} e^z (4z^2 + 24z + 21)$$

07.25.03.ajet.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 + 36z^2 + 24z + 3) I_0\left(\frac{z}{2}\right)}{105z} + \frac{4 e^{z/2} (8z^4 + 28z^3 + 9z - 12) I_1\left(\frac{z}{2}\right)}{105z^2}$$

07.25.03.ajeu.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{3} e^z (2z + 3)$$

07.25.03.ajev.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^3 + 9z - 15) I_0\left(\frac{z}{2}\right)}{105z^2} + \frac{32 e^{z/2} (4z^4 - 4z^3 + 15z^2 - 36z + 60) I_1\left(\frac{z}{2}\right)}{105z^3}$$

07.25.03.ajew.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (8z^4 - 24z^3 + 84z^2 - 210z + 315)}{8z^4} - \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.ajex.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (8z^4 + 24z^3 + 84z^2 + 210z + 315)}{8z^4} - \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.ajey.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 - 18z^2 + 69z - 168) I_0\left(\frac{z}{2}\right)}{21z^3} + \frac{32 e^{z/2} (4z^4 - 22z^3 + 93z^2 - 276z + 672) I_1\left(\frac{z}{2}\right)}{21z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 2$

07.25.03.ajez.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{105} e^{z/2} (8z^3 + 76z^2 + 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 + 68z^2 + 116z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajf0.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{21} e^{z/2} (4z^2 + 22z + 21) I_0\left(\frac{z}{2}\right) + \frac{1}{21} e^{z/2} (4z^2 + 18z + 5) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajf1.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{3} e^{z/2} (2z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z + 1) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{5}{2}$

07.25.03.ajf2.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{35} e^z (4z^2 + 28z + 35)$$

07.25.03.ajf3.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 + 24z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4z^3 + 20z^2 + 9z - 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.ajf4.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (2z + 7)$$

07.25.03.ajf5.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (4z^2 + 10z - 1) I_0\left(\frac{z}{2}\right)}{35z} + \frac{4 e^{z/2} (4z^3 + 6z^2 - 5z + 4) I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.ajf6.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = e^z$$

07.25.03.ajf7.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 - 2z + 3) I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{64 e^{z/2} (z^3 - 2z^2 + 4z - 6) I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.ajf8.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (8z^3 - 28z^2 + 70z - 105)}{16z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.ajf9.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32z^{9/2}} - \frac{9 e^{-z} (8z^3 + 28z^2 + 70z + 105)}{16z^4}$$

07.25.03.ajfa.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^2 - 9z + 24) I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{32 e^{z/2} (2z^3 - 11z^2 + 36z - 96) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 3$

07.25.03.ajfb.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; 3, \frac{7}{2}; z\right) = \frac{8}{21} e^{z/2} (z + 3) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2z^2 + 4z - 3) I_1\left(\frac{z}{2}\right)}{21z}$$

07.25.03.ajfc.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; 3, \frac{9}{2}; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (z-1) I_1\left(\frac{z}{2}\right)}{3z}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{7}{2}$

07.25.03.ajfd.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2z^2 + 2z - 3)}{14z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{28z^{5/2}}$$

07.25.03.ajfe.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} (2z^2 - 2z - 3)}{14z^2} + \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{28z^{5/2}}$$

07.25.03.ajff.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (2z+1) I_0\left(\frac{z}{2}\right)}{7z} + \frac{4 e^{z/2} (2z^2 - z - 4) I_1\left(\frac{z}{2}\right)}{7z^2}$$

07.25.03.ajfg.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{5 e^z (2z - 3)}{4z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.ajfh.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5 e^{-z} (2z + 3)}{4z^2}$$

07.25.03.ajfi.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (z-1) I_0\left(\frac{z}{2}\right)}{7z^2} + \frac{32 e^{z/2} (z^2 - 4z + 4) I_1\left(\frac{z}{2}\right)}{7z^3}$$

07.25.03.ajfj.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{45 e^z (16z^2 - 70z + 105)}{64z^4} + \frac{135 \sqrt{\pi} (4z^2 - 35) \operatorname{erfi}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.ajfk.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{45 e^{-z} (16z^2 + 70z + 105)}{64z^4} + \frac{135 \sqrt{\pi} (4z^2 - 35) \operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.ajfl.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (7z - 24) I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{32 e^{z/2} (3z^2 - 28z + 96) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 4$

07.25.03.ajfm.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; 4, \frac{9}{2}; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z-4) I_1\left(\frac{z}{2}\right)}{z^2}$$

For fixed z and $a_1 = \frac{5}{2}, a_2 = \frac{9}{2}, b_1 = \frac{9}{2}$

07.25.03.ajfn.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (4z - 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ajfo.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (4z + 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ajfp.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.ajfq.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{1575 e^z (2z - 21)}{128 z^4} + \frac{945 \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.ajfr.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 e^{-z} (2z + 21)}{128 z^4}$$

07.25.03.ajfs.01

$${}_2F_2\left(\frac{5}{2}, \frac{9}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (z + 8) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (z^2 + 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{5}{2}, a_2 = 5, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{5}{2}, a_2 = 5, b_1 = -\frac{11}{2}$

07.25.03.ajft.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{972\,504\,225} (2048 z^{18} + 281\,600 z^{17} + 16\,224\,768 z^{16} + 513\,347\,328 z^{15} + 9\,824\,894\,976 z^{14} + 118\,169\,985\,024 z^{13} + 899\,348\,889\,600 z^{12} + 4\,256\,755\,292\,160 z^{11} + 11\,996\,838\,153\,216 z^{10} + 18\,554\,822\,254\,080 z^9 + 13\,513\,012\,289\,280 z^8 + 3\,316\,494\,585\,600 z^7 + 81\,729\,648\,000 z^6 + 1\,634\,592\,960 z^5 + 314\,344\,800 z^4 + 178\,605\,000 z^3 + 208\,372\,500 z^2 + 401\,861\,250 z + 972\,504\,225) + \frac{1}{972\,504\,225} (128 e^z \sqrt{\pi} (16 z^{37/2} + 2208 z^{35/2} + 127\,848 z^{33/2} + 4\,072\,824 z^{31/2} + 78\,701\,553 z^{29/2} + 959\,724\,864 z^{27/2} + 7\,453\,859\,616 z^{25/2} + 36\,387\,308\,160 z^{23/2} + 107\,713\,277\,280 z^{21/2} + 180\,984\,706\,560 z^{19/2} + 153\,572\,993\,280 z^{17/2} + 52\,510\,187\,520 z^{15/2} + 4\,102\,358\,400 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajfu.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{972\,504\,225} (2048 z^{18} - 281\,600 z^{17} + 16\,224\,768 z^{16} - 513\,347\,328 z^{15} + 9\,824\,894\,976 z^{14} - 118\,169\,985\,024 z^{13} + 899\,348\,889\,600 z^{12} - 4\,256\,755\,292\,160 z^{11} + 11\,996\,838\,153\,216 z^{10} - 18\,554\,822\,254\,080 z^9 + 13\,513\,012\,289\,280 z^8 - 3\,316\,494\,585\,600 z^7 + 81\,729\,648\,000 z^6 - 1\,634\,592\,960 z^5 + 314\,344\,800 z^4 - 178\,605\,000 z^3 + 208\,372\,500 z^2 - 401\,861\,250 z + 972\,504\,225) - \frac{1}{972\,504\,225} (128 e^{-z} \sqrt{\pi} (16 z^{37/2} - 2208 z^{35/2} + 127\,848 z^{33/2} - 4\,072\,824 z^{31/2} + 78\,701\,553 z^{29/2} - 959\,724\,864 z^{27/2} + 7\,453\,859\,616 z^{25/2} - 36\,387\,308\,160 z^{23/2} + 107\,713\,277\,280 z^{21/2} - 180\,984\,706\,560 z^{19/2} + 153\,572\,993\,280 z^{17/2} - 52\,510\,187\,520 z^{15/2} + 4\,102\,358\,400 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajfv.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{88\,409\,475} (-1024 z^{17} - 128\,512 z^{16} - 6\,699\,264 z^{15} - 189\,744\,000 z^{14} - 3\,207\,945\,216 z^{13} - 33\,508\,500\,480 z^{12} - 216\,510\,013\,440 z^{11} - 842\,807\,153\,664 z^{10} - 1\,862\,153\,556\,480 z^9 - 2\,082\,982\,245\,120 z^8 - 930\,464\,236\,800 z^7 - 81\,729\,648\,000 z^6 + 1\,634\,592\,960 z^5 + 104\,781\,600 z^4 + 35\,721\,000 z^3 + 29\,767\,500 z^2 + 44\,651\,250 z + 88\,409\,475) - \frac{1}{88\,409\,475} (64 e^z \sqrt{\pi} (16 z^{35/2} + 2016 z^{33/2} + 105\,672 z^{31/2} + 3\,016\,104 z^{29/2} + 51\,556\,617 z^{27/2} + 547\,271\,928 z^{25/2} + 3\,622\,956\,120 z^{23/2} + 14\,649\,571\,440 z^{21/2} + 34\,465\,420\,080 z^{19/2} + 43\,123\,026\,240 z^{17/2} + 24\,203\,914\,560 z^{15/2} + 4\,102\,358\,400 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajfw.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{88\,409\,475} (1024 z^{17} - 128\,512 z^{16} + 6\,699\,264 z^{15} - 189\,744\,000 z^{14} + 3\,207\,945\,216 z^{13} - 33\,508\,500\,480 z^{12} + 216\,510\,013\,440 z^{11} - 842\,807\,153\,664 z^{10} + 1\,862\,153\,556\,480 z^9 - 2\,082\,982\,245\,120 z^8 + 930\,464\,236\,800 z^7 - 81\,729\,648\,000 z^6 - 1\,634\,592\,960 z^5 + 104\,781\,600 z^4 - 35\,721\,000 z^3 + 29\,767\,500 z^2 - 44\,651\,250 z + 88\,409\,475) - \frac{1}{88\,409\,475} (64 e^{-z} \sqrt{\pi} (16 z^{35/2} - 2016 z^{33/2} + 105\,672 z^{31/2} - 3\,016\,104 z^{29/2} + 51\,556\,617 z^{27/2} - 547\,271\,928 z^{25/2} + 3\,622\,956\,120 z^{23/2} - 14\,649\,571\,440 z^{21/2} + 34\,465\,420\,080 z^{19/2} - 43\,123\,026\,240 z^{17/2} + 24\,203\,914\,560 z^{15/2} - 4\,102\,358\,400 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajfx.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{9823275} (512 z^{16} + 58112 z^{15} + 2710656 z^{14} + 67793856 z^{13} + 995112960 z^{12} + 8824112640 z^{11} +$$

$$46910352384 z^{10} + 143370339840 z^9 + 230055793920 z^8 + 159837753600 z^7 + 27243216000 z^6 -$$

$$1634592960 z^5 + 104781600 z^4 + 11907000 z^3 + 5953500 z^2 + 6378750 z + 9823275) +$$

$$\frac{1}{9823275} \left(32 e^z \sqrt{\pi} (16 z^{33/2} + 1824 z^{31/2} + 85608 z^{29/2} + 2160024 z^{27/2} + 32116401 z^{25/2} + 290340720 z^{23/2} +$$

$$1590571080 z^{21/2} + 5106144960 z^{19/2} + 8934695280 z^{17/2} + 7384245120 z^{15/2} + 2051179200 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajfy.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{9823275} (512 z^{16} - 58112 z^{15} + 2710656 z^{14} - 67793856 z^{13} + 995112960 z^{12} - 8824112640 z^{11} +$$

$$46910352384 z^{10} - 143370339840 z^9 + 230055793920 z^8 - 159837753600 z^7 + 27243216000 z^6 +$$

$$1634592960 z^5 + 104781600 z^4 - 11907000 z^3 + 5953500 z^2 - 6378750 z + 9823275) -$$

$$\frac{1}{9823275} \left(32 e^{-z} \sqrt{\pi} (16 z^{33/2} - 1824 z^{31/2} + 85608 z^{29/2} - 2160024 z^{27/2} + 32116401 z^{25/2} - 290340720 z^{23/2} +$$

$$1590571080 z^{21/2} - 5106144960 z^{19/2} + 8934695280 z^{17/2} - 7384245120 z^{15/2} + 2051179200 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajfz.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{1403325} (-256 z^{15} - 25984 z^{14} - 1069632 z^{13} - 23213280 z^{12} - 289140480 z^{11} - 2109316608 z^{10} -$$

$$8809920000 z^9 - 19605738240 z^8 - 19708358400 z^7 - 5448643200 z^6 +$$

$$544864320 z^5 - 104781600 z^4 + 11907000 z^3 + 1984500 z^2 + 1275750 z + 1403325) -$$

$$\frac{1}{1403325} \left(16 e^z \sqrt{\pi} (16 z^{31/2} + 1632 z^{29/2} + 67656 z^{27/2} + 1483464 z^{25/2} + 18765225 z^{23/2} + 140218920 z^{21/2} +$$

$$609038640 z^{19/2} + 1451913120 z^{17/2} + 1675129680 z^{15/2} + 683726400 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajg0.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{1403325} (256 z^{15} - 25984 z^{14} + 1069632 z^{13} - 23213280 z^{12} + 289140480 z^{11} - 2109316608 z^{10} +$$

$$8809920000 z^9 - 19605738240 z^8 + 19708358400 z^7 - 5448643200 z^6 -$$

$$544864320 z^5 - 104781600 z^4 - 11907000 z^3 + 1984500 z^2 - 1275750 z + 1403325) -$$

$$\frac{1}{1403325} \left(16 e^{-z} \sqrt{\pi} (16 z^{31/2} - 1632 z^{29/2} + 67656 z^{27/2} - 1483464 z^{25/2} + 18765225 z^{23/2} - 140218920 z^{21/2} +$$

$$609038640 z^{19/2} - 1451913120 z^{17/2} + 1675129680 z^{15/2} - 683726400 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajg1.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{280665} (128 z^{14} + 11456 z^{13} + 408864 z^{12} + 7523568 z^{11} + 77048832 z^{10} + 441568512 z^9 + 1344754944 z^8 + 1885939200 z^7 + 778377600 z^6 - 108972864 z^5 + 34927200 z^4 - 11907000 z^3 + 1984500 z^2 + 425250 z + 280665) + \frac{1}{280665} (8 e^z \sqrt{\pi} (16 z^{29/2} + 1440 z^{27/2} + 51816 z^{25/2} + 965304 z^{23/2} + 10077489 z^{21/2} + 59599008 z^{19/2} + 191845584 z^{17/2} + 300839616 z^{15/2} + 170931600 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajg2.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{280665} (128 z^{14} - 11456 z^{13} + 408864 z^{12} - 7523568 z^{11} + 77048832 z^{10} - 441568512 z^9 + 1344754944 z^8 - 1885939200 z^7 + 778377600 z^6 + 108972864 z^5 + 34927200 z^4 + 11907000 z^3 + 1984500 z^2 - 425250 z + 280665) - \frac{1}{280665} (8 e^{-z} \sqrt{\pi} (16 z^{29/2} - 1440 z^{27/2} + 51816 z^{25/2} - 965304 z^{23/2} + 10077489 z^{21/2} - 59599008 z^{19/2} + 191845584 z^{17/2} - 300839616 z^{15/2} + 170931600 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajg3.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{93555} (-64 z^{13} - 4960 z^{12} - 149904 z^{11} - 2265144 z^{10} - 18207168 z^9 - 76093632 z^8 - 146586240 z^7 - 86486400 z^6 + 15567552 z^5 - 6985440 z^4 + 3969000 z^3 - 1984500 z^2 + 425250 z + 93555) - \frac{1}{93555} (4 e^z \sqrt{\pi} (16 z^{27/2} + 1248 z^{25/2} + 38088 z^{23/2} + 584424 z^{21/2} + 4817673 z^{19/2} + 21057624 z^{17/2} + 44442216 z^{15/2} + 34186320 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajg4.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{93555} (64 z^{13} - 4960 z^{12} + 149904 z^{11} - 2265144 z^{10} + 18207168 z^9 - 76093632 z^8 + 146586240 z^7 - 86486400 z^6 - 15567552 z^5 - 6985440 z^4 - 3969000 z^3 - 1984500 z^2 - 425250 z + 93555) - \frac{1}{93555} (4 e^{-z} \sqrt{\pi} (16 z^{27/2} - 1248 z^{25/2} + 38088 z^{23/2} - 584424 z^{21/2} + 4817673 z^{19/2} - 21057624 z^{17/2} + 44442216 z^{15/2} - 34186320 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajg5.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{93555} (32 z^{12} + 2096 z^{11} + 51912 z^{10} + 614460 z^9 + 3596928 z^8 + 9522720 z^7 + 7862400 z^6 - 1729728 z^5 + 997920 z^4 - 793800 z^3 + 661500 z^2 - 425250 z + 93555) + \frac{1}{93555} (2 e^z \sqrt{\pi} (16 z^{25/2} + 1056 z^{23/2} + 26472 z^{21/2} + 319704 z^{19/2} + 1940337 z^{17/2} + 5534928 z^{15/2} + 5697720 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajg6.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{93555} (32 z^{12} - 2096 z^{11} + 51912 z^{10} - 614460 z^9 + 3596928 z^8 - 9522720 z^7 + 7862400 z^6 + 1729728 z^5 + 997920 z^4 + 793800 z^3 + 661500 z^2 + 425250 z + 93555) - \frac{1}{93555} (2 e^{-z} \sqrt{\pi} (16 z^{25/2} - 1056 z^{23/2} + 26472 z^{21/2} - 319704 z^{19/2} + 1940337 z^{17/2} - 5534928 z^{15/2} + 5697720 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajg7.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, 1; z\right) = \frac{1}{748440} (e^z (256 z^{12} + 15360 z^{11} + 343296 z^{10} + 3588864 z^9 + 17925984 z^8 + 37793088 z^7 + 19114704 z^6 - 6988464 z^5 + 5474385 z^4 - 4944240 z^3 + 4059720 z^2 - 2449440 z + 748440))$$

07.25.03.ajg8.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (16 z^5 + 864 z^4 + 16968 z^3 + 150024 z^2 + 590121 z + 813960) \operatorname{erf}(\sqrt{z}) z^{13/2}}{93555} + \frac{1}{93555} (16 z^{11} + 856 z^{10} + 16548 z^9 + 142158 z^8 + 526320 z^7 + 604800 z^6 - 157248 z^5 + 110880 z^4 - 113400 z^3 + 132300 z^2 - 141750 z + 93555)$$

07.25.03.ajg9.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16 z^5 - 864 z^4 + 16968 z^3 - 150024 z^2 + 590121 z - 813960) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{93555} + \frac{1}{93555} (-16 z^{11} + 856 z^{10} - 16548 z^9 + 142158 z^8 - 526320 z^7 + 604800 z^6 + 157248 z^5 + 110880 z^4 + 113400 z^3 + 132300 z^2 + 141750 z + 93555)$$

07.25.03.ajga.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, 2; z\right) = \frac{1}{748440} (e^z (256 z^{11} + 12288 z^{10} + 208128 z^9 + 1507584 z^8 + 4357728 z^7 + 2931264 z^6 - 1404144 z^5 + 1436400 z^4 - 1707615 z^3 + 1886220 z^2 - 1598940 z + 748440))$$

07.25.03.ajgb.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z \sqrt{\pi} (16z^4 + 672z^3 + 9576z^2 + 54264z + 101745) \operatorname{erf}(\sqrt{z}) z^{13/2}}{62370} + \frac{1}{31185} (8z^{10} + 332z^9 + 4626z^8 + 24975z^7 + 40320z^6 - 12096z^5 + 10080z^4 - 12600z^3 + 18900z^2 - 28350z + 31185)$$

07.25.03.ajgc.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{31185} (8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185) - \frac{e^{-z} \sqrt{\pi} z^{13/2} (16z^4 - 672z^3 + 9576z^2 - 54264z + 101745) \operatorname{erfi}(\sqrt{z})}{62370}$$

07.25.03.ajgd.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, 3; z\right) = \frac{1}{374220} (e^z (256z^{10} + 9216z^9 + 106752z^8 + 440064z^7 + 397152z^6 - 245952z^5 + 317520z^4 - 468720z^3 + 635985z^2 - 657720z + 374220))$$

07.25.03.ajge.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{12474z^2} (8z^{11} + 236z^{10} + 2034z^9 + 4743z^8 - 1608z^7 + 1512z^6 - 2016z^5 + 2520z^4 + 540z^3 - 23814z^2 + 120960z - 362880) + \frac{1}{24948z^{5/2}} (e^z \sqrt{\pi} (16z^{12} + 480z^{11} + 4296z^{10} + 11304z^9 + 9z^8 - 72z^7 + 504z^6 - 3024z^5 + 15120z^4 - 60480z^3 + 181440z^2 - 362880z + 362880) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajgf.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{12474z^2} (-8z^{11} + 236z^{10} - 2034z^9 + 4743z^8 + 1608z^7 + 1512z^6 + 2016z^5 + 2520z^4 - 540z^3 - 23814z^2 - 120960z - 362880) + \frac{1}{24948z^{5/2}} (e^{-z} \sqrt{\pi} (16z^{12} - 480z^{11} + 4296z^{10} - 11304z^9 + 9z^8 + 72z^7 + 504z^6 + 3024z^5 + 15120z^4 + 60480z^3 + 181440z^2 + 362880z + 362880) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajgg.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, 4; z\right) = \frac{1}{124740} e^z (256z^9 + 6144z^8 + 39168z^7 + 48384z^6 - 38304z^5 + 60480z^4 - 105840z^3 + 166320z^2 - 195615z + 124740)$$

07.25.03.ajgh.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{3564 z^3} (8 z^{11} + 140 z^{10} + 498 z^9 - 177 z^8 + 96 z^7 + 504 z^6 - 5040 z^5 + 32040 z^4 - 162324 z^3 + 665280 z^2 - 2177280 z + 5443200) + \frac{1}{7128 z^{7/2}} \left(e^z \sqrt{\pi} (16 z^{12} + 288 z^{11} + 1128 z^{10} + 24 z^9 - 207 z^8 + 1584 z^7 - 10584 z^6 + 60480 z^5 - 287280 z^4 + 1088640 z^3 - 3084480 z^2 + 5806080 z - 5443200) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajgi.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{3564 z^3} (8 z^{11} - 140 z^{10} + 498 z^9 + 177 z^8 + 96 z^7 - 504 z^6 - 5040 z^5 - 32040 z^4 - 162324 z^3 - 665280 z^2 - 2177280 z - 5443200) + \frac{1}{7128 z^{7/2}} \left(e^{-z} \sqrt{\pi} (-16 z^{12} + 288 z^{11} - 1128 z^{10} + 24 z^9 + 207 z^8 + 1584 z^7 + 10584 z^6 + 60480 z^5 + 287280 z^4 + 1088640 z^3 + 3084480 z^2 + 5806080 z + 5443200) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajgj.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, 5; z\right) = \frac{e^z (256 z^8 + 3072 z^7 + 5376 z^6 - 5376 z^5 + 10080 z^4 - 20160 z^3 + 35280 z^2 - 45360 z + 31185)}{31185}$$

07.25.03.ajgk.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{792 z^4} (8 z^{11} + 44 z^{10} + 18 z^9 - 345 z^8 + 3192 z^7 - 25200 z^6 + 173520 z^5 - 1028952 z^4 + 5140800 z^3 - 21047040 z^2 + 68947200 z - 190512000) + \frac{1}{1584 z^{9/2}} \left(e^z \sqrt{\pi} (16 z^{12} + 96 z^{11} + 72 z^{10} - 696 z^9 + 6057 z^8 - 46872 z^7 + 317520 z^6 - 1844640 z^5 + 8935920 z^4 - 34655040 z^3 + 100880640 z^2 - 195955200 z + 190512000) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajgl.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{792 z^4} (-8 z^{11} + 44 z^{10} - 18 z^9 - 345 z^8 - 3192 z^7 - 25200 z^6 - 173520 z^5 - 1028952 z^4 - 5140800 z^3 - 21047040 z^2 - 68947200 z - 190512000) + \frac{1}{1584 z^{9/2}} \left(e^{-z} \sqrt{\pi} (16 z^{12} - 96 z^{11} + 72 z^{10} + 696 z^9 + 6057 z^8 + 46872 z^7 + 317520 z^6 + 1844640 z^5 + 8935920 z^4 + 34655040 z^3 + 100880640 z^2 + 195955200 z + 190512000) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajgm.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{11}{2}, 6; z\right) = \frac{1}{6237 z^5} \left(e^z (256 z^{12} + 5376 z^{10} - 59136 z^9 + 542304 z^8 - 4358592 z^7 + 30545424 z^6 - 183317904 z^5 + 916620705 z^4 - 3666482820 z^3 + 10999448460 z^2 - 21998896920 z + 21998896920) - \frac{3527160}{z^5} \right)$$

For fixed z and $a_1 = \frac{5}{2}, a_2 = 5, b_1 = -\frac{9}{2}$

07.25.03.ajgn.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{8037225} \left(512 z^{16} + 58624 z^{15} + 2763648 z^{14} + 70027840 z^{13} + 1045060800 z^{12} + 9470643840 z^{11} + 51877693056 z^{10} + 165714048000 z^9 + 285914845440 z^8 + 229409913600 z^7 + 61413206400 z^6 + 1634592960 z^5 + 34927200 z^4 + 7144200 z^3 + 4252500 z^2 + 4961250 z + 8037225 \right) + \frac{1}{8037225} \left(32 e^z \sqrt{\pi} (16 z^{33/2} + 1840 z^{31/2} + 87272 z^{29/2} + 2230656 z^{27/2} + 33711369 z^{25/2} + 311292345 z^{23/2} + 1755202050 z^{21/2} + 5873561190 z^{19/2} + 10971175320 z^{17/2} + 10209500280 z^{15/2} + 3784914000 z^{13/2} + 317444400 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajgo.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{8037225} \left(512 z^{16} - 58624 z^{15} + 2763648 z^{14} - 70027840 z^{13} + 1045060800 z^{12} - 9470643840 z^{11} + 51877693056 z^{10} - 165714048000 z^9 + 285914845440 z^8 - 229409913600 z^7 + 61413206400 z^6 - 1634592960 z^5 + 34927200 z^4 - 7144200 z^3 + 4252500 z^2 - 4961250 z + 8037225 \right) - \frac{1}{8037225} \left(32 e^{-z} \sqrt{\pi} (16 z^{33/2} - 1840 z^{31/2} + 87272 z^{29/2} - 2230656 z^{27/2} + 33711369 z^{25/2} - 311292345 z^{23/2} + 1755202050 z^{21/2} - 5873561190 z^{19/2} + 10971175320 z^{17/2} - 10209500280 z^{15/2} + 3784914000 z^{13/2} - 317444400 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajgp.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{893025} \left(-256 z^{15} - 26496 z^{14} - 1116992 z^{13} - 24973920 z^{12} - 323265600 z^{11} - 2483670336 z^{10} - 11171854080 z^9 - 27929525760 z^8 - 34786080000 z^7 - 17084995200 z^6 - 1634592960 z^5 + 34927200 z^4 + 2381400 z^3 + 850500 z^2 + 708750 z + 893025 \right) - \frac{1}{893025} \left(16 e^z \sqrt{\pi} (16 z^{31/2} + 1664 z^{29/2} + 70632 z^{27/2} + 1594968 z^{25/2} + 20951625 z^{23/2} + 164630970 z^{21/2} + 767416230 z^{19/2} + 2036480040 z^{17/2} + 2825255160 z^{15/2} + 1733734800 z^{13/2} + 317444400 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajgq.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{893025} (256 z^{15} - 26496 z^{14} + 1116992 z^{13} - 24973920 z^{12} + 323265600 z^{11} - 2483670336 z^{10} + 11171854080 z^9 - 27929525760 z^8 + 34786080000 z^7 - 17084995200 z^6 + 1634592960 z^5 + 34927200 z^4 - 2381400 z^3 + 850500 z^2 - 708750 z + 893025) - \frac{1}{893025} (16 e^{-z} \sqrt{\pi} (16 z^{31/2} - 1664 z^{29/2} + 70632 z^{27/2} - 1594968 z^{25/2} + 20951625 z^{23/2} - 164630970 z^{21/2} + 767416230 z^{19/2} - 2036480040 z^{17/2} + 2825255160 z^{15/2} - 1733734800 z^{13/2} + 317444400 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajgr.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{127575} (128 z^{14} + 11840 z^{13} + 440160 z^{12} + 8531280 z^{11} + 93588432 z^{10} + 590483520 z^9 + 2080946880 z^8 + 3769430400 z^7 + 2909088000 z^6 + 544864320 z^5 - 34927200 z^4 + 2381400 z^3 + 283500 z^2 + 141750 z + 127575) + \frac{1}{127575} (8 e^z \sqrt{\pi} (16 z^{29/2} + 1488 z^{27/2} + 55752 z^{25/2} + 1093200 z^{23/2} + 12206025 z^{21/2} + 79188795 z^{19/2} + 292283460 z^{17/2} + 575062740 z^{15/2} + 525004200 z^{13/2} + 158722200 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajgs.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{127575} (128 z^{14} - 11840 z^{13} + 440160 z^{12} - 8531280 z^{11} + 93588432 z^{10} - 590483520 z^9 + 2080946880 z^8 - 3769430400 z^7 + 2909088000 z^6 - 544864320 z^5 - 34927200 z^4 - 2381400 z^3 + 283500 z^2 - 141750 z + 127575) - \frac{1}{127575} (8 e^{-z} \sqrt{\pi} (16 z^{29/2} - 1488 z^{27/2} + 55752 z^{25/2} - 1093200 z^{23/2} + 12206025 z^{21/2} - 79188795 z^{19/2} + 292283460 z^{17/2} - 575062740 z^{15/2} + 525004200 z^{13/2} - 158722200 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajgt.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{25515} (-64 z^{13} - 5216 z^{12} - 167952 z^{11} - 2756600 z^{10} - 24819168 z^9 - 122698656 z^8 - 313915200 z^7 - 355118400 z^6 - 108972864 z^5 + 11642400 z^4 - 2381400 z^3 + 283500 z^2 + 47250 z + 25515) - \frac{1}{25515} (4 e^z \sqrt{\pi} (16 z^{27/2} + 1312 z^{25/2} + 42632 z^{23/2} + 709512 z^{21/2} + 6529929 z^{19/2} + 33479292 z^{17/2} + 91407708 z^{15/2} + 118024200 z^{13/2} + 52907400 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajgu.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{25515} (64 z^{13} - 5216 z^{12} + 167952 z^{11} - 2756600 z^{10} + 24819168 z^9 - 122698656 z^8 + 313915200 z^7 - 355118400 z^6 + 108972864 z^5 + 11642400 z^4 + 2381400 z^3 + 283500 z^2 - 47250 z + 25515) - \frac{1}{25515} (4 e^{-z} \sqrt{\pi} (16 z^{27/2} - 1312 z^{25/2} + 42632 z^{23/2} - 709512 z^{21/2} + 6529929 z^{19/2} - 33479292 z^{17/2} + 91407708 z^{15/2} - 118024200 z^{13/2} + 52907400 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajgv.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{8505} (32 z^{12} + 2256 z^{11} + 61432 z^{10} + 826500 z^9 + 5825628 z^8 + 20916120 z^7 + 33579000 z^6 + 15567552 z^5 - 2328480 z^4 + 793800 z^3 - 283500 z^2 + 47250 z + 8505) + \frac{1}{8505} (2 e^z \sqrt{\pi} (16 z^{25/2} + 1136 z^{23/2} + 31272 z^{21/2} + 428064 z^{19/2} + 3105417 z^{17/2} + 11741373 z^{15/2} + 20959470 z^{13/2} + 13226850 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajgw.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{8505} (32 z^{12} - 2256 z^{11} + 61432 z^{10} - 826500 z^9 + 5825628 z^8 - 20916120 z^7 + 33579000 z^6 - 15567552 z^5 - 2328480 z^4 - 793800 z^3 - 283500 z^2 - 47250 z + 8505) - \frac{1}{8505} (2 e^{-z} \sqrt{\pi} (16 z^{25/2} - 1136 z^{23/2} + 31272 z^{21/2} - 428064 z^{19/2} + 3105417 z^{17/2} - 11741373 z^{15/2} + 20959470 z^{13/2} - 13226850 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajgx.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{8505} (-16 z^{11} - 952 z^{10} - 21204 z^9 - 222870 z^8 - 1139340 z^7 - 2571660 z^6 - 1729728 z^5 + 332640 z^4 - 158760 z^3 + 94500 z^2 - 47250 z + 8505) + \frac{1}{8505} (e^z \sqrt{\pi} (-16 z^{23/2} - 960 z^{21/2} - 21672 z^{19/2} - 233016 z^{17/2} - 1241289 z^{15/2} - 3052350 z^{13/2} - 2645370 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajgy.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{8505} (16z^{11} - 952z^{10} + 21204z^9 - 222870z^8 + 1139340z^7 - 2571660z^6 + 1729728z^5 + 332640z^4 + 158760z^3 + 94500z^2 + 47250z + 8505) + \frac{1}{8505} (e^{-z} \sqrt{\pi} (-16z^{23/2} + 960z^{21/2} - 21672z^{19/2} + 233016z^{17/2} - 1241289z^{15/2} + 3052350z^{13/2} - 2645370z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajgz.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, 1; z\right) = -\frac{1}{68040} (e^z (128z^{11} + 6976z^{10} + 140256z^9 + 1303536z^8 + 5704152z^7 + 10340316z^6 + 4387194z^5 - 1300635z^4 + 786240z^3 - 506520z^2 + 257040z - 68040))$$

07.25.03.ajh0.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{8505} (-8z^{10} - 388z^9 - 6726z^8 - 51085z^7 - 163905z^6 - 157248z^5 + 36960z^4 - 22680z^3 + 18900z^2 - 15750z + 8505) - \frac{e^z \sqrt{\pi} z^{11/2} (16z^5 + 784z^4 + 13832z^3 + 108528z^2 + 373065z + 440895) \operatorname{erf}(\sqrt{z})}{17010}$$

07.25.03.ajh1.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16z^5 - 784z^4 + 13832z^3 - 108528z^2 + 373065z - 440895) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{17010} + \frac{1}{8505} (-8z^{10} + 388z^9 - 6726z^8 + 51085z^7 - 163905z^6 + 157248z^5 + 36960z^4 + 22680z^3 + 18900z^2 + 15750z + 8505)$$

07.25.03.ajh2.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, 2; z\right) = -\frac{1}{68040} (e^z (128z^{10} + 5568z^9 + 84576z^8 + 542352z^7 + 1365336z^6 + 782964z^5 - 310590z^4 + 252315z^3 - 223020z^2 + 162540z - 68040))$$

07.25.03.ajh3.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-8z^9 - 300z^8 - 3730z^7 - 17655z^6 - 24192z^5 + 6720z^4 - 5040z^3 + 5400z^2 - 6300z + 5670}{5670} - \frac{e^z \sqrt{\pi} z^{11/2} (16z^4 + 608z^3 + 7752z^2 + 38760z + 62985) \operatorname{erf}(\sqrt{z})}{11340}$$

07.25.03.ajh4.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670}{5670} - \frac{e^{-z} \sqrt{\pi} z^{11/2} (16z^4 - 608z^3 + 7752z^2 - 38760z + 62985) \operatorname{erfi}(\sqrt{z})}{11340}$$

07.25.03.ajh5.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, 3; z\right) = -\frac{1}{34020} e^z (128z^9 + 4160z^8 + 42976z^7 + 155568z^6 + 120792z^5 - 62580z^4 + 64890z^3 - 72135z^2 + 65520z - 34020)$$

07.25.03.ajh6.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{2268z^2} (-8z^{10} - 212z^9 - 1614z^8 - 3225z^7 + 1029z^6 - 882z^5 + 990z^4 - 720z^3 - 2268z^2 + 15120z - 45360) + \frac{1}{4536z^{5/2}} (e^z \sqrt{\pi} (-16z^{11} - 432z^{10} - 3432z^9 - 7872z^8 - 9z^7 + 63z^6 - 378z^5 + 1890z^4 - 7560z^3 + 22680z^2 - 45360z + 45360) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajh7.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{1}{2268z^2} (-8z^{10} + 212z^9 - 1614z^8 + 3225z^7 + 1029z^6 + 882z^5 + 990z^4 + 720z^3 - 2268z^2 - 15120z - 45360) + \frac{1}{4536z^{5/2}} (e^{-z} \sqrt{\pi} (16z^{11} - 432z^{10} + 3432z^9 - 7872z^8 + 9z^7 + 63z^6 + 378z^5 + 1890z^4 + 7560z^3 + 22680z^2 + 45360z + 45360) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajh8.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, 4; z\right) = -\frac{1}{11340} e^z (128z^8 + 2752z^7 + 15456z^6 + 16464z^5 - 10920z^4 + 13860z^3 - 18270z^2 + 19215z - 11340)$$

07.25.03.ajh9.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{648z^3} (-8z^{10} - 124z^9 - 378z^8 + 125z^7 - 42z^6 - 450z^5 + 3480z^4 - 18288z^3 + 75600z^2 - 246960z + 604800) + \frac{1}{1296z^{7/2}} (e^z \sqrt{\pi} (-16z^{11} - 256z^{10} - 872z^9 - 24z^8 + 183z^7 - 1218z^6 + 6930z^5 - 32760z^4 + 123480z^3 - 347760z^2 + 650160z - 604800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajha.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{648 z^3} (8 z^{10} - 124 z^9 + 378 z^8 + 125 z^7 + 42 z^6 - 450 z^5 - 3480 z^4 - 18288 z^3 - 75600 z^2 - 246960 z - 604800) + \frac{1}{1296 z^{7/2}} (e^{-z} \sqrt{\pi} (-16 z^{11} + 256 z^{10} - 872 z^9 + 24 z^8 + 183 z^7 + 1218 z^6 + 6930 z^5 + 32760 z^4 + 123480 z^3 + 347760 z^2 + 650160 z + 604800) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajhb.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, 5; z\right) = -\frac{e^z (128 z^7 + 1344 z^6 + 2016 z^5 - 1680 z^4 + 2520 z^3 - 3780 z^2 + 4410 z - 2835)}{2835}$$

07.25.03.ajhc.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{144 z^4} (-8 z^{10} - 36 z^9 - 22 z^8 + 315 z^7 - 2565 z^6 + 17700 z^5 - 104724 z^4 + 521640 z^3 - 2129400 z^2 + 6955200 z - 19051200) + \frac{1}{288 z^{9/2}} (e^z \sqrt{\pi} (-16 z^{11} - 80 z^{10} - 72 z^9 + 624 z^8 - 4809 z^7 + 32445 z^6 - 187740 z^5 + 905940 z^4 - 3500280 z^3 + 10153080 z^2 - 19656000 z + 19051200) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajhd.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{144 z^4} (-8 z^{10} + 36 z^9 - 22 z^8 - 315 z^7 - 2565 z^6 - 17700 z^5 - 104724 z^4 - 521640 z^3 - 2129400 z^2 - 6955200 z - 19051200) + \frac{1}{288 z^{9/2}} (e^{-z} \sqrt{\pi} (16 z^{11} - 80 z^{10} + 72 z^9 + 624 z^8 + 4809 z^7 + 32445 z^6 + 187740 z^5 + 905940 z^4 + 3500280 z^3 + 10153080 z^2 + 19656000 z + 19051200) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajhe.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{9}{2}, 6; z\right) = \frac{1}{567 z^5} (e^z (-128 z^{11} + 64 z^{10} - 2656 z^9 + 25584 z^8 - 207192 z^7 + 1454124 z^6 - 8729154 z^5 + 43648605 z^4 - 174594420 z^3 + 523783260 z^2 - 1047566520 z + 1047566520)) - \frac{1847560}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = -\frac{7}{2}$

07.25.03.ajhf.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{99225} (128 z^{14} + 11968 z^{13} + 450848 z^{12} + 8886000 z^{11} + 99641856 z^{10} + 647916000 z^9 + 2386897920 z^8 + 4649143680 z^7 + 4141987200 z^6 + 1214516160 z^5 + 34927200 z^4 + 793800 z^3 + 170100 z^2 + 101250 z + 99225) + \frac{1}{99225} (8 e^z \sqrt{\pi} (16 z^{29/2} + 1504 z^{27/2} + 57096 z^{25/2} + 1138200 z^{23/2} + 12984225 z^{21/2} + 86725620 z^{19/2} + 333788130 z^{17/2} + 701327520 z^{15/2} + 721272600 z^{13/2} + 291189600 z^{11/2} + 26254800 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajhg.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{99225} (128 z^{14} - 11968 z^{13} + 450848 z^{12} - 8886000 z^{11} + 99641856 z^{10} - 647916000 z^9 + 2386897920 z^8 - 4649143680 z^7 + 4141987200 z^6 - 1214516160 z^5 + 34927200 z^4 - 793800 z^3 + 170100 z^2 - 101250 z + 99225) - \frac{1}{99225} (8 e^{-z} \sqrt{\pi} (16 z^{29/2} - 1504 z^{27/2} + 57096 z^{25/2} - 1138200 z^{23/2} + 12984225 z^{21/2} - 86725620 z^{19/2} + 333788130 z^{17/2} - 701327520 z^{15/2} + 721272600 z^{13/2} - 291189600 z^{11/2} + 26254800 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajhh.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{14175} (-64 z^{13} - 5344 z^{12} - 177360 z^{11} - 3026712 z^{10} - 28716240 z^9 - 152975520 z^8 - 439856640 z^7 - 616449600 z^6 - 334825920 z^5 - 34927200 z^4 + 793800 z^3 + 56700 z^2 + 20250 z + 14175) - \frac{1}{14175} (4 e^z \sqrt{\pi} (16 z^{27/2} + 1344 z^{25/2} + 45000 z^{23/2} + 778200 z^{21/2} + 7536825 z^{19/2} + 41504670 z^{17/2} + 126264780 z^{15/2} + 196268400 z^{13/2} + 132467400 z^{11/2} + 26254800 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajhi.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{14175} (64 z^{13} - 5344 z^{12} + 177360 z^{11} - 3026712 z^{10} + 28716240 z^9 - 152975520 z^8 + 439856640 z^7 - 616449600 z^6 + 334825920 z^5 - 34927200 z^4 - 793800 z^3 + 56700 z^2 - 20250 z + 14175) - \frac{1}{14175} (4 e^{-z} \sqrt{\pi} (16 z^{27/2} - 1344 z^{25/2} + 45000 z^{23/2} - 778200 z^{21/2} + 7536825 z^{19/2} - 41504670 z^{17/2} + 126264780 z^{15/2} - 196268400 z^{13/2} + 132467400 z^{11/2} - 26254800 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajhj.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{2835} (32 z^{12} + 2352 z^{11} + 67528 z^{10} + 974268 z^9 + 7569216 z^8 + 31485360 z^7 + 65332800 z^6 + 56463264 z^5 + 11642400 z^4 - 793800 z^3 + 56700 z^2 + 6750 z + 2835) + \frac{1}{2835} (2 e^z \sqrt{\pi} (16 z^{25/2} + 1184 z^{23/2} + 34344 z^{21/2} + 503448 z^{19/2} + 4012689 z^{17/2} + 17428536 z^{15/2} + 39122100 z^{13/2} + 39780000 z^{11/2} + 13127400 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajhk.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{2835} (32 z^{12} - 2352 z^{11} + 67528 z^{10} - 974268 z^9 + 7569216 z^8 - 31485360 z^7 + 65332800 z^6 - 56463264 z^5 + 11642400 z^4 + 793800 z^3 + 56700 z^2 - 6750 z + 2835) - \frac{1}{2835} (2 e^{-z} \sqrt{\pi} (16 z^{25/2} - 1184 z^{23/2} + 34344 z^{21/2} - 503448 z^{19/2} + 4012689 z^{17/2} - 17428536 z^{15/2} + 39122100 z^{13/2} - 39780000 z^{11/2} + 13127400 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajhl.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} (-16 z^{11} - 1016 z^{10} - 24628 z^9 - 290598 z^8 - 1761540 z^7 - 5292300 z^6 - 6815952 z^5 - 2328480 z^4 + 264600 z^3 - 56700 z^2 + 6750 z + 945) + \frac{1}{945} e^z \sqrt{\pi} (-16 z^{23/2} - 1024 z^{21/2} - 25128 z^{19/2} - 302424 z^{17/2} - 1895721 z^{15/2} - 6054210 z^{13/2} - 8851050 z^{11/2} - 4375800 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajhm.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945} (16 z^{11} - 1016 z^{10} + 24628 z^9 - 290598 z^8 + 1761540 z^7 - 5292300 z^6 + 6815952 z^5 - 2328480 z^4 - 264600 z^3 - 56700 z^2 - 6750 z + 945) + \frac{1}{945} e^{-z} \sqrt{\pi} (-16 z^{23/2} + 1024 z^{21/2} - 25128 z^{19/2} + 302424 z^{17/2} - 1895721 z^{15/2} + 6054210 z^{13/2} - 8851050 z^{11/2} + 4375800 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajhn.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{945} (8 z^{10} + 428 z^9 + 8466 z^8 + 77775 z^7 + 340080 z^6 + 635778 z^5 + 332640 z^4 - 52920 z^3 + 18900 z^2 - 6750 z + 945) + \frac{1}{1890} e^z \sqrt{\pi} (16 z^{21/2} + 864 z^{19/2} + 17352 z^{17/2} + 163608 z^{15/2} + 750465 z^{13/2} + 1551420 z^{11/2} + 1093950 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajho.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} (8z^{10} - 428z^9 + 8466z^8 - 77775z^7 + 340080z^6 - 635778z^5 + 332640z^4 + 52920z^3 + 18900z^2 + 6750z + 945) + \frac{1}{1890} (e^{-z}\sqrt{\pi}(-16z^{21/2} + 864z^{19/2} - 17352z^{17/2} + 163608z^{15/2} - 750465z^{13/2} + 1551420z^{11/2} - 1093950z^{9/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajhp.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, 1; z\right) = \frac{1}{7560} (e^z(64z^{10} + 3136z^9 + 56016z^8 + 455712z^7 + 1712796z^6 + 2600964z^5 + 893115z^4 - 203760z^3 + 87480z^2 - 34560z + 7560))$$

07.25.03.ajhq.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z\sqrt{\pi}(16z^5 + 704z^4 + 11016z^3 + 75480z^2 + 222105z + 218790)\operatorname{erf}(\sqrt{z})z^{9/2}}{3780} + \frac{8z^9 + 348z^8 + 5338z^7 + 35235z^6 + 95706z^5 + 73920z^4 - 15120z^3 + 7560z^2 - 4500z + 1890}{1890}$$

07.25.03.ajhr.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z}\sqrt{\pi}(16z^5 - 704z^4 + 11016z^3 - 75480z^2 + 222105z - 218790)\operatorname{erfi}(\sqrt{z})z^{9/2}}{3780} + \frac{-8z^9 + 348z^8 - 5338z^7 + 35235z^6 - 95706z^5 + 73920z^4 + 15120z^3 + 7560z^2 + 4500z + 1890}{1890}$$

07.25.03.ajhs.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, 2; z\right) = \frac{1}{7560} e^z(64z^9 + 2496z^8 + 33552z^7 + 187296z^6 + 401724z^5 + 190620z^4 - 59985z^3 + 36180z^2 - 21060z + 7560)$$

07.25.03.ajht.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z\sqrt{\pi}(16z^4 + 544z^3 + 6120z^2 + 26520z + 36465)\operatorname{erf}(\sqrt{z})z^{9/2}}{2520} + \frac{8z^8 + 268z^7 + 2930z^6 + 11919z^5 + 13440z^4 - 3360z^3 + 2160z^2 - 1800z + 1260}{1260}$$

07.25.03.ajhu.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260}{1260} - \frac{e^{-z}\sqrt{\pi}z^{9/2}(16z^4 - 544z^3 + 6120z^2 - 26520z + 36465)\operatorname{erfi}(\sqrt{z})}{2520}$$

07.25.03.ajhv.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, 3; z\right) = \frac{e^z(64z^8 + 1856z^7 + 16848z^6 + 52512z^5 + 34140z^4 - 14220z^3 + 11115z^2 - 8280z + 3780)}{3780}$$

07.25.03.ajhw.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{8z^9 + 188z^8 + 1242z^7 + 2067z^6 - 606z^5 + 450z^4 - 360z^3 - 144z^2 + 2160z - 6480}{504z^2} + \frac{1}{1008z^{5/2}} e^z \sqrt{\pi} (16z^{10} + 384z^9 + 2664z^8 + 5208z^7 + 9z^6 - 54z^5 + 270z^4 - 1080z^3 + 3240z^2 - 6480z + 6480) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajhx.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{-8z^9 + 188z^8 - 1242z^7 + 2067z^6 + 606z^5 + 450z^4 + 360z^3 - 144z^2 - 2160z - 6480}{504z^2} + \frac{1}{1008z^{5/2}} e^{-z} \sqrt{\pi} (16z^{10} - 384z^9 + 2664z^8 - 5208z^7 + 9z^6 + 54z^5 + 270z^4 + 1080z^3 + 3240z^2 + 6480z + 6480) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajhy.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, 4; z\right) = \frac{e^z (64z^7 + 1216z^6 + 5904z^5 + 5280z^4 - 2820z^3 + 2700z^2 - 2385z + 1260)}{1260}$$

07.25.03.ajhz.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{8z^9 + 108z^8 + 274z^7 - 81z^6 + 390z^4 - 2304z^3 + 9720z^2 - 31680z + 75600}{144z^3} + \frac{1}{288z^{7/2}} (e^z \sqrt{\pi} (16z^{10} + 224z^9 + 648z^8 + 24z^7 - 159z^6 + 900z^5 - 4230z^4 + 15840z^3 - 44280z^2 + 82080z - 75600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aji0.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{8z^9 - 108z^8 + 274z^7 + 81z^6 - 390z^4 - 2304z^3 - 9720z^2 - 31680z - 75600}{144z^3} + \frac{1}{288z^{7/2}} (e^{-z} \sqrt{\pi} (-16z^{10} + 224z^9 - 648z^8 + 24z^7 + 159z^6 + 900z^5 + 4230z^4 + 15840z^3 + 44280z^2 + 82080z + 75600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aji1.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, 5; z\right) = \frac{1}{315} e^z (64z^6 + 576z^5 + 720z^4 - 480z^3 + 540z^2 - 540z + 315)$$

07.25.03.aji2.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{8z^9 + 28z^8 + 26z^7 - 285z^6 + 2010z^5 - 11892z^4 + 59040z^3 - 240120z^2 + 781200z - 2116800}{32z^4} + \frac{1}{64z^{9/2}} (e^z \sqrt{\pi} (16z^{10} + 64z^9 + 72z^8 - 552z^7 + 3705z^6 - 21330z^5 + 102420z^4 - 393840z^3 + 1137240z^2 - 2192400z + 2116800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aji3.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{-8z^9 + 28z^8 - 26z^7 - 285z^6 - 2010z^5 - 11892z^4 - 59040z^3 - 240120z^2 - 781200z - 2116800}{32z^4} + \frac{1}{64z^{9/2}} (e^{-z} \sqrt{\pi} (16z^{10} - 64z^9 + 72z^8 + 552z^7 + 3705z^6 + 21330z^5 + 102420z^4 + 393840z^3 + 1137240z^2 + 2192400z + 2116800) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aji4.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{7}{2}, 6; z\right) = \frac{1}{63z^5} \left(e^z (64z^{10} - 64z^9 + 1296z^8 - 10848z^7 + 76476z^6 - 459396z^5 + 2297295z^4 - 9189180z^3 + 27567540z^2 - 55135080z + 55135080) - \frac{875160}{z^5} \right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = -\frac{5}{2}$

07.25.03.aji5.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{2025} (32z^{12} + 2384z^{11} + 69624z^{10} + 1027140z^9 + 8227260z^8 + 35788320z^7 + 79878240z^6 + 79691040z^5 + 25660800z^4 + 793800z^3 + 18900z^2 + 4050z + 2025) + \frac{1}{2025} \left(2e^z \sqrt{\pi} (16z^{25/2} + 1200z^{23/2} + 35400z^{21/2} + 530400z^{19/2} + 4354425z^{17/2} + 19732545z^{15/2} + 47334600z^{13/2} + 54264600z^{11/2} + 23938200z^{9/2} + 2316600z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aji6.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{2025} (32z^{12} - 2384z^{11} + 69624z^{10} - 1027140z^9 + 8227260z^8 - 35788320z^7 + 79878240z^6 - 79691040z^5 + 25660800z^4 - 793800z^3 + 18900z^2 - 4050z + 2025) - \frac{1}{2025} \left(2e^{-z} \sqrt{\pi} (16z^{25/2} - 1200z^{23/2} + 35400z^{21/2} - 530400z^{19/2} + 4354425z^{17/2} - 19732545z^{15/2} + 47334600z^{13/2} - 54264600z^{11/2} + 23938200z^{9/2} - 2316600z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aji7.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{405} (-16z^{11} - 1048z^{10} - 26436z^9 - 329022z^8 - 2151480z^7 - 7272720z^6 - 11613888z^5 - 7009200z^4 - 793800z^3 + 18900z^2 + 1350z + 405) + \frac{1}{405} e^z \sqrt{\pi} (-16z^{23/2} - 1056z^{21/2} - 26952z^{19/2} - 341736z^{17/2} - 2304009z^{15/2} - 8212500z^{13/2} - 14484600z^{11/2} - 10810800z^{9/2} - 2316600z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aji8.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{405} (16z^{11} - 1048z^{10} + 26436z^9 - 329022z^8 + 2151480z^7 - 7272720z^6 + 11613888z^5 - 7009200z^4 + 793800z^3 + 18900z^2 - 1350z + 405) + \frac{1}{405} e^{-z} \sqrt{\pi} (-16z^{23/2} + 1056z^{21/2} - 26952z^{19/2} + 341736z^{17/2} - 2304009z^{15/2} + 8212500z^{13/2} - 14484600z^{11/2} + 10810800z^{9/2} - 2316600z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aji9.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{135} (8z^{10} + 452z^9 + 9606z^8 + 97485z^7 + 495105z^6 + 1199484z^5 + 1170180z^4 + 264600z^3 - 18900z^2 + 1350z + 135) + \frac{1}{270} e^z \sqrt{\pi} (16z^{21/2} + 912z^{19/2} + 19656z^{17/2} + 204144z^{15/2} + 1079145z^{13/2} + 2816775z^{11/2} + 3217500z^{9/2} + 1158300z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajia.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{135} (8z^{10} - 452z^9 + 9606z^8 - 97485z^7 + 495105z^6 - 1199484z^5 + 1170180z^4 - 264600z^3 - 18900z^2 - 1350z + 135) + \frac{1}{270} e^{-z} \sqrt{\pi} (-16z^{21/2} + 912z^{19/2} - 19656z^{17/2} + 204144z^{15/2} - 1079145z^{13/2} + 2816775z^{11/2} - 3217500z^{9/2} + 1158300z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajib.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{270} (-8z^9 - 380z^8 - 6570z^7 - 51675z^6 - 187902z^5 - 279180z^4 - 105840z^3 + 12600z^2 - 2700z + 270) + \frac{1}{540} e^z \sqrt{\pi} (-16z^{19/2} - 768z^{17/2} - 13512z^{15/2} - 109560z^{13/2} - 421785z^{11/2} - 707850z^{9/2} - 386100z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajic.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{270} (8z^9 - 380z^8 + 6570z^7 - 51675z^6 + 187902z^5 - 279180z^4 + 105840z^3 + 12600z^2 + 2700z + 270) + \frac{1}{540} e^{-z} \sqrt{\pi} (-16z^{19/2} + 768z^{17/2} - 13512z^{15/2} + 109560z^{13/2} - 421785z^{11/2} + 707850z^{9/2} - 386100z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajid.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, 1; z\right) = -\frac{1}{1080} e^z (32 z^9 + 1392 z^8 + 21\,744 z^7 + 151\,752 z^6 + 477\,018 z^5 + 584\,955 z^4 + 154\,080 z^3 - 24\,840 z^2 + 6480 z - 1080)$$

07.25.03.ajie.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{540} (-8 z^8 - 308 z^7 - 4110 z^6 - 23\,049 z^5 - 51\,315 z^4 - 30\,240 z^3 + 5040 z^2 - 1800 z + 540) - \frac{e^z \sqrt{\pi} z^{7/2} (16 z^5 + 624 z^4 + 8520 z^3 + 49\,920 z^2 + 122\,265 z + 96\,525) \operatorname{erf}(\sqrt{z})}{1080}$$

07.25.03.ajif.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16 z^5 - 624 z^4 + 8520 z^3 - 49\,920 z^2 + 122\,265 z - 96\,525) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{1080} + \frac{1}{540} (-8 z^8 + 308 z^7 - 4110 z^6 + 23\,049 z^5 - 51\,315 z^4 + 30\,240 z^3 + 5040 z^2 + 1800 z + 540)$$

07.25.03.ajig.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, 2; z\right) = -\frac{e^z (32 z^8 + 1104 z^7 + 12\,912 z^6 + 61\,368 z^5 + 108\,810 z^4 + 40\,905 z^3 - 9540 z^2 + 3780 z - 1080)}{1080}$$

07.25.03.ajih.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{360} (-8 z^7 - 236 z^6 - 2226 z^5 - 7575 z^4 - 6720 z^3 + 1440 z^2 - 720 z + 360) - \frac{1}{720} e^z \sqrt{\pi} z^{7/2} (16 z^4 + 480 z^3 + 4680 z^2 + 17\,160 z + 19\,305) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajii.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{360} (8 z^7 - 236 z^6 + 2226 z^5 - 7575 z^4 + 6720 z^3 + 1440 z^2 + 720 z + 360) - \frac{1}{720} e^{-z} \sqrt{\pi} z^{7/2} (16 z^4 - 480 z^3 + 4680 z^2 - 17\,160 z + 19\,305) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajij.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, 3; z\right) = -\frac{1}{540} e^z (32 z^7 + 816 z^6 + 6384 z^5 + 16\,680 z^4 + 8730 z^3 - 2745 z^2 + 1440 z - 540)$$

07.25.03.ajik.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-8 z^8 - 164 z^7 - 918 z^6 - 1221 z^5 + 315 z^4 - 180 z^3 + 36 z^2 + 360 z - 1080}{144 z^2} + \frac{1}{288 z^{5/2}} e^z \sqrt{\pi} (-16 z^9 - 336 z^8 - 1992 z^7 - 3216 z^6 - 9 z^5 + 45 z^4 - 180 z^3 + 540 z^2 - 1080 z + 1080) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajil.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-8 z^8 + 164 z^7 - 918 z^6 + 1221 z^5 + 315 z^4 + 180 z^3 + 36 z^2 - 360 z - 1080}{144 z^2} + \frac{1}{288 z^{5/2}} e^{-z} \sqrt{\pi} (16 z^9 - 336 z^8 + 1992 z^7 - 3216 z^6 + 9 z^5 + 45 z^4 + 180 z^3 + 540 z^2 + 1080 z + 1080) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajim.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, 4; z\right) = -\frac{1}{180} e^z (32 z^6 + 528 z^5 + 2160 z^4 + 1560 z^3 - 630 z^2 + 405 z - 180)$$

07.25.03.ajin.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(8 z^8 + 92 z^7 + 186 z^6 - 45 z^5 - 30 z^4 + 324 z^3 - 1440 z^2 + 4680 z - 10800)}{288 z^3} - \frac{1}{576 z^{7/2}} 7 e^z \sqrt{\pi} (16 z^9 + 192 z^8 + 456 z^7 + 24 z^6 - 135 z^5 + 630 z^4 - 2340 z^3 + 6480 z^2 - 11880 z + 10800) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajio.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(8 z^8 - 92 z^7 + 186 z^6 + 45 z^5 - 30 z^4 - 324 z^3 - 1440 z^2 - 4680 z - 10800)}{288 z^3} - \frac{1}{576 z^{7/2}} 7 e^{-z} \sqrt{\pi} (16 z^9 - 192 z^8 + 456 z^7 - 24 z^6 - 135 z^5 - 630 z^4 - 2340 z^3 - 6480 z^2 - 11880 z - 10800) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajip.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, 5; z\right) = -\frac{1}{45} e^z (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45)$$

07.25.03.ajiq.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{7(8 z^8 + 20 z^7 + 30 z^6 - 255 z^5 + 1527 z^4 - 7560 z^3 + 30600 z^2 - 99000 z + 264600)}{64 z^4} - \frac{1}{128 z^{9/2}} 7 e^z \sqrt{\pi} (16 z^9 + 48 z^8 + 72 z^7 - 480 z^6 + 2745 z^5 - 13095 z^4 + 50040 z^3 - 143640 z^2 + 275400 z - 264600) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajir.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{128 z^{9/2}} 7 e^{-z} \sqrt{\pi} (16 z^9 - 48 z^8 + 72 z^7 + 480 z^6 + 2745 z^5 + 13095 z^4 + 50040 z^3 + 143640 z^2 + 275400 z + 264600) \operatorname{erfi}(\sqrt{z}) - \frac{7(8 z^8 - 20 z^7 + 30 z^6 + 255 z^5 + 1527 z^4 + 7560 z^3 + 30600 z^2 + 99000 z + 264600)}{64 z^4}$$

07.25.03.ajis.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{5}{2}, 6; z\right) = \frac{1}{9 z^5} e^z (-32 z^9 + 48 z^8 - 624 z^7 + 4488 z^6 - 27018 z^5 + 135135 z^4 - 540540 z^3 + 1621620 z^2 - 3243240 z + 3243240) - \frac{360360}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = -\frac{3}{2}$

07.25.03.ajit.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{81} (8z^{10} + 460z^9 + 10002z^8 + 104719z^7 + 556608z^6 + 1451736z^5 + 1636272z^4 + 577584z^3 + 18900z^2 + 450z + 81) + \frac{1}{162} e^z \sqrt{\pi} (16z^{21/2} + 928z^{19/2} + 20456z^{17/2} + 219000z^{15/2} + 1209009z^{13/2} + 3376464z^{11/2} + 4355208z^{9/2} + 2100384z^{7/2} + 216216z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajiu.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{81} (8z^{10} - 460z^9 + 10002z^8 - 104719z^7 + 556608z^6 - 1451736z^5 + 1636272z^4 - 577584z^3 + 18900z^2 - 450z + 81) + \frac{1}{162} e^{-z} \sqrt{\pi} (-16z^{21/2} + 928z^{19/2} - 20456z^{17/2} + 219000z^{15/2} - 1209009z^{13/2} + 3376464z^{11/2} - 4355208z^{9/2} + 2100384z^{7/2} - 216216z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajiv.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{54} (-8z^9 - 396z^8 - 7234z^7 - 61503z^6 - 252252z^5 - 466092z^4 - 312984z^3 - 37800z^2 + 900z + 54) + \frac{1}{108} e^z \sqrt{\pi} (-16z^{19/2} - 800z^{17/2} - 14856z^{15/2} - 129864z^{13/2} - 559689z^{11/2} - 1137708z^{9/2} - 942084z^{7/2} - 216216z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajiw.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{54} (8z^9 - 396z^8 + 7234z^7 - 61503z^6 + 252252z^5 - 466092z^4 + 312984z^3 - 37800z^2 - 900z + 54) + \frac{1}{108} e^{-z} \sqrt{\pi} (-16z^{19/2} + 800z^{17/2} - 14856z^{15/2} + 129864z^{13/2} - 559689z^{11/2} + 1137708z^{9/2} - 942084z^{7/2} + 216216z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajix.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{108} (8z^8 + 332z^7 + 4914z^6 + 32175z^5 + 93456z^4 + 103572z^3 + 25200z^2 - 1800z + 108) + \frac{1}{216} e^z \sqrt{\pi} (16z^{17/2} + 672z^{15/2} + 10152z^{13/2} + 68952z^{11/2} + 214929z^{9/2} + 277992z^{7/2} + 108108z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajiy.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{108} (8z^8 - 332z^7 + 4914z^6 - 32175z^5 + 93456z^4 - 103572z^3 + 25200z^2 + 1800z + 108) + \frac{1}{216} e^{-z} \sqrt{\pi} (-16z^{17/2} + 672z^{15/2} - 10152z^{13/2} + 68952z^{11/2} - 214929z^{9/2} + 277992z^{7/2} - 108108z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajiz.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, 1; z\right) = \frac{1}{216} e^z (16z^8 + 608z^7 + 8136z^6 + 47400z^5 + 120009z^4 + 112464z^3 + 20808z^2 - 2016z + 216)$$

07.25.03.ajj0.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{432} e^z \sqrt{\pi} (16 z^5 + 544 z^4 + 6344 z^3 + 30888 z^2 + 60489 z + 36036) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{216} (8 z^7 + 268 z^6 + 3042 z^5 + 14047 z^4 + 24444 z^3 + 10080 z^2 - 1200 z + 216)$$

07.25.03.ajj1.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{432} e^{-z} \sqrt{\pi} (16 z^5 - 544 z^4 + 6344 z^3 - 30888 z^2 + 60489 z - 36036) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{216} (-8 z^7 + 268 z^6 - 3042 z^5 + 14047 z^4 - 24444 z^3 + 10080 z^2 + 1200 z + 216)$$

07.25.03.ajj2.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, 2; z\right) = \frac{1}{216} e^z (16 z^7 + 480 z^6 + 4776 z^5 + 18744 z^4 + 26289 z^3 + 7308 z^2 - 1116 z + 216)$$

07.25.03.ajj3.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{288} e^z \sqrt{\pi} (16 z^4 + 416 z^3 + 3432 z^2 + 10296 z + 9009) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{144} (8 z^6 + 204 z^5 + 1618 z^4 + 4431 z^3 + 2880 z^2 - 480 z + 144)$$

07.25.03.ajj4.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{144} (8 z^6 - 204 z^5 + 1618 z^4 - 4431 z^3 + 2880 z^2 + 480 z + 144) - \frac{1}{288} e^{-z} \sqrt{\pi} z^{5/2} (16 z^4 - 416 z^3 + 3432 z^2 - 10296 z + 9009) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajj5.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, 3; z\right) = \frac{1}{108} e^z (16 z^6 + 352 z^5 + 2312 z^4 + 4872 z^3 + 1929 z^2 - 408 z + 108)$$

07.25.03.ajj6.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(8 z^7 + 140 z^6 + 642 z^5 + 639 z^4 - 132 z^3 + 36 z^2 + 72 z - 216)}{288 z^2} + \frac{5 e^z \sqrt{\pi} (16 z^8 + 288 z^7 + 1416 z^6 + 1800 z^5 + 9 z^4 - 36 z^3 + 108 z^2 - 216 z + 216) \operatorname{erf}(\sqrt{z})}{576 z^{5/2}}$$

07.25.03.ajj7.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} \sqrt{\pi} (16 z^8 - 288 z^7 + 1416 z^6 - 1800 z^5 + 9 z^4 + 36 z^3 + 108 z^2 + 216 z + 216) \operatorname{erfi}(\sqrt{z})}{576 z^{5/2}} - \frac{5(8 z^7 - 140 z^6 + 642 z^5 - 639 z^4 - 132 z^3 - 36 z^2 + 72 z + 216)}{288 z^2}$$

07.25.03.ajj8.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, 4; z\right) = \frac{1}{36} e^z (16 z^5 + 224 z^4 + 744 z^3 + 408 z^2 - 111 z + 36)$$

07.25.03.ajj9.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(8z^7 + 76z^6 + 114z^5 - 17z^4 - 48z^3 + 252z^2 - 816z + 1800)}{576z^3} + \frac{35e^z\sqrt{\pi}(16z^8 + 160z^7 + 296z^6 + 24z^5 - 111z^4 + 408z^3 - 1116z^2 + 2016z - 1800)\operatorname{erf}(\sqrt{z})}{1152z^{7/2}}$$

07.25.03.ajja.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^7 - 76z^6 + 114z^5 + 17z^4 - 48z^3 - 252z^2 - 816z - 1800)}{576z^3} - \frac{35e^{-z}\sqrt{\pi}(16z^8 - 160z^7 + 296z^6 - 24z^5 - 111z^4 - 408z^3 - 1116z^2 - 2016z - 1800)\operatorname{erfi}(\sqrt{z})}{1152z^{7/2}}$$

07.25.03.ajjb.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, 5; z\right) = \frac{1}{9}e^z(16z^4 + 96z^3 + 72z^2 - 24z + 9)$$

07.25.03.ajjc.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{35(8z^7 + 12z^6 + 34z^5 - 225z^4 + 1116z^3 - 4488z^2 + 14400z - 37800)}{128z^4} + \frac{1}{256z^{9/2}}35e^z\sqrt{\pi}(16z^8 + 32z^7 + 72z^6 - 408z^5 + 1929z^4 - 7308z^3 + 20808z^2 - 39600z + 37800)\operatorname{erf}(\sqrt{z})$$

07.25.03.ajjd.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{256z^{9/2}}35e^{-z}\sqrt{\pi}(16z^8 - 32z^7 + 72z^6 + 408z^5 + 1929z^4 + 7308z^3 + 20808z^2 + 39600z + 37800)\operatorname{erfi}(\sqrt{z}) - \frac{35(8z^7 - 12z^6 + 34z^5 + 225z^4 + 1116z^3 + 4488z^2 + 14400z + 37800)}{128z^4}$$

07.25.03.ajje.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{3}{2}, 6; z\right) = \frac{5e^z(16z^8 - 32z^7 + 296z^6 - 1800z^5 + 9009z^4 - 36036z^3 + 108108z^2 - 216216z + 216216)}{9z^5} - \frac{120120}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = -\frac{1}{2}$

07.25.03.ajjf.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{36}(8z^8 + 340z^7 + 5198z^6 + 35673z^5 + 111771z^4 + 143514z^3 + 54810z^2 + 1800z + 36) + \frac{1}{72}e^z\sqrt{\pi}(16z^{17/2} + 688z^{15/2} + 10728z^{13/2} + 76224z^{11/2} + 254793z^{9/2} + 373329z^{7/2} + 195426z^{5/2} + 20790z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ajjg.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{36} (8z^8 - 340z^7 + 5198z^6 - 35673z^5 + 111771z^4 - 143514z^3 + 54810z^2 - 1800z + 36) + \frac{1}{72} e^{-z} \sqrt{\pi} (-16z^{17/2} + 688z^{15/2} - 10728z^{13/2} + 76224z^{11/2} - 254793z^{9/2} + 373329z^{7/2} - 195426z^{5/2} + 20790z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajjh.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{72} (-8z^7 - 284z^6 - 3498z^5 - 18315z^4 - 39942z^3 - 29610z^2 - 3600z + 72) + \frac{1}{144} e^z \sqrt{\pi} (-16z^{15/2} - 576z^{13/2} - 7272z^{11/2} - 39864z^{9/2} - 95337z^{7/2} - 87318z^{5/2} - 20790z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajji.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{72} (8z^7 - 284z^6 + 3498z^5 - 18315z^4 + 39942z^3 - 29610z^2 + 3600z + 72) + \frac{1}{144} e^{-z} \sqrt{\pi} (-16z^{15/2} + 576z^{13/2} - 7272z^{11/2} + 39864z^{9/2} - 95337z^{7/2} + 87318z^{5/2} - 20790z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajjj.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, 1; z\right) = -\frac{1}{72} e^z (8z^7 + 260z^6 + 2898z^5 + 13557z^4 + 26112z^3 + 17064z^2 + 1872z - 72)$$

07.25.03.ajjk.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{144} (-8z^6 - 228z^5 - 2134z^4 - 7749z^3 - 9765z^2 - 2400z + 144) + \frac{1}{288} e^z \sqrt{\pi} (-16z^{13/2} - 464z^{11/2} - 4488z^{9/2} - 17424z^{7/2} - 25641z^{5/2} - 10395z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajjl.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{144} (-8z^6 + 228z^5 - 2134z^4 + 7749z^3 - 9765z^2 + 2400z + 144) + \frac{1}{288} e^{-z} \sqrt{\pi} (16z^{13/2} - 464z^{11/2} + 4488z^{9/2} - 17424z^{7/2} + 25641z^{5/2} - 10395z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajjm.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, 2; z\right) = -\frac{1}{72} e^z (8z^6 + 204z^5 + 1674z^4 + 5187z^3 + 5364z^2 + 972z - 72)$$

07.25.03.ajjn.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{96} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) - \frac{1}{192} e^z \sqrt{\pi} z^{3/2} (16z^4 + 352z^3 + 2376z^2 + 5544z + 3465) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajjo.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{96} (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) - \frac{1}{192} e^{-z} \sqrt{\pi} z^{3/2} (16z^4 - 352z^3 + 2376z^2 - 5544z + 3465) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajjp.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, 3; z\right) = -\frac{1}{36} e^z (8z^5 + 148z^4 + 786z^3 + 1257z^2 + 336z - 36)$$

07.25.03.ajjq.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{5(8z^6 + 116z^5 + 414z^4 + 273z^3 - 33z^2 - 18z + 54)}{192z^2} - \frac{5e^z \sqrt{\pi} (16z^7 + 240z^6 + 936z^5 + 864z^4 + 9z^3 - 27z^2 + 54z - 54) \operatorname{erfi}(\sqrt{z})}{384z^{5/2}}$$

07.25.03.ajjr.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^7 - 240z^6 + 936z^5 - 864z^4 + 9z^3 + 27z^2 + 54z + 54) \operatorname{erfi}(\sqrt{z})}{384z^{5/2}} - \frac{5(8z^6 - 116z^5 + 414z^4 - 273z^3 - 33z^2 + 18z + 54)}{192z^2}$$

07.25.03.ajjs.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, 4; z\right) = -\frac{1}{12} e^z (8z^4 + 92z^3 + 234z^2 + 87z - 12)$$

07.25.03.ajjt.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{35(8z^6 + 60z^5 + 58z^4 + 3z^3 - 54z^2 + 174z - 360)}{384z^3} - \frac{35e^z \sqrt{\pi} (16z^7 + 128z^6 + 168z^5 + 24z^4 - 87z^3 + 234z^2 - 414z + 360) \operatorname{erf}(\sqrt{z})}{768z^{7/2}}$$

07.25.03.ajju.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^6 - 60z^5 + 58z^4 - 3z^3 - 54z^2 - 174z - 360)}{384z^3} - \frac{35e^{-z} \sqrt{\pi} (16z^7 - 128z^6 + 168z^5 - 24z^4 - 87z^3 - 234z^2 - 414z - 360) \operatorname{erfi}(\sqrt{z})}{768z^{7/2}}$$

07.25.03.ajjv.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, 5; z\right) = -\frac{1}{3} e^z (8z^3 + 36z^2 + 18z - 3)$$

07.25.03.ajjw.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{105(8z^6 + 4z^5 + 38z^4 - 195z^3 + 777z^2 - 2460z + 6300)}{256z^4} - \frac{105e^z \sqrt{\pi} (16z^7 + 16z^6 + 72z^5 - 336z^4 + 1257z^3 - 3537z^2 + 6660z - 6300) \operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.ajjx.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{105 e^{-z} \sqrt{\pi} (16 z^7 - 16 z^6 + 72 z^5 + 336 z^4 + 1257 z^3 + 3537 z^2 + 6660 z + 6300) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}} - \frac{105 (8 z^6 - 4 z^5 + 38 z^4 + 195 z^3 + 777 z^2 + 2460 z + 6300)}{256 z^4}$$

07.25.03.ajjy.01

$${}_2F_2\left(\frac{5}{2}, 5; -\frac{1}{2}, 6; z\right) = -\frac{5 e^z (8 z^7 - 20 z^6 + 138 z^5 - 693 z^4 + 2772 z^3 - 8316 z^2 + 16632 z - 16632)}{3 z^5} - \frac{27720}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = \frac{1}{2}$

07.25.03.ajjz.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{144} (8 z^6 + 236 z^5 + 2322 z^4 + 9135 z^3 + 13440 z^2 + 5310 z + 144) + \frac{1}{288} e^z \sqrt{\pi} (16 z^{13/2} + 480 z^{11/2} + 4872 z^{9/2} + 20376 z^{7/2} + 34209 z^{5/2} + 18900 z^{3/2} + 1890 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajk0.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{144} (8 z^6 - 236 z^5 + 2322 z^4 - 9135 z^3 + 13440 z^2 - 5310 z + 144) + \frac{1}{288} e^{-z} \sqrt{\pi} (-16 z^{13/2} + 480 z^{11/2} - 4872 z^{9/2} + 20376 z^{7/2} - 34209 z^{5/2} + 18900 z^{3/2} - 1890 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajk1.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, 1; z\right) = \frac{1}{72} e^z (4 z^6 + 108 z^5 + 963 z^4 + 3408 z^3 + 4536 z^2 + 1728 z + 72)$$

07.25.03.ajk2.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{288} (8 z^5 + 188 z^4 + 1386 z^3 + 3675 z^2 + 2910 z + 288) + \frac{1}{576} e^z \sqrt{\pi} \sqrt{z} (16 z^5 + 384 z^4 + 2952 z^3 + 8568 z^2 + 8505 z + 1890) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajk3.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{288} (-8 z^5 + 188 z^4 - 1386 z^3 + 3675 z^2 - 2910 z + 288) + \frac{1}{576} e^{-z} \sqrt{\pi} \sqrt{z} (16 z^5 - 384 z^4 + 2952 z^3 - 8568 z^2 + 8505 z - 1890) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajk4.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, 2; z\right) = \frac{1}{72} e^z (4 z^5 + 84 z^4 + 543 z^3 + 1236 z^2 + 828 z + 72)$$

07.25.03.ajk5.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{192} (8 z^4 + 140 z^3 + 690 z^2 + 975 z + 192) + \frac{1}{384} e^z \sqrt{\pi} \sqrt{z} (16 z^4 + 288 z^3 + 1512 z^2 + 2520 z + 945) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajk6.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{192} (8z^4 - 140z^3 + 690z^2 - 975z + 192) - \frac{1}{384} e^{-z} \sqrt{\pi} \sqrt{z} (16z^4 - 288z^3 + 1512z^2 - 2520z + 945) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajk7.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, 3; z\right) = \frac{1}{36} e^z (4z^4 + 60z^3 + 243z^2 + 264z + 36)$$

07.25.03.ajk8.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{5(8z^5 + 92z^4 + 234z^3 + 75z^2 + 6z - 18)}{384z^2} + \frac{5e^z \sqrt{\pi} (16z^6 + 192z^5 + 552z^4 + 312z^3 + 9z^2 - 18z + 18) \operatorname{erf}(\sqrt{z})}{768z^{5/2}}$$

07.25.03.ajk9.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^6 - 192z^5 + 552z^4 - 312z^3 + 9z^2 + 18z + 18) \operatorname{erfi}(\sqrt{z})}{768z^{5/2}} - \frac{5(8z^5 - 92z^4 + 234z^3 - 75z^2 + 6z + 18)}{384z^2}$$

07.25.03.ajka.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, 4; z\right) = \frac{1}{12} e^z (4z^3 + 36z^2 + 63z + 12)$$

07.25.03.ajkb.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{35(8z^5 + 44z^4 + 18z^3 + 15z^2 - 48z + 90)}{768z^3} + \frac{35e^z \sqrt{\pi} (16z^6 + 96z^5 + 72z^4 + 24z^3 - 63z^2 + 108z - 90) \operatorname{erf}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.ajkc.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^5 - 44z^4 + 18z^3 - 15z^2 - 48z - 90)}{768z^3} - \frac{35e^{-z} \sqrt{\pi} (16z^6 - 96z^5 + 72z^4 - 24z^3 - 63z^2 - 108z - 90) \operatorname{erfi}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.ajkd.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, 5; z\right) = \frac{1}{3} e^z (4z^2 + 12z + 3)$$

07.25.03.ajke.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{105(8z^5 - 4z^4 + 42z^3 - 165z^2 + 510z - 1260)}{512z^4} + \frac{105e^z \sqrt{\pi} (16z^6 + 72z^4 - 264z^3 + 729z^2 - 1350z + 1260) \operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.ajkf.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{105 e^{-z} \sqrt{\pi} (16 z^6 + 72 z^4 + 264 z^3 + 729 z^2 + 1350 z + 1260) \operatorname{erfi}(\sqrt{z})}{1024 z^{9/2}} - \frac{105 (8 z^5 + 4 z^4 + 42 z^3 + 165 z^2 + 510 z + 1260)}{512 z^4}$$

07.25.03.ajkg.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{1}{2}, 6; z\right) = \frac{5 e^z (4 z^6 - 12 z^5 + 63 z^4 - 252 z^3 + 756 z^2 - 1512 z + 1512)}{3 z^5} - \frac{2520}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = 1$

07.25.03.ajkh.01

$${}_2F_2\left(\frac{5}{2}, 5; 1, 1; z\right) = \frac{1}{288} e^{z/2} (8 z^6 + 200 z^5 + 1656 z^4 + 5556 z^3 + 7497 z^2 + 3456 z + 288) I_0\left(\frac{z}{2}\right) + \frac{1}{72} e^{z/2} (2 z^6 + 48 z^5 + 367 z^4 + 1044 z^3 + 972 z^2 + 171 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajki.01

$${}_2F_2\left(\frac{5}{2}, 5; 1, \frac{3}{2}; z\right) = \frac{1}{72} e^z (2 z^5 + 43 z^4 + 288 z^3 + 696 z^2 + 528 z + 72)$$

07.25.03.ajkj.01

$${}_2F_2\left(\frac{5}{2}, 5; 1, 2; z\right) = \frac{1}{288} e^{z/2} (8 z^5 + 156 z^4 + 948 z^3 + 2133 z^2 + 1656 z + 288) I_0\left(\frac{z}{2}\right) + \frac{1}{288} e^{z/2} (8 z^5 + 148 z^4 + 804 z^3 + 1395 z^2 + 540 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajkk.01

$${}_2F_2\left(\frac{5}{2}, 5; 1, \frac{5}{2}; z\right) = \frac{1}{24} e^z (z^4 + 16 z^3 + 72 z^2 + 96 z + 24)$$

07.25.03.ajkl.01

$${}_2F_2\left(\frac{5}{2}, 5; 1, 3; z\right) = \frac{1}{72} e^{z/2} (4 z^4 + 56 z^3 + 219 z^2 + 264 z + 72) I_0\left(\frac{z}{2}\right) + \frac{1}{72} e^{z/2} z (4 z^3 + 52 z^2 + 169 z + 117) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajkm.01

$${}_2F_2\left(\frac{5}{2}, 5; 1, \frac{7}{2}; z\right) = \frac{5 e^z (32 z^5 + 336 z^4 + 792 z^3 + 300 z^2 + 18 z - 27)}{1536 z^2} + \frac{45 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.ajkn.01

$${}_2F_2\left(\frac{5}{2}, 5; 1, \frac{7}{2}; -z\right) = \frac{45 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}} - \frac{5 e^{-z} (32 z^5 - 336 z^4 + 792 z^3 - 300 z^2 + 18 z + 27)}{1536 z^2}$$

07.25.03.ajko.01

$${}_2F_2\left(\frac{5}{2}, 5; 1, 4; z\right) = \frac{1}{24} e^{z/2} (4 z^3 + 34 z^2 + 63 z + 24) I_0\left(\frac{z}{2}\right) + \frac{1}{24} e^{z/2} z (4 z^2 + 30 z + 35) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajkp.01

$${}_2F_2\left(\frac{5}{2}, 5; 1, \frac{9}{2}; z\right) = \frac{35 e^z (64 z^5 + 320 z^4 + 144 z^3 + 96 z^2 - 204 z + 225)}{6144 z^3} + \frac{105 \sqrt{\pi} (6 z - 25) \operatorname{erfi}(\sqrt{z})}{4096 z^{7/2}}$$

07.25.03.ajkq.01

$${}_2F_2\left(\frac{5}{2}, 5; 1, \frac{9}{2}; -z\right) = \frac{35 e^{-z} (64 z^5 - 320 z^4 + 144 z^3 - 96 z^2 - 204 z - 225)}{6144 z^3} + \frac{105 \sqrt{\pi} (6 z + 25) \operatorname{erf}(\sqrt{z})}{4096 z^{7/2}}$$

07.25.03.ajkr.01

$${}_2F_2\left(\frac{5}{2}, 5; 1, 5; z\right) = \frac{1}{3} e^{z/2} (2 z^2 + 6 z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} z (z + 2) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajks.01

$${}_2F_2\left(\frac{5}{2}, 5; 1, \frac{11}{2}; z\right) = \frac{105 e^z (256 z^5 - 128 z^4 + 1152 z^3 - 3648 z^2 + 8250 z - 11025)}{16384 z^4} + \frac{945 \sqrt{\pi} (12 z^2 - 100 z + 1225) \operatorname{erfi}(\sqrt{z})}{32768 z^{9/2}}$$

07.25.03.ajkt.01

$${}_2F_2\left(\frac{5}{2}, 5; 1, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (12 z^2 + 100 z + 1225) \operatorname{erf}(\sqrt{z})}{32768 z^{9/2}} - \frac{105 e^{-z} (256 z^5 + 128 z^4 + 1152 z^3 + 3648 z^2 + 8250 z + 11025)}{16384 z^4}$$

07.25.03.ajku.01

$${}_2F_2\left(\frac{5}{2}, 5; 1, 6; z\right) = \frac{e^{z/2} (10 z^4 - 25 z^3 + 120 z^2 - 384 z + 768) I_0\left(\frac{z}{2}\right)}{3 z^3} + \frac{e^{z/2} (10 z^5 - 35 z^4 + 160 z^3 - 576 z^2 + 1536 z - 3072) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = \frac{3}{2}$

07.25.03.ajkv.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{576} (8 z^4 + 148 z^3 + 798 z^2 + 1345 z + 471) + \frac{e^z \sqrt{\pi} (16 z^5 + 304 z^4 + 1736 z^3 + 3360 z^2 + 1785 z + 105) \operatorname{erf}(\sqrt{z})}{1152 \sqrt{z}}$$

07.25.03.ajkw.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{576} (8 z^4 - 148 z^3 + 798 z^2 - 1345 z + 471) + \frac{e^{-z} \sqrt{\pi} (-16 z^5 + 304 z^4 - 1736 z^3 + 3360 z^2 - 1785 z + 105) \operatorname{erfi}(\sqrt{z})}{1152 \sqrt{z}}$$

07.25.03.ajkx.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{3}{2}, 2; z\right) = \frac{1}{72} e^z (2z^4 + 33z^3 + 156z^2 + 228z + 72)$$

07.25.03.ajky.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{384} (8z^3 + 108z^2 + 370z + 279) + \frac{e^z \sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.ajkz.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{384} (-8z^3 + 108z^2 - 370z + 279) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.ajl0.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{3}{2}, 3; z\right) = \frac{1}{36} e^z (2z^3 + 23z^2 + 64z + 36)$$

07.25.03.ajl1.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{5(8z^4 + 68z^3 + 102z^2 - 3z + 9)}{768z^2} + \frac{5e^z \sqrt{\pi} (16z^5 + 144z^4 + 264z^3 + 48z^2 + 9z - 9) \operatorname{erf}(\sqrt{z})}{1536z^{5/2}}$$

07.25.03.ajl2.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{5(8z^4 - 68z^3 + 102z^2 + 3z + 9)}{768z^2} - \frac{5e^{-z} \sqrt{\pi} (16z^5 - 144z^4 + 264z^3 - 48z^2 + 9z + 9) \operatorname{erfi}(\sqrt{z})}{1536z^{5/2}}$$

07.25.03.ajl3.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{3}{2}, 4; z\right) = \frac{1}{12} e^z (2z^2 + 13z + 12)$$

07.25.03.ajl4.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{35(8z^4 + 28z^3 - 6z^2 + 19z - 30)}{1536z^3} + \frac{35e^z \sqrt{\pi} (16z^5 + 64z^4 + 8z^3 + 24z^2 - 39z + 30) \operatorname{erf}(\sqrt{z})}{3072z^{7/2}}$$

07.25.03.ajl5.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (16z^5 - 64z^4 + 8z^3 - 24z^2 - 39z - 30) \operatorname{erfi}(\sqrt{z})}{3072z^{7/2}} - \frac{35(8z^4 - 28z^3 - 6z^2 - 19z - 30)}{1536z^3}$$

07.25.03.ajl6.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{3}{2}, 5; z\right) = \frac{1}{3} e^z (2z + 3)$$

07.25.03.ajl7.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{105(8z^4 - 12z^3 + 46z^2 - 135z + 315)}{1024z^4} + \frac{105e^z \sqrt{\pi} (16z^5 - 16z^4 + 72z^3 - 192z^2 + 345z - 315) \operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.ajl8.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{105(8z^4 + 12z^3 + 46z^2 + 135z + 315)}{1024z^4} - \frac{105e^{-z}\sqrt{\pi}(16z^5 + 16z^4 + 72z^3 + 192z^2 + 345z + 315)\operatorname{erfi}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.ajl9.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{3}{2}, 6; z\right) = \frac{5e^z(2z^5 - 7z^4 + 28z^3 - 84z^2 + 168z - 168)}{3z^5} + \frac{280}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = 2$

07.25.03.ajla.01

$${}_2F_2\left(\frac{5}{2}, 5; 2, 2; z\right) = \frac{1}{144}e^{z/2}(4z^4 + 60z^3 + 261z^2 + 375z + 144)I_0\left(\frac{z}{2}\right) + \frac{1}{144}e^{z/2}(4z^4 + 56z^3 + 207z^2 + 192z + 12)I_1\left(\frac{z}{2}\right)$$

07.25.03.ajlb.01

$${}_2F_2\left(\frac{5}{2}, 5; 2, \frac{5}{2}; z\right) = \frac{1}{24}e^z(z^3 + 12z^2 + 36z + 24)$$

07.25.03.ajlc.01

$${}_2F_2\left(\frac{5}{2}, 5; 2, 3; z\right) = \frac{1}{72}e^{z/2}(4z^3 + 42z^2 + 111z + 72)I_0\left(\frac{z}{2}\right) + \frac{1}{72}e^{z/2}(4z^3 + 38z^2 + 75z + 12)I_1\left(\frac{z}{2}\right)$$

07.25.03.ajld.01

$${}_2F_2\left(\frac{5}{2}, 5; 2, \frac{7}{2}; z\right) = \frac{5e^z(16z^4 + 120z^3 + 156z^2 - 6z + 9)}{768z^2} - \frac{15\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.ajle.01

$${}_2F_2\left(\frac{5}{2}, 5; 2, \frac{7}{2}; -z\right) = \frac{5e^{-z}(16z^4 - 120z^3 + 156z^2 + 6z + 9)}{768z^2} - \frac{15\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.ajlf.01

$${}_2F_2\left(\frac{5}{2}, 5; 2, 4; z\right) = \frac{1}{6}e^{z/2}(z^2 + 6z + 6)I_0\left(\frac{z}{2}\right) + \frac{1}{12}e^{z/2}(2z^2 + 10z + 3)I_1\left(\frac{z}{2}\right)$$

07.25.03.ajlg.01

$${}_2F_2\left(\frac{5}{2}, 5; 2, \frac{9}{2}; z\right) = \frac{35e^z(32z^4 + 96z^3 - 24z^2 + 48z - 45)}{3072z^3} - \frac{105\sqrt{\pi}(2z - 5)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.ajlh.01

$${}_2F_2\left(\frac{5}{2}, 5; 2, \frac{9}{2}; -z\right) = -\frac{35e^{-z}(32z^4 - 96z^3 - 24z^2 - 48z - 45)}{3072z^3} - \frac{105\sqrt{\pi}(2z + 5)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.ajli.01

$${}_2F_2\left(\frac{5}{2}, 5; 2, 5; z\right) = \frac{1}{3}e^{z/2}(2z + 3)I_0\left(\frac{z}{2}\right) + \frac{1}{3}e^{z/2}(2z + 1)I_1\left(\frac{z}{2}\right)$$

07.25.03.ajlj.01

$${}_2F_2\left(\frac{5}{2}, 5; 2, \frac{11}{2}; z\right) = \frac{105 e^z (128 z^4 - 192 z^3 + 576 z^2 - 1230 z + 1575)}{8192 z^4} - \frac{945 \sqrt{\pi} (4 z^2 - 20 z + 175) \operatorname{erfi}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.ajlk.01

$${}_2F_2\left(\frac{5}{2}, 5; 2, \frac{11}{2}; -z\right) = \frac{105 e^{-z} (128 z^4 + 192 z^3 + 576 z^2 + 1230 z + 1575)}{8192 z^4} - \frac{945 \sqrt{\pi} (4 z^2 + 20 z + 175) \operatorname{erf}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.ajll.01

$${}_2F_2\left(\frac{5}{2}, 5; 2, 6; z\right) = \frac{2 e^{z/2} (5 z^3 - 15 z^2 + 48 z - 96) I_0\left(\frac{z}{2}\right)}{3 z^3} + \frac{2 e^{z/2} (5 z^4 - 20 z^3 + 72 z^2 - 192 z + 384) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = \frac{5}{2}$

07.25.03.ajlm.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{8 z^3 + 76 z^2 + 146 z + 15}{256 z} + \frac{e^z \sqrt{\pi} (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15) \operatorname{erf}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.ajln.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{8 z^3 - 76 z^2 + 146 z - 15}{256 z} + \frac{e^{-z} \sqrt{\pi} (-16 z^4 + 160 z^3 - 360 z^2 + 120 z + 15) \operatorname{erfi}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.ajlo.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{5}{2}, 3; z\right) = \frac{1}{12} e^z (z^2 + 8 z + 12)$$

07.25.03.ajlp.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{5 (8 z^3 + 44 z^2 + 18 z - 9)}{512 z^2} + \frac{5 e^z \sqrt{\pi} (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.ajlq.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} \sqrt{\pi} (16 z^4 - 96 z^3 + 72 z^2 + 24 z + 9) \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}} - \frac{5 (8 z^3 - 44 z^2 + 18 z + 9)}{512 z^2}$$

07.25.03.ajlr.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{5}{2}, 4; z\right) = \frac{1}{4} e^z (z + 4)$$

07.25.03.ajls.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{35 (8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 e^z \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.ajlt.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{35 (8 z^3 - 12 z^2 - 14 z - 15)}{1024 z^3} - \frac{35 e^{-z} \sqrt{\pi} (16 z^4 - 32 z^3 - 24 z^2 - 24 z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.ajlu.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{5}{2}, 5; z\right) = e^z$$

07.25.03.ajlv.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{315(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315e^z\sqrt{\pi}(16z^4 - 32z^3 + 72z^2 - 120z + 105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.ajlw.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(16z^4 + 32z^3 + 72z^2 + 120z + 105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315(8z^3 + 20z^2 + 50z + 105)}{2048z^4}$$

07.25.03.ajlx.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{5}{2}, 6; z\right) = \frac{5e^z(z^4 - 4z^3 + 12z^2 - 24z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = 3$

07.25.03.ajly.01

$${}_2F_2\left(\frac{5}{2}, 5; 3, 3; z\right) = \frac{1}{18}e^{z/2}(2z^2 + 14z + 19)I_0\left(\frac{z}{2}\right) + \frac{e^{z/2}(z^3 + 6z^2 + 4z - 2)I_1\left(\frac{z}{2}\right)}{9z}$$

07.25.03.ajlz.01

$${}_2F_2\left(\frac{5}{2}, 5; 3, \frac{7}{2}; z\right) = \frac{5e^z(8z^3 + 36z^2 + 6z - 9)}{192z^2} + \frac{15\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.ajm0.01

$${}_2F_2\left(\frac{5}{2}, 5; 3, \frac{7}{2}; -z\right) = \frac{15\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{128z^{5/2}} - \frac{5e^{-z}(8z^3 - 36z^2 + 6z + 9)}{192z^2}$$

07.25.03.ajm1.01

$${}_2F_2\left(\frac{5}{2}, 5; 3, 4; z\right) = \frac{1}{6}e^{z/2}(2z + 7)I_0\left(\frac{z}{2}\right) + \frac{e^{z/2}(2z^2 + 5z - 4)I_1\left(\frac{z}{2}\right)}{6z}$$

07.25.03.ajm2.01

$${}_2F_2\left(\frac{5}{2}, 5; 3, \frac{9}{2}; z\right) = \frac{35e^z(16z^3 + 16z^2 - 28z + 15)}{768z^3} + \frac{35\sqrt{\pi}(6z - 5)\operatorname{erfi}(\sqrt{z})}{512z^{7/2}}$$

07.25.03.ajm3.01

$${}_2F_2\left(\frac{5}{2}, 5; 3, \frac{9}{2}; -z\right) = \frac{35e^{-z}(16z^3 - 16z^2 - 28z - 15)}{768z^3} + \frac{35\sqrt{\pi}(6z + 5)\operatorname{erf}(\sqrt{z})}{512z^{7/2}}$$

07.25.03.ajm4.01

$${}_2F_2\left(\frac{5}{2}, 5; 3, 5; z\right) = \frac{4}{3}e^{z/2}I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2}(z - 1)I_1\left(\frac{z}{2}\right)}{3z}$$

07.25.03.ajm5.01

$${}_2F_2\left(\frac{5}{2}, 5; 3, \frac{11}{2}; z\right) = \frac{105e^z(64z^3 - 160z^2 + 270z - 315)}{2048z^4} + \frac{315\sqrt{\pi}(12z^2 - 20z + 105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.ajm6.01

$${}_2F_2\left(\frac{5}{2}, 5; 3, \frac{11}{2}; -z\right) = \frac{315 \sqrt{\pi} (12 z^2 + 20 z + 105) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}} - \frac{105 e^{-z} (64 z^3 + 160 z^2 + 270 z + 315)}{2048 z^4}$$

07.25.03.ajm7.01

$${}_2F_2\left(\frac{5}{2}, 5; 3, 6; z\right) = \frac{4 e^{z/2} (5 z^2 - 16 z + 32) I_0\left(\frac{z}{2}\right)}{3 z^3} + \frac{4 e^{z/2} (5 z^3 - 24 z^2 + 64 z - 128) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = \frac{7}{2}$

07.25.03.ajm8.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{7}{2}, 4; z\right) = \frac{5 e^z (4 z^2 + 6 z - 9)}{32 z^2} + \frac{45 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.ajm9.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{7}{2}, 4; -z\right) = \frac{5 e^{-z} (4 z^2 - 6 z - 9)}{32 z^2} + \frac{45 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.ajma.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{7}{2}, 5; z\right) = \frac{5 e^z (2 z - 3)}{4 z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.ajmb.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{7}{2}, 5; -z\right) = \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5 e^{-z} (2 z + 3)}{4 z^2}$$

07.25.03.ajmc.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{7}{2}, 6; z\right) = \frac{5 e^z (5 z^3 - 24 z^2 + 48 z - 48)}{2 z^5} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{5/2}} + \frac{120}{z^5}$$

07.25.03.ajmd.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{7}{2}, 6; -z\right) = \frac{5 e^{-z} (5 z^3 + 24 z^2 + 48 z + 48)}{2 z^5} + \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{5/2}} - \frac{120}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = 4$

07.25.03.ajme.01

$${}_2F_2\left(\frac{5}{2}, 5; 4, 4; z\right) = \frac{e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right)}{z} + \frac{e^{z/2} (z^2 - 4) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.ajmf.01

$${}_2F_2\left(\frac{5}{2}, 5; 4, \frac{9}{2}; z\right) = \frac{35 e^z (8 z^2 - 8 z - 15)}{128 z^3} + \frac{105 \sqrt{\pi} (6 z + 5) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.ajmg.01

$${}_2F_2\left(\frac{5}{2}, 5; 4, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} (6z - 5) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}} - \frac{35 e^{-z} (8z^2 + 8z - 15)}{128 z^3}$$

07.25.03.ajmh.01

$${}_2F_2\left(\frac{5}{2}, 5; 4, 5; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z - 4) I_1\left(\frac{z}{2}\right)}{z^2}$$

07.25.03.ajmi.01

$${}_2F_2\left(\frac{5}{2}, 5; 4, \frac{11}{2}; z\right) = \frac{315 e^z (32z^2 - 130z + 105)}{1024 z^4} + \frac{945 \sqrt{\pi} (12z^2 + 20z - 35) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.ajmj.01

$${}_2F_2\left(\frac{5}{2}, 5; 4, \frac{11}{2}; -z\right) = \frac{315 e^{-z} (32z^2 + 130z + 105)}{1024 z^4} + \frac{945 \sqrt{\pi} (12z^2 - 20z - 35) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.ajmk.01

$${}_2F_2\left(\frac{5}{2}, 5; 4, 6; z\right) = \frac{32 e^{z/2} (z - 2) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{8 e^{z/2} (z^2 - 16z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = \frac{9}{2}$

07.25.03.ajml.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{9}{2}, 5; z\right) = \frac{35 e^z (4z - 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ajmm.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{9}{2}, 5; -z\right) = \frac{35 e^{-z} (4z + 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ajmn.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{9}{2}, 6; z\right) = \frac{35 e^z (7z^2 - 64z + 64)}{8 z^5} + \frac{35 \sqrt{\pi} (6z + 25) \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}} - \frac{280}{z^5}$$

07.25.03.ajmo.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{9}{2}, 6; -z\right) = -\frac{35 e^{-z} (7z^2 + 64z + 64)}{8 z^5} + \frac{35 \sqrt{\pi} (6z - 25) \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} + \frac{280}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = 5$

07.25.03.ajmp.01

$${}_2F_2\left(\frac{5}{2}, 5; 5, 5; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^3}$$

07.25.03.ajmq.01

$${}_2F_2\left(\frac{5}{2}, 5; 5, \frac{11}{2}; z\right) = \frac{1575 e^z (2z - 21)}{128 z^4} + \frac{945 \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.ajmr.01

$${}_2F_2\left(\frac{5}{2}, 5; 5, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 e^{-z} (2z + 21)}{128 z^4}$$

07.25.03.ajms.01

$${}_2F_2\left(\frac{5}{2}, 5; 5, 6; z\right) = \frac{32 e^{z/2} (z + 8) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (z^2 + 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = \frac{11}{2}$

07.25.03.ajmt.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{11}{2}, 6; z\right) = -\frac{315 e^z (6z^2 + 13z + 512)}{64 z^5} + \frac{315 \sqrt{\pi} (12z^2 + 100z + 525) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}} + \frac{2520}{z^5}$$

07.25.03.ajmu.01

$${}_2F_2\left(\frac{5}{2}, 5; \frac{11}{2}, 6; -z\right) = \frac{315 e^{-z} (6z^2 - 13z + 512)}{64 z^5} + \frac{315 \sqrt{\pi} (12z^2 - 100z + 525) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}} - \frac{2520}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 5$, $b_1 = 6$

07.25.03.ajmv.01

$${}_2F_2\left(\frac{5}{2}, 5; 6, 6; z\right) = \frac{64 e^{z/2} (3z^3 + 29z^2 + 240z - 480) I_0\left(\frac{z}{2}\right)}{3 z^5} - \frac{64 e^{z/2} (3z^2 + 32z + 236) I_1\left(\frac{z}{2}\right)}{3 z^4} + \frac{10240}{z^5}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.ajmw.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{306338830875} \left(e^z (524288 z^{19} + 78381056 z^{18} + 4952031232 z^{17} + 173616070656 z^{16} + 3730966708224 z^{15} + 51259611217920 z^{14} + 456052513996800 z^{13} + 2606913843609600 z^{12} + 9315019858636800 z^{11} + 19757842988083200 z^{10} + 22756235412556800 z^9 + 12121282461657600 z^8 + 2123792264563200 z^7 + 38029014777600 z^6 + 629108726400 z^5 + 91159992000 z^4 + 12180861000 z^3 + 92142319500 z^2 - 167093907750 z + 306338830875) \right)$$

07.25.03.ajmx.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{27848984625} \left(e^z (262144z^{18} + 35913728z^{17} + 2063007744z^{16} + 65146454016z^{15} + 1246592040960z^{14} + 15033773260800z^{13} + 115272957542400z^{12} + 554182697779200z^{11} + 1609505091532800z^{10} + 2636148582144000z^9 + 2151597668774400z^8 + 681647058892800z^7 + 39425543942400z^6 - 698264582400z^5 - 34577928000z^4 - 6286896000z^3 - 9626809500z^2 + 12377326500z - 27848984625) \right)$$

07.25.03.ajmy.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{3094331625} \left(e^z (131072z^{17} + 16318464z^{16} + 843841536z^{15} + 23712890880z^{14} + 398023557120z^{13} + 4133686394880z^{12} + 26633830809600z^{11} + 103971448627200z^{10} + 232909578316800z^9 + 269981188646400z^8 + 130864674124800z^7 + 13661844134400z^6 - 779994230400z^5 + 40864824000z^4 + 3143448000z^3 + 1571724000z^2 - 884094750z + 3094331625) \right)$$

07.25.03.ajmz.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{442047375} \left(e^z (65536z^{16} + 7340032z^{15} + 337510400z^{14} + 8312586240z^{13} + 120042209280z^{12} + 1046484418560z^{11} + 5468282265600z^{10} + 16441889587200z^9 + 26024396428800z^8 + 17880810393600z^7 + 2849500684800z^6 - 292829644800z^5 + 49247352000z^4 - 4191264000z^3 - 523908000z^2 - 442047375) \right)$$

07.25.03.ajn0.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{88409475} \left(e^z (32768z^{15} + 3260416z^{14} + 131260416z^{13} + 2778058752z^{12} + 33629546496z^{11} + 237391064064z^{10} + 953708152320z^9 + 2021841803520z^8 + 1892068295040z^7 + 426097869120z^6 - 66592199520z^5 + 20065676400z^4 - 5474838600z^3 + 641787300z^2 + 58939650z + 88409475) \right)$$

07.25.03.ajn1.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{29469825} \left(e^z (16384z^{14} + 1425408z^{13} + 49238016z^{12} + 872030208z^{11} + 8530486272z^{10} + 46186398720z^9 + 130456085760z^8 + 162956344320z^7 + 49774253760z^6 - 10935207360z^5 + 4977126000z^4 - 2409976800z^3 + 877545900z^2 - 117879300z - 29469825) \right)$$

07.25.03.ajn2.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{29469825} \left(e^z (8192z^{13} + 610304z^{12} + 17600512z^{11} + 251209728z^{10} + 1878750720z^9 + 7123818240z^8 + 11799406080z^7 + 4782032640z^6 - 1414052640z^5 + 895633200z^4 - 646153200z^3 + 410394600z^2 - 176818950z + 29469825) \right)$$

07.25.03.ajn3.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{29469825} \left(e^{z/2} (4096 z^{13} + 282624 z^{12} + 7474176 z^{11} + 96611328 z^{10} + 643887360 z^9 + 2128557312 z^8 + 2970890496 z^7 + 917602560 z^6 - 236265120 z^5 + 153468000 z^4 - 134549100 z^3 + 122642100 z^2 - 88409475 z + 29469825) I_0\left(\frac{z}{2}\right) + \frac{1}{29469825} \left(e^{z/2} (4096 z^{13} + 278528 z^{12} + 7197696 z^{11} + 89548800 z^{10} + 557671680 z^9 + 1609279488 z^8 + 1570044672 z^7 - 202212864 z^6 + 100245600 z^5 - 78624000 z^4 + 73161900 z^3 - 64297800 z^2 + 36614025 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ajn4.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{29469825} \left(e^z (4096 z^{12} + 253952 z^{11} + 5879808 z^{10} + 63866880 z^9 + 332640000 z^8 + 734469120 z^7 + 391184640 z^6 - 151683840 z^5 + 127234800 z^4 - 124740000 z^3 + 113513400 z^2 - 78586200 z + 29469825) \right)$$

07.25.03.ajn5.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{29469825} \left(e^{z/2} (4096 z^{12} + 231424 z^{11} + 4809728 z^{10} + 45941760 z^9 + 204164352 z^8 + 365062656 z^7 + 132652800 z^6 - 40561920 z^5 + 32104800 z^4 - 35721000 z^3 + 44055900 z^2 - 48024900 z + 29469825) I_0\left(\frac{z}{2}\right) + \frac{1}{29469825} \left(e^{z/2} (4096 z^{12} + 227328 z^{11} + 4584448 z^{10} + 41466880 z^9 + 164775168 z^8 + 217093632 z^7 - 31874304 z^6 + 18627840 z^5 - 17892000 z^4 + 21609000 z^3 - 27386100 z^2 + 28973700 z - 14189175) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajn6.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{9823275} \left(e^z (2048 z^{11} + 101376 z^{10} + 1774080 z^9 + 13305600 z^8 + 39916800 z^7 + 27941760 z^6 - 13970880 z^5 + 14968800 z^4 - 18711000 z^3 + 21829500 z^2 - 19646550 z + 9823275) \right)$$

07.25.03.ajn7.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, 3; z\right) =$$

$$\frac{1}{29469825} \left(16 e^{z/2} (512 z^{11} + 22528 z^{10} + 341760 z^9 + 2138112 z^8 + 4983936 z^7 + 2096640 z^6 - 745920 z^5 + 705600 z^4 - 992250 z^3 + 1701000 z^2 - 2962575 z + 3742200) I_0\left(\frac{z}{2}\right) + \right.$$

$$\left. \frac{1}{29469825 z} \left(4 e^{z/2} (2048 z^{12} + 88064 z^{11} + 1280000 z^{10} + 7314432 z^9 + 13179648 z^8 - 2167296 z^7 + 1451520 z^6 - 1612800 z^5 + 2205000 z^4 - 2835000 z^3 + 1474200 z^2 + 8108100 z - 30405375) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajn8.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) =$$

$$\frac{1}{1964655} \left(e^z (1024 z^{10} + 37888 z^9 + 451328 z^8 + 1913856 z^7 + 1776768 z^6 - 1131648 z^5 + 1501920 z^4 - 2278080 z^3 + 3173940 z^2 - 3367980 z + 1964655) \right)$$

07.25.03.ajn9.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, 4; z\right) =$$

$$\frac{1}{9823275 z} \left(4 e^{z/2} (2048 z^{11} + 64512 z^{10} + 623616 z^9 + 1959168 z^8 + 944640 z^7 - 403200 z^6 + 564480 z^5 - 1587600 z^4 + 6010200 z^3 - 21829500 z^2 + 61746300 z - 103378275) I_0\left(\frac{z}{2}\right) + \right.$$

$$\left. \frac{1}{9823275 z^2} \left(4 e^{z/2} (2048 z^{12} + 62464 z^{11} + 562176 z^{10} + 1426176 z^9 - 256512 z^8 + 172800 z^7 - 80640 z^6 - 670320 z^5 + 5103000 z^4 - 24664500 z^3 + 89189100 z^2 - 237161925 z + 413513100) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajna.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{280665}$$

$$e^z (512 z^9 + 12544 z^8 + 81408 z^7 + 102144 z^6 - 81984 z^5 + 131040 z^4 - 231840 z^3 + 367920 z^2 - 436590 z + 280665)$$

07.25.03.ajnb.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, 5; z\right) =$$

$$\frac{1}{9823275 z^2} \left(32 e^{z/2} (1024 z^{11} + 19456 z^{10} + 87296 z^9 + 49920 z^8 - 42240 z^7 + 188160 z^6 - 1164240 z^5 + 6728400 z^4 - 33056100 z^3 + 130353300 z^2 - 379053675 z + 654729075) I_0\left(\frac{z}{2}\right) + \right.$$

$$\left. \frac{1}{9823275 z^3} \left(32 e^{z/2} (1024 z^{12} + 18432 z^{11} + 69376 z^{10} - 11264 z^9 - 11520 z^8 + 168960 z^7 - 1281840 z^6 + 7983360 z^5 - 41674500 z^4 + 178378200 z^3 - 602026425 z^2 + 1516214700 z - 2618916300) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajnc.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z (256 z^8 + 3072 z^7 + 5376 z^6 - 5376 z^5 + 10080 z^4 - 20160 z^3 + 35280 z^2 - 45360 z + 31185)}{31185}$$

07.25.03.ajnd.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{1964655 z^3} \left(32 e^{z/2} (1024 z^{11} + 6656 z^{10} + 9984 z^9 - 58368 z^8 + 510720 z^7 - 4106592 z^6 + 29154384 z^5 - 178627680 z^4 + 917961660 z^3 - 3790536750 z^2 + 11654177535 z - 21998896920) I_0\left(\frac{z}{2}\right) + \frac{1}{1964655 z^4} \left(32 e^{z/2} (1024 z^{12} + 5632 z^{11} + 4864 z^{10} - 61440 z^9 + 572160 z^8 - 4710048 z^7 + 34222608 z^6 - 216076896 z^5 + 1159458300 z^4 - 5128373250 z^3 + 17912009115 z^2 - 46616710140 z + 87995587680) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.ajne.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{2531725875} \left(e^z (131072 z^{17} + 16449536 z^{16} + 858783744 z^{15} + 24414781440 z^{14} + 415770378240 z^{13} + 4398608793600 z^{12} + 29045521612800 z^{11} + 117340980019200 z^{10} + 276718135680000 z^9 + 349560816192000 z^8 + 201896793907200 z^7 + 37978338585600 z^6 + 723602678400 z^5 + 12669048000 z^4 + 1714608000 z^3 + 1143072000 z^2 - 812652750 z + 2531725875) \right)$$

07.25.03.ajnf.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{281302875} \left(e^z (65536 z^{16} + 7471104 z^{15} + 350945280 z^{14} + 8873410560 z^{13} + 132461199360 z^{12} + 1205845401600 z^{11} + 6684765696000 z^{10} + 21904278681600 z^9 + 39789813772800 z^8 + 35516059891200 z^7 + 12158247225600 z^6 + 751798454400 z^5 - 14097888000 z^4 - 714420000 z^3 - 214326000 z^2 + 35721000 z - 281302875) \right)$$

07.25.03.ajng.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{40186125} \left(e^z (32768 z^{15} + 3358720 z^{14} + 140206080 z^{13} + 3104747520 z^{12} + 39840245760 z^{11} + 304120857600 z^{10} + 1365597273600 z^9 + 3441354336000 z^8 + 4408812374400 z^7 + 2327186635200 z^6 + 261157024800 z^5 - 15836310000 z^4 + 869211000 z^3 + 77395500 z^2 + 8930250 z + 40186125) \right)$$

07.25.03.ajnh.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{8037225} \left(e^z (16384 z^{14} + 1490944 z^{13} + 54448128 z^{12} + 1035116544 z^{11} + 11121632256 z^{10} + 68648186880 z^9 + 236585422080 z^8 + 419457346560 z^7 + 316848127680 z^6 + 54624870720 z^5 - 5983664400 z^4 + 1057341600 z^3 - 94065300 z^2 - 8334900 z - 8037225) \right)$$

07.25.03.ajni.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{2679075} \left(e^z (8192 z^{13} + 651264 z^{12} + 20385792 z^{11} + 323893248 z^{10} + 2807723520 z^9 + 13266167040 z^8 + 32062625280 z^7 + 33384234240 z^6 + 8195009760 z^5 - 1370098800 z^4 + 433414800 z^3 - 121451400 z^2 + 13693050 z + 2679075) \right)$$

07.25.03.ajnj.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{2679075} \left(e^z (4096 z^{12} + 278528 z^{11} + 7268352 z^{10} + 92897280 z^9 + 614234880 z^8 + 2026321920 z^7 + 2860220160 z^6 + 960906240 z^5 - 226573200 z^4 + 107956800 z^3 - 53184600 z^2 + 19051200 z - 2679075) \right)$$

07.25.03.ajnk.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{2679075} \left(e^{z/2} (-2048 z^{12} - 129024 z^{11} - 3090432 z^{10} - 35850240 z^9 - 212260608 z^8 - 617025024 z^7 - 752451840 z^6 - 207990720 z^5 + 46683000 z^4 - 25137000 z^3 + 16669800 z^2 - 9525600 z + 2679075) I_0\left(\frac{z}{2}\right) - \frac{1}{2679075} \left(4 e^{z/2} (512 z^{12} + 31744 z^{11} + 741120 z^{10} + 8236800 z^9 + 45168768 z^8 + 112557312 z^7 + 91840896 z^6 - 10710000 z^5 + 4602150 z^4 - 2929500 z^3 + 1951425 z^2 - 893025 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajnl.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{2679075} \left(e^z (2048 z^{11} + 115712 z^{10} + 2419200 z^9 + 23466240 z^8 + 107654400 z^7 + 205752960 z^6 + 92715840 z^5 - 29484000 z^4 + 19391400 z^3 - 13891500 z^2 + 8136450 z - 2679075) \right)$$

07.25.03.ajnm.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{2679075} \left(e^{z/2} (-2048 z^{11} - 105472 z^{10} - 1981440 z^9 - 16950528 z^8 - 66845184 z^7 - 105557760 z^6 - 35118720 z^5 + 9651600 z^4 - 6615000 z^3 + 5953500 z^2 - 5159700 z + 2679075) I_0\left(\frac{z}{2}\right) + \frac{1}{2679075} \left(e^{z/2} (-2048 z^{11} - 103424 z^{10} - 1879040 z^9 - 15121152 z^8 - 52566528 z^7 - 58969344 z^6 + 8023680 z^5 - 4208400 z^4 + 3465000 z^3 - 3307500 z^2 + 2778300 z - 1091475) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ajnn.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{893025} \left(e^z (1024 z^{10} + 46080 z^9 + 725760 z^8 + 4838400 z^7 + 12700800 z^6 + 7620480 z^5 - 3175200 z^4 + 2721600 z^3 - 2551500 z^2 + 1984500 z - 893025) \right)$$

07.25.03.ajno.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, 3; z\right) = -\frac{1}{2679075} \left(4 e^{z/2} (1024 z^{10} + 40960 z^9 + 559872 z^8 + 3127296 z^7 + 6478080 z^6 + 2540160 z^5 - 831600 z^4 + 705600 z^3 - 850500 z^2 + 1134000 z - 1176525) I_0\left(\frac{z}{2}\right) - \frac{1}{2679075 z} \left(4 e^{z/2} (1024 z^{11} + 39936 z^{10} + 520448 z^9 + 2625792 z^8 + 4075776 z^7 - 631680 z^6 + 388080 z^5 - 378000 z^4 + 409500 z^3 - 283500 z^2 - 467775 z + 2027025) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajnp.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{1}{178605} \left(e^z (512 z^9 + 17152 z^8 + 182784 z^7 + 682752 z^6 + 547008 z^5 - 292320 z^4 + 312480 z^3 - 357840 z^2 + 334530 z - 178605) \right)$$

07.25.03.ajnq.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = -\frac{1}{893025 z} \left(4 e^{z/2} (1024 z^{10} + 29184 z^9 + 252672 z^8 + 706560 z^7 + 322560 z^6 - 131040 z^5 + 176400 z^4 - 453600 z^3 + 1417500 z^2 - 3770550 z + 6081075) I_0\left(\frac{z}{2}\right) - \frac{1}{893025 z^2} \left(4 e^{z/2} (1024 z^{11} + 28160 z^{10} + 225024 z^9 + 494592 z^8 - 84480 z^7 + 50400 z^6 - 5040 z^5 - 252000 z^4 + 1417500 z^3 - 5301450 z^2 + 14189175 z - 24324300) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajnr.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{1}{25515} e^z (256 z^8 + 5632 z^7 + 32256 z^6 + 34944 z^5 - 23520 z^4 + 30240 z^3 - 40320 z^2 + 42840 z - 25515)$$

07.25.03.ajns.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, 5; z\right) = -\frac{1}{893025 z^2} \left(32 e^{z/2} (512 z^{10} + 8704 z^9 + 34560 z^8 + 19200 z^7 - 16800 z^6 + 70560 z^5 - 378000 z^4 + 1814400 z^3 - 7059150 z^2 + 20270250 z - 34459425) I_0\left(\frac{z}{2}\right) - \frac{1}{893025 z^3} \left(64 e^{z/2} (256 z^{11} + 4096 z^{10} + 13312 z^9 - 1920 z^8 - 3120 z^7 + 33600 z^6 - 216720 z^5 + 1134000 z^4 - 4833675 z^3 + 16216200 z^2 - 40540500 z + 68918850) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.ajnt.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = -\frac{e^z (128 z^7 + 1344 z^6 + 2016 z^5 - 1680 z^4 + 2520 z^3 - 3780 z^2 + 4410 z - 2835)}{2835}$$

07.25.03.ajnu.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = -\frac{1}{178605 z^3} \left(32 e^{z/2} (512 z^{10} + 2816 z^9 + 4608 z^8 - 25920 z^7 + 202272 z^6 - 1424304 z^5 + 8678880 z^4 - 44384760 z^3 + 182432250 z^2 - 558242685 z + 1047566520) I_0\left(\frac{z}{2}\right) - \frac{1}{178605 z^4} \left(32 e^{z/2} (512 z^{11} + 2304 z^{10} + 2560 z^9 - 27840 z^8 + 230688 z^7 - 1670928 z^6 + 10505376 z^5 - 56133000 z^4 + 247297050 z^3 - 860674815 z^2 + 2232970740 z - 4190266080) I_1\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.ajnv.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{31255875} \left(e^z (32768 z^{15} + 3391488 z^{14} + 143253504 z^{13} + 3219050496 z^{12} + 42087720960 z^{11} + 329352514560 z^{10} + 1530944017920 z^9 + 4062891260160 z^8 + 5674787475840 z^7 + 3571061256000 z^6 + 722531728800 z^5 + 14633362800 z^4 + 267737400 z^3 + 44396100 z^2 + 3827250 z + 31255875)\right)$$

07.25.03.ajnw.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{4465125} \left(e^z (16384 z^{14} + 1523712 z^{13} + 57151488 z^{12} + 1123737600 z^{11} + 12615828480 z^{10} + 82673372160 z^9 + 310768462080 z^8 + 632987550720 z^7 + 621937310400 z^6 + 230687352000 z^5 + 15234836400 z^4 - 300736800 z^3 - 16499700 z^2 - 2551500 z - 4465125) \right)$$

07.25.03.ajnx.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{893025} \left(e^z (8192 z^{13} + 675840 z^{12} + 22155264 z^{11} + 373549056 z^{10} + 3506296320 z^9 + 18545760000 z^8 + 53382551040 z^7 + 76272295680 z^6 + 44015620320 z^5 + 5304625200 z^4 - 339519600 z^3 + 19391400 z^2 + 1445850 z + 893025) \right)$$

07.25.03.ajny.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{297675} \left(e^z (4096 z^{12} + 294912 z^{11} + 8275968 z^{10} + 116428800 z^9 + 879932160 z^8 + 3553320960 z^7 + 7148010240 z^6 + 5970101760 z^5 + 1112454000 z^4 - 128822400 z^3 + 23473800 z^2 - 2041200 z - 297675) \right)$$

07.25.03.ajnz.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{297675} \left(e^z (2048 z^{11} + 125952 z^{10} + 2941440 z^9 + 33212160 z^8 + 190874880 z^7 + 535973760 z^6 + 626149440 z^5 + 167378400 z^4 - 29597400 z^3 + 9582300 z^2 - 2636550 z + 297675) \right)$$

07.25.03.ajo0.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{297675} \left(e^{z/2} (1024 z^{11} + 58368 z^{10} + 1252608 z^9 + 12872448 z^8 + 66657024 z^7 + 167207040 z^6 + 174129840 z^5 + 41668560 z^4 - 7740900 z^3 + 3156300 z^2 - 1318275 z + 297675) I_0\left(\frac{z}{2}\right) + \frac{1}{297675} \left(e^{z/2} (1024 z^{11} + 57344 z^{10} + 1195776 z^9 + 11704320 z^8 + 55496448 z^7 + 116532864 z^6 + 76700880 z^5 - 7807680 z^4 + 2726460 z^3 - 1242000 z^2 + 429975 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajo1.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{297675} \left(e^z (1024 z^{10} + 52224 z^9 + 974592 z^8 + 8322048 z^7 + 33022080 z^6 + 53343360 z^5 + 19686240 z^4 - 4898880 z^3 + 2347380 z^2 - 1077300 z + 297675) \right)$$

07.25.03.ajo2.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{297675} \left(e^{z/2} (1024 z^{10} + 47616 z^9 + 799488 z^8 + 6042624 z^7 + 20805120 z^6 + 28467360 z^5 + 8453520 z^4 - 2008800 z^3 + 1115100 z^2 - 708750 z + 297675) I_0\left(\frac{z}{2}\right) + \frac{1}{297675} \left(e^{z/2} (1024 z^{10} + 46592 z^9 + 753408 z^8 + 5311488 z^7 + 15826944 z^6 + 14675040 z^5 - 1802160 z^4 + 810720 z^3 - 526500 z^2 + 330750 z - 99225) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajo3.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{99225} \left(e^z (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + 408240 z^2 - 255150 z + 99225) \right)$$

07.25.03.ajo4.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{297675} \left(8 e^{z/2} (256 z^9 + 9216 z^8 + 112128 z^7 + 551040 z^6 + 997200 z^5 + 357120 z^4 - 104400 z^3 + 75600 z^2 - 70875 z + 56700) I_0\left(\frac{z}{2}\right) + \frac{1}{297675 z} \left(4 e^{z/2} (512 z^{10} + 17920 z^9 + 206592 z^8 + 903936 z^7 + 1177440 z^6 - 168480 z^5 + 91440 z^4 - 72000 z^3 + 47250 z^2 + 28350 z - 155925) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajo5.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{19845} e^z (256 z^8 + 7680 z^7 + 72192 z^6 + 233088 z^5 + 156960 z^4 - 67680 z^3 + 54720 z^2 - 42120 z + 19845)$$

07.25.03.ajo6.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{99225 z} \left(4 e^{z/2} (512 z^9 + 13056 z^8 + 99840 z^7 + 244416 z^6 + 103968 z^5 - 39600 z^4 + 50400 z^3 - 113400 z^2 + 266490 z - 405405) I_0\left(\frac{z}{2}\right) + \frac{1}{99225 z^2} \left(4 e^{z/2} (512 z^{10} + 12544 z^9 + 87552 z^8 + 162624 z^7 - 25824 z^6 + 12528 z^5 + 7200 z^4 - 88200 z^3 + 357210 z^2 - 966735 z + 1621620) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajo7.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 + 2496 z^6 + 12384 z^5 + 11280 z^4 - 6120 z^3 + 5940 z^2 - 5310 z + 2835)}{2835}$$

07.25.03.ajo8.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{99225 z^2}$$

$$\left(32 e^{z/2} (256 z^9 + 3840 z^8 + 13248 z^7 + 7104 z^6 - 6480 z^5 + 25200 z^4 - 113400 z^3 + 430920 z^2 - 1216215 z + 2027025)\right.$$

$$I_0\left(\frac{z}{2}\right) + \frac{1}{99225 z^3} \left(32 e^{z/2} (256 z^{10} + 3584 z^9 + 9792 z^8 - 1152 z^7 - 3216 z^6 +\right.$$

$$\left.25920 z^5 - 138600 z^4 + 589680 z^3 - 1964655 z^2 + 4864860 z - 8108100)\right) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajo9.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315)$$

07.25.03.ajoa.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{7}{2}, 6; z\right) =$$

$$\frac{1}{19845 z^3} \left(32 e^{z/2} (256 z^9 + 1152 z^8 + 2112 z^7 - 11328 z^6 + 77616 z^5 - 468720 z^4 + 2381400 z^3 - 9729720 z^2 +\right.$$

$$\left.29594565 z - 55135080)\right) I_0\left(\frac{z}{2}\right) +$$

$$\frac{1}{19845 z^4} \left(32 e^{z/2} (256 z^{10} + 896 z^9 + 1344 z^8 - 12480 z^7 + 90672 z^6 - 567504 z^5 + 3016440 z^4 -\right.$$

$$\left.13222440 z^3 + 45810765 z^2 - 118378260 z + 220540320)\right) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.ajob.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{637875}$$

$$\left(e^z (8192 z^{13} + 684032 z^{12} + 22761472 z^{11} + 391157760 z^{10} + 3765388800 z^9 + 20627047680 z^8 + 62562516480 z^7 +\right.$$

$$\left.97524967680 z^6 + 67156236000 z^5 + 14609322000 z^4 + 312757200 z^3 + 6010200 z^2 + 765450 z + 637875)\right)$$

07.25.03.ajoc.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) =$$

$$-\frac{1}{127575} \left(e^z (4096 z^{12} + 303104 z^{11} + 8804352 z^{10} + 129546240 z^9 + 1040643840 z^8 + 4589982720 z^7 +\right.$$

$$\left.10626336000 z^6 + 11570307840 z^5 + 4652348400 z^4 + 326138400 z^3 - 6690600 z^2 - 340200 z - 127575)\right)$$

07.25.03.ajod.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{42525} \left(e^z (2048 z^{11} + 132096 z^{10} + 3279360 z^9 + 40177920 z^8 + 259165440 z^7 + 869581440 z^6 + 1400051520 z^5 +\right.$$

$$\left.884973600 z^4 + 113740200 z^3 - 7541100 z^2 + 425250 z + 42525)\right)$$

07.25.03.ajoe.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) =$$

$$-\frac{1}{42525} \left(e^z (1024 z^{10} + 56320 z^9 + 1160960 z^8 + 11381760 z^7 + 55601280 z^6 + 128983680 z^5 + 119599200 z^4 + 23889600 z^3 - 2853900 z^2 + 510300 z - 42525) \right)$$

07.25.03.ajof.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, 1; z\right) =$$

$$\frac{1}{42525} \left(e^{z/2} (-512 z^{10} - 26112 z^9 - 495360 z^8 - 4435968 z^7 - 19686240 z^6 - 41551200 z^5 - 35774640 z^4 - 7037280 z^3 + 989550 z^2 - 255150 z + 42525) I_0\left(\frac{z}{2}\right) - \right.$$

$$\left. \frac{1}{42525} \left(2 e^{z/2} (256 z^{10} + 12800 z^9 + 235008 z^8 + 1989120 z^7 + 7959504 z^6 + 13612320 z^5 + 6850800 z^4 - 571680 z^3 + 142965 z^2 - 33750 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajog.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) =$$

$$-\frac{1}{42525} \left(e^z (512 z^9 + 23296 z^8 + 382464 z^7 + 2822400 z^6 + 9455040 z^5 + 12489120 z^4 + 3598560 z^3 - 650160 z^2 + 198450 z - 42525) \right)$$

07.25.03.ajoh.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, 2; z\right) =$$

$$\frac{1}{42525} \left(e^{z/2} (-512 z^9 - 21248 z^8 - 314368 z^7 - 2063040 z^6 - 6070560 z^5 - 7010640 z^4 - 1787040 z^3 + 343800 z^2 - 135450 z + 42525) I_0\left(\frac{z}{2}\right) + \right.$$

$$\left. \frac{1}{42525} \left(e^{z/2} (-512 z^9 - 20736 z^8 - 293888 z^7 - 1779008 z^6 - 4419360 z^5 - 3245040 z^4 + 344160 z^3 - 122040 z^2 + 51750 z - 11025) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ajoi.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) =$$

$$-\frac{1}{14175} e^z (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175)$$

07.25.03.ajoj.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = -\frac{1}{42525} 4 e^{z/2} (256 z^8 + 8192 z^7 + 87360 z^6 + 370560 z^5 + 572400 z^4 + 181440 z^3 - 45000 z^2 + 25200 z - 14175) I_0\left(\frac{z}{2}\right) - \frac{1}{42525 z} \left(4 e^{z/2} (256 z^9 + 7936 z^8 + 79552 z^7 + 294720 z^6 + 310320 z^5 - 39600 z^4 + 17640 z^3 - 9000 z^2 - 1575 z + 14175) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.ajok.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{e^z (128 z^7 + 3392 z^6 + 27616 z^5 + 75120 z^4 + 40920 z^3 - 13380 z^2 + 7290 z - 2835)}{2835}$$

07.25.03.ajol.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = -\frac{1}{14175 z} 4 e^{z/2} (256 z^8 + 5760 z^7 + 38208 z^6 + 80064 z^5 + 30960 z^4 - 10800 z^3 + 12600 z^2 - 22680 z + 31185) I_0\left(\frac{z}{2}\right) - \frac{1}{14175 z^2} 4 e^{z/2} (256 z^9 + 5504 z^8 + 32832 z^7 + 49728 z^6 - 7056 z^5 + 2160 z^4 + 5400 z^3 - 27720 z^2 + 76545 z - 124740) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajom.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{1}{405} e^z (64 z^6 + 1088 z^5 + 4560 z^4 + 3360 z^3 - 1380 z^2 + 900 z - 405)$$

07.25.03.ajon.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, 5; z\right) = -\frac{1}{14175 z^2} 32 e^{z/2} (128 z^8 + 1664 z^7 + 4864 z^6 + 2496 z^5 - 2400 z^4 + 8400 z^3 - 30240 z^2 + 83160 z - 135135) I_0\left(\frac{z}{2}\right) - \frac{1}{14175 z^3} 128 e^{z/2} (32 z^9 + 384 z^8 + 848 z^7 - 64 z^6 - 396 z^5 + 2400 z^4 - 10290 z^3 + 34020 z^2 - 83160 z + 135135) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajoo.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{1}{45} e^z (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45)$$

07.25.03.ajop.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{5}{2}, 6; z\right) = -\frac{1}{2835 z^3} 32 e^{z/2} (128 z^8 + 448 z^7 + 960 z^6 - 4848 z^5 + 28560 z^4 - 143640 z^3 + 582120 z^2 - 1756755 z + 3243240) I_0\left(\frac{z}{2}\right) - \frac{1}{2835 z^4} \left(32 e^{z/2} (128 z^9 + 320 z^8 + 704 z^7 - 5520 z^6 + 34512 z^5 - 182280 z^4 + 793800 z^3 - 2733885 z^2 + 7027020 z - 12972960) I_1\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.aj0q.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{25515} \left(e^z (2048 z^{11} + 134144 z^{10} + 3396096 z^9 + 42698496 z^8 + 285480192 z^7 + 1010330496 z^6 + \right. \\
 & \left. 1777011264 z^5 + 1342625760 z^4 + 312235560 z^3 + 6951420 z^2 + 130410 z + 25515) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajor.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \\
 & -\frac{1}{8505} \left(e^z (1024 z^{10} + 58368 z^9 + 1260288 z^8 + 13157376 z^7 + 70374528 z^6 + 188479872 z^5 + 228826080 z^4 + \right. \\
 & \left. 99247680 z^3 + 7246260 z^2 - 147420 z - 8505) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajos.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \\
 & \frac{1}{8505} \left(e^z (512 z^9 + 24832 z^8 + 443904 z^7 + 3693312 z^6 + 14874048 z^5 + 27306720 z^4 + 18839520 z^3 + \right. \\
 & \left. 2525040 z^2 - 164430 z + 8505) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajot.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \\
 & \frac{1}{8505} \left(e^{z/2} (256 z^9 + 11520 z^8 + 189888 z^7 + 1450176 z^6 + 5366448 z^5 + 9198000 z^4 + 6232392 z^3 + 922536 z^2 - \right. \\
 & \left. 82215 z + 8505) I_0\left(\frac{z}{2}\right) + \frac{1}{8505} \left(e^{z/2} (256 z^9 + 11264 z^8 + 178752 z^7 + 1276800 z^6 + \right. \right. \\
 & \left. \left. 4168560 z^5 + 5520960 z^4 + 1948248 z^3 - 117648 z^2 + 15201 z) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajou.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \\
 & \frac{1}{8505} e^z (256 z^8 + 10240 z^7 + 145152 z^6 + 903168 z^5 + 2469600 z^4 + 2540160 z^3 + 529200 z^2 - 60480 z + 8505)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajov.01} \\
 & {}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \\
 & \frac{1}{8505} e^{z/2} (256 z^8 + 9344 z^7 + 119616 z^6 + 666048 z^5 + 1626480 z^4 + 1525392 z^3 + 312696 z^2 - 42840 z + 8505) I_0\left(\frac{z}{2}\right) + \\
 & \frac{1}{8505} e^{z/2} (256 z^8 + 9088 z^7 + 110656 z^6 + 559680 z^5 + 1113840 z^4 + 605808 z^3 - 51048 z^2 + 11736 z - 1575) I_1\left(\frac{z}{2}\right)
 \end{aligned}$$

07.25.03.ajow.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835)}{2835}$$

07.25.03.ajox.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{32 e^{z/2} (16 z^7 + 448 z^6 + 4104 z^5 + 14640 z^4 + 18666 z^3 + 4968 z^2 - 945 z + 315) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (128 z^8 + 3456 z^7 + 29440 z^6 + 89280 z^5 + 71712 z^4 - 7632 z^3 + 2304 z^2 - 1575) I_1\left(\frac{z}{2}\right)}{8505 z}$$

07.25.03.ajoy.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{567} e^z (64 z^6 + 1472 z^5 + 10128 z^4 + 22368 z^3 + 9276 z^2 - 2052 z + 567)$$

07.25.03.ajoz.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (128 z^7 + 2496 z^6 + 14016 z^5 + 24336 z^4 + 8208 z^3 - 2520 z^2 + 2520 z - 2835) I_0\left(\frac{z}{2}\right) + \frac{1}{2835 z^2} 4 e^{z/2} (128 z^8 + 2368 z^7 + 11712 z^6 + 13680 z^5 - 1584 z^4 - 72 z^3 + 2520 z^2 - 7245 z + 11340) I_1\left(\frac{z}{2}\right)}{2835 z}$$

07.25.03.ajp0.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{81} e^z (32 z^5 + 464 z^4 + 1584 z^3 + 888 z^2 - 246 z + 81)$$

07.25.03.ajp1.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (64 z^7 + 704 z^6 + 1680 z^5 + 816 z^4 - 840 z^3 + 2520 z^2 - 6615 z + 10395) I_0\left(\frac{z}{2}\right) + 32 e^{z/2} (64 z^8 + 640 z^7 + 1072 z^6 - 744 z^4 + 3360 z^3 - 11025 z^2 + 26460 z - 41580) I_1\left(\frac{z}{2}\right)}{2835 z^2}$$

07.25.03.ajp2.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{9} e^z (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9)$$

07.25.03.ajp3.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 + 160 z^6 + 432 z^5 - 2016 z^4 + 9912 z^3 - 39690 z^2 + 118503 z - 216216) I_0\left(\frac{z}{2}\right) + \frac{1}{567 z^3} 32 e^{z/2} (64 z^8 + 96 z^7 + 368 z^6 - 2400 z^5 + 12600 z^4 - 54390 z^3 + 185787 z^2 - 474012 z + 864864) I_1\left(\frac{z}{2}\right)}{567 z^3}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.ajp4.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{2835} (e^z (512 z^9 + 25344 z^8 + 465408 z^7 + 4018944 z^6 + 17102016 z^5 + 34382880 z^4 + 28455840 z^3 + 6940080 z^2 + 153090 z + 2835))$$

07.25.03.ajp5.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{2835} e^z (256 z^8 + 10752 z^7 + 162816 z^6 + 1113984 z^5 + 3538080 z^4 + 4808160 z^3 + 2207520 z^2 + 158760 z - 2835)$$

07.25.03.ajp6.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{2835} e^{z/2} (-128 z^8 - 4992 z^7 - 69888 z^6 - 441984 z^5 - 1311840 z^4 - 1730736 z^3 - 849168 z^2 - 79380 z + 2835) I_0\left(\frac{z}{2}\right) - \frac{1}{2835} 4 e^{z/2} (32 z^8 + 1216 z^7 + 16272 z^6 + 94800 z^5 + 240180 z^4 + 227016 z^3 + 47754 z^2 - 1503 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajp7.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{e^z (128 z^7 + 4416 z^6 + 52704 z^5 + 267120 z^4 + 567000 z^3 + 419580 z^2 + 54810 z - 2835)}{2835}$$

07.25.03.ajp8.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^{z/2} (-128 z^7 - 4032 z^6 - 43584 z^5 - 199440 z^4 - 387216 z^3 - 277128 z^2 - 40320 z + 2835) I_0\left(\frac{z}{2}\right) + e^{z/2} (-128 z^7 - 3904 z^6 - 39744 z^5 - 161520 z^4 - 242064 z^3 - 86616 z^2 + 4752 z - 315) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.ajp9.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 1728 z^5 + 15120 z^4 + 50400 z^3 + 56700 z^2 + 11340 z - 945)$$

07.25.03.ajpa.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = -\frac{4 e^{z/2} (64 z^6 + 1536 z^5 + 11760 z^4 + 33984 z^3 + 33912 z^2 + 6840 z - 765) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (64 z^7 + 1472 z^6 + 10320 z^5 + 24336 z^4 + 13464 z^3 - 1008 z^2 + 45 z + 225) I_1\left(\frac{z}{2}\right)}{2835 z}$$

07.25.03.ajpb.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{1}{189} e^z (32 z^5 + 624 z^4 + 3504 z^3 + 5928 z^2 + 1674 z - 189)$$

07.25.03.ajpc.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = -\frac{4 e^{z/2} (64 z^6 + 1056 z^5 + 4848 z^4 + 6624 z^3 + 1800 z^2 - 450 z + 315) I_0\left(\frac{z}{2}\right) - 4 e^{z/2} (64 z^7 + 992 z^6 + 3888 z^5 + 3168 z^4 - 216 z^3 - 270 z^2 + 855 z - 1260) I_1\left(\frac{z}{2}\right)}{945 z^2}$$

07.25.03.ajpd.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{1}{27} e^z (16 z^4 + 192 z^3 + 504 z^2 + 192 z - 27)$$

07.25.03.ajpe.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = -\frac{32 e^{z/2} (32 z^6 + 288 z^5 + 528 z^4 + 240 z^3 - 270 z^2 + 630 z - 945) I_0\left(\frac{z}{2}\right) - 64 e^{z/2} (16 z^7 + 128 z^6 + 144 z^5 + 24 z^4 - 165 z^3 + 540 z^2 - 1260 z + 1890) I_1\left(\frac{z}{2}\right)}{945 z^3}$$

07.25.03.ajpf.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{1}{3} e^z (8 z^3 + 36 z^2 + 18 z - 3)$$

07.25.03.ajpg.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = -\frac{32 e^{z/2} (32 z^6 + 48 z^5 + 192 z^4 - 804 z^3 + 3150 z^2 - 9261 z + 16632) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (32 z^7 + 16 z^6 + 192 z^5 - 1020 z^4 + 4350 z^3 - 14679 z^2 + 37044 z - 66528) I_1\left(\frac{z}{2}\right)}{189 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{1}{2}$

07.25.03.ajph.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 4544 z^6 + 56416 z^5 + 303120 z^4 + 708120 z^3 + 633780 z^2 + 153090 z + 2835)}{2835}$$

07.25.03.ajpi.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, 1; z\right) = \frac{e^{z/2} (64 z^7 + 2112 z^6 + 24336 z^5 + 122160 z^4 + 274104 z^3 + 254592 z^2 + 76545 z + 2835) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^7 + 2048 z^6 + 22320 z^5 + 100800 z^4 + 182616 z^3 + 105624 z^2 + 8847 z) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.ajpj.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z (64 z^6 + 1856 z^5 + 18000 z^4 + 70560 z^3 + 107100 z^2 + 49140 z + 2835)}{2835}$$

07.25.03.ajpk.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 + 1696 z^5 + 14960 z^4 + 53664 z^3 + 77352 z^2 + 37590 z + 2835) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^6 + 1632 z^5 + 13360 z^4 + 41056 z^3 + 41544 z^2 + 7482 z - 105) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.ajpl.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945)$$

07.25.03.ajpm.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, 3; z\right) = \frac{8 e^{z/2} (16 z^5 + 320 z^4 + 1968 z^3 + 4344 z^2 + 3075 z + 360) I_0\left(\frac{z}{2}\right)}{2835} + \frac{4 e^{z/2} (32 z^6 + 608 z^5 + 3344 z^4 + 5616 z^3 + 1698 z^2 - 30 z - 45) I_1\left(\frac{z}{2}\right)}{2835 z}$$

07.25.03.ajpn.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{189} e^z (16 z^4 + 256 z^3 + 1112 z^2 + 1296 z + 189)$$

07.25.03.ajpo.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 + 432 z^4 + 1536 z^3 + 1500 z^2 + 270 z - 45) I_0\left(\frac{z}{2}\right)}{945 z} + \frac{4 e^{z/2} (32 z^6 + 400 z^5 + 1152 z^4 + 516 z^3 + 30 z^2 - 135 z + 180) I_1\left(\frac{z}{2}\right)}{945 z^2}$$

07.25.03.ajpp.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{27} e^z (8 z^3 + 76 z^2 + 138 z + 27)$$

07.25.03.ajpq.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^5 + 112 z^4 + 140 z^3 + 60 z^2 - 75 z + 105) I_0\left(\frac{z}{2}\right)}{945 z^2} + \frac{32 e^{z/2} (16 z^6 + 96 z^5 + 52 z^4 + 40 z^3 - 135 z^2 + 300 z - 420) I_1\left(\frac{z}{2}\right)}{945 z^3}$$

07.25.03.ajpr.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{3} e^z (4 z^2 + 12 z + 3)$$

07.25.03.ajps.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 + 8 z^4 + 84 z^3 - 300 z^2 + 861 z - 1512) I_0\left(\frac{z}{2}\right)}{189 z^3} + \frac{32 e^{z/2} (16 z^6 - 8 z^5 + 100 z^4 - 420 z^3 + 1389 z^2 - 3444 z + 6048) I_1\left(\frac{z}{2}\right)}{189 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 1$

07.25.03.ajpt.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \frac{e^{z/2} (32 z^6 + 864 z^5 + 7824 z^4 + 29184 z^3 + 44802 z^2 + 24570 z + 2835) I_0\left(\frac{z}{2}\right)}{2835} + \frac{2 e^{z/2} (16 z^6 + 416 z^5 + 3504 z^4 + 11280 z^3 + 12507 z^2 + 3006 z) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.ajpu.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{945} e^{z/2} (16 z^5 + 336 z^4 + 2220 z^3 + 5484 z^2 + 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^5 + 320 z^4 + 1908 z^3 + 3720 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajpv.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{189} e^{z/2} (8 z^4 + 120 z^3 + 504 z^2 + 648 z + 189) I_0\left(\frac{z}{2}\right) + \frac{4}{189} e^{z/2} (2 z^4 + 28 z^3 + 99 z^2 + 75 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajpw.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{27} e^{z/2} (4 z^3 + 36 z^2 + 69 z + 27) I_0\left(\frac{z}{2}\right) + \frac{1}{27} e^{z/2} (4 z^3 + 32 z^2 + 39 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajpx.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; 1, \frac{11}{2}; z\right) = \frac{1}{3} e^{z/2} (2 z^2 + 6 z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} (z^2 + 2 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{3}{2}$

07.25.03.ajpy.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (32 z^5 + 752 z^4 + 5616 z^3 + 15 624 z^2 + 14 490 z + 2835)}{2835}$$

07.25.03.ajpz.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{e^{z/2} (32 z^5 + 688 z^4 + 4704 z^3 + 12 252 z^2 + 11 550 z + 2835) I_0\left(\frac{z}{2}\right)}{2835} + \frac{e^{z/2} (32 z^5 + 656 z^4 + 4064 z^3 + 8484 z^2 + 4542 z + 105) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.ajq0.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{945} e^z (16 z^4 + 288 z^3 + 1512 z^2 + 2520 z + 945)$$

07.25.03.ajq1.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (16 z^4 + 256 z^3 + 1188 z^2 + 1800 z + 705) I_0\left(\frac{z}{2}\right)}{2835} + \frac{4 e^{z/2} (16 z^5 + 240 z^4 + 956 z^3 + 948 z^2 + 45 z + 15) I_1\left(\frac{z}{2}\right)}{2835 z}$$

07.25.03.ajq2.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{189} e^z (8 z^3 + 100 z^2 + 306 z + 189)$$

07.25.03.ajq3.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 + 168 z^3 + 420 z^2 + 228 z + 9) I_0\left(\frac{z}{2}\right)}{945 z} + \frac{4 e^{z/2} (16 z^5 + 152 z^4 + 276 z^3 + 12 z^2 + 33 z - 36) I_1\left(\frac{z}{2}\right)}{945 z^2}$$

07.25.03.ajq4.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{27} e^z (4z^2 + 28z + 27)$$

07.25.03.ajq5.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (8z^4 + 40z^3 + 24z^2 + 12z - 15) I_0\left(\frac{z}{2}\right)}{945 z^2} + \frac{128 e^{z/2} (2z^5 + 8z^4 - z^3 + 6z^2 - 12z + 15) I_1\left(\frac{z}{2}\right)}{945 z^3}$$

07.25.03.ajq6.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{3} e^z (2z + 3)$$

07.25.03.ajq7.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (8z^4 - 4z^3 + 36z^2 - 99z + 168) I_0\left(\frac{z}{2}\right)}{189 z^3} + \frac{32 e^{z/2} (8z^5 - 12z^4 + 52z^3 - 165z^2 + 396z - 672) I_1\left(\frac{z}{2}\right)}{189 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 2$

07.25.03.ajq8.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{945} e^{z/2} (16z^4 + 264z^3 + 1284z^2 + 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^4 + 248z^3 + 1044z^2 + 1164z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajq9.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{189} e^{z/2} (8z^3 + 92z^2 + 268z + 189) I_0\left(\frac{z}{2}\right) + \frac{1}{189} e^{z/2} (8z^3 + 84z^2 + 188z + 35) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajqa.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{27} e^{z/2} (4z^2 + 26z + 27) I_0\left(\frac{z}{2}\right) + \frac{1}{27} e^{z/2} (4z^2 + 22z + 7) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajqb.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; 2, \frac{11}{2}; z\right) = \frac{1}{3} e^{z/2} (2z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z + 1) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{5}{2}$

07.25.03.ajqc.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z (8z^3 + 108z^2 + 378z + 315)$$

07.25.03.ajqd.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{16}{945} e^{z/2} (2z^3 + 24z^2 + 75z + 60) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8z^4 + 88z^3 + 216z^2 + 60z - 15) I_1\left(\frac{z}{2}\right)}{945 z}$$

07.25.03.ajqe.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (4z^2 + 36z + 63)$$

07.25.03.ajqf.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (8 z^3 + 60 z^2 + 84 z - 3) I_0\left(\frac{z}{2}\right)}{315 z} + \frac{4 e^{z/2} (8 z^4 + 52 z^3 + 36 z^2 - 21 z + 12) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.ajqg.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2 z + 9)$$

07.25.03.ajqh.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (4 z^3 + 12 z^2 - 3 z + 3) I_0\left(\frac{z}{2}\right)}{315 z^2} + \frac{32 e^{z/2} (4 z^4 + 8 z^3 - 9 z^2 + 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3}$$

07.25.03.ajqi.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = e^z$$

07.25.03.ajqj.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (4 z^3 - 6 z^2 + 15 z - 24) I_0\left(\frac{z}{2}\right)}{63 z^3} + \frac{32 e^{z/2} (4 z^4 - 10 z^3 + 27 z^2 - 60 z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 3$

07.25.03.ajqk.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{4}{189} e^{z/2} (4 z^2 + 32 z + 51) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4 z^3 + 28 z^2 + 25 z - 15) I_1\left(\frac{z}{2}\right)}{189 z}$$

07.25.03.ajql.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{8}{27} e^{z/2} (z + 4) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2 z^2 + 6 z - 5) I_1\left(\frac{z}{2}\right)}{27 z}$$

07.25.03.ajqm.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; 3, \frac{11}{2}; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (z - 1) I_1\left(\frac{z}{2}\right)}{3 z}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{7}{2}$

07.25.03.ajqn.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5 e^z (2 z^3 + 11 z^2 + 4 z - 6)}{63 z^2} + \frac{5 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{21 z^{5/2}}$$

07.25.03.ajqp.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{21 z^{5/2}} - \frac{5 e^{-z} (2 z^3 - 11 z^2 + 4 z + 6)}{63 z^2}$$

07.25.03.ajqq.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (4 z^2 + 18 z + 3) I_0\left(\frac{z}{2}\right)}{63 z} + \frac{4 e^{z/2} (4 z^3 + 14 z^2 - 9 z - 12) I_1\left(\frac{z}{2}\right)}{63 z^2}$$

07.25.03.ajqq.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{5 e^z (z^2 + 2z - 3)}{9 z^2} + \frac{5 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{6 z^{5/2}}$$

07.25.03.ajqr.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5 e^{-z} (z^2 - 2z - 3)}{9 z^2} + \frac{5 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{6 z^{5/2}}$$

07.25.03.ajqs.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 + 2z - 1) I_0\left(\frac{z}{2}\right)}{63 z^2} + \frac{64 e^{z/2} (z^3 - 4z + 2) I_1\left(\frac{z}{2}\right)}{63 z^3}$$

07.25.03.ajqt.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{5 e^z (2z - 3)}{4 z^2} + \frac{15 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{5/2}}$$

07.25.03.ajqu.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{15 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{5/2}} - \frac{5 e^{-z} (2z + 3)}{4 z^2}$$

07.25.03.ajqv.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (10z^2 - 17z + 24) I_0\left(\frac{z}{2}\right)}{63 z^3} + \frac{32 e^{z/2} (10z^3 - 43z^2 + 68z - 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 4$

07.25.03.ajqw.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; 4, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (2z + 3) I_0\left(\frac{z}{2}\right)}{9 z} + \frac{4 e^{z/2} (2z^2 + z - 12) I_1\left(\frac{z}{2}\right)}{9 z^2}$$

07.25.03.ajqx.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; 4, \frac{11}{2}; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z - 4) I_1\left(\frac{z}{2}\right)}{z^2}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{9}{2}$

07.25.03.ajqy.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 e^z (4z^2 - 2z - 15)}{72 z^3} + \frac{35 \sqrt{\pi} (4z + 5) \operatorname{erfi}(\sqrt{z})}{48 z^{7/2}}$$

07.25.03.ajqz.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 \sqrt{\pi} (4z - 5) \operatorname{erf}(\sqrt{z})}{48 z^{7/2}} - \frac{35 e^{-z} (4z^2 + 2z - 15)}{72 z^3}$$

07.25.03.ajr0.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (z + 1) I_0\left(\frac{z}{2}\right)}{9 z^2} + \frac{32 e^{z/2} (z^2 - 4z - 4) I_1\left(\frac{z}{2}\right)}{9 z^3}$$

07.25.03.ajr1.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{35 e^z (4z - 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z + 5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ajr2.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{35 e^{-z} (4z + 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ajr3.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (9z - 8) I_0\left(\frac{z}{2}\right)}{9 z^3} + \frac{32 e^{z/2} (z^2 - 36z + 32) I_1\left(\frac{z}{2}\right)}{9 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 5$

07.25.03.ajr4.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; 5, \frac{11}{2}; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^3}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{11}{2}$

07.25.03.ajr5.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{1575 e^z (2z - 21)}{128 z^4} + \frac{945 \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.ajr6.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 e^{-z} (2z + 21)}{128 z^4}$$

07.25.03.ajr7.01

$${}_2F_2\left(\frac{5}{2}, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (z + 8) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (z^2 + 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = -\frac{11}{2}$

07.25.03.ajr8.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{4862521125} (2048 z^{19} + 329728 z^{18} + 22559744 z^{17} + 862041600 z^{16} + 20340745344 z^{15} + 309517787136 z^{14} + 3081153761280 z^{13} + 19946506567680 z^{12} + 81895384166400 z^{11} + 203118614737920 z^{10} + 279424854696960 z^9 + 182390463763200 z^8 + 40323036902400 z^7 + 899026128000 z^6 + 16345929600 z^5 + 2829103200 z^4 + 1428840000 z^3 + 1458607500 z^2 + 2411167500 z + 4862521125) + \frac{1}{4862521125} (64 e^z \sqrt{\pi} (32 z^{39/2} + 5168 z^{37/2} + 355056 z^{35/2} + 13643112 z^{33/2} + 324388890 z^{31/2} + 4988810295 z^{29/2} + 50417539200 z^{27/2} + 333659702880 z^{25/2} + 1416207723840 z^{23/2} + 3701081008800 z^{21/2} + 5555702476800 z^{19/2} + 4251491193600 z^{17/2} + 1320959404800 z^{15/2} + 94354243200 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajr9.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{4862521125} (-2048 z^{19} + 329728 z^{18} - 22559744 z^{17} + 862041600 z^{16} - 20340745344 z^{15} + 309517787136 z^{14} - 3081153761280 z^{13} + 19946506567680 z^{12} - 81895384166400 z^{11} + 203118614737920 z^{10} - 279424854696960 z^9 + 182390463763200 z^8 - 40323036902400 z^7 + 899026128000 z^6 - 16345929600 z^5 + 2829103200 z^4 - 1428840000 z^3 + 1458607500 z^2 - 2411167500 z + 4862521125) + \frac{1}{4862521125} (64 e^{-z} \sqrt{\pi} (32 z^{39/2} - 5168 z^{37/2} + 355056 z^{35/2} - 13643112 z^{33/2} + 324388890 z^{31/2} - 4988810295 z^{29/2} + 50417539200 z^{27/2} - 333659702880 z^{25/2} + 1416207723840 z^{23/2} - 3701081008800 z^{21/2} + 5555702476800 z^{19/2} - 4251491193600 z^{17/2} + 1320959404800 z^{15/2} - 94354243200 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajra.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{442047375} (-1024 z^{18} - 151552 z^{17} - 9461760 z^{16} - 327015936 z^{15} - 6904759488 z^{14} - 92768417280 z^{13} - 801513699840 z^{12} - 4401732787200 z^{11} - 14847894190080 z^{10} - 28830023470080 z^9 - 28627819718400 z^8 - 11428121779200 z^7 - 899026128000 z^6 + 16345929600 z^5 + 943034400 z^4 + 285768000 z^3 + 208372500 z^2 + 267907500 z + 442047375) - \frac{1}{442047375} (32 e^z \sqrt{\pi} (32 z^{37/2} + 4752 z^{35/2} + 298032 z^{33/2} + 10364760 z^{31/2} + 220741290 z^{29/2} + 3002138685 z^{27/2} + 26400429720 z^{25/2} + 148856694840 z^{23/2} + 523067554800 z^{21/2} + 1085743234800 z^{19/2} + 1212729537600 z^{17/2} + 613302580800 z^{15/2} + 94354243200 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajrb.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{442047375} \left(-1024 z^{18} + 151552 z^{17} - 9461760 z^{16} + 327015936 z^{15} - 6904759488 z^{14} + 92768417280 z^{13} - 801513699840 z^{12} + 4401732787200 z^{11} - 14847894190080 z^{10} + 28830023470080 z^9 - 28627819718400 z^8 + 11428121779200 z^7 - 899026128000 z^6 - 16345929600 z^5 + 943034400 z^4 - 285768000 z^3 + 208372500 z^2 - 267907500 z + 442047375 \right) + \frac{1}{442047375} \left(32 e^{-z} \sqrt{\pi} \left(32 z^{37/2} - 4752 z^{35/2} + 298032 z^{33/2} - 10364760 z^{31/2} + 220741290 z^{29/2} - 3002138685 z^{27/2} + 26400429720 z^{25/2} - 148856694840 z^{23/2} + 523067554800 z^{21/2} - 1085743234800 z^{19/2} + 1212729537600 z^{17/2} - 613302580800 z^{15/2} + 94354243200 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajrc.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{49116375} \left(512 z^{17} + 69120 z^{16} + 3901696 z^{15} + 120623232 z^{14} + 2248014240 z^{13} + 26207823360 z^{12} + 192084076800 z^{11} + 867051924480 z^{10} + 2293095006720 z^9 + 3227021164800 z^8 + 1983690777600 z^7 + 299675376000 z^6 - 16345929600 z^5 + 943034400 z^4 + 95256000 z^3 + 41674500 z^2 + 38272500 z + 49116375 \right) + \frac{1}{49116375} \left(16 e^z \sqrt{\pi} \left(32 z^{35/2} + 4336 z^{33/2} + 246000 z^{31/2} + 7658760 z^{29/2} + 144153690 z^{27/2} + 1704755475 z^{25/2} + 12762385920 z^{23/2} + 59519993400 z^{21/2} + 165947594400 z^{19/2} + 256005262800 z^{17/2} + 188708486400 z^{15/2} + 47177121600 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajrd.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{49116375} \left(-512 z^{17} + 69120 z^{16} - 3901696 z^{15} + 120623232 z^{14} - 2248014240 z^{13} + 26207823360 z^{12} - 192084076800 z^{11} + 867051924480 z^{10} - 2293095006720 z^9 + 3227021164800 z^8 - 1983690777600 z^7 + 299675376000 z^6 + 16345929600 z^5 + 943034400 z^4 - 95256000 z^3 + 41674500 z^2 - 38272500 z + 49116375 \right) + \frac{1}{49116375} \left(16 e^{-z} \sqrt{\pi} \left(32 z^{35/2} - 4336 z^{33/2} + 246000 z^{31/2} - 7658760 z^{29/2} + 144153690 z^{27/2} - 1704755475 z^{25/2} + 12762385920 z^{23/2} - 59519993400 z^{21/2} + 165947594400 z^{19/2} - 256005262800 z^{17/2} + 188708486400 z^{15/2} - 47177121600 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajre.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{7016625} \left(-256 z^{16} - 31232 z^{15} - 1576192 z^{14} - 42988800 z^{13} - 694869360 z^{12} - 6869750400 z^{11} - 41384367360 z^{10} - 146569489920 z^9 - 281676672000 z^8 - 247439923200 z^7 - 59935075200 z^6 + 5448643200 z^5 - 943034400 z^4 + 95256000 z^3 + 13891500 z^2 + 7654500 z + 7016625 \right) - \frac{1}{7016625} \left(8 e^z \sqrt{\pi} \left(32 z^{33/2} + 3920 z^{31/2} + 198960 z^{29/2} + 5470200 z^{27/2} + 89451690 z^{25/2} + 899690265 z^{23/2} + 5564863800 z^{21/2} + 20565946800 z^{19/2} + 42551913600 z^{17/2} + 43245694800 z^{15/2} + 15725707200 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajrf.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{7016625} \left(-256 z^{16} + 31232 z^{15} - 1576192 z^{14} + 42988800 z^{13} - 694869360 z^{12} + 6869750400 z^{11} - 41384367360 z^{10} + 146569489920 z^9 - 281676672000 z^8 + 247439923200 z^7 - 59935075200 z^6 - 5448643200 z^5 - 943034400 z^4 - 95256000 z^3 + 13891500 z^2 - 7654500 z + 7016625 \right) + \frac{1}{7016625} \left(8 e^{-z} \sqrt{\pi} \left(32 z^{33/2} - 3920 z^{31/2} + 198960 z^{29/2} - 5470200 z^{27/2} + 89451690 z^{25/2} - 899690265 z^{23/2} + 5564863800 z^{21/2} - 20565946800 z^{19/2} + 42551913600 z^{17/2} - 43245694800 z^{15/2} + 15725707200 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajrg.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{1403325} \left(128 z^{15} + 13952 z^{14} + 620736 z^{13} + 14673120 z^{12} + 200997000 z^{11} + 1632524544 z^{10} + 7716723840 z^9 + 19888531200 z^8 + 23998723200 z^7 + 8562153600 z^6 - 1089728640 z^5 + 314344800 z^4 - 95256000 z^3 + 13891500 z^2 + 2551500 z + 1403325 \right) + \frac{1}{1403325} \left(4 e^z \sqrt{\pi} \left(32 z^{31/2} + 3504 z^{29/2} + 156912 z^{27/2} + 3744168 z^{25/2} + 52010010 z^{23/2} + 431600175 z^{21/2} + 2112062400 z^{19/2} + 5781510000 z^{17/2} + 7862853600 z^{15/2} + 3931426800 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajrh.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{1403325} \left(-128 z^{15} + 13952 z^{14} - 620736 z^{13} + 14673120 z^{12} - 200997000 z^{11} + 1632524544 z^{10} - 7716723840 z^9 + 19888531200 z^8 - 23998723200 z^7 + 8562153600 z^6 + 1089728640 z^5 + 314344800 z^4 + 95256000 z^3 + 13891500 z^2 - 2551500 z + 1403325 \right) + \frac{1}{1403325} \left(4 e^{-z} \sqrt{\pi} \left(32 z^{31/2} - 3504 z^{29/2} + 156912 z^{27/2} - 3744168 z^{25/2} + 52010010 z^{23/2} - 431600175 z^{21/2} + 2112062400 z^{19/2} - 5781510000 z^{17/2} + 7862853600 z^{15/2} - 3931426800 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajri.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{467775} \left(-64 z^{14} - 6144 z^{13} - 236672 z^{12} - 4736160 z^{11} - 53247852 z^{10} - 339130848 z^9 - 1166986080 z^8 - 1895780160 z^7 - 951350400 z^6 + 155675520 z^5 - 62868960 z^4 + 31752000 z^3 - 13891500 z^2 + 2551500 z + 467775 \right) -$$

$$\frac{1}{467775} \left(2 e^z \sqrt{\pi} \left(32 z^{29/2} + 3088 z^{27/2} + 119856 z^{25/2} + 2425752 z^{23/2} + 27752490 z^{21/2} + 181827765 z^{19/2} + 657440280 z^{17/2} + 1179428040 z^{15/2} + 786285360 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajrj.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{467775} \left(-64 z^{14} + 6144 z^{13} - 236672 z^{12} + 4736160 z^{11} - 53247852 z^{10} + 339130848 z^9 - 1166986080 z^8 + 1895780160 z^7 - 951350400 z^6 - 155675520 z^5 - 62868960 z^4 - 31752000 z^3 - 13891500 z^2 - 2551500 z + 467775 \right) +$$

$$\frac{1}{467775} \left(2 e^{-z} \sqrt{\pi} \left(32 z^{29/2} - 3088 z^{27/2} + 119856 z^{25/2} - 2425752 z^{23/2} + 27752490 z^{21/2} - 181827765 z^{19/2} + 657440280 z^{17/2} - 1179428040 z^{15/2} + 786285360 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajrk.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{467775} \left(32 z^{13} + 2656 z^{12} + 86480 z^{11} + 1418088 z^{10} + 12483114 z^9 + 57829920 z^8 + 125668080 z^7 + 86486400 z^6 - 17297280 z^5 + 8981280 z^4 - 6350400 z^3 + 4630500 z^2 - 2551500 z + 467775 \right) +$$

$$\frac{1}{467775} \left(e^z \sqrt{\pi} \left(32 z^{27/2} + 2672 z^{25/2} + 87792 z^{23/2} + 1460040 z^{21/2} + 13152090 z^{19/2} + 63458955 z^{17/2} + 149768640 z^{15/2} + 131047560 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajrl.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, \frac{1}{2}; -z\right) =$$

$$\frac{1}{467775} \left(-32 z^{13} + 2656 z^{12} - 86480 z^{11} + 1418088 z^{10} - 12483114 z^9 + 57829920 z^8 - 125668080 z^7 + 86486400 z^6 + 17297280 z^5 + 8981280 z^4 + 6350400 z^3 + 4630500 z^2 + 2551500 z + 467775 \right) +$$

$$\frac{1}{467775} \left(e^{-z} \sqrt{\pi} \left(32 z^{27/2} - 2672 z^{25/2} + 87792 z^{23/2} - 1460040 z^{21/2} + 13152090 z^{19/2} - 63458955 z^{17/2} + 149768640 z^{15/2} - 131047560 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajrm.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, 1; z\right) = \frac{1}{3742200} \left(e^z (256 z^{13} + 19712 z^{12} + 589056 z^{11} + 8738304 z^{10} + 68170080 z^9 + 270830880 z^8 + 472631760 z^7 + 203273280 z^6 - 64410255 z^5 + 44325225 z^4 - 35494200 z^3 + 25968600 z^2 - 13948200 z + 3742200) \right)$$

07.25.03.ajrm.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{935550} e^z \sqrt{\pi} (32 z^6 + 2256 z^5 + 60720 z^4 + 792120 z^3 + 5230890 z^2 + 16380945 z + 18721080) \operatorname{erf}(\sqrt{z}) z^{13/2} + \frac{1}{467775} (16 z^{12} + 1120 z^{11} + 29808 z^{10} + 381696 z^9 + 2438175 z^8 + 7129800 z^7 + 6652800 z^6 - 1572480 z^5 + 997920 z^4 - 907200 z^3 + 926100 z^2 - 850500 z + 467775)$$

07.25.03.ajro.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{467775} (16 z^{12} - 1120 z^{11} + 29808 z^{10} - 381696 z^9 + 2438175 z^8 - 7129800 z^7 + 6652800 z^6 + 1572480 z^5 + 997920 z^4 + 907200 z^3 + 926100 z^2 + 850500 z + 467775) - \frac{1}{935550} e^{-z} \sqrt{\pi} z^{13/2} (32 z^6 - 2256 z^5 + 60720 z^4 - 792120 z^3 + 5230890 z^2 - 16380945 z + 18721080) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajrp.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, 2; z\right) = \frac{1}{3742200} \left(e^z (256 z^{12} + 16384 z^{11} + 392448 z^{10} + 4421376 z^9 + 23956320 z^8 + 55224000 z^7 + 30839760 z^6 - 12605040 z^5 + 11219985 z^4 - 11774700 z^3 + 11604600 z^2 - 8845200 z + 3742200) \right)$$

07.25.03.ajrq.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z \sqrt{\pi} (32 z^5 + 1840 z^4 + 38640 z^3 + 367080 z^2 + 1560090 z + 2340135) \operatorname{erf}(\sqrt{z}) z^{13/2}}{623700} + \frac{1}{311850} (16 z^{11} + 912 z^{10} + 18872 z^9 + 174540 z^8 + 701145 z^7 + 887040 z^6 - 241920 z^5 + 181440 z^4 - 201600 z^3 + 264600 z^2 - 340200 z + 311850)$$

07.25.03.ajrr.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32 z^5 - 1840 z^4 + 38640 z^3 - 367080 z^2 + 1560090 z - 2340135) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{623700} + \frac{1}{311850} (-16 z^{11} + 912 z^{10} - 18872 z^9 + 174540 z^8 - 701145 z^7 + 887040 z^6 + 241920 z^5 + 181440 z^4 + 201600 z^3 + 264600 z^2 + 340200 z + 311850)$$

07.25.03.ajrs.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, 3; z\right) = \frac{1}{1871100} \left(e^z (256z^{11} + 13056z^{10} + 235776z^9 + 1827840z^8 + 5677920z^7 + 4122720z^6 - 2142000z^5 + 2388960z^4 - 3113775z^3 + 3794175z^2 - 3572100z + 1871100) \right)$$

07.25.03.ajrt.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{124740z^2} \left(16z^{12} + 704z^{11} + 10432z^{10} + 60120z^9 + 104355z^8 - 32232z^7 + 27720z^6 - 35280z^5 + 50400z^4 - 54000z^3 - 56700z^2 + 604800z - 1814400 \right) + \frac{1}{249480z^{5/2}} \left(e^z \sqrt{\pi} (32z^{13} + 1424z^{12} + 21552z^{11} + 130008z^{10} + 260010z^9 + 45z^8 - 360z^7 + 2520z^6 - 15120z^5 + 75600z^4 - 302400z^3 + 907200z^2 - 1814400z + 1814400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajru.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{124740z^2} \left(16z^{12} - 704z^{11} + 10432z^{10} - 60120z^9 + 104355z^8 + 32232z^7 + 27720z^6 + 35280z^5 + 50400z^4 + 54000z^3 - 56700z^2 - 604800z - 1814400 \right) + \frac{1}{249480z^{5/2}} \left(e^{-z} \sqrt{\pi} (-32z^{13} + 1424z^{12} - 21552z^{11} + 130008z^{10} - 260010z^9 + 45z^8 + 360z^7 + 2520z^6 + 15120z^5 + 75600z^4 + 302400z^3 + 907200z^2 + 1814400z + 1814400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajrv.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, 4; z\right) = \frac{1}{623700} \left(e^z (256z^{10} + 9728z^9 + 119040z^8 + 518400z^7 + 493920z^6 - 322560z^5 + 438480z^4 - 680400z^3 + 968625z^2 - 1048950z + 623700) \right)$$

07.25.03.ajrw.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{35640z^3} \left(16z^{12} + 496z^{11} + 4488z^{10} + 10980z^9 - 3747z^8 + 3312z^7 - 2520z^6 - 10080z^5 + 97200z^4 - 534600z^3 + 2237760z^2 - 7257600z + 16329600 \right) + \frac{1}{71280z^{7/2}} \left(e^z \sqrt{\pi} (32z^{13} + 1008z^{12} + 9456z^{11} + 25992z^{10} + 90z^9 - 765z^8 + 5760z^7 - 37800z^6 + 211680z^5 - 982800z^4 + 3628800z^3 - 9979200z^2 + 18144000z - 16329600) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajrx.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{35640z^3}(-16z^{12} + 496z^{11} - 4488z^{10} + 10980z^9 + 3747z^8 + 3312z^7 + 2520z^6 - 10080z^5 - 97200z^4 - 534600z^3 - 2237760z^2 - 7257600z - 16329600) + \frac{1}{71280z^{7/2}}\left(e^{-z}\sqrt{\pi}(32z^{13} - 1008z^{12} + 9456z^{11} - 25992z^{10} + 90z^9 + 765z^8 + 5760z^7 + 37800z^6 + 211680z^5 + 982800z^4 + 3628800z^3 + 9979200z^2 + 18144000z + 16329600)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ajry.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, 5; z\right) = \frac{1}{155925}e^z(256z^9 + 6400z^8 + 42240z^7 + 53760z^6 - 43680z^5 + 70560z^4 - 126000z^3 + 201600z^2 - 240975z + 155925)$$

07.25.03.ajrz.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{7920z^4}(16z^{12} + 288z^{11} + 1040z^{10} - 336z^9 - 153z^8 + 4200z^7 - 35280z^6 + 237600z^5 - 1353600z^4 + 6471360z^3 - 25401600z^2 + 79833600z - 190512000) + \frac{1}{15840z^{9/2}}\left(e^z\sqrt{\pi}(32z^{13} + 592z^{12} + 2352z^{11} + 120z^{10} - 1110z^9 + 9225z^8 - 68040z^7 + 438480z^6 - 2419200z^5 + 11113200z^4 - 40824000z^3 + 112492800z^2 - 206841600z + 190512000)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ajs0.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{7920z^4}(16z^{12} - 288z^{11} + 1040z^{10} + 336z^9 - 153z^8 - 4200z^7 - 35280z^6 - 237600z^5 - 1353600z^4 - 6471360z^3 - 25401600z^2 - 79833600z - 190512000) + \frac{1}{15840z^{9/2}}\left(e^{-z}\sqrt{\pi}(-32z^{13} + 592z^{12} - 2352z^{11} + 120z^{10} + 1110z^9 + 9225z^8 + 68040z^7 + 438480z^6 + 2419200z^5 + 11113200z^4 + 40824000z^3 + 112492800z^2 + 206841600z + 190512000)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ajs1.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{11}{2}, 6; z\right) = \frac{e^z(256z^8 + 3072z^7 + 5376z^6 - 5376z^5 + 10080z^4 - 20160z^3 + 35280z^2 - 45360z + 31185)}{31185}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = -\frac{9}{2}$

07.25.03.ajs2.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{40\,186\,125} (512 z^{17} + 69\,632 z^{16} + 3\,965\,184 z^{15} + 123\,890\,304 z^{14} + 2\,339\,264\,928 z^{13} + 27\,727\,388\,640 z^{12} + 207\,696\,767\,040 z^{11} + 966\,119\,353\,920 z^{10} + 2\,671\,074\,282\,240 z^9 + 4\,043\,596\,999\,680 z^8 + 2\,874\,036\,211\,200 z^7 + 685\,703\,491\,200 z^6 + 16\,345\,929\,600 z^5 + 314\,344\,800 z^4 + 57\,153\,600 z^3 + 29\,767\,500 z^2 + 29\,767\,500 z + 40\,186\,125) + \frac{1}{40\,186\,125} (16 e^z \sqrt{\pi} (32 z^{35/2} + 4368 z^{33/2} + 249\,984 z^{31/2} + 7\,864\,920 z^{29/2} + 149\,957\,010 z^{27/2} + 1\,802\,482\,605 z^{25/2} + 13\,783\,051\,485 z^{23/2} + 66\,158\,385\,930 z^{21/2} + 192\,275\,625\,150 z^{19/2} + 316\,640\,734\,200 z^{17/2} + 262\,807\,335\,000 z^{15/2} + 87\,687\,910\,800 z^{13/2} + 6\,666\,332\,400 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajs3.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{40\,186\,125} (-512 z^{17} + 69\,632 z^{16} - 3\,965\,184 z^{15} + 123\,890\,304 z^{14} - 2\,339\,264\,928 z^{13} + 27\,727\,388\,640 z^{12} - 207\,696\,767\,040 z^{11} + 966\,119\,353\,920 z^{10} - 2\,671\,074\,282\,240 z^9 + 4\,043\,596\,999\,680 z^8 - 2\,874\,036\,211\,200 z^7 + 685\,703\,491\,200 z^6 - 16\,345\,929\,600 z^5 + 314\,344\,800 z^4 - 57\,153\,600 z^3 + 29\,767\,500 z^2 - 29\,767\,500 z + 40\,186\,125) + \frac{1}{40\,186\,125} (16 e^{-z} \sqrt{\pi} (32 z^{35/2} - 4368 z^{33/2} + 249\,984 z^{31/2} - 7\,864\,920 z^{29/2} + 149\,957\,010 z^{27/2} - 1\,802\,482\,605 z^{25/2} + 13\,783\,051\,485 z^{23/2} - 66\,158\,385\,930 z^{21/2} + 192\,275\,625\,150 z^{19/2} - 316\,640\,734\,200 z^{17/2} + 262\,807\,335\,000 z^{15/2} - 87\,687\,910\,800 z^{13/2} + 6\,666\,332\,400 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajs4.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{44\,651\,25} (-256 z^{16} - 31\,744 z^{15} - 1\,633\,536 z^{14} - 45\,625\,344 z^{13} - 759\,782\,640 z^{12} - 7\,806\,345\,120 z^{11} - 49\,533\,714\,720 z^{10} - 188\,989\,637\,760 z^9 - 408\,287\,917\,440 z^8 - 445\,172\,716\,800 z^7 - 193\,014\,057\,600 z^6 - 16\,345\,929\,600 z^5 + 314\,344\,800 z^4 + 19\,051\,200 z^3 + 5\,953\,500 z^2 + 4\,252\,500 z + 44\,651\,25) - \frac{1}{44\,651\,25} (8 e^z \sqrt{\pi} (32 z^{33/2} + 3984 z^{31/2} + 206\,160 z^{29/2} + 5\,803\,320 z^{27/2} + 97\,727\,130 z^{25/2} + 1\,020\,665\,565 z^{23/2} + 6\,638\,392\,530 z^{21/2} + 26\,328\,030\,750 z^{19/2} + 60\,635\,471\,400 z^{17/2} + 74\,098\,848\,600 z^{15/2} + 40\,510\,789\,200 z^{13/2} + 6\,666\,332\,400 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajs5.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{4465125} \left(-256z^{16} + 31744z^{15} - 1633536z^{14} + 45625344z^{13} - 759782640z^{12} + 7806345120z^{11} - 49533714720z^{10} + 188989637760z^9 - 408287917440z^8 + 445172716800z^7 - 193014057600z^6 + 16345929600z^5 + 314344800z^4 - 19051200z^3 + 5953500z^2 - 4252500z + 4465125 \right) + \frac{1}{4465125} \left(8e^{-z}\sqrt{\pi} \left(32z^{33/2} - 3984z^{31/2} + 206160z^{29/2} - 5803320z^{27/2} + 97727130z^{25/2} - 1020665565z^{23/2} + 6638392530z^{21/2} - 26328030750z^{19/2} + 60635471400z^{17/2} - 74098848600z^{15/2} + 40510789200z^{13/2} - 6666332400z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajs6.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{637875} \left(128z^{15} + 14336z^{14} + 659136z^{13} + 16228320z^{12} + 234148680z^{11} + 2037336840z^{10} + 10605036960z^9 + 31652811360z^8 + 49433198400z^7 + 33269745600z^6 + 5448643200z^5 - 314344800z^4 + 19051200z^3 + 1984500z^2 + 850500z + 637875 \right) + \frac{1}{637875} \left(4e^z\sqrt{\pi} \left(32z^{31/2} + 3600z^{29/2} + 166560z^{27/2} + 4137720z^{25/2} + 60487650z^{23/2} + 536764365z^{21/2} + 2881041975z^{19/2} + 9041778900z^{17/2} + 15426576900z^{15/2} + 12392541000z^{13/2} + 3333166200z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajs7.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{637875} \left(-128z^{15} + 14336z^{14} - 659136z^{13} + 16228320z^{12} - 234148680z^{11} + 2037336840z^{10} - 10605036960z^9 + 31652811360z^8 - 49433198400z^7 + 33269745600z^6 - 5448643200z^5 - 314344800z^4 - 19051200z^3 + 1984500z^2 - 850500z + 637875 \right) + \frac{1}{637875} \left(4e^{-z}\sqrt{\pi} \left(32z^{31/2} - 3600z^{29/2} + 166560z^{27/2} - 4137720z^{25/2} + 60487650z^{23/2} - 536764365z^{21/2} + 2881041975z^{19/2} - 9041778900z^{17/2} + 15426576900z^{15/2} - 12392541000z^{13/2} + 3333166200z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajs8.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{127575} \left(-64z^{14} - 6400z^{13} - 259200z^{12} - 5525280z^{11} - 67468716z^{10} - 481385520z^9 - 1960713360z^8 - 4239079200z^7 - 4117932000z^6 - 1089728640z^5 + 104781600z^4 - 19051200z^3 + 1984500z^2 + 283500z + 127575 \right) - \frac{1}{127575} \left(2e^z\sqrt{\pi} \left(32z^{29/2} + 3216z^{27/2} + 131184z^{25/2} + 2825880z^{23/2} + 35054730z^{21/2} + 256326525z^{19/2} + 1086756300z^{17/2} + 2521241100z^{15/2} + 2820371400z^{13/2} + 1111055400z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajs9.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{127575} \left(-64 z^{14} + 6400 z^{13} - 259200 z^{12} + 5525280 z^{11} - 67468716 z^{10} + 481385520 z^9 - 1960713360 z^8 + 4239079200 z^7 - 4117932000 z^6 + 1089728640 z^5 + 104781600 z^4 + 19051200 z^3 + 1984500 z^2 - 283500 z + 127575 \right) +$$

$$\frac{1}{127575} \left(2 e^{-z} \sqrt{\pi} \left(32 z^{29/2} - 3216 z^{27/2} + 131184 z^{25/2} - 2825880 z^{23/2} + 35054730 z^{21/2} - 256326525 z^{19/2} + 1086756300 z^{17/2} - 2521241100 z^{15/2} + 2820371400 z^{13/2} - 1111055400 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajsa.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{42525} \left(32 z^{13} + 2816 z^{12} + 98640 z^{11} + 1777608 z^{10} + 17781834 z^9 + 99215910 z^8 + 292912380 z^7 + 395822700 z^6 + 155675520 z^5 - 20956320 z^4 + 6350400 z^3 - 1984500 z^2 + 283500 z + 42525 \right) +$$

$$\frac{1}{42525} \left(e^z \sqrt{\pi} \left(32 z^{27/2} + 2832 z^{25/2} + 100032 z^{23/2} + 1825560 z^{21/2} + 18624690 z^{19/2} + 107329005 z^{17/2} + 335453265 z^{15/2} + 508521510 z^{13/2} + 277763850 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajsb.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{42525} \left(-32 z^{13} + 2816 z^{12} - 98640 z^{11} + 1777608 z^{10} - 17781834 z^9 + 99215910 z^8 - 292912380 z^7 + 395822700 z^6 - 155675520 z^5 - 20956320 z^4 - 6350400 z^3 - 1984500 z^2 - 283500 z + 42525 \right) +$$

$$\frac{1}{42525} \left(e^{-z} \sqrt{\pi} \left(32 z^{27/2} - 2832 z^{25/2} + 100032 z^{23/2} - 1825560 z^{21/2} + 18624690 z^{19/2} - 107329005 z^{17/2} + 335453265 z^{15/2} - 508521510 z^{13/2} + 277763850 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajsc.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{42525} \left(-16 z^{12} - 1216 z^{11} - 35952 z^{10} - 529872 z^9 - 4138599 z^8 - 16724430 z^7 - 30933630 z^6 - 17297280 z^5 + 2993760 z^4 - 1270080 z^3 + 661500 z^2 - 283500 z + 42525 \right) +$$

$$\frac{1}{85050} \left(e^z \sqrt{\pi} \left(-32 z^{25/2} - 2448 z^{23/2} - 73104 z^{21/2} - 1094520 z^{19/2} - 8774010 z^{17/2} - 37136925 z^{15/2} - 75494790 z^{13/2} - 55552770 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajsd.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{42525} \left(-16z^{12} + 1216z^{11} - 35952z^{10} + 529872z^9 - 4138599z^8 + 16724430z^7 - 30933630z^6 + 17297280z^5 + 2993760z^4 + 1270080z^3 + 661500z^2 + 283500z + 42525\right) + \frac{1}{85050} \left(e^{-z} \sqrt{\pi} (32z^{25/2} - 2448z^{23/2} + 73104z^{21/2} - 1094520z^{19/2} + 8774010z^{17/2} - 37136925z^{15/2} + 75494790z^{13/2} - 55552770z^{11/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ajse.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, 1; z\right) = -\frac{1}{340200} \left(e^z (128z^{12} + 9024z^{11} + 244896z^{10} + 3267120z^9 + 22650120z^8 + 78790140z^7 + 118130670z^6 + 42571305z^5 - 10919475z^4 + 5783400z^3 - 3288600z^2 + 1474200z - 340200)\right)$$

07.25.03.ajsf.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{85050} \left(-16z^{11} - 1024z^{10} - 24696z^9 - 283404z^8 - 1599105z^7 - 4046805z^6 - 3144960z^5 + 665280z^4 - 362880z^3 + 264600z^2 - 189000z + 85050\right) - \frac{1}{170100} e^z \sqrt{\pi} z^{11/2} (32z^6 + 2064z^5 + 50400z^4 + 590520z^3 + 3459330z^2 + 9462285z + 9258795) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajsg.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{85050} \left(16z^{11} - 1024z^{10} + 24696z^9 - 283404z^8 + 1599105z^7 - 4046805z^6 + 3144960z^5 + 665280z^4 + 362880z^3 + 264600z^2 + 189000z + 85050\right) - \frac{1}{170100} e^{-z} \sqrt{\pi} z^{11/2} (32z^6 - 2064z^5 + 50400z^4 - 590520z^3 + 3459330z^2 - 9462285z + 9258795) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajsh.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, 2; z\right) = -\frac{1}{340200} \left(e^z (128z^{11} + 7488z^{10} + 162528z^9 + 1641840z^8 + 7873560z^7 + 15801660z^6 + 7519050z^5 - 2542995z^4 + 1795500z^3 - 1398600z^2 + 907200z - 340200)\right)$$

07.25.03.ajsl.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{56700} (-16z^{10} - 832z^9 - 15552z^8 - 128280z^7 - 451395z^6 - 483840z^5 + 120960z^4 - 80640z^3 + 75600z^2 - 75600z + 56700) - \frac{e^z \sqrt{\pi} z^{11/2} (32z^5 + 1680z^4 + 31920z^3 + 271320z^2 + 1017450z + 1322685) \operatorname{erf}(\sqrt{z})}{113400}$$

07.25.03.ajsl.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32z^5 - 1680z^4 + 31920z^3 - 271320z^2 + 1017450z - 1322685) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{113400} + \frac{1}{56700} (-16z^{10} + 832z^9 - 15552z^8 + 128280z^7 - 451395z^6 + 483840z^5 + 120960z^4 + 80640z^3 + 75600z^2 + 75600z + 56700)$$

07.25.03.ajsk.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, 3; z\right) = -\frac{1}{170100} (e^z (128z^{10} + 5952z^9 + 97056z^8 + 671280z^7 + 1832040z^6 + 1145340z^5 - 498330z^4 + 446985z^3 - 439425z^2 + 359100z - 170100))$$

07.25.03.ajsl.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{22680z^2} (-16z^{11} - 640z^{10} - 8520z^9 - 43380z^8 - 64509z^7 + 18585z^6 - 14490z^5 + 15750z^4 - 16200z^3 + 75600z - 226800) + \frac{1}{45360z^{5/2}} (e^z \sqrt{\pi} (-32z^{12} - 1296z^{11} - 17664z^{10} - 94680z^9 - 165330z^8 - 45z^7 + 315z^6 - 1890z^5 + 9450z^4 - 37800z^3 + 113400z^2 - 226800z + 226800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajsm.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{1}{22680z^2} (16z^{11} - 640z^{10} + 8520z^9 - 43380z^8 + 64509z^7 + 18585z^6 + 14490z^5 + 15750z^4 + 16200z^3 - 75600z - 226800) + \frac{1}{45360z^{5/2}} (e^{-z} \sqrt{\pi} (-32z^{12} + 1296z^{11} - 17664z^{10} + 94680z^9 - 165330z^8 + 45z^7 + 315z^6 + 1890z^5 + 9450z^4 + 37800z^3 + 113400z^2 + 226800z + 226800) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajsn.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, 4; z\right) = -\frac{1}{56700} e^z (128z^9 + 4416z^8 + 48480z^7 + 186480z^6 + 153720z^5 - 84420z^4 + 92610z^3 - 108675z^2 + 103950z - 56700)$$

07.25.03.ajso.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{6480 z^3} (-16 z^{11} - 448 z^{10} - 3600 z^9 - 7584 z^8 + 2433 z^7 - 1890 z^6 + 630 z^5 + 9000 z^4 - 59400 z^3 + 257040 z^2 - 831600 z + 1814400) + \frac{1}{12960 z^{7/2}} \left(e^z \sqrt{\pi} (-32 z^{12} - 912 z^{11} - 7632 z^{10} - 18360 z^9 - 90 z^8 + 675 z^7 - 4410 z^6 + 24570 z^5 - 113400 z^4 + 415800 z^3 - 1134000 z^2 + 2041200 z - 1814400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajsp.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{6480 z^3} (-16 z^{11} + 448 z^{10} - 3600 z^9 + 7584 z^8 + 2433 z^7 + 1890 z^6 + 630 z^5 - 9000 z^4 - 59400 z^3 - 257040 z^2 - 831600 z - 1814400) + \frac{1}{12960 z^{7/2}} \left(e^{-z} \sqrt{\pi} (32 z^{12} - 912 z^{11} + 7632 z^{10} - 18360 z^9 + 90 z^8 + 675 z^7 + 4410 z^6 + 24570 z^5 + 113400 z^4 + 415800 z^3 + 1134000 z^2 + 2041200 z + 1814400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajsq.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, 5; z\right) = -\frac{1}{14175} e^z (128 z^8 + 2880 z^7 + 16800 z^6 + 18480 z^5 - 12600 z^4 + 16380 z^3 - 22050 z^2 + 23625 z - 14175)$$

07.25.03.ajsr.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{1440 z^4} (-16 z^{11} - 256 z^{10} - 792 z^9 + 228 z^8 + 231 z^7 - 3465 z^6 + 24660 z^5 - 141300 z^4 + 672840 z^3 - 2623320 z^2 + 8164800 z - 19051200) + \frac{1}{2880 z^{9/2}} \left(e^z \sqrt{\pi} (-32 z^{12} - 528 z^{11} - 1824 z^{10} - 120 z^9 + 990 z^8 - 7245 z^7 + 46305 z^6 - 253260 z^5 + 1152900 z^4 - 4195800 z^3 + 11453400 z^2 - 20865600 z + 19051200) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajss.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{1440 z^4} (16 z^{11} - 256 z^{10} + 792 z^9 + 228 z^8 - 231 z^7 - 3465 z^6 - 24660 z^5 - 141300 z^4 - 672840 z^3 - 2623320 z^2 - 8164800 z - 19051200) + \frac{1}{2880 z^{9/2}} \left(e^{-z} \sqrt{\pi} (-32 z^{12} + 528 z^{11} - 1824 z^{10} + 120 z^9 + 990 z^8 + 7245 z^7 + 46305 z^6 + 253260 z^5 + 1152900 z^4 + 4195800 z^3 + 11453400 z^2 + 20865600 z + 19051200) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajst.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{9}{2}, 6; z\right) = -\frac{e^z (128 z^7 + 1344 z^6 + 2016 z^5 - 1680 z^4 + 2520 z^3 - 3780 z^2 + 4410 z - 2835)}{2835}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = -\frac{7}{2}$

07.25.03.ajsu.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{496125} (128 z^{15} + 14464 z^{14} + 672192 z^{13} + 16770016 z^{12} + 246049800 z^{11} + 2188432800 z^{10} + 11741129040 z^9 + 36640293120 z^8 + 61559904960 z^7 + 47891376000 z^6 + 12355200000 z^5 + 314344800 z^4 + 6350400 z^3 + 1190700 z^2 + 607500 z + 496125) + \frac{1}{496125} (4 e^z \sqrt{\pi} (32 z^{31/2} + 3632 z^{29/2} + 169840 z^{27/2} + 4274760 z^{25/2} + 63529050 z^{23/2} + 575962215 z^{21/2} + 3182619240 z^{19/2} + 10414934550 z^{17/2} + 18975733200 z^{15/2} + 17171649000 z^{13/2} + 6167491200 z^{11/2} + 498841200 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajsv.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{496125} (-128 z^{15} + 14464 z^{14} - 672192 z^{13} + 16770016 z^{12} - 246049800 z^{11} + 2188432800 z^{10} - 11741129040 z^9 + 36640293120 z^8 - 61559904960 z^7 + 47891376000 z^6 - 12355200000 z^5 + 314344800 z^4 - 6350400 z^3 + 1190700 z^2 - 607500 z + 496125) + \frac{1}{496125} (4 e^{-z} \sqrt{\pi} (32 z^{31/2} - 3632 z^{29/2} + 169840 z^{27/2} - 4274760 z^{25/2} + 63529050 z^{23/2} - 575962215 z^{21/2} + 3182619240 z^{19/2} - 10414934550 z^{17/2} + 18975733200 z^{15/2} - 17171649000 z^{13/2} + 6167491200 z^{11/2} - 498841200 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajsw.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{70875} (-64 z^{14} - 6528 z^{13} - 270848 z^{12} - 5950560 z^{11} - 75547980 z^{10} - 568046040 z^9 - 2493740880 z^8 - 6063353280 z^7 - 7310815200 z^6 - 3453278400 z^5 - 314344800 z^4 + 6350400 z^3 + 396900 z^2 + 121500 z + 70875) - \frac{1}{70875} (2 e^z \sqrt{\pi} (32 z^{29/2} + 3280 z^{27/2} + 137040 z^{25/2} + 3041400 z^{23/2} + 39197850 z^{21/2} + 301577265 z^{19/2} + 1373155650 z^{17/2} + 3549156300 z^{15/2} + 4779108000 z^{13/2} + 2834325000 z^{11/2} + 498841200 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajsx.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{70875} (-64 z^{14} + 6528 z^{13} - 270848 z^{12} + 5950560 z^{11} - 75547980 z^{10} + 568046040 z^9 - 2493740880 z^8 + 6063353280 z^7 - 7310815200 z^6 + 3453278400 z^5 - 314344800 z^4 - 6350400 z^3 + 396900 z^2 - 121500 z + 70875) + \frac{1}{70875} (2 e^{-z} \sqrt{\pi} (32 z^{29/2} - 3280 z^{27/2} + 137040 z^{25/2} - 3041400 z^{23/2} + 39197850 z^{21/2} - 301577265 z^{19/2} + 1373155650 z^{17/2} - 3549156300 z^{15/2} + 4779108000 z^{13/2} - 2834325000 z^{11/2} + 498841200 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajsy.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{14175} (32 z^{13} + 2912 z^{12} + 106320 z^{11} + 2019816 z^{10} + 21665130 z^9 + 133256880 z^8 + 456068520 z^7 + 798220800 z^6 + 590887440 z^5 + 104781600 z^4 - 6350400 z^3 + 396900 z^2 + 40500 z + 14175) + \frac{1}{14175} (e^z \sqrt{\pi} (32 z^{27/2} + 2928 z^{25/2} + 107760 z^{23/2} + 2071560 z^{21/2} + 22625370 z^{19/2} + 143199675 z^{17/2} + 513957600 z^{15/2} + 979368300 z^{13/2} + 861634800 z^{11/2} + 249420600 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajsz.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{14175} (-32 z^{13} + 2912 z^{12} - 106320 z^{11} + 2019816 z^{10} - 21665130 z^9 + 133256880 z^8 - 456068520 z^7 + 798220800 z^6 - 590887440 z^5 + 104781600 z^4 + 6350400 z^3 + 396900 z^2 - 40500 z + 14175) + \frac{1}{14175} (e^{-z} \sqrt{\pi} (32 z^{27/2} - 2928 z^{25/2} + 107760 z^{23/2} - 2071560 z^{21/2} + 22625370 z^{19/2} - 143199675 z^{17/2} + 513957600 z^{15/2} - 979368300 z^{13/2} + 861634800 z^{11/2} - 249420600 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajt0.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{4725} (-16 z^{12} - 1280 z^{11} - 40368 z^{10} - 647216 z^9 - 5673495 z^8 - 27192690 z^7 - 67066350 z^6 - 72535320 z^5 - 20956320 z^4 + 2116800 z^3 - 396900 z^2 + 40500 z + 4725) + \frac{1}{9450} (e^z \sqrt{\pi} (-32 z^{25/2} - 2576 z^{23/2} - 82000 z^{21/2} - 1333560 z^{19/2} - 11956890 z^{17/2} - 59501445 z^{15/2} - 156948930 z^{13/2} - 194623650 z^{11/2} - 83140200 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajt1.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{4725} (-16 z^{12} + 1280 z^{11} - 40368 z^{10} + 647216 z^9 - 5673495 z^8 + 27192690 z^7 - 67066350 z^6 + 72535320 z^5 - 20956320 z^4 - 2116800 z^3 - 396900 z^2 - 40500 z + 4725) + \frac{1}{9450} (e^{-z} \sqrt{\pi} (32 z^{25/2} - 2576 z^{23/2} + 82000 z^{21/2} - 1333560 z^{19/2} + 11956890 z^{17/2} - 59501445 z^{15/2} + 156948930 z^{13/2} - 194623650 z^{11/2} + 83140200 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajt2.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{9450} (16z^{11} + 1104z^{10} + 29336z^9 + 383724z^8 + 2617065z^7 + 9033180z^6 + 13809510z^5 + 5987520z^4 - 846720z^3 + 264600z^2 - 81000z + 9450) + \frac{1}{18900} (e^z \sqrt{\pi} (32z^{23/2} + 2224z^{21/2} + 59760z^{19/2} + 795720z^{17/2} + 5591130z^{15/2} + 20363535z^{13/2} + 34767720z^{11/2} + 20785050z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajt3.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{9450} (-16z^{11} + 1104z^{10} - 29336z^9 + 383724z^8 - 2617065z^7 + 9033180z^6 - 13809510z^5 + 5987520z^4 + 846720z^3 + 264600z^2 + 81000z + 9450) + \frac{1}{18900} (e^{-z} \sqrt{\pi} (32z^{23/2} - 2224z^{21/2} + 59760z^{19/2} - 795720z^{17/2} + 5591130z^{15/2} - 20363535z^{13/2} + 34767720z^{11/2} - 20785050z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajt4.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, 1; z\right) = \frac{1}{37800} (e^z (64z^{11} + 4096z^{10} + 99920z^9 + 1183920z^8 + 7181340z^7 + 21441720z^6 + 26902755z^5 + 7834275z^4 - 1542600z^3 + 577800z^2 - 199800z + 37800))$$

07.25.03.ajt5.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{37800} e^z \sqrt{\pi} (32z^6 + 1872z^5 + 41040z^4 + 426360z^3 + 2180250z^2 + 5101785z + 4157010) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{18900} (16z^{10} + 928z^9 + 20064z^8 + 203592z^7 + 997275z^6 + 2132910z^5 + 1330560z^4 - 241920z^3 + 105840z^2 - 54000z + 18900)$$

07.25.03.ajt6.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{18900} (16z^{10} - 928z^9 + 20064z^8 - 203592z^7 + 997275z^6 - 2132910z^5 + 1330560z^4 + 241920z^3 + 105840z^2 + 54000z + 18900) - \frac{1}{37800} e^{-z} \sqrt{\pi} z^{9/2} (32z^6 - 1872z^5 + 41040z^4 - 426360z^3 + 2180250z^2 - 5101785z + 4157010) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajt7.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, 2; z\right) = \frac{1}{37800} (e^z (64z^{10} + 3392z^9 + 66000z^8 + 589920z^7 + 2461980z^6 + 4207860z^5 + 1655595z^4 - 443700z^3 + 232200z^2 - 118800z + 37800))$$

07.25.03.ajt8.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z \sqrt{\pi} (32 z^5 + 1520 z^4 + 25\,840 z^3 + 193\,800 z^2 + 629\,850 z + 692\,835) \operatorname{erf}(\sqrt{z}) z^{9/2}}{25\,200} + \frac{1}{12\,600} (16 z^9 + 752 z^8 + 12\,552 z^7 + 90\,980 z^6 + 274\,845 z^5 + 241\,920 z^4 - 53\,760 z^3 + 30\,240 z^2 - 21\,600 z + 12\,600)$$

07.25.03.ajt9.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32 z^5 - 1520 z^4 + 25\,840 z^3 - 193\,800 z^2 + 629\,850 z - 692\,835) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{25\,200} + \frac{1}{12\,600} (-16 z^9 + 752 z^8 - 12\,552 z^7 + 90\,980 z^6 - 274\,845 z^5 + 241\,920 z^4 + 53\,760 z^3 + 30\,240 z^2 + 21\,600 z + 12\,600)$$

07.25.03.ajta.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, 3; z\right) = \frac{1}{18\,900} e^z (64 z^9 + 2688 z^8 + 39\,120 z^7 + 237\,840 z^6 + 559\,260 z^5 + 293\,040 z^4 - 102\,645 z^3 + 69\,525 z^2 - 45\,900 z + 18\,900)$$

07.25.03.ajtb.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{5040 z^2} (16 z^{10} + 576 z^9 + 6800 z^8 + 30\,048 z^7 + 37\,215 z^6 - 9750 z^5 + 6570 z^4 - 5400 z^3 + 1800 z^2 + 10\,800 z - 32\,400) + \frac{1}{10\,080 z^{5/2}} (e^z \sqrt{\pi} (32 z^{11} + 1168 z^{10} + 14\,160 z^9 + 66\,360 z^8 + 98\,970 z^7 + 45 z^6 - 270 z^5 + 1350 z^4 - 5400 z^3 + 16\,200 z^2 - 32\,400 z + 32\,400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajtc.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{1}{5040 z^2} (16 z^{10} - 576 z^9 + 6800 z^8 - 30\,048 z^7 + 37\,215 z^6 + 9750 z^5 + 6570 z^4 + 5400 z^3 + 1800 z^2 - 10\,800 z - 32\,400) + \frac{1}{10\,080 z^{5/2}} (e^{-z} \sqrt{\pi} (-32 z^{11} + 1168 z^{10} - 14\,160 z^9 + 66\,360 z^8 - 98\,970 z^7 + 45 z^6 + 270 z^5 + 1350 z^4 + 5400 z^3 + 16\,200 z^2 + 32\,400 z + 32\,400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajtd.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, 4; z\right) = \frac{e^z (64 z^8 + 1984 z^7 + 19\,280 z^6 + 64\,320 z^5 + 44\,700 z^4 - 19\,860 z^3 + 16\,515 z^2 - 13\,050 z + 6300)}{6300}$$

07.25.03.ajte.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{1440 z^3} (16 z^{10} + 400 z^9 + 2808 z^8 + 4956 z^7 - 1455 z^6 + 900 z^5 + 450 z^4 - 7200 z^3 + 33480 z^2 - 108000 z + 226800) + \frac{1}{2880 z^{7/2}} (e^z \sqrt{\pi} (32 z^{11} + 816 z^{10} + 6000 z^9 + 12360 z^8 + 90 z^7 - 585 z^6 + 3240 z^5 - 14850 z^4 + 54000 z^3 - 145800 z^2 + 259200 z - 226800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajtf.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{1440 z^3} (-16 z^{10} + 400 z^9 - 2808 z^8 + 4956 z^7 + 1455 z^6 + 900 z^5 - 450 z^4 - 7200 z^3 - 33480 z^2 - 108000 z - 226800) + \frac{1}{2880 z^{7/2}} (e^{-z} \sqrt{\pi} (32 z^{11} - 816 z^{10} + 6000 z^9 - 12360 z^8 + 90 z^7 + 585 z^6 + 3240 z^5 + 14850 z^4 + 54000 z^3 + 145800 z^2 + 259200 z + 226800) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajtg.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, 5; z\right) = \frac{e^z (64 z^7 + 1280 z^6 + 6480 z^5 + 6000 z^4 - 3300 z^3 + 3240 z^2 - 2925 z + 1575)}{1575}$$

07.25.03.ajth.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{320 z^4} (16 z^{10} + 224 z^9 + 576 z^8 - 136 z^7 - 285 z^6 + 2790 z^5 - 16500 z^4 + 78480 z^3 - 303480 z^2 + 932400 z - 2116800) + \frac{1}{640 z^{9/2}} (e^z \sqrt{\pi} (32 z^{11} + 464 z^{10} + 1360 z^9 + 120 z^8 - 870 z^7 + 5505 z^6 - 29790 z^5 + 134100 z^4 - 482400 z^3 + 1301400 z^2 - 2343600 z + 2116800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajti.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{320 z^4} (16 z^{10} - 224 z^9 + 576 z^8 + 136 z^7 - 285 z^6 - 2790 z^5 - 16500 z^4 - 78480 z^3 - 303480 z^2 - 932400 z - 2116800) + \frac{1}{640 z^{9/2}} (e^{-z} \sqrt{\pi} (-32 z^{11} + 464 z^{10} - 1360 z^9 + 120 z^8 + 870 z^7 + 5505 z^6 + 29790 z^5 + 134100 z^4 + 482400 z^3 + 1301400 z^2 + 2343600 z + 2116800) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajtj.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{7}{2}, 6; z\right) = \frac{1}{315} e^z (64 z^6 + 576 z^5 + 720 z^4 - 480 z^3 + 540 z^2 - 540 z + 315)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = -\frac{5}{2}$

07.25.03.ajtk.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{10125} (32 z^{13} + 2944 z^{12} + 108944 z^{11} + 2105160 z^{10} + 23088810 z^9 + 146419470 z^8 + 524129040 z^7 +$$

$$987189840 z^6 + 844786800 z^5 + 235580400 z^4 + 6350400 z^3 + 132300 z^2 + 24300 z + 10125) +$$

$$\frac{1}{10125} \left(e^z \sqrt{\pi} (32 z^{27/2} + 2960 z^{25/2} + 110400 z^{23/2} + 2158200 z^{21/2} + 24090450 z^{19/2} + 157034565 z^{17/2} +$$

$$587982825 z^{15/2} + 1197225000 z^{13/2} + 1187433000 z^{11/2} + 459459000 z^{9/2} + 39382200 z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajtl.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{10125} (-32 z^{13} + 2944 z^{12} - 108944 z^{11} + 2105160 z^{10} - 23088810 z^9 + 146419470 z^8 - 524129040 z^7 +$$

$$987189840 z^6 - 844786800 z^5 + 235580400 z^4 - 6350400 z^3 + 132300 z^2 - 24300 z + 10125) +$$

$$\frac{1}{10125} \left(e^{-z} \sqrt{\pi} (32 z^{27/2} - 2960 z^{25/2} + 110400 z^{23/2} - 2158200 z^{21/2} + 24090450 z^{19/2} - 157034565 z^{17/2} +$$

$$587982825 z^{15/2} - 1197225000 z^{13/2} + 1187433000 z^{11/2} - 459459000 z^{9/2} + 39382200 z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajtm.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{2025} (-16 z^{12} - 1312 z^{11} - 42672 z^{10} - 711840 z^9 - 6581295 z^8 - 34030260 z^7 - 94484520 z^6 - 126949680 z^5 -$$

$$65399400 z^4 - 6350400 z^3 + 132300 z^2 + 8100 z + 2025) +$$

$$\frac{1}{4050} \left(e^z \sqrt{\pi} (-32 z^{25/2} - 2640 z^{23/2} - 86640 z^{21/2} - 1465080 z^{19/2} - 13834890 z^{17/2} - 74025225 z^{15/2} -$$

$$217856700 z^{13/2} - 325798200 z^{11/2} - 210038400 z^{9/2} - 39382200 z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajtn.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{2025} (-16 z^{12} + 1312 z^{11} - 42672 z^{10} + 711840 z^9 - 6581295 z^8 + 34030260 z^7 - 94484520 z^6 + 126949680 z^5 -$$

$$65399400 z^4 + 6350400 z^3 + 132300 z^2 - 8100 z + 2025) +$$

$$\frac{1}{4050} \left(e^{-z} \sqrt{\pi} (32 z^{25/2} - 2640 z^{23/2} + 86640 z^{21/2} - 1465080 z^{19/2} + 13834890 z^{17/2} - 74025225 z^{15/2} +$$

$$217856700 z^{13/2} - 325798200 z^{11/2} + 210038400 z^{9/2} - 39382200 z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ajto.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{1350} (16z^{11} + 1152z^{10} + 32312z^9 + 453900z^8 + 3418785z^7 + 13709085z^6 + 27207180z^5 + 22221540z^4 + 4233600z^3 - 264600z^2 + 16200z + 1350) + \frac{1}{2700} (e^z \sqrt{\pi} (32z^{23/2} + 2320z^{21/2} + 65760z^{19/2} + 939000z^{17/2} + 7261890z^{15/2} + 30453885z^{13/2} + 65587275z^{11/2} + 63449100z^{9/2} + 19691100z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajtp.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{1350} (-16z^{11} + 1152z^{10} - 32312z^9 + 453900z^8 - 3418785z^7 + 13709085z^6 - 27207180z^5 + 22221540z^4 - 4233600z^3 - 264600z^2 - 16200z + 1350) + \frac{1}{2700} (e^{-z} \sqrt{\pi} (32z^{23/2} - 2320z^{21/2} + 65760z^{19/2} - 939000z^{17/2} + 7261890z^{15/2} - 30453885z^{13/2} + 65587275z^{11/2} - 63449100z^{9/2} + 19691100z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajtq.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{2700} (-16z^{10} - 992z^9 - 23392z^8 - 267240z^7 - 1558635z^6 - 4465890z^5 - 5411340z^4 - 1693440z^3 + 176400z^2 - 32400z + 2700) + \frac{1}{5400} (e^z \sqrt{\pi} (-32z^{21/2} - 2000z^{19/2} - 47760z^{17/2} - 556920z^{15/2} - 3363450z^{13/2} - 10273185z^{11/2} - 14221350z^{9/2} - 6563700z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajtr.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{2700} (-16z^{10} + 992z^9 - 23392z^8 + 267240z^7 - 1558635z^6 + 4465890z^5 - 5411340z^4 + 1693440z^3 + 176400z^2 + 32400z + 2700) + \frac{1}{5400} (e^{-z} \sqrt{\pi} (32z^{21/2} - 2000z^{19/2} + 47760z^{17/2} - 556920z^{15/2} + 3363450z^{13/2} - 10273185z^{11/2} + 14221350z^{9/2} - 6563700z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajts.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, 1; z\right) = -\frac{1}{5400} (e^z (32z^{10} + 1840z^9 + 39840z^8 + 412680z^7 + 2146290z^6 + 5355135z^5 + 5418675z^4 + 1207800z^3 - 167400z^2 + 37800z - 5400))$$

07.25.03.ajtt.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{5400} (-16z^9 - 832z^8 - 15912z^7 - 140340z^6 - 583245z^5 - 1020195z^4 - 483840z^3 + 70560z^2 - 21600z + 5400) - \frac{1}{10800} e^z \sqrt{\pi} z^{7/2} (32z^6 + 1680z^5 + 32640z^4 + 295800z^3 + 1292850z^2 + 2516085z + 1640925) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajtu.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{5400} (16z^9 - 832z^8 + 15912z^7 - 140340z^6 + 583245z^5 - 1020195z^4 + 483840z^3 + 70560z^2 + 21600z + 5400) - \frac{1}{10800} e^{-z} \sqrt{\pi} z^{7/2} (32z^6 - 1680z^5 + 32640z^4 - 295800z^3 + 1292850z^2 - 2516085z + 1640925) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajtv.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, 2; z\right) = -\frac{1}{5400} e^z (32z^9 + 1520z^8 + 26160z^7 + 203400z^6 + 722490z^5 + 1020195z^4 + 317700z^3 - 63000z^2 + 21600z - 5400)$$

07.25.03.ajtw.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-16z^8 - 672z^7 - 9872z^6 - 61680z^5 - 155655z^4 - 107520z^3 + 20160z^2 - 8640z + 3600}{3600} - \frac{e^z \sqrt{\pi} z^{7/2} (32z^5 + 1360z^4 + 20400z^3 + 132600z^2 + 364650z + 328185) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.ajtx.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32z^5 - 1360z^4 + 20400z^3 - 132600z^2 + 364650z - 328185) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{7200} + \frac{-16z^8 + 672z^7 - 9872z^6 + 61680z^5 - 155655z^4 + 107520z^3 + 20160z^2 + 8640z + 3600}{3600}$$

07.25.03.ajty.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, 3; z\right) = -\frac{e^z (32z^8 + 1200z^7 + 15360z^6 + 80520z^5 + 158850z^4 + 67095z^3 - 17775z^2 + 8100z - 2700)}{2700}$$

07.25.03.ajtz.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-16z^9 - 512z^8 - 5272z^7 - 19740z^6 - 19545z^5 + 4455z^4 - 2340z^3 + 900z^2 + 1800z - 5400}{1440z^2} + \frac{1}{2880z^{5/2}} (e^z \sqrt{\pi} (-32z^{10} - 1040z^9 - 11040z^8 - 44280z^7 - 54690z^6 - 45z^5 + 225z^4 - 900z^3 + 2700z^2 - 5400z + 5400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aju0.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{16z^9 - 512z^8 + 5272z^7 - 19740z^6 + 19545z^5 + 4455z^4 + 2340z^3 + 900z^2 - 1800z - 5400}{1440z^2} + \frac{1}{2880z^{5/2}} \left(e^{-z} \sqrt{\pi} (-32z^{10} + 1040z^9 - 11040z^8 + 44280z^7 - 54690z^6 + 45z^5 + 225z^4 + 900z^3 + 2700z^2 + 5400z + 5400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aju1.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, 4; z\right) = -\frac{1}{900} e^z (32z^7 + 880z^6 + 7440z^5 + 21000z^4 + 11850z^3 - 4005z^2 + 2250z - 900)$$

07.25.03.aju2.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{7(16z^9 + 352z^8 + 2112z^7 + 3000z^6 - 765z^5 + 270z^4 + 900z^3 - 5040z^2 + 16200z - 32400)}{2880z^3} - \frac{1}{5760z^{7/2}} \left(7e^z \sqrt{\pi} (32z^{10} + 720z^9 + 4560z^8 + 7800z^7 + 90z^6 - 495z^5 + 2250z^4 - 8100z^3 + 21600z^2 - 37800z + 32400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aju3.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{5760z^{7/2}} \left(7e^{-z} \sqrt{\pi} (32z^{10} - 720z^9 + 4560z^8 - 7800z^7 + 90z^6 + 495z^5 + 2250z^4 + 8100z^3 + 21600z^2 + 37800z + 32400) \operatorname{erfi}(\sqrt{z}) \right) - \frac{7(16z^9 - 352z^8 + 2112z^7 - 3000z^6 - 765z^5 - 270z^4 + 900z^3 + 5040z^2 + 16200z + 32400)}{2880z^3}$$

07.25.03.aju4.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, 5; z\right) = -\frac{1}{225} e^z (32z^6 + 560z^5 + 2400z^4 + 1800z^3 - 750z^2 + 495z - 225)$$

07.25.03.aju5.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{1}{640z^4} 7(16z^9 + 192z^8 + 392z^7 - 60z^6 - 315z^5 + 2175z^4 - 10440z^3 + 39960z^2 - 120600z + 264600) - \frac{1}{1280z^{9/2}} \left(7e^z \sqrt{\pi} (32z^{10} + 400z^9 + 960z^8 + 120z^7 - 750z^6 + 4005z^5 - 17775z^4 + 63000z^3 - 167400z^2 + 297000z - 264600) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aju6.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{7(16z^9 - 192z^8 + 392z^7 + 60z^6 - 315z^5 - 2175z^4 - 10440z^3 - 39960z^2 - 120600z - 264600)}{640z^4} - \frac{1}{1280z^{9/2}} \left(7e^{-z}\sqrt{\pi}(32z^{10} - 400z^9 + 960z^8 - 120z^7 - 750z^6 - 4005z^5 - 17775z^4 - 63000z^3 - 167400z^2 - 297000z - 264600) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.aju7.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{5}{2}, 6; z\right) = -\frac{1}{45}e^z(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = -\frac{3}{2}$

07.25.03.aju8.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{810}(16z^{11} + 1168z^{10} + 33336z^9 + 479052z^8 + 3722265z^7 + 15621840z^6 + 33389928z^5 + 31553280z^4 + 9457560z^3 + 264600z^2 + 5400z + 810) + \frac{1}{1620}\left(e^z\sqrt{\pi}(32z^{23/2} + 2352z^{21/2} + 67824z^{19/2} + 990312z^{17/2} + 7893018z^{15/2} + 34560135z^{13/2} + 79616160z^{11/2} + 86949720z^{9/2} + 36138960z^{7/2} + 3243240z^{5/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aju9.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{810}(-16z^{11} + 1168z^{10} - 33336z^9 + 479052z^8 - 3722265z^7 + 15621840z^6 - 33389928z^5 + 31553280z^4 - 9457560z^3 + 264600z^2 - 5400z + 810) + \frac{1}{1620}\left(e^{-z}\sqrt{\pi}(32z^{23/2} - 2352z^{21/2} + 67824z^{19/2} - 990312z^{17/2} + 7893018z^{15/2} - 34560135z^{13/2} + 79616160z^{11/2} - 86949720z^{9/2} + 36138960z^{7/2} - 3243240z^{5/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ajua.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{540}(-16z^{10} - 1024z^9 - 25152z^8 - 303480z^7 - 1912755z^6 - 6182748z^5 - 9331740z^4 - 5223960z^3 - 529200z^2 + 10800z + 540) + \frac{1}{1080}\left(e^z\sqrt{\pi}(-32z^{21/2} - 2064z^{19/2} - 51312z^{17/2} - 631128z^{15/2} - 4106250z^{13/2} - 14028885z^{11/2} - 23500620z^{9/2} - 16447860z^{7/2} - 3243240z^{5/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ajub.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{540} (-16z^{10} + 1024z^9 - 25152z^8 + 303480z^7 - 1912755z^6 + 6182748z^5 - 9331740z^4 + 5223960z^3 - 529200z^2 - 10800z + 540) + \frac{1}{1080} (e^{-z} \sqrt{\pi} (32z^{21/2} - 2064z^{19/2} + 51312z^{17/2} - 631128z^{15/2} + 4106250z^{13/2} - 14028885z^{11/2} + 23500620z^{9/2} - 16447860z^{7/2} + 3243240z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajuc.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{1080} (16z^9 + 880z^8 + 18120z^7 + 177060z^6 + 858429z^5 + 1960200z^4 + 1765260z^3 + 352800z^2 - 21600z + 1080) + \frac{1}{2160} (e^z \sqrt{\pi} (32z^{19/2} + 1776z^{17/2} + 37104z^{15/2} + 371400z^{13/2} + 1877850z^{11/2} + 4639635z^{9/2} + 4942080z^{7/2} + 1621620z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajud.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{1080} (-16z^9 + 880z^8 - 18120z^7 + 177060z^6 - 858429z^5 + 1960200z^4 - 1765260z^3 + 352800z^2 + 21600z + 1080) + \frac{1}{2160} (e^{-z} \sqrt{\pi} (32z^{19/2} - 1776z^{17/2} + 37104z^{15/2} - 371400z^{13/2} + 1877850z^{11/2} - 4639635z^{9/2} + 4942080z^{7/2} - 1621620z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ajue.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, 1; z\right) = \frac{1}{1080} e^z (16z^9 + 816z^8 + 15432z^7 + 136896z^6 + 594009z^5 + 1192545z^4 + 920520z^3 + 143640z^2 - 11880z + 1080)$$

07.25.03.ajuf.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z \sqrt{\pi} (32z^6 + 1488z^5 + 25200z^4 + 195000z^3 + 707850z^2 + 1100385z + 540540) \operatorname{erf}(\sqrt{z}) z^{5/2}}{4320} + \frac{16z^8 + 736z^7 + 12240z^6 + 91728z^5 + 313335z^4 + 427140z^3 + 141120z^2 - 14400z + 2160}{2160}$$

07.25.03.ajug.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{16z^8 - 736z^7 + 12240z^6 - 91728z^5 + 313335z^4 - 427140z^3 + 141120z^2 + 14400z + 2160}{2160} - \frac{1}{4320} e^{-z} \sqrt{\pi} z^{5/2} (32z^6 - 1488z^5 + 25200z^4 - 195000z^3 + 707850z^2 - 1100385z + 540540) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajuh.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, 2; z\right) = \frac{e^z (16z^8 + 672z^7 + 10056z^6 + 66504z^5 + 194985z^4 + 217620z^3 + 50040z^2 - 6480z + 1080)}{1080}$$

07.25.03.ajui.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z \sqrt{\pi} (32z^5 + 1200z^4 + 15600z^3 + 85800z^2 + 193050z + 135135) \operatorname{erf}(\sqrt{z}) z^{5/2}}{2880} + \frac{16z^7 + 592z^6 + 7512z^5 + 39420z^4 + 79905z^3 + 40320z^2 - 5760z + 1440}{1440}$$

07.25.03.ajuj.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32z^5 - 1200z^4 + 15600z^3 - 85800z^2 + 193050z - 135135) \operatorname{erfi}(\sqrt{z}) z^{5/2}}{2880} + \frac{-16z^7 + 592z^6 - 7512z^5 + 39420z^4 - 79905z^3 + 40320z^2 + 5760z + 1440}{1440}$$

07.25.03.ajuk.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, 3; z\right) = \frac{1}{540} e^z (16z^7 + 528z^6 + 5832z^5 + 25680z^4 + 40905z^3 + 13095z^2 - 2340z + 540)$$

07.25.03.ajul.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{16z^8 + 448z^7 + 3936z^6 + 12072z^5 + 8955z^4 - 1620z^3 + 468z^2 + 360z - 1080}{576z^2} + \frac{1}{1152z^{5/2}} e^z \sqrt{\pi} (32z^9 + 912z^8 + 8304z^7 + 27672z^6 + 27018z^5 + 45z^4 - 180z^3 + 540z^2 - 1080z + 1080) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajum.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{16z^8 - 448z^7 + 3936z^6 - 12072z^5 + 8955z^4 + 1620z^3 + 468z^2 - 360z - 1080}{576z^2} + \frac{1}{1152z^{5/2}} e^{-z} \sqrt{\pi} (-32z^9 + 912z^8 - 8304z^7 + 27672z^6 - 27018z^5 + 45z^4 + 180z^3 + 540z^2 + 1080z + 1080) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajun.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, 4; z\right) = \frac{1}{180} e^z (16z^6 + 384z^5 + 2760z^4 + 6360z^3 + 2745z^2 - 630z + 180)$$

07.25.03.aju.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(16z^8 + 304z^7 + 1512z^6 + 1620z^5 - 315z^4 - 72z^3 + 900z^2 - 2880z + 5400)}{1152z^3} + \frac{1}{2304z^{7/2}} 7 e^z \sqrt{\pi} (32z^9 + 624z^8 + 3312z^7 + 4488z^6 + 90z^5 - 405z^4 + 1440z^3 - 3780z^2 + 6480z - 5400) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajup.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{2304 z^{7/2}} 7 e^{-z} \sqrt{\pi} (32 z^9 - 624 z^8 + 3312 z^7 - 4488 z^6 + 90 z^5 + 405 z^4 + 1440 z^3 + 3780 z^2 + 6480 z + 5400) \operatorname{erfi}(\sqrt{z}) - \frac{7(16 z^8 - 304 z^7 + 1512 z^6 - 1620 z^5 - 315 z^4 + 72 z^3 + 900 z^2 + 2880 z + 5400)}{1152 z^3}$$

07.25.03.ajuq.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, 5; z\right) = \frac{1}{45} e^z (16 z^5 + 240 z^4 + 840 z^3 + 480 z^2 - 135 z + 45)$$

07.25.03.ajur.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{7(16 z^8 + 160 z^7 + 240 z^6 - 321 z^4 + 1620 z^3 - 6120 z^2 + 18000 z - 37800)}{256 z^4} + \frac{1}{512 z^{9/2}} 7 e^z \sqrt{\pi} (32 z^9 + 336 z^8 + 624 z^7 + 120 z^6 - 630 z^5 + 2745 z^4 - 9540 z^3 + 24840 z^2 - 43200 z + 37800) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajus.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{7(16 z^8 - 160 z^7 + 240 z^6 - 321 z^4 - 1620 z^3 - 6120 z^2 - 18000 z - 37800)}{256 z^4} - \frac{1}{512 z^{9/2}} 7 e^{-z} \sqrt{\pi} (32 z^9 - 336 z^8 + 624 z^7 - 120 z^6 - 630 z^5 - 2745 z^4 - 9540 z^3 - 24840 z^2 - 43200 z - 37800) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajut.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{3}{2}, 6; z\right) = \frac{1}{9} e^z (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = -\frac{1}{2}$

07.25.03.ajuu.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{360} (16 z^9 + 896 z^8 + 18888 z^7 + 190580 z^6 + 968253 z^5 + 2385207 z^4 + 2491650 z^3 + 788130 z^2 + 21600 z + 360) + \frac{1}{720} e^z \sqrt{\pi} (32 z^{19/2} + 1808 z^{17/2} + 38656 z^{15/2} + 399192 z^{13/2} + 2110290 z^{11/2} + 5587725 z^{9/2} + 6737445 z^{7/2} + 2972970 z^{5/2} + 270270 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajuv.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{360}(-16z^9 + 896z^8 - 18888z^7 + 190580z^6 - 968253z^5 + 2385207z^4 - 2491650z^3 + 788130z^2 - 21600z + 360) + \frac{1}{720}e^{-z}\sqrt{\pi}(32z^{19/2} - 1808z^{17/2} + 38656z^{15/2} - 399192z^{13/2} + 2110290z^{11/2} - 5587725z^{9/2} + 6737445z^{7/2} - 2972970z^{5/2} + 270270z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ajuw.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{720}(-16z^8 - 768z^7 - 13520z^6 - 109824z^5 - 425007z^4 - 726390z^3 - 435330z^2 - 43200z + 720) + \frac{1}{1440}(e^z\sqrt{\pi}(-32z^{17/2} - 1552z^{15/2} - 27792z^{13/2} - 232440z^{11/2} - 948090z^{9/2} - 1795365z^{7/2} - 1351350z^{5/2} - 270270z^{3/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.ajux.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{720}(-16z^8 + 768z^7 - 13520z^6 + 109824z^5 - 425007z^4 + 726390z^3 - 435330z^2 + 43200z + 720) + \frac{1}{1440}(e^{-z}\sqrt{\pi}(32z^{17/2} - 1552z^{15/2} + 27792z^{13/2} - 232440z^{11/2} + 948090z^{9/2} - 1795365z^{7/2} + 1351350z^{5/2} - 270270z^{3/2})\operatorname{erfi}(\sqrt{-z}))$$

07.25.03.ajuy.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, 1; z\right) = -\frac{1}{360}e^z(8z^8 + 356z^7 + 5758z^6 + 42537z^5 + 148125z^4 + 225960z^3 + 121320z^2 + 11160z - 360)$$

07.25.03.ajuz.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{-16z^7 - 640z^6 - 9048z^5 - 55836z^4 - 149625z^3 - 147105z^2 - 28800z + 1440}{1440} + \frac{1}{2880}e^z\sqrt{\pi}(-32z^{15/2} - 1296z^{13/2} - 18720z^{11/2} - 120120z^{9/2} - 347490z^{7/2} - 405405z^{5/2} - 135135z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ajv0.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{16z^7 - 640z^6 + 9048z^5 - 55836z^4 + 149625z^3 - 147105z^2 + 28800z + 1440}{1440} + \frac{1}{2880}e^{-z}\sqrt{\pi}(-32z^{15/2} + 1296z^{13/2} - 18720z^{11/2} + 120120z^{9/2} - 347490z^{7/2} + 405405z^{5/2} - 135135z^{3/2})\operatorname{erfi}(\sqrt{-z})$$

07.25.03.ajv1.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, 2; z\right) = -\frac{1}{360}e^z(8z^7 + 292z^6 + 3714z^5 + 20253z^4 + 46860z^3 + 38520z^2 + 5760z - 360)$$

07.25.03.ajv2.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{960} (-16z^6 - 512z^5 - 5472z^4 - 23240z^3 - 35595z^2 - 11520z + 960) - \frac{e^z \sqrt{\pi} z^{3/2} (32z^5 + 1040z^4 + 11440z^3 + 51480z^2 + 90090z + 45045) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.ajv3.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32z^5 - 1040z^4 + 11440z^3 - 51480z^2 + 90090z - 45045) \operatorname{erfi}(\sqrt{z}) z^{3/2}}{1920} + \frac{1}{960} (-16z^6 + 512z^5 - 5472z^4 + 23240z^3 - 35595z^2 + 11520z + 960)$$

07.25.03.ajv4.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, 3; z\right) = -\frac{1}{180} e^z (8z^6 + 228z^5 + 2118z^4 + 7545z^3 + 9135z^2 + 1980z - 180)$$

07.25.03.ajv5.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{-16z^7 - 384z^6 - 2792z^5 - 6660z^4 - 3285z^3 + 357z^2 + 90z - 270}{384z^2} + \frac{e^z \sqrt{\pi} (-32z^8 - 784z^7 - 5952z^6 - 15768z^5 - 11250z^4 - 45z^3 + 135z^2 - 270z + 270) \operatorname{erf}(\sqrt{z})}{768z^{5/2}}$$

07.25.03.ajv6.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{16z^7 - 384z^6 + 2792z^5 - 6660z^4 + 3285z^3 + 357z^2 - 90z - 270}{384z^2} + \frac{1}{768z^{5/2}} e^{-z} \sqrt{\pi} (-32z^8 + 784z^7 - 5952z^6 + 15768z^5 - 11250z^4 + 45z^3 + 135z^2 + 270z + 270) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajv7.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, 4; z\right) = -\frac{1}{60} e^z (8z^5 + 164z^4 + 970z^3 + 1725z^2 + 510z - 60)$$

07.25.03.ajv8.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{7(16z^7 + 256z^6 + 1008z^5 + 720z^4 - 57z^3 - 198z^2 + 630z - 1080)}{768z^3} - \frac{7e^z \sqrt{\pi} (32z^8 + 528z^7 + 2256z^6 + 2232z^5 + 90z^4 - 315z^3 + 810z^2 - 1350z + 1080) \operatorname{erf}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.ajv9.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (32z^8 - 528z^7 + 2256z^6 - 2232z^5 + 90z^4 + 315z^3 + 810z^2 + 1350z + 1080) \operatorname{erfi}(\sqrt{z})}{1536z^{7/2}} - \frac{7(16z^7 - 256z^6 + 1008z^5 - 720z^4 - 57z^3 + 198z^2 + 630z + 1080)}{768z^3}$$

07.25.03.ajva.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, 5; z\right) = -\frac{1}{15} e^z (8z^4 + 100z^3 + 270z^2 + 105z - 15)$$

07.25.03.ajvb.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{21(16z^7 + 128z^6 + 120z^5 + 44z^4 - 303z^3 + 1125z^2 - 3180z + 6300)}{512z^4} - \frac{21e^z\sqrt{\pi}(32z^8 + 272z^7 + 352z^6 + 120z^5 - 510z^4 + 1725z^3 - 4365z^2 + 7380z - 6300)\operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.ajvc.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{21(16z^7 - 128z^6 + 120z^5 - 44z^4 - 303z^3 - 1125z^2 - 3180z - 6300)}{512z^4} - \frac{1}{1024z^{9/2}} 21e^{-z}\sqrt{\pi}(32z^8 - 272z^7 + 352z^6 - 120z^5 - 510z^4 - 1725z^3 - 4365z^2 - 7380z - 6300)\operatorname{erfi}(\sqrt{z})$$

07.25.03.ajvd.01

$${}_2F_2\left(\frac{5}{2}, 6; -\frac{1}{2}, 6; z\right) = -\frac{1}{3}e^z(8z^3 + 36z^2 + 18z - 3)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = \frac{1}{2}$

07.25.03.ajve.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{16z^7 + 656z^6 + 9592z^5 + 62172z^4 + 180369z^3 + 207060z^2 + 65610z + 1440}{1440} + \frac{1}{2880}\left(e^z\sqrt{\pi}(32z^{15/2} + 1328z^{13/2} + 19824z^{11/2} + 133320z^{9/2} + 414810z^{7/2} + 550935z^{5/2} + 249480z^{3/2} + 20790\sqrt{z})\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ajvf.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{-16z^7 + 656z^6 - 9592z^5 + 62172z^4 - 180369z^3 + 207060z^2 - 65610z + 1440}{1440} + \frac{1}{2880}\left(e^{-z}\sqrt{\pi}(32z^{15/2} - 1328z^{13/2} + 19824z^{11/2} - 133320z^{9/2} + 414810z^{7/2} - 550935z^{5/2} + 249480z^{3/2} - 20790\sqrt{z})\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ajvg.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, 1; z\right) = \frac{1}{360}e^z(4z^7 + 152z^6 + 2043z^5 + 12075z^4 + 31800z^3 + 33480z^2 + 10440z + 360)$$

07.25.03.ajvh.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{16z^6 + 544z^5 + 6336z^4 + 30744z^3 + 59955z^2 + 36810z + 2880}{2880} + \frac{e^z\sqrt{\pi}\sqrt{z}(32z^6 + 1104z^5 + 13200z^4 + 67320z^3 + 145530z^2 + 114345z + 20790)\operatorname{erf}(\sqrt{z})}{5760}$$

07.25.03.ajvi.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{16z^6 - 544z^5 + 6336z^4 - 30744z^3 + 59955z^2 - 36810z + 2880}{2880} - \frac{e^{-z}\sqrt{\pi}\sqrt{z}(32z^6 - 1104z^5 + 13200z^4 - 67320z^3 + 145530z^2 - 114345z + 20790)\operatorname{erfi}(\sqrt{z})}{5760}$$

07.25.03.ajvj.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, 2; z\right) = \frac{1}{360} e^z (4z^6 + 124z^5 + 1299z^4 + 5580z^3 + 9480z^2 + 5040z + 360)$$

07.25.03.ajvk.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920}{1920} + \frac{e^z \sqrt{\pi} \sqrt{z} (32z^5 + 880z^4 + 7920z^3 + 27720z^2 + 34650z + 10395) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.ajvl.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920}{1920} + \frac{e^{-z} \sqrt{\pi} \sqrt{z} (32z^5 - 880z^4 + 7920z^3 - 27720z^2 + 34650z - 10395) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.ajvm.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, 3; z\right) = \frac{1}{180} e^z (4z^5 + 96z^4 + 723z^3 + 1965z^2 + 1620z + 180)$$

07.25.03.ajvn.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{16z^6 + 320z^5 + 1840z^4 + 3120z^3 + 759z^2 + 30z - 90}{768z^2} + \frac{e^z \sqrt{\pi} (32z^7 + 656z^6 + 3984z^5 + 7800z^4 + 3450z^3 + 45z^2 - 90z + 90) \operatorname{erf}(\sqrt{z})}{1536z^{5/2}}$$

07.25.03.ajvo.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{16z^6 - 320z^5 + 1840z^4 - 3120z^3 + 759z^2 - 30z - 90}{768z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^7 + 656z^6 - 3984z^5 + 7800z^4 - 3450z^3 + 45z^2 + 90z + 90) \operatorname{erfi}(\sqrt{z})}{1536z^{5/2}}$$

07.25.03.ajvp.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, 4; z\right) = \frac{1}{60} e^z (4z^4 + 68z^3 + 315z^2 + 390z + 60)$$

07.25.03.ajvq.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7(16z^6 + 208z^5 + 600z^4 + 204z^3 + 57z^2 - 180z + 270)}{1536z^3} + \frac{7e^z \sqrt{\pi} (32z^7 + 432z^6 + 1392z^5 + 840z^4 + 90z^3 - 225z^2 + 360z - 270) \operatorname{erf}(\sqrt{z})}{3072z^{7/2}}$$

07.25.03.ajvr.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} \sqrt{\pi} (32 z^7 - 432 z^6 + 1392 z^5 - 840 z^4 + 90 z^3 + 225 z^2 + 360 z + 270) \operatorname{erfi}(\sqrt{z})}{3072 z^{7/2}} - \frac{7 (16 z^6 - 208 z^5 + 600 z^4 - 204 z^3 + 57 z^2 + 180 z + 270)}{1536 z^3}$$

07.25.03.ajvs.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, 5; z\right) = \frac{1}{15} e^z (4 z^3 + 40 z^2 + 75 z + 15)$$

07.25.03.ajvt.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{21 (16 z^6 + 96 z^5 + 32 z^4 + 72 z^3 - 261 z^2 + 690 z - 1260)}{1024 z^4} + \frac{21 e^z \sqrt{\pi} (32 z^7 + 208 z^6 + 144 z^5 + 120 z^4 - 390 z^3 + 945 z^2 - 1530 z + 1260) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.ajvu.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{21 (16 z^6 - 96 z^5 + 32 z^4 - 72 z^3 - 261 z^2 - 690 z - 1260)}{1024 z^4} - \frac{21 e^{-z} \sqrt{\pi} (32 z^7 - 208 z^6 + 144 z^5 - 120 z^4 - 390 z^3 - 945 z^2 - 1530 z - 1260) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.ajvw.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{1}{2}, 6; z\right) = \frac{1}{3} e^z (4 z^2 + 12 z + 3)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = 1$

07.25.03.ajvw.01

$${}_2F_2\left(\frac{5}{2}, 6; 1, 1; z\right) = \frac{e^{z/2} (16 z^7 + 568 z^6 + 7124 z^5 + 39540 z^4 + 100281 z^3 + 109098 z^2 + 41760 z + 2880) I_0\left(\frac{z}{2}\right)}{2880} + \frac{e^{z/2} (16 z^7 + 552 z^6 + 6580 z^5 + 33220 z^4 + 69849 z^3 + 50796 z^2 + 7128 z) I_1\left(\frac{z}{2}\right)}{2880}$$

07.25.03.ajvx.01

$${}_2F_2\left(\frac{5}{2}, 6; 1, \frac{3}{2}; z\right) = \frac{1}{360} e^z (2 z^6 + 63 z^5 + 675 z^4 + 3000 z^3 + 5400 z^2 + 3240 z + 360)$$

07.25.03.ajvy.01

$${}_2F_2\left(\frac{5}{2}, 6; 1, 2; z\right) = \frac{e^{z/2} (8 z^6 + 232 z^5 + 2280 z^4 + 9348 z^3 + 16029 z^2 + 10080 z + 1440) I_0\left(\frac{z}{2}\right)}{1440} + \frac{1}{360} e^{z/2} (2 z^6 + 56 z^5 + 515 z^4 + 1848 z^3 + 2367 z^2 + 711 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajvz.01

$${}_2F_2\left(\frac{5}{2}, 6; 1, \frac{5}{2}; z\right) = \frac{1}{120} e^z (z^5 + 25 z^4 + 200 z^3 + 600 z^2 + 600 z + 120)$$

07.25.03.ajw0.01

$${}_2F_2\left(\frac{5}{2}, 6; 1, 3; z\right) = \frac{1}{720} e^{z/2} (8z^5 + 180z^4 + 1284z^3 + 3447z^2 + 3240z + 720) I_0\left(\frac{z}{2}\right) + \frac{1}{720} e^{z/2} z (8z^4 + 172z^3 + 1116z^2 + 2409z + 1242) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajw1.01

$${}_2F_2\left(\frac{5}{2}, 6; 1, \frac{7}{2}; z\right) = \frac{e^z (64z^6 + 1184z^5 + 6288z^4 + 10104z^3 + 3036z^2 + 90z - 135)}{3072z^2} + \frac{45\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.ajw2.01

$${}_2F_2\left(\frac{5}{2}, 6; 1, \frac{7}{2}; -z\right) = \frac{e^{-z} (64z^6 - 1184z^5 + 6288z^4 - 10104z^3 + 3036z^2 - 90z - 135)}{3072z^2} + \frac{45\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.ajw3.01

$${}_2F_2\left(\frac{5}{2}, 6; 1, 4; z\right) = \frac{1}{120} e^{z/2} (4z^4 + 64z^3 + 287z^2 + 390z + 120) I_0\left(\frac{z}{2}\right) + \frac{1}{120} e^{z/2} z (4z^3 + 60z^2 + 229z + 187) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajw4.01

$${}_2F_2\left(\frac{5}{2}, 6; 1, \frac{9}{2}; z\right) = \frac{7e^z (128z^6 + 1536z^5 + 4128z^4 + 1632z^3 + 360z^2 - 720z + 675)}{12288z^3} + \frac{315\sqrt{\pi} (2z - 5) \operatorname{erfi}(\sqrt{z})}{8192z^{7/2}}$$

07.25.03.ajw5.01

$${}_2F_2\left(\frac{5}{2}, 6; 1, \frac{9}{2}; -z\right) = \frac{315\sqrt{\pi} (2z + 5) \operatorname{erf}(\sqrt{z})}{8192z^{7/2}} - \frac{7e^{-z} (128z^6 - 1536z^5 + 4128z^4 - 1632z^3 + 360z^2 + 720z + 675)}{12288z^3}$$

07.25.03.ajw6.01

$${}_2F_2\left(\frac{5}{2}, 6; 1, 5; z\right) = \frac{1}{30} e^{z/2} (4z^3 + 38z^2 + 75z + 30) I_0\left(\frac{z}{2}\right) + \frac{1}{30} e^{z/2} z (4z^2 + 34z + 43) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajw7.01

$${}_2F_2\left(\frac{5}{2}, 6; 1, \frac{11}{2}; z\right) = \frac{21e^z (512z^6 + 2816z^5 + 1024z^4 + 1920z^3 - 5280z^2 + 10050z - 11025)}{32768z^4} + \frac{945\sqrt{\pi} (12z^2 - 60z + 245) \operatorname{erfi}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.ajw8.01

$${}_2F_2\left(\frac{5}{2}, 6; 1, \frac{11}{2}; -z\right) = \frac{21e^{-z} (512z^6 - 2816z^5 + 1024z^4 - 1920z^3 - 5280z^2 - 10050z - 11025)}{32768z^4} + \frac{945\sqrt{\pi} (12z^2 + 60z + 245) \operatorname{erf}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.ajw9.01

$${}_2F_2\left(\frac{5}{2}, 6; 1, 6; z\right) = \frac{1}{3} e^{z/2} (2z^2 + 6z + 3) I_0\left(\frac{z}{2}\right) + \frac{2}{3} e^{z/2} z (z + 2) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = \frac{3}{2}$

07.25.03.ajwa.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{16z^5 + 448z^4 + 4104z^3 + 14532z^2 + 17925z + 4815}{5760} + \frac{e^z \sqrt{\pi} (32z^6 + 912z^5 + 8640z^4 + 32760z^3 + 47250z^2 + 19845z + 945) \operatorname{erf}(\sqrt{z})}{11520\sqrt{z}}$$

07.25.03.ajwb.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{-16z^5 + 448z^4 - 4104z^3 + 14532z^2 - 17925z + 4815}{5760} + \frac{e^{-z} \sqrt{\pi} (32z^6 - 912z^5 + 8640z^4 - 32760z^3 + 47250z^2 - 19845z + 945) \operatorname{erfi}(\sqrt{z})}{11520\sqrt{z}}$$

07.25.03.ajwc.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{3}{2}, 2; z\right) = \frac{1}{360} e^z (2z^5 + 51z^4 + 420z^3 + 1320z^2 + 1440z + 360)$$

07.25.03.ajwd.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{16z^4 + 352z^3 + 2352z^2 + 5280z + 2895}{3840} + \frac{e^z \sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.ajwe.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{16z^4 - 352z^3 + 2352z^2 - 5280z + 2895}{3840} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945) \operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.ajwf.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{3}{2}, 3; z\right) = \frac{1}{180} e^z (2z^4 + 39z^3 + 225z^2 + 420z + 180)$$

07.25.03.ajwg.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{16z^5 + 256z^4 + 1080z^3 + 1068z^2 - 15z + 45}{1536z^2} + \frac{e^z \sqrt{\pi} (32z^6 + 528z^5 + 2400z^4 + 3000z^3 + 450z^2 + 45z - 45) \operatorname{erf}(\sqrt{z})}{3072z^{5/2}}$$

07.25.03.ajwh.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{-16z^5 + 256z^4 - 1080z^3 + 1068z^2 + 15z + 45}{1536z^2} + \frac{e^{-z} \sqrt{\pi} (32z^6 - 528z^5 + 2400z^4 - 3000z^3 + 450z^2 - 45z - 45) \operatorname{erfi}(\sqrt{z})}{3072z^{5/2}}$$

07.25.03.ajwi.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{3}{2}, 4; z\right) = \frac{1}{60} e^z (2z^3 + 27z^2 + 90z + 60)$$

07.25.03.ajwj.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(16z^5 + 160z^4 + 288z^3 - 24z^2 + 75z - 90)}{3072z^3} + \frac{7e^z\sqrt{\pi}(32z^6 + 336z^5 + 720z^4 + 120z^3 + 90z^2 - 135z + 90)\operatorname{erf}(\sqrt{z})}{6144z^{7/2}}$$

07.25.03.ajwk.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7(16z^5 - 160z^4 + 288z^3 + 24z^2 + 75z + 90)}{3072z^3} - \frac{7e^{-z}\sqrt{\pi}(32z^6 - 336z^5 + 720z^4 - 120z^3 + 90z^2 + 135z + 90)\operatorname{erfi}(\sqrt{z})}{6144z^{7/2}}$$

07.25.03.ajwl.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{3}{2}, 5; z\right) = \frac{1}{15} e^z (2z^2 + 15z + 15)$$

07.25.03.ajwm.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{21(16z^5 + 64z^4 - 24z^3 + 84z^2 - 195z + 315)}{2048z^4} + \frac{21e^z\sqrt{\pi}(32z^6 + 144z^5 + 120z^3 - 270z^2 + 405z - 315)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.ajwn.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z}\sqrt{\pi}(32z^6 - 144z^5 - 120z^3 - 270z^2 - 405z - 315)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{21(16z^5 - 64z^4 - 24z^3 - 84z^2 - 195z - 315)}{2048z^4}$$

07.25.03.ajwo.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{3}{2}, 6; z\right) = \frac{1}{3} e^z (2z + 3)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = 2$

07.25.03.ajwp.01

$${}_2F_2\left(\frac{5}{2}, 6; 2, 2; z\right) = \frac{e^{z/2}(8z^5 + 188z^4 + 1428z^3 + 4221z^2 + 4656z + 1440)I_0\left(\frac{z}{2}\right)}{1440} + \frac{e^{z/2}(8z^5 + 180z^4 + 1252z^3 + 3051z^2 + 2076z + 96)I_1\left(\frac{z}{2}\right)}{1440}$$

07.25.03.ajwq.01

$${}_2F_2\left(\frac{5}{2}, 6; 2, \frac{5}{2}; z\right) = \frac{1}{120} e^z (z^4 + 20z^3 + 120z^2 + 240z + 120)$$

07.25.03.ajwr.01

$${}_2F_2\left(\frac{5}{2}, 6; 2, 3; z\right) = \frac{1}{360} e^{z/2} (4z^4 + 72z^3 + 387z^2 + 708z + 360) I_0\left(\frac{z}{2}\right) + \frac{1}{360} e^{z/2} (4z^4 + 68z^3 + 321z^2 + 417z + 48) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajws.01

$${}_2F_2\left(\frac{5}{2}, 6; 2, \frac{7}{2}; z\right) = \frac{e^z (32z^5 + 464z^4 + 1752z^3 + 1548z^2 - 30z + 45)}{1536z^2} - \frac{15\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.ajwt.01

$${}_2F_2\left(\frac{5}{2}, 6; 2, \frac{7}{2}; -z\right) = \frac{e^{-z} (-32z^5 + 464z^4 - 1752z^3 + 1548z^2 + 30z + 45)}{1536z^2} - \frac{15\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.ajwu.01

$${}_2F_2\left(\frac{5}{2}, 6; 2, 4; z\right) = \frac{1}{120} e^{z/2} (4z^3 + 50z^2 + 159z + 120) I_0\left(\frac{z}{2}\right) + \frac{1}{120} e^{z/2} (4z^3 + 46z^2 + 115z + 24) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajvw.01

$${}_2F_2\left(\frac{5}{2}, 6; 2, \frac{9}{2}; z\right) = \frac{7e^z (64z^5 + 576z^4 + 912z^3 - 96z^2 + 180z - 135)}{6144z^3} - \frac{105\sqrt{\pi} (2z - 3) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.ajww.01

$${}_2F_2\left(\frac{5}{2}, 6; 2, \frac{9}{2}; -z\right) = \frac{7e^{-z} (64z^5 - 576z^4 + 912z^3 + 96z^2 + 180z + 135)}{6144z^3} - \frac{105\sqrt{\pi} (2z + 3) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.ajwx.01

$${}_2F_2\left(\frac{5}{2}, 6; 2, 5; z\right) = \frac{1}{15} e^{z/2} (2z^2 + 14z + 15) I_0\left(\frac{z}{2}\right) + \frac{2}{15} e^{z/2} (z^2 + 6z + 2) I_1\left(\frac{z}{2}\right)$$

07.25.03.ajwy.01

$${}_2F_2\left(\frac{5}{2}, 6; 2, \frac{11}{2}; z\right) = \frac{21e^z (256z^5 + 896z^4 - 384z^3 + 960z^2 - 1590z + 1575)}{16384z^4} - \frac{945\sqrt{\pi} (4z^2 - 12z + 35) \operatorname{erfi}(\sqrt{z})}{32768z^{9/2}}$$

07.25.03.ajwz.01

$${}_2F_2\left(\frac{5}{2}, 6; 2, \frac{11}{2}; -z\right) = -\frac{21e^{-z} (256z^5 - 896z^4 - 384z^3 - 960z^2 - 1590z - 1575)}{16384z^4} - \frac{945\sqrt{\pi} (4z^2 + 12z + 35) \operatorname{erf}(\sqrt{z})}{32768z^{9/2}}$$

07.25.03.ajx0.01

$${}_2F_2\left(\frac{5}{2}, 6; 2, 6; z\right) = \frac{1}{3} e^{z/2} (2z + 3) I_0\left(\frac{z}{2}\right) + \frac{1}{3} e^{z/2} (2z + 1) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = \frac{5}{2}$

07.25.03.ajx1.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z \sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.ajx2.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z}\sqrt{\pi}(32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105)\operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.ajx3.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{5}{2}, 3; z\right) = \frac{1}{60} e^z (z^3 + 15z^2 + 60z + 60)$$

07.25.03.ajx4.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{16z^4 + 192z^3 + 512z^2 + 120z - 45}{1024z^2} + \frac{e^z\sqrt{\pi}(32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45)\operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.ajx5.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z}\sqrt{\pi}(-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45)\operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.ajx6.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{5}{2}, 4; z\right) = \frac{1}{20} e^z (z^2 + 10z + 20)$$

07.25.03.ajx7.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z\sqrt{\pi}(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)\operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.ajx8.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}\sqrt{\pi}(32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45)\operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.ajx9.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{5}{2}, 5; z\right) = \frac{1}{5} e^z (z + 5)$$

07.25.03.ajxa.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z\sqrt{\pi}(32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ajxb.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z}\sqrt{\pi}(32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ajxc.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{5}{2}, 6; z\right) = e^z$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = 3$

07.25.03.ajxd.01

$${}_2F_2\left(\frac{5}{2}, 6; 3, 3; z\right) = \frac{1}{180}e^{z/2}(4z^3 + 54z^2 + 195z + 186)I_0\left(\frac{z}{2}\right) + \frac{e^{z/2}(4z^4 + 50z^3 + 147z^2 + 60z - 24)I_1\left(\frac{z}{2}\right)}{180z}$$

07.25.03.ajxe.01

$${}_2F_2\left(\frac{5}{2}, 6; 3, \frac{7}{2}; z\right) = \frac{e^z(16z^4 + 168z^3 + 372z^2 + 30z - 45)}{384z^2} + \frac{15\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.ajxf.01

$${}_2F_2\left(\frac{5}{2}, 6; 3, \frac{7}{2}; -z\right) = \frac{e^{-z}(16z^4 - 168z^3 + 372z^2 - 30z - 45)}{384z^2} + \frac{15\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{256z^{5/2}}$$

07.25.03.ajxg.01

$${}_2F_2\left(\frac{5}{2}, 6; 3, 4; z\right) = \frac{1}{30}e^{z/2}(2z^2 + 18z + 33)I_0\left(\frac{z}{2}\right) + \frac{e^{z/2}(z^3 + 8z^2 + 9z - 6)I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.ajxh.01

$${}_2F_2\left(\frac{5}{2}, 6; 3, \frac{9}{2}; z\right) = \frac{7e^z(32z^4 + 192z^3 + 72z^2 - 120z + 45)}{1536z^3} + \frac{105\sqrt{\pi}(2z - 1)\operatorname{erfi}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.ajxi.01

$${}_2F_2\left(\frac{5}{2}, 6; 3, \frac{9}{2}; -z\right) = \frac{105\sqrt{\pi}(2z + 1)\operatorname{erf}(\sqrt{z})}{1024z^{7/2}} - \frac{7e^{-z}(32z^4 - 192z^3 + 72z^2 + 120z + 45)}{1536z^3}$$

07.25.03.ajxj.01

$${}_2F_2\left(\frac{5}{2}, 6; 3, 5; z\right) = \frac{2}{15}e^{z/2}(2z + 9)I_0\left(\frac{z}{2}\right) + \frac{2e^{z/2}(2z^2 + 7z - 6)I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.ajxk.01

$${}_2F_2\left(\frac{5}{2}, 6; 3, \frac{11}{2}; z\right) = \frac{21e^z(128z^4 + 192z^3 - 384z^2 + 390z - 315)}{4096z^4} + \frac{945\sqrt{\pi}(4z^2 - 4z + 7)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ajxl.01

$${}_2F_2\left(\frac{5}{2}, 6; 3, \frac{11}{2}; -z\right) = \frac{21e^{-z}(128z^4 - 192z^3 - 384z^2 - 390z - 315)}{4096z^4} + \frac{945\sqrt{\pi}(4z^2 + 4z + 7)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ajxm.01

$${}_2F_2\left(\frac{5}{2}, 6; 3, 6; z\right) = \frac{4}{3} e^{z/2} I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (z-1) I_1\left(\frac{z}{2}\right)}{3z}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = \frac{7}{2}$

07.25.03.ajxn.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{7}{2}, 4; z\right) = \frac{e^z (8z^3 + 52z^2 + 30z - 45)}{64z^2} + \frac{45\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.ajxo.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{7}{2}, 4; -z\right) = \frac{e^{-z} (-8z^3 + 52z^2 - 30z - 45)}{64z^2} + \frac{45\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.ajxp.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{7}{2}, 5; z\right) = \frac{e^z (4z^2 + 10z - 15)}{8z^2} + \frac{15\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.ajxq.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{7}{2}, 5; -z\right) = \frac{e^{-z} (4z^2 - 10z - 15)}{8z^2} + \frac{15\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16z^{5/2}}$$

07.25.03.ajxr.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{7}{2}, 6; z\right) = \frac{5e^z (2z - 3)}{4z^2} + \frac{15\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8z^{5/2}}$$

07.25.03.ajxs.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{7}{2}, 6; -z\right) = \frac{15\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8z^{5/2}} - \frac{5e^{-z} (2z + 3)}{4z^2}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = 4$

07.25.03.ajxt.01

$${}_2F_2\left(\frac{5}{2}, 6; 4, 4; z\right) = \frac{e^{z/2} (2z^2 + 11z + 4) I_0\left(\frac{z}{2}\right)}{10z} + \frac{e^{z/2} (2z^3 + 9z^2 - 4z - 16) I_1\left(\frac{z}{2}\right)}{10z^2}$$

07.25.03.ajxu.01

$${}_2F_2\left(\frac{5}{2}, 6; 4, \frac{9}{2}; z\right) = \frac{7e^z (16z^3 + 48z^2 - 60z - 45)}{256z^3} + \frac{315\sqrt{\pi} (2z + 1) \operatorname{erfi}(\sqrt{z})}{512z^{7/2}}$$

07.25.03.ajxv.01

$${}_2F_2\left(\frac{5}{2}, 6; 4, \frac{9}{2}; -z\right) = \frac{7e^{-z} (16z^3 - 48z^2 - 60z + 45)}{256z^3} + \frac{315\sqrt{\pi} (2z - 1) \operatorname{erf}(\sqrt{z})}{512z^{7/2}}$$

07.25.03.ajxw.01

$${}_2F_2\left(\frac{5}{2}, 6; 4, 5; z\right) = \frac{4e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right)}{5z} + \frac{4e^{z/2} (z^2 + z - 8) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.ajxx.01

$${}_2F_2\left(\frac{5}{2}, 6; 4, \frac{11}{2}; z\right) = \frac{63 e^z (64 z^3 - 32 z^2 - 250 z + 105)}{2048 z^4} + \frac{945 \sqrt{\pi} (12 z^2 + 12 z - 7) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.ajxy.01

$${}_2F_2\left(\frac{5}{2}, 6; 4, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (12 z^2 - 12 z - 7) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}} - \frac{63 e^{-z} (64 z^3 + 32 z^2 - 250 z - 105)}{2048 z^4}$$

07.25.03.ajxz.01

$${}_2F_2\left(\frac{5}{2}, 6; 4, 6; z\right) = \frac{4 e^{z/2} I_0\left(\frac{z}{2}\right)}{z} + \frac{4 e^{z/2} (z-4) I_1\left(\frac{z}{2}\right)}{z^2}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = \frac{9}{2}$

07.25.03.ajy0.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{9}{2}, 5; z\right) = \frac{7 e^z (8 z^2 - 45)}{32 z^3} + \frac{105 \sqrt{\pi} (2 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.ajy1.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{9}{2}, 5; -z\right) = \frac{105 \sqrt{\pi} (2 z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{7/2}} - \frac{7 e^{-z} (8 z^2 - 45)}{32 z^3}$$

07.25.03.ajy2.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{9}{2}, 6; z\right) = \frac{35 e^z (4 z - 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2 z + 5) \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.ajy3.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{9}{2}, 6; -z\right) = \frac{35 e^{-z} (4 z + 15)}{16 z^3} + \frac{105 \sqrt{\pi} (2 z - 5) \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = 5$

07.25.03.ajy4.01

$${}_2F_2\left(\frac{5}{2}, 6; 5, 5; z\right) = \frac{16 e^{z/2} (z+2) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{16 e^{z/2} (z^2 - 4 z - 8) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.ajy5.01

$${}_2F_2\left(\frac{5}{2}, 6; 5, \frac{11}{2}; z\right) = \frac{63 e^z (32 z^2 - 110 z - 105)}{256 z^4} + \frac{945 \sqrt{\pi} (4 z^2 + 12 z + 7) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ajy6.01

$${}_2F_2\left(\frac{5}{2}, 6; 5, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (32 z^2 + 110 z - 105)}{256 z^4} + \frac{945 \sqrt{\pi} (4 z^2 - 12 z + 7) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ajy7.01

$${}_2F_2\left(\frac{5}{2}, 6; 5, 6; z\right) = \frac{32 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^2} - \frac{128 e^{z/2} I_1\left(\frac{z}{2}\right)}{z^3}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = \frac{11}{2}$

07.25.03.ajy8.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{11}{2}, 6; z\right) = \frac{1575 e^z (2z - 21)}{128 z^4} + \frac{945 \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.ajy9.01

$${}_2F_2\left(\frac{5}{2}, 6; \frac{11}{2}, 6; -z\right) = \frac{945 \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 e^{-z} (2z + 21)}{128 z^4}$$

For fixed z and $a_1 = \frac{5}{2}$, $a_2 = 6$, $b_1 = 6$

07.25.03.ajya.01

$${}_2F_2\left(\frac{5}{2}, 6; 6, 6; z\right) = \frac{32 e^{z/2} (z + 8) I_0\left(\frac{z}{2}\right)}{z^3} - \frac{32 e^{z/2} (z^2 + 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 3$, $a_2 \geq 3$

For fixed z and $a_1 = 3$, $a_2 = 3$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 3$, $a_2 = 3$, $b_1 = -\frac{11}{2}$

07.25.03.ajyb.01

$${}_2F_2\left(3, 3; -\frac{11}{2}, 1; z\right) = \frac{1}{10395} (16z^{10} + 600z^9 + 7492z^8 + 35838z^7 + 50176z^6 - 14112z^5 + 10800z^4 - 12000z^3 + 15120z^2 - 17010z + 10395) + \frac{e^z \sqrt{\pi} (16z^{21/2} + 608z^{19/2} + 7784z^{17/2} + 39304z^{15/2} + 65025z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.ajyc.01

$${}_2F_2\left(3, 3; -\frac{11}{2}, 1; -z\right) = \frac{1}{10395} (16z^{10} - 600z^9 + 7492z^8 - 35838z^7 + 50176z^6 + 14112z^5 + 10800z^4 + 12000z^3 + 15120z^2 + 17010z + 10395) + \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 608z^{19/2} - 7784z^{17/2} + 39304z^{15/2} - 65025z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.ajyd.01

$${}_2F_2\left(3, 3; -\frac{11}{2}, 2; z\right) = \frac{16z^9 + 432z^8 + 3396z^7 + 7168z^6 - 2352z^5 + 2160z^4 - 3000z^3 + 5040z^2 - 8505z + 10395}{10395} + \frac{2e^z \sqrt{\pi} (8z^{19/2} + 220z^{17/2} + 1802z^{15/2} + 4335z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.ajye.01

$${}_2F_2\left(3, 3; -\frac{11}{2}, 2; -z\right) = \frac{-16z^9 + 432z^8 - 3396z^7 + 7168z^6 + 2352z^5 + 2160z^4 + 3000z^3 + 5040z^2 + 8505z + 10395}{10395} + \frac{2e^{-z}\sqrt{\pi}\left(8z^{19/2} - 220z^{17/2} + 1802z^{15/2} - 4335z^{13/2}\right)\operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.ajyf.01

$${}_2F_2\left(3, 3; -\frac{11}{2}, 3; z\right) = \frac{32z^8 + 528z^7 + 1792z^6 - 672z^5 + 720z^4 - 1200z^3 + 2520z^2 - 5670z + 10395}{10395} + \frac{8e^z\sqrt{\pi}\left(4z^{17/2} + 68z^{15/2} + 255z^{13/2}\right)\operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.ajyg.01

$${}_2F_2\left(3, 3; -\frac{11}{2}, 3; -z\right) = \frac{32z^8 - 528z^7 + 1792z^6 + 672z^5 + 720z^4 + 1200z^3 + 2520z^2 + 5670z + 10395}{10395} - \frac{8e^{-z}\sqrt{\pi}\left(4z^{17/2} - 68z^{15/2} + 255z^{13/2}\right)\operatorname{erfi}(\sqrt{z})}{10395}$$

For fixed z and $a_1 = 3, a_2 = 3, b_1 = -\frac{9}{2}$

07.25.03.ajyh.01

$${}_2F_2\left(3, 3; -\frac{9}{2}, 1; z\right) = \frac{1}{945}\left(-8z^9 - 268z^8 - 2946z^7 - 12151z^6 - 14112z^5 + 3600z^4 - 2400z^3 + 2160z^2 - 1890z + 945\right) + \frac{e^z\sqrt{\pi}\left(-16z^{19/2} - 544z^{17/2} - 6152z^{15/2} - 27000z^{13/2} - 38025z^{11/2}\right)\operatorname{erf}(\sqrt{z})}{1890}$$

07.25.03.ajyi.01

$${}_2F_2\left(3, 3; -\frac{9}{2}, 1; -z\right) = \frac{1}{945}\left(8z^9 - 268z^8 + 2946z^7 - 12151z^6 + 14112z^5 + 3600z^4 + 2400z^3 + 2160z^2 + 1890z + 945\right) + \frac{e^{-z}\sqrt{\pi}\left(-16z^{19/2} + 544z^{17/2} - 6152z^{15/2} + 27000z^{13/2} - 38025z^{11/2}\right)\operatorname{erfi}(\sqrt{z})}{1890}$$

07.25.03.ajyj.01

$${}_2F_2\left(3, 3; -\frac{9}{2}, 2; z\right) = \frac{1}{945}\left(-8z^8 - 192z^7 - 1318z^6 - 2352z^5 + 720z^4 - 600z^3 + 720z^2 - 945z + 945\right) + \frac{1}{945}e^z\sqrt{\pi}\left(-8z^{17/2} - 196z^{15/2} - 1410z^{13/2} - 2925z^{11/2}\right)\operatorname{erf}(\sqrt{z})$$

07.25.03.ajyk.01

$${}_2F_2\left(3, 3; -\frac{9}{2}, 2; -z\right) = \frac{1}{945}\left(-8z^8 + 192z^7 - 1318z^6 + 2352z^5 + 720z^4 + 600z^3 + 720z^2 + 945z + 945\right) + \frac{1}{945}e^{-z}\sqrt{\pi}\left(8z^{17/2} - 196z^{15/2} + 1410z^{13/2} - 2925z^{11/2}\right)\operatorname{erfi}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.ajyl.01} \\
 {}_2F_2\left(3, 3; -\frac{9}{2}, 3; z\right) &= \\
 & \frac{1}{945}(-16z^7 - 232z^6 - 672z^5 + 240z^4 - 240z^3 + 360z^2 - 630z + 945) - \frac{4}{945}e^z\sqrt{\pi}(4z^{15/2} + 60z^{13/2} + 195z^{11/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajym.01} \\
 {}_2F_2\left(3, 3; -\frac{9}{2}, 3; -z\right) &= \\
 & \frac{1}{945}(16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945) - \frac{4}{945}e^{-z}\sqrt{\pi}(4z^{15/2} - 60z^{13/2} + 195z^{11/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

For fixed z and $a_1 = 3, a_2 = 3, b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.ajyn.01} \\
 {}_2F_2\left(3, 3; -\frac{7}{2}, 1; z\right) &= \frac{1}{210}(8z^8 + 236z^7 + 2242z^6 + 7775z^5 + 7200z^4 - 1600z^3 + 864z^2 - 540z + 210) + \\
 & \frac{1}{420}e^z\sqrt{\pi}(16z^{17/2} + 480z^{15/2} + 4712z^{13/2} + 17576z^{11/2} + 20449z^{9/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajyo.01} \\
 {}_2F_2\left(3, 3; -\frac{7}{2}, 1; -z\right) &= \frac{1}{210}(8z^8 - 236z^7 + 2242z^6 - 7775z^5 + 7200z^4 + 1600z^3 + 864z^2 + 540z + 210) + \\
 & \frac{1}{420}e^{-z}\sqrt{\pi}(-16z^{17/2} + 480z^{15/2} - 4712z^{13/2} + 17576z^{11/2} - 20449z^{9/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajyp.01} \\
 {}_2F_2\left(3, 3; -\frac{7}{2}, 2; z\right) &= \frac{1}{105}(4z^7 + 84z^6 + 493z^5 + 720z^4 - 200z^3 + 144z^2 - 135z + 105) + \\
 & \frac{1}{210}e^z\sqrt{\pi}(8z^{15/2} + 172z^{13/2} + 1066z^{11/2} + 1859z^{9/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajyq.01} \\
 {}_2F_2\left(3, 3; -\frac{7}{2}, 2; -z\right) &= \frac{1}{105}(-4z^7 + 84z^6 - 493z^5 + 720z^4 + 200z^3 + 144z^2 + 135z + 105) + \\
 & \frac{1}{210}e^{-z}\sqrt{\pi}(8z^{15/2} - 172z^{13/2} + 1066z^{11/2} - 1859z^{9/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajyr.01} \\
 {}_2F_2\left(3, 3; -\frac{7}{2}, 3; z\right) &= \\
 & \frac{1}{105}(8z^6 + 100z^5 + 240z^4 - 80z^3 + 72z^2 - 90z + 105) + \frac{2}{105}e^z\sqrt{\pi}(4z^{13/2} + 52z^{11/2} + 143z^{9/2})\operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ajys.01} \\
 {}_2F_2\left(3, 3; -\frac{7}{2}, 3; -z\right) &= \\
 & \frac{1}{105}(8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105) - \frac{2}{105}e^{-z}\sqrt{\pi}(4z^{13/2} - 52z^{11/2} + 143z^{9/2})\operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

For fixed z and $a_1 = 3, a_2 = 3, b_1 = -\frac{5}{2}$

07.25.03.ajyt.01

$${}_2F_2\left(3, 3; -\frac{5}{2}, 1; z\right) = \frac{1}{60}(-8z^7 - 204z^6 - 1634z^5 - 4599z^4 - 3200z^3 + 576z^2 - 216z + 60) + \frac{1}{120}e^z\sqrt{\pi}(-16z^{15/2} - 416z^{13/2} - 3464z^{11/2} - 10648z^{9/2} - 9801z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ajyu.01

$${}_2F_2\left(3, 3; -\frac{5}{2}, 1; -z\right) = \frac{1}{60}(8z^7 - 204z^6 + 1634z^5 - 4599z^4 + 3200z^3 + 576z^2 + 216z + 60) + \frac{1}{120}e^{-z}\sqrt{\pi}(-16z^{15/2} + 416z^{13/2} - 3464z^{11/2} + 10648z^{9/2} - 9801z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ajyv.01

$${}_2F_2\left(3, 3; -\frac{5}{2}, 2; z\right) = \frac{1}{30}(-4z^6 - 72z^5 - 351z^4 - 400z^3 + 96z^2 - 54z + 30) + \frac{1}{60}e^z\sqrt{\pi}(-8z^{13/2} - 148z^{11/2} - 770z^{9/2} - 1089z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ajyw.01

$${}_2F_2\left(3, 3; -\frac{5}{2}, 2; -z\right) = \frac{1}{30}(4z^6 + 72z^5 - 351z^4 + 400z^3 + 96z^2 + 54z + 30) + \frac{1}{60}e^{-z}\sqrt{\pi}(8z^{13/2} - 148z^{11/2} + 770z^{9/2} - 1089z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ajyx.01

$${}_2F_2\left(3, 3; -\frac{5}{2}, 3; z\right) = \frac{1}{15}(-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) + \frac{1}{15}e^z\sqrt{\pi}(-4z^{11/2} - 44z^{9/2} - 99z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ajyy.01

$${}_2F_2\left(3, 3; -\frac{5}{2}, 3; -z\right) = \frac{1}{15}(4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) + \frac{1}{15}e^{-z}\sqrt{\pi}(-4z^{11/2} + 44z^{9/2} - 99z^{7/2})\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 3, b_1 = -\frac{3}{2}$

07.25.03.ajyz.01

$${}_2F_2\left(3, 3; -\frac{3}{2}, 1; z\right) = \frac{1}{24}(8z^6 + 172z^5 + 1122z^4 + 2431z^3 + 1152z^2 - 144z + 24) + \frac{1}{48}e^z\sqrt{\pi}(16z^{13/2} + 352z^{11/2} + 2408z^{9/2} + 5832z^{7/2} + 3969z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ajz0.01

$${}_2F_2\left(3, 3; -\frac{3}{2}, 1; -z\right) = \frac{1}{24}(8z^6 - 172z^5 + 1122z^4 - 2431z^3 + 1152z^2 + 144z + 24) + \frac{1}{48}e^{-z}\sqrt{\pi}(-16z^{13/2} + 352z^{11/2} - 2408z^{9/2} + 5832z^{7/2} - 3969z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ajz1.01

$${}_2F_2\left(3, 3; -\frac{3}{2}, 2; z\right) = \frac{1}{12} (4z^5 + 60z^4 + 233z^3 + 192z^2 - 36z + 12) + \frac{1}{24} e^z \sqrt{\pi} (8z^{11/2} + 124z^{9/2} + 522z^{7/2} + 567z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajz2.01

$${}_2F_2\left(3, 3; -\frac{3}{2}, 2; -z\right) = \frac{1}{12} (-4z^5 + 60z^4 - 233z^3 + 192z^2 + 36z + 12) + \frac{1}{24} e^{-z} \sqrt{\pi} (8z^{11/2} - 124z^{9/2} + 522z^{7/2} - 567z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajz3.01

$${}_2F_2\left(3, 3; -\frac{3}{2}, 3; z\right) = \frac{1}{3} (2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6} e^z \sqrt{\pi} (4z^{9/2} + 36z^{7/2} + 63z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajz4.01

$${}_2F_2\left(3, 3; -\frac{3}{2}, 3; -z\right) = \frac{1}{3} (2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6} e^{-z} \sqrt{\pi} (-4z^{9/2} + 36z^{7/2} - 63z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 3, b_1 = -\frac{1}{2}$

07.25.03.ajz5.01

$${}_2F_2\left(3, 3; -\frac{1}{2}, 1; z\right) = \frac{1}{16} (-8z^5 - 140z^4 - 706z^3 - 1079z^2 - 288z + 16) + \frac{1}{32} e^z \sqrt{\pi} (-16z^{11/2} - 288z^{9/2} - 1544z^{7/2} - 2744z^{5/2} - 1225z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajz6.01

$${}_2F_2\left(3, 3; -\frac{1}{2}, 1; -z\right) = \frac{1}{16} (8z^5 - 140z^4 + 706z^3 - 1079z^2 + 288z + 16) + \frac{1}{32} e^{-z} \sqrt{\pi} (-16z^{11/2} + 288z^{9/2} - 1544z^{7/2} + 2744z^{5/2} - 1225z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajz7.01

$${}_2F_2\left(3, 3; -\frac{1}{2}, 2; z\right) = \frac{1}{8} (-4z^4 - 48z^3 - 139z^2 - 72z + 8) + \frac{1}{16} e^z \sqrt{\pi} (-8z^{9/2} - 100z^{7/2} - 322z^{5/2} - 245z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajz8.01

$${}_2F_2\left(3, 3; -\frac{1}{2}, 2; -z\right) = \frac{1}{8} (-4z^4 + 48z^3 - 139z^2 + 72z + 8) + \frac{1}{16} e^{-z} \sqrt{\pi} (8z^{9/2} - 100z^{7/2} + 322z^{5/2} - 245z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajz9.01

$${}_2F_2\left(3, 3; -\frac{1}{2}, 3; z\right) = \frac{1}{2} (-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4} e^z \sqrt{\pi} (-4z^{7/2} - 28z^{5/2} - 35z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajza.01

$${}_2F_2\left(3, 3; -\frac{1}{2}, 3; -z\right) = \frac{1}{2} (2z^3 - 13z^2 + 12z + 2) + \frac{1}{4} e^{-z} \sqrt{\pi} (-4z^{7/2} + 28z^{5/2} - 35z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 3, b_1 = \frac{1}{2}$

07.25.03.0168.01

$${}_2F_2\left(3, 3; \frac{1}{2}, 1; z\right) = \frac{1}{64} \left(16z^4 + 216z^3 + 772z^2 + 702z + e^z \sqrt{\pi} (16z^4 + 224z^3 + 872z^2 + 1000z + 225) \operatorname{erf}(\sqrt{z}) \sqrt{z} + 64\right)$$

07.25.03.ajzb.01

$${}_2F_2\left(3, 3; \frac{1}{2}, 1; -z\right) = \frac{1}{32} (8z^4 - 108z^3 + 386z^2 - 351z + 32) + \frac{1}{64} e^{-z} \sqrt{\pi} (-16z^{9/2} + 224z^{7/2} - 872z^{5/2} + 1000z^{3/2} - 225\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.0169.01

$${}_2F_2\left(3, 3; \frac{1}{2}, 2; z\right) = \frac{1}{32} \left(8z^3 + 72z^2 + 138z + e^z \sqrt{\pi} (8z^3 + 76z^2 + 170z + 75) \operatorname{erf}(\sqrt{z}) \sqrt{z} + 32\right)$$

07.25.03.ajzc.01

$${}_2F_2\left(3, 3; \frac{1}{2}, 2; -z\right) = \frac{1}{16} (-4z^3 + 36z^2 - 69z + 16) + \frac{1}{32} e^{-z} \sqrt{\pi} (8z^{7/2} - 76z^{5/2} + 170z^{3/2} - 75\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ajzd.01

$${}_2F_2\left(3, 3; \frac{1}{2}, 3; z\right) = \frac{1}{4} (2z^2 + 9z + 4) + \frac{1}{8} e^z \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ajze.01

$${}_2F_2\left(3, 3; \frac{1}{2}, 3; -z\right) = \frac{1}{4} (2z^2 - 9z + 4) + \frac{1}{8} e^{-z} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 3, b_1 = 1$

07.25.03.0170.01

$${}_2F_2(3, 3; 1, 1; z) = \frac{1}{4} e^z (z^4 + 12z^3 + 38z^2 + 32z + 4)$$

07.25.03.0171.01

$${}_2F_2\left(3, 3; 1, \frac{3}{2}; z\right) = \frac{1}{128\sqrt{z}} \left(2\sqrt{z} (8z^3 + 76z^2 + 162z + 55) + e^z \sqrt{\pi} (16z^4 + 160z^3 + 392z^2 + 216z + 9) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ajzf.01

$${}_2F_2\left(3, 3; 1, \frac{3}{2}; -z\right) = \frac{1}{64} (-8z^3 + 76z^2 - 162z + 55) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 160z^3 + 392z^2 - 216z + 9) \operatorname{erfi}(\sqrt{z})}{128\sqrt{z}}$$

07.25.03.0172.01

$${}_2F_2(3, 3; 1, 2; z) = \frac{1}{4} e^z (z^3 + 8z^2 + 14z + 4)$$

07.25.03.0173.01

$${}_2F_2\left(3, 3; 1, \frac{5}{2}; z\right) = \frac{3}{256z^{3/2}} \left(2\sqrt{z} (8z^3 + 44z^2 + 34z - 1) + e^z \sqrt{\pi} (16z^4 + 96z^3 + 104z^2 + 8z + 1) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ajzg.01

$${}_2F_2\left(3, 3; 1, \frac{5}{2}; -z\right) = \frac{3(8z^3 - 44z^2 + 34z + 1)}{128z} - \frac{3e^{-z} \sqrt{\pi} (16z^4 - 96z^3 + 104z^2 - 8z + 1) \operatorname{erfi}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.ajzh.01

$${}_2F_2(3, 3; 1, 3; z) = \frac{1}{2} e^z (z^2 + 4z + 2)$$

07.25.03.ajzi.01

$${}_2F_2\left(3, 3; 1, \frac{7}{2}; z\right) = \frac{15(8z^3 + 12z^2 + 2z - 9)}{256z^2} + \frac{15e^z \sqrt{\pi} (16z^4 + 32z^3 + 8z^2 - 8z + 9) \operatorname{erf}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.ajzj.01

$${}_2F_2\left(3, 3; 1, \frac{7}{2}; -z\right) = \frac{15e^{-z} \sqrt{\pi} (16z^4 - 32z^3 + 8z^2 + 8z + 9) \operatorname{erfi}(\sqrt{z})}{512z^{5/2}} - \frac{15(8z^3 - 12z^2 + 2z + 9)}{256z^2}$$

07.25.03.ajzk.01

$${}_2F_2(3, 3; 1, 4; z) = \frac{3e^z (z^4 + 2z^2 - 4z + 4)}{2z^3} - \frac{6}{z^3}$$

07.25.03.ajzl.01

$${}_2F_2\left(3, 3; 1, \frac{9}{2}; z\right) = \frac{105(8z^3 - 20z^2 + 66z - 225)}{512z^3} + \frac{105e^z \sqrt{\pi} (16z^4 - 32z^3 + 104z^2 - 216z + 225) \operatorname{erf}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.ajzm.01

$${}_2F_2\left(3, 3; 1, \frac{9}{2}; -z\right) = \frac{105(8z^3 + 20z^2 + 66z + 225)}{512z^3} - \frac{105e^{-z} \sqrt{\pi} (16z^4 + 32z^3 + 104z^2 + 216z + 225) \operatorname{erfi}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.ajzn.01

$${}_2F_2(3, 3; 1, 5; z) = \frac{6e^z (z^4 - 4z^3 + 14z^2 - 32z + 36)}{z^4} - \frac{24(z + 9)}{z^4}$$

07.25.03.ajzo.01

$${}_2F_2\left(3, 3; 1, \frac{11}{2}; z\right) = \frac{315(24z^3 - 156z^2 + 550z - 3675)}{1024z^4} + \frac{945e^z \sqrt{\pi} (16z^4 - 96z^3 + 392z^2 - 1000z + 1225) \operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.ajzp.01

$${}_2F_2\left(3, 3; 1, \frac{11}{2}; -z\right) = \frac{945e^{-z} \sqrt{\pi} (16z^4 + 96z^3 + 392z^2 + 1000z + 1225) \operatorname{erfi}(\sqrt{z})}{2048z^{9/2}} - \frac{315(24z^3 + 156z^2 + 550z + 3675)}{1024z^4}$$

07.25.03.ajzq.01

$${}_2F_2(3, 3; 1, 6; z) = \frac{30e^z (z^4 - 8z^3 + 38z^2 - 108z + 144)}{z^5} - \frac{60(z^2 + 18z + 72)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = 3, b_1 = \frac{3}{2}$

07.25.03.0174.01

$${}_2F_2\left(3, 3; \frac{3}{2}, 2; z\right) = \frac{1}{64\sqrt{z}} (2\sqrt{z} (4z^2 + 24z + 23) + e^z \sqrt{\pi} (8z^3 + 52z^2 + 66z + 9) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ajzr.01

$${}_2F_2\left(3, 3; \frac{3}{2}, 2; -z\right) = \frac{1}{32} (4z^2 - 24z + 23) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 52z^2 - 66z + 9) \operatorname{erfi}(\sqrt{z})}{64\sqrt{z}}$$

07.25.03.ajzs.01

$${}_2F_2\left(3, 3; \frac{3}{2}, 3; z\right) = \frac{1}{8}(2z+5) + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.ajzt.01

$${}_2F_2\left(3, 3; \frac{3}{2}, 3; -z\right) = \frac{1}{8}(5-2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

For fixed z and $a_1 = 3, a_2 = 3, b_1 = 2$

07.25.03.0175.01

$${}_2F_2(3, 3; 2, 2; z) = \frac{1}{4} e^z (z^2 + 5z + 4)$$

07.25.03.0176.01

$${}_2F_2\left(3, 3; 2, \frac{5}{2}; z\right) = \frac{3}{128 z^{3/2}} \left(2\sqrt{z} (4z^2 + 12z + 1) + e^z \sqrt{\pi} (8z^3 + 28z^2 + 10z - 1) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ajzu.01

$${}_2F_2\left(3, 3; 2, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (8z^3 - 28z^2 + 10z + 1) \operatorname{erfi}(\sqrt{z})}{128 z^{3/2}} - \frac{3(4z^2 - 12z + 1)}{64z}$$

07.25.03.ajzv.01

$${}_2F_2(3, 3; 2, 3; z) = \frac{1}{2} e^z (z + 2)$$

07.25.03.ajzw.01

$${}_2F_2\left(3, 3; 2, \frac{7}{2}; z\right) = \frac{15(4z^2 + 3)}{128z^2} + \frac{15 e^z \sqrt{\pi} (8z^3 + 4z^2 + 2z - 3) \operatorname{erf}(\sqrt{z})}{256 z^{5/2}}$$

07.25.03.ajzx.01

$${}_2F_2\left(3, 3; 2, \frac{7}{2}; -z\right) = \frac{15(4z^2 + 3)}{128z^2} - \frac{15 e^{-z} \sqrt{\pi} (8z^3 - 4z^2 + 2z + 3) \operatorname{erfi}(\sqrt{z})}{256 z^{5/2}}$$

07.25.03.ajzy.01

$${}_2F_2(3, 3; 2, 4; z) = \frac{3 e^z (z^3 - z^2 + 2z - 2)}{2z^3} + \frac{3}{z^3}$$

07.25.03.ajzz.01

$${}_2F_2\left(3, 3; 2, \frac{9}{2}; z\right) = \frac{105(4z^2 - 12z + 45)}{256z^3} + \frac{105 e^z \sqrt{\pi} (8z^3 - 20z^2 + 42z - 45) \operatorname{erf}(\sqrt{z})}{512 z^{7/2}}$$

07.25.03.ak00.01

$${}_2F_2\left(3, 3; 2, \frac{9}{2}; -z\right) = \frac{105 e^{-z} \sqrt{\pi} (8z^3 + 20z^2 + 42z + 45) \operatorname{erfi}(\sqrt{z})}{512 z^{7/2}} - \frac{105(4z^2 + 12z + 45)}{256z^3}$$

07.25.03.ak01.01

$${}_2F_2(3, 3; 2, 5; z) = \frac{12(z+6)}{z^4} + \frac{6 e^z (z^3 - 4z^2 + 10z - 12)}{z^4}$$

07.25.03.ak02.01

$${}_2F_2\left(3, 3; 2, \frac{11}{2}; z\right) = \frac{315(12z^2 - 40z + 525)}{512z^4} + \frac{945e^z\sqrt{\pi}(8z^3 - 44z^2 + 130z - 175)\operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.ak03.01

$${}_2F_2\left(3, 3; 2, \frac{11}{2}; -z\right) = \frac{315(12z^2 + 40z + 525)}{512z^4} - \frac{945e^{-z}\sqrt{\pi}(8z^3 + 44z^2 + 130z + 175)\operatorname{erfi}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.ak04.01

$${}_2F_2(3, 3; 2, 6; z) = \frac{30(z^2 + 12z + 36)}{z^5} + \frac{30e^z(z^3 - 7z^2 + 24z - 36)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = 3, b_1 = \frac{5}{2}$

07.25.03.ak05.01

$${}_2F_2\left(3, 3; \frac{5}{2}, 3; z\right) = \frac{3(2z + 1)}{16z} + \frac{3e^z\sqrt{\pi}(4z^2 + 4z - 1)\operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.ak06.01

$${}_2F_2\left(3, 3; \frac{5}{2}, 3; -z\right) = \frac{3(2z - 1)}{16z} - \frac{3e^{-z}\sqrt{\pi}(4z^2 - 4z - 1)\operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

For fixed z and $a_1 = 3, a_2 = 3, b_1 = 3$

07.25.03.ak07.01

$${}_2F_2(3, 3; 3, 3; z) = e^z$$

07.25.03.ak08.01

$${}_2F_2\left(3, 3; 3, \frac{7}{2}; z\right) = \frac{15(2z - 3)}{32z^2} + \frac{15e^z\sqrt{\pi}(4z^2 - 4z + 3)\operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.ak09.01

$${}_2F_2\left(3, 3; 3, \frac{7}{2}; -z\right) = \frac{15e^{-z}\sqrt{\pi}(4z^2 + 4z + 3)\operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15(2z + 3)}{32z^2}$$

07.25.03.ak0a.01

$${}_2F_2(3, 3; 3, 4; z) = \frac{3e^z(z^2 - 2z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.ak0b.01

$${}_2F_2\left(3, 3; 3, \frac{9}{2}; z\right) = \frac{105(2z - 15)}{64z^3} + \frac{105e^z\sqrt{\pi}(4z^2 - 12z + 15)\operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.ak0c.01

$${}_2F_2\left(3, 3; 3, \frac{9}{2}; -z\right) = \frac{105(2z + 15)}{64z^3} - \frac{105e^{-z}\sqrt{\pi}(4z^2 + 12z + 15)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.ak0d.01

$${}_2F_2(3, 3; 3, 5; z) = \frac{12 e^z (z^2 - 4z + 6)}{z^4} - \frac{24(z + 3)}{z^4}$$

07.25.03.ak0e.01

$${}_2F_2\left(3, 3; 3, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575(2z + 21)}{128 z^4}$$

07.25.03.ak0f.01

$${}_2F_2\left(3, 3; 3, \frac{11}{2}; -z\right) = \frac{1575(2z - 21)}{128 z^4} + \frac{945 e^{-z} \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.ak0g.01

$${}_2F_2(3, 3; 3, 6; z) = \frac{60 e^z (z^2 - 6z + 12)}{z^5} - \frac{60(z^2 + 6z + 12)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = 3, b_1 = 4$

07.25.03.ak0h.01

$${}_2F_2(3, 3; 4, 4; z) = \frac{9 e^z (z - 3)}{z^3} + \frac{18 \operatorname{Ei}(z)}{z^3} + \frac{9 \log\left(\frac{1}{z}\right)}{z^3} - \frac{9 \log(z)}{z^3} - \frac{9(-3 + 2\gamma)}{z^3}$$

07.25.03.ak0i.01

$${}_2F_2(3, 3; 4, 5; z) = \frac{36 e^z (z - 6)}{z^4} - \frac{36(2\gamma z - 5z - 6)}{z^4} + \frac{72 \operatorname{Ei}(z)}{z^3} + \frac{36 \log\left(\frac{1}{z}\right)}{z^3} - \frac{36 \log(z)}{z^3}$$

07.25.03.ak0j.01

$${}_2F_2(3, 3; 4, 6; z) = -\frac{180(\gamma z^2 - 3z^2 - 6z - 6)}{z^5} + \frac{180 \operatorname{Ei}(z)}{z^3} + \frac{90 \log\left(\frac{1}{z}\right)}{z^3} - \frac{90 \log(z)}{z^3} - \frac{1080 e^z}{z^5}$$

For fixed z and $a_1 = 3, a_2 = 3, b_1 = 5$

07.25.03.ak0k.01

$${}_2F_2(3, 3; 5, 5; z) = -\frac{144(2\gamma z - 7z - 6\gamma - 1)}{z^4} + \frac{288(z - 3) \operatorname{Ei}(z)}{z^4} + \frac{144(z - 3) \log\left(\frac{1}{z}\right)}{z^4} - \frac{144(z - 3) \log(z)}{z^4} - \frac{144 e^z}{z^4}$$

07.25.03.ak0l.01

$${}_2F_2(3, 3; 5, 6; z) = \frac{720 \operatorname{Ei}(z)(z - 6)}{z^4} + \frac{360 \log\left(\frac{1}{z}\right)(z - 6)}{z^4} - \frac{360 \log(z)(z - 6)}{z^4} - \frac{720 e^z (z - 6)}{z^5} - \frac{720(\gamma z^2 - 4z^2 - 6\gamma z + 5z + 6)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = 3, b_1 = 6$

07.25.03.ak0m.01

$${}_2F_2(3, 3; 6, 6; z) = -\frac{1800 e^z (z - 11)}{z^5} - \frac{900 (2 \gamma z^2 - 9 z^2 - 24 \gamma z + 44 z + 24 \gamma + 22)}{z^5} + \frac{1800 (z^2 - 12 z + 12) \text{Ei}(z)}{z^5} + \frac{900 (z^2 - 12 z + 12) \log\left(\frac{1}{z}\right)}{z^5} - \frac{900 (z^2 - 12 z + 12) \log(z)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = -\frac{11}{2}$

07.25.03.ak0n.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{1620840375} (16384 z^{17} + 1892352 z^{16} + 90054656 z^{15} + 2305425408 z^{14} + 34792611840 z^{13} + 319197204480 z^{12} + 1772321034240 z^{11} + 5747233720320 z^{10} + 10085183700480 z^9 + 8249935276800 z^8 + 2258949772800 z^7 + 61751289600 z^6 + 1362160800 z^5 + 291891600 z^4 + 187110000 z^3 + 250047000 z^2 + 562605750 z + 1620840375) + \frac{1}{1620840375} (4096 e^z \sqrt{\pi} (4 z^{35/2} + 464 z^{33/2} + 22215 z^{31/2} + 573615 z^{29/2} + 8765280 z^{27/2} + 81920160 z^{25/2} + 468024480 z^{23/2} + 1588960800 z^{21/2} + 3015532800 z^{19/2} + 2855865600 z^{17/2} + 1079568000 z^{15/2} + 92534400 z^{13/2}) \text{erf}(\sqrt{z}))$$

07.25.03.ak0o.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{1620840375} (-16384 z^{17} + 1892352 z^{16} - 90054656 z^{15} + 2305425408 z^{14} - 34792611840 z^{13} + 319197204480 z^{12} - 1772321034240 z^{11} + 5747233720320 z^{10} - 10085183700480 z^9 + 8249935276800 z^8 - 2258949772800 z^7 + 61751289600 z^6 - 1362160800 z^5 + 291891600 z^4 - 187110000 z^3 + 250047000 z^2 - 562605750 z + 1620840375) + \frac{1}{1620840375} (4096 e^{-z} \sqrt{\pi} (4 z^{35/2} - 464 z^{33/2} + 22215 z^{31/2} - 573615 z^{29/2} + 8765280 z^{27/2} - 81920160 z^{25/2} + 468024480 z^{23/2} - 1588960800 z^{21/2} + 3015532800 z^{19/2} - 2855865600 z^{17/2} + 1079568000 z^{15/2} - 92534400 z^{13/2}) \text{erfi}(\sqrt{z}))$$

07.25.03.ak0p.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{147\,349\,125} \left(-8192 z^{16} - 856\,064 z^{15} - 36\,470\,784 z^{14} - 824\,893\,440 z^{13} - 10\,814\,361\,600 z^{12} - 84\,268\,707\,840 z^{11} - 385\,075\,169\,280 z^{10} - 979\,970\,019\,840 z^9 - 1\,245\,698\,092\,800 z^8 - 626\,642\,956\,800 z^7 - 61\,751\,289\,600 z^6 + 1\,362\,160\,800 z^5 + 97\,297\,200 z^4 + 37\,422\,000 z^3 + 35\,721\,000 z^2 + 62\,511\,750 z + 147\,349\,125 \right) - \frac{1}{147\,349\,125} \left(2048 e^z \sqrt{\pi} \left(4 z^{33/2} + 420 z^{31/2} + 18\,015 z^{29/2} + 411\,480 z^{27/2} + 5\,473\,440 z^{25/2} + 43\,606\,080 z^{23/2} + 206\,388\,000 z^{21/2} + 557\,020\,800 z^{19/2} + 787\,449\,600 z^{17/2} + 493\,516\,800 z^{15/2} + 92\,534\,400 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ak0q.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{147\,349\,125} \left(-8192 z^{16} + 856\,064 z^{15} - 36\,470\,784 z^{14} + 824\,893\,440 z^{13} - 10\,814\,361\,600 z^{12} + 84\,268\,707\,840 z^{11} - 385\,075\,169\,280 z^{10} + 979\,970\,019\,840 z^9 - 1\,245\,698\,092\,800 z^8 + 626\,642\,956\,800 z^7 - 61\,751\,289\,600 z^6 - 1\,362\,160\,800 z^5 + 97\,297\,200 z^4 - 37\,422\,000 z^3 + 35\,721\,000 z^2 - 62\,511\,750 z + 147\,349\,125 \right) + \frac{1}{147\,349\,125} \left(2048 e^{-z} \sqrt{\pi} \left(4 z^{33/2} - 420 z^{31/2} + 18\,015 z^{29/2} - 411\,480 z^{27/2} + 5\,473\,440 z^{25/2} - 43\,606\,080 z^{23/2} + 206\,388\,000 z^{21/2} - 557\,020\,800 z^{19/2} + 787\,449\,600 z^{17/2} - 493\,516\,800 z^{15/2} + 92\,534\,400 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ak0r.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{16\,372\,125} \left(4096 z^{15} + 382\,976 z^{14} + 14\,407\,680 z^{13} + 282\,963\,968 z^{12} + 3\,150\,213\,120 z^{11} + 20\,208\,015\,360 z^{10} + 72\,569\,602\,560 z^9 + 134\,339\,385\,600 z^8 + 106\,377\,546\,240 z^7 + 20\,583\,763\,200 z^6 - 1\,362\,160\,800 z^5 + 97\,297\,200 z^4 + 12\,474\,000 z^3 + 7\,144\,200 z^2 + 8\,930\,250 z + 16\,372\,125 \right) + \frac{1}{16\,372\,125} \left(1024 e^z \sqrt{\pi} \left(4 z^{31/2} + 376 z^{29/2} + 14\,255 z^{27/2} + 283\,185 z^{25/2} + 3\,207\,960 z^{23/2} + 21\,150\,360 z^{21/2} + 79\,485\,840 z^{19/2} + 159\,591\,600 z^{17/2} + 149\,083\,200 z^{15/2} + 46\,267\,200 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ak0s.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{16\,372\,125} \left(-4096 z^{15} + 382\,976 z^{14} - 14\,407\,680 z^{13} + 282\,963\,968 z^{12} - 3\,150\,213\,120 z^{11} + 20\,208\,015\,360 z^{10} - 72\,569\,602\,560 z^9 + 134\,339\,385\,600 z^8 - 106\,377\,546\,240 z^7 + 20\,583\,763\,200 z^6 + 1\,362\,160\,800 z^5 + 97\,297\,200 z^4 - 12\,474\,000 z^3 + 7\,144\,200 z^2 - 8\,930\,250 z + 16\,372\,125 \right) + \frac{1}{16\,372\,125} \left(1024 e^{-z} \sqrt{\pi} \left(4 z^{31/2} - 376 z^{29/2} + 14\,255 z^{27/2} - 283\,185 z^{25/2} + 3\,207\,960 z^{23/2} - 21\,150\,360 z^{21/2} + 79\,485\,840 z^{19/2} - 159\,591\,600 z^{17/2} + 149\,083\,200 z^{15/2} - 46\,267\,200 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ak0t.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{2338875} \left(-2048 z^{14} - 168960 z^{13} - 5515264 z^{12} - 91926528 z^{11} - 842250240 z^{10} - 4248061440 z^9 - \right.$$

$$\left. 11124691200 z^8 - 12940715520 z^7 - 4116752640 z^6 + 454053600 z^5 - \right.$$

$$\left. 97297200 z^4 + 12474000 z^3 + 2381400 z^2 + 1786050 z + 2338875 \right) -$$

$$\frac{1}{2338875} \left(512 e^z \sqrt{\pi} \left(4 z^{29/2} + 332 z^{27/2} + 10935 z^{25/2} + 184770 z^{23/2} + 1729800 z^{21/2} + \right. \right.$$

$$\left. \left. 9041760 z^{19/2} + 25235280 z^{17/2} + 33415200 z^{15/2} + 15422400 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ak0u.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{2338875} \left(-2048 z^{14} + 168960 z^{13} - 5515264 z^{12} + 91926528 z^{11} - 842250240 z^{10} + 4248061440 z^9 - \right.$$

$$\left. 11124691200 z^8 + 12940715520 z^7 - 4116752640 z^6 - 454053600 z^5 - \right.$$

$$\left. 97297200 z^4 - 12474000 z^3 + 2381400 z^2 - 1786050 z + 2338875 \right) +$$

$$\frac{1}{2338875} \left(512 e^{-z} \sqrt{\pi} \left(4 z^{29/2} - 332 z^{27/2} + 10935 z^{25/2} - 184770 z^{23/2} + 1729800 z^{21/2} - \right. \right.$$

$$\left. \left. 9041760 z^{19/2} + 25235280 z^{17/2} - 33415200 z^{15/2} + 15422400 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ak0v.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{467775} \left(1024 z^{13} + 73216 z^{12} + 2025984 z^{11} + 27764736 z^{10} + 199933440 z^9 + 736162560 z^8 + 1218516480 z^7 + \right.$$

$$\left. 588107520 z^6 - 90810720 z^5 + 32432400 z^4 - 12474000 z^3 + 2381400 z^2 + 595350 z + 467775 \right) +$$

$$\frac{1}{467775} \left(256 e^z \sqrt{\pi} \left(4 z^{27/2} + 288 z^{25/2} + 8055 z^{23/2} + 112275 z^{21/2} + 831600 z^{19/2} + \right. \right.$$

$$\left. \left. 3220560 z^{17/2} + 5911920 z^{15/2} + 3855600 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ak0w.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{467775} \left(-1024 z^{13} + 73216 z^{12} - 2025984 z^{11} + 27764736 z^{10} - 199933440 z^9 + 736162560 z^8 - 1218516480 z^7 + \right.$$

$$\left. 588107520 z^6 + 90810720 z^5 + 32432400 z^4 + 12474000 z^3 + 2381400 z^2 - 595350 z + 467775 \right) +$$

$$\frac{1}{467775} \left(256 e^{-z} \sqrt{\pi} \left(4 z^{27/2} - 288 z^{25/2} + 8055 z^{23/2} - 112275 z^{21/2} + 831600 z^{19/2} - \right. \right.$$

$$\left. \left. 3220560 z^{17/2} + 5911920 z^{15/2} - 3855600 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ak0x.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{155925} \left(-512 z^{12} - 30976 z^{11} - 703488 z^{10} - 7565824 z^9 - 39755520 z^8 - 92828160 z^7 - 65345280 z^6 + 12972960 z^5 - 6486480 z^4 + 4158000 z^3 - 2381400 z^2 + 595350 z + 155925 \right) - \frac{1}{155925} 128 e^z \sqrt{\pi} \left(4 z^{25/2} + 244 z^{23/2} + 5615 z^{21/2} + 61740 z^{19/2} + 337680 z^{17/2} + 856800 z^{15/2} + 771120 z^{13/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak0y.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{155925} \left(-512 z^{12} + 30976 z^{11} - 703488 z^{10} + 7565824 z^9 - 39755520 z^8 + 92828160 z^7 - 65345280 z^6 - 12972960 z^5 - 6486480 z^4 - 4158000 z^3 - 2381400 z^2 - 595350 z + 155925 \right) + \frac{1}{155925} \left(128 e^{-z} \sqrt{\pi} \left(4 z^{25/2} - 244 z^{23/2} + 5615 z^{21/2} - 61740 z^{19/2} + 337680 z^{17/2} - 856800 z^{15/2} + 771120 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ak0z.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{155925} \left(256 z^{11} + 12672 z^{10} + 225152 z^9 + 1762560 z^8 + 5875200 z^7 + 5940480 z^6 - 1441440 z^5 + 926640 z^4 - 831600 z^3 + 793800 z^2 - 595350 z + 155925 \right) + \frac{64 e^z \sqrt{\pi} \left(4 z^{23/2} + 200 z^{21/2} + 3615 z^{19/2} + 29205 z^{17/2} + 104040 z^{15/2} + 128520 z^{13/2} \right) \operatorname{erf}(\sqrt{z})}{155925}$$

07.25.03.ak10.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{155925} \left(-256 z^{11} + 12672 z^{10} - 225152 z^9 + 1762560 z^8 - 5875200 z^7 + 5940480 z^6 + 1441440 z^5 + 926640 z^4 + 831600 z^3 + 793800 z^2 + 595350 z + 155925 \right) + \frac{64 e^{-z} \sqrt{\pi} \left(4 z^{23/2} - 200 z^{21/2} + 3615 z^{19/2} - 29205 z^{17/2} + 104040 z^{15/2} - 128520 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.ak11.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{311850} \left(e^z \left(512 z^{11} + 22784 z^{10} + 355840 z^9 + 2361600 z^8 + 6206400 z^7 + 3759840 z^6 - 1602720 z^5 + 1436400 z^4 - 1464750 z^3 + 1346625 z^2 - 907200 z + 311850 \right) \right)$$

07.25.03.ak12.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{32 e^z \sqrt{\pi} (4 z^4 + 156 z^3 + 2055 z^2 + 10710 z + 18360) \operatorname{erf}(\sqrt{z}) z^{13/2}}{155925} + \frac{1}{155925} (128 z^{10} + 4928 z^9 + 63360 z^8 + 313344 z^7 + 456960 z^6 - 131040 z^5 + 102960 z^4 - 118800 z^3 + 158760 z^2 - 198450 z + 155925)$$

07.25.03.ak13.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{155925} (128 z^{10} - 4928 z^9 + 63360 z^8 - 313344 z^7 + 456960 z^6 + 131040 z^5 + 102960 z^4 + 118800 z^3 + 158760 z^2 + 198450 z + 155925) - \frac{32 e^{-z} \sqrt{\pi} z^{13/2} (4 z^4 - 156 z^3 + 2055 z^2 - 10710 z + 18360) \operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.ak14.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{311850} (e^z (512 z^{10} + 17152 z^9 + 184320 z^8 + 702720 z^7 + 584640 z^6 - 332640 z^5 + 393120 z^4 - 529200 z^3 + 652050 z^2 - 609525 z + 311850))$$

07.25.03.ak15.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{16 e^z \sqrt{\pi} (4 z^3 + 112 z^2 + 935 z + 2295) \operatorname{erf}(\sqrt{z}) z^{13/2}}{51975} + \frac{1}{51975} (64 z^9 + 1760 z^8 + 14112 z^7 + 30464 z^6 - 10080 z^5 + 9360 z^4 - 13200 z^3 + 22680 z^2 - 39690 z + 51975)$$

07.25.03.ak16.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{16 e^{-z} \sqrt{\pi} (4 z^3 - 112 z^2 + 935 z - 2295) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{51975} + \frac{1}{51975} (-64 z^9 + 1760 z^8 - 14112 z^7 + 30464 z^6 + 10080 z^5 + 9360 z^4 + 13200 z^3 + 22680 z^2 + 39690 z + 51975)$$

07.25.03.ak17.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{155925} e^z (512 z^9 + 11520 z^8 + 69120 z^7 + 80640 z^6 - 60480 z^5 + 90720 z^4 - 151200 z^3 + 226800 z^2 - 255150 z + 155925)$$

07.25.03.ak18.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{8 e^z \sqrt{\pi} (4 z^2 + 68 z + 255) \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{32 z^8 + 528 z^7 + 1792 z^6 - 672 z^5 + 720 z^4 - 1200 z^3 + 2520 z^2 - 5670 z + 10395}{10395}$$

07.25.03.ak19.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{32 z^8 - 528 z^7 + 1792 z^6 + 672 z^5 + 720 z^4 + 1200 z^3 + 2520 z^2 + 5670 z + 10395}{10395} - \frac{8 e^{-z} \sqrt{\pi} z^{13/2} (4 z^2 - 68 z + 255) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.ak1a.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{51975 z^3} (e^z (512 z^{11} + 5888 z^{10} + 10240 z^9 - 11520 z^8 + 31680 z^7 - 131040 z^6 + 635040 z^5 - 2948400 z^4 + 11538450 z^3 - 34459425 z^2 + 68918850 z - 68918850)) + \frac{1326}{z^3}$$

07.25.03.ak1b.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{1485 z^3} (16 z^{10} + 88 z^9 + 24 z^8 - 528 z^7 + 4560 z^6 - 32760 z^5 + 200970 z^4 - 1035315 z^3 + 4354560 z^2 - 14515200 z + 43545600) + \frac{1}{1485 z^{7/2}} (4 e^z \sqrt{\pi} (4 z^{11} + 24 z^{10} + 15 z^9 - 135 z^8 + 1080 z^7 - 7560 z^6 + 45360 z^5 - 226800 z^4 + 907200 z^3 - 2721600 z^2 + 5443200 z - 5443200) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ak1c.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{1485 z^3} (-16 z^{10} + 88 z^9 - 24 z^8 - 528 z^7 - 4560 z^6 - 32760 z^5 - 200970 z^4 - 1035315 z^3 - 4354560 z^2 - 14515200 z - 43545600) + \frac{1}{1485 z^{7/2}} (4 e^{-z} \sqrt{\pi} (4 z^{11} - 24 z^{10} + 15 z^9 + 135 z^8 + 1080 z^7 + 7560 z^6 + 45360 z^5 + 226800 z^4 + 907200 z^3 + 2721600 z^2 + 5443200 z + 5443200) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ak1d.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, 5; z\right) = \frac{5304(z+57)}{z^4} + \frac{1}{51975 z^4} (4 e^z (512 z^{11} + 256 z^{10} + 7680 z^9 - 80640 z^8 + 676800 z^7 - 4868640 z^6 + 29846880 z^5 - 152182800 z^4 + 620269650 z^3 - 1895268375 z^2 + 3859455600 z - 3928374450))$$

07.25.03.ak1e.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{165 z^4} (8 z^{10} - 44 z^9 + 456 z^8 - 4400 z^7 + 37800 z^6 - 284130 z^5 + 1833765 z^4 - 9918720 z^3 + 43545600 z^2 - 147571200 z + 508032000) + \frac{1}{165 z^{9/2}} (2 e^z \sqrt{\pi} (4 z^{11} - 20 z^{10} + 215 z^9 - 2070 z^8 + 17640 z^7 - 131040 z^6 + 831600 z^5 - 4384800 z^4 + 18446400 z^3 - 58060800 z^2 + 121564800 z - 127008000) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ak1f.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{165 z^4} (8 z^{10} + 44 z^9 + 456 z^8 + 4400 z^7 + 37800 z^6 + 284130 z^5 + 1833765 z^4 + 9918720 z^3 + 43545600 z^2 + 147571200 z + 508032000) - \frac{1}{165 z^{9/2}} (2 e^{-z} \sqrt{\pi} (4 z^{11} + 20 z^{10} + 215 z^9 + 2070 z^8 + 17640 z^7 + 131040 z^6 + 831600 z^5 + 4384800 z^4 + 18446400 z^3 + 58060800 z^2 + 121564800 z + 127008000) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ak1g.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{11}{2}, 6; z\right) = \frac{13260(z^2 + 114z + 1596)}{z^5} + \frac{1}{10395 z^5} (4 e^z (512 z^{11} - 5376 z^{10} + 61440 z^9 - 633600 z^8 + 5745600 z^7 - 45087840 z^6 + 300373920 z^5 - 1654052400 z^4 + 7236479250 z^3 - 23604706125 z^2 + 51068867850 z - 54997242300))$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = -\frac{9}{2}$

07.25.03.ak1h.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{13395375} (4096 z^{15} + 387072 z^{14} + 14753792 z^{13} + 294604800 z^{12} + 3351859200 z^{11} + 22153758720 z^{10} + 83136683520 z^9 + 165408203520 z^8 + 151078233600 z^7 + 45649094400 z^6 + 1362160800 z^5 + 32432400 z^4 + 7484400 z^3 + 5103000 z^2 + 6945750 z + 13395375) + \frac{1}{13395375} (1024 e^z \sqrt{\pi} (4 z^{31/2} + 380 z^{29/2} + 14595 z^{27/2} + 294720 z^{25/2} + 3410400 z^{23/2} + 23143680 z^{21/2} + 90669600 z^{19/2} + 194342400 z^{17/2} + 204422400 z^{15/2} + 84672000 z^{13/2} + 7862400 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ak1i.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{13\,395\,375} \left(-4096 z^{15} + 387\,072 z^{14} - 14\,753\,792 z^{13} + 294\,604\,800 z^{12} - 3\,351\,859\,200 z^{11} + 22\,153\,758\,720 z^{10} - \right.$$

$$83\,136\,683\,520 z^9 + 165\,408\,203\,520 z^8 - 151\,078\,233\,600 z^7 + 45\,649\,094\,400 z^6 -$$

$$1\,362\,160\,800 z^5 + 32\,432\,400 z^4 - 7\,484\,400 z^3 + 5\,103\,000 z^2 - 6\,945\,750 z + 13\,395\,375 \Big) +$$

$$\frac{1}{13\,395\,375} \left(1024 e^{-z} \sqrt{\pi} \left(4 z^{31/2} - 380 z^{29/2} + 14\,595 z^{27/2} - 294\,720 z^{25/2} + 3\,410\,400 z^{23/2} - 23\,143\,680 z^{21/2} + \right. \right.$$

$$\left. \left. 90\,669\,600 z^{19/2} - 194\,342\,400 z^{17/2} + 204\,422\,400 z^{15/2} - 84\,672\,000 z^{13/2} + 7\,862\,400 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ak1j.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{1\,488\,375} \left(-2048 z^{14} - 173\,056 z^{13} - 5\,820\,416 z^{12} - 100\,823\,040 z^{11} - 972\,871\,680 z^{10} - 5\,283\,540\,480 z^9 - \right.$$

$$15\,534\,408\,960 z^8 - 22\,350\,343\,680 z^7 - 12\,532\,665\,600 z^6 - 1\,362\,160\,800 z^5 +$$

$$32\,432\,400 z^4 + 2\,494\,800 z^3 + 1\,020\,600 z^2 + 992\,250 z + 1\,488\,375 \Big) -$$

$$\frac{1}{1\,488\,375} \left(512 e^z \sqrt{\pi} \left(4 z^{29/2} + 340 z^{27/2} + 11\,535 z^{25/2} + 202\,440 z^{23/2} + 1\,993\,320 z^{21/2} + 11\,183\,760 z^{19/2} + \right. \right.$$

$$\left. \left. 34\,750\,800 z^{17/2} + 55\,339\,200 z^{15/2} + 38\,404\,800 z^{13/2} + 7\,862\,400 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ak1k.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{1\,488\,375} \left(-2048 z^{14} + 173\,056 z^{13} - 5\,820\,416 z^{12} + 100\,823\,040 z^{11} - 972\,871\,680 z^{10} + 5\,283\,540\,480 z^9 - \right.$$

$$15\,534\,408\,960 z^8 + 22\,350\,343\,680 z^7 - 12\,532\,665\,600 z^6 + 1\,362\,160\,800 z^5 +$$

$$32\,432\,400 z^4 - 2\,494\,800 z^3 + 1\,020\,600 z^2 - 992\,250 z + 1\,488\,375 \Big) +$$

$$\frac{1}{1\,488\,375} \left(512 e^{-z} \sqrt{\pi} \left(4 z^{29/2} - 340 z^{27/2} + 11\,535 z^{25/2} - 202\,440 z^{23/2} + 1\,993\,320 z^{21/2} - 11\,183\,760 z^{19/2} + \right. \right.$$

$$\left. \left. 34\,750\,800 z^{17/2} - 55\,339\,200 z^{15/2} + 38\,404\,800 z^{13/2} - 7\,862\,400 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ak1l.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{212\,625} \left(1024 z^{13} + 76\,288 z^{12} + 2\,224\,128 z^{11} + 32\,655\,360 z^{10} + 258\,869\,760 z^9 + 1\,102\,429\,440 z^8 + 2\,352\,407\,040 z^7 + \right.$$

$$2\,103\,978\,240 z^6 + 454\,053\,600 z^5 - 32\,432\,400 z^4 + 2\,494\,800 z^3 + 340\,200 z^2 + 198\,450 z + 212\,625 \Big) +$$

$$\frac{1}{212\,625} \left(256 e^z \sqrt{\pi} \left(4 z^{27/2} + 300 z^{25/2} + 8835 z^{23/2} + 131\,760 z^{21/2} + 1\,071\,000 z^{19/2} + \right. \right.$$

$$\left. \left. 4\,757\,760 z^{17/2} + 10\,962\,000 z^{15/2} + 11\,491\,200 z^{13/2} + 3\,931\,200 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ak1m.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{212\,625} \left(-1024 z^{13} + 76\,288 z^{12} - 2\,224\,128 z^{11} + 32\,655\,360 z^{10} - 258\,869\,760 z^9 + 1\,102\,429\,440 z^8 - 2\,352\,407\,040 z^7 + \right.$$

$$\left. 2\,103\,978\,240 z^6 - 454\,053\,600 z^5 - 32\,432\,400 z^4 - 2\,494\,800 z^3 + 340\,200 z^2 - 198\,450 z + 212\,625 \right) +$$

$$\frac{1}{212\,625} \left(256 e^{-z} \sqrt{\pi} \left(4 z^{27/2} - 300 z^{25/2} + 8835 z^{23/2} - 131\,760 z^{21/2} + 1\,071\,000 z^{19/2} - \right. \right.$$

$$\left. \left. 4\,757\,760 z^{17/2} + 10\,962\,000 z^{15/2} - 11\,491\,200 z^{13/2} + 3\,931\,200 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ak1n.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{42\,525} \left(-512 z^{12} - 33\,024 z^{11} - 815\,104 z^{10} - 9\,822\,720 z^9 - 61\,044\,480 z^8 - 188\,981\,760 z^7 - 252\,645\,120 z^6 - \right.$$

$$\left. 90\,810\,720 z^5 + 10\,810\,800 z^4 - 2\,494\,800 z^3 + 340\,200 z^2 + 66\,150 z + 42\,525 \right) -$$

$$\frac{1}{42\,525} \left(128 e^z \sqrt{\pi} \left(4 z^{25/2} + 260 z^{23/2} + 6\,495 z^{21/2} + 79\,800 z^{19/2} + 512\,400 z^{17/2} + \right. \right.$$

$$\left. \left. 1\,683\,360 z^{15/2} + 2\,545\,200 z^{13/2} + 1\,310\,400 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ak1o.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{42\,525} \left(-512 z^{12} + 33\,024 z^{11} - 815\,104 z^{10} + 9\,822\,720 z^9 - 61\,044\,480 z^8 + 188\,981\,760 z^7 - 252\,645\,120 z^6 + \right.$$

$$\left. 90\,810\,720 z^5 + 10\,810\,800 z^4 + 2\,494\,800 z^3 + 340\,200 z^2 - 66\,150 z + 42\,525 \right) +$$

$$\frac{1}{42\,525} \left(128 e^{-z} \sqrt{\pi} \left(4 z^{25/2} - 260 z^{23/2} + 6\,495 z^{21/2} - 79\,800 z^{19/2} + 512\,400 z^{17/2} - \right. \right.$$

$$\left. \left. 1\,683\,360 z^{15/2} + 2\,545\,200 z^{13/2} - 1\,310\,400 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ak1p.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{14\,175} \left(256 z^{11} + 13\,952 z^{10} + 282\,112 z^9 + 2\,661\,120 z^8 + 12\,019\,200 z^7 + 23\,412\,480 z^6 + 12\,972\,960 z^5 - \right.$$

$$\left. 2\,162\,160 z^4 + 831\,600 z^3 - 340\,200 z^2 + 66\,150 z + 14\,175 \right) +$$

$$\frac{1}{14\,175} 64 e^z \sqrt{\pi} \left(4 z^{23/2} + 220 z^{21/2} + 4\,515 z^{19/2} + 43\,680 z^{17/2} + 206\,640 z^{15/2} + 443\,520 z^{13/2} + 327\,600 z^{11/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak1q.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{14\,175} \left(-256 z^{11} + 13\,952 z^{10} - 282\,112 z^9 + 2\,661\,120 z^8 - 12\,019\,200 z^7 + 23\,412\,480 z^6 - 12\,972\,960 z^5 - \right.$$

$$\left. 2\,162\,160 z^4 - 831\,600 z^3 - 340\,200 z^2 - 66\,150 z + 14\,175 \right) +$$

$$\frac{1}{14\,175} 64 e^{-z} \sqrt{\pi} \left(4 z^{23/2} - 220 z^{21/2} + 4\,515 z^{19/2} - 43\,680 z^{17/2} + 206\,640 z^{15/2} - 443\,520 z^{13/2} + 327\,600 z^{11/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak1r.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{14175} (-128 z^{10} - 5696 z^9 - 89856 z^8 - 614400 z^7 - 1747200 z^6 - 1441440 z^5 + 308880 z^4 - 166320 z^3 + 113400 z^2 - 66150 z + 14175) - \frac{32 e^z \sqrt{\pi} (4 z^{21/2} + 180 z^{19/2} + 2895 z^{17/2} + 20520 z^{15/2} + 63000 z^{13/2} + 65520 z^{11/2}) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.ak1s.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{14175} (-128 z^{10} + 5696 z^9 - 89856 z^8 + 614400 z^7 - 1747200 z^6 + 1441440 z^5 + 308880 z^4 + 166320 z^3 + 113400 z^2 + 66150 z + 14175) + \frac{32 e^{-z} \sqrt{\pi} (4 z^{21/2} - 180 z^{19/2} + 2895 z^{17/2} - 20520 z^{15/2} + 63000 z^{13/2} - 65520 z^{11/2}) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.ak1t.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, 1; z\right) = -\frac{1}{28350} (e^z (256 z^{10} + 10240 z^9 + 142080 z^8 + 825600 z^7 + 1864800 z^6 + 947520 z^5 - 327600 z^4 + 226800 z^3 - 165375 z^2 + 94500 z - 28350))$$

07.25.03.ak1u.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{14175} (-64 z^9 - 2208 z^8 - 25088 z^7 - 107520 z^6 - 131040 z^5 + 34320 z^4 - 23760 z^3 + 22680 z^2 - 22050 z + 14175) - \frac{16 e^z \sqrt{\pi} z^{11/2} (4 z^4 + 140 z^3 + 1635 z^2 + 7440 z + 10920) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.ak1v.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{14175} (64 z^9 - 2208 z^8 + 25088 z^7 - 107520 z^6 + 131040 z^5 + 34320 z^4 + 23760 z^3 + 22680 z^2 + 22050 z + 14175) - \frac{16 e^{-z} \sqrt{\pi} z^{11/2} (4 z^4 - 140 z^3 + 1635 z^2 - 7440 z + 10920) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.ak1w.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, 2; z\right) = -\frac{1}{28350} e^z (256 z^9 + 7680 z^8 + 72960 z^7 + 241920 z^6 + 171360 z^5 - 80640 z^4 + 75600 z^3 - 75600 z^2 + 61425 z - 28350)$$

07.25.03.ak1x.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{-32 z^8 - 784 z^7 - 5504 z^6 - 10080 z^5 + 3120 z^4 - 2640 z^3 + 3240 z^2 - 4410 z + 4725}{4725} - \frac{8 e^z \sqrt{\pi} z^{11/2} (4 z^3 + 100 z^2 + 735 z + 1560) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.ak1y.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{8 e^{-z} \sqrt{\pi} (4 z^3 - 100 z^2 + 735 z - 1560) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{4725} + \frac{-32 z^8 + 784 z^7 - 5504 z^6 + 10080 z^5 + 3120 z^4 + 2640 z^3 + 3240 z^2 + 4410 z + 4725}{4725}$$

07.25.03.ak1z.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, 3; z\right) = \frac{1}{14175} e^z (256 z^8 + 5120 z^7 + 26880 z^6 + 26880 z^5 - 16800 z^4 + 20160 z^3 - 25200 z^2 + 25200 z - 14175)$$

07.25.03.ak20.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{945} (-16 z^7 - 232 z^6 - 672 z^5 + 240 z^4 - 240 z^3 + 360 z^2 - 630 z + 945) - \frac{4}{945} e^z \sqrt{\pi} z^{11/2} (4 z^2 + 60 z + 195) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak21.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{1}{945} (16 z^7 - 232 z^6 + 672 z^5 + 240 z^4 + 240 z^3 + 360 z^2 + 630 z + 945) - \frac{4}{945} e^{-z} \sqrt{\pi} z^{11/2} (4 z^2 - 60 z + 195) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak22.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, 4; z\right) = \frac{1}{4725 z^3} (e^z (-256 z^{10} - 2560 z^9 - 3840 z^8 + 3840 z^7 - 10080 z^6 + 40320 z^5 - 176400 z^4 + 680400 z^3 - 2027025 z^2 + 4054050 z - 4054050)) + \frac{858}{z^3}$$

07.25.03.ak23.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-8 z^9 - 36 z^8 - 16 z^7 + 240 z^6 - 1800 z^5 + 11130 z^4 - 57465 z^3 + 241920 z^2 - 806400 z + 2419200}{135 z^3} - \frac{1}{135 z^{7/2}} (2 e^z \sqrt{\pi} (4 z^{10} + 20 z^9 + 15 z^8 - 120 z^7 + 840 z^6 - 5040 z^5 + 25200 z^4 - 100800 z^3 + 302400 z^2 - 604800 z + 604800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ak24.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{-8z^9 + 36z^8 - 16z^7 - 240z^6 - 1800z^5 - 11130z^4 - 57465z^3 - 241920z^2 - 806400z - 2419200}{135z^3} + \frac{1}{135z^{7/2}} \left(2e^{-z}\sqrt{\pi}\left(4z^{10} - 20z^9 + 15z^8 + 120z^7 + 840z^6 + 5040z^5 + 25200z^4 + 100800z^3 + 302400z^2 + 604800z + 604800\right)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ak25.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, 5; z\right) = \frac{3432(z+51)}{z^4} - \frac{1}{4725z^4} \left(4e^z(256z^{10} + 3840z^8 - 34560z^7 + 252000z^6 - 1552320z^5 + 7938000z^4 - 32432400z^3 + 99324225z^2 - 202702500z + 206756550)\right)$$

07.25.03.ak26.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{15z^4} \left(-4z^9 + 22z^8 - 208z^7 + 1800z^6 - 13650z^5 + 88815z^4 - 483840z^3 + 2136960z^2 - 7257600z + 25401600\right) + \frac{1}{15z^{9/2}} \left(e^z\sqrt{\pi}\left(-4z^{10} + 20z^9 - 195z^8 + 1680z^7 - 12600z^6 + 80640z^5 - 428400z^4 + 1814400z^3 - 5745600z^2 + 12096000z - 12700800\right)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ak27.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{15z^4} \left(4z^9 + 22z^8 + 208z^7 + 1800z^6 + 13650z^5 + 88815z^4 + 483840z^3 + 2136960z^2 + 7257600z + 25401600\right) + \frac{1}{15z^{9/2}} \left(e^{-z}\sqrt{\pi}\left(-4z^{10} - 20z^9 - 195z^8 - 1680z^7 - 12600z^6 - 80640z^5 - 428400z^4 - 1814400z^3 - 5745600z^2 - 12096000z - 12700800\right)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ak28.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{9}{2}, 6; z\right) = \frac{8580(z^2 + 102z + 1292)}{z^5} - \frac{1}{945z^5} \left(4e^z(256z^{10} - 2560z^9 + 26880z^8 - 249600z^7 + 1999200z^6 - 13547520z^5 + 75675600z^4 - 335134800z^3 + 1104728625z^2 - 2412159750z + 2618916300)\right)$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = -\frac{7}{2}$

07.25.03.ak29.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{165375} (1024 z^{13} + 77312 z^{12} + 2292224 z^{11} + 34403328 z^{10} + 281070080 z^9 + 1251091200 z^8 + 2869396992 z^7 + 2958708480 z^6 + 993152160 z^5 + 32432400 z^4 + 831600 z^3 + 204120 z^2 + 141750 z + 165375) + \frac{1}{165375} (256 e^z \sqrt{\pi} (4 z^{27/2} + 304 z^{25/2} + 9103 z^{23/2} + 138719 z^{21/2} + 1161006 z^{19/2} + 5378730 z^{17/2} + 13235880 z^{15/2} + 15631560 z^{13/2} + 7141680 z^{11/2} + 720720 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ak2a.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{165375} (-1024 z^{13} + 77312 z^{12} - 2292224 z^{11} + 34403328 z^{10} - 281070080 z^9 + 1251091200 z^8 - 2869396992 z^7 + 2958708480 z^6 - 993152160 z^5 + 32432400 z^4 - 831600 z^3 + 204120 z^2 - 141750 z + 165375) + \frac{1}{165375} (256 e^{-z} \sqrt{\pi} (4 z^{27/2} - 304 z^{25/2} + 9103 z^{23/2} - 138719 z^{21/2} + 1161006 z^{19/2} - 5378730 z^{17/2} + 13235880 z^{15/2} - 15631560 z^{13/2} + 7141680 z^{11/2} - 720720 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ak2b.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{23625} (-512 z^{12} - 34048 z^{11} - 873984 z^{10} - 11100160 z^9 - 74330880 z^8 - 258494976 z^7 - 427365120 z^6 - 269549280 z^5 - 32432400 z^4 + 831600 z^3 + 68040 z^2 + 28350 z + 23625) - \frac{1}{23625} (128 e^z \sqrt{\pi} (4 z^{25/2} + 268 z^{23/2} + 6959 z^{21/2} + 90006 z^{19/2} + 620970 z^{17/2} + 2273880 z^{15/2} + 4140360 z^{13/2} + 3210480 z^{11/2} + 720720 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ak2c.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{23625} (-512 z^{12} + 34048 z^{11} - 873984 z^{10} + 11100160 z^9 - 74330880 z^8 + 258494976 z^7 - 427365120 z^6 + 269549280 z^5 - 32432400 z^4 - 831600 z^3 + 68040 z^2 - 28350 z + 23625) + \frac{1}{23625} (128 e^{-z} \sqrt{\pi} (4 z^{25/2} - 268 z^{23/2} + 6959 z^{21/2} - 90006 z^{19/2} + 620970 z^{17/2} - 2273880 z^{15/2} + 4140360 z^{13/2} - 3210480 z^{11/2} + 720720 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ak2d.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{4725} (256 z^{11} + 14720 z^{10} + 319360 z^9 + 3321600 z^8 + 17378304 z^7 + 43680000 z^6 + 44684640 z^5 + 10810800 z^4 - 831600 z^3 + 68040 z^2 + 9450 z + 4725) + \frac{1}{4725} (64 e^z \sqrt{\pi} (4 z^{23/2} + 232 z^{21/2} + 5103 z^{19/2} + 54285 z^{17/2} + 295260 z^{15/2} + 797580 z^{13/2} + 950040 z^{11/2} + 360360 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ak2e.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{4725} (-256 z^{11} + 14720 z^{10} - 319360 z^9 + 3321600 z^8 - 17378304 z^7 + 43680000 z^6 - 44684640 z^5 + 10810800 z^4 + 831600 z^3 + 68040 z^2 - 9450 z + 4725) + \frac{1}{4725} (64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 232 z^{21/2} + 5103 z^{19/2} - 54285 z^{17/2} + 295260 z^{15/2} - 797580 z^{13/2} + 950040 z^{11/2} - 360360 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ak2f.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{1575} (-128 z^{10} - 6208 z^9 - 110080 z^8 - 893184 z^7 - 3377920 z^6 - 5285280 z^5 - 2162160 z^4 + 277200 z^3 - 68040 z^2 + 9450 z + 1575) - \frac{1}{1575} 32 e^z \sqrt{\pi} (4 z^{21/2} + 196 z^{19/2} + 3535 z^{17/2} + 29540 z^{15/2} + 118020 z^{13/2} + 207480 z^{11/2} + 120120 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak2g.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{1575} (-128 z^{10} + 6208 z^9 - 110080 z^8 + 893184 z^7 - 3377920 z^6 + 5285280 z^5 - 2162160 z^4 - 277200 z^3 - 68040 z^2 - 9450 z + 1575) + \frac{1}{1575} 32 e^{-z} \sqrt{\pi} (4 z^{21/2} - 196 z^{19/2} + 3535 z^{17/2} - 29540 z^{15/2} + 118020 z^{13/2} - 207480 z^{11/2} + 120120 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak2h.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{1575} (64 z^9 + 2528 z^8 + 34848 z^7 + 203840 z^6 + 480480 z^5 + 308880 z^4 - 55440 z^3 + 22680 z^2 - 9450 z + 1575) + \frac{16 e^z \sqrt{\pi} (4 z^{19/2} + 160 z^{17/2} + 2255 z^{15/2} + 13755 z^{13/2} + 35490 z^{11/2} + 30030 z^{9/2}) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.ak2i.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{1575} (-64 z^9 + 2528 z^8 - 34848 z^7 + 203840 z^6 - 480480 z^5 + 308880 z^4 + 55440 z^3 + 22680 z^2 + 9450 z + 1575) + \frac{16 e^{-z} \sqrt{\pi} (4 z^{19/2} - 160 z^{17/2} + 2255 z^{15/2} - 13755 z^{13/2} + 35490 z^{11/2} - 30030 z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.ak2j.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{3150} e^z (128 z^9 + 4544 z^8 + 55136 z^7 + 274960 z^6 + 519960 z^5 + 213780 z^4 - 56910 z^3 + 28035 z^2 - 12600 z + 3150)$$

07.25.03.ak2k.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{8 e^z \sqrt{\pi} (4 z^4 + 124 z^3 + 1263 z^2 + 4914 z + 6006) \operatorname{erf}(\sqrt{z}) z^{9/2}}{1575} + \frac{32 z^8 + 976 z^7 + 9632 z^6 + 34944 z^5 + 34320 z^4 - 7920 z^3 + 4536 z^2 - 3150 z + 1575}{1575}$$

07.25.03.ak2l.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{32 z^8 - 976 z^7 + 9632 z^6 - 34944 z^5 + 34320 z^4 + 7920 z^3 + 4536 z^2 + 3150 z + 1575}{1575} - \frac{8 e^{-z} \sqrt{\pi} z^{9/2} (4 z^4 - 124 z^3 + 1263 z^2 - 4914 z + 6006) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.ak2m.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, 2; z\right) = \frac{e^z (128 z^8 + 3392 z^7 + 28000 z^6 + 78960 z^5 + 46200 z^4 - 17220 z^3 + 11970 z^2 - 7875 z + 3150)}{3150}$$

07.25.03.ak2n.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{4}{525} e^z \sqrt{\pi} (4 z^3 + 88 z^2 + 559 z + 1001) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{525} (16 z^7 + 344 z^6 + 2072 z^5 + 3120 z^4 - 880 z^3 + 648 z^2 - 630 z + 525)$$

07.25.03.ak2o.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{4}{525} e^{-z} \sqrt{\pi} (4 z^3 - 88 z^2 + 559 z - 1001) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{525} (-16 z^7 + 344 z^6 - 2072 z^5 + 3120 z^4 + 880 z^3 + 648 z^2 + 630 z + 525)$$

07.25.03.ak2p.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, 3; z\right) = \frac{e^z (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575)}{1575}$$

07.25.03.ak2q.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{2}{105} e^z \sqrt{\pi} (4 z^2 + 52 z + 143) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (8 z^6 + 100 z^5 + 240 z^4 - 80 z^3 + 72 z^2 - 90 z + 105)$$

07.25.03.ak2r.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{1}{105} (8 z^6 - 100 z^5 + 240 z^4 + 80 z^3 + 72 z^2 + 90 z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} z^{9/2} (4 z^2 - 52 z + 143) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak2s.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{525 z^3} e^z (128 z^9 + 1088 z^8 + 1376 z^7 - 1232 z^6 + 3192 z^5 - 12180 z^4 + 45570 z^3 - 135135 z^2 + 270270 z - 270270) + \frac{2574}{5 z^3}$$

07.25.03.ak2t.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{4 z^8 + 14 z^7 + 10 z^6 - 108 z^5 + 690 z^4 - 3585 z^3 + 15120 z^2 - 50400 z + 151200}{15 z^3} + \frac{1}{15 z^{7/2}} e^z \sqrt{\pi} (4 z^9 + 16 z^8 + 15 z^7 - 105 z^6 + 630 z^5 - 3150 z^4 + 12600 z^3 - 37800 z^2 + 75600 z - 75600) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak2u.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-4 z^8 + 14 z^7 - 10 z^6 - 108 z^5 - 690 z^4 - 3585 z^3 - 15120 z^2 - 50400 z - 151200}{15 z^3} + \frac{1}{15 z^{7/2}} e^{-z} \sqrt{\pi} (4 z^9 - 16 z^8 + 15 z^7 + 105 z^6 + 630 z^5 + 3150 z^4 + 12600 z^3 + 37800 z^2 + 75600 z + 75600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak2v.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, 5; z\right) = \frac{10296(z+45)}{5 z^4} + \frac{1}{525 z^4} (4 e^z (128 z^9 - 64 z^8 + 1888 z^7 - 14448 z^6 + 89880 z^5 - 461580 z^4 + 1891890 z^3 - 5810805 z^2 + 11891880 z - 12162150))$$

07.25.03.ak2w.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{3(2 z^8 - 11 z^7 + 94 z^6 - 720 z^5 + 4735 z^4 - 26040 z^3 + 115920 z^2 - 394800 z + 1411200)}{5 z^4} + \frac{1}{10 z^{9/2}} (3 e^z \sqrt{\pi} (4 z^9 - 20 z^8 + 175 z^7 - 1330 z^6 + 8610 z^5 - 46200 z^4 + 197400 z^3 - 630000 z^2 + 1335600 z - 1411200) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ak2x.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{3(2 z^8 + 11 z^7 + 94 z^6 + 720 z^5 + 4735 z^4 + 26040 z^3 + 115920 z^2 + 394800 z + 1411200)}{5 z^4} - \frac{1}{10 z^{9/2}} (3 e^{-z} \sqrt{\pi} (4 z^9 + 20 z^8 + 175 z^7 + 1330 z^6 + 8610 z^5 + 46200 z^4 + 197400 z^3 + 630000 z^2 + 1335600 z + 1411200) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ak2y.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{7}{2}, 6; z\right) = \frac{5148(z^2 + 90z + 1020)}{z^5} + \frac{1}{105 z^5} (4 e^z (128 z^9 - 1216 z^8 + 11616 z^7 - 95760 z^6 + 664440 z^5 - 3783780 z^4 + 17027010 z^3 - 56891835 z^2 + 125675550 z - 137837700))$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = -\frac{5}{2}$

07.25.03.ak2z.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{3375} (256 z^{11} + 14976 z^{10} + 332288 z^9 + 3563520 z^8 + 19496448 z^7 + 52691712 z^6 + 62140320 z^5 + 23308560 z^4 + 831600 z^3 + 22680 z^2 + 5670 z + 3375) + \frac{1}{3375} (64 e^z \sqrt{\pi} (4 z^{23/2} + 236 z^{21/2} + 5307 z^{19/2} + 58164 z^{17/2} + 330150 z^{15/2} + 953280 z^{13/2} + 1280520 z^{11/2} + 649440 z^{9/2} + 71280 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ak30.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{3375} (-256 z^{11} + 14976 z^{10} - 332288 z^9 + 3563520 z^8 - 19496448 z^7 + 52691712 z^6 - 62140320 z^5 + 23308560 z^4 - 831600 z^3 + 22680 z^2 - 5670 z + 3375) + \frac{1}{3375} (64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 236 z^{21/2} + 5307 z^{19/2} - 58164 z^{17/2} + 330150 z^{15/2} - 953280 z^{13/2} + 1280520 z^{11/2} - 649440 z^{9/2} + 71280 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ak31.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{675} (-128 z^{10} - 6464 z^9 - 120960 z^8 - 1059072 z^7 - 4505856 z^6 - 8727840 z^5 - 6248880 z^4 - 831600 z^3 + 22680 z^2 + 1890 z + 675) - \frac{32}{675} e^z \sqrt{\pi} (4 z^{21/2} + 204 z^{19/2} + 3879 z^{17/2} + 34890 z^{15/2} + 155700 z^{13/2} + 330480 z^{11/2} + 289080 z^{9/2} + 71280 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak32.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{675} (-128 z^{10} + 6464 z^9 - 120960 z^8 + 1059072 z^7 - 4505856 z^6 + 8727840 z^5 - 6248880 z^4 + 831600 z^3 + 22680 z^2 - 1890 z + 675) + \frac{32}{675} e^{-z} \sqrt{\pi} (4 z^{21/2} - 204 z^{19/2} + 3879 z^{17/2} - 34890 z^{15/2} + 155700 z^{13/2} - 330480 z^{11/2} + 289080 z^{9/2} - 71280 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak33.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{225} (64 z^9 + 2720 z^8 + 41472 z^7 + 281984 z^6 + 860640 z^5 + 1021680 z^4 + 277200 z^3 - 22680 z^2 + 1890 z + 225) + \frac{16}{225} e^z \sqrt{\pi} (4 z^{19/2} + 172 z^{17/2} + 2675 z^{15/2} + 18840 z^{13/2} + 61500 z^{11/2} + 84480 z^{9/2} + 35640 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak34.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{225} (-64 z^9 + 2720 z^8 - 41472 z^7 + 281984 z^6 - 860640 z^5 + 1021680 z^4 - 277200 z^3 - 22680 z^2 - 1890 z + 225) + \frac{16}{225} e^{-z} \sqrt{\pi} (4 z^{19/2} - 172 z^{17/2} + 2675 z^{15/2} - 18840 z^{13/2} + 61500 z^{11/2} - 84480 z^{9/2} + 35640 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak35.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{225} (-32 z^8 - 1104 z^7 - 13024 z^6 - 63360 z^5 - 118800 z^4 - 55440 z^3 + 7560 z^2 - 1890 z + 225) - \frac{8}{225} e^z \sqrt{\pi} (4 z^{17/2} + 140 z^{15/2} + 1695 z^{13/2} + 8670 z^{11/2} + 18150 z^{9/2} + 11880 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak36.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{225} (-32 z^8 + 1104 z^7 - 13024 z^6 + 63360 z^5 - 118800 z^4 + 55440 z^3 + 7560 z^2 + 1890 z + 225) + \frac{8}{225} e^{-z} \sqrt{\pi} (4 z^{17/2} - 140 z^{15/2} + 1695 z^{13/2} - 8670 z^{11/2} + 18150 z^{9/2} - 11880 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak37.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, 1; z\right) = -\frac{1}{450} e^z (64 z^8 + 1984 z^7 + 20624 z^6 + 85920 z^5 + 131100 z^4 + 41340 z^3 - 7785 z^2 + 2340 z - 450)$$

07.25.03.ak38.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{225} (-16 z^7 - 424 z^6 - 3552 z^5 - 10560 z^4 - 7920 z^3 + 1512 z^2 - 630 z + 225) - \frac{4}{225} e^z \sqrt{\pi} z^{7/2} (4 z^4 + 108 z^3 + 939 z^2 + 3036 z + 2970) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak39.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{225} (16 z^7 - 424 z^6 + 3552 z^5 - 10560 z^4 + 7920 z^3 + 1512 z^2 + 630 z + 225) - \frac{4}{225} e^{-z} \sqrt{\pi} z^{7/2} (4 z^4 - 108 z^3 + 939 z^2 - 3036 z + 2970) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak3a.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, 2; z\right) = -\frac{1}{450} e^z (64 z^7 + 1472 z^6 + 10320 z^5 + 24000 z^4 + 11100 z^3 - 3060 z^2 + 1395 z - 450)$$

07.25.03.ak3b.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{75} (-8 z^6 - 148 z^5 - 744 z^4 - 880 z^3 + 216 z^2 - 126 z + 75) - \frac{2}{75} e^z \sqrt{\pi} z^{7/2} (4 z^3 + 76 z^2 + 407 z + 594) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak3c.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{2}{75} e^{-z} \sqrt{\pi} (4z^3 - 76z^2 + 407z - 594) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{75} (-8z^6 + 148z^5 - 744z^4 + 880z^3 + 216z^2 + 126z + 75)$$

07.25.03.ak3d.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, 3; z\right) = -\frac{1}{225} e^z (64z^6 + 960z^5 + 3600z^4 + 2400z^3 - 900z^2 + 540z - 225)$$

07.25.03.ak3e.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{15} (-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) - \frac{1}{15} e^z \sqrt{\pi} z^{7/2} (4z^2 + 44z + 99) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak3f.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{15} (4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) - \frac{1}{15} e^{-z} \sqrt{\pi} z^{7/2} (4z^2 - 44z + 99) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak3g.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, 4; z\right) = \frac{e^z (-64z^8 - 448z^7 - 464z^6 + 384z^5 - 1020z^4 + 3540z^3 - 10395z^2 + 20790z - 20790)}{75z^3} + \frac{1386}{5z^3}$$

07.25.03.ak3h.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(2z^7 + 5z^6 + 6z^5 - 48z^4 + 255z^3 - 1080z^2 + 3600z - 10800)}{15z^3} - \frac{7e^z \sqrt{\pi} (4z^8 + 12z^7 + 15z^6 - 90z^5 + 450z^4 - 1800z^3 + 5400z^2 - 10800z + 10800) \operatorname{erf}(\sqrt{z})}{30z^{7/2}}$$

07.25.03.ak3i.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (4z^8 - 12z^7 + 15z^6 + 90z^5 + 450z^4 + 1800z^3 + 5400z^2 + 10800z + 10800) \operatorname{erfi}(\sqrt{z})}{30z^{7/2}} - \frac{7(2z^7 - 5z^6 + 6z^5 + 48z^4 + 255z^3 + 1080z^2 + 3600z + 10800)}{15z^3}$$

07.25.03.ak3j.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, 5; z\right) = \frac{5544(z + 39)}{5z^4} - \frac{4e^z (64z^8 - 64z^7 + 912z^6 - 5856z^5 + 30300z^4 - 124740z^3 + 384615z^2 - 790020z + 810810)}{75z^4}$$

07.25.03.ak3k.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{21(2z^7 - 11z^6 + 84z^5 - 560z^4 + 3120z^3 - 14040z^2 + 48000z - 176400)}{10z^4} - \frac{1}{20z^{9/2}} 21e^z \sqrt{\pi} (4z^8 - 20z^7 + 155z^6 - 1020z^5 + 5550z^4 - 24000z^3 + 77400z^2 - 165600z + 176400) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak3l.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{21(2z^7 + 11z^6 + 84z^5 + 560z^4 + 3120z^3 + 14040z^2 + 48000z + 176400)}{10z^4} - \frac{1}{20z^{9/2}} 21 e^{-z} \sqrt{\pi} (4z^8 + 20z^7 + 155z^6 + 1020z^5 + 5550z^4 + 24000z^3 + 77400z^2 + 165600z + 176400) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak3m.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{5}{2}, 6; z\right) = \frac{2772(z^2 + 78z + 780)}{z^5} - \frac{1}{15z^5} 4 e^z (64z^8 - 576z^7 + 4944z^6 - 35520z^5 + 207900z^4 - 956340z^3 + 3253635z^2 - 7297290z + 8108100)$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = -\frac{3}{2}$

07.25.03.ak3n.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{135} (64z^9 + 2784z^8 + 43808z^7 + 311808z^6 + 1024416z^5 + 1403280z^4 + 589680z^3 + 22680z^2 + 630z + 135) + \frac{16}{135} e^z \sqrt{\pi} (4z^{19/2} + 176z^{17/2} + 2823z^{15/2} + 20775z^{13/2} + 72600z^{11/2} + 112680z^{9/2} + 63720z^{7/2} + 7560z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak3o.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{135} (-64z^9 + 2784z^8 - 43808z^7 + 311808z^6 - 1024416z^5 + 1403280z^4 - 589680z^3 + 22680z^2 - 630z + 135) + \frac{16}{135} e^{-z} \sqrt{\pi} (4z^{19/2} - 176z^{17/2} + 2823z^{15/2} - 20775z^{13/2} + 72600z^{11/2} - 112680z^{9/2} + 63720z^{7/2} - 7560z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak3p.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{45} (-32z^8 - 1168z^7 - 14912z^6 - 81888z^5 - 190800z^4 - 156240z^3 - 22680z^2 + 630z + 45) - \frac{8}{45} e^z \sqrt{\pi} (4z^{17/2} + 148z^{15/2} + 1935z^{13/2} + 11100z^{11/2} + 28200z^{9/2} + 28080z^{7/2} + 7560z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak3q.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{45} (-32z^8 + 1168z^7 - 14912z^6 + 81888z^5 - 190800z^4 + 156240z^3 - 22680z^2 - 630z + 45) + \frac{8}{45} e^{-z} \sqrt{\pi} (4z^{17/2} - 148z^{15/2} + 1935z^{13/2} - 11100z^{11/2} + 28200z^{9/2} - 28080z^{7/2} + 7560z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak3r.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{45} (16z^7 + 472z^6 + 4632z^5 + 18000z^4 + 25200z^3 + 7560z^2 - 630z + 45) + \frac{4}{45} e^z \sqrt{\pi} (4z^{15/2} + 120z^{13/2} + 1215z^{11/2} + 5025z^{9/2} + 8100z^{7/2} + 3780z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak3s.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{45} (-16z^7 + 472z^6 - 4632z^5 + 18000z^4 - 25200z^3 + 7560z^2 + 630z + 45) + \frac{4}{45} e^{-z} \sqrt{\pi} (4z^{15/2} - 120z^{13/2} + 1215z^{11/2} - 5025z^{9/2} + 8100z^{7/2} - 3780z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak3t.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{90} e^z (32z^7 + 848z^6 + 7344z^5 + 24600z^4 + 28650z^3 + 6345z^2 - 720z + 90)$$

07.25.03.ak3u.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{2}{45} e^z \sqrt{\pi} (4z^4 + 92z^3 + 663z^2 + 1710z + 1260) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{45} (8z^6 + 180z^5 + 1240z^4 + 2880z^3 + 1512z^2 - 210z + 45)$$

07.25.03.ak3v.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{45} (8z^6 - 180z^5 + 1240z^4 - 2880z^3 + 1512z^2 + 210z + 45) - \frac{2}{45} e^{-z} \sqrt{\pi} z^{5/2} (4z^4 - 92z^3 + 663z^2 - 1710z + 1260) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak3w.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{90} e^z (32z^6 + 624z^5 + 3600z^4 + 6600z^3 + 2250z^2 - 405z + 90)$$

07.25.03.ak3x.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{15} e^z \sqrt{\pi} (4z^3 + 64z^2 + 279z + 315) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{15} (4z^5 + 62z^4 + 250z^3 + 216z^2 - 42z + 15)$$

07.25.03.ak3y.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{15} e^{-z} \sqrt{\pi} (4z^3 - 64z^2 + 279z - 315) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{15} (-4z^5 + 62z^4 - 250z^3 + 216z^2 + 42z + 15)$$

07.25.03.ak3z.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, 3; z\right) = \frac{1}{45} e^z (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45)$$

07.25.03.ak40.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{6} e^z \sqrt{\pi} (4z^2 + 36z + 63) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (2z^4 + 17z^3 + 24z^2 - 6z + 3)$$

07.25.03.ak41.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{3} (2z^4 - 17z^3 + 24z^2 + 6z + 3) - \frac{1}{6} e^{-z} \sqrt{\pi} z^{5/2} (4z^2 - 36z + 63) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak42.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, 4; z\right) = \frac{e^z (32z^7 + 176z^6 + 144z^5 - 120z^4 + 330z^3 - 945z^2 + 1890z - 1890)}{15z^3} + \frac{126}{z^3}$$

07.25.03.ak43.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(2z^6 + 3z^5 + 7z^4 - 42z^3 + 180z^2 - 600z + 1800)}{6z^3} + \frac{7e^z \sqrt{\pi} (4z^7 + 8z^6 + 15z^5 - 75z^4 + 300z^3 - 900z^2 + 1800z - 1800) \operatorname{erf}(\sqrt{z})}{12z^{7/2}}$$

07.25.03.ak44.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (4z^7 - 8z^6 + 15z^5 + 75z^4 + 300z^3 + 900z^2 + 1800z + 1800) \operatorname{erfi}(\sqrt{z})}{12z^{7/2}} - \frac{7(2z^6 - 3z^5 + 7z^4 + 42z^3 + 180z^2 + 600z + 1800)}{6z^3}$$

07.25.03.ak45.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, 5; z\right) = \frac{504(z + 33)}{z^4} + \frac{4e^z (32z^7 - 48z^6 + 432z^5 - 2280z^4 + 9450z^3 - 29295z^2 + 60480z - 62370)}{15z^4}$$

07.25.03.ak46.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{21(2z^6 - 11z^5 + 74z^4 - 420z^3 + 1920z^2 - 6600z + 25200)}{4z^4} + \frac{21e^z \sqrt{\pi} (4z^7 - 20z^6 + 135z^5 - 750z^4 + 3300z^3 - 10800z^2 + 23400z - 25200) \operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.ak47.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21(2z^6 + 11z^5 + 74z^4 + 420z^3 + 1920z^2 + 6600z + 25200)}{4z^4} - \frac{21e^{-z} \sqrt{\pi} (4z^7 + 20z^6 + 135z^5 + 750z^4 + 3300z^3 + 10800z^2 + 23400z + 25200) \operatorname{erfi}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.ak48.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{3}{2}, 6; z\right) = \frac{1260(z^2 + 66z + 572)}{z^5} + \frac{4e^z (32z^7 - 272z^6 + 2064z^5 - 12600z^4 + 59850z^3 - 208845z^2 + 478170z - 540540)}{3z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = -\frac{1}{2}$

07.25.03.ak49.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{15} (16z^7 + 488z^6 + 5024z^5 + 21072z^4 + 34160z^3 + 15960z^2 + 630z + 15) + \frac{4}{15} e^z \sqrt{\pi} (4z^{15/2} + 124z^{13/2} + 1315z^{11/2} + 5840z^{9/2} + 10680z^{7/2} + 6720z^{5/2} + 840z^{3/2}) \operatorname{erf}(\sqrt{z})$$

$$\begin{aligned}
 & \text{07.25.03.ak4a.01} \\
 {}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) &= \frac{1}{15} (-16z^7 + 488z^6 - 5024z^5 + 21072z^4 - 34160z^3 + 15960z^2 - 630z + 15) + \\
 & \frac{4}{15} e^{-z} \sqrt{\pi} (4z^{15/2} - 124z^{13/2} + 1315z^{11/2} - 5840z^{9/2} + 10680z^{7/2} - 6720z^{5/2} + 840z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ak4b.01} \\
 {}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) &= \frac{1}{15} (-8z^6 - 196z^5 - 1536z^4 - 4480z^3 - 4200z^2 - 630z + 15) - \\
 & \frac{2}{15} e^z \sqrt{\pi} (4z^{13/2} + 100z^{11/2} + 815z^{9/2} + 2580z^{7/2} + 2940z^{5/2} + 840z^{3/2}) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ak4c.01} \\
 {}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) &= \frac{1}{15} (-8z^6 + 196z^5 - 1536z^4 + 4480z^3 - 4200z^2 + 630z + 15) + \\
 & \frac{2}{15} e^{-z} \sqrt{\pi} (4z^{13/2} - 100z^{11/2} + 815z^{9/2} - 2580z^{7/2} + 2940z^{5/2} - 840z^{3/2}) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ak4d.01} \\
 {}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, 1; z\right) &= -\frac{1}{30} e^z (16z^6 + 352z^5 + 2440z^4 + 6200z^3 + 5025z^2 + 660z - 30)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ak4e.01} \\
 {}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) &= \\
 & \frac{1}{15} (-4z^5 - 74z^4 - 400z^3 - 672z^2 - 210z + 15) - \frac{1}{15} e^z \sqrt{\pi} z^{3/2} (4z^4 + 76z^3 + 435z^2 + 840z + 420) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ak4f.01} \\
 {}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) &= \\
 & \frac{1}{15} (4z^5 - 74z^4 + 400z^3 - 672z^2 + 210z + 15) - \frac{1}{15} e^{-z} \sqrt{\pi} z^{3/2} (4z^4 - 76z^3 + 435z^2 - 840z + 420) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ak4g.01} \\
 {}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, 2; z\right) &= -\frac{1}{30} e^z (16z^5 + 256z^4 + 1160z^3 + 1560z^2 + 345z - 30)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ak4h.01} \\
 {}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) &= \frac{1}{5} (-2z^4 - 25z^3 - 76z^2 - 42z + 5) - \frac{1}{10} e^z \sqrt{\pi} z^{3/2} (4z^3 + 52z^2 + 175z + 140) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ak4i.01} \\
 {}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) &= \frac{1}{10} e^{-z} \sqrt{\pi} (4z^3 - 52z^2 + 175z - 140) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{5} (-2z^4 + 25z^3 - 76z^2 + 42z + 5)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ak4j.01} \\
 {}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, 3; z\right) &= -\frac{1}{15} e^z (16z^4 + 160z^3 + 360z^2 + 120z - 15)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ak4k.01} \\
 {}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) &= \frac{1}{2} (-2z^3 - 13z^2 - 12z + 2) - \frac{1}{4} e^z \sqrt{\pi} z^{3/2} (4z^2 + 28z + 35) \operatorname{erf}(\sqrt{z})
 \end{aligned}$$

07.25.03.ak4l.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{2} (2z^3 - 13z^2 + 12z + 2) - \frac{1}{4} e^{-z} \sqrt{\pi} z^{3/2} (4z^2 - 28z + 35) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak4m.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, 4; z\right) = \frac{e^z (-16z^6 - 64z^5 - 40z^4 + 40z^3 - 105z^2 + 210z - 210)}{5z^3} + \frac{42}{z^3}$$

07.25.03.ak4n.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{7(2z^5 + z^4 + 8z^3 - 36z^2 + 120z - 360)}{4z^3} - \frac{7e^z \sqrt{\pi} (4z^6 + 4z^5 + 15z^4 - 60z^3 + 180z^2 - 360z + 360) \operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.ak4o.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (4z^6 - 4z^5 + 15z^4 + 60z^3 + 180z^2 + 360z + 360) \operatorname{erfi}(\sqrt{z})}{8z^{7/2}} - \frac{7(2z^5 - z^4 + 8z^3 + 36z^2 + 120z + 360)}{4z^3}$$

07.25.03.ak4p.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, 5; z\right) = \frac{168(z + 27)}{z^4} - \frac{4e^z (16z^6 - 32z^5 + 200z^4 - 840z^3 + 2625z^2 - 5460z + 5670)}{5z^4}$$

07.25.03.ak4q.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{63(2z^5 - 11z^4 + 64z^3 - 300z^2 + 1040z - 4200)}{8z^4} - \frac{63e^z \sqrt{\pi} (4z^6 - 20z^5 + 115z^4 - 520z^3 + 1740z^2 - 3840z + 4200) \operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.ak4r.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63(2z^5 + 11z^4 + 64z^3 + 300z^2 + 1040z + 4200)}{8z^4} - \frac{63e^{-z} \sqrt{\pi} (4z^6 + 20z^5 + 115z^4 + 520z^3 + 1740z^2 + 3840z + 4200) \operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.ak4s.01

$${}_2F_2\left(3, \frac{7}{2}; -\frac{1}{2}, 6; z\right) = \frac{420(z^2 + 54z + 396)}{z^5} - \frac{4e^z (16z^6 - 128z^5 + 840z^4 - 4200z^3 + 15225z^2 - 35910z + 41580)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = \frac{1}{2}$

07.25.03.ak4t.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{15} (4z^5 + 78z^4 + 458z^3 + 900z^2 + 450z + 15) + \frac{1}{15} e^z \sqrt{\pi} (4z^{11/2} + 80z^{9/2} + 495z^{7/2} + 1095z^{5/2} + 750z^{3/2} + 90\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak4u.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{15}(-4z^5 + 78z^4 - 458z^3 + 900z^2 - 450z + 15) + \frac{1}{15}e^{-z}\sqrt{\pi}(4z^{11/2} - 80z^{9/2} + 495z^{7/2} - 1095z^{5/2} + 750z^{3/2} - 90\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ak4v.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{30}e^z(8z^5 + 140z^4 + 730z^3 + 1275z^2 + 600z + 30)$$

07.25.03.ak4w.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{15}(2z^4 + 29z^3 + 114z^2 + 120z + 15) + \frac{1}{30}e^z\sqrt{\pi}\sqrt{z}(4z^4 + 60z^3 + 255z^2 + 330z + 90)\operatorname{erf}(\sqrt{z})$$

07.25.03.ak4x.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{15}(2z^4 - 29z^3 + 114z^2 - 120z + 15) - \frac{1}{30}e^{-z}\sqrt{\pi}\sqrt{z}(4z^4 - 60z^3 + 255z^2 - 330z + 90)\operatorname{erfi}(\sqrt{z})$$

07.25.03.ak4y.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{30}e^z(8z^4 + 100z^3 + 330z^2 + 285z + 30)$$

07.25.03.ak4z.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{10}(2z^3 + 19z^2 + 39z + 10) + \frac{1}{20}e^z\sqrt{\pi}\sqrt{z}(4z^3 + 40z^2 + 95z + 45)\operatorname{erf}(\sqrt{z})$$

07.25.03.ak50.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{10}(-2z^3 + 19z^2 - 39z + 10) + \frac{1}{20}e^{-z}\sqrt{\pi}\sqrt{z}(4z^3 - 40z^2 + 95z - 45)\operatorname{erfi}(\sqrt{z})$$

07.25.03.ak51.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, 3; z\right) = \frac{1}{15}e^z(8z^3 + 60z^2 + 90z + 15)$$

07.25.03.ak52.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{4}(2z^2 + 9z + 4) + \frac{1}{8}e^z\sqrt{\pi}\sqrt{z}(4z^2 + 20z + 15)\operatorname{erf}(\sqrt{z})$$

07.25.03.ak53.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{4}(2z^2 - 9z + 4) - \frac{1}{8}e^{-z}\sqrt{\pi}\sqrt{z}(4z^2 - 20z + 15)\operatorname{erfi}(\sqrt{z})$$

07.25.03.ak54.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, 4; z\right) = \frac{e^z(8z^5 + 20z^4 + 10z^3 - 15z^2 + 30z - 30)}{5z^3} + \frac{6}{z^3}$$

07.25.03.ak55.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7(2z^4 - z^3 + 9z^2 - 30z + 90)}{8z^3} + \frac{7e^z\sqrt{\pi}(4z^5 + 15z^3 - 45z^2 + 90z - 90)\operatorname{erf}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.ak56.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}\sqrt{\pi}(4z^5 + 15z^3 + 45z^2 + 90z + 90)\operatorname{erfi}(\sqrt{z})}{16z^{7/2}} - \frac{7(2z^4 + z^3 + 9z^2 + 30z + 90)}{8z^3}$$

07.25.03.ak57.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, 5; z\right) = \frac{24(z+21)}{z^4} + \frac{4e^z(8z^5 - 20z^4 + 90z^3 - 285z^2 + 600z - 630)}{5z^4}$$

07.25.03.ak58.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{63(2z^4 - 11z^3 + 54z^2 - 190z + 840)}{16z^4} + \frac{63e^z\sqrt{\pi}(4z^5 - 20z^4 + 95z^3 - 330z^2 + 750z - 840)\operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.ak59.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{63(2z^4 + 11z^3 + 54z^2 + 190z + 840)}{16z^4} - \frac{63e^{-z}\sqrt{\pi}(4z^5 + 20z^4 + 95z^3 + 330z^2 + 750z + 840)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.ak5a.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{1}{2}, 6; z\right) = \frac{60(z^2 + 42z + 252)}{z^5} + \frac{4e^z(8z^5 - 60z^4 + 330z^3 - 1275z^2 + 3150z - 3780)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = 1$

07.25.03.ak5b.01

$${}_2F_2\left(3, \frac{7}{2}; 1, 1; z\right) = \frac{1}{15}e^{z/2}(2z^5 + 32z^4 + 155z^3 + 268z^2 + 150z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{60}e^{z/2}(8z^5 + 120z^4 + 504z^3 + 620z^2 + 137z)I_1\left(\frac{z}{2}\right)$$

07.25.03.ak5c.01

$${}_2F_2\left(3, \frac{7}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{30}e^z(4z^4 + 52z^3 + 183z^2 + 180z + 30)$$

07.25.03.ak5d.01

$${}_2F_2\left(3, \frac{7}{2}; 1, 2; z\right) = \frac{1}{60}e^{z/2}(8z^4 + 92z^3 + 292z^2 + 285z + 60)I_0\left(\frac{z}{2}\right) + \frac{1}{60}e^{z/2}(8z^4 + 84z^3 + 212z^2 + 107z)I_1\left(\frac{z}{2}\right)$$

07.25.03.ak5e.01

$${}_2F_2\left(3, \frac{7}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{10}e^z(2z^3 + 17z^2 + 32z + 10)$$

07.25.03.ak5f.01

$${}_2F_2\left(3, \frac{7}{2}; 1, 3; z\right) = \frac{1}{15}e^{z/2}(4z^3 + 28z^2 + 45z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}z(4z^2 + 24z + 23)I_1\left(\frac{z}{2}\right)$$

07.25.03.ak5g.01

$${}_2F_2\left(3, \frac{7}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{2}e^z(z^2 + 4z + 2)$$

07.25.03.ak5h.01

$${}_2F_2\left(3, \frac{7}{2}; 1, 4; z\right) = \frac{e^{z/2}(4z^3 + 10z^2 + 7z - 4)I_0\left(\frac{z}{2}\right)}{5z} + \frac{e^{z/2}(4z^4 + 6z^3 + 3z^2 - 8z + 16)I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.ak5i.01

$${}_2F_2\left(3, \frac{7}{2}; 1, \frac{9}{2}; z\right) = \frac{7 e^z (16 z^4 - 8 z^3 + 60 z^2 - 150 z + 225)}{64 z^3} - \frac{1575 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.ak5j.01

$${}_2F_2\left(3, \frac{7}{2}; 1, \frac{9}{2}; -z\right) = \frac{1575 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{128 z^{7/2}} - \frac{7 e^{-z} (16 z^4 + 8 z^3 + 60 z^2 + 150 z + 225)}{64 z^3}$$

07.25.03.ak5k.01

$${}_2F_2\left(3, \frac{7}{2}; 1, 5; z\right) = \frac{16 e^{z/2} (z^3 - 2 z^2 + 8 z - 18) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{8 e^{z/2} (2 z^4 - 6 z^3 + 23 z^2 - 64 z + 144) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.ak5l.01

$${}_2F_2\left(3, \frac{7}{2}; 1, \frac{11}{2}; z\right) = \frac{63 e^z (32 z^4 - 160 z^3 + 680 z^2 - 2000 z + 3675)}{256 z^4} - \frac{4725 \sqrt{\pi} (6 z + 49) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ak5m.01

$${}_2F_2\left(3, \frac{7}{2}; 1, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (32 z^4 + 160 z^3 + 680 z^2 + 2000 z + 3675)}{256 z^4} + \frac{4725 \sqrt{\pi} (6 z - 49) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.ak5n.01

$${}_2F_2\left(3, \frac{7}{2}; 1, 6; z\right) = \frac{8 e^{z/2} (2 z^3 - 13 z^2 + 60 z - 192) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{8 e^{z/2} (2 z^4 - 15 z^3 + 76 z^2 - 240 z + 768) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = \frac{3}{2}$

07.25.03.ak5o.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{30} (2 z^3 + 21 z^2 + 52 z + 24) + \frac{e^z \sqrt{\pi} (4 z^4 + 44 z^3 + 123 z^2 + 84 z + 6) \operatorname{erf}(\sqrt{z})}{60 \sqrt{z}}$$

07.25.03.ak5p.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{30} (-2 z^3 + 21 z^2 - 52 z + 24) + \frac{e^{-z} \sqrt{\pi} (4 z^4 - 44 z^3 + 123 z^2 - 84 z + 6) \operatorname{erfi}(\sqrt{z})}{60 \sqrt{z}}$$

07.25.03.ak5q.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{30} e^z (4 z^3 + 36 z^2 + 75 z + 30)$$

07.25.03.ak5r.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{20} (2 z^2 + 13 z + 14) + \frac{e^z \sqrt{\pi} (4 z^3 + 28 z^2 + 39 z + 6) \operatorname{erf}(\sqrt{z})}{40 \sqrt{z}}$$

07.25.03.ak5s.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{20} (2 z^2 - 13 z + 14) + \frac{e^{-z} \sqrt{\pi} (-4 z^3 + 28 z^2 - 39 z + 6) \operatorname{erfi}(\sqrt{z})}{40 \sqrt{z}}$$

07.25.03.ak5t.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{3}{2}, 3; z\right) = \frac{1}{15} e^z (4z^2 + 20z + 15)$$

07.25.03.ak5u.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{8} (2z + 5) + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.ak5v.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{8} (5 - 2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.ak5w.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{3}{2}, 4; z\right) = \frac{e^z (4z^4 + 4z^3 + 3z^2 - 6z + 6)}{5z^3} - \frac{6}{5z^3}$$

07.25.03.ak5x.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(2z^3 - 3z^2 + 10z - 30)}{16z^3} + \frac{7e^z \sqrt{\pi} (4z^4 - 4z^3 + 15z^2 - 30z + 30) \operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.ak5y.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7(2z^3 + 3z^2 + 10z + 30)}{16z^3} - \frac{7e^{-z} \sqrt{\pi} (4z^4 + 4z^3 + 15z^2 + 30z + 30) \operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.ak5z.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{3}{2}, 5; z\right) = \frac{4e^z (4z^4 - 12z^3 + 39z^2 - 84z + 90)}{5z^4} - \frac{24(z + 15)}{5z^4}$$

07.25.03.ak60.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{63(2z^3 - 11z^2 + 40z - 210)}{32z^4} + \frac{63e^z \sqrt{\pi} (4z^4 - 20z^3 + 75z^2 - 180z + 210) \operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.ak61.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{63e^{-z} \sqrt{\pi} (4z^4 + 20z^3 + 75z^2 + 180z + 210) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}} - \frac{63(2z^3 + 11z^2 + 40z + 210)}{32z^4}$$

07.25.03.ak62.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{3}{2}, 6; z\right) = \frac{4e^z (4z^4 - 28z^3 + 123z^2 - 330z + 420)}{z^5} - \frac{12(z^2 + 30z + 140)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = 2$

07.25.03.ak63.01

$${}_2F_2\left(3, \frac{7}{2}; 2, 2; z\right) = \frac{1}{30} e^{z/2} (4z^3 + 32z^2 + 63z + 30) I_0\left(\frac{z}{2}\right) + \frac{1}{30} e^{z/2} (4z^3 + 28z^2 + 37z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.ak64.01

$${}_2F_2\left(3, \frac{7}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{10} e^z (2z^2 + 11z + 10)$$

07.25.03.ak65.01

$${}_2F_2\left(3, \frac{7}{2}; 2, 3; z\right) = \frac{1}{15} e^{z/2} (4z^2 + 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^2 + 14z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.ak66.01

$${}_2F_2\left(3, \frac{7}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{2} e^z (z + 2)$$

07.25.03.ak67.01

$${}_2F_2\left(3, \frac{7}{2}; 2, 4; z\right) = \frac{2 e^{z/2} (2z^2 + 2z + 1) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (z^3 + z - 2) I_1\left(\frac{z}{2}\right)}{5z}$$

07.25.03.ak68.01

$${}_2F_2\left(3, \frac{7}{2}; 2, \frac{9}{2}; z\right) = \frac{7 e^z (8z^3 - 12z^2 + 30z - 45)}{32z^3} + \frac{315 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.ak69.01

$${}_2F_2\left(3, \frac{7}{2}; 2, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (8z^3 + 12z^2 + 30z + 45)}{32z^3} - \frac{315 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{64 z^{7/2}}$$

07.25.03.ak6a.01

$${}_2F_2\left(3, \frac{7}{2}; 2, 5; z\right) = \frac{8 e^{z/2} (2z^2 - 5z + 12) I_0\left(\frac{z}{2}\right) + 8 e^{z/2} (2z^3 - 7z^2 + 20z - 48) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.ak6b.01

$${}_2F_2\left(3, \frac{7}{2}; 2, \frac{11}{2}; z\right) = \frac{63 e^z (16z^3 - 80z^2 + 260z - 525)}{128z^4} + \frac{945 \sqrt{\pi} (6z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.ak6c.01

$${}_2F_2\left(3, \frac{7}{2}; 2, \frac{11}{2}; -z\right) = -\frac{63 e^{-z} (16z^3 + 80z^2 + 260z + 525)}{128z^4} - \frac{945 \sqrt{\pi} (6z - 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.ak6d.01

$${}_2F_2\left(3, \frac{7}{2}; 2, 6; z\right) = \frac{16 e^{z/2} (z^2 - 6z + 24) I_0\left(\frac{z}{2}\right) + 16 e^{z/2} (z^3 - 7z^2 + 24z - 96) I_1\left(\frac{z}{2}\right)}{z^3}$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = \frac{5}{2}$

07.25.03.ak6e.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3(2z^2 + 7z + 1)}{40z} + \frac{3 e^z \sqrt{\pi} (4z^3 + 16z^2 + 7z - 1) \operatorname{erf}(\sqrt{z})}{80 z^{3/2}}$$

07.25.03.ak6f.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (4z^3 - 16z^2 + 7z + 1) \operatorname{erfi}(\sqrt{z})}{80 z^{3/2}} - \frac{3(2z^2 - 7z + 1)}{40z}$$

07.25.03.ak6g.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{5}{2}, 3; z\right) = \frac{1}{5} e^z (2z + 5)$$

07.25.03.ak6h.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{3(2z+1)}{16z} + \frac{3e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.ak6i.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{3(2z-1)}{16z} - \frac{3e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.ak6j.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{5}{2}, 4; z\right) = \frac{3e^z (2z^3 - z^2 + 2z - 2)}{5z^3} + \frac{6}{5z^3}$$

07.25.03.ak6k.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{21(2z^2 - 5z + 15)}{32z^3} + \frac{21e^z \sqrt{\pi} (4z^3 - 8z^2 + 15z - 15) \operatorname{erf}(\sqrt{z})}{64z^{7/2}}$$

07.25.03.ak6l.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{21e^{-z} \sqrt{\pi} (4z^3 + 8z^2 + 15z + 15) \operatorname{erfi}(\sqrt{z})}{64z^{7/2}} - \frac{21(2z^2 + 5z + 15)}{32z^3}$$

07.25.03.ak6m.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{5}{2}, 5; z\right) = \frac{24(z+9)}{5z^4} + \frac{12e^z (2z^3 - 7z^2 + 16z - 18)}{5z^4}$$

07.25.03.ak6n.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{63(6z^2 - 25z + 210)}{64z^4} + \frac{189e^z \sqrt{\pi} (4z^3 - 20z^2 + 55z - 70) \operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.ak6o.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63(6z^2 + 25z + 210)}{64z^4} - \frac{189e^{-z} \sqrt{\pi} (4z^3 + 20z^2 + 55z + 70) \operatorname{erfi}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.ak6p.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{5}{2}, 6; z\right) = \frac{12(z^2 + 18z + 60)}{z^5} + \frac{12e^z (2z^3 - 13z^2 + 42z - 60)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = 3$

07.25.03.ak6q.01

$${}_2F_2\left(3, \frac{7}{2}; 3, 3; z\right) = \frac{8}{15} e^{z/2} (z+2) I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2} (2z^2 + 2z - 1) I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.ak6r.01

$${}_2F_2\left(3, \frac{7}{2}; 3, \frac{7}{2}; z\right) = e^z$$

07.25.03.ak6s.01

$${}_2F_2\left(3, \frac{7}{2}; 3, 4; z\right) = \frac{4e^{z/2} (2z-1) I_0\left(\frac{z}{2}\right)}{5z} + \frac{4e^{z/2} (2z^2 - 3z + 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.ak6t.01

$${}_2F_2\left(3, \frac{7}{2}; 3, \frac{9}{2}; z\right) = \frac{7 e^z (4 z^2 - 10 z + 15)}{8 z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.ak6u.01

$${}_2F_2\left(3, \frac{7}{2}; 3, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7 e^{-z} (4 z^2 + 10 z + 15)}{8 z^3}$$

07.25.03.ak6v.01

$${}_2F_2\left(3, \frac{7}{2}; 3, 5; z\right) = \frac{32 e^{z/2} (z-3) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{32 e^{z/2} (z^2 - 4 z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.ak6w.01

$${}_2F_2\left(3, \frac{7}{2}; 3, \frac{11}{2}; z\right) = \frac{63 e^z (8 z^2 - 40 z + 105)}{32 z^4} - \frac{945 \sqrt{\pi} (2 z + 7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ak6x.01

$${}_2F_2\left(3, \frac{7}{2}; 3, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8 z^2 + 40 z + 105)}{32 z^4} + \frac{945 \sqrt{\pi} (2 z - 7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ak6y.01

$${}_2F_2\left(3, \frac{7}{2}; 3, 6; z\right) = \frac{32 e^{z/2} (z-8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4 z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = \frac{7}{2}$

07.25.03.ak6z.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{15 (2 z - 3)}{32 z^2} + \frac{15 e^z \sqrt{\pi} (4 z^2 - 4 z + 3) \operatorname{erf}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.ak70.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15 e^{-z} \sqrt{\pi} (4 z^2 + 4 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{5/2}} - \frac{15 (2 z + 3)}{32 z^2}$$

07.25.03.ak71.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{7}{2}, 4; z\right) = \frac{3 e^z (z^2 - 2 z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.ak72.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{105 (2 z - 15)}{64 z^3} + \frac{105 e^z \sqrt{\pi} (4 z^2 - 12 z + 15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.ak73.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{105 (2 z + 15)}{64 z^3} - \frac{105 e^{-z} \sqrt{\pi} (4 z^2 + 12 z + 15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.ak74.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{7}{2}, 5; z\right) = \frac{12 e^z (z^2 - 4z + 6)}{z^4} - \frac{24(z + 3)}{z^4}$$

07.25.03.ak75.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575(2z + 21)}{128 z^4}$$

07.25.03.ak76.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1575(2z - 21)}{128 z^4} + \frac{945 e^{-z} \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.ak77.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{7}{2}, 6; z\right) = \frac{60 e^z (z^2 - 6z + 12)}{z^5} - \frac{60(z^2 + 6z + 12)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = 4$

07.25.03.ak78.01

$${}_2F_2\left(3, \frac{7}{2}; 4, 4; z\right) = \frac{24 e^{z/2} (z^2 - 2z + 4) I_0\left(\frac{z}{2}\right)}{5 z^3} + \frac{24 e^{z/2} (z - 3) I_1\left(\frac{z}{2}\right)}{5 z^2} - \frac{96}{5 z^3}$$

07.25.03.ak79.01

$${}_2F_2\left(3, \frac{7}{2}; 4, \frac{9}{2}; z\right) = \frac{21 e^z (2z - 7)}{4 z^3} + \frac{315 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{7/2}} - \frac{42}{z^3}$$

07.25.03.ak7a.01

$${}_2F_2\left(3, \frac{7}{2}; 4, \frac{9}{2}; -z\right) = \frac{21 e^{-z} (2z + 7)}{4 z^3} - \frac{315 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{7/2}} + \frac{42}{z^3}$$

07.25.03.ak7b.01

$${}_2F_2\left(3, \frac{7}{2}; 4, 5; z\right) = \frac{96 e^{z/2} (z + 4) I_0\left(\frac{z}{2}\right)}{5 z^3} + \frac{96 e^{z/2} (z - 12) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{384}{5 z^3}$$

07.25.03.ak7c.01

$${}_2F_2\left(3, \frac{7}{2}; 4, \frac{11}{2}; z\right) = \frac{189 e^z (4z - 35)}{16 z^4} + \frac{945 \sqrt{\pi} (6z + 7) \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}} - \frac{126}{z^3}$$

07.25.03.ak7d.01

$${}_2F_2\left(3, \frac{7}{2}; 4, \frac{11}{2}; -z\right) = -\frac{189 e^{-z} (4z + 35)}{16 z^4} - \frac{945 \sqrt{\pi} (6z - 7) \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} + \frac{126}{z^3}$$

07.25.03.ak7e.01

$${}_2F_2\left(3, \frac{7}{2}; 4, 6; z\right) = \frac{576 e^{z/2} I_0\left(\frac{z}{2}\right)}{z^3} - \frac{384 e^{z/2} (z + 4) I_1\left(\frac{z}{2}\right)}{z^4} - \frac{192}{z^3}$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = \frac{9}{2}$

07.25.03.ak7f.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{9}{2}, 5; z\right) = \frac{42 e^z (z-12)}{z^4} + \frac{315 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}} - \frac{168 (z-3)}{z^4}$$

07.25.03.ak7g.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{9}{2}, 5; -z\right) = \frac{168 (z+3)}{z^4} - \frac{42 e^{-z} (z+12)}{z^4} - \frac{315 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ak7h.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{9}{2}, 6; z\right) = -\frac{840 e^z (z+2)}{z^5} - \frac{420 (z^2 - 6z - 4)}{z^5} + \frac{1050 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ak7i.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{9}{2}, 6; -z\right) = -\frac{840 e^{-z} (z-2)}{z^5} + \frac{420 (z^2 + 6z - 4)}{z^5} - \frac{1050 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = 5$

07.25.03.ak7j.01

$${}_2F_2\left(3, \frac{7}{2}; 5, 5; z\right) = -\frac{1536 (z-6)}{5 z^4} + \frac{3072 e^{z/2} (2z-3) I_0\left(\frac{z}{2}\right)}{5 z^4} - \frac{5376 e^{z/2} I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.ak7k.01

$${}_2F_2\left(3, \frac{7}{2}; 5, \frac{11}{2}; z\right) = -\frac{504 (z-9)}{z^4} + \frac{945 \sqrt{\pi} (6z-7) \operatorname{erfi}(\sqrt{z})}{4 z^{9/2}} - \frac{2457 e^z}{2 z^4}$$

07.25.03.ak7l.01

$${}_2F_2\left(3, \frac{7}{2}; 5, \frac{11}{2}; -z\right) = \frac{504 (z+9)}{z^4} - \frac{945 \sqrt{\pi} (6z+7) \operatorname{erf}(\sqrt{z})}{4 z^{9/2}} - \frac{2457 e^{-z}}{2 z^4}$$

07.25.03.ak7m.01

$${}_2F_2\left(3, \frac{7}{2}; 5, 6; z\right) = -\frac{768 (z-12)}{z^4} + \frac{768 e^{z/2} (5z-12) I_0\left(\frac{z}{2}\right)}{z^4} - \frac{768 e^{z/2} (5z-8) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = \frac{11}{2}$

07.25.03.ak7n.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{11}{2}, 6; z\right) = -\frac{945 e^z (5z-16)}{z^5} - \frac{1260 (z^2 - 18z + 12)}{z^5} + \frac{4725 \sqrt{\pi} (2z-7) \operatorname{erfi}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.ak7o.01

$${}_2F_2\left(3, \frac{7}{2}; \frac{11}{2}, 6; -z\right) = -\frac{945 e^{-z} (5z+16)}{z^5} + \frac{1260 (z^2 + 18z + 12)}{z^5} - \frac{4725 \sqrt{\pi} (2z+7) \operatorname{erf}(\sqrt{z})}{2 z^{9/2}}$$

For fixed z and $a_1 = 3, a_2 = \frac{7}{2}, b_1 = 6$

07.25.03.ak7p.01

$${}_2F_2\left(3, \frac{7}{2}; 6, 6; z\right) = -\frac{1920(z^2 - 24z + 32)}{z^5} + \frac{2560 e^{z/2} (5z^2 - 30z + 24) I_0\left(\frac{z}{2}\right)}{z^5} - \frac{12800 e^{z/2} (z - 5) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = -\frac{11}{2}$

07.25.03.ak7q.01

$${}_2F_2\left(3, 4; -\frac{11}{2}, 1; z\right) = \frac{1}{31185} (16z^{11} + 816z^{10} + 14984z^9 + 121716z^8 + 423405z^7 + 451584z^6 - 112896z^5 + 75600z^4 - 72000z^3 + 75600z^2 - 68040z + 31185) + \frac{1}{62370} e^z \sqrt{\pi} (32z^{23/2} + 1648z^{21/2} + 30768z^{19/2} + 257640z^{17/2} + 955434z^{15/2} + 1235475z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak7r.01

$${}_2F_2\left(3, 4; -\frac{11}{2}, 1; -z\right) = \frac{1}{31185} (-16z^{11} + 816z^{10} - 14984z^9 + 121716z^8 - 423405z^7 + 451584z^6 + 112896z^5 + 75600z^4 + 72000z^3 + 75600z^2 + 68040z + 31185) + \frac{1}{62370} e^{-z} \sqrt{\pi} (32z^{23/2} - 1648z^{21/2} + 30768z^{19/2} - 257640z^{17/2} + 955434z^{15/2} - 1235475z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak7s.01

$${}_2F_2\left(3, 4; -\frac{11}{2}, 2; z\right) = \frac{1}{31185} (16z^{10} + 632z^9 + 8356z^8 + 42630z^7 + 64512z^6 - 18816z^5 + 15120z^4 - 18000z^3 + 25200z^2 - 34020z + 31185) + \frac{e^z \sqrt{\pi} (16z^{21/2} + 640z^{19/2} + 8664z^{17/2} + 46512z^{15/2} + 82365z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.ak7t.01

$${}_2F_2\left(3, 4; -\frac{11}{2}, 2; -z\right) = \frac{1}{31185} (16z^{10} - 632z^9 + 8356z^8 - 42630z^7 + 64512z^6 + 18816z^5 + 15120z^4 + 18000z^3 + 25200z^2 + 34020z + 31185) + \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 640z^{19/2} - 8664z^{17/2} + 46512z^{15/2} - 82365z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.ak7u.01

$${}_2F_2\left(3, 4; -\frac{11}{2}, 3; z\right) = \frac{32z^9 + 896z^8 + 7320z^7 + 16128z^6 - 5376z^5 + 5040z^4 - 7200z^3 + 12600z^2 - 22680z + 31185}{31185} + \frac{4 e^z \sqrt{\pi} (8z^{19/2} + 228z^{17/2} + 1938z^{15/2} + 4845z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.ak7v.01

$${}_2F_2\left(3, 4; -\frac{11}{2}, 3; -z\right) = \frac{-32z^9 + 896z^8 - 7320z^7 + 16128z^6 + 5376z^5 + 5040z^4 + 7200z^3 + 12600z^2 + 22680z + 31185}{31185} + \frac{4e^{-z}\sqrt{\pi}(8z^{19/2} - 228z^{17/2} + 1938z^{15/2} - 4845z^{13/2})\operatorname{erfi}(\sqrt{z})}{31185}$$

07.25.03.ak7w.01

$${}_2F_2\left(3, 4; -\frac{11}{2}, 4; z\right) = \frac{32z^8 + 528z^7 + 1792z^6 - 672z^5 + 720z^4 - 1200z^3 + 2520z^2 - 5670z + 10395}{10395} + \frac{8e^z\sqrt{\pi}(4z^{17/2} + 68z^{15/2} + 255z^{13/2})\operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.ak7x.01

$${}_2F_2\left(3, 4; -\frac{11}{2}, 4; -z\right) = \frac{32z^8 - 528z^7 + 1792z^6 + 672z^5 + 720z^4 + 1200z^3 + 2520z^2 + 5670z + 10395}{10395} - \frac{8e^{-z}\sqrt{\pi}(4z^{17/2} - 68z^{15/2} + 255z^{13/2})\operatorname{erfi}(\sqrt{z})}{10395}$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = -\frac{9}{2}$

07.25.03.ak7y.01

$${}_2F_2\left(3, 4; -\frac{9}{2}, 1; z\right) = \frac{1}{5670} \left(-16z^{10} - 736z^9 - 12048z^8 - 85920z^7 - 256743z^6 - 225792z^5 + 50400z^4 - 28800z^3 + 21600z^2 - 15120z + 5670 \right) + \frac{1}{11340} e^z \sqrt{\pi} \left(-32z^{21/2} - 1488z^{19/2} - 24816z^{17/2} - 183192z^{15/2} - 589050z^{13/2} - 646425z^{11/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak7z.01

$${}_2F_2\left(3, 4; -\frac{9}{2}, 1; -z\right) = \frac{1}{5670} \left(-16z^{10} + 736z^9 - 12048z^8 + 85920z^7 - 256743z^6 + 225792z^5 + 50400z^4 + 28800z^3 + 21600z^2 + 15120z + 5670 \right) + \frac{1}{11340} e^{-z} \sqrt{\pi} \left(32z^{21/2} - 1488z^{19/2} + 24816z^{17/2} - 183192z^{15/2} + 589050z^{13/2} - 646425z^{11/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak80.01

$${}_2F_2\left(3, 4; -\frac{9}{2}, 2; z\right) = \frac{-8z^9 - 284z^8 - 3330z^7 - 14787z^6 - 18816z^5 + 5040z^4 - 3600z^3 + 3600z^2 - 3780z + 2835}{2835} + \frac{e^z \sqrt{\pi} \left(-16z^{19/2} - 576z^{17/2} - 6936z^{15/2} - 32640z^{13/2} - 49725z^{11/2} \right) \operatorname{erf}(\sqrt{z})}{5670}$$

07.25.03.ak81.01

$${}_2F_2\left(3, 4; -\frac{9}{2}, 2; -z\right) = \frac{8z^9 - 284z^8 + 3330z^7 - 14787z^6 + 18816z^5 + 5040z^4 + 3600z^3 + 3600z^2 + 3780z + 2835}{2835} + \frac{e^{-z} \sqrt{\pi} \left(-16z^{19/2} + 576z^{17/2} - 6936z^{15/2} + 32640z^{13/2} - 49725z^{11/2} \right) \operatorname{erfi}(\sqrt{z})}{5670}$$

07.25.03.ak82.01

$${}_2F_2\left(3, 4; -\frac{9}{2}, 3; z\right) = \frac{-16z^8 - 400z^7 - 2868z^6 - 5376z^5 + 1680z^4 - 1440z^3 + 1800z^2 - 2520z + 2835}{2835} - \frac{2e^z\sqrt{\pi}(8z^{17/2} + 204z^{15/2} + 1530z^{13/2} + 3315z^{11/2})\operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.ak83.01

$${}_2F_2\left(3, 4; -\frac{9}{2}, 3; -z\right) = \frac{-16z^8 + 400z^7 - 2868z^6 + 5376z^5 + 1680z^4 + 1440z^3 + 1800z^2 + 2520z + 2835}{2835} + \frac{2e^{-z}\sqrt{\pi}(8z^{17/2} - 204z^{15/2} + 1530z^{13/2} - 3315z^{11/2})\operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.ak84.01

$${}_2F_2\left(3, 4; -\frac{9}{2}, 4; z\right) = \frac{1}{945}(-16z^7 - 232z^6 - 672z^5 + 240z^4 - 240z^3 + 360z^2 - 630z + 945) - \frac{4}{945}e^z\sqrt{\pi}(4z^{15/2} + 60z^{13/2} + 195z^{11/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ak85.01

$${}_2F_2\left(3, 4; -\frac{9}{2}, 4; -z\right) = \frac{1}{945}(16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945) - \frac{4}{945}e^{-z}\sqrt{\pi}(4z^{15/2} - 60z^{13/2} + 195z^{11/2})\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = -\frac{7}{2}$

07.25.03.ak86.01

$${}_2F_2\left(3, 4; -\frac{7}{2}, 1; z\right) = \frac{16z^9 + 656z^8 + 9432z^7 + 57932z^6 + 144849z^5 + 100800z^4 - 19200z^3 + 8640z^2 - 4320z + 1260}{1260} + \frac{e^z\sqrt{\pi}(32z^{19/2} + 1328z^{17/2} + 19504z^{15/2} + 124680z^{13/2} + 339690z^{11/2} + 306735z^{9/2})\operatorname{erf}(\sqrt{z})}{2520}$$

07.25.03.ak87.01

$${}_2F_2\left(3, 4; -\frac{7}{2}, 1; -z\right) = \frac{1}{1260}(-16z^9 + 656z^8 - 9432z^7 + 57932z^6 - 144849z^5 + 100800z^4 + 19200z^3 + 8640z^2 + 4320z + 1260) + \frac{1}{2520}e^{-z}\sqrt{\pi}(32z^{19/2} - 1328z^{17/2} + 19504z^{15/2} - 124680z^{13/2} + 339690z^{11/2} - 306735z^{9/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ak88.01

$${}_2F_2\left(3, 4; -\frac{7}{2}, 2; z\right) = \frac{1}{630}(8z^8 + 252z^7 + 2578z^6 + 9747z^5 + 10080z^4 - 2400z^3 + 1440z^2 - 1080z + 630) + \frac{e^z\sqrt{\pi}(16z^{17/2} + 512z^{15/2} + 5400z^{13/2} + 21840z^{11/2} + 27885z^{9/2})\operatorname{erf}(\sqrt{z})}{1260}$$

07.25.03.ak89.01

$${}_2F_2\left(3, 4; -\frac{7}{2}, 2; -z\right) = \frac{1}{630} (8z^8 - 252z^7 + 2578z^6 - 9747z^5 + 10080z^4 + 2400z^3 + 1440z^2 + 1080z + 630) + \frac{e^{-z} \sqrt{\pi} (-16z^{17/2} + 512z^{15/2} - 5400z^{13/2} + 21840z^{11/2} - 27885z^{9/2}) \operatorname{erfi}(\sqrt{z})}{1260}$$

07.25.03.ak8a.01

$${}_2F_2\left(3, 4; -\frac{7}{2}, 3; z\right) = \frac{1}{315} (8z^7 + 176z^6 + 1086z^5 + 1680z^4 - 480z^3 + 360z^2 - 360z + 315) + \frac{1}{315} e^z \sqrt{\pi} (8z^{15/2} + 180z^{13/2} + 1170z^{11/2} + 2145z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak8b.01

$${}_2F_2\left(3, 4; -\frac{7}{2}, 3; -z\right) = \frac{1}{315} (-8z^7 + 176z^6 - 1086z^5 + 1680z^4 + 480z^3 + 360z^2 + 360z + 315) + \frac{1}{315} e^{-z} \sqrt{\pi} (8z^{15/2} - 180z^{13/2} + 1170z^{11/2} - 2145z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak8c.01

$${}_2F_2\left(3, 4; -\frac{7}{2}, 4; z\right) = \frac{1}{105} (8z^6 + 100z^5 + 240z^4 - 80z^3 + 72z^2 - 90z + 105) + \frac{2}{105} e^z \sqrt{\pi} (4z^{13/2} + 52z^{11/2} + 143z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak8d.01

$${}_2F_2\left(3, 4; -\frac{7}{2}, 4; -z\right) = \frac{1}{105} (8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} (4z^{13/2} - 52z^{11/2} + 143z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = -\frac{5}{2}$

07.25.03.ak8e.01

$${}_2F_2\left(3, 4; -\frac{5}{2}, 1; z\right) = \frac{1}{360} (-16z^8 - 576z^7 - 7136z^6 - 36792z^5 - 74187z^4 - 38400z^3 + 5760z^2 - 1728z + 360) + \frac{1}{720} e^z \sqrt{\pi} (-32z^{17/2} - 1168z^{15/2} - 14832z^{13/2} - 80184z^{11/2} - 179322z^{9/2} - 127413z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak8f.01

$${}_2F_2\left(3, 4; -\frac{5}{2}, 1; -z\right) = \frac{1}{360} (-16z^8 + 576z^7 - 7136z^6 + 36792z^5 - 74187z^4 + 38400z^3 + 5760z^2 + 1728z + 360) + \frac{1}{720} e^{-z} \sqrt{\pi} (32z^{17/2} - 1168z^{15/2} + 14832z^{13/2} - 80184z^{11/2} + 179322z^{9/2} - 127413z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak8g.01

$${}_2F_2\left(3, 4; -\frac{5}{2}, 2; z\right) = \frac{1}{180} (-8z^7 - 220z^6 - 1922z^5 - 6003z^4 - 4800z^3 + 960z^2 - 432z + 180) + \frac{1}{360} e^z \sqrt{\pi} (-16z^{15/2} - 448z^{13/2} - 4056z^{11/2} - 13728z^{9/2} - 14157z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak8h.01

$${}_2F_2\left(3, 4; -\frac{5}{2}, 2; -z\right) = \frac{1}{180} (8z^7 - 220z^6 + 1922z^5 - 6003z^4 + 4800z^3 + 960z^2 + 432z + 180) + \frac{1}{360} e^{-z} \sqrt{\pi} (-16z^{15/2} + 448z^{13/2} - 4056z^{11/2} + 13728z^{9/2} - 14157z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak8i.01

$${}_2F_2\left(3, 4; -\frac{5}{2}, 3; z\right) = \frac{1}{45} (-4z^6 - 76z^5 - 393z^4 - 480z^3 + 120z^2 - 72z + 45) + \frac{1}{90} e^z \sqrt{\pi} (-8z^{13/2} - 156z^{11/2} - 858z^{9/2} - 1287z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak8j.01

$${}_2F_2\left(3, 4; -\frac{5}{2}, 3; -z\right) = \frac{1}{45} (-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45) + \frac{1}{90} e^{-z} \sqrt{\pi} (8z^{13/2} - 156z^{11/2} + 858z^{9/2} - 1287z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak8k.01

$${}_2F_2\left(3, 4; -\frac{5}{2}, 4; z\right) = \frac{1}{15} (-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) + \frac{1}{15} e^z \sqrt{\pi} (-4z^{11/2} - 44z^{9/2} - 99z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak8l.01

$${}_2F_2\left(3, 4; -\frac{5}{2}, 4; -z\right) = \frac{1}{15} (4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) + \frac{1}{15} e^{-z} \sqrt{\pi} (-4z^{11/2} + 44z^{9/2} - 99z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = -\frac{3}{2}$

07.25.03.ak8m.01

$${}_2F_2\left(3, 4; -\frac{3}{2}, 1; z\right) = \frac{1}{144} (16z^7 + 496z^6 + 5160z^5 + 21540z^4 + 33141z^3 + 11520z^2 - 1152z + 144) + \frac{1}{288} e^z \sqrt{\pi} (32z^{15/2} + 1008z^{13/2} + 10800z^{11/2} + 47784z^{9/2} + 83754z^{7/2} + 43659z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak8n.01

$${}_2F_2\left(3, 4; -\frac{3}{2}, 1; -z\right) = \frac{1}{144} (-16z^7 + 496z^6 - 5160z^5 + 21540z^4 - 33141z^3 + 11520z^2 + 1152z + 144) + \frac{1}{288} e^{-z} \sqrt{\pi} (32z^{15/2} - 1008z^{13/2} + 10800z^{11/2} - 47784z^{9/2} + 83754z^{7/2} - 43659z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak8o.01

$${}_2F_2\left(3, 4; -\frac{3}{2}, 2; z\right) = \frac{1}{72} (8z^6 + 188z^5 + 1362z^4 + 3363z^3 + 1920z^2 - 288z + 72) + \frac{1}{144} e^z \sqrt{\pi} (16z^{13/2} + 384z^{11/2} + 2904z^{9/2} + 7920z^{7/2} + 6237z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak8p.01

$${}_2F_2\left(3, 4; -\frac{3}{2}, 2; -z\right) = \frac{1}{72} (8z^6 - 188z^5 + 1362z^4 - 3363z^3 + 1920z^2 + 288z + 72) + \frac{1}{144} e^{-z} \sqrt{\pi} (-16z^{13/2} + 384z^{11/2} - 2904z^{9/2} + 7920z^{7/2} - 6237z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak8q.01

$${}_2F_2\left(3, 4; -\frac{3}{2}, 3; z\right) = \frac{1}{18} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36} e^z \sqrt{\pi} (8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak8r.01

$${}_2F_2\left(3, 4; -\frac{3}{2}, 3; -z\right) = \frac{1}{18} (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36} e^{-z} \sqrt{\pi} (8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak8s.01

$${}_2F_2\left(3, 4; -\frac{3}{2}, 4; z\right) = \frac{1}{3} (2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6} e^z \sqrt{\pi} (4z^{9/2} + 36z^{7/2} + 63z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak8t.01

$${}_2F_2\left(3, 4; -\frac{3}{2}, 4; -z\right) = \frac{1}{3} (2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6} e^{-z} \sqrt{\pi} (-4z^{9/2} + 36z^{7/2} - 63z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = -\frac{1}{2}$

07.25.03.ak8u.01

$${}_2F_2\left(3, 4; -\frac{1}{2}, 1; z\right) = \frac{1}{96} (-16z^6 - 416z^5 - 3504z^4 - 11216z^3 - 12015z^2 - 2304z + 96) + \frac{1}{192} e^z \sqrt{\pi} (-32z^{13/2} - 848z^{11/2} - 7408z^{9/2} - 25560z^{7/2} - 32634z^{5/2} - 11025z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak8v.01

$${}_2F_2\left(3, 4; -\frac{1}{2}, 1; -z\right) = \frac{1}{96} (-16z^6 + 416z^5 - 3504z^4 + 11216z^3 - 12015z^2 + 2304z + 96) + \frac{1}{192} e^{-z} \sqrt{\pi} (32z^{13/2} - 848z^{11/2} + 7408z^{9/2} - 25560z^{7/2} + 32634z^{5/2} - 11025z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak8w.01

$${}_2F_2\left(3, 4; -\frac{1}{2}, 2; z\right) = \frac{1}{48} (-8z^5 - 156z^4 - 898z^3 - 1635z^2 - 576z + 48) + \frac{1}{96} e^z \sqrt{\pi} (-16z^{11/2} - 320z^{9/2} - 1944z^{7/2} - 4032z^{5/2} - 2205z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak8x.01

$${}_2F_2\left(3, 4; -\frac{1}{2}, 2; -z\right) = \frac{1}{48} (8z^5 - 156z^4 + 898z^3 - 1635z^2 + 576z + 48) + \frac{1}{96} e^{-z} \sqrt{\pi} (-16z^{11/2} + 320z^{9/2} - 1944z^{7/2} + 4032z^{5/2} - 2205z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ak8y.01

$${}_2F_2\left(3, 4; -\frac{1}{2}, 3; z\right) = \frac{1}{12} (-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24} e^z \sqrt{\pi} (-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ak8z.01

$${}_2F_2\left(3, 4; -\frac{1}{2}, 3; -z\right) = \frac{1}{12}(-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24}e^{-z}\sqrt{\pi}(8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ak90.01

$${}_2F_2\left(3, 4; -\frac{1}{2}, 4; z\right) = \frac{1}{2}(-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4}e^z\sqrt{\pi}(-4z^{7/2} - 28z^{5/2} - 35z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.ak91.01

$${}_2F_2\left(3, 4; -\frac{1}{2}, 4; -z\right) = \frac{1}{2}(2z^3 - 13z^2 + 12z + 2) + \frac{1}{4}e^{-z}\sqrt{\pi}(-4z^{7/2} + 28z^{5/2} - 35z^{3/2})\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = \frac{1}{2}$

07.25.03.ak92.01

$${}_2F_2\left(3, 4; \frac{1}{2}, 1; z\right) = \frac{1}{192}(16z^5 + 336z^4 + 2168z^3 + 4860z^2 + 3033z + 192) + \frac{1}{384}e^z\sqrt{\pi}(32z^{11/2} + 688z^{9/2} + 4656z^{7/2} + 11592z^{5/2} + 9450z^{3/2} + 1575\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.ak93.01

$${}_2F_2\left(3, 4; \frac{1}{2}, 1; -z\right) = \frac{1}{192}(-16z^5 + 336z^4 - 2168z^3 + 4860z^2 - 3033z + 192) + \frac{1}{384}e^{-z}\sqrt{\pi}(32z^{11/2} - 688z^{9/2} + 4656z^{7/2} - 11592z^{5/2} + 9450z^{3/2} - 1575\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ak94.01

$${}_2F_2\left(3, 4; \frac{1}{2}, 2; z\right) = \frac{1}{96}(8z^4 + 124z^3 + 530z^2 + 627z + 96) + \frac{1}{192}e^z\sqrt{\pi}(16z^{9/2} + 256z^{7/2} + 1176z^{5/2} + 1680z^{3/2} + 525\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.ak95.01

$${}_2F_2\left(3, 4; \frac{1}{2}, 2; -z\right) = \frac{1}{96}(8z^4 - 124z^3 + 530z^2 - 627z + 96) + \frac{1}{192}e^{-z}\sqrt{\pi}(-16z^{9/2} + 256z^{7/2} - 1176z^{5/2} + 1680z^{3/2} - 525\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ak96.01

$${}_2F_2\left(3, 4; \frac{1}{2}, 3; z\right) = \frac{1}{24}(4z^3 + 40z^2 + 87z + 24) + \frac{1}{48}e^z\sqrt{\pi}(8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.ak97.01

$${}_2F_2\left(3, 4; \frac{1}{2}, 3; -z\right) = \frac{1}{24}(-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48}e^{-z}\sqrt{\pi}(8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.ak98.01

$${}_2F_2\left(3, 4; \frac{1}{2}, 4; z\right) = \frac{1}{4}(2z^2 + 9z + 4) + \frac{1}{8}e^z\sqrt{\pi}(4z^{5/2} + 20z^{3/2} + 15\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.ak99.01

$${}_2F_2\left(3, 4; \frac{1}{2}, 4; -z\right) = \frac{1}{4}(2z^2 - 9z + 4) + \frac{1}{8}e^{-z}\sqrt{\pi}(-4z^{5/2} + 20z^{3/2} - 15\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = 1$

07.25.03.ak9a.01

$${}_2F_2(3, 4; 1, 1; z) = \frac{1}{12} e^z (z^5 + 19z^4 + 110z^3 + 222z^2 + 132z + 12)$$

07.25.03.ak9b.01

$${}_2F_2\left(3, 4; 1, \frac{3}{2}; z\right) = \frac{1}{384} (16z^4 + 256z^3 + 1152z^2 + 1512z + 339) + \frac{e^z \sqrt{\pi} (32z^5 + 528z^4 + 2544z^3 + 3960z^2 + 1530z + 45) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.ak9c.01

$${}_2F_2\left(3, 4; 1, \frac{3}{2}; -z\right) = \frac{1}{384} (16z^4 - 256z^3 + 1152z^2 - 1512z + 339) + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 528z^4 - 2544z^3 + 3960z^2 - 1530z + 45) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.ak9d.01

$${}_2F_2(3, 4; 1, 2; z) = \frac{1}{12} e^z (z^4 + 14z^3 + 54z^2 + 60z + 12)$$

07.25.03.ak9e.01

$${}_2F_2\left(3, 4; 1, \frac{5}{2}; z\right) = \frac{16z^4 + 176z^3 + 456z^2 + 212z - 3}{256z} + \frac{e^z \sqrt{\pi} (32z^5 + 368z^4 + 1072z^3 + 744z^2 + 42z + 3) \operatorname{erf}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.ak9f.01

$${}_2F_2\left(3, 4; 1, \frac{5}{2}; -z\right) = \frac{-16z^4 + 176z^3 - 456z^2 + 212z + 3}{256z} + \frac{e^{-z} \sqrt{\pi} (32z^5 - 368z^4 + 1072z^3 - 744z^2 + 42z - 3) \operatorname{erfi}(\sqrt{z})}{512 z^{3/2}}$$

07.25.03.ak9g.01

$${}_2F_2(3, 4; 1, 3; z) = \frac{1}{6} e^z (z^3 + 9z^2 + 18z + 6)$$

07.25.03.ak9h.01

$${}_2F_2\left(3, 4; 1, \frac{7}{2}; z\right) = \frac{5(16z^4 + 96z^3 + 80z^2 - 9)}{512z^2} + \frac{5e^z \sqrt{\pi} (32z^5 + 208z^4 + 240z^3 + 24z^2 - 6z + 9) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.ak9i.01

$${}_2F_2\left(3, 4; 1, \frac{7}{2}; -z\right) = \frac{5(16z^4 - 96z^3 + 80z^2 - 9)}{512z^2} - \frac{5e^{-z} \sqrt{\pi} (32z^5 - 208z^4 + 240z^3 - 24z^2 - 6z - 9) \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.ak9j.01

$${}_2F_2(3, 4; 1, 4; z) = \frac{1}{2} e^z (z^2 + 4z + 2)$$

07.25.03.ak9k.01

$${}_2F_2\left(3, 4; 1, \frac{9}{2}; z\right) = \frac{35(16z^4 + 16z^3 + 24z^2 - 84z + 225)}{1024z^3} + \frac{35e^z \sqrt{\pi} (32z^5 + 48z^4 + 48z^3 - 120z^2 + 234z - 225) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.ak9l.01

$${}_2F_2\left(3, 4; 1, \frac{9}{2}; -z\right) = \frac{35 e^{-z} \sqrt{\pi} (32 z^5 - 48 z^4 + 48 z^3 + 120 z^2 + 234 z + 225) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}} - \frac{35 (16 z^4 - 16 z^3 + 24 z^2 + 84 z + 225)}{1024 z^3}$$

07.25.03.ak9m.01

$${}_2F_2(3, 4; 1, 5; z) = \frac{2 e^z (z^5 - z^4 + 6 z^3 - 18 z^2 + 36 z - 36)}{z^4} + \frac{72}{z^4}$$

07.25.03.ak9n.01

$${}_2F_2\left(3, 4; 1, \frac{11}{2}; z\right) = \frac{315 (16 z^4 - 64 z^3 + 288 z^2 - 1000 z + 3675)}{2048 z^4} + \frac{315 e^z \sqrt{\pi} (32 z^5 - 112 z^4 + 496 z^3 - 1608 z^2 + 3450 z - 3675) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.ak9o.01

$${}_2F_2\left(3, 4; 1, \frac{11}{2}; -z\right) = \frac{315 (16 z^4 + 64 z^3 + 288 z^2 + 1000 z + 3675)}{2048 z^4} - \frac{315 e^{-z} \sqrt{\pi} (32 z^5 + 112 z^4 + 496 z^3 + 1608 z^2 + 3450 z + 3675) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.ak9p.01

$${}_2F_2(3, 4; 1, 6; z) = \frac{360(z+8)}{z^5} + \frac{10 e^z (z^5 - 6 z^4 + 30 z^3 - 108 z^2 + 252 z - 288)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = \frac{3}{2}$

07.25.03.ak9q.01

$${}_2F_2\left(3, 4; \frac{3}{2}, 2; z\right) = \frac{1}{192} (8 z^3 + 92 z^2 + 258 z + 147) + \frac{e^z \sqrt{\pi} (16 z^4 + 192 z^3 + 600 z^2 + 480 z + 45) \operatorname{erf}(\sqrt{z})}{384 \sqrt{z}}$$

07.25.03.ak9r.01

$${}_2F_2\left(3, 4; \frac{3}{2}, 2; -z\right) = \frac{1}{192} (-8 z^3 + 92 z^2 - 258 z + 147) + \frac{e^{-z} \sqrt{\pi} (16 z^4 - 192 z^3 + 600 z^2 - 480 z + 45) \operatorname{erfi}(\sqrt{z})}{384 \sqrt{z}}$$

07.25.03.ak9s.01

$${}_2F_2\left(3, 4; \frac{3}{2}, 3; z\right) = \frac{1}{48} (4 z^2 + 28 z + 33) + \frac{e^z \sqrt{\pi} (8 z^3 + 60 z^2 + 90 z + 15) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.ak9t.01

$${}_2F_2\left(3, 4; \frac{3}{2}, 3; -z\right) = \frac{1}{48} (4 z^2 - 28 z + 33) + \frac{e^{-z} \sqrt{\pi} (-8 z^3 + 60 z^2 - 90 z + 15) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.ak9u.01

$${}_2F_2\left(3, 4; \frac{3}{2}, 4; z\right) = \frac{1}{8}(2z+5) + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.ak9v.01

$${}_2F_2\left(3, 4; \frac{3}{2}, 4; -z\right) = \frac{1}{8}(5-2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = 2$

07.25.03.ak9w.01

$${}_2F_2(3, 4; 2, 2; z) = \frac{1}{12} e^z (z^3 + 10z^2 + 24z + 12)$$

07.25.03.ak9x.01

$${}_2F_2\left(3, 4; 2, \frac{5}{2}; z\right) = \frac{8z^3 + 60z^2 + 82z + 3}{128z} + \frac{e^z \sqrt{\pi} (16z^4 + 128z^3 + 216z^2 + 48z - 3) \operatorname{erf}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.ak9y.01

$${}_2F_2\left(3, 4; 2, \frac{5}{2}; -z\right) = \frac{8z^3 - 60z^2 + 82z - 3}{128z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 128z^3 - 216z^2 + 48z + 3) \operatorname{erfi}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.ak9z.01

$${}_2F_2(3, 4; 2, 3; z) = \frac{1}{6} e^z (z^2 + 6z + 6)$$

07.25.03.aka0.01

$${}_2F_2\left(3, 4; 2, \frac{7}{2}; z\right) = \frac{5(8z^3 + 28z^2 + 2z + 3)}{256z^2} + \frac{5e^z \sqrt{\pi} (16z^4 + 64z^3 + 24z^2 - 3) \operatorname{erf}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.aka1.01

$${}_2F_2\left(3, 4; 2, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^4 - 64z^3 + 24z^2 - 3) \operatorname{erfi}(\sqrt{z})}{512z^{5/2}} - \frac{5(8z^3 - 28z^2 + 2z - 3)}{256z^2}$$

07.25.03.aka2.01

$${}_2F_2(3, 4; 2, 4; z) = \frac{1}{2} e^z (z + 2)$$

07.25.03.aka3.01

$${}_2F_2\left(3, 4; 2, \frac{9}{2}; z\right) = \frac{35(8z^3 - 4z^2 + 18z - 45)}{512z^3} + \frac{35e^z \sqrt{\pi} (16z^4 + 24z^2 - 48z + 45) \operatorname{erf}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.aka4.01

$${}_2F_2\left(3, 4; 2, \frac{9}{2}; -z\right) = \frac{35(8z^3 + 4z^2 + 18z + 45)}{512z^3} - \frac{35e^{-z} \sqrt{\pi} (16z^4 + 24z^2 + 48z + 45) \operatorname{erfi}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.aka5.01

$${}_2F_2(3, 4; 2, 5; z) = \frac{2e^z (z^4 - 2z^3 + 6z^2 - 12z + 12)}{z^4} - \frac{24}{z^4}$$

07.25.03.aka6.01

$${}_2F_2\left(3, 4; 2, \frac{11}{2}; z\right) = \frac{315(8z^3 - 36z^2 + 130z - 525)}{1024z^4} + \frac{315e^z\sqrt{\pi}(16z^4 - 64z^3 + 216z^2 - 480z + 525)\operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.aka7.01

$${}_2F_2\left(3, 4; 2, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(16z^4 + 64z^3 + 216z^2 + 480z + 525)\operatorname{erfi}(\sqrt{z})}{2048z^{9/2}} - \frac{315(8z^3 + 36z^2 + 130z + 525)}{1024z^4}$$

07.25.03.aka8.01

$${}_2F_2(3, 4; 2, 6; z) = \frac{10e^z(z^4 - 6z^3 + 24z^2 - 60z + 72)}{z^5} - \frac{120(z + 6)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = \frac{5}{2}$

07.25.03.aka9.01

$${}_2F_2\left(3, 4; \frac{5}{2}, 3; z\right) = \frac{4z^2 + 16z + 3}{32z} + \frac{e^z\sqrt{\pi}(8z^3 + 36z^2 + 18z - 3)\operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.akaa.01

$${}_2F_2\left(3, 4; \frac{5}{2}, 3; -z\right) = \frac{-4z^2 + 16z - 3}{32z} + \frac{e^{-z}\sqrt{\pi}(8z^3 - 36z^2 + 18z + 3)\operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.akab.01

$${}_2F_2\left(3, 4; \frac{5}{2}, 4; z\right) = \frac{3(2z + 1)}{16z} + \frac{3e^z\sqrt{\pi}(4z^2 + 4z - 1)\operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.akac.01

$${}_2F_2\left(3, 4; \frac{5}{2}, 4; -z\right) = \frac{3(2z - 1)}{16z} - \frac{3e^{-z}\sqrt{\pi}(4z^2 - 4z - 1)\operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = 3$

07.25.03.akad.01

$${}_2F_2(3, 4; 3, 3; z) = \frac{1}{3}e^z(z + 3)$$

07.25.03.akae.01

$${}_2F_2\left(3, 4; 3, \frac{7}{2}; z\right) = \frac{5(4z^2 + 4z - 3)}{64z^2} + \frac{5e^z\sqrt{\pi}(8z^3 + 12z^2 - 6z + 3)\operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.akaf.01

$${}_2F_2\left(3, 4; 3, \frac{7}{2}; -z\right) = \frac{5(4z^2 - 4z - 3)}{64z^2} - \frac{5e^{-z}\sqrt{\pi}(8z^3 - 12z^2 - 6z - 3)\operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.akag.01

$${}_2F_2(3, 4; 3, 4; z) = e^z$$

07.25.03.akah.01

$${}_2F_2\left(3, 4; 3, \frac{9}{2}; z\right) = \frac{35(4z^2 - 8z + 15)}{128z^3} + \frac{35e^z\sqrt{\pi}(8z^3 - 12z^2 + 18z - 15)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.akai.01

$${}_2F_2\left(3, 4; 3, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(8z^3 + 12z^2 + 18z + 15)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35(4z^2 + 8z + 15)}{128z^3}$$

07.25.03.akaj.01

$${}_2F_2(3, 4; 3, 5; z) = \frac{4e^z(z^3 - 3z^2 + 6z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.akak.01

$${}_2F_2\left(3, 4; 3, \frac{11}{2}; z\right) = \frac{315(4z^2 - 20z + 105)}{256z^4} + \frac{315e^z\sqrt{\pi}(8z^3 - 36z^2 + 90z - 105)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.akal.01

$${}_2F_2\left(3, 4; 3, \frac{11}{2}; -z\right) = \frac{315(4z^2 + 20z + 105)}{256z^4} - \frac{315e^{-z}\sqrt{\pi}(8z^3 + 36z^2 + 90z + 105)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.akam.01

$${}_2F_2(3, 4; 3, 6; z) = \frac{120(z + 4)}{z^5} + \frac{20e^z(z^3 - 6z^2 + 18z - 24)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = \frac{7}{2}$

07.25.03.akan.01

$${}_2F_2\left(3, 4; \frac{7}{2}, 4; z\right) = \frac{15(2z - 3)}{32z^2} + \frac{15e^z\sqrt{\pi}(4z^2 - 4z + 3)\operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.akao.01

$${}_2F_2\left(3, 4; \frac{7}{2}, 4; -z\right) = \frac{15e^{-z}\sqrt{\pi}(4z^2 + 4z + 3)\operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15(2z + 3)}{32z^2}$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = 4$

07.25.03.akap.01

$${}_2F_2(3, 4; 4, 4; z) = \frac{3e^z(z^2 - 2z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.akaq.01

$${}_2F_2\left(3, 4; 4, \frac{9}{2}; z\right) = \frac{105(2z - 15)}{64z^3} + \frac{105e^z\sqrt{\pi}(4z^2 - 12z + 15)\operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.akar.01

$${}_2F_2\left(3, 4; 4, \frac{9}{2}; -z\right) = \frac{105(2z + 15)}{64z^3} - \frac{105e^{-z}\sqrt{\pi}(4z^2 + 12z + 15)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.akas.01

$${}_2F_2(3, 4; 4, 5; z) = \frac{12 e^z (z^2 - 4z + 6)}{z^4} - \frac{24(z + 3)}{z^4}$$

07.25.03.akat.01

$${}_2F_2\left(3, 4; 4, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575(2z + 21)}{128 z^4}$$

07.25.03.akau.01

$${}_2F_2\left(3, 4; 4, \frac{11}{2}; -z\right) = \frac{1575(2z - 21)}{128 z^4} + \frac{945 e^{-z} \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.akav.01

$${}_2F_2(3, 4; 4, 6; z) = \frac{60 e^z (z^2 - 6z + 12)}{z^5} - \frac{60(z^2 + 6z + 12)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = 5$

07.25.03.akaw.01

$${}_2F_2(3, 4; 5, 5; z) = \frac{48 e^z (z - 5)}{z^4} - \frac{48(2z + 6\gamma - 5)}{z^4} + \frac{288 \operatorname{Ei}(z)}{z^4} + \frac{144 \log\left(\frac{1}{z}\right)}{z^4} - \frac{144 \log(z)}{z^4}$$

07.25.03.akax.01

$${}_2F_2(3, 4; 5, 6; z) = \frac{240 e^z (z - 12)}{z^5} - \frac{240(z^2 + 6\gamma z - 11z - 12)}{z^5} + \frac{1440 \operatorname{Ei}(z)}{z^4} + \frac{720 \log\left(\frac{1}{z}\right)}{z^4} - \frac{720 \log(z)}{z^4}$$

For fixed z and $a_1 = 3, a_2 = 4, b_1 = 6$

07.25.03.akay.01

$${}_2F_2(3, 4; 6, 6; z) = \frac{600(z^2 + 12\gamma z - 34z - 24\gamma - 10)}{z^5} + \frac{7200(z - 2) \operatorname{Ei}(z)}{z^5} + \frac{3600(z - 2) \log\left(\frac{1}{z}\right)}{z^5} - \frac{3600(z - 2) \log(z)}{z^5} - \frac{6000 e^z}{z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = -\frac{11}{2}$

07.25.03.akaz.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) =$$

$$\frac{1}{11\,345\,882\,625} \left(32\,768\,z^{18} + 4\,472\,832\,z^{17} + 255\,787\,008\,z^{16} + 8\,031\,076\,352\,z^{15} + 152\,495\,063\,040\,z^{14} + \right.$$

$$18\,192\,461\,440\,z^{13} + 13\,729\,169\,879\,040\,z^{12} + 64\,414\,076\,866\,560\,z^{11} + 179\,878\,555\,146\,240\,z^{10} +$$

$$275\,524\,843\,507\,200\,z^9 + 198\,592\,332\,422\,400\,z^8 + 48\,195\,987\,033\,600\,z^7 + 1\,173\,274\,502\,400\,z^6 +$$

$$23\,156\,733\,600\,z^5 + 4\,378\,374\,000\,z^4 + 2\,432\,430\,000\,z^3 + 2\,750\,517\,000\,z^2 + 5\,063\,451\,750\,z + 11\,345\,882\,625 \Big) +$$

$$\frac{1}{11\,345\,882\,625} \left(8192\,e^z\sqrt{\pi} \left(4\,z^{37/2} + 548\,z^{35/2} + 31\,495\,z^{33/2} + 995\,700\,z^{31/2} + 19\,090\,350\,z^{29/2} + \right. \right.$$

$$230\,929\,920\,z^{27/2} + 1\,778\,747\,040\,z^{25/2} + 8\,609\,328\,000\,z^{23/2} + 25\,260\,984\,000\,z^{21/2} +$$

$$\left. \left. 42\,057\,792\,000\,z^{19/2} + 35\,349\,955\,200\,z^{17/2} + 11\,967\,782\,400\,z^{15/2} + 925\,344\,000\,z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akb0.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; -z\right) =$$

$$\frac{1}{11\,345\,882\,625} \left(32\,768\,z^{18} - 4\,472\,832\,z^{17} + 255\,787\,008\,z^{16} - 8\,031\,076\,352\,z^{15} + 152\,495\,063\,040\,z^{14} - \right.$$

$$18\,192\,461\,440\,z^{13} + 13\,729\,169\,879\,040\,z^{12} - 64\,414\,076\,866\,560\,z^{11} + 179\,878\,555\,146\,240\,z^{10} -$$

$$275\,524\,843\,507\,200\,z^9 + 198\,592\,332\,422\,400\,z^8 - 48\,195\,987\,033\,600\,z^7 + 1\,173\,274\,502\,400\,z^6 -$$

$$23\,156\,733\,600\,z^5 + 4\,378\,374\,000\,z^4 - 2\,432\,430\,000\,z^3 + 2\,750\,517\,000\,z^2 - 5\,063\,451\,750\,z + 11\,345\,882\,625 \Big) -$$

$$\frac{1}{11\,345\,882\,625} \left(8192\,e^{-z}\sqrt{\pi} \left(4\,z^{37/2} - 548\,z^{35/2} + 31\,495\,z^{33/2} - 995\,700\,z^{31/2} + 19\,090\,350\,z^{29/2} - \right. \right.$$

$$230\,929\,920\,z^{27/2} + 1\,778\,747\,040\,z^{25/2} - 8\,609\,328\,000\,z^{23/2} + 25\,260\,984\,000\,z^{21/2} -$$

$$\left. \left. 42\,057\,792\,000\,z^{19/2} + 35\,349\,955\,200\,z^{17/2} - 11\,967\,782\,400\,z^{15/2} + 925\,344\,000\,z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akb1.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{1\,031\,443\,875} \left(-16\,384\,z^{17} - 2\,039\,808\,z^{16} - 105\,463\,808\,z^{15} - 2\,961\,899\,520\,z^{14} - 49\,640\,693\,760\,z^{13} - \right.$$

$$513\,855\,713\,280\,z^{12} - 3\,289\,157\,775\,360\,z^{11} - 12\,678\,586\,767\,360\,z^{10} - 27\,724\,644\,057\,600\,z^9 -$$

$$30\,672\,500\,947\,200\,z^8 - 13\,538\,522\,995\,200\,z^7 - 1\,173\,274\,502\,400\,z^6 + 23\,156\,733\,600\,z^5 +$$

$$1\,459\,458\,000\,z^4 + 486\,486\,000\,z^3 + 392\,931\,000\,z^2 + 562\,605\,750\,z + 1\,031\,443\,875 \Big) - \frac{1}{1\,031\,443\,875}$$

$$\left(4096\,e^z\sqrt{\pi} \left(4\,z^{35/2} + 500\,z^{33/2} + 25\,995\,z^{31/2} + 735\,750\,z^{29/2} + 12\,468\,600\,z^{27/2} + 131\,181\,120\,z^{25/2} + 860\,479\,200\,z^{23/2} + \right. \right.$$

$$\left. \left. 3\,446\,452\,800\,z^{21/2} + 8\,028\,720\,000\,z^{19/2} + 9\,942\,912\,000\,z^{17/2} + 5\,521\,219\,200\,z^{15/2} + 925\,344\,000\,z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akb2.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{1031443875} (16384 z^{17} - 2039808 z^{16} + 105463808 z^{15} - 2961899520 z^{14} + 49640693760 z^{13} - 513855713280 z^{12} + 3289157775360 z^{11} - 12678586767360 z^{10} + 27724644057600 z^9 - 30672500947200 z^8 + 13538522995200 z^7 - 1173274502400 z^6 - 23156733600 z^5 + 1459458000 z^4 - 486486000 z^3 + 392931000 z^2 - 562605750 z + 1031443875) - \frac{1}{1031443875} (4096 e^{-z} \sqrt{\pi} (4 z^{35/2} - 500 z^{33/2} + 25995 z^{31/2} - 735750 z^{29/2} + 12468600 z^{27/2} - 131181120 z^{25/2} + 860479200 z^{23/2} - 3446452800 z^{21/2} + 8028720000 z^{19/2} - 9942912000 z^{17/2} + 5521219200 z^{15/2} - 925344000 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.akb3.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{114604875} (8192 z^{16} + 921600 z^{15} + 42598400 z^{14} + 1055416320 z^{13} + 15341785088 z^{12} + 134672117760 z^{11} + 708403415040 z^{10} + 2141083660800 z^9 + 3395128262400 z^8 + 2328683696640 z^7 + 391091500800 z^6 - 23156733600 z^5 + 1459458000 z^4 + 162162000 z^3 + 78586200 z^2 + 80372250 z + 114604875) + \frac{1}{114604875} (2048 e^z \sqrt{\pi} (4 z^{33/2} + 452 z^{31/2} + 21023 z^{29/2} + 525520 z^{27/2} + 7738920 z^{25/2} + 69269760 z^{23/2} + 375590880 z^{21/2} + 1192907520 z^{19/2} + 2064182400 z^{17/2} + 1686182400 z^{15/2} + 462672000 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akb4.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{114604875} (8192 z^{16} - 921600 z^{15} + 42598400 z^{14} - 1055416320 z^{13} + 15341785088 z^{12} - 134672117760 z^{11} + 708403415040 z^{10} - 2141083660800 z^9 + 3395128262400 z^8 - 2328683696640 z^7 + 391091500800 z^6 - 23156733600 z^5 + 1459458000 z^4 - 162162000 z^3 + 78586200 z^2 - 80372250 z + 114604875) - \frac{1}{114604875} (2048 e^{-z} \sqrt{\pi} (4 z^{33/2} - 452 z^{31/2} + 21023 z^{29/2} - 525520 z^{27/2} + 7738920 z^{25/2} - 69269760 z^{23/2} + 375590880 z^{21/2} - 1192907520 z^{19/2} + 2064182400 z^{17/2} - 1686182400 z^{15/2} + 462672000 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.akb5.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{16372125} (-4096 z^{15} - 411648 z^{14} - 16773120 z^{13} - 360177664 z^{12} - 4437184512 z^{11} - 31999518720 z^{10} - 132042462720 z^9 - 290085062400 z^8 - 287547563520 z^7 - 78218300160 z^6 + 7718911200 z^5 - 1459458000 z^4 + 162162000 z^3 + 26195400 z^2 + 16074450 z + 16372125) - \frac{1}{16372125} (1024 e^z \sqrt{\pi} (4 z^{31/2} + 404 z^{29/2} + 16579 z^{27/2} + 359730 z^{25/2} + 4501350 z^{23/2} + 33258960 z^{21/2} + 142778160 z^{19/2} + 336238560 z^{17/2} + 382989600 z^{15/2} + 154224000 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akb6.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{16372125} (4096 z^{15} - 411648 z^{14} + 16773120 z^{13} - 360177664 z^{12} + 4437184512 z^{11} - 31999518720 z^{10} +$$

$$132042462720 z^9 - 290085062400 z^8 + 287547563520 z^7 - 78218300160 z^6 -$$

$$7718911200 z^5 - 1459458000 z^4 - 162162000 z^3 + 26195400 z^2 - 16074450 z + 16372125) -$$

$$\frac{1}{16372125} \left(1024 e^{-z} \sqrt{\pi} (4 z^{3/2} - 404 z^{29/2} + 16579 z^{27/2} - 359730 z^{25/2} + 4501350 z^{23/2} - 33258960 z^{21/2} +$$

$$142778160 z^{19/2} - 336238560 z^{17/2} + 382989600 z^{15/2} - 154224000 z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.akb7.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{3274425} (2048 z^{14} + 181248 z^{13} + 6393856 z^{12} + 116238336 z^{11} + 1175427072 z^{10} + 6647262720 z^9 +$$

$$19958641920 z^8 + 27562913280 z^7 + 11174042880 z^6 - 1543782240 z^5 +$$

$$486486000 z^4 - 162162000 z^3 + 26195400 z^2 + 5358150 z + 3274425) +$$

$$\frac{1}{3274425} \left(512 e^z \sqrt{\pi} (4 z^{29/2} + 356 z^{27/2} + 12663 z^{25/2} + 233100 z^{23/2} + 2403450 z^{21/2} +$$

$$14031360 z^{19/2} + 44558640 z^{17/2} + 68886720 z^{15/2} + 38556000 z^{13/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.akb8.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{3274425} (2048 z^{14} - 181248 z^{13} + 6393856 z^{12} - 116238336 z^{11} + 1175427072 z^{10} - 6647262720 z^9 +$$

$$19958641920 z^8 - 27562913280 z^7 + 11174042880 z^6 + 1543782240 z^5 +$$

$$486486000 z^4 + 162162000 z^3 + 26195400 z^2 - 5358150 z + 3274425) -$$

$$\frac{1}{3274425} \left(512 e^{-z} \sqrt{\pi} (4 z^{29/2} - 356 z^{27/2} + 12663 z^{25/2} - 233100 z^{23/2} + 2403450 z^{21/2} -$$

$$14031360 z^{19/2} + 44558640 z^{17/2} - 68886720 z^{15/2} + 38556000 z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.akb9.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{1091475} (-1024 z^{13} - 78336 z^{12} - 2335744 z^{11} - 34799616 z^{10} - 275591680 z^9 - 1133717760 z^8 - 2146798080 z^7 -$$

$$1241560320 z^6 + 220540320 z^5 - 97297200 z^4 + 54054000 z^3 - 26195400 z^2 + 5358150 z + 1091475) -$$

$$\frac{1}{1091475} \left(256 e^z \sqrt{\pi} (4 z^{27/2} + 308 z^{25/2} + 9275 z^{23/2} + 140350 z^{21/2} + 1140300 z^{19/2} +$$

$$4908960 z^{17/2} + 10195920 z^{15/2} + 7711200 z^{13/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.akba.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{1091475} (1024 z^{13} - 78336 z^{12} + 2335744 z^{11} - 34799616 z^{10} + 275591680 z^9 - 1133717760 z^8 + 2146798080 z^7 - 1241560320 z^6 - 220540320 z^5 - 97297200 z^4 - 54054000 z^3 - 26195400 z^2 - 5358150 z + 1091475) - \frac{1}{1091475} (256 e^{-z} \sqrt{\pi} (4 z^{27/2} - 308 z^{25/2} + 9275 z^{23/2} - 140350 z^{21/2} + 1140300 z^{19/2} - 4908960 z^{17/2} + 10195920 z^{15/2} - 7711200 z^{13/2})) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akbb.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{1091475} (512 z^{12} + 33024 z^{11} + 804864 z^{10} + 9367040 z^9 + 53856000 z^8 + 139829760 z^7 + 112869120 z^6 - 24504480 z^5 + 13899600 z^4 - 10810800 z^3 + 8731800 z^2 - 5358150 z + 1091475) + \frac{1}{1091475} (128 e^z \sqrt{\pi} (4 z^{25/2} + 260 z^{23/2} + 6415 z^{21/2} + 76200 z^{19/2} + 454500 z^{17/2} + 1272960 z^{15/2} + 1285200 z^{13/2})) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akbc.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{1091475} (512 z^{12} - 33024 z^{11} + 804864 z^{10} - 9367040 z^9 + 53856000 z^8 - 139829760 z^7 + 112869120 z^6 + 24504480 z^5 + 13899600 z^4 + 10810800 z^3 + 8731800 z^2 + 5358150 z + 1091475) - \frac{1}{1091475} (128 e^{-z} \sqrt{\pi} (4 z^{25/2} - 260 z^{23/2} + 6415 z^{21/2} - 76200 z^{19/2} + 454500 z^{17/2} - 1272960 z^{15/2} + 1285200 z^{13/2})) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akbd.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{2182950} (e^z (1024 z^{12} + 60416 z^{11} + 1326848 z^{10} + 13619200 z^9 + 66729600 z^8 + 137854080 z^7 + 68231520 z^6 - 24373440 z^5 + 18616500 z^4 - 16348500 z^3 + 12998475 z^2 - 7541100 z + 2182950))$$

07.25.03.akbe.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{64 e^z \sqrt{\pi} (4 z^5 + 212 z^4 + 4083 z^3 + 35370 z^2 + 136170 z + 183600) \operatorname{erf}(\sqrt{z}) z^{13/2}}{1091475} + \frac{1}{1091475} (256 z^{11} + 13440 z^{10} + 254720 z^9 + 2142720 z^8 + 7755264 z^7 + 8682240 z^6 - 2227680 z^5 + 1544400 z^4 - 1544400 z^3 + 1746360 z^2 - 1786050 z + 1091475)$$

07.25.03.akbf.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{64 e^{-z} \sqrt{\pi} (4 z^5 - 212 z^4 + 4083 z^3 - 35370 z^2 + 136170 z - 183600) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{1091475} + \frac{1}{1091475} (-256 z^{11} + 13440 z^{10} - 254720 z^9 + 2142720 z^8 - 7755264 z^7 + 8682240 z^6 + 2227680 z^5 + 1544400 z^4 + 1544400 z^3 + 1746360 z^2 + 1786050 z + 1091475)$$

07.25.03.akbg.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{2182950} (e^z (1024 z^{11} + 48128 z^{10} + 797440 z^9 + 5644800 z^8 + 15926400 z^7 + 10442880 z^6 - 4868640 z^5 + 4838400 z^4 - 5575500 z^3 + 5953500 z^2 - 4862025 z + 2182950))$$

07.25.03.akbh.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{32 e^z \sqrt{\pi} (4 z^4 + 164 z^3 + 2279 z^2 + 12580 z + 22950) \operatorname{erf}(\sqrt{z}) z^{13/2}}{363825} + \frac{1}{363825} (128 z^{10} + 5184 z^9 + 70400 z^8 + 369792 z^7 + 578816 z^6 - 171360 z^5 + 140400 z^4 - 171600 z^3 + 249480 z^2 - 357210 z + 363825)$$

07.25.03.akbi.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{363825} (128 z^{10} - 5184 z^9 + 70400 z^8 - 369792 z^7 + 578816 z^6 + 171360 z^5 + 140400 z^4 + 171600 z^3 + 249480 z^2 + 357210 z + 363825) - \frac{32 e^{-z} \sqrt{\pi} z^{13/2} (4 z^4 - 164 z^3 + 2279 z^2 - 12580 z + 22950) \operatorname{erfi}(\sqrt{z})}{363825}$$

07.25.03.akbj.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{1091475} (e^z (1024 z^{10} + 35840 z^9 + 403200 z^8 + 1612800 z^7 + 1411200 z^6 - 846720 z^5 + 1058400 z^4 - 1512000 z^3 + 1984500 z^2 - 1984500 z + 1091475))$$

07.25.03.akbk.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{16 e^z \sqrt{\pi} (4 z^3 + 116 z^2 + 1003 z + 2550) \operatorname{erf}(\sqrt{z}) z^{13/2}}{72765} + \frac{1}{72765} (64 z^9 + 1824 z^8 + 15168 z^7 + 34048 z^6 - 11424 z^5 + 10800 z^4 - 15600 z^3 + 27720 z^2 - 51030 z + 72765)$$

07.25.03.akbl.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{16 e^{-z} \sqrt{\pi} (4 z^3 - 116 z^2 + 1003 z - 2550) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{72765} + \frac{1}{72765} (-64 z^9 + 1824 z^8 - 15168 z^7 + 34048 z^6 + 11424 z^5 + 10800 z^4 + 15600 z^3 + 27720 z^2 + 51030 z + 72765)$$

07.25.03.akbm.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{363825 z^3} (e^z (1024 z^{12} + 23552 z^{11} + 144128 z^{10} + 171520 z^9 - 132480 z^8 + 213120 z^7 - 433440 z^6 + 1088640 z^5 - 3458700 z^4 + 11850300 z^3 - 34459425 z^2 + 68918850 z - 68918850)) + \frac{1326}{7 z^3}$$

07.25.03.akbn.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{8 e^z \sqrt{\pi} (4 z^2 + 68 z + 255) \operatorname{erf}(\sqrt{z}) z^{13/2}}{10395} + \frac{32 z^8 + 528 z^7 + 1792 z^6 - 672 z^5 + 720 z^4 - 1200 z^3 + 2520 z^2 - 5670 z + 10395}{10395}$$

07.25.03.akbo.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{32 z^8 - 528 z^7 + 1792 z^6 + 672 z^5 + 720 z^4 + 1200 z^3 + 2520 z^2 + 5670 z + 10395}{10395} - \frac{8 e^{-z} \sqrt{\pi} z^{13/2} (4 z^2 - 68 z + 255) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.akbp.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, 5; z\right) = \frac{5304(z-57)}{7 z^4} + \frac{1}{363825 z^4} (4 e^z (1024 z^{12} + 11264 z^{11} + 20224 z^{10} - 30720 z^9 + 144000 z^8 - 938880 z^7 + 6138720 z^6 - 35743680 z^5 + 175259700 z^4 - 689188500 z^3 + 2033106075 z^2 - 3997293300 z + 3928374450))$$

07.25.03.akbq.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{1155 z^4} (16 z^{11} + 72 z^{10} + 112 z^9 - 1440 z^8 + 13360 z^7 - 108360 z^6 + 769230 z^5 - 4702845 z^4 + 24192000 z^3 - 101606400 z^2 + 338688000 z - 1016064000) + \frac{1}{1155 z^{9/2}} (4 e^z \sqrt{\pi} (4 z^{12} + 20 z^{11} + 35 z^{10} - 350 z^9 + 3150 z^8 - 25200 z^7 + 176400 z^6 - 1058400 z^5 + 5292000 z^4 - 21168000 z^3 + 63504000 z^2 - 127008000 z + 127008000) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akbr.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{1155 z^4} (-16 z^{11} + 72 z^{10} - 112 z^9 - 1440 z^8 - 13360 z^7 - 108360 z^6 - 769230 z^5 - 4702845 z^4 - 24192000 z^3 - 101606400 z^2 - 338688000 z - 1016064000) + \frac{1}{1155 z^{9/2}} (4 e^{-z} \sqrt{\pi} (4 z^{12} - 20 z^{11} + 35 z^{10} + 350 z^9 + 3150 z^8 + 25200 z^7 + 176400 z^6 + 1058400 z^5 + 5292000 z^4 + 21168000 z^3 + 63504000 z^2 + 127008000 z + 127008000) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.akbs.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{11}{2}, 6; z\right) = \frac{13260(z^2 - 114z - 4788)}{7z^5} + \frac{1}{72765 z^5} (4 e^z (1024 z^{12} - 1024 z^{11} + 31488 z^{10} - 345600 z^9 + 3254400 z^8 - 26974080 z^7 + 194957280 z^6 - 1205487360 z^5 + 6202696500 z^4 - 25499974500 z^3 + 78533029575 z^2 - 161063352450 z + 164991726900))$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = -\frac{9}{2}$

07.25.03.akbt.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{93767625} (8192 z^{16} + 929792 z^{15} + 43438080 z^{14} + 1090461696 z^{13} + 16117248000 z^{12} + 144602173440 z^{11} + 783842826240 z^{10} + 2476430323200 z^9 + 4223045756160 z^8 + 3346051161600 z^7 + 883434988800 z^6 + 23156733600 z^5 + 486486000 z^4 + 97297200 z^3 + 56133000 z^2 + 62511750 z + 93767625) + \frac{1}{93767625} (2048 e^z \sqrt{\pi} (4 z^{33/2} + 456 z^{31/2} + 21435 z^{29/2} + 542835 z^{27/2} + 8125920 z^{25/2} + 74299680 z^{23/2} + 414681120 z^{21/2} + 1373047200 z^{19/2} + 2536531200 z^{17/2} + 2333318400 z^{15/2} + 854582400 z^{13/2} + 70761600 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akbu.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{93767625} (8192 z^{16} - 929792 z^{15} + 43438080 z^{14} - 1090461696 z^{13} + 16117248000 z^{12} - 144602173440 z^{11} + 783842826240 z^{10} - 2476430323200 z^9 + 4223045756160 z^8 - 3346051161600 z^7 + 883434988800 z^6 - 23156733600 z^5 + 486486000 z^4 - 97297200 z^3 + 56133000 z^2 - 62511750 z + 93767625) - \frac{1}{93767625} (2048 e^{-z} \sqrt{\pi} (4 z^{33/2} - 456 z^{31/2} + 21435 z^{29/2} - 542835 z^{27/2} + 8125920 z^{25/2} - 74299680 z^{23/2} + 414681120 z^{21/2} - 1373047200 z^{19/2} + 2536531200 z^{17/2} - 2333318400 z^{15/2} + 854582400 z^{13/2} - 70761600 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.akbv.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{10418625} \left(-4096 z^{15} - 419840 z^{14} - 17522688 z^{13} - 387731456 z^{12} - 4965027840 z^{11} - 37719705600 z^{10} - 167673331200 z^9 - 413958746880 z^8 - 508683732480 z^7 - 246171744000 z^6 - 23156733600 z^5 + 486486000 z^4 + 32432400 z^3 + 11226600 z^2 + 8930250 z + 10418625 \right) - \frac{1}{10418625} \left(1024 e^z \sqrt{\pi} \left(4 z^{31/2} + 412 z^{29/2} + 17315 z^{27/2} + 387000 z^{25/2} + 5029920 z^{23/2} + 39090240 z^{21/2} + 180139680 z^{19/2} + 472348800 z^{17/2} + 647136000 z^{15/2} + 391910400 z^{13/2} + 70761600 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akbw.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{10418625} \left(4096 z^{15} - 419840 z^{14} + 17522688 z^{13} - 387731456 z^{12} + 4965027840 z^{11} - 37719705600 z^{10} + 167673331200 z^9 - 413958746880 z^8 + 508683732480 z^7 - 246171744000 z^6 + 23156733600 z^5 + 486486000 z^4 - 32432400 z^3 + 11226600 z^2 - 8930250 z + 10418625 \right) - \frac{1}{10418625} \left(1024 e^{-z} \sqrt{\pi} \left(4 z^{31/2} - 412 z^{29/2} + 17315 z^{27/2} - 387000 z^{25/2} + 5029920 z^{23/2} - 39090240 z^{21/2} + 180139680 z^{19/2} - 472348800 z^{17/2} + 647136000 z^{15/2} - 391910400 z^{13/2} + 70761600 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akbx.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{1488375} \left(2048 z^{14} + 187392 z^{13} + 6888448 z^{12} + 131960832 z^{11} + 1430046720 z^{10} + 8907717120 z^9 + 30968421120 z^8 + 55284042240 z^7 + 41988360960 z^6 + 7718911200 z^5 - 486486000 z^4 + 32432400 z^3 + 3742200 z^2 + 1786050 z + 1488375 \right) + \frac{1}{1488375} \left(512 e^z \sqrt{\pi} \left(4 z^{29/2} + 368 z^{27/2} + 13635 z^{25/2} + 264285 z^{23/2} + 2915640 z^{21/2} + 18680760 z^{19/2} + 68055120 z^{17/2} + 132073200 z^{15/2} + 118843200 z^{13/2} + 35380800 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akby.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{1488375} \left(2048 z^{14} - 187392 z^{13} + 6888448 z^{12} - 131960832 z^{11} + 1430046720 z^{10} - 8907717120 z^9 + 30968421120 z^8 - 55284042240 z^7 + 41988360960 z^6 - 7718911200 z^5 - 486486000 z^4 - 32432400 z^3 + 3742200 z^2 - 1786050 z + 1488375 \right) - \frac{1}{1488375} \left(512 e^{-z} \sqrt{\pi} \left(4 z^{29/2} - 368 z^{27/2} + 13635 z^{25/2} - 264285 z^{23/2} + 2915640 z^{21/2} - 18680760 z^{19/2} + 68055120 z^{17/2} - 132073200 z^{15/2} + 118843200 z^{13/2} - 35380800 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akbz.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{297675} \left(-1024 z^{13} - 82432 z^{12} - 2620416 z^{11} - 42436608 z^{10} - 376742400 z^9 - 1834963200 z^8 - 4620188160 z^7 - \right.$$

$$\left. 5135719680 z^6 - 1543782240 z^5 + 162162000 z^4 - 32432400 z^3 + 3742200 z^2 + 595350 z + 297675 \right) -$$

$$\frac{1}{297675} \left(256 e^z \sqrt{\pi} \left(4 z^{27/2} + 324 z^{25/2} + 10395 z^{23/2} + 170730 z^{21/2} + 1549800 z^{19/2} + \right. \right.$$

$$\left. \left. 7832160 z^{17/2} + 21062160 z^{15/2} + 26762400 z^{13/2} + 11793600 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akc0.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{297675} \left(1024 z^{13} - 82432 z^{12} + 2620416 z^{11} - 42436608 z^{10} + 376742400 z^9 - 1834963200 z^8 + 4620188160 z^7 - \right.$$

$$\left. 5135719680 z^6 + 1543782240 z^5 + 162162000 z^4 + 32432400 z^3 + 3742200 z^2 - 595350 z + 297675 \right) -$$

$$\frac{1}{297675} \left(256 e^{-z} \sqrt{\pi} \left(4 z^{27/2} - 324 z^{25/2} + 10395 z^{23/2} - 170730 z^{21/2} + 1549800 z^{19/2} - \right. \right.$$

$$\left. \left. 7832160 z^{17/2} + 21062160 z^{15/2} - 26762400 z^{13/2} + 11793600 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akc1.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{99225} \left(512 z^{12} + 35584 z^{11} + 954624 z^{10} + 12643840 z^9 + 87655680 z^8 + 309173760 z^7 + 486769920 z^6 + \right.$$

$$\left. 220540320 z^5 - 32432400 z^4 + 10810800 z^3 - 3742200 z^2 + 595350 z + 99225 \right) +$$

$$\frac{1}{99225} \left(128 e^z \sqrt{\pi} \left(4 z^{25/2} + 280 z^{23/2} + 7595 z^{21/2} + 102375 z^{19/2} + 730800 z^{17/2} + \right. \right.$$

$$\left. \left. 2716560 z^{15/2} + 4762800 z^{13/2} + 2948400 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akc2.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{99225} \left(512 z^{12} - 35584 z^{11} + 954624 z^{10} - 12643840 z^9 + 87655680 z^8 - 309173760 z^7 + 486769920 z^6 - \right.$$

$$\left. 220540320 z^5 - 32432400 z^4 - 10810800 z^3 - 3742200 z^2 - 595350 z + 99225 \right) -$$

$$\frac{1}{99225} \left(128 e^{-z} \sqrt{\pi} \left(4 z^{25/2} - 280 z^{23/2} + 7595 z^{21/2} - 102375 z^{19/2} + 730800 z^{17/2} - \right. \right.$$

$$\left. \left. 2716560 z^{15/2} + 4762800 z^{13/2} - 2948400 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akc3.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{99225} (-256 z^{11} - 14976 z^{10} - 327680 z^9 - 3379968 z^8 - 16934400 z^7 - 37390080 z^6 - 24504480 z^5 + 4633200 z^4 - 2162160 z^3 + 1247400 z^2 - 595350 z + 99225) - \frac{1}{99225} 64 e^z \sqrt{\pi} (4 z^{23/2} + 236 z^{21/2} + 5235 z^{19/2} + 55260 z^{17/2} + 288720 z^{15/2} + 695520 z^{13/2} + 589680 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akc4.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{99225} (256 z^{11} - 14976 z^{10} + 327680 z^9 - 3379968 z^8 + 16934400 z^7 - 37390080 z^6 + 24504480 z^5 + 4633200 z^4 + 2162160 z^3 + 1247400 z^2 + 595350 z + 99225) - \frac{1}{99225} 64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 236 z^{21/2} + 5235 z^{19/2} - 55260 z^{17/2} + 288720 z^{15/2} - 695520 z^{13/2} + 589680 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akc5.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, 1; z\right) = -\frac{1}{198450} (e^z (512 z^{11} + 27392 z^{10} + 540160 z^9 + 4919040 z^8 + 21067200 z^7 + 37326240 z^6 + 15452640 z^5 - 4460400 z^4 + 2617650 z^3 - 1630125 z^2 + 793800 z - 198450))$$

07.25.03.akc6.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{99225} (-128 z^{10} - 6080 z^9 - 103104 z^8 - 764928 z^7 - 2392320 z^6 - 2227680 z^5 + 514800 z^4 - 308880 z^3 + 249480 z^2 - 198450 z + 99225) - \frac{32 e^z \sqrt{\pi} z^{11/2} (4 z^5 + 192 z^4 + 3315 z^3 + 25425 z^2 + 85320 z + 98280) \operatorname{erf}(\sqrt{z})}{99225}$$

07.25.03.akc7.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{32 e^{-z} \sqrt{\pi} (4 z^5 - 192 z^4 + 3315 z^3 - 25425 z^2 + 85320 z - 98280) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{99225} + \frac{1}{99225} (-128 z^{10} + 6080 z^9 - 103104 z^8 + 764928 z^7 - 2392320 z^6 + 2227680 z^5 + 514800 z^4 + 308880 z^3 + 249480 z^2 + 198450 z + 99225)$$

07.25.03.akc8.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, 2; z\right) = -\frac{1}{198450} (e^z (512 z^{10} + 21760 z^9 + 322560 z^8 + 2016000 z^7 + 4939200 z^6 + 2751840 z^5 - 1058400 z^4 + 831600 z^3 - 708750 z^2 + 496125 z - 198450))$$

07.25.03.akc9.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{33075} (-64 z^9 - 2336 z^8 - 28224 z^7 - 129536 z^6 - 171360 z^5 + 46800 z^4 - 34320 z^3 + 35640 z^2 - 39690 z + 33075) - \frac{16 e^z \sqrt{\pi} z^{11/2} (4 z^4 + 148 z^3 + 1835 z^2 + 8910 z + 14040) \operatorname{erf}(\sqrt{z})}{33075}$$

07.25.03.akca.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{1}{33075} (64 z^9 - 2336 z^8 + 28224 z^7 - 129536 z^6 + 171360 z^5 + 46800 z^4 + 34320 z^3 + 35640 z^2 + 39690 z + 33075) - \frac{16 e^{-z} \sqrt{\pi} z^{11/2} (4 z^4 - 148 z^3 + 1835 z^2 - 8910 z + 14040) \operatorname{erfi}(\sqrt{z})}{33075}$$

07.25.03.akcb.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, 3; z\right) = -\frac{1}{99225} (e^z (512 z^9 + 16128 z^8 + 161280 z^7 + 564480 z^6 + 423360 z^5 - 211680 z^4 + 211680 z^3 - 226800 z^2 + 198450 z - 99225))$$

07.25.03.akcc.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-32 z^8 - 816 z^7 - 5968 z^6 - 11424 z^5 + 3600 z^4 - 3120 z^3 + 3960 z^2 - 5670 z + 6615}{6615} - \frac{8 e^z \sqrt{\pi} z^{11/2} (4 z^3 + 104 z^2 + 795 z + 1755) \operatorname{erf}(\sqrt{z})}{6615}$$

07.25.03.akcd.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{8 e^{-z} \sqrt{\pi} (4 z^3 - 104 z^2 + 795 z - 1755) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{6615} + \frac{-32 z^8 + 816 z^7 - 5968 z^6 + 11424 z^5 + 3600 z^4 + 3120 z^3 + 3960 z^2 + 5670 z + 6615}{6615}$$

07.25.03.akce.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, 4; z\right) = \frac{1}{33075 z^3} (e^z (-512 z^{11} - 10496 z^{10} - 56320 z^9 - 57600 z^8 + 37440 z^7 - 50400 z^6 + 90720 z^5 - 226800 z^4 + 708750 z^3 - 2027025 z^2 + 4054050 z - 4054050)) + \frac{858}{7 z^3}$$

07.25.03.akcf.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{945} (-16 z^7 - 232 z^6 - 672 z^5 + 240 z^4 - 240 z^3 + 360 z^2 - 630 z + 945) - \frac{4}{945} e^z \sqrt{\pi} z^{11/2} (4 z^2 + 60 z + 195) \operatorname{erf}(\sqrt{z})$$

07.25.03.akcg.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{945} (16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945) - \frac{4}{945} e^{-z} \sqrt{\pi} z^{11/2} (4z^2 - 60z + 195) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akch.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, 5; z\right) = \frac{3432(z-51)}{7z^4} - \frac{1}{33075z^4} (4e^z (512z^{11} + 4864z^{10} + 7680z^9 - 11520z^8 + 54720z^7 - 332640z^6 + 1905120z^5 - 9298800z^4 + 36486450z^3 - 107432325z^2 + 210810600z - 206756550))$$

07.25.03.akci.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{105z^4} (-8z^{10} - 28z^9 - 60z^8 + 656z^7 - 5400z^6 + 38430z^5 - 235095z^4 + 1209600z^3 - 5080320z^2 + 16934400z - 50803200) - \frac{1}{105z^{9/2}} (2e^z \sqrt{\pi} (4z^{11} + 16z^{10} + 35z^9 - 315z^8 + 2520z^7 - 17640z^6 + 105840z^5 - 529200z^4 + 2116800z^3 - 6350400z^2 + 12700800z - 12700800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akcj.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{105z^4} (-8z^{10} + 28z^9 - 60z^8 - 656z^7 - 5400z^6 - 38430z^5 - 235095z^4 - 1209600z^3 - 5080320z^2 - 16934400z - 50803200) + \frac{1}{105z^{9/2}} (2e^{-z} \sqrt{\pi} (4z^{11} - 16z^{10} + 35z^9 + 315z^8 + 2520z^7 + 17640z^6 + 105840z^5 + 529200z^4 + 2116800z^3 + 6350400z^2 + 12700800z + 12700800) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.akck.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{9}{2}, 6; z\right) = \frac{8580(z^2 - 102z - 3876)}{7z^5} - \frac{1}{6615z^5} (4e^z (512z^{11} - 768z^{10} + 15360z^9 - 149760z^8 + 1252800z^7 - 9102240z^6 + 56518560z^5 - 291891600z^4 + 1204052850z^3 - 3719590875z^2 + 7649992350z - 7856748900))$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = -\frac{7}{2}$

07.25.03.akcl.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{1157625} (2048 z^{14} + 189440 z^{13} + 7057408 z^{12} + 137498624 z^{11} + 1523324928 z^{10} + 9780661760 z^9 +$$

$$35551868160 z^8 + 68260695552 z^7 + 59872001280 z^6 + 17252595360 z^5 +$$

$$486486000 z^4 + 10810800 z^3 + 2245320 z^2 + 1275750 z + 1157625) +$$

$$\frac{1}{1157625} \left(512 e^z \sqrt{\pi} (4 z^{29/2} + 372 z^{27/2} + 13967 z^{25/2} + 275264 z^{23/2} + 3103072 z^{21/2} + 20471808 z^{19/2} +$$

$$77780640 z^{17/2} + 161226240 z^{15/2} + 163457280 z^{13/2} + 64995840 z^{11/2} + 5765760 z^{9/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.akcm.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{1157625} (2048 z^{14} - 189440 z^{13} + 7057408 z^{12} - 137498624 z^{11} + 1523324928 z^{10} - 9780661760 z^9 +$$

$$35551868160 z^8 - 68260695552 z^7 + 59872001280 z^6 - 17252595360 z^5 +$$

$$486486000 z^4 - 10810800 z^3 + 2245320 z^2 - 1275750 z + 1157625) -$$

$$\frac{1}{1157625} \left(512 e^{-z} \sqrt{\pi} (4 z^{29/2} - 372 z^{27/2} + 13967 z^{25/2} - 275264 z^{23/2} + 3103072 z^{21/2} - 20471808 z^{19/2} +$$

$$77780640 z^{17/2} - 161226240 z^{15/2} + 163457280 z^{13/2} - 64995840 z^{11/2} + 5765760 z^{9/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.akcn.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{165375} (-1024 z^{13} - 84480 z^{12} - 2768896 z^{11} - 46639104 z^{10} - 436472320 z^9 - 2291723520 z^8 - 6488326656 z^7 -$$

$$8941820160 z^6 - 4766842080 z^5 - 486486000 z^4 + 10810800 z^3 + 748440 z^2 + 255150 z + 165375) -$$

$$\frac{1}{165375} \left(256 e^z \sqrt{\pi} (4 z^{27/2} + 332 z^{25/2} + 10979 z^{23/2} + 187432 z^{21/2} + 1791048 z^{19/2} + 9725520 z^{17/2} +$$

$$29153040 z^{15/2} + 44614080 z^{13/2} + 29615040 z^{11/2} + 5765760 z^{9/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.akco.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{165375} (1024 z^{13} - 84480 z^{12} + 2768896 z^{11} - 46639104 z^{10} + 436472320 z^9 - 2291723520 z^8 + 6488326656 z^7 -$$

$$8941820160 z^6 + 4766842080 z^5 - 486486000 z^4 - 10810800 z^3 + 748440 z^2 - 255150 z + 165375) -$$

$$\frac{1}{165375} \left(256 e^{-z} \sqrt{\pi} (4 z^{27/2} - 332 z^{25/2} + 10979 z^{23/2} - 187432 z^{21/2} + 1791048 z^{19/2} - 9725520 z^{17/2} +$$

$$29153040 z^{15/2} - 44614080 z^{13/2} + 29615040 z^{11/2} - 5765760 z^{9/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.akcp.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{33075} (512 z^{12} + 37120 z^{11} + 1050624 z^{10} + 14932480 z^9 + 114190080 z^8 + 467034624 z^7 + 951525120 z^6 + 805764960 z^5 + 162162000 z^4 - 10810800 z^3 + 748440 z^2 + 85050 z + 33075) + \frac{1}{33075} (128 e^z \sqrt{\pi} (4 z^{25/2} + 292 z^{23/2} + 8351 z^{21/2} + 120624 z^{19/2} + 946680 z^{17/2} + 4045440 z^{15/2} + 8925840 z^{13/2} + 8910720 z^{11/2} + 2882880 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akcq.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{33075} (512 z^{12} - 37120 z^{11} + 1050624 z^{10} - 14932480 z^9 + 114190080 z^8 - 467034624 z^7 + 951525120 z^6 - 805764960 z^5 + 162162000 z^4 + 10810800 z^3 + 748440 z^2 - 85050 z + 33075) - \frac{1}{33075} (128 e^{-z} \sqrt{\pi} (4 z^{25/2} - 292 z^{23/2} + 8351 z^{21/2} - 120624 z^{19/2} + 946680 z^{17/2} - 4045440 z^{15/2} + 8925840 z^{13/2} - 8910720 z^{11/2} + 2882880 z^{9/2}) \operatorname{erfi}(\sqrt{-z}))$$

07.25.03.akcr.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{11025} (-256 z^{11} - 16000 z^{10} - 381440 z^9 - 4422400 z^8 - 26310144 z^7 - 77459200 z^6 - 97537440 z^5 - 32432400 z^4 + 3603600 z^3 - 748440 z^2 + 85050 z + 11025) - \frac{1}{11025} (64 e^z \sqrt{\pi} (4 z^{23/2} + 252 z^{21/2} + 6083 z^{19/2} + 71960 z^{17/2} + 442960 z^{15/2} + 1387680 z^{13/2} + 1987440 z^{11/2} + 960960 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akcs.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{11025} (256 z^{11} - 16000 z^{10} + 381440 z^9 - 4422400 z^8 + 26310144 z^7 - 77459200 z^6 + 97537440 z^5 - 32432400 z^4 - 3603600 z^3 - 748440 z^2 - 85050 z + 11025) - \frac{1}{11025} (64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 252 z^{21/2} + 6083 z^{19/2} - 71960 z^{17/2} + 442960 z^{15/2} - 1387680 z^{13/2} + 1987440 z^{11/2} - 960960 z^{9/2}) \operatorname{erfi}(\sqrt{-z}))$$

07.25.03.akct.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{11025} (128 z^{10} + 6720 z^9 + 130304 z^8 + 1171968 z^7 + 5008640 z^6 + 9129120 z^5 + 4633200 z^4 - 720720 z^3 + 249480 z^2 - 85050 z + 11025) + \frac{1}{11025} 32 e^z \sqrt{\pi} (4 z^{21/2} + 212 z^{19/2} + 4175 z^{17/2} + 38560 z^{15/2} + 173040 z^{13/2} + 349440 z^{11/2} + 240240 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akcu.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{11025} (128 z^{10} - 6720 z^9 + 130304 z^8 - 1171968 z^7 + 5008640 z^6 - 9129120 z^5 + 4633200 z^4 + 720720 z^3 + 249480 z^2 + 85050 z + 11025) - \frac{1}{11025} 32 e^{-z} \sqrt{\pi} (4 z^{21/2} - 212 z^{19/2} + 4175 z^{17/2} - 38560 z^{15/2} + 173040 z^{13/2} - 349440 z^{11/2} + 240240 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akcv.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{22050} (e^z (256 z^{10} + 12288 z^9 + 214784 z^8 + 1707776 z^7 + 6264160 z^6 + 9266880 z^5 + 3092880 z^4 - 683760 z^3 + 283185 z^2 - 107100 z + 22050))$$

07.25.03.akcw.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{16 e^z \sqrt{\pi} (4 z^5 + 172 z^4 + 2627 z^3 + 17544 z^2 + 50232 z + 48048) \operatorname{erf}(\sqrt{z}) z^{9/2}}{11025} + \frac{1}{11025} (64 z^9 + 2720 z^8 + 40704 z^7 + 261632 z^6 + 690144 z^5 + 514800 z^4 - 102960 z^3 + 49896 z^2 - 28350 z + 11025)$$

07.25.03.akcx.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{16 e^{-z} \sqrt{\pi} (4 z^5 - 172 z^4 + 2627 z^3 - 17544 z^2 + 50232 z - 48048) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{11025} + \frac{1}{11025} (-64 z^9 + 2720 z^8 - 40704 z^7 + 261632 z^6 - 690144 z^5 + 514800 z^4 + 102960 z^3 + 49896 z^2 + 28350 z + 11025)$$

07.25.03.akcy.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{22050} (e^z (256 z^9 + 9728 z^8 + 127232 z^7 + 689920 z^6 + 1434720 z^5 + 658560 z^4 - 199920 z^3 + 115920 z^2 - 64575 z + 22050))$$

07.25.03.akcz.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{8 e^z \sqrt{\pi} (4 z^4 + 132 z^3 + 1439 z^2 + 6032 z + 8008) \operatorname{erf}(\sqrt{z}) z^{9/2}}{3675} + \frac{32 z^8 + 1040 z^7 + 11008 z^6 + 43232 z^5 + 46800 z^4 - 11440 z^3 + 7128 z^2 - 5670 z + 3675}{3675}$$

07.25.03.akd0.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{32 z^8 - 1040 z^7 + 11008 z^6 - 43232 z^5 + 46800 z^4 + 11440 z^3 + 7128 z^2 + 5670 z + 3675}{3675} - \frac{8 e^{-z} \sqrt{\pi} z^{9/2} (4 z^4 - 132 z^3 + 1439 z^2 - 6032 z + 8008) \operatorname{erfi}(\sqrt{z})}{3675}$$

07.25.03.akd1.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{11025} e^z (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025)$$

07.25.03.akd2.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{4}{735} e^z \sqrt{\pi} (4z^3 + 92z^2 + 611z + 1144) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{735} (16z^7 + 360z^6 + 2272z^5 + 3600z^4 - 1040z^3 + 792z^2 - 810z + 735)$$

07.25.03.akd3.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{4}{735} e^{-z} \sqrt{\pi} (4z^3 - 92z^2 + 611z - 1144) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{735} (-16z^7 + 360z^6 - 2272z^5 + 3600z^4 + 1040z^3 + 792z^2 + 810z + 735)$$

07.25.03.akd4.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{3675 z^3} (e^z (256z^{10} + 4608z^9 + 21248z^8 + 18176z^7 - 9632z^6 + 10752z^5 - 18480z^4 + 48720z^3 - 135135z^2 + 270270z - 270270)) + \frac{2574}{35 z^3}$$

07.25.03.akd5.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{2}{105} e^z \sqrt{\pi} (4z^2 + 52z + 143) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (8z^6 + 100z^5 + 240z^4 - 80z^3 + 72z^2 - 90z + 105)$$

07.25.03.akd6.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{105} (8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} z^{9/2} (4z^2 - 52z + 143) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akd7.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, 5; z\right) = \frac{10296(z-45)}{35 z^4} + \frac{1}{3675 z^4} (4 e^z (256z^{10} + 2048z^9 + 2816z^8 - 4352z^7 + 20832z^6 - 114240z^5 + 552720z^4 - 2162160z^3 + 6351345z^2 - 12432420z + 12162150))$$

07.25.03.akd8.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{35 z^4} 3(4z^9 + 10z^8 + 32z^7 - 296z^6 + 2130z^5 - 13055z^4 + 67200z^3 - 282240z^2 + 940800z - 2822400) + \frac{1}{35 z^{9/2}} (3 e^z \sqrt{\pi} (4z^{10} + 12z^9 + 35z^8 - 280z^7 + 1960z^6 - 11760z^5 + 58800z^4 - 235200z^3 + 705600z^2 - 1411200z + 1411200) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akd9.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{35 z^{9/2}} \left(3 e^{-z} \sqrt{\pi} (4 z^{10} - 12 z^9 + 35 z^8 + 280 z^7 + 1960 z^6 + 11\,760 z^5 + 58\,800 z^4 + 235\,200 z^3 + 705\,600 z^2 + 1\,411\,200 z + 1\,411\,200) \operatorname{erfi}(\sqrt{z}) \right) -$$

$$\frac{1}{35 z^4} 3 (4 z^9 - 10 z^8 + 32 z^7 + 296 z^6 + 2130 z^5 + 13\,055 z^4 + 67\,200 z^3 + 282\,240 z^2 + 940\,800 z + 2\,822\,400)$$

07.25.03.akda.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{7}{2}, 6; z\right) =$$

$$\frac{5148 (z^2 - 90 z - 3060)}{7 z^5} + \frac{1}{735 z^5} (4 e^z (256 z^{10} - 512 z^9 + 7424 z^8 - 63\,744 z^7 + 467\,040 z^6 - 2\,916\,480 z^5 + 15\,135\,120 z^4 - 62\,702\,640 z^3 + 194\,459\,265 z^2 - 401\,350\,950 z + 413\,513\,100))$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = -\frac{5}{2}$

07.25.03.akdb.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{23\,625} (512 z^{12} + 37\,632 z^{11} + 1\,083\,648 z^{10} + 15\,752\,192 z^9 + 124\,220\,160 z^8 + 531\,445\,248 z^7 + 1\,165\,049\,088 z^6 + 1\,139\,513\,760 z^5 + 358\,752\,240 z^4 + 10\,810\,800 z^3 + 249\,480 z^2 + 51\,030 z + 23\,625) +$$

$$\frac{1}{23\,625} \left(128 e^z \sqrt{\pi} (4 z^{25/2} + 296 z^{23/2} + 8611 z^{21/2} + 127\,155 z^{19/2} + 1\,028\,118 z^{17/2} + 4\,584\,930 z^{15/2} + 10\,813\,320 z^{13/2} + 12\,174\,120 z^{11/2} + 5\,266\,800 z^{9/2} + 498\,960 z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akdc.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{23\,625} (512 z^{12} - 37\,632 z^{11} + 1\,083\,648 z^{10} - 15\,752\,192 z^9 + 124\,220\,160 z^8 - 531\,445\,248 z^7 + 1\,165\,049\,088 z^6 - 1\,139\,513\,760 z^5 + 358\,752\,240 z^4 - 10\,810\,800 z^3 + 249\,480 z^2 - 51\,030 z + 23\,625) -$$

$$\frac{1}{23\,625} \left(128 e^{-z} \sqrt{\pi} (4 z^{25/2} - 296 z^{23/2} + 8611 z^{21/2} - 127\,155 z^{19/2} + 1\,028\,118 z^{17/2} - 4\,584\,930 z^{15/2} + 10\,813\,320 z^{13/2} - 12\,174\,120 z^{11/2} + 5\,266\,800 z^{9/2} - 498\,960 z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akdd.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{4725} \left(-256 z^{11} - 16512 z^{10} - 409856 z^9 - 5015040 z^8 - 32205312 z^7 - 106761984 z^6 - 166874400 z^5 - 98295120 z^4 - 10810800 z^3 + 249480 z^2 + 17010 z + 4725 \right) - \frac{1}{4725} \left(64 e^z \sqrt{\pi} \left(4 z^{23/2} + 260 z^{21/2} + 6531 z^{19/2} + 81438 z^{17/2} + 539490 z^{15/2} + 1887480 z^{13/2} + 3263400 z^{11/2} + 2383920 z^{9/2} + 498960 z^{7/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akde.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{4725} \left(256 z^{11} - 16512 z^{10} + 409856 z^9 - 5015040 z^8 + 32205312 z^7 - 106761984 z^6 + 166874400 z^5 - 98295120 z^4 + 10810800 z^3 + 249480 z^2 - 17010 z + 4725 \right) - \frac{1}{4725} \left(64 e^{-z} \sqrt{\pi} \left(4 z^{23/2} - 260 z^{21/2} + 6531 z^{19/2} - 81438 z^{17/2} + 539490 z^{15/2} - 1887480 z^{13/2} + 3263400 z^{11/2} - 2383920 z^{9/2} + 498960 z^{7/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akdf.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{1575} \left(128 z^{10} + 7104 z^9 + 148160 z^8 + 1473792 z^7 + 7325696 z^6 + 17334240 z^5 + 16465680 z^4 + 3603600 z^3 - 249480 z^2 + 17010 z + 1575 \right) + \frac{1}{1575} \left(32 e^z \sqrt{\pi} \left(4 z^{21/2} + 224 z^{19/2} + 4739 z^{17/2} + 48265 z^{15/2} + 249900 z^{13/2} + 637980 z^{11/2} + 711480 z^{9/2} + 249480 z^{7/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akdg.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{1575} \left(128 z^{10} - 7104 z^9 + 148160 z^8 - 1473792 z^7 + 7325696 z^6 - 17334240 z^5 + 16465680 z^4 - 3603600 z^3 - 249480 z^2 - 17010 z + 1575 \right) - \frac{1}{1575} \left(32 e^{-z} \sqrt{\pi} \left(4 z^{21/2} - 224 z^{19/2} + 4739 z^{17/2} - 48265 z^{15/2} + 249900 z^{13/2} - 637980 z^{11/2} + 711480 z^{9/2} - 249480 z^{7/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akdh.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{1575} \left(-64 z^9 - 2976 z^8 - 50304 z^7 - 386176 z^6 - 1367520 z^5 - 1972080 z^4 - 720720 z^3 + 83160 z^2 - 17010 z + 1575 \right) - \frac{1}{1575} 16 e^z \sqrt{\pi} \left(4 z^{19/2} + 188 z^{17/2} + 3235 z^{15/2} + 25620 z^{13/2} + 96180 z^{11/2} + 157080 z^{9/2} + 83160 z^{7/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.akdi.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{1575} (64 z^9 - 2976 z^8 + 50304 z^7 - 386176 z^6 + 1367520 z^5 - 1972080 z^4 + 720720 z^3 + 83160 z^2 + 17010 z + 1575) - \frac{1}{1575} 16 e^{-z} \sqrt{\pi} (4 z^{19/2} - 188 z^{17/2} + 3235 z^{15/2} - 25620 z^{13/2} + 96180 z^{11/2} - 157080 z^{9/2} + 83160 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akdj.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, 1; z\right) = -\frac{1}{3150} (e^z (128 z^9 + 5440 z^8 + 82912 z^7 + 563696 z^6 + 1722840 z^5 + 2049180 z^4 + 521850 z^3 - 80955 z^2 + 20160 z - 3150))$$

07.25.03.akdk.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{-32 z^8 - 1200 z^7 - 15568 z^6 - 84672 z^5 - 182160 z^4 - 102960 z^3 + 16632 z^2 - 5670 z + 1575}{1575} - \frac{8 e^z \sqrt{\pi} z^{7/2} (4 z^5 + 152 z^4 + 2019 z^3 + 11487 z^2 + 27258 z + 20790) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.akdl.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{8 e^{-z} \sqrt{\pi} (4 z^5 - 152 z^4 + 2019 z^3 - 11487 z^2 + 27258 z - 20790) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{1575} + \frac{-32 z^8 + 1200 z^7 - 15568 z^6 + 84672 z^5 - 182160 z^4 + 102960 z^3 + 16632 z^2 + 5670 z + 1575}{1575}$$

07.25.03.akdm.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, 2; z\right) = -\frac{1}{3150} e^z (128 z^8 + 4288 z^7 + 48608 z^6 + 223440 z^5 + 382200 z^4 + 138180 z^3 - 30870 z^2 + 11655 z - 3150)$$

07.25.03.akdn.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{525} (-16 z^7 - 456 z^6 - 4144 z^5 - 13536 z^4 - 11440 z^3 + 2376 z^2 - 1134 z + 525) - \frac{4}{525} e^z \sqrt{\pi} z^{7/2} (4 z^4 + 116 z^3 + 1091 z^2 + 3850 z + 4158) \operatorname{erf}(\sqrt{z})$$

07.25.03.akdo.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{525} (16 z^7 - 456 z^6 + 4144 z^5 - 13536 z^4 + 11440 z^3 + 2376 z^2 + 1134 z + 525) - \frac{4}{525} e^{-z} \sqrt{\pi} z^{7/2} (4 z^4 - 116 z^3 + 1091 z^2 - 3850 z + 4158) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akdp.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, 3; z\right) = -\frac{e^z (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575)}{1575}$$

07.25.03.akdq.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{105}(-8z^6 - 156z^5 - 828z^4 - 1040z^3 + 264z^2 - 162z + 105) - \frac{2}{105}e^z\sqrt{\pi}z^{7/2}(4z^3 + 80z^2 + 451z + 693)\operatorname{erf}(\sqrt{z})$$

07.25.03.akdr.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{2}{105}e^{-z}\sqrt{\pi}(4z^3 - 80z^2 + 451z - 693)\operatorname{erfi}(\sqrt{z})z^{7/2} + \frac{1}{105}(-8z^6 + 156z^5 - 828z^4 + 1040z^3 + 264z^2 + 162z + 105)$$

07.25.03.akds.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, 4; z\right) = \frac{1}{525z^3}e^z(-128z^9 - 1984z^8 - 7648z^7 - 5264z^6 + 2184z^5 - 2100z^4 + 3990z^3 - 10395z^2 + 20790z - 20790) + \frac{198}{5z^3}$$

07.25.03.akdt.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{15}(-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) - \frac{1}{15}e^z\sqrt{\pi}z^{7/2}(4z^2 + 44z + 99)\operatorname{erf}(\sqrt{z})$$

07.25.03.akdu.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{15}(4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) - \frac{1}{15}e^{-z}\sqrt{\pi}z^{7/2}(4z^2 - 44z + 99)\operatorname{erfi}(\sqrt{z})$$

07.25.03.akdv.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, 5; z\right) = \frac{792(z - 39)}{5z^4} - \frac{1}{525z^4}4e^z(128z^9 + 832z^8 + 992z^7 - 1680z^6 + 7896z^5 - 37380z^4 + 145530z^3 - 426195z^2 + 831600z - 810810)$$

07.25.03.akdw.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{3(2z^8 + 3z^7 + 17z^6 - 132z^5 + 815z^4 - 4200z^3 + 17640z^2 - 58800z + 176400)}{5z^4} - \frac{1}{10z^{9/2}}3e^z\sqrt{\pi}(4z^9 + 8z^8 + 35z^7 - 245z^6 + 1470z^5 - 7350z^4 + 29400z^3 - 88200z^2 + 176400z - 176400)\operatorname{erf}(\sqrt{z})$$

07.25.03.akdx.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{10z^{9/2}}3e^{-z}\sqrt{\pi}(4z^9 - 8z^8 + 35z^7 + 245z^6 + 1470z^5 + 7350z^4 + 29400z^3 + 88200z^2 + 176400z + 176400)\operatorname{erfi}(\sqrt{z}) - \frac{3(2z^8 - 3z^7 + 17z^6 + 132z^5 + 815z^4 + 4200z^3 + 17640z^2 + 58800z + 176400)}{5z^4}$$

07.25.03.akdy.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{5}{2}, 6; z\right) = \frac{396(z^2 - 78z - 2340)}{z^5} - \frac{1}{105z^5} (4e^z(128z^9 - 320z^8 + 3552z^7 - 26544z^6 + 167160z^5 - 873180z^4 + 3638250z^3 - 11340945z^2 + 23513490z - 24324300))$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = -\frac{3}{2}$

07.25.03.akdz.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{945} (128z^{10} + 7232z^9 + 154368z^8 + 1584768z^7 + 8247552z^6 + 21020832z^5 + 23088240z^4 + 7907760z^3 + 249480z^2 + 5670z + 945) + \frac{32}{945} e^z \sqrt{\pi} (4z^{21/2} + 228z^{19/2} + 4935z^{17/2} + 51828z^{15/2} + 280350z^{13/2} + 766080z^{11/2} + 965160z^{9/2} + 453600z^{7/2} + 45360z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ake0.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{945} (128z^{10} - 7232z^9 + 154368z^8 - 1584768z^7 + 8247552z^6 - 21020832z^5 + 23088240z^4 - 7907760z^3 + 249480z^2 - 5670z + 945) - \frac{32}{945} e^{-z} \sqrt{\pi} (4z^{21/2} - 228z^{19/2} + 4935z^{17/2} - 51828z^{15/2} + 280350z^{13/2} - 766080z^{11/2} + 965160z^{9/2} - 453600z^{7/2} + 45360z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ake1.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} (-64z^9 - 3104z^8 - 55488z^7 - 460928z^6 - 1843296z^5 - 3311280z^4 - 2152080z^3 - 249480z^2 + 5670z + 315) - \frac{16}{315} e^z \sqrt{\pi} (4z^{19/2} + 196z^{17/2} + 3563z^{15/2} + 30450z^{13/2} + 128100z^{11/2} + 253680z^{9/2} + 204120z^{7/2} + 45360z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ake2.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{315} (64z^9 - 3104z^8 + 55488z^7 - 460928z^6 + 1843296z^5 - 3311280z^4 + 2152080z^3 - 249480z^2 - 5670z + 315) - \frac{16}{315} e^{-z} \sqrt{\pi} (4z^{19/2} - 196z^{17/2} + 3563z^{15/2} - 30450z^{13/2} + 128100z^{11/2} - 253680z^{9/2} + 204120z^{7/2} - 45360z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ake3.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{315} (32z^8 + 1296z^7 + 18688z^6 + 118944z^5 + 334800z^4 + 357840z^3 + 83160z^2 - 5670z + 315) + \frac{8}{315} e^z \sqrt{\pi} (4z^{17/2} + 164z^{15/2} + 2415z^{13/2} + 15960z^{11/2} + 48300z^{9/2} + 60480z^{7/2} + 22680z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ake4.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} (32 z^8 - 1296 z^7 + 18\,688 z^6 - 118\,944 z^5 + 334\,800 z^4 - 357\,840 z^3 + 83\,160 z^2 + 5670 z + 315) - \frac{8}{315} e^{-z} \sqrt{\pi} (4 z^{17/2} - 164 z^{15/2} + 2415 z^{13/2} - 15\,960 z^{11/2} + 48\,300 z^{9/2} - 60\,480 z^{7/2} + 22\,680 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ake5.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{630} e^z (64 z^8 + 2368 z^7 + 30\,800 z^6 + 174\,048 z^5 + 426\,300 z^4 + 385\,140 z^3 + 68\,355 z^2 - 6300 z + 630)$$

07.25.03.ake6.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{4}{315} e^z \sqrt{\pi} (4 z^5 + 132 z^4 + 1491 z^3 + 7014 z^2 + 13\,230 z + 7560) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{315} (16 z^7 + 520 z^6 + 5712 z^5 + 25\,440 z^4 + 42\,480 z^3 + 16\,632 z^2 - 1890 z + 315)$$

07.25.03.ake7.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{4}{315} e^{-z} \sqrt{\pi} (4 z^5 - 132 z^4 + 1491 z^3 - 7014 z^2 + 13\,230 z - 7560) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{315} (-16 z^7 + 520 z^6 - 5712 z^5 + 25\,440 z^4 - 42\,480 z^3 + 16\,632 z^2 + 1890 z + 315)$$

07.25.03.ake8.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{630} e^z (64 z^7 + 1856 z^6 + 17\,808 z^5 + 67\,200 z^4 + 90\,300 z^3 + 23\,940 z^2 - 3465 z + 630)$$

07.25.03.ake9.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{2}{105} e^z \sqrt{\pi} (4 z^4 + 100 z^3 + 791 z^2 + 2268 z + 1890) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{105} (8 z^6 + 196 z^5 + 1488 z^4 + 3880 z^3 + 2376 z^2 - 378 z + 105)$$

07.25.03.akea.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{105} (8 z^6 - 196 z^5 + 1488 z^4 - 3880 z^3 + 2376 z^2 + 378 z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} z^{5/2} (4 z^4 - 100 z^3 + 791 z^2 - 2268 z + 1890) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akeb.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, 3; z\right) = \frac{1}{315} e^z (64 z^6 + 1344 z^5 + 8400 z^4 + 16\,800 z^3 + 6300 z^2 - 1260 z + 315)$$

07.25.03.akec.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{21} e^z \sqrt{\pi} (4 z^3 + 68 z^2 + 315 z + 378) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{21} (4 z^5 + 66 z^4 + 284 z^3 + 264 z^2 - 54 z + 21)$$

07.25.03.aked.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{21} e^{-z} \sqrt{\pi} (4 z^3 - 68 z^2 + 315 z - 378) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{21} (-4 z^5 + 66 z^4 - 284 z^3 + 264 z^2 + 54 z + 21)$$

07.25.03.akee.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, 4; z\right) = \frac{e^z (64 z^8 + 832 z^7 + 2576 z^6 + 1344 z^5 - 420 z^4 + 420 z^3 - 945 z^2 + 1890 z - 1890)}{105 z^3} + \frac{18}{z^3}$$

07.25.03.akef.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{6} e^z \sqrt{\pi} (4z^2 + 36z + 63) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (2z^4 + 17z^3 + 24z^2 - 6z + 3)$$

07.25.03.akeg.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{3} (2z^4 - 17z^3 + 24z^2 + 6z + 3) - \frac{1}{6} e^{-z} \sqrt{\pi} z^{5/2} (4z^2 - 36z + 63) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akeh.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, 5; z\right) = \frac{72(z-33)}{z^4} + \frac{4e^z(64z^8 + 320z^7 + 336z^6 - 672z^5 + 2940z^4 - 11340z^3 + 33075z^2 - 64260z + 62370)}{105z^4}$$

07.25.03.akei.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{3(2z^7 + z^6 + 18z^5 - 116z^4 + 600z^3 - 2520z^2 + 8400z - 25200)}{2z^4} + \frac{3e^z \sqrt{\pi} (4z^8 + 4z^7 + 35z^6 - 210z^5 + 1050z^4 - 4200z^3 + 12600z^2 - 25200z + 25200) \operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.akej.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z} \sqrt{\pi} (4z^8 - 4z^7 + 35z^6 + 210z^5 + 1050z^4 + 4200z^3 + 12600z^2 + 25200z + 25200) \operatorname{erfi}(\sqrt{-z})}{4z^{9/2}} - \frac{3(2z^7 - z^6 + 18z^5 + 116z^4 + 600z^3 + 2520z^2 + 8400z + 25200)}{2z^4}$$

07.25.03.akek.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{3}{2}, 6; z\right) = \frac{180(z^2 - 66z - 1716)}{z^5} + \frac{1}{21z^5} 4e^z (64z^8 - 192z^7 + 1680z^6 - 10752z^5 + 56700z^4 - 238140z^3 + 747495z^2 - 1559250z + 1621620)$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = -\frac{1}{2}$

07.25.03.akek.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{105} (32z^8 + 1328z^7 + 19792z^6 + 132128z^5 + 401520z^4 + 497840z^3 + 182280z^2 + 5670z + 105) + \frac{8}{105} e^z \sqrt{\pi} (4z^{17/2} + 168z^{15/2} + 2555z^{13/2} + 17675z^{11/2} + 57400z^{9/2} + 81480z^{7/2} + 41160z^{5/2} + 4200z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akem.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{105} (32z^8 - 1328z^7 + 19792z^6 - 132128z^5 + 401520z^4 - 497840z^3 + 182280z^2 - 5670z + 105) - \frac{8}{105} e^{-z} \sqrt{\pi} (4z^{17/2} - 168z^{15/2} + 2555z^{13/2} - 17675z^{11/2} + 57400z^{9/2} - 81480z^{7/2} + 41160z^{5/2} - 4200z^{3/2}) \operatorname{erfi}(\sqrt{-z})$$

07.25.03.aken.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{105} (-16z^7 - 552z^6 - 6592z^5 - 33360z^4 - 70000z^3 - 49560z^2 - 5670z + 105) - \frac{4}{105} e^z \sqrt{\pi} (4z^{15/2} + 140z^{13/2} + 1715z^{11/2} + 9100z^{9/2} + 21000z^{7/2} + 18480z^{5/2} + 4200z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akeo.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} (16z^7 - 552z^6 + 6592z^5 - 33360z^4 + 70000z^3 - 49560z^2 + 5670z + 105) - \frac{4}{105} e^{-z} \sqrt{\pi} (4z^{15/2} - 140z^{13/2} + 1715z^{11/2} - 9100z^{9/2} + 21000z^{7/2} - 18480z^{5/2} + 4200z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akep.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, 1; z\right) = -\frac{1}{210} e^z (32z^7 + 1008z^6 + 10864z^5 + 49000z^4 + 90650z^3 + 56595z^2 + 5880z - 210)$$

07.25.03.akeq.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{105} (-8z^6 - 220z^5 - 1980z^4 - 6880z^3 - 8232z^2 - 1890z + 105) - \frac{2}{105} e^z \sqrt{\pi} z^{3/2} (4z^5 + 112z^4 + 1043z^3 + 3885z^2 + 5460z + 2100) \operatorname{erf}(\sqrt{z})$$

07.25.03.aker.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{2}{105} e^{-z} \sqrt{\pi} (4z^5 - 112z^4 + 1043z^3 - 3885z^2 + 5460z - 2100) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{105} (-8z^6 + 220z^5 - 1980z^4 + 6880z^3 - 8232z^2 + 1890z + 105)$$

07.25.03.akes.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, 2; z\right) = -\frac{1}{210} e^z (32z^6 + 784z^5 + 6160z^4 + 18200z^3 + 17850z^2 + 3045z - 210)$$

07.25.03.aket.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{35} (-4z^5 - 82z^4 - 500z^3 - 976z^2 - 378z + 35) - \frac{1}{35} e^z \sqrt{\pi} z^{3/2} (4z^4 + 84z^3 + 539z^2 + 1190z + 700) \operatorname{erf}(\sqrt{z})$$

07.25.03.akeu.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{35} (4z^5 - 82z^4 + 500z^3 - 976z^2 + 378z + 35) - \frac{1}{35} e^{-z} \sqrt{\pi} z^{3/2} (4z^4 - 84z^3 + 539z^2 - 1190z + 700) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akev.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, 3; z\right) = -\frac{1}{105} e^z (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105)$$

07.25.03.akew.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{7} (-2z^4 - 27z^3 - 89z^2 - 54z + 7) - \frac{1}{14} e^z \sqrt{\pi} z^{3/2} (4z^3 + 56z^2 + 203z + 175) \operatorname{erf}(\sqrt{z})$$

07.25.03.akex.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{14} e^{-z} \sqrt{\pi} (4z^3 - 56z^2 + 203z - 175) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{7} (-2z^4 + 27z^3 - 89z^2 + 54z + 7)$$

07.25.03.akey.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, 4; z\right) = \frac{e^z (-32z^7 - 336z^6 - 784z^5 - 280z^4 + 70z^3 - 105z^2 + 210z - 210)}{35z^3} + \frac{6}{z^3}$$

07.25.03.akez.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{2} (-2z^3 - 13z^2 - 12z + 2) - \frac{1}{4} e^z \sqrt{\pi} z^{3/2} (4z^2 + 28z + 35) \operatorname{erf}(\sqrt{z})$$

07.25.03.akf0.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{2} (2z^3 - 13z^2 + 12z + 2) - \frac{1}{4} e^{-z} \sqrt{\pi} z^{3/2} (4z^2 - 28z + 35) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akf1.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, 5; z\right) = \frac{24(z-27)}{z^4} - \frac{4e^z(32z^7 + 112z^6 + 112z^5 - 280z^4 + 1050z^3 - 3045z^2 + 5880z - 5670)}{35z^4}$$

07.25.03.akf2.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{9(2z^6 - z^5 + 19z^4 - 100z^3 + 420z^2 - 1400z + 4200)}{4z^4} - \frac{9e^z \sqrt{\pi} (4z^7 + 35z^5 - 175z^4 + 700z^3 - 2100z^2 + 4200z - 4200) \operatorname{erf}(\sqrt{z})}{8z^{9/2}}$$

07.25.03.akf3.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{9e^{-z} \sqrt{\pi} (4z^7 + 35z^5 + 175z^4 + 700z^3 + 2100z^2 + 4200z + 4200) \operatorname{erfi}(\sqrt{z})}{8z^{9/2}} - \frac{9(2z^6 + z^5 + 19z^4 + 100z^3 + 420z^2 + 1400z + 4200)}{4z^4}$$

07.25.03.akf4.01

$${}_2F_2\left(3, \frac{9}{2}; -\frac{1}{2}, 6; z\right) = \frac{60(z^2 - 54z - 1188)}{z^5} - \frac{4e^z(32z^7 - 112z^6 + 784z^5 - 4200z^4 + 17850z^3 - 56595z^2 + 119070z - 124740)}{7z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = \frac{1}{2}$

07.25.03.akf5.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{105} (8z^6 + 228z^5 + 2160z^4 + 8144z^3 + 11400z^2 + 4230z + 105) + \frac{2}{105} e^z \sqrt{\pi} (4z^{13/2} + 116z^{11/2} + 1135z^{9/2} + 4560z^{7/2} + 7320z^{5/2} + 3840z^{3/2} + 360\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akf6.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{105} (8z^6 - 228z^5 + 2160z^4 - 8144z^3 + 11400z^2 - 4230z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} (4z^{13/2} - 116z^{11/2} + 1135z^{9/2} - 4560z^{7/2} + 7320z^{5/2} - 3840z^{3/2} + 360\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akf7.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{210} e^z (16z^6 + 416z^5 + 3560z^4 + 12040z^3 + 15225z^2 + 5460z + 210)$$

07.25.03.akf8.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{105} (4z^5 + 90z^4 + 632z^3 + 1584z^2 + 1170z + 105) + \frac{1}{105} e^z \sqrt{\pi} \sqrt{z} (4z^5 + 92z^4 + 675z^3 + 1860z^2 + 1740z + 360) \operatorname{erf}(\sqrt{z})$$

07.25.03.akf9.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} (-4z^5 + 90z^4 - 632z^3 + 1584z^2 - 1170z + 105) + \frac{1}{105} e^{-z} \sqrt{\pi} \sqrt{z} (4z^5 - 92z^4 + 675z^3 - 1860z^2 + 1740z - 360) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akfa.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{210} e^z (16z^5 + 320z^4 + 1960z^3 + 4200z^2 + 2625z + 210)$$

07.25.03.akfb.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{35} (2z^4 + 33z^3 + 152z^2 + 198z + 35) + \frac{1}{70} e^z \sqrt{\pi} \sqrt{z} (4z^4 + 68z^3 + 335z^2 + 520z + 180) \operatorname{erf}(\sqrt{z})$$

07.25.03.akfc.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{35} (2z^4 - 33z^3 + 152z^2 - 198z + 35) - \frac{1}{70} e^{-z} \sqrt{\pi} \sqrt{z} (4z^4 - 68z^3 + 335z^2 - 520z + 180) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akfd.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, 3; z\right) = \frac{1}{105} e^z (16z^4 + 224z^3 + 840z^2 + 840z + 105)$$

07.25.03.akfe.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{14} (2z^3 + 21z^2 + 48z + 14) + \frac{1}{28} e^z \sqrt{\pi} \sqrt{z} (4z^3 + 44z^2 + 115z + 60) \operatorname{erf}(\sqrt{z})$$

07.25.03.akff.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{14} (-2z^3 + 21z^2 - 48z + 14) + \frac{1}{28} e^{-z} \sqrt{\pi} \sqrt{z} (4z^3 - 44z^2 + 115z - 60) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akfg.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, 4; z\right) = \frac{e^z (16z^6 + 128z^5 + 200z^4 + 40z^3 - 15z^2 + 30z - 30)}{35z^3} + \frac{6}{7z^3}$$

07.25.03.akfh.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{4} (2z^2 + 9z + 4) + \frac{1}{8} e^z \sqrt{\pi} \sqrt{z} (4z^2 + 20z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.akfi.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{4} (2z^2 - 9z + 4) - \frac{1}{8} e^{-z} \sqrt{\pi} \sqrt{z} (4z^2 - 20z + 15) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akfj.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, 5; z\right) = \frac{24(z-21)}{7z^4} + \frac{4e^z(16z^6 + 32z^5 + 40z^4 - 120z^3 + 345z^2 - 660z + 630)}{35z^4}$$

07.25.03.akfk.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{9(2z^5 - 3z^4 + 20z^3 - 84z^2 + 280z - 840)}{8z^4} + \frac{9e^z\sqrt{\pi}(4z^6 - 4z^5 + 35z^4 - 140z^3 + 420z^2 - 840z + 840)\operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.akfl.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{9e^{-z}\sqrt{\pi}(4z^6 + 4z^5 + 35z^4 + 140z^3 + 420z^2 + 840z + 840)\operatorname{erfi}(\sqrt{z})}{16z^{9/2}} - \frac{9(2z^5 + 3z^4 + 20z^3 + 84z^2 + 280z + 840)}{8z^4}$$

07.25.03.akfm.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{1}{2}, 6; z\right) = \frac{60(z^2 - 42z - 756)}{7z^5} + \frac{4e^z(16z^6 - 64z^5 + 360z^4 - 1560z^3 + 5025z^2 - 10710z + 11340)}{7z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = 1$

07.25.03.akfn.01

$${}_2F_2\left(3, \frac{9}{2}; 1, 1; z\right) = \frac{1}{420} e^{z/2} (16z^6 + 384z^5 + 3044z^4 + 9752z^3 + 12529z^2 + 5460z + 420) I_0\left(\frac{z}{2}\right) + \frac{1}{420} e^{z/2} (16z^6 + 368z^5 + 2684z^4 + 7236z^3 + 6317z^2 + 1019z) I_1\left(\frac{z}{2}\right)$$

07.25.03.akfo.01

$${}_2F_2\left(3, \frac{9}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{210} e^z (8z^5 + 164z^4 + 1042z^3 + 2373z^2 + 1680z + 210)$$

07.25.03.akfp.01

$${}_2F_2\left(3, \frac{9}{2}; 1, 2; z\right) = \frac{1}{420} e^{z/2} (16z^5 + 296z^4 + 1700z^3 + 3604z^2 + 2625z + 420) I_0\left(\frac{z}{2}\right) + \frac{1}{420} e^{z/2} (16z^5 + 280z^4 + 1428z^3 + 2300z^2 + 809z) I_1\left(\frac{z}{2}\right)$$

07.25.03.akfq.01

$${}_2F_2\left(3, \frac{9}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{70} e^z (4z^4 + 60z^3 + 251z^2 + 308z + 70)$$

07.25.03.akfr.01

$${}_2F_2\left(3, \frac{9}{2}; 1, 3; z\right) = \frac{1}{105} e^{z/2} (8z^4 + 104z^3 + 376z^2 + 420z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} z (2z^3 + 24z^2 + 71z + 44) I_1\left(\frac{z}{2}\right)$$

07.25.03.akfs.01

$${}_2F_2\left(3, \frac{9}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{14} e^z (2z^3 + 19z^2 + 40z + 14)$$

07.25.03.akft.01

$${}_2F_2\left(3, \frac{9}{2}; 1, 4; z\right) = \frac{e^{z/2} (8z^4 + 60z^3 + 100z^2 + 37z - 4) I_0\left(\frac{z}{2}\right)}{35z} + \frac{e^{z/2} (8z^5 + 52z^4 + 52z^3 + 3z^2 - 8z + 16) I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.akfu.01

$${}_2F_2\left(3, \frac{9}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{2} e^z (z^2 + 4z + 2)$$

07.25.03.akfv.01

$${}_2F_2\left(3, \frac{9}{2}; 1, 5; z\right) = \frac{8e^{z/2} (4z^4 + 8z^3 + 11z^2 - 20z + 36) I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{8e^{z/2} (4z^5 + 4z^4 + 9z^3 - 31z^2 + 80z - 144) I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.akfw.01

$${}_2F_2\left(3, \frac{9}{2}; 1, \frac{11}{2}; z\right) = \frac{9e^z (32z^5 - 48z^4 + 280z^3 - 980z^2 + 2450z - 3675)}{128z^4} + \frac{33075\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.akfx.01

$${}_2F_2\left(3, \frac{9}{2}; 1, \frac{11}{2}; -z\right) = \frac{33075\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{256z^{9/2}} - \frac{9e^{-z} (32z^5 + 48z^4 + 280z^3 + 980z^2 + 2450z + 3675)}{128z^4}$$

07.25.03.akfy.01

$${}_2F_2\left(3, \frac{9}{2}; 1, 6; z\right) = \frac{8e^{z/2} (4z^4 - 14z^3 + 71z^2 - 252z + 576) I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{8e^{z/2} (4z^5 - 18z^4 + 91z^3 - 356z^2 + 1008z - 2304) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = \frac{3}{2}$

07.25.03.akfz.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{105} (2z^4 + 35z^3 + 177z^2 + 276z + 87) + \frac{e^z \sqrt{\pi} (4z^5 + 72z^4 + 387z^3 + 699z^2 + 342z + 18) \operatorname{erf}(\sqrt{z})}{210\sqrt{z}}$$

07.25.03.akg0.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{105} (2z^4 - 35z^3 + 177z^2 - 276z + 87) + \frac{e^{-z} \sqrt{\pi} (-4z^5 + 72z^4 - 387z^3 + 699z^2 - 342z + 18) \operatorname{erfi}(\sqrt{z})}{210\sqrt{z}}$$

07.25.03.akg1.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{210} e^z (8z^4 + 124z^3 + 546z^2 + 735z + 210)$$

07.25.03.akg2.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{70} (2z^3 + 25z^2 + 78z + 52) + \frac{e^z \sqrt{\pi} (4z^4 + 52z^3 + 179z^2 + 162z + 18) \operatorname{erf}(\sqrt{z})}{140\sqrt{z}}$$

07.25.03.akg3.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{70}(-2z^3 + 25z^2 - 78z + 52) + \frac{e^{-z}\sqrt{\pi}(4z^4 - 52z^3 + 179z^2 - 162z + 18)\operatorname{erfi}(\sqrt{z})}{140\sqrt{z}}$$

07.25.03.akg4.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{3}{2}, 3; z\right) = \frac{1}{105}e^z(8z^3 + 84z^2 + 210z + 105)$$

07.25.03.akg5.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{28}(2z^2 + 15z + 19) + \frac{e^z\sqrt{\pi}(4z^3 + 32z^2 + 51z + 9)\operatorname{erf}(\sqrt{z})}{56\sqrt{z}}$$

07.25.03.akg6.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{28}(2z^2 - 15z + 19) + \frac{e^{-z}\sqrt{\pi}(-4z^3 + 32z^2 - 51z + 9)\operatorname{erfi}(\sqrt{z})}{56\sqrt{z}}$$

07.25.03.akg7.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{3}{2}, 4; z\right) = \frac{e^z(8z^5 + 44z^4 + 34z^3 + 3z^2 - 6z + 6)}{35z^3} - \frac{6}{35z^3}$$

07.25.03.akg8.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{8}(2z + 5) + \frac{e^z\sqrt{\pi}(4z^2 + 12z + 3)\operatorname{erf}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.akg9.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{8}(5 - 2z) + \frac{e^{-z}\sqrt{\pi}(4z^2 - 12z + 3)\operatorname{erfi}(\sqrt{z})}{16\sqrt{z}}$$

07.25.03.akga.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{3}{2}, 5; z\right) = \frac{4e^z(8z^5 + 4z^4 + 18z^3 - 51z^2 + 96z - 90)}{35z^4} - \frac{24(z - 15)}{35z^4}$$

07.25.03.akgb.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{9(2z^4 - 5z^3 + 21z^2 - 70z + 210)}{16z^4} + \frac{9e^z\sqrt{\pi}(4z^5 - 8z^4 + 35z^3 - 105z^2 + 210z - 210)\operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.akgc.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{9(2z^4 + 5z^3 + 21z^2 + 70z + 210)}{16z^4} - \frac{9e^{-z}\sqrt{\pi}(4z^5 + 8z^4 + 35z^3 + 105z^2 + 210z + 210)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.akgd.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{3}{2}, 6; z\right) = \frac{4e^z(8z^5 - 36z^4 + 162z^3 - 537z^2 + 1170z - 1260)}{7z^5} - \frac{12(z^2 - 30z - 420)}{7z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = 2$

07.25.03.akge.01

$${}_2F_2\left(3, \frac{9}{2}; 2, 2; z\right) = \frac{1}{105} e^{z/2} (4z^4 + 56z^3 + 226z^2 + 300z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{210} e^{z/2} (8z^4 + 104z^3 + 352z^2 + 292z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.akgf.01

$${}_2F_2\left(3, \frac{9}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{70} e^z (4z^3 + 44z^2 + 119z + 70)$$

07.25.03.akgg.01

$${}_2F_2\left(3, \frac{9}{2}; 2, 3; z\right) = \frac{1}{105} e^{z/2} (8z^3 + 76z^2 + 180z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8z^3 + 68z^2 + 116z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.akgh.01

$${}_2F_2\left(3, \frac{9}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{14} e^z (2z^2 + 13z + 14)$$

07.25.03.akgi.01

$${}_2F_2\left(3, \frac{9}{2}; 2, 4; z\right) = \frac{2 e^{z/2} (4z^3 + 20z^2 + 17z + 1) I_0\left(\frac{z}{2}\right)}{35z} + \frac{2 e^{z/2} (4z^4 + 16z^3 + 3z^2 + 2z - 4) I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.akgj.01

$${}_2F_2\left(3, \frac{9}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{2} e^z (z + 2)$$

07.25.03.akgk.01

$${}_2F_2\left(3, \frac{9}{2}; 2, 5; z\right) = \frac{8 e^{z/2} (4z^3 + 2z^2 + 7z - 12) I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{8 e^{z/2} (4z^4 - 2z^3 + 11z^2 - 28z + 48) I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.akgl.01

$${}_2F_2\left(3, \frac{9}{2}; 2, \frac{11}{2}; z\right) = \frac{9 e^z (16z^4 - 40z^3 + 140z^2 - 350z + 525)}{64z^4} - \frac{4725 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.akgm.01

$${}_2F_2\left(3, \frac{9}{2}; 2, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (16z^4 + 40z^3 + 140z^2 + 350z + 525)}{64z^4} - \frac{4725 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.akgn.01

$${}_2F_2\left(3, \frac{9}{2}; 2, 6; z\right) = \frac{32 e^{z/2} (z^3 - 4z^2 + 15z - 36) I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{16 e^{z/2} (2z^4 - 10z^3 + 41z^2 - 120z + 288) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = \frac{5}{2}$

07.25.03.akgo.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{3(2z^3 + 17z^2 + 28z + 2)}{140z} + \frac{3 e^z \sqrt{\pi} (4z^4 + 36z^3 + 71z^2 + 20z - 2) \operatorname{erf}(\sqrt{z})}{280z^{3/2}}$$

07.25.03.akgp.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{3(2z^3 - 17z^2 + 28z - 2)}{140z} - \frac{3 e^{-z} \sqrt{\pi} (4z^4 - 36z^3 + 71z^2 - 20z - 2) \operatorname{erfi}(\sqrt{z})}{280z^{3/2}}$$

07.25.03.akgq.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{5}{2}, 3; z\right) = \frac{1}{35} e^z (4z^2 + 28z + 35)$$

07.25.03.akgr.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{3(2z^2 + 9z + 2)}{56z} + \frac{3e^z \sqrt{\pi} (4z^3 + 20z^2 + 11z - 2) \operatorname{erf}(\sqrt{z})}{112z^{3/2}}$$

07.25.03.akgs.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{3e^{-z} \sqrt{\pi} (4z^3 - 20z^2 + 11z + 2) \operatorname{erfi}(\sqrt{z})}{112z^{3/2}} - \frac{3(2z^2 - 9z + 2)}{56z}$$

07.25.03.akgt.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{5}{2}, 4; z\right) = \frac{3e^z (4z^4 + 12z^3 - z^2 + 2z - 2)}{35z^3} + \frac{6}{35z^3}$$

07.25.03.akgu.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{3(2z + 1)}{16z} + \frac{3e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.akgv.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{3(2z - 1)}{16z} - \frac{3e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.akgw.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{5}{2}, 5; z\right) = \frac{24(z - 9)}{35z^4} + \frac{12e^z (4z^4 - 4z^3 + 11z^2 - 20z + 18)}{35z^4}$$

07.25.03.akgx.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{9(6z^3 - 21z^2 + 70z - 210)}{32z^4} + \frac{27e^z \sqrt{\pi} (4z^4 - 12z^3 + 35z^2 - 70z + 70) \operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.akgy.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{27e^{-z} \sqrt{\pi} (4z^4 + 12z^3 + 35z^2 + 70z + 70) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}} - \frac{9(6z^3 + 21z^2 + 70z + 210)}{32z^4}$$

07.25.03.akgz.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{5}{2}, 6; z\right) = \frac{12(z^2 - 18z - 180)}{7z^5} + \frac{12e^z (4z^4 - 20z^3 + 71z^2 - 162z + 180)}{7z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = 3$

07.25.03.akh0.01

$${}_2F_2\left(3, \frac{9}{2}; 3, 3; z\right) = \frac{4}{105} e^{z/2} (4z^2 + 24z + 27) I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2} (4z^3 + 20z^2 + 9z - 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.akh1.01

$${}_2F_2\left(3, \frac{9}{2}; 3, \frac{7}{2}; z\right) = \frac{1}{7} e^z (2z + 7)$$

07.25.03.akh2.01

$${}_2F_2\left(3, \frac{9}{2}; 3, 4; z\right) = \frac{4 e^{z/2} (4 z^2 + 10 z - 1) I_0\left(\frac{z}{2}\right)}{35 z} + \frac{4 e^{z/2} (4 z^3 + 6 z^2 - 5 z + 4) I_1\left(\frac{z}{2}\right)}{35 z^2}$$

07.25.03.akh3.01

$${}_2F_2\left(3, \frac{9}{2}; 3, \frac{9}{2}; z\right) = e^z$$

07.25.03.akh4.01

$${}_2F_2\left(3, \frac{9}{2}; 3, 5; z\right) = \frac{32 e^{z/2} (2 z^2 - 2 z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} + \frac{64 e^{z/2} (z^3 - 2 z^2 + 4 z - 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.akh5.01

$${}_2F_2\left(3, \frac{9}{2}; 3, \frac{11}{2}; z\right) = \frac{9 e^z (8 z^3 - 28 z^2 + 70 z - 105)}{16 z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.akh6.01

$${}_2F_2\left(3, \frac{9}{2}; 3, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9 e^{-z} (8 z^3 + 28 z^2 + 70 z + 105)}{16 z^4}$$

07.25.03.akh7.01

$${}_2F_2\left(3, \frac{9}{2}; 3, 6; z\right) = \frac{32 e^{z/2} (2 z^2 - 9 z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{32 e^{z/2} (2 z^3 - 11 z^2 + 36 z - 96) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = \frac{7}{2}$

07.25.03.akh8.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{15 (2 z^2 + 3 z - 3)}{112 z^2} + \frac{15 e^z \sqrt{\pi} (4 z^3 + 8 z^2 - 5 z + 3) \operatorname{erf}(\sqrt{z})}{224 z^{5/2}}$$

07.25.03.akh9.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{15 (2 z^2 - 3 z - 3)}{112 z^2} - \frac{15 e^{-z} \sqrt{\pi} (4 z^3 - 8 z^2 - 5 z - 3) \operatorname{erfi}(\sqrt{z})}{224 z^{5/2}}$$

07.25.03.akh10.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{7}{2}, 4; z\right) = \frac{3 e^z (2 z^3 + z^2 - 2 z + 2)}{7 z^3} - \frac{6}{7 z^3}$$

07.25.03.akh11.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{15 (2 z - 3)}{32 z^2} + \frac{15 e^z \sqrt{\pi} (4 z^2 - 4 z + 3) \operatorname{erf}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.akh12.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{15 e^{-z} \sqrt{\pi} (4 z^2 + 4 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{5/2}} - \frac{15 (2 z + 3)}{32 z^2}$$

07.25.03.akh13.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{7}{2}, 5; z\right) = \frac{12 e^z (2 z^3 - 5 z^2 + 8 z - 6)}{7 z^4} - \frac{24 (z - 3)}{7 z^4}$$

07.25.03.akhe.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{45(6z^2 - 35z + 105)}{64z^4} + \frac{135e^z\sqrt{\pi}(4z^3 - 16z^2 + 35z - 35)\operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.akhf.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{45(6z^2 + 35z + 105)}{64z^4} - \frac{135e^{-z}\sqrt{\pi}(4z^3 + 16z^2 + 35z + 35)\operatorname{erfi}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.akhg.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{7}{2}, 6; z\right) = \frac{60e^z(2z^3 - 11z^2 + 30z - 36)}{7z^5} - \frac{60(z^2 - 6z - 36)}{7z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = 4$

07.25.03.akhh.01

$${}_2F_2\left(3, \frac{9}{2}; 4, 4; z\right) = \frac{48e^{z/2}(z^3 - z + 2)I_0\left(\frac{z}{2}\right)}{35z^3} + \frac{24e^{z/2}(2z^2 - 2z + 1)I_1\left(\frac{z}{2}\right)}{35z^2} - \frac{96}{35z^3}$$

07.25.03.akhi.01

$${}_2F_2\left(3, \frac{9}{2}; 4, \frac{9}{2}; z\right) = \frac{3e^z(z^2 - 2z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.akhj.01

$${}_2F_2\left(3, \frac{9}{2}; 4, 5; z\right) = \frac{96e^{z/2}(2z^2 - 5z + 4)I_0\left(\frac{z}{2}\right)}{35z^3} + \frac{96e^{z/2}(2z^2 - 7z + 12)I_1\left(\frac{z}{2}\right)}{35z^3} - \frac{384}{35z^3}$$

07.25.03.akhk.01

$${}_2F_2\left(3, \frac{9}{2}; 4, \frac{11}{2}; z\right) = \frac{27e^z(4z^2 - 18z + 35)}{8z^4} - \frac{945\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{16z^{9/2}} - \frac{18}{z^3}$$

07.25.03.akhl.01

$${}_2F_2\left(3, \frac{9}{2}; 4, \frac{11}{2}; -z\right) = \frac{27e^{-z}(4z^2 + 18z + 35)}{8z^4} - \frac{945\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{16z^{9/2}} + \frac{18}{z^3}$$

07.25.03.akhm.01

$${}_2F_2\left(3, \frac{9}{2}; 4, 6; z\right) = \frac{192e^{z/2}(z - 5)I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{192e^{z/2}(z^2 - 6z + 24)I_1\left(\frac{z}{2}\right)}{7z^4} - \frac{192}{7z^3}$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = \frac{9}{2}$

07.25.03.akhn.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{105(2z - 15)}{64z^3} + \frac{105e^z\sqrt{\pi}(4z^2 - 12z + 15)\operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.akho.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{105(2z + 15)}{64z^3} - \frac{105e^{-z}\sqrt{\pi}(4z^2 + 12z + 15)\operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.akhp.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{9}{2}, 5; z\right) = \frac{12 e^z (z^2 - 4z + 6)}{z^4} - \frac{24(z + 3)}{z^4}$$

07.25.03.akhq.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575(2z + 21)}{128 z^4}$$

07.25.03.akhr.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1575(2z - 21)}{128 z^4} + \frac{945 e^{-z} \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.akhs.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{9}{2}, 6; z\right) = \frac{60 e^z (z^2 - 6z + 12)}{z^5} - \frac{60(z^2 + 6z + 12)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = 5$

07.25.03.akht.01

$${}_2F_2\left(3, \frac{9}{2}; 5, 5; z\right) = -\frac{1536(z + 6)}{35 z^4} + \frac{768 e^{z/2} (z^2 - 4z + 12) I_0\left(\frac{z}{2}\right)}{35 z^4} + \frac{768 e^{z/2} (z - 5) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.akhu.01

$${}_2F_2\left(3, \frac{9}{2}; 5, \frac{11}{2}; z\right) = -\frac{72(z + 9)}{z^4} + \frac{27 e^z (2z - 11)}{z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.akhv.01

$${}_2F_2\left(3, \frac{9}{2}; 5, \frac{11}{2}; -z\right) = \frac{72(z - 9)}{z^4} - \frac{27 e^{-z} (2z + 11)}{z^4} + \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.akhw.01

$${}_2F_2\left(3, \frac{9}{2}; 5, 6; z\right) = \frac{768 e^{z/2} I_0\left(\frac{z}{2}\right) (z + 12)}{7 z^4} - \frac{768(z + 12)}{7 z^4} + \frac{768 e^{z/2} (z - 24) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = \frac{11}{2}$

07.25.03.akhx.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{11}{2}, 6; z\right) = \frac{270 e^z (z - 24)}{z^5} - \frac{180(z^2 + 18z - 36)}{z^5} + \frac{4725 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.akhy.01

$${}_2F_2\left(3, \frac{9}{2}; \frac{11}{2}, 6; -z\right) = \frac{270 e^{-z} (z + 24)}{z^5} + \frac{180(z^2 - 18z - 36)}{z^5} + \frac{4725 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

For fixed z and $a_1 = 3, a_2 = \frac{9}{2}, b_1 = 6$

07.25.03.akhz.01

$${}_2F_2\left(3, \frac{9}{2}; 6, 6; z\right) = -\frac{1920(z^2 + 24z - 96)}{7z^5} + \frac{46080 e^{z/2} (3z - 4) I_0\left(\frac{z}{2}\right)}{7z^5} - \frac{130560 e^{z/2} I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = -\frac{11}{2}$

07.25.03.aki0.01

$${}_2F_2\left(3, 5; -\frac{11}{2}, 1; z\right) = \frac{1}{249480} (32z^{12} + 2128z^{11} + 53616z^{10} + 647224z^9 + 3876618z^8 + 10550385z^7 + 9031680z^6 - 2032128z^5 + 1209600z^4 - 1008000z^3 + 907200z^2 - 680400z + 249480) + \frac{1}{498960} (e^z \sqrt{\pi} (64z^{25/2} + 4288z^{23/2} + 109328z^{21/2} + 1346016z^{19/2} + 8351868z^{17/2} + 24445932z^{15/2} + 25944975z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aki1.01

$${}_2F_2\left(3, 5; -\frac{11}{2}, 1; -z\right) = \frac{1}{249480} (32z^{12} - 2128z^{11} + 53616z^{10} - 647224z^9 + 3876618z^8 - 10550385z^7 + 9031680z^6 + 2032128z^5 + 1209600z^4 + 1008000z^3 + 907200z^2 + 680400z + 249480) + \frac{1}{498960} (e^{-z} \sqrt{\pi} (-64z^{25/2} + 4288z^{23/2} - 109328z^{21/2} + 1346016z^{19/2} - 8351868z^{17/2} + 24445932z^{15/2} - 25944975z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aki2.01

$${}_2F_2\left(3, 5; -\frac{11}{2}, 2; z\right) = \frac{1}{124740} (16z^{11} + 864z^{10} + 16880z^9 + 146784z^8 + 551295z^7 + 645120z^6 - 169344z^5 + 120960z^4 - 126000z^3 + 151200z^2 - 170100z + 124740) + \frac{1}{249480} e^z \sqrt{\pi} (32z^{23/2} + 1744z^{21/2} + 34608z^{19/2} + 309624z^{17/2} + 1234506z^{15/2} + 1729665z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aki3.01

$${}_2F_2\left(3, 5; -\frac{11}{2}, 2; -z\right) = \frac{1}{124740} (-16z^{11} + 864z^{10} - 16880z^9 + 146784z^8 - 551295z^7 + 645120z^6 + 169344z^5 + 120960z^4 + 126000z^3 + 151200z^2 + 170100z + 124740) + \frac{1}{249480} e^{-z} \sqrt{\pi} (32z^{23/2} - 1744z^{21/2} + 34608z^{19/2} - 309624z^{17/2} + 1234506z^{15/2} - 1729665z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aki4.01

$${}_2F_2\left(3, 5; -\frac{11}{2}, 3; z\right) = \frac{1}{31185} (8z^{10} + 332z^9 + 4626z^8 + 24975z^7 + 40320z^6 - 12096z^5 + 10080z^4 - 12600z^3 + 18900z^2 - 28350z + 31185) + \frac{e^z \sqrt{\pi} (16z^{21/2} + 672z^{19/2} + 9576z^{17/2} + 54264z^{15/2} + 101745z^{13/2}) \operatorname{erf}(\sqrt{z})}{62370}$$

07.25.03.aki5.01

$${}_2F_2\left(3, 5; -\frac{11}{2}, 3; -z\right) = \frac{1}{31185} (8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185) + \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 672z^{19/2} - 9576z^{17/2} + 54264z^{15/2} - 101745z^{13/2}) \operatorname{erfi}(\sqrt{z})}{62370}$$

07.25.03.aki6.01

$${}_2F_2\left(3, 5; -\frac{11}{2}, 4; z\right) = \frac{16z^9 + 464z^8 + 3924z^7 + 8960z^6 - 3024z^5 + 2880z^4 - 4200z^3 + 7560z^2 - 14175z + 20790}{20790} + \frac{e^z \sqrt{\pi} (8z^{19/2} + 236z^{17/2} + 2074z^{15/2} + 5355z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.aki7.01

$${}_2F_2\left(3, 5; -\frac{11}{2}, 4; -z\right) = \frac{-16z^9 + 464z^8 - 3924z^7 + 8960z^6 + 3024z^5 + 2880z^4 + 4200z^3 + 7560z^2 + 14175z + 20790}{20790} + \frac{e^{-z} \sqrt{\pi} (8z^{19/2} - 236z^{17/2} + 2074z^{15/2} - 5355z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.aki8.01

$${}_2F_2\left(3, 5; -\frac{11}{2}, 5; z\right) = \frac{32z^8 + 528z^7 + 1792z^6 - 672z^5 + 720z^4 - 1200z^3 + 2520z^2 - 5670z + 10395}{10395} + \frac{8e^z \sqrt{\pi} (4z^{17/2} + 68z^{15/2} + 255z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.aki9.01

$${}_2F_2\left(3, 5; -\frac{11}{2}, 5; -z\right) = \frac{32z^8 - 528z^7 + 1792z^6 + 672z^5 + 720z^4 + 1200z^3 + 2520z^2 + 5670z + 10395}{10395} - \frac{8e^{-z} \sqrt{\pi} (4z^{17/2} - 68z^{15/2} + 255z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = -\frac{9}{2}$

07.25.03.akia.01

$${}_2F_2\left(3, 5; -\frac{9}{2}, 1; z\right) = \frac{1}{45360} \left(-32z^{11} - 1936z^{10} - 43952z^9 - 472344z^8 - 2479290z^7 - 5781285z^6 - 4064256z^5 + 806400z^4 - 403200z^3 + 259200z^2 - 151200z + 45360 \right) + \frac{1}{90720} \left(e^z \sqrt{\pi} \left(-64z^{23/2} - 3904z^{21/2} - 89808z^{19/2} - 986784z^{17/2} - 5391516z^{15/2} - 13662900z^{13/2} - 12282075z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akib.01

$${}_2F_2\left(3, 5; -\frac{9}{2}, 1; -z\right) = \frac{1}{45360} \left(32z^{11} - 1936z^{10} + 43952z^9 - 472344z^8 + 2479290z^7 - 5781285z^6 + 4064256z^5 + 806400z^4 + 403200z^3 + 259200z^2 + 151200z + 45360 \right) + \frac{1}{90720} \left(e^{-z} \sqrt{\pi} \left(-64z^{23/2} + 3904z^{21/2} - 89808z^{19/2} + 986784z^{17/2} - 5391516z^{15/2} + 13662900z^{13/2} - 12282075z^{11/2} \right) \operatorname{erfi}(\sqrt{-z}) \right)$$

07.25.03.akic.01

$${}_2F_2\left(3, 5; -\frac{9}{2}, 2; z\right) = \frac{1}{22680} \left(-16z^{10} - 784z^9 - 13752z^8 - 105900z^7 - 345465z^6 - 338688z^5 + 80640z^4 - 50400z^3 + 43200z^2 - 37800z + 22680 \right) + \frac{1}{45360} e^z \sqrt{\pi} \left(-32z^{21/2} - 1584z^{19/2} - 28272z^{17/2} - 224808z^{15/2} - 784890z^{13/2} - 944775z^{11/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akid.01

$${}_2F_2\left(3, 5; -\frac{9}{2}, 2; -z\right) = \frac{1}{22680} \left(-16z^{10} + 784z^9 - 13752z^8 + 105900z^7 - 345465z^6 + 338688z^5 + 80640z^4 + 50400z^3 + 43200z^2 + 37800z + 22680 \right) + \frac{1}{45360} e^{-z} \sqrt{\pi} \left(32z^{21/2} - 1584z^{19/2} + 28272z^{17/2} - 224808z^{15/2} + 784890z^{13/2} - 944775z^{11/2} \right) \operatorname{erfi}(\sqrt{-z})$$

07.25.03.akie.01

$${}_2F_2\left(3, 5; -\frac{9}{2}, 3; z\right) = \frac{-8z^9 - 300z^8 - 3730z^7 - 17655z^6 - 24192z^5 + 6720z^4 - 5040z^3 + 5400z^2 - 6300z + 5670}{5670} + \frac{e^z \sqrt{\pi} \left(-16z^{19/2} - 608z^{17/2} - 7752z^{15/2} - 38760z^{13/2} - 62985z^{11/2} \right) \operatorname{erfi}(\sqrt{z})}{11340}$$

07.25.03.akif.01

$${}_2F_2\left(3, 5; -\frac{9}{2}, 3; -z\right) = \frac{8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670}{5670} + \frac{e^{-z} \sqrt{\pi} \left(-16z^{19/2} + 608z^{17/2} - 7752z^{15/2} + 38760z^{13/2} - 62985z^{11/2} \right) \operatorname{erfi}(\sqrt{-z})}{11340}$$

07.25.03.akig.01

$${}_2F_2\left(3, 5; -\frac{9}{2}, 4; z\right) = \frac{-8z^8 - 208z^7 - 1550z^6 - 3024z^5 + 960z^4 - 840z^3 + 1080z^2 - 1575z + 1890}{1890} + \frac{e^z \sqrt{\pi} (-8z^{17/2} - 212z^{15/2} - 1650z^{13/2} - 3705z^{11/2}) \operatorname{erf}(\sqrt{z})}{1890}$$

07.25.03.akih.01

$${}_2F_2\left(3, 5; -\frac{9}{2}, 4; -z\right) = \frac{-8z^8 + 208z^7 - 1550z^6 + 3024z^5 + 960z^4 + 840z^3 + 1080z^2 + 1575z + 1890}{1890} + \frac{e^{-z} \sqrt{\pi} (8z^{17/2} - 212z^{15/2} + 1650z^{13/2} - 3705z^{11/2}) \operatorname{erfi}(\sqrt{z})}{1890}$$

07.25.03.akii.01

$${}_2F_2\left(3, 5; -\frac{9}{2}, 5; z\right) = \frac{1}{945} (-16z^7 - 232z^6 - 672z^5 + 240z^4 - 240z^3 + 360z^2 - 630z + 945) - \frac{4}{945} e^z \sqrt{\pi} (4z^{15/2} + 60z^{13/2} + 195z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akij.01

$${}_2F_2\left(3, 5; -\frac{9}{2}, 5; -z\right) = \frac{1}{945} (16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945) - \frac{4}{945} e^{-z} \sqrt{\pi} (4z^{15/2} - 60z^{13/2} + 195z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = -\frac{7}{2}$

07.25.03.akik.01

$${}_2F_2\left(3, 5; -\frac{7}{2}, 1; z\right) = \frac{1}{10080} (32z^{10} + 1744z^9 + 35248z^8 + 332184z^7 + 1498330z^6 + 2914017z^5 + 1612800z^4 - 268800z^3 + 103680z^2 - 43200z + 10080) + \frac{1}{20160} (e^z \sqrt{\pi} (64z^{21/2} + 3520z^{19/2} + 72208z^{17/2} + 697952z^{15/2} + 3297660z^{13/2} + 7067580z^{11/2} + 5214495z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akil.01

$${}_2F_2\left(3, 5; -\frac{7}{2}, 1; -z\right) = \frac{1}{10080} (32z^{10} - 1744z^9 + 35248z^8 - 332184z^7 + 1498330z^6 - 2914017z^5 + 1612800z^4 + 268800z^3 + 103680z^2 + 43200z + 10080) + \frac{1}{20160} (e^{-z} \sqrt{\pi} (-64z^{21/2} + 3520z^{19/2} - 72208z^{17/2} + 697952z^{15/2} - 3297660z^{13/2} + 7067580z^{11/2} - 5214495z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.akim.01

$${}_2F_2\left(3, 5; -\frac{7}{2}, 2; z\right) = \frac{1}{5040} (16z^9 + 704z^8 + 10944z^7 + 73400z^6 + 203331z^5 + 161280z^4 - 33600z^3 + 17280z^2 - 10800z + 5040) + \frac{e^z \sqrt{\pi} (32z^{19/2} + 1424z^{17/2} + 22576z^{15/2} + 157080z^{13/2} + 470730z^{11/2} + 474045z^{9/2}) \operatorname{erf}(\sqrt{z})}{10080}$$

07.25.03.akin.01

$${}_2F_2\left(3, 5; -\frac{7}{2}, 2; -z\right) = \frac{1}{5040} (-16z^9 + 704z^8 - 10944z^7 + 73400z^6 - 203331z^5 + 161280z^4 + 33600z^3 + 17280z^2 + 10800z + 5040) + \frac{1}{10080} e^{-z} \sqrt{\pi} (32z^{19/2} - 1424z^{17/2} + 22576z^{15/2} - 157080z^{13/2} + 470730z^{11/2} - 474045z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akio.01

$${}_2F_2\left(3, 5; -\frac{7}{2}, 3; z\right) = \frac{8z^8 + 268z^7 + 2930z^6 + 11919z^5 + 13440z^4 - 3360z^3 + 2160z^2 - 1800z + 1260}{1260} + \frac{e^z \sqrt{\pi} (16z^{17/2} + 544z^{15/2} + 6120z^{13/2} + 26520z^{11/2} + 36465z^{9/2}) \operatorname{erf}(\sqrt{z})}{2520}$$

07.25.03.akip.01

$${}_2F_2\left(3, 5; -\frac{7}{2}, 3; -z\right) = \frac{8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260}{1260} + \frac{e^{-z} \sqrt{\pi} (-16z^{17/2} + 544z^{15/2} - 6120z^{13/2} + 26520z^{11/2} - 36465z^{9/2}) \operatorname{erfi}(\sqrt{z})}{2520}$$

07.25.03.akiq.01

$${}_2F_2\left(3, 5; -\frac{7}{2}, 4; z\right) = \frac{1}{210} (4z^7 + 92z^6 + 593z^5 + 960z^4 - 280z^3 + 216z^2 - 225z + 210) + \frac{1}{420} e^z \sqrt{\pi} (8z^{15/2} + 188z^{13/2} + 1274z^{11/2} + 2431z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akir.01

$${}_2F_2\left(3, 5; -\frac{7}{2}, 4; -z\right) = \frac{1}{210} (-4z^7 + 92z^6 - 593z^5 + 960z^4 + 280z^3 + 216z^2 + 225z + 210) + \frac{1}{420} e^{-z} \sqrt{\pi} (8z^{15/2} - 188z^{13/2} + 1274z^{11/2} - 2431z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akis.01

$${}_2F_2\left(3, 5; -\frac{7}{2}, 5; z\right) = \frac{1}{105} (8z^6 + 100z^5 + 240z^4 - 80z^3 + 72z^2 - 90z + 105) + \frac{2}{105} e^z \sqrt{\pi} (4z^{13/2} + 52z^{11/2} + 143z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akit.01

$${}_2F_2\left(3, 5; -\frac{7}{2}, 5; -z\right) = \frac{1}{105} (8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} (4z^{13/2} - 52z^{11/2} + 143z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = -\frac{5}{2}$

07.25.03.akiu.01

$${}_2F_2\left(3, 5; -\frac{5}{2}, 1; z\right) = \frac{1}{2880} (-32 z^9 - 1552 z^8 - 27504 z^7 - 222904 z^6 - 841578 z^5 - 1314405 z^4 - 537600 z^3 + 69120 z^2 - 17280 z + 2880) + \frac{1}{5760} (e^z \sqrt{\pi} (-64 z^{19/2} - 3136 z^{17/2} - 56528 z^{15/2} - 471840 z^{13/2} - 1882140 z^{11/2} - 3303300 z^{9/2} - 1911195 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akiv.01

$${}_2F_2\left(3, 5; -\frac{5}{2}, 1; -z\right) = \frac{1}{2880} (32 z^9 - 1552 z^8 + 27504 z^7 - 222904 z^6 + 841578 z^5 - 1314405 z^4 + 537600 z^3 + 69120 z^2 + 17280 z + 2880) + \frac{1}{5760} (e^{-z} \sqrt{\pi} (-64 z^{19/2} + 3136 z^{17/2} - 56528 z^{15/2} + 471840 z^{13/2} - 1882140 z^{11/2} + 3303300 z^{9/2} - 1911195 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.akiw.01

$${}_2F_2\left(3, 5; -\frac{5}{2}, 2; z\right) = \frac{-16 z^8 - 624 z^7 - 8456 z^6 - 48324 z^5 - 110205 z^4 - 67200 z^3 + 11520 z^2 - 4320 z + 1440}{1440} + \frac{e^z \sqrt{\pi} (-32 z^{17/2} - 1264 z^{15/2} - 17520 z^{13/2} - 104520 z^{11/2} - 261690 z^{9/2} - 212355 z^{7/2}) \operatorname{erf}(\sqrt{z})}{2880}$$

07.25.03.akix.01

$${}_2F_2\left(3, 5; -\frac{5}{2}, 2; -z\right) = \frac{-16 z^8 + 624 z^7 - 8456 z^6 + 48324 z^5 - 110205 z^4 + 67200 z^3 + 11520 z^2 + 4320 z + 1440}{1440} + \frac{e^{-z} \sqrt{\pi} (32 z^{17/2} - 1264 z^{15/2} + 17520 z^{13/2} - 104520 z^{11/2} + 261690 z^{9/2} - 212355 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{2880}$$

07.25.03.akiy.01

$${}_2F_2\left(3, 5; -\frac{5}{2}, 3; z\right) = \frac{1}{360} (-8 z^7 - 236 z^6 - 2226 z^5 - 7575 z^4 - 6720 z^3 + 1440 z^2 - 720 z + 360) + \frac{1}{720} e^z \sqrt{\pi} (-16 z^{15/2} - 480 z^{13/2} - 4680 z^{11/2} - 17160 z^{9/2} - 19305 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akiz.01

$${}_2F_2\left(3, 5; -\frac{5}{2}, 3; -z\right) = \frac{1}{360} (8 z^7 - 236 z^6 + 2226 z^5 - 7575 z^4 + 6720 z^3 + 1440 z^2 + 720 z + 360) + \frac{1}{720} e^{-z} \sqrt{\pi} (-16 z^{15/2} + 480 z^{13/2} - 4680 z^{11/2} + 17160 z^{9/2} - 19305 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akj0.01

$${}_2F_2\left(3, 5; -\frac{5}{2}, 4; z\right) = \frac{1}{60} (-4 z^6 - 80 z^5 - 435 z^4 - 560 z^3 + 144 z^2 - 90 z + 60) + \frac{1}{120} e^z \sqrt{\pi} (-8 z^{13/2} - 164 z^{11/2} - 946 z^{9/2} - 1485 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akj1.01

$${}_2F_2\left(3, 5; -\frac{5}{2}, 4; -z\right) = \frac{1}{60}(-4z^6 + 80z^5 - 435z^4 + 560z^3 + 144z^2 + 90z + 60) + \frac{1}{120}e^{-z}\sqrt{\pi}(8z^{13/2} - 164z^{11/2} + 946z^{9/2} - 1485z^{7/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.akj2.01

$${}_2F_2\left(3, 5; -\frac{5}{2}, 5; z\right) = \frac{1}{15}(-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) + \frac{1}{15}e^z\sqrt{\pi}(-4z^{11/2} - 44z^{9/2} - 99z^{7/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.akj3.01

$${}_2F_2\left(3, 5; -\frac{5}{2}, 5; -z\right) = \frac{1}{15}(4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) + \frac{1}{15}e^{-z}\sqrt{\pi}(-4z^{11/2} + 44z^{9/2} - 99z^{7/2})\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = -\frac{3}{2}$

07.25.03.akj4.01

$${}_2F_2\left(3, 5; -\frac{3}{2}, 1; z\right) = \frac{32z^8 + 1360z^7 + 20720z^6 + 140664z^5 + 428394z^4 + 507633z^3 + 138240z^2 - 11520z + 1152}{1152} + \frac{1}{2304}e^z\sqrt{\pi}(64z^{17/2} + 2752z^{15/2} + 42768z^{13/2} + 300768z^{11/2} + 979836z^{9/2} + 1343628z^{7/2} + 567567z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.akj5.01

$${}_2F_2\left(3, 5; -\frac{3}{2}, 1; -z\right) = \frac{32z^8 - 1360z^7 + 20720z^6 - 140664z^5 + 428394z^4 - 507633z^3 + 138240z^2 + 11520z + 1152}{1152} + \frac{1}{2304}(e^{-z}\sqrt{\pi}(-64z^{17/2} + 2752z^{15/2} - 42768z^{13/2} + 300768z^{11/2} - 979836z^{9/2} + 1343628z^{7/2} - 567567z^{5/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.akj6.01

$${}_2F_2\left(3, 5; -\frac{3}{2}, 2; z\right) = \frac{1}{576}(16z^7 + 544z^6 + 6288z^5 + 29712z^4 + 53319z^3 + 23040z^2 - 2880z + 576) + \frac{e^z\sqrt{\pi}(32z^{15/2} + 1104z^{13/2} + 13104z^{11/2} + 65208z^{9/2} + 131274z^{7/2} + 81081z^{5/2})\operatorname{erf}(\sqrt{z})}{1152}$$

07.25.03.akj7.01

$${}_2F_2\left(3, 5; -\frac{3}{2}, 2; -z\right) = \frac{1}{576}(-16z^7 + 544z^6 - 6288z^5 + 29712z^4 - 53319z^3 + 23040z^2 + 2880z + 576) + \frac{e^{-z}\sqrt{\pi}(32z^{15/2} - 1104z^{13/2} + 13104z^{11/2} - 65208z^{9/2} + 131274z^{7/2} - 81081z^{5/2})\operatorname{erfi}(\sqrt{z})}{1152}$$

07.25.03.akj8.01

$${}_2F_2\left(3, 5; -\frac{3}{2}, 3; z\right) = \frac{1}{144}(8z^6 + 204z^5 + 1618z^4 + 4431z^3 + 2880z^2 - 480z + 144) + \frac{1}{288}e^z\sqrt{\pi}(16z^{13/2} + 416z^{11/2} + 3432z^{9/2} + 10296z^{7/2} + 9009z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.akj9.01

$${}_2F_2\left(3, 5; -\frac{3}{2}, 3; -z\right) = \frac{1}{144} (8z^6 - 204z^5 + 1618z^4 - 4431z^3 + 2880z^2 + 480z + 144) + \frac{1}{288} e^{-z} \sqrt{\pi} (-16z^{13/2} + 416z^{11/2} - 3432z^{9/2} + 10296z^{7/2} - 9009z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akja.01

$${}_2F_2\left(3, 5; -\frac{3}{2}, 4; z\right) = \frac{1}{24} (4z^5 + 68z^4 + 301z^3 + 288z^2 - 60z + 24) + \frac{1}{48} e^z \sqrt{\pi} (8z^{11/2} + 140z^{9/2} + 666z^{7/2} + 819z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akjb.01

$${}_2F_2\left(3, 5; -\frac{3}{2}, 4; -z\right) = \frac{1}{24} (-4z^5 + 68z^4 - 301z^3 + 288z^2 + 60z + 24) + \frac{1}{48} e^{-z} \sqrt{\pi} (8z^{11/2} - 140z^{9/2} + 666z^{7/2} - 819z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akjc.01

$${}_2F_2\left(3, 5; -\frac{3}{2}, 5; z\right) = \frac{1}{3} (2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6} e^z \sqrt{\pi} (4z^{9/2} + 36z^{7/2} + 63z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akjd.01

$${}_2F_2\left(3, 5; -\frac{3}{2}, 5; -z\right) = \frac{1}{3} (2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6} e^{-z} \sqrt{\pi} (-4z^{9/2} + 36z^{7/2} - 63z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = -\frac{1}{2}$

07.25.03.akje.01

$${}_2F_2\left(3, 5; -\frac{1}{2}, 1; z\right) = \frac{1}{768} (-32z^7 - 1168z^6 - 14896z^5 - 81624z^4 - 189658z^3 - 155205z^2 - 23040z + 768) + \frac{1}{1536} e^z \sqrt{\pi} (-64z^{15/2} - 2368z^{13/2} - 30928z^{11/2} - 177056z^{9/2} - 448668z^{7/2} - 446292z^{5/2} - 121275z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akjf.01

$${}_2F_2\left(3, 5; -\frac{1}{2}, 1; -z\right) = \frac{1}{768} (32z^7 - 1168z^6 + 14896z^5 - 81624z^4 + 189658z^3 - 155205z^2 + 23040z + 768) + \frac{1}{1536} e^{-z} \sqrt{\pi} (-64z^{15/2} + 2368z^{13/2} - 30928z^{11/2} + 177056z^{9/2} - 448668z^{7/2} + 446292z^{5/2} - 121275z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akjg.01

$${}_2F_2\left(3, 5; -\frac{1}{2}, 2; z\right) = \frac{1}{384} (-16z^6 - 464z^5 - 4440z^4 - 16604z^3 - 21825z^2 - 5760z + 384) + \frac{1}{768} e^z \sqrt{\pi} (-32z^{13/2} - 944z^{11/2} - 9328z^{9/2} - 37224z^{7/2} - 56826z^{5/2} - 24255z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akjh.01

$${}_2F_2\left(3, 5; -\frac{1}{2}, 2; -z\right) = \frac{1}{384} (-16z^6 + 464z^5 - 4440z^4 + 16604z^3 - 21825z^2 + 5760z + 384) + \frac{1}{768} e^{-z} \sqrt{\pi} (32z^{13/2} - 944z^{11/2} + 9328z^{9/2} - 37224z^{7/2} + 56826z^{5/2} - 24255z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akji.01

$${}_2F_2\left(3, 5; -\frac{1}{2}, 3; z\right) = \frac{1}{96} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) + \frac{1}{192} e^z \sqrt{\pi} (-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akji.01

$${}_2F_2\left(3, 5; -\frac{1}{2}, 3; -z\right) = \frac{1}{96} (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) + \frac{1}{192} e^{-z} \sqrt{\pi} (-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akjk.01

$${}_2F_2\left(3, 5; -\frac{1}{2}, 4; z\right) = \frac{1}{16} (-4z^4 - 56z^3 - 191z^2 - 120z + 16) + \frac{1}{32} e^z \sqrt{\pi} (-8z^{9/2} - 116z^{7/2} - 434z^{5/2} - 385z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akji.01

$${}_2F_2\left(3, 5; -\frac{1}{2}, 4; -z\right) = \frac{1}{16} (-4z^4 + 56z^3 - 191z^2 + 120z + 16) + \frac{1}{32} e^{-z} \sqrt{\pi} (8z^{9/2} - 116z^{7/2} + 434z^{5/2} - 385z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akjm.01

$${}_2F_2\left(3, 5; -\frac{1}{2}, 5; z\right) = \frac{1}{2} (-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4} e^z \sqrt{\pi} (-4z^{7/2} - 28z^{5/2} - 35z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akjn.01

$${}_2F_2\left(3, 5; -\frac{1}{2}, 5; -z\right) = \frac{1}{2} (2z^3 - 13z^2 + 12z + 2) + \frac{1}{4} e^{-z} \sqrt{\pi} (-4z^{7/2} + 28z^{5/2} - 35z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = \frac{1}{2}$

07.25.03.akjo.01

$${}_2F_2\left(3, 5; \frac{1}{2}, 1; z\right) = \frac{32z^6 + 976z^5 + 10032z^4 + 41944z^3 + 67770z^2 + 31905z + 1536}{1536} + \frac{1}{3072} e^z \sqrt{\pi} (64z^{13/2} + 1984z^{11/2} + 21008z^{9/2} + 93024z^{7/2} + 169596z^{5/2} + 107100z^{3/2} + 14175\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akjp.01

$${}_2F_2\left(3, 5; \frac{1}{2}, 1; -z\right) = \frac{32z^6 - 976z^5 + 10032z^4 - 41944z^3 + 67770z^2 - 31905z + 1536}{1536} + \frac{1}{3072} e^{-z} \sqrt{\pi} (-64z^{13/2} + 1984z^{11/2} - 21008z^{9/2} + 93024z^{7/2} - 169596z^{5/2} + 107100z^{3/2} - 14175\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akjq.01

$${}_2F_2\left(3, 5; \frac{1}{2}, 2; z\right) = \frac{1}{768} (16z^5 + 384z^4 + 2912z^3 + 8040z^2 + 6795z + 768) + \frac{e^z \sqrt{\pi} (32z^{11/2} + 784z^{9/2} + 6192z^{7/2} + 18648z^{5/2} + 19530z^{3/2} + 4725\sqrt{z}) \operatorname{erf}(\sqrt{z})}{1536}$$

07.25.03.akjr.01

$${}_2F_2\left(3, 5; \frac{1}{2}, 2; -z\right) = \frac{1}{768} (-16 z^5 + 384 z^4 - 2912 z^3 + 8040 z^2 - 6795 z + 768) + \frac{e^{-z} \sqrt{\pi} (32 z^{11/2} - 784 z^{9/2} + 6192 z^{7/2} - 18648 z^{5/2} + 19530 z^{3/2} - 4725 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1536}$$

07.25.03.akjs.01

$${}_2F_2\left(3, 5; \frac{1}{2}, 3; z\right) = \frac{1}{192} (8 z^4 + 140 z^3 + 690 z^2 + 975 z + 192) + \frac{1}{384} e^z \sqrt{\pi} (16 z^{9/2} + 288 z^{7/2} + 1512 z^{5/2} + 2520 z^{3/2} + 945 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akjt.01

$${}_2F_2\left(3, 5; \frac{1}{2}, 3; -z\right) = \frac{1}{192} (8 z^4 - 140 z^3 + 690 z^2 - 975 z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (-16 z^{9/2} + 288 z^{7/2} - 1512 z^{5/2} + 2520 z^{3/2} - 945 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akju.01

$${}_2F_2\left(3, 5; \frac{1}{2}, 4; z\right) = \frac{1}{32} (4 z^3 + 44 z^2 + 105 z + 32) + \frac{1}{64} e^z \sqrt{\pi} (8 z^{7/2} + 92 z^{5/2} + 250 z^{3/2} + 135 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akjv.01

$${}_2F_2\left(3, 5; \frac{1}{2}, 4; -z\right) = \frac{1}{32} (-4 z^3 + 44 z^2 - 105 z + 32) + \frac{1}{64} e^{-z} \sqrt{\pi} (8 z^{7/2} - 92 z^{5/2} + 250 z^{3/2} - 135 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akjw.01

$${}_2F_2\left(3, 5; \frac{1}{2}, 5; z\right) = \frac{1}{4} (2 z^2 + 9 z + 4) + \frac{1}{8} e^z \sqrt{\pi} (4 z^{5/2} + 20 z^{3/2} + 15 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akjx.01

$${}_2F_2\left(3, 5; \frac{1}{2}, 5; -z\right) = \frac{1}{4} (2 z^2 - 9 z + 4) + \frac{1}{8} e^{-z} \sqrt{\pi} (-4 z^{5/2} + 20 z^{3/2} - 15 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = 1$

07.25.03.akjy.01

$${}_2F_2(3, 5; 1, 1; z) = \frac{1}{48} e^z (z^6 + 28 z^5 + 262 z^4 + 992 z^3 + 1464 z^2 + 672 z + 48)$$

07.25.03.akjz.01

$${}_2F_2\left(3, 5; 1, \frac{3}{2}; z\right) = \frac{32 z^5 + 784 z^4 + 6128 z^3 + 17784 z^2 + 16650 z + 2757}{3072} + \frac{e^z \sqrt{\pi} (64 z^6 + 1600 z^5 + 13008 z^4 + 40992 z^3 + 46620 z^2 + 13860 z + 315) \operatorname{erf}(\sqrt{z})}{6144 \sqrt{z}}$$

07.25.03.akk0.01

$${}_2F_2\left(3, 5; 1, \frac{3}{2}; -z\right) = \frac{-32z^5 + 784z^4 - 6128z^3 + 17784z^2 - 16650z + 2757}{3072} + \frac{e^{-z} \sqrt{\pi} (64z^6 - 1600z^5 + 13008z^4 - 40992z^3 + 46620z^2 - 13860z + 315) \operatorname{erfi}(\sqrt{z})}{6144 \sqrt{z}}$$

07.25.03.akk1.01

$${}_2F_2(3, 5; 1, 2; z) = \frac{1}{48} e^z (z^5 + 22z^4 + 152z^3 + 384z^2 + 312z + 48)$$

07.25.03.akk2.01

$${}_2F_2\left(3, 5; 1, \frac{5}{2}; z\right) = \frac{32z^5 + 592z^4 + 3184z^3 + 5304z^2 + 1738z - 15}{2048z} + \frac{e^z \sqrt{\pi} (64z^6 + 1216z^5 + 6928z^4 + 13280z^3 + 6780z^2 + 300z + 15) \operatorname{erf}(\sqrt{z})}{4096 z^{3/2}}$$

07.25.03.akk3.01

$${}_2F_2\left(3, 5; 1, \frac{5}{2}; -z\right) = \frac{32z^5 - 592z^4 + 3184z^3 - 5304z^2 + 1738z + 15}{2048z} + \frac{e^{-z} \sqrt{\pi} (-64z^6 + 1216z^5 - 6928z^4 + 13280z^3 - 6780z^2 + 300z - 15) \operatorname{erfi}(\sqrt{z})}{4096 z^{3/2}}$$

07.25.03.akk4.01

$${}_2F_2(3, 5; 1, 3; z) = \frac{1}{24} e^z (z^4 + 16z^3 + 72z^2 + 96z + 24)$$

07.25.03.akk5.01

$${}_2F_2\left(3, 5; 1, \frac{7}{2}; z\right) = \frac{5(32z^5 + 400z^4 + 1200z^3 + 664z^2 - 6z - 27)}{4096z^2} + \frac{5e^z \sqrt{\pi} (64z^6 + 832z^5 + 2768z^4 + 2208z^3 + 156z^2 - 12z + 27) \operatorname{erf}(\sqrt{z})}{8192 z^{5/2}}$$

07.25.03.akk6.01

$${}_2F_2\left(3, 5; 1, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (64z^6 - 832z^5 + 2768z^4 - 2208z^3 + 156z^2 + 12z + 27) \operatorname{erfi}(\sqrt{z})}{8192 z^{5/2}} - \frac{5(32z^5 - 400z^4 + 1200z^3 - 664z^2 - 6z + 27)}{4096 z^2}$$

07.25.03.akk7.01

$${}_2F_2(3, 5; 1, 4; z) = \frac{1}{8} e^z (z^3 + 10z^2 + 22z + 8)$$

07.25.03.akk8.01

$${}_2F_2\left(3, 5; 1, \frac{9}{2}; z\right) = \frac{35(32z^5 + 208z^4 + 176z^3 + 24z^2 - 102z + 225)}{8192z^3} + \frac{35e^z \sqrt{\pi} (64z^6 + 448z^5 + 528z^4 + 96z^3 - 132z^2 + 252z - 225) \operatorname{erf}(\sqrt{z})}{16384 z^{7/2}}$$

07.25.03.akk9.01

$${}_2F_2\left(3, 5; 1, \frac{9}{2}; -z\right) = \frac{35(32z^5 - 208z^4 + 176z^3 - 24z^2 - 102z - 225)}{8192z^3} - \frac{35e^{-z}\sqrt{\pi}(64z^6 - 448z^5 + 528z^4 - 96z^3 - 132z^2 - 252z - 225)\operatorname{erfi}(\sqrt{z})}{16384z^{7/2}}$$

07.25.03.akka.01

$${}_2F_2(3, 5; 1, 5; z) = \frac{1}{2}e^z(z^2 + 4z + 2)$$

07.25.03.akkb.01

$${}_2F_2\left(3, 5; 1, \frac{11}{2}; z\right) = \frac{315(32z^5 + 16z^4 + 112z^3 - 456z^2 + 1450z - 3675)}{16384z^4} + \frac{315e^z\sqrt{\pi}(64z^6 + 64z^5 + 208z^4 - 736z^3 + 2076z^2 - 3900z + 3675)\operatorname{erf}(\sqrt{z})}{32768z^{9/2}}$$

07.25.03.akkc.01

$${}_2F_2\left(3, 5; 1, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(64z^6 - 64z^5 + 208z^4 + 736z^3 + 2076z^2 + 3900z + 3675)\operatorname{erfi}(\sqrt{z})}{32768z^{9/2}} - \frac{315(32z^5 - 16z^4 + 112z^3 + 456z^2 + 1450z + 3675)}{16384z^4}$$

07.25.03.akkd.01

$${}_2F_2(3, 5; 1, 6; z) = \frac{5e^z(z^6 - 2z^5 + 12z^4 - 48z^3 + 144z^2 - 288z + 288)}{2z^5} - \frac{720}{z^5}$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = \frac{3}{2}$

07.25.03.akke.01

$${}_2F_2\left(3, 5; \frac{3}{2}, 2; z\right) = \frac{16z^4 + 304z^3 + 1704z^2 + 3060z + 1221}{1536} + \frac{e^z\sqrt{\pi}(32z^5 + 624z^4 + 3696z^3 + 7560z^2 + 4410z + 315)\operatorname{erf}(\sqrt{z})}{3072\sqrt{z}}$$

07.25.03.akkf.01

$${}_2F_2\left(3, 5; \frac{3}{2}, 2; -z\right) = \frac{16z^4 - 304z^3 + 1704z^2 - 3060z + 1221}{1536} + \frac{e^{-z}\sqrt{\pi}(-32z^5 + 624z^4 - 3696z^3 + 7560z^2 - 4410z + 315)\operatorname{erfi}(\sqrt{z})}{3072\sqrt{z}}$$

07.25.03.akkg.01

$${}_2F_2\left(3, 5; \frac{3}{2}, 3; z\right) = \frac{1}{384}(8z^3 + 108z^2 + 370z + 279) + \frac{e^z\sqrt{\pi}(16z^4 + 224z^3 + 840z^2 + 840z + 105)\operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.akkh.01

$${}_2F_2\left(3, 5; \frac{3}{2}, 3; -z\right) = \frac{1}{384} (-8z^3 + 108z^2 - 370z + 279) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.akkj.01

$${}_2F_2\left(3, 5; \frac{3}{2}, 4; z\right) = \frac{1}{64} (4z^2 + 32z + 43) + \frac{e^z \sqrt{\pi} (8z^3 + 68z^2 + 114z + 21) \operatorname{erf}(\sqrt{z})}{128 \sqrt{z}}$$

07.25.03.akkj.01

$${}_2F_2\left(3, 5; \frac{3}{2}, 4; -z\right) = \frac{1}{64} (4z^2 - 32z + 43) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 68z^2 - 114z + 21) \operatorname{erfi}(\sqrt{z})}{128 \sqrt{z}}$$

07.25.03.akkk.01

$${}_2F_2\left(3, 5; \frac{3}{2}, 5; z\right) = \frac{1}{8} (2z + 5) + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.akkk.01

$${}_2F_2\left(3, 5; \frac{3}{2}, 5; -z\right) = \frac{1}{8} (5 - 2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = 2$

07.25.03.akkm.01

$${}_2F_2(3, 5; 2, 2; z) = \frac{1}{48} e^z (z^4 + 17z^3 + 84z^2 + 132z + 48)$$

07.25.03.akkn.01

$${}_2F_2\left(3, 5; 2, \frac{5}{2}; z\right) = \frac{16z^4 + 224z^3 + 816z^2 + 704z + 15}{1024z} + \frac{e^z \sqrt{\pi} (32z^5 + 464z^4 + 1840z^3 + 2040z^2 + 330z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{3/2}}$$

07.25.03.akkp.01

$${}_2F_2\left(3, 5; 2, \frac{5}{2}; -z\right) = \frac{-16z^4 + 224z^3 - 816z^2 + 704z - 15}{1024z} + \frac{e^{-z} \sqrt{\pi} (32z^5 - 464z^4 + 1840z^3 - 2040z^2 + 330z + 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{3/2}}$$

07.25.03.akkp.01

$${}_2F_2(3, 5; 2, 3; z) = \frac{1}{24} e^z (z^3 + 12z^2 + 36z + 24)$$

07.25.03.akkq.01

$${}_2F_2\left(3, 5; 2, \frac{7}{2}; z\right) = \frac{5(16z^4 + 144z^3 + 248z^2 + 12z + 9)}{2048z^2} + \frac{5e^z \sqrt{\pi} (32z^5 + 304z^4 + 624z^3 + 168z^2 - 6z - 9) \operatorname{erf}(\sqrt{z})}{4096 z^{5/2}}$$

07.25.03.akkq.01

$${}_2F_2\left(3, 5; 2, \frac{7}{2}; -z\right) = \frac{5(16z^4 - 144z^3 + 248z^2 - 12z + 9)}{2048z^2} - \frac{5e^{-z} \sqrt{\pi} (32z^5 - 304z^4 + 624z^3 - 168z^2 - 6z + 9) \operatorname{erfi}(\sqrt{z})}{4096 z^{5/2}}$$

07.25.03.akks.01

$${}_2F_2(3, 5; 2, 4; z) = \frac{1}{8} e^z (z^2 + 7z + 8)$$

07.25.03.akk.01

$${}_2F_2\left(3, 5; 2, \frac{9}{2}; z\right) = \frac{35(16z^4 + 64z^3 + 24z - 45)}{4096z^3} + \frac{35e^z \sqrt{\pi} (32z^5 + 144z^4 + 48z^3 + 24z^2 - 54z + 45) \operatorname{erf}(\sqrt{z})}{8192z^{7/2}}$$

07.25.03.aku.01

$${}_2F_2\left(3, 5; 2, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (32z^5 - 144z^4 + 48z^3 - 24z^2 - 54z - 45) \operatorname{erfi}(\sqrt{z})}{8192z^{7/2}} - \frac{35(16z^4 - 64z^3 - 24z - 45)}{4096z^3}$$

07.25.03.akkv.01

$${}_2F_2(3, 5; 2, 5; z) = \frac{1}{2} e^z (z + 2)$$

07.25.03.akkw.01

$${}_2F_2\left(3, 5; 2, \frac{11}{2}; z\right) = \frac{315(16z^4 - 16z^3 + 72z^2 - 220z + 525)}{8192z^4} + \frac{315e^z \sqrt{\pi} (32z^5 - 16z^4 + 112z^3 - 312z^2 + 570z - 525) \operatorname{erf}(\sqrt{z})}{16384z^{9/2}}$$

07.25.03.akkx.01

$${}_2F_2\left(3, 5; 2, \frac{11}{2}; -z\right) = \frac{315(16z^4 + 16z^3 + 72z^2 + 220z + 525)}{8192z^4} - \frac{315e^{-z} \sqrt{\pi} (32z^5 + 16z^4 + 112z^3 + 312z^2 + 570z + 525) \operatorname{erfi}(\sqrt{z})}{16384z^{9/2}}$$

07.25.03.akky.01

$${}_2F_2(3, 5; 2, 6; z) = \frac{5e^z (z^5 - 3z^4 + 12z^3 - 36z^2 + 72z - 72)}{2z^5} + \frac{180}{z^5}$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = \frac{5}{2}$

07.25.03.akkz.01

$${}_2F_2\left(3, 5; \frac{5}{2}, 3; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.akl0.01

$${}_2F_2\left(3, 5; \frac{5}{2}, 3; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.akl1.01

$${}_2F_2\left(3, 5; \frac{5}{2}, 4; z\right) = \frac{3(4z^2 + 20z + 5)}{128z} + \frac{3e^z \sqrt{\pi} (8z^3 + 44z^2 + 26z - 5) \operatorname{erf}(\sqrt{z})}{256z^{3/2}}$$

07.25.03.akl2.01

$${}_2F_2\left(3, 5; \frac{5}{2}, 4; -z\right) = \frac{3 e^{-z} \sqrt{\pi} (8 z^3 - 44 z^2 + 26 z + 5) \operatorname{erfi}(\sqrt{z})}{256 z^{3/2}} - \frac{3(4 z^2 - 20 z + 5)}{128 z}$$

07.25.03.akl3.01

$${}_2F_2\left(3, 5; \frac{5}{2}, 5; z\right) = \frac{3(2z+1)}{16z} + \frac{3 e^z \sqrt{\pi} (4 z^2 + 4 z - 1) \operatorname{erf}(\sqrt{z})}{32 z^{3/2}}$$

07.25.03.akl4.01

$${}_2F_2\left(3, 5; \frac{5}{2}, 5; -z\right) = \frac{3(2z-1)}{16z} - \frac{3 e^{-z} \sqrt{\pi} (4 z^2 - 4 z - 1) \operatorname{erfi}(\sqrt{z})}{32 z^{3/2}}$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = 3$

07.25.03.akl5.01

$${}_2F_2(3, 5; 3, 3; z) = \frac{1}{12} e^z (z^2 + 8z + 12)$$

07.25.03.akl6.01

$${}_2F_2\left(3, 5; 3, \frac{7}{2}; z\right) = \frac{5(8 z^3 + 44 z^2 + 18 z - 9)}{512 z^2} + \frac{5 e^z \sqrt{\pi} (16 z^4 + 96 z^3 + 72 z^2 - 24 z + 9) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.akl7.01

$${}_2F_2\left(3, 5; 3, \frac{7}{2}; -z\right) = \frac{5 e^{-z} \sqrt{\pi} (16 z^4 - 96 z^3 + 72 z^2 + 24 z + 9) \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}} - \frac{5(8 z^3 - 44 z^2 + 18 z + 9)}{512 z^2}$$

07.25.03.akl8.01

$${}_2F_2(3, 5; 3, 4; z) = \frac{1}{4} e^z (z + 4)$$

07.25.03.akl9.01

$${}_2F_2\left(3, 5; 3, \frac{9}{2}; z\right) = \frac{35(8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 e^z \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.akla.01

$${}_2F_2\left(3, 5; 3, \frac{9}{2}; -z\right) = \frac{35(8 z^3 - 12 z^2 - 14 z - 15)}{1024 z^3} - \frac{35 e^{-z} \sqrt{\pi} (16 z^4 - 32 z^3 - 24 z^2 - 24 z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.aklb.01

$${}_2F_2(3, 5; 3, 5; z) = e^z$$

07.25.03.aklc.01

$${}_2F_2\left(3, 5; 3, \frac{11}{2}; z\right) = \frac{315(8 z^3 - 20 z^2 + 50 z - 105)}{2048 z^4} + \frac{315 e^z \sqrt{\pi} (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.akld.01

$${}_2F_2\left(3, 5; 3, \frac{11}{2}; -z\right) = \frac{315 e^{-z} \sqrt{\pi} (16 z^4 + 32 z^3 + 72 z^2 + 120 z + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315(8 z^3 + 20 z^2 + 50 z + 105)}{2048 z^4}$$

07.25.03.akle.01

$${}_2F_2(3, 5; 3, 6; z) = \frac{5 e^z (z^4 - 4 z^3 + 12 z^2 - 24 z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = \frac{7}{2}$

07.25.03.aklf.01

$${}_2F_2\left(3, 5; \frac{7}{2}, 4; z\right) = \frac{15(4z^2 + 8z - 9)}{256z^2} + \frac{15 e^z \sqrt{\pi} (8z^3 + 20z^2 - 14z + 9) \operatorname{erf}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.aklg.01

$${}_2F_2\left(3, 5; \frac{7}{2}, 4; -z\right) = \frac{15(4z^2 - 8z - 9)}{256z^2} - \frac{15 e^{-z} \sqrt{\pi} (8z^3 - 20z^2 - 14z - 9) \operatorname{erfi}(\sqrt{z})}{512z^{5/2}}$$

07.25.03.aklh.01

$${}_2F_2\left(3, 5; \frac{7}{2}, 5; z\right) = \frac{15(2z - 3)}{32z^2} + \frac{15 e^z \sqrt{\pi} (4z^2 - 4z + 3) \operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.akli.01

$${}_2F_2\left(3, 5; \frac{7}{2}, 5; -z\right) = \frac{15 e^{-z} \sqrt{\pi} (4z^2 + 4z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15(2z + 3)}{32z^2}$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = 4$

07.25.03.aklj.01

$${}_2F_2(3, 5; 4, 4; z) = \frac{3 e^z (z^3 + z^2 - 2z + 2)}{4z^3} - \frac{3}{2z^3}$$

07.25.03.aklk.01

$${}_2F_2\left(3, 5; 4, \frac{9}{2}; z\right) = \frac{105(4z^2 - 4z - 15)}{512z^3} + \frac{105 e^z \sqrt{\pi} (8z^3 - 4z^2 - 6z + 15) \operatorname{erf}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.akll.01

$${}_2F_2\left(3, 5; 4, \frac{9}{2}; -z\right) = \frac{105 e^{-z} \sqrt{\pi} (8z^3 + 4z^2 - 6z - 15) \operatorname{erfi}(\sqrt{z})}{1024z^{7/2}} - \frac{105(4z^2 + 4z - 15)}{512z^3}$$

07.25.03.aklm.01

$${}_2F_2(3, 5; 4, 5; z) = \frac{3 e^z (z^2 - 2z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.akln.01

$${}_2F_2\left(3, 5; 4, \frac{11}{2}; z\right) = \frac{315(12z^2 - 80z + 105)}{1024z^4} + \frac{945 e^z \sqrt{\pi} (8z^3 - 28z^2 + 50z - 35) \operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.aklo.01

$${}_2F_2\left(3, 5; 4, \frac{11}{2}; -z\right) = \frac{315(12z^2 + 80z + 105)}{1024z^4} - \frac{945 e^{-z} \sqrt{\pi} (8z^3 + 28z^2 + 50z + 35) \operatorname{erfi}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.aklp.01

$${}_2F_2(3, 5; 4, 6; z) = \frac{15 e^z (z^3 - 5 z^2 + 12 z - 12)}{z^5} - \frac{15 (z^2 - 12)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = \frac{9}{2}$

07.25.03.aklq.01

$${}_2F_2\left(3, 5; \frac{9}{2}, 5; z\right) = \frac{105 (2 z - 15)}{64 z^3} + \frac{105 e^z \sqrt{\pi} (4 z^2 - 12 z + 15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.aklr.01

$${}_2F_2\left(3, 5; \frac{9}{2}, 5; -z\right) = \frac{105 (2 z + 15)}{64 z^3} - \frac{105 e^{-z} \sqrt{\pi} (4 z^2 + 12 z + 15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = 5$

07.25.03.akls.01

$${}_2F_2(3, 5; 5, 5; z) = \frac{12 e^z (z^2 - 4 z + 6)}{z^4} - \frac{24 (z + 3)}{z^4}$$

07.25.03.aklt.01

$${}_2F_2\left(3, 5; 5, \frac{11}{2}; z\right) = \frac{945 e^z \sqrt{\pi} (4 z^2 - 20 z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575 (2 z + 21)}{128 z^4}$$

07.25.03.aklu.01

$${}_2F_2\left(3, 5; 5, \frac{11}{2}; -z\right) = \frac{1575 (2 z - 21)}{128 z^4} + \frac{945 e^{-z} \sqrt{\pi} (4 z^2 + 20 z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.aklv.01

$${}_2F_2(3, 5; 5, 6; z) = \frac{60 e^z (z^2 - 6 z + 12)}{z^5} - \frac{60 (z^2 + 6 z + 12)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = 5, b_1 = 6$

07.25.03.aklw.01

$${}_2F_2(3, 5; 6, 6; z) = \frac{300 e^z (z - 7)}{z^5} - \frac{150 (z^2 + 12 z + 24 \gamma - 14)}{z^5} + \frac{3600 \operatorname{Ei}(z)}{z^5} + \frac{1800 \log\left(\frac{1}{z}\right)}{z^5} - \frac{1800 \log(z)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = -\frac{11}{2}$

07.25.03.aklx.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{102\,112\,943\,625} (65\,536 z^{19} + 10\,452\,992 z^{18} + 708\,345\,856 z^{17} + 26\,800\,816\,128 z^{16} + 625\,988\,272\,128 z^{15} + 9\,425\,873\,141\,760 z^{14} + 92\,816\,606\,453\,760 z^{13} + 594\,117\,835\,960\,320 z^{12} + 2\,410\,712\,344\,719\,360 z^{11} + 5\,905\,552\,963\,368\,960 z^{10} + 8\,018\,344\,440\,691\,200 z^9 + 5\,160\,888\,457\,401\,600 z^8 + 1\,123\,668\,537\,868\,800 z^7 + 24\,638\,764\,550\,400 z^6 + 439\,977\,938\,400 z^5 + 74\,432\,358\,000 z^4 + 36\,486\,450\,000 z^3 + 35\,756\,721\,000 z^2 + 55\,697\,969\,250 z + 102\,112\,943\,625) + \frac{1}{102\,112\,943\,625} (16\,384 e^z \sqrt{\pi} (4 z^{39/2} + 640 z^{37/2} + 43\,551 z^{35/2} + 1\,657\,095 z^{33/2} + 39\,004\,350 z^{31/2} + 593\,646\,570 z^{29/2} + 5\,935\,485\,600 z^{27/2} + 38\,848\,027\,680 z^{25/2} + 163\,010\,232\,000 z^{23/2} + 420\,972\,552\,000 z^{21/2} + 624\,159\,043\,200 z^{19/2} + 471\,517\,200\,000 z^{17/2} + 144\,538\,732\,800 z^{15/2} + 10\,178\,784\,000 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akly.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{102\,112\,943\,625} (-65\,536 z^{19} + 10\,452\,992 z^{18} - 708\,345\,856 z^{17} + 26\,800\,816\,128 z^{16} - 625\,988\,272\,128 z^{15} + 9\,425\,873\,141\,760 z^{14} - 92\,816\,606\,453\,760 z^{13} + 594\,117\,835\,960\,320 z^{12} - 2\,410\,712\,344\,719\,360 z^{11} + 5\,905\,552\,963\,368\,960 z^{10} - 8\,018\,344\,440\,691\,200 z^9 + 5\,160\,888\,457\,401\,600 z^8 - 1\,123\,668\,537\,868\,800 z^7 + 24\,638\,764\,550\,400 z^6 - 439\,977\,938\,400 z^5 + 74\,432\,358\,000 z^4 - 36\,486\,450\,000 z^3 + 35\,756\,721\,000 z^2 - 55\,697\,969\,250 z + 102\,112\,943\,625) + \frac{1}{102\,112\,943\,625} (16\,384 e^{-z} \sqrt{\pi} (4 z^{39/2} - 640 z^{37/2} + 43\,551 z^{35/2} - 1\,657\,095 z^{33/2} + 39\,004\,350 z^{31/2} - 593\,646\,570 z^{29/2} + 5\,935\,485\,600 z^{27/2} - 38\,848\,027\,680 z^{25/2} + 163\,010\,232\,000 z^{23/2} - 420\,972\,552\,000 z^{21/2} + 624\,159\,043\,200 z^{19/2} - 471\,517\,200\,000 z^{17/2} + 144\,538\,732\,800 z^{15/2} - 10\,178\,784\,000 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aklz.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{9\,282\,994\,875} (-32\,768 z^{18} - 4\,800\,512 z^{17} - 296\,583\,168 z^{16} - 10\,140\,352\,512 z^{15} - 211\,733\,053\,440 z^{14} - 2\,812\,060\,016\,640 z^{13} - 24\,006\,284\,144\,640 z^{12} - 130\,197\,232\,373\,760 z^{11} - 433\,450\,290\,493\,440 z^{10} - 830\,017\,724\,659\,200 z^9 - 812\,042\,351\,366\,400 z^8 - 318\,966\,446\,937\,600 z^7 - 24\,638\,764\,550\,400 z^6 + 439\,977\,938\,400 z^5 + 24\,810\,786\,000 z^4 + 7\,297\,290\,000 z^3 + 5\,108\,103\,000 z^2 + 6\,188\,663\,250 z + 9\,282\,994\,875) - \frac{1}{9\,282\,994\,875} (8192 e^z \sqrt{\pi} (4 z^{37/2} + 588 z^{35/2} + 36\,495 z^{33/2} + 1\,255\,650 z^{31/2} + 26\,447\,850 z^{29/2} + 355\,615\,920 z^{27/2} + 3\,090\,558\,240 z^{25/2} + 17\,214\,120\,000 z^{23/2} + 59\,725\,512\,000 z^{21/2} + 122\,344\,992\,000 z^{19/2} + 134\,779\,075\,200 z^{17/2} + 67\,179\,974\,400 z^{15/2} + 10\,178\,784\,000 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akm0.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{9282994875} \left(-32768 z^{18} + 4800512 z^{17} - 296583168 z^{16} + 10140352512 z^{15} - 211733053440 z^{14} + \right.$$

$$281206016640 z^{13} - 24006284144640 z^{12} + 130197232373760 z^{11} - 433450290493440 z^{10} +$$

$$830017724659200 z^9 - 812042351366400 z^8 + 318966446937600 z^7 - 24638764550400 z^6 -$$

$$439977938400 z^5 + 24810786000 z^4 - 7297290000 z^3 + 5108103000 z^2 - 6188663250 z + 9282994875 \left. \right) +$$

$$\frac{1}{9282994875} \left(8192 e^{-z} \sqrt{\pi} \left(4 z^{37/2} - 588 z^{35/2} + 36495 z^{33/2} - 1255650 z^{31/2} + 26447850 z^{29/2} - \right. \right.$$

$$355615920 z^{27/2} + 3090558240 z^{25/2} - 17214120000 z^{23/2} + 59725512000 z^{21/2} -$$

$$\left. \left. 122344992000 z^{19/2} + 134779075200 z^{17/2} - 67179974400 z^{15/2} + 10178784000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akm1.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{1031443875} \left(16384 z^{17} + 2187264 z^{16} + 122052608 z^{15} + 3728670720 z^{14} + 68638187520 z^{13} + \right.$$

$$790007844864 z^{12} + 5713255895040 z^{11} + 25429848238080 z^{10} + 66264149952000 z^9 +$$

$$91784809670400 z^8 + 55454829534720 z^7 + 8212921516800 z^6 - 439977938400 z^5 +$$

$$24810786000 z^4 + 2432430000 z^3 + 1021620600 z^2 + 884094750 z + 1031443875 \left. \right) +$$

$$\frac{1}{1031443875} \left(4096 e^z \sqrt{\pi} \left(4 z^{35/2} + 536 z^{33/2} + 30063 z^{31/2} + 924957 z^{29/2} + 17198280 z^{27/2} + \right. \right.$$

$$200831400 z^{25/2} + 1483907040 z^{23/2} + 6826770720 z^{21/2} + 18764887680 z^{19/2} +$$

$$\left. \left. 28520553600 z^{17/2} + 20696860800 z^{15/2} + 5089392000 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akm2.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{1031443875} \left(-16384 z^{17} + 2187264 z^{16} - 122052608 z^{15} + 3728670720 z^{14} - 68638187520 z^{13} + \right.$$

$$790007844864 z^{12} - 5713255895040 z^{11} + 25429848238080 z^{10} - 66264149952000 z^9 +$$

$$91784809670400 z^8 - 55454829534720 z^7 + 8212921516800 z^6 + 439977938400 z^5 +$$

$$24810786000 z^4 - 2432430000 z^3 + 1021620600 z^2 - 884094750 z + 1031443875 \left. \right) +$$

$$\frac{1}{1031443875} \left(4096 e^{-z} \sqrt{\pi} \left(4 z^{35/2} - 536 z^{33/2} + 30063 z^{31/2} - 924957 z^{29/2} + 17198280 z^{27/2} - \right. \right.$$

$$200831400 z^{25/2} + 1483907040 z^{23/2} - 6826770720 z^{21/2} + 18764887680 z^{19/2} -$$

$$\left. \left. 28520553600 z^{17/2} + 20696860800 z^{15/2} - 5089392000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akm3.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{147\,349\,125} \left(-8192 z^{16} - 987\,136 z^{15} - 49\,184\,768 z^{14} - 1\,323\,786\,240 z^{13} - 21\,104\,627\,712 z^{12} - 205\,667\,069\,952 z^{11} - \right.$$

$$1\,220\,395\,714\,560 z^{10} - 4\,253\,763\,064\,320 z^9 - 8\,036\,489\,260\,800 z^8 - 6\,929\,444\,712\,960 z^7 - 1\,642\,584\,303\,360 z^6 +$$

$$146\,659\,312\,800 z^5 - 24\,810\,786\,000 z^4 + 2\,432\,430\,000 z^3 + 340\,540\,200 z^2 + 176\,818\,950 z + 147\,349\,125) -$$

$$\frac{1}{147\,349\,125} \left(2048 e^z \sqrt{\pi} \left(4 z^{33/2} + 484 z^{31/2} + 24\,255 z^{29/2} + 658\,152 z^{27/2} + 10\,616\,760 z^{25/2} + 105\,280\,560 z^{23/2} + \right. \right.$$

$$\left. \left. 641\,662\,560 z^{21/2} + 2\,335\,132\,800 z^{19/2} + 4\,754\,090\,880 z^{17/2} + 4\,750\,099\,200 z^{15/2} + 1\,696\,464\,000 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akm4.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{147\,349\,125} \left(-8192 z^{16} + 987\,136 z^{15} - 49\,184\,768 z^{14} + 1\,323\,786\,240 z^{13} - 21\,104\,627\,712 z^{12} + 205\,667\,069\,952 z^{11} - \right.$$

$$1\,220\,395\,714\,560 z^{10} + 4\,253\,763\,064\,320 z^9 - 8\,036\,489\,260\,800 z^8 + 6\,929\,444\,712\,960 z^7 - 1\,642\,584\,303\,360 z^6 -$$

$$146\,659\,312\,800 z^5 - 24\,810\,786\,000 z^4 - 2\,432\,430\,000 z^3 + 340\,540\,200 z^2 - 176\,818\,950 z + 147\,349\,125) +$$

$$\frac{1}{147\,349\,125} \left(2048 e^{-z} \sqrt{\pi} \left(4 z^{33/2} - 484 z^{31/2} + 24\,255 z^{29/2} - 658\,152 z^{27/2} + 10\,616\,760 z^{25/2} - 105\,280\,560 z^{23/2} + \right. \right.$$

$$\left. \left. 641\,662\,560 z^{21/2} - 2\,335\,132\,800 z^{19/2} + 4\,754\,090\,880 z^{17/2} - 4\,750\,099\,200 z^{15/2} + 1\,696\,464\,000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akm5.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{29\,469\,825} \left(4096 z^{15} + 440\,320 z^{14} + 19\,310\,592 z^{13} + 449\,691\,648 z^{12} + 6\,064\,521\,216 z^{11} + 48\,455\,497\,728 z^{10} + \right.$$

$$225\,104\,140\,800 z^9 + 569\,506\,049\,280 z^8 + 673\,428\,349\,440 z^7 + 234\,654\,900\,480 z^6 -$$

$$29\,331\,862\,560 z^5 + 8\,270\,262\,000 z^4 - 2\,432\,430\,000 z^3 + 340\,540\,200 z^2 + 58\,939\,650 z + 29\,469\,825) +$$

$$\frac{1}{29\,469\,825} \left(1024 e^z \sqrt{\pi} \left(4 z^{31/2} + 432 z^{29/2} + 19\,071 z^{27/2} + 448\,371 z^{25/2} + 6\,133\,050 z^{23/2} + 50\,083\,110 z^{21/2} + \right. \right.$$

$$\left. \left. 240\,997\,680 z^{19/2} + 648\,149\,040 z^{17/2} + 865\,196\,640 z^{15/2} + 424\,116\,000 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akm6.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{29\,469\,825} \left(-4096 z^{15} + 440\,320 z^{14} - 19\,310\,592 z^{13} + 449\,691\,648 z^{12} - 6\,064\,521\,216 z^{11} + 48\,455\,497\,728 z^{10} - \right.$$

$$225\,104\,140\,800 z^9 + 569\,506\,049\,280 z^8 - 673\,428\,349\,440 z^7 + 234\,654\,900\,480 z^6 +$$

$$29\,331\,862\,560 z^5 + 8\,270\,262\,000 z^4 + 2\,432\,430\,000 z^3 + 340\,540\,200 z^2 - 58\,939\,650 z + 29\,469\,825) +$$

$$\frac{1}{29\,469\,825} \left(1024 e^{-z} \sqrt{\pi} \left(4 z^{31/2} - 432 z^{29/2} + 19\,071 z^{27/2} - 448\,371 z^{25/2} + 6\,133\,050 z^{23/2} - 50\,083\,110 z^{21/2} + \right. \right.$$

$$\left. \left. 240\,997\,680 z^{19/2} - 648\,149\,040 z^{17/2} + 865\,196\,640 z^{15/2} - 424\,116\,000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akm7.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{9823275} \left(-2048 z^{14} - 193536 z^{13} - 7333888 z^{12} - 144267264 z^{11} - 1593022464 z^{10} - 9954362880 z^9 - \right.$$

$$33563255040 z^8 - 53324490240 z^7 - 26072766720 z^6 + 4190266080 z^5 -$$

$$1654052400 z^4 + 810810000 z^3 - 340540200 z^2 + 58939650 z + 9823275) -$$

$$\frac{1}{9823275} \left(512 e^z \sqrt{\pi} \left(4 z^{29/2} + 380 z^{27/2} + 14511 z^{25/2} + 288750 z^{23/2} + 3245550 z^{21/2} + \right. \right.$$

$$\left. \left. 20873160 z^{19/2} + 74012400 z^{17/2} + 130062240 z^{15/2} + 84823200 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akm8.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{9823275} \left(-2048 z^{14} + 193536 z^{13} - 7333888 z^{12} + 144267264 z^{11} - 1593022464 z^{10} + 9954362880 z^9 - \right.$$

$$33563255040 z^8 + 53324490240 z^7 - 26072766720 z^6 - 4190266080 z^5 -$$

$$1654052400 z^4 - 810810000 z^3 - 340540200 z^2 - 58939650 z + 9823275) +$$

$$\frac{1}{9823275} \left(512 e^{-z} \sqrt{\pi} \left(4 z^{29/2} - 380 z^{27/2} + 14511 z^{25/2} - 288750 z^{23/2} + 3245550 z^{21/2} - \right. \right.$$

$$\left. \left. 20873160 z^{19/2} + 74012400 z^{17/2} - 130062240 z^{15/2} + 84823200 z^{13/2} \right) \operatorname{erfi}(\sqrt{-z}) \right)$$

07.25.03.akm9.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{9823275} \left(1024 z^{13} + 83456 z^{12} + 2665984 z^{11} + 42848256 z^{10} + 369262080 z^9 + 1672277760 z^8 + 3545095680 z^7 + \right.$$

$$2370251520 z^6 - 465585120 z^5 + 236293200 z^4 - 162162000 z^3 + 113513400 z^2 - 58939650 z + 9823275) +$$

$$\frac{1}{9823275} \left(256 e^z \sqrt{\pi} \left(4 z^{27/2} + 328 z^{25/2} + 10575 z^{23/2} + 172425 z^{21/2} + 1521300 z^{19/2} + \right. \right.$$

$$\left. \left. 7181460 z^{17/2} + 16560720 z^{15/2} + 14137200 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akma.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) =$$

$$\frac{1}{9823275} \left(-1024 z^{13} + 83456 z^{12} - 2665984 z^{11} + 42848256 z^{10} - 369262080 z^9 + 1672277760 z^8 - 3545095680 z^7 + \right.$$

$$2370251520 z^6 + 465585120 z^5 + 236293200 z^4 + 162162000 z^3 + 113513400 z^2 + 58939650 z + 9823275) +$$

$$\frac{1}{9823275} \left(256 e^{-z} \sqrt{\pi} \left(4 z^{27/2} - 328 z^{25/2} + 10575 z^{23/2} - 172425 z^{21/2} + 1521300 z^{19/2} - \right. \right.$$

$$\left. \left. 7181460 z^{17/2} + 16560720 z^{15/2} - 14137200 z^{13/2} \right) \operatorname{erfi}(\sqrt{-z}) \right)$$

07.25.03.akmb.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{19\,646\,550} (e^z (2048 z^{13} + 154\,624 z^{12} + 4\,526\,592 z^{11} + 65\,716\,992 z^{10} + 501\,177\,600 z^9 + 1943\,948\,160 z^8 + 3\,307\,106\,880 z^7 + 1\,384\,115\,040 z^6 - 425\,862\,360 z^5 + 283\,783\,500 z^4 - 219\,230\,550 z^3 + 153\,897\,975 z^2 - 78\,586\,200 z + 19\,646\,550))$$

07.25.03.akmc.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{128 e^{-z} \sqrt{\pi} (4 z^6 + 276 z^5 + 7263 z^4 + 92\,532 z^3 + 595\,980 z^2 + 1\,817\,640 z + 2\,019\,600) \operatorname{erf}(\sqrt{z}) z^{13/2}}{9\,823\,275} + \frac{1}{9\,823\,275} (512 z^{12} + 35\,072 z^{11} + 912\,384 z^{10} + 11\,404\,800 z^9 + 70\,997\,760 z^8 + 201\,871\,872 z^7 + 182\,327\,040 z^6 - 42\,325\,920 z^5 + 26\,254\,800 z^4 - 23\,166\,000 z^3 + 22\,702\,680 z^2 - 19\,646\,550 z + 9\,823\,275)$$

07.25.03.akmd.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{9\,823\,275} (512 z^{12} - 35\,072 z^{11} + 912\,384 z^{10} - 11\,404\,800 z^9 + 70\,997\,760 z^8 - 201\,871\,872 z^7 + 182\,327\,040 z^6 + 42\,325\,920 z^5 + 26\,254\,800 z^4 + 23\,166\,000 z^3 + 22\,702\,680 z^2 + 19\,646\,550 z + 9\,823\,275) - \frac{1}{9\,823\,275} 128 e^{-z} \sqrt{\pi} z^{13/2} (4 z^6 - 276 z^5 + 7263 z^4 - 92\,532 z^3 + 595\,980 z^2 - 1\,817\,640 z + 2\,019\,600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akme.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{19\,646\,550} (e^z (2048 z^{12} + 128\,000 z^{11} + 2\,990\,592 z^{10} + 32\,820\,480 z^9 + 172\,972\,800 z^8 + 387\,192\,960 z^7 + 209\,563\,200 z^6 - 82\,827\,360 z^5 + 71\,101\,800 z^4 - 71\,725\,500 z^3 + 67\,671\,450 z^2 - 49\,116\,375 z + 19\,646\,550))$$

07.25.03.akmf.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{64 e^z \sqrt{\pi} (4 z^5 + 224 z^4 + 4575 z^3 + 42\,207 z^2 + 173\,910 z + 252\,450) \operatorname{erf}(\sqrt{z}) z^{13/2}}{3\,274\,425} + \frac{1}{3\,274\,425} (256 z^{11} + 14\,208 z^{10} + 285\,824 z^9 + 2\,565\,120 z^8 + 9\,974\,016 z^7 + 12\,155\,136 z^6 - 3\,255\,840 z^5 + 2\,386\,800 z^4 - 2\,574\,000 z^3 + 3\,243\,240 z^2 - 3\,929\,310 z + 3\,274\,425)$$

07.25.03.akmg.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{64 e^{-z} \sqrt{\pi} (4 z^5 - 224 z^4 + 4575 z^3 - 42\,207 z^2 + 173\,910 z - 252\,450) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{3\,274\,425} + \frac{1}{3\,274\,425} (-256 z^{11} + 14\,208 z^{10} - 285\,824 z^9 + 2\,565\,120 z^8 - 9\,974\,016 z^7 + 12\,155\,136 z^6 + 3\,255\,840 z^5 + 2\,386\,800 z^4 + 2\,574\,000 z^3 + 3\,243\,240 z^2 + 3\,929\,310 z + 3\,274\,425)$$

07.25.03.akmh.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{9823275} \left(e^z (2048 z^{11} + 101376 z^{10} + 1774080 z^9 + 13305600 z^8 + 39916800 z^7 + 27941760 z^6 - 13970880 z^5 + 14968800 z^4 - 18711000 z^3 + 21829500 z^2 - 19646550 z + 9823275) \right)$$

07.25.03.akmi.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{32 e^z \sqrt{\pi} (4 z^4 + 172 z^3 + 2511 z^2 + 14586 z + 28050) \operatorname{erf}(\sqrt{z}) z^{13/2}}{654885} + \frac{1}{654885} (128 z^{10} + 5440 z^9 + 77696 z^8 + 430464 z^7 + 715008 z^6 - 217056 z^5 + 183600 z^4 - 234000 z^3 + 360360 z^2 - 561330 z + 654885)$$

07.25.03.akmj.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{654885} (128 z^{10} - 5440 z^9 + 77696 z^8 - 430464 z^7 + 715008 z^6 + 217056 z^5 + 183600 z^4 + 234000 z^3 + 360360 z^2 + 561330 z + 654885) - \frac{32 e^{-z} \sqrt{\pi} z^{13/2} (4 z^4 - 172 z^3 + 2511 z^2 - 14586 z + 28050) \operatorname{erfi}(\sqrt{z})}{654885}$$

07.25.03.akmk.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{3274425 z^3} \left(e^z (2048 z^{13} + 74752 z^{12} + 877056 z^{11} + 3657984 z^{10} + 3336960 z^9 - 2090880 z^8 + 2756160 z^7 - 4324320 z^6 + 7234920 z^5 - 14345100 z^4 + 37733850 z^3 - 103378275 z^2 + 206756550 z - 206756550) \right) + \frac{442}{7 z^3}$$

07.25.03.akml.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{16 e^z \sqrt{\pi} (4 z^3 + 120 z^2 + 1071 z + 2805) \operatorname{erf}(\sqrt{z}) z^{13/2}}{93555} + \frac{1}{93555} (64 z^9 + 1888 z^8 + 16224 z^7 + 37632 z^6 - 12768 z^5 + 12240 z^4 - 18000 z^3 + 32760 z^2 - 62370 z + 93555)$$

07.25.03.akmm.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{16 e^{-z} \sqrt{\pi} (4 z^3 - 120 z^2 + 1071 z - 2805) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{93555} + \frac{1}{93555} (-64 z^9 + 1888 z^8 - 16224 z^7 + 37632 z^6 + 12768 z^5 + 12240 z^4 + 18000 z^3 + 32760 z^2 + 62370 z + 93555)$$

07.25.03.akmn.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = \frac{1768(z-19)}{7z^4} + \frac{1}{3274425z^4} (4e^z(2048z^{13} + 48128z^{12} + 299520z^{11} + 363264z^{10} - 295680z^9 + 570240z^8 - 1805760z^7 + 8316000z^6 - 42661080z^5 + 198960300z^4 - 758107350z^3 + 2170943775z^2 - 4135131000z + 3928374450))$$

07.25.03.akmo.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{8e^z\sqrt{\pi}(4z^2 + 68z + 255)\operatorname{erf}(\sqrt{z})z^{13/2}}{10395} + \frac{32z^8 + 528z^7 + 1792z^6 - 672z^5 + 720z^4 - 1200z^3 + 2520z^2 - 5670z + 10395}{10395}$$

07.25.03.akmp.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{32z^8 - 528z^7 + 1792z^6 + 672z^5 + 720z^4 + 1200z^3 + 2520z^2 + 5670z + 10395}{10395} - \frac{8e^{-z}\sqrt{\pi}z^{13/2}(4z^2 - 68z + 255)\operatorname{erfi}(\sqrt{z})}{10395}$$

07.25.03.akmq.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \frac{4420(z^2 - 38z + 1596)}{7z^5} + \frac{1}{654885z^5} (4e^z(2048z^{13} + 21504z^{12} + 41472z^{11} - 92928z^{10} + 633600z^9 - 5132160z^8 + 39251520z^7 - 266444640z^6 + 1556006760z^5 - 7581073500z^4 + 29566186650z^3 - 86527616175z^2 + 168920101350z - 164991726900))$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = -\frac{9}{2}$

07.25.03.akmr.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{843908625} (16384z^{17} + 2203648z^{16} + 124059648z^{15} + 3830661120z^{14} + 71449927680z^{13} + 836200673280z^{12} + 6181201244160z^{11} + 28355443292160z^{10} + 77253250521600z^9 + 115133416070400z^8 + 80459546227200z^7 + 18841974278400z^6 + 439977938400z^5 + 8270262000z^4 + 1459458000z^3 + 729729000z^2 + 687629250z + 843908625) + \frac{1}{843908625} (4096e^z\sqrt{\pi}(4z^{35/2} + 540z^{33/2} + 30555z^{31/2} + 950100z^{29/2} + 17896950z^{27/2} + 212440320z^{25/2} + 1603476000z^{23/2} + 7593264000z^{21/2} + 21759192000z^{19/2} + 35308224000z^{17/2} + 28854403200z^{15/2} + 9471168000z^{13/2} + 707616000z^{11/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.akms.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{843\,908\,625} \left(-16\,384\,z^{17} + 2203\,648\,z^{16} - 124\,059\,648\,z^{15} + 3\,830\,661\,120\,z^{14} - 71\,449\,927\,680\,z^{13} + \right.$$

$$836\,200\,673\,280\,z^{12} - 6\,181\,201\,244\,160\,z^{11} + 28\,355\,443\,292\,160\,z^{10} - 77\,253\,250\,521\,600\,z^9 +$$

$$115\,133\,416\,070\,400\,z^8 - 80\,459\,546\,227\,200\,z^7 + 18\,841\,974\,278\,400\,z^6 - 439\,977\,938\,400\,z^5 +$$

$$8\,270\,262\,000\,z^4 - 1\,459\,458\,000\,z^3 + 729\,729\,000\,z^2 - 687\,629\,250\,z + 843\,908\,625 \left. + \right.$$

$$\frac{1}{843\,908\,625} \left(4096\,e^{-z}\sqrt{\pi} \left(4\,z^{35/2} - 540\,z^{33/2} + 30\,555\,z^{31/2} - 950\,100\,z^{29/2} + 17\,896\,950\,z^{27/2} - \right. \right.$$

$$212\,440\,320\,z^{25/2} + 1\,603\,476\,000\,z^{23/2} - 7\,593\,264\,000\,z^{21/2} + 21\,759\,192\,000\,z^{19/2} -$$

$$\left. \left. 35\,308\,224\,000\,z^{17/2} + 28\,854\,403\,200\,z^{15/2} - 9\,471\,168\,000\,z^{13/2} + 707\,616\,000\,z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akmt.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{93\,767\,625} \left(-8192\,z^{16} - 1\,003\,520\,z^{15} - 50\,995\,200\,z^{14} - 1\,405\,870\,080\,z^{13} - 23\,096\,414\,208\,z^{12} - 233\,972\,674\,560\,z^{11} - \right.$$

$$1\,462\,797\,527\,040\,z^{10} - 5\,494\,550\,284\,800\,z^9 - 11\,674\,303\,200\,000\,z^8 - 12\,502\,358\,346\,240\,z^7 - 5\,314\,526\,380\,800\,z^6 -$$

$$439\,977\,938\,400\,z^5 + 8\,270\,262\,000\,z^4 + 486\,486\,000\,z^3 + 145\,945\,800\,z^2 + 98\,232\,750\,z + 93\,767\,625 \left. - \right.$$

$$\frac{1}{93\,767\,625} \left(2048\,e^z\sqrt{\pi} \left(4\,z^{33/2} + 492\,z^{31/2} + 25\,143\,z^{29/2} + 698\,670\,z^{27/2} + 11\,608\,920\,z^{25/2} + 119\,568\,960\,z^{23/2} + 766\,493\,280\,z^{21/2} + \right. \right.$$

$$\left. \left. 2\,994\,304\,320\,z^{19/2} + 6\,787\,670\,400\,z^{17/2} + 8\,157\,542\,400\,z^{15/2} + 4\,381\,776\,000\,z^{13/2} + 707\,616\,000\,z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akmu.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{93\,767\,625} \left(-8192\,z^{16} + 1\,003\,520\,z^{15} - 50\,995\,200\,z^{14} + 1\,405\,870\,080\,z^{13} - 23\,096\,414\,208\,z^{12} + 233\,972\,674\,560\,z^{11} - \right.$$

$$1\,462\,797\,527\,040\,z^{10} + 5\,494\,550\,284\,800\,z^9 - 11\,674\,303\,200\,000\,z^8 + 12\,502\,358\,346\,240\,z^7 - 5\,314\,526\,380\,800\,z^6 +$$

$$439\,977\,938\,400\,z^5 + 8\,270\,262\,000\,z^4 - 486\,486\,000\,z^3 + 145\,945\,800\,z^2 - 98\,232\,750\,z + 93\,767\,625 \left. + \right.$$

$$\frac{1}{93\,767\,625} \left(2048\,e^{-z}\sqrt{\pi} \left(4\,z^{33/2} - 492\,z^{31/2} + 25\,143\,z^{29/2} - 698\,670\,z^{27/2} + 11\,608\,920\,z^{25/2} - 119\,568\,960\,z^{23/2} + 766\,493\,280\,z^{21/2} - \right. \right.$$

$$\left. \left. 2\,994\,304\,320\,z^{19/2} + 6\,787\,670\,400\,z^{17/2} - 8\,157\,542\,400\,z^{15/2} + 4\,381\,776\,000\,z^{13/2} - 707\,616\,000\,z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akmv.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{13\,395\,375} \left(4096\,z^{15} + 452\,608\,z^{14} + 20\,520\,960\,z^{13} + 497\,946\,624\,z^{12} + 7\,076\,401\,152\,z^{11} + 60\,600\,453\,120\,z^{10} + \right.$$

$$310\,196\,805\,120\,z^9 + 909\,453\,484\,800\,z^8 + 1\,393\,228\,408\,320\,z^7 + 917\,985\,519\,360\,z^6 +$$

$$146\,659\,312\,800\,z^5 - 8\,270\,262\,000\,z^4 + 486\,486\,000\,z^3 + 48\,648\,600\,z^2 + 19\,646\,550\,z + 13\,395\,375 \left. + \right.$$

$$\frac{1}{13\,395\,375} \left(1024\,e^z\sqrt{\pi} \left(4\,z^{31/2} + 444\,z^{29/2} + 20\,259\,z^{27/2} + 496\,080\,z^{25/2} + 7\,144\,200\,z^{23/2} + 62\,415\,360\,z^{21/2} + \right. \right.$$

$$\left. \left. 329\,585\,760\,z^{19/2} + 1\,016\,789\,760\,z^{17/2} + 1\,703\,721\,600\,z^{15/2} + 1\,342\,656\,000\,z^{13/2} + 353\,808\,000\,z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akmw.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{13\,395\,375} \left(-4096 z^{15} + 452\,608 z^{14} - 20\,520\,960 z^{13} + 497\,946\,624 z^{12} - 7\,076\,401\,152 z^{11} + 60\,600\,453\,120 z^{10} - \right.$$

$$310\,196\,805\,120 z^9 + 909\,453\,484\,800 z^8 - 1\,393\,228\,408\,320 z^7 + 917\,985\,519\,360 z^6 -$$

$$146\,659\,312\,800 z^5 - 8\,270\,262\,000 z^4 - 486\,486\,000 z^3 + 48\,648\,600 z^2 - 19\,646\,550 z + 13\,395\,375 \Big) +$$

$$\frac{1}{13\,395\,375} \left(1024 e^{-z} \sqrt{\pi} \left(4 z^{3/2} - 444 z^{29/2} + 20\,259 z^{27/2} - 496\,080 z^{25/2} + 7\,144\,200 z^{23/2} - 62\,415\,360 z^{21/2} + \right. \right.$$

$$\left. \left. 329\,585\,760 z^{19/2} - 1\,016\,789\,760 z^{17/2} + 1\,703\,721\,600 z^{15/2} - 1\,342\,656\,000 z^{13/2} + 353\,808\,000 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akmx.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{2\,679\,075} \left(-2048 z^{14} - 201\,728 z^{13} - 8\,042\,496 z^{12} - 168\,646\,656 z^{11} - 2\,024\,159\,232 z^{10} - 14\,182\,110\,720 z^9 - \right.$$

$$56\,657\,905\,920 z^8 - 119\,966\,676\,480 z^7 - 113\,888\,436\,480 z^6 - 29\,331\,862\,560 z^5 +$$

$$2\,756\,754\,000 z^4 - 486\,486\,000 z^3 + 48\,648\,600 z^2 + 6\,548\,850 z + 2\,679\,075 \Big) -$$

$$\frac{1}{2\,679\,075} \left(512 e^z \sqrt{\pi} \left(4 z^{29/2} + 396 z^{27/2} + 15\,903 z^{25/2} + 337\,050 z^{23/2} + 4\,110\,750 z^{21/2} + 29\,529\,360 z^{19/2} + \right. \right.$$

$$\left. \left. 122\,880\,240 z^{17/2} + 279\,508\,320 z^{15/2} + 306\,180\,000 z^{13/2} + 117\,936\,000 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akmy.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{2\,679\,075} \left(-2048 z^{14} + 201\,728 z^{13} - 8\,042\,496 z^{12} + 168\,646\,656 z^{11} - 2\,024\,159\,232 z^{10} + 14\,182\,110\,720 z^9 - \right.$$

$$56\,657\,905\,920 z^8 + 119\,966\,676\,480 z^7 - 113\,888\,436\,480 z^6 + 29\,331\,862\,560 z^5 +$$

$$2\,756\,754\,000 z^4 + 486\,486\,000 z^3 + 48\,648\,600 z^2 - 6\,548\,850 z + 2\,679\,075 \Big) +$$

$$\frac{1}{2\,679\,075} \left(512 e^{-z} \sqrt{\pi} \left(4 z^{29/2} - 396 z^{27/2} + 15\,903 z^{25/2} - 337\,050 z^{23/2} + 4\,110\,750 z^{21/2} - 29\,529\,360 z^{19/2} + \right. \right.$$

$$\left. \left. 122\,880\,240 z^{17/2} - 279\,508\,320 z^{15/2} + 306\,180\,000 z^{13/2} - 117\,936\,000 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akmz.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{893\,025} \left(1024 z^{13} + 88\,576 z^{12} + 3\,047\,424 z^{11} + 53\,892\,096 z^{10} + 528\,468\,480 z^9 + 2\,886\,831\,360 z^8 + 8\,330\,273\,280 z^7 + \right.$$

$$10\,976\,958\,720 z^6 + 4\,190\,266\,080 z^5 - 551\,350\,800 z^4 + 162\,162\,000 z^3 - 48\,648\,600 z^2 + 6\,548\,850 z + 893\,025 \Big) +$$

$$\frac{1}{893\,025} \left(256 e^z \sqrt{\pi} \left(4 z^{27/2} + 348 z^{25/2} + 12\,075 z^{23/2} + 216\,300 z^{21/2} + 2\,164\,050 z^{19/2} + \right. \right.$$

$$\left. \left. 12\,216\,960 z^{17/2} + 37\,361\,520 z^{15/2} + 55\,339\,200 z^{13/2} + 29\,484\,000 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akn0.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{893025} \left(-1024 z^{13} + 88576 z^{12} - 3047424 z^{11} + 53892096 z^{10} - 528468480 z^9 + 2886831360 z^8 - 8330273280 z^7 + 10976958720 z^6 - 4190266080 z^5 - 551350800 z^4 - 162162000 z^3 - 48648600 z^2 - 6548850 z + 893025 \right) + \frac{1}{893025} \left(256 e^{-z} \sqrt{\pi} \left(4 z^{27/2} - 348 z^{25/2} + 12075 z^{23/2} - 216300 z^{21/2} + 2164050 z^{19/2} - 12216960 z^{17/2} + 37361520 z^{15/2} - 55339200 z^{13/2} + 29484000 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akn1.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{893025} \left(-512 z^{12} - 38144 z^{11} - 1104384 z^{10} - 15920640 z^9 - 121455360 z^8 - 478517760 z^7 - 860670720 z^6 - 465585120 z^5 + 78764400 z^4 - 32432400 z^3 + 16216200 z^2 - 6548850 z + 893025 \right) - \frac{1}{893025} \left(128 e^z \sqrt{\pi} \left(4 z^{25/2} + 300 z^{23/2} + 8775 z^{21/2} + 128550 z^{19/2} + 1007100 z^{17/2} + 4160160 z^{15/2} + 8240400 z^{13/2} + 5896800 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akn2.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{893025} \left(-512 z^{12} + 38144 z^{11} - 1104384 z^{10} + 15920640 z^9 - 121455360 z^8 + 478517760 z^7 - 860670720 z^6 + 465585120 z^5 + 78764400 z^4 + 32432400 z^3 + 16216200 z^2 + 6548850 z + 893025 \right) + \frac{1}{893025} \left(128 e^{-z} \sqrt{\pi} \left(4 z^{25/2} - 300 z^{23/2} + 8775 z^{21/2} - 128550 z^{19/2} + 1007100 z^{17/2} - 4160160 z^{15/2} + 8240400 z^{13/2} - 5896800 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akn3.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, 1; z\right) = -\frac{1}{1786050} \left(e^z \left(1024 z^{12} + 70656 z^{11} + 1874688 z^{10} + 24422400 z^9 + 165110400 z^8 + 559198080 z^7 + 814756320 z^6 + 284679360 z^5 - 70591500 z^4 + 36004500 z^3 - 19604025 z^2 + 8334900 z - 1786050 \right) \right)$$

07.25.03.akn4.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{893025} \left(-256 z^{11} - 16000 z^{10} - 376320 z^9 - 4204800 z^8 - 23053824 z^7 - 56528640 z^6 - 42325920 z^5 + 8751600 z^4 - 4633200 z^3 + 3243240 z^2 - 2182950 z + 893025 \right) - \frac{64 e^z \sqrt{\pi} z^{11/2} \left(4 z^6 + 252 z^5 + 6003 z^4 + 68520 z^3 + 390420 z^2 + 1036800 z + 982800 \right) \operatorname{erf}(\sqrt{z})}{893025}$$

07.25.03.akn5.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{893025} (256 z^{11} - 16000 z^{10} + 376320 z^9 - 4204800 z^8 + 23053824 z^7 - 56528640 z^6 + 42325920 z^5 + 8751600 z^4 + 4633200 z^3 + 3243240 z^2 + 2182950 z + 893025) - \frac{1}{893025} 64 e^{-z} \sqrt{\pi} z^{11/2} (4 z^6 - 252 z^5 + 6003 z^4 - 68520 z^3 + 390420 z^2 - 1036800 z + 982800) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akn6.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, 2; z\right) = -\frac{1}{1786050} (e^z (1024 z^{11} + 58368 z^{10} + 1232640 z^9 + 12096000 z^8 + 56246400 z^7 + 109226880 z^6 + 50168160 z^5 - 16329600 z^4 + 11056500 z^3 - 8221500 z^2 + 5060475 z - 1786050))$$

07.25.03.akn7.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{297675} (-128 z^{10} - 6464 z^9 - 117120 z^8 - 934272 z^7 - 3169536 z^6 - 3255840 z^5 + 795600 z^4 - 514800 z^3 + 463320 z^2 - 436590 z + 297675) - \frac{32 e^z \sqrt{\pi} z^{11/2} (4 z^5 + 204 z^4 + 3759 z^3 + 30930 z^2 + 112050 z + 140400) \operatorname{erf}(\sqrt{z})}{297675}$$

07.25.03.akn8.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{32 e^{-z} \sqrt{\pi} (4 z^5 - 204 z^4 + 3759 z^3 - 30930 z^2 + 112050 z - 140400) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{297675} + \frac{1}{297675} (-128 z^{10} + 6464 z^9 - 117120 z^8 + 934272 z^7 - 3169536 z^6 + 3255840 z^5 + 795600 z^4 + 514800 z^3 + 463320 z^2 + 436590 z + 297675)$$

07.25.03.akn9.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, 3; z\right) = -\frac{1}{893025} (e^z (1024 z^{10} + 46080 z^9 + 725760 z^8 + 4838400 z^7 + 12700800 z^6 + 7620480 z^5 - 3175200 z^4 + 2721600 z^3 - 2551500 z^2 + 1984500 z - 893025))$$

07.25.03.akna.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{59535} (-64 z^9 - 2464 z^8 - 31488 z^7 - 153408 z^6 - 217056 z^5 + 61200 z^4 - 46800 z^3 + 51480 z^2 - 62370 z + 59535) - \frac{16 e^z \sqrt{\pi} z^{11/2} (4 z^4 + 156 z^3 + 2043 z^2 + 10500 z + 17550) \operatorname{erf}(\sqrt{z})}{59535}$$

07.25.03.aknb.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{1}{59535} (64z^9 - 2464z^8 + 31488z^7 - 153408z^6 + 217056z^5 + 61200z^4 + 46800z^3 + 51480z^2 + 62370z + 59535) - \frac{16e^{-z}\sqrt{\pi}z^{11/2}(4z^4 - 156z^3 + 2043z^2 - 10500z + 17550)\operatorname{erfi}(\sqrt{z})}{59535}$$

07.25.03.aknc.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = \frac{1}{297675z^3} (e^z(-1024z^{12} - 33792z^{11} - 354048z^{10} - 1297920z^9 - 1019520z^8 + 535680z^7 - 574560z^6 + 725760z^5 - 1077300z^4 + 2324700z^3 - 6081075z^2 + 12162150z - 12162150)) + \frac{286}{7z^3}$$

07.25.03.aknd.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-32z^8 - 848z^7 - 6432z^6 - 12768z^5 + 4080z^4 - 3600z^3 + 4680z^2 - 6930z + 8505}{8505} - \frac{8e^z\sqrt{\pi}z^{11/2}(4z^3 + 108z^2 + 855z + 1950)\operatorname{erf}(\sqrt{z})}{8505}$$

07.25.03.akne.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{8e^{-z}\sqrt{\pi}(4z^3 - 108z^2 + 855z - 1950)\operatorname{erfi}(\sqrt{z})z^{11/2}}{8505} + \frac{-32z^8 + 848z^7 - 6432z^6 + 12768z^5 + 4080z^4 + 3600z^3 + 4680z^2 + 6930z + 8505}{8505}$$

07.25.03.aknf.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, 5; z\right) = \frac{1144(z-17)}{7z^4} - \frac{1}{297675z^4} (4e^z(1024z^{12} + 21504z^{11} + 117504z^{10} + 122880z^9 - 86400z^8 + 155520z^7 - 514080z^6 + 2358720z^5 - 10716300z^4 + 40540500z^3 - 115540425z^2 + 218918700z - 206756550))$$

07.25.03.akng.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{945} (-16z^7 - 232z^6 - 672z^5 + 240z^4 - 240z^3 + 360z^2 - 630z + 945) - \frac{4}{945} e^z\sqrt{\pi}z^{11/2}(4z^2 + 60z + 195)\operatorname{erf}(\sqrt{z})$$

07.25.03.aknh.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{945} (16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945) - \frac{4}{945} e^{-z}\sqrt{\pi}z^{11/2}(4z^2 - 60z + 195)\operatorname{erfi}(\sqrt{z})$$

07.25.03.akni.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = \frac{2860(z^2 - 34z + 1292)}{7z^5} - \frac{1}{59535z^5} (4e^{-z} (1024z^{12} + 9216z^{11} + 16128z^{10} - 38400z^9 + 259200z^8 - 1918080z^7 + 12912480z^6 - 75116160z^5 + 364864500z^4 - 1418917500z^3 + 4141212075z^2 - 8063505450z + 7856748900))$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = -\frac{7}{2}$

07.25.03.aknj.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{10418625} (4096z^{15} + 456704z^{14} + 20932608z^{13} + 514764800z^{12} + 7440003072z^{11} + 65139554304z^{10} + 343725242880z^9 + 1053892373760z^8 + 1737376252416z^7 + 1323867767040z^6 + 333703450080z^5 + 8270262000z^4 + 162162000z^3 + 29189160z^2 + 14033250z + 10418625) + \frac{1}{10418625} (1024e^z \sqrt{\pi} (4z^{31/2} + 448z^{29/2} + 20663z^{27/2} + 512703z^{25/2} + 7507296z^{23/2} + 67017888z^{21/2} + 364385952z^{19/2} + 1172374560z^{17/2} + 2098172160z^{15/2} + 1863025920z^{13/2} + 655724160z^{11/2} + 51891840z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aknk.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{10418625} (-4096z^{15} + 456704z^{14} - 20932608z^{13} + 514764800z^{12} - 7440003072z^{11} + 65139554304z^{10} - 343725242880z^9 + 1053892373760z^8 - 1737376252416z^7 + 1323867767040z^6 - 333703450080z^5 + 8270262000z^4 - 162162000z^3 + 29189160z^2 - 14033250z + 10418625) + \frac{1}{10418625} (1024e^{-z} \sqrt{\pi} (4z^{31/2} - 448z^{29/2} + 20663z^{27/2} - 512703z^{25/2} + 7507296z^{23/2} - 67017888z^{21/2} + 364385952z^{19/2} - 1172374560z^{17/2} + 2098172160z^{15/2} - 1863025920z^{13/2} + 655724160z^{11/2} - 51891840z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aknl.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{1488375} (-2048z^{14} - 205824z^{13} - 8409088z^{12} - 181800960z^{11} - 2269550592z^{10} - 16764218880z^9 - 72219444480z^8 - 172073922048z^7 - 202941123840z^6 - 93522068640z^5 - 8270262000z^4 + 162162000z^3 + 9729720z^2 + 2806650z + 1488375) - \frac{1}{1488375} (512e^z \sqrt{\pi} (4z^{29/2} + 404z^{27/2} + 16623z^{25/2} + 363096z^{23/2} + 4602528z^{21/2} + 34800192z^{19/2} + 155584800z^{17/2} + 394450560z^{15/2} + 520369920z^{13/2} + 301916160z^{11/2} + 51891840z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aknm.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{1488375} \left(-2048 z^{14} + 205824 z^{13} - 8409088 z^{12} + 181800960 z^{11} - 2269550592 z^{10} + 16764218880 z^9 - \right.$$

$$\left. 72219444480 z^8 + 172073922048 z^7 - 202941123840 z^6 + 93522068640 z^5 - \right.$$

$$\left. 8270262000 z^4 - 162162000 z^3 + 9729720 z^2 - 2806650 z + 1488375 \right) +$$

$$\frac{1}{1488375} \left(512 e^{-z} \sqrt{\pi} \left(4 z^{29/2} - 404 z^{27/2} + 16623 z^{25/2} - 363096 z^{23/2} + 4602528 z^{21/2} - 34800192 z^{19/2} + \right. \right.$$

$$\left. 155584800 z^{17/2} - 394450560 z^{15/2} + 520369920 z^{13/2} - 301916160 z^{11/2} + 51891840 z^{9/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aknn.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{297675} \left(1024 z^{13} + 91648 z^{12} + 3288576 z^{11} + 61347840 z^{10} + 645527040 z^9 + 3890384640 z^8 + 13026811392 z^7 + \right.$$

$$\left. 22263171840 z^6 + 16047551520 z^5 + 2756754000 z^4 - 162162000 z^3 + 9729720 z^2 + 935550 z + 297675 \right) +$$

$$\frac{1}{297675} \left(256 e^z \sqrt{\pi} \left(4 z^{27/2} + 360 z^{25/2} + 13023 z^{23/2} + 245889 z^{21/2} + 2635416 z^{19/2} + 16352280 z^{17/2} + \right. \right.$$

$$\left. 57471120 z^{15/2} + 107094960 z^{13/2} + 91990080 z^{11/2} + 25945920 z^{9/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.akno.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{297675} \left(-1024 z^{13} + 91648 z^{12} - 3288576 z^{11} + 61347840 z^{10} - 645527040 z^9 + 3890384640 z^8 - 13026811392 z^7 + \right.$$

$$\left. 22263171840 z^6 - 16047551520 z^5 + 2756754000 z^4 + 162162000 z^3 + 9729720 z^2 - 935550 z + 297675 \right) +$$

$$\frac{1}{297675} \left(256 e^{-z} \sqrt{\pi} \left(4 z^{27/2} - 360 z^{25/2} + 13023 z^{23/2} - 245889 z^{21/2} + 2635416 z^{19/2} - 16352280 z^{17/2} + \right. \right.$$

$$\left. 57471120 z^{15/2} - 107094960 z^{13/2} + 91990080 z^{11/2} - 25945920 z^{9/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aknp.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{99225} \left(-512 z^{12} - 40192 z^{11} - 1242624 z^{10} - 19509760 z^9 - 167258880 z^8 - 782756352 z^7 - 1881035520 z^6 - \right.$$

$$\left. 1976214240 z^5 - 551350800 z^4 + 54054000 z^3 - 9729720 z^2 + 935550 z + 99225 \right) -$$

$$\frac{1}{99225} \left(128 e^z \sqrt{\pi} \left(4 z^{25/2} + 316 z^{23/2} + 9863 z^{21/2} + 157122 z^{19/2} + 1378440 z^{17/2} + \right. \right.$$

$$\left. 6703200 z^{15/2} + 17251920 z^{13/2} + 20835360 z^{11/2} + 8648640 z^{9/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.aknq.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{99225} \left(-512 z^{12} + 40192 z^{11} - 1242624 z^{10} + 19509760 z^9 - 167258880 z^8 + 782756352 z^7 - 1881035520 z^6 + 1976214240 z^5 - 551350800 z^4 - 54054000 z^3 - 9729720 z^2 - 935550 z + 99225 \right) + \frac{1}{99225} \left(128 e^{-z} \sqrt{\pi} \left(4 z^{25/2} - 316 z^{23/2} + 9863 z^{21/2} - 157122 z^{19/2} + 1378440 z^{17/2} - 6703200 z^{15/2} + 17251920 z^{13/2} - 20835360 z^{11/2} + 8648640 z^{9/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aknr.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{99225} \left(256 z^{11} + 17280 z^{10} + 448640 z^9 + 5725440 z^8 + 38029824 z^7 + 127545600 z^6 + 188828640 z^5 + 78764400 z^4 - 10810800 z^3 + 3243240 z^2 - 935550 z + 99225 \right) + \frac{1}{99225} \left(64 e^z \sqrt{\pi} \left(4 z^{23/2} + 272 z^{21/2} + 7143 z^{19/2} + 92835 z^{17/2} + 635760 z^{15/2} + 2252880 z^{13/2} + 3734640 z^{11/2} + 2162160 z^{9/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akns.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{99225} \left(-256 z^{11} + 17280 z^{10} - 448640 z^9 + 5725440 z^8 - 38029824 z^7 + 127545600 z^6 - 188828640 z^5 + 78764400 z^4 + 10810800 z^3 + 3243240 z^2 + 935550 z + 99225 \right) + \frac{1}{99225} \left(64 e^{-z} \sqrt{\pi} \left(4 z^{23/2} - 272 z^{21/2} + 7143 z^{19/2} - 92835 z^{17/2} + 635760 z^{15/2} - 2252880 z^{13/2} + 3734640 z^{11/2} - 2162160 z^{9/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aknt.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{198450} \left(e^z \left(512 z^{11} + 32000 z^{10} + 761344 z^9 + 8785152 z^8 + 51807168 z^7 + 150081120 z^6 + 182256480 z^5 + 51211440 z^4 - 9690030 z^3 + 3467205 z^2 - 1134000 z + 198450 \right) \right)$$

07.25.03.aknu.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{32 e^z \sqrt{\pi} \left(4 z^6 + 228 z^5 + 4863 z^4 + 49068 z^3 + 243216 z^2 + 550368 z + 432432 \right) \operatorname{erf}(\sqrt{z}) z^{9/2}}{99225} + \frac{1}{99225} \left(128 z^{10} + 7232 z^9 + 152064 z^8 + 1497600 z^7 + 7101696 z^6 + 14650272 z^5 + 8751600 z^4 - 1544400 z^3 + 648648 z^2 - 311850 z + 99225 \right)$$

07.25.03.aknv.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{99225} (128 z^{10} - 7232 z^9 + 152064 z^8 - 1497600 z^7 + 7101696 z^6 - 14650272 z^5 + 8751600 z^4 + 1544400 z^3 + 648648 z^2 + 311850 z + 99225) - \frac{32 e^{-z} \sqrt{\pi} z^{9/2} (4 z^6 - 228 z^5 + 4863 z^4 - 49068 z^3 + 243216 z^2 - 550368 z + 432432) \operatorname{erfi}(\sqrt{z})}{99225}$$

07.25.03.aknw.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{198450} (e^z (512 z^{10} + 26368 z^9 + 497664 z^8 + 4306176 z^7 + 17357760 z^6 + 28576800 z^5 + 10795680 z^4 - 2766960 z^3 + 1377810 z^2 - 666225 z + 198450))$$

07.25.03.aknx.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{16 e^z \sqrt{\pi} (4 z^5 + 184 z^4 + 3023 z^3 + 21861 z^2 + 68328 z + 72072) \operatorname{erf}(\sqrt{z}) z^{9/2}}{33075} + \frac{1}{33075} (64 z^9 + 2912 z^8 + 46944 z^7 + 327680 z^6 + 949536 z^5 + 795600 z^4 - 171600 z^3 + 92664 z^2 - 62370 z + 33075)$$

07.25.03.akny.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{16 e^{-z} \sqrt{\pi} (4 z^5 - 184 z^4 + 3023 z^3 - 21861 z^2 + 68328 z - 72072) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{33075} + \frac{1}{33075} (-64 z^9 + 2912 z^8 - 46944 z^7 + 327680 z^6 - 949536 z^5 + 795600 z^4 + 171600 z^3 + 92664 z^2 + 62370 z + 33075)$$

07.25.03.aknz.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{99225} (e^z (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + 408240 z^2 - 255150 z + 99225))$$

07.25.03.ako0.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{8 e^z \sqrt{\pi} (4 z^4 + 140 z^3 + 1623 z^2 + 7254 z + 10296) \operatorname{erf}(\sqrt{z}) z^{9/2}}{6615} + \frac{32 z^8 + 1104 z^7 + 12448 z^6 + 52320 z^5 + 61200 z^4 - 15600 z^3 + 10296 z^2 - 8910 z + 6615}{6615}$$

07.25.03.ako1.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{32 z^8 - 1104 z^7 + 12448 z^6 - 52320 z^5 + 61200 z^4 + 15600 z^3 + 10296 z^2 + 8910 z + 6615}{6615} - \frac{8 e^{-z} \sqrt{\pi} z^{9/2} (4 z^4 - 140 z^3 + 1623 z^2 - 7254 z + 10296) \operatorname{erfi}(\sqrt{z})}{6615}$$

$$\begin{aligned}
 & \text{07.25.03.ako2.01} \\
 {}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = & \\
 & \frac{1}{33075 z^3} \left(e^z (512 z^{11} + 15104 z^{10} + 139264 z^9 + 440064 z^8 + 289728 z^7 - 122976 z^6 + 102816 z^5 - 105840 z^4 + \right. \\
 & \left. 168210 z^3 - 405405 z^2 + 810810 z - 810810) \right) + \frac{858}{35 z^3}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ako3.01} \\
 {}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = & \frac{4}{945} e^z \sqrt{\pi} (4 z^3 + 96 z^2 + 663 z + 1287) \operatorname{erf}(\sqrt{z}) z^{9/2} + \\
 & \frac{1}{945} (16 z^7 + 376 z^6 + 2472 z^5 + 4080 z^4 - 1200 z^3 + 936 z^2 - 990 z + 945)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ako4.01} \\
 {}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = & \frac{4}{945} e^{-z} \sqrt{\pi} (4 z^3 - 96 z^2 + 663 z - 1287) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \\
 & \frac{1}{945} (-16 z^7 + 376 z^6 - 2472 z^5 + 4080 z^4 + 1200 z^3 + 936 z^2 + 990 z + 945)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ako5.01} \\
 {}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = & \\
 & \frac{3432(z-15)}{35 z^4} + \frac{1}{33075 z^4} (4 e^z (512 z^{11} + 9472 z^{10} + 44544 z^9 + 39168 z^8 - 23616 z^7 + 42336 z^6 - 151200 z^5 + \\
 & 650160 z^4 - 2432430 z^3 + 6891885 z^2 - 12972960 z + 12162150))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ako6.01} \\
 {}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = & \frac{2}{105} e^z \sqrt{\pi} (4 z^2 + 52 z + 143) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{105} (8 z^6 + 100 z^5 + 240 z^4 - 80 z^3 + 72 z^2 - 90 z + 105)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ako7.01} \\
 {}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = & \\
 & \frac{1}{105} (8 z^6 - 100 z^5 + 240 z^4 + 80 z^3 + 72 z^2 + 90 z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} z^{9/2} (4 z^2 - 52 z + 143) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ako8.01} \\
 {}_2F_2\left(3, \frac{11}{2}; -\frac{7}{2}, 6; z\right) = & \\
 & \frac{1716(z^2 - 30z + 1020)}{7 z^5} + \frac{1}{6615 z^5} (4 e^z (512 z^{11} + 3840 z^{10} + 6144 z^9 - 16128 z^8 + 105408 z^7 - 695520 z^6 + \\
 & 4021920 z^5 - 19459440 z^4 + 75405330 z^3 - 219324105 z^2 + 425675250 z - 413513100))
 \end{aligned}$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = -\frac{5}{2}$

07.25.03.ako9.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{212\,625} (1024 z^{13} + 92\,672 z^{12} + 3\,371\,008 z^{11} + 63\,977\,472 z^{10} + 688\,507\,392 z^9 + 4\,279\,246\,080 z^8 + 14\,991\,450\,624 z^7 + 27\,582\,605\,568 z^6 + 22\,999\,062\,240 z^5 + 6\,226\,521\,840 z^4 + 162\,162\,000 z^3 + 3\,243\,240 z^2 + 561\,330 z + 212\,625) +$$

$$\frac{1}{212\,625} \left(256 e^z \sqrt{\pi} (4 z^{27/2} + 364 z^{25/2} + 13\,347 z^{23/2} + 256\,320 z^{21/2} + 2\,808\,288 z^{19/2} + 17\,950\,464 z^{17/2} + 65\,832\,480 z^{15/2} + 131\,120\,640 z^{13/2} + 127\,008\,000 z^{11/2} + 47\,900\,160 z^{9/2} + 3\,991\,680 z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ako10.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{212\,625} (-1024 z^{13} + 92\,672 z^{12} - 3\,371\,008 z^{11} + 63\,977\,472 z^{10} - 688\,507\,392 z^9 + 4\,279\,246\,080 z^8 - 14\,991\,450\,624 z^7 + 27\,582\,605\,568 z^6 - 22\,999\,062\,240 z^5 + 6\,226\,521\,840 z^4 - 162\,162\,000 z^3 + 3\,243\,240 z^2 - 561\,330 z + 212\,625) +$$

$$\frac{1}{212\,625} \left(256 e^{-z} \sqrt{\pi} (4 z^{27/2} - 364 z^{25/2} + 13\,347 z^{23/2} - 256\,320 z^{21/2} + 2\,808\,288 z^{19/2} - 17\,950\,464 z^{17/2} + 65\,832\,480 z^{15/2} - 131\,120\,640 z^{13/2} + 127\,008\,000 z^{11/2} - 47\,900\,160 z^{9/2} + 3\,991\,680 z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akob.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{42\,525} (-512 z^{12} - 41\,216 z^{11} - 1\,314\,816 z^{10} - 21\,490\,176 z^9 - 194\,430\,720 z^8 - 982\,319\,616 z^7 - 2\,659\,716\,864 z^6 - 3\,475\,755\,360 z^5 - 1\,734\,883\,920 z^4 - 162\,162\,000 z^3 + 3\,243\,240 z^2 + 187\,110 z + 42\,525) -$$

$$\frac{1}{42\,525} \left(128 e^z \sqrt{\pi} (4 z^{25/2} + 324 z^{23/2} + 10\,431 z^{21/2} + 172\,872 z^{19/2} + 1\,598\,184 z^{17/2} + 8\,361\,360 z^{15/2} + 24\,025\,680 z^{13/2} + 35\,017\,920 z^{11/2} + 21\,954\,240 z^{9/2} + 3\,991\,680 z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akoc.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{42\,525} (-512 z^{12} + 41\,216 z^{11} - 1\,314\,816 z^{10} + 21\,490\,176 z^9 - 194\,430\,720 z^8 + 982\,319\,616 z^7 - 2\,659\,716\,864 z^6 + 3\,475\,755\,360 z^5 - 1\,734\,883\,920 z^4 + 162\,162\,000 z^3 + 3\,243\,240 z^2 - 187\,110 z + 42\,525) +$$

$$\frac{1}{42\,525} \left(128 e^{-z} \sqrt{\pi} (4 z^{25/2} - 324 z^{23/2} + 10\,431 z^{21/2} - 172\,872 z^{19/2} + 1\,598\,184 z^{17/2} - 8\,361\,360 z^{15/2} + 24\,025\,680 z^{13/2} - 35\,017\,920 z^{11/2} + 21\,954\,240 z^{9/2} - 3\,991\,680 z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akod.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{14175} (256 z^{11} + 18048 z^{10} + 495104 z^9 + 6792960 z^8 + 49890816 z^7 + 194670336 z^6 + 374885280 z^5 +$$

$$295883280 z^4 + 54054000 z^3 - 3243240 z^2 + 187110 z + 14175) +$$

$$\frac{1}{14175} (64 e^z \sqrt{\pi} (4 z^{23/2} + 284 z^{21/2} + 7875 z^{19/2} + 109872 z^{17/2} + 829080 z^{15/2} +$$

$$3386880 z^{13/2} + 7091280 z^{11/2} + 6652800 z^{9/2} + 1995840 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akoe.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{14175} (-256 z^{11} + 18048 z^{10} - 495104 z^9 + 6792960 z^8 - 49890816 z^7 + 194670336 z^6 - 374885280 z^5 +$$

$$295883280 z^4 - 54054000 z^3 - 3243240 z^2 - 187110 z + 14175) +$$

$$\frac{1}{14175} (64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 284 z^{21/2} + 7875 z^{19/2} - 109872 z^{17/2} + 829080 z^{15/2} -$$

$$3386880 z^{13/2} + 7091280 z^{11/2} - 6652800 z^{9/2} + 1995840 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.akof.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{14175} (-128 z^{10} - 7744 z^9 - 177920 z^8 - 1976832 z^7 - 11187456 z^6 - 31009440 z^5 - 36186480 z^4 -$$

$$10810800 z^3 + 1081080 z^2 - 187110 z + 14175) - \frac{1}{14175} (32 e^z \sqrt{\pi}$$

$$(4 z^{21/2} + 244 z^{19/2} + 5679 z^{17/2} + 64440 z^{15/2} + 378000 z^{13/2} + 1118880 z^{11/2} + 1496880 z^{9/2} + 665280 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akog.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) =$$

$$\frac{1}{14175} (-128 z^{10} + 7744 z^9 - 177920 z^8 + 1976832 z^7 - 11187456 z^6 + 31009440 z^5 - 36186480 z^4 +$$

$$10810800 z^3 + 1081080 z^2 + 187110 z + 14175) + \frac{1}{14175} (32 e^{-z} \sqrt{\pi}$$

$$(4 z^{21/2} - 244 z^{19/2} + 5679 z^{17/2} - 64440 z^{15/2} + 378000 z^{13/2} - 1118880 z^{11/2} + 1496880 z^{9/2} - 665280 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.akoh.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, 1; z\right) =$$

$$-\frac{1}{28350} (e^z (256 z^{10} + 14336 z^9 + 301824 z^8 + 3034368 z^7 + 15283296 z^6 + 36832320 z^5 + 35879760 z^4 +$$

$$7665840 z^3 - 1012095 z^2 + 215460 z - 28350))$$

07.25.03.akoi.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{14175} \frac{(-64 z^9 - 3232 z^8 - 59904 z^7 - 510720 z^6 - 2044896 z^5 - 3429360 z^4 - 1544400 z^3 + 216216 z^2 - 62370 z + 14175) - 16 e^z \sqrt{\pi} z^{7/2} (4 z^6 + 204 z^5 + 3843 z^4 + 33696 z^3 + 142128 z^2 + 266112 z + 166320) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.akoj.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{14175} \frac{(64 z^9 - 3232 z^8 + 59904 z^7 - 510720 z^6 + 2044896 z^5 - 3429360 z^4 + 1544400 z^3 + 216216 z^2 + 62370 z + 14175) - 16 e^{-z} \sqrt{\pi} z^{7/2} (4 z^6 - 204 z^5 + 3843 z^4 - 33696 z^3 + 142128 z^2 - 266112 z + 166320) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.akok.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, 2; z\right) = -\frac{1}{28350} (e^z (256 z^9 + 11776 z^8 + 195840 z^7 + 1467648 z^6 + 5009760 z^5 + 6773760 z^4 + 2010960 z^3 - 378000 z^2 + 121905 z - 28350))$$

07.25.03.akol.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-32 z^8 - 1296 z^7 - 18304 z^6 - 109536 z^5 - 263376 z^4 - 171600 z^3 + 30888 z^2 - 12474 z + 4725}{4725} - \frac{8 e^z \sqrt{\pi} z^{7/2} (4 z^5 + 164 z^4 + 2367 z^3 + 14760 z^2 + 38808 z + 33264) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.akom.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{8 e^{-z} \sqrt{\pi} (4 z^5 - 164 z^4 + 2367 z^3 - 14760 z^2 + 38808 z - 33264) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{4725} + \frac{-32 z^8 + 1296 z^7 - 18304 z^6 + 109536 z^5 - 263376 z^4 + 171600 z^3 + 30888 z^2 + 12474 z + 4725}{4725}$$

07.25.03.akon.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = -\frac{1}{14175} e^z (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175)$$

07.25.03.akoo.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{945} (-16 z^7 - 488 z^6 - 4768 z^5 - 16848 z^4 - 15600 z^3 + 3432 z^2 - 1782 z + 945) - \frac{4}{945} e^z \sqrt{\pi} z^{7/2} (4 z^4 + 124 z^3 + 1251 z^2 + 4752 z + 5544) \operatorname{erf}(\sqrt{z})$$

07.25.03.akop.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{945} (16z^7 - 488z^6 + 4768z^5 - 16848z^4 + 15600z^3 + 3432z^2 + 1782z + 945) - \frac{4}{945} e^{-z} \sqrt{\pi} z^{7/2} (4z^4 - 124z^3 + 1251z^2 - 4752z + 5544) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akoq.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = \frac{1}{4725z^3} (e^z (-256z^{10} - 6656z^9 - 52992z^8 - 140544z^7 - 74592z^6 + 24192z^5 - 15120z^4 + 15120z^3 - 31185z^2 + 62370z - 62370)) + \frac{66}{5z^3}$$

07.25.03.akor.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{135} (-8z^6 - 164z^5 - 912z^4 - 1200z^3 + 312z^2 - 198z + 135) - \frac{2}{135} e^z \sqrt{\pi} z^{7/2} (4z^3 + 84z^2 + 495z + 792) \operatorname{erf}(\sqrt{z})$$

07.25.03.akos.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{2}{135} e^{-z} \sqrt{\pi} (4z^3 - 84z^2 + 495z - 792) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{135} (-8z^6 + 164z^5 - 912z^4 + 1200z^3 + 312z^2 + 198z + 135)$$

07.25.03.akot.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, 5; z\right) = \frac{264(z-13)}{5z^4} - \frac{1}{4725z^4} (4e^z (256z^{10} + 4096z^9 + 16128z^8 + 11520z^7 - 6048z^6 + 12096z^5 - 45360z^4 + 166320z^3 - 467775z^2 + 873180z - 810810))$$

07.25.03.akou.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{15} (-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) - \frac{1}{15} e^z \sqrt{\pi} z^{7/2} (4z^2 + 44z + 99) \operatorname{erf}(\sqrt{z})$$

07.25.03.akov.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{15} (4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) - \frac{1}{15} e^{-z} \sqrt{\pi} z^{7/2} (4z^2 - 44z + 99) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akow.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{5}{2}, 6; z\right) = \frac{132(z^2 - 26z + 780)}{z^5} - \frac{1}{945z^5} (4e^z (256z^{10} + 1536z^9 + 2304z^8 - 6912z^7 + 42336z^6 - 241920z^5 + 1164240z^4 - 4490640z^3 + 13004145z^2 - 25135110z + 24324300))$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.akox.01} \\
 & {}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{8505} (256 z^{11} + 18304 z^{10} + 511104 z^9 + 7176192 z^8 + 54392064 z^7 + 222227712 z^6 + 461166048 z^5 + \\
 & \quad 421530480 z^4 + 121519440 z^3 + 3243240 z^2 + 62370 z + 8505) + \\
 & \frac{1}{8505} \left(64 e^z \sqrt{\pi} (4 z^{23/2} + 288 z^{21/2} + 8127 z^{19/2} + 115983 z^{17/2} + 902286 z^{15/2} + 3849930 z^{13/2} + \right. \\
 & \quad \left. 8625960 z^{11/2} + 9140040 z^{9/2} + 3674160 z^{7/2} + 317520 z^{5/2}) \operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.akoy.01} \\
 & {}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \\
 & \frac{1}{8505} (-256 z^{11} + 18304 z^{10} - 511104 z^9 + 7176192 z^8 - 54392064 z^7 + 222227712 z^6 - 461166048 z^5 + \\
 & \quad 421530480 z^4 - 121519440 z^3 + 3243240 z^2 - 62370 z + 8505) + \\
 & \frac{1}{8505} \left(64 e^{-z} \sqrt{\pi} (4 z^{23/2} - 288 z^{21/2} + 8127 z^{19/2} - 115983 z^{17/2} + 902286 z^{15/2} - 3849930 z^{13/2} + \right. \\
 & \quad \left. 8625960 z^{11/2} - 9140040 z^{9/2} + 3674160 z^{7/2} - 317520 z^{5/2}) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.ako.01} \\
 & {}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{2835} (-128 z^{10} - 8000 z^9 - 191616 z^8 - 2250624 z^7 - 13778688 z^6 - 43140384 z^5 - 62823600 z^4 - \\
 & \quad 33732720 z^3 - 3243240 z^2 + 62370 z + 2835) - \\
 & \frac{1}{2835} \left(32 e^z \sqrt{\pi} (4 z^{21/2} + 252 z^{19/2} + 6111 z^{17/2} + 73206 z^{15/2} + 463050 z^{13/2} + 1534680 z^{11/2} + \right. \\
 & \quad \left. 2487240 z^{9/2} + 1678320 z^{7/2} + 317520 z^{5/2}) \operatorname{erf}(\sqrt{z})\right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.akp0.01} \\
 & {}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \\
 & \frac{1}{2835} (-128 z^{10} + 8000 z^9 - 191616 z^8 + 2250624 z^7 - 13778688 z^6 + 43140384 z^5 - 62823600 z^4 + \\
 & \quad 33732720 z^3 - 3243240 z^2 - 62370 z + 2835) + \\
 & \frac{1}{2835} \left(32 e^{-z} \sqrt{\pi} (4 z^{21/2} - 252 z^{19/2} + 6111 z^{17/2} - 73206 z^{15/2} + 463050 z^{13/2} - 1534680 z^{11/2} + \right. \\
 & \quad \left. 2487240 z^{9/2} - 1678320 z^{7/2} + 317520 z^{5/2}) \operatorname{erfi}(\sqrt{z})\right)
 \end{aligned}$$

07.25.03.akp1.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{2835} (64 z^9 + 3424 z^8 + 68448 z^7 + 647808 z^6 + 3032736 z^5 + 6659280 z^4 + 5730480 z^3 + 1081080 z^2 - 62370 z + 2835) + \frac{1}{2835} (16 e^z \sqrt{\pi} (4 z^{19/2} + 216 z^{17/2} + 4383 z^{15/2} + 42525 z^{13/2} + 207900 z^{11/2} + 495180 z^{9/2} + 506520 z^{7/2} + 158760 z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akp2.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{2835} (-64 z^9 + 3424 z^8 - 68448 z^7 + 647808 z^6 - 3032736 z^5 + 6659280 z^4 - 5730480 z^3 + 1081080 z^2 + 62370 z + 2835) + \frac{1}{2835} (16 e^{-z} \sqrt{\pi} (4 z^{19/2} - 216 z^{17/2} + 4383 z^{15/2} - 42525 z^{13/2} + 207900 z^{11/2} - 495180 z^{9/2} + 506520 z^{7/2} - 158760 z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.akp3.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{5670} (e^z (128 z^9 + 6336 z^8 + 116064 z^7 + 994896 z^6 + 4159512 z^5 + 8017380 z^4 + 5913810 z^3 + 876015 z^2 - 68040 z + 5670))$$

07.25.03.akp4.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{8 e^z \sqrt{\pi} (4 z^6 + 180 z^5 + 2943 z^4 + 21924 z^3 + 76356 z^2 + 113400 z + 52920) \operatorname{erf}(\sqrt{z}) z^{5/2}}{2835} + \frac{32 z^8 + 1424 z^7 + 22848 z^6 + 164640 z^5 + 538320 z^4 + 697680 z^3 + 216216 z^2 - 20790 z + 2835}{2835}$$

07.25.03.akp5.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{32 z^8 - 1424 z^7 + 22848 z^6 - 164640 z^5 + 538320 z^4 - 697680 z^3 + 216216 z^2 + 20790 z + 2835}{2835} - \frac{8 e^{-z} \sqrt{\pi} z^{5/2} (4 z^6 - 180 z^5 + 2943 z^4 - 21924 z^3 + 76356 z^2 - 113400 z + 52920) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.akp6.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{5670} e^z (128 z^8 + 5184 z^7 + 74592 z^6 + 472752 z^5 + 1323000 z^4 + 1402380 z^3 + 304290 z^2 - 36855 z + 5670)$$

07.25.03.akp7.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{4}{945} e^z \sqrt{\pi} (4 z^5 + 144 z^4 + 1791 z^3 + 9387 z^2 + 20034 z + 13230) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{945} (16 z^7 + 568 z^6 + 6888 z^5 + 34368 z^4 + 65760 z^3 + 30888 z^2 - 4158 z + 945)$$

07.25.03.akp8.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{4}{945} e^{-z} \sqrt{\pi} (4z^5 - 144z^4 + 1791z^3 - 9387z^2 + 20034z - 13230) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{945} (-16z^7 + 568z^6 - 6888z^5 + 34368z^4 - 65760z^3 + 30888z^2 + 4158z + 945)$$

07.25.03.akp9.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{e^z (128z^7 + 4032z^6 + 42336z^5 + 176400z^4 + 264600z^3 + 79380z^2 - 13230z + 2835)}{2835}$$

07.25.03.akpa.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{2}{189} e^z \sqrt{\pi} (4z^4 + 108z^3 + 927z^2 + 2898z + 2646) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{189} (8z^6 + 212z^5 + 1752z^4 + 5016z^3 + 3432z^2 - 594z + 189)$$

07.25.03.akpb.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{189} (8z^6 - 212z^5 + 1752z^4 - 5016z^3 + 3432z^2 + 594z + 189) - \frac{2}{189} e^{-z} \sqrt{\pi} z^{5/2} (4z^4 - 108z^3 + 927z^2 - 2898z + 2646) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akpc.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{945 z^3} e^z (128z^9 + 2880z^8 + 19296z^7 + 41328z^6 + 16632z^5 - 3780z^4 + 1890z^3 - 2835z^2 + 5670z - 5670) + \frac{6}{z^3}$$

07.25.03.akpd.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{27} e^z \sqrt{\pi} (4z^3 + 72z^2 + 351z + 441) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{27} (4z^5 + 70z^4 + 318z^3 + 312z^2 - 66z + 27)$$

07.25.03.akpe.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{27} e^{-z} \sqrt{\pi} (4z^3 - 72z^2 + 351z - 441) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{27} (-4z^5 + 70z^4 - 318z^3 + 312z^2 + 66z + 27)$$

07.25.03.akpf.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = \frac{24(z-11)}{z^4} + \frac{1}{945 z^4} 4 e^z (128z^9 + 1728z^8 + 5472z^7 + 3024z^6 - 1512z^5 + 3780z^4 - 13230z^3 + 36855z^2 - 68040z + 62370)$$

07.25.03.akpg.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{6} e^z \sqrt{\pi} (4z^2 + 36z + 63) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{3} (2z^4 + 17z^3 + 24z^2 - 6z + 3)$$

07.25.03.akph.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{3} (2z^4 - 17z^3 + 24z^2 + 6z + 3) - \frac{1}{6} e^{-z} \sqrt{\pi} z^{5/2} (4z^2 - 36z + 63) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akpi.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{3}{2}, 6; z\right) = \frac{60(z^2 - 22z + 572)}{z^5} + \frac{1}{189z^5} 4e^z (128z^9 + 576z^8 + 864z^7 - 3024z^6 + 16632z^5 - 79380z^4 + 304290z^3 - 876015z^2 + 1683990z - 1621620)$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = -\frac{1}{2}$

07.25.03.akpj.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} (64z^9 + 3488z^8 + 71424z^7 + 698432z^6 + 3428832z^5 + 8129520z^4 + 8126160z^3 + 2436840z^2 + 62370z + 945) + \frac{16}{945} e^z \sqrt{\pi} (4z^{19/2} + 220z^{17/2} + 4571z^{15/2} + 45780z^{13/2} + 234150z^{11/2} + 598080z^{9/2} + 693000z^{7/2} + 292320z^{5/2} + 25200z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akpk.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945} (-64z^9 + 3488z^8 - 71424z^7 + 698432z^6 - 3428832z^5 + 8129520z^4 - 8126160z^3 + 2436840z^2 - 62370z + 945) + \frac{16}{945} e^{-z} \sqrt{\pi} (4z^{19/2} - 220z^{17/2} + 4571z^{15/2} - 45780z^{13/2} + 234150z^{11/2} - 598080z^{9/2} + 693000z^{7/2} - 292320z^{5/2} + 25200z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akpl.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{945} (-32z^8 - 1488z^7 - 25312z^6 - 198048z^5 - 735120z^4 - 1197840z^3 - 677880z^2 - 62370z + 945) - \frac{8}{945} e^z \sqrt{\pi} (4z^{17/2} + 188z^{15/2} + 3255z^{13/2} + 26250z^{11/2} + 102900z^{9/2} + 186480z^{7/2} + 133560z^{5/2} + 25200z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akpm.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} (-32z^8 + 1488z^7 - 25312z^6 + 198048z^5 - 735120z^4 + 1197840z^3 - 677880z^2 + 62370z + 945) + \frac{8}{945} e^{-z} \sqrt{\pi} (4z^{17/2} - 188z^{15/2} + 3255z^{13/2} - 26250z^{11/2} + 102900z^{9/2} - 186480z^{7/2} + 133560z^{5/2} - 25200z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akpn.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = -\frac{1}{1890} e^z (64z^8 + 2752z^7 + 42896z^6 + 304416z^5 + 1014300z^4 + 1472940z^3 + 747495z^2 + 64260z - 1890)$$

07.25.03.akpo.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{945} (-16z^7 - 616z^6 - 8352z^5 - 49200z^4 - 125040z^3 - 115416z^2 - 20790z + 945) - \frac{4}{945} e^z \sqrt{\pi} z^{3/2} (4z^6 + 156z^5 + 2163z^4 + 13272z^3 + 36540z^2 + 40320z + 12600) \operatorname{erf}(\sqrt{z})$$

07.25.03.akpp.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} (16z^7 - 616z^6 + 8352z^5 - 49200z^4 + 125040z^3 - 115416z^2 + 20790z + 945) - \frac{4}{945} e^{-z} \sqrt{\pi} z^{3/2} (4z^6 - 156z^5 + 2163z^4 - 13272z^3 + 36540z^2 - 40320z + 12600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akpq.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = -\frac{e^z (64z^7 + 2240z^6 + 27216z^5 + 141120z^4 + 308700z^3 + 238140z^2 + 33075z - 1890)}{1890}$$

07.25.03.akpr.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{315} (-8z^6 - 244z^5 - 2472z^4 - 9880z^3 - 14088z^2 - 4158z + 315) - \frac{2}{315} e^z \sqrt{\pi} z^{3/2} (4z^5 + 124z^4 + 1295z^3 + 5502z^2 + 9030z + 4200) \operatorname{erf}(\sqrt{z})$$

07.25.03.akps.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{2}{315} e^{-z} \sqrt{\pi} (4z^5 - 124z^4 + 1295z^3 - 5502z^2 + 9030z - 4200) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{315} (-8z^6 + 244z^5 - 2472z^4 + 9880z^3 - 14088z^2 + 4158z + 315)$$

07.25.03.akpt.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = -\frac{1}{945} e^z (64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945)$$

07.25.03.akpu.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{63} (-4z^5 - 90z^4 - 608z^3 - 1332z^2 - 594z + 63) - \frac{1}{63} e^z \sqrt{\pi} z^{3/2} (4z^4 + 92z^3 + 651z^2 + 1596z + 1050) \operatorname{erf}(\sqrt{z})$$

07.25.03.akpv.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{63} (4z^5 - 90z^4 + 608z^3 - 1332z^2 + 594z + 63) - \frac{1}{63} e^{-z} \sqrt{\pi} z^{3/2} (4z^4 - 92z^3 + 651z^2 - 1596z + 1050) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akpw.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = \frac{e^z (-64z^8 - 1216z^7 - 6608z^6 - 10752z^5 - 2940z^4 + 420z^3 - 315z^2 + 630z - 630)}{315z^3} + \frac{2}{z^3}$$

07.25.03.akpx.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{9} (-2z^4 - 29z^3 - 102z^2 - 66z + 9) - \frac{1}{18} e^z \sqrt{\pi} z^{3/2} (4z^3 + 60z^2 + 231z + 210) \operatorname{erf}(\sqrt{z})$$

07.25.03.akpy.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{18} e^{-z} \sqrt{\pi} (4z^3 - 60z^2 + 231z - 210) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{9} (-2z^4 + 29z^3 - 102z^2 + 66z + 9)$$

07.25.03.akpz.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = \frac{8(z-9)}{z^4} - \frac{4e^z(64z^8 + 704z^7 + 1680z^6 + 672z^5 - 420z^4 + 1260z^3 - 3465z^2 + 6300z - 5670)}{315z^4}$$

07.25.03.akq0.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{2} (-2z^3 - 13z^2 - 12z + 2) - \frac{1}{4} e^z \sqrt{\pi} z^{3/2} (4z^2 + 28z + 35) \operatorname{erf}(\sqrt{z})$$

07.25.03.akq1.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{2} (2z^3 - 13z^2 + 12z + 2) - \frac{1}{4} e^{-z} \sqrt{\pi} z^{3/2} (4z^2 - 28z + 35) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akq2.01

$${}_2F_2\left(3, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = \frac{20(z^2 - 18z + 396)}{z^5} - \frac{4e^z(64z^8 + 192z^7 + 336z^6 - 1344z^5 + 6300z^4 - 23940z^3 + 68355z^2 - 130410z + 124740)}{63z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = \frac{1}{2}$

07.25.03.akq3.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{945} (16z^7 + 632z^6 + 8872z^5 + 54960z^4 + 151440z^3 + 163560z^2 + 47970z + 945) + \frac{4}{945} e^z \sqrt{\pi} (4z^{15/2} + 160z^{13/2} + 2295z^{11/2} + 14775z^{9/2} + 43800z^{7/2} + 55080z^{5/2} + 23400z^{3/2} + 1800\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akq4.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} (-16z^7 + 632z^6 - 8872z^5 + 54960z^4 - 151440z^3 + 163560z^2 - 47970z + 945) + \frac{4}{945} e^{-z} \sqrt{\pi} (4z^{15/2} - 160z^{13/2} + 2295z^{11/2} - 14775z^{9/2} + 43800z^{7/2} - 55080z^{5/2} + 23400z^{3/2} - 1800\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akq5.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, 1; z\right) = \frac{e^z(32z^7 + 1168z^6 + 15024z^5 + 84600z^4 + 211050z^3 + 208845z^2 + 60480z + 1890)}{1890}$$

07.25.03.akq6.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{945} (8z^6 + 260z^5 + 2880z^4 + 13200z^3 + 24072z^2 + 13590z + 945) + \frac{2}{945} e^z \sqrt{\pi} \sqrt{z} (4z^6 + 132z^5 + 1503z^4 + 7260z^3 + 14760z^2 + 10800z + 1800) \operatorname{erf}(\sqrt{z})$$

07.25.03.akq7.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} (8z^6 - 260z^5 + 2880z^4 - 13200z^3 + 24072z^2 - 13590z + 945) - \frac{2}{945} e^{-z} \sqrt{\pi} \sqrt{z} (4z^6 - 132z^5 + 1503z^4 - 7260z^3 + 14760z^2 - 10800z + 1800) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akq8.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{e^z (32 z^6 + 944 z^5 + 9360 z^4 + 37800 z^3 + 59850 z^2 + 29295 z + 1890)}{1890}$$

07.25.03.akq9.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{315} (4 z^5 + 102 z^4 + 830 z^3 + 2496 z^2 + 2358 z + 315) + \frac{1}{315} e^z \sqrt{\pi} \sqrt{z} (4 z^5 + 104 z^4 + 879 z^3 + 2865 z^2 + 3300 z + 900) \operatorname{erf}(\sqrt{z})$$

07.25.03.akqa.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{315} (-4 z^5 + 102 z^4 - 830 z^3 + 2496 z^2 - 2358 z + 315) + \frac{1}{315} e^{-z} \sqrt{\pi} \sqrt{z} (4 z^5 - 104 z^4 + 879 z^3 - 2865 z^2 + 3300 z - 900) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akqb.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, 3; z\right) = \frac{1}{945} e^z (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945)$$

07.25.03.akqc.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{63} (2 z^4 + 37 z^3 + 194 z^2 + 294 z + 63) + \frac{1}{126} e^z \sqrt{\pi} \sqrt{z} (4 z^4 + 76 z^3 + 423 z^2 + 750 z + 300) \operatorname{erf}(\sqrt{z})$$

07.25.03.akqd.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{63} (2 z^4 - 37 z^3 + 194 z^2 - 294 z + 63) - \frac{1}{126} e^{-z} \sqrt{\pi} \sqrt{z} (4 z^4 - 76 z^3 + 423 z^2 - 750 z + 300) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akqe.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, 4; z\right) = \frac{e^z (32 z^7 + 496 z^6 + 2064 z^5 + 2280 z^4 + 330 z^3 - 45 z^2 + 90 z - 90)}{315 z^3} + \frac{2}{7 z^3}$$

07.25.03.akqf.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{18} (2 z^3 + 23 z^2 + 57 z + 18) + \frac{1}{36} e^z \sqrt{\pi} \sqrt{z} (4 z^3 + 48 z^2 + 135 z + 75) \operatorname{erf}(\sqrt{z})$$

07.25.03.akqg.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{18} (-2 z^3 + 23 z^2 - 57 z + 18) + \frac{1}{36} e^{-z} \sqrt{\pi} \sqrt{z} (4 z^3 - 48 z^2 + 135 z - 75) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akqh.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{8(z-7)}{7 z^4} + \frac{4 e^z (32 z^7 + 272 z^6 + 432 z^5 + 120 z^4 - 150 z^3 + 405 z^2 - 720 z + 630)}{315 z^4}$$

07.25.03.akqi.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{4} (2 z^2 + 9 z + 4) + \frac{1}{8} e^z \sqrt{\pi} \sqrt{z} (4 z^2 + 20 z + 15) \operatorname{erf}(\sqrt{z})$$

07.25.03.akqj.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{4} (2 z^2 - 9 z + 4) - \frac{1}{8} e^{-z} \sqrt{\pi} \sqrt{z} (4 z^2 - 20 z + 15) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akqk.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \frac{20(z^2 - 14z + 252)}{7z^5} + \frac{4e^z(32z^7 + 48z^6 + 144z^5 - 600z^4 + 2250z^3 - 6345z^2 + 11970z - 11340)}{63z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = 1$

07.25.03.akql.01

$${}_2F_2\left(3, \frac{11}{2}; 1, 1; z\right) = \frac{e^{z/2}(16z^7 + 544z^6 + 6512z^5 + 34368z^4 + 82563z^3 + 84678z^2 + 30240z + 1890)I_0\left(\frac{z}{2}\right)}{1890} + \frac{e^{z/2}(32z^7 + 1056z^6 + 11984z^5 + 57248z^4 + 112914z^3 + 75966z^2 + 9591z)I_1\left(\frac{z}{2}\right)}{3780}$$

07.25.03.akqm.01

$${}_2F_2\left(3, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \frac{e^z(16z^6 + 480z^5 + 4872z^4 + 20376z^3 + 34209z^2 + 18900z + 1890)}{1890}$$

07.25.03.akqn.01

$${}_2F_2\left(3, \frac{11}{2}; 1, 2; z\right) = \frac{e^{z/2}(32z^6 + 880z^5 + 8160z^4 + 31404z^3 + 50286z^2 + 29295z + 3780)I_0\left(\frac{z}{2}\right)}{3780} + \frac{e^{z/2}(32z^6 + 848z^5 + 7328z^4 + 24468z^3 + 28734z^2 + 7701z)I_1\left(\frac{z}{2}\right)}{3780}$$

07.25.03.akqo.01

$${}_2F_2\left(3, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{630} e^z(8z^5 + 188z^4 + 1402z^3 + 3879z^2 + 3528z + 630)$$

07.25.03.akqp.01

$${}_2F_2\left(3, \frac{11}{2}; 1, 3; z\right) = \frac{1}{945} e^{z/2}(16z^5 + 336z^4 + 2220z^3 + 5484z^2 + 4725z + 945)I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2}z(16z^4 + 320z^3 + 1908z^2 + 3720z + 1689)I_1\left(\frac{z}{2}\right)$$

07.25.03.akqq.01

$${}_2F_2\left(3, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{126} e^z(4z^4 + 68z^3 + 327z^2 + 468z + 126)$$

07.25.03.akqr.01

$${}_2F_2\left(3, \frac{11}{2}; 1, 4; z\right) = \frac{e^{z/2}(16z^5 + 232z^4 + 932z^3 + 1140z^2 + 321z - 12)I_0\left(\frac{z}{2}\right)}{315z} + \frac{e^{z/2}(16z^6 + 216z^5 + 724z^4 + 508z^3 + 9z^2 - 24z + 48)I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.akqs.01

$${}_2F_2\left(3, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{18} e^z(2z^3 + 21z^2 + 48z + 18)$$

07.25.03.akqt.01

$${}_2F_2\left(3, \frac{11}{2}; 1, 5; z\right) = \frac{32 e^{z/2} (2z^5 + 16z^4 + 27z^3 + 12z^2 - 6z + 9) I_0\left(\frac{z}{2}\right)}{315 z^2} + \frac{8 e^{z/2} (8z^6 + 56z^5 + 56z^4 + 12z^3 - 39z^2 + 96z - 144) I_1\left(\frac{z}{2}\right)}{315 z^3}$$

07.25.03.akqu.01

$${}_2F_2\left(3, \frac{11}{2}; 1, \frac{11}{2}; z\right) = \frac{1}{2} e^z (z^2 + 4z + 2)$$

07.25.03.akqv.01

$${}_2F_2\left(3, \frac{11}{2}; 1, 6; z\right) = \frac{8 e^{z/2} (8z^5 + 12z^4 + 36z^3 - 111z^2 + 324z - 576) I_0\left(\frac{z}{2}\right)}{63 z^3} + \frac{8 e^{z/2} (8z^6 + 4z^5 + 36z^4 - 153z^3 + 516z^2 - 1296z + 2304) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = \frac{3}{2}$

07.25.03.akqw.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{945} (4z^5 + 106z^4 + 912z^3 + 3000z^2 + 3378z + 801) + \frac{e^z \sqrt{\pi} (4z^6 + 108z^5 + 963z^4 + 3408z^3 + 4536z^2 + 1728z + 72) \operatorname{erf}(\sqrt{z})}{945 \sqrt{z}}$$

07.25.03.akqx.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} (-4z^5 + 106z^4 - 912z^3 + 3000z^2 - 3378z + 801) + \frac{e^{-z} \sqrt{\pi} (4z^6 - 108z^5 + 963z^4 - 3408z^3 + 4536z^2 - 1728z + 72) \operatorname{erfi}(\sqrt{z})}{945 \sqrt{z}}$$

07.25.03.akqy.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{e^z (16z^5 + 384z^4 + 2952z^3 + 8568z^2 + 8505z + 1890)}{1890}$$

07.25.03.akqz.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{315} (2z^4 + 41z^3 + 252z^2 + 510z + 243) + \frac{e^z \sqrt{\pi} (4z^5 + 84z^4 + 543z^3 + 1236z^2 + 828z + 72) \operatorname{erf}(\sqrt{z})}{630 \sqrt{z}}$$

07.25.03.akr0.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{315} (2z^4 - 41z^3 + 252z^2 - 510z + 243) + \frac{e^{-z} \sqrt{\pi} (-4z^5 + 84z^4 - 543z^3 + 1236z^2 - 828z + 72) \operatorname{erfi}(\sqrt{z})}{630 \sqrt{z}}$$

07.25.03.akr1.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{1}{945} e^z (16z^4 + 288z^3 + 1512z^2 + 2520z + 945)$$

07.25.03.akr2.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{126} (2z^3 + 29z^2 + 108z + 90) + \frac{e^z \sqrt{\pi} (4z^4 + 60z^3 + 243z^2 + 264z + 36) \operatorname{erf}(\sqrt{z})}{252 \sqrt{z}}$$

07.25.03.akr3.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{126} (-2z^3 + 29z^2 - 108z + 90) + \frac{e^{-z} \sqrt{\pi} (4z^4 - 60z^3 + 243z^2 - 264z + 36) \operatorname{erfi}(\sqrt{z})}{252 \sqrt{z}}$$

07.25.03.akr4.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{e^z (16z^6 + 192z^5 + 552z^4 + 312z^3 + 9z^2 - 18z + 18)}{315z^3} - \frac{2}{35z^3}$$

07.25.03.akr5.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{36} (2z^2 + 17z + 24) + \frac{e^z \sqrt{\pi} (4z^3 + 36z^2 + 63z + 12) \operatorname{erf}(\sqrt{z})}{72 \sqrt{z}}$$

07.25.03.akr6.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{36} (2z^2 - 17z + 24) + \frac{e^{-z} \sqrt{\pi} (-4z^3 + 36z^2 - 63z + 12) \operatorname{erfi}(\sqrt{z})}{72 \sqrt{z}}$$

07.25.03.akr7.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \frac{4e^z (16z^6 + 96z^5 + 72z^4 + 24z^3 - 63z^2 + 108z - 90)}{315z^4} - \frac{8(z-5)}{35z^4}$$

07.25.03.akr8.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{8} (2z + 5) + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.akr9.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{8} (5 - 2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.akra.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \frac{4e^z (16z^6 + 72z^4 - 264z^3 + 729z^2 - 1350z + 1260)}{63z^5} - \frac{4(z^2 - 10z + 140)}{7z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = 2$

07.25.03.akrb.01

$${}_2F_2\left(3, \frac{11}{2}; 2, 2; z\right) = \frac{e^{z/2} (16z^5 + 352z^4 + 2484z^3 + 6768z^2 + 6825z + 1890) I_0\left(\frac{z}{2}\right)}{1890} + \frac{e^{z/2} (16z^5 + 336z^4 + 2156z^3 + 4764z^2 + 2853z + 105) I_1\left(\frac{z}{2}\right)}{1890}$$

07.25.03.akrc.01

$${}_2F_2\left(3, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{630} e^z (8z^4 + 148z^3 + 810z^2 + 1449z + 630)$$

07.25.03.akrd.01

$${}_2F_2\left(3, \frac{11}{2}; 2, 3; z\right) = \frac{1}{945} e^{z/2} (16z^4 + 264z^3 + 1284z^2 + 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^4 + 248z^3 + 1044z^2 + 1164z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.akre.01

$${}_2F_2\left(3, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{126} e^z (4z^3 + 52z^2 + 171z + 126)$$

07.25.03.akrf.01

$${}_2F_2\left(3, \frac{11}{2}; 2, 4; z\right) = \frac{2 e^{z/2} (8z^4 + 88z^3 + 240z^2 + 156z + 3) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (4z^5 + 40z^4 + 82z^3 + 12z^2 + 3z - 6) I_1\left(\frac{z}{2}\right)}{315z}$$

07.25.03.akrg.01

$${}_2F_2\left(3, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{18} e^z (2z^2 + 15z + 18)$$

07.25.03.akrh.01

$${}_2F_2\left(3, \frac{11}{2}; 2, 5; z\right) = \frac{8 e^{z/2} (8z^4 + 44z^3 + 36z^2 + 9z - 12) I_0\left(\frac{z}{2}\right) + 8 e^{z/2} (8z^5 + 36z^4 + 4z^3 + 15z^2 - 36z + 48) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.akri.01

$${}_2F_2\left(3, \frac{11}{2}; 2, \frac{11}{2}; z\right) = \frac{1}{2} e^z (z + 2)$$

07.25.03.akrj.01

$${}_2F_2\left(3, \frac{11}{2}; 2, 6; z\right) = \frac{16 e^{z/2} (4z^4 + 15z^2 - 42z + 72) I_0\left(\frac{z}{2}\right) + 16 e^{z/2} (4z^5 - 4z^4 + 21z^3 - 69z^2 + 168z - 288) I_1\left(\frac{z}{2}\right)}{63z^3}$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = \frac{5}{2}$

07.25.03.akrk.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{2z^4 + 31z^3 + 129z^2 + 136z + 6}{210z} + \frac{e^z \sqrt{\pi} (4z^5 + 64z^4 + 287z^3 + 375z^2 + 78z - 6) \operatorname{erf}(\sqrt{z})}{420z^{3/2}}$$

07.25.03.akrl.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-2z^4 + 31z^3 - 129z^2 + 136z - 6}{210z} + \frac{e^{-z} \sqrt{\pi} (4z^5 - 64z^4 + 287z^3 - 375z^2 + 78z + 6) \operatorname{erfi}(\sqrt{z})}{420z^{3/2}}$$

07.25.03.akrm.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{1}{315} e^z (8z^3 + 108z^2 + 378z + 315)$$

07.25.03.akrn.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{2z^3 + 21z^2 + 46z + 6}{84z} + \frac{e^z \sqrt{\pi} (4z^4 + 44z^3 + 111z^2 + 42z - 6) \operatorname{erf}(\sqrt{z})}{168z^{3/2}}$$

07.25.03.akro.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{2z^3 - 21z^2 + 46z - 6}{84z} + \frac{e^{-z} \sqrt{\pi} (-4z^4 + 44z^3 - 111z^2 + 42z + 6) \operatorname{erfi}(\sqrt{z})}{168z^{3/2}}$$

07.25.03.akrp.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{e^z (8z^5 + 68z^4 + 106z^3 - 3z^2 + 6z - 6)}{105z^3} + \frac{2}{35z^3}$$

07.25.03.akrq.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{2z^2 + 11z + 3}{24z} + \frac{e^z \sqrt{\pi} (4z^3 + 24z^2 + 15z - 3) \operatorname{erf}(\sqrt{z})}{48z^{3/2}}$$

07.25.03.akrr.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{-2z^2 + 11z - 3}{24z} + \frac{e^{-z} \sqrt{\pi} (4z^3 - 24z^2 + 15z + 3) \operatorname{erfi}(\sqrt{z})}{48z^{3/2}}$$

07.25.03.akrs.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{8(z-3)}{35z^4} + \frac{4e^z (8z^5 + 28z^4 - 6z^3 + 15z^2 - 24z + 18)}{105z^4}$$

07.25.03.akrt.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{3(2z+1)}{16z} + \frac{3e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.akru.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{3(2z-1)}{16z} - \frac{3e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.akrv.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{4(z^2 - 6z + 60)}{7z^5} + \frac{4e^z (8z^5 - 12z^4 + 42z^3 - 111z^2 + 198z - 180)}{21z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = 3$

07.25.03.akrw.01

$${}_2F_2\left(3, \frac{11}{2}; 3, 3; z\right) = \frac{16}{945} e^{z/2} (2z^3 + 24z^2 + 75z + 60) I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2} (8z^4 + 88z^3 + 216z^2 + 60z - 15) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.akrx.01

$${}_2F_2\left(3, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{1}{63} e^z (4z^2 + 36z + 63)$$

07.25.03.akry.01

$${}_2F_2\left(3, \frac{11}{2}; 3, 4; z\right) = \frac{4e^{z/2} (8z^3 + 60z^2 + 84z - 3) I_0\left(\frac{z}{2}\right)}{315z} + \frac{4e^{z/2} (8z^4 + 52z^3 + 36z^2 - 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.akrz.01

$${}_2F_2\left(3, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2z + 9)$$

07.25.03.aks0.01

$${}_2F_2\left(3, \frac{11}{2}; 3, 5; z\right) = \frac{32e^{z/2} (4z^3 + 12z^2 - 3z + 3) I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{32e^{z/2} (4z^4 + 8z^3 - 9z^2 + 12z - 12) I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.aks1.01

$${}_2F_2\left(3, \frac{11}{2}; 3, \frac{11}{2}; z\right) = e^z$$

07.25.03.aks2.01

$${}_2F_2\left(3, \frac{11}{2}; 3, 6; z\right) = \frac{32 e^{z/2} (4 z^3 - 6 z^2 + 15 z - 24) I_0\left(\frac{z}{2}\right)}{63 z^3} + \frac{32 e^{z/2} (4 z^4 - 10 z^3 + 27 z^2 - 60 z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = \frac{7}{2}$

07.25.03.aks3.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5(2 z^3 + 13 z^2 + 8 z - 6)}{168 z^2} + \frac{5 e^z \sqrt{\pi} (4 z^4 + 28 z^3 + 27 z^2 - 12 z + 6) \operatorname{erf}(\sqrt{z})}{336 z^{5/2}}$$

07.25.03.aks4.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} \sqrt{\pi} (4 z^4 - 28 z^3 + 27 z^2 + 12 z + 6) \operatorname{erfi}(\sqrt{z})}{336 z^{5/2}} - \frac{5(2 z^3 - 13 z^2 + 8 z + 6)}{168 z^2}$$

07.25.03.aks5.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{e^z (4 z^4 + 20 z^3 + 3 z^2 - 6 z + 6)}{21 z^3} - \frac{2}{7 z^3}$$

07.25.03.aks6.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{5(2 z^2 + 5 z - 6)}{48 z^2} + \frac{5 e^z \sqrt{\pi} (4 z^3 + 12 z^2 - 9 z + 6) \operatorname{erf}(\sqrt{z})}{96 z^{5/2}}$$

07.25.03.aks7.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{5(2 z^2 - 5 z - 6)}{48 z^2} - \frac{5 e^{-z} \sqrt{\pi} (4 z^3 - 12 z^2 - 9 z - 6) \operatorname{erfi}(\sqrt{z})}{96 z^{5/2}}$$

07.25.03.aks8.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{4 e^z (4 z^4 + 4 z^3 - 9 z^2 + 12 z - 6)}{21 z^4} - \frac{8(z-1)}{7 z^4}$$

07.25.03.aks9.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{15(2z-3)}{32 z^2} + \frac{15 e^z \sqrt{\pi} (4 z^2 - 4 z + 3) \operatorname{erf}(\sqrt{z})}{64 z^{5/2}}$$

07.25.03.aksa.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{15 e^{-z} \sqrt{\pi} (4 z^2 + 4 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{5/2}} - \frac{15(2z+3)}{32 z^2}$$

07.25.03.aksb.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \frac{20 e^z (4 z^4 - 12 z^3 + 27 z^2 - 42 z + 36)}{21 z^5} - \frac{20(z^2 - 2z + 12)}{7 z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = 4$

07.25.03.aksc.01

$${}_2F_2\left(3, \frac{11}{2}; 4, 4; z\right) = \frac{8 e^{z/2} (4 z^4 + 16 z^3 - z^2 - 6 z + 12) I_0\left(\frac{z}{2}\right)}{105 z^3} + \frac{8 e^{z/2} (4 z^3 + 12 z^2 - 11 z + 7) I_1\left(\frac{z}{2}\right)}{105 z^2} - \frac{32}{35 z^3}$$

07.25.03.aksd.01

$${}_2F_2\left(3, \frac{11}{2}; 4, \frac{9}{2}; z\right) = \frac{e^z (2 z^3 + 3 z^2 - 6 z + 6)}{3 z^3} - \frac{2}{z^3}$$

07.25.03.akse.01

$${}_2F_2\left(3, \frac{11}{2}; 4, 5; z\right) = \frac{32 e^{z/2} (4 z^3 + 2 z^2 - 9 z + 12) I_0\left(\frac{z}{2}\right)}{105 z^3} + \frac{32 e^{z/2} (4 z^3 - 2 z^2 - 5 z + 12) I_1\left(\frac{z}{2}\right)}{105 z^3} - \frac{128}{35 z^3}$$

07.25.03.aksf.01

$${}_2F_2\left(3, \frac{11}{2}; 4, \frac{11}{2}; z\right) = \frac{3 e^z (z^2 - 2 z + 2)}{z^3} - \frac{6}{z^3}$$

07.25.03.aksg.01

$${}_2F_2\left(3, \frac{11}{2}; 4, 6; z\right) = \frac{64 e^{z/2} (2 z^2 - 6 z + 9) I_0\left(\frac{z}{2}\right)}{21 z^3} + \frac{128 e^{z/2} (z^3 - 4 z^2 + 9 z - 12) I_1\left(\frac{z}{2}\right)}{21 z^4} - \frac{64}{7 z^3}$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = \frac{9}{2}$

07.25.03.aksh.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 (2 z^2 - z - 15)}{96 z^3} + \frac{35 e^z \sqrt{\pi} (4 z^3 - 9 z + 15) \operatorname{erf}(\sqrt{z})}{192 z^{7/2}}$$

07.25.03.aksi.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} \sqrt{\pi} (4 z^3 - 9 z - 15) \operatorname{erfi}(\sqrt{z})}{192 z^{7/2}} - \frac{35 (2 z^2 + z - 15)}{96 z^3}$$

07.25.03.aksj.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{4 e^z (2 z^3 - 3 z^2 + 6)}{3 z^4} - \frac{8 (z + 1)}{z^4}$$

07.25.03.aksk.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{105 (2 z - 15)}{64 z^3} + \frac{105 e^z \sqrt{\pi} (4 z^2 - 12 z + 15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.aksl.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{105 (2 z + 15)}{64 z^3} - \frac{105 e^{-z} \sqrt{\pi} (4 z^2 + 12 z + 15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.aksm.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{20 e^z (2 z^3 - 9 z^2 + 18 z - 12)}{3 z^5} - \frac{20 (z^2 + 2 z - 4)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = 5$

07.25.03.aksn.01

$${}_2F_2\left(3, \frac{11}{2}; 5, 5; z\right) = -\frac{512(z+2)}{35z^4} + \frac{512e^{z/2}(z^3 - 2z^2 + 6)I_0\left(\frac{z}{2}\right)}{105z^4} + \frac{256e^{z/2}(2z^2 - 6z + 7)I_1\left(\frac{z}{2}\right)}{105z^3}$$

07.25.03.akso.01

$${}_2F_2\left(3, \frac{11}{2}; 5, \frac{11}{2}; z\right) = \frac{12e^z(z^2 - 4z + 6)}{z^4} - \frac{24(z+3)}{z^4}$$

07.25.03.aksp.01

$${}_2F_2\left(3, \frac{11}{2}; 5, 6; z\right) = -\frac{256(z+4)}{7z^4} + \frac{256e^{z/2}(2z^2 - 9z + 12)I_0\left(\frac{z}{2}\right)}{21z^4} + \frac{256e^{z/2}(2z^2 - 11z + 24)I_1\left(\frac{z}{2}\right)}{21z^4}$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = \frac{11}{2}$

07.25.03.aksq.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{945e^z\sqrt{\pi}(4z^2 - 20z + 35)\operatorname{erf}(\sqrt{z})}{256z^{9/2}} - \frac{1575(2z + 21)}{128z^4}$$

07.25.03.aksr.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1575(2z - 21)}{128z^4} + \frac{945e^{-z}\sqrt{\pi}(4z^2 + 20z + 35)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.akss.01

$${}_2F_2\left(3, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{60e^z(z^2 - 6z + 12)}{z^5} - \frac{60(z^2 + 6z + 12)}{z^5}$$

For fixed z and $a_1 = 3, a_2 = \frac{11}{2}, b_1 = 6$

07.25.03.akst.01

$${}_2F_2\left(3, \frac{11}{2}; 6, 6; z\right) = -\frac{640(z^2 + 8z + 32)}{7z^5} + \frac{2560e^{z/2}(z^2 - 6z + 24)I_0\left(\frac{z}{2}\right)}{21z^5} + \frac{2560e^{z/2}(z - 7)I_1\left(\frac{z}{2}\right)}{21z^4}$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = -\frac{11}{2}$

07.25.03.aksu.01

$${}_2F_2\left(3, 6; -\frac{11}{2}, 1; z\right) = \frac{1}{2494800} (64z^{13} + 5376z^{12} + 177424z^{11} + 2954496z^{10} + 26474140z^9 + 125238000z^8 + 279154215z^7 + 198696960z^6 - 40642560z^5 + 21772800z^4 - 16128000z^3 + 12700800z^2 - 8164800z + 2494800) + \frac{1}{4989600} (e^z\sqrt{\pi}(128z^{27/2} + 10816z^{25/2} + 360160z^{23/2} + 6081200z^{21/2} + 55738200z^{19/2} + 274392300z^{17/2} + 663038250z^{15/2} + 596734425z^{13/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.aksv.01

$${}_2F_2\left(3, 6; -\frac{11}{2}, 1; -z\right) = \frac{1}{2494800} (-64z^{13} + 5376z^{12} - 177424z^{11} + 2954496z^{10} - 26474140z^9 + 125238000z^8 - 279154215z^7 + 198696960z^6 + 40642560z^5 + 21772800z^4 + 16128000z^3 + 12700800z^2 + 8164800z + 2494800) + \frac{1}{4989600} (e^{-z} \sqrt{\pi} (128z^{27/2} - 10816z^{25/2} + 360160z^{23/2} - 6081200z^{21/2} + 55738200z^{19/2} - 274392300z^{17/2} + 666038250z^{15/2} - 596734425z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aksw.01

$${}_2F_2\left(3, 6; -\frac{11}{2}, 2; z\right) = \frac{1}{1247400} (32z^{12} + 2256z^{11} + 60528z^{10} + 782264z^9 + 5050890z^8 + 14960745z^7 + 14192640z^6 - 3386880z^5 + 2177280z^4 - 2016000z^3 + 2116800z^2 - 2041200z + 1247400) + \frac{1}{2494800} (e^z \sqrt{\pi} (64z^{25/2} + 4544z^{23/2} + 123280z^{21/2} + 1622880z^{19/2} + 10828860z^{17/2} + 34321980z^{15/2} + 39782295z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aksx.01

$${}_2F_2\left(3, 6; -\frac{11}{2}, 2; -z\right) = \frac{1}{1247400} (32z^{12} - 2256z^{11} + 60528z^{10} - 782264z^9 + 5050890z^8 - 14960745z^7 + 14192640z^6 + 3386880z^5 + 2177280z^4 + 2016000z^3 + 2116800z^2 + 2041200z + 1247400) + \frac{1}{2494800} (e^{-z} \sqrt{\pi} (-64z^{25/2} + 4544z^{23/2} - 123280z^{21/2} + 1622880z^{19/2} - 10828860z^{17/2} + 34321980z^{15/2} - 39782295z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aksy.01

$${}_2F_2\left(3, 6; -\frac{11}{2}, 3; z\right) = \frac{1}{311850} (16z^{11} + 912z^{10} + 18872z^9 + 174540z^8 + 701145z^7 + 887040z^6 - 241920z^5 + 181440z^4 - 201600z^3 + 264600z^2 - 340200z + 311850) + \frac{1}{623700} e^z \sqrt{\pi} (32z^{23/2} + 1840z^{21/2} + 38640z^{19/2} + 367080z^{17/2} + 1560090z^{15/2} + 2340135z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aksz.01

$${}_2F_2\left(3, 6; -\frac{11}{2}, 3; -z\right) = \frac{1}{311850} (-16z^{11} + 912z^{10} - 18872z^9 + 174540z^8 - 701145z^7 + 887040z^6 + 241920z^5 + 181440z^4 + 201600z^3 + 264600z^2 + 340200z + 311850) + \frac{1}{623700} e^{-z} \sqrt{\pi} (32z^{23/2} - 1840z^{21/2} + 38640z^{19/2} - 367080z^{17/2} + 1560090z^{15/2} - 2340135z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akt0.01

$${}_2F_2\left(3, 6; -\frac{11}{2}, 4; z\right) = \frac{1}{51975} (8z^{10} + 348z^9 + 5090z^8 + 28899z^7 + 49280z^6 - 15120z^5 + 12960z^4 - 16800z^3 + 26460z^2 - 42525z + 51975) + \frac{e^z \sqrt{\pi} (16z^{21/2} + 704z^{19/2} + 10520z^{17/2} + 62560z^{15/2} + 123165z^{13/2}) \operatorname{erf}(\sqrt{z})}{103950}$$

07.25.03.akt1.01

$${}_2F_2\left(3, 6; -\frac{11}{2}, 4; -z\right) = \frac{1}{51975} (8z^{10} - 348z^9 + 5090z^8 - 28899z^7 + 49280z^6 + 15120z^5 + 12960z^4 + 16800z^3 + 26460z^2 + 42525z + 51975) + \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 704z^{19/2} - 10520z^{17/2} + 62560z^{15/2} - 123165z^{13/2}) \operatorname{erfi}(\sqrt{z})}{103950}$$

07.25.03.akt2.01

$${}_2F_2\left(3, 6; -\frac{11}{2}, 5; z\right) = \frac{32z^9 + 960z^8 + 8376z^7 + 19712z^6 - 6720z^5 + 6480z^4 - 9600z^3 + 17640z^2 - 34020z + 51975}{51975} + \frac{4e^z \sqrt{\pi} (8z^{19/2} + 244z^{17/2} + 2210z^{15/2} + 5865z^{13/2}) \operatorname{erf}(\sqrt{z})}{51975}$$

07.25.03.akt3.01

$${}_2F_2\left(3, 6; -\frac{11}{2}, 5; -z\right) = \frac{-32z^9 + 960z^8 - 8376z^7 + 19712z^6 + 6720z^5 + 6480z^4 + 9600z^3 + 17640z^2 + 34020z + 51975}{51975} + \frac{4e^{-z} \sqrt{\pi} (8z^{19/2} - 244z^{17/2} + 2210z^{15/2} - 5865z^{13/2}) \operatorname{erfi}(\sqrt{z})}{51975}$$

07.25.03.akt4.01

$${}_2F_2\left(3, 6; -\frac{11}{2}, 6; z\right) = \frac{32z^8 + 528z^7 + 1792z^6 - 672z^5 + 720z^4 - 1200z^3 + 2520z^2 - 5670z + 10395}{10395} + \frac{8e^z \sqrt{\pi} (4z^{17/2} + 68z^{15/2} + 255z^{13/2}) \operatorname{erf}(\sqrt{z})}{10395}$$

07.25.03.akt5.01

$${}_2F_2\left(3, 6; -\frac{11}{2}, 6; -z\right) = \frac{32z^8 - 528z^7 + 1792z^6 + 672z^5 + 720z^4 + 1200z^3 + 2520z^2 + 5670z + 10395}{10395} - \frac{8e^{-z} \sqrt{\pi} (4z^{17/2} - 68z^{15/2} + 255z^{13/2}) \operatorname{erfi}(\sqrt{z})}{10395}$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = -\frac{9}{2}$

07.25.03.akt6.01

$${}_2F_2\left(3, 6; -\frac{9}{2}, 1; z\right) = \frac{1}{453\,600} \left(-64 z^{12} - 4928 z^{11} - 147\,888 z^{10} - 2\,217\,440 z^9 - 17\,672\,460 z^8 - 73\,165\,860 z^7 - 139\,470\,345 z^6 - 81\,285\,120 z^5 + 14\,515\,200 z^4 - 6\,451\,200 z^3 + 3\,628\,800 z^2 - 1\,814\,400 z + 453\,600\right) + \frac{1}{907\,200} \left(e^z \sqrt{\pi} \left(-128 z^{25/2} - 9920 z^{23/2} - 300\,640 z^{21/2} - 4\,578\,000 z^{19/2} - 37\,426\,200 z^{17/2} - 162\,113\,700 z^{15/2} - 338\,810\,850 z^{13/2} - 257\,923\,575 z^{11/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.akt7.01

$${}_2F_2\left(3, 6; -\frac{9}{2}, 1; -z\right) = \frac{1}{453\,600} \left(-64 z^{12} + 4928 z^{11} - 147\,888 z^{10} + 2\,217\,440 z^9 - 17\,672\,460 z^8 + 73\,165\,860 z^7 - 139\,470\,345 z^6 + 81\,285\,120 z^5 + 14\,515\,200 z^4 + 6\,451\,200 z^3 + 3\,628\,800 z^2 + 1\,814\,400 z + 453\,600\right) + \frac{1}{907\,200} \left(e^{-z} \sqrt{\pi} \left(128 z^{25/2} - 9920 z^{23/2} + 300\,640 z^{21/2} - 4\,578\,000 z^{19/2} + 37\,426\,200 z^{17/2} - 162\,113\,700 z^{15/2} + 338\,810\,850 z^{13/2} - 257\,923\,575 z^{11/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.akt8.01

$${}_2F_2\left(3, 6; -\frac{9}{2}, 2; z\right) = \frac{1}{226\,800} \left(-32 z^{11} - 2064 z^{10} - 50\,224 z^9 - 582\,360 z^8 - 3\,326\,490 z^7 - 8\,545\,005 z^6 - 6\,773\,760 z^5 + 1\,451\,520 z^4 - 806\,400 z^3 + 604\,800 z^2 - 453\,600 z + 226\,800\right) + \frac{1}{453\,600} \left(e^z \sqrt{\pi} \left(-64 z^{23/2} - 4160 z^{21/2} - 102\,480 z^{19/2} - 1\,212\,960 z^{17/2} - 7\,189\,980 z^{15/2} - 19\,942\,020 z^{13/2} - 19\,840\,275 z^{11/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.akt9.01

$${}_2F_2\left(3, 6; -\frac{9}{2}, 2; -z\right) = \frac{1}{226\,800} \left(32 z^{11} - 2064 z^{10} + 50\,224 z^9 - 582\,360 z^8 + 3\,326\,490 z^7 - 8\,545\,005 z^6 + 6\,773\,760 z^5 + 1\,451\,520 z^4 + 806\,400 z^3 + 604\,800 z^2 + 453\,600 z + 226\,800\right) + \frac{1}{453\,600} \left(e^{-z} \sqrt{\pi} \left(-64 z^{23/2} + 4160 z^{21/2} - 102\,480 z^{19/2} + 1\,212\,960 z^{17/2} - 7\,189\,980 z^{15/2} + 19\,942\,020 z^{13/2} - 19\,840\,275 z^{11/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.akta.01

$${}_2F_2\left(3, 6; -\frac{9}{2}, 3; z\right) = \frac{1}{56\,700} \left(-16 z^{10} - 832 z^9 - 15\,552 z^8 - 128\,280 z^7 - 451\,395 z^6 - 483\,840 z^5 + 120\,960 z^4 - 80\,640 z^3 + 75\,600 z^2 - 75\,600 z + 56\,700\right) + \frac{1}{113\,400} e^z \sqrt{\pi} \left(-32 z^{21/2} - 1680 z^{19/2} - 31\,920 z^{17/2} - 271\,320 z^{15/2} - 1\,017\,450 z^{13/2} - 1\,322\,685 z^{11/2}\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.aktb.01

$${}_2F_2\left(3, 6; -\frac{9}{2}, 3; -z\right) = \frac{1}{56700} (-16z^{10} + 832z^9 - 15552z^8 + 128280z^7 - 451395z^6 + 483840z^5 + 120960z^4 + 80640z^3 + 75600z^2 + 75600z + 56700) + \frac{1}{113400} e^{-z} \sqrt{\pi} (32z^{21/2} - 1680z^{19/2} + 31920z^{17/2} - 271320z^{15/2} + 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aktc.01

$${}_2F_2\left(3, 6; -\frac{9}{2}, 4; z\right) = \frac{-8z^9 - 316z^8 - 4146z^7 - 20755z^6 - 30240z^5 + 8640z^4 - 6720z^3 + 7560z^2 - 9450z + 9450}{9450} + \frac{e^z \sqrt{\pi} (-16z^{19/2} - 640z^{17/2} - 8600z^{15/2} - 45360z^{13/2} - 77805z^{11/2}) \operatorname{erf}(\sqrt{z})}{18900}$$

07.25.03.aktc.01

$${}_2F_2\left(3, 6; -\frac{9}{2}, 4; -z\right) = \frac{8z^9 - 316z^8 + 4146z^7 - 20755z^6 + 30240z^5 + 8640z^4 + 6720z^3 + 7560z^2 + 9450z + 9450}{9450} + \frac{e^{-z} \sqrt{\pi} (-16z^{19/2} + 640z^{17/2} - 8600z^{15/2} + 45360z^{13/2} - 77805z^{11/2}) \operatorname{erfi}(\sqrt{z})}{18900}$$

07.25.03.akte.01

$${}_2F_2\left(3, 6; -\frac{9}{2}, 5; z\right) = \frac{-16z^8 - 432z^7 - 3332z^6 - 6720z^5 + 2160z^4 - 1920z^3 + 2520z^2 - 3780z + 4725}{4725} - \frac{2e^z \sqrt{\pi} (8z^{17/2} + 220z^{15/2} + 1770z^{13/2} + 4095z^{11/2}) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.aktf.01

$${}_2F_2\left(3, 6; -\frac{9}{2}, 5; -z\right) = \frac{-16z^8 + 432z^7 - 3332z^6 + 6720z^5 + 2160z^4 + 1920z^3 + 2520z^2 + 3780z + 4725}{4725} + \frac{2e^{-z} \sqrt{\pi} (8z^{17/2} - 220z^{15/2} + 1770z^{13/2} - 4095z^{11/2}) \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.aktg.01

$${}_2F_2\left(3, 6; -\frac{9}{2}, 6; z\right) = \frac{1}{945} (-16z^7 - 232z^6 - 672z^5 + 240z^4 - 240z^3 + 360z^2 - 630z + 945) - \frac{4}{945} e^z \sqrt{\pi} (4z^{15/2} + 60z^{13/2} + 195z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aktg.01

$${}_2F_2\left(3, 6; -\frac{9}{2}, 6; -z\right) = \frac{1}{945} (16z^7 - 232z^6 + 672z^5 + 240z^4 + 240z^3 + 360z^2 + 630z + 945) - \frac{4}{945} e^{-z} \sqrt{\pi} (4z^{15/2} - 60z^{13/2} + 195z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = -\frac{7}{2}$

07.25.03.akti.01

$${}_2F_2\left(3, 6; -\frac{7}{2}, 1; z\right) = \frac{1}{100800} (64 z^{11} + 4480 z^{10} + 121040 z^9 + 1614400 z^8 + 11270076 z^7 + 40030840 z^6 + 63494835 z^5 + 29030400 z^4 - 4300800 z^3 + 1451520 z^2 - 518400 z + 100800) + \frac{1}{201600} \left(e^z \sqrt{\pi} (128 z^{23/2} + 9024 z^{21/2} + 246496 z^{19/2} + 3345520 z^{17/2} + 24044120 z^{15/2} + 89981340 z^{13/2} + 158848170 z^{11/2} + 99075405 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aktj.01

$${}_2F_2\left(3, 6; -\frac{7}{2}, 1; -z\right) = \frac{1}{100800} (-64 z^{11} + 4480 z^{10} - 121040 z^9 + 1614400 z^8 - 11270076 z^7 + 40030840 z^6 - 63494835 z^5 + 29030400 z^4 + 4300800 z^3 + 1451520 z^2 + 518400 z + 100800) + \frac{1}{201600} \left(e^{-z} \sqrt{\pi} (128 z^{23/2} - 9024 z^{21/2} + 246496 z^{19/2} - 3345520 z^{17/2} + 24044120 z^{15/2} - 89981340 z^{13/2} + 158848170 z^{11/2} - 99075405 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aktk.01

$${}_2F_2\left(3, 6; -\frac{7}{2}, 2; z\right) = \frac{1}{50400} (32 z^{10} + 1872 z^9 + 40880 z^8 + 419736 z^7 + 2085530 z^6 + 4540665 z^5 + 2903040 z^4 - 537600 z^3 + 241920 z^2 - 129600 z + 50400) + \frac{1}{100800} \left(e^z \sqrt{\pi} (64 z^{21/2} + 3776 z^{19/2} + 83600 z^{17/2} + 878560 z^{15/2} + 4554300 z^{13/2} + 10833420 z^{11/2} + 9006855 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aktl.01

$${}_2F_2\left(3, 6; -\frac{7}{2}, 2; -z\right) = \frac{1}{50400} (32 z^{10} - 1872 z^9 + 40880 z^8 - 419736 z^7 + 2085530 z^6 - 4540665 z^5 + 2903040 z^4 + 537600 z^3 + 241920 z^2 + 129600 z + 50400) + \frac{1}{100800} \left(e^{-z} \sqrt{\pi} (-64 z^{21/2} + 3776 z^{19/2} - 83600 z^{17/2} + 878560 z^{15/2} - 4554300 z^{13/2} + 10833420 z^{11/2} - 9006855 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aktm.01

$${}_2F_2\left(3, 6; -\frac{7}{2}, 3; z\right) = \frac{1}{12600} (16 z^9 + 752 z^8 + 12552 z^7 + 90980 z^6 + 274845 z^5 + 241920 z^4 - 53760 z^3 + 30240 z^2 - 21600 z + 12600) + \frac{1}{12600} e^z \sqrt{\pi} (32 z^{19/2} + 1520 z^{17/2} + 25840 z^{15/2} + 193800 z^{13/2} + 629850 z^{11/2} + 692835 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aktn.01

$${}_2F_2\left(3, 6; -\frac{7}{2}, 3; -z\right) = \frac{1}{12600} (-16z^9 + 752z^8 - 12552z^7 + 90980z^6 - 274845z^5 + 241920z^4 + 53760z^3 + 30240z^2 + 21600z + 12600) + \frac{1}{25200} e^{-z} \sqrt{\pi} (32z^{19/2} - 1520z^{17/2} + 25840z^{15/2} - 193800z^{13/2} + 629850z^{11/2} - 692835z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akt.01

$${}_2F_2\left(3, 6; -\frac{7}{2}, 4; z\right) = \frac{8z^8 + 284z^7 + 3298z^6 + 14291z^5 + 17280z^4 - 4480z^3 + 3024z^2 - 2700z + 2100}{2100} + \frac{e^z \sqrt{\pi} (16z^{17/2} + 576z^{15/2} + 6872z^{13/2} + 31616z^{11/2} + 46189z^{9/2}) \operatorname{erf}(\sqrt{z})}{4200}$$

07.25.03.akt.01

$${}_2F_2\left(3, 6; -\frac{7}{2}, 4; -z\right) = \frac{8z^8 - 284z^7 + 3298z^6 - 14291z^5 + 17280z^4 + 4480z^3 + 3024z^2 + 2700z + 2100}{2100} + \frac{e^{-z} \sqrt{\pi} (-16z^{17/2} + 576z^{15/2} - 6872z^{13/2} + 31616z^{11/2} - 46189z^{9/2}) \operatorname{erfi}(\sqrt{z})}{4200}$$

07.25.03.aktq.01

$${}_2F_2\left(3, 6; -\frac{7}{2}, 5; z\right) = \frac{1}{525} (8z^7 + 192z^6 + 1286z^5 + 2160z^4 - 640z^3 + 504z^2 - 540z + 525) + \frac{1}{525} e^z \sqrt{\pi} (8z^{15/2} + 196z^{13/2} + 1378z^{11/2} + 2717z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aktr.01

$${}_2F_2\left(3, 6; -\frac{7}{2}, 5; -z\right) = \frac{1}{525} (-8z^7 + 192z^6 - 1286z^5 + 2160z^4 + 640z^3 + 504z^2 + 540z + 525) + \frac{1}{525} e^{-z} \sqrt{\pi} (8z^{15/2} - 196z^{13/2} + 1378z^{11/2} - 2717z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akts.01

$${}_2F_2\left(3, 6; -\frac{7}{2}, 6; z\right) = \frac{1}{105} (8z^6 + 100z^5 + 240z^4 - 80z^3 + 72z^2 - 90z + 105) + \frac{2}{105} e^z \sqrt{\pi} (4z^{13/2} + 52z^{11/2} + 143z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akt.01

$${}_2F_2\left(3, 6; -\frac{7}{2}, 6; -z\right) = \frac{1}{105} (8z^6 - 100z^5 + 240z^4 + 80z^3 + 72z^2 + 90z + 105) - \frac{2}{105} e^{-z} \sqrt{\pi} (4z^{13/2} - 52z^{11/2} + 143z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = -\frac{5}{2}$

07.25.03.aktu.01

$${}_2F_2\left(3, 6; -\frac{5}{2}, 1; z\right) = \frac{1}{28800} \left(-64 z^{10} - 4032 z^9 - 96880 z^8 - 1131936 z^7 - 6786028 z^6 - 20134860 z^5 - 25570485 z^4 - 8601600 z^3 + 967680 z^2 - 207360 z + 28800\right) + \frac{1}{57600} \left(e^z \sqrt{\pi} \left(-128 z^{21/2} - 8128 z^{19/2} - 197728 z^{17/2} - 2356880 z^{15/2} - 14616600 z^{13/2} - 46131540 z^{11/2} - 66585090 z^{9/2} - 32490315 z^{7/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aktv.01

$${}_2F_2\left(3, 6; -\frac{5}{2}, 1; -z\right) = \frac{1}{28800} \left(-64 z^{10} + 4032 z^9 - 96880 z^8 + 1131936 z^7 - 6786028 z^6 + 20134860 z^5 - 25570485 z^4 + 8601600 z^3 + 967680 z^2 + 207360 z + 28800\right) + \frac{1}{57600} \left(e^{-z} \sqrt{\pi} \left(128 z^{21/2} - 8128 z^{19/2} + 197728 z^{17/2} - 2356880 z^{15/2} + 14616600 z^{13/2} - 46131540 z^{11/2} + 66585090 z^{9/2} - 32490315 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.aktw.01

$${}_2F_2\left(3, 6; -\frac{5}{2}, 2; z\right) = \frac{1}{14400} \left(-32 z^9 - 1680 z^8 - 32496 z^7 - 290552 z^6 - 1228170 z^5 - 2196045 z^4 - 1075200 z^3 + 161280 z^2 - 51840 z + 14400\right) + \frac{1}{28800} \left(e^z \sqrt{\pi} \left(-64 z^{19/2} - 3392 z^{17/2} - 66640 z^{15/2} - 612000 z^{13/2} - 2718300 z^{11/2} - 5396820 z^{9/2} - 3610035 z^{7/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aktx.01

$${}_2F_2\left(3, 6; -\frac{5}{2}, 2; -z\right) = \frac{1}{14400} \left(32 z^9 - 1680 z^8 + 32496 z^7 - 290552 z^6 + 1228170 z^5 - 2196045 z^4 + 1075200 z^3 + 161280 z^2 + 51840 z + 14400\right) + \frac{1}{28800} \left(e^{-z} \sqrt{\pi} \left(-64 z^{19/2} + 3392 z^{17/2} - 66640 z^{15/2} + 612000 z^{13/2} - 2718300 z^{11/2} + 5396820 z^{9/2} - 3610035 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.akty.01

$${}_2F_2\left(3, 6; -\frac{5}{2}, 3; z\right) = \frac{-16 z^8 - 672 z^7 - 9872 z^6 - 61680 z^5 - 155655 z^4 - 107520 z^3 + 20160 z^2 - 8640 z + 3600}{3600} + \frac{e^z \sqrt{\pi} \left(-32 z^{17/2} - 1360 z^{15/2} - 20400 z^{13/2} - 132600 z^{11/2} - 364650 z^{9/2} - 328185 z^{7/2}\right) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.aktz.01

$${}_2F_2\left(3, 6; -\frac{5}{2}, 3; -z\right) = \frac{-16 z^8 + 672 z^7 - 9872 z^6 + 61680 z^5 - 155655 z^4 + 107520 z^3 + 20160 z^2 + 8640 z + 3600}{3600} + \frac{e^{-z} \sqrt{\pi} \left(32 z^{17/2} - 1360 z^{15/2} + 20400 z^{13/2} - 132600 z^{11/2} + 364650 z^{9/2} - 328185 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})}{7200}$$

07.25.03.aku0.01

$${}_2F_2\left(3, 6; -\frac{5}{2}, 4; z\right) = \frac{1}{600} (-8z^7 - 252z^6 - 2546z^5 - 9315z^4 - 8960z^3 + 2016z^2 - 1080z + 600) + \frac{e^z \sqrt{\pi} (-16z^{15/2} - 512z^{13/2} - 5336z^{11/2} - 20944z^{9/2} - 25245z^{7/2}) \operatorname{erf}(\sqrt{z})}{1200}$$

07.25.03.aku1.01

$${}_2F_2\left(3, 6; -\frac{5}{2}, 4; -z\right) = \frac{1}{600} (8z^7 - 252z^6 + 2546z^5 - 9315z^4 + 8960z^3 + 2016z^2 + 1080z + 600) + \frac{e^{-z} \sqrt{\pi} (-16z^{15/2} + 512z^{13/2} - 5336z^{11/2} + 20944z^{9/2} - 25245z^{7/2}) \operatorname{erfi}(\sqrt{z})}{1200}$$

07.25.03.aku2.01

$${}_2F_2\left(3, 6; -\frac{5}{2}, 5; z\right) = \frac{1}{75} (-4z^6 - 84z^5 - 477z^4 - 640z^3 + 168z^2 - 108z + 75) + \frac{1}{150} e^z \sqrt{\pi} (-8z^{13/2} - 172z^{11/2} - 1034z^{9/2} - 1683z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aku3.01

$${}_2F_2\left(3, 6; -\frac{5}{2}, 5; -z\right) = \frac{1}{75} (-4z^6 + 84z^5 - 477z^4 + 640z^3 + 168z^2 + 108z + 75) + \frac{1}{150} e^{-z} \sqrt{\pi} (8z^{13/2} - 172z^{11/2} + 1034z^{9/2} - 1683z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aku4.01

$${}_2F_2\left(3, 6; -\frac{5}{2}, 6; z\right) = \frac{1}{15} (-4z^5 - 42z^4 - 80z^3 + 24z^2 - 18z + 15) + \frac{1}{15} e^z \sqrt{\pi} (-4z^{11/2} - 44z^{9/2} - 99z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aku5.01

$${}_2F_2\left(3, 6; -\frac{5}{2}, 6; -z\right) = \frac{1}{15} (4z^5 - 42z^4 + 80z^3 + 24z^2 + 18z + 15) + \frac{1}{15} e^{-z} \sqrt{\pi} (-4z^{11/2} + 44z^{9/2} - 99z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = -\frac{3}{2}$

07.25.03.aku6.01

$${}_2F_2\left(3, 6; -\frac{3}{2}, 1; z\right) = \frac{1}{11520} (64z^9 + 3584z^8 + 75408z^7 + 756608z^6 + 3793116z^5 + 9054720z^4 + 8689695z^3 + 1935360z^2 - 138240z + 11520) + \frac{1}{23040} (e^z \sqrt{\pi} (128z^{19/2} + 7232z^{17/2} + 154336z^{15/2} + 1585200z^{13/2} + 8275800z^{11/2} + 21304140z^{9/2} + 23976810z^{7/2} + 8513505z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aku7.01

$${}_2F_2\left(3, 6; -\frac{3}{2}, 1; -z\right) = \frac{1}{11520} (-64 z^9 + 3584 z^8 - 75408 z^7 + 756608 z^6 - 3793116 z^5 + 9054720 z^4 - 8689695 z^3 + 1935360 z^2 + 138240 z + 11520) + \frac{1}{23040} \left(e^{-z} \sqrt{\pi} (128 z^{19/2} - 7232 z^{17/2} + 154336 z^{15/2} - 1585200 z^{13/2} + 8275800 z^{11/2} - 21304140 z^{9/2} + 23976810 z^{7/2} - 8513505 z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aku8.01

$${}_2F_2\left(3, 6; -\frac{3}{2}, 2; z\right) = \frac{32 z^8 + 1488 z^7 + 25072 z^6 + 190968 z^5 + 666090 z^4 + 934185 z^3 + 322560 z^2 - 34560 z + 5760}{5760} + \frac{1}{11520} e^z \sqrt{\pi} (64 z^{17/2} + 3008 z^{15/2} + 51600 z^{13/2} + 405600 z^{11/2} + 1501500 z^{9/2} + 2393820 z^{7/2} + 1216215 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aku9.01

$${}_2F_2\left(3, 6; -\frac{3}{2}, 2; -z\right) = \frac{32 z^8 - 1488 z^7 + 25072 z^6 - 190968 z^5 + 666090 z^4 - 934185 z^3 + 322560 z^2 + 34560 z + 5760}{5760} + \frac{1}{11520} \left(e^{-z} \sqrt{\pi} (-64 z^{17/2} + 3008 z^{15/2} - 51600 z^{13/2} + 405600 z^{11/2} - 1501500 z^{9/2} + 2393820 z^{7/2} - 1216215 z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aku10.01

$${}_2F_2\left(3, 6; -\frac{3}{2}, 3; z\right) = \frac{16 z^7 + 592 z^6 + 7512 z^5 + 39420 z^4 + 79905 z^3 + 40320 z^2 - 5760 z + 1440}{1440} + \frac{e^z \sqrt{\pi} (32 z^{15/2} + 1200 z^{13/2} + 15600 z^{11/2} + 85800 z^{9/2} + 193050 z^{7/2} + 135135 z^{5/2}) \operatorname{erf}(\sqrt{z})}{2880}$$

07.25.03.aku11.01

$${}_2F_2\left(3, 6; -\frac{3}{2}, 3; -z\right) = \frac{-16 z^7 + 592 z^6 - 7512 z^5 + 39420 z^4 - 79905 z^3 + 40320 z^2 + 5760 z + 1440}{1440} + \frac{e^{-z} \sqrt{\pi} (32 z^{15/2} - 1200 z^{13/2} + 15600 z^{11/2} - 85800 z^{9/2} + 193050 z^{7/2} - 135135 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{2880}$$

07.25.03.aku12.01

$${}_2F_2\left(3, 6; -\frac{3}{2}, 4; z\right) = \frac{1}{240} (8 z^6 + 220 z^5 + 1890 z^4 + 5635 z^3 + 4032 z^2 - 720 z + 240) + \frac{1}{480} e^z \sqrt{\pi} (16 z^{13/2} + 448 z^{11/2} + 3992 z^{9/2} + 12960 z^{7/2} + 12285 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.aku13.01

$${}_2F_2\left(3, 6; -\frac{3}{2}, 4; -z\right) = \frac{1}{240} (8 z^6 - 220 z^5 + 1890 z^4 - 5635 z^3 + 4032 z^2 + 720 z + 240) + \frac{1}{480} e^{-z} \sqrt{\pi} (-16 z^{13/2} + 448 z^{11/2} - 3992 z^{9/2} + 12960 z^{7/2} - 12285 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akue.01

$${}_2F_2\left(3, 6; -\frac{3}{2}, 5; z\right) = \frac{1}{30} (4z^5 + 72z^4 + 335z^3 + 336z^2 - 72z + 30) + \frac{1}{60} e^z \sqrt{\pi} (8z^{11/2} + 148z^{9/2} + 738z^{7/2} + 945z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akuf.01

$${}_2F_2\left(3, 6; -\frac{3}{2}, 5; -z\right) = \frac{1}{30} (-4z^5 + 72z^4 - 335z^3 + 336z^2 + 72z + 30) + \frac{1}{60} e^{-z} \sqrt{\pi} (8z^{11/2} - 148z^{9/2} + 738z^{7/2} - 945z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akug.01

$${}_2F_2\left(3, 6; -\frac{3}{2}, 6; z\right) = \frac{1}{3} (2z^4 + 17z^3 + 24z^2 - 6z + 3) + \frac{1}{6} e^z \sqrt{\pi} (4z^{9/2} + 36z^{7/2} + 63z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akuh.01

$${}_2F_2\left(3, 6; -\frac{3}{2}, 6; -z\right) = \frac{1}{3} (2z^4 - 17z^3 + 24z^2 + 6z + 3) + \frac{1}{6} e^{-z} \sqrt{\pi} (-4z^{9/2} + 36z^{7/2} - 63z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = -\frac{1}{2}$

07.25.03.akui.01

$${}_2F_2\left(3, 6; -\frac{1}{2}, 1; z\right) = \frac{1}{7680} (-64z^8 - 3136z^7 - 56624z^6 - 474976z^5 - 1917900z^4 - 3480820z^3 - 2294145z^2 - 276480z + 7680) + \frac{1}{15360} (e^z \sqrt{\pi} (-128z^{17/2} - 6336z^{15/2} - 116320z^{13/2} - 1003600z^{11/2} - 4261400z^{9/2} - 8519940z^{7/2} - 6936930z^{5/2} - 1576575z^{3/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.akuj.01

$${}_2F_2\left(3, 6; -\frac{1}{2}, 1; -z\right) = \frac{1}{7680} (-64z^8 + 3136z^7 - 56624z^6 + 474976z^5 - 1917900z^4 + 3480820z^3 - 2294145z^2 + 276480z + 7680) + \frac{1}{15360} (e^{-z} \sqrt{\pi} (128z^{17/2} - 6336z^{15/2} + 116320z^{13/2} - 1003600z^{11/2} + 4261400z^{9/2} - 8519940z^{7/2} + 6936930z^{5/2} - 1576575z^{3/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.akuk.01

$${}_2F_2\left(3, 6; -\frac{1}{2}, 2; z\right) = \frac{-32z^7 - 1296z^6 - 18608z^5 - 117144z^4 - 322490z^3 - 329805z^2 - 69120z + 3840}{3840} + \frac{1}{7680} e^z \sqrt{\pi} (-64z^{15/2} - 2624z^{13/2} - 38480z^{11/2} - 251680z^{9/2} - 746460z^{7/2} - 900900z^{5/2} - 315315z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akul.01

$${}_2F_2\left(3, 6; -\frac{1}{2}, 2; -z\right) = \frac{32z^7 - 1296z^6 + 18608z^5 - 117144z^4 + 322490z^3 - 329805z^2 + 69120z + 3840}{3840} + \frac{1}{7680} e^{-z} \sqrt{\pi} (-64z^{15/2} + 2624z^{13/2} - 38480z^{11/2} + 251680z^{9/2} - 746460z^{7/2} + 900900z^{5/2} - 315315z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akum.01

$${}_2F_2\left(3, 6; -\frac{1}{2}, 3; z\right) = \frac{1}{960} (-16z^6 - 512z^5 - 5472z^4 - 23240z^3 - 35595z^2 - 11520z + 960) + \frac{e^z \sqrt{\pi} (-32z^{13/2} - 1040z^{11/2} - 11440z^{9/2} - 51480z^{7/2} - 90090z^{5/2} - 45045z^{3/2}) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.akun.01

$${}_2F_2\left(3, 6; -\frac{1}{2}, 3; -z\right) = \frac{1}{960} (-16z^6 + 512z^5 - 5472z^4 + 23240z^3 - 35595z^2 + 11520z + 960) + \frac{e^{-z} \sqrt{\pi} (32z^{13/2} - 1040z^{11/2} + 11440z^{9/2} - 51480z^{7/2} + 90090z^{5/2} - 45045z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.akuo.01

$${}_2F_2\left(3, 6; -\frac{1}{2}, 4; z\right) = \frac{1}{160} (-8z^5 - 188z^4 - 1330z^3 - 3059z^2 - 1440z + 160) + \frac{1}{320} e^z \sqrt{\pi} (-16z^{11/2} - 384z^{9/2} - 2840z^{7/2} - 7280z^{5/2} - 5005z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akup.01

$${}_2F_2\left(3, 6; -\frac{1}{2}, 4; -z\right) = \frac{1}{160} (8z^5 - 188z^4 + 1330z^3 - 3059z^2 + 1440z + 160) + \frac{1}{320} e^{-z} \sqrt{\pi} (-16z^{11/2} + 384z^{9/2} - 2840z^{7/2} + 7280z^{5/2} - 5005z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akuq.01

$${}_2F_2\left(3, 6; -\frac{1}{2}, 5; z\right) = \frac{1}{20} (-4z^4 - 60z^3 - 217z^2 - 144z + 20) + \frac{1}{40} e^z \sqrt{\pi} (-8z^{9/2} - 124z^{7/2} - 490z^{5/2} - 455z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akur.01

$${}_2F_2\left(3, 6; -\frac{1}{2}, 5; -z\right) = \frac{1}{20} (-4z^4 + 60z^3 - 217z^2 + 144z + 20) + \frac{1}{40} e^{-z} \sqrt{\pi} (8z^{9/2} - 124z^{7/2} + 490z^{5/2} - 455z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akus.01

$${}_2F_2\left(3, 6; -\frac{1}{2}, 6; z\right) = \frac{1}{2} (-2z^3 - 13z^2 - 12z + 2) + \frac{1}{4} e^z \sqrt{\pi} (-4z^{7/2} - 28z^{5/2} - 35z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akut.01

$${}_2F_2\left(3, 6; -\frac{1}{2}, 6; -z\right) = \frac{1}{2} (2z^3 - 13z^2 + 12z + 2) + \frac{1}{4} e^{-z} \sqrt{\pi} (-4z^{7/2} + 28z^{5/2} - 35z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = \frac{1}{2}$

07.25.03.akuu.01

$${}_2F_2\left(3, 6; \frac{1}{2}, 1; z\right) = \frac{64 z^7 + 2688 z^6 + 40528 z^5 + 273600 z^4 + 840700 z^3 + 1055880 z^2 + 397035 z + 15360}{15360} + \frac{1}{30720} \left(e^z \sqrt{\pi} (128 z^{15/2} + 5440 z^{13/2} + 83680 z^{11/2} + 585200 z^{9/2} + 1920600 z^{7/2} + 2758140 z^{5/2} + 1420650 z^{3/2} + 155925 \sqrt{z}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.akuv.01

$${}_2F_2\left(3, 6; \frac{1}{2}, 1; -z\right) = \frac{-64 z^7 + 2688 z^6 - 40528 z^5 + 273600 z^4 - 840700 z^3 + 1055880 z^2 - 397035 z + 15360}{15360} + \frac{1}{30720} \left(e^{-z} \sqrt{\pi} (128 z^{15/2} - 5440 z^{13/2} + 83680 z^{11/2} - 585200 z^{9/2} + 1920600 z^{7/2} - 2758140 z^{5/2} + 1420650 z^{3/2} - 155925 \sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.akuw.01

$${}_2F_2\left(3, 6; \frac{1}{2}, 2; z\right) = \frac{32 z^6 + 1104 z^5 + 13104 z^4 + 65240 z^3 + 132090 z^2 + 86265 z + 7680}{7680} + \frac{1}{15360} e^z \sqrt{\pi} (64 z^{13/2} + 2240 z^{11/2} + 27280 z^{9/2} + 142560 z^{7/2} + 318780 z^{5/2} + 263340 z^{3/2} + 51975 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akux.01

$${}_2F_2\left(3, 6; \frac{1}{2}, 2; -z\right) = \frac{32 z^6 - 1104 z^5 + 13104 z^4 - 65240 z^3 + 132090 z^2 - 86265 z + 7680}{7680} + \frac{1}{15360} e^{-z} \sqrt{\pi} (-64 z^{13/2} + 2240 z^{11/2} - 27280 z^{9/2} + 142560 z^{7/2} - 318780 z^{5/2} + 263340 z^{3/2} - 51975 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akuy.01

$${}_2F_2\left(3, 6; \frac{1}{2}, 3; z\right) = \frac{16 z^5 + 432 z^4 + 3752 z^3 + 12180 z^2 + 12645 z + 1920}{1920} + \frac{e^z \sqrt{\pi} (32 z^{11/2} + 880 z^{9/2} + 7920 z^{7/2} + 27720 z^{5/2} + 34650 z^{3/2} + 10395 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.akuz.01

$${}_2F_2\left(3, 6; \frac{1}{2}, 3; -z\right) = \frac{-16 z^5 + 432 z^4 - 3752 z^3 + 12180 z^2 - 12645 z + 1920}{1920} + \frac{e^{-z} \sqrt{\pi} (32 z^{11/2} - 880 z^{9/2} + 7920 z^{7/2} - 27720 z^{5/2} + 34650 z^{3/2} - 10395 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.akv0.01

$${}_2F_2\left(3, 6; \frac{1}{2}, 4; z\right) = \frac{1}{320} (8 z^4 + 156 z^3 + 866 z^2 + 1395 z + 320) + \frac{1}{640} e^z \sqrt{\pi} (16 z^{9/2} + 320 z^{7/2} + 1880 z^{5/2} + 3520 z^{3/2} + 1485 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akv1.01

$${}_2F_2\left(3, 6; \frac{1}{2}, 4; -z\right) = \frac{1}{320} (8z^4 - 156z^3 + 866z^2 - 1395z + 320) + \frac{1}{640} e^{-z} \sqrt{\pi} (-16z^{9/2} + 320z^{7/2} - 1880z^{5/2} + 3520z^{3/2} - 1485\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akv2.01

$${}_2F_2\left(3, 6; \frac{1}{2}, 5; z\right) = \frac{1}{40} (4z^3 + 48z^2 + 123z + 40) + \frac{1}{80} e^z \sqrt{\pi} (8z^{7/2} + 100z^{5/2} + 290z^{3/2} + 165\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akv3.01

$${}_2F_2\left(3, 6; \frac{1}{2}, 5; -z\right) = \frac{1}{40} (-4z^3 + 48z^2 - 123z + 40) + \frac{1}{80} e^{-z} \sqrt{\pi} (8z^{7/2} - 100z^{5/2} + 290z^{3/2} - 165\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akv4.01

$${}_2F_2\left(3, 6; \frac{1}{2}, 6; z\right) = \frac{1}{4} (2z^2 + 9z + 4) + \frac{1}{8} e^z \sqrt{\pi} (4z^{5/2} + 20z^{3/2} + 15\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.akv5.01

$${}_2F_2\left(3, 6; \frac{1}{2}, 6; -z\right) = \frac{1}{4} (2z^2 - 9z + 4) + \frac{1}{8} e^{-z} \sqrt{\pi} (-4z^{5/2} + 20z^{3/2} - 15\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = 1$

07.25.03.akv6.01

$${}_2F_2(3, 6; 1, 1; z) = \frac{1}{240} (z^7 + 39z^6 + 542z^5 + 3350z^4 + 9400z^3 + 10920z^2 + 4080z + 240)$$

07.25.03.akv7.01

$${}_2F_2\left(3, 6; 1, \frac{3}{2}; z\right) = \frac{64z^6 + 2240z^5 + 27120z^4 + 139040z^3 + 295596z^2 + 213660z + 27885}{30720} + \frac{1}{61440\sqrt{z}} e^z \sqrt{\pi} (128z^7 + 4544z^6 + 56416z^5 + 303120z^4 + 708120z^3 + 633780z^2 + 153090z + 2835) \operatorname{erf}(\sqrt{z})$$

07.25.03.akv8.01

$${}_2F_2\left(3, 6; 1, \frac{3}{2}; -z\right) = \frac{64z^6 - 2240z^5 + 27120z^4 - 139040z^3 + 295596z^2 - 213660z + 27885}{30720} + \frac{1}{61440\sqrt{z}} e^{-z} \sqrt{\pi} (-128z^7 + 4544z^6 - 56416z^5 + 303120z^4 - 708120z^3 + 633780z^2 - 153090z + 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akv9.01

$${}_2F_2(3, 6; 1, 2; z) = \frac{1}{240} e^z (z^6 + 32z^5 + 350z^4 + 1600z^3 + 3000z^2 + 1920z + 240)$$

07.25.03.akva.01

$${}_2F_2\left(3, 6; 1, \frac{5}{2}; z\right) = \frac{64z^6 + 1792z^5 + 16400z^4 + 57856z^3 + 70428z^2 + 17680z - 105}{20480z} + \frac{1}{40960z^{3/2}} e^z \sqrt{\pi} (128z^7 + 3648z^6 + 34528z^5 + 130480z^4 + 186200z^3 + 75180z^2 + 2730z + 105) \operatorname{erf}(\sqrt{z})$$

07.25.03.akvb.01

$${}_2F_2\left(3, 6; 1, \frac{5}{2}; -z\right) = \frac{-64 z^6 + 1792 z^5 - 16400 z^4 + 57856 z^3 - 70428 z^2 + 17680 z + 105}{20480 z} + \frac{1}{40960 z^{3/2}} e^{-z} \sqrt{\pi} (128 z^7 - 3648 z^6 + 34528 z^5 - 130480 z^4 + 186200 z^3 - 75180 z^2 + 2730 z - 105) \operatorname{erfi}(\sqrt{z})$$

07.25.03.akvc.01

$${}_2F_2(3, 6; 1, 3; z) = \frac{1}{120} e^z (z^5 + 25 z^4 + 200 z^3 + 600 z^2 + 600 z + 120)$$

07.25.03.akvd.01

$${}_2F_2\left(3, 6; 1, \frac{7}{2}; z\right) = \frac{64 z^6 + 1344 z^5 + 8368 z^4 + 16608 z^3 + 6796 z^2 - 60 z - 135}{8192 z^2} + \frac{e^z \sqrt{\pi} (128 z^7 + 2752 z^6 + 18016 z^5 + 40400 z^4 + 24600 z^3 + 1380 z^2 - 30 z + 135) \operatorname{erf}(\sqrt{z})}{16384 z^{5/2}}$$

07.25.03.akve.01

$${}_2F_2\left(3, 6; 1, \frac{7}{2}; -z\right) = \frac{64 z^6 - 1344 z^5 + 8368 z^4 - 16608 z^3 + 6796 z^2 + 60 z - 135}{8192 z^2} + \frac{e^{-z} \sqrt{\pi} (-128 z^7 + 2752 z^6 - 18016 z^5 + 40400 z^4 - 24600 z^3 + 1380 z^2 + 30 z + 135) \operatorname{erfi}(\sqrt{z})}{16384 z^{5/2}}$$

07.25.03.akvf.01

$${}_2F_2(3, 6; 1, 4; z) = \frac{1}{40} e^z (z^4 + 18 z^3 + 92 z^2 + 140 z + 40)$$

07.25.03.akvg.01

$${}_2F_2\left(3, 6; 1, \frac{9}{2}; z\right) = \frac{7(64 z^6 + 896 z^5 + 3024 z^4 + 1856 z^3 + 60 z^2 - 360 z + 675)}{16384 z^3} + \frac{7 e^z \sqrt{\pi} (128 z^7 + 1856 z^6 + 6880 z^5 + 6000 z^4 + 600 z^3 - 420 z^2 + 810 z - 675) \operatorname{erf}(\sqrt{z})}{32768 z^{7/2}}$$

07.25.03.akvh.01

$${}_2F_2\left(3, 6; 1, \frac{9}{2}; -z\right) = \frac{7 e^{-z} \sqrt{\pi} (128 z^7 - 1856 z^6 + 6880 z^5 - 6000 z^4 + 600 z^3 + 420 z^2 + 810 z + 675) \operatorname{erfi}(\sqrt{z})}{32768 z^{7/2}} - \frac{7(64 z^6 - 896 z^5 + 3024 z^4 - 1856 z^3 + 60 z^2 + 360 z + 675)}{16384 z^3}$$

07.25.03.akvi.01

$${}_2F_2(3, 6; 1, 5; z) = \frac{1}{10} e^z (z^3 + 11 z^2 + 26 z + 10)$$

07.25.03.akvj.01

$${}_2F_2\left(3, 6; 1, \frac{11}{2}; z\right) = \frac{63(64 z^6 + 448 z^5 + 368 z^4 + 160 z^3 - 660 z^2 + 1900 z - 3675)}{32768 z^4} + \frac{63 e^z \sqrt{\pi} (128 z^7 + 960 z^6 + 1120 z^5 + 400 z^4 - 1000 z^3 + 2580 z^2 - 4350 z + 3675) \operatorname{erf}(\sqrt{z})}{65536 z^{9/2}}$$

07.25.03.akvk.01

$${}_2F_2\left(3, 6; 1, \frac{11}{2}; -z\right) = \frac{63(64z^6 - 448z^5 + 368z^4 - 160z^3 - 660z^2 - 1900z - 3675)}{32768z^4} - \frac{63e^{-z}\sqrt{\pi}(128z^7 - 960z^6 + 1120z^5 - 400z^4 - 1000z^3 - 2580z^2 - 4350z - 3675)\operatorname{erfi}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.akvl.01

$${}_2F_2(3, 6; 1, 6; z) = \frac{1}{2}e^z(z^2 + 4z + 2)$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = \frac{3}{2}$

07.25.03.akvm.01

$${}_2F_2\left(3, 6; \frac{3}{2}, 2; z\right) = \frac{32z^5 + 912z^4 + 8560z^3 + 31416z^2 + 41130z + 12525}{15360} + \frac{e^z\sqrt{\pi}(64z^6 + 1856z^5 + 18000z^4 + 70560z^3 + 107100z^2 + 49140z + 2835)\operatorname{erf}(\sqrt{z})}{30720\sqrt{z}}$$

07.25.03.akvn.01

$${}_2F_2\left(3, 6; \frac{3}{2}, 2; -z\right) = \frac{-32z^5 + 912z^4 - 8560z^3 + 31416z^2 - 41130z + 12525}{15360} + \frac{e^{-z}\sqrt{\pi}(64z^6 - 1856z^5 + 18000z^4 - 70560z^3 + 107100z^2 - 49140z + 2835)\operatorname{erfi}(\sqrt{z})}{30720\sqrt{z}}$$

07.25.03.akvo.01

$${}_2F_2\left(3, 6; \frac{3}{2}, 3; z\right) = \frac{16z^4 + 352z^3 + 2352z^2 + 5280z + 2895}{3840} + \frac{e^z\sqrt{\pi}(32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945)\operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.akvp.01

$${}_2F_2\left(3, 6; \frac{3}{2}, 3; -z\right) = \frac{16z^4 - 352z^3 + 2352z^2 - 5280z + 2895}{3840} + \frac{e^{-z}\sqrt{\pi}(-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945)\operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.akvq.01

$${}_2F_2\left(3, 6; \frac{3}{2}, 4; z\right) = \frac{1}{640}(8z^3 + 124z^2 + 498z + 451) + \frac{e^z\sqrt{\pi}(16z^4 + 256z^3 + 1112z^2 + 1296z + 189)\operatorname{erf}(\sqrt{z})}{1280\sqrt{z}}$$

07.25.03.akvr.01

$${}_2F_2\left(3, 6; \frac{3}{2}, 4; -z\right) = \frac{1}{640}(-8z^3 + 124z^2 - 498z + 451) + \frac{e^{-z}\sqrt{\pi}(16z^4 - 256z^3 + 1112z^2 - 1296z + 189)\operatorname{erfi}(\sqrt{z})}{1280\sqrt{z}}$$

07.25.03.akvs.01

$${}_2F_2\left(3, 6; \frac{3}{2}, 5; z\right) = \frac{1}{80} (4z^2 + 36z + 53) + \frac{e^z \sqrt{\pi} (8z^3 + 76z^2 + 138z + 27) \operatorname{erf}(\sqrt{z})}{160 \sqrt{z}}$$

07.25.03.akvt.01

$${}_2F_2\left(3, 6; \frac{3}{2}, 5; -z\right) = \frac{1}{80} (4z^2 - 36z + 53) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 76z^2 - 138z + 27) \operatorname{erfi}(\sqrt{z})}{160 \sqrt{z}}$$

07.25.03.akvu.01

$${}_2F_2\left(3, 6; \frac{3}{2}, 6; z\right) = \frac{1}{8} (2z + 5) + \frac{e^z \sqrt{\pi} (4z^2 + 12z + 3) \operatorname{erf}(\sqrt{z})}{16 \sqrt{z}}$$

07.25.03.akvv.01

$${}_2F_2\left(3, 6; \frac{3}{2}, 6; -z\right) = \frac{1}{8} (5 - 2z) + \frac{e^{-z} \sqrt{\pi} (4z^2 - 12z + 3) \operatorname{erfi}(\sqrt{z})}{16 \sqrt{z}}$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = 2$

07.25.03.akvw.01

$${}_2F_2(3, 6; 2, 2; z) = \frac{1}{240} e^z (z^5 + 26z^4 + 220z^3 + 720z^2 + 840z + 240)$$

07.25.03.akvx.01

$${}_2F_2\left(3, 6; 2, \frac{5}{2}; z\right) = \frac{32z^5 + 720z^4 + 4976z^3 + 11832z^2 + 7370z + 105}{10240z} + \frac{e^z \sqrt{\pi} (64z^6 + 1472z^5 + 10640z^4 + 28000z^3 + 23100z^2 + 2940z - 105) \operatorname{erf}(\sqrt{z})}{20480z^{3/2}}$$

07.25.03.akvy.01

$${}_2F_2\left(3, 6; 2, \frac{5}{2}; -z\right) = \frac{32z^5 - 720z^4 + 4976z^3 - 11832z^2 + 7370z - 105}{10240z} + \frac{e^{-z} \sqrt{\pi} (-64z^6 + 1472z^5 - 10640z^4 + 28000z^3 - 23100z^2 + 2940z + 105) \operatorname{erfi}(\sqrt{z})}{20480z^{3/2}}$$

07.25.03.akvz.01

$${}_2F_2(3, 6; 2, 3; z) = \frac{1}{120} e^z (z^4 + 20z^3 + 120z^2 + 240z + 120)$$

07.25.03.akw0.01

$${}_2F_2\left(3, 6; 2, \frac{7}{2}; z\right) = \frac{32z^5 + 528z^4 + 2352z^3 + 2648z^2 + 90z + 45}{4096z^2} + \frac{e^z \sqrt{\pi} (64z^6 + 1088z^5 + 5200z^4 + 7200z^3 + 1500z^2 - 60z - 45) \operatorname{erf}(\sqrt{z})}{8192z^{5/2}}$$

07.25.03.akw1.01

$${}_2F_2\left(3, 6; 2, \frac{7}{2}; -z\right) = \frac{-32z^5 + 528z^4 - 2352z^3 + 2648z^2 - 90z + 45}{4096z^2} + \frac{e^{-z}\sqrt{\pi}(64z^6 - 1088z^5 + 5200z^4 - 7200z^3 + 1500z^2 + 60z - 45)\operatorname{erfi}(\sqrt{z})}{8192z^{5/2}}$$

07.25.03.akw2.01

$${}_2F_2(3, 6; 2, 4; z) = \frac{1}{40} e^z (z^3 + 14z^2 + 50z + 40)$$

07.25.03.akw3.01

$${}_2F_2\left(3, 6; 2, \frac{9}{2}; z\right) = \frac{7(32z^5 + 336z^4 + 688z^3 + 24z^2 + 90z - 135)}{8192z^3} + \frac{7e^z\sqrt{\pi}(64z^6 + 704z^5 + 1680z^4 + 480z^3 + 60z^2 - 180z + 135)\operatorname{erf}(\sqrt{z})}{16384z^{7/2}}$$

07.25.03.akw4.01

$${}_2F_2\left(3, 6; 2, \frac{9}{2}; -z\right) = \frac{7(32z^5 - 336z^4 + 688z^3 - 24z^2 + 90z + 135)}{8192z^3} - \frac{7e^{-z}\sqrt{\pi}(64z^6 - 704z^5 + 1680z^4 - 480z^3 + 60z^2 + 180z + 135)\operatorname{erfi}(\sqrt{z})}{16384z^{7/2}}$$

07.25.03.akw5.01

$${}_2F_2(3, 6; 2, 5; z) = \frac{1}{10} e^z (z^2 + 8z + 10)$$

07.25.03.akw6.01

$${}_2F_2\left(3, 6; 2, \frac{11}{2}; z\right) = \frac{63(32z^5 + 144z^4 - 16z^3 + 120z^2 - 310z + 525)}{16384z^4} + \frac{63e^z\sqrt{\pi}(64z^6 + 320z^5 + 80z^4 + 160z^3 - 420z^2 + 660z - 525)\operatorname{erf}(\sqrt{z})}{32768z^{9/2}}$$

07.25.03.akw7.01

$${}_2F_2\left(3, 6; 2, \frac{11}{2}; -z\right) = \frac{63e^{-z}\sqrt{\pi}(64z^6 - 320z^5 + 80z^4 - 160z^3 - 420z^2 - 660z - 525)\operatorname{erfi}(\sqrt{z})}{32768z^{9/2}} - \frac{63(32z^5 - 144z^4 - 16z^3 - 120z^2 - 310z - 525)}{16384z^4}$$

07.25.03.akw8.01

$${}_2F_2(3, 6; 2, 6; z) = \frac{1}{2} e^z (z + 2)$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = \frac{5}{2}$

07.25.03.akw9.01

$${}_2F_2\left(3, 6; \frac{5}{2}, 3; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z \sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.akwa.01

$${}_2F_2\left(3, 6; \frac{5}{2}, 3; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z} \sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.akwb.01

$${}_2F_2\left(3, 6; \frac{5}{2}, 4; z\right) = \frac{3(8z^3 + 92z^2 + 226z + 35)}{1280z} + \frac{3e^z \sqrt{\pi} (16z^4 + 192z^3 + 536z^2 + 224z - 35) \operatorname{erf}(\sqrt{z})}{2560z^{3/2}}$$

07.25.03.akwc.01

$${}_2F_2\left(3, 6; \frac{5}{2}, 4; -z\right) = \frac{3(8z^3 - 92z^2 + 226z - 35)}{1280z} - \frac{3e^{-z} \sqrt{\pi} (16z^4 - 192z^3 + 536z^2 - 224z - 35) \operatorname{erfi}(\sqrt{z})}{2560z^{3/2}}$$

07.25.03.akwd.01

$${}_2F_2\left(3, 6; \frac{5}{2}, 5; z\right) = \frac{3(4z^2 + 24z + 7)}{160z} + \frac{3e^z \sqrt{\pi} (8z^3 + 52z^2 + 34z - 7) \operatorname{erf}(\sqrt{z})}{320z^{3/2}}$$

07.25.03.akwe.01

$${}_2F_2\left(3, 6; \frac{5}{2}, 5; -z\right) = \frac{3e^{-z} \sqrt{\pi} (8z^3 - 52z^2 + 34z + 7) \operatorname{erfi}(\sqrt{z})}{320z^{3/2}} - \frac{3(4z^2 - 24z + 7)}{160z}$$

07.25.03.akwf.01

$${}_2F_2\left(3, 6; \frac{5}{2}, 6; z\right) = \frac{3(2z + 1)}{16z} + \frac{3e^z \sqrt{\pi} (4z^2 + 4z - 1) \operatorname{erf}(\sqrt{z})}{32z^{3/2}}$$

07.25.03.akwg.01

$${}_2F_2\left(3, 6; \frac{5}{2}, 6; -z\right) = \frac{3(2z - 1)}{16z} - \frac{3e^{-z} \sqrt{\pi} (4z^2 - 4z - 1) \operatorname{erfi}(\sqrt{z})}{32z^{3/2}}$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = 3$

07.25.03.akwh.01

$${}_2F_2(3, 6; 3, 3; z) = \frac{1}{60} e^z (z^3 + 15z^2 + 60z + 60)$$

07.25.03.akwi.01

$${}_2F_2\left(3, 6; 3, \frac{7}{2}; z\right) = \frac{16z^4 + 192z^3 + 512z^2 + 120z - 45}{1024z^2} + \frac{e^z \sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.akwj.01

$${}_2F_2\left(3, 6; 3, \frac{7}{2}; -z\right) = \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z}\sqrt{\pi}(-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45)\operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.akwk.01

$${}_2F_2(3, 6; 3, 4; z) = \frac{1}{20} e^z (z^2 + 10z + 20)$$

07.25.03.akwl.01

$${}_2F_2\left(3, 6; 3, \frac{9}{2}; z\right) = \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z\sqrt{\pi}(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)\operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.akwm.01

$${}_2F_2\left(3, 6; 3, \frac{9}{2}; -z\right) = \frac{7e^{-z}\sqrt{\pi}(32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45)\operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.akwn.01

$${}_2F_2(3, 6; 3, 5; z) = \frac{1}{5} e^z (z + 5)$$

07.25.03.akwo.01

$${}_2F_2\left(3, 6; 3, \frac{11}{2}; z\right) = \frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z\sqrt{\pi}(32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.akwp.01

$${}_2F_2\left(3, 6; 3, \frac{11}{2}; -z\right) = \frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z}\sqrt{\pi}(32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.akwq.01

$${}_2F_2(3, 6; 3, 6; z) = e^z$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = \frac{7}{2}$

07.25.03.akwr.01

$${}_2F_2\left(3, 6; \frac{7}{2}, 4; z\right) = \frac{3(8z^3 + 60z^2 + 50z - 45)}{512z^2} + \frac{3e^z\sqrt{\pi}(16z^4 + 128z^3 + 152z^2 - 80z + 45)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.akws.01

$${}_2F_2\left(3, 6; \frac{7}{2}, 4; -z\right) = \frac{3e^{-z}\sqrt{\pi}(16z^4 - 128z^3 + 152z^2 + 80z + 45)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{3(8z^3 - 60z^2 + 50z + 45)}{512z^2}$$

07.25.03.akwt.01

$${}_2F_2\left(3, 6; \frac{7}{2}, 5; z\right) = \frac{3(4z^2 + 12z - 15)}{64z^2} + \frac{3e^z\sqrt{\pi}(8z^3 + 28z^2 - 22z + 15)\operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.akwu.01

$${}_2F_2\left(3, 6; \frac{7}{2}, 5; -z\right) = \frac{3(4z^2 - 12z - 15)}{64z^2} - \frac{3e^{-z}\sqrt{\pi}(8z^3 - 28z^2 - 22z - 15)\operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.akwv.01

$${}_2F_2\left(3, 6; \frac{7}{2}, 6; z\right) = \frac{15(2z - 3)}{32z^2} + \frac{15e^z\sqrt{\pi}(4z^2 - 4z + 3)\operatorname{erf}(\sqrt{z})}{64z^{5/2}}$$

07.25.03.akww.01

$${}_2F_2\left(3, 6; \frac{7}{2}, 6; -z\right) = \frac{15e^{-z}\sqrt{\pi}(4z^2 + 4z + 3)\operatorname{erfi}(\sqrt{z})}{64z^{5/2}} - \frac{15(2z + 3)}{32z^2}$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = 4$

07.25.03.akwx.01

$${}_2F_2(3, 6; 4, 4; z) = \frac{3e^z(z^4 + 6z^3 + 2z^2 - 4z + 4)}{20z^3} - \frac{3}{5z^3}$$

07.25.03.akwy.01

$${}_2F_2\left(3, 6; 4, \frac{9}{2}; z\right) = \frac{21(8z^3 + 28z^2 - 30z - 45)}{1024z^3} + \frac{21e^z\sqrt{\pi}(16z^4 + 64z^3 - 40z^2 + 45)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.akwz.01

$${}_2F_2\left(3, 6; 4, \frac{9}{2}; -z\right) = \frac{21(8z^3 - 28z^2 - 30z + 45)}{1024z^3} - \frac{21e^{-z}\sqrt{\pi}(16z^4 - 64z^3 - 40z^2 + 45)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.akx0.01

$${}_2F_2(3, 6; 4, 5; z) = \frac{3e^z(z^3 + 2z^2 - 4z + 4)}{5z^3} - \frac{12}{5z^3}$$

07.25.03.akx1.01

$${}_2F_2\left(3, 6; 4, \frac{11}{2}; z\right) = \frac{63(24z^3 - 12z^2 - 170z + 105)}{2048z^4} + \frac{189e^z\sqrt{\pi}(16z^4 - 40z^2 + 80z - 35)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.akx2.01

$${}_2F_2\left(3, 6; 4, \frac{11}{2}; -z\right) = \frac{189e^{-z}\sqrt{\pi}(16z^4 - 40z^2 - 80z - 35)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{63(24z^3 + 12z^2 - 170z - 105)}{2048z^4}$$

07.25.03.akx3.01

$${}_2F_2(3, 6; 4, 6; z) = \frac{3e^z(z^2 - 2z + 2)}{z^3} - \frac{6}{z^3}$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = \frac{9}{2}$

07.25.03.akx4.01

$${}_2F_2\left(3, 6; \frac{9}{2}, 5; z\right) = \frac{21(4z^2 - 45)}{128z^3} + \frac{21e^z\sqrt{\pi}(8z^3 + 4z^2 - 30z + 45)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.akx5.01

$${}_2F_2\left(3, 6; \frac{9}{2}, 5; -z\right) = \frac{21 e^{-z} \sqrt{\pi} (8z^3 - 4z^2 - 30z - 45) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{21(4z^2 - 45)}{128 z^3}$$

07.25.03.akx6.01

$${}_2F_2\left(3, 6; \frac{9}{2}, 6; z\right) = \frac{105(2z - 15)}{64 z^3} + \frac{105 e^z \sqrt{\pi} (4z^2 - 12z + 15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.akx7.01

$${}_2F_2\left(3, 6; \frac{9}{2}, 6; -z\right) = \frac{105(2z + 15)}{64 z^3} - \frac{105 e^{-z} \sqrt{\pi} (4z^2 + 12z + 15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = 5$

07.25.03.akx8.01

$${}_2F_2(3, 6; 5, 5; z) = \frac{12 e^z (z^3 - z^2 - 2z + 6)}{5 z^4} - \frac{24(2z + 3)}{5 z^4}$$

07.25.03.akx9.01

$${}_2F_2\left(3, 6; 5, \frac{11}{2}; z\right) = \frac{63(12z^2 - 100z - 105)}{256 z^4} + \frac{189 e^z \sqrt{\pi} (8z^3 - 20z^2 + 10z + 35) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.akxa.01

$${}_2F_2\left(3, 6; 5, \frac{11}{2}; -z\right) = \frac{63(12z^2 + 100z - 105)}{256 z^4} - \frac{189 e^{-z} \sqrt{\pi} (8z^3 + 20z^2 + 10z - 35) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.akxb.01

$${}_2F_2(3, 6; 5, 6; z) = \frac{12 e^z (z^2 - 4z + 6)}{z^4} - \frac{24(z + 3)}{z^4}$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = \frac{11}{2}$

07.25.03.akxc.01

$${}_2F_2\left(3, 6; \frac{11}{2}, 6; z\right) = \frac{945 e^z \sqrt{\pi} (4z^2 - 20z + 35) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}} - \frac{1575(2z + 21)}{128 z^4}$$

07.25.03.akxd.01

$${}_2F_2\left(3, 6; \frac{11}{2}, 6; -z\right) = \frac{1575(2z - 21)}{128 z^4} + \frac{945 e^{-z} \sqrt{\pi} (4z^2 + 20z + 35) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

For fixed z and $a_1 = 3, a_2 = 6, b_1 = 6$

07.25.03.akxe.01

$${}_2F_2(3, 6; 6, 6; z) = \frac{60 e^z (z^2 - 6z + 12)}{z^5} - \frac{60(z^2 + 6z + 12)}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}, a_2 \geq \frac{7}{2}$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.akxf.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{24312605625} (e^z (262144z^{18} + 33030144z^{17} + 1732313088z^{16} + 49507467264z^{15} + 848148627456z^{14} + 9034446274560z^{13} + 60124311797760z^{12} + 245065254174720z^{11} + 583819673794560z^{10} + 746119124029440z^9 + 436718887718400z^8 + 83420480102400z^7 + 1617904108800z^6 + 28805414400z^5 + 4629441600z^4 + 7233502500z^2 - 14467005000z + 24312605625))$$

07.25.03.akxg.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{2210236875} (e^z (131072z^{17} + 15007744z^{16} + 708575232z^{15} + 18022268928z^{14} + 270885027840z^{13} + 2485585428480z^{12} + 13905850613760z^{11} + 46050448711680z^{10} + 84682817694720z^9 + 7666970083200z^8 + 26685193651200z^7 + 1682449574400z^6 - 32272732800z^5 - 1733659200z^4 - 285768000z^3 - 714420000z^2 + 1116281250z - 2210236875))$$

07.25.03.akxh.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{245581875} (e^z (65536z^{16} + 6750208z^{15} + 283410432z^{14} + 6318735360z^{13} + 81733263360z^{12} + 629793239040z^{11} + 2859269253120z^{10} + 7299243463680z^9 + 9494813260800z^8 + 5103003628800z^7 + 585087753600z^6 - 36406843200z^5 + 2067055200z^4 + 166698000z^3 + 107163000z^2 - 89302500z + 245581875))$$

07.25.03.akxi.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{35083125} (e^z (32768z^{15} + 2998272z^{14} + 110223360z^{13} + 2112245760z^{12} + 22912542720z^{11} + 143052549120z^{10} + 499793057280z^9 + 900759916800z^8 + 693987004800z^7 + 122547297600z^6 - 13824367200z^5 + 2533129200z^4 - 233037000z^3 - 33169500z^2 + 3827250z - 35083125))$$

07.25.03.akxj.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{7016625} (e^z (16384z^{14} + 1310720z^{13} + 41349120z^{12} + 663306240z^{11} + 5818168320z^{10} + 27890012160z^9 + 68611449600z^8 + 73016985600z^7 + 18417067200z^6 - 3186086400z^5 + 1053032400z^4 - 312984000z^3 + 39973500z^2 + 3402000z + 7016625))$$

07.25.03.akxk.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{2338875} (e^z (8192 z^{13} + 561152 z^{12} + 14782464 z^{11} + 191219712 z^{10} + 1283716608 z^9 + 4317131520 z^8 + 6244369920 z^7 + 2164458240 z^6 - 531528480 z^5 + 267306480 z^4 - 141750000 z^3 + 56133000 z^2 - 8079750 z - 2338875))$$

07.25.03.akxl.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{2338875} (e^z (4096 z^{12} + 233472 z^{11} + 4939776 z^{10} + 48681984 z^9 + 228061440 z^8 + 448104960 z^7 + 209502720 z^6 - 70035840 z^5 + 49397040 z^4 - 39236400 z^3 + 27216000 z^2 - 12757500 z + 2338875))$$

07.25.03.akxm.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{2338875} (e^{z/2} (2048 z^{12} + 106496 z^{11} + 2027520 z^{10} + 17656320 z^9 + 71251200 z^8 + 115706880 z^7 + 39352320 z^6 - 11138400 z^5 + 7986600 z^4 - 7776000 z^3 + 7916400 z^2 - 6378750 z + 2338875) I_0\left(\frac{z}{2}\right) + \frac{1}{2338875} (2 e^{z/2} (1024 z^{12} + 52224 z^{11} + 962048 z^{10} + 7891200 z^9 + 28166400 z^8 + 32820480 z^7 - 4556160 z^6 + 2464560 z^5 - 2128500 z^4 + 2200500 z^3 - 2166750 z^2 + 1389825 z) I_1\left(\frac{z}{2}\right))$$

07.25.03.akxn.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{2338875} (e^z (2048 z^{11} + 93184 z^{10} + 1491456 z^9 + 10172160 z^8 + 27567360 z^7 + 17297280 z^6 - 7680960 z^5 + 7227360 z^4 - 7824600 z^3 + 7767900 z^2 - 5811750 z + 2338875))$$

07.25.03.akxo.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{2338875} (e^{z/2} (2048 z^{11} + 82944 z^{10} + 1155072 z^9 + 6624000 z^8 + 14197248 z^7 + 5693184 z^6 - 1915200 z^5 + 1674000 z^4 - 2068200 z^3 + 2847420 z^2 - 3470040 z + 2338875) I_0\left(\frac{z}{2}\right) + \frac{1}{2338875} (e^{z/2} (2048 z^{11} + 80896 z^{10} + 1075200 z^9 + 5587200 z^8 + 9073152 z^7 - 1435392 z^6 + 915264 z^5 - 968400 z^4 + 1301400 z^3 - 1853820 z^2 + 2218320 z - 1216215) I_1\left(\frac{z}{2}\right))$$

07.25.03.akxp.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{779625} \left(e^z (1024 z^{10} + 34816 z^9 + 380160 z^8 + 1474560 z^7 + 1249920 z^6 - 725760 z^5 + 876960 z^4 - 1209600 z^3 + 1530900 z^2 - 1474200 z + 779625) \right)$$

07.25.03.akxq.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{2338875} \left(4 e^{z/2} (1024 z^{10} + 29696 z^9 + 264960 z^8 + 774144 z^7 + 360192 z^6 - 141120 z^5 + 147600 z^4 - 230400 z^3 + 436860 z^2 - 827820 z + 1091475) I_0\left(\frac{z}{2}\right) + \frac{1}{2338875 z} \left(4 e^{z/2} (1024 z^{11} + 28672 z^{10} + 236800 z^9 + 550656 z^8 - 97536 z^7 + 71232 z^6 - 87120 z^5 + 133200 z^4 - 201060 z^3 + 180360 z^2 + 405405 z - 2027025) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.akxr.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{155925} e^z (512 z^9 + 11520 z^8 + 69120 z^7 + 80640 z^6 - 60480 z^5 + 90720 z^4 - 151200 z^3 + 226800 z^2 - 255150 z + 155925)$$

07.25.03.akxs.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{779625 z} \left(4 e^{z/2} (1024 z^{10} + 17920 z^9 + 76032 z^8 + 39936 z^7 - 13440 z^6 - 12960 z^5 + 183600 z^4 - 1113120 z^3 + 5000940 z^2 - 16528050 z + 34459425) I_0\left(\frac{z}{2}\right) + \frac{1}{779625 z^2} \left(4 e^{z/2} (1024 z^{11} + 16896 z^{10} + 59648 z^9 - 12288 z^8 + 14976 z^7 - 54240 z^6 + 293040 z^5 - 1550880 z^4 + 7003980 z^3 - 25135110 z^2 + 66891825 z - 137837700) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.akxt.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{22275 z^3} \left(e^z (256 z^{11} + 2816 z^{10} + 4992 z^9 - 7104 z^8 + 30144 z^7 - 180720 z^6 + 1099080 z^5 - 5931540 z^4 + 26564355 z^3 - 92897280 z^2 + 232243200 z - 348364800) + \frac{86016 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{7/2}} \right)$$

07.25.03.akxu.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{22275 z^3} \left(e^{-z} (256 z^{11} - 2816 z^{10} + 4992 z^9 + 7104 z^8 + 30144 z^7 + 180720 z^6 + 1099080 z^5 + 5931540 z^4 + 26564355 z^3 + 92897280 z^2 + 232243200 z + 348364800) \right) - \frac{86016 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{7/2}}$$

07.25.03.akxv.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{779625 z^2} \left(32 e^{z/2} (512 z^{10} + 3072 z^9 + 5376 z^8 - 32640 z^7 + 269280 z^6 - 1998720 z^5 + 12822480 z^4 - 68992560 z^3 + 298440450 z^2 - 964863900 z + 1964187225) I_0\left(\frac{z}{2}\right) + 64 e^{z/2} (256 z^{11} + 1280 z^{10} + 1536 z^9 - 17472 z^8 + 152400 z^7 - 1161360 z^6 + 7671600 z^5 - 42995160 z^4 + 198243045 z^3 - 719593875 z^2 + 1929727800 z - 3928374450) I_1\left(\frac{z}{2}\right) \right) + \frac{1}{779625 z^3} \left(42995160 z^4 + 198243045 z^3 - 719593875 z^2 + 1929727800 z - 3928374450 \right) I_1\left(\frac{z}{2}\right)$$

07.25.03.akxw.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{2475 z^4} \left(e^z (128 z^{11} - 64 z^{10} + 3168 z^9 - 33648 z^8 + 301080 z^7 - 2348460 z^6 + 15814530 z^5 - 89945685 z^4 + 418037760 z^3 - 1509580800 z^2 + 389073600 z - 6096384000) \right) + \frac{387072 \sqrt{\pi} (z + 35) \operatorname{erfi}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.akxx.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{2475 z^4} \left(e^{-z} (-128 z^{11} - 64 z^{10} - 3168 z^9 - 33648 z^8 - 301080 z^7 - 2348460 z^6 - 15814530 z^5 - 89945685 z^4 - 418037760 z^3 - 1509580800 z^2 - 389073600 z - 6096384000) \right) - \frac{387072 \sqrt{\pi} (z - 35) \operatorname{erf}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.akxy.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{155925 z^3} \left(32 e^{z/2} (512 z^{10} - 2816 z^9 + 34560 z^8 - 358080 z^7 + 3280800 z^6 - 26266320 z^5 + 180351360 z^4 - 1034094600 z^3 + 4755400650 z^2 - 16368226875 z + 36664828200) I_0\left(\frac{z}{2}\right) + 32 e^{z/2} (512 z^{11} - 3328 z^{10} + 38144 z^9 - 398400 z^8 + 3703200 z^7 - 30223920 z^6 + 213022080 z^5 - 1268106840 z^4 + 6182426250 z^3 - 23604706125 z^2 + 65472907500 z - 146659312800) I_1\left(\frac{z}{2}\right) \right) + \frac{1}{155925 z^4} \left(1268106840 z^4 + 6182426250 z^3 - 23604706125 z^2 + 65472907500 z - 146659312800 \right) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{9}{2}$

$$\begin{aligned}
 & \text{07.25.03.akxz.01} \\
 & {}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \\
 & \frac{1}{200930625} \left(e^z (65536 z^{16} + 6815744 z^{15} + 289538048 z^{14} + 6550061056 z^{13} + 86317056000 z^{12} + 681731850240 z^{11} + \right. \\
 & \quad \left. 3203400130560 z^{10} + 8609923768320 z^9 + 12206675658240 z^8 + 7818160896000 z^7 + 1615355481600 z^6 + \right. \\
 & \quad \left. 33547046400 z^5 + 637156800 z^4 + 88905600 z^3 + 79380000 z^2 - 79380000 z + 200930625) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aky0.01} \\
 & {}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = \\
 & -\frac{1}{22325625} \left(e^z (32768 z^{15} + 3063808 z^{14} + 115662848 z^{13} + 2291896320 z^{12} + 25969305600 z^{11} + 172065438720 z^{10} + \right. \\
 & \quad \left. 655340152320 z^9 + 1355931198720 z^8 + 1357578633600 z^7 + 515133864000 z^6 + \right. \\
 & \quad \left. 34976944800 z^5 - 714949200 z^4 - 38896200 z^3 - 13891500 z^2 + 4961250 z - 22325625) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aky1.01} \\
 & {}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \\
 & \frac{1}{3189375} \left(e^z (16384 z^{14} + 1359872 z^{13} + 44912640 z^{12} + 764190720 z^{11} + 7253222400 z^{10} + 38886773760 z^9 + \right. \\
 & \quad \left. 113792820480 z^8 + 165897907200 z^7 + 98146641600 z^6 + 12200328000 z^5 - \right. \\
 & \quad \left. 812019600 z^4 + 48535200 z^3 + 4819500 z^2 + 283500 z + 3189375) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aky2.01} \\
 & {}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = \\
 & -\frac{1}{637875} \left(e^z (8192 z^{13} + 593920 z^{12} + 16814080 z^{11} + 239175680 z^{10} + 1832793600 z^9 + 7530228480 z^8 + 15480153600 \right. \\
 & \quad \left. z^7 + 13288262400 z^6 + 2564402400 z^5 - 310842000 z^4 + 60253200 z^3 - 5859000 z^2 - 519750 z - 637875) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aky3.01} \\
 & {}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \\
 & \frac{1}{212625} \left(e^z (4096 z^{12} + 253952 z^{11} + 5994496 z^{10} + 68634624 z^9 + 401637120 z^8 + 1154472960 z^7 + \right. \\
 & \quad \left. 1390475520 z^6 + 386991360 z^5 - 72268560 z^4 + 25250400 z^3 - 7749000 z^2 + 945000 z + 212625) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.aky4.01} \\
 & {}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \\
 & -\frac{1}{212625} \left(e^z (2048 z^{11} + 105472 z^{10} + 1995264 z^9 + 17357568 z^8 + 70636800 z^7 + 118097280 z^6 + 45702720 z^5 - \right. \\
 & \quad \left. 12166560 z^4 + 6448680 z^3 - 3496500 z^2 + 1370250 z - 212625) \right)
 \end{aligned}$$

07.25.03.aky5.01

$$\begin{aligned}
 {}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, 1; z\right) = & \\
 & \frac{1}{212\,625} \left(e^{z/2} (-1024 z^{11} - 48\,128 z^{10} - 820\,480 z^9 - 6\,332\,160 z^8 - 22\,414\,080 z^7 - 31\,745\,280 z^6 - 9\,722\,160 z^5 + \right. \\
 & \quad \left. 2415\,600 z^4 - 1\,446\,300 z^3 + 1\,071\,900 z^2 - 685\,125 z + 212\,625) I_0\left(\frac{z}{2}\right) + \right. \\
 & \frac{1}{212\,625} \left(e^{z/2} (-1024 z^{11} - 47\,104 z^{10} - 773\,888 z^9 - 5\,580\,800 z^8 - 17\,176\,320 z^7 - 16\,719\,360 z^6 + \right. \\
 & \quad \left. 2\,115\,120 z^5 - 999\,360 z^4 + 706\,500 z^3 - 527\,400 z^2 + 272\,025 z) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

07.25.03.aky6.01

$$\begin{aligned}
 {}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = & \\
 & -\frac{1}{212\,625} \left(e^z (1024 z^{10} + 41\,984 z^9 + 598\,784 z^8 + 3\,589\,120 z^7 + 8\,400\,000 z^6 + 4\,448\,640 z^5 - 1\,616\,160 z^4 + \right. \\
 & \quad \left. 1\,189\,440 z^3 - 938\,700 z^2 + 598\,500 z - 212\,625) \right)
 \end{aligned}$$

07.25.03.aky7.01

$$\begin{aligned}
 {}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, 2; z\right) = & \\
 & \frac{1}{212\,625} \left(e^{z/2} (-1024 z^{10} - 37\,376 z^9 - 464\,640 z^8 - 2\,356\,224 z^7 - 4\,445\,952 z^6 - 1\,643\,040 z^5 + 500\,400 z^4 - \right. \\
 & \quad \left. 381\,600 z^3 + 383\,940 z^2 - 372\,330 z + 212\,625) I_0\left(\frac{z}{2}\right) + \right. \\
 & \frac{1}{212\,625} \left(e^{z/2} (-1024 z^{10} - 36\,352 z^9 - 428\,800 z^8 - 1\,944\,576 z^7 - 2\,682\,624 z^6 + 395\,808 z^5 - \right. \\
 & \quad \left. 228\,240 z^4 + 208\,800 z^3 - 223\,740 z^2 + 212\,490 z - 93\,555) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

07.25.03.aky8.01

$$\begin{aligned}
 {}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = & -\frac{1}{70\,875} \\
 & \left(e^z (512 z^9 + 15\,616 z^8 + 151\,040 z^7 + 510\,720 z^6 + 369\,600 z^5 - 178\,080 z^4 + 171\,360 z^3 - 176\,400 z^2 + 148\,050 z - 70\,875) \right)
 \end{aligned}$$

07.25.03.aky9.01

$$\begin{aligned}
 {}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, 3; z\right) = & \\
 & -\frac{1}{212\,625} \left(8 e^{z/2} (256 z^9 + 6656 z^8 + 52\,736 z^7 + 136\,192 z^6 + 59\,472 z^5 - 21\,600 z^4 + 20\,400 z^3 - 27\,360 z^2 + 40\,005 z - 43\,470) \right. \\
 & \quad \left. I_0\left(\frac{z}{2}\right) - \frac{1}{212\,625 z} \left(4 e^{z/2} (512 z^{10} + 12\,800 z^9 + 92\,928 z^8 + 185\,344 z^7 - 31\,136 z^6 + \right. \right. \\
 & \quad \left. \left. 21\,024 z^5 - 22\,800 z^4 + 28\,320 z^3 - 26\,190 z^2 - 20\,790 z + 135\,135) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

07.25.03.akya.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{1}{14175} e^z (256 z^8 + 5120 z^7 + 26880 z^6 + 26880 z^5 - 16800 z^4 + 20160 z^3 - 25200 z^2 + 25200 z - 14175)$$

07.25.03.akyb.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, 4; z\right) = -\frac{1}{70875 z} \left(4 e^{z/2} (512 z^9 + 7936 z^8 + 29696 z^7 + 14784 z^6 - 4320 z^5 - 6000 z^4 + 59040 z^3 - 284760 z^2 + 962010 z - 2027025) I_0\left(\frac{z}{2}\right) - \frac{1}{70875 z^2} \left(4 e^{z/2} (512 z^{10} + 7424 z^9 + 22528 z^8 - 4544 z^7 + 5664 z^6 - 19920 z^5 + 94560 z^4 - 415080 z^3 + 1476090 z^2 - 3918915 z + 8108100) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.akyc.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{2025 z^3} \left(e^z (-128 z^{10} - 1216 z^9 - 1888 z^8 + 2608 z^7 - 11160 z^6 + 62460 z^5 - 330930 z^4 + 1476585 z^3 - 5160960 z^2 + 12902400 z - 19353600) + \frac{14336 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{3 z^{7/2}}\right)$$

07.25.03.akyd.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{2025 z^3} \left(e^{-z} (128 z^{10} - 1216 z^9 + 1888 z^8 + 2608 z^7 + 11160 z^6 + 62460 z^5 + 330930 z^4 + 1476585 z^3 + 5160960 z^2 + 12902400 z + 19353600) - \frac{14336 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{3 z^{7/2}}\right)$$

07.25.03.akye.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, 5; z\right) = -\frac{1}{70875 z^2} \left(32 e^{z/2} (256 z^9 + 1280 z^8 + 2496 z^7 - 14400 z^6 + 104880 z^5 - 671760 z^4 + 3616200 z^3 - 15656760 z^2 + 50675625 z - 103378275) I_0\left(\frac{z}{2}\right) - \frac{1}{70875 z^3} \left(32 e^{z/2} (256 z^{10} + 1024 z^9 + 1600 z^8 - 15744 z^7 + 121200 z^6 - 802560 z^5 + 4503960 z^4 - 20790000 z^3 + 75540465 z^2 - 202702500 z + 413513100) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.akyf.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{225 z^4} \left(e^z (-64 z^{10} + 64 z^9 - 1552 z^8 + 14496 z^7 - 114300 z^6 + 774180 z^5 - 4423455 z^4 + 20643840 z^3 - 74833920 z^2 + 193536000 z - 304819200) \right) + \frac{10752 \sqrt{\pi} (2z + 63) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.akyg.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{225 z^4} \left(e^{-z} (-64 z^{10} - 64 z^9 - 1552 z^8 - 14496 z^7 - 114300 z^6 - 774180 z^5 - 4423455 z^4 - 20643840 z^3 - 74833920 z^2 - 193536000 z - 304819200) \right) - \frac{10752 \sqrt{\pi} (2z - 63) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.akyh.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{9}{2}, 6; z\right) = -\frac{1}{14175 z^3} \left(32 e^{z/2} (256 z^9 - 1408 z^8 + 15680 z^7 - 146240 z^6 + 1186800 z^5 - 8243760 z^4 + 47751480 z^3 - 221621400 z^2 + 769593825 z - 1745944200) I_0\left(\frac{z}{2}\right) - \frac{1}{14175 z^4} \left(32 e^{z/2} (256 z^{10} - 1664 z^9 + 17472 z^8 - 164800 z^7 + 1362800 z^6 - 9714960 z^5 + 58406040 z^4 - 287206920 z^3 + 1104728625 z^2 - 3078375300 z + 6983776800) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.akyi.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{2480625} \left(e^z (16384 z^{14} + 1376256 z^{13} + 46133248 z^{12} + 799948800 z^{11} + 7784985600 z^{10} + 43215298560 z^9 + 133201232640 z^8 + 211761285120 z^7 + 149386104000 z^6 + 33487776000 z^5 + 744584400 z^4 + 14817600 z^3 + 2778300 z^2 + 2480625) \right)$$

07.25.03.akyj.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{354375} \left(e^z (8192 z^{13} + 610304 z^{12} + 17879040 z^{11} + 265881600 z^{10} + 2164262400 z^9 + 9704206080 z^8 + 22931688960 z^7 + 25619731200 z^6 + 10643724000 z^5 + 778302000 z^4 - 16858800 z^3 - 1020600 z^2 - 141750 z - 354375) \right)$$

07.25.03.akyk.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{70875} (e^z (4096 z^{12} + 266240 z^{11} + 6676480 z^{10} + 82867200 z^9 + 543494400 z^8 + 1862883840 z^7 + 3082867200 z^6 + 2019830400 z^5 + 272286000 z^4 - 19278000 z^3 + 1209600 z^2 + 94500 z + 70875))$$

07.25.03.akyl.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{23625} (e^z (2048 z^{11} + 113664 z^{10} + 2372096 z^9 + 23642880 z^8 + 118068480 z^7 + 282065280 z^6 + 272139840 z^5 + 57425760 z^4 - 7421400 z^3 + 1493100 z^2 - 141750 z - 23625))$$

07.25.03.akym.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{23625} (e^z (1024 z^{10} + 47104 z^9 + 785664 z^8 + 5928960 z^7 + 20496000 z^6 + 28304640 z^5 + 8699040 z^4 - 1733760 z^3 + 623700 z^2 - 189000 z + 23625))$$

07.25.03.akyn.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{23625} \left(e^{z/2} (512 z^{10} + 21504 z^9 + 323840 z^8 + 2179200 z^7 + 6636000 z^6 + 8010240 z^5 + 2137680 z^4 - 442800 z^3 + 202050 z^2 - 94500 z + 23625) I_0\left(\frac{z}{2}\right) + \frac{1}{23625} \left(2 e^{z/2} (256 z^{10} + 10496 z^9 + 151552 z^8 + 943040 z^7 + 2441040 z^6 + 1913520 z^5 - 212880 z^4 + 82440 z^3 - 42075 z^2 + 16425 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.akyk.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{23625} (e^z (512 z^9 + 18688 z^8 + 233984 z^7 + 1209600 z^6 + 2385600 z^5 + 1031520 z^4 - 292320 z^3 + 156240 z^2 - 78750 z + 23625))$$

07.25.03.akyp.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{23625} \left(e^{z/2} (512 z^9 + 16640 z^8 + 182016 z^7 + 802368 z^6 + 1307040 z^5 + 434160 z^4 - 115200 z^3 + 71640 z^2 - 51030 z + 23625) I_0\left(\frac{z}{2}\right) + \frac{1}{23625} \left(e^{z/2} (512 z^9 + 16128 z^8 + 166144 z^7 + 643776 z^6 + 731808 z^5 - 98160 z^4 + 48960 z^3 - 35640 z^2 + 25290 z - 8505) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.akyq.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z (256 z^8 + 6912 z^7 + 58240 z^6 + 168000 z^5 + 100800 z^4 - 38640 z^3 + 27720 z^2 - 18900 z + 7875)}{7875}$$

07.25.03.akyr.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{23625} 4 e^{z/2} (256 z^8 + 5888 z^7 + 40768 z^6 + 91392 z^5 + 36720 z^4 - 12000 z^3 + 9720 z^2 - 10080 z + 8505) I_0\left(\frac{z}{2}\right) + \frac{1}{23625 z} 4 e^{z/2} (256 z^9 + 5632 z^8 + 35264 z^7 + 58688 z^6 - 9168 z^5 + 5520 z^4 - 4920 z^3 + 3960 z^2 + 945 z - 10395) I_1\left(\frac{z}{2}\right)$$

07.25.03.akys.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575)}{1575}$$

07.25.03.akyt.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{7875 z} 4 e^{z/2} (256 z^8 + 3456 z^7 + 11200 z^6 + 5184 z^5 - 1200 z^4 - 2640 z^3 + 17640 z^2 - 63000 z + 135135) I_0\left(\frac{z}{2}\right) + \frac{1}{7875 z^2} 4 e^{z/2} (256 z^9 + 3200 z^8 + 8128 z^7 - 1600 z^6 + 2064 z^5 - 6960 z^4 + 28200 z^3 - 98280 z^2 + 259875 z - 540540) I_1\left(\frac{z}{2}\right)$$

07.25.03.akyu.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{225 z^3} e^z (64 z^9 + 512 z^8 + 688 z^7 - 960 z^6 + 4140 z^5 - 20880 z^4 + 92385 z^3 - 322560 z^2 + 806400 z - 1209600) + \frac{2688 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.akyv.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{225 z^3} e^{-z} (64 z^9 - 512 z^8 + 688 z^7 + 960 z^6 + 4140 z^5 + 20880 z^4 + 92385 z^3 + 322560 z^2 + 806400 z + 1209600) - \frac{2688 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.akyw.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{7875 z^2} (32 e^{z/2} (128 z^8 + 512 z^7 + 1152 z^6 - 6240 z^5 + 39360 z^4 - 211680 z^3 + 917280 z^2 - 2972970 z + 6081075) I_0\left(\frac{z}{2}\right) + \frac{1}{7875 z^3} (64 e^{z/2} (64 z^9 + 192 z^8 + 416 z^7 - 3504 z^6 + 23400 z^5 - 131640 z^4 + 608580 z^3 - 2214135 z^2 + 5945940 z - 12162150) I_1\left(\frac{z}{2}\right))$$

07.25.03.akyx.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{25 z^4} e^z (32 z^9 - 48 z^8 + 752 z^7 - 6120 z^6 + 41850 z^5 - 240615 z^4 + 1128960 z^3 - 4112640 z^2 + 10684800 z - 16934400) + \frac{12096 \sqrt{\pi} (z + 28) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.akyy.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{25 z^4} (e^{-z} (-32 z^9 - 48 z^8 - 752 z^7 - 6120 z^6 - 41850 z^5 - 240615 z^4 - 1128960 z^3 - 4112640 z^2 - 10684800 z - 16934400)) - \frac{12096 \sqrt{\pi} (z - 28) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.akyz.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{1575 z^3} (32 e^{z/2} (128 z^8 - 704 z^7 + 7040 z^6 - 58320 z^5 + 411600 z^4 - 2416680 z^3 + 11351340 z^2 - 39864825 z + 91891800) I_0\left(\frac{z}{2}\right) + \frac{1}{1575 z^4} (32 e^{z/2} (128 z^9 - 832 z^8 + 7936 z^7 - 66800 z^6 + 483600 z^5 - 2945880 z^4 + 14650020 z^3 - 56891835 z^2 + 159459300 z - 367567200) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = \frac{7}{2}, a_2 = \frac{7}{2}, b_1 = -\frac{5}{2}$

07.25.03.akz0.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{50625} (e^z (4096 z^{12} + 270336 z^{11} + 6912000 z^{10} + 88012800 z^9 + 598060800 z^8 + 2160829440 z^7 + 3902941440 z^6 + 3052512000 z^5 + 743094000 z^4 + 17604000 z^3 + 372600 z^2 + 48600 z + 50625))$$

07.25.03.akz1.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{10125} \left(e^z (2048 z^{11} + 117760 z^{10} + 2572800 z^9 + 27283200 z^8 + 148972800 z^7 + 410037120 z^6 + 516340800 z^5 + 235404000 z^4 + 18441000 z^3 - 418500 z^2 - 22950 z - 10125) \right)$$

07.25.03.akz2.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{3375} \left(e^z (1024 z^{10} + 50176 z^9 + 910080 z^8 + 7726080 z^7 + 31992960 z^6 + 61050240 z^5 + 44494560 z^4 + 6465600 z^3 - 477900 z^2 + 29700 z + 3375) \right)$$

07.25.03.akz3.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{3375} \left(e^z (512 z^9 + 20736 z^8 + 299520 z^7 + 1916160 z^6 + 5457600 z^5 + 5965920 z^4 + 1366560 z^3 - 183600 z^2 + 36450 z - 3375) \right)$$

07.25.03.akz4.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{3375} \left(e^{z/2} (-256 z^9 - 9472 z^8 - 123840 z^7 - 711360 z^6 - 1815600 z^5 - 1807920 z^4 - 399240 z^3 + 63000 z^2 - 18225 z + 3375) I_0\left(\frac{z}{2}\right) + \frac{1}{3375} e^{z/2} (-256 z^9 - 9216 z^8 - 114752 z^7 - 600960 z^6 - 1263600 z^5 - 755520 z^4 + 69480 z^3 - 19440 z^2 + 5175 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.akz5.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{3375} e^z (256 z^8 + 8192 z^7 + 88320 z^6 + 384000 z^5 + 616800 z^4 + 207360 z^3 - 42480 z^2 + 14400 z - 3375)$$

07.25.03.akz6.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{3375} e^{z/2} (-256 z^8 - 7296 z^7 - 68928 z^6 - 258240 z^5 - 353520 z^4 - 101520 z^3 + 21960 z^2 - 9720 z + 3375) I_0\left(\frac{z}{2}\right) + \frac{1}{3375} e^{z/2} (-256 z^8 - 7040 z^7 - 62016 z^6 - 199488 z^5 - 178800 z^4 + 20880 z^3 - 8280 z^2 + 3960 z - 945) I_1\left(\frac{z}{2}\right)$$

07.25.03.akz7.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{e^z (128 z^7 + 3008 z^6 + 21600 z^5 + 51600 z^4 + 24600 z^3 - 7020 z^2 + 3330 z - 1125)}{1125}$$

07.25.03.akz8.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, 3; z\right) = -\frac{32 e^{z/2} (16 z^7 + 320 z^6 + 1896 z^5 + 3600 z^4 + 1290 z^3 - 360 z^2 + 225 z - 135) I_0\left(\frac{z}{2}\right)}{3375} - \frac{4 e^{z/2} (128 z^8 + 2432 z^7 + 12800 z^6 + 17088 z^5 - 2400 z^4 + 1200 z^3 - 720 z^2 + 945) I_1\left(\frac{z}{2}\right)}{3375 z}$$

07.25.03.akz9.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{1}{225} e^z (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225)$$

07.25.03.akza.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, 4; z\right) = -\frac{4 e^{z/2} (128 z^7 + 1472 z^6 + 4032 z^5 + 1680 z^4 - 240 z^3 - 1080 z^2 + 4680 z - 10395) I_0\left(\frac{z}{2}\right)}{1125 z} - \frac{4 e^{z/2} (128 z^8 + 1344 z^7 + 2752 z^6 - 528 z^5 + 720 z^4 - 2280 z^3 + 7560 z^2 - 19845 z + 41580) I_1\left(\frac{z}{2}\right)}{1125 z^2}$$

07.25.03.akzb.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1344 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}} - \frac{7 e^z (32 z^8 + 208 z^7 + 240 z^6 - 360 z^5 + 1530 z^4 - 6615 z^3 + 23040 z^2 - 57600 z + 86400)}{225 z^3}$$

07.25.03.akzc.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (32 z^8 - 208 z^7 + 240 z^6 + 360 z^5 + 1530 z^4 + 6615 z^3 + 23040 z^2 + 57600 z + 86400)}{225 z^3} - \frac{1344 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.akzd.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, 5; z\right) = -\frac{32 e^{z/2} (64 z^7 + 192 z^6 + 528 z^5 - 2640 z^4 + 14040 z^3 - 60840 z^2 + 197505 z - 405405) I_0\left(\frac{z}{2}\right)}{1125 z^2} - \frac{1}{1125 z^3} 32 e^{z/2} (64 z^8 + 128 z^7 + 432 z^6 - 3072 z^5 + 17400 z^4 - 80640 z^3 + 293895 z^2 - 790020 z + 1621620) I_1\left(\frac{z}{2}\right)$$

07.25.03.akze.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{3024 \sqrt{\pi} (2z + 49) \operatorname{erfi}(\sqrt{z})}{z^{9/2}} - \frac{7 e^z (16 z^8 - 32 z^7 + 360 z^6 - 2520 z^5 + 14625 z^4 - 69120 z^3 + 253440 z^2 - 662400 z + 1058400)}{25 z^4}$$

07.25.03.akzf.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = -\frac{1}{25z^4} 7e^{-z}(16z^8 + 32z^7 + 360z^6 + 2520z^5 + 14625z^4 + 69120z^3 + 253440z^2 + 662400z + 1058400) - \frac{3024\sqrt{\pi}(2z-49)\operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.akzg.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{5}{2}, 6; z\right) = -\frac{1}{225z^3} 32e^{z/2}(64z^7 - 352z^6 + 3120z^5 - 22560z^4 + 135000z^3 - 644490z^2 + 2297295z - 5405400)I_0\left(\frac{z}{2}\right) - \frac{1}{225z^4} 32e^{z/2}(64z^8 - 416z^7 + 3568z^6 - 26400z^5 + 163800z^4 - 827190z^3 + 3253635z^2 - 9189180z + 21621600)I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.akzh.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{2025} (e^z(1024z^{10} + 51200z^9 + 953600z^8 + 8396800z^7 + 36700800z^6 + 76565760z^5 + 66756000z^4 + 17568000z^3 + 436500z^2 + 9000z + 2025))$$

07.25.03.akzi.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{675} e^z (512z^9 + 21760z^8 + 335360z^7 + 2353920z^6 + 7757760z^5 + 11130720z^4 + 5551200z^3 + 457200z^2 - 10350z - 675)$$

07.25.03.akzj.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{675} e^z (256z^8 + 8960z^7 + 109440z^6 + 575040z^5 + 1291200z^4 + 1046160z^3 + 160200z^2 - 11700z + 675)$$

07.25.03.akzk.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{675} e^{z/2} (128z^8 + 4096z^7 + 45440z^6 + 216480z^5 + 446400z^4 + 348960z^3 + 58320z^2 - 5850z + 675)I_0\left(\frac{z}{2}\right) + \frac{2}{675} e^{z/2} (64z^8 + 1984z^7 + 20768z^6 + 88400z^5 + 143400z^4 + 59880z^3 - 4020z^2 + 585z)I_1\left(\frac{z}{2}\right)$$

07.25.03.akzl.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{675} e^z (128z^7 + 3520z^6 + 31840z^5 + 112400z^4 + 139800z^3 + 33780z^2 - 4350z + 675)$$

07.25.03.akzm.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{675} e^{z/2} (128 z^7 + 3136 z^6 + 24960 z^5 + 77040 z^4 + 85200 z^3 + 19800 z^2 - 3060 z + 675) I_0\left(\frac{z}{2}\right) + \frac{1}{675} e^{z/2} (128 z^7 + 3008 z^6 + 22016 z^5 + 56400 z^4 + 37200 z^3 - 3480 z^2 + 900 z - 135) I_1\left(\frac{z}{2}\right)$$

07.25.03.akzn.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{225} e^z (64 z^6 + 1280 z^5 + 7600 z^4 + 14400 z^3 + 5100 z^2 - 960 z + 225)$$

07.25.03.akzo.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, 3; z\right) = \frac{4}{675} e^{z/2} (64 z^6 + 1088 z^5 + 5360 z^4 + 8320 z^3 + 2520 z^2 - 540 z + 195) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (64 z^7 + 1024 z^6 + 4368 z^5 + 4400 z^4 - 520 z^3 + 180 z^2 - 15 z - 105) I_1\left(\frac{z}{2}\right)}{675 z}$$

07.25.03.akzp.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{45} e^z (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45)$$

07.25.03.akzq.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^6 + 608 z^5 + 1360 z^4 + 480 z^3 - 390 z + 945) I_0\left(\frac{z}{2}\right)}{225 z} + \frac{4 e^{z/2} (64 z^7 + 544 z^6 + 848 z^5 - 160 z^4 + 240 z^3 - 690 z^2 + 1785 z - 3780) I_1\left(\frac{z}{2}\right)}{225 z^2}$$

07.25.03.akzr.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (16 z^7 + 80 z^6 + 80 z^5 - 140 z^4 + 555 z^3 - 1920 z^2 + 4800 z - 7200)}{45 z^3} + \frac{560 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.akzs.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (16 z^7 - 80 z^6 + 80 z^5 + 140 z^4 + 555 z^3 + 1920 z^2 + 4800 z + 7200)}{45 z^3} - \frac{560 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.akzt.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 + 64 z^5 + 240 z^4 - 1080 z^3 + 4650 z^2 - 15120 z + 31185) I_0\left(\frac{z}{2}\right)}{225 z^2} + \frac{64 e^{z/2} (16 z^7 + 16 z^6 + 112 z^5 - 660 z^4 + 3075 z^3 - 11235 z^2 + 30240 z - 62370) I_1\left(\frac{z}{2}\right)}{225 z^3}$$

07.25.03.akzu.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{7 e^z (8 z^7 - 20 z^6 + 170 z^5 - 1005 z^4 + 4800 z^3 - 17760 z^2 + 46800 z - 75600)}{5 z^4} + \frac{2520 \sqrt{\pi} (z + 21) \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.akzv.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{7 e^{-z} (8 z^7 + 20 z^6 + 170 z^5 + 1005 z^4 + 4800 z^3 + 17760 z^2 + 46800 z + 75600)}{5 z^4} - \frac{2520 \sqrt{\pi} (z-21) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.akzw.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^6 - 176 z^5 + 1360 z^4 - 8380 z^3 + 40950 z^2 - 148995 z + 360360) I_0\left(\frac{z}{2}\right)}{45 z^3} + \frac{1}{45 z^4} 32 e^{z/2} (32 z^7 - 208 z^6 + 1584 z^5 - 10100 z^4 + 52150 z^3 - 208845 z^2 + 595980 z - 1441440) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.akzx.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{225} e^z (256 z^8 + 9216 z^7 + 116992 z^6 + 650496 z^5 + 1602144 z^4 + 1560000 z^3 + 435600 z^2 + 10800 z + 225)$$

07.25.03.akzy.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{225} e^z (128 z^7 + 3776 z^6 + 37728 z^5 + 155472 z^4 + 256920 z^3 + 137700 z^2 + 11250 z - 225)$$

07.25.03.akzz.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{225} e^{z/2} (-64 z^7 - 1728 z^6 - 15760 z^5 - 59760 z^4 - 94200 z^3 - 53160 z^2 - 5625 z + 225) I_0\left(\frac{z}{2}\right) + \frac{1}{225} e^{z/2} (-64 z^7 - 1664 z^6 - 14128 z^5 - 46400 z^4 - 53400 z^3 - 13200 z^2 + 465 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.al00.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{225} e^z (64 z^6 + 1472 z^5 + 10768 z^4 + 29280 z^3 + 25980 z^2 + 3900 z - 225)$$

07.25.03.al01.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{225} e^{z/2} (-64 z^6 - 1312 z^5 - 8496 z^4 - 20640 z^3 - 17304 z^2 - 2862 z + 225) I_0\left(\frac{z}{2}\right) + \frac{1}{225} e^{z/2} (-64 z^6 - 1248 z^5 - 7280 z^4 - 13920 z^3 - 5976 z^2 + 366 z - 27) I_1\left(\frac{z}{2}\right)$$

07.25.03.al02.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{1}{75} e^z (32 z^5 + 528 z^4 + 2480 z^3 + 3480 z^2 + 810 z - 75)$$

07.25.03.al03.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, 3; z\right) = -\frac{8}{225} e^{z/2} (16 z^5 + 224 z^4 + 880 z^3 + 1056 z^2 + 243 z - 30) I_0\left(\frac{z}{2}\right) - \frac{4 e^{z/2} (32 z^6 + 416 z^5 + 1360 z^4 + 928 z^3 - 78 z^2 + 6 z + 15) I_1\left(\frac{z}{2}\right)}{225 z}$$

07.25.03.ai04.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{1}{15} e^z (16z^4 + 160z^3 + 360z^2 + 120z - 15)$$

07.25.03.ai05.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, 4; z\right) = -\frac{4 e^{z/2} (32z^5 + 240z^4 + 416z^3 + 108z^2 + 30z - 105) I_0\left(\frac{z}{2}\right)}{75z} - \frac{4 e^{z/2} (32z^6 + 208z^5 + 224z^4 - 44z^3 + 78z^2 - 195z + 420) I_1\left(\frac{z}{2}\right)}{75z^2}$$

07.25.03.ai06.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{168 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}} - \frac{7 e^z (8z^6 + 28z^5 + 26z^4 - 57z^3 + 192z^2 - 480z + 720)}{15z^3}$$

07.25.03.ai07.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (8z^6 - 28z^5 + 26z^4 + 57z^3 + 192z^2 + 480z + 720)}{15z^3} - \frac{168 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.ai08.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, 5; z\right) = -\frac{32 e^{z/2} (16z^5 + 16z^4 + 108z^3 - 420z^2 + 1365z - 2835) I_0\left(\frac{z}{2}\right)}{75z^2} - \frac{32 e^{z/2} (16z^6 + 116z^4 - 552z^3 + 2025z^2 - 5460z + 11340) I_1\left(\frac{z}{2}\right)}{75z^3}$$

07.25.03.ai09.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{378 \sqrt{\pi} (2z + 35) \operatorname{erfi}(\sqrt{z})}{z^{9/2}} - \frac{21 e^z (4z^6 - 12z^5 + 79z^4 - 384z^3 + 1440z^2 - 3840z + 6300)}{5z^4}$$

07.25.03.ai0a.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{21 e^{-z} (4z^6 + 12z^5 + 79z^4 + 384z^3 + 1440z^2 + 3840z + 6300)}{5z^4} - \frac{378 \sqrt{\pi} (2z - 35) \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.ai0b.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; -\frac{1}{2}, 6; z\right) = -\frac{32 e^{z/2} (16z^5 - 88z^4 + 580z^3 - 2940z^2 + 11025z - 27720) I_0\left(\frac{z}{2}\right)}{15z^3} - \frac{32 e^{z/2} (16z^6 - 104z^5 + 692z^4 - 3700z^3 + 15225z^2 - 44100z + 110880) I_1\left(\frac{z}{2}\right)}{15z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{1}{2}$

07.25.03.ai0c.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{225} e^z (64z^6 + 1536z^5 + 11952z^4 + 35904z^3 + 38700z^2 + 10800z + 225)$$

07.25.03.al0d.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{225} e^{z/2} (32 z^6 + 704 z^5 + 5040 z^4 + 14280 z^3 + 15690 z^2 + 5400 z + 225) I_0\left(\frac{z}{2}\right) + \frac{2}{225} e^{z/2} (16 z^6 + 336 z^5 + 2192 z^4 + 5100 z^3 + 3555 z^2 + 345 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.al0e.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{225} e^z (32 z^5 + 592 z^4 + 3312 z^3 + 6360 z^2 + 3450 z + 225)$$

07.25.03.al0f.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{225} e^{z/2} (32 z^5 + 528 z^4 + 2640 z^3 + 4692 z^2 + 2646 z + 225) I_0\left(\frac{z}{2}\right) + \frac{1}{225} e^{z/2} (32 z^5 + 496 z^4 + 2160 z^3 + 2748 z^2 + 582 z - 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.al0g.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{75} e^z (16 z^4 + 208 z^3 + 720 z^2 + 660 z + 75)$$

07.25.03.al0h.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, 3; z\right) = \frac{4}{225} e^{z/2} (16 z^4 + 176 z^3 + 516 z^2 + 432 z + 57) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (16 z^5 + 160 z^4 + 364 z^3 + 132 z^2 - 3 z - 3) I_1\left(\frac{z}{2}\right)}{225 z}$$

07.25.03.al0i.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{15} e^z (8 z^3 + 60 z^2 + 90 z + 15)$$

07.25.03.al0j.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 + 88 z^3 + 108 z^2 + 12 z + 15) I_0\left(\frac{z}{2}\right)}{75 z} + \frac{4 e^{z/2} (16 z^5 + 72 z^4 + 44 z^3 - 12 z^2 + 27 z - 60) I_1\left(\frac{z}{2}\right)}{75 z^2}$$

07.25.03.al0k.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4 z^5 + 8 z^4 + 9 z^3 - 24 z^2 + 60 z - 90)}{15 z^3} + \frac{21 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.al0l.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (4 z^5 - 8 z^4 + 9 z^3 + 24 z^2 + 60 z + 90)}{15 z^3} - \frac{21 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

07.25.03.al0m.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 + 48 z^2 - 150 z + 315) I_0\left(\frac{z}{2}\right)}{75 z^2} + \frac{64 e^{z/2} (4 z^5 - 4 z^4 + 30 z^3 - 111 z^2 + 300 z - 630) I_1\left(\frac{z}{2}\right)}{75 z^3}$$

07.25.03.al0n.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{21 e^z (2 z^5 - 7 z^4 + 36 z^3 - 138 z^2 + 375 z - 630)}{5 z^4} + \frac{189 \sqrt{\pi} (z + 14) \operatorname{erfi}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.al0o.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = -\frac{21 e^{-z} (2 z^5 + 7 z^4 + 36 z^3 + 138 z^2 + 375 z + 630)}{5 z^4} - \frac{189 \sqrt{\pi} (z - 14) \operatorname{erf}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.al0p.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^4 - 44 z^3 + 240 z^2 - 945 z + 2520) I_0\left(\frac{z}{2}\right)}{15 z^3} + \frac{32 e^{z/2} (8 z^5 - 52 z^4 + 296 z^3 - 1275 z^2 + 3780 z - 10080) I_1\left(\frac{z}{2}\right)}{15 z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 1$

07.25.03.al0q.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{225} e^{z/2} (16 z^5 + 272 z^4 + 1420 z^3 + 2700 z^2 + 1725 z + 225) I_0\left(\frac{z}{2}\right) + \frac{1}{225} e^{z/2} (16 z^5 + 256 z^4 + 1172 z^3 + 1640 z^2 + 465 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.al0r.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{75} e^{z/2} (8 z^4 + 96 z^3 + 320 z^2 + 330 z + 75) I_0\left(\frac{z}{2}\right) + \frac{2}{75} e^{z/2} (4 z^4 + 44 z^3 + 118 z^2 + 65 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.al0s.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{15} e^{z/2} (4 z^3 + 28 z^2 + 45 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4 z^3 + 24 z^2 + 23 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{3}{2}$

07.25.03.al0t.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{225} e^z (16 z^4 + 224 z^3 + 872 z^2 + 1000 z + 225)$$

07.25.03.al0u.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{225} e^{z/2} (16 z^4 + 200 z^3 + 708 z^2 + 804 z + 225) I_0\left(\frac{z}{2}\right) + \frac{1}{225} e^{z/2} (16 z^4 + 184 z^3 + 532 z^2 + 348 z + 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.al0v.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{75} e^z (8 z^3 + 76 z^2 + 170 z + 75)$$

07.25.03.al0w.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, 3; z\right) = \frac{16}{225} e^{z/2} (2 z^3 + 16 z^2 + 31 z + 14) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8 z^4 + 56 z^3 + 72 z^2 + 4 z + 1) I_1\left(\frac{z}{2}\right)}{225 z}$$

07.25.03.al0x.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{15} e^z (4 z^2 + 20 z + 15)$$

07.25.03.al0y.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (8 z^3 + 28 z^2 + 20 z - 3) I_0\left(\frac{z}{2}\right)}{75 z} + \frac{4 e^{z/2} (8 z^4 + 20 z^3 + 4 z^2 - 5 z + 12) I_1\left(\frac{z}{2}\right)}{75 z^2}$$

07.25.03.al0z.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (2 z^4 + z^3 + 4 z^2 - 10 z + 15)}{15 z^3} - \frac{7 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 z^{7/2}}$$

07.25.03.al10.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 z^{7/2}} - \frac{7 e^{-z} (2 z^4 - z^3 + 4 z^2 + 10 z + 15)}{15 z^3}$$

07.25.03.al11.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (4 z^3 - 4 z^2 + 21 z - 45) I_0\left(\frac{z}{2}\right)}{75 z^2} + \frac{32 e^{z/2} (4 z^4 - 8 z^3 + 31 z^2 - 84 z + 180) I_1\left(\frac{z}{2}\right)}{75 z^3}$$

07.25.03.al12.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{21 e^z (4 z^4 - 16 z^3 + 64 z^2 - 180 z + 315)}{20 z^4} - \frac{63 \sqrt{\pi} (2 z + 21) \operatorname{erfi}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.al13.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (4 z^4 + 16 z^3 + 64 z^2 + 180 z + 315)}{20 z^4} + \frac{63 \sqrt{\pi} (2 z - 21) \operatorname{erf}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.al14.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (4 z^3 - 22 z^2 + 95 z - 280) I_0\left(\frac{z}{2}\right)}{15 z^3} + \frac{32 e^{z/2} (4 z^4 - 26 z^3 + 123 z^2 - 380 z + 1120) I_1\left(\frac{z}{2}\right)}{15 z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 2$

07.25.03.al15.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{75} e^{z/2} (8 z^3 + 68 z^2 + 144 z + 75) I_0\left(\frac{z}{2}\right) + \frac{1}{75} e^{z/2} (8 z^3 + 60 z^2 + 88 z + 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.al16.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{15} e^{z/2} (4 z^2 + 18 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4 z^2 + 14 z + 3) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{5}{2}$

07.25.03.al17.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{25} e^z (4 z^2 + 24 z + 25)$$

07.25.03.al18.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, 3; z\right) = \frac{4}{75} e^{z/2} (4 z^2 + 20 z + 19) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4 z^3 + 16 z^2 + 5 z - 1) I_1\left(\frac{z}{2}\right)}{75 z}$$

07.25.03.al19.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{5} e^z (2z + 5)$$

07.25.03.al1a.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (4z^2 + 6z + 1) I_0\left(\frac{z}{2}\right)}{25z} + \frac{4 e^{z/2} (4z^3 + 2z^2 + z - 4) I_1\left(\frac{z}{2}\right)}{25z^2}$$

07.25.03.al1b.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4z^3 - 4z^2 + 10z - 15)}{20z^3} + \frac{21 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.al1c.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (4z^3 + 4z^2 + 10z + 15)}{20z^3} - \frac{21 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8z^{7/2}}$$

07.25.03.al1d.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 - 4z + 9) I_0\left(\frac{z}{2}\right)}{25z^2} + \frac{64 e^{z/2} (z^3 - 3z^2 + 8z - 18) I_1\left(\frac{z}{2}\right)}{25z^3}$$

07.25.03.al1e.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (4z^3 - 18z^2 + 55z - 105)}{40z^4} + \frac{189 \sqrt{\pi} (z + 7) \operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.al1f.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = -\frac{63 e^{-z} (4z^3 + 18z^2 + 55z + 105)}{40z^4} - \frac{189 \sqrt{\pi} (z - 7) \operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.al1g.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^2 - 11z + 40) I_0\left(\frac{z}{2}\right)}{5z^3} + \frac{32 e^{z/2} (2z^3 - 13z^2 + 44z - 160) I_1\left(\frac{z}{2}\right)}{5z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = 3$

07.25.03.al1h.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; 3, \frac{7}{2}; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2z^2 + 2z - 1) I_1\left(\frac{z}{2}\right)}{15z}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{7}{2}$, $b_1 = \frac{7}{2}$

07.25.03.al1i.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = e^z$$

07.25.03.al1j.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (2z - 1) I_0\left(\frac{z}{2}\right)}{5z} + \frac{4 e^{z/2} (2z^2 - 3z + 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.al1k.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4 z^2 - 10 z + 15)}{8 z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.al1l.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7 e^{-z} (4 z^2 + 10 z + 15)}{8 z^3}$$

07.25.03.al1m.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (z-3) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{32 e^{z/2} (z^2 - 4 z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.al1n.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (8 z^2 - 40 z + 105)}{32 z^4} - \frac{945 \sqrt{\pi} (2 z + 7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.al1o.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8 z^2 + 40 z + 105)}{32 z^4} + \frac{945 \sqrt{\pi} (2 z - 7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.al1p.01

$${}_2F_2\left(\frac{7}{2}, \frac{7}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (z-8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4 z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = -\frac{11}{2}$

07.25.03.al1q.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{4862521125} (16384 z^{18} + 2228224 z^{17} + 126947328 z^{16} + 3970510848 z^{15} + 75094818816 z^{14} + 892226764800 z^{13} + 6704986337280 z^{12} + 31320877916160 z^{11} + 87065660712960 z^{10} + 132719829903360 z^9 + 95171198572800 z^8 + 22968518630400 z^7 + 555761606400 z^6 + 10897286400 z^5 + 2043241200 z^4 + 1122660000 z^3 + 1250235000 z^2 + 2250423000 z + 4862521125) + \frac{1}{4862521125} (2048 e^z \sqrt{\pi} (8 z^{37/2} + 1092 z^{35/2} + 62526 z^{33/2} + 1969185 z^{31/2} + 37607085 z^{29/2} + 453094560 z^{27/2} + 3475573920 z^{25/2} + 16750631520 z^{23/2} + 48933007200 z^{21/2} + 81100051200 z^{19/2} + 67844044800 z^{17/2} + 22855996800 z^{15/2} + 1758153600 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.al1r.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, -\frac{11}{2}; -z\right) =$$

$$\frac{1}{4862521125} (16384 z^{18} - 2228224 z^{17} + 126947328 z^{16} - 3970510848 z^{15} + 75094818816 z^{14} -$$

$$892226764800 z^{13} + 6704986337280 z^{12} - 31320877916160 z^{11} + 87065660712960 z^{10} -$$

$$132719829903360 z^9 + 95171198572800 z^8 - 22968518630400 z^7 + 555761606400 z^6 -$$

$$10897286400 z^5 + 2043241200 z^4 - 1122660000 z^3 + 1250235000 z^2 - 2250423000 z + 4862521125) -$$

$$\frac{1}{4862521125} \left(2048 e^{-z} \sqrt{\pi} (8 z^{37/2} - 1092 z^{35/2} + 62526 z^{33/2} - 1969185 z^{31/2} + 37607085 z^{29/2} -$$

$$453094560 z^{27/2} + 3475573920 z^{25/2} - 16750631520 z^{23/2} + 48933007200 z^{21/2} -$$

$$81100051200 z^{19/2} + 67844044800 z^{17/2} - 22855996800 z^{15/2} + 1758153600 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.al1s.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{442047375} (-8192 z^{17} - 1015808 z^{16} - 52303872 z^{15} - 1462714368 z^{14} - 24407900160 z^{13} - 251520675840 z^{12} -$$

$$1602444533760 z^{11} - 6146755799040 z^{10} - 13372337018880 z^9 -$$

$$14713401427200 z^8 - 645594019200 z^7 - 555761606400 z^6 + 10897286400 z^5 +$$

$$681080400 z^4 + 224532000 z^3 + 178605000 z^2 + 250047000 z + 442047375) -$$

$$\frac{1}{442047375} \left(1024 e^z \sqrt{\pi} (8 z^{35/2} + 996 z^{33/2} + 51570 z^{31/2} + 1453485 z^{29/2} + 24525720 z^{27/2} +$$

$$256888800 z^{25/2} + 1677352320 z^{23/2} + 6686517600 z^{21/2} + 15500419200 z^{19/2} +$$

$$19098374400 z^{17/2} + 10548921600 z^{15/2} + 1758153600 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.al1t.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{442047375} (8192 z^{17} - 1015808 z^{16} + 52303872 z^{15} - 1462714368 z^{14} + 24407900160 z^{13} - 251520675840 z^{12} +$$

$$1602444533760 z^{11} - 6146755799040 z^{10} + 13372337018880 z^9 -$$

$$14713401427200 z^8 + 645594019200 z^7 - 555761606400 z^6 - 10897286400 z^5 +$$

$$681080400 z^4 - 224532000 z^3 + 178605000 z^2 - 250047000 z + 442047375) -$$

$$\frac{1}{442047375} \left(1024 e^{-z} \sqrt{\pi} (8 z^{35/2} - 996 z^{33/2} + 51570 z^{31/2} - 1453485 z^{29/2} + 24525720 z^{27/2} -$$

$$256888800 z^{25/2} + 1677352320 z^{23/2} - 6686517600 z^{21/2} + 15500419200 z^{19/2} -$$

$$19098374400 z^{17/2} + 10548921600 z^{15/2} - 1758153600 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.al1u.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{49116375} (4096 z^{16} + 458752 z^{15} + 21107712 z^{14} + 520504320 z^{13} + 7529410560 z^{12} + 65760952320 z^{11} +$$

$$344097699840 z^{10} + 1034257029120 z^9 + 1630394438400 z^8 + 1111153075200 z^7 + 185253868800 z^6 -$$

$$10897286400 z^5 + 681080400 z^4 + 74844000 z^3 + 35721000 z^2 + 35721000 z + 49116375) +$$

$$\frac{1}{49116375} \left(512 e^z \sqrt{\pi} (8 z^{33/2} + 900 z^{31/2} + 41670 z^{29/2} + 1036785 z^{27/2} + 15194655 z^{25/2} + 135331560 z^{23/2} +$$

$$730031400 z^{21/2} + 2306329200 z^{19/2} + 3968773200 z^{17/2} + 3223281600 z^{15/2} + 879076800 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.al1v.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{49116375} (4096 z^{16} - 458752 z^{15} + 21107712 z^{14} - 520504320 z^{13} + 7529410560 z^{12} - 65760952320 z^{11} +$$

$$344097699840 z^{10} - 1034257029120 z^9 + 1630394438400 z^8 - 1111153075200 z^7 + 185253868800 z^6 +$$

$$10897286400 z^5 + 681080400 z^4 - 74844000 z^3 + 35721000 z^2 - 35721000 z + 49116375) -$$

$$\frac{1}{49116375} \left(512 e^{-z} \sqrt{\pi} (8 z^{33/2} - 900 z^{31/2} + 41670 z^{29/2} - 1036785 z^{27/2} + 15194655 z^{25/2} - 135331560 z^{23/2} +$$

$$730031400 z^{21/2} - 2306329200 z^{19/2} + 3968773200 z^{17/2} - 3223281600 z^{15/2} + 879076800 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.al1w.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{7016625} (-2048 z^{15} - 204800 z^{14} - 8302080 z^{13} - 177331200 z^{12} - 2172628992 z^{11} - 15578634240 z^{10} -$$

$$63897200640 z^9 - 139480185600 z^8 - 137303424000 z^7 - 37050773760 z^6 +$$

$$3632428800 z^5 - 681080400 z^4 + 74844000 z^3 + 11907000 z^2 + 7144200 z + 7016625) -$$

$$\frac{1}{7016625} \left(256 e^z \sqrt{\pi} (8 z^{31/2} + 804 z^{29/2} + 32826 z^{27/2} + 708525 z^{25/2} + 8817930 z^{23/2} + 64788120 z^{21/2} +$$

$$276514560 z^{19/2} + 647241840 z^{17/2} + 732564000 z^{15/2} + 293025600 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.al1x.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{7016625} (2048 z^{15} - 204800 z^{14} + 8302080 z^{13} - 177331200 z^{12} + 2172628992 z^{11} - 15578634240 z^{10} +$$

$$63897200640 z^9 - 139480185600 z^8 + 137303424000 z^7 - 37050773760 z^6 -$$

$$3632428800 z^5 - 681080400 z^4 - 74844000 z^3 + 11907000 z^2 - 7144200 z + 7016625) -$$

$$\frac{1}{7016625} \left(256 e^{-z} \sqrt{\pi} (8 z^{31/2} - 804 z^{29/2} + 32826 z^{27/2} - 708525 z^{25/2} + 8817930 z^{23/2} - 64788120 z^{21/2} +$$

$$276514560 z^{19/2} - 647241840 z^{17/2} + 732564000 z^{15/2} - 293025600 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.al1y.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{1403325} (1024 z^{14} + 90112 z^{13} + 3160320 z^{12} + 57106176 z^{11} + 573831168 z^{10} + 3223664640 z^9 +$$

$$9611239680 z^8 + 13172198400 z^7 + 5292967680 z^6 - 726485760 z^5 +$$

$$227026800 z^4 - 74844000 z^3 + 11907000 z^2 + 2381400 z + 1403325) +$$

$$\frac{1}{1403325} \left(128 e^z \sqrt{\pi} (8 z^{29/2} + 708 z^{27/2} + 25038 z^{25/2} + 458145 z^{23/2} + 4694625 z^{21/2} +$$

$$27231120 z^{19/2} + 85896720 z^{17/2} + 131861520 z^{15/2} + 73256400 z^{13/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.al1z.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{1403325} (1024 z^{14} - 90112 z^{13} + 3160320 z^{12} - 57106176 z^{11} + 573831168 z^{10} - 3223664640 z^9 +$$

$$9611239680 z^8 - 13172198400 z^7 + 5292967680 z^6 + 726485760 z^5 +$$

$$227026800 z^4 + 74844000 z^3 + 11907000 z^2 - 2381400 z + 1403325) -$$

$$\frac{1}{1403325} \left(128 e^{-z} \sqrt{\pi} (8 z^{29/2} - 708 z^{27/2} + 25038 z^{25/2} - 458145 z^{23/2} + 4694625 z^{21/2} -$$

$$27231120 z^{19/2} + 85896720 z^{17/2} - 131861520 z^{15/2} + 73256400 z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.al20.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{467775} (-512 z^{13} - 38912 z^{12} - 1152384 z^{11} - 17048064 z^{10} - 134012928 z^9 - 546981120 z^8 - 1026984960 z^7 -$$

$$588107520 z^6 + 103783680 z^5 - 45405360 z^4 + 24948000 z^3 - 11907000 z^2 + 2381400 z + 467775) -$$

$$\frac{1}{467775} \left(64 e^z \sqrt{\pi} (8 z^{27/2} + 612 z^{25/2} + 18306 z^{23/2} + 275085 z^{21/2} + 2218860 z^{19/2} +$$

$$9480240 z^{17/2} + 19535040 z^{15/2} + 14651280 z^{13/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.al21.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{467775} (512 z^{13} - 38912 z^{12} + 1152384 z^{11} - 17048064 z^{10} + 134012928 z^9 - 546981120 z^8 + 1026984960 z^7 -$$

$$588107520 z^6 - 103783680 z^5 - 45405360 z^4 - 24948000 z^3 - 11907000 z^2 - 2381400 z + 467775) -$$

$$\frac{1}{467775} \left(64 e^{-z} \sqrt{\pi} (8 z^{27/2} - 612 z^{25/2} + 18306 z^{23/2} - 275085 z^{21/2} + 2218860 z^{19/2} -$$

$$9480240 z^{17/2} + 19535040 z^{15/2} - 14651280 z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ai22.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{467775} (256 z^{12} + 16384 z^{11} + 396096 z^{10} + 4570944 z^9 + 26046720 z^8 + 66977280 z^7 + 53464320 z^6 - 11531520 z^5 + 6486480 z^4 - 4989600 z^3 + 3969000 z^2 - 2381400 z + 467775) + \frac{1}{467775} (32 e^z \sqrt{\pi} (8 z^{25/2} + 516 z^{23/2} + 12630 z^{21/2} + 148785 z^{19/2} + 879795 z^{17/2} + 2441880 z^{15/2} + 2441880 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ai23.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{467775} (256 z^{12} - 16384 z^{11} + 396096 z^{10} - 4570944 z^9 + 26046720 z^8 - 66977280 z^7 + 53464320 z^6 + 11531520 z^5 + 6486480 z^4 + 4989600 z^3 + 3969000 z^2 + 2381400 z + 467775) - \frac{1}{467775} (32 e^{-z} \sqrt{\pi} (8 z^{25/2} - 516 z^{23/2} + 12630 z^{21/2} - 148785 z^{19/2} + 879795 z^{17/2} - 2441880 z^{15/2} + 2441880 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ai24.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, 1; z\right) = \frac{1}{935550} (e^z (512 z^{12} + 29952 z^{11} + 652032 z^{10} + 6631680 z^9 + 32184000 z^8 + 65823840 z^7 + 32235840 z^6 - 11385360 z^5 + 8590050 z^4 - 7441875 z^3 + 5825925 z^2 - 3316950 z + 935550))$$

07.25.03.ai25.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{16 e^z \sqrt{\pi} (8 z^5 + 420 z^4 + 8010 z^3 + 68685 z^2 + 261630 z + 348840) \operatorname{erf}(\sqrt{z}) z^{13/2}}{467775} + \frac{1}{467775} (128 z^{11} + 6656 z^{10} + 124896 z^9 + 1039680 z^8 + 3720960 z^7 + 4112640 z^6 - 1048320 z^5 + 720720 z^4 - 712800 z^3 + 793800 z^2 - 793800 z + 467775)$$

07.25.03.ai26.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{16 e^{-z} \sqrt{\pi} (8 z^5 - 420 z^4 + 8010 z^3 - 68685 z^2 + 261630 z - 348840) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{467775} + \frac{1}{467775} (-128 z^{11} + 6656 z^{10} - 124896 z^9 + 1039680 z^8 - 3720960 z^7 + 4112640 z^6 + 1048320 z^5 + 720720 z^4 + 712800 z^3 + 793800 z^2 + 793800 z + 467775)$$

07.25.03.ai27.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, 2; z\right) = \frac{1}{935550} (e^z (512 z^{11} + 23808 z^{10} + 390144 z^9 + 2730240 z^8 + 7611840 z^7 + 4929120 z^6 - 2268000 z^5 + 2222640 z^4 - 2523150 z^3 + 2650725 z^2 - 2126250 z + 935550))$$

07.25.03.al28.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{8 e^z \sqrt{\pi} (8 z^4 + 324 z^3 + 4446 z^2 + 24 225 z + 43 605) \operatorname{erf}(\sqrt{z}) z^{13/2}}{155 925} + \frac{1}{155 925} (64 z^{10} + 2560 z^9 + 34 320 z^8 + 177 840 z^7 + 274 176 z^6 - 80 640 z^5 + 65 520 z^4 - 79 200 z^3 + 113 400 z^2 - 158 760 z + 155 925)$$

07.25.03.al29.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{155 925} (64 z^{10} - 2560 z^9 + 34 320 z^8 - 177 840 z^7 + 274 176 z^6 + 80 640 z^5 + 65 520 z^4 + 79 200 z^3 + 113 400 z^2 + 158 760 z + 155 925) - \frac{8 e^{-z} \sqrt{\pi} z^{13/2} (8 z^4 - 324 z^3 + 4446 z^2 - 24 225 z + 43 605) \operatorname{erfi}(\sqrt{z})}{155 925}$$

07.25.03.al2a.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, 3; z\right) = \frac{1}{467 775} (e^z (512 z^{10} + 17 664 z^9 + 195 840 z^8 + 771 840 z^7 + 665 280 z^6 - 393 120 z^5 + 483 840 z^4 - 680 400 z^3 + 878 850 z^2 - 864 675 z + 467 775))$$

07.25.03.al2b.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{4 e^z \sqrt{\pi} (8 z^3 + 228 z^2 + 1938 z + 4845) \operatorname{erf}(\sqrt{z}) z^{13/2}}{31 185} + \frac{32 z^9 + 896 z^8 + 7320 z^7 + 16 128 z^6 - 5376 z^5 + 5040 z^4 - 7200 z^3 + 12 600 z^2 - 22 680 z + 31 185}{31 185}$$

07.25.03.al2c.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{4 e^{-z} \sqrt{\pi} (8 z^3 - 228 z^2 + 1938 z - 4845) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{31 185} + \frac{1}{31 185} (-32 z^9 + 896 z^8 - 7320 z^7 + 16 128 z^6 + 5376 z^5 + 5040 z^4 + 7200 z^3 + 12 600 z^2 + 22 680 z + 31 185)$$

07.25.03.al2d.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, 4; z\right) = \frac{1}{155 925} e^z (512 z^9 + 11 520 z^8 + 69 120 z^7 + 80 640 z^6 - 60 480 z^5 + 90 720 z^4 - 151 200 z^3 + 226 800 z^2 - 255 150 z + 155 925)$$

07.25.03.al2e.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{4455 z^3} (16 z^{11} + 256 z^{10} + 852 z^9 - 348 z^8 + 624 z^7 - 2880 z^6 + 17\,640 z^5 - 103\,320 z^4 + 522\,855 z^3 - 2\,177\,280 z^2 + 7\,257\,600 z - 21\,772\,800) + \frac{1}{4455 z^{7/2}} \left(2 e^z \sqrt{\pi} (8 z^{12} + 132 z^{11} + 486 z^{10} - 15 z^9 + 135 z^8 - 1080 z^7 + 7560 z^6 - 45\,360 z^5 + 226\,800 z^4 - 907\,200 z^3 + 2\,721\,600 z^2 - 5\,443\,200 z + 5\,443\,200) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.al2f.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{4455 z^3} (16 z^{11} - 256 z^{10} + 852 z^9 + 348 z^8 + 624 z^7 + 2880 z^6 + 17\,640 z^5 + 103\,320 z^4 + 522\,855 z^3 + 2\,177\,280 z^2 + 7\,257\,600 z + 21\,772\,800) - \frac{1}{4455 z^{7/2}} \left(2 e^{-z} \sqrt{\pi} (8 z^{12} - 132 z^{11} + 486 z^{10} + 15 z^9 + 135 z^8 + 1080 z^7 + 7560 z^6 + 45\,360 z^5 + 226\,800 z^4 + 907\,200 z^3 + 2\,721\,600 z^2 + 5\,443\,200 z + 5\,443\,200) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.al2g.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, 5; z\right) = \frac{1}{155\,925 z^4} (4 e^z (512 z^{12} + 5376 z^{11} + 9984 z^{10} - 19\,200 z^9 + 112\,320 z^8 - 807\,840 z^7 + 5\,503\,680 z^6 - 32\,795\,280 z^5 + 163\,721\,250 z^4 - 654\,729\,075 z^3 + 1\,964\,187\,225 z^2 - 3\,928\,374\,450 z + 3\,928\,374\,450)) - \frac{100\,776}{z^4}$$

07.25.03.al2h.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{495 z^4} (8 z^{11} + 32 z^{10} + 78 z^9 - 948 z^8 + 8880 z^7 - 73\,080 z^6 + 526\,680 z^5 - 3\,268\,305 z^4 + 17\,055\,360 z^3 - 72\,576\,000 z^2 + 243\,129\,600 z - 762\,048\,000) + \frac{1}{495 z^{9/2}} \left(e^z \sqrt{\pi} (8 z^{12} + 36 z^{11} + 90 z^{10} - 915 z^9 + 8370 z^8 - 68\,040 z^7 + 483\,840 z^6 - 2\,948\,400 z^5 + 14\,968\,800 z^4 - 60\,782\,400 z^3 + 185\,068\,800 z^2 - 375\,580\,800 z + 381\,024\,000) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.al2i.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{495 z^4} (-8 z^{11} + 32 z^{10} - 78 z^9 - 948 z^8 - 8880 z^7 - 73\,080 z^6 - 526\,680 z^5 - 3\,268\,305 z^4 - 17\,055\,360 z^3 - 72\,576\,000 z^2 - 243\,129\,600 z - 762\,048\,000) + \frac{1}{495 z^{9/2}} \left(e^{-z} \sqrt{\pi} (8 z^{12} - 36 z^{11} + 90 z^{10} + 915 z^9 + 8370 z^8 + 68\,040 z^7 + 483\,840 z^6 + 2\,948\,400 z^5 + 14\,968\,800 z^4 + 60\,782\,400 z^3 + 185\,068\,800 z^2 + 375\,580\,800 z + 381\,024\,000) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.al2j.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{11}{2}, 6; z\right) = \frac{1}{31\,185\,z^5} (4 e^z (512 z^{12} - 768 z^{11} + 18\,432 z^{10} - 203\,520 z^9 + 1\,944\,000 z^8 - 16\,359\,840 z^7 + 120\,022\,560 z^6 - 752\,930\,640 z^5 + 3\,928\,374\,450 z^4 - 16\,368\,226\,875 z^3 + 51\,068\,867\,850 z^2 - 106\,066\,110\,150 z + 109\,994\,484\,600)) - \frac{503\,880(z + 28)}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = -\frac{9}{2}$

07.25.03.al2k.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{40\,186\,125} (4096 z^{16} + 462\,848 z^{15} + 21\,525\,504 z^{14} + 537\,853\,952 z^{13} + 7\,911\,321\,600 z^{12} + 70\,625\,157\,120 z^{11} + 380\,844\,533\,760 z^{10} + 1\,196\,646\,819\,840 z^9 + 2\,028\,818\,776\,320 z^8 + 1\,597\,486\,464\,000 z^7 + 418\,892\,947\,200 z^6 + 10\,897\,286\,400 z^5 + 227\,026\,800 z^4 + 44\,906\,400 z^3 + 25\,515\,000 z^2 + 27\,783\,000 z + 40\,186\,125) + \frac{1}{40\,186\,125} (512 e^z \sqrt{\pi} (8 z^{33/2} + 908 z^{31/2} + 42\,490 z^{29/2} + 1\,071\,075 z^{27/2} + 15\,957\,120 z^{25/2} + 145\,188\,960 z^{23/2} + 806\,218\,560 z^{21/2} + 2\,655\,424\,800 z^{19/2} + 4\,878\,720\,000 z^{17/2} + 4\,462\,214\,400 z^{15/2} + 1\,624\,492\,800 z^{13/2} + 133\,660\,800 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.al2l.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{40\,186\,125} (4096 z^{16} - 462\,848 z^{15} + 21\,525\,504 z^{14} - 537\,853\,952 z^{13} + 7\,911\,321\,600 z^{12} - 70\,625\,157\,120 z^{11} + 380\,844\,533\,760 z^{10} - 1\,196\,646\,819\,840 z^9 + 2\,028\,818\,776\,320 z^8 - 1\,597\,486\,464\,000 z^7 + 418\,892\,947\,200 z^6 - 10\,897\,286\,400 z^5 + 227\,026\,800 z^4 - 44\,906\,400 z^3 + 25\,515\,000 z^2 - 27\,783\,000 z + 40\,186\,125) - \frac{1}{40\,186\,125} (512 e^{-z} \sqrt{\pi} (8 z^{33/2} - 908 z^{31/2} + 42\,490 z^{29/2} - 1\,071\,075 z^{27/2} + 15\,957\,120 z^{25/2} - 145\,188\,960 z^{23/2} + 806\,218\,560 z^{21/2} - 2\,655\,424\,800 z^{19/2} + 4\,878\,720\,000 z^{17/2} - 4\,462\,214\,400 z^{15/2} + 1\,624\,492\,800 z^{13/2} - 133\,660\,800 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.al2m.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{4\,465\,125} (-2048 z^{15} - 208\,896 z^{14} - 8\,674\,816 z^{13} - 190\,955\,520 z^{12} - 2\,432\,102\,400 z^{11} - 18\,373\,416\,960 z^{10} - 81\,194\,895\,360 z^9 - 199\,212\,168\,960 z^8 - 243\,166\,694\,400 z^7 - 116\,819\,539\,200 z^6 - 10\,897\,286\,400 z^5 + 227\,026\,800 z^4 + 14\,968\,800 z^3 + 5\,103\,000 z^2 + 3\,969\,000 z + 4\,465\,125) - \frac{1}{4\,465\,125} (256 e^z \sqrt{\pi} (8 z^{31/2} + 820 z^{29/2} + 34\,290 z^{27/2} + 762\,465 z^{25/2} + 9\,857\,400 z^{23/2} + 76\,187\,160 z^{21/2} + 349\,095\,600 z^{19/2} + 909\,946\,800 z^{17/2} + 1\,238\,932\,800 z^{15/2} + 745\,416\,000 z^{13/2} + 133\,660\,800 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.al2n.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{4465125} (2048 z^{15} - 208896 z^{14} + 8674816 z^{13} - 19095520 z^{12} + 2432102400 z^{11} - 18373416960 z^{10} +$$

$$81194895360 z^9 - 199212168960 z^8 + 243166694400 z^7 - 116819539200 z^6 +$$

$$10897286400 z^5 + 227026800 z^4 - 14968800 z^3 + 5103000 z^2 - 3969000 z + 4465125) -$$

$$\frac{1}{4465125} \left(256 e^{-z} \sqrt{\pi} (8 z^{31/2} - 820 z^{29/2} + 34290 z^{27/2} - 762465 z^{25/2} + 9857400 z^{23/2} - 76187160 z^{21/2} +$$

$$349095600 z^{19/2} - 909946800 z^{17/2} + 1238932800 z^{15/2} - 745416000 z^{13/2} + 133660800 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.al2o.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{637875} (1024 z^{14} + 93184 z^{13} + 3406080 z^{12} + 64868352 z^{11} + 698695680 z^{10} + 4324423680 z^9 + 14932995840 z^8 +$$

$$26465817600 z^7 + 19942191360 z^6 + 3632428800 z^5 -$$

$$227026800 z^4 + 14968800 z^3 + 1701000 z^2 + 793800 z + 637875) +$$

$$\frac{1}{637875} \left(128 e^z \sqrt{\pi} (8 z^{29/2} + 732 z^{27/2} + 26970 z^{25/2} + 519735 z^{23/2} + 5699520 z^{21/2} + 36290520 z^{19/2} +$$

$$131352480 z^{17/2} + 253184400 z^{15/2} + 226195200 z^{13/2} + 66830400 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.al2p.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{637875} (1024 z^{14} - 93184 z^{13} + 3406080 z^{12} - 64868352 z^{11} + 698695680 z^{10} - 4324423680 z^9 +$$

$$14932995840 z^8 - 26465817600 z^7 + 19942191360 z^6 - 3632428800 z^5 -$$

$$227026800 z^4 - 14968800 z^3 + 1701000 z^2 - 793800 z + 637875) -$$

$$\frac{1}{637875} \left(128 e^{-z} \sqrt{\pi} (8 z^{29/2} - 732 z^{27/2} + 26970 z^{25/2} - 519735 z^{23/2} + 5699520 z^{21/2} - 36290520 z^{19/2} +$$

$$131352480 z^{17/2} - 253184400 z^{15/2} + 226195200 z^{13/2} - 66830400 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.al2q.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{127575} (-512 z^{13} - 40960 z^{12} - 1293696 z^{11} - 20810752 z^{10} - 183459840 z^9 - 886959360 z^8 - 2215603200 z^7 -$$

$$2441537280 z^6 - 726485760 z^5 + 75675600 z^4 - 14968800 z^3 + 1701000 z^2 + 264600 z + 127575) -$$

$$\frac{1}{127575} \left(64 e^z \sqrt{\pi} (8 z^{27/2} + 644 z^{25/2} + 20530 z^{23/2} + 334965 z^{21/2} + 3019800 z^{19/2} +$$

$$15151920 z^{17/2} + 40440960 z^{15/2} + 50979600 z^{13/2} + 22276800 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.al2r.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{127575} (512 z^{13} - 40960 z^{12} + 1293696 z^{11} - 20810752 z^{10} + 183459840 z^9 - 886959360 z^8 + 2215603200 z^7 - 2441537280 z^6 + 726485760 z^5 + 75675600 z^4 + 14968800 z^3 + 1701000 z^2 - 264600 z + 127575) - \frac{1}{127575} (64 e^{-z} \sqrt{\pi} (8 z^{27/2} - 644 z^{25/2} + 20530 z^{23/2} - 334965 z^{21/2} + 3019800 z^{19/2} - 15151920 z^{17/2} + 40440960 z^{15/2} - 50979600 z^{13/2} + 22276800 z^{11/2})) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al2s.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{42525} (256 z^{12} + 17664 z^{11} + 470336 z^{10} + 6180864 z^9 + 42497280 z^8 + 148577280 z^7 + 231678720 z^6 + 103783680 z^5 - 15135120 z^4 + 4989600 z^3 - 1701000 z^2 + 264600 z + 42525) + \frac{1}{42525} (32 e^z \sqrt{\pi} (8 z^{25/2} + 556 z^{23/2} + 14970 z^{21/2} + 200235 z^{19/2} + 1417920 z^{17/2} + 5226480 z^{15/2} + 9082080 z^{13/2} + 5569200 z^{11/2})) \operatorname{erf}(\sqrt{z})$$

07.25.03.al2t.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{42525} (256 z^{12} - 17664 z^{11} + 470336 z^{10} - 6180864 z^9 + 42497280 z^8 - 148577280 z^7 + 231678720 z^6 - 103783680 z^5 - 15135120 z^4 - 4989600 z^3 - 1701000 z^2 - 264600 z + 42525) - \frac{1}{42525} (32 e^{-z} \sqrt{\pi} (8 z^{25/2} - 556 z^{23/2} + 14970 z^{21/2} - 200235 z^{19/2} + 1417920 z^{17/2} - 5226480 z^{15/2} + 9082080 z^{13/2} - 5569200 z^{11/2})) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al2u.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{42525} (-128 z^{11} - 7424 z^{10} - 160992 z^9 - 1645056 z^8 - 8160000 z^7 - 17821440 z^6 - 11531520 z^5 + 2162160 z^4 - 997920 z^3 + 567000 z^2 - 264600 z + 42525) - \frac{1}{42525} (16 e^z \sqrt{\pi} (8 z^{23/2} + 468 z^{21/2} + 10290 z^{19/2} + 107625 z^{17/2} + 556920 z^{15/2} + 1328040 z^{13/2} + 1113840 z^{11/2})) \operatorname{erf}(\sqrt{z})$$

07.25.03.al2v.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{42525} (128 z^{11} - 7424 z^{10} + 160992 z^9 - 1645056 z^8 + 8160000 z^7 - 17821440 z^6 + 11531520 z^5 + 2162160 z^4 + 997920 z^3 + 567000 z^2 + 264600 z + 42525) - \frac{1}{42525} (16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 468 z^{21/2} + 10290 z^{19/2} - 107625 z^{17/2} + 556920 z^{15/2} - 1328040 z^{13/2} + 1113840 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.al2w.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, 1; z\right) = -\frac{1}{85050} (e^z (256 z^{11} + 13568 z^{10} + 264960 z^9 + 2388480 z^8 + 10120800 z^7 + 17730720 z^6 + 7252560 z^5 - 2066400 z^4 + 1195425 z^3 - 732375 z^2 + 349650 z - 85050))$$

07.25.03.al2x.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{42525} (-64 z^{10} - 3008 z^9 - 50448 z^8 - 369920 z^7 - 1142400 z^6 - 1048320 z^5 + 240240 z^4 - 142560 z^3 + 113400 z^2 - 88200 z + 42525) - \frac{8 e^z \sqrt{\pi} z^{11/2} (8 z^5 + 380 z^4 + 6490 z^3 + 49215 z^2 + 163200 z + 185640) \operatorname{erf}(\sqrt{z})}{42525}$$

07.25.03.al2y.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{8 e^{-z} \sqrt{\pi} (8 z^5 - 380 z^4 + 6490 z^3 - 49215 z^2 + 163200 z - 185640) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{42525} + \frac{1}{42525} (-64 z^{10} + 3008 z^9 - 50448 z^8 + 369920 z^7 - 1142400 z^6 + 1048320 z^5 + 240240 z^4 + 142560 z^3 + 113400 z^2 + 88200 z + 42525)$$

07.25.03.al2z.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, 2; z\right) = -\frac{1}{85050} (e^z (256 z^{10} + 10752 z^9 + 157440 z^8 + 971520 z^7 + 2348640 z^6 + 1290240 z^5 - 488880 z^4 + 378000 z^3 - 316575 z^2 + 217350 z - 85050))$$

07.25.03.al30.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{14175} (-32 z^9 - 1152 z^8 - 13720 z^7 - 62016 z^6 - 80640 z^5 + 21840 z^4 - 15840 z^3 + 16200 z^2 - 17640 z + 14175) - \frac{4 e^z \sqrt{\pi} z^{11/2} (8 z^4 + 292 z^3 + 3570 z^2 + 17085 z + 26520) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.al31.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{1}{14175} (32z^9 - 1152z^8 + 13720z^7 - 62016z^6 + 80640z^5 + 21840z^4 + 15840z^3 + 16200z^2 + 17640z + 14175) - \frac{4e^{-z}\sqrt{\pi}z^{11/2}(8z^4 - 292z^3 + 3570z^2 - 17085z + 26520)\operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.al32.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, 3; z\right) = -\frac{1}{42525} e^z (256z^9 + 7936z^8 + 78080z^7 + 268800z^6 + 198240z^5 - 97440z^4 + 95760z^3 - 100800z^2 + 86625z - 42525)$$

07.25.03.al33.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-16z^8 - 400z^7 - 2868z^6 - 5376z^5 + 1680z^4 - 1440z^3 + 1800z^2 - 2520z + 2835}{2835} - \frac{2e^z\sqrt{\pi}z^{11/2}(8z^3 + 204z^2 + 1530z + 3315)\operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.al34.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{2e^{-z}\sqrt{\pi}(8z^3 - 204z^2 + 1530z - 3315)\operatorname{erfi}(\sqrt{z})z^{11/2}}{2835} + \frac{-16z^8 + 400z^7 - 2868z^6 + 5376z^5 + 1680z^4 + 1440z^3 + 1800z^2 + 2520z + 2835}{2835}$$

07.25.03.al35.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, 4; z\right) = -\frac{1}{14175} e^z (256z^8 + 5120z^7 + 26880z^6 + 26880z^5 - 16800z^4 + 20160z^3 - 25200z^2 + 25200z - 14175)$$

07.25.03.al36.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{405z^3} (-8z^{10} - 112z^9 - 318z^8 + 128z^7 - 240z^6 + 1080z^5 - 5880z^4 + 29205z^3 - 120960z^2 + 403200z - 1209600) + \frac{1}{405z^{7/2}} (e^z\sqrt{\pi}(-8z^{11} - 116z^{10} - 370z^9 + 15z^8 - 120z^7 + 840z^6 - 5040z^5 + 25200z^4 - 100800z^3 + 302400z^2 - 604800z + 604800)\operatorname{erf}(\sqrt{z}))$$

07.25.03.al37.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{405 z^3} (8 z^{10} - 112 z^9 + 318 z^8 + 128 z^7 + 240 z^6 + 1080 z^5 + 5880 z^4 + 29205 z^3 + 120960 z^2 + 403200 z + 1209600) + \frac{1}{405 z^{7/2}} \left(e^{-z} \sqrt{\pi} (-8 z^{11} + 116 z^{10} - 370 z^9 - 15 z^8 - 120 z^7 - 840 z^6 - 5040 z^5 - 25200 z^4 - 100800 z^3 - 302400 z^2 - 604800 z - 604800) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.al38.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, 5; z\right) = -\frac{1}{14175 z^4} (4 e^z (256 z^{11} + 2304 z^{10} + 3840 z^9 - 7680 z^8 + 44640 z^7 - 292320 z^6 + 1728720 z^5 - 8618400 z^4 + 34459425 z^3 - 103378275 z^2 + 206756550 z - 206756550)) - \frac{58344}{z^4}$$

07.25.03.al39.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{45 z^4} (-4 z^{10} - 12 z^9 - 41 z^8 + 432 z^7 - 3600 z^6 + 26040 z^5 - 161955 z^4 + 846720 z^3 - 3608640 z^2 + 12096000 z - 38102400) + \frac{1}{90 z^{9/2}} \left(e^z \sqrt{\pi} (-8 z^{11} - 28 z^{10} - 90 z^9 + 825 z^8 - 6720 z^7 + 47880 z^6 - 292320 z^5 + 1486800 z^4 - 6048000 z^3 + 18446400 z^2 - 37497600 z + 38102400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.al3a.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{45 z^4} (-4 z^{10} + 12 z^9 - 41 z^8 - 432 z^7 - 3600 z^6 - 26040 z^5 - 161955 z^4 - 846720 z^3 - 3608640 z^2 - 12096000 z - 38102400) + \frac{1}{90 z^{9/2}} \left(e^{-z} \sqrt{\pi} (8 z^{11} - 28 z^{10} + 90 z^9 + 825 z^8 + 6720 z^7 + 47880 z^6 + 292320 z^5 + 1486800 z^4 + 6048000 z^3 + 18446400 z^2 + 37497600 z + 38102400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.al3b.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{9}{2}, 6; z\right) = -\frac{97240(3z+76)}{z^5} - \frac{1}{2835 z^5} (4 e^z (256 z^{11} - 512 z^{10} + 8960 z^9 - 88320 z^8 + 751200 z^7 - 5550720 z^6 + 35033040 z^5 - 183783600 z^4 + 769593825 z^3 - 2412159750 z^2 + 5031076050 z - 5237832600))$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = -\frac{7}{2}$

07.25.03.al3c.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{496125} (1024 z^{14} + 94208 z^{13} + 3490048 z^{12} + 67603200 z^{11} + 744460800 z^{10} + 4749795840 z^9 + 17150388480 z^8 +$$

$$32695649280 z^7 + 28456646400 z^6 + 8129721600 z^5 +$$

$$227026800 z^4 + 4989600 z^3 + 1020600 z^2 + 567000 z + 496125) +$$

$$\frac{1}{496125} (128 e^z \sqrt{\pi} (8 z^{29/2} + 740 z^{27/2} + 27630 z^{25/2} + 541425 z^{23/2} + 6067425 z^{21/2} + 39782610 z^{19/2} +$$

$$150182550 z^{17/2} + 309216600 z^{15/2} + 311283000 z^{13/2} + 122850000 z^{11/2} + 10810800 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.al3d.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{496125} (1024 z^{14} - 94208 z^{13} + 3490048 z^{12} - 67603200 z^{11} + 744460800 z^{10} - 4749795840 z^9 +$$

$$17150388480 z^8 - 32695649280 z^7 + 28456646400 z^6 - 8129721600 z^5 +$$

$$227026800 z^4 - 4989600 z^3 + 1020600 z^2 - 567000 z + 496125) -$$

$$\frac{1}{496125} (128 e^{-z} \sqrt{\pi} (8 z^{29/2} - 740 z^{27/2} + 27630 z^{25/2} - 541425 z^{23/2} + 6067425 z^{21/2} - 39782610 z^{19/2} +$$

$$150182550 z^{17/2} - 309216600 z^{15/2} + 311283000 z^{13/2} - 122850000 z^{11/2} + 10810800 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.al3e.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{70875} (-512 z^{13} - 41984 z^{12} - 1367424 z^{11} - 22882560 z^{10} - 212686080 z^9 - 1108696320 z^8 - 3114915840 z^7 -$$

$$4257227520 z^6 - 2248646400 z^5 - 227026800 z^4 + 4989600 z^3 + 340200 z^2 + 113400 z + 70875) -$$

$$\frac{1}{70875} (64 e^z \sqrt{\pi} (8 z^{27/2} + 660 z^{25/2} + 21690 z^{23/2} + 367905 z^{21/2} + 3492090 z^{19/2} + 18830070 z^{17/2} +$$

$$56032200 z^{15/2} + 85087800 z^{13/2} + 56019600 z^{11/2} + 10810800 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.al3f.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{70875} (512 z^{13} - 41984 z^{12} + 1367424 z^{11} - 22882560 z^{10} + 212686080 z^9 - 1108696320 z^8 + 3114915840 z^7 -$$

$$4257227520 z^6 + 2248646400 z^5 - 227026800 z^4 - 4989600 z^3 + 340200 z^2 - 113400 z + 70875) -$$

$$\frac{1}{70875} (64 e^{-z} \sqrt{\pi} (8 z^{27/2} - 660 z^{25/2} + 21690 z^{23/2} - 367905 z^{21/2} + 3492090 z^{19/2} - 18830070 z^{17/2} +$$

$$56032200 z^{15/2} - 85087800 z^{13/2} + 56019600 z^{11/2} - 10810800 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.al3g.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{14175} (256 z^{12} + 18432 z^{11} + 517952 z^{10} + 7306560 z^9 + 55434240 z^8 + 224828160 z^7 + 453922560 z^6 + 380540160 z^5 + 75675600 z^4 - 4989600 z^3 + 340200 z^2 + 37800 z + 14175) + \frac{1}{14175} (32 e^z \sqrt{\pi} (8 z^{25/2} + 580 z^{23/2} + 16470 z^{21/2} + 236145 z^{19/2} + 1839075 z^{17/2} + 7795620 z^{15/2} + 17054100 z^{13/2} + 16871400 z^{11/2} + 5405400 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.al3h.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{14175} (256 z^{12} - 18432 z^{11} + 517952 z^{10} - 7306560 z^9 + 55434240 z^8 - 224828160 z^7 + 453922560 z^6 - 380540160 z^5 + 75675600 z^4 + 4989600 z^3 + 340200 z^2 - 37800 z + 14175) - \frac{1}{14175} (32 e^{-z} \sqrt{\pi} (8 z^{25/2} - 580 z^{23/2} + 16470 z^{21/2} - 236145 z^{19/2} + 1839075 z^{17/2} - 7795620 z^{15/2} + 17054100 z^{13/2} - 16871400 z^{11/2} + 5405400 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.al3i.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{4725} (-128 z^{11} - 7936 z^{10} - 187616 z^9 - 2156160 z^8 - 12708480 z^7 - 37040640 z^6 - 46126080 z^5 - 15135120 z^4 + 1663200 z^3 - 340200 z^2 + 37800 z + 4725) - \frac{1}{4725} (16 e^z \sqrt{\pi} (8 z^{23/2} + 500 z^{21/2} + 11970 z^{19/2} + 140385 z^{17/2} + 856380 z^{15/2} + 2657340 z^{13/2} + 3767400 z^{11/2} + 1801800 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.al3j.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{4725} (128 z^{11} - 7936 z^{10} + 187616 z^9 - 2156160 z^8 + 12708480 z^7 - 37040640 z^6 + 46126080 z^5 - 15135120 z^4 - 1663200 z^3 - 340200 z^2 - 37800 z + 4725) - \frac{1}{4725} (16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 500 z^{21/2} + 11970 z^{19/2} - 140385 z^{17/2} + 856380 z^{15/2} - 2657340 z^{13/2} + 3767400 z^{11/2} - 1801800 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.al3k.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{4725} (64 z^{10} + 3328 z^9 + 63888 z^8 + 568560 z^7 + 2402400 z^6 + 4324320 z^5 + 2162160 z^4 - 332640 z^3 + 113400 z^2 - 37800 z + 4725) + \frac{1}{4725} 8 e^z \sqrt{\pi} (8 z^{21/2} + 420 z^{19/2} + 8190 z^{17/2} + 74865 z^{15/2} + 332325 z^{13/2} + 663390 z^{11/2} + 450450 z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.al3l.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{4725} (64 z^{10} - 3328 z^9 + 63\,888 z^8 - 568\,560 z^7 + 2\,402\,400 z^6 - 4\,324\,320 z^5 + 2\,162\,160 z^4 + 332\,640 z^3 + 113\,400 z^2 + 37\,800 z + 4725) - \frac{1}{4725} 8 e^{-z} \sqrt{\pi} (8 z^{21/2} - 420 z^{19/2} + 8190 z^{17/2} - 74\,865 z^{15/2} + 332\,325 z^{13/2} - 663\,390 z^{11/2} + 450\,450 z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al3m.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, 1; z\right) = \frac{1}{9450} (e^z (128 z^{10} + 6080 z^9 + 105\,120 z^8 + 826\,320 z^7 + 2\,994\,600 z^6 + 4\,373\,460 z^5 + 1\,439\,550 z^4 - 313\,425 z^3 + 127\,575 z^2 - 47\,250 z + 9450))$$

07.25.03.al3n.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{4 e^z \sqrt{\pi} (8 z^5 + 340 z^4 + 5130 z^3 + 33\,825 z^2 + 95\,550 z + 90\,090) \operatorname{erf}(\sqrt{z}) z^{9/2}}{4725} + \frac{1}{4725} (32 z^9 + 1344 z^8 + 19\,864 z^7 + 126\,000 z^6 + 327\,600 z^5 + 240\,240 z^4 - 47\,520 z^3 + 22\,680 z^2 - 12\,600 z + 4725)$$

07.25.03.al3o.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{4 e^{-z} \sqrt{\pi} (8 z^5 - 340 z^4 + 5130 z^3 - 33\,825 z^2 + 95\,550 z - 90\,090) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{4725} + \frac{1}{4725} (-32 z^9 + 1344 z^8 - 19\,864 z^7 + 126\,000 z^6 - 327\,600 z^5 + 240\,240 z^4 + 47\,520 z^3 + 22\,680 z^2 + 12\,600 z + 4725)$$

07.25.03.al3p.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, 2; z\right) = \frac{1}{9450} e^z (128 z^9 + 4800 z^8 + 61\,920 z^7 + 330\,960 z^6 + 677\,880 z^5 + 306\,180 z^4 - 91\,350 z^3 + 51\,975 z^2 - 28\,350 z + 9450)$$

07.25.03.al3q.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{2 e^z \sqrt{\pi} (8 z^4 + 260 z^3 + 2790 z^2 + 11\,505 z + 15\,015) \operatorname{erf}(\sqrt{z}) z^{9/2}}{1575} + \frac{16 z^8 + 512 z^7 + 5332 z^6 + 20\,580 z^5 + 21\,840 z^4 - 5280 z^3 + 3240 z^2 - 2520 z + 1575}{1575}$$

07.25.03.al3r.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{16 z^8 - 512 z^7 + 5332 z^6 - 20\,580 z^5 + 21\,840 z^4 + 5280 z^3 + 3240 z^2 + 2520 z + 1575}{1575} - \frac{2 e^{-z} \sqrt{\pi} z^{9/2} (8 z^4 - 260 z^3 + 2790 z^2 - 11\,505 z + 15\,015) \operatorname{erfi}(\sqrt{z})}{1575}$$

07.25.03.al3s.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, 3; z\right) = \frac{e^z (128 z^8 + 3520 z^7 + 30\,240 z^6 + 89\,040 z^5 + 54\,600 z^4 - 21\,420 z^3 + 15\,750 z^2 - 11\,025 z + 4725)}{4725}$$

07.25.03.al3t.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{315} e^z \sqrt{\pi} (8z^3 + 180z^2 + 1170z + 2145) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{315} (8z^7 + 176z^6 + 1086z^5 + 1680z^4 - 480z^3 + 360z^2 - 360z + 315)$$

07.25.03.al3u.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{1}{315} e^{-z} \sqrt{\pi} (8z^3 - 180z^2 + 1170z - 2145) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{315} (-8z^7 + 176z^6 - 1086z^5 + 1680z^4 + 480z^3 + 360z^2 + 360z + 315)$$

07.25.03.al3v.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, 4; z\right) = \frac{e^z (128z^7 + 2240z^6 + 10080z^5 + 8400z^4 - 4200z^3 + 3780z^2 - 3150z + 1575)}{1575}$$

07.25.03.al3w.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{4z^9 + 48z^8 + 113z^7 - 45z^6 + 90z^5 - 390z^4 + 1845z^3 - 7560z^2 + 25200z - 75600}{45z^3} + \frac{1}{90z^{7/2}} (e^z \sqrt{\pi} (8z^{10} + 100z^9 + 270z^8 - 15z^7 + 105z^6 - 630z^5 + 3150z^4 - 12600z^3 + 37800z^2 - 75600z + 75600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.al3x.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{4z^9 - 48z^8 + 113z^7 + 45z^6 + 90z^5 + 390z^4 + 1845z^3 + 7560z^2 + 25200z + 75600}{45z^3} + \frac{1}{90z^{7/2}} (e^{-z} \sqrt{\pi} (-8z^{10} + 100z^9 - 270z^8 - 15z^7 - 105z^6 - 630z^5 - 3150z^4 - 12600z^3 - 37800z^2 - 75600z - 75600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.al3y.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, 5; z\right) = \frac{1}{1575z^4} (4e^z (128z^{10} + 960z^9 + 1440z^8 - 3120z^7 + 17640z^6 - 102060z^5 + 507150z^4 - 2027025z^3 + 6081075z^2 - 12162150z + 12162150)) - \frac{30888}{z^4}$$

07.25.03.al3z.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{4z^9 + 8z^8 + 43z^7 - 390z^6 + 2850z^5 - 17790z^4 + 93240z^3 - 398160z^2 + 1335600z - 4233600}{10z^4} + \frac{1}{20z^{9/2}} (e^z \sqrt{\pi} (8z^{10} + 20z^9 + 90z^8 - 735z^7 + 5250z^6 - 32130z^5 + 163800z^4 - 667800z^3 + 2041200z^2 - 4158000z + 4233600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.al40.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, \frac{11}{2}; -z\right) =$$

$$\frac{1}{10z^4} (-4z^9 + 8z^8 - 43z^7 - 390z^6 - 2850z^5 - 17790z^4 - 93240z^3 - 398160z^2 - 1335600z - 4233600) +$$

$$\frac{1}{20z^{9/2}} \left(e^{-z} \sqrt{\pi} (8z^{10} - 20z^9 + 90z^8 + 735z^7 + 5250z^6 + 32130z^5 +$$

$$163800z^4 + 667800z^3 + 2041200z^2 + 4158000z + 4233600) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.al41.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{7}{2}, 6; z\right) =$$

$$\frac{1}{315z^5} (4e^z (128z^{10} - 320z^9 + 4320z^8 - 37680z^7 + 281400z^6 - 1790460z^5 + 9459450z^4 - 39864825z^3 +$$

$$125675550z^2 - 263513250z + 275675400)) - \frac{51480(3z + 68)}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = -\frac{5}{2}$

07.25.03.al42.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{10125} (256z^{12} + 18688z^{11} + 534336z^{10} + 7709952z^9 + 60328320z^8 + 255974400z^7 + 556178688z^6 +$$

$$538686720z^5 + 167721840z^4 + 4989600z^3 + 113400z^2 + 22680z + 10125) +$$

$$\frac{1}{10125} (32e^z \sqrt{\pi} (8z^{25/2} + 588z^{23/2} + 16986z^{21/2} + 249003z^{19/2} + 1998072z^{17/2} + 8839710z^{15/2} +$$

$$20673360z^{13/2} + 23067720z^{11/2} + 9884160z^{9/2} + 926640z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.al43.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{10125} (256z^{12} - 18688z^{11} + 534336z^{10} - 7709952z^9 + 60328320z^8 - 255974400z^7 + 556178688z^6 -$$

$$538686720z^5 + 167721840z^4 - 4989600z^3 + 113400z^2 - 22680z + 10125) -$$

$$\frac{1}{10125} (32e^{-z} \sqrt{\pi} (8z^{25/2} - 588z^{23/2} + 16986z^{21/2} - 249003z^{19/2} + 1998072z^{17/2} - 8839710z^{15/2} +$$

$$20673360z^{13/2} - 23067720z^{11/2} + 9884160z^{9/2} - 926640z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ai44.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{2025} (-128 z^{11} - 8192 z^{10} - 201\,696 z^9 - 2\,447\,040 z^8 - 15\,573\,120 z^7 - 51\,128\,064 z^6 - 79\,073\,280 z^5 - 46\,023\,120 z^4 - 4\,989\,600 z^3 + 113\,400 z^2 + 7560 z + 2025) - \frac{1}{2025} \left(16 e^z \sqrt{\pi} (8 z^{23/2} + 516 z^{21/2} + 12\,858 z^{19/2} + 158\,997 z^{17/2} + 1\,044\,090 z^{15/2} + 3\,619\,260 z^{13/2} + 6\,196\,320 z^{11/2} + 4\,478\,760 z^{9/2} + 926\,640 z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ai45.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{2025} (128 z^{11} - 8192 z^{10} + 201\,696 z^9 - 2\,447\,040 z^8 + 15\,573\,120 z^7 - 51\,128\,064 z^6 + 79\,073\,280 z^5 - 46\,023\,120 z^4 + 4\,989\,600 z^3 + 113\,400 z^2 - 7560 z + 2025) - \frac{1}{2025} \left(16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 516 z^{21/2} + 12\,858 z^{19/2} - 158\,997 z^{17/2} + 1\,044\,090 z^{15/2} - 3\,619\,260 z^{13/2} + 6\,196\,320 z^{11/2} - 4\,478\,760 z^{9/2} + 926\,640 z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ai46.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{675} (64 z^{10} + 3520 z^9 + 72\,720 z^8 + 716\,160 z^7 + 3\,521\,856 z^6 + 8\,236\,800 z^5 + 7\,722\,000 z^4 + 1\,663\,200 z^3 - 113\,400 z^2 + 7560 z + 675) + \frac{8}{675} e^z \sqrt{\pi} (8 z^{21/2} + 444 z^{19/2} + 9306 z^{17/2} + 93\,855 z^{15/2} + 480\,960 z^{13/2} + 1\,214\,460 z^{11/2} + 1\,338\,480 z^{9/2} + 463\,320 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ai47.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{675} (64 z^{10} - 3520 z^9 + 72\,720 z^8 - 716\,160 z^7 + 3\,521\,856 z^6 - 8\,236\,800 z^5 + 7\,722\,000 z^4 - 1\,663\,200 z^3 - 113\,400 z^2 - 7560 z + 675) - \frac{8}{675} e^{-z} \sqrt{\pi} (8 z^{21/2} - 444 z^{19/2} + 9306 z^{17/2} - 93\,855 z^{15/2} + 480\,960 z^{13/2} - 1\,214\,460 z^{11/2} + 1\,338\,480 z^{9/2} - 463\,320 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ai48.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{675} (-32 z^9 - 1472 z^8 - 24\,600 z^7 - 186\,576 z^6 - 652\,080 z^5 - 926\,640 z^4 - 332\,640 z^3 + 37\,800 z^2 - 7560 z + 675) - \frac{4}{675} e^z \sqrt{\pi} (8 z^{19/2} + 372 z^{17/2} + 6330 z^{15/2} + 49\,545 z^{13/2} + 183\,690 z^{11/2} + 296\,010 z^{9/2} + 154\,440 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.al49.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{675} (32 z^9 - 1472 z^8 + 24\,600 z^7 - 186\,576 z^6 + 652\,080 z^5 - 926\,640 z^4 + 332\,640 z^3 + 37\,800 z^2 + 7560 z + 675) - \frac{4}{675} e^{-z} \sqrt{\pi} (8 z^{19/2} - 372 z^{17/2} + 6330 z^{15/2} - 49\,545 z^{13/2} + 183\,690 z^{11/2} - 296\,010 z^{9/2} + 154\,440 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al4a.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, 1; z\right) = -\frac{1}{1350} e^z (64 z^9 + 2688 z^8 + 40\,464 z^7 + 271\,536 z^6 + 818\,460 z^5 + 959\,040 z^4 + 240\,255 z^3 - 36\,585 z^2 + 8910 z - 1350)$$

07.25.03.al4b.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{675} (-16 z^8 - 592 z^7 - 7572 z^6 - 40\,560 z^5 - 85\,800 z^4 - 47\,520 z^3 + 7560 z^2 - 2520 z + 675) - \frac{2}{675} e^z \sqrt{\pi} z^{7/2} (8 z^5 + 300 z^4 + 3930 z^3 + 22\,035 z^2 + 51\,480 z + 38\,610) \operatorname{erf}(\sqrt{z})$$

07.25.03.al4c.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{2}{675} e^{-z} \sqrt{\pi} (8 z^5 - 300 z^4 + 3930 z^3 - 22\,035 z^2 + 51\,480 z - 38\,610) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{675} (-16 z^8 + 592 z^7 - 7572 z^6 + 40\,560 z^5 - 85\,800 z^4 + 47\,520 z^3 + 7560 z^2 + 2520 z + 675)$$

07.25.03.al4d.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, 2; z\right) = -\frac{e^z (64 z^8 + 2112 z^7 + 23\,568 z^6 + 106\,560 z^5 + 179\,100 z^4 + 63\,540 z^3 - 13\,905 z^2 + 5130 z - 1350)}{1350}$$

07.25.03.al4e.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{225} (-8 z^7 - 224 z^6 - 1998 z^5 - 6396 z^4 - 5280 z^3 + 1080 z^2 - 504 z + 225) - \frac{1}{225} e^z \sqrt{\pi} z^{7/2} (8 z^4 + 228 z^3 + 2106 z^2 + 7293 z + 7722) \operatorname{erf}(\sqrt{z})$$

07.25.03.al4f.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{225} (8 z^7 - 224 z^6 + 1998 z^5 - 6396 z^4 + 5280 z^3 + 1080 z^2 + 504 z + 225) - \frac{1}{225} e^{-z} \sqrt{\pi} z^{7/2} (8 z^4 - 228 z^3 + 2106 z^2 - 7293 z + 7722) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al4g.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, 3; z\right) = -\frac{1}{675} e^z (64 z^7 + 1536 z^6 + 11\,280 z^5 + 27\,600 z^4 + 13\,500 z^3 - 3960 z^2 + 1935 z - 675)$$

07.25.03.al4h.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{45}(-4z^6 - 76z^5 - 393z^4 - 480z^3 + 120z^2 - 72z + 45) - \frac{1}{90}e^z\sqrt{\pi}z^{7/2}(8z^3 + 156z^2 + 858z + 1287)\operatorname{erf}(\sqrt{z})$$

07.25.03.al4i.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{90}e^{-z}\sqrt{\pi}(8z^3 - 156z^2 + 858z - 1287)\operatorname{erfi}(\sqrt{z})z^{7/2} + \frac{1}{45}(-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45)$$

07.25.03.al4j.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, 4; z\right) = -\frac{1}{225}e^z(64z^6 + 960z^5 + 3600z^4 + 2400z^3 - 900z^2 + 540z - 225)$$

07.25.03.al4k.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(4z^8 + 40z^7 + 75z^6 - 30z^5 + 66z^4 - 270z^3 + 1080z^2 - 3600z + 10800)}{90z^3} - \frac{1}{180z^{7/2}}7e^z\sqrt{\pi}(8z^9 + 84z^8 + 186z^7 - 15z^6 + 90z^5 - 450z^4 + 1800z^3 - 5400z^2 + 10800z - 10800)\operatorname{erf}(\sqrt{z})$$

07.25.03.al4l.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(4z^8 - 40z^7 + 75z^6 + 30z^5 + 66z^4 + 270z^3 + 1080z^2 + 3600z + 10800)}{90z^3} - \frac{1}{180z^{7/2}}7e^{-z}\sqrt{\pi}(8z^9 - 84z^8 + 186z^7 + 15z^6 + 90z^5 + 450z^4 + 1800z^3 + 5400z^2 + 10800z + 10800)\operatorname{erfi}(\sqrt{z})$$

07.25.03.al4m.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, 5; z\right) = -\frac{1}{225z^4}4e^z(64z^9 + 384z^8 + 528z^7 - 1296z^6 + 6876z^5 - 33840z^4 + 135135z^3 - 405405z^2 + 810810z - 810810) - \frac{72072}{5z^4}$$

07.25.03.al4n.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{7(4z^8 + 4z^7 + 45z^6 - 348z^5 + 2190z^4 - 11520z^3 + 49320z^2 - 165600z + 529200)}{20z^4} - \frac{1}{40z^{9/2}}7e^z\sqrt{\pi}(8z^9 + 12z^8 + 90z^7 - 645z^6 + 3960z^5 - 20250z^4 + 82800z^3 - 253800z^2 + 518400z - 529200)\operatorname{erf}(\sqrt{z})$$

07.25.03.al4o.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{40z^{9/2}}7e^{-z}\sqrt{\pi}(8z^9 - 12z^8 + 90z^7 + 645z^6 + 3960z^5 + 20250z^4 + 82800z^3 + 253800z^2 + 518400z + 529200)\operatorname{erfi}(\sqrt{z}) - \frac{7(4z^8 - 4z^7 + 45z^6 + 348z^5 + 2190z^4 + 11520z^3 + 49320z^2 + 165600z + 529200)}{20z^4}$$

07.25.03.al4p.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{5}{2}, 6; z\right) = -\frac{72072(z+20)}{z^5} - \frac{1}{45z^5} (4e^z(64z^9 - 192z^8 + 2064z^7 - 15744z^6 + 101340z^5 - 540540z^4 + 2297295z^3 - 7297290z^2 + 15405390z - 16216200))$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = -\frac{3}{2}$

07.25.03.al4q.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{405} (64z^{10} + 3584z^9 + 75792z^8 + 770480z^7 + 3967872z^6 + 9998208z^5 + 10842480z^4 + 3659040z^3 + 113400z^2 + 2520z + 405) + \frac{8}{405} e^z \sqrt{\pi} (8z^{21/2} + 452z^{19/2} + 9694z^{17/2} + 100833z^{15/2} + 539925z^{13/2} + 1459560z^{11/2} + 1817640z^{9/2} + 843480z^{7/2} + 83160z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.al4r.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{405} (64z^{10} - 3584z^9 + 75792z^8 - 770480z^7 + 3967872z^6 - 9998208z^5 + 10842480z^4 - 3659040z^3 + 113400z^2 - 2520z + 405) - \frac{8}{405} e^{-z} \sqrt{\pi} (8z^{21/2} - 452z^{19/2} + 9694z^{17/2} - 100833z^{15/2} + 539925z^{13/2} - 1459560z^{11/2} + 1817640z^{9/2} - 843480z^{7/2} + 83160z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al4s.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{135} (-32z^9 - 1536z^8 - 27160z^7 - 223008z^6 - 880704z^5 - 1560240z^4 - 997920z^3 - 113400z^2 + 2520z + 135) - \frac{4}{135} e^z \sqrt{\pi} (8z^{19/2} + 388z^{17/2} + 6978z^{15/2} + 58965z^{13/2} + 245100z^{11/2} + 479160z^{9/2} + 380160z^{7/2} + 83160z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.al4t.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{135} (32z^9 - 1536z^8 + 27160z^7 - 223008z^6 + 880704z^5 - 1560240z^4 + 997920z^3 - 113400z^2 - 2520z + 135) - \frac{4}{135} e^{-z} \sqrt{\pi} (8z^{19/2} - 388z^{17/2} + 6978z^{15/2} - 58965z^{13/2} + 245100z^{11/2} - 479160z^{9/2} + 380160z^{7/2} - 83160z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al4u.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{135} (16z^8 + 640z^7 + 9108z^6 + 57156z^5 + 158400z^4 + 166320z^3 + 37800z^2 - 2520z + 135) + \frac{2}{135} e^z \sqrt{\pi} (8z^{17/2} + 324z^{15/2} + 4710z^{13/2} + 30705z^{11/2} + 91575z^{9/2} + 112860z^{7/2} + 41580z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.al4v.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{135} (16z^8 - 640z^7 + 9108z^6 - 57156z^5 + 158400z^4 - 166320z^3 + 37800z^2 + 2520z + 135) - \frac{2}{135} e^{-z} \sqrt{\pi} (8z^{17/2} - 324z^{15/2} + 4710z^{13/2} - 30705z^{11/2} + 91575z^{9/2} - 112860z^{7/2} + 41580z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al4w.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, 1; z\right) = \frac{1}{270} e^z (32z^8 + 1168z^7 + 14976z^6 + 83352z^5 + 200850z^4 + 178245z^3 + 31005z^2 - 2790z + 270)$$

07.25.03.al4x.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{135} e^z \sqrt{\pi} (8z^5 + 260z^4 + 2890z^3 + 13365z^2 + 24750z + 13860) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{135} (8z^7 + 256z^6 + 2766z^5 + 12100z^4 + 19800z^3 + 7560z^2 - 840z + 135)$$

07.25.03.al4y.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{135} e^{-z} \sqrt{\pi} (8z^5 - 260z^4 + 2890z^3 - 13365z^2 + 24750z - 13860) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{135} (-8z^7 + 256z^6 - 2766z^5 + 12100z^4 - 19800z^3 + 7560z^2 + 840z + 135)$$

07.25.03.al4z.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, 2; z\right) = \frac{1}{270} e^z (32z^7 + 912z^6 + 8592z^5 + 31800z^4 + 41850z^3 + 10845z^2 - 1530z + 270)$$

07.25.03.al50.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{90} e^z \sqrt{\pi} (8z^4 + 196z^3 + 1518z^2 + 4257z + 3465) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{45} (4z^6 + 96z^5 + 713z^4 + 1815z^3 + 1080z^2 - 168z + 45)$$

07.25.03.al51.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{45} (4z^6 - 96z^5 + 713z^4 - 1815z^3 + 1080z^2 + 168z + 45) - \frac{1}{90} e^{-z} \sqrt{\pi} z^{5/2} (8z^4 - 196z^3 + 1518z^2 - 4257z + 3465) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al52.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, 3; z\right) = \frac{1}{135} e^z (32z^6 + 656z^5 + 4000z^4 + 7800z^3 + 2850z^2 - 555z + 135)$$

07.25.03.al53.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{36} e^z \sqrt{\pi} (8z^3 + 132z^2 + 594z + 693) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{18} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18)$$

07.25.03.al54.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{36} e^{-z} \sqrt{\pi} (8z^3 - 132z^2 + 594z - 693) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{18} (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18)$$

07.25.03.al55.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, 4; z\right) = \frac{1}{45} e^z (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45)$$

07.25.03.al56.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(4 z^7 + 32 z^6 + 45 z^5 - 19 z^4 + 48 z^3 - 180 z^2 + 600 z - 1800)}{36 z^3} + \frac{7 e^z \sqrt{\pi} (8 z^8 + 68 z^7 + 118 z^6 - 15 z^5 + 75 z^4 - 300 z^3 + 900 z^2 - 1800 z + 1800) \operatorname{erfi}(\sqrt{z})}{72 z^{7/2}}$$

07.25.03.al57.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7(4 z^7 - 32 z^6 + 45 z^5 + 19 z^4 + 48 z^3 + 180 z^2 + 600 z + 1800)}{36 z^3} - \frac{7 e^{-z} \sqrt{\pi} (8 z^8 - 68 z^7 + 118 z^6 + 15 z^5 + 75 z^4 + 300 z^3 + 900 z^2 + 1800 z + 1800) \operatorname{erfi}(\sqrt{z})}{72 z^{7/2}}$$

07.25.03.al58.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, 5; z\right) = \frac{4 e^z (32 z^8 + 144 z^7 + 192 z^6 - 552 z^5 + 2610 z^4 - 10395 z^3 + 31185 z^2 - 62370 z + 62370)}{45 z^4} - \frac{5544}{z^4}$$

07.25.03.al59.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{7(4 z^7 + 47 z^5 - 306 z^4 + 1620 z^3 - 6960 z^2 + 23400 z - 75600)}{8 z^4} + \frac{1}{16 z^{9/2}} 7 e^z \sqrt{\pi} (8 z^8 + 4 z^7 + 90 z^6 - 555 z^5 + 2850 z^4 - 11700 z^3 + 36000 z^2 - 73800 z + 75600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al5a.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{16 z^{9/2}} 7 e^{-z} \sqrt{\pi} (8 z^8 - 4 z^7 + 90 z^6 + 555 z^5 + 2850 z^4 + 11700 z^3 + 36000 z^2 + 73800 z + 75600) \operatorname{erfi}(\sqrt{z}) - \frac{7(4 z^7 + 47 z^5 + 306 z^4 + 1620 z^3 + 6960 z^2 + 23400 z + 75600)}{8 z^4}$$

07.25.03.al5b.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{3}{2}, 6; z\right) = \frac{1}{9 z^5} 4 e^z (32 z^8 - 112 z^7 + 976 z^6 - 6408 z^5 + 34650 z^4 - 148995 z^3 + 478170 z^2 - 1018710 z + 1081080) - \frac{9240(3z + 52)}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = -\frac{1}{2}$

07.25.03.al5c.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{45} (16 z^8 + 656 z^7 + 9652 z^6 + 63552 z^5 + 190224 z^4 + 231840 z^3 + 83160 z^2 + 2520 z + 45) + \frac{2}{45} e^z \sqrt{\pi} (8 z^{17/2} + 332 z^{15/2} + 4986 z^{13/2} + 34035 z^{11/2} + 108960 z^{9/2} + 152280 z^{7/2} + 75600 z^{5/2} + 7560 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al5d.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{45} (16z^8 - 656z^7 + 9652z^6 - 63552z^5 + 190224z^4 - 231840z^3 + 83160z^2 - 2520z + 45) - \frac{2}{45} e^{-z} \sqrt{\pi} (8z^{17/2} - 332z^{15/2} + 4986z^{13/2} - 34035z^{11/2} + 108960z^{9/2} - 152280z^{7/2} + 75600z^{5/2} - 7560z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al5e.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{45} (-8z^7 - 272z^6 - 3198z^5 - 15912z^4 - 32760z^3 - 22680z^2 - 2520z + 45) + \frac{1}{45} e^z \sqrt{\pi} (-8z^{15/2} - 276z^{13/2} - 3330z^{11/2} - 17385z^{9/2} - 39420z^{7/2} - 34020z^{5/2} - 7560z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.al5f.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{45} (8z^7 - 272z^6 + 3198z^5 - 15912z^4 + 32760z^3 - 22680z^2 + 2520z + 45) + \frac{1}{45} e^{-z} \sqrt{\pi} (-8z^{15/2} + 276z^{13/2} - 3330z^{11/2} + 17385z^{9/2} - 39420z^{7/2} + 34020z^{5/2} - 7560z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al5g.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, 1; z\right) = -\frac{1}{90} e^z (16z^7 + 496z^6 + 5256z^5 + 23280z^4 + 42225z^3 + 25785z^2 + 2610z - 90)$$

07.25.03.al5h.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{45} (-4z^6 - 108z^5 - 953z^4 - 3240z^3 - 3780z^2 - 840z + 45) - \frac{1}{90} e^z \sqrt{\pi} z^{3/2} (8z^5 + 220z^4 + 2010z^3 + 7335z^2 + 10080z + 3780) \operatorname{erf}(\sqrt{z})$$

07.25.03.al5i.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{90} e^{-z} \sqrt{\pi} (8z^5 - 220z^4 + 2010z^3 - 7335z^2 + 10080z - 3780) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{45} (-4z^6 + 108z^5 - 953z^4 + 3240z^3 - 3780z^2 + 840z + 45)$$

07.25.03.al5j.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, 2; z\right) = -\frac{1}{90} e^z (16z^6 + 384z^5 + 2952z^4 + 8520z^3 + 8145z^2 + 1350z - 90)$$

07.25.03.al5k.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{30} (-4z^5 - 80z^4 - 475z^3 - 900z^2 - 336z + 30) - \frac{1}{60} e^z \sqrt{\pi} z^{3/2} (8z^4 + 164z^3 + 1026z^2 + 2205z + 1260) \operatorname{erf}(\sqrt{z})$$

07.25.03.al5l.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{30} (4z^5 - 80z^4 + 475z^3 - 900z^2 + 336z + 30) - \frac{1}{60} e^{-z} \sqrt{\pi} z^{3/2} (8z^4 - 164z^3 + 1026z^2 - 2205z + 1260) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al5m.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, 3; z\right) = -\frac{1}{45} e^z (16z^5 + 272z^4 + 1320z^3 + 1920z^2 + 465z - 45)$$

07.25.03.al5n.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{12} (-4z^4 - 52z^3 - 165z^2 - 96z + 12) - \frac{1}{24} e^z \sqrt{\pi} z^{3/2} (8z^3 + 108z^2 + 378z + 315) \operatorname{erf}(\sqrt{z})$$

07.25.03.al5o.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{24} e^{-z} \sqrt{\pi} (8z^3 - 108z^2 + 378z - 315) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{12} (-4z^4 + 52z^3 - 165z^2 + 96z + 12)$$

07.25.03.al5p.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, 4; z\right) = -\frac{1}{15} e^z (16z^4 + 160z^3 + 360z^2 + 120z - 15)$$

07.25.03.al5q.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{7(4z^6 + 24z^5 + 23z^4 - 12z^3 + 36z^2 - 120z + 360)}{24z^3} - \frac{7e^z \sqrt{\pi} (8z^7 + 52z^6 + 66z^5 - 15z^4 + 60z^3 - 180z^2 + 360z - 360) \operatorname{erf}(\sqrt{z})}{48z^{7/2}}$$

07.25.03.al5r.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7(4z^6 - 24z^5 + 23z^4 + 12z^3 + 36z^2 + 120z + 360)}{24z^3} - \frac{7e^{-z} \sqrt{\pi} (8z^7 - 52z^6 + 66z^5 + 15z^4 + 60z^3 + 180z^2 + 360z + 360) \operatorname{erfi}(\sqrt{z})}{48z^{7/2}}$$

07.25.03.al5s.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, 5; z\right) = -\frac{4e^z (16z^7 + 48z^6 + 72z^5 - 240z^4 + 945z^3 - 2835z^2 + 5670z - 5670)}{15z^4} - \frac{1512}{z^4}$$

07.25.03.al5t.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{21(4z^6 - 4z^5 + 49z^4 - 264z^3 + 1140z^2 - 3840z + 12600)}{16z^4} - \frac{21e^z \sqrt{\pi} (8z^7 - 4z^6 + 90z^5 - 465z^4 + 1920z^3 - 5940z^2 + 12240z - 12600) \operatorname{erf}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.al5u.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z} \sqrt{\pi} (8z^7 + 4z^6 + 90z^5 + 465z^4 + 1920z^3 + 5940z^2 + 12240z + 12600) \operatorname{erfi}(\sqrt{z})}{32z^{9/2}} - \frac{21(4z^6 + 4z^5 + 49z^4 + 264z^3 + 1140z^2 + 3840z + 12600)}{16z^4}$$

07.25.03.al5v.01

$${}_2F_2\left(\frac{7}{2}, 4; -\frac{1}{2}, 6; z\right) = -\frac{2520(3z + 44)}{z^5} - \frac{4e^z (16z^7 - 64z^6 + 456z^5 - 2520z^4 + 11025z^3 - 35910z^2 + 77490z - 83160)}{3z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = \frac{1}{2}$

07.25.03.al5w.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{45} (4z^6 + 112z^5 + 1041z^4 + 3843z^3 + 5250z^2 + 1890z + 45) + \frac{1}{90} e^z \sqrt{\pi} (8z^{13/2} + 228z^{11/2} + 2190z^{9/2} + 8625z^{7/2} + 13545z^{5/2} + 6930z^{3/2} + 630\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.al5x.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{45} (4z^6 - 112z^5 + 1041z^4 - 3843z^3 + 5250z^2 - 1890z + 45) + \frac{1}{90} e^{-z} \sqrt{\pi} (-8z^{13/2} + 228z^{11/2} - 2190z^{9/2} + 8625z^{7/2} - 13545z^{5/2} + 6930z^{3/2} - 630\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al5y.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, 1; z\right) = \frac{1}{90} e^z (8z^6 + 204z^5 + 1710z^4 + 5655z^3 + 6975z^2 + 2430z + 90)$$

07.25.03.al5z.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{90} (4z^5 + 88z^4 + 603z^3 + 1470z^2 + 1050z + 90) + \frac{1}{180} e^z \sqrt{\pi} \sqrt{z} (8z^5 + 180z^4 + 1290z^3 + 3465z^2 + 3150z + 630) \operatorname{erf}(\sqrt{z})$$

07.25.03.al60.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{90} (-4z^5 + 88z^4 - 603z^3 + 1470z^2 - 1050z + 90) + \frac{1}{180} e^{-z} \sqrt{\pi} \sqrt{z} (8z^5 - 180z^4 + 1290z^3 - 3465z^2 + 3150z - 630) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al61.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, 2; z\right) = \frac{1}{90} e^z (8z^5 + 156z^4 + 930z^3 + 1935z^2 + 1170z + 90)$$

07.25.03.al62.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{60} (4z^4 + 64z^3 + 285z^2 + 357z + 60) + \frac{1}{120} e^z \sqrt{\pi} \sqrt{z} (8z^4 + 132z^3 + 630z^2 + 945z + 315) \operatorname{erf}(\sqrt{z})$$

07.25.03.al63.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{60} (4z^4 - 64z^3 + 285z^2 - 357z + 60) - \frac{1}{120} e^{-z} \sqrt{\pi} \sqrt{z} (8z^4 - 132z^3 + 630z^2 - 945z + 315) \operatorname{erfi}(\sqrt{z})$$

07.25.03.al64.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, 3; z\right) = \frac{1}{45} e^z (8z^4 + 108z^3 + 390z^2 + 375z + 45)$$

07.25.03.al65.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{24} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} e^z \sqrt{\pi} \sqrt{z} (8z^3 + 84z^2 + 210z + 105) \operatorname{erf}(\sqrt{z})$$

07.25.03.al66.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{24}(-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48}e^{-z}\sqrt{\pi}\sqrt{z}(8z^3 - 84z^2 + 210z - 105)\operatorname{erfi}(\sqrt{z})$$

07.25.03.al67.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, 4; z\right) = \frac{1}{15}e^z(8z^3 + 60z^2 + 90z + 15)$$

07.25.03.al68.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7(4z^5 + 16z^4 + 9z^3 - 9z^2 + 30z - 90)}{48z^3} + \frac{7e^z\sqrt{\pi}(8z^6 + 36z^5 + 30z^4 - 15z^3 + 45z^2 - 90z + 90)\operatorname{erfi}(\sqrt{z})}{96z^{7/2}}$$

07.25.03.al69.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7(4z^5 - 16z^4 + 9z^3 + 9z^2 + 30z + 90)}{48z^3} - \frac{7e^{-z}\sqrt{\pi}(8z^6 - 36z^5 + 30z^4 + 15z^3 + 45z^2 + 90z + 90)\operatorname{erfi}(\sqrt{z})}{96z^{7/2}}$$

07.25.03.al6a.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, 5; z\right) = \frac{4e^z(8z^6 + 12z^5 + 30z^4 - 105z^3 + 315z^2 - 630z + 630)}{15z^4} - \frac{168}{z^4}$$

07.25.03.al6b.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{21(4z^5 - 8z^4 + 51z^3 - 222z^2 + 750z - 2520)}{32z^4} + \frac{21e^z\sqrt{\pi}(8z^6 - 12z^5 + 90z^4 - 375z^3 + 1170z^2 - 2430z + 2520)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.al6c.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z}\sqrt{\pi}(8z^6 + 12z^5 + 90z^4 + 375z^3 + 1170z^2 + 2430z + 2520)\operatorname{erfi}(\sqrt{z})}{64z^{9/2}} - \frac{21(4z^5 + 8z^4 + 51z^3 + 222z^2 + 750z + 2520)}{32z^4}$$

07.25.03.al6d.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{1}{2}, 6; z\right) = \frac{4e^z(8z^6 - 36z^5 + 210z^4 - 945z^3 + 3150z^2 - 6930z + 7560)}{3z^5} - \frac{840(z + 12)}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = 1$

07.25.03.al6e.01

$${}_2F_2\left(\frac{7}{2}, 4; 1, 1; z\right) = \frac{1}{360}e^{z/2}(16z^6 + 376z^5 + 2916z^4 + 9132z^3 + 11457z^2 + 4860z + 360)I_0\left(\frac{z}{2}\right) + \frac{1}{360}e^{z/2}(16z^6 + 360z^5 + 2564z^4 + 6732z^3 + 5697z^2 + 882z)I_1\left(\frac{z}{2}\right)$$

07.25.03.al6f.01

$${}_2F_2\left(\frac{7}{2}, 4; 1, \frac{3}{2}; z\right) = \frac{1}{90} e^z (4z^5 + 80z^4 + 495z^3 + 1095z^2 + 750z + 90)$$

07.25.03.al6g.01

$${}_2F_2\left(\frac{7}{2}, 4; 1, 2; z\right) = \frac{1}{90} e^{z/2} (4z^5 + 72z^4 + 402z^3 + 828z^2 + 585z + 90) I_0\left(\frac{z}{2}\right) + \frac{1}{180} e^{z/2} (8z^5 + 136z^4 + 672z^3 + 1044z^2 + 351z) I_1\left(\frac{z}{2}\right)$$

07.25.03.al6h.01

$${}_2F_2\left(\frac{7}{2}, 4; 1, \frac{5}{2}; z\right) = \frac{1}{30} e^z (2z^4 + 29z^3 + 117z^2 + 138z + 30)$$

07.25.03.al6i.01

$${}_2F_2\left(\frac{7}{2}, 4; 1, 3; z\right) = \frac{1}{90} e^{z/2} (8z^4 + 100z^3 + 348z^2 + 375z + 90) I_0\left(\frac{z}{2}\right) + \frac{1}{90} e^{z/2} z (8z^3 + 92z^2 + 260z + 153) I_1\left(\frac{z}{2}\right)$$

07.25.03.al6j.01

$${}_2F_2\left(\frac{7}{2}, 4; 1, \frac{7}{2}; z\right) = \frac{1}{6} e^z (z^3 + 9z^2 + 18z + 6)$$

07.25.03.al6k.01

$${}_2F_2\left(\frac{7}{2}, 4; 1, 4; z\right) = \frac{1}{15} e^{z/2} (4z^3 + 28z^2 + 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} z (4z^2 + 24z + 23) I_1\left(\frac{z}{2}\right)$$

07.25.03.al6l.01

$${}_2F_2\left(\frac{7}{2}, 4; 1, \frac{9}{2}; z\right) = \frac{7e^z (32z^5 + 112z^4 + 72z^3 - 60z^2 + 150z - 225)}{384z^3} + \frac{525\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.al6m.01

$${}_2F_2\left(\frac{7}{2}, 4; 1, \frac{9}{2}; -z\right) = \frac{7e^{-z} (32z^5 - 112z^4 + 72z^3 + 60z^2 + 150z + 225)}{384z^3} - \frac{525\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.al6n.01

$${}_2F_2\left(\frac{7}{2}, 4; 1, 5; z\right) = \frac{4e^{z/2} (4z^4 + 6z^3 + 15z^2 - 36z + 72) I_0\left(\frac{z}{2}\right)}{15z^2} + \frac{4e^{z/2} (4z^5 + 2z^4 + 15z^3 - 54z^2 + 144z - 288) I_1\left(\frac{z}{2}\right)}{15z^3}$$

07.25.03.al6o.01

$${}_2F_2\left(\frac{7}{2}, 4; 1, \frac{11}{2}; z\right) = \frac{21e^z (64z^5 - 128z^4 + 720z^3 - 2640z^2 + 6900z - 11025)}{512z^4} + \frac{4725\sqrt{\pi} (2z + 49) \operatorname{erfi}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.al6p.01

$${}_2F_2\left(\frac{7}{2}, 4; 1, \frac{11}{2}; -z\right) = -\frac{21e^{-z} (64z^5 + 128z^4 + 720z^3 + 2640z^2 + 6900z + 11025)}{512z^4} - \frac{4725\sqrt{\pi} (2z - 49) \operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.al6q.01

$${}_2F_2\left(\frac{7}{2}, 4; 1, 6; z\right) = \frac{16e^{z/2} (z^4 - 4z^3 + 21z^2 - 78z + 192) I_0\left(\frac{z}{2}\right)}{3z^3} + \frac{8e^{z/2} (2z^5 - 10z^4 + 53z^3 - 216z^2 + 624z - 1536) I_1\left(\frac{z}{2}\right)}{3z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = \frac{3}{2}$

07.25.03.al6r.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{180} (4z^4 + 68z^3 + 333z^2 + 500z + 150) + \frac{e^z \sqrt{\pi} (8z^5 + 140z^4 + 730z^3 + 1275z^2 + 600z + 30) \operatorname{erf}(\sqrt{z})}{360\sqrt{z}}$$

07.25.03.al6s.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{180} (4z^4 - 68z^3 + 333z^2 - 500z + 150) + \frac{e^{-z} \sqrt{\pi} (-8z^5 + 140z^4 - 730z^3 + 1275z^2 - 600z + 30) \operatorname{erfi}(\sqrt{z})}{360\sqrt{z}}$$

07.25.03.al6t.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{3}{2}, 2; z\right) = \frac{1}{90} e^z (4z^4 + 60z^3 + 255z^2 + 330z + 90)$$

07.25.03.al6u.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{120} (4z^3 + 48z^2 + 143z + 90) + \frac{e^z \sqrt{\pi} (8z^4 + 100z^3 + 330z^2 + 285z + 30) \operatorname{erf}(\sqrt{z})}{240\sqrt{z}}$$

07.25.03.al6v.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{120} (-4z^3 + 48z^2 - 143z + 90) + \frac{e^{-z} \sqrt{\pi} (8z^4 - 100z^3 + 330z^2 - 285z + 30) \operatorname{erfi}(\sqrt{z})}{240\sqrt{z}}$$

07.25.03.al6w.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{3}{2}, 3; z\right) = \frac{1}{45} e^z (4z^3 + 40z^2 + 95z + 45)$$

07.25.03.al6x.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{48} (4z^2 + 28z + 33) + \frac{e^z \sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.al6y.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{48} (4z^2 - 28z + 33) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.al6z.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{3}{2}, 4; z\right) = \frac{1}{15} e^z (4z^2 + 20z + 15)$$

07.25.03.al70.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(4z^4 + 8z^3 + 3z^2 - 10z + 30)}{96z^3} + \frac{7e^z \sqrt{\pi} (8z^5 + 20z^4 + 10z^3 - 15z^2 + 30z - 30) \operatorname{erf}(\sqrt{z})}{192z^{7/2}}$$

07.25.03.al71.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (8z^5 - 20z^4 + 10z^3 + 15z^2 + 30z + 30) \operatorname{erfi}(\sqrt{z})}{192z^{7/2}} - \frac{7(4z^4 - 8z^3 + 3z^2 + 10z + 30)}{96z^3}$$

07.25.03.al72.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{3}{2}, 5; z\right) = \frac{4e^z (4z^5 + 15z^3 - 45z^2 + 90z - 90)}{15z^4} + \frac{24}{z^4}$$

07.25.03.ai73.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{21(4z^4 - 12z^3 + 53z^2 - 180z + 630)}{64z^4} + \frac{21e^z\sqrt{\pi}(8z^5 - 20z^4 + 90z^3 - 285z^2 + 600z - 630)\operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.ai74.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21(4z^4 + 12z^3 + 53z^2 + 180z + 630)}{64z^4} - \frac{21e^{-z}\sqrt{\pi}(8z^5 + 20z^4 + 90z^3 + 285z^2 + 600z + 630)\operatorname{erfi}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.ai75.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{3}{2}, 6; z\right) = \frac{40(3z + 28)}{z^5} + \frac{4e^z(4z^5 - 20z^4 + 95z^3 - 330z^2 + 750z - 840)}{3z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = 2$

07.25.03.ai76.01

$${}_2F_2\left(\frac{7}{2}, 4; 2, 2; z\right) = \frac{1}{180}e^{z/2}(8z^4 + 108z^3 + 420z^2 + 537z + 180)I_0\left(\frac{z}{2}\right) + \frac{1}{180}e^{z/2}(8z^4 + 100z^3 + 324z^2 + 255z + 12)I_1\left(\frac{z}{2}\right)$$

07.25.03.ai77.01

$${}_2F_2\left(\frac{7}{2}, 4; 2, \frac{5}{2}; z\right) = \frac{1}{30}e^z(2z^3 + 21z^2 + 54z + 30)$$

07.25.03.ai78.01

$${}_2F_2\left(\frac{7}{2}, 4; 2, 3; z\right) = \frac{1}{45}e^{z/2}(4z^3 + 36z^2 + 81z + 45)I_0\left(\frac{z}{2}\right) + \frac{1}{45}e^{z/2}(4z^3 + 32z^2 + 51z + 6)I_1\left(\frac{z}{2}\right)$$

07.25.03.ai79.01

$${}_2F_2\left(\frac{7}{2}, 4; 2, \frac{7}{2}; z\right) = \frac{1}{6}e^z(z^2 + 6z + 6)$$

07.25.03.ai7a.01

$${}_2F_2\left(\frac{7}{2}, 4; 2, 4; z\right) = \frac{1}{15}e^{z/2}(4z^2 + 18z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}(4z^2 + 14z + 3)I_1\left(\frac{z}{2}\right)$$

07.25.03.ai7b.01

$${}_2F_2\left(\frac{7}{2}, 4; 2, \frac{9}{2}; z\right) = \frac{7e^z(16z^4 + 24z^3 + 12z^2 - 30z + 45)}{192z^3} - \frac{105\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.ai7c.01

$${}_2F_2\left(\frac{7}{2}, 4; 2, \frac{9}{2}; -z\right) = \frac{105\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{128z^{7/2}} - \frac{7e^{-z}(16z^4 - 24z^3 + 12z^2 + 30z + 45)}{192z^3}$$

07.25.03.ai7d.01

$${}_2F_2\left(\frac{7}{2}, 4; 2, 5; z\right) = \frac{16e^{z/2}(z^3 + 3z - 6)I_0\left(\frac{z}{2}\right)}{15z^2} + \frac{8e^{z/2}(2z^4 - 2z^3 + 9z^2 - 24z + 48)I_1\left(\frac{z}{2}\right)}{15z^3}$$

07.25.03.al7e.01

$${}_2F_2\left(\frac{7}{2}, 4; 2, \frac{11}{2}; z\right) = \frac{21 e^z (32 z^4 - 96 z^3 + 360 z^2 - 960 z + 1575)}{256 z^4} - \frac{945 \sqrt{\pi} (2 z + 35) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.al7f.01

$${}_2F_2\left(\frac{7}{2}, 4; 2, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (32 z^4 + 96 z^3 + 360 z^2 + 960 z + 1575)}{256 z^4} + \frac{945 \sqrt{\pi} (2 z - 35) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.al7g.01

$${}_2F_2\left(\frac{7}{2}, 4; 2, 6; z\right) = \frac{8 e^{z/2} (2 z^3 - 9 z^2 + 36 z - 96) I_0\left(\frac{z}{2}\right)}{3 z^3} + \frac{8 e^{z/2} (2 z^4 - 11 z^3 + 48 z^2 - 144 z + 384) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = \frac{5}{2}$

07.25.03.al7h.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{4 z^3 + 32 z^2 + 49 z + 3}{80 z} + \frac{e^z \sqrt{\pi} (8 z^4 + 68 z^3 + 126 z^2 + 33 z - 3) \operatorname{erf}(\sqrt{z})}{160 z^{3/2}}$$

07.25.03.al7i.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{4 z^3 - 32 z^2 + 49 z - 3}{80 z} + \frac{e^{-z} \sqrt{\pi} (-8 z^4 + 68 z^3 - 126 z^2 + 33 z + 3) \operatorname{erfi}(\sqrt{z})}{160 z^{3/2}}$$

07.25.03.al7j.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{5}{2}, 3; z\right) = \frac{1}{15} e^z (2 z^2 + 13 z + 15)$$

07.25.03.al7k.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{4 z^2 + 16 z + 3}{32 z} + \frac{e^z \sqrt{\pi} (8 z^3 + 36 z^2 + 18 z - 3) \operatorname{erf}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.al7l.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-4 z^2 + 16 z - 3}{32 z} + \frac{e^{-z} \sqrt{\pi} (8 z^3 - 36 z^2 + 18 z + 3) \operatorname{erfi}(\sqrt{z})}{64 z^{3/2}}$$

07.25.03.al7m.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{5}{2}, 4; z\right) = \frac{1}{5} e^z (2 z + 5)$$

07.25.03.al7n.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{7(4 z^3 + 5 z - 15)}{64 z^3} + \frac{7 e^z \sqrt{\pi} (8 z^4 + 4 z^3 + 6 z^2 - 15 z + 15) \operatorname{erf}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.al7o.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(4 z^3 + 5 z + 15)}{64 z^3} - \frac{7 e^{-z} \sqrt{\pi} (8 z^4 - 4 z^3 + 6 z^2 + 15 z + 15) \operatorname{erfi}(\sqrt{z})}{128 z^{7/2}}$$

07.25.03.al7p.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{5}{2}, 5; z\right) = \frac{4 e^z (2 z^4 - 3 z^3 + 9 z^2 - 18 z + 18)}{5 z^4} - \frac{72}{5 z^4}$$

07.25.03.al7q.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{63 (4 z^3 - 16 z^2 + 55 z - 210)}{128 z^4} + \frac{63 e^z \sqrt{\pi} (8 z^4 - 28 z^3 + 90 z^2 - 195 z + 210) \operatorname{erf}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.al7r.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} \sqrt{\pi} (8 z^4 + 28 z^3 + 90 z^2 + 195 z + 210) \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}} - \frac{63 (4 z^3 + 16 z^2 + 55 z + 210)}{128 z^4}$$

07.25.03.al7s.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{5}{2}, 6; z\right) = \frac{4 e^z (2 z^4 - 11 z^3 + 42 z^2 - 102 z + 120)}{z^5} - \frac{24 (3 z + 20)}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = 3$

07.25.03.al7t.01

$${}_2F_2\left(\frac{7}{2}, 4; 3, 3; z\right) = \frac{2}{45} e^{z/2} (4 z^2 + 22 z + 23) I_0\left(\frac{z}{2}\right) + \frac{2 e^{z/2} (4 z^3 + 18 z^2 + 7 z - 2) I_1\left(\frac{z}{2}\right)}{45 z}$$

07.25.03.al7u.01

$${}_2F_2\left(\frac{7}{2}, 4; 3, \frac{7}{2}; z\right) = \frac{1}{3} e^z (z + 3)$$

07.25.03.al7v.01

$${}_2F_2\left(\frac{7}{2}, 4; 3, 4; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2 z^2 + 2 z - 1) I_1\left(\frac{z}{2}\right)}{15 z}$$

07.25.03.al7w.01

$${}_2F_2\left(\frac{7}{2}, 4; 3, \frac{9}{2}; z\right) = \frac{7 e^z (8 z^3 - 4 z^2 + 10 z - 15)}{48 z^3} + \frac{35 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.al7x.01

$${}_2F_2\left(\frac{7}{2}, 4; 3, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (8 z^3 + 4 z^2 + 10 z + 15)}{48 z^3} - \frac{35 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{7/2}}$$

07.25.03.al7y.01

$${}_2F_2\left(\frac{7}{2}, 4; 3, 5; z\right) = \frac{16 e^{z/2} (2 z^2 - 3 z + 6) I_0\left(\frac{z}{2}\right)}{15 z^2} + \frac{16 e^{z/2} (2 z^3 - 5 z^2 + 12 z - 24) I_1\left(\frac{z}{2}\right)}{15 z^3}$$

07.25.03.al7z.01

$${}_2F_2\left(\frac{7}{2}, 4; 3, \frac{11}{2}; z\right) = \frac{21 e^z (16 z^3 - 64 z^2 + 180 z - 315)}{64 z^4} + \frac{315 \sqrt{\pi} (2 z + 21) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.al80.01

$${}_2F_2\left(\frac{7}{2}, 4; 3, \frac{11}{2}; -z\right) = -\frac{21 e^{-z} (16 z^3 + 64 z^2 + 180 z + 315)}{64 z^4} - \frac{315 \sqrt{\pi} (2 z - 21) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.al81.01

$${}_2F_2\left(\frac{7}{2}, 4; 3, 6; z\right) = \frac{32 e^{z/2} (z^2 - 5z + 16) I_0\left(\frac{z}{2}\right)}{3 z^3} + \frac{32 e^{z/2} (z^3 - 6z^2 + 20z - 64) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = \frac{7}{2}$

07.25.03.al82.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5(4z^2 + 4z - 3)}{64 z^2} + \frac{5 e^z \sqrt{\pi} (8z^3 + 12z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.al83.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5(4z^2 - 4z - 3)}{64 z^2} - \frac{5 e^{-z} \sqrt{\pi} (8z^3 - 12z^2 - 6z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.al84.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{7}{2}, 4; z\right) = e^z$$

07.25.03.al85.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{35(4z^2 - 8z + 15)}{128 z^3} + \frac{35 e^z \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.al86.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} \sqrt{\pi} (8z^3 + 12z^2 + 18z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{35(4z^2 + 8z + 15)}{128 z^3}$$

07.25.03.al87.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{7}{2}, 5; z\right) = \frac{4 e^z (z^3 - 3z^2 + 6z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.al88.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{315(4z^2 - 20z + 105)}{256 z^4} + \frac{315 e^z \sqrt{\pi} (8z^3 - 36z^2 + 90z - 105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.al89.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{315(4z^2 + 20z + 105)}{256 z^4} - \frac{315 e^{-z} \sqrt{\pi} (8z^3 + 36z^2 + 90z + 105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.al8a.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{7}{2}, 6; z\right) = \frac{120(z + 4)}{z^5} + \frac{20 e^z (z^3 - 6z^2 + 18z - 24)}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = 4$

07.25.03.al8b.01

$${}_2F_2\left(\frac{7}{2}, 4; 4, 4; z\right) = \frac{4 e^{z/2} (2z - 1) I_0\left(\frac{z}{2}\right)}{5 z} + \frac{4 e^{z/2} (2z^2 - 3z + 4) I_1\left(\frac{z}{2}\right)}{5 z^2}$$

07.25.03.al8c.01

$${}_2F_2\left(\frac{7}{2}, 4; 4, \frac{9}{2}; z\right) = \frac{7 e^z (4 z^2 - 10 z + 15)}{8 z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.al8d.01

$${}_2F_2\left(\frac{7}{2}, 4; 4, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7 e^{-z} (4 z^2 + 10 z + 15)}{8 z^3}$$

07.25.03.al8e.01

$${}_2F_2\left(\frac{7}{2}, 4; 4, 5; z\right) = \frac{32 e^{z/2} (z - 3) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{32 e^{z/2} (z^2 - 4 z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.al8f.01

$${}_2F_2\left(\frac{7}{2}, 4; 4, \frac{11}{2}; z\right) = \frac{63 e^z (8 z^2 - 40 z + 105)}{32 z^4} - \frac{945 \sqrt{\pi} (2 z + 7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.al8g.01

$${}_2F_2\left(\frac{7}{2}, 4; 4, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8 z^2 + 40 z + 105)}{32 z^4} + \frac{945 \sqrt{\pi} (2 z - 7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.al8h.01

$${}_2F_2\left(\frac{7}{2}, 4; 4, 6; z\right) = \frac{32 e^{z/2} (z - 8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4 z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = \frac{9}{2}$

07.25.03.al8i.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{9}{2}, 5; z\right) = \frac{7 e^z (2 z^2 - 9 z + 24)}{z^4} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 z^{7/2}} - \frac{168}{z^4}$$

07.25.03.al8j.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{9}{2}, 5; -z\right) = \frac{7 e^{-z} (2 z^2 + 9 z + 24)}{z^4} + \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 z^{7/2}} - \frac{168}{z^4}$$

07.25.03.al8k.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{9}{2}, 6; z\right) = -\frac{280 (3 z + 4)}{z^5} + \frac{70 e^z (z^2 - 4 z + 16)}{z^5} - \frac{175 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{7/2}}$$

07.25.03.al8l.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{9}{2}, 6; -z\right) = -\frac{280 (3 z - 4)}{z^5} - \frac{70 e^{-z} (z^2 + 4 z + 16)}{z^5} + \frac{175 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{7/2}}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = 5$

07.25.03.al8m.01

$${}_2F_2\left(\frac{7}{2}, 4; 5, 5; z\right) = \frac{128 e^{z/2} (z^2 - 12 z + 24) I_0\left(\frac{z}{2}\right)}{5 z^4} + \frac{128 e^{z/2} (z + 2) I_1\left(\frac{z}{2}\right)}{5 z^3} - \frac{3072}{5 z^4}$$

07.25.03.al8n.01

$${}_2F_2\left(\frac{7}{2}, 4; 5, \frac{11}{2}; z\right) = \frac{63 e^z (4z - 9)}{4z^4} - \frac{945 \sqrt{\pi} (2z - 7) \operatorname{erfi}(\sqrt{z})}{8z^{9/2}} - \frac{1512}{z^4}$$

07.25.03.al8o.01

$${}_2F_2\left(\frac{7}{2}, 4; 5, \frac{11}{2}; -z\right) = -\frac{63 e^{-z} (4z + 9)}{4z^4} + \frac{945 \sqrt{\pi} (2z + 7) \operatorname{erf}(\sqrt{z})}{8z^{9/2}} - \frac{1512}{z^4}$$

07.25.03.al8p.01

$${}_2F_2\left(\frac{7}{2}, 4; 5, 6; z\right) = -\frac{512 e^{z/2} (z - 6) I_0\left(\frac{z}{2}\right)}{z^4} + \frac{256 e^{z/2} (3z - 16) I_1\left(\frac{z}{2}\right)}{z^4} - \frac{3072}{z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = \frac{11}{2}$

07.25.03.al8q.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{11}{2}, 6; z\right) = -\frac{2520 (3z - 4)}{z^5} + \frac{315 e^z (7z - 64)}{2z^5} - \frac{1575 \sqrt{\pi} (2z - 21) \operatorname{erfi}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.al8r.01

$${}_2F_2\left(\frac{7}{2}, 4; \frac{11}{2}, 6; -z\right) = -\frac{2520 (3z + 4)}{z^5} + \frac{315 e^{-z} (7z + 64)}{2z^5} + \frac{1575 \sqrt{\pi} (2z + 21) \operatorname{erf}(\sqrt{z})}{4z^{9/2}}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 4$, $b_1 = 6$

07.25.03.al8s.01

$${}_2F_2\left(\frac{7}{2}, 4; 6, 6; z\right) = -\frac{5120 (3z - 8)}{z^5} - \frac{1280 e^{z/2} (5z^2 - 84z + 96) I_0\left(\frac{z}{2}\right)}{3z^5} + \frac{1280 e^{z/2} (5z - 76) I_1\left(\frac{z}{2}\right)}{3z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.al8t.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{170188239375} \left(e^z (524288z^{19} + 77332480z^{18} + 4818862080z^{17} + 166575144960z^{16} + 3528073543680z^{15} + 47754094510080z^{14} + 418385350656000z^{13} + 2353984174080000z^{12} + 8274531718656000z^{11} + 17255369440512000z^{10} + 19526415876172800z^9 + 1021137537728000z^8 + 1755065890368000z^7 + 30797788896000z^6 + 498950928000z^5 + 69441624000z^4 + 14467005000z^3 + 50634517500z^2 - 81577833750z + 170188239375) \right)$$

07.25.03.al8u.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$-\frac{1}{15471658125} \left(e^z (262144z^{18} + 35389440z^{17} + 2002452480z^{16} + 62261821440z^{15} + 1172549468160z^{14} + 13910376775680z^{13} + 104864849510400z^{12} + 495370565222400z^{11} + 1412727750604800z^{10} + 2270409842534400z^9 + 1816773489216000z^8 + 563753965824000z^7 + 31901996448000z^6 - 552103776000z^5 - 26576424000z^4 - 5143824000z^3 - 5626057500z^2 + 5626057500z - 15471658125) \right)$$

07.25.03.al8v.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{1719073125} \left(e^z (131072z^{17} + 16056320z^{16} + 816578560z^{15} + 22556835840z^{14} + 371984793600z^{13} + 3793317642240z^{12} + 23982542438400z^{11} + 91798756761600z^{10} + 201470713113600z^9 + 228586712256000z^8 + 108333251712000z^7 + 11043853632000z^6 - 614782224000z^5 + 31339224000z^4 + 2381400000z^3 + 1000188000z^2 - 312558750z + 1719073125) \right)$$

07.25.03.al8w.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$-\frac{1}{245581875} \left(e^z (65536z^{16} + 7208960z^{15} + 325386240z^{14} + 7861862400z^{13} + 111304704000z^{12} + 950568837120z^{11} + 4862004940800z^{10} + 14296346265600z^9 + 22105452096000z^8 + 14818821696000z^7 + 2300749920000z^6 - 229947984000z^5 + 37530864000z^4 - 3095820000z^3 - 357210000z^2 - 35721000z - 245581875) \right)$$

07.25.03.al8x.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{49116375} \left(e^z (32768z^{15} + 3194880z^{14} + 125952000z^{13} + 2608435200z^{12} + 30872217600z^{11} + 212870568960z^{10} + 834473203200z^9 + 1724097312000z^8 + 1570190832000z^7 + 343552104000z^6 - 52057404000z^5 + 15169518000z^4 - 3988845000z^3 + 446512500z^2 + 44651250z + 49116375) \right)$$

07.25.03.al8y.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) =$$

$$-\frac{1}{16372125} \left(e^z (16384z^{14} + 1392640z^{13} + 46960640z^{12} + 811130880z^{11} + 7730365440z^{10} + 40727178240z^9 + 111782764800z^8 + 135460684800z^7 + 40061649600z^6 - 8501371200z^5 + 3726097200z^4 - 1730484000z^3 + 601303500z^2 - 77395500z - 16372125) \right)$$

07.25.03.al8z.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{16372125}$$

$$\left(e^z (8192z^{13} + 593920z^{12} + 16650240z^{11} + 230737920z^{10} + 1673172480z^9 + 6141623040z^8 + 9829209600z^7 + 3840480000z^6 - 1091815200z^5 + 662482800z^4 - 455641200z^3 + 273861000z^2 - 110139750z + 16372125) \right)$$

07.25.03.ai90.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{16372125} \left(e^{z/2} (4096 z^{13} + 274432 z^{12} + 7040000 z^{11} + 88181760 z^{10} + 568992000 z^9 + 1820125440 z^8 + 2460084480 z^7 + 741484800 z^6 - 185623200 z^5 + 116424000 z^4 - 97505100 z^3 + 83481300 z^2 - 55069875 z + 16372125) I_0\left(\frac{z}{2}\right) + \frac{1}{16372125} \left(e^{z/2} (4096 z^{13} + 270336 z^{12} + 6771712 z^{11} + 81541120 z^{10} + 490579200 z^9 + 1364336640 z^8 + 1277418240 z^7 - 161118720 z^6 + 77666400 z^5 - 58716000 z^4 + 51993900 z^3 - 42600600 z^2 + 21796425 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ai91.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{16372125} \left(e^z (4096 z^{12} + 245760 z^{11} + 5498880 z^{10} + 57630720 z^9 + 289094400 z^8 + 613509120 z^7 + 313286400 z^6 - 116121600 z^5 + 92761200 z^4 - 86184000 z^3 + 73823400 z^2 - 47628000 z + 16372125) \right)$$

07.25.03.ai92.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{16372125} \left(e^{z/2} (4096 z^{12} + 223232 z^{11} + 4469760 z^{10} + 41088000 z^9 + 175622400 z^8 + 302400000 z^7 + 107170560 z^6 - 31852800 z^5 + 24343200 z^4 - 25893000 z^3 + 30069900 z^2 - 30107700 z + 16372125) I_0\left(\frac{z}{2}\right) + \frac{1}{16372125} \left(e^{z/2} (4096 z^{12} + 219136 z^{11} + 4252672 z^{10} + 36940800 z^9 + 140601600 z^8 + 176647680 z^7 - 25401600 z^6 + 14434560 z^5 - 13356000 z^4 + 15309000 z^3 - 17936100 z^2 + 16650900 z - 6081075) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ai93.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{5457375} \left(e^z (2048 z^{11} + 97280 z^{10} + 1630720 z^9 + 11692800 z^8 + 33465600 z^7 + 22296960 z^6 - 10584000 z^5 + 10735200 z^4 - 12663000 z^3 + 13891500 z^2 - 11708550 z + 5457375) \right)$$

07.25.03.ai94.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{16372125} \left(16 e^{z/2} (512 z^{11} + 21504 z^{10} + 311040 z^9 + 1854720 z^8 + 4129920 z^7 + 1693440 z^6 - 584640 z^5 + 529200 z^4 - 689850 z^3 + 1039500 z^2 - 1488375 z + 1403325) I_0\left(\frac{z}{2}\right) + \frac{1}{16372125 z} \left(4 e^{z/2} (2048 z^{12} + 83968 z^{11} + 1161216 z^{10} + 6297600 z^9 + 10725120 z^8 - 1728000 z^7 + 1128960 z^6 - 1229760 z^5 + 1701000 z^4 - 2457000 z^3 + 2759400 z^2 - 6081075) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ai95.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{1091475} \left(e^z (1024 z^{10} + 35840 z^9 + 403200 z^8 + 1612800 z^7 + 1411200 z^6 - 846720 z^5 + 1058400 z^4 - 1512000 z^3 + 1984500 z^2 - 1984500 z + 1091475) \right)$$

07.25.03.ai96.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{5457375 z} \left(4 e^{z/2} (2048 z^{11} + 60416 z^{10} + 547840 z^9 + 1624320 z^8 + 760320 z^7 - 295680 z^6 + 282240 z^5 - 277200 z^4 - 239400 z^3 + 3345300 z^2 - 14345100 z + 34459425) I_0\left(\frac{z}{2}\right) + \frac{1}{5457375 z^2} \left(4 e^{z/2} (2048 z^{12} + 58368 z^{11} + 490496 z^{10} + 1160960 z^9 - 207360 z^8 + 157440 z^7 - 228480 z^6 + 559440 z^5 - 1953000 z^4 + 7364700 z^3 - 24324300 z^2 + 62837775 z - 137837700) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ai97.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{155925} e^z (512 z^9 + 11520 z^8 + 69120 z^7 + 80640 z^6 - 60480 z^5 + 90720 z^4 - 151200 z^3 + 226800 z^2 - 255150 z + 155925)$$

07.25.03.ai98.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{5457375 z^2} \left(32 e^{z/2} (1024 z^{11} + 17408 z^{10} + 72960 z^9 + 34560 z^8 + 19200 z^7 - 282240 z^6 + 2182320 z^5 - 13935600 z^4 + 73993500 z^3 - 314968500 z^2 + 999323325 z - 1964187225) I_0\left(\frac{z}{2}\right) + \frac{1}{5457375 z^3} \left(32 e^{z/2} (1024 z^{12} + 16384 z^{11} + 57088 z^{10} - 15360 z^9 + 49920 z^8 - 359040 z^7 + 2615760 z^6 - 16894080 z^5 + 92994300 z^4 - 421621200 z^3 + 1506079575 z^2 - 3997293300 z + 7856748900) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ai99.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{17325 z^4} \left(e^z (256 z^{12} + 2560 z^{11} + 5120 z^{10} - 13440 z^9 + 97440 z^8 - 782880 z^7 + 5796000 z^6 - 37560600 z^5 + 206455725 z^4 - 928972800 z^3 + 3251404800 z^2 - 8128512000 z + 12192768000) \right) - \frac{3870720 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.al9a.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{17325 z^4} \left(e^{-z} (256 z^{12} - 2560 z^{11} + 5120 z^{10} + 13440 z^9 + 97440 z^8 + 782880 z^7 + 5796000 z^6 + 37560600 z^5 + 206455725 z^4 + 928972800 z^3 + 3251404800 z^2 + 8128512000 z + 12192768000) \right) - \frac{3870720 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{11 z^{9/2}}$$

07.25.03.al9b.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{1091475 z^3} \left(32 e^{z/2} (1024 z^{11} + 4608 z^{10} + 19200 z^9 - 168960 z^8 + 1612800 z^7 - 13839840 z^6 + 104443920 z^5 - 679039200 z^4 + 3699164700 z^3 - 16195929750 z^2 + 53033055075 z - 109994484600) I_0\left(\frac{z}{2}\right) + \frac{1}{1091475 z^4} \left(32 e^{z/2} (1024 z^{12} + 3584 z^{11} + 16128 z^{10} - 184320 z^9 + 1804800 z^8 - 15755040 z^7 + 121358160 z^6 - 811046880 z^5 + 4597292700 z^4 - 21425654250 z^3 + 78533029575 z^2 - 212132220300 z + 439977938400) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.al9c.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{1406514375} \left(e^z (131072 z^{17} + 16187392 z^{16} + 831258624 z^{15} + 23233953792 z^{14} + 388786126848 z^{13} + 4039292436480 z^{12} + 26177023918080 z^{11} + 103711651061760 z^{10} + 239661445524480 z^9 + 296389861931520 z^8 + 167412089779200 z^7 + 30758848243200 z^6 + 571574102400 z^5 + 9735163200 z^4 + 1314532800 z^3 + 714420000 z^2 - 312558750 z + 1406514375) \right)$$

07.25.03.al9d.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{156279375} \left(e^z (65536 z^{16} + 7340032 z^{15} + 338558976 z^{14} + 840066624 z^{13} + 122987397120 z^{12} + 1097240739840 z^{11} + 5956447150080 z^{10} + 19095366205440 z^9 + 33901574837760 z^8 + 29539419033600 z^7 + 9857497305600 z^6 + 593178163200 z^5 - 10802030400 z^4 - 533433600 z^3 - 142884000 z^2 - 156279375) \right)$$

07.25.03.al9e.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{22325625} \left(e^z (32768 z^{15} + 3293184 z^{14} + 134701056 z^{13} + 2920673280 z^{12} + 36667975680 z^{11} + 273610552320 z^{10} + 1199754984960 z^9 + 2949030685440 z^8 + 3680149334400 z^7 + 1889186846400 z^6 + 205781536800 z^5 - 12083223600 z^4 + 640596600 z^3 + 53581500 z^2 + 8930250 z + 22325625) \right)$$

07.25.03.ai9f.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{4465125} \left(e^z (16384 z^{14} + 1458176 z^{13} + 52039680 z^{12} + 965959680 z^{11} + 10123330560 z^{10} + 60880296960 z^9 + 204155562240 z^8 + 351659750400 z^7 + 257605790400 z^6 + 42973156800 z^5 - 4542123600 z^4 + 771573600 z^3 - 65488500 z^2 - 5953500 z - 4465125) \right)$$

07.25.03.ai9g.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{1488375} \left(e^z (8192 z^{13} + 634880 z^{12} + 19353600 z^{11} + 299120640 z^{10} + 2519139840 z^9 + 11546599680 z^8 + 27024883200 z^7 + 27193017600 z^6 + 6434316000 z^5 - 1033527600 z^4 + 312757200 z^3 - 83349000 z^2 + 8930250 z + 1488375) \right)$$

07.25.03.ai9h.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{1488375} \left(e^z (4096 z^{12} + 270336 z^{11} + 6838272 z^{10} + 84596736 z^9 + 540497664 z^8 + 1719567360 z^7 + 2335253760 z^6 + 752613120 z^5 - 169601040 z^4 + 76839840 z^3 - 35721000 z^2 + 11907000 z - 1488375) \right)$$

07.25.03.ai9i.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{1488375} \left(e^{z/2} (-2048 z^{12} - 124928 z^{11} - 2893824 z^{10} - 32424960 z^9 - 185230080 z^8 - 519160320 z^7 - 610767360 z^6 - 163860480 z^5 + 35494200 z^4 - 18257400 z^3 + 11377800 z^2 - 5953500 z + 1488375) I_0\left(\frac{z}{2}\right) - \frac{1}{1488375} \left(4 e^{z/2} (512 z^{12} + 30720 z^{11} + 692992 z^{10} + 7428096 z^9 + 39196800 z^8 + 93703680 z^7 + 72959040 z^6 - 8285760 z^5 + 3432870 z^4 - 2079000 z^3 + 1289925 z^2 - 529200 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ai9j.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{1488375} \left(e^z (2048 z^{11} + 111616 z^{10} + 2247168 z^9 + 20950272 z^8 + 92171520 z^7 + 168497280 z^6 + 72394560 z^5 - 21863520 z^4 + 13585320 z^3 - 9128700 z^2 + 4961250 z - 1488375) \right)$$

07.25.03.ai9k.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{1488375} \left(e^{z/2} (-2048 z^{11} - 101376 z^{10} - 1827840 z^9 - 14987520 z^8 - 56609280 z^7 - 85720320 z^6 - 27659520 z^5 + 7333200 z^4 - 4800600 z^3 + 4063500 z^2 - 3231900 z + 1488375) I_0\left(\frac{z}{2}\right) + \frac{1}{1488375} \left(e^{z/2} (-2048 z^{11} - 99328 z^{10} - 1729536 z^9 - 13305600 z^8 - 44075520 z^7 - 46851840 z^6 + 6209280 z^5 - 3139920 z^4 + 2457000 z^3 - 2173500 z^2 + 1606500 z - 467775) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ai9l.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{496125} \left(e^z (1024 z^{10} + 44032 z^9 + 661248 z^8 + 4193280 z^7 + 10442880 z^6 + 5927040 z^5 - 2328480 z^4 + 1874880 z^3 - 1644300 z^2 + 1190700 z - 496125) \right)$$

07.25.03.ai9m.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, 3; z\right) = -\frac{1}{1488375} \left(4 e^{z/2} (1024 z^{10} + 38912 z^9 + 504576 z^8 + 2672640 z^7 + 5263104 z^6 + 1999872 z^5 - 630000 z^4 + 504000 z^3 - 548100 z^2 + 612360 z - 473445) I_0\left(\frac{z}{2}\right) - \frac{1}{1488375 z} \left(4 e^{z/2} (1024 z^{11} + 37888 z^{10} + 467200 z^9 + 2223360 z^8 + 3238656 z^7 - 489216 z^6 + 291312 z^5 - 277200 z^4 + 308700 z^3 - 291060 z^2 + 31185 z + 405405) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ai9n.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{1}{99225} \left(e^z (512 z^9 + 16128 z^8 + 161280 z^7 + 564480 z^6 + 423360 z^5 - 211680 z^4 + 211680 z^3 - 226800 z^2 + 198450 z - 99225) \right)$$

07.25.03.ai9o.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, 4; z\right) = -\frac{1}{496125 z} \left(4 e^{z/2} (1024 z^{10} + 27136 z^9 + 218880 z^8 + 574464 z^7 + 252672 z^6 - 90720 z^5 + 75600 z^4 - 50400 z^3 - 124740 z^2 + 788130 z - 2027025) I_0\left(\frac{z}{2}\right) - \frac{1}{496125 z^2} \left(4 e^{z/2} (1024 z^{11} + 26112 z^{10} + 193280 z^9 + 393216 z^8 - 66816 z^7 + 47712 z^6 - 65520 z^5 + 151200 z^4 - 467460 z^3 + 1434510 z^2 - 3648645 z + 8108100) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.al9p.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{1}{14175} e^z (256 z^8 + 5120 z^7 + 26880 z^6 + 26880 z^5 - 16800 z^4 + 20160 z^3 - 25200 z^2 + 25200 z - 14175)$$

07.25.03.al9q.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, 5; z\right) = -\frac{1}{496125 z^2} \left(32 e^{z/2} (512 z^{10} + 7680 z^9 + 28416 z^8 + 12288 z^7 + 10080 z^6 - 110880 z^5 + 730800 z^4 - 3900960 z^3 + 16618770 z^2 - 52702650 z + 103378275) I_0\left(\frac{z}{2}\right) - \frac{1}{496125 z^3} (64 e^{z/2} (256 z^{11} + 3584 z^{10} + 10752 z^9 - 3072 z^8 + 10704 z^7 - 70560 z^6 + 448560 z^5 - 2459520 z^4 + 11133045 z^3 - 39729690 z^2 + 105405300 z - 206756550) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.al9r.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{1575 z^4} (e^z (-128 z^{11} - 1088 z^{10} - 2016 z^9 + 5712 z^8 - 40152 z^7 + 291060 z^6 - 1879290 z^5 + 10323495 z^4 - 46448640 z^3 + 162570240 z^2 - 406425600 z + 609638400)) - \frac{193536 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.al9s.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{1575 z^4} (e^{-z} (128 z^{11} - 1088 z^{10} + 2016 z^9 + 5712 z^8 + 40152 z^7 + 291060 z^6 + 1879290 z^5 + 10323495 z^4 + 46448640 z^3 + 162570240 z^2 + 406425600 z + 609638400)) - \frac{193536 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.al9t.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{9}{2}, 6; z\right) = -\frac{1}{99225 z^3} \left(32 e^{z/2} (512 z^{10} + 1792 z^9 + 9216 z^8 - 75840 z^7 + 648480 z^6 - 4903920 z^5 + 31963680 z^4 - 174567960 z^3 + 766215450 z^2 - 2515538025 z + 5237832600) I_0\left(\frac{z}{2}\right) - \frac{1}{99225 z^4} (32 e^{z/2} (512 z^{11} + 1280 z^{10} + 8192 z^9 - 83904 z^8 + 736800 z^7 - 5693520 z^6 + 38152800 z^5 - 216798120 z^4 + 1012701690 z^3 - 3719590875 z^2 + 10062152100 z - 20951330400) I_1\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.al9u.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{17364375} \left(e^z (32768 z^{15} + 3325952 z^{14} + 137682944 z^{13} + 3030028288 z^{12} + 38768486400 z^{11} + 296625208320 z^{10} + 1346784929280 z^9 + 3487150920960 z^8 + 4745759195520 z^7 + 2905311528000 z^6 + 570781360800 z^5 + 11198401200 z^4 + 198185400 z^3 + 30561300 z^2 + 4961250 z + 17364375) \right)$$

07.25.03.al9v.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{2480625} \left(e^z (16384 z^{14} + 1490944 z^{13} + 54677504 z^{12} + 1050255360 z^{11} + 11507328000 z^{10} + 73514972160 z^9 + 269060117760 z^8 + 532804930560 z^7 + 508062340800 z^6 + 182499912000 z^5 + 11640812400 z^4 - 221205600 z^3 - 11510100 z^2 - 1984500 z - 2480625) \right)$$

07.25.03.al9w.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{496125} \left(e^z (8192 z^{13} + 659456 z^{12} + 21073920 z^{11} + 345999360 z^{10} + 3158668800 z^9 + 16226138880 z^8 + 45286295040 z^7 + 62614137600 z^6 + 34881688800 z^5 + 4045734000 z^4 - 248194800 z^3 + 13494600 z^2 + 992250 z + 496125) \right)$$

07.25.03.al9x.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = -\frac{1}{165375} \left(e^z (4096 z^{12} + 286720 z^{11} + 7813120 z^{10} + 106588160 z^9 + 779923200 z^8 + 3043568640 z^7 + 5903520000 z^6 + 4741228800 z^5 + 846543600 z^4 - 93492000 z^3 + 16140600 z^2 - 1323000 z - 165375) \right)$$

07.25.03.al9y.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{165375} \left(e^z (2048 z^{11} + 121856 z^{10} + 2748928 z^9 + 29928192 z^8 + 165500160 z^7 + 446033280 z^6 + 498576960 z^5 + 127018080 z^4 - 21291480 z^3 + 6482700 z^2 - 1653750 z + 165375) \right)$$

07.25.03.al9z.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{165375} \left(e^{z/2} (1024 z^{11} + 56320 z^{10} + 1164544 z^9 + 11513600 z^8 + 57281280 z^7 + 137921280 z^6 + 137886000 z^5 + 31787280 z^4 - 5638500 z^3 + 2160900 z^2 - 826875 z + 165375) I_0\left(\frac{z}{2}\right) + \frac{1}{165375} \left(e^{z/2} (1024 z^{11} + 55296 z^{10} + 1109760 z^9 + 10430464 z^8 + 47353600 z^7 + 94832640 z^6 + 59117520 z^5 - 5812800 z^4 + 1931580 z^3 - 819000 z^2 + 253575 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ala0.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{165375} (e^z (1024 z^{10} + 50176 z^9 + 897792 z^8 + 7332864 z^7 + 27753600 z^6 + 42618240 z^5 + 14888160 z^4 - 3487680 z^3 + 1561140 z^2 - 661500 z + 165375))$$

07.25.03.ala1.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{165375} \left(e^{z/2} (1024 z^{10} + 45568 z^9 + 730880 z^8 + 5268480 z^7 + 17283840 z^6 + 22555680 z^5 + 6446160 z^4 - 1461600 z^3 + 762300 z^2 - 444150 z + 165375) I_0\left(\frac{z}{2}\right) + \frac{1}{165375} \left(e^{z/2} (1024 z^{10} + 44544 z^9 + 686848 z^8 + 4602880 z^7 + 12983040 z^6 + 11313120 z^5 - 1342320 z^4 + 574560 z^3 - 346500 z^2 + 192150 z - 42525) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ala2.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{55125} (e^z (512 z^9 + 19712 z^8 + 261632 z^7 + 1442560 z^6 + 3057600 z^5 + 1434720 z^4 - 446880 z^3 + 267120 z^2 - 154350 z + 55125))$$

07.25.03.ala3.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{165375} \left(8 e^{z/2} (256 z^9 + 8704 z^8 + 99840 z^7 + 462336 z^6 + 790608 z^5 + 272160 z^4 - 75600 z^3 + 50400 z^2 - 40635 z + 24570) I_0\left(\frac{z}{2}\right) + \frac{1}{165375 z} \left(4 e^{z/2} (512 z^{10} + 16896 z^9 + 183040 z^8 + 749568 z^7 + 907872 z^6 - 125664 z^5 + 65520 z^4 - 50400 z^3 + 37170 z^2 - 5670 z - 31185) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ala4.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{11025} e^z (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025)$$

07.25.03.ala5.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{55125 z} \left(4 e^{z/2} (512 z^9 + 12032 z^8 + 84992 z^7 + 193984 z^6 + 78624 z^5 - 25200 z^4 + 16800 z^3 - 2520 z^2 - 45990 z + 135135) I_0\left(\frac{z}{2}\right) + \frac{1}{55125 z^2} \left(4 e^{z/2} (512 z^{10} + 11520 z^9 + 73728 z^8 + 125504 z^7 - 19936 z^6 + 13104 z^5 - 16800 z^4 + 36120 z^3 - 96390 z^2 + 239085 z - 540540) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ala6.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575)}{1575}$$

07.25.03.ala7.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{55\,125 z^2} \left(32 e^{z/2} (256 z^9 + 3328 z^8 + 10\,688 z^7 + 4032 z^6 + 5040 z^5 - 42\,000 z^4 + 229\,320 z^3 - 980\,280 z^2 + 3\,108\,105 z - 6\,081\,075) \right. \\ \left. I_0\left(\frac{z}{2}\right) + \frac{1}{55\,125 z^3} \left(32 e^{z/2} (256 z^{10} + 3072 z^9 + 7744 z^8 - 2432 z^7 + 9072 z^6 - 53\,760 z^5 + 291\,480 z^4 - 1\,315\,440 z^3 + 4\,688\,145 z^2 - 12\,432\,420 z + 24\,324\,300) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ala8.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{175 z^4} \left(e^z (64 z^{10} + 448 z^9 + 784 z^8 - 2464 z^7 + 16\,380 z^6 - 104\,580 z^5 + 573\,615 z^4 - 2\,580\,480 z^3 + 9\,031\,680 z^2 - 22\,579\,200 z + 33\,868\,800) - \frac{96\,768 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}} \right)$$

07.25.03.ala9.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{175 z^4} \left(e^{-z} (64 z^{10} - 448 z^9 + 784 z^8 + 2464 z^7 + 16\,380 z^6 + 104\,580 z^5 + 573\,615 z^4 + 2\,580\,480 z^3 + 9\,031\,680 z^2 + 22\,579\,200 z + 33\,868\,800) - \frac{96\,768 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}} \right)$$

07.25.03.ala.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{11\,025 z^3} \left(32 e^{z/2} (256 z^9 + 640 z^8 + 4416 z^7 - 33\,600 z^6 + 253\,680 z^5 - 1\,658\,160 z^4 + 9\,084\,600 z^3 - 39\,999\,960 z^2 + 131\,756\,625 z - 275\,675\,400) I_0\left(\frac{z}{2}\right) + \frac{1}{11\,025 z^4} \left(32 e^{z/2} (256 z^{10} + 384 z^9 + 4160 z^8 - 37\,824 z^7 + 294\,000 z^6 - 1\,977\,360 z^5 + 11\,271\,960 z^4 - 52\,806\,600 z^3 + 194\,459\,265 z^2 - 527\,026\,500 z + 1\,102\,701\,600) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.alab.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{354375} (e^z (8192 z^{13} + 667648 z^{12} + 21663744 z^{11} + 362649600 z^{10} + 3396441600 z^9 + 18077057280 z^8 + 53183301120 z^7 + 80260911360 z^6 + 53378892000 z^5 + 11181618000 z^4 + 229597200 z^3 + 4195800 z^2 + 538650 z + 354375))$$

07.25.03.alac.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{70875} (e^z (4096 z^{12} + 294912 z^{11} + 8325120 z^{10} + 118886400 z^9 + 925459200 z^8 + 3948503040 z^7 + 8823386880 z^6 + 9248601600 z^5 + 3567942000 z^4 + 238896000 z^3 - 4649400 z^2 - 226800 z - 70875))$$

07.25.03.alad.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{23625} (e^z (2048 z^{11} + 128000 z^{10} + 3074560 z^9 + 36384000 z^8 + 226233600 z^7 + 729966720 z^6 + 1126843200 z^5 + 680349600 z^4 + 83097000 z^3 - 5197500 z^2 + 274050 z + 23625))$$

07.25.03.alae.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{23625} (e^z (1024 z^{10} + 54272 z^9 + 1075968 z^8 + 10122240 z^7 + 47322240 z^6 + 104711040 z^5 + 92221920 z^4 + 17398080 z^3 - 1946700 z^2 + 321300 z - 23625))$$

07.25.03.alaf.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{23625} (e^{z/2} (-512 z^{10} - 25088 z^9 - 456448 z^8 - 3912960 z^7 - 16595040 z^6 - 33428640 z^5 - 27448560 z^4 - 5146560 z^3 + 679950 z^2 - 160650 z + 23625) I_0\left(\frac{z}{2}\right)) - \frac{1}{23625} (2 e^{z/2} (256 z^{10} + 12288 z^9 + 216064 z^8 + 1746304 z^7 + 6647760 z^6 + 10758720 z^5 + 5075760 z^4 - 403920 z^3 + 94005 z^2 - 19800 z) I_1\left(\frac{z}{2}\right))$$

07.25.03.alag.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{23625} (e^z (512 z^9 + 22272 z^8 + 348672 z^7 + 2446080 z^6 + 7761600 z^5 + 9666720 z^4 + 2610720 z^3 - 438480 z^2 + 122850 z - 23625))$$

07.25.03.alah.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{23625} \left(e^{z/2} (-512 z^9 - 20224 z^8 - 284160 z^7 - 1767360 z^6 - 4922400 z^5 - 5383440 z^4 - 1306080 z^3 + 235800 z^2 - 85050 z + 23625) I_0\left(\frac{z}{2}\right) + \frac{1}{23625} \left(e^{z/2} (-512 z^9 - 19712 z^8 - 264704 z^7 - 1512000 z^6 - 3524640 z^5 - 2405040 z^4 + 243360 z^3 - 80280 z^2 + 30150 z - 4725) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.alai.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{1}{7875} e^z (256 z^8 + 8704 z^7 + 100352 z^6 + 470400 z^5 + 823200 z^4 + 305760 z^3 - 70560 z^2 + 27720 z - 7875)$$

07.25.03.alaj.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, 3; z\right) = -\frac{1}{23625} 4 e^{z/2} (256 z^8 + 7680 z^7 + 76608 z^6 + 303744 z^5 + 439920 z^4 + 132480 z^3 - 30600 z^2 + 15120 z - 6615) I_0\left(\frac{z}{2}\right) - \frac{1}{23625 z} 4 e^{z/2} (256 z^9 + 7424 z^8 + 69312 z^7 + 237888 z^6 + 230064 z^5 - 28080 z^4 + 11880 z^3 - 6120 z^2 + 945 z + 2835) I_1\left(\frac{z}{2}\right)$$

07.25.03.alak.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{e^z (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575)}{1575}$$

07.25.03.alal.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, 4; z\right) = -\frac{1}{7875 z} 4 e^{z/2} (256 z^8 + 5248 z^7 + 31808 z^6 + 61632 z^5 + 22320 z^4 - 6000 z^3 + 2520 z^2 + 2520 z - 10395) I_0\left(\frac{z}{2}\right) - \frac{1}{7875 z^2} 4 e^{z/2} (256 z^9 + 4992 z^8 + 26944 z^7 + 36928 z^6 - 5328 z^5 + 3120 z^4 - 3720 z^3 + 7560 z^2 - 17955 z + 41580) I_1\left(\frac{z}{2}\right)$$

07.25.03.alam.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{1}{225} e^z (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225)$$

07.25.03.alan.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, 5; z\right) = -\frac{1}{7875 z^2} 32 e^{z/2} (128 z^8 + 1408 z^7 + 3840 z^6 + 1152 z^5 + 2400 z^4 - 15120 z^3 + 65520 z^2 - 207900 z + 405405) I_0\left(\frac{z}{2}\right) - \frac{1}{7875 z^3} 128 e^{z/2} (32 z^9 + 320 z^8 + 656 z^7 - 240 z^6 + 948 z^5 - 4920 z^4 + 22050 z^3 - 78435 z^2 + 207900 z - 405405) I_1\left(\frac{z}{2}\right)$$

07.25.03.alao.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{25z^4} e^z (-32z^9 - 176z^8 - 304z^7 + 1080z^6 - 6570z^5 + 35865z^4 - 161280z^3 + 564480z^2 - 1411200z + 2116800) - \frac{42336\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.alap.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{25z^4} e^{-z} (32z^9 - 176z^8 + 304z^7 + 1080z^6 + 6570z^5 + 35865z^4 + 161280z^3 + 564480z^2 + 1411200z + 2116800) - \frac{42336\sqrt{\pi} \operatorname{erf}(\sqrt{-z})}{z^{9/2}}$$

07.25.03.alaq.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{5}{2}, 6; z\right) = -\frac{1}{1575z^3} \left(32e^{z/2} (128z^8 + 192z^7 + 2112z^6 - 14640z^5 + 95760z^4 - 526680z^3 + 2328480z^2 - 7702695z + 16216200) - I_0\left(\frac{z}{2}\right) - \frac{1}{1575z^4} \left(32e^{z/2} (128z^9 + 64z^8 + 2112z^7 - 16848z^6 + 114000z^5 - 652680z^4 + 3069360z^3 - 11340945z^2 + 30810780z - 64864800) I_1\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.alar.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{14175} \left(e^z (2048z^{11} + 130048z^{10} + 3187200z^9 + 38726400z^8 + 249734400z^7 + 850446720z^6 + 1435129920z^5 + 1036476000z^4 + 229257000z^3 + 4819500z^2 + 85050z + 14175)\right)$$

07.25.03.alas.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{4725} \left(e^z (1024z^{10} + 56320z^9 + 1171200z^8 + 11750400z^7 + 60240000z^6 + 154143360z^5 + 178063200z^4 + 73080000z^3 + 5008500z^2 - 94500z - 4725)\right)$$

07.25.03.alat.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{4725} (e^z (512 z^9 + 23 808 z^8 + 407 040 z^7 + 3 229 440 z^6 + 12 358 080 z^5 + 21 460 320 z^4 + 13 920 480 z^3 + 1 738 800 z^2 - 103 950 z + 4725))$$

07.25.03.alau.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{4725} \left(e^{z/2} (256 z^9 + 11 008 z^8 + 172 992 z^7 + 1 256 640 z^6 + 4 413 360 z^5 + 7 164 720 z^4 + 4 586 760 z^3 + 636 840 z^2 - 51 975 z + 4725) I_0\left(\frac{z}{2}\right) + \frac{1}{4725} (e^{z/2} (256 z^9 + 10 752 z^8 + 162 368 z^7 + 1 099 392 z^6 + 3 385 200 z^5 + 4 197 120 z^4 + 1 367 640 z^3 - 77 040 z^2 + 8865 z) I_1\left(\frac{z}{2}\right)) \right)$$

07.25.03.alav.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{4725} e^z (256 z^8 + 9728 z^7 + 130 560 z^6 + 766 080 z^5 + 1 965 600 z^4 + 1 884 960 z^3 + 362 880 z^2 - 37 800 z + 4725)$$

07.25.03.alaw.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{4725} e^{z/2} (256 z^8 + 8832 z^7 + 106 560 z^6 + 557 760 z^5 + 1 278 000 z^4 + 1 123 920 z^3 + 215 640 z^2 - 27 000 z + 4725) I_0\left(\frac{z}{2}\right) + \frac{1}{4725} e^{z/2} (256 z^8 + 8576 z^7 + 98 112 z^6 + 463 680 z^5 + 855 600 z^4 + 425 520 z^3 - 33 480 z^2 + 6840 z - 675) I_1\left(\frac{z}{2}\right)$$

07.25.03.alax.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 3776 z^6 + 36 960 z^5 + 142 800 z^4 + 197 400 z^3 + 54 180 z^2 - 8190 z + 1575)}{1575}$$

07.25.03.alay.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, 3; z\right) = \frac{16 e^{z/2} (32 z^7 + 832 z^6 + 7056 z^5 + 23 280 z^4 + 27 540 z^3 + 6840 z^2 - 1170 z + 315) I_0\left(\frac{z}{2}\right)}{4725} + \frac{1}{4725 z} 4 e^{z/2} (128 z^8 + 3200 z^7 + 25 088 z^6 + 69 504 z^5 + 50 400 z^4 - 5040 z^3 + 1440 z^2 - 180 z - 315) I_1\left(\frac{z}{2}\right)$$

07.25.03.alaz.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 1344 z^5 + 8400 z^4 + 16 800 z^3 + 6300 z^2 - 1260 z + 315)$$

07.25.03.alb0.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (128 z^7 + 2240 z^6 + 11 328 z^5 + 18 000 z^4 + 5520 z^3 - 1080 z^2 + 945) I_0\left(\frac{z}{2}\right)}{1575 z} + \frac{4 e^{z/2} (128 z^8 + 2112 z^7 + 9280 z^6 + 9648 z^5 - 1200 z^4 + 600 z^3 - 720 z^2 + 1575 z - 3780) I_1\left(\frac{z}{2}\right)}{1575 z^2}$$

07.25.03.alb1.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{45} e^z (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45)$$

07.25.03.alb2.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (64 z^7 + 576 z^6 + 1296 z^5 + 240 z^4 + 1080 z^3 - 5040 z^2 + 16065 z - 31185) I_0\left(\frac{z}{2}\right)}{1575 z^2} + \frac{1}{1575 z^3} 32 e^{z/2} (64 z^8 + 512 z^7 + 816 z^6 - 384 z^5 + 1560 z^4 - 6840 z^3 + 24255 z^2 - 64260 z + 124740) I_1\left(\frac{z}{2}\right)$$

07.25.03.alb3.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z (16 z^8 + 64 z^7 + 120 z^6 - 480 z^5 + 2565 z^4 - 11520 z^3 + 40320 z^2 - 100800 z + 151200)}{5 z^4} - \frac{15120 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.alb4.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} (16 z^8 - 64 z^7 + 120 z^6 + 480 z^5 + 2565 z^4 + 11520 z^3 + 40320 z^2 + 100800 z + 151200)}{5 z^4} - \frac{15120 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.alb5.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 + 32 z^6 + 1008 z^5 - 6240 z^4 + 34440 z^3 - 153090 z^2 + 509355 z - 1081080) I_0\left(\frac{z}{2}\right)}{315 z^3} + \frac{1}{315 z^4} 32 e^{z/2} (64 z^8 - 32 z^7 + 1072 z^6 - 7392 z^5 + 42600 z^4 - 201390 z^3 + 747495 z^2 - 2037420 z + 4324320) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.alb6.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{1575} (e^z (512 z^9 + 24320 z^8 + 427520 z^7 + 3523840 z^6 + 14262720 z^5 + 27152160 z^4 + 21151200 z^3 + 4813200 z^2 + 97650 z + 1575))$$

07.25.03.alb7.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{1575} e^z (256 z^8 + 10240 z^7 + 147200 z^6 + 952320 z^5 + 2845920 z^4 + 3615360 z^3 + 1537200 z^2 + 100800 z - 1575)$$

07.25.03.alb8.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{1575} e^{z/2} (-128 z^8 - 4736 z^7 - 62720 z^6 - 374080 z^5 - 1044000 z^4 - 1290960 z^3 - 589920 z^2 - 50400 z + 1575) I_0\left(\frac{z}{2}\right) - \frac{8 e^{z/2} (16 z^8 + 576 z^7 + 7272 z^6 + 39760 z^5 + 93850 z^4 + 81720 z^3 + 15495 z^2 - 435 z) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.alb9.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{e^z (128 z^7 + 4160 z^6 + 46560 z^5 + 220080 z^4 + 432600 z^3 + 293580 z^2 + 34650 z - 1575)}{1575}$$

07.25.03.alba.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, 2; z\right) = \frac{e^{z/2} (-128 z^7 - 3776 z^6 - 38080 z^5 - 162000 z^4 - 291600 z^3 - 192840 z^2 - 25560 z + 1575) I_0\left(\frac{z}{2}\right)}{1575} + \frac{e^{z/2} (-128 z^7 - 3648 z^6 - 34496 z^5 - 129200 z^4 - 176400 z^3 - 56280 z^2 + 2760 z - 135) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.albb.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{1}{525} e^z (64 z^6 + 1600 z^5 + 12880 z^4 + 39200 z^3 + 39900 z^2 + 7140 z - 525)$$

07.25.03.albc.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, 3; z\right) = -\frac{4 e^{z/2} (64 z^6 + 1408 z^5 + 9840 z^4 + 25920 z^3 + 23640 z^2 + 4320 z - 405) I_0\left(\frac{z}{2}\right)}{1575} - \frac{4 e^{z/2} (64 z^7 + 1344 z^6 + 8528 z^5 + 18000 z^4 + 8760 z^3 - 600 z^2 + 45 z + 45) I_1\left(\frac{z}{2}\right)}{1575 z}$$

07.25.03.albd.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{1}{105} e^z (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105)$$

07.25.03.albe.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, 4; z\right) = -\frac{4 e^{z/2} (64 z^6 + 928 z^5 + 3760 z^4 + 4640 z^3 + 1080 z^2 - 90 z - 105) I_0\left(\frac{z}{2}\right)}{525 z} - \frac{4 e^{z/2} (64 z^7 + 864 z^6 + 2928 z^5 + 2080 z^4 - 200 z^3 + 90 z^2 - 165 z + 420) I_1\left(\frac{z}{2}\right)}{525 z^2}$$

07.25.03.albf.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{1}{15} e^z (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15)$$

07.25.03.albg.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, 5; z\right) = -\frac{32 e^{z/2} (32 z^6 + 224 z^5 + 400 z^4 + 450 z^2 - 1470 z + 2835) I_0\left(\frac{z}{2}\right)}{525 z^2} - \frac{64 e^{z/2} (16 z^7 + 96 z^6 + 112 z^5 - 80 z^4 + 315 z^3 - 1110 z^2 + 2940 z - 5670) I_1\left(\frac{z}{2}\right)}{525 z^3}$$

07.25.03.albh.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{3 e^z (8 z^7 + 20 z^6 + 50 z^5 - 215 z^4 + 960 z^3 - 3360 z^2 + 8400 z - 12600)}{5 z^4} - \frac{3780 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.albi.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (8 z^7 - 20 z^6 + 50 z^5 + 215 z^4 + 960 z^3 + 3360 z^2 + 8400 z + 12600)}{5 z^4} - \frac{3780 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.albj.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; -\frac{1}{2}, 6; z\right) = -\frac{32 e^{z/2} (32 z^6 - 16 z^5 + 480 z^4 - 2580 z^3 + 11550 z^2 - 38745 z + 83160) I_0\left(\frac{z}{2}\right)}{105 z^3} - \frac{32 e^{z/2} (32 z^7 - 48 z^6 + 544 z^5 - 3180 z^4 + 15150 z^3 - 56595 z^2 + 154980 z - 332640) I_1\left(\frac{z}{2}\right)}{105 z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{1}{2}$

07.25.03.albk.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{e^z (128 z^7 + 4288 z^6 + 50016 z^5 + 251088 z^4 + 544152 z^3 + 447300 z^2 + 97650 z + 1575)}{1575}$$

07.25.03.albl.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, 1; z\right) = \frac{e^{z/2} (64 z^7 + 1984 z^6 + 21392 z^5 + 100080 z^4 + 208440 z^3 + 178680 z^2 + 48825 z + 1575) I_0\left(\frac{z}{2}\right)}{1575} + \frac{e^{z/2} (64 z^7 + 1920 z^6 + 19504 z^5 + 81472 z^4 + 135000 z^3 + 70080 z^2 + 5055 z) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.albm.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z (64 z^6 + 1728 z^5 + 15504 z^4 + 55776 z^3 + 76860 z^2 + 31500 z + 1575)}{1575}$$

07.25.03.albn.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 + 1568 z^5 + 12720 z^4 + 41760 z^3 + 54840 z^2 + 24030 z + 1575) I_0\left(\frac{z}{2}\right)}{1575} + \frac{e^{z/2} (64 z^6 + 1504 z^5 + 11248 z^4 + 31200 z^3 + 27960 z^2 + 4290 z - 45) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.albo.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{525} e^z (32 z^5 + 656 z^4 + 4144 z^3 + 9240 z^2 + 6090 z + 525)$$

07.25.03.albp.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, 3; z\right) = \frac{8 e^{z/2} (16 z^5 + 288 z^4 + 1584 z^3 + 3120 z^2 + 1971 z + 198) I_0\left(\frac{z}{2}\right)}{1575} + \frac{4 e^{z/2} (32 z^6 + 544 z^5 + 2640 z^4 + 3840 z^3 + 978 z^2 - 18 z - 9) I_1\left(\frac{z}{2}\right)}{1575 z}$$

07.25.03.albq.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{105} e^z (16z^4 + 224z^3 + 840z^2 + 840z + 105)$$

07.25.03.albr.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (32z^5 + 368z^4 + 1120z^3 + 972z^2 + 126z + 15) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (32z^6 + 336z^5 + 800z^4 + 308z^3 - 18z^2 + 21z - 60) I_1\left(\frac{z}{2}\right)}{525z + 525z^2}$$

07.25.03.albs.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{15} e^z (8z^3 + 60z^2 + 90z + 15)$$

07.25.03.albt.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (16z^5 + 80z^4 + 108z^3 - 36z^2 + 165z - 315) I_0\left(\frac{z}{2}\right) + 32 e^{z/2} (16z^6 + 64z^5 + 52z^4 - 72z^3 + 249z^2 - 660z + 1260) I_1\left(\frac{z}{2}\right)}{525z^2 + 525z^3}$$

07.25.03.albu.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (4z^6 + 4z^5 + 23z^4 - 96z^3 + 336z^2 - 840z + 1260)}{5z^4} - \frac{378 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.albv.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (4z^6 - 4z^5 + 23z^4 + 96z^3 + 336z^2 + 840z + 1260)}{5z^4} - \frac{378 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.albw.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (16z^5 - 24z^4 + 228z^3 - 1020z^2 + 3465z - 7560) I_0\left(\frac{z}{2}\right) + 32 e^{z/2} (16z^6 - 40z^5 + 276z^4 - 1332z^3 + 5025z^2 - 13860z + 30240) I_1\left(\frac{z}{2}\right)}{105z^3 + 105z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 1$

07.25.03.albx.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; 1, \frac{3}{2}; z\right) = \frac{e^{z/2} (32z^6 + 800z^5 + 6672z^4 + 22800z^3 + 31890z^2 + 15750z + 1575) I_0\left(\frac{z}{2}\right) + 2 e^{z/2} (16z^6 + 384z^5 + 2960z^4 + 8616z^3 + 8475z^2 + 1740z) I_1\left(\frac{z}{2}\right)}{1575 + 1575}$$

07.25.03.alby.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{525} e^{z/2} (16z^5 + 304z^4 + 1804z^3 + 3980z^2 + 3045z + 525) I_0\left(\frac{z}{2}\right) + \frac{1}{525} e^{z/2} (16z^5 + 288z^4 + 1524z^3 + 2584z^2 + 985z) I_1\left(\frac{z}{2}\right)$$

07.25.03.albz.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{105} e^{z/2} (8z^4 + 104z^3 + 376z^2 + 420z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} (2z^4 + 24z^3 + 71z^2 + 44z) I_1\left(\frac{z}{2}\right)$$

07.25.03.alc0.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{15} e^{z/2} (4z^3 + 28z^2 + 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^3 + 24z^2 + 23z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{3}{2}$

07.25.03.alc1.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (32z^5 + 688z^4 + 4656z^3 + 11592z^2 + 9450z + 1575)}{1575}$$

07.25.03.alc2.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, 2; z\right) = \frac{e^{z/2} (32z^5 + 624z^4 + 3840z^3 + 8940z^2 + 7470z + 1575) I_0\left(\frac{z}{2}\right) + e^{z/2} (32z^5 + 592z^4 + 3264z^3 + 5940z^2 + 2670z + 45) I_1\left(\frac{z}{2}\right)}{1575}$$

07.25.03.alc3.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{525} e^z (16z^4 + 256z^3 + 1176z^2 + 1680z + 525)$$

07.25.03.alc4.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (16z^4 + 224z^3 + 900z^2 + 1176z + 393) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (16z^5 + 208z^4 + 700z^3 + 564z^2 + 21z + 3) I_1\left(\frac{z}{2}\right)}{1575z}$$

07.25.03.alc5.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{105} e^z (8z^3 + 84z^2 + 210z + 105)$$

07.25.03.alc6.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (16z^4 + 136z^3 + 276z^2 + 132z - 3) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (16z^5 + 120z^4 + 164z^3 + 12z^2 - 3z + 12) I_1\left(\frac{z}{2}\right)}{525z^2}$$

07.25.03.alc7.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{15} e^z (4z^2 + 20z + 15)$$

07.25.03.alc8.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (8z^4 + 24z^3 + 24z^2 - 24z + 45) I_0\left(\frac{z}{2}\right) + 128 e^{z/2} (2z^5 + 4z^4 + 3z^3 - 9z^2 + 24z - 45) I_1\left(\frac{z}{2}\right)}{525z^3}$$

07.25.03.alc9.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (4z^5 - 2z^4 + 24z^3 - 84z^2 + 210z - 315)}{10z^4} + \frac{189 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4z^{9/2}}$$

07.25.03.alca.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{189\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4z^{9/2}} - \frac{3e^{-z}(4z^5 + 2z^4 + 24z^3 + 84z^2 + 210z + 315)}{10z^4}$$

07.25.03.alcb.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{3}{2}, 6; z\right) = \frac{32e^{z/2}(8z^4 - 20z^3 + 108z^2 - 375z + 840)I_0\left(\frac{z}{2}\right)}{105z^3} + \frac{32e^{z/2}(8z^5 - 28z^4 + 140z^3 - 537z^2 + 1500z - 3360)I_1\left(\frac{z}{2}\right)}{105z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 2$

07.25.03.alcc.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{525}e^{z/2}(16z^4 + 232z^3 + 980z^2 + 1380z + 525)I_0\left(\frac{z}{2}\right) + \frac{1}{525}e^{z/2}(16z^4 + 216z^3 + 772z^2 + 700z + 45)I_1\left(\frac{z}{2}\right)$$

07.25.03.alcd.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{105}e^{z/2}(8z^3 + 76z^2 + 180z + 105)I_0\left(\frac{z}{2}\right) + \frac{1}{105}e^{z/2}(8z^3 + 68z^2 + 116z + 15)I_1\left(\frac{z}{2}\right)$$

07.25.03.alce.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{15}e^{z/2}(4z^2 + 18z + 15)I_0\left(\frac{z}{2}\right) + \frac{1}{15}e^{z/2}(4z^2 + 14z + 3)I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{5}{2}$

07.25.03.alcf.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{175}e^z(8z^3 + 92z^2 + 266z + 175)$$

07.25.03.alcg.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, 3; z\right) = \frac{16}{525}e^{z/2}(2z^3 + 20z^2 + 51z + 33)I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2}(8z^4 + 72z^3 + 136z^2 + 24z - 3)I_1\left(\frac{z}{2}\right)}{525z}$$

07.25.03.alch.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{35}e^z(4z^2 + 28z + 35)$$

07.25.03.alci.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, 4; z\right) = \frac{4e^{z/2}(8z^3 + 44z^2 + 44z + 1)I_0\left(\frac{z}{2}\right)}{175z} + \frac{4e^{z/2}(8z^4 + 36z^3 + 12z^2 - z - 4)I_1\left(\frac{z}{2}\right)}{175z^2}$$

07.25.03.alcj.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{5}e^z(2z + 5)$$

07.25.03.alck.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^3 + 4z^2 + 5z - 9) I_0\left(\frac{z}{2}\right)}{175 z^2} + \frac{32 e^{z/2} (4z^4 + 7z^2 - 20z + 36) I_1\left(\frac{z}{2}\right)}{175 z^3}$$

07.25.03.alcl.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (4z^4 - 8z^3 + 28z^2 - 70z + 105)}{20 z^4} - \frac{189 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.alcm.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (4z^4 + 8z^3 + 28z^2 + 70z + 105)}{20 z^4} - \frac{189 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{9/2}}$$

07.25.03.alcn.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 - 14z^2 + 51z - 120) I_0\left(\frac{z}{2}\right)}{35 z^3} + \frac{32 e^{z/2} (4z^4 - 18z^3 + 71z^2 - 204z + 480) I_1\left(\frac{z}{2}\right)}{35 z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 3$

07.25.03.alco.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; 3, \frac{7}{2}; z\right) = \frac{4}{105} e^{z/2} (4z^2 + 24z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4z^3 + 20z^2 + 9z - 3) I_1\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.alcp.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; 3, \frac{9}{2}; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2z^2 + 2z - 1) I_1\left(\frac{z}{2}\right)}{15 z}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{7}{2}$

07.25.03.alcq.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{7} e^z (2z + 7)$$

07.25.03.alcr.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (4z^2 + 10z - 1) I_0\left(\frac{z}{2}\right)}{35 z} + \frac{4 e^{z/2} (4z^3 + 6z^2 - 5z + 4) I_1\left(\frac{z}{2}\right)}{35 z^2}$$

07.25.03.alcs.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = e^z$$

07.25.03.alct.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 - 2z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} + \frac{64 e^{z/2} (z^3 - 2z^2 + 4z - 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.alcu.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (8z^3 - 28z^2 + 70z - 105)}{16 z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.alcv.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9 e^{-z} (8 z^3 + 28 z^2 + 70 z + 105)}{16 z^4}$$

07.25.03.alcw.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (2 z^2 - 9 z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{32 e^{z/2} (2 z^3 - 11 z^2 + 36 z - 96) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 4$

07.25.03.alcx.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; 4, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (2 z - 1) I_0\left(\frac{z}{2}\right)}{5 z} + \frac{4 e^{z/2} (2 z^2 - 3 z + 4) I_1\left(\frac{z}{2}\right)}{5 z^2}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{9}{2}$

07.25.03.alcy.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4 z^2 - 10 z + 15)}{8 z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.alcz.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7 e^{-z} (4 z^2 + 10 z + 15)}{8 z^3}$$

07.25.03.ald0.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (z - 3) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{32 e^{z/2} (z^2 - 4 z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.ald1.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (8 z^2 - 40 z + 105)}{32 z^4} - \frac{945 \sqrt{\pi} (2 z + 7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ald2.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8 z^2 + 40 z + 105)}{32 z^4} + \frac{945 \sqrt{\pi} (2 z - 7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.ald3.01

$${}_2F_2\left(\frac{7}{2}, \frac{9}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (z - 8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4 z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = -\frac{11}{2}$

07.25.03.ald4.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{4862521125} (4096z^{19} + 649216z^{18} + 43711488z^{17} + 1642959360z^{16} + 38114754048z^{15} + 569911099392z^{14} + 5571457597440z^{13} + 35396268687360z^{12} + 142506991872000z^{11} + 346253038709760z^{10} + 466075598123520z^9 + 297215866080000z^8 + 64063600876800z^7 + 1389404016000z^6 + 24518894400z^5 + 4086482400z^4 + 1964655000z^3 + 1875352500z^2 + 2813028750z + 4862521125) + \frac{1}{4862521125} (256e^z\sqrt{\pi}(16z^{39/2} + 2544z^{37/2} + 172008z^{35/2} + 6501936z^{33/2} + 152012385z^{31/2} + 2297651265z^{29/2} + 22809457440z^{27/2} + 148195202400z^{25/2} + 617135591520z^{23/2} + 1581257311200z^{21/2} + 2325389472000z^{19/2} + 1741813113600z^{17/2} + 529204233600z^{15/2} + 36921225600z^{13/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.ald5.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{4862521125} (-4096z^{19} + 649216z^{18} - 43711488z^{17} + 1642959360z^{16} - 38114754048z^{15} + 569911099392z^{14} - 5571457597440z^{13} + 35396268687360z^{12} - 142506991872000z^{11} + 346253038709760z^{10} - 466075598123520z^9 + 297215866080000z^8 - 64063600876800z^7 + 1389404016000z^6 - 24518894400z^5 + 4086482400z^4 - 1964655000z^3 + 1875352500z^2 - 2813028750z + 4862521125) + \frac{1}{4862521125} (256e^{-z}\sqrt{\pi}(16z^{39/2} - 2544z^{37/2} + 172008z^{35/2} - 6501936z^{33/2} + 152012385z^{31/2} - 2297651265z^{29/2} + 22809457440z^{27/2} - 148195202400z^{25/2} + 617135591520z^{23/2} - 1581257311200z^{21/2} + 2325389472000z^{19/2} - 1741813113600z^{17/2} + 529204233600z^{15/2} - 36921225600z^{13/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.ald6.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{442047375} (-2048z^{18} - 297984z^{17} - 18280960z^{16} - 620535552z^{15} - 12860798976z^{14} - 169497108480z^{13} - 1435484897280z^{12} - 7720915507200z^{11} - 25481752611840z^{10} - 48349279157760z^9 - 46840728211200z^8 - 18203922374400z^7 - 1389404016000z^6 + 24518894400z^5 + 1362160800z^4 + 392931000z^3 + 267907500z^2 + 312558750z + 442047375) - \frac{1}{442047375} (128e^z\sqrt{\pi}(16z^{37/2} + 2336z^{35/2} + 143976z^{33/2} + 4918200z^{31/2} + 102830385z^{29/2} + 1372177800z^{27/2} + 11832035040z^{25/2} + 65370957120z^{23/2} + 224909848800z^{21/2} + 456708067200z^{19/2} + 498557203200z^{17/2} + 246141504000z^{15/2} + 36921225600z^{13/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.ald7.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{442047375} \left(-2048 z^{18} + 297984 z^{17} - 18280960 z^{16} + 620535552 z^{15} - 12860798976 z^{14} + 169497108480 z^{13} - 1435484897280 z^{12} + 7720915507200 z^{11} - 25481752611840 z^{10} + 48349279157760 z^9 - 46840728211200 z^8 + 18203922374400 z^7 - 1389404016000 z^6 - 24518894400 z^5 + 1362160800 z^4 - 392931000 z^3 + 267907500 z^2 - 312558750 z + 442047375 \right) + \frac{1}{442047375} \left(128 e^{-z} \sqrt{\pi} \left(16 z^{37/2} - 2336 z^{35/2} + 143976 z^{33/2} - 4918200 z^{31/2} + 102830385 z^{29/2} - 1372177800 z^{27/2} + 11832035040 z^{25/2} - 65370957120 z^{23/2} + 224909848800 z^{21/2} - 456708067200 z^{19/2} + 498557203200 z^{17/2} - 246141504000 z^{15/2} + 36921225600 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ald8.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{49116375} \left(1024 z^{17} + 135680 z^{16} + 7512832 z^{15} + 227693184 z^{14} + 4157059200 z^{13} + 47440081920 z^{12} + 340047590400 z^{11} + 1499552087040 z^{10} + 3869338314240 z^9 + 5303763360000 z^8 + 3168192787200 z^7 + 463134672000 z^6 - 24518894400 z^5 + 1362160800 z^4 + 130977000 z^3 + 53581500 z^2 + 44651250 z + 49116375 \right) + \frac{1}{49116375} \left(64 e^z \sqrt{\pi} \left(16 z^{35/2} + 2128 z^{33/2} + 118440 z^{31/2} + 3615360 z^{29/2} + 66676785 z^{27/2} + 772086735 z^{25/2} + 5655341160 z^{23/2} + 25783569000 z^{21/2} + 70208434800 z^{19/2} + 105665893200 z^{17/2} + 75893630400 z^{15/2} + 18460612800 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ald9.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{49116375} \left(-1024 z^{17} + 135680 z^{16} - 7512832 z^{15} + 227693184 z^{14} - 4157059200 z^{13} + 47440081920 z^{12} - 340047590400 z^{11} + 1499552087040 z^{10} - 3869338314240 z^9 + 5303763360000 z^8 - 3168192787200 z^7 + 463134672000 z^6 + 24518894400 z^5 + 1362160800 z^4 - 130977000 z^3 + 53581500 z^2 - 44651250 z + 49116375 \right) + \frac{1}{49116375} \left(64 e^{-z} \sqrt{\pi} \left(16 z^{35/2} - 2128 z^{33/2} + 118440 z^{31/2} - 3615360 z^{29/2} + 66676785 z^{27/2} - 772086735 z^{25/2} + 5655341160 z^{23/2} - 25783569000 z^{21/2} + 70208434800 z^{19/2} - 105665893200 z^{17/2} + 75893630400 z^{15/2} - 18460612800 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aldA.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{7016625} \left(-512 z^{16} - 61184 z^{15} - 3022464 z^{14} - 80629440 z^{13} - 1273672320 z^{12} - 12293798400 z^{11} - 72222151680 z^{10} - 249089379840 z^9 - 465324652800 z^8 - 396338054400 z^7 - 92626934400 z^6 + 8172964800 z^5 - 1362160800 z^4 + 130977000 z^3 + 17860500 z^2 + 8930250 z + 7016625 \right) - \frac{1}{7016625} \left(32 e^z \sqrt{\pi} \left(16 z^{33/2} + 1920 z^{31/2} + 95400 z^{29/2} + 2565960 z^{27/2} + 41017185 z^{25/2} + 402932070 z^{23/2} + 2431884600 z^{21/2} + 8760376800 z^{19/2} + 17646174000 z^{17/2} + 17435023200 z^{15/2} + 6153537600 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aldb.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{7016625} \left(-512 z^{16} + 61184 z^{15} - 3022464 z^{14} + 80629440 z^{13} - 1273672320 z^{12} + 12293798400 z^{11} - \right.$$

$$\left. 72222151680 z^{10} + 249089379840 z^9 - 465324652800 z^8 + 396338054400 z^7 - 92626934400 z^6 - \right.$$

$$\left. 8172964800 z^5 - 1362160800 z^4 - 130977000 z^3 + 17860500 z^2 - 8930250 z + 7016625 \right) + \frac{1}{7016625}$$

$$\left(32 e^{-z} \sqrt{\pi} \left(16 z^{33/2} - 1920 z^{31/2} + 95400 z^{29/2} - 2565960 z^{27/2} + 41017185 z^{25/2} - 402932070 z^{23/2} + 2431884600 \right. \right.$$

$$\left. \left. z^{21/2} - 8760376800 z^{19/2} + 17646174000 z^{17/2} - 17435023200 z^{15/2} + 6153537600 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aldc.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{1403325} \left(256 z^{15} + 27264 z^{14} + 1184192 z^{13} + 27301920 z^{12} + 364376160 z^{11} + 2879804928 z^{10} + \right.$$

$$\left. 13225605120 z^9 + 33053287680 z^8 + 38567750400 z^7 + 13232419200 z^6 - \right.$$

$$\left. 1634592960 z^5 + 454053600 z^4 - 130977000 z^3 + 17860500 z^2 + 2976750 z + 1403325 \right) +$$

$$\frac{1}{1403325} \left(16 e^z \sqrt{\pi} \left(16 z^{31/2} + 1712 z^{29/2} + 74856 z^{27/2} + 1742544 z^{25/2} + 23591745 z^{23/2} + 190606365 z^{21/2} + \right. \right.$$

$$\left. \left. 907033680 z^{19/2} + 2411141040 z^{17/2} + 3179327760 z^{15/2} + 1538384400 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aldd.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{1403325} \left(-256 z^{15} + 27264 z^{14} - 1184192 z^{13} + 27301920 z^{12} - 364376160 z^{11} + 2879804928 z^{10} - \right.$$

$$\left. 13225605120 z^9 + 33053287680 z^8 - 38567750400 z^7 + 13232419200 z^6 + \right.$$

$$\left. 1634592960 z^5 + 454053600 z^4 + 130977000 z^3 + 17860500 z^2 - 2976750 z + 1403325 \right) +$$

$$\frac{1}{1403325} \left(16 e^{-z} \sqrt{\pi} \left(16 z^{31/2} - 1712 z^{29/2} + 74856 z^{27/2} - 1742544 z^{25/2} + 23591745 z^{23/2} - 190606365 z^{21/2} + \right. \right.$$

$$\left. \left. 907033680 z^{19/2} - 2411141040 z^{17/2} + 3179327760 z^{15/2} - 1538384400 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alde.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{467775} \left(-128 z^{14} - 11968 z^{13} - 448544 z^{12} - 8722800 z^{11} - 95169984 z^{10} - 587225856 z^9 - 1953504000 z^8 - \right.$$

$$\left. 3058629120 z^7 - 1470268800 z^6 + 233513280 z^5 - 90810720 z^4 + \right.$$

$$\left. 43659000 z^3 - 17860500 z^2 + 2976750 z + 467775 \right) -$$

$$\frac{1}{467775} \left(8 e^z \sqrt{\pi} \left(16 z^{29/2} + 1504 z^{27/2} + 56808 z^{25/2} + 1117656 z^{23/2} + 12415185 z^{21/2} + \right. \right.$$

$$\left. \left. 78869700 z^{19/2} + 276076080 z^{17/2} + 478608480 z^{15/2} + 307676880 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aldf.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{467775} \left(-128 z^{14} + 11968 z^{13} - 448544 z^{12} + 8722800 z^{11} - 95169984 z^{10} + 587225856 z^9 - 1953504000 z^8 + 3058629120 z^7 - 1470268800 z^6 - 233513280 z^5 - 90810720 z^4 - 43659000 z^3 - 17860500 z^2 - 2976750 z + 467775 \right) + \frac{1}{467775} \left(8 e^{-z} \sqrt{\pi} \left(16 z^{29/2} - 1504 z^{27/2} + 56808 z^{25/2} - 1117656 z^{23/2} + 12415185 z^{21/2} - 78869700 z^{19/2} + 276076080 z^{17/2} - 478608480 z^{15/2} + 307676880 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aldg.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{467775} \left(64 z^{13} + 5152 z^{12} + 162480 z^{11} + 2576616 z^{10} + 21893928 z^9 + 97675200 z^8 + 203722560 z^7 + 133660800 z^6 - 25945920 z^5 + 12972960 z^4 - 8731800 z^3 + 5953500 z^2 - 2976750 z + 467775 \right) + \frac{1}{467775} \left(4 e^z \sqrt{\pi} \left(16 z^{27/2} + 1296 z^{25/2} + 41256 z^{23/2} + 663840 z^{21/2} + 5776785 z^{19/2} + 26878635 z^{17/2} + 61047000 z^{15/2} + 51279480 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aldh.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{467775} \left(-64 z^{13} + 5152 z^{12} - 162480 z^{11} + 2576616 z^{10} - 21893928 z^9 + 97675200 z^8 - 203722560 z^7 + 133660800 z^6 + 25945920 z^5 + 12972960 z^4 + 8731800 z^3 + 5953500 z^2 + 2976750 z + 467775 \right) + \frac{1}{467775} \left(4 e^{-z} \sqrt{\pi} \left(16 z^{27/2} - 1296 z^{25/2} + 41256 z^{23/2} - 663840 z^{21/2} + 5776785 z^{19/2} - 26878635 z^{17/2} + 61047000 z^{15/2} - 51279480 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aldi.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, 1; z\right) = \frac{1}{3742200} \left(e^z \left(512 z^{13} + 38144 z^{12} + 1101312 z^{11} + 15760128 z^{10} + 118395840 z^9 + 452031840 z^8 + 756298080 z^7 + 310973040 z^6 - 93878190 z^5 + 61278525 z^4 - 46267200 z^3 + 31638600 z^2 - 15649200 z + 3742200 \right) \right)$$

07.25.03.aldj.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{467775} 2 e^z \sqrt{\pi} \left(16 z^6 + 1088 z^5 + 28200 z^4 + 353640 z^3 + 2240385 z^2 + 6715170 z + 7325640 \right) \operatorname{erf}(\sqrt{z}) z^{13/2} + \frac{1}{467775} \left(32 z^{12} + 2160 z^{11} + 55336 z^{10} + 680652 z^9 + 4165560 z^8 + 11628000 z^7 + 10281600 z^6 - 2358720 z^5 + 1441440 z^4 - 1247400 z^3 + 1190700 z^2 - 992250 z + 467775 \right)$$

07.25.03.aldk.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{467775} (32z^{12} - 2160z^{11} + 55336z^{10} - 680652z^9 + 4165560z^8 - 11628000z^7 + 10281600z^6 + 2358720z^5 + 1441440z^4 + 1247400z^3 + 1190700z^2 + 992250z + 467775) - \frac{1}{467775} 2e^{-z} \sqrt{\pi} z^{13/2} (16z^6 - 1088z^5 + 28200z^4 - 353640z^3 + 2240385z^2 - 6715170z + 7325640) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aldl.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, 2; z\right) = \frac{1}{3742200} (e^z (512z^{12} + 31488z^{11} + 723456z^{10} + 7802112z^9 + 40374720z^8 + 88659360z^7 + 47023200z^6 - 18189360z^5 + 15257970z^4 - 15011325z^3 + 13778100z^2 - 9695700z + 3742200))$$

07.25.03.aldm.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{e^z \sqrt{\pi} (16z^5 + 880z^4 + 17640z^3 + 159600z^2 + 644385z + 915705) \operatorname{erf}(\sqrt{z}) z^{13/2}}{155925} + \frac{1}{155925} (16z^{11} + 872z^{10} + 17212z^9 + 151410z^8 + 576270z^7 + 685440z^6 - 181440z^5 + 131040z^4 - 138600z^3 + 170100z^2 - 198450z + 155925)$$

07.25.03.aldn.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16z^5 - 880z^4 + 17640z^3 - 159600z^2 + 644385z - 915705) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{155925} + \frac{1}{155925} (-16z^{11} + 872z^{10} - 17212z^9 + 151410z^8 - 576270z^7 + 685440z^6 + 181440z^5 + 131040z^4 + 138600z^3 + 170100z^2 + 198450z + 155925)$$

07.25.03.aldo.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, 3; z\right) = \frac{1}{1871100} (e^z (512z^{11} + 24832z^{10} + 425472z^9 + 3121920z^8 + 915520z^7 + 6259680z^6 - 3054240z^5 + 3190320z^4 - 3883950z^3 + 4408425z^2 - 3855600z + 1871100))$$

07.25.03.aldp.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z \sqrt{\pi} (16z^4 + 672z^3 + 9576z^2 + 54264z + 101745) \operatorname{erf}(\sqrt{z}) z^{13/2}}{62370} + \frac{1}{31185} (8z^{10} + 332z^9 + 4626z^8 + 24975z^7 + 40320z^6 - 12096z^5 + 10080z^4 - 12600z^3 + 18900z^2 - 28350z + 31185)$$

07.25.03.aldq.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{31\,185} (8z^{10} - 332z^9 + 4626z^8 - 24\,975z^7 + 40\,320z^6 + 12\,096z^5 + 10\,080z^4 + 12\,600z^3 + 18\,900z^2 + 28\,350z + 31\,185) - \frac{e^{-z} \sqrt{\pi} z^{13/2} (16z^4 - 672z^3 + 9576z^2 - 54\,264z + 101\,745) \operatorname{erfi}(\sqrt{z})}{62\,370}$$

07.25.03.aldr.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, 4; z\right) = \frac{1}{623\,700} (e^z (512z^{10} + 18\,176z^9 + 207\,360z^8 + 840\,960z^7 + 745\,920z^6 - 453\,600z^5 + 574\,560z^4 - 831\,600z^3 + 1\,105\,650z^2 - 1\,119\,825z + 623\,700))$$

07.25.03.alds.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{8910z^3} (8z^{12} + 228z^{11} + 1894z^{10} + 4245z^9 - 1431z^8 + 1416z^7 - 2520z^6 + 7560z^5 - 31\,500z^4 + 138\,510z^3 - 544\,320z^2 + 1\,814\,400z - 5\,443\,200) + \frac{1}{17\,820z^{7/2}} (e^z \sqrt{\pi} (16z^{13} + 464z^{12} + 4008z^{11} + 10\,176z^{10} - 15z^9 + 135z^8 - 1080z^7 + 7560z^6 - 45\,360z^5 + 226\,800z^4 - 907\,200z^3 + 2\,721\,600z^2 - 5\,443\,200z + 5\,443\,200) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aldt.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{8910z^3} (-8z^{12} + 228z^{11} - 1894z^{10} + 4245z^9 + 1431z^8 + 1416z^7 + 2520z^6 + 7560z^5 + 31\,500z^4 + 138\,510z^3 + 544\,320z^2 + 1\,814\,400z + 5\,443\,200) + \frac{1}{17\,820z^{7/2}} (e^{-z} \sqrt{\pi} (16z^{13} - 464z^{12} + 4008z^{11} - 10\,176z^{10} - 15z^9 - 135z^8 - 1080z^7 - 7560z^6 - 45\,360z^5 - 226\,800z^4 - 907\,200z^3 - 2\,721\,600z^2 - 5\,443\,200z - 5\,443\,200) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aldu.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, 5; z\right) = \frac{1}{155\,925} e^z (512z^9 + 11\,520z^8 + 69\,120z^7 + 80\,640z^6 - 60\,480z^5 + 90\,720z^4 - 151\,200z^3 + 226\,800z^2 - 255\,150z + 155\,925)$$

07.25.03.aldv.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{1980 z^4} (8 z^{12} + 124 z^{11} + 410 z^{10} - 213 z^9 + 786 z^8 - 5880 z^7 + 45360 z^6 - 315000 z^5 + 1895580 z^4 - 9616320 z^3 + 39916800 z^2 - 132451200 z + 381024000) + \frac{1}{3960 z^{9/2}} (e^z \sqrt{\pi} (16 z^{13} + 256 z^{12} + 936 z^{11} - 120 z^{10} + 1185 z^9 - 10530 z^8 + 83160 z^7 - 574560 z^6 + 3402000 z^5 - 16783200 z^4 + 66225600 z^3 - 195955200 z^2 + 386467200 z - 381024000) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aldw.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{1980 z^4} (8 z^{12} - 124 z^{11} + 410 z^{10} + 213 z^9 + 786 z^8 + 5880 z^7 + 45360 z^6 + 315000 z^5 + 1895580 z^4 + 9616320 z^3 + 39916800 z^2 + 132451200 z + 381024000) + \frac{1}{3960 z^{9/2}} (e^{-z} \sqrt{\pi} (-16 z^{13} + 256 z^{12} - 936 z^{11} - 120 z^{10} - 1185 z^9 - 10530 z^8 - 83160 z^7 - 574560 z^6 - 3402000 z^5 - 16783200 z^4 - 66225600 z^3 - 195955200 z^2 - 386467200 z - 381024000) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aldx.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{11}{2}, 6; z\right) = \frac{1}{31185 z^5} (e^z (512 z^{13} + 4864 z^{12} + 10752 z^{11} - 37632 z^{10} + 315840 z^9 - 2751840 z^8 + 21863520 z^7 - 152817840 z^6 + 916651890 z^5 - 4583103525 z^4 + 18332414100 z^3 - 54997242300 z^2 + 109994484600 z - 109994484600)) + \frac{3527160}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = -\frac{9}{2}$

07.25.03.aldy.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{40186125} (1024 z^{17} + 136704 z^{16} + 7637248 z^{15} + 233962368 z^{14} + 4328390656 z^{13} + 50229473280 z^{12} + 368040314880 z^{11} + 1672850242560 z^{10} + 4513578324480 z^9 + 6657619772160 z^8 + 4601022854400 z^7 + 1064340950400 z^6 + 24518894400 z^5 + 454053600 z^4 + 78586200 z^3 + 38272500 z^2 + 34728750 z + 40186125) + \frac{1}{40186125} (64 e^z \sqrt{\pi} (16 z^{35/2} + 2144 z^{33/2} + 120392 z^{31/2} + 3714280 z^{29/2} + 69401865 z^{27/2} + 816962880 z^{25/2} + 6113294880 z^{23/2} + 28691187840 z^{21/2} + 81453909600 z^{19/2} + 130892428800 z^{17/2} + 105879916800 z^{15/2} + 34381670400 z^{13/2} + 2539555200 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aldz.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{40186125}$$

$$\begin{aligned} & (-1024z^{17} + 136704z^{16} - 7637248z^{15} + 233962368z^{14} - 4328390656z^{13} + 50229473280z^{12} - 368040314880z^{11} + \\ & 1672850242560z^{10} - 4513578324480z^9 + 6657619772160z^8 - 4601022854400z^7 + 1064340950400z^6 - \\ & 24518894400z^5 + 454053600z^4 - 78586200z^3 + 38272500z^2 - 34728750z + 40186125) + \\ & \frac{1}{40186125} \left(64e^{-z} \sqrt{\pi} (16z^{35/2} - 2144z^{33/2} + 120392z^{31/2} - 3714280z^{29/2} + 69401865z^{27/2} - \right. \\ & 816962880z^{25/2} + 6113294880z^{23/2} - 28691187840z^{21/2} + 81453909600z^{19/2} - \\ & \left. 130892428800z^{17/2} + 105879916800z^{15/2} - 34381670400z^{13/2} + 2539555200z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right) \end{aligned}$$

07.25.03.ale0.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{4465125} (-512z^{16} - 62208z^{15} - 3134592z^{14} - 85665728z^{13} - 1394695680z^{12} - 13996362240z^{11} -$$

$$86649077760z^{10} - 322120005120z^9 - 676928206080z^8 - 716415033600z^7 - 300603139200z^6 -$$

$$24518894400z^5 + 454053600z^4 + 26195400z^3 + 7654500z^2 + 4961250z + 4465125) -$$

$$\frac{1}{4465125} \left(32e^z \sqrt{\pi} (16z^{33/2} + 1952z^{31/2} + 98920z^{29/2} + 2725080z^{27/2} + 44876145z^{25/2} + \right.$$

$$457953720z^{23/2} + 2907618840z^{21/2} + 11245474800z^{19/2} + 25226535600z^{17/2} +$$

$$\left. 29986286400z^{15/2} + 15921057600z^{13/2} + 2539555200z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ale1.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{4465125} (-512z^{16} + 62208z^{15} - 3134592z^{14} + 85665728z^{13} - 1394695680z^{12} + 13996362240z^{11} -$$

$$86649077760z^{10} + 322120005120z^9 - 676928206080z^8 + 716415033600z^7 - 300603139200z^6 +$$

$$24518894400z^5 + 454053600z^4 - 26195400z^3 + 7654500z^2 - 4961250z + 4465125) +$$

$$\frac{1}{4465125} \left(32e^{-z} \sqrt{\pi} (16z^{33/2} - 1952z^{31/2} + 98920z^{29/2} - 2725080z^{27/2} + 44876145z^{25/2} - \right.$$

$$457953720z^{23/2} + 2907618840z^{21/2} - 11245474800z^{19/2} + 25226535600z^{17/2} -$$

$$\left. 29986286400z^{15/2} + 15921057600z^{13/2} - 2539555200z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ale2.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{637875} (256z^{15} + 28032z^{14} + 1259072z^{13} + 30255840z^{12} + 425640960z^{11} + 3606731520z^{10} + 18257656320z^9 +$$

$$52900888320z^8 + 80019244800z^7 + 51994051200z^6 + 8172964800z^5 -$$

$$454053600z^4 + 26195400z^3 + 2551500z^2 + 992250z + 637875) +$$

$$\frac{1}{637875} \left(16e^z \sqrt{\pi} (16z^{31/2} + 1760z^{29/2} + 79560z^{27/2} + 1929480z^{25/2} + 27510825z^{23/2} + 237867120z^{21/2} + \right.$$

$$\left. 1242549000z^{19/2} + 3790180800z^{17/2} + 6275631600z^{15/2} + 4883760000z^{13/2} + 1269777600z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ale3.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{637875} \left(-256 z^{15} + 28032 z^{14} - 1259072 z^{13} + 30255840 z^{12} - 425640960 z^{11} + 3606731520 z^{10} - 18257656320 z^9 + 52900888320 z^8 - 80019244800 z^7 + 51994051200 z^6 - 8172964800 z^5 - 454053600 z^4 - 26195400 z^3 + 2551500 z^2 - 992250 z + 637875 \right) + \frac{1}{637875} \left(16 e^{-z} \sqrt{\pi} \left(16 z^{31/2} - 1760 z^{29/2} + 79560 z^{27/2} - 1929480 z^{25/2} + 27510825 z^{23/2} - 237867120 z^{21/2} + 1242549000 z^{19/2} - 3790180800 z^{17/2} + 6275631600 z^{15/2} - 4883760000 z^{13/2} + 1269777600 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ale4.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{127575} \left(-128 z^{14} - 12480 z^{13} - 492320 z^{12} - 10210800 z^{11} - 121154432 z^{10} - 838675200 z^9 - 3307933440 z^8 - 6908582400 z^7 - 6460272000 z^6 - 1634592960 z^5 + 151351200 z^4 - 26195400 z^3 + 2551500 z^2 + 330750 z + 127575 \right) - \frac{1}{127575} \left(8 e^z \sqrt{\pi} \left(16 z^{29/2} + 1568 z^{27/2} + 62312 z^{25/2} + 1306360 z^{23/2} + 15753585 z^{21/2} + 111838440 z^{19/2} + 459679920 z^{17/2} + 1032101280 z^{15/2} + 1115125200 z^{13/2} + 423259200 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ale5.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{127575} \left(-128 z^{14} + 12480 z^{13} - 492320 z^{12} + 10210800 z^{11} - 121154432 z^{10} + 838675200 z^9 - 3307933440 z^8 + 6908582400 z^7 - 6460272000 z^6 + 1634592960 z^5 + 151351200 z^4 + 26195400 z^3 + 2551500 z^2 - 330750 z + 127575 \right) + \frac{1}{127575} \left(8 e^{-z} \sqrt{\pi} \left(16 z^{29/2} - 1568 z^{27/2} + 62312 z^{25/2} - 1306360 z^{23/2} + 15753585 z^{21/2} - 111838440 z^{19/2} + 459679920 z^{17/2} - 1032101280 z^{15/2} + 1115125200 z^{13/2} - 423259200 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ale6.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{42525} \left(64 z^{13} + 5472 z^{12} + 186000 z^{11} + 3248056 z^{10} + 31431168 z^9 + 169303680 z^8 + 481244160 z^7 + 623750400 z^6 + 233513280 z^5 - 30270240 z^4 + 8731800 z^3 - 2551500 z^2 + 330750 z + 42525 \right) + \frac{1}{42525} \left(4 e^z \sqrt{\pi} \left(16 z^{27/2} + 1376 z^{25/2} + 47176 z^{23/2} + 834600 z^{21/2} + 8242185 z^{19/2} + 45900960 z^{17/2} + 138373200 z^{15/2} + 201862080 z^{13/2} + 105814800 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ale7.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{42525} (-64 z^{13} + 5472 z^{12} - 186000 z^{11} + 3248056 z^{10} - 31431168 z^9 + 169303680 z^8 - 481244160 z^7 + 623750400 z^6 - 233513280 z^5 - 30270240 z^4 - 8731800 z^3 - 2551500 z^2 - 330750 z + 42525) + \frac{1}{42525} (4 e^{-z} \sqrt{\pi} (16 z^{27/2} - 1376 z^{25/2} + 47176 z^{23/2} - 834600 z^{21/2} + 8242185 z^{19/2} - 45900960 z^{17/2} + 138373200 z^{15/2} - 201862080 z^{13/2} + 105814800 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ale8.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{42525} (-32 z^{12} - 2352 z^{11} - 67144 z^{10} - 953724 z^9 - 7162848 z^8 - 27752160 z^7 - 49008960 z^6 - 25945920 z^5 + 4324320 z^4 - 1746360 z^3 + 850500 z^2 - 330750 z + 42525) - \frac{1}{42525} (2 e^z \sqrt{\pi} (16 z^{25/2} + 1184 z^{23/2} + 34152 z^{21/2} + 493080 z^{19/2} + 3804465 z^{17/2} + 15465240 z^{15/2} + 30116520 z^{13/2} + 21162960 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ale9.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{42525} (-32 z^{12} + 2352 z^{11} - 67144 z^{10} + 953724 z^9 - 7162848 z^8 + 27752160 z^7 - 49008960 z^6 + 25945920 z^5 + 4324320 z^4 + 1746360 z^3 + 850500 z^2 + 330750 z + 42525) + \frac{1}{42525} (2 e^{-z} \sqrt{\pi} (16 z^{25/2} - 1184 z^{23/2} + 34152 z^{21/2} - 493080 z^{19/2} + 3804465 z^{17/2} - 15465240 z^{15/2} + 30116520 z^{13/2} - 21162960 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alea.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, 1; z\right) = -\frac{1}{340200} (e^z (256 z^{12} + 17408 z^{11} + 454912 z^{10} + 5832960 z^9 + 38782560 z^8 + 129059520 z^7 + 184559760 z^6 + 63206640 z^5 - 15335775 z^4 + 7635600 z^3 - 4044600 z^2 + 1663200 z - 340200))$$

07.25.03.aleb.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{42525} (-16 z^{11} - 984 z^{10} - 22756 z^9 - 249774 z^8 - 1343680 z^7 - 3227280 z^6 - 2358720 z^5 + 480480 z^4 - 249480 z^3 + 170100 z^2 - 110250 z + 42525) - \frac{1}{42525} e^z \sqrt{\pi} z^{11/2} (16 z^6 + 992 z^5 + 23240 z^4 + 260680 z^3 + 1458345 z^2 + 3798480 z + 3527160) \operatorname{erf}(\sqrt{z})$$

07.25.03.alec.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{42525} (16z^{11} - 984z^{10} + 22756z^9 - 249774z^8 + 1343680z^7 - 3227280z^6 + 2358720z^5 + 480480z^4 + 249480z^3 + 170100z^2 + 110250z + 42525) - \frac{1}{42525} e^{-z} \sqrt{\pi} z^{11/2} (16z^6 - 992z^5 + 23240z^4 - 260680z^3 + 1458345z^2 - 3798480z + 3527160) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aled.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, 2; z\right) = -\frac{1}{340200} (e^z (256z^{11} + 14336z^{10} + 297216z^9 + 2860800z^8 + 13035360z^7 + 24776640z^6 + 11123280z^5 - 3533040z^4 + 2329425z^3 - 1682100z^2 + 1001700z - 340200))$$

07.25.03.alee.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{14175} (-8z^{10} - 396z^9 - 7026z^8 - 54815z^7 - 181560z^6 - 181440z^5 + 43680z^4 - 27720z^3 + 24300z^2 - 22050z + 14175) - \frac{e^z \sqrt{\pi} z^{11/2} (16z^5 + 800z^4 + 14440z^3 + 116280z^2 + 411825z + 503880) \operatorname{erf}(\sqrt{z})}{28350}$$

07.25.03.alef.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16z^5 - 800z^4 + 14440z^3 - 116280z^2 + 411825z - 503880) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{28350} + \frac{1}{14175} (-8z^{10} + 396z^9 - 7026z^8 + 54815z^7 - 181560z^6 + 181440z^5 + 43680z^4 + 27720z^3 + 24300z^2 + 22050z + 14175)$$

07.25.03.aleg.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, 3; z\right) = -\frac{1}{170100} (e^z (256z^{10} + 11264z^9 + 173312z^8 + 1127680z^7 + 2886240z^6 + 1686720z^5 - 683760z^4 + 569520z^3 - 518175z^2 + 390600z - 170100))$$

07.25.03.aleh.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{-8z^9 - 300z^8 - 3730z^7 - 17655z^6 - 24192z^5 + 6720z^4 - 5040z^3 + 5400z^2 - 6300z + 5670}{5670} - \frac{e^z \sqrt{\pi} z^{11/2} (16z^4 + 608z^3 + 7752z^2 + 38760z + 62985) \operatorname{erf}(\sqrt{z})}{11340}$$

07.25.03.alei.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670}{5670} - \frac{e^{-z} \sqrt{\pi} z^{11/2} (16z^4 - 608z^3 + 7752z^2 - 38760z + 62985) \operatorname{erfi}(\sqrt{z})}{11340}$$

07.25.03.alej.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, 4; z\right) = -\frac{1}{56700} \left(e^z (256 z^9 + 8192 z^8 + 83200 z^7 + 295680 z^6 + 225120 z^5 - 114240 z^4 + 115920 z^3 - 126000 z^2 + 111825 z - 56700) \right)$$

07.25.03.alek.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{1620 z^3} (-8 z^{11} - 204 z^{10} - 1490 z^9 - 2847 z^8 + 904 z^7 - 840 z^6 + 1440 z^5 - 4200 z^4 + 16020 z^3 - 60480 z^2 + 201600 z - 604800) + \frac{1}{3240 z^{7/2}} \left(e^z \sqrt{\pi} (-16 z^{12} - 416 z^{11} - 3176 z^{10} - 7000 z^9 + 15 z^8 - 120 z^7 + 840 z^6 - 5040 z^5 + 25200 z^4 - 100800 z^3 + 302400 z^2 - 604800 z + 604800) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alel.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{1620 z^3} (-8 z^{11} + 204 z^{10} - 1490 z^9 + 2847 z^8 + 904 z^7 + 840 z^6 + 1440 z^5 + 4200 z^4 + 16020 z^3 + 60480 z^2 + 201600 z + 604800) + \frac{1}{3240 z^{7/2}} \left(e^{-z} \sqrt{\pi} (16 z^{12} - 416 z^{11} + 3176 z^{10} - 7000 z^9 - 15 z^8 - 120 z^7 - 840 z^6 - 5040 z^5 - 25200 z^4 - 100800 z^3 - 302400 z^2 - 604800 z - 604800) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alem.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, 5; z\right) = -\frac{1}{14175} e^z (256 z^8 + 5120 z^7 + 26880 z^6 + 26880 z^5 - 16800 z^4 + 20160 z^3 - 25200 z^2 + 25200 z - 14175)$$

07.25.03.alen.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{360 z^4} (-8 z^{11} - 108 z^{10} - 306 z^9 + 169 z^8 - 672 z^7 + 4680 z^6 - 31920 z^5 + 191160 z^4 - 967680 z^3 + 4011840 z^2 - 13305600 z + 38102400) + \frac{1}{720 z^{9/2}} \left(e^z \sqrt{\pi} (-16 z^{12} - 224 z^{11} - 712 z^{10} + 120 z^9 - 1065 z^8 + 8400 z^7 - 57960 z^6 + 342720 z^5 - 1688400 z^4 + 6652800 z^3 - 19656000 z^2 + 38707200 z - 38102400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aleo.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{360 z^4} (8 z^{11} - 108 z^{10} + 306 z^9 + 169 z^8 + 672 z^7 + 4680 z^6 + 31920 z^5 + 191160 z^4 + 967680 z^3 + 4011840 z^2 + 13305600 z + 38102400) + \frac{1}{720 z^{9/2}} \left(e^{-z} \sqrt{\pi} (-16 z^{12} + 224 z^{11} - 712 z^{10} - 120 z^9 - 1065 z^8 - 8400 z^7 - 57960 z^6 - 342720 z^5 - 1688400 z^4 - 6652800 z^3 - 19656000 z^2 - 38707200 z - 38102400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alep.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{9}{2}, 6; z\right) = \frac{1}{2835 z^5} \left(e^z (-256 z^{12} - 2048 z^{11} - 4352 z^{10} + 16640 z^9 - 132960 z^8 + 1043520 z^7 - 7279440 z^6 + 43651440 z^5 - 218243025 z^4 + 872972100 z^3 - 2618916300 z^2 + 5237832600 z - 5237832600) \right) + \frac{1847560}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = -\frac{7}{2}$

07.25.03.aleq.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{496125} \left(256 z^{15} + 28288 z^{14} + 1284544 z^{13} + 31285792 z^{12} + 447669600 z^{11} + 3878656320 z^{10} + 20242678080 z^9 + 61346096640 z^8 + 99874091520 z^7 + 75072816000 z^6 + 18637819200 z^5 + 454053600 z^4 + 8731800 z^3 + 1530900 z^2 + 708750 z + 496125 \right) + \frac{1}{496125} \left(16 e^z \sqrt{\pi} (16 z^{31/2} + 1776 z^{29/2} + 81160 z^{27/2} + 1994640 z^{25/2} + 28919025 z^{23/2} + 255520545 z^{21/2} + 1374495570 z^{19/2} + 4372996950 z^{17/2} + 7734547800 z^{15/2} + 6782643000 z^{13/2} + 2355771600 z^{11/2} + 183783600 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aler.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{496125} \left(-256 z^{15} + 28288 z^{14} - 1284544 z^{13} + 31285792 z^{12} - 447669600 z^{11} + 3878656320 z^{10} - 20242678080 z^9 + 61346096640 z^8 - 99874091520 z^7 + 75072816000 z^6 - 18637819200 z^5 + 454053600 z^4 - 8731800 z^3 + 1530900 z^2 - 708750 z + 496125 \right) + \frac{1}{496125} \left(16 e^{-z} \sqrt{\pi} (16 z^{31/2} - 1776 z^{29/2} + 81160 z^{27/2} - 1994640 z^{25/2} + 28919025 z^{23/2} - 255520545 z^{21/2} + 1374495570 z^{19/2} - 4372996950 z^{17/2} + 7734547800 z^{15/2} - 6782643000 z^{13/2} + 2355771600 z^{11/2} - 183783600 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ales.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{70875} \left(-128 z^{14} - 12736 z^{13} - 514976 z^{12} - 11014320 z^{11} - 135962400 z^{10} - 992510880 z^9 - 4222604160 z^8 - 9927423360 z^7 - 11539382400 z^6 - 5232427200 z^5 - 454053600 z^4 + 8731800 z^3 + 510300 z^2 + 141750 z + 70875 \right) - \frac{1}{70875} \left(8 e^z \sqrt{\pi} (16 z^{29/2} + 1600 z^{27/2} + 65160 z^{25/2} + 1408200 z^{23/2} + 17653425 z^{21/2} + 131946570 z^{19/2} + 582816150 z^{17/2} + 1458916200 z^{15/2} + 1898883000 z^{13/2} + 1085994000 z^{11/2} + 183783600 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alet.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{70875} \left(-128 z^{14} + 12736 z^{13} - 514976 z^{12} + 11014320 z^{11} - 135962400 z^{10} + 992510880 z^9 - 4222604160 z^8 + 9927423360 z^7 - 11539382400 z^6 + 5232427200 z^5 - 454053600 z^4 - 8731800 z^3 + 510300 z^2 - 141750 z + 70875 \right) + \frac{1}{70875} \left(8 e^{-z} \sqrt{\pi} \left(16 z^{29/2} - 1600 z^{27/2} + 65160 z^{25/2} - 1408200 z^{23/2} + 17653425 z^{21/2} - 131946570 z^{19/2} + 582816150 z^{17/2} - 1458916200 z^{15/2} + 1898883000 z^{13/2} - 1085994000 z^{11/2} + 183783600 z^{9/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aleu.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{14175} \left(64 z^{13} + 5664 z^{12} + 200880 z^{11} + 3701992 z^{10} + 38458920 z^9 + 228667680 z^8 + 754710240 z^7 + 1269777600 z^6 + 899458560 z^5 + 151351200 z^4 - 8731800 z^3 + 510300 z^2 + 47250 z + 14175 \right) + \frac{1}{14175} \left(4 e^z \sqrt{\pi} \left(16 z^{27/2} + 1424 z^{25/2} + 50920 z^{23/2} + 949920 z^{21/2} + 10054065 z^{19/2} + 61568115 z^{17/2} + 213407460 z^{15/2} + 391878900 z^{13/2} + 331367400 z^{11/2} + 91891800 z^{9/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alev.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; -z\right) = \frac{1}{14175} \left(-64 z^{13} + 5664 z^{12} - 200880 z^{11} + 3701992 z^{10} - 38458920 z^9 + 228667680 z^8 - 754710240 z^7 + 1269777600 z^6 - 899458560 z^5 + 151351200 z^4 + 8731800 z^3 + 510300 z^2 - 47250 z + 14175 \right) + \frac{1}{14175} \left(4 e^{-z} \sqrt{\pi} \left(16 z^{27/2} - 1424 z^{25/2} + 50920 z^{23/2} - 949920 z^{21/2} + 10054065 z^{19/2} - 61568115 z^{17/2} + 213407460 z^{15/2} - 391878900 z^{13/2} + 331367400 z^{11/2} - 91891800 z^{9/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alew.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{4725} \left(-32 z^{12} - 2480 z^{11} - 75656 z^{10} - 1171292 z^9 - 9894000 z^8 - 45577680 z^7 - 107671200 z^6 - 110990880 z^5 - 30270240 z^4 + 2910600 z^3 - 510300 z^2 + 47250 z + 4725 \right) - \frac{1}{4725} \left(2 e^z \sqrt{\pi} \left(16 z^{25/2} + 1248 z^{23/2} + 38440 z^{21/2} + 603960 z^{19/2} + 5222385 z^{17/2} + 25011420 z^{15/2} + 63338940 z^{13/2} + 75184200 z^{11/2} + 30630600 z^{9/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alex.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{4725} \left(-32z^{12} + 2480z^{11} - 75656z^{10} + 1171292z^9 - 9894000z^8 + 45577680z^7 - 107671200z^6 + 110990880z^5 - 30270240z^4 - 2910600z^3 - 510300z^2 - 47250z + 4725 \right) + \frac{1}{4725} \left(2e^{-z}\sqrt{\pi} \left(16z^{25/2} - 1248z^{23/2} + 38440z^{21/2} - 603960z^{19/2} + 5222385z^{17/2} - 25011420z^{15/2} + 63338940z^{13/2} - 75184200z^{11/2} + 30630600z^{9/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aley.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{4725} \left(16z^{11} + 1064z^{10} + 27196z^9 + 341394z^8 + 2228190z^7 + 7332780z^6 + 10630620z^5 + 4324320z^4 - 582120z^3 + 170100z^2 - 47250z + 4725 \right) + \frac{1}{4725} \left(e^z\sqrt{\pi} \left(16z^{23/2} + 1072z^{21/2} + 27720z^{19/2} + 354480z^{17/2} + 2386545z^{15/2} + 8305605z^{13/2} + 13505310z^{11/2} + 7657650z^{9/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alez.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{4725} \left(-16z^{11} + 1064z^{10} - 27196z^9 + 341394z^8 - 2228190z^7 + 7332780z^6 - 10630620z^5 + 4324320z^4 + 582120z^3 + 170100z^2 + 47250z + 4725 \right) + \frac{1}{4725} \left(e^{-z}\sqrt{\pi} \left(16z^{23/2} - 1072z^{21/2} + 27720z^{19/2} - 354480z^{17/2} + 2386545z^{15/2} - 8305605z^{13/2} + 13505310z^{11/2} - 7657650z^{9/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alf0.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, 1; z\right) = \frac{1}{37800} \left(e^z \left(128z^{11} + 7872z^{10} + 184160z^9 + 2087760z^8 + 12084120z^7 + 34319460z^6 + 40800690z^5 + 11202975z^4 - 2066400z^3 + 718200z^2 - 226800z + 37800 \right) \right)$$

07.25.03.alf1.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{e^z\sqrt{\pi} \left(16z^6 + 896z^5 + 18760z^4 + 185640z^3 + 901425z^2 + 1995630z + 1531530 \right) \operatorname{erf}(\sqrt{z})z^{9/2}}{9450} + \frac{1}{4725} \left(8z^{10} + 444z^9 + 9162z^8 + 88451z^7 + 410550z^6 + 827190z^5 + 480480z^4 - 83160z^3 + 34020z^2 - 15750z + 4725 \right)$$

07.25.03.af2.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{4725} (8z^{10} - 444z^9 + 9162z^8 - 88451z^7 + 410550z^6 - 827190z^5 + 480480z^4 + 83160z^3 + 34020z^2 + 15750z + 4725) - \frac{1}{9450} e^{-z} \sqrt{\pi} z^{9/2} (16z^6 - 896z^5 + 18760z^4 - 185640z^3 + 901425z^2 - 1995630z + 1531530) \operatorname{erfi}(\sqrt{z})$$

07.25.03.af3.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, 2; z\right) = \frac{1}{37800} (e^z (128z^{10} + 6464z^9 + 119520z^8 + 1012080z^7 + 3987480z^6 + 6407100z^5 + 2358090z^4 - 587475z^3 + 283500z^2 - 132300z + 37800))$$

07.25.03.af4.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{e^z \sqrt{\pi} (16z^5 + 720z^4 + 11560z^3 + 81600z^2 + 248625z + 255255) \operatorname{erf}(\sqrt{z}) z^{9/2}}{6300} + \frac{8z^9 + 356z^8 + 5606z^7 + 38165z^6 + 107625z^5 + 87360z^4 - 18480z^3 + 9720z^2 - 6300z + 3150}{3150}$$

07.25.03.af5.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16z^5 - 720z^4 + 11560z^3 - 81600z^2 + 248625z - 255255) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{6300} + \frac{1}{3150} (-8z^9 + 356z^8 - 5606z^7 + 38165z^6 - 107625z^5 + 87360z^4 + 18480z^3 + 9720z^2 + 6300z + 3150)$$

07.25.03.af6.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, 3; z\right) = \frac{1}{18900} e^z (128z^9 + 5056z^8 + 68960z^7 + 391440z^6 + 855960z^5 + 415380z^4 - 134190z^3 + 83475z^2 - 50400z + 18900)$$

07.25.03.af7.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z \sqrt{\pi} (16z^4 + 544z^3 + 6120z^2 + 26520z + 36465) \operatorname{erf}(\sqrt{z}) z^{9/2}}{2520} + \frac{8z^8 + 268z^7 + 2930z^6 + 11919z^5 + 13440z^4 - 3360z^3 + 2160z^2 - 1800z + 1260}{1260}$$

07.25.03.af8.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260}{1260} - \frac{e^{-z} \sqrt{\pi} z^{9/2} (16z^4 - 544z^3 + 6120z^2 - 26520z + 36465) \operatorname{erfi}(\sqrt{z})}{2520}$$

07.25.03.af9.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, 4; z\right) = \frac{e^z (128z^8 + 3648z^7 + 32480z^6 + 99120z^5 + 63000z^4 - 25620z^3 + 19530z^2 - 14175z + 6300)}{6300}$$

07.25.03.alfa.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{360 z^3} (8 z^{10} + 180 z^9 + 1134 z^8 + 1793 z^7 - 525 z^6 + 450 z^5 - 750 z^4 + 2160 z^3 - 7560 z^2 + 25200 z - 75600) + \frac{1}{720 z^{7/2}} \left(e^z \sqrt{\pi} (16 z^{11} + 368 z^{10} + 2440 z^9 + 4560 z^8 - 15 z^7 + 105 z^6 - 630 z^5 + 3150 z^4 - 12600 z^3 + 37800 z^2 - 75600 z + 75600) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alfb.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{360 z^3} (-8 z^{10} + 180 z^9 - 1134 z^8 + 1793 z^7 + 525 z^6 + 450 z^5 + 750 z^4 + 2160 z^3 + 7560 z^2 + 25200 z + 75600) + \frac{1}{720 z^{7/2}} \left(e^{-z} \sqrt{\pi} (16 z^{11} - 368 z^{10} + 2440 z^9 - 4560 z^8 - 15 z^7 - 105 z^6 - 630 z^5 - 3150 z^4 - 12600 z^3 - 37800 z^2 - 75600 z - 75600) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alfc.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, 5; z\right) = \frac{e^z (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575)}{1575}$$

07.25.03.alfd.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{80 z^4} (8 z^{10} + 92 z^9 + 218 z^8 - 133 z^7 + 570 z^6 - 3630 z^5 + 21480 z^4 - 108360 z^3 + 448560 z^2 - 1486800 z + 4233600) + \frac{1}{160 z^{9/2}} \left(e^z \sqrt{\pi} (16 z^{11} + 192 z^{10} + 520 z^9 - 120 z^8 + 945 z^7 - 6510 z^6 + 38430 z^5 - 189000 z^4 + 743400 z^3 - 2192400 z^2 + 4309200 z - 4233600) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alfe.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{80 z^4} (8 z^{10} - 92 z^9 + 218 z^8 + 133 z^7 + 570 z^6 + 3630 z^5 + 21480 z^4 + 108360 z^3 + 448560 z^2 + 1486800 z + 4233600) + \frac{1}{160 z^{9/2}} \left(e^{-z} \sqrt{\pi} (-16 z^{11} + 192 z^{10} - 520 z^9 - 120 z^8 - 945 z^7 - 6510 z^6 - 38430 z^5 - 189000 z^4 - 743400 z^3 - 2192400 z^2 - 4309200 z - 4233600) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alff.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{7}{2}, 6; z\right) = \frac{1}{315 z^5} \left(e^z (128 z^{11} + 832 z^{10} + 1760 z^9 - 7440 z^8 + 55\,320 z^7 - 383\,460 z^6 + 2\,297\,610 z^5 - 11\,486\,475 z^4 + 45\,945\,900 z^3 - 137\,837\,700 z^2 + 275\,675\,400 z - 275\,675\,400) \right) + \frac{875\,160}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = -\frac{5}{2}$

07.25.03.alfg.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{10\,125} \left(64 z^{13} + 5728 z^{12} + 205\,968 z^{11} + 3\,862\,200 z^{10} + 41\,041\,920 z^9 + 251\,702\,640 z^8 + 869\,316\,480 z^7 + 1\,574\,988\,480 z^6 + 1\,291\,118\,400 z^5 + 342\,856\,800 z^4 + 8\,731\,800 z^3 + 170\,100 z^2 + 28\,350 z + 10\,125 \right) + \frac{1}{10\,125} \left(4 e^z \sqrt{\pi} \left(16 z^{27/2} + 1440 z^{25/2} + 52\,200 z^{23/2} + 990\,600 z^{21/2} + 10\,719\,225 z^{19/2} + 67\,631\,220 z^{17/2} + 244\,660\,050 z^{15/2} + 480\,276\,000 z^{13/2} + 458\,055\,000 z^{11/2} + 169\,884\,000 z^{9/2} + 13\,899\,600 z^{7/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alfh.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{10\,125} \left(-64 z^{13} + 5728 z^{12} - 205\,968 z^{11} + 3\,862\,200 z^{10} - 41\,041\,920 z^9 + 251\,702\,640 z^8 - 869\,316\,480 z^7 + 1\,574\,988\,480 z^6 - 1\,291\,118\,400 z^5 + 342\,856\,800 z^4 - 8\,731\,800 z^3 + 170\,100 z^2 - 28\,350 z + 10\,125 \right) + \frac{1}{10\,125} \left(4 e^{-z} \sqrt{\pi} \left(16 z^{27/2} - 1440 z^{25/2} + 52\,200 z^{23/2} - 990\,600 z^{21/2} + 10\,719\,225 z^{19/2} - 67\,631\,220 z^{17/2} + 244\,660\,050 z^{15/2} - 480\,276\,000 z^{13/2} + 458\,055\,000 z^{11/2} - 169\,884\,000 z^{9/2} + 13\,899\,600 z^{7/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alfi.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{2025} \left(-32 z^{12} - 2544 z^{11} - 80\,104 z^{10} - 1\,291\,500 z^9 - 11\,517\,480 z^8 - 57\,303\,120 z^7 - 152\,605\,440 z^6 - 195\,829\,920 z^5 - 95\,752\,800 z^4 - 8\,731\,800 z^3 + 170\,100 z^2 + 9450 z + 2025 \right) - \frac{1}{2025} \left(2 e^z \sqrt{\pi} \left(16 z^{25/2} + 1280 z^{23/2} + 40\,680 z^{21/2} + 665\,160 z^{19/2} + 6\,063\,105 z^{17/2} + 31\,252\,590 z^{15/2} + 88\,397\,100 z^{13/2} + 126\,687\,600 z^{11/2} + 77\,992\,200 z^{9/2} + 13\,899\,600 z^{7/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alfj.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{2025} \left(-32 z^{12} + 2544 z^{11} - 80\,104 z^{10} + 1\,291\,500 z^9 - 11\,517\,480 z^8 + 57\,303\,120 z^7 - 152\,605\,440 z^6 + 195\,829\,920 z^5 - 95\,752\,800 z^4 + 8\,731\,800 z^3 + 170\,100 z^2 - 9450 z + 2025 \right) + \frac{1}{2025} \left(2 e^{-z} \sqrt{\pi} \left(16 z^{25/2} - 1280 z^{23/2} + 40\,680 z^{21/2} - 665\,160 z^{19/2} + 6\,063\,105 z^{17/2} - 31\,252\,590 z^{15/2} + 88\,397\,100 z^{13/2} - 126\,687\,600 z^{11/2} + 77\,992\,200 z^{9/2} - 13\,899\,600 z^{7/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alfk.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{675} \left(16 z^{11} + 1112 z^{10} + 30\,052 z^9 + 405\,870 z^8 + 2\,931\,360 z^7 + 11\,233\,560 z^6 + 21\,209\,760 z^5 + 16\,370\,640 z^4 + 2\,910\,600 z^3 - 170\,100 z^2 + 9450 z + 675 \right) + \frac{1}{675} e^z \sqrt{\pi} \left(16 z^{23/2} + 1120 z^{21/2} + 30\,600 z^{19/2} + 420\,360 z^{17/2} + 3\,120\,585 z^{15/2} + 12\,529\,080 z^{13/2} + 25\,751\,700 z^{11/2} + 23\,680\,800 z^{9/2} + 6\,949\,800 z^{7/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.alfi.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{675} \left(-16 z^{11} + 1112 z^{10} - 30\,052 z^9 + 405\,870 z^8 - 2\,931\,360 z^7 + 11\,233\,560 z^6 - 21\,209\,760 z^5 + 16\,370\,640 z^4 - 2\,910\,600 z^3 - 170\,100 z^2 - 9450 z + 675 \right) + \frac{1}{675} e^{-z} \sqrt{\pi} \left(16 z^{23/2} - 1120 z^{21/2} + 30\,600 z^{19/2} - 420\,360 z^{17/2} + 3\,120\,585 z^{15/2} - 12\,529\,080 z^{13/2} + 25\,751\,700 z^{11/2} - 23\,680\,800 z^{9/2} + 6\,949\,800 z^{7/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alfm.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{675} \left(-8 z^{10} - 476 z^9 - 10\,746 z^8 - 117\,195 z^7 - 650\,130 z^6 - 1\,763\,190 z^5 - 2\,007\,720 z^4 - 582\,120 z^3 + 56\,700 z^2 - 9450 z + 675 \right) + \frac{1}{1350} \left(e^z \sqrt{\pi} \left(-16 z^{21/2} - 960 z^{19/2} - 21\,960 z^{17/2} - 244\,680 z^{15/2} - 1\,407\,825 z^{13/2} - 4\,082\,130 z^{11/2} - 5\,341\,050 z^{9/2} - 2\,316\,600 z^{7/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alfn.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{675} \left(-8 z^{10} + 476 z^9 - 10\,746 z^8 + 117\,195 z^7 - 650\,130 z^6 + 1\,763\,190 z^5 - 2\,007\,720 z^4 + 582\,120 z^3 + 56\,700 z^2 + 9450 z + 675 \right) + \frac{1}{1350} \left(e^{-z} \sqrt{\pi} \left(16 z^{21/2} - 960 z^{19/2} + 21\,960 z^{17/2} - 244\,680 z^{15/2} + 1\,407\,825 z^{13/2} - 4\,082\,130 z^{11/2} + 5\,341\,050 z^{9/2} - 2\,316\,600 z^{7/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alf0.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, 1; z\right) = \frac{1}{5400} (e^z (64 z^{10} + 3520 z^9 + 72720 z^8 + 716640 z^7 + 3533820 z^6 + 8325180 z^5 + 7912575 z^4 + 1645200 z^3 - 210600 z^2 + 43200 z - 5400))$$

07.25.03.alfp.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{1350} (-8 z^9 - 396 z^8 - 7186 z^7 - 59895 z^6 - 234000 z^5 - 381810 z^4 - 166320 z^3 + 22680 z^2 - 6300 z + 1350) - \frac{e^z \sqrt{\pi} z^{7/2} (16 z^6 + 800 z^5 + 14760 z^4 + 126600 z^3 + 521625 z^2 + 952380 z + 579150) \operatorname{erf}(\sqrt{z})}{2700}$$

07.25.03.alfq.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{1350} (8 z^9 - 396 z^8 + 7186 z^7 - 59895 z^6 + 234000 z^5 - 381810 z^4 + 166320 z^3 + 22680 z^2 + 6300 z + 1350) - \frac{e^{-z} \sqrt{\pi} z^{7/2} (16 z^6 - 800 z^5 + 14760 z^4 - 126600 z^3 + 521625 z^2 - 952380 z + 579150) \operatorname{erfi}(\sqrt{z})}{2700}$$

07.25.03.alfs.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, 2; z\right) = \frac{1}{5400} e^z (64 z^9 + 2880 z^8 + 46800 z^7 + 342240 z^6 + 1138140 z^5 + 1496340 z^4 + 430875 z^3 - 78300 z^2 + 24300 z - 5400)$$

07.25.03.alfs.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{900} (-8 z^8 - 316 z^7 - 4346 z^6 - 25275 z^5 - 58890 z^4 - 36960 z^3 + 6480 z^2 - 2520 z + 900) - \frac{e^z \sqrt{\pi} z^{7/2} (16 z^5 + 640 z^4 + 9000 z^3 + 54600 z^2 + 139425 z + 115830) \operatorname{erf}(\sqrt{z})}{1800}$$

07.25.03.alft.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16 z^5 - 640 z^4 + 9000 z^3 - 54600 z^2 + 139425 z - 115830) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{1800} + \frac{1}{900} (-8 z^8 + 316 z^7 - 4346 z^6 + 25275 z^5 - 58890 z^4 + 36960 z^3 + 6480 z^2 + 2520 z + 900)$$

07.25.03.alfu.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, 3; z\right) = -\frac{e^z (64 z^8 + 2240 z^7 + 26640 z^6 + 129120 z^5 + 234300 z^4 + 90540 z^3 - 21825 z^2 + 9000 z - 2700)}{2700}$$

07.25.03.alfv.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{360} (-8z^7 - 236z^6 - 2226z^5 - 7575z^4 - 6720z^3 + 1440z^2 - 720z + 360) - \frac{1}{720} e^z \sqrt{\pi} z^{7/2} (16z^4 + 480z^3 + 4680z^2 + 17160z + 19305) \operatorname{erf}(\sqrt{z})$$

07.25.03.alfw.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{360} (8z^7 - 236z^6 + 2226z^5 - 7575z^4 + 6720z^3 + 1440z^2 + 720z + 360) - \frac{1}{720} e^{-z} \sqrt{\pi} z^{7/2} (16z^4 - 480z^3 + 4680z^2 - 17160z + 19305) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alfx.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, 4; z\right) = -\frac{1}{900} e^z (64z^7 + 1600z^6 + 12240z^5 + 31200z^4 + 15900z^3 - 4860z^2 + 2475z - 900)$$

07.25.03.alfy.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{7(8z^9 + 156z^8 + 826z^7 + 1035z^6 - 270z^5 + 210z^4 - 360z^3 + 1080z^2 - 3600z + 10800)}{720z^3} - \frac{1}{1440z^{7/2}} (7e^z \sqrt{\pi} (16z^{10} + 320z^9 + 1800z^8 + 2760z^7 - 15z^6 + 90z^5 - 450z^4 + 1800z^3 - 5400z^2 + 10800z - 10800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alfz.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{1440z^{7/2}} (7e^{-z} \sqrt{\pi} (16z^{10} - 320z^9 + 1800z^8 - 2760z^7 - 15z^6 - 90z^5 - 450z^4 - 1800z^3 - 5400z^2 - 10800z - 10800) \operatorname{erfi}(\sqrt{z})) - \frac{7(8z^9 - 156z^8 + 826z^7 - 1035z^6 - 270z^5 - 210z^4 - 360z^3 - 1080z^2 - 3600z - 10800)}{720z^3}$$

07.25.03.alg0.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, 5; z\right) = -\frac{1}{225} e^z (64z^6 + 960z^5 + 3600z^4 + 2400z^3 - 900z^2 + 540z - 225)$$

07.25.03.alg1.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{1}{160z^4} 7(8z^9 + 76z^8 + 146z^7 - 105z^6 + 480z^5 - 2730z^4 + 13680z^3 - 56520z^2 + 187200z - 529200) - \frac{1}{320z^{9/2}} (7e^z \sqrt{\pi} (16z^{10} + 160z^9 + 360z^8 - 120z^7 + 825z^6 - 4860z^5 + 23850z^4 - 93600z^3 + 275400z^2 - 540000z + 529200) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alg2.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{7(8z^9 - 76z^8 + 146z^7 + 105z^6 + 480z^5 + 2730z^4 + 13680z^3 + 56520z^2 + 187200z + 529200)}{160z^4} - \frac{1}{320z^{9/2}} \left(7e^{-z}\sqrt{\pi}(16z^{10} - 160z^9 + 360z^8 + 120z^7 + 825z^6 + 4860z^5 + 23850z^4 + 93600z^3 + 275400z^2 + 540000z + 529200)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.alg3.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{5}{2}, 6; z\right) = \frac{1}{45z^5} \left(e^z(-64z^{10} - 320z^9 - 720z^8 + 3360z^7 - 22620z^6 + 135180z^5 - 675675z^4 + 2702700z^3 - 8108100z^2 + 16216200z - 16216200)\right) + \frac{360360}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = -\frac{3}{2}$

07.25.03.alg4.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{405} \left(16z^{11} + 1128z^{10} + 31036z^9 + 429042z^8 + 3198670z^7 + 12838800z^6 + 26131248z^5 + 23371920z^4 + 6569640z^3 + 170100z^2 + 3150z + 405\right) + \frac{1}{405} e^{-z}\sqrt{\pi} \left(16z^{23/2} + 1136z^{21/2} + 31592z^{19/2} + 444016z^{17/2} + 3399009z^{15/2} + 14257545z^{13/2} + 31366920z^{11/2} + 32586840z^{9/2} + 12818520z^{7/2} + 1081080z^{5/2}\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.alg5.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{405} \left(-16z^{11} + 1128z^{10} - 31036z^9 + 429042z^8 - 3198670z^7 + 12838800z^6 - 26131248z^5 + 23371920z^4 - 6569640z^3 + 170100z^2 - 3150z + 405\right) + \frac{1}{405} e^{-z}\sqrt{\pi} \left(16z^{23/2} - 1136z^{21/2} + 31592z^{19/2} - 444016z^{17/2} + 3399009z^{15/2} - 14257545z^{13/2} + 31366920z^{11/2} - 32586840z^{9/2} + 12818520z^{7/2} - 1081080z^{5/2}\right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alg6.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{135} \left(-8z^{10} - 492z^9 - 11586z^8 - 133655z^7 - 802620z^6 - 2460744z^5 - 3500640z^4 - 1829520z^3 - 170100z^2 + 3150z + 135\right) + \frac{1}{270} e^{-z}\sqrt{\pi} \left(-16z^{21/2} - 992z^{19/2} - 23656z^{17/2} - 278424z^{15/2} - 1728465z^{13/2} - 5615220z^{11/2} - 8906040z^{9/2} - 5868720z^{7/2} - 1081080z^{5/2}\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.alg7.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{135}(-8z^{10} + 492z^9 - 11586z^8 + 133655z^7 - 802620z^6 + 2460744z^5 - 3500640z^4 + 1829520z^3 - 170100z^2 - 3150z + 135) + \frac{1}{270}e^{-z}\sqrt{\pi}(16z^{21/2} - 992z^{19/2} + 23656z^{17/2} - 278424z^{15/2} + 1728465z^{13/2} - 5615220z^{11/2} + 8906040z^{9/2} - 5868720z^{7/2} + 1081080z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.alg8.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{270}(8z^9 + 420z^8 + 8230z^7 + 76245z^6 + 348777z^5 + 746460z^4 + 623700z^3 + 113400z^2 - 6300z + 270) + \frac{1}{540}e^z\sqrt{\pi}(16z^{19/2} + 848z^{17/2} + 16872z^{15/2} + 160320z^{13/2} + 766545z^{11/2} + 1782495z^{9/2} + 1776060z^{7/2} + 540540z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.alg9.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{270}(-8z^9 + 420z^8 - 8230z^7 + 76245z^6 - 348777z^5 + 746460z^4 - 623700z^3 + 113400z^2 + 6300z + 270) + \frac{1}{540}e^{-z}\sqrt{\pi}(16z^{19/2} - 848z^{17/2} + 16872z^{15/2} - 160320z^{13/2} + 766545z^{11/2} - 1782495z^{9/2} + 1776060z^{7/2} - 540540z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.alga.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, 1; z\right) = \frac{1}{1080}e^z(32z^9 + 1552z^8 + 27824z^7 + 233112z^6 + 951018z^5 + 1785045z^4 + 1278720z^3 + 183240z^2 - 13680z + 1080)$$

07.25.03.algb.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z\sqrt{\pi}(16z^6 + 704z^5 + 11240z^4 + 81640z^3 + 276705z^2 + 398970z + 180180)\operatorname{erf}(\sqrt{z})z^{5/2}}{1080} + \frac{1}{540}(8z^8 + 348z^7 + 5450z^6 + 38259z^5 + 121550z^4 + 152460z^3 + 45360z^2 - 4200z + 540)$$

07.25.03.algc.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{540}(8z^8 - 348z^7 + 5450z^6 - 38259z^5 + 121550z^4 - 152460z^3 + 45360z^2 + 4200z + 540) - \frac{e^{-z}\sqrt{\pi}z^{5/2}(16z^6 - 704z^5 + 11240z^4 - 81640z^3 + 276705z^2 - 398970z + 180180)\operatorname{erfi}(\sqrt{z})}{1080}$$

07.25.03.algd.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, 2; z\right) = \frac{e^z(32z^8 + 1264z^7 + 17712z^6 + 109128z^5 + 296250z^4 + 303795z^3 + 63540z^2 - 7380z + 1080)}{1080}$$

07.25.03.alge.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{720} e^z \sqrt{\pi} (16 z^5 + 560 z^4 + 6760 z^3 + 34320 z^2 + 70785 z + 45045) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{360} (8 z^7 + 276 z^6 + 3246 z^5 + 15665 z^4 + 28875 z^3 + 12960 z^2 - 1680 z + 360)$$

07.25.03.algf.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{720} e^{-z} \sqrt{\pi} (16 z^5 - 560 z^4 + 6760 z^3 - 34320 z^2 + 70785 z - 45045) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{360} (-8 z^7 + 276 z^6 - 3246 z^5 + 15665 z^4 - 28875 z^3 + 12960 z^2 + 1680 z + 360)$$

07.25.03.algg.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, 3; z\right) = \frac{1}{540} e^z (32 z^7 + 976 z^6 + 9904 z^5 + 39800 z^4 + 57450 z^3 + 16545 z^2 - 2640 z + 540)$$

07.25.03.algh.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{288} e^z \sqrt{\pi} (16 z^4 + 416 z^3 + 3432 z^2 + 10296 z + 9009) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{144} (8 z^6 + 204 z^5 + 1618 z^4 + 4431 z^3 + 2880 z^2 - 480 z + 144)$$

07.25.03.algi.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{144} (8 z^6 - 204 z^5 + 1618 z^4 - 4431 z^3 + 2880 z^2 + 480 z + 144) - \frac{1}{288} e^{-z} \sqrt{\pi} z^{5/2} (16 z^4 - 416 z^3 + 3432 z^2 - 10296 z + 9009) \operatorname{erfi}(\sqrt{z})$$

07.25.03.algj.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, 4; z\right) = \frac{1}{180} e^z (32 z^6 + 688 z^5 + 4400 z^4 + 9000 z^3 + 3450 z^2 - 705 z + 180)$$

07.25.03.algk.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(8 z^8 + 132 z^7 + 566 z^6 + 525 z^5 - 115 z^4 + 84 z^3 - 180 z^2 + 600 z - 1800)}{288 z^3} + \frac{1}{576 z^{7/2}} 7 e^z \sqrt{\pi} (16 z^9 + 272 z^8 + 1256 z^7 + 1504 z^6 - 15 z^5 + 75 z^4 - 300 z^3 + 900 z^2 - 1800 z + 1800) \operatorname{erf}(\sqrt{z})$$

07.25.03.algl.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{576 z^{7/2}} 7 e^{-z} \sqrt{\pi} (16 z^9 - 272 z^8 + 1256 z^7 - 1504 z^6 - 15 z^5 - 75 z^4 - 300 z^3 - 900 z^2 - 1800 z - 1800) \operatorname{erfi}(\sqrt{z}) - \frac{7(8 z^8 - 132 z^7 + 566 z^6 - 525 z^5 - 115 z^4 - 84 z^3 - 180 z^2 - 600 z - 1800)}{288 z^3}$$

07.25.03.algm.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, 5; z\right) = \frac{1}{45} e^z (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45)$$

07.25.03.algn.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{7(8z^8 + 60z^7 + 90z^6 - 85z^5 + 402z^4 - 1980z^3 + 8160z^2 - 27000z + 75600)}{64z^4} + \frac{1}{128z^{9/2}} 7e^z \sqrt{\pi} (16z^9 + 128z^8 + 232z^7 - 120z^6 + 705z^5 - 3450z^4 + 13500z^3 - 39600z^2 + 77400z - 75600) \operatorname{erf}(\sqrt{z})$$

07.25.03.algo.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{7(8z^8 - 60z^7 + 90z^6 + 85z^5 + 402z^4 + 1980z^3 + 8160z^2 + 27000z + 75600)}{64z^4} - \frac{1}{128z^{9/2}} 7e^{-z} \sqrt{\pi} (16z^9 - 128z^8 + 232z^7 + 120z^6 + 705z^5 + 3450z^4 + 13500z^3 + 39600z^2 + 77400z + 75600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.algp.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{3}{2}, 6; z\right) = \frac{1}{9z^5} e^z (32z^9 + 112z^8 + 304z^7 - 1528z^6 + 9018z^5 - 45045z^4 + 180180z^3 - 540540z^2 + 1081080z - 1081080) + \frac{120120}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = -\frac{1}{2}$

07.25.03.algq.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{90} (8z^9 + 428z^8 + 8594z^7 + 82295z^6 + 394944z^5 + 913176z^4 + 887040z^3 + 257040z^2 + 6300z + 90) + \frac{1}{180} e^z \sqrt{\pi} (16z^{19/2} + 864z^{17/2} + 17608z^{15/2} + 172776z^{13/2} + 864585z^{11/2} + 2156880z^{9/2} + 2435400z^{7/2} + 997920z^{5/2} + 83160z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.algr.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{90} (-8z^9 + 428z^8 - 8594z^7 + 82295z^6 - 394944z^5 + 913176z^4 - 887040z^3 + 257040z^2 - 6300z + 90) + \frac{1}{180} e^{-z} \sqrt{\pi} (16z^{19/2} - 864z^{17/2} + 17608z^{15/2} - 172776z^{13/2} + 864585z^{11/2} - 2156880z^{9/2} + 2435400z^{7/2} - 997920z^{5/2} + 83160z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.algs.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{180} (-8z^8 - 364z^7 - 6050z^6 - 46167z^5 - 166716z^4 - 263340z^3 - 143640z^2 - 12600z + 180) + \frac{1}{360} e^z \sqrt{\pi} (-16z^{17/2} - 736z^{15/2} - 12456z^{13/2} - 98040z^{11/2} - 374385z^{9/2} - 659340z^{7/2} - 457380z^{5/2} - 83160z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.algt.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{180}(-8z^8 + 364z^7 - 6050z^6 + 46167z^5 - 166716z^4 + 263340z^3 - 143640z^2 + 12600z + 180) + \frac{1}{360}e^{-z}\sqrt{\pi}(16z^{17/2} - 736z^{15/2} + 12456z^{13/2} - 98040z^{11/2} + 374385z^{9/2} - 659340z^{7/2} + 457380z^{5/2} - 83160z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.algu.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, 1; z\right) = -\frac{1}{360}e^z(16z^8 + 672z^7 + 10216z^6 + 70584z^5 + 228465z^4 + 321360z^3 + 157320z^2 + 12960z - 360)$$

07.25.03.algv.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{360}(-8z^7 - 300z^6 - 3954z^5 - 22583z^4 - 55440z^3 - 49140z^2 - 8400z + 360) - \frac{1}{720}e^z\sqrt{\pi}z^{3/2}(16z^6 + 608z^5 + 8200z^4 + 48840z^3 + 130185z^2 + 138600z + 41580)\operatorname{erf}(\sqrt{z})$$

07.25.03.algw.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{360}(8z^7 - 300z^6 + 3954z^5 - 22583z^4 + 55440z^3 - 49140z^2 + 8400z + 360) - \frac{1}{720}e^{-z}\sqrt{\pi}z^{3/2}(16z^6 - 608z^5 + 8200z^4 - 48840z^3 + 130185z^2 - 138600z + 41580)\operatorname{erfi}(\sqrt{z})$$

07.25.03.algx.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, 2; z\right) = -\frac{1}{360}e^z(16z^7 + 544z^6 + 6408z^5 + 32136z^4 + 67785z^3 + 50220z^2 + 6660z - 360)$$

07.25.03.algy.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{240}(-8z^6 - 236z^5 - 2306z^4 - 8855z^3 - 12060z^2 - 3360z + 240) - \frac{1}{480}e^z\sqrt{\pi}z^{3/2}(16z^5 + 480z^4 + 4840z^3 + 19800z^2 + 31185z + 13860)\operatorname{erf}(\sqrt{z})$$

07.25.03.algz.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{480}e^{-z}\sqrt{\pi}(16z^5 - 480z^4 + 4840z^3 - 19800z^2 + 31185z - 13860)\operatorname{erfi}(\sqrt{z})z^{3/2} + \frac{1}{240}(-8z^6 + 236z^5 - 2306z^4 + 8855z^3 - 12060z^2 + 3360z + 240)$$

07.25.03.alh0.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, 3; z\right) = -\frac{1}{180}e^z(16z^6 + 416z^5 + 3496z^4 + 11160z^3 + 11985z^2 + 2280z - 180)$$

07.25.03.alh1.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{96}(-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) - \frac{1}{192}e^z\sqrt{\pi}z^{3/2}(16z^4 + 352z^3 + 2376z^2 + 5544z + 3465)\operatorname{erf}(\sqrt{z})$$

07.25.03.alh2.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{96} (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) - \frac{1}{192} e^{-z} \sqrt{\pi} z^{3/2} (16z^4 - 352z^3 + 2376z^2 - 5544z + 3465) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alh3.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, 4; z\right) = -\frac{1}{60} e^z (16z^5 + 288z^4 + 1480z^3 + 2280z^2 + 585z - 60)$$

07.25.03.alh4.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{7(8z^7 + 108z^6 + 354z^5 + 215z^4 - 36z^3 + 36z^2 - 120z + 360)}{192z^3} - \frac{7e^z \sqrt{\pi} (16z^8 + 224z^7 + 808z^6 + 696z^5 - 15z^4 + 60z^3 - 180z^2 + 360z - 360) \operatorname{erf}(\sqrt{z})}{384z^{7/2}}$$

07.25.03.alh5.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (16z^8 - 224z^7 + 808z^6 - 696z^5 - 15z^4 - 60z^3 - 180z^2 - 360z - 360) \operatorname{erfi}(\sqrt{z})}{384z^{7/2}} - \frac{7(8z^7 - 108z^6 + 354z^5 - 215z^4 - 36z^3 - 36z^2 - 120z - 360)}{192z^3}$$

07.25.03.alh6.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, 5; z\right) = -\frac{1}{15} e^z (16z^4 + 160z^3 + 360z^2 + 120z - 15)$$

07.25.03.alh7.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{21(8z^7 + 44z^6 + 50z^5 - 73z^4 + 336z^3 - 1380z^2 + 4560z - 12600)}{128z^4} - \frac{1}{256z^{9/2}} 21e^z \sqrt{\pi} (16z^8 + 96z^7 + 136z^6 - 120z^5 + 585z^4 - 2280z^3 + 6660z^2 - 12960z + 12600) \operatorname{erf}(\sqrt{z})$$

07.25.03.alh8.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{21(8z^7 - 44z^6 + 50z^5 + 73z^4 + 336z^3 + 1380z^2 + 4560z + 12600)}{128z^4} - \frac{1}{256z^{9/2}} 21e^{-z} \sqrt{\pi} (16z^8 - 96z^7 + 136z^6 + 120z^5 + 585z^4 + 2280z^3 + 6660z^2 + 12960z + 12600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alh9.01

$${}_2F_2\left(\frac{7}{2}, 5; -\frac{1}{2}, 6; z\right) = \frac{e^z (-16z^8 - 32z^7 - 136z^6 + 696z^5 - 3465z^4 + 13860z^3 - 41580z^2 + 83160z - 83160)}{3z^5} + \frac{27720}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = \frac{1}{2}$

07.25.03.alha.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{360} (8z^7 + 308z^6 + 4206z^5 + 25281z^4 + 67347z^3 + 69930z^2 + 19530z + 360) + \frac{1}{720} e^z \sqrt{\pi} (16z^{15/2} + 624z^{13/2} + 8712z^{11/2} + 54480z^{9/2} + 156465z^{7/2} + 189945z^{5/2} + 77490z^{3/2} + 5670\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.alhb.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{360} (-8z^7 + 308z^6 - 4206z^5 + 25281z^4 - 67347z^3 + 69930z^2 - 19530z + 360) + \frac{1}{720} e^{-z} \sqrt{\pi} (16z^{15/2} - 624z^{13/2} + 8712z^{11/2} - 54480z^{9/2} + 156465z^{7/2} - 189945z^{5/2} + 77490z^{3/2} - 5670\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alhc.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, 1; z\right) = \frac{1}{360} e^z (8z^7 + 284z^6 + 3546z^5 + 19335z^4 + 46560z^3 + 44280z^2 + 12240z + 360)$$

07.25.03.alhd.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{720} (8z^6 + 252z^5 + 2698z^4 + 11907z^3 + 20790z^2 + 11130z + 720) + \frac{e^z \sqrt{\pi} \sqrt{z} (16z^6 + 512z^5 + 5640z^4 + 26280z^3 + 51345z^2 + 35910z + 5670) \operatorname{erf}(\sqrt{z})}{1440}$$

07.25.03.alhe.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{720} (8z^6 - 252z^5 + 2698z^4 - 11907z^3 + 20790z^2 - 11130z + 720) - \frac{e^{-z} \sqrt{\pi} \sqrt{z} (16z^6 - 512z^5 + 5640z^4 - 26280z^3 + 51345z^2 - 35910z + 5670) \operatorname{erfi}(\sqrt{z})}{1440}$$

07.25.03.alhf.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, 2; z\right) = \frac{1}{360} e^z (8z^6 + 228z^5 + 2178z^4 + 8445z^3 + 12780z^2 + 5940z + 360)$$

07.25.03.alhg.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{480} (8z^5 + 196z^4 + 1526z^3 + 4365z^2 + 3885z + 480) + \frac{1}{960} e^z \sqrt{\pi} \sqrt{z} (16z^5 + 400z^4 + 3240z^3 + 10080z^2 + 11025z + 2835) \operatorname{erf}(\sqrt{z})$$

07.25.03.alhh.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{480} (-8z^5 + 196z^4 - 1526z^3 + 4365z^2 - 3885z + 480) + \frac{1}{960} e^{-z} \sqrt{\pi} \sqrt{z} (16z^5 - 400z^4 + 3240z^3 - 10080z^2 + 11025z - 2835) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alhi.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, 3; z\right) = \frac{1}{180} e^z (8z^5 + 172z^4 + 1146z^3 + 2715z^2 + 1920z + 180)$$

07.25.03.alhj.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{192} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} \sqrt{z} (16z^4 + 288z^3 + 1512z^2 + 2520z + 945) \operatorname{erf}(\sqrt{z})$$

07.25.03.alhk.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{192} (8z^4 - 140z^3 + 690z^2 - 975z + 192) - \frac{1}{384} e^{-z} \sqrt{\pi} \sqrt{z} (16z^4 - 288z^3 + 1512z^2 - 2520z + 945) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alhl.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, 4; z\right) = \frac{1}{60} e^z (8z^4 + 116z^3 + 450z^2 + 465z + 60)$$

07.25.03.alhm.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7(8z^6 + 84z^5 + 190z^4 + 57z^3 - 9z^2 + 30z - 90)}{384z^3} + \frac{7e^z \sqrt{\pi} (16z^7 + 176z^6 + 456z^5 + 240z^4 - 15z^3 + 45z^2 - 90z + 90) \operatorname{erf}(\sqrt{z})}{768z^{7/2}}$$

07.25.03.alhn.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (16z^7 - 176z^6 + 456z^5 - 240z^4 - 15z^3 - 45z^2 - 90z - 90) \operatorname{erfi}(\sqrt{z})}{768z^{7/2}} - \frac{7(8z^6 - 84z^5 + 190z^4 - 57z^3 - 9z^2 - 30z - 90)}{384z^3}$$

07.25.03.alho.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, 5; z\right) = \frac{1}{15} e^z (8z^3 + 60z^2 + 90z + 15)$$

07.25.03.alhp.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{21(8z^6 + 28z^5 + 26z^4 - 69z^3 + 282z^2 - 930z + 2520)}{256z^4} + \frac{21e^z \sqrt{\pi} (16z^7 + 64z^6 + 72z^5 - 120z^4 + 465z^3 - 1350z^2 + 2610z - 2520) \operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.alhq.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{21(8z^6 - 28z^5 + 26z^4 + 69z^3 + 282z^2 + 930z + 2520)}{256z^4} - \frac{21e^{-z} \sqrt{\pi} (16z^7 - 64z^6 + 72z^5 + 120z^4 + 465z^3 + 1350z^2 + 2610z + 2520) \operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.alhr.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{1}{2}, 6; z\right) = \frac{e^z (8z^7 + 4z^6 + 66z^5 - 315z^4 + 1260z^3 - 3780z^2 + 7560z - 7560)}{3z^5} + \frac{2520}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = 1$

07.25.03.alhs.01

$${}_2F_2\left(\frac{7}{2}, 5; 1, 1; z\right) = \frac{e^{z/2} (16z^7 + 528z^6 + 6124z^5 + 31260z^4 + 72501z^3 + 71613z^2 + 24480z + 1440) I_0\left(\frac{z}{2}\right)}{1440} + \frac{e^{z/2} (16z^7 + 512z^6 + 5620z^5 + 25880z^4 + 48969z^3 + 31356z^2 + 3708z) I_1\left(\frac{z}{2}\right)}{1440}$$

07.25.03.alht.01

$${}_2F_2\left(\frac{7}{2}, 5; 1, \frac{3}{2}; z\right) = \frac{1}{360} e^z (4z^6 + 116z^5 + 1135z^4 + 4560z^3 + 7320z^2 + 3840z + 360)$$

07.25.03.alhu.01

$${}_2F_2\left(\frac{7}{2}, 5; 1, 2; z\right) = \frac{e^{z/2} (16z^6 + 424z^5 + 3780z^4 + 13956z^3 + 21393z^2 + 11880z + 1440) I_0\left(\frac{z}{2}\right)}{1440} + \frac{e^{z/2} (16z^6 + 408z^5 + 3380z^4 + 10764z^3 + 11961z^2 + 2988z) I_1\left(\frac{z}{2}\right)}{1440}$$

07.25.03.alhv.01

$${}_2F_2\left(\frac{7}{2}, 5; 1, \frac{5}{2}; z\right) = \frac{1}{120} e^z (2z^5 + 45z^4 + 320z^3 + 840z^2 + 720z + 120)$$

07.25.03.alhw.01

$${}_2F_2\left(\frac{7}{2}, 5; 1, 3; z\right) = \frac{1}{90} e^{z/2} (2z^5 + 40z^4 + 251z^3 + 588z^2 + 480z + 90) I_0\left(\frac{z}{2}\right) + \frac{1}{360} e^{z/2} z (8z^4 + 152z^3 + 856z^2 + 1564z + 657) I_1\left(\frac{z}{2}\right)$$

07.25.03.alhx.01

$${}_2F_2\left(\frac{7}{2}, 5; 1, \frac{7}{2}; z\right) = \frac{1}{24} e^z (z^4 + 16z^3 + 72z^2 + 96z + 24)$$

07.25.03.alhy.01

$${}_2F_2\left(\frac{7}{2}, 5; 1, 4; z\right) = \frac{1}{120} e^{z/2} (8z^4 + 108z^3 + 404z^2 + 465z + 120) I_0\left(\frac{z}{2}\right) + \frac{1}{120} e^{z/2} z (8z^3 + 100z^2 + 308z + 199) I_1\left(\frac{z}{2}\right)$$

07.25.03.alhz.01

$${}_2F_2\left(\frac{7}{2}, 5; 1, \frac{9}{2}; z\right) = \frac{7e^z (64z^6 + 608z^5 + 1264z^4 + 456z^3 - 60z^2 + 150z - 225)}{3072z^3} + \frac{525\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.ali0.01

$${}_2F_2\left(\frac{7}{2}, 5; 1, \frac{9}{2}; -z\right) = -\frac{7e^{-z} (64z^6 - 608z^5 + 1264z^4 - 456z^3 - 60z^2 - 150z - 225)}{3072z^3} - \frac{525\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.ali1.01

$${}_2F_2\left(\frac{7}{2}, 5; 1, 5; z\right) = \frac{1}{15} e^{z/2} (4z^3 + 28z^2 + 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} z (4z^2 + 24z + 23) I_1\left(\frac{z}{2}\right)$$

07.25.03.ali2.01

$${}_2F_2\left(\frac{7}{2}, 5; 1, \frac{11}{2}; z\right) = \frac{21 e^z (128 z^6 + 384 z^5 + 416 z^4 - 960 z^3 + 3240 z^2 - 7800 z + 11025)}{4096 z^4} + \frac{4725 \sqrt{\pi} (2z - 49) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.ali3.01

$${}_2F_2\left(\frac{7}{2}, 5; 1, \frac{11}{2}; -z\right) = \frac{21 e^{-z} (128 z^6 - 384 z^5 + 416 z^4 + 960 z^3 + 3240 z^2 + 7800 z + 11025)}{4096 z^4} - \frac{4725 \sqrt{\pi} (2z + 49) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.ali4.01

$${}_2F_2\left(\frac{7}{2}, 5; 1, 6; z\right) = \frac{e^{z/2} (4 z^5 + 2 z^4 + 31 z^3 - 120 z^2 + 384 z - 768) I_0\left(\frac{z}{2}\right)}{3 z^3} + \frac{e^{z/2} (4 z^6 - 2 z^5 + 35 z^4 - 160 z^3 + 576 z^2 - 1536 z + 3072) I_1\left(\frac{z}{2}\right)}{3 z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = \frac{3}{2}$

07.25.03.ali5.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{8 z^5 + 204 z^4 + 1682 z^3 + 5271 z^2 + 5600 z + 1230}{1440} + \frac{e^z \sqrt{\pi} (16 z^6 + 416 z^5 + 3560 z^4 + 12040 z^3 + 15225 z^2 + 5460 z + 210) \operatorname{erf}(\sqrt{z})}{2880 \sqrt{z}}$$

07.25.03.ali6.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{-8 z^5 + 204 z^4 - 1682 z^3 + 5271 z^2 - 5600 z + 1230}{1440} + \frac{e^{-z} \sqrt{\pi} (16 z^6 - 416 z^5 + 3560 z^4 - 12040 z^3 + 15225 z^2 - 5460 z + 210) \operatorname{erfi}(\sqrt{z})}{2880 \sqrt{z}}$$

07.25.03.ali7.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{3}{2}, 2; z\right) = \frac{1}{360} e^z (4 z^5 + 92 z^4 + 675 z^3 + 1860 z^2 + 1740 z + 360)$$

07.25.03.ali8.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{960} (8 z^4 + 156 z^3 + 906 z^2 + 1715 z + 750) + \frac{e^z \sqrt{\pi} (16 z^5 + 320 z^4 + 1960 z^3 + 4200 z^2 + 2625 z + 210) \operatorname{erf}(\sqrt{z})}{1920 \sqrt{z}}$$

07.25.03.ali9.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{960} (8 z^4 - 156 z^3 + 906 z^2 - 1715 z + 750) + \frac{e^{-z} \sqrt{\pi} (-16 z^5 + 320 z^4 - 1960 z^3 + 4200 z^2 - 2625 z + 210) \operatorname{erfi}(\sqrt{z})}{1920 \sqrt{z}}$$

07.25.03.alia.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{3}{2}, 3; z\right) = \frac{1}{180} e^z (4z^4 + 68z^3 + 335z^2 + 520z + 180)$$

07.25.03.alib.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{384} (8z^3 + 108z^2 + 370z + 279) + \frac{e^z \sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.alic.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{384} (-8z^3 + 108z^2 - 370z + 279) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.alid.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{3}{2}, 4; z\right) = \frac{1}{60} e^z (4z^3 + 44z^2 + 115z + 60)$$

07.25.03.alie.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(8z^5 + 60z^4 + 74z^3 + 3z^2 - 10z + 30)}{768z^3} + \frac{7e^z \sqrt{\pi} (16z^6 + 128z^5 + 200z^4 + 40z^3 - 15z^2 + 30z - 30) \operatorname{erf}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.alif.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7(8z^5 - 60z^4 + 74z^3 - 3z^2 - 10z - 30)}{768z^3} - \frac{7e^{-z} \sqrt{\pi} (16z^6 - 128z^5 + 200z^4 - 40z^3 - 15z^2 - 30z - 30) \operatorname{erfi}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.alig.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{3}{2}, 5; z\right) = \frac{1}{15} e^z (4z^2 + 20z + 15)$$

07.25.03.alih.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{21(8z^5 + 12z^4 + 18z^3 - 73z^2 + 240z - 630)}{512z^4} + \frac{21e^z \sqrt{\pi} (16z^6 + 32z^5 + 40z^4 - 120z^3 + 345z^2 - 660z + 630) \operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.alii.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z} \sqrt{\pi} (16z^6 - 32z^5 + 40z^4 + 120z^3 + 345z^2 + 660z + 630) \operatorname{erfi}(\sqrt{z})}{1024z^{9/2}} - \frac{21(8z^5 - 12z^4 + 18z^3 + 73z^2 + 240z + 630)}{512z^4}$$

07.25.03.alij.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{3}{2}, 6; z\right) = \frac{e^z (4z^6 - 4z^5 + 35z^4 - 140z^3 + 420z^2 - 840z + 840)}{3z^5} - \frac{280}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = 2$

07.25.03.alik.01

$${}_2F_2\left(\frac{7}{2}, 5; 2, 2; z\right) = \frac{1}{720} e^{z/2} (8z^5 + 168z^4 + 1128z^3 + 2916z^2 + 2781z + 720) I_0\left(\frac{z}{2}\right) + \frac{1}{180} e^{z/2} (2z^5 + 40z^4 + 243z^3 + 504z^2 + 279z + 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.alil.01

$${}_2F_2\left(\frac{7}{2}, 5; 2, \frac{5}{2}; z\right) = \frac{1}{120} e^z (2z^4 + 35z^3 + 180z^2 + 300z + 120)$$

07.25.03.alim.01

$${}_2F_2\left(\frac{7}{2}, 5; 2, 3; z\right) = \frac{1}{360} e^{z/2} (8z^4 + 124z^3 + 564z^2 + 861z + 360) I_0\left(\frac{z}{2}\right) + \frac{1}{360} e^{z/2} (8z^4 + 116z^3 + 452z^2 + 459z + 36) I_1\left(\frac{z}{2}\right)$$

07.25.03.alin.01

$${}_2F_2\left(\frac{7}{2}, 5; 2, \frac{7}{2}; z\right) = \frac{1}{24} e^z (z^3 + 12z^2 + 36z + 24)$$

07.25.03.alio.01

$${}_2F_2\left(\frac{7}{2}, 5; 2, 4; z\right) = \frac{1}{60} e^{z/2} (4z^3 + 40z^2 + 99z + 60) I_0\left(\frac{z}{2}\right) + \frac{1}{60} e^{z/2} (4z^3 + 36z^2 + 65z + 9) I_1\left(\frac{z}{2}\right)$$

07.25.03.alip.01

$${}_2F_2\left(\frac{7}{2}, 5; 2, \frac{9}{2}; z\right) = \frac{7e^z (32z^5 + 208z^4 + 216z^3 + 12z^2 - 30z + 45)}{1536z^3} - \frac{105\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.aliq.01

$${}_2F_2\left(\frac{7}{2}, 5; 2, \frac{9}{2}; -z\right) = \frac{7e^{-z} (32z^5 - 208z^4 + 216z^3 - 12z^2 - 30z - 45)}{1536z^3} + \frac{105\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.alir.01

$${}_2F_2\left(\frac{7}{2}, 5; 2, 5; z\right) = \frac{1}{15} e^{z/2} (4z^2 + 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^2 + 14z + 3) I_1\left(\frac{z}{2}\right)$$

07.25.03.alis.01

$${}_2F_2\left(\frac{7}{2}, 5; 2, \frac{11}{2}; z\right) = \frac{21e^z (64z^5 + 64z^4 + 144z^3 - 480z^2 + 1140z - 1575)}{2048z^4} - \frac{945\sqrt{\pi} (2z - 35) \operatorname{erfi}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.alit.01

$${}_2F_2\left(\frac{7}{2}, 5; 2, \frac{11}{2}; -z\right) = \frac{945\sqrt{\pi} (2z + 35) \operatorname{erf}(\sqrt{z})}{4096z^{9/2}} - \frac{21e^{-z} (64z^5 - 64z^4 + 144z^3 + 480z^2 + 1140z + 1575)}{2048z^4}$$

07.25.03.aliu.01

$${}_2F_2\left(\frac{7}{2}, 5; 2, 6; z\right) = \frac{2e^{z/2} (2z^4 - 2z^3 + 15z^2 - 48z + 96) I_0\left(\frac{z}{2}\right)}{3z^3} + \frac{4e^{z/2} (z^5 - 2z^4 + 10z^3 - 36z^2 + 96z - 192) I_1\left(\frac{z}{2}\right)}{3z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = \frac{5}{2}$

07.25.03.aliv.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{8z^4 + 116z^3 + 446z^2 + 425z + 15}{640z} + \frac{e^z \sqrt{\pi} (16z^5 + 240z^4 + 1000z^3 + 1200z^2 + 225z - 15) \operatorname{erf}(\sqrt{z})}{1280z^{3/2}}$$

07.25.03.aliw.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-8z^4 + 116z^3 - 446z^2 + 425z - 15}{640z} + \frac{e^{-z} \sqrt{\pi} (16z^5 - 240z^4 + 1000z^3 - 1200z^2 + 225z + 15) \operatorname{erfi}(\sqrt{z})}{1280z^{3/2}}$$

07.25.03.alix.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{5}{2}, 3; z\right) = \frac{1}{60} e^z (2z^3 + 25z^2 + 80z + 60)$$

07.25.03.aliy.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.aliz.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.ajj0.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{5}{2}, 4; z\right) = \frac{1}{20} e^z (2z^2 + 15z + 20)$$

07.25.03.ajj1.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{7(8z^4 + 36z^3 + 6z^2 + 5z - 15)}{512z^3} + \frac{7e^z \sqrt{\pi} (16z^5 + 80z^4 + 40z^3 - 15z + 15) \operatorname{erf}(\sqrt{z})}{1024z^{7/2}}$$

07.25.03.ajj2.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (16z^5 - 80z^4 + 40z^3 - 15z - 15) \operatorname{erfi}(\sqrt{z})}{1024z^{7/2}} - \frac{7(8z^4 - 36z^3 + 6z^2 - 5z - 15)}{512z^3}$$

07.25.03.ajj3.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{5}{2}, 5; z\right) = \frac{1}{5} e^z (2z + 5)$$

07.25.03.ajj4.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{63(8z^4 - 4z^3 + 26z^2 - 85z + 210)}{1024z^4} + \frac{63e^z \sqrt{\pi} (16z^5 + 40z^3 - 120z^2 + 225z - 210) \operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.ajj5.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63(8z^4 + 4z^3 + 26z^2 + 85z + 210)}{1024z^4} - \frac{63e^{-z} \sqrt{\pi} (16z^5 + 40z^3 + 120z^2 + 225z + 210) \operatorname{erfi}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.ajj6.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{5}{2}, 6; z\right) = \frac{e^z (2z^5 - 5z^4 + 20z^3 - 60z^2 + 120z - 120)}{z^5} + \frac{120}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = 3$

07.25.03.alj7.01

$${}_2F_2\left(\frac{7}{2}, 5; 3, 3; z\right) = \frac{1}{90} e^{z/2} (4z^3 + 44z^2 + 125z + 91) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (4z^4 + 40z^3 + 87z^2 + 20z - 4) I_1\left(\frac{z}{2}\right)}{90z}$$

07.25.03.alj8.01

$${}_2F_2\left(\frac{7}{2}, 5; 3, \frac{7}{2}; z\right) = \frac{1}{12} e^z (z^2 + 8z + 12)$$

07.25.03.alj9.01

$${}_2F_2\left(\frac{7}{2}, 5; 3, 4; z\right) = \frac{1}{30} e^{z/2} (4z^2 + 26z + 31) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (4z^3 + 22z^2 + 11z - 4) I_1\left(\frac{z}{2}\right)}{30z}$$

07.25.03.alja.01

$${}_2F_2\left(\frac{7}{2}, 5; 3, \frac{9}{2}; z\right) = \frac{7e^z (16z^4 + 56z^3 - 4z^2 + 10z - 15)}{384z^3} + \frac{35\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.aljb.01

$${}_2F_2\left(\frac{7}{2}, 5; 3, \frac{9}{2}; -z\right) = -\frac{7e^{-z} (16z^4 - 56z^3 - 4z^2 - 10z - 15)}{384z^3} - \frac{35\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.aljc.01

$${}_2F_2\left(\frac{7}{2}, 5; 3, 5; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2} (2z^2 + 2z - 1) I_1\left(\frac{z}{2}\right)}{15z}$$

07.25.03.aljd.01

$${}_2F_2\left(\frac{7}{2}, 5; 3, \frac{11}{2}; z\right) = \frac{21e^z (32z^4 - 32z^3 + 104z^2 - 240z + 315)}{512z^4} + \frac{315\sqrt{\pi} (2z - 21) \operatorname{erfi}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.alje.01

$${}_2F_2\left(\frac{7}{2}, 5; 3, \frac{11}{2}; -z\right) = \frac{21e^{-z} (32z^4 + 32z^3 + 104z^2 + 240z + 315)}{512z^4} - \frac{315\sqrt{\pi} (2z + 21) \operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.aljf.01

$${}_2F_2\left(\frac{7}{2}, 5; 3, 6; z\right) = \frac{4e^{z/2} (2z^3 - 5z^2 + 16z - 32) I_0\left(\frac{z}{2}\right)}{3z^3} + \frac{4e^{z/2} (2z^4 - 7z^3 + 24z^2 - 64z + 128) I_1\left(\frac{z}{2}\right)}{3z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = \frac{7}{2}$

07.25.03.aljg.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5e^z \sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.aljh.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^4 - 96z^3 + 72z^2 + 24z + 9) \operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.alji.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{7}{2}, 4; z\right) = \frac{1}{4} e^z (z + 4)$$

07.25.03.aljj.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{35(8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35e^z \sqrt{\pi} (16z^4 + 32z^3 - 24z^2 + 24z - 15) \operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.aljk.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{35(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35e^{-z} \sqrt{\pi} (16z^4 - 32z^3 - 24z^2 - 24z - 15) \operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.aljl.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{7}{2}, 5; z\right) = e^z$$

07.25.03.aljm.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{315(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315e^z \sqrt{\pi} (16z^4 - 32z^3 + 72z^2 - 120z + 105) \operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.aljn.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z} \sqrt{\pi} (16z^4 + 32z^3 + 72z^2 + 120z + 105) \operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315(8z^3 + 20z^2 + 50z + 105)}{2048z^4}$$

07.25.03.aljo.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{7}{2}, 6; z\right) = \frac{5e^z (z^4 - 4z^3 + 12z^2 - 24z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = 4$

07.25.03.aljp.01

$${}_2F_2\left(\frac{7}{2}, 5; 4, 4; z\right) = \frac{e^{z/2} (2z^2 + 6z - 1) I_0\left(\frac{z}{2}\right)}{5z} + \frac{2e^{z/2} (z^3 + 2z^2 - 2z + 2) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.aljq.01

$${}_2F_2\left(\frac{7}{2}, 5; 4, \frac{9}{2}; z\right) = \frac{7e^z (8z^3 + 4z^2 - 10z + 15)}{64z^3} - \frac{105\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.aljr.01

$${}_2F_2\left(\frac{7}{2}, 5; 4, \frac{9}{2}; -z\right) = \frac{7e^{-z} (8z^3 - 4z^2 - 10z - 15)}{64z^3} + \frac{105\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{128z^{7/2}}$$

07.25.03.aljs.01

$${}_2F_2\left(\frac{7}{2}, 5; 4, 5; z\right) = \frac{4e^{z/2} (2z - 1) I_0\left(\frac{z}{2}\right)}{5z} + \frac{4e^{z/2} (2z^2 - 3z + 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

07.25.03.aljt.01

$${}_2F_2\left(\frac{7}{2}, 5; 4, \frac{11}{2}; z\right) = \frac{63e^z (16z^3 - 48z^2 + 100z - 105)}{256z^4} - \frac{945\sqrt{\pi} (2z - 7) \operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.alju.01

$${}_2F_2\left(\frac{7}{2}, 5; 4, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} (2z+7) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}} - \frac{63 e^{-z} (16z^3 + 48z^2 + 100z + 105)}{256 z^4}$$

07.25.03.aljv.01

$${}_2F_2\left(\frac{7}{2}, 5; 4, 6; z\right) = \frac{8 e^{z/2} (z^2 - 4z + 8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{8 e^{z/2} (z^3 - 5z^2 + 16z - 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = \frac{9}{2}$

07.25.03.aljw.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{9}{2}, 5; z\right) = \frac{7 e^z (4z^2 - 10z + 15)}{8 z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.aljx.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{9}{2}, 5; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7 e^{-z} (4z^2 + 10z + 15)}{8 z^3}$$

07.25.03.aljy.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{9}{2}, 6; z\right) = \frac{35 e^z (2z^3 - 11z^2 + 32z - 32)}{4 z^5} - \frac{175 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8 z^{7/2}} + \frac{280}{z^5}$$

07.25.03.aljz.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{9}{2}, 6; -z\right) = \frac{35 e^{-z} (2z^3 + 11z^2 + 32z + 32)}{4 z^5} + \frac{175 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8 z^{7/2}} - \frac{280}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = 5$

07.25.03.alk0.01

$${}_2F_2\left(\frac{7}{2}, 5; 5, 5; z\right) = \frac{32 e^{z/2} (z-3) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{32 e^{z/2} (z^2 - 4z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

07.25.03.alk1.01

$${}_2F_2\left(\frac{7}{2}, 5; 5, \frac{11}{2}; z\right) = \frac{63 e^z (8z^2 - 40z + 105)}{32 z^4} - \frac{945 \sqrt{\pi} (2z+7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.alk2.01

$${}_2F_2\left(\frac{7}{2}, 5; 5, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8z^2 + 40z + 105)}{32 z^4} + \frac{945 \sqrt{\pi} (2z-7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.alk3.01

$${}_2F_2\left(\frac{7}{2}, 5; 5, 6; z\right) = \frac{32 e^{z/2} (z-8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = \frac{11}{2}$

07.25.03.alk4.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{11}{2}, 6; z\right) = \frac{315 e^z (4z^2 - 23z + 128)}{16z^5} - \frac{1575 \sqrt{\pi} (2z + 21) \operatorname{erfi}(\sqrt{z})}{32z^{9/2}} - \frac{2520}{z^5}$$

07.25.03.alk5.01

$${}_2F_2\left(\frac{7}{2}, 5; \frac{11}{2}, 6; -z\right) = -\frac{315 e^{-z} (4z^2 + 23z + 128)}{16z^5} + \frac{1575 \sqrt{\pi} (2z - 21) \operatorname{erf}(\sqrt{z})}{32z^{9/2}} + \frac{2520}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 5$, $b_1 = 6$

07.25.03.alk6.01

$${}_2F_2\left(\frac{7}{2}, 5; 6, 6; z\right) = -\frac{320 e^{z/2} (z^2 + 48z - 96) I_0\left(\frac{z}{2}\right)}{3z^5} + \frac{1280 e^{z/2} (z + 7) I_1\left(\frac{z}{2}\right)}{3z^4} - \frac{10240}{z^5}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.alk7.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{1531694154375} (e^z (1048576z^{20} + 179306496z^{19} + 13117685760z^{18} + 540361359360z^{17} + 13885728030720z^{16} + 233103057223680z^{15} + 2603672198184960z^{14} + 19351455621120000z^{13} + 94230541181952000z^{12} + 291021222159360000z^{11} + 539458545527193600z^{10} + 547635979412121600z^9 + 258794516223936000z^8 + 40428111056256000z^7 + 647751468672000z^6 + 9618950880000z^5 + 1209441618000z^4 + 318274110000z^3 + 495093060000z^2 - 556979692500z + 1531694154375))$$

07.25.03.alk8.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = -\frac{1}{139244923125} (e^z (524288z^{19} + 82575360z^{18} + 5526650880z^{17} + 206624194560z^{16} + 4773309972480z^{15} + 71205083873280z^{14} + 696592886169600z^{13} + 4451281164288000z^{12} + 18181943023104000z^{11} + 45509924452608000z^{10} + 64934612726860800z^9 + 46546845162048000z^8 + 13030145206848000z^7 + 668837717856000z^6 - 10543124592000z^5 - 462086856000z^4 - 88409475000z^3 - 61886632500z^2 + 30943316250z - 139244923125))$$

07.25.03.alk9.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{15471658125} (e^z (262144z^{18} + 37748736z^{17} + 2291466240z^{16} + 76960235520z^{15} + 1578572513280z^{14} + 20606103060480z^{13} + 173144567070720z^{12} + 927056329113600z^{11} + 3065105372313600z^{10} + 5896882678579200z^9 + 5931334309824000z^8 + 2513752496640000z^7 + 230691361824000z^6 - 11618183808000z^5 + 537529608000z^4 + 37721376000z^3 + 12377326500z^2 + 15471658125))$$

07.25.03.alka.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{2210236875} \left(e^z (131072 z^{17} + 17104896 z^{16} + 931921920 z^{15} + 27763015680 z^{14} + 497774592000 z^{13} + 5574192906240 z^{12} + 39191643832320 z^{11} + 169590835814400 z^{10} + 430212253363200 z^9 + 582273945792000 z^8 + 345434398848000 z^7 + 47855852352000 z^6 - 4293949968000 z^5 + 631833048000 z^4 - 47151720000 z^3 - 4715172000 z^2 - 884094750 z - 2210236875) \right)$$

07.25.03.alkb.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{442047375} \left(e^z (65536 z^{16} + 7667712 z^{15} + 370114560 z^{14} + 9625190400 z^{13} + 147822796800 z^{12} + 1382779883520 z^{11} + 7842192906240 z^{10} + 25978971110400 z^9 + 46242814464000 z^8 + 36801493344000 z^7 + 7110479376000 z^6 - 958751640000 z^5 + 249904116000 z^4 - 58939650000 z^3 + 5893965000 z^2 + 589396500 z + 442047375) \right)$$

07.25.03.alkc.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{147349125} \left(e^z (32768 z^{15} + 3391488 z^{14} + 142663680 z^{13} + 3171962880 z^{12} + 40605788160 z^{11} + 305634954240 z^{10} + 1323199342080 z^9 + 3065490489600 z^8 + 3195719049600 z^7 + 824291899200 z^6 - 154073858400 z^5 + 59882684400 z^4 - 24754653000 z^3 + 7662154500 z^2 - 884094750 z - 147349125) \right)$$

07.25.03.alkd.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{147349125} \left(e^z (16384 z^{14} + 1474560 z^{13} + 52899840 z^{12} + 977633280 z^{11} + 10037744640 z^{10} + 57458903040 z^9 + 173198995200 z^8 + 233752780800 z^7 + 78466449600 z^6 - 19419523200 z^5 + 10350925200 z^4 - 6286896000 z^3 + 3339913500 z^2 - 1178793000 z + 147349125) \right)$$

07.25.03.alk.e.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{147349125} \left(e^{z/2} (8192 z^{14} + 688128 z^{13} + 22867968 z^{12} + 387962880 z^{11} + 3616842240 z^{10} + 18547246080 z^9 + 49240638720 z^8 + 57162309120 z^7 + 15463224000 z^6 - 3469132800 z^5 + 1933696800 z^4 - 1421695800 z^3 + 1051983450 z^2 - 589396500 z + 147349125) I_0\left(\frac{z}{2}\right) + \frac{1}{147349125} \left(2 e^{z/2} (4096 z^{14} + 339968 z^{13} + 11096064 z^{12} + 183051264 z^{11} + 1630590720 z^{10} + 7724471040 z^9 + 17558622720 z^8 + 13703074560 z^7 - 1584606240 z^6 + 689018400 z^5 - 463125600 z^4 + 358400700 z^3 - 250940025 z^2 + 106269975 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.alkf.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{147349125} \left(e^z (8192 z^{13} + 626688 z^{12} + 18616320 z^{11} + 274728960 z^{10} + 2134218240 z^9 + 8454378240 z^8 + 14737282560 z^7 + 6346771200 z^6 - 2020788000 z^5 + 1404572400 z^4 - 1145113200 z^3 + 864448200 z^2 - 491163750 z + 147349125) \right)$$

07.25.03.alkg.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{147349125} \left(e^{z/2} (8192 z^{13} + 577536 z^{12} + 15642624 z^{11} + 207651840 z^{10} + 1425600000 z^9 + 4869607680 z^8 + 7036968960 z^7 + 2233163520 z^6 - 594216000 z^5 + 403250400 z^4 - 376261200 z^3 + 377451900 z^2 - 320893650 z + 147349125) I_0\left(\frac{z}{2}\right) + \frac{1}{147349125} \left(e^{z/2} (8192 z^{13} + 569344 z^{12} + 15077376 z^{11} + 192850944 z^{10} + 1239744000 z^9 + 3712884480 z^8 + 3791370240 z^7 - 500048640 z^6 + 256374720 z^5 - 210924000 z^4 + 211150800 z^3 - 210753900 z^2 + 160149150 z - 42567525) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.alkh.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{49116375} \left(e^z (4096 z^{12} + 258048 z^{11} + 6082560 z^{10} + 67415040 z^9 + 359251200 z^8 + 814302720 z^7 + 447068160 z^6 - 179625600 z^5 + 157172400 z^4 - 162162000 z^3 + 157172400 z^2 - 117879300 z + 49116375) \right)$$

07.25.03.alki.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{147349125} \left(4 e^{z/2} (4096 z^{12} + 233472 z^{11} + 4899840 z^{10} + 47308800 z^9 + 212716800 z^8 + 384998400 z^7 + 141039360 z^6 - 43545600 z^5 + 34927200 z^4 - 39690000 z^3 + 50859900 z^2 - 59875200 z + 44438625) I_0\left(\frac{z}{2}\right) + \frac{1}{147349125 z} \left(4 e^{z/2} (4096 z^{13} + 229376 z^{12} + 4672512 z^{11} + 42746880 z^{10} + 172089600 z^9 + 230273280 z^8 - 34041600 z^7 + 20079360 z^6 - 19504800 z^5 + 23814000 z^4 - 30221100 z^3 + 30447900 z^2 - 6081075 z - 30405375) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.alkj.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{9823275} \left(e^z (2048 z^{11} + 101376 z^{10} + 1774080 z^9 + 13305600 z^8 + 39916800 z^7 + 27941760 z^6 - 13970880 z^5 + 14968800 z^4 - 18711000 z^3 + 21829500 z^2 - 19646550 z + 9823275) \right)$$

07.25.03.alkk.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{49\,116\,375\,z} \left(4 e^{z/2} (4096 z^{12} + 178\,176 z^{11} + 2\,669\,568 z^{10} + 16\,481\,280 z^9 + 37\,912\,320 z^8 + 15\,828\,480 z^7 - 5\,564\,160 z^6 + 5\,080\,320 z^5 - 6\,350\,400 z^4 + 7\,597\,800 z^3 - 1\,871\,100 z^2 - 31\,808\,700 z + 103\,378\,275) I_0\left(\frac{z}{2}\right) + \frac{1}{49\,116\,375\,z^2} \left(4 e^{z/2} (4096 z^{13} + 174\,080 z^{12} + 2\,497\,536 z^{11} + 14\,066\,688 z^{10} + 24\,933\,120 z^9 - 4\,078\,080 z^8 + 2\,730\,240 z^7 - 3\,144\,960 z^6 + 5\,080\,320 z^5 - 10\,773\,000 z^4 + 27\,612\,900 z^3 - 72\,972\,900 z^2 + 176\,351\,175 z - 413\,513\,100) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.alkl.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{1\,403\,325} \left(e^z (1024 z^{10} + 36\,864 z^9 + 426\,240 z^8 + 1\,751\,040 z^7 + 1\,572\,480 z^6 - 967\,680 z^5 + 1\,239\,840 z^4 - 1\,814\,400 z^3 + 2\,438\,100 z^2 - 2\,494\,800 z + 1\,403\,325) \right)$$

07.25.03.alkm.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{49\,116\,375\,z^2} \left(32 e^{z/2} (2048 z^{12} + 61\,440 z^{11} + 565\,248 z^{10} + 1\,697\,280 z^9 + 794\,880 z^8 - 276\,480 z^7 + 1\,905\,120 z^5 - 14\,175\,000 z^4 + 77\,338\,800 z^3 - 329\,313\,600 z^2 + 1\,033\,782\,750 z - 1\,964\,187\,225) I_0\left(\frac{z}{2}\right) + \frac{1}{49\,116\,375\,z^3} \left(64 e^{z/2} (1024 z^{13} + 29\,696 z^{12} + 253\,440 z^{11} + 609\,024 z^{10} - 111\,360 z^9 + 103\,680 z^8 - 293\,760 z^7 + 1\,587\,600 z^6 - 9\,423\,540 z^5 + 50\,179\,500 z^4 - 222\,972\,750 z^3 + 784\,458\,675 z^2 - 2\,067\,565\,500 z + 3\,928\,374\,450) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.alkn.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{155\,925} e^z (512 z^9 + 11\,520 z^8 + 69\,120 z^7 + 80\,640 z^6 - 60\,480 z^5 + 90\,720 z^4 - 151\,200 z^3 + 226\,800 z^2 - 255\,150 z + 155\,925)$$

07.25.03.alko.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{9\,823\,275\,z^3} \left(32 e^{z/2} (2048 z^{12} + 33\,792 z^{11} + 141\,312 z^{10} + 49\,920 z^9 + 207\,360 z^8 - 2\,177\,280 z^7 + 18\,204\,480 z^6 - 132\,315\,120 z^5 + 827\,026\,200 z^4 - 4\,329\,101\,700 z^3 + 18\,194\,576\,400 z^2 - 56\,961\,429\,525 z + 109\,994\,484\,600) I_0\left(\frac{z}{2}\right) + \frac{1}{9\,823\,275\,z^4} \left(32 e^{z/2} (2048 z^{13} + 31\,744 z^{12} + 110\,592 z^{11} - 46\,848 z^{10} + 284\,160 z^9 - 2\,522\,880 z^8 + 20\,986\,560 z^7 - 155\,146\,320 z^6 + 997\,035\,480 z^5 - 5\,440\,535\,100 z^4 + 24\,437\,813\,400 z^3 - 86\,527\,616\,175 z^2 + 227\,845\,718\,100 z - 439\,977\,938\,400) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.alkp.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{12\,658\,629\,375} \left(e^z (262\,144\,z^{18} + 38\,010\,880\,z^{17} + 2\,326\,200\,320\,z^{16} + 78\,886\,993\,920\,z^{15} + 1\,637\,228\,544\,000\,z^{14} + 21\,686\,099\,312\,640\,z^{13} + 185\,650\,698\,240\,000\,z^{12} + 1\,018\,911\,043\,584\,000\,z^{11} + 3\,486\,960\,771\,840\,000\,z^{10} + 7\,063\,638\,753\,024\,000\,z^9 + 7\,744\,570\,727\,846\,400\,z^8 + 3\,911\,995\,761\,408\,000\,z^7 + 647\,078\,961\,312\,000\,z^6 + 10\,879\,378\,272\,000\,z^5 + 168\,126\,840\,000\,z^4 + 21\,146\,832\,000\,z^3 + 8\,662\,342\,500\,z^2 - 625\,117\,500\,z + 12\,658\,629\,375) \right)$$

07.25.03.alkq.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{1\,406\,514\,375} \left(e^z (131\,072\,z^{17} + 17\,367\,040\,z^{16} + 963\,379\,200\,z^{15} + 29\,328\,015\,360\,z^{14} + 539\,998\,126\,080\,z^{13} + 6\,253\,065\,584\,640\,z^{12} + 45\,927\,357\,235\,200\,z^{11} + 210\,927\,699\,763\,200\,z^{10} + 583\,378\,037\,222\,400\,z^9 + 906\,618\,209\,011\,200\,z^8 + 699\,121\,632\,384\,000\,z^7 + 208\,193\,799\,744\,000\,z^6 + 11\,248\,781\,040\,000\,z^5 - 184\,701\,384\,000\,z^4 - 8\,287\,272\,000\,z^3 - 1\,857\,492\,000\,z^2 - 312\,558\,750\,z - 1\,406\,514\,375) \right)$$

07.25.03.alkr.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{200\,930\,625} \left(e^z (65\,536\,z^{16} + 7\,864\,320\,z^{15} + 391\,249\,920\,z^{14} + 10\,555\,883\,520\,z^{13} + 169\,718\,169\,600\,z^{12} + 1\,683\,928\,350\,720\,z^{11} + 10\,334\,215\,987\,200\,z^{10} + 38\,291\,445\,964\,800\,z^9 + 81\,086\,065\,804\,800\,z^8 + 88\,421\,808\,384\,000\,z^7 + 40\,084\,486\,848\,000\,z^6 + 3\,885\,682\,752\,000\,z^5 - 204\,133\,608\,000\,z^4 + 9\,716\,112\,000\,z^3 + 714\,420\,000\,z^2 + 142\,884\,000\,z + 200\,930\,625) \right)$$

07.25.03.alks.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{40\,186\,125} \left(e^z (32\,768\,z^{15} + 3\,522\,560\,z^{14} + 155\,115\,520\,z^{13} + 3\,649\,228\,800\,z^{12} + 50\,191\,411\,200\,z^{11} + 415\,337\,180\,160\,z^{10} + 2\,052\,079\,142\,400\,z^9 + 5\,807\,208\,556\,800\,z^8 + 8\,603\,385\,840\,000\,z^7 + 5\,495\,667\,912\,000\,z^6 + 807\,405\,732\,000\,z^5 - 75\,672\,954\,000\,z^4 + 11\,442\,627\,000\,z^3 - 863\,257\,500\,z^2 - 74\,418\,750\,z - 40\,186\,125) \right)$$

07.25.03.alkt.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{13\,395\,375} \left(e^z (16\,384\,z^{14} + 1\,556\,480\,z^{13} + 59\,658\,240\,z^{12} + 1\,198\,202\,880\,z^{11} + 13\,712\,778\,240\,z^{10} + 91\,109\,975\,040\,z^9 + 342\,714\,758\,400\,z^8 + 675\,958\,348\,800\,z^7 + 583\,922\,001\,600\,z^6 + 120\,184\,948\,800\,z^5 - 16\,944\,454\,800\,z^4 + 4\,524\,660\,000\,z^3 - 1\,065\,676\,500\,z^2 + 101\,209\,500\,z + 13\,395\,375) \right)$$

07.25.03.alku.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) =$$

$$-\frac{1}{13395375} \left(e^z (8192 z^{13} + 675840 z^{12} + 22056960 z^{11} + 367503360 z^{10} + 3365107200 z^9 + 16951576320 z^8 + 44220556800 z^7 + 50545555200 z^6 + 13960447200 z^5 - 2729538000 z^4 + 1081155600 z^3 - 440559000 z^2 + 128000250 z - 13395375) \right)$$

07.25.03.alkv.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, 1; z\right) =$$

$$\frac{1}{13395375} \left(e^{z/2} (-4096 z^{13} - 315392 z^{12} - 9538560 z^{11} - 146058240 z^{10} - 1217491200 z^9 - 5524727040 z^8 - 12843290880 z^7 - 12956832000 z^6 - 3091586400 z^5 + 593460000 z^4 - 267642900 z^3 + 144074700 z^2 - 64000125 z + 13395375) I_0\left(\frac{z}{2}\right) + \frac{1}{13395375} \left(e^{z/2} (-4096 z^{13} - 311296 z^{12} - 9229312 z^{11} - 136980480 z^{10} - 1084826880 z^9 - 450080640 z^8 - 8773712640 z^7 - 5675604480 z^6 + 585194400 z^5 - 215913600 z^4 + 114326100 z^3 - 60593400 z^2 + 20539575 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.alkw.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) =$$

$$-\frac{1}{13395375} \left(e^z (4096 z^{12} + 286720 z^{11} + 7731200 z^{10} + 102574080 z^9 + 708099840 z^8 + 2456939520 z^7 + 3683232000 z^6 + 1331769600 z^5 - 344509200 z^4 + 185522400 z^3 - 108750600 z^2 + 51597000 z - 13395375) \right)$$

07.25.03.alkx.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, 2; z\right) =$$

$$\frac{1}{13395375} \left(e^{z/2} (-4096 z^{12} - 264192 z^{11} - 6497280 z^{10} - 77644800 z^9 - 475372800 z^8 - 1434585600 z^7 - 1821576960 z^6 - 521337600 z^5 + 122320800 z^4 - 70119000 z^3 + 51200100 z^2 - 34530300 z + 13395375) I_0\left(\frac{z}{2}\right) + \frac{1}{13395375} \left(e^{z/2} (-4096 z^{12} - 260096 z^{11} - 6239232 z^{10} - 71531520 z^9 - 406713600 z^8 - 1058158080 z^7 - 911635200 z^6 + 109751040 z^5 - 49442400 z^4 + 33831000 z^3 - 25533900 z^2 + 15479100 z - 3274425) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.alky.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) =$$

$$-\frac{1}{4465125} \left(e^z (2048 z^{11} + 117760 z^{10} + 2511360 z^9 + 24917760 z^8 + 117331200 z^7 + 231154560 z^6 + 107956800 z^5 - 35834400 z^4 + 24834600 z^3 - 18994500 z^2 + 12105450 z - 4465125) \right)$$

07.25.03.alkz.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, 3; z\right) =$$

$$-\frac{1}{13395375} \left(16 e^{z/2} (512 z^{11} + 26624 z^{10} + 505600 z^9 + 4377600 z^8 + 17493120 z^7 + 28008960 z^6 + 9414720 z^5 - \right.$$

$$\left. 2620800 z^4 + 1830150 z^3 - 1701000 z^2 + 1573425 z - 963900) I_0\left(\frac{z}{2}\right) - \right.$$

$$\left. \frac{1}{13395375 z} \left(4 e^{z/2} (2048 z^{12} + 104448 z^{11} + 1918976 z^{10} + 15641600 z^9 + 55192320 z^8 + 63045120 z^7 - \right. \right.$$

$$\left. \left. 8655360 z^6 + 4596480 z^5 - 3843000 z^4 + 3717000 z^3 - 3061800 z^2 + 623700 z + 2027025) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.all0.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) =$$

$$-\frac{1}{893025} \left(e^z (1024 z^{10} + 46080 z^9 + 725760 z^8 + 4838400 z^7 + 12700800 z^6 + 7620480 z^5 - 3175200 z^4 + \right.$$

$$\left. 2721600 z^3 - 2551500 z^2 + 1984500 z - 893025) \right)$$

07.25.03.all1.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, 4; z\right) =$$

$$-\frac{1}{4465125 z} \left(4 e^{z/2} (2048 z^{11} + 80896 z^{10} + 1090560 z^9 + 6001920 z^8 + 12249600 z^7 + 4757760 z^6 - \right.$$

$$\left. 1532160 z^5 + 1234800 z^4 - 1247400 z^3 + 850500 z^2 + 1417500 z - 6081075) I_0\left(\frac{z}{2}\right) - \right.$$

$$\left. \frac{1}{4465125 z^2} \left(4 e^{z/2} (2048 z^{12} + 78848 z^{11} + 1012736 z^{10} + 5026560 z^9 + 7656960 z^8 - 1178880 z^7 + \right. \right.$$

$$\left. \left. 725760 z^6 - 750960 z^5 + 1071000 z^4 - 1984500 z^3 + 4365900 z^2 - 10135125 z + 24324300) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.all2.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{1}{127575} \left(e^z (512 z^9 + 16640 z^8 + 171520 z^7 + \right.$$

$$\left. 618240 z^6 + 477120 z^5 - 245280 z^4 + 252000 z^3 - 277200 z^2 + 248850 z - 127575) \right)$$

07.25.03.all3.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, 5; z\right) =$$

$$-\frac{1}{4465125 z^2} \left(32 e^{z/2} (1024 z^{11} + 27648 z^{10} + 226560 z^9 + 602880 z^8 + 264960 z^7 - 80640 z^6 - 35280 z^5 + \right.$$

$$\left. 680400 z^4 - 4025700 z^3 + 17406900 z^2 - 54729675 z + 103378275) I_0\left(\frac{z}{2}\right) - \right.$$

$$\left. \frac{1}{4465125 z^3} \left(32 e^{z/2} (1024 z^{12} + 26624 z^{11} + 200448 z^{10} + 414720 z^9 - 72960 z^8 + 69120 z^7 - 206640 z^6 + \right. \right.$$

$$\left. \left. 1048320 z^5 - 5386500 z^4 + 23700600 z^3 - 83108025 z^2 + 218918700 z - 413513100) I_1\left(\frac{z}{2}\right) \right)$$

$$\begin{aligned}
 & \text{07.25.03.all4.01} \\
 & {}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \\
 & -\frac{1}{14175} e^z (256 z^8 + 5120 z^7 + 26880 z^6 + 26880 z^5 - 16800 z^4 + 20160 z^3 - 25200 z^2 + 25200 z - 14175)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.all5.01} \\
 & {}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = \\
 & -\frac{1}{893025 z^3} \left(32 e^{z/2} (1024 z^{11} + 14848 z^{10} + 55040 z^9 + 15360 z^8 + 96000 z^7 - 870240 z^6 + 6365520 z^5 - \right. \\
 & \quad \left. 39765600 z^4 + 207805500 z^3 - 871620750 z^2 + 2722294575 z - 5237832600) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{893025 z^4} (32 e^{z/2} (1024 z^{12} + 13824 z^{11} + 41728 z^{10} - 20480 z^9 + 126720 z^8 - 1019040 z^7 + 7487760 z^6 - \right. \\
 & \quad \left. 47990880 z^5 + 261330300 z^4 - 1171620450 z^3 + 4141212075 z^2 - 10889178300 z + 20951330400) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{7}{2}$

$$\begin{aligned}
 & \text{07.25.03.all6.01} \\
 & {}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \\
 & \frac{1}{156279375} (e^z (65536 z^{16} + 7929856 z^{15} + 398426112 z^{14} + 10878959616 z^{13} + 177527906304 z^{12} + \\
 & \quad 1795073495040 z^{11} + 11295700899840 z^{10} + 43337494932480 z^9 + 96670291415040 z^8 + \\
 & \quad 114963084552960 z^7 + 62153104809600 z^6 + 10867242657600 z^5 + \\
 & \quad 190769191200 z^4 + 3033903600 z^3 + 407219400 z^2 + 89302500 z + 156279375))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.all7.01} \\
 & {}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \\
 & -\frac{1}{22325625} (e^z (32768 z^{15} + 3588096 z^{14} + 161538048 z^{13} + 3904868352 z^{12} + 55572572160 z^{11} + 480742456320 z^{10} + \\
 & \quad 2523024483840 z^9 + 7792112805120 z^8 + 13270638084480 z^7 + 11034308980800 z^6 + \\
 & \quad 3490779952800 z^5 + 197451399600 z^4 - 3341104200 z^3 - 153600300 z^2 - 26790750 z - 22325625))
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.all8.01} \\
 & {}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{4465125} (e^z (16384 z^{14} + 1605632 z^{13} + 63909888 z^{12} + 1345290240 z^{11} + 16351319040 z^{10} + 117736335360 z^9 + \\
 & \quad 496226062080 z^8 + 1166813061120 z^7 + 1384660267200 z^6 + 670843555200 z^5 + \\
 & \quad 68281088400 z^4 - 3695932800 z^3 + 177414300 z^2 + 11907000 z + 4465125))
 \end{aligned}$$

07.25.03.all9.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{1488375} \left(e^z (8192 z^{13} + 708608 z^{12} + 24514560 z^{11} + 439756800 z^{10} + 4437726720 z^9 + 25585217280 z^8 + 81809118720 z^7 + 133456377600 z^6 + 91776434400 z^5 + 14204257200 z^4 - 137098800 z^3 + 207181800 z^2 - 14883750 z - 1488375) \right)$$

07.25.03.alla.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{1488375} \left(e^z (4096 z^{12} + 307200 z^{11} + 9031680 z^{10} + 134077440 z^9 + 1079205120 z^8 + 4698570240 z^7 + 10363852800 z^6 + 9726998400 z^5 + 2116724400 z^4 - 306406800 z^3 + 80967600 z^2 - 17860500 z + 1488375) \right)$$

07.25.03.allb.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{1488375} \left(e^z (2048 z^{12} + 143360 z^{11} + 3907584 z^{10} + 53386752 z^9 + 392474880 z^8 + 1550223360 z^7 + 3093350400 z^6 + 2645808480 z^5 + 536676840 z^4 - 83235600 z^3 + 27518400 z^2 - 8930250 z + 1488375) I_0\left(\frac{z}{2}\right) + \frac{1}{1488375} \left(2 e^{z/2} (1024 z^{12} + 70656 z^{11} + 1883648 z^{10} + 24844032 z^9 + 172267776 z^8 + 613589760 z^7 + 999411840 z^6 + 515486160 z^5 - 45449460 z^4 + 13226220 z^3 - 4791150 z^2 + 1223775 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.allc.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{1488375} \left(e^z (2048 z^{11} + 130048 z^{10} + 3150336 z^9 + 37110528 z^8 + 224163072 z^7 + 668062080 z^6 + 839522880 z^5 + 246123360 z^4 - 49192920 z^3 + 18971820 z^2 - 6945750 z + 1488375) \right)$$

07.25.03.alld.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{1488375} \left(e^z (2048 z^{11} + 119808 z^{10} + 2648064 z^9 + 28143360 z^8 + 151441920 z^7 + 396829440 z^6 + 433661760 z^5 + 108697680 z^4 - 21508200 z^3 + 9657900 z^2 - 4762800 z + 1488375) I_0\left(\frac{z}{2}\right) + \frac{1}{1488375} \left(e^{z/2} (2048 z^{11} + 117760 z^{10} + 2531328 z^9 + 25668864 z^8 + 126927360 z^7 + 280546560 z^6 + 197426880 z^5 - 21021840 z^4 + 7885080 z^3 - 4063500 z^2 + 1852200 z - 297675) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.alle.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{496125} \left(e^z (1024 z^{10} + 53248 z^9 + 1016064 z^8 + 8902656 z^7 + 36408960 z^6 + 60963840 z^5 + 23496480 z^4 - 6168960 z^3 + 3163860 z^2 - 1587600 z + 496125) \right)$$

07.25.03.allf.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{1488375} \left(4 e^{z/2} (1024 z^{10} + 48128 z^9 + 817920 z^8 + 6266880 z^7 + 21907200 z^6 + 30461760 z^5 + 9167760 z^4 - 2217600 z^3 + 1266300 z^2 - 850500 z + 411075) I_0\left(\frac{z}{2}\right) + \frac{1}{1488375 z} \left(4 e^{z/2} (1024 z^{11} + 47104 z^{10} + 771328 z^9 + 5518080 z^8 + 16730880 z^7 + 15852480 z^6 - 1970640 z^5 + 902160 z^4 - 598500 z^3 + 378000 z^2 - 70875 z - 155925) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.allg.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{99225} \left(e^z (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + 408240 z^2 - 255150 z + 99225) \right)$$

07.25.03.allh.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{496125 z} \left(4 e^{z/2} (1024 z^{10} + 36352 z^9 + 435456 z^8 + 2104320 z^7 + 3744384 z^6 + 1324512 z^5 - 378000 z^4 + 252000 z^3 - 170100 z^2 - 39690 z + 405405) I_0\left(\frac{z}{2}\right) + \frac{1}{496125 z^2} \left(4 e^{z/2} (1024 z^{11} + 35328 z^{10} + 400640 z^9 + 1720320 z^8 + 2192256 z^7 - 311136 z^6 + 170352 z^5 - 151200 z^4 + 182700 z^3 - 300510 z^2 + 654885 z - 1621620) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.alli.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{14175} e^z (256 z^8 + 7424 z^7 + 67200 z^6 + 208320 z^5 + 134400 z^4 - 55440 z^3 + 42840 z^2 - 31500 z + 14175)$$

07.25.03.allj.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{496125z^2} \left(32e^{z/2} (512z^{10} + 12288z^9 + 88320z^8 + 204672z^7 + 82656z^6 - 20160z^5 - 25200z^4 + 226800z^3 - 1026270z^2 + 3243240z - 6081075) I_0\left(\frac{z}{2}\right) + \frac{1}{496125z^3} \left(64e^{z/2} (256z^{11} + 5888z^{10} + 38400z^9 + 66624z^8 - 11184z^7 + 11088z^6 - 35280z^5 + 163800z^4 - 705915z^3 + 2463615z^2 - 6486480z + 12162150) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.allk.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{e^z (128z^7 + 2240z^6 + 10080z^5 + 8400z^4 - 4200z^3 + 3780z^2 - 3150z + 1575)}{1575}$$

07.25.03.alll.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{99225z^3} \left(32e^{z/2} (512z^{10} + 6400z^9 + 20736z^8 + 3648z^7 + 43680z^6 - 337680z^5 + 2116800z^4 - 11045160z^3 + 46216170z^2 - 143918775z + 275675400) I_0\left(\frac{z}{2}\right) + \frac{1}{99225z^4} \left(32e^{z/2} (512z^{11} + 5888z^{10} + 15104z^9 - 9024z^8 + 55968z^7 - 401520z^6 + 2560320z^5 - 13902840z^4 + 62182890z^3 - 219324105z^2 + 575675100z - 1102701600) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.allm.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{3189375} \left(e^z (16384z^{14} + 1622016z^{13} + 65359872z^{12} + 1396875264z^{11} + 17309721600z^{10} + 127858037760z^9 + 558293034240z^8 + 138373748480z^7 + 1792236922560z^6 + 1036562184000z^5 + 190546700400z^4 + 3452349600z^3 + 55622700z^2 + 6633900z + 3189375) \right)$$

07.25.03.alln.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{637875} \left(e^z (8192z^{13} + 724992z^{12} + 25792512z^{11} + 479201280z^{10} + 5060851200z^9 + 31033486080z^8 + 108462343680z^7 + 203788327680z^6 + 182859314400z^5 + 61132806000z^4 + 3574141200z^3 - 60895800z^2 - 2636550z - 637875) \right)$$

07.25.03.allo.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{212625} \left(e^z (4096 z^{12} + 319488 z^{11} + 9861120 z^{10} + 155781120 z^9 + 1362067200 z^8 + 6663306240 z^7 + 17582987520 z^6 + 22770720000 z^5 + 11732137200 z^4 + 1236060000 z^3 - 67019400 z^2 + 3061800 z + 212625) \right)$$

07.25.03.alp.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{212625} \left(e^z (2048 z^{11} + 138240 z^{10} + 3617280 z^9 + 47143680 z^8 + 327456000 z^7 + 1203189120 z^6 + 2173953600 z^5 + 1602568800 z^4 + 257077800 z^3 - 24664500 z^2 + 3487050 z - 212625) \right)$$

07.25.03.allq.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{212625} \left(e^{z/2} (-1024 z^{11} - 64512 z^{10} - 1565952 z^9 - 18816768 z^8 - 119888640 z^7 - 403441920 z^6 - 672744240 z^5 - 470964240 z^4 - 76706460 z^3 + 8718300 z^2 - 1743525 z + 212625) I_0\left(\frac{z}{2}\right) + \frac{1}{212625} \left(e^{z/2} (-1024 z^{11} - 63488 z^{10} - 1502976 z^9 - 17344512 z^8 - 103235328 z^7 - 307560960 z^6 - 403396560 z^5 - 156611520 z^4 + 10993860 z^3 - 2189160 z^2 + 380025 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.allr.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{212625} \left(e^z (1024 z^{10} + 58368 z^9 + 1254144 z^8 + 12911616 z^7 + 66890880 z^6 + 166803840 z^5 + 169555680 z^4 + 38283840 z^3 - 5454540 z^2 + 1304100 z - 212625) \right)$$

07.25.03.alls.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{212625} \left(e^{z/2} (-1024 z^{10} - 53760 z^9 - 1054464 z^8 - 9815040 z^7 - 45561600 z^6 - 101314080 z^5 - 92581200 z^4 - 19435680 z^3 + 3010500 z^2 - 916650 z + 212625) I_0\left(\frac{z}{2}\right) + \frac{1}{212625} \left(e^{z/2} (-1024 z^{10} - 52736 z^9 - 1002240 z^8 - 8838144 z^7 - 37175040 z^6 - 67707360 z^5 - 37138320 z^4 + 3319200 z^3 - 937980 z^2 + 290250 z - 33075) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.allt.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{1}{70875} \left(e^z (512 z^9 + 23\,808 z^8 + 400\,896 z^7 + 3\,048\,192 z^6 + 10\,584\,000 z^5 + 14\,605\,920 z^4 + 4\,445\,280 z^3 - 861\,840 z^2 + 289\,170 z - 70\,875) \right)$$

07.25.03.allu.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = -\frac{1}{212\,625} \left(8 e^{z/2} (256 z^9 + 10\,752 z^8 + 161\,280 z^7 + 1\,075\,200 z^6 + 3\,220\,560 z^5 + 3\,791\,520 z^4 + 984\,240 z^3 - 194\,400 z^2 + 80\,325 z - 28\,350) I_0\left(\frac{z}{2}\right) - \frac{1}{212\,625 z} \left(4 e^{z/2} (512 z^{10} + 20\,992 z^9 + 301\,824 z^8 + 1\,858\,560 z^7 + 4\,714\,080 z^6 + 3\,555\,360 z^5 - 383\,760 z^4 + 139\,680 z^3 - 60\,750 z^2 + 9\,450 z + 14\,175) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.allv.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{1}{14\,175} e^z (256 z^8 + 9\,216 z^7 + 112\,896 z^6 + 564\,480 z^5 + 1\,058\,400 z^4 + 423\,360 z^3 - 105\,840 z^2 + 45\,360 z - 14\,175)$$

07.25.03.allw.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = -\frac{1}{70\,875 z} \left(4 e^{z/2} (512 z^9 + 16\,128 z^8 + 168\,960 z^7 + 702\,912 z^6 + 1\,064\,736 z^5 + 331\,920 z^4 - 79\,200 z^3 + 37\,800 z^2 - 56\,700 z + 31\,185) I_0\left(\frac{z}{2}\right) - \frac{1}{70\,875 z^2} \left(4 e^{z/2} (512 z^{10} + 15\,616 z^9 + 153\,600 z^8 + 556\,608 z^7 + 570\,912 z^6 - 72\,144 z^5 + 33\,120 z^4 - 23\,400 z^3 + 24\,570 z^2 - 48\,195 z + 124\,740) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.allx.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{e^z (128 z^7 + 32\,640 z^6 + 25\,440 z^5 + 66\,000 z^4 + 34\,200 z^3 - 10\,620 z^2 + 5\,490 z - 2025)}{2025}$$

07.25.03.ally.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, 5; z\right) = -\frac{1}{70\,875 z^2} \left(32 e^{z/2} (256 z^9 + 53\,760 z^8 + 33\,216 z^7 + 65\,472 z^6 + 23\,472 z^5 - 3\,600 z^4 - 12\,600 z^3 + 68\,040 z^2 - 218\,295 z + 405\,405) I_0\left(\frac{z}{2}\right) - \frac{1}{70\,875 z^3} \left(32 e^{z/2} (256 z^{10} + 51\,200 z^9 + 28\,224 z^8 + 39\,552 z^7 - 62\,880 z^6 + 69\,120 z^5 - 23\,400 z^4 + 95\,760 z^3 - 331\,695 z^2 + 873\,180 z - 1\,621\,620) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.allz.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{1}{225} e^z (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225)$$

07.25.03.alm0.01

$$\begin{aligned} {}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{5}{2}, 6; z\right) = \\ -\frac{1}{14175 z^3} \left(32 e^{z/2} (256 z^9 + 2688 z^8 + 7488 z^7 + 192 z^6 + 19440 z^5 - 126000 z^4 + 657720 z^3 - 2744280 z^2 + \right. \\ \left. 8513505 z - 16216200) I_0\left(\frac{z}{2}\right) - \right. \\ \left. \frac{1}{14175 z^4} \left(32 e^{z/2} (256 z^{10} + 2432 z^9 + 5184 z^8 - 4032 z^7 + 24432 z^6 - 153360 z^5 + 829080 z^4 - \right. \right. \\ \left. \left. 3696840 z^3 + 13004145 z^2 - 34054020 z + 64864800) I_1\left(\frac{z}{2}\right)\right) \right) \end{aligned}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.alm1.01

$$\begin{aligned} {}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \\ \frac{1}{127575} \left(e^z (4096 z^{12} + 323584 z^{11} + 10145792 z^{10} + 163507200 z^9 + 1467628800 z^8 + 7444784640 z^7 + \right. \\ \left. 20729640960 z^6 + 29340420480 z^5 + 18078606000 z^4 + 3448494000 z^3 + 62823600 z^2 + 963900 z + 127575)\right) \end{aligned}$$

07.25.03.alm2.01

$$\begin{aligned} {}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \\ -\frac{1}{42525} \left(e^z (2048 z^{11} + 142336 z^{10} + 3863040 z^9 + 52780800 z^8 + 390739200 z^7 + 1573326720 z^6 + \right. \\ \left. 3284850240 z^5 + 3173234400 z^4 + 1106217000 z^3 + 64921500 z^2 - 1048950 z - 42525)\right) \end{aligned}$$

07.25.03.alm3.01

$$\begin{aligned} {}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \\ \frac{1}{42525} \left(e^z (1024 z^{10} + 61440 z^9 + 1409280 z^8 + 15820800 z^7 + 92534400 z^6 + 277724160 z^5 + 392666400 z^4 + \right. \\ \left. 212284800 z^3 + 22396500 z^2 - 1134000 z + 42525)\right) \end{aligned}$$

07.25.03.alm4.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{42525} \left(e^{z/2} (512 z^{10} + 28672 z^9 + 610560 z^8 + 6334848 z^7 + 34188000 z^6 + 95215680 z^5 + 127754640 z^4 + 69361200 z^3 + 8235810 z^2 - 567000 z + 42525) I_0\left(\frac{z}{2}\right) + \frac{1}{42525} \left(2 e^{z/2} (256 z^{10} + 14080 z^9 + 291328 z^8 + 2882880 z^7 + 14343504 z^6 + 34455120 z^5 + 34455600 z^4 + 9169560 z^3 - 445275 z^2 + 42255 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.alm5.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{42525} \left(e^z (512 z^9 + 25856 z^8 + 484864 z^7 + 4273920 z^6 + 18486720 z^5 + 37185120 z^4 + 29000160 z^3 + 4641840 z^2 - 406350 z + 42525) \right)$$

07.25.03.alm6.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{42525} \left(e^{z/2} (512 z^9 + 23808 z^8 + 407808 z^7 + 3259200 z^6 + 12731040 z^5 + 23275440 z^4 + 17040960 z^3 + 2783160 z^2 - 292950 z + 42525) I_0\left(\frac{z}{2}\right) + \frac{1}{42525} \left(e^{z/2} (512 z^9 + 23296 z^8 + 384768 z^7 + 2885568 z^6 + 10016160 z^5 + 14383440 z^4 + 5713920 z^3 - 388440 z^2 + 65610 z - 4725) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.alm7.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{14175} e^z (256 z^8 + 10496 z^7 + 153216 z^6 + 987840 z^5 + 2822400 z^4 + 3069360 z^3 + 687960 z^2 - 86940 z + 14175)$$

07.25.03.alm8.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{1}{42525} 4 e^{z/2} (256 z^8 + 9472 z^7 + 123200 z^6 + 698880 z^5 + 1743600 z^4 + 1674720 z^3 + 352440 z^2 - 50400 z + 11025) + I_0\left(\frac{z}{2}\right) + \frac{1}{42525 z} \left(4 e^{z/2} (256 z^9 + 9216 z^8 + 114112 z^7 + 589120 z^6 + 1203120 z^5 + 677520 z^4 - 58680 z^3 + 14040 z^2 - 1575 z - 1575) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.alm9.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835)}{2835}$$

07.25.03.alma.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{14175z}$$

$$4e^{z/2} (256z^8 + 7040z^7 + 63168z^6 + 220224z^5 + 274320z^4 + 71280z^3 - 12600z^2 + 2520z + 2835) I_0\left(\frac{z}{2}\right) + \frac{1}{14175z^2}$$

$$\left(4e^{z/2} (256z^9 + 6784z^8 + 56512z^7 + 166848z^6 + 129744z^5 - 13680z^4 + 4680z^3 - 2520z^2 + 4095z - 11340) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.almb.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{405} e^z (64z^6 + 1408z^5 + 9200z^4 + 19200z^3 + 7500z^2 - 1560z + 405)$$

07.25.03.almc.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = \frac{32e^{z/2} (128z^8 + 2304z^7 + 11904z^6 + 19296z^5 + 5760z^4 - 5040z^2 + 17010z - 31185) I_0\left(\frac{z}{2}\right)}{14175z^2} +$$

$$\frac{1}{14175z^3} 64e^{z/2} (64z^9 + 1088z^8 + 4896z^7 + 5232z^6 - 792z^5 + 1080z^4 - 3780z^3 + 12915z^2 - 34020z + 62370) I_1\left(\frac{z}{2}\right)$$

07.25.03.almd.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{45} e^z (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45)$$

07.25.03.alme.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{3}{2}, 6; z\right) =$$

$$\frac{1}{2835z^3} 32e^{z/2} (128z^8 + 1088z^7 + 2560z^6 - 528z^5 + 8400z^4 - 44520z^3 + 185220z^2 - 571725z + 1081080) I_0\left(\frac{z}{2}\right) +$$

$$\frac{1}{2835z^4} \left(32e^{z/2} (128z^9 + 960z^8 + 1664z^7 - 1840z^6 + 10512z^5 - 56280z^4 + 249900z^3 - 876015z^2 + 2286900z - 4324320) I_1\left(\frac{z}{2}\right)\right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.almf.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{14175} \left(e^z (1024z^{10} + 62464z^9 + 1463040z^8 + 16880640z^7 + 102526080z^6 + 325296000z^5 + 503889120z^4 + 326894400z^3 + 62766900z^2 + 1077300z + 14175)\right)$$

07.25.03.almg.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) =$$

$$-\frac{1}{14175} \left(e^z (512z^9 + 26880z^8 + 529920z^7 + 4995840z^6 + 23785920z^5 + 55611360z^4 + 57304800z^3 + 20185200z^2 + 1105650z - 14175)\right)$$

07.25.03.almh.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{14175} \left(e^{z/2} (-256 z^9 - 12544 z^8 - 229824 z^7 - 2009280 z^6 - 8902320 z^5 - 19692720 z^4 - 20078280 z^3 - 7715880 z^2 - 552825 z + 14175) I_0\left(\frac{z}{2}\right) + \frac{1}{14175} \left(e^{z/2} (-256 z^9 - 12288 z^8 - 217664 z^7 - 1797504 z^6 - 7202160 z^5 - 13206720 z^4 - 9212760 z^3 - 1410480 z^2 + 32895 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.almi.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{14175} e^z (256 z^8 + 11264 z^7 + 180480 z^6 + 1324800 z^5 + 4606560 z^4 + 7076160 z^3 + 3885840 z^2 + 378000 z - 14175)$$

07.25.03.almj.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{14175} \left(e^{z/2} (-256 z^8 - 10368 z^7 - 151872 z^6 - 1014720 z^5 - 3222000 z^4 - 4623120 z^3 - 2529720 z^2 - 279720 z + 14175) I_0\left(\frac{z}{2}\right) + \frac{1}{14175} e^{z/2} (-256 z^8 - 10112 z^7 - 141888 z^6 - 877632 z^5 - 2406000 z^4 - 2542320 z^3 - 641880 z^2 + 26280 z - 945) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.almk.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{e^z (128 z^7 + 4544 z^6 + 56160 z^5 + 297360 z^4 + 667800 z^3 + 532980 z^2 + 77490 z - 4725)}{4725}$$

07.25.03.almi.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = -\frac{32 e^{z/2} (16 z^7 + 512 z^6 + 5640 z^5 + 26400 z^4 + 52650 z^3 + 38880 z^2 + 5895 z - 450) I_0\left(\frac{z}{2}\right) - \frac{1}{14175 z} 4 e^{z/2} (128 z^8 + 3968 z^7 + 41216 z^6 + 171840 z^5 + 266400 z^4 + 100080 z^3 - 5760 z^2 + 360 z + 225) I_1\left(\frac{z}{2}\right)}{14175}$$

07.25.03.almm.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 1728 z^5 + 15120 z^4 + 50400 z^3 + 56700 z^2 + 11340 z - 945)$$

07.25.03.almn.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = -\frac{4 e^{z/2} (128 z^7 + 3008 z^6 + 22464 z^5 + 63120 z^4 + 61200 z^3 + 11880 z^2 - 1080 z - 315) I_0\left(\frac{z}{2}\right) - \frac{1}{4725 z^2} 4 e^{z/2} (128 z^8 + 2880 z^7 + 19648 z^6 + 44784 z^5 + 23760 z^4 - 1800 z^3 + 360 z^2 - 405 z + 1260) I_1\left(\frac{z}{2}\right)}{4725 z}$$

07.25.03.almo.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{1}{135} e^z (32 z^5 + 592 z^4 + 3120 z^3 + 4920 z^2 + 1290 z - 135)$$

07.25.03.almq.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = -\frac{32 e^{z/2} (64 z^7 + 960 z^6 + 3984 z^5 + 5040 z^4 + 1080 z^3 + 360 z^2 - 1575 z + 2835) I_0\left(\frac{z}{2}\right) - 32 e^{z/2} (64 z^8 + 896 z^7 + 3120 z^6 + 2304 z^5 - 360 z^4 + 720 z^3 - 2385 z^2 + 6300 z - 11340) I_1\left(\frac{z}{2}\right)}{4725 z^2}$$

07.25.03.almq.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{1}{15} e^z (16 z^4 + 160 z^3 + 360 z^2 + 120 z - 15)$$

07.25.03.almr.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = -\frac{32 e^{z/2} (64 z^7 + 416 z^6 + 816 z^5 - 480 z^4 + 3480 z^3 - 14490 z^2 + 44415 z - 83160) I_0\left(\frac{z}{2}\right) - \frac{1}{945 z^4} 32 e^{z/2} (64 z^8 + 352 z^7 + 496 z^6 - 864 z^5 + 4440 z^4 - 19590 z^3 + 68355 z^2 - 177660 z + 332640) I_1\left(\frac{z}{2}\right)}{945 z^3}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{1}{2}$

07.25.03.almr.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{14175} e^z (256 z^8 + 11520 z^7 + 190080 z^6 + 1452480 z^5 + 5356800 z^4 + 9056880 z^3 + 6010200 z^2 + 1077300 z + 14175)$$

07.25.03.almr.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{14175} e^{z/2} (128 z^8 + 5376 z^7 + 82560 z^6 + 588000 z^5 + 2044800 z^4 + 3375360 z^3 + 2376720 z^2 + 538650 z + 14175) I_0\left(\frac{z}{2}\right) + \frac{1}{14175} 2 e^{z/2} (64 z^8 + 2624 z^7 + 38688 z^6 + 256560 z^5 + 782760 z^4 + 1001880 z^3 + 412380 z^2 + 23535 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.almu.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 4800 z^6 + 63840 z^5 + 375120 z^4 + 990360 z^3 + 1062180 z^2 + 349650 z + 14175)}{14175}$$

07.25.03.almv.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{e^{z/2} (128 z^7 + 4416 z^6 + 53760 z^5 + 289200 z^4 + 709200 z^3 + 741240 z^2 + 265860 z + 14175) I_0\left(\frac{z}{2}\right) + e^{z/2} (128 z^7 + 4288 z^6 + 49536 z^5 + 241680 z^4 + 488400 z^3 + 335880 z^2 + 40140 z - 315) I_1\left(\frac{z}{2}\right)}{14175}$$

07.25.03.almw.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (64 z^6 + 1920 z^5 + 19440 z^4 + 80640 z^3 + 132300 z^2 + 68040 z + 4725)}{4725}$$

07.25.03.almx.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 + 1728 z^5 + 15\,600 z^4 + 57\,600 z^3 + 86\,040 z^2 + 43\,740 z + 3555) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 + 1664 z^6 + 13\,968 z^5 + 44\,400 z^4 + 47\,160 z^3 + 9180 z^2 - 135 z - 45) I_1\left(\frac{z}{2}\right)}{14\,175}$$

07.25.03.almx.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 720 z^4 + 5040 z^3 + 12\,600 z^2 + 9450 z + 945)$$

07.25.03.almz.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^6 + 1248 z^5 + 7440 z^4 + 15\,840 z^3 + 10\,800 z^2 + 1170 z + 45) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 + 1184 z^6 + 6288 z^5 + 10\,080 z^4 + 2880 z^3 - 90 z^2 + 45 z - 180) I_1\left(\frac{z}{2}\right)}{4725 z^2}$$

07.25.03.aln0.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{135} e^z (16 z^4 + 240 z^3 + 960 z^2 + 1020 z + 135)$$

07.25.03.aln1.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 + 384 z^5 + 1200 z^4 + 1080 z^3 + 90 z^2 + 180 z - 315) I_0\left(\frac{z}{2}\right) + 64 e^{z/2} (16 z^7 + 176 z^6 + 432 z^5 + 180 z^4 - 45 z^3 + 135 z^2 - 360 z + 630) I_1\left(\frac{z}{2}\right)}{4725 z^3}$$

07.25.03.aln2.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{15} e^z (8 z^3 + 60 z^2 + 90 z + 15)$$

07.25.03.aln3.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^6 + 144 z^5 + 240 z^4 - 300 z^3 + 1350 z^2 - 4095 z + 7560) I_0\left(\frac{z}{2}\right) + 32 e^{z/2} (32 z^7 + 112 z^6 + 144 z^5 - 420 z^4 + 1830 z^3 - 6345 z^2 + 16\,380 z - 30\,240) I_1\left(\frac{z}{2}\right)}{945 z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 1$

07.25.03.aln4.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \frac{e^{z/2} (64 z^7 + 2240 z^6 + 27\,792 z^5 + 153\,456 z^4 + 390\,840 z^3 + 433\,800 z^2 + 174\,825 z + 14\,175) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^7 + 2176 z^6 + 25\,648 z^5 + 128\,832 z^4 + 272\,856 z^3 + 205\,680 z^2 + 32\,895 z) I_1\left(\frac{z}{2}\right)}{14\,175}$$

07.25.03.aln5.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \frac{e^{z/2} (32 z^6 + 896 z^5 + 8496 z^4 + 33624 z^3 + 55770 z^2 + 34020 z + 4725) I_0\left(\frac{z}{2}\right) + 2 e^{z/2} (16 z^6 + 432 z^5 + 3824 z^4 + 13188 z^3 + 16227 z^2 + 4695 z) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.aln6.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{945} e^{z/2} (16 z^5 + 336 z^4 + 2220 z^3 + 5484 z^2 + 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^5 + 320 z^4 + 1908 z^3 + 3720 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aln7.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{135} e^{z/2} (8 z^4 + 112 z^3 + 432 z^2 + 510 z + 135) I_0\left(\frac{z}{2}\right) + \frac{2}{135} e^{z/2} (4 z^4 + 52 z^3 + 166 z^2 + 111 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.aln8.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; 1, \frac{11}{2}; z\right) = \frac{1}{15} e^{z/2} (4 z^3 + 28 z^2 + 45 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4 z^3 + 24 z^2 + 23 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{3}{2}$

07.25.03.aln9.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (64 z^6 + 1984 z^5 + 21008 z^4 + 93024 z^3 + 169596 z^2 + 107100 z + 14175)}{14175}$$

07.25.03.alna.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 + 1824 z^5 + 17712 z^4 + 72480 z^3 + 126360 z^2 + 83790 z + 14175) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^6 + 1760 z^5 + 15984 z^4 + 57312 z^3 + 75480 z^2 + 25650 z + 315) I_1\left(\frac{z}{2}\right)}{14175}$$

07.25.03.alnb.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (32 z^5 + 784 z^4 + 6192 z^3 + 18648 z^2 + 19530 z + 4725)}{4725}$$

07.25.03.alnc.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{8 e^{z/2} (16 z^5 + 352 z^4 + 2480 z^3 + 6720 z^2 + 6675 z + 1770) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (32 z^6 + 672 z^5 + 4304 z^4 + 9440 z^3 + 5490 z^2 + 150 z + 15) I_1\left(\frac{z}{2}\right)}{14175 z}$$

07.25.03.alnd.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{945} e^z (16 z^4 + 288 z^3 + 1512 z^2 + 2520 z + 945)$$

07.25.03.alne.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 + 496 z^4 + 2208 z^3 + 3180 z^2 + 1182 z - 9) I_0\left(\frac{z}{2}\right)}{4725 z} + \frac{4 e^{z/2} (32 z^6 + 464 z^5 + 1760 z^4 + 1620 z^3 + 78 z^2 - 3 z + 36) I_1\left(\frac{z}{2}\right)}{4725 z^2}$$

07.25.03.alnf.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{135} e^z (8 z^3 + 92 z^2 + 250 z + 135)$$

07.25.03.alng.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^5 + 144 z^4 + 300 z^3 + 156 z^2 - 27 z + 45) I_0\left(\frac{z}{2}\right)}{4725 z^2} + \frac{32 e^{z/2} (16 z^6 + 128 z^5 + 180 z^4 + 24 z^3 - 39 z^2 + 108 z - 180) I_1\left(\frac{z}{2}\right)}{4725 z^3}$$

07.25.03.alnh.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{15} e^z (4 z^2 + 20 z + 15)$$

07.25.03.alni.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 + 40 z^4 + 68 z^3 - 156 z^2 + 465 z - 840) I_0\left(\frac{z}{2}\right)}{945 z^3} + \frac{32 e^{z/2} (16 z^6 + 24 z^5 + 52 z^4 - 212 z^3 + 729 z^2 - 1860 z + 3360) I_1\left(\frac{z}{2}\right)}{945 z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 2$

07.25.03.alnj.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \frac{e^{z/2} (32 z^5 + 720 z^4 + 5232 z^3 + 14820 z^2 + 15750 z + 4725) I_0\left(\frac{z}{2}\right)}{4725} + \frac{e^{z/2} (32 z^5 + 688 z^4 + 4560 z^3 + 10572 z^2 + 6870 z + 315) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.alnk.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{945} e^{z/2} (16 z^4 + 264 z^3 + 1284 z^2 + 2100 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^4 + 248 z^3 + 1044 z^2 + 1164 z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.alnl.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{135} e^{z/2} (8 z^3 + 84 z^2 + 216 z + 135) I_0\left(\frac{z}{2}\right) + \frac{1}{135} e^{z/2} (8 z^3 + 76 z^2 + 144 z + 21) I_1\left(\frac{z}{2}\right)$$

07.25.03.alnm.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; 2, \frac{11}{2}; z\right) = \frac{1}{15} e^{z/2} (4 z^2 + 18 z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4 z^2 + 14 z + 3) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{5}{2}$

07.25.03.alnn.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (16z^4 + 304z^3 + 1728z^2 + 3276z + 1575)}{1575}$$

07.25.03.alno.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{4e^{z/2} (16z^4 + 272z^3 + 1380z^2 + 2400z + 1185) I_0\left(\frac{z}{2}\right) + 4e^{z/2} (16z^5 + 256z^4 + 1132z^3 + 1380z^2 + 165z - 15) I_1\left(\frac{z}{2}\right)}{4725 + 4725z}$$

07.25.03.alnp.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{315} e^z (8z^3 + 108z^2 + 378z + 315)$$

07.25.03.alnq.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{4e^{z/2} (16z^4 + 184z^3 + 540z^2 + 396z + 3) I_0\left(\frac{z}{2}\right) + 4e^{z/2} (16z^5 + 168z^4 + 380z^3 + 84z^2 - 9z - 12) I_1\left(\frac{z}{2}\right)}{1575z + 1575z^2}$$

07.25.03.alnr.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{45} e^z (4z^2 + 32z + 45)$$

07.25.03.alns.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{32e^{z/2} (8z^4 + 48z^3 + 48z^2 + 6z - 9) I_0\left(\frac{z}{2}\right) + 64e^{z/2} (4z^5 + 20z^4 + 6z^3 + 3z^2 - 12z + 18) I_1\left(\frac{z}{2}\right)}{1575z^2 + 1575z^3}$$

07.25.03.alnt.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{5} e^z (2z + 5)$$

07.25.03.alnu.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{32e^{z/2} (8z^4 + 4z^3 + 24z^2 - 69z + 120) I_0\left(\frac{z}{2}\right) + 32e^{z/2} (8z^5 - 4z^4 + 32z^3 - 111z^2 + 276z - 480) I_1\left(\frac{z}{2}\right)}{315z^3 + 315z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 3$

07.25.03.alnv.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{16}{945} e^{z/2} (2z^3 + 24z^2 + 75z + 60) I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2} (8z^4 + 88z^3 + 216z^2 + 60z - 15) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.alnw.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{4}{135} e^{z/2} (4z^2 + 28z + 35) I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2} (4z^3 + 24z^2 + 13z - 5) I_1\left(\frac{z}{2}\right)}{135z}$$

07.25.03.alnx.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; 3, \frac{11}{2}; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2} (2z^2 + 2z - 1) I_1\left(\frac{z}{2}\right)}{15z}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{7}{2}$

07.25.03.alny.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{63} e^z (4z^2 + 36z + 63)$$

07.25.03.alnz.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (8z^3 + 60z^2 + 84z - 3) I_0\left(\frac{z}{2}\right)}{315z} + \frac{4 e^{z/2} (8z^4 + 52z^3 + 36z^2 - 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

07.25.03.alo0.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2z + 9)$$

07.25.03.alo1.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (4z^3 + 12z^2 - 3z + 3) I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{32 e^{z/2} (4z^4 + 8z^3 - 9z^2 + 12z - 12) I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.alo2.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = e^z$$

07.25.03.alo3.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (4z^3 - 6z^2 + 15z - 24) I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{32 e^{z/2} (4z^4 - 10z^3 + 27z^2 - 60z + 96) I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 4$

07.25.03.alo4.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; 4, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (4z^2 + 14z - 3) I_0\left(\frac{z}{2}\right)}{45z} + \frac{4 e^{z/2} (4z^3 + 10z^2 - 11z + 12) I_1\left(\frac{z}{2}\right)}{45z^2}$$

07.25.03.alo5.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; 4, \frac{11}{2}; z\right) = \frac{4 e^{z/2} (2z - 1) I_0\left(\frac{z}{2}\right)}{5z} + \frac{4 e^{z/2} (2z^2 - 3z + 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{9}{2}$

07.25.03.alo6.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{7 e^z (4z^3 + 4z^2 - 10z + 15)}{36z^3} - \frac{35 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{24 z^{7/2}}$$

07.25.03.alo7.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (4z^3 - 4z^2 - 10z - 15)}{36z^3} + \frac{35 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{24 z^{7/2}}$$

07.25.03.alo8.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (2z^2 - 3) I_0\left(\frac{z}{2}\right)}{45 z^2} + \frac{64 e^{z/2} (z^3 - z^2 + 6) I_1\left(\frac{z}{2}\right)}{45 z^3}$$

07.25.03.alo9.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{7 e^z (4z^2 - 10z + 15)}{8 z^3} - \frac{105 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{7/2}}$$

07.25.03.aloa.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{105 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{7/2}} - \frac{7 e^{-z} (4z^2 + 10z + 15)}{8 z^3}$$

07.25.03.alob.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^2 - 7z + 8) I_0\left(\frac{z}{2}\right)}{9 z^3} + \frac{32 e^{z/2} (2z^3 - 9z^2 + 28z - 32) I_1\left(\frac{z}{2}\right)}{9 z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 5$

07.25.03.aloc.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; 5, \frac{11}{2}; z\right) = \frac{32 e^{z/2} (z - 3) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{32 e^{z/2} (z^2 - 4z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{11}{2}$

07.25.03.alod.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{63 e^z (8z^2 - 40z + 105)}{32 z^4} - \frac{945 \sqrt{\pi} (2z + 7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.aloe.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} (8z^2 + 40z + 105)}{32 z^4} + \frac{945 \sqrt{\pi} (2z - 7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.alof.01

$${}_2F_2\left(\frac{7}{2}, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (z - 8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = -\frac{11}{2}$

07.25.03.alog.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; z\right) =$$

$$\frac{1}{24312605625} (4096 z^{20} + 749568 z^{19} + 58966016 z^{18} + 2626148352 z^{17} + 73417317120 z^{16} + 1350493804800 z^{15} +$$

$$16667531993088 z^{14} + 138224208568320 z^{13} + 759723279114240 z^{12} +$$

$$2684913741619200 z^{11} + 5789095285478400 z^{10} + 6970962530810880 z^9 +$$

$$3999282542841600 z^8 + 778215044275200 z^7 + 15283444176000 z^6 + 245188944000 z^5 +$$

$$36778341600 z^4 + 15717240000 z^3 + 13127467500 z^2 + 16878172500 z + 24312605625) +$$

$$\frac{1}{24312605625} \left(128 e^z \sqrt{\pi} (32 z^{41/2} + 5872 z^{39/2} + 463584 z^{37/2} + 20744232 z^{35/2} + 583608018 z^{33/2} +$$

$$10827810315 z^{31/2} + 135227314215 z^{29/2} + 1140340330080 z^{27/2} + 6421103267040 z^{25/2} +$$

$$23527989142560 z^{23/2} + 5366975591200 z^{21/2} + 70919920915200 z^{19/2} +$$

$$48087362534400 z^{17/2} + 13303948291200 z^{15/2} + 849188188800 z^{13/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aloh.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; -z\right) =$$

$$\frac{1}{24312605625} (4096 z^{20} - 749568 z^{19} + 58966016 z^{18} - 2626148352 z^{17} + 73417317120 z^{16} - 1350493804800 z^{15} +$$

$$16667531993088 z^{14} - 138224208568320 z^{13} + 759723279114240 z^{12} -$$

$$2684913741619200 z^{11} + 5789095285478400 z^{10} - 6970962530810880 z^9 +$$

$$3999282542841600 z^8 - 778215044275200 z^7 + 15283444176000 z^6 - 245188944000 z^5 +$$

$$36778341600 z^4 - 15717240000 z^3 + 13127467500 z^2 - 16878172500 z + 24312605625) -$$

$$\frac{1}{24312605625} \left(128 e^{-z} \sqrt{\pi} (32 z^{41/2} - 5872 z^{39/2} + 463584 z^{37/2} - 20744232 z^{35/2} + 583608018 z^{33/2} -$$

$$10827810315 z^{31/2} + 135227314215 z^{29/2} - 1140340330080 z^{27/2} + 6421103267040 z^{25/2} -$$

$$23527989142560 z^{23/2} + 5366975591200 z^{21/2} - 70919920915200 z^{19/2} +$$

$$48087362534400 z^{17/2} - 13303948291200 z^{15/2} + 849188188800 z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.aloi.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{2210236875} (-2048 z^{19} - 346112 z^{18} - 24984576 z^{17} - 1013429760 z^{16} - 25573000320 z^{15} - 419993938944 z^{14} -$$

$$4565448437760 z^{13} - 32770725765120 z^{12} - 152323108761600 z^{11} - 440684921779200 z^{10} -$$

$$740705230218240 z^9 - 640435579257600 z^8 - 223172985369600 z^7 - 15283444176000 z^6 +$$

$$245188944000 z^5 + 12259447200 z^4 + 3143448000 z^3 + 1875352500 z^2 + 1875352500 z + 2210236875) -$$

$$\frac{1}{2210236875} \left(64 e^z \sqrt{\pi} (32 z^{39/2} + 5424 z^{37/2} + 393072 z^{35/2} + 16027368 z^{33/2} + 407306970 z^{31/2} + 6754740615 z^{29/2} +$$

$$74434648680 z^{27/2} + 544863140640 z^{25/2} + 2607061282560 z^{23/2} + 7885621447200 z^{21/2} +$$

$$14241648355200 z^{19/2} + 13953327494400 z^{17/2} + 6227380051200 z^{15/2} + 849188188800 z^{13/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aloj.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{2210236875} (2048 z^{19} - 346112 z^{18} + 24984576 z^{17} - 1013429760 z^{16} + 25573000320 z^{15} - 419993938944 z^{14} +$$

$$4565448437760 z^{13} - 32770725765120 z^{12} + 152323108761600 z^{11} - 440684921779200 z^{10} +$$

$$740705230218240 z^9 - 640435579257600 z^8 + 223172985369600 z^7 - 15283444176000 z^6 -$$

$$245188944000 z^5 + 12259447200 z^4 - 3143448000 z^3 + 1875352500 z^2 - 1875352500 z + 2210236875) -$$

$$\frac{1}{2210236875} (64 e^{-z} \sqrt{\pi} (32 z^{39/2} - 5424 z^{37/2} + 393072 z^{35/2} - 16027368 z^{33/2} + 407306970 z^{31/2} - 6754740615 z^{29/2} +$$

$$74434648680 z^{27/2} - 544863140640 z^{25/2} + 2607061282560 z^{23/2} - 7885621447200 z^{21/2} +$$

$$14241648355200 z^{19/2} - 13953327494400 z^{17/2} + 6227380051200 z^{15/2} - 849188188800 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alok.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{245581875} (1024 z^{18} + 158720 z^{17} + 10429440 z^{16} + 381639680 z^{15} + 8593484736 z^{14} + 124240616640 z^{13} +$$

$$1168423226880 z^{12} + 7090909862400 z^{11} + 26986621132800 z^{10} + 60933353564160 z^9 +$$

$$73806116025600 z^8 + 39199792665600 z^7 + 5094481392000 z^6 - 245188944000 z^5 +$$

$$12259447200 z^4 + 1047816000 z^3 + 375070500 z^2 + 267907500 z + 245581875) +$$

$$\frac{1}{245581875} (32 e^z \sqrt{\pi} (32 z^{37/2} + 4976 z^{35/2} + 328384 z^{33/2} + 12086760 z^{31/2} + 274352610 z^{29/2} +$$

$$4011214515 z^{27/2} + 38333718045 z^{25/2} + 238193396280 z^{23/2} + 939707508600 z^{21/2} +$$

$$2247376395600 z^{19/2} + 3004766377200 z^{17/2} + 1934261985600 z^{15/2} + 424594094400 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alol.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{245581875} (1024 z^{18} - 158720 z^{17} + 10429440 z^{16} - 381639680 z^{15} + 8593484736 z^{14} - 124240616640 z^{13} +$$

$$1168423226880 z^{12} - 7090909862400 z^{11} + 26986621132800 z^{10} - 60933353564160 z^9 +$$

$$73806116025600 z^8 - 39199792665600 z^7 + 5094481392000 z^6 + 245188944000 z^5 +$$

$$12259447200 z^4 - 1047816000 z^3 + 375070500 z^2 - 267907500 z + 245581875) -$$

$$\frac{1}{245581875} (32 e^{-z} \sqrt{\pi} (32 z^{37/2} - 4976 z^{35/2} + 328384 z^{33/2} - 12086760 z^{31/2} + 274352610 z^{29/2} -$$

$$4011214515 z^{27/2} + 38333718045 z^{25/2} - 238193396280 z^{23/2} + 939707508600 z^{21/2} -$$

$$2247376395600 z^{19/2} + 3004766377200 z^{17/2} - 1934261985600 z^{15/2} + 424594094400 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alom.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{35083125} \left(-512z^{17} - 72192z^{16} - 4276480z^{15} - 139537536z^{14} - 2763879840z^{13} - 34546255680z^{12} - 274521081600z^{11} - 1363664332800z^{10} - 4051928885760z^9 - 6607141228800z^8 - 4952969856000z^7 - 1018896278400z^6 + 81729648000z^5 - 12259447200z^4 + 1047816000z^3 + 125023500z^2 + 53581500z + 35083125 \right) - \frac{1}{35083125} \left(16e^z \sqrt{\pi} \left(32z^{35/2} + 4528z^{33/2} + 269520z^{31/2} + 8852520z^{29/2} + 176974890z^{27/2} + 2241465615z^{25/2} + 18160527510z^{23/2} + 92909176200z^{21/2} + 289343275200z^{19/2} + 511316744400z^{17/2} + 448182655200z^{15/2} + 141531364800z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alon.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{35083125} \left(512z^{17} - 72192z^{16} + 4276480z^{15} - 139537536z^{14} + 2763879840z^{13} - 34546255680z^{12} + 274521081600z^{11} - 1363664332800z^{10} + 4051928885760z^9 - 6607141228800z^8 + 4952969856000z^7 - 1018896278400z^6 - 81729648000z^5 - 12259447200z^4 - 1047816000z^3 + 125023500z^2 - 53581500z + 35083125 \right) - \frac{1}{35083125} \left(16e^{-z} \sqrt{\pi} \left(32z^{35/2} - 4528z^{33/2} + 269520z^{31/2} - 8852520z^{29/2} + 176974890z^{27/2} - 2241465615z^{25/2} + 18160527510z^{23/2} - 92909176200z^{21/2} + 289343275200z^{19/2} - 511316744400z^{17/2} + 448182655200z^{15/2} - 141531364800z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aloo.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{7016625} \left(256z^{16} + 32512z^{15} + 1715712z^{14} + 49196160z^{13} + 841600560z^{12} + 8879720400z^{11} + 57709612800z^{10} + 223736728320z^9 + 480561984000z^8 + 487427155200z^7 + 145556611200z^6 - 16345929600z^5 + 4086482400z^4 - 1047816000z^3 + 125023500z^2 + 17860500z + 7016625 \right) + \frac{1}{7016625} \left(8e^z \sqrt{\pi} \left(32z^{33/2} + 4080z^{31/2} + 216480z^{29/2} + 6254760z^{27/2} + 108172530z^{25/2} + 1159740315z^{23/2} + 7722864675z^{21/2} + 31126258800z^{19/2} + 71459463600z^{17/2} + 82559962800z^{15/2} + 35382841200z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alop.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{7016625} \left(256z^{16} - 32512z^{15} + 1715712z^{14} - 49196160z^{13} + 841600560z^{12} - 8879720400z^{11} + 57709612800z^{10} - 223736728320z^9 + 480561984000z^8 - 487427155200z^7 + 145556611200z^6 + 16345929600z^5 + 4086482400z^4 + 1047816000z^3 + 125023500z^2 - 17860500z + 7016625 \right) - \frac{1}{7016625} \left(8e^{-z} \sqrt{\pi} \left(32z^{33/2} - 4080z^{31/2} + 216480z^{29/2} - 6254760z^{27/2} + 108172530z^{25/2} - 1159740315z^{23/2} + 7722864675z^{21/2} - 31126258800z^{19/2} + 71459463600z^{17/2} - 82559962800z^{15/2} + 35382841200z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aloq.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{2338875} \left(-128 z^{15} - 14464 z^{14} - 669888 z^{13} - 16566496 z^{12} - 238886280 z^{11} - 2058507360 z^{10} - 10429770624 z^9 - 29224419840 z^8 - 39164964480 z^7 - 16172956800 z^6 + 2335132800 z^5 - 817296480 z^4 + 349272000 z^3 - 125023500 z^2 + 17860500 z + 2338875 \right) - \frac{1}{2338875} \left(4 e^z \sqrt{\pi} \left(32 z^{31/2} + 3632 z^{29/2} + 169264 z^{27/2} + 4223592 z^{25/2} + 61713018 z^{23/2} + 542610135 z^{21/2} + 2839373460 z^{19/2} + 8411271120 z^{17/2} + 12580565760 z^{15/2} + 7076568240 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alor.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2338875} \left(128 z^{15} - 14464 z^{14} + 669888 z^{13} - 16566496 z^{12} + 238886280 z^{11} - 2058507360 z^{10} + 10429770624 z^9 - 29224419840 z^8 + 39164964480 z^7 - 16172956800 z^6 - 2335132800 z^5 - 817296480 z^4 - 349272000 z^3 - 125023500 z^2 - 17860500 z + 2338875 \right) - \frac{1}{2338875} \left(4 e^{-z} \sqrt{\pi} \left(32 z^{31/2} - 3632 z^{29/2} + 169264 z^{27/2} - 4223592 z^{25/2} + 61713018 z^{23/2} - 542610135 z^{21/2} + 2839373460 z^{19/2} - 8411271120 z^{17/2} + 12580565760 z^{15/2} - 7076568240 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alos.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{2338875} \left(64 z^{14} + 6336 z^{13} + 252608 z^{12} + 5255040 z^{11} + 61756380 z^{10} + 414029532 z^9 + 1513965600 z^8 + 2649788640 z^7 + 1470268800 z^6 - 259459200 z^5 + 116756640 z^4 - 69854400 z^3 + 41674500 z^2 - 17860500 z + 2338875 \right) + \frac{1}{2338875} \left(2 e^z \sqrt{\pi} \left(32 z^{29/2} + 3184 z^{27/2} + 127872 z^{25/2} + 2689128 z^{23/2} + 32132610 z^{21/2} + 221284035 z^{19/2} + 847817145 z^{17/2} + 1628733960 z^{15/2} + 1179428040 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alot.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{2338875} \left(64 z^{14} - 6336 z^{13} + 252608 z^{12} - 5255040 z^{11} + 61756380 z^{10} - 414029532 z^9 + 1513965600 z^8 - 2649788640 z^7 + 1470268800 z^6 + 259459200 z^5 + 116756640 z^4 + 69854400 z^3 + 41674500 z^2 + 17860500 z + 2338875 \right) - \frac{1}{2338875} \left(2 e^{-z} \sqrt{\pi} \left(32 z^{29/2} - 3184 z^{27/2} + 127872 z^{25/2} - 2689128 z^{23/2} + 32132610 z^{21/2} - 221284035 z^{19/2} + 847817145 z^{17/2} - 1628733960 z^{15/2} + 1179428040 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alou.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, 1; z\right) = \frac{1}{18711000} \left(e^z (512 z^{14} + 47360 z^{13} + 1749760 z^{12} + 33381120 z^{11} + 354797760 z^{10} + 2109573600 z^9 + 6632712000 z^8 + 9386550000 z^7 + 3326825250 z^6 - 877503375 z^5 + 505239525 z^4 - 338499000 z^3 + 205821000 z^2 - 90153000 z + 18711000) \right)$$

07.25.03.alov.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{2338875} \left(e^z \sqrt{\pi} (32 z^7 + 2736 z^6 + 92304 z^5 + 1581480 z^4 + 14736330 z^3 + 73920735 z^2 + 182530530 z + 168489720) \operatorname{erf}(\sqrt{z}) z^{13/2} \right) + \frac{1}{2338875} \left(32 z^{13} + 2720 z^{12} + 90960 z^{11} + 1537320 z^{10} + 14009898 z^9 + 67582620 z^8 + 154187280 z^7 + 113097600 z^6 - 23587200 z^5 + 12972960 z^4 - 9979200 z^3 + 8334900 z^2 - 5953500 z + 2338875 \right)$$

07.25.03.alow.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{2338875} \left(e^{-z} \sqrt{\pi} (32 z^7 - 2736 z^6 + 92304 z^5 - 1581480 z^4 + 14736330 z^3 - 73920735 z^2 + 182530530 z - 168489720) \operatorname{erfi}(\sqrt{z}) z^{13/2} \right) + \frac{1}{2338875} \left(-32 z^{13} + 2720 z^{12} - 90960 z^{11} + 1537320 z^{10} - 14009898 z^9 + 67582620 z^8 - 154187280 z^7 + 113097600 z^6 + 23587200 z^5 + 12972960 z^4 + 9979200 z^3 + 8334900 z^2 + 5953500 z + 2338875 \right)$$

07.25.03.alox.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, 2; z\right) = \frac{1}{18711000} \left(e^z (512 z^{13} + 40192 z^{12} + 1227264 z^{11} + 18653952 z^{10} + 149604288 z^9 + 613530720 z^8 + 1110935520 z^7 + 499065840 z^6 - 166635630 z^5 + 122310405 z^4 - 106312500 z^3 + 86751000 z^2 - 54432000 z + 18711000) \right)$$

07.25.03.aloy.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{1559250} e^z \sqrt{\pi} (32 z^6 + 2288 z^5 + 62560 z^4 + 830760 z^3 + 5597970 z^2 + 17941035 z + 21061215) \operatorname{erf}(\sqrt{z}) z^{13/2} + \frac{1}{779625} \left(16 z^{12} + 1136 z^{11} + 30720 z^{10} + 400568 z^9 + 2612715 z^8 + 7830945 z^7 + 7539840 z^6 - 1814400 z^5 + 1179360 z^4 - 1108800 z^3 + 1190700 z^2 - 1190700 z + 779625 \right)$$

07.25.03.aloz.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{779\,625} (16z^{12} - 1136z^{11} + 30\,720z^{10} - 400\,568z^9 + 2\,612\,715z^8 - 7\,830\,945z^7 + 7\,539\,840z^6 + 1\,814\,400z^5 + 1\,179\,360z^4 + 1\,108\,800z^3 + 1\,190\,700z^2 + 1\,190\,700z + 779\,625) - \frac{1}{1\,559\,250} e^{-z} \sqrt{\pi} z^{13/2} (32z^6 - 2288z^5 + 62\,560z^4 - 830\,760z^3 + 5\,597\,970z^2 - 17\,941\,035z + 21\,061\,215) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alp0.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, 3; z\right) = \frac{1}{9\,355\,500} (e^z (512z^{12} + 33\,024z^{11} + 797\,952z^{10} + 9\,078\,528z^9 + 49\,740\,480z^8 + 116\,125\,920z^7 + 65\,802\,240z^6 - 27\,352\,080z^5 + 24\,828\,930z^4 - 26\,663\,175z^3 + 27\,003\,375z^2 - 21\,262\,500z + 9\,355\,500))$$

07.25.03.alp1.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z \sqrt{\pi} (32z^5 + 1840z^4 + 38\,640z^3 + 367\,080z^2 + 1\,560\,090z + 2\,340\,135) \operatorname{erf}(\sqrt{z}) z^{13/2}}{623\,700} + \frac{1}{311\,850} (16z^{11} + 912z^{10} + 18\,872z^9 + 174\,540z^8 + 701\,145z^7 + 887\,040z^6 - 241\,920z^5 + 181\,440z^4 - 201\,600z^3 + 264\,600z^2 - 340\,200z + 311\,850)$$

07.25.03.alp2.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32z^5 - 1840z^4 + 38\,640z^3 - 367\,080z^2 + 1\,560\,090z - 2\,340\,135) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{623\,700} + \frac{1}{311\,850} (-16z^{11} + 912z^{10} - 18\,872z^9 + 174\,540z^8 - 701\,145z^7 + 887\,040z^6 + 241\,920z^5 + 181\,440z^4 + 201\,600z^3 + 264\,600z^2 + 340\,200z + 311\,850)$$

07.25.03.alp3.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, 4; z\right) = \frac{1}{3\,118\,500} (e^z (512z^{11} + 25\,856z^{10} + 461\,824z^9 + 3\,536\,640z^8 + 10\,837\,440z^7 + 7\,751\,520z^6 - 3\,961\,440z^5 + 4\,339\,440z^4 - 5\,547\,150z^3 + 6\,619\,725z^2 - 6\,095\,250z + 3\,118\,500))$$

07.25.03.alp4.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{89\,100z^3} (16z^{13} + 688z^{12} + 9936z^{11} + 55\,632z^{10} + 93\,375z^9 - 28\,485z^8 + 24\,408z^7 - 32\,760z^6 + 60\,480z^5 - 151\,200z^4 + 477\,900z^3 - 1\,632\,960z^2 + 5\,443\,200z - 16\,329\,600) + \frac{1}{178\,200z^{7/2}} (e^z \sqrt{\pi} (32z^{14} + 1392z^{13} + 20\,544z^{12} + 120\,552z^{11} + 234\,018z^{10} - 45z^9 + 405z^8 - 3240z^7 + 22\,680z^6 - 136\,080z^5 + 680\,400z^4 - 2\,721\,600z^3 + 8\,164\,800z^2 - 16\,329\,600z + 16\,329\,600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alp5.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{89\,100\,z^3} (16\,z^{13} - 688\,z^{12} + 9936\,z^{11} - 55\,632\,z^{10} + 93\,375\,z^9 + 28\,485\,z^8 + 24\,408\,z^7 + 32\,760\,z^6 + 60\,480\,z^5 + 151\,200\,z^4 + 477\,900\,z^3 + 1\,632\,960\,z^2 + 5\,443\,200\,z + 16\,329\,600) + \frac{1}{178\,200\,z^{7/2}} (e^{-z} \sqrt{\pi} (-32\,z^{14} + 1392\,z^{13} - 20\,544\,z^{12} + 120\,552\,z^{11} - 234\,018\,z^{10} - 45\,z^9 - 405\,z^8 - 3240\,z^7 - 22\,680\,z^6 - 136\,080\,z^5 - 680\,400\,z^4 - 2\,721\,600\,z^3 - 8\,164\,800\,z^2 - 16\,329\,600\,z - 16\,329\,600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alp6.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, 5; z\right) = \frac{1}{779\,625} (e^z (512\,z^{10} + 18\,688\,z^9 + 218\,880\,z^8 + 910\,080\,z^7 + 826\,560\,z^6 - 514\,080\,z^5 + 665\,280\,z^4 - 982\,800\,z^3 + 1\,332\,450\,z^2 - 1\,374\,975\,z + 779\,625))$$

07.25.03.alp7.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{19\,800\,z^4} (16\,z^{13} + 464\,z^{12} + 3912\,z^{11} + 8900\,z^{10} - 3075\,z^9 + 3618\,z^8 - 10\,920\,z^7 + 60\,480\,z^6 - 378\,000\,z^5 + 2\,172\,600\,z^4 - 10\,704\,960\,z^3 + 43\,545\,600\,z^2 - 143\,337\,600\,z + 381\,024\,000) + \frac{1}{39\,600\,z^{9/2}} (e^z \sqrt{\pi} (32\,z^{14} + 944\,z^{13} + 8272\,z^{12} + 21\,288\,z^{11} - 150\,z^{10} + 1455\,z^9 - 12\,690\,z^8 + 98\,280\,z^7 - 665\,280\,z^6 + 3\,855\,600\,z^5 - 18\,597\,600\,z^4 + 71\,668\,800\,z^3 - 206\,841\,600\,z^2 + 397\,353\,600\,z - 381\,024\,000) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alp8.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{19\,800\,z^4} (-16\,z^{13} + 464\,z^{12} - 3912\,z^{11} + 8900\,z^{10} + 3075\,z^9 + 3618\,z^8 + 10\,920\,z^7 + 60\,480\,z^6 + 378\,000\,z^5 + 2\,172\,600\,z^4 + 10\,704\,960\,z^3 + 43\,545\,600\,z^2 + 143\,337\,600\,z + 381\,024\,000) + \frac{1}{39\,600\,z^{9/2}} (e^{-z} \sqrt{\pi} (32\,z^{14} - 944\,z^{13} + 8272\,z^{12} - 21\,288\,z^{11} - 150\,z^{10} - 1455\,z^9 - 12\,690\,z^8 - 98\,280\,z^7 - 665\,280\,z^6 - 3\,855\,600\,z^5 - 18\,597\,600\,z^4 - 71\,668\,800\,z^3 - 206\,841\,600\,z^2 - 397\,353\,600\,z - 381\,024\,000) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alp9.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{11}{2}, 6; z\right) = \frac{1}{155\,925} e^z (512\,z^9 + 11\,520\,z^8 + 69\,120\,z^7 + 80\,640\,z^6 - 60\,480\,z^5 + 90\,720\,z^4 - 151\,200\,z^3 + 226\,800\,z^2 - 255\,150\,z + 155\,925)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = -\frac{9}{2}$

07.25.03.alpa.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{200930625} (1024 z^{18} + 159744 z^{17} + 10575872 z^{16} + 390458880 z^{15} + 8887004352 z^{14} + 130196656128 z^{13} + 1245151918080 z^{12} + 7724881059840 z^{11} + 30305803852800 z^{10} + 71567211985920 z^9 + 93325371713280 z^8 + 57412701158400 z^7 + 11870281987200 z^6 + 245188944000 z^5 + 4086482400 z^4 + 628689600 z^3 + 267907500 z^2 + 208372500 z + 200930625) + \frac{1}{200930625} (32 e^z \sqrt{\pi} (32 z^{37/2} + 5008 z^{35/2} + 332976 z^{33/2} + 12364632 z^{31/2} + 283660650 z^{29/2} + 4201794765 z^{27/2} + 40820290560 z^{25/2} + 259121106720 z^{23/2} + 1052334642240 z^{21/2} + 2623948236000 z^{19/2} + 3745855411200 z^{17/2} + 2715761260800 z^{15/2} + 795857529600 z^{13/2} + 53330659200 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alpb.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{200930625} (1024 z^{18} - 159744 z^{17} + 10575872 z^{16} - 390458880 z^{15} + 8887004352 z^{14} - 130196656128 z^{13} + 1245151918080 z^{12} - 7724881059840 z^{11} + 30305803852800 z^{10} - 71567211985920 z^9 + 93325371713280 z^8 - 57412701158400 z^7 + 11870281987200 z^6 - 245188944000 z^5 + 4086482400 z^4 - 628689600 z^3 + 267907500 z^2 - 208372500 z + 200930625) - \frac{1}{200930625} (32 e^{-z} \sqrt{\pi} (32 z^{37/2} - 5008 z^{35/2} + 332976 z^{33/2} - 12364632 z^{31/2} + 283660650 z^{29/2} - 4201794765 z^{27/2} + 40820290560 z^{25/2} - 259121106720 z^{23/2} + 1052334642240 z^{21/2} - 2623948236000 z^{19/2} + 3745855411200 z^{17/2} - 2715761260800 z^{15/2} + 795857529600 z^{13/2} - 53330659200 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alpc.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{22325625} (-512 z^{17} - 73216 z^{16} - 4409600 z^{15} - 146759808 z^{14} - 2978019744 z^{13} - 38364345600 z^{12} - 316985598720 z^{11} - 1659591360000 z^{10} - 5316929210880 z^9 - 9759627843840 z^8 - 9106454246400 z^7 - 3387900297600 z^6 - 245188944000 z^5 + 4086482400 z^4 + 209563200 z^3 + 53581500 z^2 + 29767500 z + 22325625) - \frac{1}{22325625} (16 e^z \sqrt{\pi} (32 z^{35/2} + 4592 z^{33/2} + 277872 z^{31/2} + 9308040 z^{29/2} + 190580250 z^{27/2} + 2486572515 z^{25/2} + 20927710440 z^{23/2} + 112627133640 z^{21/2} + 376571840400 z^{19/2} + 741089034000 z^{17/2} + 781499275200 z^{15/2} + 371263435200 z^{13/2} + 53330659200 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alpd.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{22\,325\,625}$$

$$(512 z^{17} - 73\,216 z^{16} + 4\,409\,600 z^{15} - 146\,759\,808 z^{14} + 2\,978\,019\,744 z^{13} - 38\,364\,345\,600 z^{12} + 316\,985\,598\,720 z^{11} - 1\,659\,591\,360\,000 z^{10} + 5\,316\,929\,210\,880 z^9 - 9\,759\,627\,843\,840 z^8 + 9\,106\,454\,246\,400 z^7 - 3\,387\,900\,297\,600 z^6 + 245\,188\,944\,000 z^5 + 4\,086\,482\,400 z^4 - 209\,563\,200 z^3 + 53\,581\,500 z^2 - 29\,767\,500 z + 22\,325\,625) -$$

$$\frac{1}{22\,325\,625} \left(16 e^{-z} \sqrt{\pi} (32 z^{35/2} - 4592 z^{33/2} + 277\,872 z^{31/2} - 9\,308\,040 z^{29/2} + 190\,580\,250 z^{27/2} - 2486\,572\,515 z^{25/2} + 20\,927\,710\,440 z^{23/2} - 112\,627\,133\,640 z^{21/2} + 376\,571\,840\,400 z^{19/2} - 741\,089\,034\,000 z^{17/2} + 781\,499\,275\,200 z^{15/2} - 371\,263\,435\,200 z^{13/2} + 53\,330\,659\,200 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alpe.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{3\,189\,375} (256 z^{16} + 33\,280 z^{15} + 1\,805\,568 z^{14} + 53\,534\,976 z^{13} + 954\,522\,480 z^{12} + 10\,616\,129\,280 z^{11} + 73\,981\,756\,800 z^{10} + 316\,250\,081\,280 z^9 + 788\,121\,653\,760 z^8 + 1\,038\,371\,097\,600 z^7 + 592\,251\,004\,800 z^6 + 81\,729\,648\,000 z^5 - 4\,086\,482\,400 z^4 + 209\,563\,200 z^3 + 17\,860\,500 z^2 + 5\,953\,500 z + 3\,189\,375) +$$

$$\frac{1}{3\,189\,375} \left(8 e^z \sqrt{\pi} (32 z^{33/2} + 4176 z^{31/2} + 227\,760 z^{29/2} + 6\,802\,680 z^{27/2} + 122\,553\,450 z^{25/2} + 1\,383\,591\,465 z^{23/2} + 9\,858\,978\,720 z^{21/2} + 43\,614\,282\,600 z^{19/2} + 114\,886\,144\,800 z^{17/2} + 166\,658\,310\,000 z^{15/2} + 114\,866\,035\,200 z^{13/2} + 26\,665\,329\,600 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alpf.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{3\,189\,375} (256 z^{16} - 33\,280 z^{15} + 1\,805\,568 z^{14} - 53\,534\,976 z^{13} + 954\,522\,480 z^{12} - 10\,616\,129\,280 z^{11} + 73\,981\,756\,800 z^{10} - 316\,250\,081\,280 z^9 + 788\,121\,653\,760 z^8 - 1\,038\,371\,097\,600 z^7 + 592\,251\,004\,800 z^6 - 81\,729\,648\,000 z^5 - 4\,086\,482\,400 z^4 - 209\,563\,200 z^3 + 17\,860\,500 z^2 - 5\,953\,500 z + 3\,189\,375) -$$

$$\frac{1}{3\,189\,375} \left(8 e^{-z} \sqrt{\pi} (32 z^{33/2} - 4176 z^{31/2} + 227\,760 z^{29/2} - 6\,802\,680 z^{27/2} + 122\,553\,450 z^{25/2} - 1\,383\,591\,465 z^{23/2} + 9\,858\,978\,720 z^{21/2} - 43\,614\,282\,600 z^{19/2} + 114\,886\,144\,800 z^{17/2} - 166\,658\,310\,000 z^{15/2} + 114\,866\,035\,200 z^{13/2} - 26\,665\,329\,600 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alpg.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{637\,875} (-128 z^{15} - 14\,976 z^{14} - 723\,136 z^{13} - 18\,820\,320 z^{12} - 289\,401\,480 z^{11} - 2\,712\,024\,000 z^{10} - 15\,418\,892\,160 z^9 - 51\,259\,944\,960 z^8 - 91\,823\,990\,400 z^7 - 74\,449\,065\,600 z^6 - 16\,345\,929\,600 z^5 + 1\,362\,160\,800 z^4 - 209\,563\,200 z^3 + 17\,860\,500 z^2 + 1\,984\,500 z + 637\,875) - \frac{1}{637\,875}$$

$$\left(4 e^z \sqrt{\pi} (32 z^{31/2} + 3760 z^{29/2} + 182\,640 z^{27/2} + 4\,793\,640 z^{25/2} + 74\,617\,050 z^{23/2} + 712\,038\,015 z^{21/2} + 4\,162\,674\,600 z^{19/2} + 14\,475\,560\,400 z^{17/2} + 28\,032\,782\,400 z^{15/2} + 26\,494\,398\,000 z^{13/2} + 8\,888\,443\,200 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alph.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{637875} (128 z^{15} - 14976 z^{14} + 723136 z^{13} - 18820320 z^{12} + 289401480 z^{11} - 2712024000 z^{10} + 15418892160 z^9 - 51259944960 z^8 + 91823990400 z^7 - 74449065600 z^6 + 16345929600 z^5 + 1362160800 z^4 + 209563200 z^3 + 17860500 z^2 - 1984500 z + 637875) - \frac{1}{637875} (4 e^{-z} \sqrt{\pi} (32 z^{31/2} - 3760 z^{29/2} + 182640 z^{27/2} - 4793640 z^{25/2} + 74617050 z^{23/2} - 712038015 z^{21/2} + 4162674600 z^{19/2} - 14475560400 z^{17/2} + 28032782400 z^{15/2} - 26494398000 z^{13/2} + 8888443200 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alpi.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{212625} (64 z^{14} + 6656 z^{13} + 281728 z^{12} + 6314400 z^{11} + 81689580 z^{10} + 623640192 z^9 + 2754440640 z^8 + 6582378240 z^7 + 7284513600 z^6 + 2335132800 z^5 - 272432160 z^4 + 69854400 z^3 - 17860500 z^2 + 1984500 z + 212625) + \frac{1}{212625} (2 e^z \sqrt{\pi} (32 z^{29/2} + 3344 z^{27/2} + 142512 z^{25/2} + 3226008 z^{23/2} + 42356970 z^{21/2} + 330825285 z^{19/2} + 1516072320 z^{17/2} + 3863054160 z^{15/2} + 4854457440 z^{13/2} + 2222110800 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alpi.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{212625} (64 z^{14} - 6656 z^{13} + 281728 z^{12} - 6314400 z^{11} + 81689580 z^{10} - 623640192 z^9 + 2754440640 z^8 - 6582378240 z^7 + 7284513600 z^6 - 2335132800 z^5 - 272432160 z^4 - 69854400 z^3 - 17860500 z^2 - 1984500 z + 212625) - \frac{1}{212625} (2 e^{-z} \sqrt{\pi} (32 z^{29/2} - 3344 z^{27/2} + 142512 z^{25/2} - 3226008 z^{23/2} + 42356970 z^{21/2} - 330825285 z^{19/2} + 1516072320 z^{17/2} - 3863054160 z^{15/2} + 4854457440 z^{13/2} - 2222110800 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alpk.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{212625} (-32 z^{13} - 2912 z^{12} - 105936 z^{11} - 1993320 z^{10} - 20961066 z^9 - 124047504 z^8 - 393258960 z^7 - 581424480 z^6 - 259459200 z^5 + 38918880 z^4 - 13970880 z^3 + 5953500 z^2 - 1984500 z + 212625) + \frac{1}{212625} (e^z \sqrt{\pi} (-32 z^{27/2} - 2928 z^{25/2} - 107376 z^{23/2} - 2044872 z^{21/2} - 21908250 z^{19/2} - 133651035 z^{17/2} - 446864040 z^{15/2} - 735005880 z^{13/2} - 444422160 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alpl.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, \frac{1}{2}; -z\right) =$$

$$\frac{1}{212\,625} (32 z^{13} - 2912 z^{12} + 105\,936 z^{11} - 1\,993\,320 z^{10} + 20\,961\,066 z^9 - 124\,047\,504 z^8 + 393\,258\,960 z^7 - 581\,424\,480 z^6 + 259\,459\,200 z^5 + 38\,918\,880 z^4 + 13\,970\,880 z^3 + 5\,953\,500 z^2 + 1\,984\,500 z + 212\,625) +$$

$$\frac{1}{212\,625} \left(e^{-z} \sqrt{\pi} (-32 z^{27/2} + 2928 z^{25/2} - 107\,376 z^{23/2} + 2\,044\,872 z^{21/2} - 21\,908\,250 z^{19/2} + 133\,651\,035 z^{17/2} - 446\,864\,040 z^{15/2} + 735\,005\,880 z^{13/2} - 444\,422\,160 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alpm.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, 1; z\right) =$$

$$-\frac{1}{1\,701\,000} (e^z (256 z^{13} + 21\,760 z^{12} + 733\,440 z^{11} + 12\,656\,640 z^{10} + 120\,444\,000 z^9 + 633\,232\,800 z^8 + 1\,733\,274\,000 z^7 + 2\,093\,364\,000 z^6 + 616\,730\,625 z^5 - 130\,386\,375 z^4 + 57\,040\,200 z^3 - 26\,649\,000 z^2 + 9\,639\,000 z - 1\,701\,000))$$

07.25.03.alpn.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, \frac{3}{2}; z\right) =$$

$$\frac{1}{212\,625} (-16 z^{12} - 1248 z^{11} - 38\,000 z^{10} - 579\,264 z^9 - 4\,705\,407 z^8 - 19\,922\,640 z^7 - 39\,027\,240 z^6 - 23\,587\,200 z^5 + 4\,324\,320 z^4 - 1\,995\,840 z^3 + 1\,190\,700 z^2 - 661\,500 z + 212\,625) - \frac{1}{425\,250} (e^z \sqrt{\pi} z^{11/2} (32 z^7 + 2512 z^6 + 77\,232 z^5 + 1\,195\,320 z^4 + 9\,955\,050 z^3 + 44\,055\,585 z^2 + 94\,419\,360 z + 74\,070\,360) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alpo.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, \frac{3}{2}; -z\right) =$$

$$\frac{1}{425\,250} (e^{-z} \sqrt{\pi} (32 z^7 - 2512 z^6 + 77\,232 z^5 - 1\,195\,320 z^4 + 9\,955\,050 z^3 - 44\,055\,585 z^2 + 94\,419\,360 z - 74\,070\,360) \operatorname{erfi}(\sqrt{z}) z^{11/2}) + \frac{1}{212\,625} (-16 z^{12} + 1248 z^{11} - 38\,000 z^{10} + 579\,264 z^9 - 4\,705\,407 z^8 + 19\,922\,640 z^7 - 39\,027\,240 z^6 + 23\,587\,200 z^5 + 4\,324\,320 z^4 + 1\,995\,840 z^3 + 1\,190\,700 z^2 + 661\,500 z + 212\,625)$$

07.25.03.alpp.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, 2; z\right) =$$

$$-\frac{1}{1\,701\,000} (e^z (256 z^{12} + 18\,432 z^{11} + 512\,256 z^{10} + 7\,021\,824 z^9 + 50\,225\,760 z^8 + 181\,200\,960 z^7 + 283\,666\,320 z^6 + 107\,699\,760 z^5 - 29\,467\,935 z^4 + 16\,953\,300 z^3 - 10\,773\,000 z^2 + 5\,670\,000 z - 1\,701\,000))$$

07.25.03.alpq.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{141750} (-16z^{11} - 1040z^{10} - 25528z^9 - 298956z^8 - 1727385z^7 - 4498200z^6 - 3628800z^5 + 786240z^4 - 443520z^3 + 340200z^2 - 264600z + 141750) - \frac{1}{283500} e^z \sqrt{\pi} z^{11/2} (32z^6 + 2096z^5 + 52080z^4 + 622440z^3 + 3730650z^2 + 10479735z + 10581480) \operatorname{erf}(\sqrt{z})$$

07.25.03.alpr.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{1}{141750} (16z^{11} - 1040z^{10} + 25528z^9 - 298956z^8 + 1727385z^7 - 4498200z^6 + 3628800z^5 + 786240z^4 + 443520z^3 + 340200z^2 + 264600z + 141750) - \frac{1}{283500} e^{-z} \sqrt{\pi} z^{11/2} (32z^6 - 2096z^5 + 52080z^4 - 622440z^3 + 3730650z^2 - 10479735z + 10581480) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alps.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, 3; z\right) = -\frac{1}{850500} (e^z (256z^{11} + 15104z^{10} + 331008z^9 + 3380736z^8 + 16418400z^7 + 33435360z^6 + 16183440z^5 - 5584320z^4 + 4037985z^3 - 3236625z^2 + 2173500z - 850500))$$

07.25.03.alpt.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{56700} (-16z^{10} - 832z^9 - 15552z^8 - 128280z^7 - 451395z^6 - 483840z^5 + 120960z^4 - 80640z^3 + 75600z^2 - 75600z + 56700) - \frac{e^z \sqrt{\pi} z^{11/2} (32z^5 + 1680z^4 + 31920z^3 + 271320z^2 + 1017450z + 1322685) \operatorname{erf}(\sqrt{z})}{113400}$$

07.25.03.alpu.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32z^5 - 1680z^4 + 31920z^3 - 271320z^2 + 1017450z - 1322685) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{113400} + \frac{1}{56700} (-16z^{10} + 832z^9 - 15552z^8 + 128280z^7 - 451395z^6 + 483840z^5 + 120960z^4 + 80640z^3 + 75600z^2 + 75600z + 56700)$$

07.25.03.alpv.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, 4; z\right) = -\frac{1}{283500} (e^z (256z^{10} + 11776z^9 + 189696z^8 + 1294080z^7 + 3477600z^6 + 2136960z^5 - 912240z^4 + 801360z^3 - 770175z^2 + 614250z - 283500))$$

07.25.03.alpw.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{16200z^3} (-16z^{12} - 624z^{11} - 8072z^{10} - 39780z^9 - 56925z^8 + 16152z^7 - 12600z^6 + 15120z^5 - 25200z^4 + 59400z^3 - 181440z^2 + 604800z - 1814400) + \frac{1}{32400z^{7/2}} \left(e^z \sqrt{\pi} (-32z^{13} - 1264z^{12} - 16752z^{11} - 87048z^{10} - 146970z^9 + 45z^8 - 360z^7 + 2520z^6 - 15120z^5 + 75600z^4 - 302400z^3 + 907200z^2 - 1814400z + 1814400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alpx.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{16200z^3} (16z^{12} - 624z^{11} + 8072z^{10} - 39780z^9 + 56925z^8 + 16152z^7 + 12600z^6 + 15120z^5 + 25200z^4 + 59400z^3 + 181440z^2 + 604800z + 1814400) + \frac{1}{32400z^{7/2}} \left(e^{-z} \sqrt{\pi} (-32z^{13} + 1264z^{12} - 16752z^{11} + 87048z^{10} - 146970z^9 - 45z^8 - 360z^7 - 2520z^6 - 15120z^5 - 75600z^4 - 302400z^3 - 907200z^2 - 1814400z - 1814400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alpy.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, 5; z\right) = -\frac{1}{70875} \left(e^z (256z^9 + 8448z^8 + 88320z^7 + 322560z^6 + 252000z^5 - 131040z^4 + 136080z^3 - 151200z^2 + 137025z - 70875) \right)$$

07.25.03.alpz.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{3600z^4} (-16z^{12} - 416z^{11} - 3088z^{10} - 6000z^9 + 1977z^8 - 2352z^7 + 7560z^6 - 40320z^5 + 223200z^4 - 1088640z^3 + 4415040z^2 - 14515200z + 38102400) + \frac{1}{7200z^{9/2}} \left(e^z \sqrt{\pi} (-32z^{13} - 848z^{12} - 6576z^{11} - 14712z^{10} + 150z^9 - 1305z^8 + 10080z^7 - 68040z^6 + 393120z^5 - 1890000z^4 + 7257600z^3 - 20865600z^2 + 39916800z - 38102400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alq0.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{3600z^4} (-16z^{12} + 416z^{11} - 3088z^{10} + 6000z^9 + 1977z^8 + 2352z^7 + 7560z^6 + 40320z^5 + 223200z^4 + 1088640z^3 + 4415040z^2 + 14515200z + 38102400) + \frac{1}{7200z^{9/2}} \left(e^{-z} \sqrt{\pi} (32z^{13} - 848z^{12} + 6576z^{11} - 14712z^{10} - 150z^9 - 1305z^8 - 10080z^7 - 68040z^6 - 393120z^5 - 1890000z^4 - 7257600z^3 - 20865600z^2 - 39916800z - 38102400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alq1.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{9}{2}, 6; z\right) = -\frac{1}{14175} e^z (256 z^8 + 5120 z^7 + 26880 z^6 + 26880 z^5 - 16800 z^4 + 20160 z^3 - 25200 z^2 + 25200 z - 14175)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = -\frac{7}{2}$

07.25.03.alq2.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{2480625} (256 z^{16} + 33536 z^{15} + 1836032 z^{14} + 55036032 z^{13} + 994562864 z^{12} + 11251042320 z^{11} + 80171773920 z^{10} + 353365444320 z^9 + 921252021120 z^8 + 1307011386240 z^7 + 863493321600 z^6 + 189318729600 z^5 + 4086482400 z^4 + 69854400 z^3 + 10716300 z^2 + 4252500 z + 2480625) + \frac{1}{2480625} (8 e^z \sqrt{\pi} (32 z^{33/2} + 4208 z^{31/2} + 231584 z^{29/2} + 6992200 z^{27/2} + 127650450 z^{25/2} + 1465368915 z^{23/2} + 10670128035 z^{21/2} + 48606365430 z^{19/2} + 133540013250 z^{17/2} + 206928981000 z^{15/2} + 160712332200 z^{13/2} + 49838770800 z^{11/2} + 3491888400 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alq3.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{2480625} (256 z^{16} - 33536 z^{15} + 1836032 z^{14} - 55036032 z^{13} + 994562864 z^{12} - 11251042320 z^{11} + 80171773920 z^{10} - 353365444320 z^9 + 921252021120 z^8 - 1307011386240 z^7 + 863493321600 z^6 - 189318729600 z^5 + 4086482400 z^4 - 69854400 z^3 + 10716300 z^2 - 4252500 z + 2480625) - \frac{1}{2480625} (8 e^{-z} \sqrt{\pi} (32 z^{33/2} - 4208 z^{31/2} + 231584 z^{29/2} - 6992200 z^{27/2} + 127650450 z^{25/2} - 1465368915 z^{23/2} + 10670128035 z^{21/2} - 48606365430 z^{19/2} + 133540013250 z^{17/2} - 206928981000 z^{15/2} + 160712332200 z^{13/2} - 49838770800 z^{11/2} + 3491888400 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alq4.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{354375} (-128 z^{15} - 15232 z^{14} - 750528 z^{13} - 20020192 z^{12} - 317456520 z^{11} - 3095008560 z^{10} - 18557681520 z^9 - 66565183680 z^8 - 134320144320 z^7 - 135621158400 z^6 - 53794540800 z^5 - 4086482400 z^4 + 69854400 z^3 + 3572100 z^2 + 850500 z + 354375) - \frac{1}{354375} (4 e^z \sqrt{\pi} (32 z^{31/2} + 3824 z^{29/2} + 189520 z^{27/2} + 5097000 z^{25/2} + 81777450 z^{23/2} + 811149315 z^{21/2} + 4992082830 z^{19/2} + 18653868450 z^{17/2} + 40270671000 z^{15/2} + 45846297000 z^{13/2} + 23173441200 z^{11/2} + 3491888400 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alq5.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{354375} (128 z^{15} - 15232 z^{14} + 750528 z^{13} - 20020192 z^{12} + 317456520 z^{11} - 3095008560 z^{10} + 18557681520 z^9 -$$

$$66565183680 z^8 + 134320144320 z^7 - 135621158400 z^6 + 53794540800 z^5 -$$

$$4086482400 z^4 - 69854400 z^3 + 3572100 z^2 - 850500 z + 354375) -$$

$$\frac{1}{354375} \left(4 e^{-z} \sqrt{\pi} (32 z^{31/2} - 3824 z^{29/2} + 189520 z^{27/2} - 5097000 z^{25/2} + 81777450 z^{23/2} -$$

$$811149315 z^{21/2} + 4992082830 z^{19/2} - 18653868450 z^{17/2} + 40270671000 z^{15/2} -$$

$$45846297000 z^{13/2} + 23173441200 z^{11/2} - 3491888400 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alq6.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{70875} (64 z^{14} + 6848 z^{13} + 299968 z^{12} + 7013760 z^{11} + 95746140 z^{10} + 784697340 z^9 + 3826309680 z^8 + 10624038480$$

$$z^7 + 15293023200 z^6 + 9362152800 z^5 + 1362160800 z^4 - 69854400 z^3 + 3572100 z^2 + 283500 z + 70875) +$$

$$\frac{1}{70875} \left(2 e^z \sqrt{\pi} (32 z^{29/2} + 3440 z^{27/2} + 151680 z^{25/2} + 3580200 z^{23/2} + 49555650 z^{21/2} + 414704115 z^{19/2} +$$

$$2089154025 z^{17/2} + 6118944300 z^{15/2} + 9675949500 z^{13/2} + 7142499000 z^{11/2} + 1745944200 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alq7.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{70875} (64 z^{14} - 6848 z^{13} + 299968 z^{12} - 7013760 z^{11} + 95746140 z^{10} - 784697340 z^9 + 3826309680 z^8 - 10624038480$$

$$z^7 + 15293023200 z^6 - 9362152800 z^5 + 1362160800 z^4 + 69854400 z^3 + 3572100 z^2 - 283500 z + 70875) -$$

$$\frac{1}{70875} \left(2 e^{-z} \sqrt{\pi} (32 z^{29/2} - 3440 z^{27/2} + 151680 z^{25/2} - 3580200 z^{23/2} + 49555650 z^{21/2} - 414704115 z^{19/2} +$$

$$2089154025 z^{17/2} - 6118944300 z^{15/2} + 9675949500 z^{13/2} - 7142499000 z^{11/2} + 1745944200 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alq8.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{23625} (-32 z^{13} - 3040 z^{12} - 116560 z^{11} - 2342760 z^{10} - 26842858 z^9 - 178644840 z^8 - 673610040 z^7 -$$

$$1334751600 z^6 - 1171170000 z^5 - 272432160 z^4 + 23284800 z^3 - 3572100 z^2 + 283500 z + 23625) +$$

$$\frac{1}{23625} \left(e^z \sqrt{\pi} (-32 z^{27/2} - 3056 z^{25/2} - 118064 z^{23/2} - 2399560 z^{21/2} - 27959610 z^{19/2} - 191027235 z^{17/2} -$$

$$751963380 z^{15/2} - 1607164020 z^{13/2} - 1640129400 z^{11/2} - 581981400 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alq9.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{23\,625} (32 z^{13} - 3040 z^{12} + 116\,560 z^{11} - 2\,342\,760 z^{10} + 26\,842\,858 z^9 - 178\,644\,840 z^8 + 673\,610\,040 z^7 - 1\,334\,751\,600 z^6 + 1\,171\,170\,000 z^5 - 272\,432\,160 z^4 - 23\,284\,800 z^3 - 3\,572\,100 z^2 - 283\,500 z + 23\,625) + \frac{1}{23\,625} (e^{-z} \sqrt{\pi} (-32 z^{27/2} + 3056 z^{25/2} - 118\,064 z^{23/2} + 2\,399\,560 z^{21/2} - 27\,959\,610 z^{19/2} + 191\,027\,235 z^{17/2} - 751\,963\,380 z^{15/2} + 1\,607\,164\,020 z^{13/2} - 1\,640\,129\,400 z^{11/2} + 581\,981\,400 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alqa.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{23\,625} (16 z^{12} + 1328 z^{11} + 43\,680 z^{10} + 735\,224 z^9 + 6\,824\,667 z^8 + 35\,043\,885 z^7 + 94\,165\,890 z^6 + 113\,963\,850 z^5 + 38\,918\,880 z^4 - 4\,656\,960 z^3 + 1\,190\,700 z^2 - 283\,500 z + 23\,625) + \frac{1}{47\,250} (e^z \sqrt{\pi} (32 z^{25/2} + 2672 z^{23/2} + 88\,672 z^{21/2} + 1\,512\,840 z^{19/2} + 14\,344\,050 z^{17/2} + 76\,274\,835 z^{15/2} + 218\,039\,535 z^{13/2} + 298\,926\,810 z^{11/2} + 145\,495\,350 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alqb.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{23\,625} (16 z^{12} - 1328 z^{11} + 43\,680 z^{10} - 735\,224 z^9 + 6\,824\,667 z^8 - 35\,043\,885 z^7 + 94\,165\,890 z^6 - 113\,963\,850 z^5 + 38\,918\,880 z^4 + 4\,656\,960 z^3 + 1\,190\,700 z^2 + 283\,500 z + 23\,625) + \frac{1}{47\,250} (e^{-z} \sqrt{\pi} (-32 z^{25/2} + 2672 z^{23/2} - 88\,672 z^{21/2} + 1\,512\,840 z^{19/2} - 14\,344\,050 z^{17/2} + 76\,274\,835 z^{15/2} - 218\,039\,535 z^{13/2} + 298\,926\,810 z^{11/2} - 145\,495\,350 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alqc.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, 1; z\right) = \frac{1}{189\,000} (e^z (128 z^{12} + 9920 z^{11} + 302\,240 z^{10} + 4\,666\,000 z^9 + 39\,225\,000 z^8 + 179\,328\,900 z^7 + 418\,314\,750 z^6 + 419\,209\,875 z^5 + 98\,760\,375 z^4 - 15\,813\,000 z^3 + 4\,800\,600 z^2 - 1\,323\,000 z + 189\,000))$$

07.25.03.alqd.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{94\,500} (e^z \sqrt{\pi} (32 z^7 + 2288 z^6 + 63\,504 z^5 + 877\,800 z^4 + 6\,443\,850 z^3 + 24\,724\,035 z^2 + 44\,971\,290 z + 29\,099\,070) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{47\,250} (16 z^{11} + 1136 z^{10} + 31\,192 z^9 + 423\,852 z^8 + 3\,024\,249 z^7 + 11\,027\,730 z^6 + 18\,075\,330 z^5 + 8\,648\,640 z^4 - 1\,330\,560 z^3 + 476\,280 z^2 - 189\,000 z + 47\,250))$$

07.25.03.alqe.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{94500} \left(e^{-z} \sqrt{\pi} (32 z^7 - 2288 z^6 + 63504 z^5 - 877800 z^4 + 6443850 z^3 - 24724035 z^2 + 44971290 z - 29099070) \right. \\ \left. \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{47250} (-16 z^{11} + 1136 z^{10} - 31192 z^9 + 423852 z^8 - 3024249 z^7 + 11027730 z^6 - 18075330 z^5 + 8648640 z^4 + 1330560 z^3 + 476280 z^2 + 189000 z + 47250) \right)$$

07.25.03.alqf.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, 2; z\right) = \frac{1}{189000} \left(e^z (128 z^{11} + 8384 z^{10} + 210016 z^9 + 2565840 z^8 + 16132440 z^7 + 50269380 z^6 + 66429090 z^5 + 20635335 z^4 - 4416300 z^3 + 1852200 z^2 - 756000 z + 189000) \right)$$

07.25.03.alqg.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{63000} e^z \sqrt{\pi} (32 z^6 + 1904 z^5 + 42560 z^4 + 452200 z^3 + 2374050 z^2 + 5731635 z + 4849845) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{31500} (16 z^{10} + 944 z^9 + 20816 z^8 + 216144 z^7 + 1088255 z^6 + 2407755 z^5 + 1572480 z^4 - 295680 z^3 + 136080 z^2 - 75600 z + 31500)$$

07.25.03.alqh.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{1}{31500} (16 z^{10} - 944 z^9 + 20816 z^8 - 216144 z^7 + 1088255 z^6 - 2407755 z^5 + 1572480 z^4 + 295680 z^3 + 136080 z^2 + 75600 z + 31500) - \frac{1}{63000} e^{-z} \sqrt{\pi} z^{9/2} (32 z^6 - 1904 z^5 + 42560 z^4 - 452200 z^3 + 2374050 z^2 - 5731635 z + 4849845) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alqi.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, 3; z\right) = \frac{1}{94500} \left(e^z (128 z^{10} + 6848 z^9 + 134688 z^8 + 1218960 z^7 + 5161800 z^6 + 8974980 z^5 + 3604230 z^4 - 990045 z^3 + 533925 z^2 - 283500 z + 94500) \right)$$

07.25.03.alqj.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z \sqrt{\pi} (32 z^5 + 1520 z^4 + 25840 z^3 + 193800 z^2 + 629850 z + 692835) \operatorname{erf}(\sqrt{z}) z^{9/2}}{25200} + \frac{1}{12600} (16 z^9 + 752 z^8 + 12552 z^7 + 90980 z^6 + 274845 z^5 + 241920 z^4 - 53760 z^3 + 30240 z^2 - 21600 z + 12600)$$

07.25.03.alqk.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32 z^5 - 1520 z^4 + 25840 z^3 - 193800 z^2 + 629850 z - 692835) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{25200} + \frac{1}{12600} (-16 z^9 + 752 z^8 - 12552 z^7 + 90980 z^6 - 274845 z^5 + 241920 z^4 + 53760 z^3 + 30240 z^2 + 21600 z + 12600)$$

07.25.03.alql.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, 4; z\right) = \frac{1}{31500} e^z (128 z^9 + 5312 z^8 + 76256 z^7 + 456400 z^6 + 1054200 z^5 + 541380 z^4 - 185430 z^3 + 122535 z^2 - 78750 z + 31500)$$

07.25.03.alqm.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{3600 z^3} (16 z^{11} + 560 z^{10} + 6400 z^9 + 27240 z^8 + 32259 z^7 - 8295 z^6 + 5670 z^5 - 5850 z^4 + 9000 z^3 - 22680 z^2 + 75600 z - 226800) + \frac{1}{7200 z^{7/2}} (e^z \sqrt{\pi} (32 z^{12} + 1136 z^{11} + 13344 z^{10} + 60360 z^9 + 86610 z^8 - 45 z^7 + 315 z^6 - 1890 z^5 + 9450 z^4 - 37800 z^3 + 113400 z^2 - 226800 z + 226800) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alqn.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{3600 z^3} (16 z^{11} - 560 z^{10} + 6400 z^9 - 27240 z^8 + 32259 z^7 + 8295 z^6 + 5670 z^5 + 5850 z^4 + 9000 z^3 + 22680 z^2 + 75600 z + 226800) + \frac{1}{7200 z^{7/2}} (e^{-z} \sqrt{\pi} (-32 z^{12} + 1136 z^{11} - 13344 z^{10} + 60360 z^9 - 86610 z^8 - 45 z^7 - 315 z^6 - 1890 z^5 - 9450 z^4 - 37800 z^3 - 113400 z^2 - 226800 z - 226800) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alqp.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, 5; z\right) = \frac{e^z (128 z^8 + 3776 z^7 + 34720 z^6 + 109200 z^5 + 71400 z^4 - 29820 z^3 + 23310 z^2 - 17325 z + 7875)}{7875}$$

07.25.03.alqp.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{800 z^4} (16 z^{11} + 368 z^{10} + 2360 z^9 + 3804 z^8 - 1183 z^7 + 1470 z^6 - 5130 z^5 + 25800 z^4 - 123480 z^3 + 498960 z^2 - 1638000 z + 4233600) + \frac{1}{1600 z^{9/2}} (e^z \sqrt{\pi} (32 z^{12} + 752 z^{11} + 5072 z^{10} + 9640 z^9 - 150 z^8 + 1155 z^7 - 7770 z^6 + 44730 z^5 - 214200 z^4 + 819000 z^3 - 2343600 z^2 + 4460400 z - 4233600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alqq.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{800 z^4} (-16 z^{11} + 368 z^{10} - 2360 z^9 + 3804 z^8 + 1183 z^7 + 1470 z^6 + 5130 z^5 + 25800 z^4 + 123480 z^3 + 498960 z^2 - 1638000 z + 4233600) + \frac{1}{1600 z^{9/2}} (e^{-z} \sqrt{\pi} (32 z^{12} - 752 z^{11} + 5072 z^{10} - 9640 z^9 - 150 z^8 - 1155 z^7 - 7770 z^6 - 44730 z^5 - 214200 z^4 - 819000 z^3 - 2343600 z^2 - 4460400 z - 4233600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alqr.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{7}{2}, 6; z\right) = \frac{e^z (128 z^7 + 2240 z^6 + 10080 z^5 + 8400 z^4 - 4200 z^3 + 3780 z^2 - 3150 z + 1575)}{1575}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = -\frac{5}{2}$

07.25.03.alqs.01

$$\begin{aligned} {}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; z\right) = & \frac{1}{50625} (64 z^{14} + 6912 z^{13} + 306176 z^{12} + 7257888 z^{11} + 100809900 z^{10} + 845111760 z^9 + 4250774520 z^8 + \\ & 12352901760 z^7 + 19157093280 z^6 + 13590720000 z^5 + 3141309600 z^4 + \\ & 69854400 z^3 + 1190700 z^2 + 170100 z + 50625) + \frac{1}{50625} \left(2 e^z \sqrt{\pi} \right. \\ & \left. (32 z^{29/2} + 3472 z^{27/2} + 154800 z^{25/2} + 3703800 z^{23/2} + 52147050 z^{21/2} + 446119965 z^{19/2} + 2315363040 z^{17/2} + \right. \\ & \left. 7077053250 z^{15/2} + 11962458000 z^{13/2} + 9958923000 z^{11/2} + 3255595200 z^{9/2} + 236293200 z^{7/2}) \operatorname{erf}(\sqrt{z})\right) \end{aligned}$$

07.25.03.alqt.01

$$\begin{aligned} {}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; -z\right) = & \frac{1}{50625} (64 z^{14} - 6912 z^{13} + 306176 z^{12} - 7257888 z^{11} + 100809900 z^{10} - 845111760 z^9 + 4250774520 z^8 - \\ & 12352901760 z^7 + 19157093280 z^6 - 13590720000 z^5 + 3141309600 z^4 - \\ & 69854400 z^3 + 1190700 z^2 - 170100 z + 50625) - \frac{1}{50625} \left(2 e^{-z} \sqrt{\pi} \right. \\ & \left. (32 z^{29/2} - 3472 z^{27/2} + 154800 z^{25/2} - 3703800 z^{23/2} + 52147050 z^{21/2} - 446119965 z^{19/2} + 2315363040 z^{17/2} - \right. \\ & \left. 7077053250 z^{15/2} + 11962458000 z^{13/2} - 9958923000 z^{11/2} + 3255595200 z^{9/2} - 236293200 z^{7/2}) \operatorname{erfi}(\sqrt{z})\right) \end{aligned}$$

07.25.03.alqu.01

$$\begin{aligned} {}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; z\right) = & \frac{1}{10125} (-32 z^{13} - 3104 z^{12} - 122064 z^{11} - 2531880 z^{10} - 30207210 z^9 - 212232420 z^8 - 864431640 z^7 - \\ & 1932035040 z^6 - 2114283600 z^5 - 889574400 z^4 - 69854400 z^3 + 1190700 z^2 + 56700 z + 10125) + \\ & \frac{1}{10125} \left(e^z \sqrt{\pi} (-32 z^{27/2} - 3120 z^{25/2} - 123600 z^{23/2} - 2591400 z^{21/2} - 31415850 z^{19/2} - 226209015 z^{17/2} - \right. \\ & \left. 958108950 z^{15/2} - 2286508500 z^{13/2} - 2816424000 z^{11/2} - 1509651000 z^{9/2} - 236293200 z^{7/2}) \operatorname{erf}(\sqrt{z})\right) \end{aligned}$$

07.25.03.alqv.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{10125} (32 z^{13} - 3104 z^{12} + 122064 z^{11} - 2531880 z^{10} + 30207210 z^9 - 212232420 z^8 + 864431640 z^7 -$$

$$1932035040 z^6 + 2114283600 z^5 - 889574400 z^4 + 69854400 z^3 + 1190700 z^2 - 56700 z + 10125) +$$

$$\frac{1}{10125} \left(e^{-z} \sqrt{\pi} (-32 z^{27/2} + 3120 z^{25/2} - 123600 z^{23/2} + 2591400 z^{21/2} - 31415850 z^{19/2} + 226209015 z^{17/2} -$$

$$958108950 z^{15/2} + 2286508500 z^{13/2} - 2816424000 z^{11/2} + 1509651000 z^{9/2} - 236293200 z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alqw.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{3375} (16 z^{12} + 1376 z^{11} + 47280 z^{10} + 841088 z^9 + 8396895 z^8 + 47705400 z^7 + 149320860 z^6 + 235778400 z^5 +$$

$$154285560 z^4 + 23284800 z^3 - 1190700 z^2 + 56700 z + 3375) +$$

$$\frac{1}{6750} \left(e^z \sqrt{\pi} (32 z^{25/2} + 2768 z^{23/2} + 95920 z^{21/2} + 1728120 z^{19/2} + 17590890 z^{17/2} + 103072785 z^{15/2} +$$

$$339672240 z^{13/2} + 588147300 z^{11/2} + 463834800 z^{9/2} + 118146600 z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alqx.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{3375} (16 z^{12} - 1376 z^{11} + 47280 z^{10} - 841088 z^9 + 8396895 z^8 - 47705400 z^7 + 149320860 z^6 - 235778400 z^5 +$$

$$154285560 z^4 - 23284800 z^3 - 1190700 z^2 - 56700 z + 3375) +$$

$$\frac{1}{6750} \left(e^{-z} \sqrt{\pi} (-32 z^{25/2} + 2768 z^{23/2} - 95920 z^{21/2} + 1728120 z^{19/2} - 17590890 z^{17/2} + 103072785 z^{15/2} -$$

$$339672240 z^{13/2} + 588147300 z^{11/2} - 463834800 z^{9/2} + 118146600 z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alqy.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{6750} (-16 z^{11} - 1200 z^{10} - 35288 z^9 - 524076 z^8 - 4220505 z^7 - 18384990 z^6 - 40604850 z^5 - 38455560 z^4 -$$

$$9313920 z^3 + 793800 z^2 - 113400 z + 6750) +$$

$$\frac{1}{13500} \left(e^z \sqrt{\pi} (-32 z^{23/2} - 2416 z^{21/2} - 71760 z^{19/2} - 1082280 z^{17/2} - 8932650 z^{15/2} -$$

$$40544235 z^{13/2} - 96406830 z^{11/2} - 106113150 z^{9/2} - 39382200 z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alqz.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{6750} (16z^{11} - 1200z^{10} + 35288z^9 - 524076z^8 + 4220505z^7 - 18384990z^6 + 40604850z^5 - 38455560z^4 + 9313920z^3 + 793800z^2 + 113400z + 6750) + \frac{1}{13500} (e^{-z} \sqrt{\pi} (-32z^{23/2} + 2416z^{21/2} - 71760z^{19/2} + 1082280z^{17/2} - 8932650z^{15/2} + 40544235z^{13/2} - 96406830z^{11/2} + 106113150z^{9/2} - 39382200z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alr0.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, 1; z\right) = -\frac{1}{27000} (e^z (64z^{11} + 4480z^{10} + 122000z^9 + 1662000z^8 + 12133500z^7 + 47197200z^6 + 91164375z^5 + 72858375z^4 + 12951000z^3 - 1431000z^2 + 253800z - 27000))$$

07.25.03.alr1.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{13500} (-16z^{10} - 1024z^9 - 25056z^8 - 299064z^7 - 1839315z^6 - 5632380z^5 - 7451730z^4 - 2661120z^3 + 317520z^2 - 75600z + 13500) - \frac{1}{27000} e^z \sqrt{\pi} z^{7/2} (32z^7 + 2064z^6 + 51120z^5 + 622200z^4 + 3955050z^3 + 12858885z^2 + 19253520z + 9845550) \operatorname{erf}(\sqrt{z})$$

07.25.03.alr2.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{27000} e^{-z} \sqrt{\pi} (32z^7 - 2064z^6 + 51120z^5 - 622200z^4 + 3955050z^3 - 12858885z^2 + 19253520z - 9845550) \operatorname{erfi}(\sqrt{z}) + \frac{1}{13500} (-16z^{10} + 1024z^9 - 25056z^8 + 299064z^7 - 1839315z^6 + 5632380z^5 - 7451730z^4 + 2661120z^3 + 317520z^2 + 75600z + 13500)$$

07.25.03.alr3.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, 2; z\right) = -\frac{1}{27000} (e^z (64z^{10} + 3776z^9 + 84240z^8 + 903840z^7 + 4902780z^6 + 12877740z^5 + 13897935z^4 + 3368700z^3 - 523800z^2 + 140400z - 27000))$$

07.25.03.alr4.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{9000} (-16z^9 - 848z^8 - 16584z^7 - 150212z^6 - 644925z^5 - 1175850z^4 - 591360z^3 + 90720z^2 - 30240z + 9000) - \frac{1}{18000} e^z \sqrt{\pi} z^{7/2} (32z^6 + 1712z^5 + 34000z^4 + 316200z^3 + 1425450z^2 + 2880735z + 1969110) \operatorname{erf}(\sqrt{z})$$

07.25.03.alr5.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{9000} (16z^9 - 848z^8 + 16584z^7 - 150212z^6 + 644925z^5 - 1175850z^4 + 591360z^3 + 90720z^2 + 30240z + 9000) - \frac{1}{18000} e^{-z} \sqrt{\pi} z^{7/2} (32z^6 - 1712z^5 + 34000z^4 - 316200z^3 + 1425450z^2 - 2880735z + 1969110) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alr6.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, 3; z\right) = -\frac{1}{13500} (e^z (64z^9 + 3072z^8 + 53520z^7 + 422160z^6 + 1525500z^5 + 2199240z^4 + 702495z^3 - 143775z^2 + 51300z - 13500))$$

07.25.03.alr7.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-16z^8 - 672z^7 - 9872z^6 - 61680z^5 - 155655z^4 - 107520z^3 + 20160z^2 - 8640z + 3600}{3600} - \frac{e^z \sqrt{\pi} z^{7/2} (32z^5 + 1360z^4 + 20400z^3 + 132600z^2 + 364650z + 328185) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.alr8.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32z^5 - 1360z^4 + 20400z^3 - 132600z^2 + 364650z - 328185) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{7200} + \frac{-16z^8 + 672z^7 - 9872z^6 + 61680z^5 - 155655z^4 + 107520z^3 + 20160z^2 + 8640z + 3600}{3600}$$

07.25.03.alr9.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, 4; z\right) = -\frac{1}{4500} e^z (64z^8 + 2368z^7 + 29840z^6 + 153600z^5 + 296700z^4 + 122340z^3 - 31545z^2 + 13950z - 4500)$$

07.25.03.alra.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{1}{7200z^3} 7(16z^{10} + 496z^9 + 4920z^8 + 17628z^7 + 16545z^6 - 3690z^5 + 2070z^4 - 1800z^3 + 3240z^2 - 10800z + 32400) - \frac{1}{14400z^{7/2}} (7e^z \sqrt{\pi} (32z^{11} + 1008z^{10} + 10320z^9 + 39720z^8 + 46890z^7 - 45z^6 + 270z^5 - 1350z^4 + 5400z^3 - 16200z^2 + 32400z - 32400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alrb.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{7200 z^3} 7(16 z^{10} - 496 z^9 + 4920 z^8 - 17628 z^7 + 16545 z^6 + 3690 z^5 + 2070 z^4 + 1800 z^3 + 3240 z^2 + 10800 z + 32400) - \frac{1}{14400 z^{7/2}} \left(7 e^{-z} \sqrt{\pi} (32 z^{11} - 1008 z^{10} + 10320 z^9 - 39720 z^8 + 46890 z^7 + 45 z^6 + 270 z^5 + 1350 z^4 + 5400 z^3 + 16200 z^2 + 32400 z + 32400) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.alrc.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, 5; z\right) = -\frac{e^z (64 z^7 + 1664 z^6 + 13200 z^5 + 34800 z^4 + 18300 z^3 - 5760 z^2 + 3015 z - 1125)}{1125}$$

07.25.03.alrd.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{1}{1600 z^4} 7(16 z^{10} + 320 z^9 + 1728 z^8 + 2216 z^7 - 645 z^6 + 900 z^5 - 3450 z^4 + 15840 z^3 - 63720 z^2 + 208800 z - 529200) - \frac{1}{3200 z^{9/2}} \left(7 e^z \sqrt{\pi} (32 z^{11} + 656 z^{10} + 3760 z^9 + 5880 z^8 - 150 z^7 + 1005 z^6 - 5760 z^5 + 27450 z^4 - 104400 z^3 + 297000 z^2 - 561600 z + 529200) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.alre.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{3200 z^{9/2}} \left(7 e^{-z} \sqrt{\pi} (32 z^{11} - 656 z^{10} + 3760 z^9 - 5880 z^8 - 150 z^7 - 1005 z^6 - 5760 z^5 - 27450 z^4 - 104400 z^3 - 297000 z^2 - 561600 z - 529200) \operatorname{erfi}(\sqrt{z})\right) - \frac{1}{1600 z^4} 7(16 z^{10} - 320 z^9 + 1728 z^8 - 2216 z^7 - 645 z^6 - 900 z^5 - 3450 z^4 - 15840 z^3 - 63720 z^2 - 208800 z - 529200)$$

07.25.03.alrf.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{5}{2}, 6; z\right) = -\frac{1}{225} e^z (64 z^6 + 960 z^5 + 3600 z^4 + 2400 z^3 - 900 z^2 + 540 z - 225)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = -\frac{3}{2}$

07.25.03.alrg.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{2025} (16z^{12} + 1392z^{11} + 48512z^{10} + 878520z^9 + 8976555z^8 + 52641585z^7 + 172593720z^6 + 293899320z^5 + 223165800z^4 + 53638200z^3 + 1190700z^2 + 18900z + 2025) + \frac{1}{4050} (e^z \sqrt{\pi} (32z^{25/2} + 2800z^{23/2} + 98400z^{21/2} + 1804200z^{19/2} + 18786450z^{17/2} + 113490315z^{15/2} + 390657375z^{13/2} + 723879000z^{11/2} + 644787000z^{9/2} + 220077000z^{7/2} + 16216200z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alrh.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{2025} (16z^{12} - 1392z^{11} + 48512z^{10} - 878520z^9 + 8976555z^8 - 52641585z^7 + 172593720z^6 - 293899320z^5 + 223165800z^4 - 53638200z^3 + 1190700z^2 - 18900z + 2025) + \frac{1}{4050} (e^{-z} \sqrt{\pi} (-32z^{25/2} + 2800z^{23/2} - 98400z^{21/2} + 1804200z^{19/2} - 18786450z^{17/2} + 113490315z^{15/2} - 390657375z^{13/2} + 723879000z^{11/2} - 644787000z^{9/2} + 220077000z^{7/2} - 16216200z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alri.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{1350} (-16z^{11} - 1232z^{10} - 37432z^9 - 579660z^8 - 4936185z^7 - 23272860z^6 - 58120920z^5 - 68880240z^4 - 30353400z^3 - 2381400z^2 + 37800z + 1350) + \frac{1}{2700} (e^z \sqrt{\pi} (-32z^{23/2} - 2480z^{21/2} - 76080z^{19/2} - 1195560z^{17/2} - 10417530z^{15/2} - 50985135z^{13/2} - 135731700z^{11/2} - 180952200z^{9/2} - 101930400z^{7/2} - 16216200z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alrj.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{1350} (16z^{11} - 1232z^{10} + 37432z^9 - 579660z^8 + 4936185z^7 - 23272860z^6 + 58120920z^5 - 68880240z^4 + 30353400z^3 - 2381400z^2 - 37800z + 1350) + \frac{1}{2700} (e^{-z} \sqrt{\pi} (-32z^{23/2} + 2480z^{21/2} - 76080z^{19/2} + 1195560z^{17/2} - 10417530z^{15/2} + 50985135z^{13/2} - 135731700z^{11/2} + 180952200z^{9/2} - 101930400z^{7/2} + 16216200z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alrk.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{2700} (16z^{10} + 1072z^9 + 27792z^8 + 357840z^7 + 2443935z^6 + 8758035z^5 + 15212340z^4 + 10519740z^3 + 1587600z^2 - 75600z + 2700) + \frac{1}{5400} \left(e^z \sqrt{\pi} (32z^{21/2} + 2160z^{19/2} + 56640z^{17/2} + 742440z^{15/2} + 5220450z^{13/2} + 19662435z^{11/2} + 37419525z^{9/2} + 31274100z^{7/2} + 8108100z^{5/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alrl.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{2700} (16z^{10} - 1072z^9 + 27792z^8 - 357840z^7 + 2443935z^6 - 8758035z^5 + 15212340z^4 - 10519740z^3 + 1587600z^2 + 75600z + 2700) + \frac{1}{5400} \left(e^{-z} \sqrt{\pi} (-32z^{21/2} + 2160z^{19/2} - 56640z^{17/2} + 742440z^{15/2} - 5220450z^{13/2} + 19662435z^{11/2} - 37419525z^{9/2} + 31274100z^{7/2} - 8108100z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alrm.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, 1; z\right) = \frac{1}{5400} (e^z (32z^{10} + 2000z^9 + 48000z^8 + 567000z^7 + 3515250z^6 + 11295225z^5 + 17344125z^4 + 10413000z^3 + 1269000z^2 - 81000z + 5400))$$

07.25.03.alrn.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{10800} e^z \sqrt{\pi} (32z^7 + 1840z^6 + 40080z^5 + 421800z^4 + 2267850z^3 + 6055335z^2 + 7142850z + 2702700) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{5400} (16z^9 + 912z^8 + 19592z^7 + 201540z^6 + 1041885z^5 + 2586870z^4 + 2619540z^3 + 635040z^2 - 50400z + 5400)$$

07.25.03.alro.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{10800} e^{-z} \sqrt{\pi} (32z^7 - 1840z^6 + 40080z^5 - 421800z^4 + 2267850z^3 - 6055335z^2 + 7142850z - 2702700) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{5400} (-16z^9 + 912z^8 - 19592z^7 + 201540z^6 - 1041885z^5 + 2586870z^4 - 2619540z^3 + 635040z^2 + 50400z + 5400)$$

07.25.03.alrp.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, 2; z\right) = \frac{1}{5400} e^z (32z^9 + 1680z^8 + 32880z^7 + 303960z^6 + 1387530z^5 + 2970045z^4 + 2493900z^3 + 437400z^2 - 43200z + 5400)$$

07.25.03.alrq.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z \sqrt{\pi} (32 z^6 + 1520 z^5 + 26400 z^4 + 210600 z^3 + 793650 z^2 + 1293435 z + 675675) \operatorname{erf}(\sqrt{z}) z^{5/2}}{7200} + \frac{16 z^8 + 752 z^7 + 12832 z^6 + 99240 z^5 + 352755 z^4 + 507045 z^3 + 181440 z^2 - 20160 z + 3600}{3600}$$

07.25.03.alrr.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{16 z^8 - 752 z^7 + 12832 z^6 - 99240 z^5 + 352755 z^4 - 507045 z^3 + 181440 z^2 + 20160 z + 3600}{3600} - \frac{1}{7200} e^{-z} \sqrt{\pi} z^{5/2} (32 z^6 - 1520 z^5 + 26400 z^4 - 210600 z^3 + 793650 z^2 - 1293435 z + 675675) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alrs.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, 3; z\right) = \frac{1}{2700} e^z (32 z^8 + 1360 z^7 + 20640 z^6 + 138840 z^5 + 415650 z^4 + 476145 z^3 + 113175 z^2 - 15300 z + 2700)$$

07.25.03.alrt.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z \sqrt{\pi} (32 z^5 + 1200 z^4 + 15600 z^3 + 85800 z^2 + 193050 z + 135135) \operatorname{erf}(\sqrt{z}) z^{5/2}}{2880} + \frac{16 z^7 + 592 z^6 + 7512 z^5 + 39420 z^4 + 79905 z^3 + 40320 z^2 - 5760 z + 1440}{1440}$$

07.25.03.alru.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32 z^5 - 1200 z^4 + 15600 z^3 - 85800 z^2 + 193050 z - 135135) \operatorname{erfi}(\sqrt{z}) z^{5/2}}{2880} + \frac{-16 z^7 + 592 z^6 - 7512 z^5 + 39420 z^4 - 79905 z^3 + 40320 z^2 + 5760 z + 1440}{1440}$$

07.25.03.alrv.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, 4; z\right) = \frac{1}{900} e^z (32 z^7 + 1040 z^6 + 11280 z^5 + 48600 z^4 + 75450 z^3 + 23445 z^2 - 4050 z + 900)$$

07.25.03.alrw.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(16 z^9 + 432 z^8 + 3632 z^7 + 10560 z^6 + 7335 z^5 - 1305 z^4 + 540 z^3 - 540 z^2 + 1800 z - 5400)}{2880 z^3} + \frac{1}{5760 z^{7/2}} (7 e^z \sqrt{\pi} (32 z^{10} + 880 z^9 + 7680 z^8 + 24360 z^7 + 22530 z^6 - 45 z^5 + 225 z^4 - 900 z^3 + 2700 z^2 - 5400 z + 5400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alrx.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7(16 z^9 - 432 z^8 + 3632 z^7 - 10560 z^6 + 7335 z^5 + 1305 z^4 + 540 z^3 + 540 z^2 + 1800 z + 5400)}{2880 z^3} - \frac{1}{5760 z^{7/2}} (7 e^{-z} \sqrt{\pi} (32 z^{10} - 880 z^9 + 7680 z^8 - 24360 z^7 + 22530 z^6 + 45 z^5 + 225 z^4 + 900 z^3 + 2700 z^2 + 5400 z + 5400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alry.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, 5; z\right) = \frac{1}{225} e^z (32 z^6 + 720 z^5 + 4800 z^4 + 10\,200 z^3 + 4050 z^2 - 855 z + 225)$$

07.25.03.alrz.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{7(16 z^9 + 272 z^8 + 1192 z^7 + 1140 z^6 - 315 z^5 + 570 z^4 - 2340 z^3 + 9360 z^2 - 30\,600 z + 75\,600)}{640 z^4} + \frac{1}{1280 z^{9/2}} \left(7 e^z \sqrt{\pi} (32 z^{10} + 560 z^9 + 2640 z^8 + 3240 z^7 - 150 z^6 + 855 z^5 - 4050 z^4 + 15\,300 z^3 - 43\,200 z^2 + 81\,000 z - 75\,600) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.als0.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{1280 z^{9/2}} \left(7 e^{-z} \sqrt{\pi} (32 z^{10} - 560 z^9 + 2640 z^8 - 3240 z^7 - 150 z^6 - 855 z^5 - 4050 z^4 - 15\,300 z^3 - 43\,200 z^2 - 81\,000 z - 75\,600) \operatorname{erfi}(\sqrt{z})\right) - \frac{7(16 z^9 - 272 z^8 + 1192 z^7 - 1140 z^6 - 315 z^5 - 570 z^4 - 2340 z^3 - 9360 z^2 - 30\,600 z - 75\,600)}{640 z^4}$$

07.25.03.als1.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{3}{2}, 6; z\right) = \frac{1}{45} e^z (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = -\frac{1}{2}$

07.25.03.als2.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{900} (16 z^{10} + 1088 z^9 + 28\,736 z^8 + 379\,032 z^7 + 2\,675\,075 z^6 + 10\,055\,760 z^5 + 18\,872\,568 z^4 + 15\,190\,560 z^3 + 3\,681\,720 z^2 + 75\,600 z + 900) + \frac{1}{1800} \left(e^z \sqrt{\pi} (32 z^{21/2} + 2192 z^{19/2} + 58\,544 z^{17/2} + 785\,752 z^{15/2} + 5\,703\,018 z^{13/2} + 22\,470\,045 z^{11/2} + 45\,851\,520 z^{9/2} + 43\,397\,640 z^{7/2} + 15\,135\,120 z^{5/2} + 1\,081\,080 z^{3/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.als3.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{900} (16 z^{10} - 1088 z^9 + 28\,736 z^8 - 379\,032 z^7 + 2\,675\,075 z^6 - 10\,055\,760 z^5 + 18\,872\,568 z^4 - 15\,190\,560 z^3 + 3\,681\,720 z^2 - 75\,600 z + 900) + \frac{1}{1800} \left(e^{-z} \sqrt{\pi} (-32 z^{21/2} + 2192 z^{19/2} - 58\,544 z^{17/2} + 785\,752 z^{15/2} - 5\,703\,018 z^{13/2} + 22\,470\,045 z^{11/2} - 45\,851\,520 z^{9/2} + 43\,397\,640 z^{7/2} - 15\,135\,120 z^{5/2} + 1\,081\,080 z^{3/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.als4.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{1800} (-16z^9 - 944z^8 - 21192z^7 - 231140z^6 - 1297725z^5 - 3660228z^4 - 4670820z^3 - 2094120z^2 - 151200z + 1800) + \frac{1}{3600} \left(e^z \sqrt{\pi} (-32z^{19/2} - 1904z^{17/2} - 43312z^{15/2} - 482568z^{13/2} - 2807610z^{11/2} - 8431995z^{9/2} - 12123540z^{7/2} - 7027020z^{5/2} - 1081080z^{3/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.als5.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{1800} (16z^9 - 944z^8 + 21192z^7 - 231140z^6 + 1297725z^5 - 3660228z^4 + 4670820z^3 - 2094120z^2 + 151200z + 1800) + \frac{1}{3600} \left(e^{-z} \sqrt{\pi} (-32z^{19/2} + 1904z^{17/2} - 43312z^{15/2} + 482568z^{13/2} - 2807610z^{11/2} + 8431995z^{9/2} - 12123540z^{7/2} + 7027020z^{5/2} - 1081080z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.als6.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, 1; z\right) = -\frac{1}{1800} e^z (16z^9 + 880z^8 + 18280z^7 + 182960z^6 + 934305z^5 + 2377545z^4 + 2728200z^3 + 1114200z^2 + 77400z - 1800)$$

07.25.03.als7.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{3600} (-16z^8 - 800z^7 - 14800z^6 - 127920z^5 - 536679z^4 - 1025640z^3 - 729540z^2 - 100800z + 3600) - \frac{1}{7200} e^z \sqrt{\pi} z^{3/2} (32z^7 + 1616z^6 + 30384z^5 + 269880z^4 + 1188330z^3 + 2490345z^2 + 2162160z + 540540) \operatorname{erf}(\sqrt{z})$$

07.25.03.als8.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{7200} e^{-z} \sqrt{\pi} (32z^7 - 1616z^6 + 30384z^5 - 269880z^4 + 1188330z^3 - 2490345z^2 + 2162160z - 540540) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{3600} (-16z^8 + 800z^7 - 14800z^6 + 127920z^5 - 536679z^4 + 1025640z^3 - 729540z^2 + 100800z + 3600)$$

07.25.03.als9.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, 2; z\right) = -\frac{1}{1800} e^z (16z^8 + 736z^7 + 12392z^6 + 96216z^5 + 357009z^4 + 592500z^3 + 358200z^2 + 39600z - 1800)$$

07.25.03.alsa.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{-16z^7 - 656z^6 - 9560z^5 - 61308z^4 - 172865z^3 - 182700z^2 - 40320z + 2400}{2400} - \frac{e^z \sqrt{\pi} z^{3/2} (32z^6 + 1328z^5 + 19760z^4 + 131560z^3 + 398970z^2 + 495495z + 180180) \operatorname{erfi}(\sqrt{z})}{4800}$$

07.25.03.alsb.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{16z^7 - 656z^6 + 9560z^5 - 61308z^4 + 172865z^3 - 182700z^2 + 40320z + 2400}{2400} - \frac{1}{4800} e^{-z} \sqrt{\pi} z^{3/2} (32z^6 - 1328z^5 + 19760z^4 - 131560z^3 + 398970z^2 - 495495z + 180180) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alsc.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, 3; z\right) = -\frac{1}{900} e^z (16z^7 + 592z^6 + 7656z^5 + 42624z^4 + 101265z^3 + 86175z^2 + 13500z - 900)$$

07.25.03.alsd.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{960} (-16z^6 - 512z^5 - 5472z^4 - 23240z^3 - 35595z^2 - 11520z + 960) - \frac{e^z \sqrt{\pi} z^{3/2} (32z^5 + 1040z^4 + 11440z^3 + 51480z^2 + 90090z + 45045) \operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.alse.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32z^5 - 1040z^4 + 11440z^3 - 51480z^2 + 90090z - 45045) \operatorname{erfi}(\sqrt{z}) z^{3/2}}{1920} + \frac{1}{960} (-16z^6 + 512z^5 - 5472z^4 + 23240z^3 - 35595z^2 + 11520z + 960)$$

07.25.03.alsf.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, 4; z\right) = -\frac{1}{300} e^z (16z^6 + 448z^5 + 4072z^4 + 14120z^3 + 16545z^2 + 3450z - 300)$$

07.25.03.alsg.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{7(16z^8 + 368z^7 + 2536z^6 + 5652z^5 + 2565z^4 - 300z^3 + 108z^2 - 360z + 1080)}{1920z^3} - \frac{1}{3840z^{7/2}} 7 e^z \sqrt{\pi} (32z^9 + 752z^8 + 5424z^7 + 13512z^6 + 9018z^5 - 45z^4 + 180z^3 - 540z^2 + 1080z - 1080) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alsh.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7(16z^8 - 368z^7 + 2536z^6 - 5652z^5 + 2565z^4 + 300z^3 + 108z^2 + 360z + 1080)}{1920z^3} - \frac{1}{3840z^{7/2}} 7 e^{-z} \sqrt{\pi} (32z^9 - 752z^8 + 5424z^7 - 13512z^6 + 9018z^5 + 45z^4 + 180z^3 + 540z^2 + 1080z + 1080) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alsi.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, 5; z\right) = -\frac{1}{75} e^z (16z^5 + 304z^4 + 1640z^3 + 2640z^2 + 705z - 75)$$

07.25.03.alsj.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{21(16z^8 + 224z^7 + 752z^6 + 480z^5 - 145z^4 + 408z^3 - 1620z^2 + 5280z - 12600)}{1280z^4} - \frac{1}{2560z^{9/2}} 21e^z \sqrt{\pi} (32z^9 + 464z^8 + 1712z^7 + 1528z^6 - 150z^5 + 705z^4 - 2640z^3 + 7380z^2 - 13680z + 12600) \operatorname{erf}(\sqrt{z})$$

07.25.03.alsk.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{2560z^{9/2}} 21e^{-z} \sqrt{\pi} (32z^9 - 464z^8 + 1712z^7 - 1528z^6 - 150z^5 - 705z^4 - 2640z^3 - 7380z^2 - 13680z - 12600) \operatorname{erfi}(\sqrt{z}) - \frac{21(16z^8 - 224z^7 + 752z^6 - 480z^5 - 145z^4 - 408z^3 - 1620z^2 - 5280z - 12600)}{1280z^4}$$

07.25.03.alsl.01

$${}_2F_2\left(\frac{7}{2}, 6; -\frac{1}{2}, 6; z\right) = -\frac{1}{15} e^z (16z^4 + 160z^3 + 360z^2 + 120z - 15)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = \frac{1}{2}$

07.25.03.alsm.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{16z^8 + 816z^7 + 15488z^6 + 138600z^5 + 611523z^4 + 1267497z^3 + 1056510z^2 + 240030z + 3600}{3600} + \frac{1}{7200} \left(e^z \sqrt{\pi} (32z^{17/2} + 1648z^{15/2} + 31776z^{13/2} + 291912z^{11/2} + 1348050z^{9/2} + 3039795z^{7/2} + 3004155z^{5/2} + 1018710z^{3/2} + 62370\sqrt{z}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alsn.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{16z^8 - 816z^7 + 15488z^6 - 138600z^5 + 611523z^4 - 1267497z^3 + 1056510z^2 - 240030z + 3600}{3600} + \frac{1}{7200} \left(e^{-z} \sqrt{\pi} (-32z^{17/2} + 1648z^{15/2} - 31776z^{13/2} + 291912z^{11/2} - 1348050z^{9/2} + 3039795z^{7/2} - 3004155z^{5/2} + 1018710z^{3/2} - 62370\sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.also.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, 1; z\right) = \frac{e^z (8z^8 + 380z^7 + 6670z^6 + 54795z^5 + 220575z^4 + 416760z^3 + 322200z^2 + 73800z + 1800)}{1800}$$

07.25.03.alsp.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{16z^7 + 688z^6 + 10680z^5 + 74844z^4 + 241857z^3 + 326970z^2 + 139230z + 7200}{7200} + \frac{1}{14400} e^z \sqrt{\pi} \sqrt{z} (32z^7 + 1392z^6 + 22032z^5 + 159720z^4 + 549450z^3 + 841995z^2 + 478170z + 62370) \operatorname{erf}(\sqrt{z})$$

07.25.03.alsq.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{-16z^7 + 688z^6 - 10680z^5 + 74844z^4 - 241857z^3 + 326970z^2 - 139230z + 7200}{7200} + \frac{1}{14400} e^{-z} \sqrt{\pi} \sqrt{z} (32z^7 - 1392z^6 + 22032z^5 - 159720z^4 + 549450z^3 - 841995z^2 + 478170z - 62370) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alsr.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, 2; z\right) = \frac{e^z (8z^7 + 316z^6 + 4458z^5 + 28047z^4 + 80340z^3 + 95400z^2 + 36000z + 1800)}{1800}$$

07.25.03.als.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{16z^6 + 560z^5 + 6768z^4 + 34496z^3 + 72135z^2 + 49455z + 4800}{4800} + \frac{e^z \sqrt{\pi} \sqrt{z} (32z^6 + 1136z^5 + 14080z^4 + 75240z^3 + 173250z^2 + 148995z + 31185) \operatorname{erf}(\sqrt{z})}{9600}$$

07.25.03.alst.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{16z^6 - 560z^5 + 6768z^4 - 34496z^3 + 72135z^2 - 49455z + 4800}{4800} - \frac{e^{-z} \sqrt{\pi} \sqrt{z} (32z^6 - 1136z^5 + 14080z^4 - 75240z^3 + 173250z^2 - 148995z + 31185) \operatorname{erfi}(\sqrt{z})}{9600}$$

07.25.03.alsu.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, 3; z\right) = \frac{1}{900} e^z (8z^6 + 252z^5 + 2694z^4 + 11883z^3 + 20925z^2 + 11700z + 900)$$

07.25.03.alsv.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920}{1920} + \frac{e^z \sqrt{\pi} \sqrt{z} (32z^5 + 880z^4 + 7920z^3 + 27720z^2 + 34650z + 10395) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.alsw.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920}{1920} + \frac{e^{-z} \sqrt{\pi} \sqrt{z} (32z^5 - 880z^4 + 7920z^3 - 27720z^2 + 34650z - 10395) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.alsx.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, 4; z\right) = \frac{1}{300} e^z (8z^5 + 188z^4 + 1378z^3 + 3615z^2 + 2850z + 300)$$

07.25.03.alsy.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{7(16z^7 + 304z^6 + 1632z^5 + 2520z^4 + 555z^3 - 27z^2 + 90z - 270)}{3840z^3} + \frac{7e^z \sqrt{\pi} (32z^8 + 624z^7 + 3552z^6 + 6408z^5 + 2610z^4 - 45z^3 + 135z^2 - 270z + 270) \operatorname{erf}(\sqrt{z})}{7680z^{7/2}}$$

07.25.03.alsz.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{7(16z^7 - 304z^6 + 1632z^5 - 2520z^4 + 555z^3 + 27z^2 + 90z + 270)}{3840z^3} - \frac{7e^{-z}\sqrt{\pi}(32z^8 - 624z^7 + 3552z^6 - 6408z^5 + 2610z^4 + 45z^3 + 135z^2 + 270z + 270)\operatorname{erfi}(\sqrt{z})}{7680z^{7/2}}$$

07.25.03.alt0.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, 5; z\right) = \frac{1}{75}e^z(8z^4 + 124z^3 + 510z^2 + 555z + 75)$$

07.25.03.alt1.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{21(16z^7 + 176z^6 + 408z^5 + 140z^4 - 87z^3 + 342z^2 - 1110z + 2520)}{2560z^4} + \frac{21e^z\sqrt{\pi}(32z^8 + 368z^7 + 976z^6 + 552z^5 - 150z^4 + 555z^3 - 1530z^2 + 2790z - 2520)\operatorname{erf}(\sqrt{z})}{5120z^{9/2}}$$

07.25.03.alt2.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{21e^{-z}\sqrt{\pi}(32z^8 - 368z^7 + 976z^6 - 552z^5 - 150z^4 - 555z^3 - 1530z^2 - 2790z - 2520)\operatorname{erfi}(\sqrt{z})}{5120z^{9/2}} - \frac{21(16z^7 - 176z^6 + 408z^5 - 140z^4 - 87z^3 - 342z^2 - 1110z - 2520)}{2560z^4}$$

07.25.03.alt3.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{1}{2}, 6; z\right) = \frac{1}{15}e^z(8z^3 + 60z^2 + 90z + 15)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = 1$

07.25.03.alt4.01

$${}_2F_2\left(\frac{7}{2}, 6; 1, 1; z\right) = \frac{1}{14400}e^{z/2}(32z^8 + 1424z^7 + 23360z^6 + 179620z^5 + 684150z^4 + 1262985z^3 + 1030770z^2 + 295200z + 14400)I_0\left(\frac{z}{2}\right) + \frac{1}{14400}e^{z/2}(32z^8 + 1392z^7 + 21984z^6 + 158300z^5 + 535550z^4 + 788535z^3 + 404460z^2 + 38520z)I_1\left(\frac{z}{2}\right)$$

07.25.03.alt5.01

$${}_2F_2\left(\frac{7}{2}, 6; 1, \frac{3}{2}; z\right) = \frac{e^z(4z^7 + 160z^6 + 2295z^5 + 14775z^4 + 43800z^3 + 55080z^2 + 23400z + 1800)}{1800}$$

07.25.03.alt6.01

$${}_2F_2\left(\frac{7}{2}, 6; 1, 2; z\right) = \frac{e^{z/2}(16z^7 + 592z^6 + 7820z^5 + 46380z^4 + 128325z^3 + 157185z^2 + 72000z + 7200)I_0\left(\frac{z}{2}\right) + e^{z/2}(16z^7 + 576z^6 + 7252z^5 + 39400z^4 + 92025z^3 + 79200z^2 + 15660z)I_1\left(\frac{z}{2}\right)}{7200}$$

07.25.03.alt7.01

$${}_2F_2\left(\frac{7}{2}, 6; 1, \frac{5}{2}; z\right) = \frac{1}{600} e^z (2z^6 + 65z^5 + 725z^4 + 3400z^3 + 6600z^2 + 4440z + 600)$$

07.25.03.alt8.01

$${}_2F_2\left(\frac{7}{2}, 6; 1, 3; z\right) = \frac{e^{z/2} (16z^6 + 472z^5 + 4740z^4 + 19980z^3 + 35505z^2 + 23400z + 3600) I_0\left(\frac{z}{2}\right) + e^{z/2} z (16z^5 + 456z^4 + 4292z^3 + 15900z^2 + 21345z + 6930) I_1\left(\frac{z}{2}\right)}{3600}$$

07.25.03.alt9.01

$${}_2F_2\left(\frac{7}{2}, 6; 1, \frac{7}{2}; z\right) = \frac{1}{120} e^z (z^5 + 25z^4 + 200z^3 + 600z^2 + 600z + 120)$$

07.25.03.alta.01

$${}_2F_2\left(\frac{7}{2}, 6; 1, 4; z\right) = \frac{1}{300} e^{z/2} (4z^5 + 88z^4 + 610z^3 + 1580z^2 + 1425z + 300) I_0\left(\frac{z}{2}\right) + \frac{1}{600} e^{z/2} z (8z^4 + 168z^3 + 1056z^2 + 2180z + 1055) I_1\left(\frac{z}{2}\right)$$

07.25.03.altb.01

$${}_2F_2\left(\frac{7}{2}, 6; 1, \frac{9}{2}; z\right) = \frac{7e^z (128z^7 + 2240z^6 + 11040z^5 + 16080z^4 + 4440z^3 - 180z^2 + 450z - 675)}{30720z^3} + \frac{315\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.altc.01

$${}_2F_2\left(\frac{7}{2}, 6; 1, \frac{9}{2}; -z\right) = \frac{7e^{-z} (128z^7 - 2240z^6 + 11040z^5 - 16080z^4 + 4440z^3 + 180z^2 + 450z + 675)}{30720z^3} - \frac{315\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.altd.01

$${}_2F_2\left(\frac{7}{2}, 6; 1, 5; z\right) = \frac{1}{150} e^{z/2} (8z^4 + 116z^3 + 460z^2 + 555z + 150) I_0\left(\frac{z}{2}\right) + \frac{1}{150} e^{z/2} z (8z^3 + 108z^2 + 356z + 245) I_1\left(\frac{z}{2}\right)$$

07.25.03.alte.01

$${}_2F_2\left(\frac{7}{2}, 6; 1, \frac{11}{2}; z\right) = \frac{21e^z (256z^7 + 2560z^6 + 5440z^5 + 2240z^4 - 1200z^3 + 3840z^2 - 8700z + 11025)}{40960z^4} + \frac{945\sqrt{\pi} (6z - 49) \operatorname{erfi}(\sqrt{z})}{16384z^{9/2}}$$

07.25.03.altf.01

$${}_2F_2\left(\frac{7}{2}, 6; 1, \frac{11}{2}; -z\right) = \frac{21e^{-z} (256z^7 - 2560z^6 + 5440z^5 - 2240z^4 - 1200z^3 - 3840z^2 - 8700z - 11025)}{40960z^4} - \frac{945\sqrt{\pi} (6z + 49) \operatorname{erf}(\sqrt{z})}{16384z^{9/2}}$$

07.25.03.altg.01

$${}_2F_2\left(\frac{7}{2}, 6; 1, 6; z\right) = \frac{1}{15} e^{z/2} (4z^3 + 28z^2 + 45z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} z (4z^2 + 24z + 23) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = \frac{3}{2}$

07.25.03.alth.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{16z^6 + 576z^5 + 7232z^4 + 38952z^3 + 89019z^2 + 72660z + 12510}{14400} + \frac{1}{28800\sqrt{z}} e^z \sqrt{\pi} (32z^7 + 1168z^6 + 15024z^5 + 84600z^4 + 211050z^3 + 208845z^2 + 60480z + 1890) \operatorname{erf}(\sqrt{z})$$

07.25.03.alti.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{16z^6 - 576z^5 + 7232z^4 - 38952z^3 + 89019z^2 - 72660z + 12510}{14400} + \frac{1}{28800\sqrt{z}} e^{-z} \sqrt{\pi} (-32z^7 + 1168z^6 - 15024z^5 + 84600z^4 - 211050z^3 + 208845z^2 - 60480z + 1890) \operatorname{erfi}(\sqrt{z})$$

07.25.03.altj.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{3}{2}, 2; z\right) = \frac{e^z (4z^6 + 132z^5 + 1503z^4 + 7260z^3 + 14760z^2 + 10800z + 1800)}{1800}$$

07.25.03.altk.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{16z^5 + 464z^4 + 4456z^3 + 16884z^2 + 23205z + 7710}{9600} + \frac{e^z \sqrt{\pi} (32z^6 + 944z^5 + 9360z^4 + 37800z^3 + 59850z^2 + 29295z + 1890) \operatorname{erf}(\sqrt{z})}{19200\sqrt{z}}$$

07.25.03.altl.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-16z^5 + 464z^4 - 4456z^3 + 16884z^2 - 23205z + 7710}{9600} + \frac{e^{-z} \sqrt{\pi} (32z^6 - 944z^5 + 9360z^4 - 37800z^3 + 59850z^2 - 29295z + 1890) \operatorname{erfi}(\sqrt{z})}{19200\sqrt{z}}$$

07.25.03.altm.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{3}{2}, 3; z\right) = \frac{1}{900} e^z (4z^5 + 104z^4 + 879z^3 + 2865z^2 + 3300z + 900)$$

07.25.03.altn.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{16z^4 + 352z^3 + 2352z^2 + 5280z + 2895}{3840} + \frac{e^z \sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.alto.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{16z^4 - 352z^3 + 2352z^2 - 5280z + 2895}{3840} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945) \operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.altp.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{3}{2}, 4; z\right) = \frac{1}{300} e^z (4z^4 + 76z^3 + 423z^2 + 750z + 300)$$

07.25.03.altq.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{7(16z^6 + 240z^5 + 920z^4 + 780z^3 + 9z^2 - 30z + 90)}{7680z^3} + \frac{7e^z\sqrt{\pi}(32z^7 + 496z^6 + 2064z^5 + 2280z^4 + 330z^3 - 45z^2 + 90z - 90)\operatorname{erf}(\sqrt{z})}{15360z^{7/2}}$$

07.25.03.altr.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z}\sqrt{\pi}(32z^7 - 496z^6 + 2064z^5 - 2280z^4 + 330z^3 + 45z^2 + 90z + 90)\operatorname{erfi}(\sqrt{z})}{15360z^{7/2}} - \frac{7(16z^6 - 240z^5 + 920z^4 - 780z^3 + 9z^2 + 30z + 90)}{7680z^3}$$

07.25.03.alts.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{3}{2}, 5; z\right) = \frac{1}{75}e^z(4z^3 + 48z^2 + 135z + 75)$$

07.25.03.altt.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{21(16z^6 + 128z^5 + 160z^4 + 24z^3 - 93z^2 + 300z - 630)}{5120z^4} + \frac{21e^z\sqrt{\pi}(32z^7 + 272z^6 + 432z^5 + 120z^4 - 150z^3 + 405z^2 - 720z + 630)\operatorname{erf}(\sqrt{z})}{10240z^{9/2}}$$

07.25.03.altu.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{21(16z^6 - 128z^5 + 160z^4 - 24z^3 - 93z^2 - 300z - 630)}{5120z^4} - \frac{21e^{-z}\sqrt{\pi}(32z^7 - 272z^6 + 432z^5 - 120z^4 - 150z^3 - 405z^2 - 720z - 630)\operatorname{erfi}(\sqrt{z})}{10240z^{9/2}}$$

07.25.03.altv.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{3}{2}, 6; z\right) = \frac{1}{15}e^z(4z^2 + 20z + 15)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = 2$

07.25.03.altw.01

$${}_2F_2\left(\frac{7}{2}, 6; 2, 2; z\right) = \frac{e^{z/2}(16z^6 + 488z^5 + 5124z^4 + 22980z^3 + 44721z^2 + 34128z + 7200)I_0\left(\frac{z}{2}\right)}{7200} + \frac{e^{z/2}(16z^6 + 472z^5 + 4660z^4 + 18540z^3 + 28089z^2 + 11916z + 288)I_1\left(\frac{z}{2}\right)}{7200}$$

07.25.03.altx.01

$${}_2F_2\left(\frac{7}{2}, 6; 2, \frac{5}{2}; z\right) = \frac{1}{600}e^z(2z^5 + 53z^4 + 460z^3 + 1560z^2 + 1920z + 600)$$

07.25.03.altj.01

$${}_2F_2\left(\frac{7}{2}, 6; 2, 3; z\right) = \frac{1}{450} e^{z/2} (2z^5 + 48z^4 + 375z^3 + 1152z^2 + 1341z + 450) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (8z^5 + 184z^4 + 1320z^3 + 3372z^2 + 2493z + 144) I_1\left(\frac{z}{2}\right)}{1800}$$

07.25.03.altz.01

$${}_2F_2\left(\frac{7}{2}, 6; 2, \frac{7}{2}; z\right) = \frac{1}{120} e^z (z^4 + 20z^3 + 120z^2 + 240z + 120)$$

07.25.03.alu0.01

$${}_2F_2\left(\frac{7}{2}, 6; 2, 4; z\right) = \frac{1}{600} e^{z/2} (8z^4 + 140z^3 + 724z^2 + 1257z + 600) I_0\left(\frac{z}{2}\right) + \frac{1}{600} e^{z/2} (8z^4 + 132z^3 + 596z^2 + 719z + 72) I_1\left(\frac{z}{2}\right)$$

07.25.03.alu1.01

$${}_2F_2\left(\frac{7}{2}, 6; 2, \frac{9}{2}; z\right) = \frac{7e^z (64z^6 + 864z^5 + 2928z^4 + 2184z^3 + 36z^2 - 90z + 135)}{15360z^3} - \frac{63\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.alu2.01

$${}_2F_2\left(\frac{7}{2}, 6; 2, \frac{9}{2}; -z\right) = \frac{63\sqrt{\pi} \operatorname{erf}(\sqrt{-z})}{2048z^{7/2}} - \frac{7e^{-z} (64z^6 - 864z^5 + 2928z^4 - 2184z^3 + 36z^2 + 90z + 135)}{15360z^3}$$

07.25.03.alu3.01

$${}_2F_2\left(\frac{7}{2}, 6; 2, 5; z\right) = \frac{1}{75} e^{z/2} (4z^3 + 44z^2 + 117z + 75) I_0\left(\frac{z}{2}\right) + \frac{1}{75} e^{z/2} (4z^3 + 40z^2 + 79z + 12) I_1\left(\frac{z}{2}\right)$$

07.25.03.alu4.01

$${}_2F_2\left(\frac{7}{2}, 6; 2, \frac{11}{2}; z\right) = \frac{21e^z (128z^6 + 896z^5 + 928z^4 + 192z^3 - 600z^2 + 1320z - 1575)}{20480z^4} - \frac{189\sqrt{\pi} (6z - 35) \operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.alu5.01

$${}_2F_2\left(\frac{7}{2}, 6; 2, \frac{11}{2}; -z\right) = \frac{21e^{-z} (128z^6 - 896z^5 + 928z^4 - 192z^3 - 600z^2 - 1320z - 1575)}{20480z^4} + \frac{189\sqrt{\pi} (6z + 35) \operatorname{erf}(\sqrt{-z})}{8192z^{9/2}}$$

07.25.03.alu6.01

$${}_2F_2\left(\frac{7}{2}, 6; 2, 6; z\right) = \frac{1}{15} e^{z/2} (4z^2 + 18z + 15) I_0\left(\frac{z}{2}\right) + \frac{1}{15} e^{z/2} (4z^2 + 14z + 3) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = \frac{5}{2}$

07.25.03.alu7.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{16z^5 + 368z^4 + 2624z^3 + 6552z^2 + 4475z + 105}{6400z} + \frac{e^z \sqrt{\pi} (32z^6 + 752z^5 + 5600z^4 + 15400z^3 + 13650z^2 + 1995z - 105) \operatorname{erf}(\sqrt{z})}{12800z^{3/2}}$$

07.25.03.alu8.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{16z^5 - 368z^4 + 2624z^3 - 6552z^2 + 4475z - 105}{6400z} + \frac{e^{-z}\sqrt{\pi}(-32z^6 + 752z^5 - 5600z^4 + 15400z^3 - 13650z^2 + 1995z + 105)\operatorname{erfi}(\sqrt{z})}{12800z^{3/2}}$$

07.25.03.alu9.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{5}{2}, 3; z\right) = \frac{1}{300}e^z(2z^4 + 41z^3 + 255z^2 + 540z + 300)$$

07.25.03.alua.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z\sqrt{\pi}(32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105)\operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.alub.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z}\sqrt{\pi}(32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105)\operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.aluc.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{5}{2}, 4; z\right) = \frac{1}{100}e^z(2z^3 + 29z^2 + 110z + 100)$$

07.25.03.alud.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{7(16z^5 + 176z^4 + 400z^3 + 48z^2 + 15z - 45)}{5120z^3} + \frac{7e^z\sqrt{\pi}(32z^6 + 368z^5 + 960z^4 + 360z^3 - 30z^2 - 45z + 45)\operatorname{erf}(\sqrt{z})}{10240z^{7/2}}$$

07.25.03.alue.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{7(16z^5 - 176z^4 + 400z^3 - 48z^2 + 15z + 45)}{5120z^3} - \frac{7e^{-z}\sqrt{\pi}(32z^6 - 368z^5 + 960z^4 - 360z^3 - 30z^2 + 45z + 45)\operatorname{erfi}(\sqrt{z})}{10240z^{7/2}}$$

07.25.03.aluf.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{5}{2}, 5; z\right) = \frac{1}{25}e^z(2z^2 + 17z + 25)$$

07.25.03.alug.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{63(16z^5 + 80z^4 + 8z^3 + 36z^2 - 115z + 210)}{10240z^4} + \frac{63e^z\sqrt{\pi}(32z^6 + 176z^5 + 80z^4 + 40z^3 - 150z^2 + 255z - 210)\operatorname{erf}(\sqrt{z})}{20480z^{9/2}}$$

07.25.03.aluh.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{63 e^{-z} \sqrt{\pi} (32 z^6 - 176 z^5 + 80 z^4 - 40 z^3 - 150 z^2 - 255 z - 210) \operatorname{erfi}(\sqrt{z})}{20480 z^{9/2}} - \frac{63 (16 z^5 - 80 z^4 + 8 z^3 - 36 z^2 - 115 z - 210)}{10240 z^4}$$

07.25.03.alui.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{5}{2}, 6; z\right) = \frac{1}{5} e^z (2z + 5)$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = 3$

07.25.03.aluj.01

$${}_2F_2\left(\frac{7}{2}, 6; 3, 3; z\right) = \frac{1}{900} e^{z/2} (8 z^4 + 148 z^3 + 828 z^2 + 1611 z + 906) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (8 z^5 + 140 z^4 + 692 z^3 + 981 z^2 + 156 z - 24) I_1\left(\frac{z}{2}\right)}{900 z}$$

07.25.03.aluk.01

$${}_2F_2\left(\frac{7}{2}, 6; 3, \frac{7}{2}; z\right) = \frac{1}{60} e^z (z^3 + 15 z^2 + 60 z + 60)$$

07.25.03.alul.01

$${}_2F_2\left(\frac{7}{2}, 6; 3, 4; z\right) = \frac{1}{150} e^{z/2} (4 z^3 + 52 z^2 + 177 z + 153) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (4 z^4 + 48 z^3 + 131 z^2 + 42 z - 12) I_1\left(\frac{z}{2}\right)}{150 z}$$

07.25.03.alum.01

$${}_2F_2\left(\frac{7}{2}, 6; 3, \frac{9}{2}; z\right) = \frac{7 e^z (32 z^5 + 304 z^4 + 552 z^3 - 12 z^2 + 30 z - 45)}{3840 z^3} + \frac{21 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{512 z^{7/2}}$$

07.25.03.alun.01

$${}_2F_2\left(\frac{7}{2}, 6; 3, \frac{9}{2}; -z\right) = \frac{7 e^{-z} (32 z^5 - 304 z^4 + 552 z^3 + 12 z^2 + 30 z + 45)}{3840 z^3} - \frac{21 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{512 z^{7/2}}$$

07.25.03.aluo.01

$${}_2F_2\left(\frac{7}{2}, 6; 3, 5; z\right) = \frac{2}{75} e^{z/2} (4 z^2 + 30 z + 39) I_0\left(\frac{z}{2}\right) + \frac{2 e^{z/2} (4 z^3 + 26 z^2 + 15 z - 6) I_1\left(\frac{z}{2}\right)}{75 z}$$

07.25.03.alup.01

$${}_2F_2\left(\frac{7}{2}, 6; 3, \frac{11}{2}; z\right) = \frac{21 e^z (64 z^5 + 256 z^4 - 48 z^3 + 144 z^2 - 300 z + 315)}{5120 z^4} + \frac{189 \sqrt{\pi} (2z - 7) \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.aluq.01

$${}_2F_2\left(\frac{7}{2}, 6; 3, \frac{11}{2}; -z\right) = -\frac{21 e^{-z} (64 z^5 - 256 z^4 - 48 z^3 - 144 z^2 - 300 z - 315)}{5120 z^4} - \frac{189 \sqrt{\pi} (2z + 7) \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.alur.01

$${}_2F_2\left(\frac{7}{2}, 6; 3, 6; z\right) = \frac{8}{15} e^{z/2} (z + 2) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (2 z^2 + 2 z - 1) I_1\left(\frac{z}{2}\right)}{15 z}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = \frac{7}{2}$

07.25.03.alus.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{16z^4 + 192z^3 + 512z^2 + 120z - 45}{1024z^2} + \frac{e^z \sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.alut.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.aluu.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{7}{2}, 4; z\right) = \frac{1}{20} e^z (z^2 + 10z + 20)$$

07.25.03.aluv.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z \sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.aluw.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{7e^{-z} \sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.alux.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{7}{2}, 5; z\right) = \frac{1}{5} e^z (z + 5)$$

07.25.03.aluy.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z \sqrt{\pi} (32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105) \operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.aluz.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z} \sqrt{\pi} (32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105) \operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.alv0.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{7}{2}, 6; z\right) = e^z$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = 4$

07.25.03.alv1.01

$${}_2F_2\left(\frac{7}{2}, 6; 4, 4; z\right) = \frac{e^{z/2} (4z^3 + 34z^2 + 55z - 4) I_0\left(\frac{z}{2}\right)}{50z} + \frac{e^{z/2} (4z^4 + 30z^3 + 27z^2 - 20z + 16) I_1\left(\frac{z}{2}\right)}{50z^2}$$

07.25.03.alv2.01

$${}_2F_2\left(\frac{7}{2}, 6; 4, \frac{9}{2}; z\right) = \frac{7e^z (16z^4 + 88z^3 + 12z^2 - 30z + 45)}{640z^3} - \frac{63\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.alv3.01

$${}_2F_2\left(\frac{7}{2}, 6; 4, \frac{9}{2}; -z\right) = \frac{63\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{256z^{7/2}} - \frac{7e^{-z} (16z^4 - 88z^3 + 12z^2 + 30z + 45)}{640z^3}$$

07.25.03.alv4.01

$${}_2F_2\left(\frac{7}{2}, 6; 4, 5; z\right) = \frac{8e^{z/2} (z^2 + 4z - 1) I_0\left(\frac{z}{2}\right)}{25z} + \frac{4e^{z/2} (2z^3 + 6z^2 - 7z + 8) I_1\left(\frac{z}{2}\right)}{25z^2}$$

07.25.03.alv5.01

$${}_2F_2\left(\frac{7}{2}, 6; 4, \frac{11}{2}; z\right) = \frac{63e^z (32z^4 + 32z^3 - 88z^2 + 160z - 105)}{2560z^4} - \frac{189\sqrt{\pi} (6z - 7) \operatorname{erfi}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.alv6.01

$${}_2F_2\left(\frac{7}{2}, 6; 4, \frac{11}{2}; -z\right) = \frac{63e^{-z} (32z^4 - 32z^3 - 88z^2 - 160z - 105)}{2560z^4} + \frac{189\sqrt{\pi} (6z + 7) \operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.alv7.01

$${}_2F_2\left(\frac{7}{2}, 6; 4, 6; z\right) = \frac{4e^{z/2} (2z - 1) I_0\left(\frac{z}{2}\right)}{5z} + \frac{4e^{z/2} (2z^2 - 3z + 4) I_1\left(\frac{z}{2}\right)}{5z^2}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = \frac{9}{2}$

07.25.03.alv8.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{9}{2}, 5; z\right) = \frac{7e^z (8z^3 + 12z^2 - 30z + 45)}{80z^3} - \frac{63\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.alv9.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{9}{2}, 5; -z\right) = \frac{7e^{-z} (8z^3 - 12z^2 - 30z - 45)}{80z^3} + \frac{63\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32z^{7/2}}$$

07.25.03.alva.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{9}{2}, 6; z\right) = \frac{7e^z (4z^2 - 10z + 15)}{8z^3} - \frac{105\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16z^{7/2}}$$

07.25.03.alvb.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{9}{2}, 6; -z\right) = \frac{105\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16z^{7/2}} - \frac{7e^{-z} (4z^2 + 10z + 15)}{8z^3}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = 5$

07.25.03.alvc.01

$${}_2F_2\left(\frac{7}{2}, 6; 5, 5; z\right) = \frac{16 e^{z/2} (2z^2 + z - 6) I_0\left(\frac{z}{2}\right)}{25 z^2} + \frac{16 e^{z/2} (2z^3 - z^2 - 4z + 24) I_1\left(\frac{z}{2}\right)}{25 z^3}$$

07.25.03.alvd.01

$${}_2F_2\left(\frac{7}{2}, 6; 5, \frac{11}{2}; z\right) = \frac{63 e^z (16z^3 - 32z^2 + 20z + 105)}{320 z^4} - \frac{189 \sqrt{\pi} (6z + 7) \operatorname{erfi}(\sqrt{z})}{128 z^{9/2}}$$

07.25.03.alve.01

$${}_2F_2\left(\frac{7}{2}, 6; 5, \frac{11}{2}; -z\right) = \frac{189 \sqrt{\pi} (6z - 7) \operatorname{erf}(\sqrt{z})}{128 z^{9/2}} - \frac{63 e^{-z} (16z^3 + 32z^2 + 20z - 105)}{320 z^4}$$

07.25.03.alvf.01

$${}_2F_2\left(\frac{7}{2}, 6; 5, 6; z\right) = \frac{32 e^{z/2} (z - 3) I_0\left(\frac{z}{2}\right)}{5 z^2} + \frac{32 e^{z/2} (z^2 - 4z + 12) I_1\left(\frac{z}{2}\right)}{5 z^3}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = \frac{11}{2}$

07.25.03.alvg.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{11}{2}, 6; z\right) = \frac{63 e^z (8z^2 - 40z + 105)}{32 z^4} - \frac{945 \sqrt{\pi} (2z + 7) \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.alvh.01

$${}_2F_2\left(\frac{7}{2}, 6; \frac{11}{2}, 6; -z\right) = \frac{63 e^{-z} (8z^2 + 40z + 105)}{32 z^4} + \frac{945 \sqrt{\pi} (2z - 7) \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

For fixed z and $a_1 = \frac{7}{2}$, $a_2 = 6$, $b_1 = 6$

07.25.03.alvi.01

$${}_2F_2\left(\frac{7}{2}, 6; 6, 6; z\right) = \frac{32 e^{z/2} (z - 8) I_0\left(\frac{z}{2}\right)}{z^3} + \frac{32 e^{z/2} (z^2 - 4z + 32) I_1\left(\frac{z}{2}\right)}{z^4}$$

For fixed z and $a_1 = 4$, $a_2 \geq 4$

For fixed z and $a_1 = 4$, $a_2 = 4$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 4$, $a_2 = 4$, $b_1 = -\frac{11}{2}$

07.25.03.alvj.01

$${}_2F_2\left(4, 4; -\frac{11}{2}, 1; z\right) = \frac{1}{187110} (32z^{12} + 2096z^{11} + 51984z^{10} + 617256z^9 + 3633186z^8 + 9703575z^7 + 8128512z^6 - 1806336z^5 + 1058400z^4 - 864000z^3 + 756000z^2 - 544320z + 187110) + \frac{1}{374220} (e^z \sqrt{\pi} (64z^{25/2} + 4224z^{23/2} + 106032z^{21/2} + 1284480z^{19/2} + 7836588z^{17/2} + 22535064z^{15/2} + 23474025z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alvk.01

$${}_2F_2\left(4, 4; -\frac{11}{2}, 1; -z\right) = \frac{1}{187110} (32z^{12} - 2096z^{11} + 51984z^{10} - 617256z^9 + 3633186z^8 - 9703575z^7 + 8128512z^6 + 1806336z^5 + 1058400z^4 + 864000z^3 + 756000z^2 + 544320z + 187110) + \frac{1}{374220} (e^{-z} \sqrt{\pi} (-64z^{25/2} + 4224z^{23/2} - 106032z^{21/2} + 1284480z^{19/2} - 7836588z^{17/2} + 22535064z^{15/2} - 23474025z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alvl.01

$${}_2F_2\left(4, 4; -\frac{11}{2}, 2; z\right) = \frac{1}{93555} (16z^{11} + 848z^{10} + 16248z^9 + 138428z^8 + 508665z^7 + 580608z^6 - 150528z^5 + 105840z^4 - 108000z^3 + 126000z^2 - 136080z + 93555) + \frac{1}{187110} e^z \sqrt{\pi} (32z^{23/2} + 1712z^{21/2} + 33328z^{19/2} + 292296z^{17/2} + 1141482z^{15/2} + 1564935z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.alvm.01

$${}_2F_2\left(4, 4; -\frac{11}{2}, 2; -z\right) = \frac{1}{93555} (-16z^{11} + 848z^{10} - 16248z^9 + 138428z^8 - 508665z^7 + 580608z^6 + 150528z^5 + 105840z^4 + 108000z^3 + 126000z^2 + 136080z + 93555) + \frac{1}{187110} e^{-z} \sqrt{\pi} (32z^{23/2} - 1712z^{21/2} + 33328z^{19/2} - 292296z^{17/2} + 1141482z^{15/2} - 1564935z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alvn.01

$${}_2F_2\left(4, 4; -\frac{11}{2}, 3; z\right) = \frac{1}{93555} (32z^{10} + 1296z^9 + 17608z^8 + 92580z^7 + 145152z^6 - 43008z^5 + 35280z^4 - 43200z^3 + 63000z^2 - 90720z + 93555) + \frac{2e^z \sqrt{\pi} (16z^{21/2} + 656z^{19/2} + 9120z^{17/2} + 50388z^{15/2} + 92055z^{13/2}) \operatorname{erf}(\sqrt{z})}{93555}$$

07.25.03.alvo.01

$${}_2F_2\left(4, 4; -\frac{11}{2}, 3; -z\right) = \frac{1}{93555} (32z^{10} - 1296z^9 + 17608z^8 - 92580z^7 + 145152z^6 + 43008z^5 + 35280z^4 + 43200z^3 + 63000z^2 + 90720z + 93555) - \frac{2e^{-z} \sqrt{\pi} (16z^{21/2} - 656z^{19/2} + 9120z^{17/2} - 50388z^{15/2} + 92055z^{13/2}) \operatorname{erfi}(\sqrt{z})}{93555}$$

07.25.03.alvp.01

$${}_2F_2\left(4, 4; -\frac{11}{2}, 4; z\right) = \frac{32 z^9 + 896 z^8 + 7320 z^7 + 16128 z^6 - 5376 z^5 + 5040 z^4 - 7200 z^3 + 12600 z^2 - 22680 z + 31185}{31185} + \frac{4 e^z \sqrt{\pi} (8 z^{19/2} + 228 z^{17/2} + 1938 z^{15/2} + 4845 z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.alvq.01

$${}_2F_2\left(4, 4; -\frac{11}{2}, 4; -z\right) = \frac{-32 z^9 + 896 z^8 - 7320 z^7 + 16128 z^6 + 5376 z^5 + 5040 z^4 + 7200 z^3 + 12600 z^2 + 22680 z + 31185}{31185} + \frac{4 e^{-z} \sqrt{\pi} (8 z^{19/2} - 228 z^{17/2} + 1938 z^{15/2} - 4845 z^{13/2}) \operatorname{erfi}(\sqrt{z})}{31185}$$

For fixed z and $a_1 = 4, a_2 = 4, b_1 = -\frac{9}{2}$

07.25.03.alvr.01

$${}_2F_2\left(4, 4; -\frac{9}{2}, 1; z\right) = \frac{1}{34020} (-32 z^{11} - 1904 z^{10} - 42480 z^9 - 448248 z^8 - 2307450 z^7 - 5267799 z^6 - 3612672 z^5 + 705600 z^4 - 345600 z^3 + 216000 z^2 - 120960 z + 34020) + \frac{1}{68040} (e^z \sqrt{\pi} (-64 z^{23/2} - 3840 z^{21/2} - 86832 z^{19/2} - 937152 z^{17/2} - 5025132 z^{15/2} - 12484800 z^{13/2} - 10989225 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alvs.01

$${}_2F_2\left(4, 4; -\frac{9}{2}, 1; -z\right) = \frac{1}{34020} (32 z^{11} - 1904 z^{10} + 42480 z^9 - 448248 z^8 + 2307450 z^7 - 5267799 z^6 + 3612672 z^5 + 705600 z^4 + 345600 z^3 + 216000 z^2 + 120960 z + 34020) + \frac{1}{68040} (e^{-z} \sqrt{\pi} (-64 z^{23/2} + 3840 z^{21/2} - 86832 z^{19/2} + 937152 z^{17/2} - 5025132 z^{15/2} + 12484800 z^{13/2} - 10989225 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alvt.01

$${}_2F_2\left(4, 4; -\frac{9}{2}, 2; z\right) = \frac{1}{17010} (-16 z^{10} - 768 z^9 - 13184 z^8 - 99240 z^7 - 315891 z^6 - 301056 z^5 + 70560 z^4 - 43200 z^3 + 36000 z^2 - 30240 z + 17010) + \frac{1}{34020} e^z \sqrt{\pi} (-32 z^{21/2} - 1552 z^{19/2} - 27120 z^{17/2} - 210936 z^{15/2} - 719610 z^{13/2} - 845325 z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.alvu.01

$${}_2F_2\left(4, 4; -\frac{9}{2}, 2; -z\right) = \frac{1}{17010} (-16 z^{10} + 768 z^9 - 13184 z^8 + 99240 z^7 - 315891 z^6 + 301056 z^5 + 70560 z^4 + 43200 z^3 + 36000 z^2 + 30240 z + 17010) + \frac{1}{34020} e^{-z} \sqrt{\pi} (32 z^{21/2} - 1552 z^{19/2} + 27120 z^{17/2} - 210936 z^{15/2} + 719610 z^{13/2} - 845325 z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alvv.01

$${}_2F_2\left(4, 4; -\frac{9}{2}, 3; z\right) = \frac{-16z^9 - 584z^8 - 7060z^7 - 32442z^6 - 43008z^5 + 11760z^4 - 8640z^3 + 9000z^2 - 10080z + 8505}{8505} + \frac{e^z \sqrt{\pi} (-16z^{19/2} - 592z^{17/2} - 7344z^{15/2} - 35700z^{13/2} - 56355z^{11/2}) \operatorname{erf}(\sqrt{z})}{8505}$$

07.25.03.alvw.01

$${}_2F_2\left(4, 4; -\frac{9}{2}, 3; -z\right) = \frac{16z^9 - 584z^8 + 7060z^7 - 32442z^6 + 43008z^5 + 11760z^4 + 8640z^3 + 9000z^2 + 10080z + 8505}{8505} + \frac{e^{-z} \sqrt{\pi} (-16z^{19/2} + 592z^{17/2} - 7344z^{15/2} + 35700z^{13/2} - 56355z^{11/2}) \operatorname{erfi}(\sqrt{z})}{8505}$$

07.25.03.alvx.01

$${}_2F_2\left(4, 4; -\frac{9}{2}, 4; z\right) = \frac{-16z^8 - 400z^7 - 2868z^6 - 5376z^5 + 1680z^4 - 1440z^3 + 1800z^2 - 2520z + 2835}{2835} - \frac{2e^z \sqrt{\pi} (8z^{17/2} + 204z^{15/2} + 1530z^{13/2} + 3315z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.alvy.01

$${}_2F_2\left(4, 4; -\frac{9}{2}, 4; -z\right) = \frac{-16z^8 + 400z^7 - 2868z^6 + 5376z^5 + 1680z^4 + 1440z^3 + 1800z^2 + 2520z + 2835}{2835} + \frac{2e^{-z} \sqrt{\pi} (8z^{17/2} - 204z^{15/2} + 1530z^{13/2} - 3315z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

For fixed z and $a_1 = 4, a_2 = 4, b_1 = -\frac{7}{2}$

07.25.03.alvz.01

$${}_2F_2\left(4, 4; -\frac{7}{2}, 1; z\right) = \frac{1}{7560} (32z^{10} + 1712z^9 + 33936z^8 + 313320z^7 + 1382466z^6 + 2624319z^5 + 1411200z^4 - 230400z^3 + 86400z^2 - 34560z + 7560) + \frac{1}{15120} (e^z \sqrt{\pi} (64z^{21/2} + 3456z^{19/2} + 69552z^{17/2} + 658944z^{15/2} + 3048300z^{13/2} + 6388200z^{11/2} + 4601025z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.alw0.01

$${}_2F_2\left(4, 4; -\frac{7}{2}, 1; -z\right) = \frac{1}{7560} (32z^{10} - 1712z^9 + 33936z^8 - 313320z^7 + 1382466z^6 - 2624319z^5 + 1411200z^4 + 230400z^3 + 86400z^2 + 34560z + 7560) + \frac{1}{15120} (e^{-z} \sqrt{\pi} (-64z^{21/2} + 3456z^{19/2} - 69552z^{17/2} + 658944z^{15/2} - 3048300z^{13/2} + 6388200z^{11/2} - 4601025z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alw1.01

$${}_2F_2\left(4, 4; -\frac{7}{2}, 2; z\right) = \frac{1}{3780} (16z^9 + 688z^8 + 10440z^7 + 68244z^6 + 183837z^5 + 141120z^4 - 28800z^3 + 14400z^2 - 8640z + 3780) + \frac{e^z \sqrt{\pi} (32z^{19/2} + 1392z^{17/2} + 21552z^{15/2} + 146280z^{13/2} + 427050z^{11/2} + 418275z^{9/2}) \operatorname{erf}(\sqrt{z})}{7560}$$

07.25.03.alw2.01

$${}_2F_2\left(4, 4; -\frac{7}{2}, 2; -z\right) = \frac{1}{3780} (-16z^9 + 688z^8 - 10440z^7 + 68244z^6 - 183837z^5 + 141120z^4 + 28800z^3 + 14400z^2 + 8640z + 3780) + \frac{1}{7560} e^{-z} \sqrt{\pi} (32z^{19/2} - 1392z^{17/2} + 21552z^{15/2} - 146280z^{13/2} + 427050z^{11/2} - 418275z^{9/2}) \operatorname{erfi}(\sqrt{-z})$$

07.25.03.alw3.01

$${}_2F_2\left(4, 4; -\frac{7}{2}, 3; z\right) = \frac{1}{945} (8z^8 + 260z^7 + 2754z^6 + 10833z^5 + 11760z^4 - 2880z^3 + 1800z^2 - 1440z + 945) + \frac{e^z \sqrt{\pi} (16z^{17/2} + 528z^{15/2} + 5760z^{13/2} + 24180z^{11/2} + 32175z^{9/2}) \operatorname{erf}(\sqrt{z})}{1890}$$

07.25.03.alw4.01

$${}_2F_2\left(4, 4; -\frac{7}{2}, 3; -z\right) = \frac{1}{945} (8z^8 - 260z^7 + 2754z^6 - 10833z^5 + 11760z^4 + 2880z^3 + 1800z^2 + 1440z + 945) + \frac{e^{-z} \sqrt{\pi} (-16z^{17/2} + 528z^{15/2} - 5760z^{13/2} + 24180z^{11/2} - 32175z^{9/2}) \operatorname{erfi}(\sqrt{-z})}{1890}$$

07.25.03.alw5.01

$${}_2F_2\left(4, 4; -\frac{7}{2}, 4; z\right) = \frac{1}{315} (8z^7 + 176z^6 + 1086z^5 + 1680z^4 - 480z^3 + 360z^2 - 360z + 315) + \frac{1}{315} e^z \sqrt{\pi} (8z^{15/2} + 180z^{13/2} + 1170z^{11/2} + 2145z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.alw6.01

$${}_2F_2\left(4, 4; -\frac{7}{2}, 4; -z\right) = \frac{1}{315} (-8z^7 + 176z^6 - 1086z^5 + 1680z^4 + 480z^3 + 360z^2 + 360z + 315) + \frac{1}{315} e^{-z} \sqrt{\pi} (8z^{15/2} - 180z^{13/2} + 1170z^{11/2} - 2145z^{9/2}) \operatorname{erfi}(\sqrt{-z})$$

For fixed z and $a_1 = 4, a_2 = 4, b_1 = -\frac{5}{2}$

07.25.03.alw7.01

$${}_2F_2\left(4, 4; -\frac{5}{2}, 1; z\right) = \frac{1}{2160} \frac{(-32 z^9 - 1520 z^8 - 26352 z^7 - 208632 z^6 - 767994 z^5 - 1166031 z^4 - 460800 z^3 + 57600 z^2 - 13824 z + 2160) + \frac{1}{4320} \left(e^z \sqrt{\pi} (-64 z^{19/2} - 3072 z^{17/2} - 54192 z^{15/2} - 442176 z^{13/2} - 1721772 z^{11/2} - 2944656 z^{9/2} - 1656369 z^{7/2}) \operatorname{erf}(\sqrt{z})\right)}{4320}$$

07.25.03.alw8.01

$${}_2F_2\left(4, 4; -\frac{5}{2}, 1; -z\right) = \frac{1}{2160} (32 z^9 - 1520 z^8 + 26352 z^7 - 208632 z^6 + 767994 z^5 - 1166031 z^4 + 460800 z^3 + 57600 z^2 + 13824 z + 2160) + \frac{1}{4320} \left(e^{-z} \sqrt{\pi} (-64 z^{19/2} + 3072 z^{17/2} - 54192 z^{15/2} + 442176 z^{13/2} - 1721772 z^{11/2} + 2944656 z^{9/2} - 1656369 z^{7/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.alw9.01

$${}_2F_2\left(4, 4; -\frac{5}{2}, 2; z\right) = \frac{-16 z^8 - 608 z^7 - 8016 z^6 - 44480 z^5 - 98199 z^4 - 57600 z^3 + 9600 z^2 - 3456 z + 1080}{1080} + \frac{e^z \sqrt{\pi} (-32 z^{17/2} - 1232 z^{15/2} - 16624 z^{13/2} - 96408 z^{11/2} - 234234 z^{9/2} - 184041 z^{7/2}) \operatorname{erf}(\sqrt{z})}{2160}$$

07.25.03.alwa.01

$${}_2F_2\left(4, 4; -\frac{5}{2}, 2; -z\right) = \frac{-16 z^8 + 608 z^7 - 8016 z^6 + 44480 z^5 - 98199 z^4 + 57600 z^3 + 9600 z^2 + 3456 z + 1080}{1080} + \frac{e^{-z} \sqrt{\pi} (32 z^{17/2} - 1232 z^{15/2} + 16624 z^{13/2} - 96408 z^{11/2} + 234234 z^{9/2} - 184041 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{2160}$$

07.25.03.alwb.01

$${}_2F_2\left(4, 4; -\frac{5}{2}, 3; z\right) = \frac{1}{270} (-8 z^7 - 228 z^6 - 2074 z^5 - 6789 z^4 - 5760 z^3 + 1200 z^2 - 576 z + 270) + \frac{1}{540} e^z \sqrt{\pi} (-16 z^{15/2} - 464 z^{13/2} - 4368 z^{11/2} - 15444 z^{9/2} - 16731 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.alwc.01

$${}_2F_2\left(4, 4; -\frac{5}{2}, 3; -z\right) = \frac{1}{270} (8 z^7 - 228 z^6 + 2074 z^5 - 6789 z^4 + 5760 z^3 + 1200 z^2 + 576 z + 270) + \frac{1}{540} e^{-z} \sqrt{\pi} (-16 z^{15/2} + 464 z^{13/2} - 4368 z^{11/2} + 15444 z^{9/2} - 16731 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alwd.01

$${}_2F_2\left(4, 4; -\frac{5}{2}, 4; z\right) = \frac{1}{45} (-4 z^6 - 76 z^5 - 393 z^4 - 480 z^3 + 120 z^2 - 72 z + 45) + \frac{1}{90} e^z \sqrt{\pi} (-8 z^{13/2} - 156 z^{11/2} - 858 z^{9/2} - 1287 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.alwe.01

$${}_2F_2\left(4, 4; -\frac{5}{2}, 4; -z\right) = \frac{1}{45}(-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45) + \frac{1}{90}e^{-z}\sqrt{\pi}(8z^{13/2} - 156z^{11/2} + 858z^{9/2} - 1287z^{7/2})\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 4, a_2 = 4, b_1 = -\frac{3}{2}$

07.25.03.alwf.01

$${}_2F_2\left(4, 4; -\frac{3}{2}, 1; z\right) = \frac{1}{864}(32z^8 + 1328z^7 + 19728z^6 + 130344z^5 + 385314z^4 + 441351z^3 + 115200z^2 - 9216z + 864) + \frac{1}{1728}e^z\sqrt{\pi}(64z^{17/2} + 2688z^{15/2} + 40752z^{13/2} + 279168z^{11/2} + 884268z^{9/2} + 1176120z^{7/2} + 480249z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.alwg.01

$${}_2F_2\left(4, 4; -\frac{3}{2}, 1; -z\right) = \frac{1}{864}(32z^8 - 1328z^7 + 19728z^6 - 130344z^5 + 385314z^4 - 441351z^3 + 115200z^2 + 9216z + 864) + \frac{1}{1728}(e^{-z}\sqrt{\pi}(-64z^{17/2} + 2688z^{15/2} - 40752z^{13/2} + 279168z^{11/2} - 884268z^{9/2} + 1176120z^{7/2} - 480249z^{5/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.alwh.01

$${}_2F_2\left(4, 4; -\frac{3}{2}, 2; z\right) = \frac{1}{432}(16z^7 + 528z^6 + 5912z^5 + 26988z^4 + 46593z^3 + 19200z^2 - 2304z + 432) + \frac{1}{864}e^z\sqrt{\pi}(32z^{15/2} + 1072z^{13/2} + 12336z^{11/2} + 59400z^{9/2} + 115434z^{7/2} + 68607z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.alwi.01

$${}_2F_2\left(4, 4; -\frac{3}{2}, 2; -z\right) = \frac{1}{432}(-16z^7 + 528z^6 - 5912z^5 + 26988z^4 - 46593z^3 + 19200z^2 + 2304z + 432) + \frac{1}{864}e^{-z}\sqrt{\pi}(32z^{15/2} - 1072z^{13/2} + 12336z^{11/2} - 59400z^{9/2} + 115434z^{7/2} - 68607z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.alwj.01

$${}_2F_2\left(4, 4; -\frac{3}{2}, 3; z\right) = \frac{1}{108}(8z^6 + 196z^5 + 1490z^4 + 3897z^3 + 2400z^2 - 384z + 108) + \frac{1}{216}e^z\sqrt{\pi}(16z^{13/2} + 400z^{11/2} + 3168z^{9/2} + 9108z^{7/2} + 7623z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.alwk.01

$${}_2F_2\left(4, 4; -\frac{3}{2}, 3; -z\right) = \frac{1}{108}(8z^6 - 196z^5 + 1490z^4 - 3897z^3 + 2400z^2 + 384z + 108) + \frac{1}{216}e^{-z}\sqrt{\pi}(-16z^{13/2} + 400z^{11/2} - 3168z^{9/2} + 9108z^{7/2} - 7623z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.alwl.01

$${}_2F_2\left(4, 4; -\frac{3}{2}, 4; z\right) = \frac{1}{18}(4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18) + \frac{1}{36}e^z\sqrt{\pi}(8z^{11/2} + 132z^{9/2} + 594z^{7/2} + 693z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.alwm.01

$${}_2F_2\left(4, 4; -\frac{3}{2}, 4; -z\right) = \frac{1}{18}(-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18) + \frac{1}{36}e^{-z}\sqrt{\pi}(8z^{11/2} - 132z^{9/2} + 594z^{7/2} - 693z^{5/2})\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 4, a_2 = 4, b_1 = -\frac{1}{2}$

07.25.03.alwn.01

$${}_2F_2\left(4, 4; -\frac{1}{2}, 1; z\right) = \frac{1}{576}(-32z^7 - 1136z^6 - 14064z^5 - 74616z^4 - 167226z^3 - 131175z^2 - 18432z + 576) + \frac{1}{1152}e^z\sqrt{\pi}(-64z^{15/2} - 2304z^{13/2} - 29232z^{11/2} - 162240z^{9/2} - 397548z^{7/2} - 381024z^{5/2} - 99225z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.alwo.01

$${}_2F_2\left(4, 4; -\frac{1}{2}, 1; -z\right) = \frac{1}{576}(32z^7 - 1136z^6 + 14064z^5 - 74616z^4 + 167226z^3 - 131175z^2 + 18432z + 576) + \frac{1}{1152}e^{-z}\sqrt{\pi}(-64z^{15/2} + 2304z^{13/2} - 29232z^{11/2} + 162240z^{9/2} - 397548z^{7/2} + 381024z^{5/2} - 99225z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.alwp.01

$${}_2F_2\left(4, 4; -\frac{1}{2}, 2; z\right) = \frac{1}{288}(-16z^6 - 448z^5 - 4128z^4 - 14808z^3 - 18555z^2 - 4608z + 288) + \frac{1}{576}e^z\sqrt{\pi}(-32z^{13/2} - 912z^{11/2} - 8688z^{9/2} - 33336z^{7/2} - 48762z^{5/2} - 19845z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.alwq.01

$${}_2F_2\left(4, 4; -\frac{1}{2}, 2; -z\right) = \frac{1}{288}(-16z^6 + 448z^5 - 4128z^4 + 14808z^3 - 18555z^2 + 4608z + 288) + \frac{1}{576}e^{-z}\sqrt{\pi}(32z^{13/2} - 912z^{11/2} + 8688z^{9/2} - 33336z^{7/2} + 48762z^{5/2} - 19845z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.alwr.01

$${}_2F_2\left(4, 4; -\frac{1}{2}, 3; z\right) = \frac{1}{72}(-8z^5 - 164z^4 - 1002z^3 - 1965z^2 - 768z + 72) + \frac{1}{144}e^z\sqrt{\pi}(-16z^{11/2} - 336z^{9/2} - 2160z^{7/2} - 4788z^{5/2} - 2835z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.alws.01

$${}_2F_2\left(4, 4; -\frac{1}{2}, 3; -z\right) = \frac{1}{72}(8z^5 - 164z^4 + 1002z^3 - 1965z^2 + 768z + 72) + \frac{1}{144}e^{-z}\sqrt{\pi}(-16z^{11/2} + 336z^{9/2} - 2160z^{7/2} + 4788z^{5/2} - 2835z^{3/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.alwt.01

$${}_2F_2\left(4, 4; -\frac{1}{2}, 4; z\right) = \frac{1}{12}(-4z^4 - 52z^3 - 165z^2 - 96z + 12) + \frac{1}{24}e^z\sqrt{\pi}(-8z^{9/2} - 108z^{7/2} - 378z^{5/2} - 315z^{3/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.alwu.01

$${}_2F_2\left(4, 4; -\frac{1}{2}, 4; -z\right) = \frac{1}{12}(-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24}e^{-z}\sqrt{\pi}(8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2})\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 4, a_2 = 4, b_1 = \frac{1}{2}$

07.25.03.alvw.01

$${}_2F_2\left(4, 4; \frac{1}{2}, 1; z\right) = \frac{32 z^6 + 944 z^5 + 9360 z^4 + 37\,608 z^3 + 58\,050 z^2 + 25\,839 z + 1152}{1152} + \frac{1}{2304} e^z \sqrt{\pi} (64 z^{13/2} + 1920 z^{11/2} + 19\,632 z^{9/2} + 83\,712 z^{7/2} + 146\,412 z^{5/2} + 88\,200 z^{3/2} + 11\,025 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.alww.01

$${}_2F_2\left(4, 4; \frac{1}{2}, 1; -z\right) = \frac{32 z^6 - 944 z^5 + 9360 z^4 - 37\,608 z^3 + 58\,050 z^2 - 25\,839 z + 1152}{1152} + \frac{1}{2304} e^{-z} \sqrt{\pi} (-64 z^{13/2} + 1920 z^{11/2} - 19\,632 z^{9/2} + 83\,712 z^{7/2} - 146\,412 z^{5/2} + 88\,200 z^{3/2} - 11\,025 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alwx.01

$${}_2F_2\left(4, 4; \frac{1}{2}, 2; z\right) = \frac{1}{576} (16 z^5 + 368 z^4 + 2664 z^3 + 6980 z^2 + 5541 z + 576) + \frac{e^z \sqrt{\pi} (32 z^{11/2} + 752 z^{9/2} + 5680 z^{7/2} + 16\,296 z^{5/2} + 16\,170 z^{3/2} + 3675 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{1152}$$

07.25.03.alwy.01

$${}_2F_2\left(4, 4; \frac{1}{2}, 2; -z\right) = \frac{1}{576} (-16 z^5 + 368 z^4 - 2664 z^3 + 6980 z^2 - 5541 z + 576) + \frac{e^{-z} \sqrt{\pi} (32 z^{11/2} - 752 z^{9/2} + 5680 z^{7/2} - 16\,296 z^{5/2} + 16\,170 z^{3/2} - 3675 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{1152}$$

07.25.03.alwz.01

$${}_2F_2\left(4, 4; \frac{1}{2}, 3; z\right) = \frac{1}{144} (8 z^4 + 132 z^3 + 610 z^2 + 801 z + 144) + \frac{1}{288} e^z \sqrt{\pi} (16 z^{9/2} + 272 z^{7/2} + 1344 z^{5/2} + 2100 z^{3/2} + 735 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.alx0.01

$${}_2F_2\left(4, 4; \frac{1}{2}, 3; -z\right) = \frac{1}{144} (8 z^4 - 132 z^3 + 610 z^2 - 801 z + 144) + \frac{1}{288} e^{-z} \sqrt{\pi} (-16 z^{9/2} + 272 z^{7/2} - 1344 z^{5/2} + 2100 z^{3/2} - 735 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alx1.01

$${}_2F_2\left(4, 4; \frac{1}{2}, 4; z\right) = \frac{1}{24} (4 z^3 + 40 z^2 + 87 z + 24) + \frac{1}{48} e^z \sqrt{\pi} (8 z^{7/2} + 84 z^{5/2} + 210 z^{3/2} + 105 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.alx2.01

$${}_2F_2\left(4, 4; \frac{1}{2}, 4; -z\right) = \frac{1}{24} (-4 z^3 + 40 z^2 - 87 z + 24) + \frac{1}{48} e^{-z} \sqrt{\pi} (8 z^{7/2} - 84 z^{5/2} + 210 z^{3/2} - 105 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 4, a_2 = 4, b_1 = 1$

07.25.03.alx3.01

$${}_2F_2(4, 4; 1, 1; z) = \frac{1}{36} e^z (z^6 + 27 z^5 + 243 z^4 + 882 z^3 + 1242 z^2 + 540 z + 36)$$

07.25.03.alx4.01

$${}_2F_2\left(4, 4; 1, \frac{3}{2}; z\right) = \frac{32 z^5 + 752 z^4 + 5616 z^3 + 15480 z^2 + 13626 z + 2079}{2304} + \frac{e^z \sqrt{\pi} (64 z^6 + 1536 z^5 + 11952 z^4 + 35904 z^3 + 38700 z^2 + 10800 z + 225) \operatorname{erf}(\sqrt{z})}{4608 \sqrt{z}}$$

07.25.03.alx5.01

$${}_2F_2\left(4, 4; 1, \frac{3}{2}; -z\right) = \frac{-32 z^5 + 752 z^4 - 5616 z^3 + 15480 z^2 - 13626 z + 2079}{2304} + \frac{e^{-z} \sqrt{\pi} (64 z^6 - 1536 z^5 + 11952 z^4 - 35904 z^3 + 38700 z^2 - 10800 z + 225) \operatorname{erfi}(\sqrt{z})}{4608 \sqrt{z}}$$

07.25.03.alx6.01

$${}_2F_2(4, 4; 1, 2; z) = \frac{1}{36} e^z (z^5 + 21 z^4 + 138 z^3 + 330 z^2 + 252 z + 36)$$

07.25.03.alx7.01

$${}_2F_2\left(4, 4; 1, \frac{5}{2}; z\right) = \frac{32 z^5 + 560 z^4 + 2832 z^3 + 4392 z^2 + 1314 z - 9}{1536 z} + \frac{e^z \sqrt{\pi} (64 z^6 + 1152 z^5 + 6192 z^4 + 11136 z^3 + 5292 z^2 + 216 z + 9) \operatorname{erf}(\sqrt{z})}{3072 z^{3/2}}$$

07.25.03.alx8.01

$${}_2F_2\left(4, 4; 1, \frac{5}{2}; -z\right) = \frac{32 z^5 - 560 z^4 + 2832 z^3 - 4392 z^2 + 1314 z + 9}{1536 z} + \frac{e^{-z} \sqrt{\pi} (-64 z^6 + 1152 z^5 - 6192 z^4 + 11136 z^3 - 5292 z^2 + 216 z - 9) \operatorname{erfi}(\sqrt{z})}{3072 z^{3/2}}$$

07.25.03.alx9.01

$${}_2F_2(4, 4; 1, 3; z) = \frac{1}{18} e^z (z^4 + 15 z^3 + 63 z^2 + 78 z + 18)$$

07.25.03.alxa.01

$${}_2F_2\left(4, 4; 1, \frac{7}{2}; z\right) = \frac{5(32 z^5 + 368 z^4 + 1008 z^3 + 504 z^2 - 6 z - 9)}{3072 z^2} + \frac{5 e^z \sqrt{\pi} (64 z^6 + 768 z^5 + 2352 z^4 + 1728 z^3 + 108 z^2 + 9) \operatorname{erf}(\sqrt{z})}{6144 z^{5/2}}$$

07.25.03.alxb.01

$${}_2F_2\left(4, 4; 1, \frac{7}{2}; -z\right) = \frac{5 e^{-z} \sqrt{\pi} (64 z^6 - 768 z^5 + 2352 z^4 - 1728 z^3 + 108 z^2 + 9) \operatorname{erfi}(\sqrt{z})}{6144 z^{5/2}} - \frac{5(32 z^5 - 368 z^4 + 1008 z^3 - 504 z^2 - 6 z + 9)}{3072 z^2}$$

07.25.03.alxc.01

$${}_2F_2(4, 4; 1, 4; z) = \frac{1}{6} e^z (z^3 + 9z^2 + 18z + 6)$$

07.25.03.alxd.01

$${}_2F_2\left(4, 4; 1, \frac{9}{2}; z\right) = \frac{35(32z^5 + 176z^4 + 144z^3 - 24z^2 + 66z - 225)}{6144z^3} + \frac{35e^z\sqrt{\pi}(64z^6 + 384z^5 + 432z^4 + 108z^2 - 216z + 225)\operatorname{erf}(\sqrt{z})}{12288z^{7/2}}$$

07.25.03.alxe.01

$${}_2F_2\left(4, 4; 1, \frac{9}{2}; -z\right) = \frac{35(32z^5 - 176z^4 + 144z^3 + 24z^2 + 66z + 225)}{6144z^3} - \frac{35e^{-z}\sqrt{\pi}(64z^6 - 384z^5 + 432z^4 + 108z^2 + 216z + 225)\operatorname{erfi}(\sqrt{z})}{12288z^{7/2}}$$

07.25.03.alxf.01

$${}_2F_2(4, 4; 1, 5; z) = \frac{2e^z(z^6 + 3z^5 + 3z^4 - 6z^3 + 18z^2 - 36z + 36)}{3z^4} - \frac{24}{z^4}$$

07.25.03.alxg.01

$${}_2F_2\left(4, 4; 1, \frac{11}{2}; z\right) = \frac{105(32z^5 - 16z^4 + 240z^3 - 1032z^2 + 3450z - 11025)}{4096z^4} + \frac{105e^z\sqrt{\pi}(64z^6 + 432z^4 - 1728z^3 + 5292z^2 - 10800z + 11025)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.alxh.01

$${}_2F_2\left(4, 4; 1, \frac{11}{2}; -z\right) = \frac{105e^{-z}\sqrt{\pi}(64z^6 + 432z^4 + 1728z^3 + 5292z^2 + 10800z + 11025)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}} - \frac{105(32z^5 + 16z^4 + 240z^3 + 1032z^2 + 3450z + 11025)}{4096z^4}$$

07.25.03.alxi.01

$${}_2F_2(4, 4; 1, 6; z) = \frac{10e^z(z^6 - 3z^5 + 18z^4 - 78z^3 + 252z^2 - 540z + 576)}{3z^5} - \frac{120(z + 16)}{z^5}$$

For fixed z and $a_1 = 4, a_2 = 4, b_1 = \frac{3}{2}$

07.25.03.alxj.01

$${}_2F_2\left(4, 4; \frac{3}{2}, 2; z\right) = \frac{16z^4 + 288z^3 + 1520z^2 + 2544z + 927}{1152} + \frac{e^z\sqrt{\pi}(32z^5 + 592z^4 + 3312z^3 + 6360z^2 + 3450z + 225)\operatorname{erf}(\sqrt{z})}{2304\sqrt{z}}$$

07.25.03.alxk.01

$${}_2F_2\left(4, 4; \frac{3}{2}, 2; -z\right) = \frac{16z^4 - 288z^3 + 1520z^2 - 2544z + 927}{1152} + \frac{e^{-z}\sqrt{\pi}(-32z^5 + 592z^4 - 3312z^3 + 6360z^2 - 3450z + 225)\operatorname{erfi}(\sqrt{z})}{2304\sqrt{z}}$$

07.25.03.alxl.01

$${}_2F_2\left(4, 4; \frac{3}{2}, 3; z\right) = \frac{1}{288}(8z^3 + 100z^2 + 314z + 213) + \frac{e^z\sqrt{\pi}(16z^4 + 208z^3 + 720z^2 + 660z + 75)\operatorname{erf}(\sqrt{z})}{576\sqrt{z}}$$

07.25.03.alxm.01

$${}_2F_2\left(4, 4; \frac{3}{2}, 3; -z\right) = \frac{1}{288}(-8z^3 + 100z^2 - 314z + 213) + \frac{e^{-z}\sqrt{\pi}(16z^4 - 208z^3 + 720z^2 - 660z + 75)\operatorname{erfi}(\sqrt{z})}{576\sqrt{z}}$$

07.25.03.alxn.01

$${}_2F_2\left(4, 4; \frac{3}{2}, 4; z\right) = \frac{1}{48}(4z^2 + 28z + 33) + \frac{e^z\sqrt{\pi}(8z^3 + 60z^2 + 90z + 15)\operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.alxo.01

$${}_2F_2\left(4, 4; \frac{3}{2}, 4; -z\right) = \frac{1}{48}(4z^2 - 28z + 33) + \frac{e^{-z}\sqrt{\pi}(-8z^3 + 60z^2 - 90z + 15)\operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

For fixed z and $a_1 = 4, a_2 = 4, b_1 = 2$

07.25.03.alxp.01

$${}_2F_2(4, 4; 2, 2; z) = \frac{1}{36}e^z(z^4 + 16z^3 + 74z^2 + 108z + 36)$$

07.25.03.alxq.01

$${}_2F_2\left(4, 4; 2, \frac{5}{2}; z\right) = \frac{16z^4 + 208z^3 + 696z^2 + 540z + 9}{768z} + \frac{e^z\sqrt{\pi}(32z^5 + 432z^4 + 1584z^3 + 1608z^2 + 234z - 9)\operatorname{erf}(\sqrt{z})}{1536z^{3/2}}$$

07.25.03.alxr.01

$${}_2F_2\left(4, 4; 2, \frac{5}{2}; -z\right) = \frac{-16z^4 + 208z^3 - 696z^2 + 540z - 9}{768z} + \frac{e^{-z}\sqrt{\pi}(32z^5 - 432z^4 + 1584z^3 - 1608z^2 + 234z + 9)\operatorname{erfi}(\sqrt{z})}{1536z^{3/2}}$$

07.25.03.alxs.01

$${}_2F_2(4, 4; 2, 3; z) = \frac{1}{18}e^z(z^3 + 11z^2 + 30z + 18)$$

07.25.03.alxt.01

$${}_2F_2\left(4, 4; 2, \frac{7}{2}; z\right) = \frac{5(16z^4 + 128z^3 + 192z^2 + 8z + 3)}{1536z^2} + \frac{5e^z\sqrt{\pi}(32z^5 + 272z^4 + 496z^3 + 120z^2 - 6z - 3)\operatorname{erf}(\sqrt{z})}{3072z^{5/2}}$$

07.25.03.alxu.01

$${}_2F_2\left(4, 4; 2, \frac{7}{2}; -z\right) = \frac{5(16z^4 - 128z^3 + 192z^2 - 8z + 3)}{1536z^2} - \frac{5e^{-z}\sqrt{\pi}(32z^5 - 272z^4 + 496z^3 - 120z^2 - 6z + 3)\operatorname{erfi}(\sqrt{z})}{3072z^{5/2}}$$

07.25.03.alxv.01

$${}_2F_2(4, 4; 2, 4; z) = \frac{1}{6} e^z (z^2 + 6z + 6)$$

07.25.03.alxw.01

$${}_2F_2\left(4, 4; 2, \frac{9}{2}; z\right) = \frac{35(16z^4 + 48z^3 + 8z^2 - 12z + 45)}{3072z^3} + \frac{35e^z\sqrt{\pi}(32z^5 + 112z^4 + 48z^3 - 24z^2 + 42z - 45)\operatorname{erf}(\sqrt{z})}{6144z^{7/2}}$$

07.25.03.alxx.01

$${}_2F_2\left(4, 4; 2, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(32z^5 - 112z^4 + 48z^3 + 24z^2 + 42z + 45)\operatorname{erfi}(\sqrt{z})}{6144z^{7/2}} - \frac{35(16z^4 - 48z^3 + 8z^2 + 12z + 45)}{3072z^3}$$

07.25.03.alxy.01

$${}_2F_2(4, 4; 2, 5; z) = \frac{2e^z(z^5 + z^4 + 2z^3 - 6z^2 + 12z - 12)}{3z^4} + \frac{8}{z^4}$$

07.25.03.alxz.01

$${}_2F_2\left(4, 4; 2, \frac{11}{2}; z\right) = \frac{105(16z^4 - 32z^3 + 144z^2 - 480z + 1575)}{2048z^4} + \frac{105e^z\sqrt{\pi}(32z^5 - 48z^4 + 240z^3 - 744z^2 + 1530z - 1575)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.aly0.01

$${}_2F_2\left(4, 4; 2, \frac{11}{2}; -z\right) = \frac{105(16z^4 + 32z^3 + 144z^2 + 480z + 1575)}{2048z^4} - \frac{105e^{-z}\sqrt{\pi}(32z^5 + 48z^4 + 240z^3 + 744z^2 + 1530z + 1575)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.aly1.01

$${}_2F_2(4, 4; 2, 6; z) = \frac{40(z + 12)}{z^5} + \frac{10e^z(z^5 - 4z^4 + 18z^3 - 60z^2 + 132z - 144)}{3z^5}$$

For fixed z and $a_1 = 4, a_2 = 4, b_1 = \frac{5}{2}$

07.25.03.aly2.01

$${}_2F_2\left(4, 4; \frac{5}{2}, 3; z\right) = \frac{8z^3 + 68z^2 + 114z + 9}{192z} + \frac{e^z\sqrt{\pi}(16z^4 + 144z^3 + 288z^2 + 84z - 9)\operatorname{erf}(\sqrt{z})}{384z^{3/2}}$$

07.25.03.aly3.01

$${}_2F_2\left(4, 4; \frac{5}{2}, 3; -z\right) = \frac{8z^3 - 68z^2 + 114z - 9}{192z} + \frac{e^{-z}\sqrt{\pi}(-16z^4 + 144z^3 - 288z^2 + 84z + 9)\operatorname{erfi}(\sqrt{z})}{384z^{3/2}}$$

07.25.03.aly4.01

$${}_2F_2\left(4, 4; \frac{5}{2}, 4; z\right) = \frac{4z^2 + 16z + 3}{32z} + \frac{e^z\sqrt{\pi}(8z^3 + 36z^2 + 18z - 3)\operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.aly5.01

$${}_2F_2\left(4, 4; \frac{5}{2}, 4; -z\right) = \frac{-4z^2 + 16z - 3}{32z} + \frac{e^{-z} \sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

For fixed z and $a_1 = 4, a_2 = 4, b_1 = 3$

07.25.03.aly6.01

$${}_2F_2(4, 4; 3, 3; z) = \frac{1}{9} e^z (z^2 + 7z + 9)$$

07.25.03.aly7.01

$${}_2F_2\left(4, 4; 3, \frac{7}{2}; z\right) = \frac{5(8z^3 + 36z^2 + 10z - 3)}{384z^2} + \frac{5e^z \sqrt{\pi} (16z^4 + 80z^3 + 48z^2 - 12z + 3) \operatorname{erf}(\sqrt{z})}{768z^{5/2}}$$

07.25.03.aly8.01

$${}_2F_2\left(4, 4; 3, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (16z^4 - 80z^3 + 48z^2 + 12z + 3) \operatorname{erfi}(\sqrt{z})}{768z^{5/2}} - \frac{5(8z^3 - 36z^2 + 10z + 3)}{384z^2}$$

07.25.03.aly9.01

$${}_2F_2(4, 4; 3, 4; z) = \frac{1}{3} e^z (z + 3)$$

07.25.03.alya.01

$${}_2F_2\left(4, 4; 3, \frac{9}{2}; z\right) = \frac{35(8z^3 + 4z^2 + 2z - 15)}{768z^3} + \frac{35e^z \sqrt{\pi} (16z^4 + 16z^3 - 12z + 15) \operatorname{erf}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.alyb.01

$${}_2F_2\left(4, 4; 3, \frac{9}{2}; -z\right) = \frac{35(8z^3 - 4z^2 + 2z + 15)}{768z^3} - \frac{35e^{-z} \sqrt{\pi} (16z^4 - 16z^3 + 12z + 15) \operatorname{erfi}(\sqrt{z})}{1536z^{7/2}}$$

07.25.03.alyc.01

$${}_2F_2(4, 4; 3, 5; z) = \frac{4e^z (z^4 - z^3 + 3z^2 - 6z + 6)}{3z^4} - \frac{8}{z^4}$$

07.25.03.alyd.01

$${}_2F_2\left(4, 4; 3, \frac{11}{2}; z\right) = \frac{105(8z^3 - 28z^2 + 90z - 315)}{512z^4} + \frac{105e^z \sqrt{\pi} (16z^4 - 48z^3 + 144z^2 - 300z + 315) \operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.alye.01

$${}_2F_2\left(4, 4; 3, \frac{11}{2}; -z\right) = \frac{105e^{-z} \sqrt{\pi} (16z^4 + 48z^3 + 144z^2 + 300z + 315) \operatorname{erfi}(\sqrt{z})}{1024z^{9/2}} - \frac{105(8z^3 + 28z^2 + 90z + 315)}{512z^4}$$

07.25.03.alyf.01

$${}_2F_2(4, 4; 3, 6; z) = \frac{20e^z (z^4 - 5z^3 + 18z^2 - 42z + 48)}{3z^5} - \frac{40(z + 8)}{z^5}$$

For fixed z and $a_1 = 4, a_2 = 4, b_1 = \frac{7}{2}$

07.25.03.alyg.01

$${}_2F_2\left(4, 4; \frac{7}{2}, 4; z\right) = \frac{5(4z^2 + 4z - 3)}{64z^2} + \frac{5e^z \sqrt{\pi} (8z^3 + 12z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.alyh.01

$${}_2F_2\left(4, 4; \frac{7}{2}, 4; -z\right) = \frac{5(4z^2 - 4z - 3)}{64z^2} - \frac{5e^{-z} \sqrt{\pi} (8z^3 - 12z^2 - 6z - 3) \operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

For fixed z and $a_1 = 4, a_2 = 4, b_1 = 4$

07.25.03.alyi.01

$${}_2F_2(4, 4; 4, 4; z) = e^z$$

07.25.03.alyj.01

$${}_2F_2\left(4, 4; 4, \frac{9}{2}; z\right) = \frac{35(4z^2 - 8z + 15)}{128z^3} + \frac{35e^z \sqrt{\pi} (8z^3 - 12z^2 + 18z - 15) \operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.alyk.01

$${}_2F_2\left(4, 4; 4, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (8z^3 + 12z^2 + 18z + 15) \operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35(4z^2 + 8z + 15)}{128z^3}$$

07.25.03.alyl.01

$${}_2F_2(4, 4; 4, 5; z) = \frac{4e^z(z^3 - 3z^2 + 6z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.alym.01

$${}_2F_2\left(4, 4; 4, \frac{11}{2}; z\right) = \frac{315(4z^2 - 20z + 105)}{256z^4} + \frac{315e^z \sqrt{\pi} (8z^3 - 36z^2 + 90z - 105) \operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.alyo.01

$${}_2F_2\left(4, 4; 4, \frac{11}{2}; -z\right) = \frac{315(4z^2 + 20z + 105)}{256z^4} - \frac{315e^{-z} \sqrt{\pi} (8z^3 + 36z^2 + 90z + 105) \operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.alyo.01

$${}_2F_2(4, 4; 4, 6; z) = \frac{120(z + 4)}{z^5} + \frac{20e^z(z^3 - 6z^2 + 18z - 24)}{z^5}$$

For fixed z and $a_1 = 4, a_2 = 4, b_1 = 5$

07.25.03.alyq.01

$${}_2F_2(4, 4; 5, 5; z) = \frac{16e^z(z^2 - 5z + 11)}{z^4} - \frac{96\operatorname{Ei}(z)}{z^4} - \frac{48\log\left(\frac{1}{z}\right)}{z^4} + \frac{48\log(z)}{z^4} + \frac{16(-11 + 6\gamma)}{z^4}$$

07.25.03.alyq.01

$${}_2F_2(4, 4; 5, 6; z) = \frac{80(6\gamma z - 17z - 24)}{z^5} + \frac{80e^z(z^2 - 7z + 24)}{z^5} - \frac{480\operatorname{Ei}(z)}{z^4} - \frac{240\log\left(\frac{1}{z}\right)}{z^4} + \frac{240\log(z)}{z^4}$$

For fixed z and $a_1 = 4, a_2 = 4, b_1 = 6$

07.25.03.alyr.01

$${}_2F_2(4, 4; 6, 6; z) = \frac{400 e^z (z - 2)}{z^5} + \frac{400 (6 \gamma z - 23 z - 24 \gamma + 2)}{z^5} - \frac{2400 (z - 4) \text{Ei}(z)}{z^5} - \frac{1200 (z - 4) \log\left(\frac{1}{z}\right)}{z^5} + \frac{1200 (z - 4) \log(z)}{z^5}$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = -\frac{11}{2}$

07.25.03.aly.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{34037647875} \left(32768 z^{19} + 5177344 z^{18} + 347463680 z^{17} + 13016727552 z^{16} + 300947521536 z^{15} + 4484193976320 z^{14} + 43679434014720 z^{13} + 276465163161600 z^{12} + 1108735057059840 z^{11} + 2682958648965120 z^{10} + 3595884955084800 z^9 + 2282555730067200 z^8 + 489540288384000 z^7 + 10559470521600 z^6 + 185253868800 z^5 + 30648618000 z^4 + 14594580000 z^3 + 13752585000 z^2 + 20253807000 z + 34037647875 \right) + \frac{1}{34037647875} \left(4096 e^z \sqrt{\pi} \left(8 z^{39/2} + 1268 z^{37/2} + 85458 z^{35/2} + 3219705 z^{33/2} + 75021600 z^{31/2} + 1130022090 z^{29/2} + 11178181440 z^{27/2} + 72359814240 z^{25/2} + 300192480000 z^{23/2} + 766162152000 z^{21/2} + 1122144710400 z^{19/2} + 836984534400 z^{17/2} + 253174118400 z^{15/2} + 17581536000 z^{13/2} \right) \text{erf}(\sqrt{z}) \right)$$

07.25.03.alyt.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{34037647875} \left(-32768 z^{19} + 5177344 z^{18} - 347463680 z^{17} + 13016727552 z^{16} - 300947521536 z^{15} + 4484193976320 z^{14} - 43679434014720 z^{13} + 276465163161600 z^{12} - 1108735057059840 z^{11} + 2682958648965120 z^{10} - 3595884955084800 z^9 + 2282555730067200 z^8 - 489540288384000 z^7 + 10559470521600 z^6 - 185253868800 z^5 + 30648618000 z^4 - 14594580000 z^3 + 13752585000 z^2 - 20253807000 z + 34037647875 \right) + \frac{1}{34037647875} \left(4096 e^{-z} \sqrt{\pi} \left(8 z^{39/2} - 1268 z^{37/2} + 85458 z^{35/2} - 3219705 z^{33/2} + 75021600 z^{31/2} - 1130022090 z^{29/2} + 11178181440 z^{27/2} - 72359814240 z^{25/2} + 300192480000 z^{23/2} - 766162152000 z^{21/2} + 1122144710400 z^{19/2} - 836984534400 z^{17/2} + 253174118400 z^{15/2} - 17581536000 z^{13/2} \right) \text{erfi}(\sqrt{z}) \right)$$

07.25.03.alyu.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{3094331625} \left(-16384 z^{18} - 2375680 z^{17} - 145231872 z^{16} - 4911980544 z^{15} - 101423677440 z^{14} - \right.$$

$$1331568967680 z^{13} - 11232358502400 z^{12} - 60164879523840 z^{11} - 197707265095680 z^{10} -$$

$$373421896243200 z^9 - 360012424262400 z^8 - 139175438976000 z^7 - 10559470521600 z^6 +$$

$$185253868800 z^5 + 10216206000 z^4 + 2918916000 z^3 + 1964655000 z^2 + 2250423000 z + 3094331625 \left. \right) -$$

$$\frac{1}{3094331625} \left(2048 e^z \sqrt{\pi} \left(8 z^{37/2} + 1164 z^{35/2} + 71490 z^{33/2} + 2433315 z^{31/2} + 50688450 z^{29/2} + \right. \right.$$

$$673826040 z^{27/2} + 5787573120 z^{25/2} + 31846802400 z^{23/2} + 109111665600 z^{21/2} +$$

$$\left. \left. 220603824000 z^{19/2} + 239729414400 z^{17/2} + 117796291200 z^{15/2} + 17581536000 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alyv.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{3094331625} \left(-16384 z^{18} + 2375680 z^{17} - 145231872 z^{16} + 4911980544 z^{15} - 101423677440 z^{14} + \right.$$

$$1331568967680 z^{13} - 11232358502400 z^{12} + 60164879523840 z^{11} - 197707265095680 z^{10} +$$

$$373421896243200 z^9 - 360012424262400 z^8 + 139175438976000 z^7 - 10559470521600 z^6 -$$

$$185253868800 z^5 + 10216206000 z^4 - 2918916000 z^3 + 1964655000 z^2 - 2250423000 z + 3094331625 \left. \right) +$$

$$\frac{1}{3094331625} \left(2048 e^{-z} \sqrt{\pi} \left(8 z^{37/2} - 1164 z^{35/2} + 71490 z^{33/2} - 2433315 z^{31/2} + 50688450 z^{29/2} - \right. \right.$$

$$673826040 z^{27/2} + 5787573120 z^{25/2} - 31846802400 z^{23/2} + 109111665600 z^{21/2} -$$

$$\left. \left. 220603824000 z^{19/2} + 239729414400 z^{17/2} - 117796291200 z^{15/2} + 17581536000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alyw.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{343814625} \left(8192 z^{17} + 1081344 z^{16} + 59643904 z^{15} + 1800437760 z^{14} + 32735969280 z^{13} + 371991244800 z^{12} + \right.$$

$$2654619770880 z^{11} + 11652318996480 z^{10} + 29920449484800 z^9 +$$

$$40799712441600 z^8 + 24234389222400 z^7 + 3519823507200 z^6 - 185253868800 z^5 +$$

$$10216206000 z^4 + 972972000 z^3 + 392931000 z^2 + 321489000 z + 343814625 \left. \right) +$$

$$\frac{1}{343814625} \left(1024 e^z \sqrt{\pi} \left(8 z^{35/2} + 1060 z^{33/2} + 58770 z^{31/2} + 1786845 z^{29/2} + 32820000 z^{27/2} + \right. \right.$$

$$378446040 z^{25/2} + 2760004800 z^{23/2} + 12526768800 z^{21/2} + 33951052800 z^{19/2} +$$

$$\left. \left. 50848560000 z^{17/2} + 36335174400 z^{15/2} + 8790768000 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alyx.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{343814625} \left(-8192 z^{17} + 1081344 z^{16} - 59643904 z^{15} + 1800437760 z^{14} - 32735969280 z^{13} + 371991244800 z^{12} - \right.$$

$$2654619770880 z^{11} + 11652318996480 z^{10} - 29920449484800 z^9 +$$

$$40799712441600 z^8 - 24234389222400 z^7 + 3519823507200 z^6 + 185253868800 z^5 +$$

$$10216206000 z^4 - 972972000 z^3 + 392931000 z^2 - 321489000 z + 343814625 \left. \right) +$$

$$\frac{1}{343814625} \left(1024 e^{-z} \sqrt{\pi} \left(8 z^{35/2} - 1060 z^{33/2} + 58770 z^{31/2} - 1786845 z^{29/2} + 32820000 z^{27/2} - \right. \right.$$

$$378446040 z^{25/2} + 276004800 z^{23/2} - 12526768800 z^{21/2} + 33951052800 z^{19/2} -$$

$$\left. \left. 50848560000 z^{17/2} + 36335174400 z^{15/2} - 8790768000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alyy.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{49116375} \left(-4096 z^{16} - 487424 z^{15} - 23974912 z^{14} - 636733440 z^{13} - 10012047360 z^{12} - 96177758208 z^{11} - \right.$$

$$562198579200 z^{10} - 1928817838080 z^9 - 3583117036800 z^8 - 3033401011200 z^7 - 703964701440 z^6 +$$

$$61751289600 z^5 - 10216206000 z^4 + 972972000 z^3 + 130977000 z^2 + 64297800 z + 49116375 \left. \right) -$$

$$\frac{1}{49116375} \left(512 e^z \sqrt{\pi} \left(8 z^{33/2} + 956 z^{31/2} + 47298 z^{29/2} + 1266567 z^{27/2} + 20154330 z^{25/2} + 197057070 z^{23/2} + \right. \right.$$

$$\left. \left. 1183548240 z^{21/2} + 4241931120 z^{19/2} + 8499466080 z^{17/2} + 8351229600 z^{15/2} + 2930256000 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alz.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{49116375} \left(-4096 z^{16} + 487424 z^{15} - 23974912 z^{14} + 636733440 z^{13} - 10012047360 z^{12} + 96177758208 z^{11} - \right.$$

$$562198579200 z^{10} + 1928817838080 z^9 - 3583117036800 z^8 + 3033401011200 z^7 - 703964701440 z^6 -$$

$$61751289600 z^5 - 10216206000 z^4 - 972972000 z^3 + 130977000 z^2 - 64297800 z + 49116375 \left. \right) +$$

$$\frac{1}{49116375} \left(512 e^{-z} \sqrt{\pi} \left(8 z^{33/2} - 956 z^{31/2} + 47298 z^{29/2} - 1266567 z^{27/2} + 20154330 z^{25/2} - 197057070 z^{23/2} + \right. \right.$$

$$\left. \left. 1183548240 z^{21/2} - 4241931120 z^{19/2} + 8499466080 z^{17/2} - 8351229600 z^{15/2} + 2930256000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alz0.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{9823275} \left(2048 z^{15} + 217088 z^{14} + 9383424 z^{13} + 215255040 z^{12} + 2857903104 z^{11} + 22464608256 z^{10} + \right.$$

$$102581176320 z^9 + 254815061760 z^8 + 295369804800 z^7 + 100566385920 z^6 -$$

$$12350257920 z^5 + 3405402000 z^4 - 972972000 z^3 + 130977000 z^2 + 21432600 z + 9823275 \left. \right) +$$

$$\frac{1}{9823275} \left(256 e^z \sqrt{\pi} \left(8 z^{31/2} + 852 z^{29/2} + 37074 z^{27/2} + 858753 z^{25/2} + 11566800 z^{23/2} + 92955870 z^{21/2} + \right. \right.$$

$$\left. \left. 439901280 z^{19/2} + 1162622160 z^{17/2} + 1523733120 z^{15/2} + 732564000 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alz1.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{9823275} \left(-2048 z^{15} + 217088 z^{14} - 9383424 z^{13} + 215255040 z^{12} - 2857903104 z^{11} + 22464608256 z^{10} - \right.$$

$$\left. 102581176320 z^9 + 254815061760 z^8 - 295369804800 z^7 + 100566385920 z^6 + \right.$$

$$\left. 12350257920 z^5 + 3405402000 z^4 + 972972000 z^3 + 130977000 z^2 - 21432600 z + 9823275 \right) +$$

$$\frac{1}{9823275} \left(256 e^{-z} \sqrt{\pi} \left(8 z^{31/2} - 852 z^{29/2} + 37074 z^{27/2} - 858753 z^{25/2} + 11566800 z^{23/2} - 92955870 z^{21/2} + \right. \right.$$

$$\left. 439901280 z^{19/2} - 1162622160 z^{17/2} + 1523733120 z^{15/2} - 732564000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alz2.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{3274425} \left(-1024 z^{14} - 95232 z^{13} - 3549440 z^{12} - 68630016 z^{11} - 744311808 z^{10} - 4563793920 z^9 - \right.$$

$$\left. 15081050880 z^8 - 23442048000 z^7 - 11174042880 z^6 + 1764322560 z^5 - \right.$$

$$\left. 681080400 z^4 + 324324000 z^3 - 130977000 z^2 + 21432600 z + 3274425 \right) -$$

$$\frac{1}{3274425} \left(128 e^z \sqrt{\pi} \left(8 z^{29/2} + 748 z^{27/2} + 28098 z^{25/2} + 549675 z^{23/2} + 6070050 z^{21/2} + \right. \right.$$

$$\left. 38325420 z^{19/2} + 133297920 z^{17/2} + 229536720 z^{15/2} + 146512800 z^{13/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.alz3.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{3274425} \left(-1024 z^{14} + 95232 z^{13} - 3549440 z^{12} + 68630016 z^{11} - 744311808 z^{10} + 4563793920 z^9 - \right.$$

$$\left. 15081050880 z^8 + 23442048000 z^7 - 11174042880 z^6 - 1764322560 z^5 - \right.$$

$$\left. 681080400 z^4 - 324324000 z^3 - 130977000 z^2 - 21432600 z + 3274425 \right) +$$

$$\frac{1}{3274425} \left(128 e^{-z} \sqrt{\pi} \left(8 z^{29/2} - 748 z^{27/2} + 28098 z^{25/2} - 549675 z^{23/2} + 6070050 z^{21/2} - \right. \right.$$

$$\left. 38325420 z^{19/2} + 133297920 z^{17/2} - 229536720 z^{15/2} + 146512800 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alz4.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{3274425} \left(512 z^{13} + 40960 z^{12} + 1283456 z^{11} + 20216832 z^{10} + 170580480 z^9 + 755354880 z^8 + 1562803200 z^7 + \right.$$

$$\left. 1015822080 z^6 - 196035840 z^5 + 97297200 z^4 - 64864800 z^3 + 43659000 z^2 - 21432600 z + 3274425 \right) +$$

$$\frac{1}{3274425} \left(64 e^z \sqrt{\pi} \left(8 z^{27/2} + 644 z^{25/2} + 20370 z^{23/2} + 325605 z^{21/2} + 2814000 z^{19/2} + \right. \right.$$

$$\left. 12999420 z^{17/2} + 29302560 z^{15/2} + 24418800 z^{13/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.alz5.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{3274425} (-512 z^{13} + 40960 z^{12} - 1283456 z^{11} + 20216832 z^{10} - 170580480 z^9 + 755354880 z^8 - 1562803200 z^7 + 1015822080 z^6 + 196035840 z^5 + 97297200 z^4 + 64864800 z^3 + 43659000 z^2 + 21432600 z + 3274425) + \frac{1}{3274425} (64 e^{-z} \sqrt{\pi} (8 z^{27/2} - 644 z^{25/2} + 20370 z^{23/2} - 325605 z^{21/2} + 2814000 z^{19/2} - 12999420 z^{17/2} + 29302560 z^{15/2} - 24418800 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.alz6.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{6548850} (e^z (1024 z^{13} + 75776 z^{12} + 2172672 z^{11} + 30868224 z^{10} + 230160000 z^9 + 871879680 z^8 + 1446772320 z^7 + 589710240 z^6 - 176371020 z^5 + 113967000 z^4 - 85092525 z^3 + 57451275 z^2 - 27981450 z + 6548850))$$

07.25.03.alz7.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{3274425} 32 e^z \sqrt{\pi} (8 z^6 + 540 z^5 + 13890 z^4 + 172815 z^3 + 1085850 z^2 + 3226770 z + 3488400) \operatorname{erf}(\sqrt{z}) z^{13/2} + \frac{1}{3274425} (256 z^{12} + 17152 z^{11} + 436032 z^{10} + 5320320 z^9 + 32284800 z^8 + 89303040 z^7 + 78140160 z^6 - 17821440 z^5 + 10810800 z^4 - 9266400 z^3 + 8731800 z^2 - 7144200 z + 3274425)$$

07.25.03.alz8.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{3274425} (256 z^{12} - 17152 z^{11} + 436032 z^{10} - 5320320 z^9 + 32284800 z^8 - 89303040 z^7 + 78140160 z^6 - 17821440 z^5 + 10810800 z^4 + 9266400 z^3 + 8731800 z^2 + 7144200 z + 3274425) - \frac{1}{3274425} 32 e^{-z} \sqrt{\pi} z^{13/2} (8 z^6 - 540 z^5 + 13890 z^4 - 172815 z^3 + 1085850 z^2 - 3226770 z + 3488400) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alz9.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{6548850} (e^z (1024 z^{12} + 62464 z^{11} + 1423104 z^{10} + 15214080 z^9 + 78019200 z^8 + 169706880 z^7 + 89117280 z^6 - 34110720 z^5 + 28293300 z^4 - 27499500 z^3 + 24905475 z^2 - 17265150 z + 6548850))$$

07.25.03.alza.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{16 e^z \sqrt{\pi} (8 z^5 + 436 z^4 + 8658 z^3 + 77577 z^2 + 310080 z + 436050) \operatorname{erf}(\sqrt{z}) z^{13/2}}{1091475} + \frac{1}{1091475} (128 z^{11} + 6912 z^{10} + 135136 z^9 + 1176960 z^8 + 4432320 z^7 + 5209344 z^6 - 1370880 z^5 + 982800 z^4 - 1029600 z^3 + 1247400 z^2 - 1428840 z + 1091475)$$

07.25.03.alzb.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{16 e^{-z} \sqrt{\pi} (8 z^5 - 436 z^4 + 8658 z^3 - 77577 z^2 + 310080 z - 436050) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{1091475} +$$

$$\frac{1}{1091475} (-128 z^{11} + 6912 z^{10} - 135136 z^9 + 1176960 z^8 - 4432320 z^7 + 5209344 z^6 +$$

$$1370880 z^5 + 982800 z^4 + 1029600 z^3 + 1247400 z^2 + 1428840 z + 1091475)$$

07.25.03.alzc.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, 3; z\right) =$$

$$\frac{1}{3274425} (e^z (1024 z^{11} + 49152 z^{10} + 833280 z^9 + 6048000 z^8 + 17539200 z^7 + 11854080 z^6 - 5715360 z^5 +$$

$$5896800 z^4 - 7087500 z^3 + 7938000 z^2 - 6846525 z + 3274425))$$

07.25.03.alzd.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) =$$

$$\frac{8 e^z \sqrt{\pi} (8 z^4 + 332 z^3 + 4674 z^2 + 26163 z + 48450) \operatorname{erf}(\sqrt{z}) z^{13/2}}{218295} + \frac{1}{218295} (64 z^{10} + 2624 z^9 + 36112 z^8 +$$

$$192480 z^7 + 306432 z^6 - 91392 z^5 + 75600 z^4 - 93600 z^3 + 138600 z^2 - 204120 z + 218295)$$

07.25.03.alze.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) =$$

$$\frac{1}{218295} (64 z^{10} - 2624 z^9 + 36112 z^8 - 192480 z^7 + 306432 z^6 + 91392 z^5 + 75600 z^4 + 93600 z^3 + 138600 z^2 +$$

$$204120 z + 218295) - \frac{8 e^{-z} \sqrt{\pi} z^{13/2} (8 z^4 - 332 z^3 + 4674 z^2 - 26163 z + 48450) \operatorname{erfi}(\sqrt{z})}{218295}$$

07.25.03.alzf.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, 4; z\right) =$$

$$\frac{1}{1091475} (e^z (1024 z^{10} + 35840 z^9 + 403200 z^8 + 1612800 z^7 + 1411200 z^6 - 846720 z^5 + 1058400 z^4 -$$

$$1512000 z^3 + 1984500 z^2 - 1984500 z + 1091475))$$

07.25.03.alzg.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{4 e^z \sqrt{\pi} (8 z^3 + 228 z^2 + 1938 z + 4845) \operatorname{erf}(\sqrt{z}) z^{13/2}}{31185} +$$

$$\frac{32 z^9 + 896 z^8 + 7320 z^7 + 16128 z^6 - 5376 z^5 + 5040 z^4 - 7200 z^3 + 12600 z^2 - 22680 z + 31185}{31185}$$

07.25.03.alzh.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{4 e^{-z} \sqrt{\pi} (8 z^3 - 228 z^2 + 1938 z - 4845) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{31185} +$$

$$\frac{1}{31185} (-32 z^9 + 896 z^8 - 7320 z^7 + 16128 z^6 + 5376 z^5 + 5040 z^4 + 7200 z^3 + 12600 z^2 + 22680 z + 31185)$$

$$\begin{aligned}
 & \text{07.25.03.alzi.01} \\
 & {}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, 5; z\right) = \\
 & \frac{1}{1091475 z^4} \left(4 e^z (1024 z^{13} + 22528 z^{12} + 132864 z^{11} + 151296 z^{10} - 101760 z^9 + 69120 z^8 + 505440 z^7 - 505080 z^6 + \right. \\
 & \quad \left. 32284980 z^5 - 163409400 z^4 + 654729075 z^3 - 1964187225 z^2 + 3928374450 z - 3928374450)\right) + \frac{100776}{7 z^4}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.alzj.01} \\
 & {}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{3465 z^4} (16 z^{12} + 240 z^{11} + 788 z^{10} - 504 z^9 + 2520 z^8 - 20640 z^7 + 163800 z^6 - 1156680 z^5 + 7059465 z^4 - \\
 & \quad 36288000 z^3 + 152409600 z^2 - 508032000 z + 1524096000) + \\
 & \frac{1}{3465 z^{9/2}} \left(2 e^z \sqrt{\pi} (8 z^{13} + 124 z^{12} + 450 z^{11} - 105 z^{10} + 1050 z^9 - 9450 z^8 + 75600 z^7 - 529200 z^6 + \right. \\
 & \quad \left. 3175200 z^5 - 15876000 z^4 + 63504000 z^3 - 190512000 z^2 + 381024000 z - 381024000)\right) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.alzk.01} \\
 & {}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \\
 & \frac{1}{3465 z^4} (16 z^{12} - 240 z^{11} + 788 z^{10} + 504 z^9 + 2520 z^8 + 20640 z^7 + 163800 z^6 + 1156680 z^5 + 7059465 z^4 + \\
 & \quad 36288000 z^3 + 152409600 z^2 + 508032000 z + 1524096000) - \\
 & \frac{1}{3465 z^{9/2}} \left(2 e^{-z} \sqrt{\pi} (8 z^{13} - 124 z^{12} + 450 z^{11} + 105 z^{10} + 1050 z^9 + 9450 z^8 + 75600 z^7 + 529200 z^6 + \right. \\
 & \quad \left. 3175200 z^5 + 15876000 z^4 + 63504000 z^3 + 190512000 z^2 + 381024000 z + 381024000)\right) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.alzl.01} \\
 & {}_2F_2\left(4, \frac{9}{2}; -\frac{11}{2}, 6; z\right) = \\
 & \frac{503880(z+84)}{7 z^5} + \frac{1}{218295 z^5} \left(4 e^z (1024 z^{13} + 9216 z^{12} + 22272 z^{11} - 93696 z^{10} + 835200 z^9 - 7447680 z^8 + \right. \\
 & \quad \left. 60086880 z^7 - 425658240 z^6 + 2586234420 z^5 - 13094581500 z^4 + \right. \\
 & \quad \left. 53033055075 z^3 - 161063352450 z^2 + 326055079350 z - 329983453800)\right)
 \end{aligned}$$

For fixed z and $a_1 = 4$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.alzm.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{281\,302\,875} \left(8192 z^{17} + 1089\,536 z^{16} + 60\,635\,136 z^{15} + 1\,850\,173\,440 z^{14} + 34\,089\,271\,296 z^{13} + 393\,924\,464\,640 z^{12} + \right.$$

$$2\,873\,697\,361\,920 z^{11} + 13\,001\,957\,406\,720 z^{10} + 34\,911\,979\,776\,000 z^9 +$$

$$51\,232\,139\,400\,960 z^8 + 35\,210\,696\,371\,200 z^7 + 8\,095\,834\,656\,000 z^6 + 185\,253\,868\,800 z^5 +$$

$$3\,405\,402\,000 z^4 + 583\,783\,200 z^3 + 280\,665\,000 z^2 + 250\,047\,000 z + 281\,302\,875 \Big) +$$

$$\frac{1}{281\,302\,875} \left(1024 e^z \sqrt{\pi} \left(8 z^{35/2} + 1068 z^{33/2} + 59\,742 z^{31/2} + 1\,835\,895 z^{29/2} + 34\,165\,395 z^{27/2} + \right. \right.$$

$$400\,502\,880 z^{25/2} + 2\,984\,052\,960 z^{23/2} + 13\,942\,484\,640 z^{21/2} + 39\,399\,242\,400 z^{19/2} +$$

$$\left. \left. 63\,006\,854\,400 z^{17/2} + 50\,708\,851\,200 z^{15/2} + 16\,378\,588\,800 z^{13/2} + 1\,202\,947\,200 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alzn.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{281\,302\,875} \left(-8192 z^{17} + 1089\,536 z^{16} - 60\,635\,136 z^{15} + 1\,850\,173\,440 z^{14} - 34\,089\,271\,296 z^{13} + 393\,924\,464\,640 z^{12} - \right.$$

$$2\,873\,697\,361\,920 z^{11} + 13\,001\,957\,406\,720 z^{10} - 34\,911\,979\,776\,000 z^9 +$$

$$51\,232\,139\,400\,960 z^8 - 35\,210\,696\,371\,200 z^7 + 8\,095\,834\,656\,000 z^6 - 185\,253\,868\,800 z^5 +$$

$$3\,405\,402\,000 z^4 - 583\,783\,200 z^3 + 280\,665\,000 z^2 - 250\,047\,000 z + 281\,302\,875 \Big) +$$

$$\frac{1}{281\,302\,875} \left(1024 e^{-z} \sqrt{\pi} \left(8 z^{35/2} - 1068 z^{33/2} + 59\,742 z^{31/2} - 1\,835\,895 z^{29/2} + 34\,165\,395 z^{27/2} - \right. \right.$$

$$400\,502\,880 z^{25/2} + 2\,984\,052\,960 z^{23/2} - 13\,942\,484\,640 z^{21/2} + 39\,399\,242\,400 z^{19/2} -$$

$$\left. \left. 63\,006\,854\,400 z^{17/2} + 50\,708\,851\,200 z^{15/2} - 16\,378\,588\,800 z^{13/2} + 1\,202\,947\,200 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alzo.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{31\,255\,875} \left(-4096 z^{16} - 495\,616 z^{15} - 24\,867\,840 z^{14} - 676\,651\,008 z^{13} - 10\,966\,609\,920 z^{12} - 109\,538\,795\,520 z^{11} - \right.$$

$$674\,819\,205\,120 z^{10} - 2\,495\,765\,145\,600 z^9 - 5\,216\,213\,479\,680 z^8 - 5\,488\,153\,574\,400 z^7 - 2\,288\,005\,574\,400 z^6 -$$

$$185\,253\,868\,800 z^5 + 3\,405\,402\,000 z^4 + 194\,594\,400 z^3 + 56\,133\,000 z^2 + 35\,721\,000 z + 31\,255\,875 \Big) -$$

$$\frac{1}{31\,255\,875} \left(512 e^z \sqrt{\pi} \left(8 z^{33/2} + 972 z^{31/2} + 49\,050 z^{29/2} + 1\,345\,395 z^{27/2} + 22\,056\,840 z^{25/2} + \right. \right.$$

$$224\,048\,160 z^{23/2} + 1\,415\,715\,840 z^{21/2} + 5\,448\,189\,600 z^{19/2} + 12\,158\,294\,400 z^{17/2} +$$

$$\left. \left. 14\,373\,676\,800 z^{15/2} + 7\,587\,820\,800 z^{13/2} + 1\,202\,947\,200 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alzp.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{31\,255\,875} \left(-4096 z^{16} + 495\,616 z^{15} - 24\,867\,840 z^{14} + 676\,651\,008 z^{13} - 10\,966\,609\,920 z^{12} + 109\,538\,795\,520 z^{11} - \right.$$

$$674\,819\,205\,120 z^{10} + 2\,495\,765\,145\,600 z^9 - 5\,216\,213\,479\,680 z^8 + 5\,488\,153\,574\,400 z^7 - 2\,288\,005\,574\,400 z^6 +$$

$$185\,253\,868\,800 z^5 + 3\,405\,402\,000 z^4 - 194\,594\,400 z^3 + 56\,133\,000 z^2 - 35\,721\,000 z + 31\,255\,875 \Big) +$$

$$\frac{1}{31\,255\,875} \left(512 e^{-z} \sqrt{\pi} \left(8 z^{33/2} - 972 z^{31/2} + 49\,050 z^{29/2} - 1\,345\,395 z^{27/2} + 22\,056\,840 z^{25/2} - \right. \right.$$

$$224\,048\,160 z^{23/2} + 1\,415\,715\,840 z^{21/2} - 5\,448\,189\,600 z^{19/2} + 12\,158\,294\,400 z^{17/2} -$$

$$\left. \left. 14\,373\,676\,800 z^{15/2} + 7\,587\,820\,800 z^{13/2} - 1\,202\,947\,200 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alzq.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{4\,465\,125} \left(2048 z^{15} + 223\,232 z^{14} + 9\,979\,392 z^{13} + 238\,640\,640 z^{12} + 3\,340\,259\,328 z^{11} + 28\,155\,156\,480 z^{10} + \right.$$

$$141\,736\,826\,880 z^9 + 408\,274\,110\,720 z^8 + 613\,688\,140\,800 z^7 + 396\,010\,218\,240 z^6 +$$

$$61\,751\,289\,600 z^5 - 3\,405\,402\,000 z^4 + 194\,594\,400 z^3 + 18\,711\,000 z^2 + 7\,144\,200 z + 4\,465\,125 \Big) +$$

$$\frac{1}{4\,465\,125} \left(256 e^z \sqrt{\pi} \left(8 z^{31/2} + 876 z^{29/2} + 39\,414 z^{27/2} + 951\,255 z^{25/2} + 13\,495\,545 z^{23/2} + 116\,083\,800 z^{21/2} + \right. \right.$$

$$603\,129\,240 z^{19/2} + 1\,829\,414\,160 z^{17/2} + 3\,011\,223\,600 z^{15/2} + 2\,328\,782\,400 z^{13/2} + 601\,473\,600 z^{11/2} \Big) \operatorname{erf}(\sqrt{z}) \Big)$$

07.25.03.alzr.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{4\,465\,125} \left(-2048 z^{15} + 223\,232 z^{14} - 9\,979\,392 z^{13} + 238\,640\,640 z^{12} - 3\,340\,259\,328 z^{11} + 28\,155\,156\,480 z^{10} - \right.$$

$$141\,736\,826\,880 z^9 + 408\,274\,110\,720 z^8 - 613\,688\,140\,800 z^7 + 396\,010\,218\,240 z^6 -$$

$$61\,751\,289\,600 z^5 - 3\,405\,402\,000 z^4 - 194\,594\,400 z^3 + 18\,711\,000 z^2 - 7\,144\,200 z + 4\,465\,125 \Big) +$$

$$\frac{1}{4\,465\,125} \left(256 e^{-z} \sqrt{\pi} \left(8 z^{31/2} - 876 z^{29/2} + 39\,414 z^{27/2} - 951\,255 z^{25/2} + 13\,495\,545 z^{23/2} - 116\,083\,800 z^{21/2} + \right. \right.$$

$$\left. \left. 603\,129\,240 z^{19/2} - 1\,829\,414\,160 z^{17/2} + 3\,011\,223\,600 z^{15/2} - 2\,328\,782\,400 z^{13/2} + 601\,473\,600 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alzs.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{893\,025} \left(-1024 z^{14} - 99\,328 z^{13} - 3\,897\,600 z^{12} - 80\,392\,704 z^{11} - 948\,424\,704 z^{10} - 6\,525\,941\,760 z^9 - \right.$$

$$25\,576\,508\,160 z^8 - 53\,053\,056\,000 z^7 - 49\,240\,638\,720 z^6 - 12\,350\,257\,920 z^5 +$$

$$1\,135\,134\,000 z^4 - 194\,594\,400 z^3 + 18\,711\,000 z^2 + 2\,381\,400 z + 893\,025 \Big) -$$

$$\frac{1}{893\,025} \left(128 e^z \sqrt{\pi} \left(8 z^{29/2} + 780 z^{27/2} + 30\,834 z^{25/2} + 642\,915 z^{23/2} + 7\,709\,310 z^{21/2} + 54\,409\,320 z^{19/2} + \right. \right.$$

$$\left. \left. 222\,264\,000 z^{17/2} + 495\,830\,160 z^{15/2} + 532\,072\,800 z^{13/2} + 200\,491\,200 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.alzt.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{893025} \left(-1024 z^{14} + 99328 z^{13} - 3897600 z^{12} + 80392704 z^{11} - 948424704 z^{10} + 6525941760 z^9 - \right.$$

$$\left. 25576508160 z^8 + 53053056000 z^7 - 49240638720 z^6 + 12350257920 z^5 + \right.$$

$$\left. 1135134000 z^4 + 194594400 z^3 + 18711000 z^2 - 2381400 z + 893025 \right) +$$

$$\frac{1}{893025} \left(128 e^{-z} \sqrt{\pi} \left(8 z^{29/2} - 780 z^{27/2} + 30834 z^{25/2} - 642915 z^{23/2} + 7709310 z^{21/2} - 54409320 z^{19/2} + \right. \right.$$

$$\left. 222264000 z^{17/2} - 495830160 z^{15/2} + 532072800 z^{13/2} - 200491200 z^{11/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alzu.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{297675} \left(512 z^{13} + 43520 z^{12} + 1470336 z^{11} + 25514112 z^{10} + 245268480 z^9 + 1311932160 z^8 + 3701376000 z^7 + \right.$$

$$\left. 4758324480 z^6 + 1764322560 z^5 - 227026800 z^4 + 64864800 z^3 - 18711000 z^2 + 2381400 z + 297675 \right) +$$

$$\frac{1}{297675} \left(64 e^z \sqrt{\pi} \left(8 z^{27/2} + 684 z^{25/2} + 23310 z^{23/2} + 409815 z^{21/2} + 4020975 z^{19/2} + \right. \right.$$

$$\left. 22241520 z^{17/2} + 66573360 z^{15/2} + 96390000 z^{13/2} + 50122800 z^{11/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.alzv.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{297675} \left(-512 z^{13} + 43520 z^{12} - 1470336 z^{11} + 25514112 z^{10} - 245268480 z^9 + 1311932160 z^8 - 3701376000 z^7 + \right.$$

$$\left. 4758324480 z^6 - 1764322560 z^5 - 227026800 z^4 - 64864800 z^3 - 18711000 z^2 - 2381400 z + 297675 \right) +$$

$$\frac{1}{297675} \left(64 e^{-z} \sqrt{\pi} \left(8 z^{27/2} - 684 z^{25/2} + 23310 z^{23/2} - 409815 z^{21/2} + 4020975 z^{19/2} - \right. \right.$$

$$\left. 22241520 z^{17/2} + 66573360 z^{15/2} - 96390000 z^{13/2} + 50122800 z^{11/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.alzw.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{297675} \left(-256 z^{12} - 18688 z^{11} - 529728 z^{10} - 7468800 z^9 - 55657728 z^8 - 213857280 z^7 - 374250240 z^6 - \right.$$

$$\left. 196035840 z^5 + 32432400 z^4 - 12972960 z^3 + 6237000 z^2 - 2381400 z + 297675 \right) -$$

$$\frac{1}{297675} \left(32 e^z \sqrt{\pi} \left(8 z^{25/2} + 588 z^{23/2} + 16842 z^{21/2} + 241395 z^{19/2} + 1848420 z^{17/2} + \right. \right.$$

$$\left. 7454160 z^{15/2} + 14394240 z^{13/2} + 10024560 z^{11/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.alzx.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) =$$

$$\frac{1}{297675} \left(-256 z^{12} + 18688 z^{11} - 529728 z^{10} + 7468800 z^9 - 55657728 z^8 + 213857280 z^7 - 374250240 z^6 + \right.$$

$$\left. 196035840 z^5 + 32432400 z^4 + 12972960 z^3 + 6237000 z^2 + 2381400 z + 297675 \right) +$$

$$\frac{1}{297675} \left(32 e^{-z} \sqrt{\pi} \left(8 z^{25/2} - 588 z^{23/2} + 16842 z^{21/2} - 241395 z^{19/2} + 1848420 z^{17/2} - \right. \right.$$

$$\left. \left. 7454160 z^{15/2} + 14394240 z^{13/2} - 10024560 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.alzy.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, 1; z\right) =$$

$$-\frac{1}{595350} \left(e^z \left(512 z^{12} + 34560 z^{11} + 896256 z^{10} + 11400960 z^9 + 75176640 z^8 + 247998240 z^7 + 351388800 z^6 + \right. \right.$$

$$\left. \left. 119160720 z^5 - 28605150 z^4 + 14075775 z^3 - 7356825 z^2 + 2976750 z - 595350 \right) \right)$$

07.25.03.alzz.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) =$$

$$\frac{1}{297675} \left(-128 z^{11} - 7808 z^{10} - 179040 z^9 - 1947744 z^8 - 10379520 z^7 - 24675840 z^6 - 17821440 z^5 + \right.$$

$$\left. 3603600 z^4 - 1853280 z^3 + 1247400 z^2 - 793800 z + 297675 \right) -$$

$$\frac{1}{297675} 16 e^z \sqrt{\pi} z^{11/2} \left(8 z^6 + 492 z^5 + 11430 z^4 + 127095 z^3 + 704565 z^2 + 1817640 z + 1670760 \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.am00.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) =$$

$$\frac{1}{297675} \left(128 z^{11} - 7808 z^{10} + 179040 z^9 - 1947744 z^8 + 10379520 z^7 - 24675840 z^6 + 17821440 z^5 + \right.$$

$$\left. 3603600 z^4 + 1853280 z^3 + 1247400 z^2 + 793800 z + 297675 \right) -$$

$$\frac{1}{297675} 16 e^{-z} \sqrt{\pi} z^{11/2} \left(8 z^6 - 492 z^5 + 11430 z^4 - 127095 z^3 + 704565 z^2 - 1817640 z + 1670760 \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am01.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, 2; z\right) =$$

$$-\frac{1}{595350} \left(e^z \left(512 z^{11} + 28416 z^{10} + 583680 z^9 + 5564160 z^8 + 25099200 z^7 + 47204640 z^6 + 20956320 z^5 - \right. \right.$$

$$\left. \left. 6577200 z^4 + 4280850 z^3 - 3047625 z^2 + 1786050 z - 595350 \right) \right)$$

07.25.03.am02.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{99225} (-64 z^{10} - 3136 z^9 - 55056 z^8 - 424800 z^7 - 1390464 z^6 - 1370880 z^5 + 327600 z^4 - 205920 z^3 + 178200 z^2 - 158760 z + 99225) - \frac{8 e^z \sqrt{\pi} z^{11/2} (8 z^5 + 396 z^4 + 7074 z^3 + 56355 z^2 + 197370 z + 238680) \operatorname{erf}(\sqrt{z})}{99225}$$

07.25.03.am03.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{8 e^{-z} \sqrt{\pi} (8 z^5 - 396 z^4 + 7074 z^3 - 56355 z^2 + 197370 z - 238680) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{99225} + \frac{1}{99225} (-64 z^{10} + 3136 z^9 - 55056 z^8 + 424800 z^7 - 1390464 z^6 + 1370880 z^5 + 327600 z^4 + 205920 z^3 + 178200 z^2 + 158760 z + 99225)$$

07.25.03.am04.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, 3; z\right) = -\frac{1}{297675} (e^z (512 z^{10} + 22272 z^9 + 338688 z^8 + 2177280 z^7 + 5503680 z^6 + 3175200 z^5 - 1270080 z^4 + 1043280 z^3 - 935550 z^2 + 694575 z - 297675))$$

07.25.03.am05.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{19845} (-32 z^9 - 1184 z^8 - 14520 z^7 - 67752 z^6 - 91392 z^5 + 25200 z^4 - 18720 z^3 + 19800 z^2 - 22680 z + 19845) - \frac{4 e^z \sqrt{\pi} z^{11/2} (8 z^4 + 300 z^3 + 3774 z^2 + 18615 z + 29835) \operatorname{erf}(\sqrt{z})}{19845}$$

07.25.03.am06.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{1}{19845} (32 z^9 - 1184 z^8 + 14520 z^7 - 67752 z^6 + 91392 z^5 + 25200 z^4 + 18720 z^3 + 19800 z^2 + 22680 z + 19845) - \frac{4 e^{-z} \sqrt{\pi} z^{11/2} (8 z^4 - 300 z^3 + 3774 z^2 - 18615 z + 29835) \operatorname{erfi}(\sqrt{z})}{19845}$$

07.25.03.am07.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, 4; z\right) = -\frac{1}{99225} (e^z (512 z^9 + 16128 z^8 + 161280 z^7 + 564480 z^6 + 423360 z^5 - 211680 z^4 + 211680 z^3 - 226800 z^2 + 198450 z - 99225))$$

07.25.03.am08.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-16z^8 - 400z^7 - 2868z^6 - 5376z^5 + 1680z^4 - 1440z^3 + 1800z^2 - 2520z + 2835}{2835} - \frac{2e^z \sqrt{\pi} z^{11/2} (8z^3 + 204z^2 + 1530z + 3315) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.am09.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{2e^{-z} \sqrt{\pi} (8z^3 - 204z^2 + 1530z - 3315) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{2835} + \frac{-16z^8 + 400z^7 - 2868z^6 + 5376z^5 + 1680z^4 + 1440z^3 + 1800z^2 + 2520z + 2835}{2835}$$

07.25.03.am0a.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, 5; z\right) = \frac{58344}{7z^4} - \frac{1}{99225z^4} (4e^z (512z^{12} + 9984z^{11} + 51456z^{10} + 49920z^9 - 25920z^8 - 4320z^7 + 241920z^6 - 1678320z^5 + 8590050z^4 - 34459425z^3 + 103378275z^2 - 206756550z + 206756550))$$

07.25.03.am0b.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{315z^4} (-8z^{11} - 104z^{10} - 294z^9 + 210z^8 - 1104z^7 + 8280z^6 - 57960z^5 + 353115z^4 - 1814400z^3 + 7620480z^2 - 25401600z + 76204800) + \frac{1}{315z^{9/2}} (e^z \sqrt{\pi} (-8z^{12} - 108z^{11} - 342z^{10} + 105z^9 - 945z^8 + 7560z^7 - 52920z^6 + 317520z^5 - 1587600z^4 + 6350400z^3 - 19051200z^2 + 38102400z - 38102400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.am0c.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{315z^4} (8z^{11} - 104z^{10} + 294z^9 + 210z^8 + 1104z^7 + 8280z^6 + 57960z^5 + 353115z^4 + 1814400z^3 + 7620480z^2 + 25401600z + 76204800) + \frac{1}{315z^{9/2}} (e^{-z} \sqrt{\pi} (-8z^{12} + 108z^{11} - 342z^{10} - 105z^9 - 945z^8 - 7560z^7 - 52920z^6 - 317520z^5 - 1587600z^4 - 6350400z^3 - 19051200z^2 - 38102400z - 38102400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.am0d.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{9}{2}, 6; z\right) = \frac{291720(z+76)}{7z^5} - \frac{1}{19845z^5} (4e^z (512z^{12} + 3840z^{11} + 9216z^{10} - 42240z^9 + 354240z^8 - 2838240z^7 + 20109600z^6 - 122335920z^5 + 620269650z^4 - 2515538025z^3 + 764992350z^2 - 15506741250z + 15713497800))$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = -\frac{7}{2}$

07.25.03.am0e.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{3472875} (2048 z^{15} + 225280 z^{14} + 10182144 z^{13} + 246796288 z^{12} + 3513753600 z^{11} + 30284789760 z^{10} + 157191628800 z^9 + 473618384640 z^8 + 766297082880 z^7 + 572125881600 z^6 + 140972832000 z^5 + 3405402000 z^4 + 64864800 z^3 + 11226600 z^2 + 5103000 z + 3472875) + \frac{1}{3472875} (256 e^z \sqrt{\pi} (8 z^{31/2} + 884 z^{29/2} + 40210 z^{27/2} + 983505 z^{25/2} + 14188800 z^{23/2} + 124726560 z^{21/2} + 667356480 z^{19/2} + 2111407200 z^{17/2} + 3712665600 z^{15/2} + 3235680000 z^{13/2} + 1116460800 z^{11/2} + 86486400 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.am0f.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{3472875} (-2048 z^{15} + 225280 z^{14} - 10182144 z^{13} + 246796288 z^{12} - 3513753600 z^{11} + 30284789760 z^{10} - 157191628800 z^9 + 473618384640 z^8 - 766297082880 z^7 + 572125881600 z^6 - 140972832000 z^5 + 3405402000 z^4 - 64864800 z^3 + 11226600 z^2 - 5103000 z + 3472875) + \frac{1}{3472875} (256 e^{-z} \sqrt{\pi} (8 z^{31/2} - 884 z^{29/2} + 40210 z^{27/2} - 983505 z^{25/2} + 14188800 z^{23/2} - 124726560 z^{21/2} + 667356480 z^{19/2} - 2111407200 z^{17/2} + 3712665600 z^{15/2} - 3235680000 z^{13/2} + 1116460800 z^{11/2} - 86486400 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.am0g.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{496125} (-1024 z^{14} - 101376 z^{13} - 4077824 z^{12} - 86747136 z^{11} - 1064816640 z^{10} - 7727400960 z^9 - 32672136960 z^8 - 76304471040 z^7 - 88057831680 z^6 - 39610771200 z^5 - 3405402000 z^4 + 64864800 z^3 + 3742200 z^2 + 1020600 z + 496125) - \frac{1}{496125} (128 e^z \sqrt{\pi} (8 z^{29/2} + 796 z^{27/2} + 32250 z^{25/2} + 693255 z^{23/2} + 8642760 z^{21/2} + 64227240 z^{19/2} + 281993040 z^{17/2} + 701442000 z^{15/2} + 906897600 z^{13/2} + 514987200 z^{11/2} + 86486400 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.am0h.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{496125} (-1024 z^{14} + 101376 z^{13} - 4077824 z^{12} + 86747136 z^{11} - 1064816640 z^{10} + 7727400960 z^9 - 32672136960 z^8 + 76304471040 z^7 - 88057831680 z^6 + 39610771200 z^5 - 3405402000 z^4 - 64864800 z^3 + 3742200 z^2 - 1020600 z + 496125) + \frac{1}{496125} (128 e^{-z} \sqrt{\pi} (8 z^{29/2} - 796 z^{27/2} + 32250 z^{25/2} - 693255 z^{23/2} + 8642760 z^{21/2} - 64227240 z^{19/2} + 281993040 z^{17/2} - 701442000 z^{15/2} + 906897600 z^{13/2} - 514987200 z^{11/2} + 86486400 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.am0i.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{99225} (512 z^{13} + 45056 z^{12} + 1588608 z^{11} + 29097984 z^{10} + 300364800 z^9 + 1773907200 z^8 + 5812853760 z^7 + 9704298240 z^6 + 6815128320 z^5 + 1135134000 z^4 - 64864800 z^3 + 3742200 z^2 + 340200 z + 99225) +$$

$$\frac{1}{99225} (64 e^z \sqrt{\pi} (8 z^{27/2} + 708 z^{25/2} + 25170 z^{23/2} + 466725 z^{21/2} + 4908960 z^{19/2} + 29864520 z^{17/2} + 102805920 z^{15/2} + 187412400 z^{13/2} + 157248000 z^{11/2} + 43243200 z^{9/2})) \operatorname{erf}(\sqrt{z})$$

07.25.03.am0j.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{99225} (-512 z^{13} + 45056 z^{12} - 1588608 z^{11} + 29097984 z^{10} - 300364800 z^9 + 1773907200 z^8 - 5812853760 z^7 + 9704298240 z^6 - 6815128320 z^5 + 1135134000 z^4 + 64864800 z^3 + 3742200 z^2 - 340200 z + 99225) +$$

$$\frac{1}{99225} (64 e^{-z} \sqrt{\pi} (8 z^{27/2} - 708 z^{25/2} + 25170 z^{23/2} - 466725 z^{21/2} + 4908960 z^{19/2} - 29864520 z^{17/2} + 102805920 z^{15/2} - 187412400 z^{13/2} + 157248000 z^{11/2} - 43243200 z^{9/2})) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am0k.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{33075} (-256 z^{12} - 19712 z^{11} - 597312 z^{10} - 9182720 z^9 - 76995840 z^8 - 351912960 z^7 - 824328960 z^6 - 841800960 z^5 - 227026800 z^4 + 21621600 z^3 - 3742200 z^2 + 340200 z + 33075) -$$

$$\frac{1}{33075} (32 e^z \sqrt{\pi} (8 z^{25/2} + 620 z^{23/2} + 18970 z^{21/2} + 295995 z^{19/2} + 2541000 z^{17/2} + 12077520 z^{15/2} + 30340800 z^{13/2} + 35708400 z^{11/2} + 14414400 z^{9/2})) \operatorname{erf}(\sqrt{z})$$

07.25.03.am0l.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{33075} (-256 z^{12} + 19712 z^{11} - 597312 z^{10} + 9182720 z^9 - 76995840 z^8 + 351912960 z^7 - 824328960 z^6 + 841800960 z^5 - 227026800 z^4 - 21621600 z^3 - 3742200 z^2 - 340200 z + 33075) +$$

$$\frac{1}{33075} (32 e^{-z} \sqrt{\pi} (8 z^{25/2} - 620 z^{23/2} + 18970 z^{21/2} - 295995 z^{19/2} + 2541000 z^{17/2} - 12077520 z^{15/2} + 30340800 z^{13/2} - 35708400 z^{11/2} + 14414400 z^{9/2})) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am0m.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{33075} (128 z^{11} + 8448 z^{10} + 214240 z^9 + 2667264 z^8 + 17256960 z^7 + 56259840 z^6 + 80720640 z^5 + 32432400 z^4 - 4324320 z^3 + 1247400 z^2 - 340200 z + 33075) + \frac{1}{33075} (16 e^z \sqrt{\pi} (8 z^{23/2} + 532 z^{21/2} + 13650 z^{19/2} + 173145 z^{17/2} + 1155840 z^{15/2} + 3986640 z^{13/2} + 6420960 z^{11/2} + 3603600 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.am0n.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{33075} (-128 z^{11} + 8448 z^{10} - 214240 z^9 + 2667264 z^8 - 17256960 z^7 + 56259840 z^6 - 80720640 z^5 + 32432400 z^4 + 4324320 z^3 + 1247400 z^2 + 340200 z + 33075) + \frac{1}{33075} (16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 532 z^{21/2} + 13650 z^{19/2} - 173145 z^{17/2} + 1155840 z^{15/2} - 3986640 z^{13/2} + 6420960 z^{11/2} - 3603600 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.am0o.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{66150} (e^z (256 z^{11} + 15616 z^{10} + 362240 z^9 + 4070400 z^8 + 23341920 z^7 + 65644320 z^6 + 77227920 z^5 + 20966400 z^4 - 3819375 z^3 + 1308825 z^2 - 406350 z + 66150))$$

07.25.03.am0p.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{8 e^z \sqrt{\pi} (8 z^6 + 444 z^5 + 9210 z^4 + 90255 z^3 + 433800 z^2 + 950040 z + 720720) \operatorname{erf}(\sqrt{z}) z^{9/2}}{33075} + \frac{1}{33075} (64 z^{10} + 3520 z^9 + 71952 z^8 + 687744 z^7 + 3158400 z^6 + 6289920 z^5 + 3603600 z^4 - 617760 z^3 + 249480 z^2 - 113400 z + 33075)$$

07.25.03.am0q.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{33075} (64 z^{10} - 3520 z^9 + 71952 z^8 - 687744 z^7 + 3158400 z^6 - 6289920 z^5 + 3603600 z^4 + 617760 z^3 + 249480 z^2 + 113400 z + 33075) - \frac{8 e^{-z} \sqrt{\pi} z^{9/2} (8 z^6 - 444 z^5 + 9210 z^4 - 90255 z^3 + 433800 z^2 - 950040 z + 720720) \operatorname{erfi}(\sqrt{z})}{33075}$$

07.25.03.am0r.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{66150} (e^z (256 z^{10} + 12800 z^9 + 234240 z^8 + 1962240 z^7 + 7644000 z^6 + 12136320 z^5 + 4410000 z^4 - 1083600 z^3 + 515025 z^2 - 236250 z + 66150))$$

07.25.03.am0s.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{4 e^z \sqrt{\pi} (8 z^5 + 356 z^4 + 5650 z^3 + 39405 z^2 + 118560 z + 120120) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{11025} +$$

$$\frac{1}{11025} (32 z^9 + 1408 z^8 + 21912 z^7 + 147328 z^6 + 409920 z^5 + 327600 z^4 - 68640 z^3 + 35640 z^2 - 22680 z + 11025)$$

07.25.03.am0t.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{4 e^{-z} \sqrt{\pi} (8 z^5 - 356 z^4 + 5650 z^3 - 39405 z^2 + 118560 z - 120120) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{11025} +$$

$$\frac{1}{11025} (-32 z^9 + 1408 z^8 - 21912 z^7 + 147328 z^6 - 409920 z^5 + 327600 z^4 + 68640 z^3 + 35640 z^2 + 22680 z + 11025)$$

07.25.03.am0u.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{33075}$$

$$e^z (256 z^9 + 9984 z^8 + 134400 z^7 + 752640 z^6 + 1622880 z^5 + 776160 z^4 - 246960 z^3 + 151200 z^2 - 89775 z + 33075)$$

07.25.03.am0v.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{2 e^z \sqrt{\pi} (8 z^4 + 268 z^3 + 2970 z^2 + 12675 z + 17160) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{2205} +$$

$$\frac{16 z^8 + 528 z^7 + 5684 z^6 + 22752 z^5 + 25200 z^4 - 6240 z^3 + 3960 z^2 - 3240 z + 2205}{2205}$$

07.25.03.am0w.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{16 z^8 - 528 z^7 + 5684 z^6 - 22752 z^5 + 25200 z^4 + 6240 z^3 + 3960 z^2 + 3240 z + 2205}{2205} -$$

$$\frac{2 e^{-z} \sqrt{\pi} z^{9/2} (8 z^4 - 268 z^3 + 2970 z^2 - 12675 z + 17160) \operatorname{erfi}(\sqrt{z})}{2205}$$

07.25.03.am0x.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, 4; z\right) =$$

$$\frac{1}{11025} e^z (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025)$$

07.25.03.am0y.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{315} e^z \sqrt{\pi} (8 z^3 + 180 z^2 + 1170 z + 2145) \operatorname{erfi}(\sqrt{z}) z^{9/2} +$$

$$\frac{1}{315} (8 z^7 + 176 z^6 + 1086 z^5 + 1680 z^4 - 480 z^3 + 360 z^2 - 360 z + 315)$$

07.25.03.am0z.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{315} e^{-z} \sqrt{\pi} (8 z^3 - 180 z^2 + 1170 z - 2145) \operatorname{erfi}(\sqrt{z}) z^{9/2} +$$

$$\frac{1}{315} (-8 z^7 + 176 z^6 - 1086 z^5 + 1680 z^4 + 480 z^3 + 360 z^2 + 360 z + 315)$$

07.25.03.am10.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{11025 z^4} (4 e^z (256 z^{11} + 4352 z^{10} + 19200 z^9 + 15360 z^8 - 5280 z^7 - 10080 z^6 + 95760 z^5 - 504000 z^4 + 2027025 z^3 - 6081075 z^2 + 12162150 z - 12162150)) + \frac{30888}{7 z^4}$$

07.25.03.am11.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{35 z^4} (4 z^{10} + 44 z^9 + 105 z^8 - 88 z^7 + 480 z^6 - 3240 z^5 + 19635 z^4 - 100800 z^3 + 423360 z^2 - 1411200 z + 4233600) + \frac{1}{70 z^{9/2}} (e^z \sqrt{\pi} (8 z^{11} + 92 z^{10} + 250 z^9 - 105 z^8 + 840 z^7 - 5880 z^6 + 35280 z^5 - 176400 z^4 + 705600 z^3 - 2116800 z^2 + 4233600 z - 4233600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.am12.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{35 z^4} (4 z^{10} - 44 z^9 + 105 z^8 + 88 z^7 + 480 z^6 + 3240 z^5 + 19635 z^4 + 100800 z^3 + 423360 z^2 + 1411200 z + 4233600) + \frac{1}{70 z^{9/2}} (e^{-z} \sqrt{\pi} (-8 z^{11} + 92 z^{10} - 250 z^9 - 105 z^8 - 840 z^7 - 5880 z^6 - 35280 z^5 - 176400 z^4 - 705600 z^3 - 2116800 z^2 - 4233600 z - 4233600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.am13.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{7}{2}, 6; z\right) = \frac{154440(z+68)}{7 z^5} + \frac{1}{2205 z^5} (4 e^z (256 z^{11} + 1536 z^{10} + 3840 z^9 - 19200 z^8 + 148320 z^7 - 1048320 z^6 + 6385680 z^5 - 32432400 z^4 + 131756625 z^3 - 401350950 z^2 + 814864050 z - 827026200))$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = -\frac{5}{2}$

07.25.03.am14.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{70875} (512 z^{13} + 45568 z^{12} + 1629056 z^{11} + 30363264 z^{10} + 320625408 z^9 + 1953292800 z^8 + 6698557440 z^7 + 12043729152 z^6 + 9790260480 z^5 + 2575132560 z^4 + 64864800 z^3 + 1247400 z^2 + 204120 z + 70875) + \frac{1}{70875} (64 e^z \sqrt{\pi} (8 z^{27/2} + 716 z^{25/2} + 25806 z^{23/2} + 486807 z^{21/2} + 5235111 z^{19/2} + 32816574 z^{17/2} + 117910170 z^{15/2} + 229801320 z^{13/2} + 217493640 z^{11/2} + 79999920 z^{9/2} + 6486480 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.am15.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{70875} \left(-512 z^{13} + 45\,568 z^{12} - 1\,629\,056 z^{11} + 30\,363\,264 z^{10} - 320\,625\,408 z^9 + 1\,953\,292\,800 z^8 - 6\,698\,557\,440 z^7 + \right.$$

$$\left. 12\,043\,729\,152 z^6 - 9\,790\,260\,480 z^5 + 2\,575\,132\,560 z^4 - 64\,864\,800 z^3 + 1\,247\,400 z^2 - 204\,120 z + 70\,875 \right) +$$

$$\frac{1}{70875} \left(64 e^{-z} \sqrt{\pi} \left(8 z^{27/2} - 716 z^{25/2} + 25\,806 z^{23/2} - 486\,807 z^{21/2} + 5\,235\,111 z^{19/2} - 32\,816\,574 z^{17/2} + \right. \right.$$

$$\left. 117\,910\,170 z^{15/2} - 229\,801\,320 z^{13/2} + 217\,493\,640 z^{11/2} - 79\,999\,920 z^{9/2} + 6\,486\,480 z^{7/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am16.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{14175} \left(-256 z^{12} - 20\,224 z^{11} - 632\,640 z^{10} - 10\,130\,304 z^9 - 89\,692\,800 z^8 - 442\,851\,840 z^7 - 1\,169\,715\,456 z^6 - \right.$$

$$\left. 1\,487\,566\,080 z^5 - 719\,999\,280 z^4 - 64\,864\,800 z^3 + 1\,247\,400 z^2 + 68\,040 z + 14\,175 \right) -$$

$$\frac{1}{14175} \left(32 e^z \sqrt{\pi} \left(8 z^{25/2} + 636 z^{23/2} + 20\,082 z^{21/2} + 326\,151 z^{19/2} + 2\,952\,054 z^{17/2} + 15\,104\,250 z^{15/2} + \right. \right.$$

$$\left. 42\,388\,920 z^{13/2} + 60\,245\,640 z^{11/2} + 36\,756\,720 z^{9/2} + 6\,486\,480 z^{7/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.am17.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{14175} \left(-256 z^{12} + 20\,224 z^{11} - 632\,640 z^{10} + 10\,130\,304 z^9 - 89\,692\,800 z^8 + 442\,851\,840 z^7 - 1\,169\,715\,456 z^6 + \right.$$

$$\left. 1\,487\,566\,080 z^5 - 719\,999\,280 z^4 + 64\,864\,800 z^3 + 1\,247\,400 z^2 - 68\,040 z + 14\,175 \right) +$$

$$\frac{1}{14175} \left(32 e^{-z} \sqrt{\pi} \left(8 z^{25/2} - 636 z^{23/2} + 20\,082 z^{21/2} - 326\,151 z^{19/2} + 2\,952\,054 z^{17/2} - 15\,104\,250 z^{15/2} + \right. \right.$$

$$\left. 42\,388\,920 z^{13/2} - 60\,245\,640 z^{11/2} + 36\,756\,720 z^{9/2} - 6\,486\,480 z^{7/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am18.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{4725} \left(128 z^{11} + 8832 z^{10} + 236\,896 z^9 + 3\,174\,240 z^8 + 22\,734\,720 z^7 + 86\,346\,624 z^6 + 161\,441\,280 z^5 + \right.$$

$$\left. 123\,243\,120 z^4 + 21\,621\,600 z^3 - 1\,247\,400 z^2 + 68\,040 z + 4725 \right) +$$

$$\frac{1}{4725} \left(16 e^z \sqrt{\pi} \left(8 z^{23/2} + 556 z^{21/2} + 15\,078 z^{19/2} + 205\,527 z^{17/2} + 1\,513\,365 z^{15/2} + \right. \right.$$

$$\left. 6024\,060 z^{13/2} + 12\,268\,620 z^{11/2} + 11\,171\,160 z^{9/2} + 3\,243\,240 z^{7/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.am19.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{4725} \left(-128 z^{11} + 8832 z^{10} - 236896 z^9 + 3174240 z^8 - 22734720 z^7 + 86346624 z^6 - 161441280 z^5 + 123243120 z^4 - 21621600 z^3 - 1247400 z^2 - 68040 z + 4725 \right) + \frac{1}{4725} \left(16 e^{-z} \sqrt{\pi} \left(8 z^{23/2} - 556 z^{21/2} + 15078 z^{19/2} - 205527 z^{17/2} + 1513365 z^{15/2} - 6024060 z^{13/2} + 12268620 z^{11/2} - 11171160 z^{9/2} + 3243240 z^{7/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.am1a.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{4725} \left(-64 z^{10} - 3776 z^9 - 84496 z^8 - 912960 z^7 - 5014464 z^6 - 13453440 z^5 - 15135120 z^4 - 4324320 z^3 + 415800 z^2 - 68040 z + 4725 \right) - \frac{1}{4725} \left(8 e^z \sqrt{\pi} \left(8 z^{21/2} + 476 z^{19/2} + 10794 z^{17/2} + 119175 z^{15/2} + 679140 z^{13/2} + 1949220 z^{11/2} + 2522520 z^{9/2} + 1081080 z^{7/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.am1b.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{4725} \left(-64 z^{10} + 3776 z^9 - 84496 z^8 + 912960 z^7 - 5014464 z^6 + 13453440 z^5 - 15135120 z^4 + 4324320 z^3 + 415800 z^2 + 68040 z + 4725 \right) + \frac{1}{4725} \left(8 e^{-z} \sqrt{\pi} \left(8 z^{21/2} - 476 z^{19/2} + 10794 z^{17/2} - 119175 z^{15/2} + 679140 z^{13/2} - 1949220 z^{11/2} + 2522520 z^{9/2} - 1081080 z^{7/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.am1c.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, 1; z\right) = -\frac{1}{9450} \left(e^z \left(128 z^{10} + 6976 z^9 + 142752 z^8 + 1392816 z^7 + 6796104 z^6 + 15831900 z^5 + 14866110 z^4 + 3050145 z^3 - 384615 z^2 + 77490 z - 9450 \right) \right)$$

07.25.03.am1d.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{4725} \left(-32 z^9 - 1568 z^8 - 28152 z^7 - 232008 z^6 - 895440 z^5 - 1441440 z^4 - 617760 z^3 + 83160 z^2 - 22680 z + 4725 \right) - \frac{4 e^z \sqrt{\pi} z^{7/2} \left(8 z^6 + 396 z^5 + 7230 z^4 + 61335 z^3 + 249795 z^2 + 450450 z + 270270 \right) \operatorname{erf}(\sqrt{z})}{4725}$$

07.25.03.am1e.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{4725} (32 z^9 - 1568 z^8 + 28152 z^7 - 232008 z^6 + 895440 z^5 - 1441440 z^4 + 617760 z^3 + 83160 z^2 + 22680 z + 4725) - \frac{4 e^{-z} \sqrt{\pi} z^{7/2} (8 z^6 - 396 z^5 + 7230 z^4 - 61335 z^3 + 249795 z^2 - 450450 z + 270270) \operatorname{erfi}(\sqrt{z})}{4725}$$

07.25.03.am1f.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, 2; z\right) = -\frac{1}{9450} (e^z (128 z^9 + 5696 z^8 + 91488 z^7 + 660912 z^6 + 2169720 z^5 + 2813580 z^4 + 798210 z^3 - 142695 z^2 + 43470 z - 9450))$$

07.25.03.am1g.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{-16 z^8 - 624 z^7 - 8468 z^6 - 48552 z^5 - 111384 z^4 - 68640 z^3 + 11880 z^2 - 4536 z + 1575}{1575} - \frac{2 e^z \sqrt{\pi} z^{7/2} (8 z^5 + 316 z^4 + 4386 z^3 + 26247 z^2 + 66066 z + 54054) \operatorname{erf}(\sqrt{z})}{1575}$$

07.25.03.am1h.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{2 e^{-z} \sqrt{\pi} (8 z^5 - 316 z^4 + 4386 z^3 - 26247 z^2 + 66066 z - 54054) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{1575} + \frac{-16 z^8 + 624 z^7 - 8468 z^6 + 48552 z^5 - 111384 z^4 + 68640 z^3 + 11880 z^2 + 4536 z + 1575}{1575}$$

07.25.03.am1i.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, 3; z\right) = -\frac{1}{4725} e^z (128 z^8 + 4416 z^7 + 51744 z^6 + 246960 z^5 + 441000 z^4 + 167580 z^3 - 39690 z^2 + 16065 z - 4725)$$

07.25.03.am1j.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{315} (-8 z^7 - 232 z^6 - 2150 z^5 - 7182 z^4 - 6240 z^3 + 1320 z^2 - 648 z + 315) - \frac{1}{315} e^z \sqrt{\pi} z^{7/2} (8 z^4 + 236 z^3 + 2262 z^2 + 8151 z + 9009) \operatorname{erf}(\sqrt{z})$$

07.25.03.am1k.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{315} (8 z^7 - 232 z^6 + 2150 z^5 - 7182 z^4 + 6240 z^3 + 1320 z^2 + 648 z + 315) - \frac{1}{315} e^{-z} \sqrt{\pi} z^{7/2} (8 z^4 - 236 z^3 + 2262 z^2 - 8151 z + 9009) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am1l.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, 4; z\right) = -\frac{e^z (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575)}{1575}$$

07.25.03.am1m.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{45}(-4z^6 - 76z^5 - 393z^4 - 480z^3 + 120z^2 - 72z + 45) - \frac{1}{90}e^z \sqrt{\pi} z^{7/2} (8z^3 + 156z^2 + 858z + 1287) \operatorname{erf}(\sqrt{z})$$

07.25.03.am1n.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{90}e^{-z} \sqrt{\pi} (8z^3 - 156z^2 + 858z - 1287) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{45}(-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45)$$

07.25.03.am1o.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, 5; z\right) = \frac{10296}{5z^4} - \frac{1}{1575z^4} (4e^z (128z^{10} + 1856z^9 + 6816z^8 + 4272z^7 - 504z^6 - 5796z^5 + 33390z^4 - 135135z^3 + 405405z^2 - 810810z + 810810))$$

07.25.03.am1p.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{-4z^9 - 36z^8 - 71z^7 + 75z^6 - 414z^5 + 2460z^4 - 12600z^3 + 52920z^2 - 176400z + 529200}{10z^4} + \frac{1}{20z^{9/2}} (e^z \sqrt{\pi} (-8z^{10} - 76z^9 - 174z^8 + 105z^7 - 735z^6 + 4410z^5 - 22050z^4 + 88200z^3 - 264600z^2 + 529200z - 529200) \operatorname{erf}(\sqrt{z}))$$

07.25.03.am1q.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{4z^9 - 36z^8 + 71z^7 + 75z^6 + 414z^5 + 2460z^4 + 12600z^3 + 52920z^2 + 176400z + 529200}{10z^4} + \frac{1}{20z^{9/2}} (e^{-z} \sqrt{\pi} (-8z^{10} + 76z^9 - 174z^8 - 105z^7 - 735z^6 - 4410z^5 - 22050z^4 - 88200z^3 - 264600z^2 - 529200z - 529200) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.am1r.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{5}{2}, 6; z\right) = \frac{10296(z+60)}{z^5} - \frac{1}{315z^5} (4e^z (128z^{10} + 576z^9 + 1632z^8 - 8784z^7 + 60984z^6 - 371700z^5 + 1891890z^4 - 7702695z^3 + 23513490z^2 - 47837790z + 48648600))$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = -\frac{3}{2}$

07.25.03.am1s.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{2835} (128 z^{11} + 8960 z^{10} + 244704 z^9 + 3356544 z^8 + 24818880 z^7 + 98742528 z^6 + 199051776 z^5 + 176132880 z^4 + 48898080 z^3 + 1247400 z^2 + 22680 z + 2835) + \frac{1}{2835} (16 e^z \sqrt{\pi} (8 z^{23/2} + 564 z^{21/2} + 15570 z^{19/2} + 217161 z^{17/2} + 1649088 z^{15/2} + 6858810 z^{13/2} + 14953680 z^{11/2} + 15384600 z^{9/2} + 5987520 z^{7/2} + 498960 z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.am1t.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{2835} (-128 z^{11} + 8960 z^{10} - 244704 z^9 + 3356544 z^8 - 24818880 z^7 + 98742528 z^6 - 199051776 z^5 + 176132880 z^4 - 48898080 z^3 + 1247400 z^2 - 22680 z + 2835) + \frac{1}{2835} (16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 564 z^{21/2} + 15570 z^{19/2} - 217161 z^{17/2} + 1649088 z^{15/2} - 6858810 z^{13/2} + 14953680 z^{11/2} - 15384600 z^{9/2} + 5987520 z^{7/2} - 498960 z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.am1u.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{945} (-64 z^{10} - 3904 z^9 - 91152 z^8 - 1042080 z^7 - 6197952 z^6 - 18805248 z^5 - 26444880 z^4 - 13638240 z^3 - 1247400 z^2 + 22680 z + 945) - \frac{8}{945} e^z \sqrt{\pi} (8 z^{21/2} + 492 z^{19/2} + 11634 z^{17/2} + 135723 z^{15/2} + 834750 z^{13/2} + 2685060 z^{11/2} + 4213440 z^{9/2} + 2744280 z^{7/2} + 498960 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am1v.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945} (-64 z^{10} + 3904 z^9 - 91152 z^8 + 1042080 z^7 - 6197952 z^6 + 18805248 z^5 - 26444880 z^4 + 13638240 z^3 - 1247400 z^2 - 22680 z + 945) + \frac{8}{945} e^{-z} \sqrt{\pi} (8 z^{21/2} - 492 z^{19/2} + 11634 z^{17/2} - 135723 z^{15/2} + 834750 z^{13/2} - 2685060 z^{11/2} + 4213440 z^{9/2} - 2744280 z^{7/2} + 498960 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am1w.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{945} (32 z^9 + 1664 z^8 + 32280 z^7 + 295872 z^6 + 1337952 z^5 + 2827440 z^4 + 2328480 z^3 + 415800 z^2 - 22680 z + 945) + \frac{4}{945} e^z \sqrt{\pi} (8 z^{19/2} + 420 z^{17/2} + 8274 z^{15/2} + 77805 z^{13/2} + 367920 z^{11/2} + 845460 z^{9/2} + 831600 z^{7/2} + 249480 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am1x.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{945} (-32 z^9 + 1664 z^8 - 32280 z^7 + 295872 z^6 - 1337952 z^5 + 2827440 z^4 - 2328480 z^3 + 415800 z^2 + 22680 z + 945) + \frac{4}{945} e^{-z} \sqrt{\pi} (8 z^{19/2} - 420 z^{17/2} + 8274 z^{15/2} - 77805 z^{13/2} + 367920 z^{11/2} - 845460 z^{9/2} + 831600 z^{7/2} - 249480 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am1y.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{1890} e^z (64 z^9 + 3072 z^8 + 54480 z^7 + 451248 z^6 + 1818684 z^5 + 3369240 z^4 + 2379195 z^3 + 335475 z^2 - 24570 z + 1890)$$

07.25.03.am1z.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{2}{945} e^z \sqrt{\pi} (8 z^6 + 348 z^5 + 5490 z^4 + 39375 z^3 + 131670 z^2 + 187110 z + 83160) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{945} (16 z^8 + 688 z^7 + 10644 z^6 + 73752 z^5 + 231000 z^4 + 285120 z^3 + 83160 z^2 - 7560 z + 945)$$

07.25.03.am20.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{945} (16 z^8 - 688 z^7 + 10644 z^6 - 73752 z^5 + 231000 z^4 - 285120 z^3 + 83160 z^2 + 7560 z + 945) - \frac{2}{945} e^{-z} \sqrt{\pi} z^{5/2} (8 z^6 - 348 z^5 + 5490 z^4 - 39375 z^3 + 131670 z^2 - 187110 z + 83160) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am21.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{1890} e^z (64 z^8 + 2496 z^7 + 34512 z^6 + 209664 z^5 + 560700 z^4 + 565740 z^3 + 116235 z^2 - 13230 z + 1890)$$

07.25.03.am22.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{315} e^z \sqrt{\pi} (8 z^5 + 276 z^4 + 3282 z^3 + 16401 z^2 + 33264 z + 20790) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{315} (8 z^7 + 272 z^6 + 3150 z^5 + 14952 z^4 + 27060 z^3 + 11880 z^2 - 1512 z + 315)$$

07.25.03.am23.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{315} e^{-z} \sqrt{\pi} (8 z^5 - 276 z^4 + 3282 z^3 - 16401 z^2 + 33264 z - 20790) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{315} (-8 z^7 + 272 z^6 - 3150 z^5 + 14952 z^4 - 27060 z^3 + 11880 z^2 + 1512 z + 315)$$

07.25.03.am24.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, 3; z\right) = \frac{1}{945} e^z (64 z^7 + 1920 z^6 + 19152 z^5 + 75600 z^4 + 107100 z^3 + 30240 z^2 - 4725 z + 945)$$

07.25.03.am25.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{126} e^z \sqrt{\pi} (8z^4 + 204z^3 + 1650z^2 + 4851z + 4158) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{63} (4z^6 + 100z^5 + 777z^4 + 2082z^3 + 1320z^2 - 216z + 63)$$

07.25.03.am26.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{63} (4z^6 - 100z^5 + 777z^4 - 2082z^3 + 1320z^2 + 216z + 63) - \frac{1}{126} e^{-z} \sqrt{\pi} z^{5/2} (8z^4 - 204z^3 + 1650z^2 - 4851z + 4158) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am27.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{315} e^z (64z^6 + 1344z^5 + 8400z^4 + 16800z^3 + 6300z^2 - 1260z + 315)$$

07.25.03.am28.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{36} e^z \sqrt{\pi} (8z^3 + 132z^2 + 594z + 693) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{18} (4z^5 + 64z^4 + 267z^3 + 240z^2 - 48z + 18)$$

07.25.03.am29.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{36} e^{-z} \sqrt{\pi} (8z^3 - 132z^2 + 594z - 693) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{18} (-4z^5 + 64z^4 - 267z^3 + 240z^2 + 48z + 18)$$

07.25.03.am2a.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, 5; z\right) = \frac{1}{315 z^4} 4 e^z (64z^9 + 768z^8 + 2256z^7 + 1008z^6 + 252z^5 - 2520z^4 + 10395z^3 - 31185z^2 + 62370z - 62370) + \frac{792}{z^4}$$

07.25.03.am2b.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{4z^8 + 28z^7 + 45z^6 - 66z^5 + 354z^4 - 1800z^3 + 7560z^2 - 25200z + 75600}{4z^4} + \frac{1}{8z^{9/2}} e^z \sqrt{\pi} (8z^9 + 60z^8 + 114z^7 - 105z^6 + 630z^5 - 3150z^4 + 12600z^3 - 37800z^2 + 75600z - 75600) \operatorname{erf}(\sqrt{z})$$

07.25.03.am2c.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{4z^8 - 28z^7 + 45z^6 + 66z^5 + 354z^4 + 1800z^3 + 7560z^2 + 25200z + 75600}{4z^4} + \frac{1}{8z^{9/2}} e^{-z} \sqrt{\pi} (-8z^9 + 60z^8 - 114z^7 - 105z^6 - 630z^5 - 3150z^4 - 12600z^3 - 37800z^2 - 75600z - 75600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am2d.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{3}{2}, 6; z\right) = \frac{3960(z + 52)}{z^5} + \frac{1}{63 z^5} 4 e^z (64z^9 + 192z^8 + 720z^7 - 4032z^6 + 24444z^5 - 124740z^4 + 509355z^3 - 1559250z^2 + 3180870z - 3243240)$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = -\frac{1}{2}$

07.25.03.am2e.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} (32 z^9 + 1696 z^8 + 33720 z^7 + 319528 z^6 + 1516224 z^5 + 3462480 z^4 + 3316320 z^3 + 945000 z^2 + 22680 z + 315) + \frac{4}{315} e^z \sqrt{\pi} (8 z^{19/2} + 428 z^{17/2} + 8638 z^{15/2} + 83895 z^{13/2} + 415275 z^{11/2} + 1023960 z^{9/2} + 1141560 z^{7/2} + 461160 z^{5/2} + 37800 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am2f.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{315} (-32 z^9 + 1696 z^8 - 33720 z^7 + 319528 z^6 - 1516224 z^5 + 3462480 z^4 - 3316320 z^3 + 945000 z^2 - 22680 z + 315) + \frac{4}{315} e^{-z} \sqrt{\pi} (8 z^{19/2} - 428 z^{17/2} + 8638 z^{15/2} - 83895 z^{13/2} + 415275 z^{11/2} - 1023960 z^{9/2} + 1141560 z^{7/2} - 461160 z^{5/2} + 37800 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am2g.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{315} (-16 z^8 - 720 z^7 - 11828 z^6 - 89136 z^5 - 317520 z^4 - 493920 z^3 - 264600 z^2 - 22680 z + 315) - \frac{2}{315} e^z \sqrt{\pi} (8 z^{17/2} + 364 z^{15/2} + 6090 z^{13/2} + 47355 z^{11/2} + 178500 z^{9/2} + 309960 z^{7/2} + 211680 z^{5/2} + 37800 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am2h.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} (-16 z^8 + 720 z^7 - 11828 z^6 + 89136 z^5 - 317520 z^4 + 493920 z^3 - 264600 z^2 + 22680 z + 315) + \frac{2}{315} e^{-z} \sqrt{\pi} (8 z^{17/2} - 364 z^{15/2} + 6090 z^{13/2} - 47355 z^{11/2} + 178500 z^{9/2} - 309960 z^{7/2} + 211680 z^{5/2} - 37800 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am2i.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, 1; z\right) = -\frac{1}{630} e^z (32 z^8 + 1328 z^7 + 19936 z^6 + 135912 z^5 + 433650 z^4 + 600495 z^3 + 288855 z^2 + 23310 z - 630)$$

07.25.03.am2j.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{315} (-8 z^7 - 296 z^6 - 3846 z^5 - 21630 z^4 - 52200 z^3 - 45360 z^2 - 7560 z + 315) - \frac{1}{315} e^z \sqrt{\pi} z^{3/2} (8 z^6 + 300 z^5 + 3990 z^4 + 23415 z^3 + 61425 z^2 + 64260 z + 18900) \operatorname{erf}(\sqrt{z})$$

07.25.03.am2k.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{315} (8z^7 - 296z^6 + 3846z^5 - 21630z^4 + 52200z^3 - 45360z^2 + 7560z + 315) - \frac{1}{315} e^{-z} \sqrt{\pi} z^{3/2} (8z^6 - 300z^5 + 3990z^4 - 23415z^3 + 61425z^2 - 64260z + 18900) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am2l.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, 2; z\right) = -\frac{1}{630} e^z (32z^7 + 1072z^6 + 12432z^5 + 61320z^4 + 127050z^3 + 92295z^2 + 11970z - 630)$$

07.25.03.am2m.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{105} (-4z^6 - 116z^5 - 1113z^4 - 4190z^3 - 5580z^2 - 1512z + 105) - \frac{1}{210} e^z \sqrt{\pi} z^{3/2} (8z^5 + 236z^4 + 2338z^3 + 9387z^2 + 14490z + 6300) \operatorname{erf}(\sqrt{z})$$

07.25.03.am2n.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{210} e^{-z} \sqrt{\pi} (8z^5 - 236z^4 + 2338z^3 - 9387z^2 + 14490z - 6300) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{105} (-4z^6 + 116z^5 - 1113z^4 + 4190z^3 - 5580z^2 + 1512z + 105)$$

07.25.03.am2o.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, 3; z\right) = -\frac{1}{315} e^z (32z^6 + 816z^5 + 6720z^4 + 21000z^3 + 22050z^2 + 4095z - 315)$$

07.25.03.am2p.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{42} (-4z^5 - 84z^4 - 527z^3 - 1065z^2 - 432z + 42) - \frac{1}{84} e^z \sqrt{\pi} z^{3/2} (8z^4 + 172z^3 + 1134z^2 + 2583z + 1575) \operatorname{erf}(\sqrt{z})$$

07.25.03.am2q.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{42} (4z^5 - 84z^4 + 527z^3 - 1065z^2 + 432z + 42) - \frac{1}{84} e^{-z} \sqrt{\pi} z^{3/2} (8z^4 - 172z^3 + 1134z^2 - 2583z + 1575) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am2r.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, 4; z\right) = -\frac{1}{105} e^z (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105)$$

07.25.03.am2s.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{12} (-4z^4 - 52z^3 - 165z^2 - 96z + 12) - \frac{1}{24} e^z \sqrt{\pi} z^{3/2} (8z^3 + 108z^2 + 378z + 315) \operatorname{erf}(\sqrt{z})$$

07.25.03.am2t.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{24} e^{-z} \sqrt{\pi} (8z^3 - 108z^2 + 378z - 315) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{12} (-4z^4 + 52z^3 - 165z^2 + 96z + 12)$$

07.25.03.am2u.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, 5; z\right) = \frac{216}{z^4} - \frac{4e^z (32z^8 + 304z^7 + 672z^6 + 168z^5 + 210z^4 - 945z^3 + 2835z^2 - 5670z + 5670)}{105z^4}$$

07.25.03.am2v.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{3(4z^7 + 20z^6 + 27z^5 - 61z^4 + 300z^3 - 1260z^2 + 4200z - 12600)}{8z^4} - \frac{3e^z \sqrt{\pi} (8z^8 + 44z^7 + 70z^6 - 105z^5 + 525z^4 - 2100z^3 + 6300z^2 - 12600z + 12600) \operatorname{erf}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.am2w.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3(4z^7 - 20z^6 + 27z^5 + 61z^4 + 300z^3 + 1260z^2 + 4200z + 12600)}{8z^4} - \frac{3e^{-z} \sqrt{\pi} (8z^8 - 44z^7 + 70z^6 + 105z^5 + 525z^4 + 2100z^3 + 6300z^2 + 12600z + 12600) \operatorname{erfi}(\sqrt{z})}{16z^{9/2}}$$

07.25.03.am2x.01

$${}_2F_2\left(4, \frac{9}{2}; -\frac{1}{2}, 6; z\right) = \frac{1080(z + 44)}{z^5} - \frac{4e^z (32z^8 + 48z^7 + 336z^6 - 1848z^5 + 9450z^4 - 38745z^3 + 119070z^2 - 243810z + 249480)}{21z^5}$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = \frac{1}{2}$

07.25.03.am2y.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{315} (8z^7 + 304z^6 + 4094z^5 + 24240z^4 + 63504z^3 + 64680z^2 + 17640z + 315) + \frac{1}{315} e^z \sqrt{\pi} (8z^{15/2} + 308z^{13/2} + 4242z^{11/2} + 26145z^{9/2} + 73920z^{7/2} + 88200z^{5/2} + 35280z^{3/2} + 2520\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am2z.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{315} (-8z^7 + 304z^6 - 4094z^5 + 24240z^4 - 63504z^3 + 64680z^2 - 17640z + 315) + \frac{1}{315} e^{-z} \sqrt{\pi} (8z^{15/2} - 308z^{13/2} + 4242z^{11/2} - 26145z^{9/2} + 73920z^{7/2} - 88200z^{5/2} + 35280z^{3/2} - 2520\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am30.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{630} e^z (16z^7 + 560z^6 + 6888z^5 + 36960z^4 + 87465z^3 + 81585z^2 + 22050z + 630)$$

07.25.03.am31.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{315} (4z^6 + 124z^5 + 1305z^4 + 5652z^3 + 9660z^2 + 5040z + 315) + \frac{1}{630} e^z \sqrt{\pi} \sqrt{z} (8z^6 + 252z^5 + 2730z^4 + 12495z^3 + 23940z^2 + 16380z + 2520) \operatorname{erf}(\sqrt{z})$$

07.25.03.am32.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{315} (4z^6 - 124z^5 + 1305z^4 - 5652z^3 + 9660z^2 - 5040z + 315) - \frac{1}{630} e^{-z} \sqrt{\pi} \sqrt{z} (8z^6 - 252z^5 + 2730z^4 - 12495z^3 + 23940z^2 - 16380z + 2520) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am33.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{630} e^z (16 z^6 + 448 z^5 + 4200 z^4 + 15\,960 z^3 + 23\,625 z^2 + 10\,710 z + 630)$$

07.25.03.am34.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{210} (4 z^5 + 96 z^4 + 731 z^3 + 2040 z^2 + 1764 z + 210) + \frac{1}{420} e^z \sqrt{\pi} \sqrt{z} (8 z^5 + 196 z^4 + 1554 z^3 + 4725 z^2 + 5040 z + 1260) \operatorname{erf}(\sqrt{z})$$

07.25.03.am35.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{210} (-4 z^5 + 96 z^4 - 731 z^3 + 2040 z^2 - 1764 z + 210) + \frac{1}{420} e^{-z} \sqrt{\pi} \sqrt{z} (8 z^5 - 196 z^4 + 1554 z^3 - 4725 z^2 + 5040 z - 1260) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am36.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, 3; z\right) = \frac{1}{315} e^z (16 z^5 + 336 z^4 + 2184 z^3 + 5040 z^2 + 3465 z + 315)$$

07.25.03.am37.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{84} (4 z^4 + 68 z^3 + 325 z^2 + 444 z + 84) + \frac{1}{168} e^z \sqrt{\pi} \sqrt{z} (8 z^4 + 140 z^3 + 714 z^2 + 1155 z + 420) \operatorname{erf}(\sqrt{z})$$

07.25.03.am38.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{84} (4 z^4 - 68 z^3 + 325 z^2 - 444 z + 84) - \frac{1}{168} e^{-z} \sqrt{\pi} \sqrt{z} (8 z^4 - 140 z^3 + 714 z^2 - 1155 z + 420) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am39.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, 4; z\right) = \frac{1}{105} e^z (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105)$$

07.25.03.am3a.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{24} (4 z^3 + 40 z^2 + 87 z + 24) + \frac{1}{48} e^z \sqrt{\pi} \sqrt{z} (8 z^3 + 84 z^2 + 210 z + 105) \operatorname{erf}(\sqrt{z})$$

07.25.03.am3b.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{24} (-4 z^3 + 40 z^2 - 87 z + 24) + \frac{1}{48} e^{-z} \sqrt{\pi} \sqrt{z} (8 z^3 - 84 z^2 + 210 z - 105) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am3c.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, 5; z\right) = \frac{4 e^z (16 z^7 + 112 z^6 + 168 z^5 + 105 z^3 - 315 z^2 + 630 z - 630)}{105 z^4} + \frac{24}{z^4}$$

07.25.03.am3d.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{3 (4 z^6 + 12 z^5 + 17 z^4 - 60 z^3 + 252 z^2 - 840 z + 2520)}{16 z^4} + \frac{3 e^z \sqrt{\pi} (8 z^7 + 28 z^6 + 42 z^5 - 105 z^4 + 420 z^3 - 1260 z^2 + 2520 z - 2520) \operatorname{erf}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.am3e.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3(4z^6 - 12z^5 + 17z^4 + 60z^3 + 252z^2 + 840z + 2520)}{16z^4} - \frac{3e^{-z}\sqrt{\pi}(8z^7 - 28z^6 + 42z^5 + 105z^4 + 420z^3 + 1260z^2 + 2520z + 2520)\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.am3f.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{1}{2}, 6; z\right) = \frac{120(z+36)}{z^5} + \frac{4e^z(16z^7 + 168z^5 - 840z^4 + 3465z^3 - 10710z^2 + 22050z - 22680)}{21z^5}$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = 1$

07.25.03.am3g.01

$${}_2F_2\left(4, \frac{9}{2}; 1, 1; z\right) = \frac{e^{z/2}(32z^7 + 1040z^6 + 11872z^5 + 59604z^4 + 135870z^3 + 131769z^2 + 44100z + 2520)I_0\left(\frac{z}{2}\right)}{2520} + \frac{e^{z/2}(32z^7 + 1008z^6 + 10880z^5 + 49196z^4 + 91206z^3 + 57015z^2 + 6534z)I_1\left(\frac{z}{2}\right)}{2520}$$

07.25.03.am3h.01

$${}_2F_2\left(4, \frac{9}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{630} e^z (8z^6 + 228z^5 + 2190z^4 + 8625z^3 + 13545z^2 + 6930z + 630)$$

07.25.03.am3i.01

$${}_2F_2\left(4, \frac{9}{2}; 1, 2; z\right) = \frac{e^{z/2}(16z^6 + 416z^5 + 3636z^4 + 13152z^3 + 19737z^2 + 10710z + 1260)I_0\left(\frac{z}{2}\right)}{1260} + \frac{e^{z/2}(16z^6 + 400z^5 + 3244z^4 + 10092z^3 + 10917z^2 + 2637z)I_1\left(\frac{z}{2}\right)}{1260}$$

07.25.03.am3j.01

$${}_2F_2\left(4, \frac{9}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{210} e^z (4z^5 + 88z^4 + 611z^3 + 1563z^2 + 1302z + 210)$$

07.25.03.am3k.01

$${}_2F_2\left(4, \frac{9}{2}; 1, 3; z\right) = \frac{1}{630} e^{z/2} (16z^5 + 312z^4 + 1908z^3 + 4356z^2 + 3465z + 630)I_0\left(\frac{z}{2}\right) + \frac{1}{630} e^{z/2} z (16z^4 + 296z^3 + 1620z^2 + 2868z + 1161)I_1\left(\frac{z}{2}\right)$$

07.25.03.am3l.01

$${}_2F_2\left(4, \frac{9}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{42} e^z (2z^4 + 31z^3 + 135z^2 + 174z + 42)$$

07.25.03.am3m.01

$${}_2F_2\left(4, \frac{9}{2}; 1, 4; z\right) = \frac{1}{105} e^{z/2} (8z^4 + 104z^3 + 376z^2 + 420z + 105)I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} z (2z^3 + 24z^2 + 71z + 44)I_1\left(\frac{z}{2}\right)$$

07.25.03.am3n.01

$${}_2F_2\left(4, \frac{9}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{6} e^z (z^3 + 9z^2 + 18z + 6)$$

07.25.03.am3o.01

$${}_2F_2\left(4, \frac{9}{2}; 1, 5; z\right) = \frac{4 e^{z/2} (8 z^5 + 52 z^4 + 84 z^3 + 15 z^2 + 36 z - 72) I_0\left(\frac{z}{2}\right)}{105 z^2} + \frac{4 e^{z/2} (8 z^6 + 44 z^5 + 44 z^4 - 15 z^3 + 54 z^2 - 144 z + 288) I_1\left(\frac{z}{2}\right)}{105 z^3}$$

07.25.03.am3p.01

$${}_2F_2\left(4, \frac{9}{2}; 1, \frac{11}{2}; z\right) = \frac{3 e^z (64 z^6 + 160 z^5 + 272 z^4 - 840 z^3 + 2940 z^2 - 7350 z + 11025)}{256 z^4} - \frac{33075 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.am3q.01

$${}_2F_2\left(4, \frac{9}{2}; 1, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 - 160 z^5 + 272 z^4 + 840 z^3 + 2940 z^2 + 7350 z + 11025)}{256 z^4} - \frac{33075 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.am3r.01

$${}_2F_2\left(4, \frac{9}{2}; 1, 6; z\right) = \frac{8 e^{z/2} (4 z^5 + 39 z^3 - 162 z^2 + 540 z - 1152) I_0\left(\frac{z}{2}\right)}{21 z^3} + \frac{8 e^{z/2} (4 z^6 - 4 z^5 + 45 z^4 - 213 z^3 + 792 z^2 - 2160 z + 4608) I_1\left(\frac{z}{2}\right)}{21 z^4}$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = \frac{3}{2}$

07.25.03.am3s.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{630} (4 z^5 + 100 z^4 + 807 z^3 + 2469 z^2 + 2550 z + 540) + \frac{e^z \sqrt{\pi} (8 z^6 + 204 z^5 + 1710 z^4 + 5655 z^3 + 6975 z^2 + 2430 z + 90) \operatorname{erf}(\sqrt{z})}{1260 \sqrt{z}}$$

07.25.03.am3t.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{630} (-4 z^5 + 100 z^4 - 807 z^3 + 2469 z^2 - 2550 z + 540) + \frac{e^{-z} \sqrt{\pi} (8 z^6 - 204 z^5 + 1710 z^4 - 5655 z^3 + 6975 z^2 - 2430 z + 90) \operatorname{erfi}(\sqrt{z})}{1260 \sqrt{z}}$$

07.25.03.am3u.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{630} e^z (8 z^5 + 180 z^4 + 1290 z^3 + 3465 z^2 + 3150 z + 630)$$

07.25.03.am3v.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{420} (4 z^4 + 76 z^3 + 429 z^2 + 786 z + 330) + \frac{e^z \sqrt{\pi} (8 z^5 + 156 z^4 + 930 z^3 + 1935 z^2 + 1170 z + 90) \operatorname{erf}(\sqrt{z})}{840 \sqrt{z}}$$

07.25.03.am3w.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{420} (4z^4 - 76z^3 + 429z^2 - 786z + 330) + \frac{e^{-z} \sqrt{\pi} (-8z^5 + 156z^4 - 930z^3 + 1935z^2 - 1170z + 90) \operatorname{erfi}(\sqrt{z})}{840 \sqrt{z}}$$

07.25.03.am3x.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{3}{2}, 3; z\right) = \frac{1}{315} e^z (8z^4 + 132z^3 + 630z^2 + 945z + 315)$$

07.25.03.am3y.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{168} (4z^3 + 52z^2 + 171z + 123) + \frac{e^z \sqrt{\pi} (8z^4 + 108z^3 + 390z^2 + 375z + 45) \operatorname{erf}(\sqrt{z})}{336 \sqrt{z}}$$

07.25.03.am3z.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{168} (-4z^3 + 52z^2 - 171z + 123) + \frac{e^{-z} \sqrt{\pi} (8z^4 - 108z^3 + 390z^2 - 375z + 45) \operatorname{erfi}(\sqrt{z})}{336 \sqrt{z}}$$

07.25.03.am40.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{3}{2}, 4; z\right) = \frac{1}{105} e^z (8z^3 + 84z^2 + 210z + 105)$$

07.25.03.am41.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{48} (4z^2 + 28z + 33) + \frac{e^z \sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.am42.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{48} (4z^2 - 28z + 33) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.am43.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{3}{2}, 5; z\right) = \frac{4e^z (8z^6 + 36z^5 + 30z^4 - 15z^3 + 45z^2 - 90z + 90)}{105z^4} - \frac{24}{7z^4}$$

07.25.03.am44.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{3(4z^5 + 4z^4 + 15z^3 - 63z^2 + 210z - 630)}{32z^4} + \frac{3e^z \sqrt{\pi} (8z^6 + 12z^5 + 30z^4 - 105z^3 + 315z^2 - 630z + 630) \operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.am45.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z} \sqrt{\pi} (8z^6 - 12z^5 + 30z^4 + 105z^3 + 315z^2 + 630z + 630) \operatorname{erfi}(\sqrt{z})}{64z^{9/2}} - \frac{3(4z^5 - 4z^4 + 15z^3 + 63z^2 + 210z + 630)}{32z^4}$$

07.25.03.am46.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{3}{2}, 6; z\right) = \frac{4e^z(8z^6 - 12z^5 + 90z^4 - 375z^3 + 1170z^2 - 2430z + 2520)}{21z^5} - \frac{120(z+28)}{7z^5}$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = 2$

07.25.03.am47.01

$${}_2F_2\left(4, \frac{9}{2}; 2, 2; z\right) = \frac{e^{z/2}(16z^5 + 328z^4 + 2148z^3 + 5412z^2 + 5025z + 1260)I_0\left(\frac{z}{2}\right)}{1260} + \frac{e^{z/2}(16z^5 + 312z^4 + 1844z^3 + 3708z^2 + 1977z + 60)I_1\left(\frac{z}{2}\right)}{1260}$$

07.25.03.am48.01

$${}_2F_2\left(4, \frac{9}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{210} e^z(4z^4 + 68z^3 + 339z^2 + 546z + 210)$$

07.25.03.am49.01

$${}_2F_2\left(4, \frac{9}{2}; 2, 3; z\right) = \frac{1}{315} e^{z/2}(8z^4 + 120z^3 + 528z^2 + 780z + 315)I_0\left(\frac{z}{2}\right) + \frac{2}{315} e^{z/2}(4z^4 + 56z^3 + 210z^2 + 204z + 15)I_1\left(\frac{z}{2}\right)$$

07.25.03.am4a.01

$${}_2F_2\left(4, \frac{9}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{42} e^z(2z^3 + 23z^2 + 66z + 42)$$

07.25.03.am4b.01

$${}_2F_2\left(4, \frac{9}{2}; 2, 4; z\right) = \frac{1}{105} e^{z/2}(8z^3 + 76z^2 + 180z + 105)I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2}(8z^3 + 68z^2 + 116z + 15)I_1\left(\frac{z}{2}\right)$$

07.25.03.am4c.01

$${}_2F_2\left(4, \frac{9}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{6} e^z(z^2 + 6z + 6)$$

07.25.03.am4d.01

$${}_2F_2\left(4, \frac{9}{2}; 2, 5; z\right) = \frac{8e^{z/2}(4z^4 + 16z^3 + 15z^2 - 6z + 12)I_0\left(\frac{z}{2}\right)}{105z^2} + \frac{8e^{z/2}(4z^5 + 12z^4 + 5z^3 - 9z^2 + 24z - 48)I_1\left(\frac{z}{2}\right)}{105z^3}$$

07.25.03.am4e.01

$${}_2F_2\left(4, \frac{9}{2}; 2, \frac{11}{2}; z\right) = \frac{3e^z(32z^5 + 16z^4 + 120z^3 - 420z^2 + 1050z - 1575)}{128z^4} + \frac{4725\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.am4f.01

$${}_2F_2\left(4, \frac{9}{2}; 2, \frac{11}{2}; -z\right) = \frac{4725\sqrt{\pi} \operatorname{erf}(\sqrt{-z})}{256z^{9/2}} - \frac{3e^{-z}(32z^5 - 16z^4 + 120z^3 + 420z^2 + 1050z + 1575)}{128z^4}$$

07.25.03.am4g.01

$${}_2F_2\left(4, \frac{9}{2}; 2, 6; z\right) = \frac{8e^{z/2}(4z^4 - 6z^3 + 39z^2 - 132z + 288)I_0\left(\frac{z}{2}\right)}{21z^3} + \frac{8e^{z/2}(4z^5 - 10z^4 + 51z^3 - 192z^2 + 528z - 1152)I_1\left(\frac{z}{2}\right)}{21z^4}$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = \frac{5}{2}$

07.25.03.am4h.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{4z^4 + 56z^3 + 207z^2 + 188z + 6}{280z} + \frac{e^z \sqrt{\pi} (8z^5 + 116z^4 + 466z^3 + 537z^2 + 96z - 6) \operatorname{erf}(\sqrt{z})}{560z^{3/2}}$$

07.25.03.am4i.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-4z^4 + 56z^3 - 207z^2 + 188z - 6}{280z} + \frac{e^{-z} \sqrt{\pi} (8z^5 - 116z^4 + 466z^3 - 537z^2 + 96z + 6) \operatorname{erfi}(\sqrt{z})}{560z^{3/2}}$$

07.25.03.am4j.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{5}{2}, 3; z\right) = \frac{1}{105} e^z (4z^3 + 48z^2 + 147z + 105)$$

07.25.03.am4k.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{4z^3 + 36z^2 + 65z + 6}{112z} + \frac{e^z \sqrt{\pi} (8z^4 + 76z^3 + 162z^2 + 51z - 6) \operatorname{erf}(\sqrt{z})}{224z^{3/2}}$$

07.25.03.am4l.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{4z^3 - 36z^2 + 65z - 6}{112z} + \frac{e^{-z} \sqrt{\pi} (-8z^4 + 76z^3 - 162z^2 + 51z + 6) \operatorname{erfi}(\sqrt{z})}{224z^{3/2}}$$

07.25.03.am4m.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{5}{2}, 4; z\right) = \frac{1}{35} e^z (4z^2 + 28z + 35)$$

07.25.03.am4n.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{4z^2 + 16z + 3}{32z} + \frac{e^z \sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.am4o.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{-4z^2 + 16z - 3}{32z} + \frac{e^{-z} \sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.am4p.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{5}{2}, 5; z\right) = \frac{4e^z (4z^5 + 8z^4 + 3z^3 - 9z^2 + 18z - 18)}{35z^4} + \frac{72}{35z^4}$$

07.25.03.am4q.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{9(4z^4 - 4z^3 + 21z^2 - 70z + 210)}{64z^4} + \frac{9e^z \sqrt{\pi} (8z^5 - 4z^4 + 34z^3 - 105z^2 + 210z - 210) \operatorname{erf}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.am4r.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{9(4z^4 + 4z^3 + 21z^2 + 70z + 210)}{64z^4} - \frac{9e^{-z} \sqrt{\pi} (8z^5 + 4z^4 + 34z^3 + 105z^2 + 210z + 210) \operatorname{erfi}(\sqrt{z})}{128z^{9/2}}$$

07.25.03.am4s.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{5}{2}, 6; z\right) = \frac{72(z + 20)}{7z^5} + \frac{4e^z (4z^5 - 12z^4 + 51z^3 - 162z^2 + 342z - 360)}{7z^5}$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = 3$

07.25.03.am4t.01

$${}_2F_2\left(4, \frac{9}{2}; 3, 3; z\right) = \frac{2}{315} e^{z/2} (8z^3 + 84z^2 + 228z + 159) I_0\left(\frac{z}{2}\right) + \frac{2 e^{z/2} (8z^4 + 76z^3 + 156z^2 + 33z - 6) I_1\left(\frac{z}{2}\right)}{315z}$$

07.25.03.am4u.01

$${}_2F_2\left(4, \frac{9}{2}; 3, \frac{7}{2}; z\right) = \frac{1}{21} e^z (2z^2 + 15z + 21)$$

07.25.03.am4v.01

$${}_2F_2\left(4, \frac{9}{2}; 3, 4; z\right) = \frac{4}{105} e^{z/2} (4z^2 + 24z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4z^3 + 20z^2 + 9z - 3) I_1\left(\frac{z}{2}\right)}{105z}$$

07.25.03.am4w.01

$${}_2F_2\left(4, \frac{9}{2}; 3, \frac{9}{2}; z\right) = \frac{1}{3} e^z (z + 3)$$

07.25.03.am4x.01

$${}_2F_2\left(4, \frac{9}{2}; 3, 5; z\right) = \frac{16 e^{z/2} (4z^3 + 6z^2 + 3z - 6) I_0\left(\frac{z}{2}\right)}{105z^2} + \frac{16 e^{z/2} (4z^4 + 2z^3 + 3z^2 - 12z + 24) I_1\left(\frac{z}{2}\right)}{105z^3}$$

07.25.03.am4y.01

$${}_2F_2\left(4, \frac{9}{2}; 3, \frac{11}{2}; z\right) = \frac{3 e^z (16z^4 - 24z^3 + 84z^2 - 210z + 315)}{32z^4} - \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.am4z.01

$${}_2F_2\left(4, \frac{9}{2}; 3, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (16z^4 + 24z^3 + 84z^2 + 210z + 315)}{32z^4} - \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{64z^{9/2}}$$

07.25.03.am50.01

$${}_2F_2\left(4, \frac{9}{2}; 3, 6; z\right) = \frac{32 e^{z/2} (2z^3 - 6z^2 + 21z - 48) I_0\left(\frac{z}{2}\right)}{21z^3} + \frac{64 e^{z/2} (z^4 - 4z^3 + 15z^2 - 42z + 96) I_1\left(\frac{z}{2}\right)}{21z^4}$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = \frac{7}{2}$

07.25.03.am51.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5(4z^3 + 20z^2 + 7z - 3)}{224z^2} + \frac{5 e^z \sqrt{\pi} (8z^4 + 44z^3 + 30z^2 - 9z + 3) \operatorname{erf}(\sqrt{z})}{448z^{5/2}}$$

07.25.03.am52.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} \sqrt{\pi} (8z^4 - 44z^3 + 30z^2 + 9z + 3) \operatorname{erfi}(\sqrt{z})}{448z^{5/2}} - \frac{5(4z^3 - 20z^2 + 7z + 3)}{224z^2}$$

07.25.03.am53.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{7}{2}, 4; z\right) = \frac{1}{7} e^z (2z + 7)$$

07.25.03.am54.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{5(4z^2 + 4z - 3)}{64z^2} + \frac{5 e^z \sqrt{\pi} (8z^3 + 12z^2 - 6z + 3) \operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.am55.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5(4z^2 - 4z - 3)}{64z^2} - \frac{5e^{-z}\sqrt{\pi}(8z^3 - 12z^2 - 6z - 3)\operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.am56.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{7}{2}, 5; z\right) = \frac{4e^z(2z^4 - z^3 + 3z^2 - 6z + 6)}{7z^4} - \frac{24}{7z^4}$$

07.25.03.am57.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{45(4z^3 - 12z^2 + 35z - 105)}{128z^4} + \frac{45e^z\sqrt{\pi}(8z^4 - 20z^3 + 54z^2 - 105z + 105)\operatorname{erf}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.am58.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{45e^{-z}\sqrt{\pi}(8z^4 + 20z^3 + 54z^2 + 105z + 105)\operatorname{erfi}(\sqrt{z})}{256z^{9/2}} - \frac{45(4z^3 + 12z^2 + 35z + 105)}{128z^4}$$

07.25.03.am59.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{7}{2}, 6; z\right) = \frac{20e^z(2z^4 - 9z^3 + 30z^2 - 66z + 72)}{7z^5} - \frac{120(z + 12)}{7z^5}$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = 4$

07.25.03.am5a.01

$${}_2F_2\left(4, \frac{9}{2}; 4, 4; z\right) = \frac{4e^{z/2}(4z^2 + 10z - 1)I_0\left(\frac{z}{2}\right)}{35z} + \frac{4e^{z/2}(4z^3 + 6z^2 - 5z + 4)I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.am5b.01

$${}_2F_2\left(4, \frac{9}{2}; 4, \frac{9}{2}; z\right) = e^z$$

07.25.03.am5c.01

$${}_2F_2\left(4, \frac{9}{2}; 4, 5; z\right) = \frac{32e^{z/2}(2z^2 - 2z + 3)I_0\left(\frac{z}{2}\right)}{35z^2} + \frac{64e^{z/2}(z^3 - 2z^2 + 4z - 6)I_1\left(\frac{z}{2}\right)}{35z^3}$$

07.25.03.am5d.01

$${}_2F_2\left(4, \frac{9}{2}; 4, \frac{11}{2}; z\right) = \frac{9e^z(8z^3 - 28z^2 + 70z - 105)}{16z^4} + \frac{945\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{32z^{9/2}}$$

07.25.03.am5e.01

$${}_2F_2\left(4, \frac{9}{2}; 4, \frac{11}{2}; -z\right) = \frac{945\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{32z^{9/2}} - \frac{9e^{-z}(8z^3 + 28z^2 + 70z + 105)}{16z^4}$$

07.25.03.am5f.01

$${}_2F_2\left(4, \frac{9}{2}; 4, 6; z\right) = \frac{32e^{z/2}(2z^2 - 9z + 24)I_0\left(\frac{z}{2}\right)}{7z^3} + \frac{32e^{z/2}(2z^3 - 11z^2 + 36z - 96)I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = \frac{9}{2}$

07.25.03.am5g.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{35(4z^2 - 8z + 15)}{128z^3} + \frac{35e^z\sqrt{\pi}(8z^3 - 12z^2 + 18z - 15)\operatorname{erf}(\sqrt{z})}{256z^{7/2}}$$

07.25.03.am5h.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35e^{-z}\sqrt{\pi}(8z^3 + 12z^2 + 18z + 15)\operatorname{erfi}(\sqrt{z})}{256z^{7/2}} - \frac{35(4z^2 + 8z + 15)}{128z^3}$$

07.25.03.am5i.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{9}{2}, 5; z\right) = \frac{4e^z(z^3 - 3z^2 + 6z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.am5j.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{315(4z^2 - 20z + 105)}{256z^4} + \frac{315e^z\sqrt{\pi}(8z^3 - 36z^2 + 90z - 105)\operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.am5k.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{315(4z^2 + 20z + 105)}{256z^4} - \frac{315e^{-z}\sqrt{\pi}(8z^3 + 36z^2 + 90z + 105)\operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.am5l.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{9}{2}, 6; z\right) = \frac{120(z + 4)}{z^5} + \frac{20e^z(z^3 - 6z^2 + 18z - 24)}{z^5}$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = 5$

07.25.03.am5m.01

$${}_2F_2\left(4, \frac{9}{2}; 5, 5; z\right) = \frac{128e^{z/2}(2z^3 - 7z^2 + 12z - 24)I_0\left(\frac{z}{2}\right)}{35z^4} + \frac{128e^{z/2}(2z^2 - 9z + 22)I_1\left(\frac{z}{2}\right)}{35z^3} + \frac{3072}{35z^4}$$

07.25.03.am5n.01

$${}_2F_2\left(4, \frac{9}{2}; 5, \frac{11}{2}; z\right) = \frac{9e^z(4z^2 - 22z + 57)}{2z^4} - \frac{945\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{4z^{9/2}} + \frac{216}{z^4}$$

07.25.03.am5o.01

$${}_2F_2\left(4, \frac{9}{2}; 5, \frac{11}{2}; -z\right) = \frac{9e^{-z}(4z^2 + 22z + 57)}{2z^4} - \frac{945\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{4z^{9/2}} + \frac{216}{z^4}$$

07.25.03.am5p.01

$${}_2F_2\left(4, \frac{9}{2}; 5, 6; z\right) = \frac{256e^{z/2}(z^2 - 6z - 12)I_0\left(\frac{z}{2}\right)}{7z^4} + \frac{256e^{z/2}(z^2 - 7z + 48)I_1\left(\frac{z}{2}\right)}{7z^4} + \frac{3072}{7z^4}$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = \frac{11}{2}$

07.25.03.am5q.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{11}{2}, 6; z\right) = \frac{1080(z - 4)}{z^5} + \frac{45e^z(2z^2 - 15z + 96)}{z^5} - \frac{4725\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{2z^{9/2}}$$

07.25.03.am5r.01

$${}_2F_2\left(4, \frac{9}{2}; \frac{11}{2}, 6; -z\right) = \frac{1080(z+4)}{z^5} - \frac{45 e^{-z} (2z^2 + 15z + 96)}{z^5} - \frac{4725 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2z^{9/2}}$$

For fixed z and $a_1 = 4, a_2 = \frac{9}{2}, b_1 = 6$

07.25.03.am5s.01

$${}_2F_2\left(4, \frac{9}{2}; 6, 6; z\right) = \frac{15360(z-8)}{7z^5} + \frac{1280 e^{z/2} (z^2 - 60z + 96) I_0\left(\frac{z}{2}\right)}{7z^5} + \frac{1280 e^{z/2} (z+44) I_1\left(\frac{z}{2}\right)}{7z^4}$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = -\frac{11}{2}$

07.25.03.am5t.01

$$\begin{aligned} &{}_2F_2\left(4, 5; -\frac{11}{2}, 1; z\right) = \\ &\frac{1}{1496880} (64z^{13} + 5248z^{12} + 168912z^{11} + 2740032z^{10} + 23885244z^9 + 109731528z^8 + 236952675z^7 + \\ &\quad 162570240z^6 - 32514048z^5 + 16934400z^4 - 12096000z^3 + 9072000z^2 - 5443200z + 1496880) + \\ &\frac{1}{2993760} \left(e^z \sqrt{\pi} (128z^{27/2} + 10560z^{25/2} + 343008z^{23/2} + 5643888z^{21/2} + 50354136z^{19/2} + \right. \\ &\quad \left. 240984828z^{17/2} + 565254522z^{15/2} + 492954525z^{13/2}) \operatorname{erf}(\sqrt{z}) \right) \end{aligned}$$

07.25.03.am5u.01

$$\begin{aligned} &{}_2F_2\left(4, 5; -\frac{11}{2}, 1; -z\right) = \\ &\frac{1}{1496880} (-64z^{13} + 5248z^{12} - 168912z^{11} + 2740032z^{10} - 23885244z^9 + 109731528z^8 - 236952675z^7 + \\ &\quad 162570240z^6 + 32514048z^5 + 16934400z^4 + 12096000z^3 + 9072000z^2 + 5443200z + 1496880) + \\ &\frac{1}{2993760} \left(e^{-z} \sqrt{\pi} (128z^{27/2} - 10560z^{25/2} + 343008z^{23/2} - 5643888z^{21/2} + 50354136z^{19/2} - \right. \\ &\quad \left. 240984828z^{17/2} + 565254522z^{15/2} - 492954525z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right) \end{aligned}$$

07.25.03.am5v.01

$$\begin{aligned} &{}_2F_2\left(4, 5; -\frac{11}{2}, 2; z\right) = \\ &\frac{1}{748440} (32z^{12} + 2192z^{11} + 57072z^{10} + 714744z^9 + 4463754z^8 + 12755565z^7 + 11612160z^6 - 2709504z^5 + \\ &\quad 1693440z^4 - 1512000z^3 + 1512000z^2 - 1360800z + 748440) + \frac{1}{1496880} \left(e^z \sqrt{\pi} \right. \\ &\quad \left. (64z^{25/2} + 4416z^{23/2} + 116304z^{21/2} + 1484448z^{19/2} + 9590364z^{17/2} + 29383956z^{15/2} + 32863635z^{13/2}) \operatorname{erf}(\sqrt{z}) \right) \end{aligned}$$

07.25.03.am5w.01

$${}_2F_2\left(4, 5; -\frac{11}{2}, 2; -z\right) = \frac{1}{748440} (32z^{12} - 2192z^{11} + 57072z^{10} - 714744z^9 + 4463754z^8 - 12755565z^7 + 11612160z^6 + 2709504z^5 + 1693440z^4 + 1512000z^3 + 1512000z^2 + 1360800z + 748440) + \frac{1}{1496880} (e^{-z}\sqrt{\pi} (-64z^{25/2} + 4416z^{23/2} - 116304z^{21/2} + 1484448z^{19/2} - 9590364z^{17/2} + 29383956z^{15/2} - 32863635z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.am5x.01

$${}_2F_2\left(4, 5; -\frac{11}{2}, 3; z\right) = \frac{1}{187110} (16z^{11} + 880z^{10} + 17544z^9 + 156036z^8 + 601245z^7 + 725760z^6 - 193536z^5 + 141120z^4 - 151200z^3 + 189000z^2 - 226800z + 187110) + \frac{1}{374220} e^z \sqrt{\pi} (32z^{23/2} + 1776z^{21/2} + 35952z^{19/2} + 328776z^{17/2} + 1343034z^{15/2} + 1933155z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am5y.01

$${}_2F_2\left(4, 5; -\frac{11}{2}, 3; -z\right) = \frac{1}{187110} (-16z^{11} + 880z^{10} - 17544z^9 + 156036z^8 - 601245z^7 + 725760z^6 + 193536z^5 + 141120z^4 + 151200z^3 + 189000z^2 + 226800z + 187110) + \frac{1}{374220} e^{-z} \sqrt{\pi} (32z^{23/2} - 1776z^{21/2} + 35952z^{19/2} - 328776z^{17/2} + 1343034z^{15/2} - 1933155z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am5z.01

$${}_2F_2\left(4, 5; -\frac{11}{2}, 4; z\right) = \frac{1}{31185} (8z^{10} + 332z^9 + 4626z^8 + 24975z^7 + 40320z^6 - 12096z^5 + 10080z^4 - 12600z^3 + 18900z^2 - 28350z + 31185) + \frac{e^z \sqrt{\pi} (16z^{21/2} + 672z^{19/2} + 9576z^{17/2} + 54264z^{15/2} + 101745z^{13/2}) \operatorname{erf}(\sqrt{z})}{62370}$$

07.25.03.am60.01

$${}_2F_2\left(4, 5; -\frac{11}{2}, 4; -z\right) = \frac{1}{31185} (8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185) + \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 672z^{19/2} - 9576z^{17/2} + 54264z^{15/2} - 101745z^{13/2}) \operatorname{erfi}(\sqrt{z})}{62370}$$

07.25.03.am61.01

$${}_2F_2\left(4, 5; -\frac{11}{2}, 5; z\right) = \frac{32z^9 + 896z^8 + 7320z^7 + 16128z^6 - 5376z^5 + 5040z^4 - 7200z^3 + 12600z^2 - 22680z + 31185}{31185} + \frac{4e^z \sqrt{\pi} (8z^{19/2} + 228z^{17/2} + 1938z^{15/2} + 4845z^{13/2}) \operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.am62.01

$${}_2F_2\left(4, 5; -\frac{11}{2}, 5; -z\right) = \frac{-32z^9 + 896z^8 - 7320z^7 + 16128z^6 + 5376z^5 + 5040z^4 + 7200z^3 + 12600z^2 + 22680z + 31185}{31185} + \frac{4e^{-z}\sqrt{\pi}\left(8z^{19/2} - 228z^{17/2} + 1938z^{15/2} - 4845z^{13/2}\right)\operatorname{erfi}(\sqrt{z})}{31185}$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = -\frac{9}{2}$

07.25.03.am63.01

$${}_2F_2\left(4, 5; -\frac{9}{2}, 1; z\right) = \frac{1}{272160}\left(-64z^{12} - 4800z^{11} - 140144z^{10} - 2041632z^9 - 15783084z^8 - 63248700z^7 - 116345205z^6 - 65028096z^5 + 11289600z^4 - 4838400z^3 + 2592000z^2 - 1209600z + 272160\right) + \frac{1}{544320}\left(e^z\sqrt{\pi}\left(-128z^{25/2} - 9664z^{23/2} - 285024z^{21/2} - 4218768z^{19/2} - 33479064z^{17/2} - 140547636z^{15/2} - 284159250z^{13/2} - 208795275z^{11/2}\right)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.am64.01

$${}_2F_2\left(4, 5; -\frac{9}{2}, 1; -z\right) = \frac{1}{272160}\left(-64z^{12} + 4800z^{11} - 140144z^{10} + 2041632z^9 - 15783084z^8 + 63248700z^7 - 116345205z^6 + 65028096z^5 + 11289600z^4 + 4838400z^3 + 2592000z^2 + 1209600z + 272160\right) + \frac{1}{544320}\left(e^{-z}\sqrt{\pi}\left(128z^{25/2} - 9664z^{23/2} + 285024z^{21/2} - 4218768z^{19/2} + 33479064z^{17/2} - 140547636z^{15/2} + 284159250z^{13/2} - 208795275z^{11/2}\right)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.am65.01

$${}_2F_2\left(4, 5; -\frac{9}{2}, 2; z\right) = \frac{1}{136080}\left(-32z^{11} - 2000z^{10} - 47088z^9 - 527352z^8 - 2902890z^7 - 7163145z^6 - 5419008z^5 + 1128960z^4 - 604800z^3 + 432000z^2 - 302400z + 136080\right) + \frac{1}{272160}\left(e^z\sqrt{\pi}\left(-64z^{23/2} - 4032z^{21/2} - 96144z^{19/2} - 1099872z^{17/2} - 6290748z^{15/2} - 16802460z^{13/2} - 16061175z^{11/2}\right)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.am66.01

$${}_2F_2\left(4, 5; -\frac{9}{2}, 2; -z\right) = \frac{1}{136080}\left(32z^{11} - 2000z^{10} + 47088z^9 - 527352z^8 + 2902890z^7 - 7163145z^6 + 5419008z^5 + 1128960z^4 - 604800z^3 + 432000z^2 + 302400z + 136080\right) + \frac{1}{272160}\left(e^{-z}\sqrt{\pi}\left(-64z^{23/2} + 4032z^{21/2} - 96144z^{19/2} + 1099872z^{17/2} - 6290748z^{15/2} + 16802460z^{13/2} - 16061175z^{11/2}\right)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.am67.01

$${}_2F_2\left(4, 5; -\frac{9}{2}, 3; z\right) = \frac{1}{34020} (-16z^{10} - 800z^9 - 14352z^8 - 113360z^7 - 380775z^6 - 387072z^5 + 94080z^4 - 60480z^3 + 54000z^2 - 50400z + 34020) + \frac{1}{68040} e^z \sqrt{\pi} (-32z^{21/2} - 1616z^{19/2} - 29488z^{17/2} - 240312z^{15/2} - 862410z^{13/2} - 1070745z^{11/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am68.01

$${}_2F_2\left(4, 5; -\frac{9}{2}, 3; -z\right) = \frac{1}{34020} (-16z^{10} + 800z^9 - 14352z^8 + 113360z^7 - 380775z^6 + 387072z^5 + 94080z^4 + 60480z^3 + 54000z^2 + 50400z + 34020) + \frac{1}{68040} e^{-z} \sqrt{\pi} (32z^{21/2} - 1616z^{19/2} + 29488z^{17/2} - 240312z^{15/2} + 862410z^{13/2} - 1070745z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am69.01

$${}_2F_2\left(4, 5; -\frac{9}{2}, 4; z\right) = \frac{-8z^9 - 300z^8 - 3730z^7 - 17655z^6 - 24192z^5 + 6720z^4 - 5040z^3 + 5400z^2 - 6300z + 5670}{5670} + \frac{e^z \sqrt{\pi} (-16z^{19/2} - 608z^{17/2} - 7752z^{15/2} - 38760z^{13/2} - 62985z^{11/2}) \operatorname{erf}(\sqrt{z})}{11340}$$

07.25.03.am6a.01

$${}_2F_2\left(4, 5; -\frac{9}{2}, 4; -z\right) = \frac{8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670}{5670} + \frac{e^{-z} \sqrt{\pi} (-16z^{19/2} + 608z^{17/2} - 7752z^{15/2} + 38760z^{13/2} - 62985z^{11/2}) \operatorname{erfi}(\sqrt{z})}{11340}$$

07.25.03.am6b.01

$${}_2F_2\left(4, 5; -\frac{9}{2}, 5; z\right) = \frac{-16z^8 - 400z^7 - 2868z^6 - 5376z^5 + 1680z^4 - 1440z^3 + 1800z^2 - 2520z + 2835}{2835} - \frac{2e^z \sqrt{\pi} (8z^{17/2} + 204z^{15/2} + 1530z^{13/2} + 3315z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.am6c.01

$${}_2F_2\left(4, 5; -\frac{9}{2}, 5; -z\right) = \frac{-16z^8 + 400z^7 - 2868z^6 + 5376z^5 + 1680z^4 + 1440z^3 + 1800z^2 + 2520z + 2835}{2835} + \frac{2e^{-z} \sqrt{\pi} (8z^{17/2} - 204z^{15/2} + 1530z^{13/2} - 3315z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = -\frac{7}{2}$

07.25.03.am6d.01

$${}_2F_2\left(4, 5; -\frac{7}{2}, 1; z\right) = \frac{1}{60480} (64 z^{11} + 4352 z^{10} + 114064 z^9 + 1473408 z^8 + 9941340 z^7 + 34037520 z^6 + 51838767 z^5 + 22579200 z^4 - 3225600 z^3 + 1036800 z^2 - 345600 z + 60480) + \frac{1}{120960} \left(e^z \sqrt{\pi} (128 z^{23/2} + 8768 z^{21/2} + 232416 z^{19/2} + 3056688 z^{17/2} + 21252312 z^{15/2} + 76790700 z^{13/2} + 130577850 z^{11/2} + 78217425 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.am6e.01

$${}_2F_2\left(4, 5; -\frac{7}{2}, 1; -z\right) = \frac{1}{60480} (-64 z^{11} + 4352 z^{10} - 114064 z^9 + 1473408 z^8 - 9941340 z^7 + 34037520 z^6 - 51838767 z^5 + 22579200 z^4 + 3225600 z^3 + 1036800 z^2 + 345600 z + 60480) + \frac{1}{120960} \left(e^{-z} \sqrt{\pi} (128 z^{23/2} - 8768 z^{21/2} + 232416 z^{19/2} - 3056688 z^{17/2} + 21252312 z^{15/2} - 76790700 z^{13/2} + 130577850 z^{11/2} - 78217425 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.am6f.01

$${}_2F_2\left(4, 5; -\frac{7}{2}, 2; z\right) = \frac{1}{30240} (32 z^{10} + 1808 z^9 + 38064 z^8 + 375960 z^7 + 1791930 z^6 + 3727341 z^5 + 2257920 z^4 - 403200 z^3 + 172800 z^2 - 86400 z + 30240) + \frac{1}{60480} \left(e^z \sqrt{\pi} (64 z^{21/2} + 3648 z^{19/2} + 77904 z^{17/2} + 788256 z^{15/2} + 3925980 z^{13/2} + 8950500 z^{11/2} + 7110675 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.am6g.01

$${}_2F_2\left(4, 5; -\frac{7}{2}, 2; -z\right) = \frac{1}{30240} (32 z^{10} - 1808 z^9 + 38064 z^8 - 375960 z^7 + 1791930 z^6 - 3727341 z^5 + 2257920 z^4 + 403200 z^3 + 172800 z^2 + 86400 z + 30240) + \frac{1}{60480} \left(e^{-z} \sqrt{\pi} (-64 z^{21/2} + 3648 z^{19/2} - 77904 z^{17/2} + 788256 z^{15/2} - 3925980 z^{13/2} + 8950500 z^{11/2} - 7110675 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.am6h.01

$${}_2F_2\left(4, 5; -\frac{7}{2}, 3; z\right) = \frac{1}{7560} (16 z^9 + 720 z^8 + 11480 z^7 + 79260 z^6 + 227169 z^5 + 188160 z^4 - 40320 z^3 + 21600 z^2 - 14400 z + 7560) + \frac{1}{7560} \left(e^z \sqrt{\pi} (32 z^{19/2} + 1456 z^{17/2} + 23664 z^{15/2} + 169320 z^{13/2} + 523770 z^{11/2} + 546975 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.am6i.01

$${}_2F_2\left(4, 5; -\frac{7}{2}, 3; -z\right) = \frac{1}{7560} (-16z^9 + 720z^8 - 11480z^7 + 79260z^6 - 227169z^5 + 188160z^4 + 40320z^3 + 21600z^2 + 14400z + 7560) + \frac{1}{15120} e^{-z} \sqrt{\pi} (32z^{19/2} - 1456z^{17/2} + 23664z^{15/2} - 169320z^{13/2} + 523770z^{11/2} - 546975z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am6j.01

$${}_2F_2\left(4, 5; -\frac{7}{2}, 4; z\right) = \frac{8z^8 + 268z^7 + 2930z^6 + 11919z^5 + 13440z^4 - 3360z^3 + 2160z^2 - 1800z + 1260}{1260} + \frac{e^z \sqrt{\pi} (16z^{17/2} + 544z^{15/2} + 6120z^{13/2} + 26520z^{11/2} + 36465z^{9/2}) \operatorname{erf}(\sqrt{z})}{2520}$$

07.25.03.am6k.01

$${}_2F_2\left(4, 5; -\frac{7}{2}, 4; -z\right) = \frac{8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260}{1260} + \frac{e^{-z} \sqrt{\pi} (-16z^{17/2} + 544z^{15/2} - 6120z^{13/2} + 26520z^{11/2} - 36465z^{9/2}) \operatorname{erfi}(\sqrt{z})}{2520}$$

07.25.03.am6l.01

$${}_2F_2\left(4, 5; -\frac{7}{2}, 5; z\right) = \frac{1}{315} (8z^7 + 176z^6 + 1086z^5 + 1680z^4 - 480z^3 + 360z^2 - 360z + 315) + \frac{1}{315} e^z \sqrt{\pi} (8z^{15/2} + 180z^{13/2} + 1170z^{11/2} + 2145z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am6m.01

$${}_2F_2\left(4, 5; -\frac{7}{2}, 5; -z\right) = \frac{1}{315} (-8z^7 + 176z^6 - 1086z^5 + 1680z^4 + 480z^3 + 360z^2 + 360z + 315) + \frac{1}{315} e^{-z} \sqrt{\pi} (8z^{15/2} - 180z^{13/2} + 1170z^{11/2} - 2145z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = -\frac{5}{2}$

07.25.03.am6n.01

$${}_2F_2\left(4, 5; -\frac{5}{2}, 1; z\right) = \frac{1}{17280} (-64z^{10} - 3904z^9 - 90672z^8 - 1021920z^7 - 5894412z^6 - 16768548z^5 - 20312865z^4 - 6451200z^3 + 691200z^2 - 138240z + 17280) + \frac{1}{34560} (e^z \sqrt{\pi} (-128z^{21/2} - 7872z^{19/2} - 185184z^{17/2} - 2130768z^{15/2} - 12729240z^{13/2} - 38602980z^{11/2} - 53371890z^{9/2} - 24845535z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.am6o.01

$${}_2F_2\left(4, 5; -\frac{5}{2}, 1; -z\right) = \frac{1}{17280} \left(-64 z^{10} + 3904 z^9 - 90672 z^8 + 1021920 z^7 - 5894412 z^6 + 16768548 z^5 - 20312865 z^4 + 6451200 z^3 + 691200 z^2 + 138240 z + 17280\right) + \frac{1}{34560} \left(e^{-z} \sqrt{\pi} \left(128 z^{21/2} - 7872 z^{19/2} + 185184 z^{17/2} - 2130768 z^{15/2} + 12729240 z^{13/2} - 38602980 z^{11/2} + 53371890 z^{9/2} - 24845535 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.am6p.01

$${}_2F_2\left(4, 5; -\frac{5}{2}, 2; z\right) = \frac{1}{8640} \left(-32 z^9 - 1616 z^8 - 30000 z^7 - 256728 z^6 - 1034874 z^5 - 1755225 z^4 - 806400 z^3 + 115200 z^2 - 34560 z + 8640\right) + \frac{1}{17280} \left(e^z \sqrt{\pi} \left(-64 z^{19/2} - 3264 z^{17/2} - 61584 z^{15/2} - 541920 z^{13/2} - 2300220 z^{11/2} - 4350060 z^{9/2} - 2760615 z^{7/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.am6q.01

$${}_2F_2\left(4, 5; -\frac{5}{2}, 2; -z\right) = \frac{1}{8640} \left(32 z^9 - 1616 z^8 + 30000 z^7 - 256728 z^6 + 1034874 z^5 - 1755225 z^4 + 806400 z^3 + 115200 z^2 + 34560 z + 8640\right) + \frac{1}{17280} \left(e^{-z} \sqrt{\pi} \left(-64 z^{19/2} + 3264 z^{17/2} - 61584 z^{15/2} + 541920 z^{13/2} - 2300220 z^{11/2} + 4350060 z^{9/2} - 2760615 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.am6r.01

$${}_2F_2\left(4, 5; -\frac{5}{2}, 3; z\right) = \frac{-16 z^8 - 640 z^7 - 8928 z^6 - 52776 z^5 - 125355 z^4 - 80640 z^3 + 14400 z^2 - 5760 z + 2160}{2160} + \frac{e^z \sqrt{\pi} \left(-32 z^{17/2} - 1296 z^{15/2} - 18480 z^{13/2} - 113880 z^{11/2} - 296010 z^{9/2} - 250965 z^{7/2}\right) \operatorname{erf}(\sqrt{z})}{4320}$$

07.25.03.am6s.01

$${}_2F_2\left(4, 5; -\frac{5}{2}, 3; -z\right) = \frac{-16 z^8 + 640 z^7 - 8928 z^6 + 52776 z^5 - 125355 z^4 + 80640 z^3 + 14400 z^2 + 5760 z + 2160}{2160} + \frac{e^{-z} \sqrt{\pi} \left(32 z^{17/2} - 1296 z^{15/2} + 18480 z^{13/2} - 113880 z^{11/2} + 296010 z^{9/2} - 250965 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})}{4320}$$

07.25.03.am6t.01

$${}_2F_2\left(4, 5; -\frac{5}{2}, 4; z\right) = \frac{1}{360} \left(-8 z^7 - 236 z^6 - 2226 z^5 - 7575 z^4 - 6720 z^3 + 1440 z^2 - 720 z + 360\right) + \frac{1}{720} e^z \sqrt{\pi} \left(-16 z^{15/2} - 480 z^{13/2} - 4680 z^{11/2} - 17160 z^{9/2} - 19305 z^{7/2}\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.am6u.01

$${}_2F_2\left(4, 5; -\frac{5}{2}, 4; -z\right) = \frac{1}{360} (8z^7 - 236z^6 + 2226z^5 - 7575z^4 + 6720z^3 + 1440z^2 + 720z + 360) + \frac{1}{720} e^{-z} \sqrt{\pi} (-16z^{15/2} + 480z^{13/2} - 4680z^{11/2} + 17160z^{9/2} - 19305z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am6v.01

$${}_2F_2\left(4, 5; -\frac{5}{2}, 5; z\right) = \frac{1}{45} (-4z^6 - 76z^5 - 393z^4 - 480z^3 + 120z^2 - 72z + 45) + \frac{1}{90} e^z \sqrt{\pi} (-8z^{13/2} - 156z^{11/2} - 858z^{9/2} - 1287z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am6w.01

$${}_2F_2\left(4, 5; -\frac{5}{2}, 5; -z\right) = \frac{1}{45} (-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45) + \frac{1}{90} e^{-z} \sqrt{\pi} (8z^{13/2} - 156z^{11/2} + 858z^{9/2} - 1287z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = -\frac{3}{2}$

07.25.03.am6x.01

$${}_2F_2\left(4, 5; -\frac{3}{2}, 1; z\right) = \frac{1}{6912} (64z^9 + 3456z^8 + 69968z^7 + 673728z^6 + 3230460z^5 + 7341144z^4 + 6659163z^3 + 1382400z^2 - 92160z + 6912) + \frac{1}{13824} (e^z \sqrt{\pi} (128z^{19/2} + 6976z^{17/2} + 143328z^{15/2} + 1414128z^{13/2} + 7072728z^{11/2} + 17384796z^{9/2} + 18602298z^{7/2} + 6243237z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.am6y.01

$${}_2F_2\left(4, 5; -\frac{3}{2}, 1; -z\right) = \frac{1}{6912} (-64z^9 + 3456z^8 - 69968z^7 + 673728z^6 - 3230460z^5 + 7341144z^4 - 6659163z^3 + 1382400z^2 + 92160z + 6912) + \frac{1}{13824} (e^{-z} \sqrt{\pi} (128z^{19/2} - 6976z^{17/2} + 143328z^{15/2} - 1414128z^{13/2} + 7072728z^{11/2} - 17384796z^{9/2} + 18602298z^{7/2} - 6243237z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.am6z.01

$${}_2F_2\left(4, 5; -\frac{3}{2}, 2; z\right) = \frac{32z^8 + 1424z^7 + 22896z^6 + 165816z^5 + 547242z^4 + 720909z^3 + 230400z^2 - 23040z + 3456}{3456} + \frac{1}{6912} e^z \sqrt{\pi} (64z^{17/2} + 2880z^{15/2} + 47184z^{13/2} + 353184z^{11/2} + 1240668z^{9/2} + 1868724z^{7/2} + 891891z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am70.01

$${}_2F_2\left(4, 5; -\frac{3}{2}, 2; -z\right) = \frac{32z^8 - 1424z^7 + 22896z^6 - 165816z^5 + 547242z^4 - 720909z^3 + 230400z^2 + 23040z + 3456}{3456} + \frac{1}{6912} (e^{-z} \sqrt{\pi} (-64z^{17/2} + 2880z^{15/2} - 47184z^{13/2} + 353184z^{11/2} - 1240668z^{9/2} + 1868724z^{7/2} - 891891z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.am71.01

$${}_2F_2\left(4, 5; -\frac{3}{2}, 3; z\right) = \frac{1}{864} (16 z^7 + 560 z^6 + 6696 z^5 + 32\,948 z^4 + 62\,181 z^3 + 28\,800 z^2 - 3840 z + 864) + \frac{e^z \sqrt{\pi} (32 z^{15/2} + 1136 z^{13/2} + 13\,936 z^{11/2} + 72\,072 z^{9/2} + 151\,866 z^{7/2} + 99\,099 z^{5/2}) \operatorname{erf}(\sqrt{z})}{1728}$$

07.25.03.am72.01

$${}_2F_2\left(4, 5; -\frac{3}{2}, 3; -z\right) = \frac{1}{864} (-16 z^7 + 560 z^6 - 6696 z^5 + 32\,948 z^4 - 62\,181 z^3 + 28\,800 z^2 + 3840 z + 864) + \frac{e^{-z} \sqrt{\pi} (32 z^{15/2} - 1136 z^{13/2} + 13\,936 z^{11/2} - 72\,072 z^{9/2} + 151\,866 z^{7/2} - 99\,099 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{1728}$$

07.25.03.am73.01

$${}_2F_2\left(4, 5; -\frac{3}{2}, 4; z\right) = \frac{1}{144} (8 z^6 + 204 z^5 + 1618 z^4 + 4431 z^3 + 2880 z^2 - 480 z + 144) + \frac{1}{288} e^z \sqrt{\pi} (16 z^{13/2} + 416 z^{11/2} + 3432 z^{9/2} + 10\,296 z^{7/2} + 9009 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am74.01

$${}_2F_2\left(4, 5; -\frac{3}{2}, 4; -z\right) = \frac{1}{144} (8 z^6 - 204 z^5 + 1618 z^4 - 4431 z^3 + 2880 z^2 + 480 z + 144) + \frac{1}{288} e^{-z} \sqrt{\pi} (-16 z^{13/2} + 416 z^{11/2} - 3432 z^{9/2} + 10\,296 z^{7/2} - 9009 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am75.01

$${}_2F_2\left(4, 5; -\frac{3}{2}, 5; z\right) = \frac{1}{18} (4 z^5 + 64 z^4 + 267 z^3 + 240 z^2 - 48 z + 18) + \frac{1}{36} e^z \sqrt{\pi} (8 z^{11/2} + 132 z^{9/2} + 594 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am76.01

$${}_2F_2\left(4, 5; -\frac{3}{2}, 5; -z\right) = \frac{1}{18} (-4 z^5 + 64 z^4 - 267 z^3 + 240 z^2 + 48 z + 18) + \frac{1}{36} e^{-z} \sqrt{\pi} (8 z^{11/2} - 132 z^{9/2} + 594 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = -\frac{1}{2}$

07.25.03.am77.01

$${}_2F_2\left(4, 5; -\frac{1}{2}, 1; z\right) = \frac{1}{4608} (-64 z^8 - 3008 z^7 - 51\,952 z^6 - 415\,392 z^5 - 1\,591\,404 z^4 - 2\,722\,188 z^3 - 1\,673\,325 z^2 - 184\,320 z + 4608) + \frac{1}{9216} (e^z \sqrt{\pi} (-128 z^{17/2} - 6080 z^{15/2} - 106\,848 z^{13/2} - 879\,888 z^{11/2} - 3\,553\,176 z^{9/2} - 6\,725\,268 z^{7/2} - 5\,151\,762 z^{5/2} - 1\,091\,475 z^{3/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.am78.01

$${}_2F_2\left(4, 5; -\frac{1}{2}, 1; -z\right) = \frac{1}{4608} (-64 z^8 + 3008 z^7 - 51952 z^6 + 415392 z^5 - 1591404 z^4 + 2722188 z^3 - 1673325 z^2 + 184320 z + 4608) + \frac{1}{9216} \left(e^{-z} \sqrt{\pi} (128 z^{17/2} - 6080 z^{15/2} + 106848 z^{13/2} - 879888 z^{11/2} + 3553176 z^{9/2} - 6725268 z^{7/2} + 5151762 z^{5/2} - 1091475 z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.am79.01

$${}_2F_2\left(4, 5; -\frac{1}{2}, 2; z\right) = \frac{-32 z^7 - 1232 z^6 - 16752 z^5 - 99384 z^4 - 256074 z^3 - 242505 z^2 - 46080 z + 2304}{2304} + \frac{1}{4608} e^z \sqrt{\pi} (-64 z^{15/2} - 2496 z^{13/2} - 34704 z^{11/2} - 214368 z^{9/2} - 597564 z^{7/2} - 673596 z^{5/2} - 218295 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am7a.01

$${}_2F_2\left(4, 5; -\frac{1}{2}, 2; -z\right) = \frac{32 z^7 - 1232 z^6 + 16752 z^5 - 99384 z^4 + 256074 z^3 - 242505 z^2 + 46080 z + 2304}{2304} + \frac{1}{4608} e^{-z} \sqrt{\pi} (-64 z^{15/2} + 2496 z^{13/2} - 34704 z^{11/2} + 214368 z^{9/2} - 597564 z^{7/2} + 673596 z^{5/2} - 218295 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am7b.01

$${}_2F_2\left(4, 5; -\frac{1}{2}, 3; z\right) = \frac{1}{576} (-16 z^6 - 480 z^5 - 4784 z^4 - 18816 z^3 - 26415 z^2 - 7680 z + 576) + \frac{e^z \sqrt{\pi} (-32 z^{13/2} - 976 z^{11/2} - 10032 z^{9/2} - 41976 z^{7/2} - 67914 z^{5/2} - 31185 z^{3/2}) \operatorname{erf}(\sqrt{z})}{1152}$$

07.25.03.am7c.01

$${}_2F_2\left(4, 5; -\frac{1}{2}, 3; -z\right) = \frac{1}{576} (-16 z^6 + 480 z^5 - 4784 z^4 + 18816 z^3 - 26415 z^2 + 7680 z + 576) + \frac{e^{-z} \sqrt{\pi} (32 z^{13/2} - 976 z^{11/2} + 10032 z^{9/2} - 41976 z^{7/2} + 67914 z^{5/2} - 31185 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1152}$$

07.25.03.am7d.01

$${}_2F_2\left(4, 5; -\frac{1}{2}, 4; z\right) = \frac{1}{96} (-8 z^5 - 172 z^4 - 1106 z^3 - 2295 z^2 - 960 z + 96) + \frac{1}{192} e^z \sqrt{\pi} (-16 z^{11/2} - 352 z^{9/2} - 2376 z^{7/2} - 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am7e.01

$${}_2F_2\left(4, 5; -\frac{1}{2}, 4; -z\right) = \frac{1}{96} (8 z^5 - 172 z^4 + 1106 z^3 - 2295 z^2 + 960 z + 96) + \frac{1}{192} e^{-z} \sqrt{\pi} (-16 z^{11/2} + 352 z^{9/2} - 2376 z^{7/2} + 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am7f.01

$${}_2F_2\left(4, 5; -\frac{1}{2}, 5; z\right) = \frac{1}{12} (-4 z^4 - 52 z^3 - 165 z^2 - 96 z + 12) + \frac{1}{24} e^z \sqrt{\pi} (-8 z^{9/2} - 108 z^{7/2} - 378 z^{5/2} - 315 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am7g.01

$${}_2F_2\left(4, 5; -\frac{1}{2}, 5; -z\right) = \frac{1}{12}(-4z^4 + 52z^3 - 165z^2 + 96z + 12) + \frac{1}{24}e^{-z}\sqrt{\pi}(8z^{9/2} - 108z^{7/2} + 378z^{5/2} - 315z^{3/2})\operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = \frac{1}{2}$

07.25.03.am7h.01

$${}_2F_2\left(4, 5; \frac{1}{2}, 1; z\right) = \frac{64z^7 + 2560z^6 + 36624z^5 + 233472z^4 + 672924z^3 + 784800z^2 + 269415z + 9216}{9216} + \frac{1}{18432}\left(e^z\sqrt{\pi}(128z^{15/2} + 5184z^{13/2} + 75744z^{11/2} + 501168z^{9/2} + 1548504z^{7/2} + 2079756z^{5/2} + 992250z^{3/2} + 99225\sqrt{z})\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.am7i.01

$${}_2F_2\left(4, 5; \frac{1}{2}, 1; -z\right) = \frac{-64z^7 + 2560z^6 - 36624z^5 + 233472z^4 - 672924z^3 + 784800z^2 - 269415z + 9216}{9216} + \frac{1}{18432}\left(e^{-z}\sqrt{\pi}(128z^{15/2} - 5184z^{13/2} + 75744z^{11/2} - 501168z^{9/2} + 1548504z^{7/2} - 2079756z^{5/2} + 992250z^{3/2} - 99225\sqrt{z})\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.am7j.01

$${}_2F_2\left(4, 5; \frac{1}{2}, 2; z\right) = \frac{32z^6 + 1040z^5 + 11568z^4 + 53592z^3 + 99930z^2 + 59085z + 4608}{4608} + \frac{1}{9216}e^z\sqrt{\pi}(64z^{13/2} + 2112z^{11/2} + 24144z^{9/2} + 117792z^{7/2} + 244188z^{5/2} + 185220z^{3/2} + 33075\sqrt{z})\operatorname{erf}(\sqrt{z})$$

07.25.03.am7k.01

$${}_2F_2\left(4, 5; \frac{1}{2}, 2; -z\right) = \frac{32z^6 - 1040z^5 + 11568z^4 - 53592z^3 + 99930z^2 - 59085z + 4608}{4608} + \frac{1}{9216}e^{-z}\sqrt{\pi}(-64z^{13/2} + 2112z^{11/2} - 24144z^{9/2} + 117792z^{7/2} - 244188z^{5/2} + 185220z^{3/2} - 33075\sqrt{z})\operatorname{erfi}(\sqrt{z})$$

07.25.03.am7l.01

$${}_2F_2\left(4, 5; \frac{1}{2}, 3; z\right) = \frac{16z^5 + 400z^4 + 3192z^3 + 9420z^2 + 8745z + 1152}{1152} + \frac{e^z\sqrt{\pi}(32z^{11/2} + 816z^{9/2} + 6768z^{7/2} + 21672z^{5/2} + 24570z^{3/2} + 6615\sqrt{z})\operatorname{erf}(\sqrt{z})}{2304}$$

07.25.03.am7m.01

$${}_2F_2\left(4, 5; \frac{1}{2}, 3; -z\right) = \frac{-16z^5 + 400z^4 - 3192z^3 + 9420z^2 - 8745z + 1152}{1152} + \frac{e^{-z}\sqrt{\pi}(32z^{11/2} - 816z^{9/2} + 6768z^{7/2} - 21672z^{5/2} + 24570z^{3/2} - 6615\sqrt{z})\operatorname{erfi}(\sqrt{z})}{2304}$$

07.25.03.am7n.01

$${}_2F_2\left(4, 5; \frac{1}{2}, 4; z\right) = \frac{1}{192} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am7o.01

$${}_2F_2\left(4, 5; \frac{1}{2}, 4; -z\right) = \frac{1}{192} (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am7p.01

$${}_2F_2\left(4, 5; \frac{1}{2}, 5; z\right) = \frac{1}{24} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} e^z \sqrt{\pi} (8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.am7q.01

$${}_2F_2\left(4, 5; \frac{1}{2}, 5; -z\right) = \frac{1}{24} (-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48} e^{-z} \sqrt{\pi} (8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = 1$

07.25.03.am7r.01

$${}_2F_2(4, 5; 1, 1; z) = \frac{1}{144} e^z (z^7 + 37z^6 + 486z^5 + 2826z^4 + 7416z^3 + 7992z^2 + 2736z + 144)$$

07.25.03.am7s.01

$${}_2F_2\left(4, 5; 1, \frac{3}{2}; z\right) = \frac{64z^6 + 2112z^5 + 23984z^4 + 114528z^3 + 224460z^2 + 147060z + 16857}{18432} + \frac{1}{36864\sqrt{z}} e^z \sqrt{\pi} (128z^7 + 4288z^6 + 50016z^5 + 251088z^4 + 544152z^3 + 447300z^2 + 97650z + 1575) \operatorname{erf}(\sqrt{z})$$

07.25.03.am7t.01

$${}_2F_2\left(4, 5; 1, \frac{3}{2}; -z\right) = \frac{64z^6 - 2112z^5 + 23984z^4 - 114528z^3 + 224460z^2 - 147060z + 16857}{18432} + \frac{1}{36864\sqrt{z}} e^{-z} \sqrt{\pi} (-128z^7 + 4288z^6 - 50016z^5 + 251088z^4 - 544152z^3 + 447300z^2 - 97650z + 1575) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am7u.01

$${}_2F_2(4, 5; 1, 2; z) = \frac{1}{144} e^z (z^6 + 30z^5 + 306z^4 + 1296z^3 + 2232z^2 + 1296z + 144)$$

07.25.03.am7v.01

$${}_2F_2\left(4, 5; 1, \frac{5}{2}; z\right) = \frac{64z^6 + 1664z^5 + 14032z^4 + 45120z^3 + 49212z^2 + 10728z - 45}{12288z} + \frac{e^z \sqrt{\pi} (128z^7 + 3392z^6 + 29664z^5 + 102768z^4 + 133080z^3 + 48060z^2 + 1530z + 45) \operatorname{erf}(\sqrt{z})}{24576z^{3/2}}$$

07.25.03.am7w.01

$${}_2F_2\left(4, 5; 1, \frac{5}{2}; -z\right) = \frac{-64 z^6 + 1664 z^5 - 14032 z^4 + 45120 z^3 - 49212 z^2 + 10728 z + 45}{12288 z} + \frac{1}{24576 z^{3/2}} e^{-z} \sqrt{\pi} (128 z^7 - 3392 z^6 + 29664 z^5 - 102768 z^4 + 133080 z^3 - 48060 z^2 + 1530 z - 45) \operatorname{erfi}(\sqrt{z})$$

07.25.03.am7x.01

$${}_2F_2(4, 5; 1, 3; z) = \frac{1}{72} e^z (z^5 + 23 z^4 + 168 z^3 + 456 z^2 + 408 z + 72)$$

07.25.03.am7y.01

$${}_2F_2\left(4, 5; 1, \frac{7}{2}; z\right) = \frac{5(64 z^6 + 1216 z^5 + 6768 z^4 + 11808 z^3 + 4140 z^2 - 36 z - 27)}{24576 z^2} + \frac{5 e^z \sqrt{\pi} (128 z^7 + 2496 z^6 + 14688 z^5 + 29328 z^4 + 15768 z^3 + 756 z^2 + 18 z + 27) \operatorname{erf}(\sqrt{z})}{49152 z^{5/2}}$$

07.25.03.am7z.01

$${}_2F_2\left(4, 5; 1, \frac{7}{2}; -z\right) = \frac{5(64 z^6 - 1216 z^5 + 6768 z^4 - 11808 z^3 + 4140 z^2 + 36 z - 27)}{24576 z^2} - \frac{5 e^{-z} \sqrt{\pi} (128 z^7 - 2496 z^6 + 14688 z^5 - 29328 z^4 + 15768 z^3 - 756 z^2 + 18 z - 27) \operatorname{erfi}(\sqrt{z})}{49152 z^{5/2}}$$

07.25.03.am80.01

$${}_2F_2(4, 5; 1, 4; z) = \frac{1}{24} e^z (z^4 + 16 z^3 + 72 z^2 + 96 z + 24)$$

07.25.03.am81.01

$${}_2F_2\left(4, 5; 1, \frac{9}{2}; z\right) = \frac{35(64 z^6 + 768 z^5 + 2192 z^4 + 1152 z^3 - 36 z^2 + 48 z - 225)}{49152 z^3} + \frac{35 e^z \sqrt{\pi} (128 z^7 + 1600 z^6 + 5088 z^5 + 3888 z^4 + 216 z^3 + 108 z^2 - 198 z + 225) \operatorname{erf}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.am82.01

$${}_2F_2\left(4, 5; 1, \frac{9}{2}; -z\right) = \frac{35 e^{-z} \sqrt{\pi} (128 z^7 - 1600 z^6 + 5088 z^5 - 3888 z^4 + 216 z^3 - 108 z^2 - 198 z - 225) \operatorname{erfi}(\sqrt{z})}{98304 z^{7/2}} - \frac{35(64 z^6 - 768 z^5 + 2192 z^4 - 1152 z^3 - 36 z^2 - 48 z - 225)}{49152 z^3}$$

07.25.03.am83.01

$${}_2F_2(4, 5; 1, 5; z) = \frac{1}{6} e^z (z^3 + 9 z^2 + 18 z + 6)$$

07.25.03.am84.01

$${}_2F_2\left(4, 5; 1, \frac{11}{2}; z\right) = \frac{105(64 z^6 + 320 z^5 + 304 z^4 - 288 z^3 + 1164 z^2 - 3900 z + 11025)}{32768 z^4} + \frac{105 e^z \sqrt{\pi} (128 z^7 + 704 z^6 + 864 z^5 - 432 z^4 + 1944 z^3 - 5724 z^2 + 11250 z - 11025) \operatorname{erf}(\sqrt{z})}{65536 z^{9/2}}$$

07.25.03.am85.01

$${}_2F_2\left(4, 5; 1, \frac{11}{2}; -z\right) = \frac{105(64z^6 - 320z^5 + 304z^4 + 288z^3 + 1164z^2 + 3900z + 11025)}{32768z^4} - \frac{105e^{-z}\sqrt{\pi}(128z^7 - 704z^6 + 864z^5 + 432z^4 + 1944z^3 + 5724z^2 + 11250z + 11025)\operatorname{erfi}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.am86.01

$${}_2F_2(4, 5; 1, 6; z) = \frac{5e^z(z^7 + 2z^6 + 6z^5 - 24z^4 + 96z^3 - 288z^2 + 576z - 576)}{6z^5} + \frac{480}{z^5}$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = \frac{3}{2}$

07.25.03.am87.01

$${}_2F_2\left(4, 5; \frac{3}{2}, 2; z\right) = \frac{32z^5 + 848z^4 + 7344z^3 + 24600z^2 + 28890z + 7641}{9216} + \frac{e^z\sqrt{\pi}(64z^6 + 1728z^5 + 15504z^4 + 55776z^3 + 76860z^2 + 31500z + 1575)\operatorname{erf}(\sqrt{z})}{18432\sqrt{z}}$$

07.25.03.am88.01

$${}_2F_2\left(4, 5; \frac{3}{2}, 2; -z\right) = \frac{-32z^5 + 848z^4 - 7344z^3 + 24600z^2 - 28890z + 7641}{9216} + \frac{e^{-z}\sqrt{\pi}(64z^6 - 1728z^5 + 15504z^4 - 55776z^3 + 76860z^2 - 31500z + 1575)\operatorname{erfi}(\sqrt{z})}{18432\sqrt{z}}$$

07.25.03.am89.01

$${}_2F_2\left(4, 5; \frac{3}{2}, 3; z\right) = \frac{16z^4 + 320z^3 + 1920z^2 + 3800z + 1779}{2304} + \frac{e^z\sqrt{\pi}(32z^5 + 656z^4 + 4144z^3 + 9240z^2 + 6090z + 525)\operatorname{erf}(\sqrt{z})}{4608\sqrt{z}}$$

07.25.03.am8a.01

$${}_2F_2\left(4, 5; \frac{3}{2}, 3; -z\right) = \frac{16z^4 - 320z^3 + 1920z^2 - 3800z + 1779}{2304} + \frac{e^{-z}\sqrt{\pi}(-32z^5 + 656z^4 - 4144z^3 + 9240z^2 - 6090z + 525)\operatorname{erfi}(\sqrt{z})}{4608\sqrt{z}}$$

07.25.03.am8b.01

$${}_2F_2\left(4, 5; \frac{3}{2}, 4; z\right) = \frac{1}{384}(8z^3 + 108z^2 + 370z + 279) + \frac{e^z\sqrt{\pi}(16z^4 + 224z^3 + 840z^2 + 840z + 105)\operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.am8c.01

$${}_2F_2\left(4, 5; \frac{3}{2}, 4; -z\right) = \frac{1}{384}(-8z^3 + 108z^2 - 370z + 279) + \frac{e^{-z}\sqrt{\pi}(16z^4 - 224z^3 + 840z^2 - 840z + 105)\operatorname{erfi}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.am8d.01

$${}_2F_2\left(4, 5; \frac{3}{2}, 5; z\right) = \frac{1}{48} (4z^2 + 28z + 33) + \frac{e^z \sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.am8e.01

$${}_2F_2\left(4, 5; \frac{3}{2}, 5; -z\right) = \frac{1}{48} (4z^2 - 28z + 33) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = 2$

07.25.03.am8f.01

$${}_2F_2(4, 5; 2, 2; z) = \frac{1}{144} e^z (z^5 + 24z^4 + 186z^3 + 552z^2 + 576z + 144)$$

07.25.03.am8g.01

$${}_2F_2\left(4, 5; 2, \frac{5}{2}; z\right) = \frac{32z^5 + 656z^4 + 4080z^3 + 8568z^2 + 4554z + 45}{6144z} + \frac{e^z \sqrt{\pi} (64z^6 + 1344z^5 + 8784z^4 + 20640z^3 + 14940z^2 + 1620z - 45) \operatorname{erf}(\sqrt{z})}{12288z^{3/2}}$$

07.25.03.am8h.01

$${}_2F_2\left(4, 5; 2, \frac{5}{2}; -z\right) = \frac{32z^5 - 656z^4 + 4080z^3 - 8568z^2 + 4554z - 45}{6144z} + \frac{e^{-z} \sqrt{\pi} (-64z^6 + 1344z^5 - 8784z^4 + 20640z^3 - 14940z^2 + 1620z + 45) \operatorname{erfi}(\sqrt{z})}{12288z^{3/2}}$$

07.25.03.am8i.01

$${}_2F_2(4, 5; 2, 3; z) = \frac{1}{72} e^z (z^4 + 18z^3 + 96z^2 + 168z + 72)$$

07.25.03.am8j.01

$${}_2F_2\left(4, 5; 2, \frac{7}{2}; z\right) = \frac{5(32z^5 + 464z^4 + 1776z^3 + 1656z^2 + 42z + 9)}{12288z^2} + \frac{5e^z \sqrt{\pi} (64z^6 + 960z^5 + 3984z^4 + 4704z^3 + 828z^2 - 36z - 9) \operatorname{erf}(\sqrt{z})}{24576z^{5/2}}$$

07.25.03.am8k.01

$${}_2F_2\left(4, 5; 2, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (64z^6 - 960z^5 + 3984z^4 - 4704z^3 + 828z^2 + 36z - 9) \operatorname{erfi}(\sqrt{z})}{24576z^{5/2}} - \frac{5(32z^5 - 464z^4 + 1776z^3 - 1656z^2 + 42z - 9)}{12288z^2}$$

07.25.03.am8l.01

$${}_2F_2(4, 5; 2, 4; z) = \frac{1}{24} e^z (z^3 + 12z^2 + 36z + 24)$$

07.25.03.am8m.01

$${}_2F_2\left(4, 5; 2, \frac{9}{2}; z\right) = \frac{35(32z^5 + 272z^4 + 432z^3 + 24z^2 - 6z + 45)}{24576z^3} + \frac{35e^z\sqrt{\pi}(64z^6 + 576z^5 + 1104z^4 + 288z^3 - 36z^2 + 36z - 45)\operatorname{erf}(\sqrt{z})}{49152z^{7/2}}$$

07.25.03.am8n.01

$${}_2F_2\left(4, 5; 2, \frac{9}{2}; -z\right) = \frac{35(32z^5 - 272z^4 + 432z^3 - 24z^2 - 6z - 45)}{24576z^3} - \frac{35e^{-z}\sqrt{\pi}(64z^6 - 576z^5 + 1104z^4 - 288z^3 - 36z^2 - 36z - 45)\operatorname{erfi}(\sqrt{z})}{49152z^{7/2}}$$

07.25.03.am8o.01

$${}_2F_2(4, 5; 2, 5; z) = \frac{1}{6}e^z(z^2 + 6z + 6)$$

07.25.03.am8p.01

$${}_2F_2\left(4, 5; 2, \frac{11}{2}; z\right) = \frac{105(32z^5 + 80z^4 + 48z^3 - 168z^2 + 570z - 1575)}{16384z^4} + \frac{105e^z\sqrt{\pi}(64z^6 + 192z^5 + 144z^4 - 288z^3 + 828z^2 - 1620z + 1575)\operatorname{erf}(\sqrt{z})}{32768z^{9/2}}$$

07.25.03.am8q.01

$${}_2F_2\left(4, 5; 2, \frac{11}{2}; -z\right) = \frac{105e^{-z}\sqrt{\pi}(64z^6 - 192z^5 + 144z^4 + 288z^3 + 828z^2 + 1620z + 1575)\operatorname{erfi}(\sqrt{z})}{32768z^{9/2}} - \frac{105(32z^5 - 80z^4 + 48z^3 + 168z^2 + 570z + 1575)}{16384z^4}$$

07.25.03.am8r.01

$${}_2F_2(4, 5; 2, 6; z) = \frac{5e^z(z^6 + 6z^4 - 24z^3 + 72z^2 - 144z + 144)}{6z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = \frac{5}{2}$

07.25.03.am8s.01

$${}_2F_2\left(4, 5; \frac{5}{2}, 3; z\right) = \frac{16z^4 + 240z^3 + 968z^2 + 996z + 45}{1536z} + \frac{e^z\sqrt{\pi}(32z^5 + 496z^4 + 2160z^3 + 2760z^2 + 570z - 45)\operatorname{erf}(\sqrt{z})}{3072z^{3/2}}$$

07.25.03.am8t.01

$${}_2F_2\left(4, 5; \frac{5}{2}, 3; -z\right) = \frac{-16z^4 + 240z^3 - 968z^2 + 996z - 45}{1536z} + \frac{e^{-z}\sqrt{\pi}(32z^5 - 496z^4 + 2160z^3 - 2760z^2 + 570z + 45)\operatorname{erfi}(\sqrt{z})}{3072z^{3/2}}$$

07.25.03.am8u.01

$${}_2F_2\left(4, 5; \frac{5}{2}, 4; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.am8v.01

$${}_2F_2\left(4, 5; \frac{5}{2}, 4; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.am8w.01

$${}_2F_2\left(4, 5; \frac{5}{2}, 5; z\right) = \frac{4z^2 + 16z + 3}{32z} + \frac{e^z \sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.am8x.01

$${}_2F_2\left(4, 5; \frac{5}{2}, 5; -z\right) = \frac{-4z^2 + 16z - 3}{32z} + \frac{e^{-z} \sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = 3$

07.25.03.am8y.01

$${}_2F_2(4, 5; 3, 3; z) = \frac{1}{36} e^z (z^3 + 13z^2 + 44z + 36)$$

07.25.03.am8z.01

$${}_2F_2\left(4, 5; 3, \frac{7}{2}; z\right) = \frac{5(16z^4 + 160z^3 + 336z^2 + 48z - 9)}{3072z^2} + \frac{5e^z \sqrt{\pi} (32z^5 + 336z^4 + 816z^3 + 312z^2 - 54z + 9) \operatorname{erf}(\sqrt{z})}{6144z^{5/2}}$$

07.25.03.am90.01

$${}_2F_2\left(4, 5; 3, \frac{7}{2}; -z\right) = \frac{5(16z^4 - 160z^3 + 336z^2 - 48z - 9)}{3072z^2} - \frac{5e^{-z} \sqrt{\pi} (32z^5 - 336z^4 + 816z^3 - 312z^2 - 54z - 9) \operatorname{erfi}(\sqrt{z})}{6144z^{5/2}}$$

07.25.03.am91.01

$${}_2F_2(4, 5; 3, 4; z) = \frac{1}{12} e^z (z^2 + 8z + 12)$$

07.25.03.am92.01

$${}_2F_2\left(4, 5; 3, \frac{9}{2}; z\right) = \frac{35(16z^4 + 80z^3 + 24z^2 - 4z - 15)}{6144z^3} + \frac{35e^z \sqrt{\pi} (32z^5 + 176z^4 + 112z^3 - 24z^2 - 6z + 15) \operatorname{erf}(\sqrt{z})}{12288z^{7/2}}$$

07.25.03.am93.01

$${}_2F_2\left(4, 5; 3, \frac{9}{2}; -z\right) = \frac{35e^{-z} \sqrt{\pi} (32z^5 - 176z^4 + 112z^3 + 24z^2 - 6z - 15) \operatorname{erfi}(\sqrt{z})}{12288z^{7/2}} - \frac{35(16z^4 - 80z^3 + 24z^2 + 4z - 15)}{6144z^3}$$

07.25.03.am94.01

$${}_2F_2(4, 5; 3, 5; z) = \frac{1}{3} e^z (z + 3)$$

07.25.03.am95.01

$${}_2F_2\left(4, 5; 3, \frac{11}{2}; z\right) = \frac{105(16z^4 + 32z^2 - 120z + 315)}{4096z^4} + \frac{105e^z \sqrt{\pi} (32z^5 + 16z^4 + 48z^3 - 168z^2 + 330z - 315) \operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.am96.01

$${}_2F_2\left(4, 5; 3, \frac{11}{2}; -z\right) = \frac{105(16z^4 + 32z^2 + 120z + 315)}{4096z^4} - \frac{105e^{-z}\sqrt{\pi}(32z^5 - 16z^4 + 48z^3 + 168z^2 + 330z + 315)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.am97.01

$${}_2F_2(4, 5; 3, 6; z) = \frac{5e^z(z^5 - 2z^4 + 8z^3 - 24z^2 + 48z - 48)}{3z^5} + \frac{80}{z^5}$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = \frac{7}{2}$

07.25.03.am98.01

$${}_2F_2\left(4, 5; \frac{7}{2}, 4; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5e^z\sqrt{\pi}(16z^4 + 96z^3 + 72z^2 - 24z + 9)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.am99.01

$${}_2F_2\left(4, 5; \frac{7}{2}, 4; -z\right) = \frac{5e^{-z}\sqrt{\pi}(16z^4 - 96z^3 + 72z^2 + 24z + 9)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.am9a.01

$${}_2F_2\left(4, 5; \frac{7}{2}, 5; z\right) = \frac{5(4z^2 + 4z - 3)}{64z^2} + \frac{5e^z\sqrt{\pi}(8z^3 + 12z^2 - 6z + 3)\operatorname{erf}(\sqrt{z})}{128z^{5/2}}$$

07.25.03.am9b.01

$${}_2F_2\left(4, 5; \frac{7}{2}, 5; -z\right) = \frac{5(4z^2 - 4z - 3)}{64z^2} - \frac{5e^{-z}\sqrt{\pi}(8z^3 - 12z^2 - 6z - 3)\operatorname{erfi}(\sqrt{z})}{128z^{5/2}}$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = 4$

07.25.03.am9c.01

$${}_2F_2(4, 5; 4, 4; z) = \frac{1}{4}e^z(z + 4)$$

07.25.03.am9d.01

$${}_2F_2\left(4, 5; 4, \frac{9}{2}; z\right) = \frac{35(8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35e^z\sqrt{\pi}(16z^4 + 32z^3 - 24z^2 + 24z - 15)\operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.am9e.01

$${}_2F_2\left(4, 5; 4, \frac{9}{2}; -z\right) = \frac{35(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35e^{-z}\sqrt{\pi}(16z^4 - 32z^3 - 24z^2 - 24z - 15)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.am9f.01

$${}_2F_2(4, 5; 4, 5; z) = e^z$$

07.25.03.am9g.01

$${}_2F_2\left(4, 5; 4, \frac{11}{2}; z\right) = \frac{315(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315e^z\sqrt{\pi}(16z^4 - 32z^3 + 72z^2 - 120z + 105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.am9h.01

$${}_2F_2\left(4, 5; 4, \frac{11}{2}; -z\right) = \frac{315 e^{-z} \sqrt{\pi} (16 z^4 + 32 z^3 + 72 z^2 + 120 z + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315 (8 z^3 + 20 z^2 + 50 z + 105)}{2048 z^4}$$

07.25.03.am9i.01

$${}_2F_2(4, 5; 4, 6; z) = \frac{5 e^z (z^4 - 4 z^3 + 12 z^2 - 24 z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = \frac{9}{2}$

07.25.03.am9j.01

$${}_2F_2\left(4, 5; \frac{9}{2}, 5; z\right) = \frac{35 (4 z^2 - 8 z + 15)}{128 z^3} + \frac{35 e^z \sqrt{\pi} (8 z^3 - 12 z^2 + 18 z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.am9k.01

$${}_2F_2\left(4, 5; \frac{9}{2}, 5; -z\right) = \frac{35 e^{-z} \sqrt{\pi} (8 z^3 + 12 z^2 + 18 z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{35 (4 z^2 + 8 z + 15)}{128 z^3}$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = 5$

07.25.03.am9l.01

$${}_2F_2(4, 5; 5, 5; z) = \frac{4 e^z (z^3 - 3 z^2 + 6 z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.am9m.01

$${}_2F_2\left(4, 5; 5, \frac{11}{2}; z\right) = \frac{315 (4 z^2 - 20 z + 105)}{256 z^4} + \frac{315 e^z \sqrt{\pi} (8 z^3 - 36 z^2 + 90 z - 105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.am9n.01

$${}_2F_2\left(4, 5; 5, \frac{11}{2}; -z\right) = \frac{315 (4 z^2 + 20 z + 105)}{256 z^4} - \frac{315 e^{-z} \sqrt{\pi} (8 z^3 + 36 z^2 + 90 z + 105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.am9o.01

$${}_2F_2(4, 5; 5, 6; z) = \frac{120 (z + 4)}{z^5} + \frac{20 e^z (z^3 - 6 z^2 + 18 z - 24)}{z^5}$$

For fixed z and $a_1 = 4, a_2 = 5, b_1 = 6$

07.25.03.am9p.01

$${}_2F_2(4, 5; 6, 6; z) = \frac{200 (3 z + 12 \gamma - 13)}{z^5} + \frac{100 e^z (z^2 - 8 z + 26)}{z^5} - \frac{2400 \operatorname{Ei}(z)}{z^5} - \frac{1200 \log\left(\frac{1}{z}\right)}{z^5} + \frac{1200 \log(z)}{z^5}$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = -\frac{11}{2}$

07.25.03.am9q.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) =$$

$$\frac{1}{306338830875} (65536z^{20} + 11927552z^{19} + 933052416z^{18} + 41316761600z^{17} + 1148262776832z^{16} +$$

$$20994094301184z^{15} + 257486839480320z^{14} + 2121551788769280z^{13} + 11582527180492800z^{12} +$$

$$40647187118039040z^{11} + 86998410287585280z^{10} + 103945471093094400z^9 +$$

$$59137895629612800z^8 + 11403454575744000z^7 + 221748880953600z^6 + 3519823507200z^5 +$$

$$521026506000z^4 + 21891870000z^3 + 178783605000z^2 + 222791877000z + 306338830875) +$$

$$\frac{1}{306338830875} \left(8192e^z\sqrt{\pi} (8z^{41/2} + 1460z^{39/2} + 114622z^{37/2} + 5099781z^{35/2} + 142635405z^{33/2} +$$

$$2630454090z^{31/2} + 32648601150z^{29/2} + 273567080160z^{27/2} + 1530309322080z^{25/2} +$$

$$5569241832000z^{23/2} + 12614576990400z^{21/2} + 16547010480000z^{19/2} +$$

$$11133973065600z^{17/2} + 3055670956800z^{15/2} + 193396896000z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.am9r.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; -z\right) =$$

$$\frac{1}{306338830875} (65536z^{20} - 11927552z^{19} + 933052416z^{18} - 41316761600z^{17} + 1148262776832z^{16} -$$

$$20994094301184z^{15} + 257486839480320z^{14} - 2121551788769280z^{13} + 11582527180492800z^{12} -$$

$$40647187118039040z^{11} + 86998410287585280z^{10} - 103945471093094400z^9 +$$

$$59137895629612800z^8 - 11403454575744000z^7 + 221748880953600z^6 - 3519823507200z^5 +$$

$$521026506000z^4 - 21891870000z^3 + 178783605000z^2 - 222791877000z + 306338830875) -$$

$$\frac{1}{306338830875} \left(8192e^{-z}\sqrt{\pi} (8z^{41/2} - 1460z^{39/2} + 114622z^{37/2} - 5099781z^{35/2} + 142635405z^{33/2} -$$

$$2630454090z^{31/2} + 32648601150z^{29/2} - 273567080160z^{27/2} + 1530309322080z^{25/2} -$$

$$5569241832000z^{23/2} + 12614576990400z^{21/2} - 16547010480000z^{19/2} +$$

$$11133973065600z^{17/2} - 3055670956800z^{15/2} + 193396896000z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.am9s.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{27848984625} (-32768z^{19} - 5505024z^{18} - 394977280z^{17} - 15921364992z^{16} - 399187132416z^{15} -$$

$$6512667525120z^{14} - 70310813368320z^{13} - 501112333209600z^{12} - 2312032647536640z^{11} -$$

$$6637103950878720z^{10} - 11064322879948800z^9 - 9482804215315200z^8 -$$

$$3273049067904000z^7 - 221748880953600z^6 + 3519823507200z^5 + 173675502000z^4 +$$

$$43783740000z^3 + 25540515000z^2 + 24754653000z + 27848984625) -$$

$$\frac{1}{27848984625} \left(4096e^z\sqrt{\pi} (8z^{39/2} + 1348z^{37/2} + 97098z^{35/2} + 3934605z^{33/2} + 99354750z^{31/2} +$$

$$1636906590z^{29/2} + 17916441840z^{27/2} + 130235545440z^{25/2} + 618660504000z^{23/2} + 1857278808000z^{21/2} +$$

$$3328182950400z^{19/2} + 3234278678400z^{17/2} + 1431137030400z^{15/2} + 193396896000z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.am9t.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{27\,848\,984\,625} (32\,768\,z^{19} - 5\,505\,024\,z^{18} + 394\,977\,280\,z^{17} - 15\,921\,364\,992\,z^{16} + 399\,187\,132\,416\,z^{15} - 6\,512\,667\,525\,120\,z^{14} + 70\,310\,813\,368\,320\,z^{13} - 501\,112\,333\,209\,600\,z^{12} + 2\,312\,032\,647\,536\,640\,z^{11} - 6\,637\,103\,950\,878\,720\,z^{10} + 11\,064\,322\,879\,948\,800\,z^9 - 9\,482\,804\,215\,315\,200\,z^8 + 3\,273\,049\,067\,904\,000\,z^7 - 221\,748\,880\,953\,600\,z^6 - 3\,519\,823\,507\,200\,z^5 + 173\,675\,502\,000\,z^4 - 43\,783\,740\,000\,z^3 + 25\,540\,515\,000\,z^2 - 24\,754\,653\,000\,z + 27\,848\,984\,625) - \frac{1}{27\,848\,984\,625} (4096 e^{-z} \sqrt{\pi} (8 z^{39/2} - 1348 z^{37/2} + 97\,098 z^{35/2} - 3\,934\,605 z^{33/2} + 99\,354\,750 z^{31/2} - 1\,636\,906\,590 z^{29/2} + 17\,916\,441\,840 z^{27/2} - 130\,235\,545\,440 z^{25/2} + 618\,660\,504\,000 z^{23/2} - 1\,857\,278\,808\,000 z^{21/2} + 3\,328\,182\,950\,400 z^{19/2} - 3\,234\,278\,678\,400 z^{17/2} + 1\,431\,137\,030\,400 z^{15/2} - 193\,396\,896\,000 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.am9u.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{3\,094\,331\,625} (16\,384\,z^{18} + 2\,523\,136\,z^{17} + 164\,696\,064\,z^{16} + 5\,985\,570\,816\,z^{15} + 133\,831\,557\,120\,z^{14} + 1\,920\,816\,414\,720\,z^{13} + 17\,928\,200\,908\,800\,z^{12} + 107\,948\,035\,399\,680\,z^{11} + 407\,449\,007\,032\,320\,z^{10} + 911\,989\,986\,969\,600\,z^9 + 1\,094\,407\,248\,211\,200\,z^8 + 575\,394\,444\,979\,200\,z^7 + 73\,916\,293\,651\,200\,z^6 - 3\,519\,823\,507\,200\,z^5 + 173\,675\,502\,000\,z^4 + 14\,594\,580\,000\,z^3 + 5\,108\,103\,000\,z^2 + 3\,536\,379\,000\,z + 3\,094\,331\,625) + \frac{1}{3\,094\,331\,625} (2048 e^{-z} \sqrt{\pi} (8 z^{37/2} + 1236 z^{35/2} + 81\,030 z^{33/2} + 2\,962\,245 z^{31/2} + 66\,770\,055 z^{29/2} + 969\,206\,040 z^{27/2} + 9\,193\,587\,480 z^{25/2} + 56\,686\,845\,600 z^{23/2} + 221\,852\,584\,800 z^{21/2} + 526\,163\,299\,200 z^{19/2} + 697\,366\,454\,400 z^{17/2} + 444\,812\,860\,800 z^{15/2} + 96\,698\,448\,000 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.am9v.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) = \frac{1}{3\,094\,331\,625} (16\,384\,z^{18} - 2\,523\,136\,z^{17} + 164\,696\,064\,z^{16} - 5\,985\,570\,816\,z^{15} + 133\,831\,557\,120\,z^{14} - 1\,920\,816\,414\,720\,z^{13} + 17\,928\,200\,908\,800\,z^{12} - 107\,948\,035\,399\,680\,z^{11} + 407\,449\,007\,032\,320\,z^{10} - 911\,989\,986\,969\,600\,z^9 + 1\,094\,407\,248\,211\,200\,z^8 - 575\,394\,444\,979\,200\,z^7 + 73\,916\,293\,651\,200\,z^6 + 3\,519\,823\,507\,200\,z^5 + 173\,675\,502\,000\,z^4 - 14\,594\,580\,000\,z^3 + 5\,108\,103\,000\,z^2 - 3\,536\,379\,000\,z + 3\,094\,331\,625) - \frac{1}{3\,094\,331\,625} (2048 e^{-z} \sqrt{\pi} (8 z^{37/2} - 1236 z^{35/2} + 81\,030 z^{33/2} - 2\,962\,245 z^{31/2} + 66\,770\,055 z^{29/2} - 969\,206\,040 z^{27/2} + 9\,193\,587\,480 z^{25/2} - 56\,686\,845\,600 z^{23/2} + 221\,852\,584\,800 z^{21/2} - 526\,163\,299\,200 z^{19/2} + 697\,366\,454\,400 z^{17/2} - 444\,812\,860\,800 z^{15/2} + 96\,698\,448\,000 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.am9w.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{442047375} \left(-8192 z^{17} - 1146880 z^{16} - 67442688 z^{15} - 2184036352 z^{14} - 42923704320 z^{13} - 532184002560 z^{12} - \right.$$

$$4193463902208 z^{11} - 20647496263680 z^{10} - 60781534894080 z^9 -$$

$$98129585030400 z^8 - 72768805401600 z^7 - 14783258730240 z^6 + 1173274502400 z^5 -$$

$$173675502000 z^4 + 14594580000 z^3 + 1702701000 z^2 + 707275800 z + 442047375) -$$

$$\frac{1}{442047375} \left(1024 e^{-z} \sqrt{\pi} \left(8 z^{35/2} + 1124 z^{33/2} + 66418 z^{31/2} + 2165229 z^{29/2} + 42952536 z^{27/2} + \right. \right.$$

$$539680680 z^{25/2} + 4336461360 z^{23/2} + 21995154720 z^{21/2} + 67886501760 z^{19/2} +$$

$$\left. \left. 118844288640 z^{17/2} + 103145011200 z^{15/2} + 32232816000 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.am9x.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{442047375} \left(8192 z^{17} - 1146880 z^{16} + 67442688 z^{15} - 2184036352 z^{14} + 42923704320 z^{13} - 532184002560 z^{12} + \right.$$

$$4193463902208 z^{11} - 20647496263680 z^{10} + 60781534894080 z^9 -$$

$$98129585030400 z^8 + 72768805401600 z^7 - 14783258730240 z^6 - 1173274502400 z^5 -$$

$$173675502000 z^4 - 14594580000 z^3 + 1702701000 z^2 - 707275800 z + 442047375) -$$

$$\frac{1}{442047375} \left(1024 e^{-z} \sqrt{\pi} \left(8 z^{35/2} - 1124 z^{33/2} + 66418 z^{31/2} - 2165229 z^{29/2} + 42952536 z^{27/2} - \right. \right.$$

$$539680680 z^{25/2} + 4336461360 z^{23/2} - 21995154720 z^{21/2} + 67886501760 z^{19/2} -$$

$$\left. \left. 118844288640 z^{17/2} + 103145011200 z^{15/2} - 32232816000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.am9y.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{88409475} \left(4096 z^{16} + 516096 z^{15} + 27014144 z^{14} + 768101376 z^{13} + 13025617920 z^{12} + 136188401664 z^{11} + \right.$$

$$876703094784 z^{10} + 3364954306560 z^9 + 7150527901440 z^8 +$$

$$7168578278400 z^7 + 2111894104320 z^6 - 234654900480 z^5 + 57891834000 z^4 -$$

$$14594580000 z^3 + 1702701000 z^2 + 235758600 z + 88409475) + \frac{1}{88409475}$$

$$\left(512 e^z \sqrt{\pi} \left(8 z^{33/2} + 1012 z^{31/2} + 53262 z^{29/2} + 1526085 z^{27/2} + 26165601 z^{25/2} + 278024670 z^{23/2} + 1834239330 \right. \right.$$

$$\left. \left. z^{21/2} + 7321240080 z^{19/2} + 16637821200 z^{17/2} + 19017361440 z^{15/2} + 8058204000 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.am9z.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{88409475} (4096 z^{16} - 516096 z^{15} + 27014144 z^{14} - 768101376 z^{13} + 13025617920 z^{12} - 136188401664 z^{11} +$$

$$876703094784 z^{10} - 3364954306560 z^9 + 7150527901440 z^8 -$$

$$7168578278400 z^7 + 2111894104320 z^6 + 234654900480 z^5 + 57891834000 z^4 +$$

$$14594580000 z^3 + 1702701000 z^2 - 235758600 z + 88409475) - \frac{1}{88409475}$$

$$\left(512 e^{-z} \sqrt{\pi} (8 z^{33/2} - 1012 z^{31/2} + 53262 z^{29/2} - 1526085 z^{27/2} + 26165601 z^{25/2} - 278024670 z^{23/2} + 1834239330$$

$$z^{21/2} - 7321240080 z^{19/2} + 16637821200 z^{17/2} - 19017361440 z^{15/2} + 8058204000 z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ama0.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{29469825} (-2048 z^{15} - 229376 z^{14} - 10526208 z^{13} - 257848320 z^{12} - 3681463296 z^{11} - 31396349952 z^{10} -$$

$$157346703360 z^9 - 435787672320 z^8 - 576674380800 z^7 - 234654900480 z^6 + 33522128640 z^5 -$$

$$11578366800 z^4 + 4864860000 z^3 - 1702701000 z^2 + 235758600 z + 29469825) -$$

$$\frac{1}{29469825} (256 e^z \sqrt{\pi} (8 z^{31/2} + 900 z^{29/2} + 41562 z^{27/2} + 1027341 z^{25/2} + 14864850 z^{23/2} + 129376170 z^{21/2} +$$

$$669853800 z^{19/2} + 1962409680 z^{17/2} + 2900953440 z^{15/2} + 1611640800 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ama1.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{29469825} (2048 z^{15} - 229376 z^{14} + 10526208 z^{13} - 257848320 z^{12} + 3681463296 z^{11} - 31396349952 z^{10} +$$

$$157346703360 z^9 - 435787672320 z^8 + 576674380800 z^7 - 234654900480 z^6 - 33522128640 z^5 -$$

$$11578366800 z^4 - 4864860000 z^3 - 1702701000 z^2 - 235758600 z + 29469825) -$$

$$\frac{1}{29469825} (256 e^{-z} \sqrt{\pi} (8 z^{31/2} - 900 z^{29/2} + 41562 z^{27/2} - 1027341 z^{25/2} + 14864850 z^{23/2} - 129376170 z^{21/2} +$$

$$669853800 z^{19/2} - 1962409680 z^{17/2} + 2900953440 z^{15/2} - 1611640800 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ama2.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{29469825} (1024 z^{14} + 100352 z^{13} + 3959040 z^{12} + 81464576 z^{11} + 946480128 z^{10} + 6269598720 z^9 +$$

$$22634599680 z^8 + 39070080000 z^7 + 21332263680 z^6 - 3724680960 z^5 +$$

$$1654052400 z^4 - 972972000 z^3 + 567567000 z^2 - 235758600 z + 29469825) +$$

$$\frac{1}{29469825} (128 e^z \sqrt{\pi} (8 z^{29/2} + 788 z^{27/2} + 31318 z^{25/2} + 651525 z^{23/2} + 7698075 z^{21/2} +$$

$$52395420 z^{19/2} + 198295020 z^{17/2} + 376049520 z^{15/2} + 268606800 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ama3.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{29469825} (1024 z^{14} - 100352 z^{13} + 3959040 z^{12} - 81464576 z^{11} + 946480128 z^{10} - 6269598720 z^9 + 22634599680 z^8 - 39070080000 z^7 + 21332263680 z^6 + 3724680960 z^5 + 1654052400 z^4 + 972972000 z^3 + 567567000 z^2 + 235758600 z + 29469825) - \frac{1}{29469825} (128 e^{-z} \sqrt{\pi} (8 z^{29/2} - 788 z^{27/2} + 31318 z^{25/2} - 651525 z^{23/2} + 7698075 z^{21/2} - 52395420 z^{19/2} + 198295020 z^{17/2} - 376049520 z^{15/2} + 268606800 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ama4.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{58939650} (e^z (2048 z^{14} + 187392 z^{13} + 6845952 z^{12} + 129089280 z^{11} + 1355498496 z^{10} + 7958079360 z^9 + 24690536640 z^8 + 34455183840 z^7 + 12031173000 z^6 - 3123115380 z^5 + 1767253950 z^4 - 1161485325 z^3 + 690903675 z^2 - 294698250 z + 58939650))$$

07.25.03.ama5.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{29469825} (64 e^z \sqrt{\pi} (8 z^7 + 676 z^6 + 22530 z^5 + 381165 z^4 + 3505260 z^3 + 17342820 z^2 + 42209640 z + 38372400) \operatorname{erf}(\sqrt{z}) z^{13/2}) + \frac{1}{29469825} (512 z^{13} + 43008 z^{12} + 1420672 z^{11} + 23705088 z^{10} + 213143040 z^9 + 1013633280 z^8 + 2277227520 z^7 + 1640943360 z^6 - 338607360 z^5 + 183783600 z^4 - 138996000 z^3 + 113513400 z^2 - 78586200 z + 29469825)$$

07.25.03.ama6.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{29469825} (64 e^{-z} \sqrt{\pi} (8 z^7 - 676 z^6 + 22530 z^5 - 381165 z^4 + 3505260 z^3 - 17342820 z^2 + 42209640 z - 38372400) \operatorname{erfi}(\sqrt{z}) z^{13/2}) + \frac{1}{29469825} (-512 z^{13} + 43008 z^{12} - 1420672 z^{11} + 23705088 z^{10} - 213143040 z^9 + 1013633280 z^8 - 2277227520 z^7 + 1640943360 z^6 + 338607360 z^5 + 183783600 z^4 + 138996000 z^3 + 113513400 z^2 + 78586200 z + 29469825)$$

07.25.03.ama7.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{58939650} (e^z (2048 z^{13} + 158720 z^{12} + 4782592 z^{11} + 71698176 z^{10} + 566818560 z^9 + 2289893760 z^8 + 4081492800 z^7 + 1803241440 z^6 - 591517080 z^5 + 425987100 z^4 - 362681550 z^3 + 289240875 z^2 - 176818950 z + 58939650))$$

07.25.03.ama8.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{9823275} 32 e^z \sqrt{\pi} (8 z^6 + 564 z^5 + 15198 z^4 + 198789 z^3 + 1318581 z^2 + 4157010 z + 4796550) \operatorname{erf}(\sqrt{z}) z^{13/2} + \frac{1}{9823275} (256 z^{12} + 17920 z^{11} + 477504 z^{10} + 6131136 z^9 + 39346560 z^8 + 115896960 z^7 + 109396224 z^6 - 26046720 z^5 + 16707600 z^4 - 15444000 z^3 + 16216200 z^2 - 15717240 z + 9823275)$$

07.25.03.ama9.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{9823275} (256 z^{12} - 17920 z^{11} + 477504 z^{10} - 6131136 z^9 + 39346560 z^8 - 115896960 z^7 + 109396224 z^6 - 26046720 z^5 + 16707600 z^4 + 15444000 z^3 + 16216200 z^2 + 15717240 z + 9823275) - \frac{1}{9823275} 32 e^{-z} \sqrt{\pi} z^{13/2} (8 z^6 - 564 z^5 + 15198 z^4 - 198789 z^3 + 1318581 z^2 - 4157010 z + 4796550) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amaa.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{29469825} (e^z (2048 z^{12} + 130048 z^{11} + 3091968 z^{10} + 34594560 z^9 + 186278400 z^8 + 427109760 z^7 + 237504960 z^6 - 96798240 z^5 + 86070600 z^4 - 90436500 z^3 + 89500950 z^2 - 68762925 z + 29469825))$$

07.25.03.amab.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{16 e^z \sqrt{\pi} (8 z^5 + 452 z^4 + 9322 z^3 + 86925 z^2 + 362406 z + 532950) \operatorname{erf}(\sqrt{z}) z^{13/2}}{1964655} + \frac{1}{1964655} (128 z^{11} + 7168 z^{10} + 145632 z^9 + 1321408 z^8 + 5202240 z^7 + 6435072 z^6 - 1736448 z^5 + 1285200 z^4 - 1404000 z^3 + 1801800 z^2 - 2245320 z + 1964655)$$

07.25.03.amac.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{16 e^{-z} \sqrt{\pi} (8 z^5 - 452 z^4 + 9322 z^3 - 86925 z^2 + 362406 z - 532950) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{1964655} + \frac{1}{1964655} (-128 z^{11} + 7168 z^{10} - 145632 z^9 + 1321408 z^8 - 5202240 z^7 + 6435072 z^6 + 1736448 z^5 + 1285200 z^4 + 1404000 z^3 + 1801800 z^2 + 2245320 z + 1964655)$$

07.25.03.amad.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{9823275} (e^z (2048 z^{11} + 101376 z^{10} + 1774080 z^9 + 13305600 z^8 + 39916800 z^7 + 27941760 z^6 - 13970880 z^5 + 14968800 z^4 - 18711000 z^3 + 21829500 z^2 - 19646550 z + 9823275))$$

07.25.03.amae.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{8 e^z \sqrt{\pi} (8 z^4 + 340 z^3 + 4902 z^2 + 28\,101 z + 53\,295) \operatorname{erf}(\sqrt{z}) z^{13/2}}{280\,665} + \frac{1}{280\,665} (64 z^{10} + 2688 z^9 + 37\,904 z^8 + 207\,120 z^7 + 338\,688 z^6 - 102\,144 z^5 + 85\,680 z^4 - 108\,000 z^3 + 163\,800 z^2 - 249\,480 z + 280\,665)$$

07.25.03.amaf.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{280\,665} (64 z^{10} - 2688 z^9 + 37\,904 z^8 - 207\,120 z^7 + 338\,688 z^6 + 102\,144 z^5 + 85\,680 z^4 + 108\,000 z^3 + 163\,800 z^2 + 249\,480 z + 280\,665) - \frac{8 e^{-z} \sqrt{\pi} z^{13/2} (8 z^4 - 340 z^3 + 4902 z^2 - 28\,101 z + 53\,295) \operatorname{erfi}(\sqrt{z})}{280\,665}$$

07.25.03.amag.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{9\,823\,275 z^4} (4 e^z (2048 z^{14} + 72\,704 z^{13} + 828\,928 z^{12} + 3\,358\,464 z^{11} + 29\,736\,96 z^{10} - 1\,795\,200 z^9 + 2\,185\,920 z^8 - 2\,518\,560 z^7 - 1\,081\,080 z^6 + 28\,315\,980 z^5 - 161\,226\,450 z^4 + 654\,729\,075 z^3 - 1\,964\,187\,225 z^2 + 3\,928\,374\,450 z - 3\,928\,374\,450)) + \frac{33\,592}{21 z^4}$$

07.25.03.amah.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{4 e^z \sqrt{\pi} (8 z^3 + 228 z^2 + 1938 z + 4845) \operatorname{erf}(\sqrt{z}) z^{13/2}}{31\,185} + \frac{32 z^9 + 896 z^8 + 7320 z^7 + 16\,128 z^6 - 5376 z^5 + 5040 z^4 - 7200 z^3 + 12\,600 z^2 - 22\,680 z + 31\,185}{31\,185}$$

07.25.03.amai.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{4 e^{-z} \sqrt{\pi} (8 z^3 - 228 z^2 + 1938 z - 4845) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{31\,185} + \frac{1}{31\,185} (-32 z^9 + 896 z^8 - 7320 z^7 + 16\,128 z^6 + 5376 z^5 + 5040 z^4 + 7200 z^3 + 12\,600 z^2 + 22\,680 z + 31\,185)$$

07.25.03.amaj.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \frac{167\,960(z-84)}{21 z^5} + \frac{1}{1\,964\,655 z^5} (4 e^z (2048 z^{14} + 44\,032 z^{13} + 256\,512 z^{12} + 280\,320 z^{11} - 109\,824 z^{10} - 696\,960 z^9 + 845\,856 z^8 - 70\,187\,040 z^7 + 490\,228\,200 z^6 - 2\,913\,053\,220 z^5 + 14\,404\,039\,650 z^4 - 56\,961\,429\,525 z^3 + 168\,920\,101\,350 z^2 - 333\,911\,828\,250 z + 329\,983\,453\,800))$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = -\frac{9}{2}$

07.25.03.amak.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{2531725875} (16384 z^{18} + 2539520 z^{17} + 167022592 z^{16} + 6124683264 z^{15} + 138427146240 z^{14} + 2013354393600 z^{13} +$$

$$19110847795200 z^{12} + 117638826762240 z^{11} + 457746413230080 z^{10} + 1071661491763200 z^9 +$$

$$1384655212281600 z^8 + 843389366400000 z^7 + 172476163641600 z^6 + 3519823507200 z^5 +$$

$$57891834000 z^4 + 8756748000 z^3 + 3648645000 z^2 + 2750517000 z + 2531725875) +$$

$$\frac{1}{2531725875} (2048 e^z \sqrt{\pi} (8 z^{37/2} + 1244 z^{35/2} + 82170 z^{33/2} + 3030735 z^{31/2} + 69047400 z^{29/2} +$$

$$1015479990 z^{27/2} + 9792601920 z^{25/2} + 61687332000 z^{23/2} + 248536512000 z^{21/2} + 614596248000 z^{19/2} +$$

$$869797958400 z^{17/2} + 624884803200 z^{15/2} + 181367424000 z^{13/2} + 12029472000 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amal.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{2531725875} (16384 z^{18} - 2539520 z^{17} + 167022592 z^{16} - 6124683264 z^{15} + 138427146240 z^{14} - 2013354393600 z^{13} +$$

$$19110847795200 z^{12} - 117638826762240 z^{11} + 457746413230080 z^{10} - 1071661491763200 z^9 +$$

$$1384655212281600 z^8 - 843389366400000 z^7 + 172476163641600 z^6 - 3519823507200 z^5 +$$

$$57891834000 z^4 - 8756748000 z^3 + 3648645000 z^2 - 2750517000 z + 2531725875) -$$

$$\frac{1}{2531725875} (2048 e^{-z} \sqrt{\pi} (8 z^{37/2} - 1244 z^{35/2} + 82170 z^{33/2} - 3030735 z^{31/2} + 69047400 z^{29/2} -$$

$$1015479990 z^{27/2} + 9792601920 z^{25/2} - 61687332000 z^{23/2} + 248536512000 z^{21/2} - 614596248000 z^{19/2} +$$

$$869797958400 z^{17/2} - 624884803200 z^{15/2} + 181367424000 z^{13/2} - 12029472000 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amam.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{281302875} (-8192 z^{17} - 1163264 z^{16} - 69556224 z^{15} - 2297794560 z^{14} - 46268989440 z^{13} - 591323443200 z^{12} -$$

$$4845395681280 z^{11} - 25148703098880 z^{10} - 79835752396800 z^9 -$$

$$145123982035200 z^8 - 133997460710400 z^7 - 49279934995200 z^6 - 3519823507200 z^5 +$$

$$57891834000 z^4 + 2918916000 z^3 + 729729000 z^2 + 392931000 z + 281302875) -$$

$$\frac{1}{281302875} (1024 e^z \sqrt{\pi} (8 z^{35/2} + 1140 z^{33/2} + 68490 z^{31/2} + 2277345 z^{29/2} + 46273950 z^{27/2} +$$

$$599014440 z^{25/2} + 5000486400 z^{23/2} + 26683927200 z^{21/2} + 88432948800 z^{19/2} +$$

$$172431504000 z^{17/2} + 180071942400 z^{15/2} + 84668976000 z^{13/2} + 12029472000 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aman.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{281\,302\,875} \left(8192 z^{17} - 1\,163\,264 z^{16} + 69\,556\,224 z^{15} - 2\,297\,794\,560 z^{14} + 46\,268\,989\,440 z^{13} - 591\,323\,443\,200 z^{12} + \right.$$

$$4\,845\,395\,681\,280 z^{11} - 25\,148\,703\,098\,880 z^{10} + 79\,835\,752\,396\,800 z^9 -$$

$$145\,123\,982\,035\,200 z^8 + 133\,997\,460\,710\,400 z^7 - 49\,279\,934\,995\,200 z^6 + 3\,519\,823\,507\,200 z^5 +$$

$$57\,891\,834\,000 z^4 - 2\,918\,916\,000 z^3 + 729\,729\,000 z^2 - 392\,931\,000 z + 281\,302\,875 \Big) -$$

$$\frac{1}{281\,302\,875} \left(1024 e^{-z} \sqrt{\pi} \left(8 z^{35/2} - 1140 z^{33/2} + 68\,490 z^{31/2} - 2\,277\,345 z^{29/2} + 46\,273\,950 z^{27/2} - \right. \right.$$

$$599\,014\,440 z^{25/2} + 5\,000\,486\,400 z^{23/2} - 26\,683\,927\,200 z^{21/2} + 88\,432\,948\,800 z^{19/2} -$$

$$\left. \left. 172\,431\,504\,000 z^{17/2} + 180\,071\,942\,400 z^{15/2} - 84\,668\,976\,000 z^{13/2} + 12\,029\,472\,000 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amao.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{40\,186\,125} \left(4096 z^{16} + 528\,384 z^{15} + 28\,439\,552 z^{14} + 836\,321\,280 z^{13} + 14\,784\,860\,160 z^{12} + 162\,982\,944\,768 z^{11} + \right.$$

$$1\,125\,301\,708\,800 z^{10} + 4\,763\,554\,375\,680 z^9 + 11\,748\,599\,251\,200 z^8 + 15\,307\,163\,827\,200 z^7 + 8\,624\,169\,066\,240 z^6 +$$

$$1\,173\,274\,502\,400 z^5 - 57\,891\,834\,000 z^4 + 2\,918\,916\,000 z^3 + 243\,243\,000 z^2 + 78\,586\,200 z + 40\,186\,125 \Big) +$$

$$\frac{1}{40\,186\,125} \left(512 e^z \sqrt{\pi} \left(8 z^{33/2} + 1036 z^{31/2} + 56\,058 z^{29/2} + 1\,660\,707 z^{27/2} + 29\,666\,880 z^{25/2} + \right. \right.$$

$$332\,012\,520 z^{23/2} + 2\,344\,386\,240 z^{21/2} + 10\,273\,223\,520 z^{19/2} + 26\,793\,607\,680 z^{17/2} +$$

$$\left. \left. 38\,463\,465\,600 z^{15/2} + 26\,218\,080\,000 z^{13/2} + 6\,014\,736\,000 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amap.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{40\,186\,125} \left(4096 z^{16} - 528\,384 z^{15} + 28\,439\,552 z^{14} - 836\,321\,280 z^{13} + 14\,784\,860\,160 z^{12} - 162\,982\,944\,768 z^{11} + \right.$$

$$1\,125\,301\,708\,800 z^{10} - 4\,763\,554\,375\,680 z^9 + 11\,748\,599\,251\,200 z^8 - 15\,307\,163\,827\,200 z^7 + 8\,624\,169\,066\,240 z^6 -$$

$$1\,173\,274\,502\,400 z^5 - 57\,891\,834\,000 z^4 - 2\,918\,916\,000 z^3 + 243\,243\,000 z^2 - 78\,586\,200 z + 40\,186\,125 \Big) -$$

$$\frac{1}{40\,186\,125} \left(512 e^{-z} \sqrt{\pi} \left(8 z^{33/2} - 1036 z^{31/2} + 56\,058 z^{29/2} - 1\,660\,707 z^{27/2} + 29\,666\,880 z^{25/2} - \right. \right.$$

$$332\,012\,520 z^{23/2} + 2\,344\,386\,240 z^{21/2} - 10\,273\,223\,520 z^{19/2} + 26\,793\,607\,680 z^{17/2} -$$

$$\left. \left. 38\,463\,465\,600 z^{15/2} + 26\,218\,080\,000 z^{13/2} - 6\,014\,736\,000 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amaq.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{8037225} \left(-2048 z^{15} - 237568 z^{14} - 11369984 z^{13} - 293207040 z^{12} - 4465757184 z^{11} - 41433102336 z^{10} - \right.$$

$$233100011520 z^9 - 766345224960 z^8 - 1356430924800 z^7 - 1085379160320 z^6 -$$

$$234654900480 z^5 + 19297278000 z^4 - 2918916000 z^3 + 243243000 z^2 + 26195400 z + 8037225 \left. \right) -$$

$$\frac{1}{8037225} \left(256 e^z \sqrt{\pi} \left(8 z^{31/2} + 932 z^{29/2} + 44874 z^{27/2} + 1167093 z^{25/2} + 17995950 z^{23/2} + 170048970 z^{21/2} + \right. \right.$$

$$983994480 z^{19/2} + 3385262160 z^{17/2} + 6482034720 z^{15/2} + 6053292000 z^{13/2} + 2004912000 z^{11/2} \left. \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amar.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{8037225} \left(2048 z^{15} - 237568 z^{14} + 11369984 z^{13} - 293207040 z^{12} + 4465757184 z^{11} - 41433102336 z^{10} + \right.$$

$$233100011520 z^9 - 766345224960 z^8 + 1356430924800 z^7 - 1085379160320 z^6 +$$

$$234654900480 z^5 + 19297278000 z^4 + 2918916000 z^3 + 243243000 z^2 - 26195400 z + 8037225 \left. \right) -$$

$$\frac{1}{8037225} \left(256 e^{-z} \sqrt{\pi} \left(8 z^{31/2} - 932 z^{29/2} + 44874 z^{27/2} - 1167093 z^{25/2} + 17995950 z^{23/2} - 170048970 z^{21/2} + \right. \right.$$

$$983994480 z^{19/2} - 3385262160 z^{17/2} + 6482034720 z^{15/2} - 6053292000 z^{13/2} + 2004912000 z^{11/2} \left. \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amas.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{2679075} \left(1024 z^{14} + 105472 z^{13} + 4419840 z^{12} + 98036736 z^{11} + 1254594048 z^{10} + 9469163520 z^9 + \right.$$

$$41319694080 z^8 + 97469568000 z^7 + 106340532480 z^6 + 33522128640 z^5 -$$

$$3859455600 z^4 + 972972000 z^3 - 243243000 z^2 + 26195400 z + 2679075 \left. \right) +$$

$$\frac{1}{2679075} \left(128 e^z \sqrt{\pi} \left(8 z^{29/2} + 828 z^{27/2} + 34938 z^{25/2} + 782775 z^{23/2} + 10168200 z^{21/2} + 78535170 z^{19/2} + \right. \right.$$

$$355713120 z^{17/2} + 895270320 z^{15/2} + 1110412800 z^{13/2} + 501228000 z^{11/2} \left. \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.amat.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{2679075} \left(1024 z^{14} - 105472 z^{13} + 4419840 z^{12} - 98036736 z^{11} + 1254594048 z^{10} - 9469163520 z^9 + \right.$$

$$41319694080 z^8 - 97469568000 z^7 + 106340532480 z^6 - 33522128640 z^5 -$$

$$3859455600 z^4 - 972972000 z^3 - 243243000 z^2 - 26195400 z + 2679075 \left. \right) -$$

$$\frac{1}{2679075} \left(128 e^{-z} \sqrt{\pi} \left(8 z^{29/2} - 828 z^{27/2} + 34938 z^{25/2} - 782775 z^{23/2} + 10168200 z^{21/2} - 78535170 z^{19/2} + \right. \right.$$

$$355713120 z^{17/2} - 895270320 z^{15/2} + 1110412800 z^{13/2} - 501228000 z^{11/2} \left. \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amau.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{2679075} (-512 z^{13} - 46080 z^{12} - 1657216 z^{11} - 30811392 z^{10} - 319956480 z^9 - 1868509440 z^8 - 5839948800 z^7 - 8500826880 z^6 - 3724680960 z^5 + 551350800 z^4 - 194594400 z^3 + 81081000 z^2 - 26195400 z + 2679075) - \frac{1}{2679075} (64 e^z \sqrt{\pi} (8 z^{27/2} + 724 z^{25/2} + 26250 z^{23/2} + 494025 z^{21/2} + 5227950 z^{19/2} + 31483620 z^{17/2} + 103844160 z^{15/2} + 168361200 z^{13/2} + 100245600 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amav.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{2679075} (512 z^{13} - 46080 z^{12} + 1657216 z^{11} - 30811392 z^{10} + 319956480 z^9 - 1868509440 z^8 + 5839948800 z^7 - 8500826880 z^6 + 3724680960 z^5 + 551350800 z^4 + 194594400 z^3 + 81081000 z^2 + 26195400 z + 2679075) - \frac{1}{2679075} (64 e^{-z} \sqrt{\pi} (8 z^{27/2} - 724 z^{25/2} + 26250 z^{23/2} - 494025 z^{21/2} + 5227950 z^{19/2} - 31483620 z^{17/2} + 103844160 z^{15/2} - 168361200 z^{13/2} + 100245600 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amaw.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, 1; z\right) = -\frac{1}{5358150} (e^z (1024 z^{13} + 86016 z^{12} + 2863872 z^{11} + 48793344 z^{10} + 458179200 z^9 + 2375412480 z^8 + 6406737120 z^7 + 7617486240 z^6 + 2206843380 z^5 - 458136000 z^4 + 196422975 z^3 - 89685225 z^2 + 31553550 z - 5358150))$$

07.25.03.amax.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{2679075} (-256 z^{12} - 19712 z^{11} - 592192 z^{10} - 8901120 z^9 - 71239680 z^8 - 296893440 z^7 - 571656960 z^6 - 338607360 z^5 + 61261200 z^4 - 27799200 z^3 + 16216200 z^2 - 8731800 z + 2679075) - \frac{1}{2679075} (32 e^z \sqrt{\pi} z^{11/2} (8 z^7 + 620 z^6 + 18810 z^5 + 287115 z^4 + 2356800 z^3 + 10272420 z^2 + 21664800 z + 16707600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amay.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{2679075} (32 e^{-z} \sqrt{\pi} (8 z^7 - 620 z^6 + 18810 z^5 - 287115 z^4 + 2356800 z^3 - 10272420 z^2 + 21664800 z - 16707600) \operatorname{erfi}(\sqrt{z}) z^{11/2}) + \frac{1}{2679075} (-256 z^{12} + 19712 z^{11} - 592192 z^{10} + 8901120 z^9 - 71239680 z^8 + 296893440 z^7 - 571656960 z^6 + 338607360 z^5 + 61261200 z^4 + 27799200 z^3 + 16216200 z^2 + 8731800 z + 2679075)$$

07.25.03.amaz.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, 2; z\right) =$$

$$-\frac{1}{5358150} \left(e^z (1024 z^{12} + 72704 z^{11} + 1991424 z^{10} + 26887680 z^9 + 189302400 z^8 + 671690880 z^7 + 1033210080 z^6 + 385015680 z^5 - 103250700 z^4 + 58117500 z^3 - 36047025 z^2 + 18455850 z - 5358150) \right)$$

07.25.03.amb0.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) =$$

$$\frac{1}{893025} \left(-128 z^{11} - 8192 z^{10} - 197856 z^9 - 2278080 z^8 - 12928320 z^7 - 33018624 z^6 - 26046720 z^5 + 5569200 z^4 - 3088800 z^3 + 2316600 z^2 - 1746360 z + 893025 \right) -$$

$$\frac{1}{893025} 16 e^z \sqrt{\pi} z^{11/2} (8 z^6 + 516 z^5 + 12618 z^4 + 148317 z^3 + 873630 z^2 + 2409750 z + 2386800) \operatorname{erf}(\sqrt{z})$$

07.25.03.amb1.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) =$$

$$\frac{1}{893025} \left(128 z^{11} - 8192 z^{10} + 197856 z^9 - 2278080 z^8 + 12928320 z^7 - 33018624 z^6 + 26046720 z^5 + 5569200 z^4 + 3088800 z^3 + 2316600 z^2 + 1746360 z + 893025 \right) -$$

$$\frac{1}{893025} 16 e^{-z} \sqrt{\pi} z^{11/2} (8 z^6 - 516 z^5 + 12618 z^4 - 148317 z^3 + 873630 z^2 - 2409750 z + 2386800) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amb2.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, 3; z\right) =$$

$$-\frac{1}{2679075} \left(e^z (1024 z^{11} + 59392 z^{10} + 1278720 z^9 + 12821760 z^8 + 61084800 z^7 + 121927680 z^6 + 57788640 z^5 - 19504800 z^4 + 13778100 z^3 - 10773000 z^2 + 7044975 z - 2679075) \right)$$

07.25.03.amb3.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) =$$

$$\frac{1}{178605} \left(-64 z^{10} - 3264 z^9 - 59792 z^8 - 482880 z^7 - 1661472 z^6 - 1736448 z^5 + 428400 z^4 - 280800 z^3 + 257400 z^2 - 249480 z + 178605 \right) -$$

$$\frac{8 e^z \sqrt{\pi} z^{11/2} (8 z^5 + 412 z^4 + 7674 z^3 + 63903 z^2 + 234600 z + 298350) \operatorname{erf}(\sqrt{z})}{178605}$$

07.25.03.amb4.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) =$$

$$\frac{8 e^{-z} \sqrt{\pi} (8 z^5 - 412 z^4 + 7674 z^3 - 63903 z^2 + 234600 z - 298350) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{178605} + \frac{1}{178605} \left(-64 z^{10} + 3264 z^9 - 59792 z^8 + 482880 z^7 - 1661472 z^6 + 1736448 z^5 + 428400 z^4 + 280800 z^3 + 257400 z^2 + 249480 z + 178605 \right)$$

07.25.03.amb5.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = -\frac{1}{893025} \left(e^z (1024 z^{10} + 46080 z^9 + 725760 z^8 + 4838400 z^7 + 12700800 z^6 + 7620480 z^5 - 3175200 z^4 + 2721600 z^3 - 2551500 z^2 + 1984500 z - 893025) \right)$$

07.25.03.amb6.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{25515} \left(-32 z^9 - 1216 z^8 - 15320 z^7 - 73488 z^6 - 102144 z^5 + 28560 z^4 - 21600 z^3 + 23400 z^2 - 27720 z + 25515 \right) - \frac{4 e^z \sqrt{\pi} z^{11/2} (8 z^4 + 308 z^3 + 3978 z^2 + 20145 z + 33150) \operatorname{erf}(\sqrt{z})}{25515}$$

07.25.03.amb7.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{25515} \left(32 z^9 - 1216 z^8 + 15320 z^7 - 73488 z^6 + 102144 z^5 + 28560 z^4 + 21600 z^3 + 23400 z^2 + 27720 z + 25515 \right) - \frac{4 e^{-z} \sqrt{\pi} z^{11/2} (8 z^4 - 308 z^3 + 3978 z^2 - 20145 z + 33150) \operatorname{erfi}(\sqrt{z})}{25515}$$

07.25.03.amb8.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, 5; z\right) = \frac{19448}{21 z^4} - \frac{1}{893025 z^4} \left(4 e^z (1024 z^{13} + 32768 z^{12} + 332544 z^{11} + 1180416 z^{10} + 896640 z^9 - 449280 z^8 + 419040 z^7 - 211680 z^6 - 1281420 z^5 + 8391600 z^4 - 34459425 z^3 + 103378275 z^2 - 206756550 z + 206756550) \right)$$

07.25.03.amb9.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-16 z^8 - 400 z^7 - 2868 z^6 - 5376 z^5 + 1680 z^4 - 1440 z^3 + 1800 z^2 - 2520 z + 2835}{2835} - \frac{2 e^z \sqrt{\pi} z^{11/2} (8 z^3 + 204 z^2 + 1530 z + 3315) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.amba.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{2 e^{-z} \sqrt{\pi} (8 z^3 - 204 z^2 + 1530 z - 3315) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{2835} + \frac{-16 z^8 + 400 z^7 - 2868 z^6 + 5376 z^5 + 1680 z^4 + 1440 z^3 + 1800 z^2 + 2520 z + 2835}{2835}$$

07.25.03.ambb.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = \frac{97\,240(z-76)}{21z^5} - \frac{1}{178\,605z^5} (4e^z(1024z^{13} + 19\,456z^{12} + 99\,072z^{11} + 90\,624z^{10} - 9\,600z^9 - 362\,880z^8 + 3\,322\,080z^7 - 23\,466\,240z^6 + 139\,516\,020z^5 - 689\,188\,500z^4 + 2\,722\,294\,575z^3 - 8\,063\,505\,450z^2 + 15\,920\,254\,350z - 15\,713\,497\,800))$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = -\frac{7}{2}$

07.25.03.ambc.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{31\,255\,875} (4096z^{16} + 532\,480z^{15} + 28\,922\,880z^{14} + 859\,929\,600z^{13} + 15\,408\,943\,104z^{12} + 172\,786\,360\,320z^{11} + 1\,219\,945\,420\,800z^{10} + 5\,325\,214\,464\,000z^9 + 13\,741\,344\,403\,200z^8 + 19\,281\,501\,066\,240z^7 + 12\,586\,271\,443\,200z^6 + 2\,722\,764\,844\,800z^5 + 57\,891\,834\,000z^4 + 972\,972\,000z^3 + 145\,945\,800z^2 + 56\,133\,000z + 31\,255\,875) + \frac{1}{31\,255\,875} (512e^z\sqrt{\pi} (8z^{33/2} + 1044z^{31/2} + 57\,006z^{29/2} + 1\,707\,285z^{27/2} + 30\,908\,385z^{25/2} + 351\,747\,360z^{23/2} + 2\,538\,254\,880z^{21/2} + 11\,454\,397\,920z^{19/2} + 31\,160\,959\,200z^{17/2} + 47\,787\,667\,200z^{15/2} + 36\,708\,940\,800z^{13/2} + 11\,251\,094\,400z^{11/2} + 778\,377\,600z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ambd.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{31\,255\,875} (4096z^{16} - 532\,480z^{15} + 28\,922\,880z^{14} - 859\,929\,600z^{13} + 15\,408\,943\,104z^{12} - 172\,786\,360\,320z^{11} + 1\,219\,945\,420\,800z^{10} - 5\,325\,214\,464\,000z^9 + 13\,741\,344\,403\,200z^8 - 19\,281\,501\,066\,240z^7 + 12\,586\,271\,443\,200z^6 - 2\,722\,764\,844\,800z^5 + 57\,891\,834\,000z^4 - 972\,972\,000z^3 + 145\,945\,800z^2 - 56\,133\,000z + 31\,255\,875) - \frac{1}{31\,255\,875} (512e^{-z}\sqrt{\pi} (8z^{33/2} - 1044z^{31/2} + 57\,006z^{29/2} - 1\,707\,285z^{27/2} + 30\,908\,385z^{25/2} - 351\,747\,360z^{23/2} + 2\,538\,254\,880z^{21/2} - 11\,454\,397\,920z^{19/2} + 31\,160\,959\,200z^{17/2} - 47\,787\,667\,200z^{15/2} + 36\,708\,940\,800z^{13/2} - 11\,251\,094\,400z^{11/2} + 778\,377\,600z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ambe.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{44\,651\,25} (-2048z^{15} - 241\,664z^{14} - 11\,804\,160z^{13} - 312\,041\,472z^{12} - 4\,901\,707\,776z^{11} - 47\,321\,856\,000z^{10} - 280\,830\,044\,160z^9 - 996\,372\,576\,000z^8 - 1\,987\,168\,619\,520z^7 - 1\,981\,051\,188\,480z^6 - 774\,745\,171\,200z^5 - 57\,891\,834\,000z^4 + 972\,972\,000z^3 + 48\,648\,600z^2 + 11\,226\,600z + 44\,651\,25) - \frac{1}{44\,651\,25} (256e^z\sqrt{\pi} (8z^{31/2} + 948z^{29/2} + 46\,578z^{27/2} + 1\,241\,505z^{25/2} + 19\,734\,840z^{23/2} + 193\,868\,640z^{21/2} + 1\,181\,174\,400z^{19/2} + 4\,367\,351\,520z^{17/2} + 9\,324\,201\,600z^{15/2} + 10\,490\,860\,800z^{13/2} + 5\,236\,358\,400z^{11/2} + 778\,377\,600z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ambf.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{4465125} (2048 z^{15} - 241664 z^{14} + 11804160 z^{13} - 312041472 z^{12} + 4901707776 z^{11} - 47321856000 z^{10} +$$

$$280830044160 z^9 - 996372576000 z^8 + 1987168619520 z^7 - 1981051188480 z^6 + 774745171200 z^5 -$$

$$57891834000 z^4 - 972972000 z^3 + 48648600 z^2 - 11226600 z + 4465125) - \frac{1}{4465125} \left(256 e^{-z} \sqrt{\pi}\right.$$

$$\left.(8 z^{31/2} - 948 z^{29/2} + 46578 z^{27/2} - 1241505 z^{25/2} + 19734840 z^{23/2} - 193868640 z^{21/2} + 1181174400 z^{19/2} -$$

$$4367351520 z^{17/2} + 9324201600 z^{15/2} - 10490860800 z^{13/2} + 5236358400 z^{11/2} - 778377600 z^{9/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ambg.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{893025} (1024 z^{14} + 108544 z^{13} + 4708608 z^{12} + 108987648 z^{11} + 1472188416 z^{10} + 11932508160 z^9 +$$

$$57506837760 z^8 + 157684423680 z^7 + 223918007040 z^6 + 135022567680 z^5 +$$

$$19297278000 z^4 - 972972000 z^3 + 48648600 z^2 + 3742200 z + 893025) +$$

$$\frac{1}{893025} \left(128 e^z \sqrt{\pi} (8 z^{29/2} + 852 z^{27/2} + 37206 z^{25/2} + 869445 z^{23/2} + 11909835 z^{21/2} + 98589960 z^{19/2} +$$

$$491044680 z^{17/2} + 1421083440 z^{15/2} + 2218784400 z^{13/2} + 1615723200 z^{11/2} + 389188800 z^{9/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ambh.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{893025} (1024 z^{14} - 108544 z^{13} + 4708608 z^{12} - 108987648 z^{11} + 1472188416 z^{10} - 11932508160 z^9 +$$

$$57506837760 z^8 - 157684423680 z^7 + 223918007040 z^6 - 135022567680 z^5 +$$

$$19297278000 z^4 + 972972000 z^3 + 48648600 z^2 - 3742200 z + 893025) -$$

$$\frac{1}{893025} \left(128 e^{-z} \sqrt{\pi} (8 z^{29/2} - 852 z^{27/2} + 37206 z^{25/2} - 869445 z^{23/2} + 11909835 z^{21/2} - 98589960 z^{19/2} +$$

$$491044680 z^{17/2} - 1421083440 z^{15/2} + 2218784400 z^{13/2} - 1615723200 z^{11/2} + 389188800 z^{9/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ambi.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{297675} (-512 z^{13} - 48128 z^{12} - 1825152 z^{11} - 36265728 z^{10} - 410557440 z^9 - 2697857280 z^8 - 10035809280 z^7 -$$

$$19596245760 z^6 - 16916739840 z^5 - 3859455600 z^4 + 324324000 z^3 - 48648600 z^2 + 3742200 z + 297675) -$$

$$\frac{1}{297675} \left(64 e^z \sqrt{\pi} (8 z^{27/2} + 756 z^{25/2} + 28890 z^{23/2} + 580545 z^{21/2} + 6684930 z^{19/2} + 45110520 z^{17/2} +$$

$$175271040 z^{15/2} + 369457200 z^{13/2} + 371498400 z^{11/2} + 129729600 z^{9/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ambj.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{297675} (512 z^{13} - 48128 z^{12} + 1825152 z^{11} - 36265728 z^{10} + 410557440 z^9 - 2697857280 z^8 + 10035809280 z^7 - 19596245760 z^6 + 16916739840 z^5 - 3859455600 z^4 - 324324000 z^3 - 48648600 z^2 - 3742200 z + 297675) - \frac{1}{297675} (64 e^{-z} \sqrt{\pi} (8 z^{27/2} - 756 z^{25/2} + 28890 z^{23/2} - 580545 z^{21/2} + 6684930 z^{19/2} - 45110520 z^{17/2} + 175271040 z^{15/2} - 369457200 z^{13/2} + 371498400 z^{11/2} - 129729600 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ambk.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{297675} (256 z^{12} + 20992 z^{11} + 681792 z^{10} + 11325120 z^9 + 103668480 z^8 + 524482560 z^7 + 1386927360 z^6 + 1649007360 z^5 + 551350800 z^4 - 64864800 z^3 + 16216200 z^2 - 3742200 z + 297675) + \frac{1}{297675} (32 e^z \sqrt{\pi} (8 z^{25/2} + 660 z^{23/2} + 21630 z^{21/2} + 364245 z^{19/2} + 3406725 z^{17/2} + 17856720 z^{15/2} + 50274000 z^{13/2} + 67813200 z^{11/2} + 32432400 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ambl.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{297675} (256 z^{12} - 20992 z^{11} + 681792 z^{10} - 11325120 z^9 + 103668480 z^8 - 524482560 z^7 + 1386927360 z^6 - 1649007360 z^5 + 551350800 z^4 + 64864800 z^3 + 16216200 z^2 + 3742200 z + 297675) - \frac{1}{297675} (32 e^{-z} \sqrt{\pi} (8 z^{25/2} - 660 z^{23/2} + 21630 z^{21/2} - 364245 z^{19/2} + 3406725 z^{17/2} - 17856720 z^{15/2} + 50274000 z^{13/2} - 67813200 z^{11/2} + 32432400 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ambm.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{595350} (e^z (512 z^{12} + 39168 z^{11} + 1177344 z^{10} + 17921280 z^9 + 148443840 z^8 + 668152800 z^7 + 1532986560 z^6 + 1509263280 z^5 + 348790050 z^4 - 54672975 z^3 + 16202025 z^2 - 4337550 z + 595350))$$

07.25.03.ambn.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{297675} (16 e^z \sqrt{\pi} (8 z^7 + 564 z^6 + 15426 z^5 + 209985 z^4 + 1516860 z^3 + 5721840 z^2 + 10221120 z + 6486480) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{297675} (128 z^{11} + 8960 z^{10} + 242400 z^9 + 3242880 z^8 + 22758912 z^7 + 81527040 z^6 + 131040000 z^5 + 61261200 z^4 - 9266400 z^3 + 3243240 z^2 - 1247400 z + 297675))$$

07.25.03.ambo.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{297675}$$

$$16 e^{-z} \sqrt{\pi} (8 z^7 - 564 z^6 + 15426 z^5 - 209985 z^4 + 1516860 z^3 - 5721840 z^2 + 10221120 z - 6486480) \operatorname{erfi}(\sqrt{z}) z^{9/2} +$$

$$\frac{1}{297675} (-128 z^{11} + 8960 z^{10} - 242400 z^9 + 3242880 z^8 - 22758912 z^7 + 81527040 z^6 -$$

$$131040000 z^5 + 61261200 z^4 + 9266400 z^3 + 3243240 z^2 + 1247400 z + 297675)$$

07.25.03.ambp.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, 2; z\right) =$$

$$\frac{1}{595350} (e^z (512 z^{11} + 33024 z^{10} + 814080 z^9 + 9780480 z^8 + 60419520 z^7 + 184796640 z^6 + 239410080 z^5 +$$

$$72802800 z^4 - 15223950 z^3 + 6222825 z^2 - 2466450 z + 595350))$$

07.25.03.ambq.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{8 e^z \sqrt{\pi} (8 z^6 + 468 z^5 + 10278 z^4 + 107205 z^3 + 552015 z^2 + 1305720 z + 1081080) \operatorname{erf}(\sqrt{z}) z^{9/2}}{99225} +$$

$$\frac{1}{99225} (64 z^{10} + 3712 z^9 + 80400 z^8 + 819216 z^7 + 4042368 z^6 +$$

$$8749440 z^5 + 5569200 z^4 - 1029600 z^3 + 463320 z^2 - 249480 z + 99225)$$

07.25.03.ambr.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{1}{99225} (64 z^{10} - 3712 z^9 + 80400 z^8 - 819216 z^7 +$$

$$4042368 z^6 - 8749440 z^5 + 5569200 z^4 + 1029600 z^3 + 463320 z^2 + 249480 z + 99225) -$$

$$\frac{1}{99225} 8 e^{-z} \sqrt{\pi} z^{9/2} (8 z^6 - 468 z^5 + 10278 z^4 - 107205 z^3 + 552015 z^2 - 1305720 z + 1081080) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ambs.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, 3; z\right) =$$

$$\frac{1}{297675} (e^z (512 z^{10} + 26880 z^9 + 518400 z^8 + 4596480 z^7 + 19051200 z^6 + 32387040 z^5 + 12700800 z^4 -$$

$$3402000 z^3 + 1786050 z^2 - 921375 z + 297675))$$

07.25.03.ambt.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{4 e^z \sqrt{\pi} (8 z^5 + 372 z^4 + 6186 z^3 + 45345 z^2 + 143910 z + 154440) \operatorname{erf}(\sqrt{z}) z^{9/2}}{19845} +$$

$$\frac{1}{19845} (32 z^9 + 1472 z^8 + 24024 z^7 + 170064 z^6 + 500928 z^5 + 428400 z^4 - 93600 z^3 + 51480 z^2 - 35640 z + 19845)$$

07.25.03.ambu.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{4 e^{-z} \sqrt{\pi} (8 z^5 - 372 z^4 + 6186 z^3 - 45345 z^2 + 143910 z - 154440) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{19845} +$$

$$\frac{1}{19845} (-32 z^9 + 1472 z^8 - 24024 z^7 + 170064 z^6 - 500928 z^5 + 428400 z^4 + 93600 z^3 + 51480 z^2 + 35640 z + 19845)$$

07.25.03.ambv.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{99225} (e^z (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + 408240 z^2 - 255150 z + 99225))$$

07.25.03.ambw.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{2 e^z \sqrt{\pi} (8 z^4 + 276 z^3 + 3150 z^2 + 13845 z + 19305) \operatorname{erf}(\sqrt{z}) z^{9/2}}{2835} + \frac{16 z^8 + 544 z^7 + 6036 z^6 + 24924 z^5 + 28560 z^4 - 7200 z^3 + 4680 z^2 - 3960 z + 2835}{2835}$$

07.25.03.ambx.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{16 z^8 - 544 z^7 + 6036 z^6 - 24924 z^5 + 28560 z^4 + 7200 z^3 + 4680 z^2 + 3960 z + 2835}{2835} - \frac{2 e^{-z} \sqrt{\pi} z^{9/2} (8 z^4 - 276 z^3 + 3150 z^2 - 13845 z + 19305) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.amby.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{99225 z^4} (4 e^z (512 z^{12} + 14592 z^{11} + 129792 z^{10} + 395520 z^9 + 250560 z^8 - 99360 z^7 + 60480 z^6 + 45360 z^5 - 481950 z^4 + 2027025 z^3 - 6081075 z^2 + 12162150 z - 12162150)) + \frac{3432}{7 z^4}$$

07.25.03.ambz.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{315} e^z \sqrt{\pi} (8 z^3 + 180 z^2 + 1170 z + 2145) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{315} (8 z^7 + 176 z^6 + 1086 z^5 + 1680 z^4 - 480 z^3 + 360 z^2 - 360 z + 315)$$

07.25.03.amc0.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{315} e^{-z} \sqrt{\pi} (8 z^3 - 180 z^2 + 1170 z - 2145) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{315} (-8 z^7 + 176 z^6 - 1086 z^5 + 1680 z^4 + 480 z^3 + 360 z^2 + 360 z + 315)$$

07.25.03.amc1.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{7}{2}, 6; z\right) = \frac{17160(z-68)}{7 z^5} + \frac{1}{19845 z^5} (4 e^z (512 z^{12} + 8448 z^{11} + 36864 z^{10} + 26880 z^9 + 8640 z^8 - 168480 z^7 + 1239840 z^6 - 7393680 z^5 + 36486450 z^4 - 143918775 z^3 + 425675250 z^2 - 839188350 z + 827026200))$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = -\frac{5}{2}$

07.25.03.amc2.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{637875} (1024 z^{14} + 109568 z^{13} + 4806912 z^{12} + 112812032 z^{11} + 1550628864 z^{10} + 12857407488 z^9 + 63924821760 z^8 + 183481390080 z^7 + 280757498112 z^6 + 196254938880 z^5 + 44607522960 z^4 + 972972000 z^3 + 16216200 z^2 + 2245320 z + 637875) + \frac{1}{637875} (128 e^z \sqrt{\pi} (8 z^{29/2} + 860 z^{27/2} + 37978 z^{25/2} + 899703 z^{23/2} + 12537216 z^{21/2} + 106108128 z^{19/2} + 544525632 z^{17/2} + 1644723360 z^{15/2} + 2745308160 z^{13/2} + 2254936320 z^{11/2} + 726485760 z^{9/2} + 51891840 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amc3.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{637875} (1024 z^{14} - 109568 z^{13} + 4806912 z^{12} - 112812032 z^{11} + 1550628864 z^{10} - 12857407488 z^9 + 63924821760 z^8 - 183481390080 z^7 + 280757498112 z^6 - 196254938880 z^5 + 44607522960 z^4 - 972972000 z^3 + 16216200 z^2 - 2245320 z + 637875) - \frac{1}{637875} (128 e^{-z} \sqrt{\pi} (8 z^{29/2} - 860 z^{27/2} + 37978 z^{25/2} - 899703 z^{23/2} + 12537216 z^{21/2} - 106108128 z^{19/2} + 544525632 z^{17/2} - 1644723360 z^{15/2} + 2745308160 z^{13/2} - 2254936320 z^{11/2} + 726485760 z^{9/2} - 51891840 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amc4.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{127575} (-512 z^{13} - 49152 z^{12} - 1912192 z^{11} - 39220224 z^{10} - 462449664 z^9 - 3208992000 z^8 - 12898483200 z^7 - 28419745536 z^6 - 30616185600 z^5 - 12655122480 z^4 - 972972000 z^3 + 16216200 z^2 + 748440 z + 127575) - \frac{1}{127575} (64 e^z \sqrt{\pi} (8 z^{27/2} + 772 z^{25/2} + 30258 z^{23/2} + 627381 z^{21/2} + 7518168 z^{19/2} + 53480952 z^{17/2} + 223639920 z^{15/2} + 526523760 z^{13/2} + 639213120 z^{11/2} + 337296960 z^{9/2} + 51891840 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amc5.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{127575} (512 z^{13} - 49152 z^{12} + 1912192 z^{11} - 39220224 z^{10} + 462449664 z^9 - 3208992000 z^8 + 12898483200 z^7 - 28419745536 z^6 + 30616185600 z^5 - 12655122480 z^4 + 972972000 z^3 + 16216200 z^2 - 748440 z + 127575) - \frac{1}{127575} (64 e^{-z} \sqrt{\pi} (8 z^{27/2} - 772 z^{25/2} + 30258 z^{23/2} - 627381 z^{21/2} + 7518168 z^{19/2} - 53480952 z^{17/2} + 223639920 z^{15/2} - 526523760 z^{13/2} + 639213120 z^{11/2} - 337296960 z^{9/2} + 51891840 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amc6.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{42525} (256 z^{12} + 21760 z^{11} + 738624 z^{10} + 12973056 z^9 + 127783680 z^8 + 715668480 z^7 + 2205874944 z^6 +$$

$$3424861440 z^5 + 2198916720 z^4 + 324324000 z^3 - 16216200 z^2 + 748440 z + 42525) +$$

$$\frac{1}{42525} \left(32 e^z \sqrt{\pi} (8 z^{25/2} + 684 z^{23/2} + 23418 z^{21/2} + 416619 z^{19/2} + 4185216 z^{17/2} + 24184440 z^{15/2} +$$

$$78533280 z^{13/2} + 133857360 z^{11/2} + 103783680 z^{9/2} + 25945920 z^{7/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.amc7.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{42525} (256 z^{12} - 21760 z^{11} + 738624 z^{10} - 12973056 z^9 + 127783680 z^8 - 715668480 z^7 + 2205874944 z^6 -$$

$$3424861440 z^5 + 2198916720 z^4 - 324324000 z^3 - 16216200 z^2 - 748440 z + 42525) -$$

$$\frac{1}{42525} \left(32 e^{-z} \sqrt{\pi} (8 z^{25/2} - 684 z^{23/2} + 23418 z^{21/2} - 416619 z^{19/2} + 4185216 z^{17/2} - 24184440 z^{15/2} +$$

$$78533280 z^{13/2} - 133857360 z^{11/2} + 103783680 z^{9/2} - 25945920 z^{7/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.amc8.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{42525} (-128 z^{11} - 9472 z^{10} - 274656 z^9 - 4019200 z^8 - 31864320 z^7 - 136491264 z^6 - 295975680 z^5 -$$

$$274594320 z^4 - 64864800 z^3 + 5405400 z^2 - 748440 z + 42525) -$$

$$\frac{1}{42525} \left(16 e^z \sqrt{\pi} (8 z^{23/2} + 596 z^{21/2} + 17458 z^{19/2} + 259497 z^{17/2} + 2109240 z^{15/2} +$$

$$9419760 z^{13/2} + 22014720 z^{11/2} + 23783760 z^{9/2} + 8648640 z^{7/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.amc9.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) =$$

$$\frac{1}{42525} (128 z^{11} - 9472 z^{10} + 274656 z^9 - 4019200 z^8 + 31864320 z^7 - 136491264 z^6 + 295975680 z^5 -$$

$$274594320 z^4 + 64864800 z^3 + 5405400 z^2 + 748440 z + 42525) -$$

$$\frac{1}{42525} \left(16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 596 z^{21/2} + 17458 z^{19/2} - 259497 z^{17/2} + 2109240 z^{15/2} -$$

$$9419760 z^{13/2} + 22014720 z^{11/2} - 23783760 z^{9/2} + 8648640 z^{7/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.amca.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{85050} \left(e^z (256 z^{11} + 17664 z^{10} + 473856 z^9 + 6354432 z^8 + 45626976 z^7 + 174381984 z^6 + 330538320 z^5 + 258824160 z^4 + 44982945 z^3 - 4845015 z^2 + 833490 z - 85050) \right)$$

07.25.03.amcb.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{42525} \left(-64 z^{10} - 4032 z^9 - 97040 z^8 - 1138176 z^7 - 6870528 z^6 - 20616960 z^5 - 26666640 z^4 - 9266400 z^3 + 1081080 z^2 - 249480 z + 42525 \right) - \frac{1}{42525} 8 e^z \sqrt{\pi} z^{7/2} (8 z^7 + 508 z^6 + 12378 z^5 + 148095 z^4 + 924480 z^3 + 2948400 z^2 + 4324320 z + 2162160) \operatorname{erf}(\sqrt{z})$$

07.25.03.amcc.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{42525} 8 e^{-z} \sqrt{\pi} (8 z^7 - 508 z^6 + 12378 z^5 - 148095 z^4 + 924480 z^3 - 2948400 z^2 + 4324320 z - 2162160) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{42525} \left(-64 z^{10} + 4032 z^9 - 97040 z^8 + 1138176 z^7 - 6870528 z^6 + 20616960 z^5 - 26666640 z^4 + 9266400 z^3 + 1081080 z^2 + 249480 z + 42525 \right)$$

07.25.03.amcd.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{85050} \left(e^z (256 z^{10} + 14848 z^9 + 325376 z^8 + 3426048 z^7 + 18218592 z^6 + 46851840 z^5 + 49427280 z^4 + 11687760 z^3 - 1768095 z^2 + 459270 z - 85050) \right)$$

07.25.03.amce.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{14175} \left(-32 z^9 - 1664 z^8 - 31896 z^7 - 282816 z^6 - 1186752 z^5 - 2109744 z^4 - 1029600 z^3 + 154440 z^2 - 49896 z + 14175 \right) - \frac{4 e^z \sqrt{\pi} z^{7/2} (8 z^6 + 420 z^5 + 8178 z^4 + 74493 z^3 + 328536 z^2 + 648648 z + 432432) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.amcf.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{14175} \left(32 z^9 - 1664 z^8 + 31896 z^7 - 282816 z^6 + 1186752 z^5 - 2109744 z^4 + 1029600 z^3 + 154440 z^2 + 49896 z + 14175 \right) - \frac{4 e^{-z} \sqrt{\pi} z^{7/2} (8 z^6 - 420 z^5 + 8178 z^4 - 74493 z^3 + 328536 z^2 - 648648 z + 432432) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.amcg.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = -\frac{1}{42525} \left(e^z (256 z^9 + 12032 z^8 + 205056 z^7 + 1580544 z^6 + 5574240 z^5 + 7832160 z^4 + 2434320 z^3 - 483840 z^2 + 167265 z - 42525) \right)$$

07.25.03.amch.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-16 z^8 - 656 z^7 - 9396 z^6 - 57152 z^5 - 140112 z^4 - 93600 z^3 + 17160 z^2 - 7128 z + 2835}{2835} - \frac{2 e^z \sqrt{\pi} z^{7/2} (8 z^5 + 332 z^4 + 4858 z^3 + 30771 z^2 + 82368 z + 72072) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.amci.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{2 e^{-z} \sqrt{\pi} (8 z^5 - 332 z^4 + 4858 z^3 - 30771 z^2 + 82368 z - 72072) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{2835} + \frac{-16 z^8 + 656 z^7 - 9396 z^6 + 57152 z^5 - 140112 z^4 + 93600 z^3 + 17160 z^2 + 7128 z + 2835}{2835}$$

07.25.03.amcj.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = -\frac{1}{14175} e^z (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175)$$

07.25.03.amck.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{405} (-8 z^7 - 240 z^6 - 2302 z^5 - 7968 z^4 - 7200 z^3 + 1560 z^2 - 792 z + 405) - \frac{1}{405} e^z \sqrt{\pi} z^{7/2} (8 z^4 + 244 z^3 + 2418 z^2 + 9009 z + 10296) \operatorname{erf}(\sqrt{z})$$

07.25.03.amcl.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{405} (8 z^7 - 240 z^6 + 2302 z^5 - 7968 z^4 + 7200 z^3 + 1560 z^2 + 792 z + 405) - \frac{1}{405} e^{-z} \sqrt{\pi} z^{7/2} (8 z^4 - 244 z^3 + 2418 z^2 - 9009 z + 10296) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amcm.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, 5; z\right) = \frac{1144}{5 z^4} - \frac{1}{14175 z^4} (4 e^z (256 z^{11} + 6400 z^{10} + 48896 z^9 + 124416 z^8 + 63072 z^7 - 18144 z^6 + 3024 z^5 + 30240 z^4 - 135135 z^3 + 405405 z^2 - 810810 z + 810810))$$

07.25.03.amcn.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{45}(-4z^6 - 76z^5 - 393z^4 - 480z^3 + 120z^2 - 72z + 45) - \frac{1}{90}e^z \sqrt{\pi} z^{7/2} (8z^3 + 156z^2 + 858z + 1287) \operatorname{erf}(\sqrt{z})$$

07.25.03.amco.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{90}e^{-z} \sqrt{\pi} (8z^3 - 156z^2 + 858z - 1287) \operatorname{erfi}(\sqrt{z}) z^{7/2} + \frac{1}{45}(-4z^6 + 76z^5 - 393z^4 + 480z^3 + 120z^2 + 72z + 45)$$

07.25.03.amcp.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{5}{2}, 6; z\right) = \frac{1144(z-60)}{z^5} - \frac{1}{2835z^5} (4e^z (256z^{11} + 3584z^{10} + 13056z^9 + 6912z^8 + 7776z^7 - 72576z^6 + 438480z^5 - 2162160z^4 + 8513505z^3 - 25135110z^2 + 49459410z - 48648600))$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = -\frac{3}{2}$

07.25.03.amcq.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{25515} (256z^{12} + 22016z^{11} + 758080z^{10} + 13556160z^9 + 136684416z^8 + 790316160z^7 + 2552110848z^6 + 4274290944z^5 + 3185859600z^4 + 749437920z^3 + 16216200z^2 + 249480z + 25515) + \frac{1}{25515} (32e^z \sqrt{\pi} (8z^{25/2} + 692z^{23/2} + 24030z^{21/2} + 435141z^{19/2} + 4472181z^{17/2} + 26647866z^{15/2} + 90400590z^{13/2} + 164921400z^{11/2} + 144448920z^{9/2} + 48399120z^{7/2} + 3492720z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amcr.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{25515} (256z^{12} - 22016z^{11} + 758080z^{10} - 13556160z^9 + 136684416z^8 - 790316160z^7 + 2552110848z^6 - 4274290944z^5 + 3185859600z^4 - 749437920z^3 + 16216200z^2 - 249480z + 25515) - \frac{1}{25515} (32e^{-z} \sqrt{\pi} (8z^{25/2} - 692z^{23/2} + 24030z^{21/2} - 435141z^{19/2} + 4472181z^{17/2} - 26647866z^{15/2} + 90400590z^{13/2} - 164921400z^{11/2} + 144448920z^{9/2} - 48399120z^{7/2} + 3492720z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amcs.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{8505} (-128 z^{11} - 9728 z^{10} - 291\,552 z^9 - 4\,450\,368 z^8 - 37\,323\,840 z^7 - 173\,117\,952 z^6 - 424\,714\,752 z^5 - 493\,471\,440 z^4 - 212\,556\,960 z^3 - 16\,216\,200 z^2 + 249\,480 z + 8505) - \frac{1}{8505} (16 e^z \sqrt{\pi} (8 z^{23/2} + 612 z^{21/2} + 18\,522 z^{19/2} + 286\,965 z^{17/2} + 2\,463\,426 z^{15/2} + 11\,867\,310 z^{13/2} + 31\,064\,040 z^{11/2} + 40\,665\,240 z^{9/2} + 22\,453\,200 z^{7/2} + 3\,492\,720 z^{5/2})) \operatorname{erf}(\sqrt{z})$$

07.25.03.amct.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{8505} (128 z^{11} - 9728 z^{10} + 291\,552 z^9 - 4\,450\,368 z^8 + 37\,323\,840 z^7 - 173\,117\,952 z^6 + 424\,714\,752 z^5 - 493\,471\,440 z^4 + 212\,556\,960 z^3 - 16\,216\,200 z^2 - 249\,480 z + 8505) - \frac{1}{8505} (16 e^{-z} \sqrt{\pi} (8 z^{23/2} - 612 z^{21/2} + 18\,522 z^{19/2} - 286\,965 z^{17/2} + 2\,463\,426 z^{15/2} - 11\,867\,310 z^{13/2} + 31\,064\,040 z^{11/2} - 40\,665\,240 z^{9/2} + 22\,453\,200 z^{7/2} - 3\,492\,720 z^{5/2})) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amcu.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{8505} (64 z^{10} + 4224 z^9 + 107\,792 z^8 + 1\,364\,880 z^7 + 9\,156\,672 z^6 + 32\,184\,768 z^5 + 54\,719\,280 z^4 + 36\,923\,040 z^3 + 5\,405\,400 z^2 - 249\,480 z + 8505) + \frac{1}{8505} (8 e^z \sqrt{\pi} (8 z^{21/2} + 532 z^{19/2} + 13\,734 z^{17/2} + 177\,093 z^{15/2} + 1\,223\,775 z^{13/2} + 4\,524\,660 z^{11/2} + 8\,440\,740 z^{9/2} + 6\,902\,280 z^{7/2} + 1\,746\,360 z^{5/2})) \operatorname{erf}(\sqrt{z})$$

07.25.03.amcv.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{8505} (64 z^{10} - 4224 z^9 + 107\,792 z^8 - 1\,364\,880 z^7 + 9\,156\,672 z^6 - 32\,184\,768 z^5 + 54\,719\,280 z^4 - 36\,923\,040 z^3 + 5\,405\,400 z^2 + 249\,480 z + 8505) - \frac{1}{8505} (8 e^{-z} \sqrt{\pi} (8 z^{21/2} - 532 z^{19/2} + 13\,734 z^{17/2} - 177\,093 z^{15/2} + 1\,223\,775 z^{13/2} - 4\,524\,660 z^{11/2} + 8\,440\,740 z^{9/2} - 6\,902\,280 z^{7/2} + 1\,746\,360 z^{5/2})) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amcw.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{17\,010} (e^z (128 z^{10} + 7872 z^9 + 185\,760 z^8 + 2\,155\,536 z^7 + 13\,113\,576 z^6 + 41\,293\,476 z^5 + 62\,035\,470 z^4 + 36\,358\,875 z^3 + 4\,312\,035 z^2 - 266\,490 z + 17\,010))$$

07.25.03.amcx.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{8505} 4 e^z \sqrt{\pi} (8 z^7 + 452 z^6 + 9666 z^5 + 99\,765 z^4 + 525\,420 z^3 + 1\,372\,140 z^2 + 1\,580\,040 z + 582\,120) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{8505} (32 z^9 + 1792 z^8 + 37\,784 z^7 + 381\,024 z^6 + 1\,927\,968 z^5 + 4\,675\,440 z^4 + 4\,609\,440 z^3 + 1\,081\,080 z^2 - 83\,160 z + 8505)$$

07.25.03.amcy.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{8505} 4 e^{-z} \sqrt{\pi} (8 z^7 - 452 z^6 + 9666 z^5 - 99\,765 z^4 + 525\,420 z^3 - 1\,372\,140 z^2 + 1\,580\,040 z - 582\,120) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{8505} (-32 z^9 + 1792 z^8 - 37\,784 z^7 + 381\,024 z^6 - 1\,927\,968 z^5 + 4\,675\,440 z^4 - 4\,609\,440 z^3 + 1\,081\,080 z^2 + 83\,160 z + 8505)$$

07.25.03.amcz.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{17\,010} (e^z (128 z^9 + 6592 z^8 + 126\,432 z^7 + 1\,144\,080 z^6 + 5\,105\,016 z^5 + 10\,663\,380 z^4 + 8\,718\,570 z^3 + 1\,484\,595 z^2 - 141\,750 z + 17\,010))$$

07.25.03.amd0.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{2 e^z \sqrt{\pi} (8 z^6 + 372 z^5 + 6318 z^4 + 49\,221 z^3 + 180\,873 z^2 + 286\,902 z + 145\,530) \operatorname{erf}(\sqrt{z}) z^{5/2} + 16 z^8 + 736 z^7 + 12\,276 z^6 + 92\,652 z^5 + 320\,712 z^4 + 447\,480 z^3 + 154\,440 z^2 - 16\,632 z + 2835}{2835}$$

07.25.03.amd1.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{16 z^8 - 736 z^7 + 12\,276 z^6 - 92\,652 z^5 + 320\,712 z^4 - 447\,480 z^3 + 154\,440 z^2 + 16\,632 z + 2835}{2835} - \frac{2 e^{-z} \sqrt{\pi} z^{5/2} (8 z^6 - 372 z^5 + 6318 z^4 - 49\,221 z^3 + 180\,873 z^2 - 286\,902 z + 145\,530) \operatorname{erfi}(\sqrt{z})}{2835}$$

07.25.03.amd2.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{1}{8505} e^z (128 z^8 + 5312 z^7 + 78\,624 z^6 + 515\,088 z^5 + 1\,499\,400 z^4 + 1\,666\,980 z^3 + 383\,670 z^2 - 50\,085 z + 8505)$$

07.25.03.amd3.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{567} e^z \sqrt{\pi} (8 z^5 + 292 z^4 + 3690 z^3 + 19\,701 z^2 + 42\,966 z + 29\,106) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{567} (8 z^7 + 288 z^6 + 3550 z^5 + 18\,060 z^4 + 35\,388 z^3 + 17\,160 z^2 - 2376 z + 567)$$

07.25.03.amd4.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{567} e^{-z} \sqrt{\pi} (8 z^5 - 292 z^4 + 3690 z^3 - 19\,701 z^2 + 42\,966 z - 29\,106) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{567} (-8 z^7 + 288 z^6 - 3550 z^5 + 18\,060 z^4 - 35\,388 z^3 + 17\,160 z^2 + 2376 z + 567)$$

07.25.03.amd5.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \frac{e^z (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835)}{2835}$$

07.25.03.amd6.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{162} e^z \sqrt{\pi} (8 z^4 + 212 z^3 + 1782 z^2 + 5445 z + 4851) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{81} (4 z^6 + 104 z^5 + 841 z^4 + 2349 z^3 + 1560 z^2 - 264 z + 81)$$

07.25.03.amd7.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{81} (4 z^6 - 104 z^5 + 841 z^4 - 2349 z^3 + 1560 z^2 + 264 z + 81) - \frac{1}{162} e^{-z} \sqrt{\pi} z^{5/2} (8 z^4 - 212 z^3 + 1782 z^2 - 5445 z + 4851) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amd8.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = \frac{1}{2835 z^4} (4 e^z (128 z^{10} + 2752 z^9 + 17568 z^8 + 35856 z^7 + 13608 z^6 - 2268 z^5 - 1890 z^4 + 10395 z^3 - 31185 z^2 + 62370 z - 62370)) + \frac{88}{z^4}$$

07.25.03.amd9.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{36} e^z \sqrt{\pi} (8 z^3 + 132 z^2 + 594 z + 693) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{18} (4 z^5 + 64 z^4 + 267 z^3 + 240 z^2 - 48 z + 18)$$

07.25.03.amda.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{36} e^{-z} \sqrt{\pi} (8 z^3 - 132 z^2 + 594 z - 693) \operatorname{erfi}(\sqrt{z}) z^{5/2} + \frac{1}{18} (-4 z^5 + 64 z^4 - 267 z^3 + 240 z^2 + 48 z + 18)$$

07.25.03.amdb.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{3}{2}, 6; z\right) = \frac{440(z-52)}{z^5} + \frac{1}{567 z^5} (4 e^z (128 z^{10} + 1472 z^9 + 4320 z^8 + 1296 z^7 + 4536 z^6 - 29484 z^5 + 145530 z^4 - 571725 z^3 + 1683990 z^2 - 3305610 z + 3243240))$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = -\frac{1}{2}$

07.25.03.amdc.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{2835} (64 z^{10} + 4288 z^9 + 111\,504 z^8 + 1\,446\,720 z^7 + 10\,032\,288 z^6 + 36\,999\,936 z^5 + 67\,994\,640 z^4 + 53\,434\,080 z^3 + 12\,587\,400 z^2 + 249\,480 z + 2835) + \frac{1}{2835} (8 e^z \sqrt{\pi} (8 z^{21/2} + 540 z^{19/2} + 14\,202 z^{17/2} + 187\,551 z^{15/2} + 1\,338\,120 z^{13/2} + 5\,176\,710 z^{11/2} + 10\,357\,200 z^{9/2} + 9\,593\,640 z^{7/2} + 3\,265\,920 z^{5/2} + 226\,800 z^{3/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amdd.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{2835} (64 z^{10} - 4288 z^9 + 111\,504 z^8 - 1\,446\,720 z^7 + 10\,032\,288 z^6 - 36\,999\,936 z^5 + 67\,994\,640 z^4 - 53\,434\,080 z^3 + 12\,587\,400 z^2 - 249\,480 z + 2835) - \frac{1}{2835} (8 e^{-z} \sqrt{\pi} (8 z^{21/2} - 540 z^{19/2} + 14\,202 z^{17/2} - 187\,551 z^{15/2} + 1\,338\,120 z^{13/2} - 5\,176\,710 z^{11/2} + 10\,357\,200 z^{9/2} - 9\,593\,640 z^{7/2} + 3\,265\,920 z^{5/2} - 226\,800 z^{3/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amde.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{2835} (-32 z^9 - 1856 z^8 - 40\,920 z^7 - 437\,808 z^6 - 2\,407\,584 z^5 - 6\,637\,680 z^4 - 8\,255\,520 z^3 - 3\,591\,000 z^2 - 249\,480 z + 2835) - \frac{1}{2835} (4 e^z \sqrt{\pi} (8 z^{19/2} + 468 z^{17/2} + 10\,458 z^{15/2} + 114\,345 z^{13/2} + 652\,050 z^{11/2} + 1\,916\,460 z^{9/2} + 2\,691\,360 z^{7/2} + 1\,519\,560 z^{5/2} + 226\,800 z^{3/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amdf.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{2835} (32 z^9 - 1856 z^8 + 40\,920 z^7 - 437\,808 z^6 + 2\,407\,584 z^5 - 6\,637\,680 z^4 + 8\,255\,520 z^3 - 3\,591\,000 z^2 + 249\,480 z + 2835) - \frac{1}{2835} (4 e^{-z} \sqrt{\pi} (8 z^{19/2} - 468 z^{17/2} + 10\,458 z^{15/2} - 114\,345 z^{13/2} + 652\,050 z^{11/2} - 1\,916\,460 z^{9/2} + 2\,691\,360 z^{7/2} - 1\,519\,560 z^{5/2} + 226\,800 z^{3/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amdg.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = -\frac{1}{5670} (e^z (64 z^9 + 3456 z^8 + 70\,416 z^7 + 690\,480 z^6 + 3\,449\,628 z^5 + 8\,573\,040 z^4 + 9\,585\,135 z^3 + 3\,801\,735 z^2 + 255\,150 z - 5670))$$

07.25.03.amdh.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{-16 z^8 - 784 z^7 - 14\,196 z^6 - 119\,904 z^5 - 490\,560 z^4 - 911\,520 z^3 - 627\,480 z^2 - 83\,160 z + 2835}{2835} - \frac{1}{2835} 2 e^z \sqrt{\pi} z^{3/2} (8 z^7 + 396 z^6 + 7290 z^5 + 63\,315 z^4 + 272\,160 z^3 + 555\,660 z^2 + 468\,720 z + 113\,400) \operatorname{erf}(\sqrt{z})$$

07.25.03.amdi.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{2835} 2 e^{-z} \sqrt{\pi} (8 z^7 - 396 z^6 + 7290 z^5 - 63\,315 z^4 + 272\,160 z^3 - 555\,660 z^2 + 468\,720 z - 113\,400) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{-16 z^8 + 784 z^7 - 14\,196 z^6 + 119\,904 z^5 - 490\,560 z^4 + 911\,520 z^3 - 627\,480 z^2 + 83\,160 z + 2835}{2835}$$

07.25.03.amdj.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = -\frac{1}{5670} e^z (64 z^8 + 2880 z^7 + 47\,376 z^6 + 358\,848 z^5 + 1\,296\,540 z^4 + 2\,090\,340 z^3 + 1\,223\,775 z^2 + 130\,410 z - 5670)$$

07.25.03.amdk.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{945} (-8 z^7 - 320 z^6 - 4542 z^5 - 28\,308 z^4 - 77\,340 z^3 - 78\,840 z^2 - 16\,632 z + 945) - \frac{1}{945} e^z \sqrt{\pi} z^{3/2} (8 z^6 + 324 z^5 + 4698 z^4 + 30\,429 z^3 + 89\,586 z^2 + 107\,730 z + 37\,800) \operatorname{erf}(\sqrt{z})$$

07.25.03.amdl.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{945} (8 z^7 - 320 z^6 + 4542 z^5 - 28\,308 z^4 + 77\,340 z^3 - 78\,840 z^2 + 16\,632 z + 945) - \frac{1}{945} e^{-z} \sqrt{\pi} z^{3/2} (8 z^6 - 324 z^5 + 4698 z^4 - 30\,429 z^3 + 89\,586 z^2 - 107\,730 z + 37\,800) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amdm.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = -\frac{e^z (64 z^7 + 2304 z^6 + 28\,944 z^5 + 156\,240 z^4 + 359\,100 z^3 + 294\,840 z^2 + 44\,415 z - 2835)}{2835}$$

07.25.03.amdn.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{189} (-4 z^6 - 124 z^5 - 1281 z^4 - 5244 z^3 - 7710 z^2 - 2376 z + 189) - \frac{1}{378} e^z \sqrt{\pi} z^{3/2} (8 z^5 + 252 z^4 + 2682 z^3 + 11\,655 z^2 + 19\,656 z + 9450) \operatorname{erf}(\sqrt{z})$$

07.25.03.amdo.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{378} e^{-z} \sqrt{\pi} (8 z^5 - 252 z^4 + 2682 z^3 - 11\,655 z^2 + 19\,656 z - 9450) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{189} (-4 z^6 + 124 z^5 - 1281 z^4 + 5244 z^3 - 7710 z^2 + 2376 z + 189)$$

07.25.03.amdp.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = -\frac{1}{945} e^z (64 z^6 + 1728 z^5 + 15\,120 z^4 + 50\,400 z^3 + 56\,700 z^2 + 11\,340 z - 945)$$

07.25.03.amdq.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{54} (-4 z^5 - 88 z^4 - 579 z^3 - 1230 z^2 - 528 z + 54) - \frac{1}{108} e^z \sqrt{\pi} z^{3/2} (8 z^4 + 180 z^3 + 1242 z^2 + 2961 z + 1890) \operatorname{erf}(\sqrt{z})$$

07.25.03.amdr.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{54} (4z^5 - 88z^4 + 579z^3 - 1230z^2 + 528z + 54) - \frac{1}{108} e^{-z} \sqrt{\pi} z^{3/2} (8z^4 - 180z^3 + 1242z^2 - 2961z + 1890) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amds.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = \frac{24}{z^4} - \frac{4e^z(64z^9 + 1152z^8 + 5904z^7 + 9072z^6 + 2268z^5 - 945z^3 + 2835z^2 - 5670z + 5670)}{945z^4}$$

07.25.03.amdt.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{12} (-4z^4 - 52z^3 - 165z^2 - 96z + 12) - \frac{1}{24} e^z \sqrt{\pi} z^{3/2} (8z^3 + 108z^2 + 378z + 315) \operatorname{erf}(\sqrt{z})$$

07.25.03.amdu.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{24} e^{-z} \sqrt{\pi} (8z^3 - 108z^2 + 378z - 315) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{12} (-4z^4 + 52z^3 - 165z^2 + 96z + 12)$$

07.25.03.amdv.01

$${}_2F_2\left(4, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = \frac{120(z-44)}{z^5} - \frac{1}{189z^5} 4e^z(64z^9 + 576z^8 + 1296z^7 + 2268z^5 - 11340z^4 + 44415z^3 - 130410z^2 + 255150z - 249480)$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = \frac{1}{2}$

07.25.03.amdw.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{16z^8 + 800z^7 + 14868z^6 + 130076z^5 + 559920z^4 + 1128960z^3 + 911400z^2 + 199080z + 2835}{2835} + \frac{1}{2835} (2e^z \sqrt{\pi} (8z^{17/2} + 404z^{15/2} + 7630z^{13/2} + 68565z^{11/2} + 309225z^{9/2} + 679560z^{7/2} + 652680z^{5/2} + 214200z^{3/2} + 12600\sqrt{z}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amdx.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{16z^8 - 800z^7 + 14868z^6 - 130076z^5 + 559920z^4 - 1128960z^3 + 911400z^2 - 199080z + 2835}{2835} - \frac{1}{2835} (2e^{-z} \sqrt{\pi} (8z^{17/2} - 404z^{15/2} + 7630z^{13/2} - 68565z^{11/2} + 309225z^{9/2} - 679560z^{7/2} + 652680z^{5/2} - 214200z^{3/2} + 12600\sqrt{z}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amdy.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{5670} e^z (32z^8 + 1488z^7 + 25536z^6 + 204792z^5 + 803250z^4 + 1475145z^3 + 1104705z^2 + 243810z + 5670)$$

07.25.03.amdz.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{8z^7 + 336z^6 + 5086z^5 + 34680z^4 + 108720z^3 + 141960z^2 + 57960z + 2835}{2835} + \frac{1}{2835} e^z \sqrt{\pi} \sqrt{z} (8z^7 + 340z^6 + 5250z^5 + 37065z^4 + 123900z^3 + 183960z^2 + 100800z + 12600) \operatorname{erf}(\sqrt{z})$$

07.25.03.ame0.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{-8z^7 + 336z^6 - 5086z^5 + 34680z^4 - 108720z^3 + 141960z^2 - 57960z + 2835}{2835} + \frac{1}{2835} e^{-z} \sqrt{\pi} \sqrt{z} (8z^7 - 340z^6 + 5250z^5 - 37065z^4 + 123900z^3 - 183960z^2 + 100800z - 12600) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ame1.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{e^z (32z^7 + 1232z^6 + 16912z^5 + 103320z^4 + 286650z^3 + 328545z^2 + 119070z + 5670)}{5670}$$

07.25.03.ame2.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{945} (4z^6 + 136z^5 + 1593z^4 + 7845z^3 + 15780z^2 + 10332z + 945) + \frac{e^z \sqrt{\pi} \sqrt{z} (8z^6 + 276z^5 + 3318z^4 + 17157z^3 + 38115z^2 + 31500z + 6300) \operatorname{erf}(\sqrt{z})}{1890}$$

07.25.03.ame3.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{945} (4z^6 - 136z^5 + 1593z^4 - 7845z^3 + 15780z^2 - 10332z + 945) - \frac{e^{-z} \sqrt{\pi} \sqrt{z} (8z^6 - 276z^5 + 3318z^4 - 17157z^3 + 38115z^2 - 31500z + 6300) \operatorname{erfi}(\sqrt{z})}{1890}$$

07.25.03.ame4.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, 3; z\right) = \frac{e^z (32z^6 + 976z^5 + 10080z^4 + 42840z^3 + 72450z^2 + 38745z + 2835)}{2835}$$

07.25.03.ame5.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{378} (4z^5 + 104z^4 + 867z^3 + 2690z^2 + 2652z + 378) + \frac{1}{756} e^z \sqrt{\pi} \sqrt{z} (8z^5 + 212z^4 + 1834z^3 + 6153z^2 + 7350z + 2100) \operatorname{erf}(\sqrt{z})$$

07.25.03.ame6.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{378} (-4z^5 + 104z^4 - 867z^3 + 2690z^2 - 2652z + 378) + \frac{1}{756} e^{-z} \sqrt{\pi} \sqrt{z} (8z^5 - 212z^4 + 1834z^3 - 6153z^2 + 7350z - 2100) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ame7.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, 4; z\right) = \frac{1}{945} e^z (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945)$$

07.25.03.ame8.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{108} (4z^4 + 72z^3 + 365z^2 + 531z + 108) + \frac{1}{216} e^z \sqrt{\pi} \sqrt{z} (8z^4 + 148z^3 + 798z^2 + 1365z + 525) \operatorname{erf}(\sqrt{z})$$

07.25.03.ame9.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{108} (4z^4 - 72z^3 + 365z^2 - 531z + 108) - \frac{1}{216} e^{-z} \sqrt{\pi} \sqrt{z} (8z^4 - 148z^3 + 798z^2 - 1365z + 525) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amea.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{4e^z(32z^8 + 464z^7 + 1792z^6 + 1848z^5 + 210z^4 + 105z^3 - 315z^2 + 630z - 630)}{945z^4} + \frac{8}{3z^4}$$

07.25.03.ameb.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{24} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} e^z \sqrt{\pi} \sqrt{z} (8z^3 + 84z^2 + 210z + 105) \operatorname{erf}(\sqrt{z})$$

07.25.03.amec.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{24} (-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48} e^{-z} \sqrt{\pi} \sqrt{z} (8z^3 - 84z^2 + 210z - 105) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amed.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \frac{40(z-36)}{3z^5} + \frac{4e^z(32z^8 + 208z^7 + 336z^6 - 168z^5 + 1050z^4 - 4095z^3 + 11970z^2 - 23310z + 22680)}{189z^5}$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = 1$

07.25.03.amee.01

$${}_2F_2\left(4, \frac{11}{2}; 1, 1; z\right) = \frac{1}{22680} e^{z/2} (64z^8 + 2784z^7 + 44592z^6 + 334368z^5 + 1240344z^4 + 2226834z^3 + 1763631z^2 + 487620z + 22680) I_0\left(\frac{z}{2}\right) + \frac{1}{22680} e^{z/2} (64z^8 + 2720z^7 + 41904z^6 + 293760z^5 + 965016z^4 + 1374462z^3 + 677799z^2 + 61326z) I_1\left(\frac{z}{2}\right)$$

07.25.03.amef.01

$${}_2F_2\left(4, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \frac{e^z (16z^7 + 624z^6 + 8712z^5 + 54480z^4 + 156465z^3 + 189945z^2 + 77490z + 5670)}{5670}$$

07.25.03.ameg.01

$${}_2F_2\left(4, \frac{11}{2}; 1, 2; z\right) = \frac{e^{z/2} (16z^7 + 576z^6 + 7392z^5 + 42528z^4 + 113967z^3 + 134964z^2 + 59535z + 5670) I_0\left(\frac{z}{2}\right) + e^{z/2} (32z^7 + 1120z^6 + 13680z^5 + 71904z^4 + 161850z^3 + 133434z^2 + 24993z) I_1\left(\frac{z}{2}\right)}{11340}$$

07.25.03.ameh.01

$${}_2F_2\left(4, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \frac{e^z (8z^6 + 252z^5 + 2718z^4 + 12291z^3 + 22923z^2 + 14742z + 1890)}{1890}$$

07.25.03.amei.01

$${}_2F_2\left(4, \frac{11}{2}; 1, 3; z\right) = \frac{e^{z/2} (32 z^6 + 912 z^5 + 8832 z^4 + 35844 z^3 + 61254 z^2 + 38745 z + 5670) I_0\left(\frac{z}{2}\right) + e^{z/2} z (32 z^5 + 880 z^4 + 7968 z^3 + 28284 z^2 + 36174 z + 11079) I_1\left(\frac{z}{2}\right)}{5670}$$

07.25.03.amej.01

$${}_2F_2\left(4, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{378} e^z (4 z^5 + 96 z^4 + 735 z^3 + 2103 z^2 + 1998 z + 378)$$

07.25.03.amek.01

$${}_2F_2\left(4, \frac{11}{2}; 1, 4; z\right) = \frac{1}{945} e^{z/2} (16 z^5 + 336 z^4 + 2220 z^3 + 5484 z^2 + 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} z (16 z^4 + 320 z^3 + 1908 z^2 + 3720 z + 1689) I_1\left(\frac{z}{2}\right)$$

07.25.03.amel.01

$${}_2F_2\left(4, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{54} e^z (2 z^4 + 33 z^3 + 153 z^2 + 210 z + 54)$$

07.25.03.amem.01

$${}_2F_2\left(4, \frac{11}{2}; 1, 5; z\right) = \frac{4 e^{z/2} (16 z^6 + 216 z^5 + 804 z^4 + 924 z^3 + 225 z^2 + 36 z - 72) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (16 z^7 + 200 z^6 + 612 z^5 + 396 z^4 - 15 z^3 + 54 z^2 - 144 z + 288) I_1\left(\frac{z}{2}\right)}{945 z^3}$$

07.25.03.amen.01

$${}_2F_2\left(4, \frac{11}{2}; 1, \frac{11}{2}; z\right) = \frac{1}{6} e^z (z^3 + 9 z^2 + 18 z + 6)$$

07.25.03.ameo.01

$${}_2F_2\left(4, \frac{11}{2}; 1, 6; z\right) = \frac{16 e^{z/2} (4 z^6 + 24 z^5 + 42 z^4 - 12 z^3 + 99 z^2 - 306 z + 576) I_0\left(\frac{z}{2}\right) + 8 e^{z/2} (8 z^7 + 40 z^6 + 48 z^5 - 60 z^4 + 267 z^3 - 936 z^2 + 2448 z - 4608) I_1\left(\frac{z}{2}\right)}{189 z^4}$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = \frac{3}{2}$

07.25.03.amep.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{4 z^6 + 140 z^5 + 1705 z^4 + 8880 z^3 + 19536 z^2 + 15240 z + 2475}{2835} + \frac{e^z \sqrt{\pi} (8 z^7 + 284 z^6 + 3546 z^5 + 19335 z^4 + 46560 z^3 + 44280 z^2 + 12240 z + 360) \operatorname{erf}(\sqrt{z})}{5670 \sqrt{z}}$$

07.25.03.ameq.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{4z^6 - 140z^5 + 1705z^4 - 8880z^3 + 19536z^2 - 15240z + 2475}{2835} + \frac{e^{-z} \sqrt{\pi} (-8z^7 + 284z^6 - 3546z^5 + 19335z^4 - 46560z^3 + 44280z^2 - 12240z + 360) \operatorname{erfi}(\sqrt{z})}{5670 \sqrt{z}}$$

07.25.03.amer.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{e^z (16z^6 + 512z^5 + 5640z^4 + 26280z^3 + 51345z^2 + 35910z + 5670)}{5670}$$

07.25.03.ames.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{4z^5 + 112z^4 + 1035z^3 + 3756z^2 + 4908z + 1530}{1890} + \frac{e^z \sqrt{\pi} (8z^6 + 228z^5 + 2178z^4 + 8445z^3 + 12780z^2 + 5940z + 360) \operatorname{erf}(\sqrt{z})}{3780 \sqrt{z}}$$

07.25.03.amet.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-4z^5 + 112z^4 - 1035z^3 + 3756z^2 - 4908z + 1530}{1890} + \frac{e^{-z} \sqrt{\pi} (8z^6 - 228z^5 + 2178z^4 - 8445z^3 + 12780z^2 - 5940z + 360) \operatorname{erfi}(\sqrt{z})}{3780 \sqrt{z}}$$

07.25.03.ameu.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{e^z (16z^5 + 400z^4 + 3240z^3 + 10080z^2 + 11025z + 2835)}{2835}$$

07.25.03.amev.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{756} (4z^4 + 84z^3 + 533z^2 + 1128z + 576) + \frac{e^z \sqrt{\pi} (8z^5 + 172z^4 + 1146z^3 + 2715z^2 + 1920z + 180) \operatorname{erf}(\sqrt{z})}{1512 \sqrt{z}}$$

07.25.03.amew.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{756} (4z^4 - 84z^3 + 533z^2 - 1128z + 576) + \frac{e^{-z} \sqrt{\pi} (-8z^5 + 172z^4 - 1146z^3 + 2715z^2 - 1920z + 180) \operatorname{erfi}(\sqrt{z})}{1512 \sqrt{z}}$$

07.25.03.amex.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{1}{945} e^z (16z^4 + 288z^3 + 1512z^2 + 2520z + 945)$$

07.25.03.amey.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{216} (4z^3 + 56z^2 + 199z + 156) + \frac{e^z \sqrt{\pi} (8z^4 + 116z^3 + 450z^2 + 465z + 60) \operatorname{erf}(\sqrt{z})}{432 \sqrt{z}}$$

07.25.03.amez.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{216} (-4z^3 + 56z^2 - 199z + 156) + \frac{e^{-z} \sqrt{\pi} (8z^4 - 116z^3 + 450z^2 - 465z + 60) \operatorname{erfi}(\sqrt{z})}{432 \sqrt{z}}$$

07.25.03.amf0.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \frac{4e^z (16z^7 + 176z^6 + 456z^5 + 240z^4 - 15z^3 + 45z^2 - 90z + 90)}{945z^4} - \frac{8}{21z^4}$$

07.25.03.amf1.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{48} (4z^2 + 28z + 33) + \frac{e^z \sqrt{\pi} (8z^3 + 60z^2 + 90z + 15) \operatorname{erf}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.amf2.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{48} (4z^2 - 28z + 33) + \frac{e^{-z} \sqrt{\pi} (-8z^3 + 60z^2 - 90z + 15) \operatorname{erfi}(\sqrt{z})}{96 \sqrt{z}}$$

07.25.03.amf3.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \frac{4e^z (16z^7 + 64z^6 + 72z^5 - 120z^4 + 465z^3 - 1350z^2 + 2610z - 2520)}{189z^5} - \frac{40(z - 28)}{21z^5}$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = 2$

07.25.03.amf4.01

$${}_2F_2\left(4, \frac{11}{2}; 2, 2; z\right) = \frac{e^{z/2} (32z^6 + 944z^5 + 9568z^4 + 41340z^3 + 77358z^2 + 56595z + 11340) I_0\left(\frac{z}{2}\right)}{11340} + \frac{e^{z/2} (32z^6 + 912z^5 + 8672z^4 + 33092z^3 + 47790z^2 + 19113z + 420) I_1\left(\frac{z}{2}\right)}{11340}$$

07.25.03.amf5.01

$${}_2F_2\left(4, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \frac{e^z (8z^5 + 204z^4 + 1698z^3 + 5499z^2 + 6426z + 1890)}{1890}$$

07.25.03.amf6.01

$${}_2F_2\left(4, \frac{11}{2}; 2, 3; z\right) = \frac{e^{z/2} (16z^5 + 368z^4 + 2748z^3 + 8052z^2 + 8925z + 2835) I_0\left(\frac{z}{2}\right)}{2835} + \frac{e^{z/2} (16z^5 + 352z^4 + 2404z^3 + 5808z^2 + 4017z + 210) I_1\left(\frac{z}{2}\right)}{2835}$$

07.25.03.amf7.01

$${}_2F_2\left(4, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{378} e^z (4z^4 + 76z^3 + 431z^2 + 810z + 378)$$

07.25.03.amf8.01

$${}_2F_2\left(4, \frac{11}{2}; 2, 4; z\right) = \frac{1}{945} e^{z/2} (16z^4 + 264z^3 + 1284z^2 + 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^4 + 248z^3 + 1044z^2 + 1164z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.amf9.01

$${}_2F_2\left(4, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{54} e^z (2z^3 + 25z^2 + 78z + 54)$$

07.25.03.amfa.01

$${}_2F_2\left(4, \frac{11}{2}; 2, 5; z\right) = \frac{16 e^{z/2} (4z^5 + 40z^4 + 98z^3 + 60z^2 - 3z + 6) I_0\left(\frac{z}{2}\right) + 8 e^{z/2} (8z^6 + 72z^5 + 128z^4 + 20z^3 - 9z^2 + 24z - 48) I_1\left(\frac{z}{2}\right)}{945 z^2 + 945 z^3}$$

07.25.03.amfb.01

$${}_2F_2\left(4, \frac{11}{2}; 2, \frac{11}{2}; z\right) = \frac{1}{6} e^z (z^2 + 6z + 6)$$

07.25.03.amfc.01

$${}_2F_2\left(4, \frac{11}{2}; 2, 6; z\right) = \frac{8 e^{z/2} (8z^5 + 28z^4 + 36z^3 - 51z^2 + 156z - 288) I_0\left(\frac{z}{2}\right) + 8 e^{z/2} (8z^6 + 20z^5 + 20z^4 - 69z^3 + 240z^2 - 624z + 1152) I_1\left(\frac{z}{2}\right)}{189 z^3 + 189 z^4}$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = \frac{5}{2}$

07.25.03.amfd.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{4z^5 + 88z^4 + 597z^3 + 1407z^2 + 894z + 18}{1260z} + \frac{e^z \sqrt{\pi} (8z^6 + 180z^5 + 1278z^4 + 3333z^3 + 2781z^2 + 378z - 18) \operatorname{erf}(\sqrt{z})}{2520 z^{3/2}}$$

07.25.03.amfe.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{4z^5 - 88z^4 + 597z^3 - 1407z^2 + 894z - 18}{1260z} + \frac{e^{-z} \sqrt{\pi} (-8z^6 + 180z^5 - 1278z^4 + 3333z^3 - 2781z^2 + 378z + 18) \operatorname{erfi}(\sqrt{z})}{2520 z^{3/2}}$$

07.25.03.amff.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{1}{945} e^z (8z^4 + 156z^3 + 918z^2 + 1827z + 945)$$

07.25.03.amfg.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{4z^4 + 64z^3 + 279z^2 + 318z + 18}{504z} + \frac{e^z \sqrt{\pi} (8z^5 + 132z^4 + 618z^3 + 861z^2 + 198z - 18) \operatorname{erf}(\sqrt{z})}{1008 z^{3/2}}$$

07.25.03.amfh.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-4z^4 + 64z^3 - 279z^2 + 318z - 18}{504z} + \frac{e^{-z} \sqrt{\pi} (8z^5 - 132z^4 + 618z^3 - 861z^2 + 198z + 18) \operatorname{erfi}(\sqrt{z})}{1008 z^{3/2}}$$

07.25.03.amfi.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{1}{315} e^z (8z^3 + 108z^2 + 378z + 315)$$

07.25.03.amfj.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{4z^3 + 40z^2 + 81z + 9}{144z} + \frac{e^z \sqrt{\pi} (8z^4 + 84z^3 + 198z^2 + 69z - 9) \operatorname{erf}(\sqrt{z})}{288z^{3/2}}$$

07.25.03.amfk.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{4z^3 - 40z^2 + 81z - 9}{144z} + \frac{e^{-z} \sqrt{\pi} (-8z^4 + 84z^3 - 198z^2 + 69z + 9) \operatorname{erfi}(\sqrt{z})}{288z^{3/2}}$$

07.25.03.amfl.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{4e^z (8z^6 + 60z^5 + 78z^4 + 3z^3 - 9z^2 + 18z - 18)}{315z^4} + \frac{8}{35z^4}$$

07.25.03.amfm.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{4z^2 + 16z + 3}{32z} + \frac{e^z \sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.amfn.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{-4z^2 + 16z - 3}{32z} + \frac{e^{-z} \sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.amfo.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{8(z - 20)}{7z^5} + \frac{4e^z (8z^6 + 12z^5 + 18z^4 - 69z^3 + 198z^2 - 378z + 360)}{63z^5}$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = 3$

07.25.03.amfp.01

$${}_2F_2\left(4, \frac{11}{2}; 3, 3; z\right) = \frac{2e^{z/2} (16z^4 + 280z^3 + 1476z^2 + 2700z + 1425) I_0\left(\frac{z}{2}\right)}{2835} + \frac{2e^{z/2} (16z^5 + 264z^4 + 1220z^3 + 1596z^2 + 225z - 30) I_1\left(\frac{z}{2}\right)}{2835z}$$

07.25.03.amfq.01

$${}_2F_2\left(4, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{1}{189} e^z (4z^3 + 56z^2 + 207z + 189)$$

07.25.03.amfr.01

$${}_2F_2\left(4, \frac{11}{2}; 3, 4; z\right) = \frac{16}{945} e^{z/2} (2z^3 + 24z^2 + 75z + 60) I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2} (8z^4 + 88z^3 + 216z^2 + 60z - 15) I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.amfs.01

$${}_2F_2\left(4, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{1}{27} e^z (2z^2 + 17z + 27)$$

07.25.03.amft.01

$${}_2F_2\left(4, \frac{11}{2}; 3, 5; z\right) = \frac{16 e^{z/2} (8 z^4 + 52 z^3 + 60 z^2 + 3 z - 6) I_0\left(\frac{z}{2}\right)}{945 z^2} + \frac{16 e^{z/2} (8 z^5 + 44 z^4 + 20 z^3 - 3 z^2 - 12 z + 24) I_1\left(\frac{z}{2}\right)}{945 z^3}$$

07.25.03.amfu.01

$${}_2F_2\left(4, \frac{11}{2}; 3, \frac{11}{2}; z\right) = \frac{1}{3} e^z (z + 3)$$

07.25.03.amfv.01

$${}_2F_2\left(4, \frac{11}{2}; 3, 6; z\right) = \frac{32 e^{z/2} (4 z^4 + 4 z^3 + 9 z^2 - 27 z + 48) I_0\left(\frac{z}{2}\right)}{189 z^3} + \frac{32 e^{z/2} (4 z^5 + 11 z^3 - 42 z^2 + 108 z - 192) I_1\left(\frac{z}{2}\right)}{189 z^4}$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = \frac{7}{2}$

07.25.03.amfw.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5 (4 z^4 + 44 z^3 + 105 z^2 + 20 z - 6)}{1008 z^2} + \frac{5 e^z \sqrt{\pi} (8 z^5 + 92 z^4 + 250 z^3 + 111 z^2 - 24 z + 6) \operatorname{erf}(\sqrt{z})}{2016 z^{5/2}}$$

07.25.03.amfx.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5 (4 z^4 - 44 z^3 + 105 z^2 - 20 z - 6)}{1008 z^2} - \frac{5 e^{-z} \sqrt{\pi} (8 z^5 - 92 z^4 + 250 z^3 - 111 z^2 - 24 z - 6) \operatorname{erfi}(\sqrt{z})}{2016 z^{5/2}}$$

07.25.03.amfy.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{1}{63} e^z (4 z^2 + 36 z + 63)$$

07.25.03.amfz.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{5 (4 z^3 + 24 z^2 + 11 z - 6)}{288 z^2} + \frac{5 e^z \sqrt{\pi} (8 z^4 + 52 z^3 + 42 z^2 - 15 z + 6) \operatorname{erf}(\sqrt{z})}{576 z^{5/2}}$$

07.25.03.amg0.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{5 e^{-z} \sqrt{\pi} (8 z^4 - 52 z^3 + 42 z^2 + 15 z + 6) \operatorname{erfi}(\sqrt{z})}{576 z^{5/2}} - \frac{5 (4 z^3 - 24 z^2 + 11 z + 6)}{288 z^2}$$

07.25.03.amg1.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{4 e^z (4 z^5 + 16 z^4 - z^3 + 3 z^2 - 6 z + 6)}{63 z^4} - \frac{8}{21 z^4}$$

07.25.03.amg2.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{5 (4 z^2 + 4 z - 3)}{64 z^2} + \frac{5 e^z \sqrt{\pi} (8 z^3 + 12 z^2 - 6 z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.amg3.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{5 (4 z^2 - 4 z - 3)}{64 z^2} - \frac{5 e^{-z} \sqrt{\pi} (8 z^3 - 12 z^2 - 6 z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.amg4.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \frac{20 e^z (4 z^5 - 4 z^4 + 15 z^3 - 42 z^2 + 78 z - 72)}{63 z^5} - \frac{40 (z - 12)}{21 z^5}$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = 4$

07.25.03.amg5.01

$${}_2F_2\left(4, \frac{11}{2}; 4, 4; z\right) = \frac{4 e^{z/2} (8 z^3 + 60 z^2 + 84 z - 3) I_0\left(\frac{z}{2}\right)}{315 z} + \frac{4 e^{z/2} (8 z^4 + 52 z^3 + 36 z^2 - 21 z + 12) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.amg6.01

$${}_2F_2\left(4, \frac{11}{2}; 4, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2 z + 9)$$

07.25.03.amg7.01

$${}_2F_2\left(4, \frac{11}{2}; 4, 5; z\right) = \frac{32 e^{z/2} (4 z^3 + 12 z^2 - 3 z + 3) I_0\left(\frac{z}{2}\right)}{315 z^2} + \frac{32 e^{z/2} (4 z^4 + 8 z^3 - 9 z^2 + 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3}$$

07.25.03.amg8.01

$${}_2F_2\left(4, \frac{11}{2}; 4, \frac{11}{2}; z\right) = e^z$$

07.25.03.amg9.01

$${}_2F_2\left(4, \frac{11}{2}; 4, 6; z\right) = \frac{32 e^{z/2} (4 z^3 - 6 z^2 + 15 z - 24) I_0\left(\frac{z}{2}\right)}{63 z^3} + \frac{32 e^{z/2} (4 z^4 - 10 z^3 + 27 z^2 - 60 z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = \frac{9}{2}$

07.25.03.amga.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 (4 z^3 + 8 z^2 - 11 z + 15)}{576 z^3} + \frac{35 e^z \sqrt{\pi} (8 z^4 + 20 z^3 - 18 z^2 + 21 z - 15) \operatorname{erf}(\sqrt{z})}{1152 z^{7/2}}$$

07.25.03.amgb.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 (4 z^3 - 8 z^2 - 11 z - 15)}{576 z^3} - \frac{35 e^{-z} \sqrt{\pi} (8 z^4 - 20 z^3 - 18 z^2 - 21 z - 15) \operatorname{erfi}(\sqrt{z})}{1152 z^{7/2}}$$

07.25.03.amgc.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{4 e^z (2 z^4 + z^3 - 3 z^2 + 6 z - 6)}{9 z^4} + \frac{8}{3 z^4}$$

07.25.03.amgd.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{35 (4 z^2 - 8 z + 15)}{128 z^3} + \frac{35 e^z \sqrt{\pi} (8 z^3 - 12 z^2 + 18 z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.amge.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{35 e^{-z} \sqrt{\pi} (8 z^3 + 12 z^2 + 18 z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{35 (4 z^2 + 8 z + 15)}{128 z^3}$$

07.25.03.amgf.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{40 (z - 4)}{3 z^5} + \frac{20 e^z (2 z^4 - 7 z^3 + 18 z^2 - 30 z + 24)}{9 z^5}$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = 5$

07.25.03.amgg.01

$${}_2F_2\left(4, \frac{11}{2}; 5, 5; z\right) = \frac{128 e^{z/2} (4z^4 - 2z^3 - z^2 + 12z - 24) I_0\left(\frac{z}{2}\right)}{315 z^4} + \frac{128 e^{z/2} (4z^3 - 6z^2 + 7z - 2) I_1\left(\frac{z}{2}\right)}{315 z^3} + \frac{1024}{105 z^4}$$

07.25.03.amgh.01

$${}_2F_2\left(4, \frac{11}{2}; 5, \frac{11}{2}; z\right) = \frac{4 e^z (z^3 - 3z^2 + 6z - 6)}{z^4} + \frac{24}{z^4}$$

07.25.03.amgi.01

$${}_2F_2\left(4, \frac{11}{2}; 5, 6; z\right) = \frac{512 e^{z/2} (z^3 - 4z^2 + 9z - 6) I_0\left(\frac{z}{2}\right)}{63 z^4} + \frac{256 e^{z/2} (2z^3 - 10z^2 + 29z - 48) I_1\left(\frac{z}{2}\right)}{63 z^4} + \frac{1024}{21 z^4}$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = \frac{11}{2}$

07.25.03.amgj.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{315 (4z^2 - 20z + 105)}{256 z^4} + \frac{315 e^z \sqrt{\pi} (8z^3 - 36z^2 + 90z - 105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.amgk.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{315 (4z^2 + 20z + 105)}{256 z^4} - \frac{315 e^{-z} \sqrt{\pi} (8z^3 + 36z^2 + 90z + 105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.amgl.01

$${}_2F_2\left(4, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{120(z+4)}{z^5} + \frac{20 e^z (z^3 - 6z^2 + 18z - 24)}{z^5}$$

For fixed z and $a_1 = 4, a_2 = \frac{11}{2}, b_1 = 6$

07.25.03.amgm.01

$${}_2F_2\left(4, \frac{11}{2}; 6, 6; z\right) = \frac{5120(z+8)}{21 z^5} + \frac{1280 e^{z/2} (2z^3 - 13z^2 + 36z - 96) I_0\left(\frac{z}{2}\right)}{63 z^5} + \frac{1280 e^{z/2} (2z^2 - 15z + 52) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = -\frac{11}{2}$

07.25.03.amgn.01

$${}_2F_2\left(4, 6; -\frac{11}{2}, 1; z\right) = \frac{1}{14968800} (128 z^{14} + 12864 z^{13} + 521440 z^{12} + 11049072 z^{11} + 132555096 z^{10} + 909771660 z^9 + 3418274250 z^8 + 6179818725 z^7 + 3576545280 z^6 - 650280960 z^5 + 304819200 z^4 - 193536000 z^3 + 127008000 z^2 - 65318400 z + 14968800) + \frac{1}{29937600} \left(e^z \sqrt{\pi} (256 z^{29/2} + 25856 z^{27/2} + 1055616 z^{25/2} + 22607040 z^{23/2} + 275668800 z^{21/2} + 1942239600 z^{19/2} + 7637099400 z^{17/2} + 15117272100 z^{15/2} + 11337954075 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amgo.01

$${}_2F_2\left(4, 6; -\frac{11}{2}, 1; -z\right) = \frac{1}{14968800} (128 z^{14} - 12864 z^{13} + 521440 z^{12} - 11049072 z^{11} + 132555096 z^{10} - 909771660 z^9 + 3418274250 z^8 - 6179818725 z^7 + 3576545280 z^6 + 650280960 z^5 + 304819200 z^4 + 193536000 z^3 + 127008000 z^2 + 65318400 z + 14968800) + \frac{1}{29937600} \left(e^{-z} \sqrt{\pi} (-256 z^{29/2} + 25856 z^{27/2} - 1055616 z^{25/2} + 22607040 z^{23/2} - 275668800 z^{21/2} + 1942239600 z^{19/2} - 7637099400 z^{17/2} + 15117272100 z^{15/2} - 11337954075 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amgp.01

$${}_2F_2\left(4, 6; -\frac{11}{2}, 2; z\right) = \frac{1}{7484400} (64 z^{13} + 5504 z^{12} + 186448 z^{11} + 3196608 z^{10} + 29603196 z^9 + 145441560 z^8 + 338997195 z^7 + 255467520 z^6 - 54190080 z^5 + 30481920 z^4 - 24192000 z^3 + 21168000 z^2 - 16329600 z + 7484400) + \frac{1}{14968800} \left(e^z \sqrt{\pi} (128 z^{27/2} + 11072 z^{25/2} + 378336 z^{23/2} + 6574320 z^{21/2} + 62229720 z^{19/2} + 317707740 z^{17/2} + 800326170 z^{15/2} + 755863605 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amgq.01

$${}_2F_2\left(4, 6; -\frac{11}{2}, 2; -z\right) = \frac{1}{7484400} (-64 z^{13} + 5504 z^{12} - 186448 z^{11} + 3196608 z^{10} - 29603196 z^9 + 145441560 z^8 - 338997195 z^7 + 255467520 z^6 + 54190080 z^5 + 30481920 z^4 + 24192000 z^3 + 21168000 z^2 + 16329600 z + 7484400) + \frac{1}{14968800} \left(e^{-z} \sqrt{\pi} (128 z^{27/2} - 11072 z^{25/2} + 378336 z^{23/2} - 6574320 z^{21/2} + 62229720 z^{19/2} - 317707740 z^{17/2} + 800326170 z^{15/2} - 755863605 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amgr.01

$${}_2F_2\left(4, 6; -\frac{11}{2}, 3; z\right) = \frac{1}{1871100} (32 z^{12} + 2288 z^{11} + 62352 z^{10} + 820008 z^9 + 5399970 z^8 + 16363035 z^7 + 15966720 z^6 - 3870720 z^5 + 2540160 z^4 - 2419200 z^3 + 2646000 z^2 - 2721600 z + 1871100) + \frac{1}{3742200} (e^z \sqrt{\pi} (64 z^{25/2} + 4608 z^{23/2} + 126960 z^{21/2} + 1700160 z^{19/2} + 11563020 z^{17/2} + 37442160 z^{15/2} + 44462565 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amgs.01

$${}_2F_2\left(4, 6; -\frac{11}{2}, 3; -z\right) = \frac{1}{1871100} (32 z^{12} - 2288 z^{11} + 62352 z^{10} - 820008 z^9 + 5399970 z^8 - 16363035 z^7 + 15966720 z^6 + 3870720 z^5 + 2540160 z^4 + 2419200 z^3 + 2646000 z^2 + 2721600 z + 1871100) + \frac{1}{3742200} (e^{-z} \sqrt{\pi} (-64 z^{25/2} + 4608 z^{23/2} - 126960 z^{21/2} + 1700160 z^{19/2} - 11563020 z^{17/2} + 37442160 z^{15/2} - 44462565 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amgt.01

$${}_2F_2\left(4, 6; -\frac{11}{2}, 4; z\right) = \frac{1}{311850} (16 z^{11} + 912 z^{10} + 18872 z^9 + 174540 z^8 + 701145 z^7 + 887040 z^6 - 241920 z^5 + 181440 z^4 - 201600 z^3 + 264600 z^2 - 340200 z + 311850) + \frac{1}{623700} e^z \sqrt{\pi} (32 z^{23/2} + 1840 z^{21/2} + 38640 z^{19/2} + 367080 z^{17/2} + 1560090 z^{15/2} + 2340135 z^{13/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.amgu.01

$${}_2F_2\left(4, 6; -\frac{11}{2}, 4; -z\right) = \frac{1}{311850} (-16 z^{11} + 912 z^{10} - 18872 z^9 + 174540 z^8 - 701145 z^7 + 887040 z^6 + 241920 z^5 + 181440 z^4 + 201600 z^3 + 264600 z^2 + 340200 z + 311850) + \frac{1}{623700} e^{-z} \sqrt{\pi} (32 z^{23/2} - 1840 z^{21/2} + 38640 z^{19/2} - 367080 z^{17/2} + 1560090 z^{15/2} - 2340135 z^{13/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amgv.01

$${}_2F_2\left(4, 6; -\frac{11}{2}, 5; z\right) = \frac{1}{155925} (32 z^{10} + 1360 z^9 + 19400 z^8 + 107220 z^7 + 177408 z^6 - 53760 z^5 + 45360 z^4 - 57600 z^3 + 88200 z^2 - 136080 z + 155925) + \frac{2 e^z \sqrt{\pi} (16 z^{21/2} + 688 z^{19/2} + 10032 z^{17/2} + 58140 z^{15/2} + 111435 z^{13/2}) \operatorname{erf}(\sqrt{z})}{155925}$$

07.25.03.amgw.01

$${}_2F_2\left(4, 6; -\frac{11}{2}, 5; -z\right) = \frac{1}{155925} (32z^{10} - 1360z^9 + 19400z^8 - 107220z^7 + 177408z^6 + 53760z^5 + 45360z^4 + 57600z^3 + 88200z^2 + 136080z + 155925) - \frac{2e^{-z}\sqrt{\pi}(16z^{21/2} - 688z^{19/2} + 10032z^{17/2} - 58140z^{15/2} + 111435z^{13/2})\operatorname{erfi}(\sqrt{z})}{155925}$$

07.25.03.amgx.01

$${}_2F_2\left(4, 6; -\frac{11}{2}, 6; z\right) = \frac{32z^9 + 896z^8 + 7320z^7 + 16128z^6 - 5376z^5 + 5040z^4 - 7200z^3 + 12600z^2 - 22680z + 31185}{31185} + \frac{4e^z\sqrt{\pi}(8z^{19/2} + 228z^{17/2} + 1938z^{15/2} + 4845z^{13/2})\operatorname{erf}(\sqrt{z})}{31185}$$

07.25.03.amgy.01

$${}_2F_2\left(4, 6; -\frac{11}{2}, 6; -z\right) = \frac{-32z^9 + 896z^8 - 7320z^7 + 16128z^6 + 5376z^5 + 5040z^4 + 7200z^3 + 12600z^2 + 22680z + 31185}{31185} + \frac{4e^{-z}\sqrt{\pi}(8z^{19/2} - 228z^{17/2} + 1938z^{15/2} - 4845z^{13/2})\operatorname{erfi}(\sqrt{z})}{31185}$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = -\frac{9}{2}$

07.25.03.amgz.01

$${}_2F_2\left(4, 6; -\frac{9}{2}, 1; z\right) = \frac{1}{2721600} (-128z^{13} - 11840z^{12} - 438624z^{11} - 8423088z^{10} - 90644760z^9 - 550907820z^8 - 1802128050z^7 - 2768389785z^6 - 1300561920z^5 + 203212800z^4 - 77414400z^3 + 36288000z^2 - 14515200z + 2721600) + \frac{1}{5443200} (e^z\sqrt{\pi}(-256z^{27/2} - 23808z^{25/2} - 888960z^{23/2} - 17273280z^{21/2} - 189302400z^{19/2} - 1185030000z^{17/2} - 4082009400z^{15/2} - 6953253300z^{13/2} - 4384700775z^{11/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.amh0.01

$${}_2F_2\left(4, 6; -\frac{9}{2}, 1; -z\right) = \frac{1}{2721600} (128z^{13} - 11840z^{12} + 438624z^{11} - 8423088z^{10} + 90644760z^9 - 550907820z^8 + 1802128050z^7 - 2768389785z^6 + 1300561920z^5 + 203212800z^4 + 77414400z^3 + 36288000z^2 + 14515200z + 2721600) + \frac{1}{5443200} (e^{-z}\sqrt{\pi}(-256z^{27/2} + 23808z^{25/2} - 888960z^{23/2} + 17273280z^{21/2} - 189302400z^{19/2} + 1185030000z^{17/2} - 4082009400z^{15/2} + 6953253300z^{13/2} - 4384700775z^{11/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.amh1.01

$${}_2F_2\left(4, 6; -\frac{9}{2}, 2; z\right) = \frac{1}{1360800} \left(-64 z^{12} - 5056 z^{11} - 156144 z^{10} - 2418336 z^9 - 20001900 z^8 - 86471820 z^7 - 173650365 z^6 - 108380160 z^5 + 20321280 z^4 - 9676800 z^3 + 6048000 z^2 - 3628800 z + 1360800\right) + \frac{1}{2721600} \left(e^z \sqrt{\pi} \left(-128 z^{25/2} - 10176 z^{23/2} - 317280 z^{21/2} - 4987920 z^{19/2} - 42278040 z^{17/2} - 190873620 z^{15/2} - 418578930 z^{13/2} - 337284675 z^{11/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.amh2.01

$${}_2F_2\left(4, 6; -\frac{9}{2}, 2; -z\right) = \frac{1}{1360800} \left(-64 z^{12} + 5056 z^{11} - 156144 z^{10} + 2418336 z^9 - 20001900 z^8 + 86471820 z^7 - 173650365 z^6 + 108380160 z^5 + 20321280 z^4 + 9676800 z^3 + 6048000 z^2 + 3628800 z + 1360800\right) + \frac{1}{2721600} \left(e^{-z} \sqrt{\pi} \left(128 z^{25/2} - 10176 z^{23/2} + 317280 z^{21/2} - 4987920 z^{19/2} + 42278040 z^{17/2} - 190873620 z^{15/2} + 418578930 z^{13/2} - 337284675 z^{11/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.amh3.01

$${}_2F_2\left(4, 6; -\frac{9}{2}, 3; z\right) = \frac{1}{340200} \left(-32 z^{11} - 2096 z^{10} - 51888 z^9 - 613464 z^8 - 3583050 z^7 - 9447795 z^6 - 7741440 z^5 + 1693440 z^4 - 967680 z^3 + 756000 z^2 - 604800 z + 340200\right) + \frac{1}{680400} \left(e^z \sqrt{\pi} \left(-64 z^{23/2} - 4224 z^{21/2} - 105840 z^{19/2} - 1276800 z^{17/2} - 7732620 z^{15/2} - 21976920 z^{13/2} - 22485645 z^{11/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.amh4.01

$${}_2F_2\left(4, 6; -\frac{9}{2}, 3; -z\right) = \frac{1}{340200} \left(32 z^{11} - 2096 z^{10} + 51888 z^9 - 613464 z^8 + 3583050 z^7 - 9447795 z^6 + 7741440 z^5 + 1693440 z^4 + 967680 z^3 + 756000 z^2 + 604800 z + 340200\right) + \frac{1}{680400} \left(e^{-z} \sqrt{\pi} \left(-64 z^{23/2} + 4224 z^{21/2} - 105840 z^{19/2} + 1276800 z^{17/2} - 7732620 z^{15/2} + 21976920 z^{13/2} - 22485645 z^{11/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.amh5.01

$${}_2F_2\left(4, 6; -\frac{9}{2}, 4; z\right) = \frac{1}{56700} \left(-16 z^{10} - 832 z^9 - 15552 z^8 - 128280 z^7 - 451395 z^6 - 483840 z^5 + 120960 z^4 - 80640 z^3 + 75600 z^2 - 75600 z + 56700\right) + \frac{1}{113400} e^z \sqrt{\pi} \left(-32 z^{21/2} - 1680 z^{19/2} - 31920 z^{17/2} - 271320 z^{15/2} - 1017450 z^{13/2} - 1322685 z^{11/2}\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.amh6.01

$${}_2F_2\left(4, 6; -\frac{9}{2}, 4; -z\right) = \frac{1}{56700} (-16z^{10} + 832z^9 - 15552z^8 + 128280z^7 - 451395z^6 + 483840z^5 + 120960z^4 + 80640z^3 + 75600z^2 + 75600z + 56700) + \frac{1}{113400} e^{-z} \sqrt{\pi} (32z^{21/2} - 1680z^{19/2} + 31920z^{17/2} - 271320z^{15/2} + 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amh7.01

$${}_2F_2\left(4, 6; -\frac{9}{2}, 5; z\right) = \frac{1}{14175} (-16z^9 - 616z^8 - 7860z^7 - 38178z^6 - 53760z^5 + 15120z^4 - 11520z^3 + 12600z^2 - 15120z + 14175) + \frac{e^z \sqrt{\pi} (-16z^{19/2} - 624z^{17/2} - 8160z^{15/2} - 41820z^{13/2} - 69615z^{11/2}) \operatorname{erf}(\sqrt{z})}{14175}$$

07.25.03.amh8.01

$${}_2F_2\left(4, 6; -\frac{9}{2}, 5; -z\right) = \frac{1}{14175} (16z^9 - 616z^8 + 7860z^7 - 38178z^6 + 53760z^5 + 15120z^4 + 11520z^3 + 12600z^2 + 15120z + 14175) + \frac{e^{-z} \sqrt{\pi} (-16z^{19/2} + 624z^{17/2} - 8160z^{15/2} + 41820z^{13/2} - 69615z^{11/2}) \operatorname{erfi}(\sqrt{z})}{14175}$$

07.25.03.amh9.01

$${}_2F_2\left(4, 6; -\frac{9}{2}, 6; z\right) = \frac{-16z^8 - 400z^7 - 2868z^6 - 5376z^5 + 1680z^4 - 1440z^3 + 1800z^2 - 2520z + 2835}{2835} - \frac{2e^z \sqrt{\pi} (8z^{17/2} + 204z^{15/2} + 1530z^{13/2} + 3315z^{11/2}) \operatorname{erf}(\sqrt{z})}{2835}$$

07.25.03.amha.01

$${}_2F_2\left(4, 6; -\frac{9}{2}, 6; -z\right) = \frac{-16z^8 + 400z^7 - 2868z^6 + 5376z^5 + 1680z^4 + 1440z^3 + 1800z^2 + 2520z + 2835}{2835} + \frac{2e^{-z} \sqrt{\pi} (8z^{17/2} - 204z^{15/2} + 1530z^{13/2} - 3315z^{11/2}) \operatorname{erfi}(\sqrt{z})}{2835}$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = -\frac{7}{2}$

07.25.03.amhb.01

$${}_2F_2\left(4, 6; -\frac{7}{2}, 1; z\right) = \frac{1}{604800} (128z^{12} + 10816z^{11} + 362976z^{10} + 6250480z^9 + 59560920z^8 + 315382860z^7 + 879403290z^6 + 1114992765z^5 + 406425600z^4 - 51609600z^3 + 14515200z^2 - 4147200z + 604800) + \frac{1}{1209600} \left(e^z \sqrt{\pi} (256z^{25/2} + 21760z^{23/2} + 736640z^{21/2} + 12853440z^{19/2} + 125035200z^{17/2} + 684889200z^{15/2} + 2027341800z^{13/2} + 2898569700z^{11/2} + 1486131075z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amhc.01

$${}_2F_2\left(4, 6; -\frac{7}{2}, 1; -z\right) = \frac{1}{604800} (128 z^{12} - 10816 z^{11} + 362976 z^{10} - 6250480 z^9 + 59560920 z^8 - 315382860 z^7 + 879403290 z^6 - 1114992765 z^5 + 406425600 z^4 + 51609600 z^3 + 14515200 z^2 + 4147200 z + 604800) + \frac{1}{1209600} \left(e^{-z} \sqrt{\pi} (-256 z^{25/2} + 21760 z^{23/2} - 736640 z^{21/2} + 12853440 z^{19/2} - 125035200 z^{17/2} + 684889200 z^{15/2} - 2027341800 z^{13/2} + 2898569700 z^{11/2} - 1486131075 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amhd.01

$${}_2F_2\left(4, 6; -\frac{7}{2}, 2; z\right) = \frac{1}{302400} (64 z^{11} + 4608 z^{10} + 128528 z^9 + 1777920 z^8 + 12949020 z^7 + 48372960 z^6 + 81657495 z^5 + 40642560 z^4 - 6451200 z^3 + 2419200 z^2 - 1036800 z + 302400) + \frac{1}{604800} \left(e^z \sqrt{\pi} (128 z^{23/2} + 9280 z^{21/2} + 261600 z^{19/2} + 3679920 z^{17/2} + 27558360 z^{15/2} + 108198540 z^{13/2} + 202181850 z^{11/2} + 135102825 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amhe.01

$${}_2F_2\left(4, 6; -\frac{7}{2}, 2; -z\right) = \frac{1}{302400} (-64 z^{11} + 4608 z^{10} - 128528 z^9 + 1777920 z^8 - 12949020 z^7 + 48372960 z^6 - 81657495 z^5 + 40642560 z^4 + 6451200 z^3 + 2419200 z^2 + 1036800 z + 302400) + \frac{1}{604800} \left(e^{-z} \sqrt{\pi} (128 z^{23/2} - 9280 z^{21/2} + 261600 z^{19/2} - 3679920 z^{17/2} + 27558360 z^{15/2} - 108198540 z^{13/2} + 202181850 z^{11/2} - 135102825 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amhf.01

$${}_2F_2\left(4, 6; -\frac{7}{2}, 3; z\right) = \frac{1}{75600} (32 z^{10} + 1904 z^9 + 42384 z^8 + 444840 z^7 + 2267490 z^6 + 5090355 z^5 + 3386880 z^4 - 645120 z^3 + 302400 z^2 - 172800 z + 75600) + \frac{1}{151200} \left(e^z \sqrt{\pi} (64 z^{21/2} + 3840 z^{19/2} + 86640 z^{17/2} + 930240 z^{15/2} + 4941900 z^{13/2} + 12093120 z^{11/2} + 10392525 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amhg.01

$${}_2F_2\left(4, 6; -\frac{7}{2}, 3; -z\right) = \frac{1}{75600} (32 z^{10} - 1904 z^9 + 42384 z^8 - 444840 z^7 + 2267490 z^6 - 5090355 z^5 + 3386880 z^4 + 645120 z^3 + 302400 z^2 + 172800 z + 75600) + \frac{1}{151200} \left(e^{-z} \sqrt{\pi} (-64 z^{21/2} + 3840 z^{19/2} - 86640 z^{17/2} + 930240 z^{15/2} - 4941900 z^{13/2} + 12093120 z^{11/2} - 10392525 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amhh.01

$${}_2F_2\left(4, 6; -\frac{7}{2}, 4; z\right) = \frac{1}{12600} (16z^9 + 752z^8 + 12552z^7 + 90980z^6 + 274845z^5 + 241920z^4 - 53760z^3 + 30240z^2 - 21600z + 12600) + \frac{e^z \sqrt{\pi} (32z^{19/2} + 1520z^{17/2} + 25840z^{15/2} + 193800z^{13/2} + 629850z^{11/2} + 692835z^{9/2}) \operatorname{erf}(\sqrt{z})}{25200}$$

07.25.03.amhi.01

$${}_2F_2\left(4, 6; -\frac{7}{2}, 4; -z\right) = \frac{1}{12600} (-16z^9 + 752z^8 - 12552z^7 + 90980z^6 - 274845z^5 + 241920z^4 + 53760z^3 + 30240z^2 + 21600z + 12600) + \frac{1}{25200} e^{-z} \sqrt{\pi} (32z^{19/2} - 1520z^{17/2} + 25840z^{15/2} - 193800z^{13/2} + 629850z^{11/2} - 692835z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amhj.01

$${}_2F_2\left(4, 6; -\frac{7}{2}, 5; z\right) = \frac{8z^8 + 276z^7 + 3106z^6 + 13005z^5 + 15120z^4 - 3840z^3 + 2520z^2 - 2160z + 1575}{1575} + \frac{e^z \sqrt{\pi} (16z^{17/2} + 560z^{15/2} + 6480z^{13/2} + 28860z^{11/2} + 40755z^{9/2}) \operatorname{erf}(\sqrt{z})}{3150}$$

07.25.03.amhk.01

$${}_2F_2\left(4, 6; -\frac{7}{2}, 5; -z\right) = \frac{8z^8 - 276z^7 + 3106z^6 - 13005z^5 + 15120z^4 + 3840z^3 + 2520z^2 + 2160z + 1575}{1575} + \frac{e^{-z} \sqrt{\pi} (-16z^{17/2} + 560z^{15/2} - 6480z^{13/2} + 28860z^{11/2} - 40755z^{9/2}) \operatorname{erfi}(\sqrt{z})}{3150}$$

07.25.03.amhl.01

$${}_2F_2\left(4, 6; -\frac{7}{2}, 6; z\right) = \frac{1}{315} (8z^7 + 176z^6 + 1086z^5 + 1680z^4 - 480z^3 + 360z^2 - 360z + 315) + \frac{1}{315} e^z \sqrt{\pi} (8z^{15/2} + 180z^{13/2} + 1170z^{11/2} + 2145z^{9/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.amhm.01

$${}_2F_2\left(4, 6; -\frac{7}{2}, 6; -z\right) = \frac{1}{315} (-8z^7 + 176z^6 - 1086z^5 + 1680z^4 + 480z^3 + 360z^2 + 360z + 315) + \frac{1}{315} e^{-z} \sqrt{\pi} (8z^{15/2} - 180z^{13/2} + 1170z^{11/2} - 2145z^{9/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = -\frac{5}{2}$

07.25.03.amhn.01

$${}_2F_2\left(4, 6; -\frac{5}{2}, 1; z\right) = \frac{1}{172\,800} \left(-128 z^{11} - 9792 z^{10} - 294\,496 z^9 - 4\,488\,240 z^8 - 37\,255\,320 z^7 - 168\,280\,044 z^6 - 388\,742\,850 z^5 - 390\,477\,105 z^4 - 103\,219\,200 z^3 + 9\,676\,800 z^2 - 1\,658\,880 z + 172\,800\right) + \frac{1}{345\,600} \left(e^z \sqrt{\pi} \left(-256 z^{23/2} - 19\,712 z^{21/2} - 598\,656 z^{19/2} - 9\,261\,504 z^{17/2} - 78\,727\,680 z^{15/2} - 369\,978\,480 z^{13/2} - 917\,406\,360 z^{11/2} - 1\,063\,756\,980 z^{9/2} - 422\,374\,095 z^{7/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.amho.01

$${}_2F_2\left(4, 6; -\frac{5}{2}, 1; -z\right) = \frac{1}{172\,800} \left(128 z^{11} - 9792 z^{10} + 294\,496 z^9 - 4\,488\,240 z^8 + 37\,255\,320 z^7 - 168\,280\,044 z^6 + 388\,742\,850 z^5 - 390\,477\,105 z^4 + 103\,219\,200 z^3 + 9\,676\,800 z^2 + 1\,658\,880 z + 172\,800\right) + \frac{1}{345\,600} \left(e^{-z} \sqrt{\pi} \left(-256 z^{23/2} + 19\,712 z^{21/2} - 598\,656 z^{19/2} + 9\,261\,504 z^{17/2} - 78\,727\,680 z^{15/2} + 369\,978\,480 z^{13/2} - 917\,406\,360 z^{11/2} + 1\,063\,756\,980 z^{9/2} - 422\,374\,095 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.amhp.01

$${}_2F_2\left(4, 6; -\frac{5}{2}, 2; z\right) = \frac{1}{86\,400} \left(-64 z^{10} - 4160 z^9 - 103\,600 z^8 - 1\,261\,920 z^7 - 7\,948\,236 z^6 - 25\,047\,540 z^5 - 34\,354\,665 z^4 - 12\,902\,400 z^3 + 1\,612\,800 z^2 - 414\,720 z + 86\,400\right) + \frac{1}{172\,800} \left(e^z \sqrt{\pi} \left(-128 z^{21/2} - 8384 z^{19/2} - 211\,296 z^{17/2} - 2\,623\,440 z^{15/2} - 17\,064\,600 z^{13/2} - 57\,004\,740 z^{11/2} - 88\,172\,370 z^{9/2} - 46\,930\,455 z^{7/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.amhq.01

$${}_2F_2\left(4, 6; -\frac{5}{2}, 2; -z\right) = \frac{1}{86\,400} \left(-64 z^{10} + 4160 z^9 - 103\,600 z^8 + 1\,261\,920 z^7 - 7\,948\,236 z^6 + 25\,047\,540 z^5 - 34\,354\,665 z^4 + 12\,902\,400 z^3 + 1\,612\,800 z^2 + 414\,720 z + 86\,400\right) + \frac{1}{172\,800} \left(e^{-z} \sqrt{\pi} \left(128 z^{21/2} - 8384 z^{19/2} + 211\,296 z^{17/2} - 2\,623\,440 z^{15/2} + 17\,064\,600 z^{13/2} - 57\,004\,740 z^{11/2} + 88\,172\,370 z^{9/2} - 46\,930\,455 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.amhr.01

$${}_2F_2\left(4, 6; -\frac{5}{2}, 3; z\right) = \frac{1}{21\,600} \left(-32 z^9 - 1712 z^8 - 33\,840 z^7 - 310\,296 z^6 - 1\,351\,530 z^5 - 2\,507\,355 z^4 - 1\,290\,240 z^3 + 201\,600 z^2 - 69\,120 z + 21\,600\right) + \frac{1}{43\,200} \left(e^z \sqrt{\pi} \left(-64 z^{19/2} - 3456 z^{17/2} - 69\,360 z^{15/2} - 652\,800 z^{13/2} - 2\,983\,500 z^{11/2} - 6\,126\,120 z^{9/2} - 4\,266\,405 z^{7/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.amhs.01

$${}_2F_2\left(4, 6; -\frac{5}{2}, 3; -z\right) = \frac{1}{21\,600} (32 z^9 - 1712 z^8 + 33\,840 z^7 - 310\,296 z^6 + 1\,351\,530 z^5 - 2\,507\,355 z^4 + 1\,290\,240 z^3 + 201\,600 z^2 + 69\,120 z + 21\,600) + \frac{1}{43\,200} (e^{-z} \sqrt{\pi} (-64 z^{19/2} + 3456 z^{17/2} - 69\,360 z^{15/2} + 652\,800 z^{13/2} - 2\,983\,500 z^{11/2} + 6\,126\,120 z^{9/2} - 4\,266\,405 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amht.01

$${}_2F_2\left(4, 6; -\frac{5}{2}, 4; z\right) = \frac{-16 z^8 - 672 z^7 - 9872 z^6 - 61\,680 z^5 - 155\,655 z^4 - 107\,520 z^3 + 20\,160 z^2 - 8640 z + 3600}{3600} + \frac{e^z \sqrt{\pi} (-32 z^{17/2} - 1360 z^{15/2} - 20\,400 z^{13/2} - 132\,600 z^{11/2} - 364\,650 z^{9/2} - 328\,185 z^{7/2}) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.amhu.01

$${}_2F_2\left(4, 6; -\frac{5}{2}, 4; -z\right) = \frac{-16 z^8 + 672 z^7 - 9872 z^6 + 61\,680 z^5 - 155\,655 z^4 + 107\,520 z^3 + 20\,160 z^2 + 8640 z + 3600}{3600} + \frac{e^{-z} \sqrt{\pi} (32 z^{17/2} - 1360 z^{15/2} + 20\,400 z^{13/2} - 132\,600 z^{11/2} + 364\,650 z^{9/2} - 328\,185 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{7200}$$

07.25.03.amhv.01

$${}_2F_2\left(4, 6; -\frac{5}{2}, 5; z\right) = \frac{1}{450} (-8 z^7 - 244 z^6 - 2378 z^5 - 8361 z^4 - 7680 z^3 + 1680 z^2 - 864 z + 450) + \frac{1}{900} e^z \sqrt{\pi} (-16 z^{15/2} - 496 z^{13/2} - 4992 z^{11/2} - 18\,876 z^{9/2} - 21\,879 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.amhw.01

$${}_2F_2\left(4, 6; -\frac{5}{2}, 5; -z\right) = \frac{1}{450} (8 z^7 - 244 z^6 + 2378 z^5 - 8361 z^4 + 7680 z^3 + 1680 z^2 + 864 z + 450) + \frac{1}{900} e^{-z} \sqrt{\pi} (-16 z^{15/2} + 496 z^{13/2} - 4992 z^{11/2} + 18\,876 z^{9/2} - 21\,879 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amhx.01

$${}_2F_2\left(4, 6; -\frac{5}{2}, 6; z\right) = \frac{1}{45} (-4 z^6 - 76 z^5 - 393 z^4 - 480 z^3 + 120 z^2 - 72 z + 45) + \frac{1}{90} e^z \sqrt{\pi} (-8 z^{13/2} - 156 z^{11/2} - 858 z^{9/2} - 1287 z^{7/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.amhy.01

$${}_2F_2\left(4, 6; -\frac{5}{2}, 6; -z\right) = \frac{1}{45} (-4 z^6 + 76 z^5 - 393 z^4 + 480 z^3 + 120 z^2 + 72 z + 45) + \frac{1}{90} e^{-z} \sqrt{\pi} (8 z^{13/2} - 156 z^{11/2} + 858 z^{9/2} - 1287 z^{7/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = -\frac{3}{2}$

07.25.03.amhz.01

$${}_2F_2\left(4, 6; -\frac{3}{2}, 1; z\right) = \frac{1}{69120} (128 z^{10} + 8768 z^9 + 233184 z^8 + 3093360 z^7 + 21894744 z^6 + 81993996 z^5 + 150742890 z^4 + 112789845 z^3 + 19353600 z^2 - 1105920 z + 69120) + \frac{1}{138240} \left(e^z \sqrt{\pi} (256 z^{21/2} + 17664 z^{19/2} + 475008 z^{17/2} + 6411456 z^{15/2} + 46670400 z^{13/2} + 183296880 z^{11/2} + 367515720 z^{9/2} + 328725540 z^{7/2} + 93648555 z^{5/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ami0.01

$${}_2F_2\left(4, 6; -\frac{3}{2}, 1; -z\right) = \frac{1}{69120} (128 z^{10} - 8768 z^9 + 233184 z^8 - 3093360 z^7 + 21894744 z^6 - 81993996 z^5 + 150742890 z^4 - 112789845 z^3 + 19353600 z^2 + 1105920 z + 69120) + \frac{1}{138240} \left(e^{-z} \sqrt{\pi} (-256 z^{21/2} + 17664 z^{19/2} - 475008 z^{17/2} + 6411456 z^{15/2} - 46670400 z^{13/2} + 183296880 z^{11/2} - 367515720 z^{9/2} + 328725540 z^{7/2} - 93648555 z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ami1.01

$${}_2F_2\left(4, 6; -\frac{3}{2}, 2; z\right) = \frac{1}{34560} (64 z^9 + 3712 z^8 + 81360 z^7 + 856896 z^6 + 4556988 z^5 + 11719080 z^4 + 12426435 z^3 + 3225600 z^2 - 276480 z + 34560) + \frac{1}{69120} \left(e^z \sqrt{\pi} (128 z^{19/2} + 7488 z^{17/2} + 166368 z^{15/2} + 1791600 z^{13/2} + 9898200 z^{11/2} + 27310140 z^{9/2} + 33552090 z^{7/2} + 13378365 z^{5/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ami2.01

$${}_2F_2\left(4, 6; -\frac{3}{2}, 2; -z\right) = \frac{1}{34560} (-64 z^9 + 3712 z^8 - 81360 z^7 + 856896 z^6 - 4556988 z^5 + 11719080 z^4 - 12426435 z^3 + 3225600 z^2 + 276480 z + 34560) + \frac{1}{69120} \left(e^{-z} \sqrt{\pi} (128 z^{19/2} - 7488 z^{17/2} + 166368 z^{15/2} - 1791600 z^{13/2} + 9898200 z^{11/2} - 27310140 z^{9/2} + 33552090 z^{7/2} - 13378365 z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ami3.01

$${}_2F_2\left(4, 6; -\frac{3}{2}, 3; z\right) = \frac{32 z^8 + 1520 z^7 + 26256 z^6 + 205992 z^5 + 744930 z^4 + 1093995 z^3 + 403200 z^2 - 46080 z + 8640}{8640} + \frac{1}{17280} e^z \sqrt{\pi} (64 z^{17/2} + 3072 z^{15/2} + 54000 z^{13/2} + 436800 z^{11/2} + 1673100 z^{9/2} + 2779920 z^{7/2} + 1486485 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ami4.01

$${}_2F_2\left(4, 6; -\frac{3}{2}, 3; -z\right) = \frac{32 z^8 - 1520 z^7 + 26256 z^6 - 205992 z^5 + 744930 z^4 - 1093995 z^3 + 403200 z^2 + 46080 z + 8640}{8640} + \frac{1}{17280} \left(e^{-z} \sqrt{\pi} (-64 z^{17/2} + 3072 z^{15/2} - 54000 z^{13/2} + 436800 z^{11/2} - 1673100 z^{9/2} + 2779920 z^{7/2} - 1486485 z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ami5.01

$${}_2F_2\left(4, 6; -\frac{3}{2}, 4; z\right) = \frac{16 z^7 + 592 z^6 + 7512 z^5 + 39420 z^4 + 79905 z^3 + 40320 z^2 - 5760 z + 1440}{1440} + \frac{e^z \sqrt{\pi} (32 z^{15/2} + 1200 z^{13/2} + 15600 z^{11/2} + 85800 z^{9/2} + 193050 z^{7/2} + 135135 z^{5/2}) \operatorname{erf}(\sqrt{z})}{2880}$$

07.25.03.ami6.01

$${}_2F_2\left(4, 6; -\frac{3}{2}, 4; -z\right) = \frac{-16 z^7 + 592 z^6 - 7512 z^5 + 39420 z^4 - 79905 z^3 + 40320 z^2 + 5760 z + 1440}{1440} + \frac{e^{-z} \sqrt{\pi} (32 z^{15/2} - 1200 z^{13/2} + 15600 z^{11/2} - 85800 z^{9/2} + 193050 z^{7/2} - 135135 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{2880}$$

07.25.03.ami7.01

$${}_2F_2\left(4, 6; -\frac{3}{2}, 5; z\right) = \frac{1}{180} (8 z^6 + 212 z^5 + 1746 z^4 + 4965 z^3 + 3360 z^2 - 576 z + 180) + \frac{1}{360} e^z \sqrt{\pi} (16 z^{13/2} + 432 z^{11/2} + 3696 z^{9/2} + 11484 z^{7/2} + 10395 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ami8.01

$${}_2F_2\left(4, 6; -\frac{3}{2}, 5; -z\right) = \frac{1}{180} (8 z^6 - 212 z^5 + 1746 z^4 - 4965 z^3 + 3360 z^2 + 576 z + 180) + \frac{1}{360} e^{-z} \sqrt{\pi} (-16 z^{13/2} + 432 z^{11/2} - 3696 z^{9/2} + 11484 z^{7/2} - 10395 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ami9.01

$${}_2F_2\left(4, 6; -\frac{3}{2}, 6; z\right) = \frac{1}{18} (4 z^5 + 64 z^4 + 267 z^3 + 240 z^2 - 48 z + 18) + \frac{1}{36} e^z \sqrt{\pi} (8 z^{11/2} + 132 z^{9/2} + 594 z^{7/2} + 693 z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.amia.01

$${}_2F_2\left(4, 6; -\frac{3}{2}, 6; -z\right) = \frac{1}{18} (-4 z^5 + 64 z^4 - 267 z^3 + 240 z^2 + 48 z + 18) + \frac{1}{36} e^{-z} \sqrt{\pi} (8 z^{11/2} - 132 z^{9/2} + 594 z^{7/2} - 693 z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = -\frac{1}{2}$

07.25.03.amib.01

$${}_2F_2\left(4, 6; -\frac{1}{2}, 1; z\right) = \frac{1}{46080} (-128 z^9 - 7744 z^8 - 179040 z^7 - 2022832 z^6 - 11861016 z^5 - 35370540 z^4 - 48706770 z^3 - 24518025 z^2 - 2211840 z + 46080) + \frac{1}{92160} \left(e^z \sqrt{\pi} (-256 z^{19/2} - 15616 z^{17/2} - 365696 z^{15/2} - 4217280 z^{13/2} - 25584000 z^{11/2} - 80960880 z^{9/2} - 124633080 z^{7/2} - 79459380 z^{5/2} - 14189175 z^{3/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amic.01

$${}_2F_2\left(4, 6; -\frac{1}{2}, 1; -z\right) = \frac{1}{46080} (128 z^9 - 7744 z^8 + 179040 z^7 - 2022832 z^6 + 11861016 z^5 - 35370540 z^4 + 48706770 z^3 - 24518025 z^2 + 2211840 z + 46080) + \frac{1}{92160} \left(e^{-z} \sqrt{\pi} (-256 z^{19/2} + 15616 z^{17/2} - 365696 z^{15/2} + 4217280 z^{13/2} - 25584000 z^{11/2} + 80960880 z^{9/2} - 124633080 z^{7/2} + 79459380 z^{5/2} - 14189175 z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amid.01

$${}_2F_2\left(4, 6; -\frac{1}{2}, 2; z\right) = \frac{1}{23040} (-64 z^8 - 3264 z^7 - 61808 z^6 - 549408 z^5 - 2386476 z^4 - 4770780 z^3 - 3613365 z^2 - 552960 z + 23040) + \frac{1}{46080} \left(e^z \sqrt{\pi} (-128 z^{17/2} - 6592 z^{15/2} - 126816 z^{13/2} - 1157520 z^{11/2} - 5268120 z^{9/2} - 11505780 z^{7/2} - 10540530 z^{5/2} - 2837835 z^{3/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amie.01

$${}_2F_2\left(4, 6; -\frac{1}{2}, 2; -z\right) = \frac{1}{23040} (-64 z^8 + 3264 z^7 - 61808 z^6 + 549408 z^5 - 2386476 z^4 + 4770780 z^3 - 3613365 z^2 + 552960 z + 23040) + \frac{1}{46080} \left(e^{-z} \sqrt{\pi} (128 z^{17/2} - 6592 z^{15/2} + 126816 z^{13/2} - 1157520 z^{11/2} + 5268120 z^{9/2} - 11505780 z^{7/2} + 10540530 z^{5/2} - 2837835 z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amif.01

$${}_2F_2\left(4, 6; -\frac{1}{2}, 3; z\right) = \frac{-32 z^7 - 1328 z^6 - 19632 z^5 - 128088 z^4 - 368970 z^3 - 400995 z^2 - 92160 z + 5760}{5760} + \frac{1}{11520} e^z \sqrt{\pi} (-64 z^{15/2} - 2688 z^{13/2} - 40560 z^{11/2} - 274560 z^{9/2} - 849420 z^{7/2} - 1081080 z^{5/2} - 405405 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.amig.01

$${}_2F_2\left(4, 6; -\frac{1}{2}, 3; -z\right) = \frac{32 z^7 - 1328 z^6 + 19632 z^5 - 128088 z^4 + 368970 z^3 - 400995 z^2 + 92160 z + 5760}{5760} + \frac{1}{11520} e^{-z} \sqrt{\pi} (-64 z^{15/2} + 2688 z^{13/2} - 40560 z^{11/2} + 274560 z^{9/2} - 849420 z^{7/2} + 1081080 z^{5/2} - 405405 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amih.01

$${}_2F_2\left(4, 6; -\frac{1}{2}, 4; z\right) = \frac{1}{960} (-16 z^6 - 512 z^5 - 5472 z^4 - 23\,240 z^3 - 35\,595 z^2 - 11\,520 z + 960) + \frac{e^z \sqrt{\pi} (-32 z^{13/2} - 1040 z^{11/2} - 11\,440 z^{9/2} - 51\,480 z^{7/2} - 90\,090 z^{5/2} - 45\,045 z^{3/2}) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.amii.01

$${}_2F_2\left(4, 6; -\frac{1}{2}, 4; -z\right) = \frac{1}{960} (-16 z^6 + 512 z^5 - 5472 z^4 + 23\,240 z^3 - 35\,595 z^2 + 11\,520 z + 960) + \frac{e^{-z} \sqrt{\pi} (32 z^{13/2} - 1040 z^{11/2} + 11\,440 z^{9/2} - 51\,480 z^{7/2} + 90\,090 z^{5/2} - 45\,045 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.amij.01

$${}_2F_2\left(4, 6; -\frac{1}{2}, 5; z\right) = \frac{1}{120} (-8 z^5 - 180 z^4 - 1210 z^3 - 2625 z^2 - 1152 z + 120) + \frac{1}{240} e^z \sqrt{\pi} (-16 z^{11/2} - 368 z^{9/2} - 2592 z^{7/2} - 6300 z^{5/2} - 4095 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.amik.01

$${}_2F_2\left(4, 6; -\frac{1}{2}, 5; -z\right) = \frac{1}{120} (8 z^5 - 180 z^4 + 1210 z^3 - 2625 z^2 + 1152 z + 120) + \frac{1}{240} e^{-z} \sqrt{\pi} (-16 z^{11/2} + 368 z^{9/2} - 2592 z^{7/2} + 6300 z^{5/2} - 4095 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amil.01

$${}_2F_2\left(4, 6; -\frac{1}{2}, 6; z\right) = \frac{1}{12} (-4 z^4 - 52 z^3 - 165 z^2 - 96 z + 12) + \frac{1}{24} e^z \sqrt{\pi} (-8 z^{9/2} - 108 z^{7/2} - 378 z^{5/2} - 315 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.amim.01

$${}_2F_2\left(4, 6; -\frac{1}{2}, 6; -z\right) = \frac{1}{12} (-4 z^4 + 52 z^3 - 165 z^2 + 96 z + 12) + \frac{1}{24} e^{-z} \sqrt{\pi} (8 z^{9/2} - 108 z^{7/2} + 378 z^{5/2} - 315 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = \frac{1}{2}$

07.25.03.amin.01

$${}_2F_2\left(4, 6; \frac{1}{2}, 1; z\right) = \frac{1}{92\,160} (128 z^8 + 6720 z^7 + 132\,064 z^6 + 1\,233\,648 z^5 + 5\,751\,000 z^4 + 12\,846\,540 z^3 + 11\,979\,450 z^2 + 3\,332\,205 z + 92\,160) + \frac{1}{184\,320} \left(e^z \sqrt{\pi} (256 z^{17/2} + 13\,568 z^{15/2} + 270\,720 z^{13/2} + 2\,592\,960 z^{11/2} + 12\,619\,200 z^{9/2} + 30\,484\,080 z^{7/2} + 33\,180\,840 z^{5/2} + 13\,097\,700 z^{3/2} + 1\,091\,475 \sqrt{z}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amio.01

$${}_2F_2\left(4, 6; \frac{1}{2}, 1; -z\right) = \frac{1}{92160} (128z^8 - 6720z^7 + 132064z^6 - 1233648z^5 + 5751000z^4 - 12846540z^3 + 11979450z^2 - 3332205z + 92160) + \frac{1}{184320} \left(e^{-z} \sqrt{\pi} (-256z^{17/2} + 13568z^{15/2} - 270720z^{13/2} + 2592960z^{11/2} - 12619200z^{9/2} + 30484080z^{7/2} - 33180840z^{5/2} + 13097700z^{3/2} - 1091475\sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amip.01

$${}_2F_2\left(4, 6; \frac{1}{2}, 2; z\right) = \frac{64z^7 + 2816z^6 + 44944z^5 + 326016z^4 + 1101660z^3 + 1584240z^2 + 742095z + 46080}{46080} + \frac{1}{92160} \left(e^z \sqrt{\pi} (128z^{15/2} + 5696z^{13/2} + 92640z^{11/2} + 694320z^{9/2} + 2490840z^{7/2} + 4033260z^{5/2} + 2474010z^{3/2} + 363825\sqrt{z}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amiq.01

$${}_2F_2\left(4, 6; \frac{1}{2}, 2; -z\right) = \frac{-64z^7 + 2816z^6 - 44944z^5 + 326016z^4 - 1101660z^3 + 1584240z^2 - 742095z + 46080}{46080} + \frac{1}{92160} \left(e^{-z} \sqrt{\pi} (128z^{15/2} - 5696z^{13/2} + 92640z^{11/2} - 694320z^{9/2} + 2490840z^{7/2} - 4033260z^{5/2} + 2474010z^{3/2} - 363825\sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amir.01

$${}_2F_2\left(4, 6; \frac{1}{2}, 3; z\right) = \frac{32z^6 + 1136z^5 + 13968z^4 + 72744z^3 + 156450z^2 + 111555z + 11520}{11520} + \frac{1}{23040} e^z \sqrt{\pi} (64z^{13/2} + 2304z^{11/2} + 29040z^{9/2} + 158400z^{7/2} + 374220z^{5/2} + 332640z^{3/2} + 72765\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.amis.01

$${}_2F_2\left(4, 6; \frac{1}{2}, 3; -z\right) = \frac{32z^6 - 1136z^5 + 13968z^4 - 72744z^3 + 156450z^2 - 111555z + 11520}{11520} + \frac{1}{23040} e^{-z} \sqrt{\pi} (-64z^{13/2} + 2304z^{11/2} - 29040z^{9/2} + 158400z^{7/2} - 374220z^{5/2} + 332640z^{3/2} - 72765\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amit.01

$${}_2F_2\left(4, 6; \frac{1}{2}, 4; z\right) = \frac{16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920}{1920} + \frac{e^z \sqrt{\pi} (32z^{11/2} + 880z^{9/2} + 7920z^{7/2} + 27720z^{5/2} + 34650z^{3/2} + 10395\sqrt{z}) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.amiu.01

$${}_2F_2\left(4, 6; \frac{1}{2}, 4; -z\right) = \frac{-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920}{1920} + \frac{e^{-z} \sqrt{\pi} (32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.amiv.01

$${}_2F_2\left(4, 6; \frac{1}{2}, 5; z\right) = \frac{1}{240} (8z^4 + 148z^3 + 770z^2 + 1149z + 240) + \frac{1}{480} e^z \sqrt{\pi} (16z^{9/2} + 304z^{7/2} + 1680z^{5/2} + 2940z^{3/2} + 1155\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.amiw.01

$${}_2F_2\left(4, 6; \frac{1}{2}, 5; -z\right) = \frac{1}{240} (8z^4 - 148z^3 + 770z^2 - 1149z + 240) + \frac{1}{480} e^{-z} \sqrt{\pi} (-16z^{9/2} + 304z^{7/2} - 1680z^{5/2} + 2940z^{3/2} - 1155\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amix.01

$${}_2F_2\left(4, 6; \frac{1}{2}, 6; z\right) = \frac{1}{24} (4z^3 + 40z^2 + 87z + 24) + \frac{1}{48} e^z \sqrt{\pi} (8z^{7/2} + 84z^{5/2} + 210z^{3/2} + 105\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.amiy.01

$${}_2F_2\left(4, 6; \frac{1}{2}, 6; -z\right) = \frac{1}{24} (-4z^3 + 40z^2 - 87z + 24) + \frac{1}{48} e^{-z} \sqrt{\pi} (8z^{7/2} - 84z^{5/2} + 210z^{3/2} - 105\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = 1$

07.25.03.amiz.01

$${}_2F_2(4, 6; 1, 1; z) = \frac{1}{720} e^z (z^8 + 49z^7 + 893z^6 + 7686z^5 + 32850z^4 + 67320z^3 + 58680z^2 + 16560z + 720)$$

07.25.03.amj0.01

$${}_2F_2\left(4, 6; 1, \frac{3}{2}; z\right) = \frac{128z^7 + 5696z^6 + 92256z^5 + 682800z^4 + 2376600z^3 + 3589740z^2 + 1862370z + 170145}{184320} + \frac{1}{368640\sqrt{z}} (e^z \sqrt{\pi} (256z^8 + 11520z^7 + 190080z^6 + 1452480z^5 + 5356800z^4 + 9056880z^3 + 6010200z^2 + 1077300z + 14175) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amj1.01

$${}_2F_2\left(4, 6; 1, \frac{3}{2}; -z\right) = \frac{-128z^7 + 5696z^6 - 92256z^5 + 682800z^4 - 2376600z^3 + 3589740z^2 - 1862370z + 170145}{184320} + \frac{1}{368640\sqrt{z}} (e^{-z} \sqrt{\pi} (256z^8 - 11520z^7 + 190080z^6 - 1452480z^5 + 5356800z^4 - 9056880z^3 + 6010200z^2 - 1077300z + 14175) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amj2.01

$${}_2F_2(4, 6; 1, 2; z) = \frac{1}{720} e^z (z^7 + 41z^6 + 606z^5 + 4050z^4 + 12600z^3 + 16920z^2 + 7920z + 720)$$

07.25.03.amj3.01

$${}_2F_2\left(4, 6; 1, \frac{5}{2}; z\right) = \frac{128z^7 + 4672z^6 + 59616z^5 + 327280z^4 + 764760z^3 + 638604z^2 + 108810z - 315}{122880z} + \frac{1}{245760z^{3/2}} (e^z \sqrt{\pi} (256z^8 + 9472z^7 + 123776z^6 + 709824z^5 + 1807680z^4 + 1826160z^3 + 531720z^2 + 13860z + 315) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amj4.01

$${}_2F_2\left(4, 6; 1, \frac{5}{2}; -z\right) = \frac{128 z^7 - 4672 z^6 + 59\,616 z^5 - 327\,280 z^4 + 764\,760 z^3 - 638\,604 z^2 + 108\,810 z + 315}{122\,880 z} + \frac{1}{245\,760 z^{3/2}} \left(e^{-z} \sqrt{\pi} \right. \\ \left. (-256 z^8 + 9472 z^7 - 123\,776 z^6 + 709\,824 z^5 - 1\,807\,680 z^4 + 1\,826\,160 z^3 - 531\,720 z^2 + 13\,860 z - 315) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amj5.01

$${}_2F_2(4, 6; 1, 3; z) = \frac{1}{360} e^z (z^6 + 33 z^5 + 375 z^4 + 1800 z^3 + 3600 z^2 + 2520 z + 360)$$

07.25.03.amj6.01

$${}_2F_2\left(4, 6; 1, \frac{7}{2}; z\right) = \frac{128 z^7 + 3648 z^6 + 34\,144 z^5 + 124\,080 z^4 + 157\,464 z^3 + 42\,156 z^2 - 270 z - 135}{49\,152 z^2} + \\ \frac{1}{98\,304 z^{5/2}} e^z \sqrt{\pi} (256 z^8 + 7424 z^7 + 71\,808 z^6 + 278\,976 z^5 + 412\,800 z^4 + 174\,960 z^3 + 6840 z^2 + 180 z + 135) \operatorname{erf}(\sqrt{z})$$

07.25.03.amj7.01

$${}_2F_2\left(4, 6; 1, \frac{7}{2}; -z\right) = \frac{-128 z^7 + 3648 z^6 - 34\,144 z^5 + 124\,080 z^4 - 157\,464 z^3 + 42\,156 z^2 + 270 z - 135}{49\,152 z^2} + \\ \frac{1}{98\,304 z^{5/2}} e^{-z} \sqrt{\pi} (256 z^8 - 7424 z^7 + 71\,808 z^6 - 278\,976 z^5 + 412\,800 z^4 - 174\,960 z^3 + 6840 z^2 - 180 z + 135) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amj8.01

$${}_2F_2(4, 6; 1, 4; z) = \frac{1}{120} e^z (z^5 + 25 z^4 + 200 z^3 + 600 z^2 + 600 z + 120)$$

07.25.03.amj9.01

$${}_2F_2\left(4, 6; 1, \frac{9}{2}; z\right) = \frac{7(128 z^7 + 2624 z^6 + 15\,840 z^5 + 30\,192 z^4 + 11\,736 z^3 - 180 z^2 + 90 z - 675)}{98\,304 z^3} + \\ \frac{1}{196\,608 z^{7/2}} 7 e^z \sqrt{\pi} (256 z^8 + 5376 z^7 + 34\,176 z^6 + 73\,920 z^5 + 43\,200 z^4 + 2160 z^3 + 360 z^2 - 540 z + 675) \operatorname{erf}(\sqrt{z})$$

07.25.03.amja.01

$${}_2F_2\left(4, 6; 1, \frac{9}{2}; -z\right) = \frac{7(128 z^7 - 2624 z^6 + 15\,840 z^5 - 30\,192 z^4 + 11\,736 z^3 + 180 z^2 + 90 z + 675)}{98\,304 z^3} - \\ \frac{1}{196\,608 z^{7/2}} 7 e^{-z} \sqrt{\pi} (256 z^8 - 5376 z^7 + 34\,176 z^6 - 73\,920 z^5 + 43\,200 z^4 - 2160 z^3 + 360 z^2 + 540 z + 675) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amjb.01

$${}_2F_2(4, 6; 1, 5; z) = \frac{1}{30} e^z (z^4 + 17 z^3 + 81 z^2 + 114 z + 30)$$

07.25.03.amjc.01

$${}_2F_2\left(4, 6; 1, \frac{11}{2}; z\right) = \frac{21(128 z^7 + 1600 z^6 + 4704 z^5 + 2608 z^4 - 360 z^3 + 1260 z^2 - 4350 z + 11\,025)}{65\,536 z^4} + \\ \frac{1}{131\,072 z^{9/2}} 21 e^z \sqrt{\pi} (256 z^8 + 3328 z^7 + 10\,880 z^6 + 8640 z^5 + 2160 z^3 - 6120 z^2 + 11\,700 z - 11\,025) \operatorname{erf}(\sqrt{z})$$

07.25.03.amjd.01

$${}_2F_2\left(4, 6; 1, \frac{11}{2}; -z\right) = \frac{1}{131\,072 z^{9/2}} 21 e^{-z} \sqrt{\pi} (256 z^8 - 3328 z^7 + 10\,880 z^6 - 8\,640 z^5 - 2\,160 z^3 - 6\,120 z^2 - 11\,700 z - 11\,025) \operatorname{erfi}(\sqrt{z}) - \frac{21 (128 z^7 - 1\,600 z^6 + 4\,704 z^5 - 2\,608 z^4 - 360 z^3 - 1\,260 z^2 - 4\,350 z - 11\,025)}{65\,536 z^4}$$

07.25.03.amje.01

$${}_2F_2(4, 6; 1, 6; z) = \frac{1}{6} e^z (z^3 + 9 z^2 + 18 z + 6)$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = \frac{3}{2}$

07.25.03.amjf.01

$${}_2F_2\left(4, 6; \frac{3}{2}, 2; z\right) = \frac{64 z^6 + 2\,368 z^5 + 30\,768 z^4 + 173\,280 z^3 + 421\,260 z^2 + 378\,180 z + 77\,985}{92\,160} + \frac{1}{184\,320 \sqrt{z}} e^z \sqrt{\pi} (128 z^7 + 4\,800 z^6 + 63\,840 z^5 + 375\,120 z^4 + 990\,360 z^3 + 1\,062\,180 z^2 + 349\,650 z + 14\,175) \operatorname{erf}(\sqrt{z})$$

07.25.03.amjg.01

$${}_2F_2\left(4, 6; \frac{3}{2}, 2; -z\right) = \frac{64 z^6 - 2\,368 z^5 + 30\,768 z^4 - 173\,280 z^3 + 421\,260 z^2 - 378\,180 z + 77\,985}{92\,160} + \frac{1}{184\,320 \sqrt{z}} e^{-z} \sqrt{\pi} (-128 z^7 + 4\,800 z^6 - 63\,840 z^5 + 375\,120 z^4 - 990\,360 z^3 + 1\,062\,180 z^2 - 349\,650 z + 14\,175) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amjh.01

$${}_2F_2\left(4, 6; \frac{3}{2}, 3; z\right) = \frac{32 z^5 + 944 z^4 + 9\,264 z^3 + 36\,120 z^2 + 51\,690 z + 18\,315}{23\,040} + \frac{e^z \sqrt{\pi} (64 z^6 + 1\,920 z^5 + 19\,440 z^4 + 80\,640 z^3 + 132\,300 z^2 + 68\,040 z + 4\,725) \operatorname{erf}(\sqrt{z})}{46\,080 \sqrt{z}}$$

07.25.03.amji.01

$${}_2F_2\left(4, 6; \frac{3}{2}, 3; -z\right) = \frac{-32 z^5 + 944 z^4 - 9\,264 z^3 + 36\,120 z^2 - 51\,690 z + 18\,315}{23\,040} + \frac{e^{-z} \sqrt{\pi} (64 z^6 - 1\,920 z^5 + 19\,440 z^4 - 80\,640 z^3 + 132\,300 z^2 - 68\,040 z + 4\,725) \operatorname{erfi}(\sqrt{z})}{46\,080 \sqrt{z}}$$

07.25.03.amjj.01

$${}_2F_2\left(4, 6; \frac{3}{2}, 4; z\right) = \frac{16 z^4 + 352 z^3 + 2\,352 z^2 + 5\,280 z + 2\,895}{3\,840} + \frac{e^z \sqrt{\pi} (32 z^5 + 720 z^4 + 5\,040 z^3 + 12\,600 z^2 + 9\,450 z + 945) \operatorname{erf}(\sqrt{z})}{7\,680 \sqrt{z}}$$

07.25.03.amjk.01

$${}_2F_2\left(4, 6; \frac{3}{2}, 4; -z\right) = \frac{16z^4 - 352z^3 + 2352z^2 - 5280z + 2895}{3840} + \frac{e^{-z}\sqrt{\pi}(-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945)\operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.amjl.01

$${}_2F_2\left(4, 6; \frac{3}{2}, 5; z\right) = \frac{1}{480}(8z^3 + 116z^2 + 426z + 345) + \frac{e^z\sqrt{\pi}(16z^4 + 240z^3 + 960z^2 + 1020z + 135)\operatorname{erf}(\sqrt{z})}{960\sqrt{z}}$$

07.25.03.amjm.01

$${}_2F_2\left(4, 6; \frac{3}{2}, 5; -z\right) = \frac{1}{480}(-8z^3 + 116z^2 - 426z + 345) + \frac{e^{-z}\sqrt{\pi}(16z^4 - 240z^3 + 960z^2 - 1020z + 135)\operatorname{erfi}(\sqrt{z})}{960\sqrt{z}}$$

07.25.03.amjn.01

$${}_2F_2\left(4, 6; \frac{3}{2}, 6; z\right) = \frac{1}{48}(4z^2 + 28z + 33) + \frac{e^z\sqrt{\pi}(8z^3 + 60z^2 + 90z + 15)\operatorname{erf}(\sqrt{z})}{96\sqrt{z}}$$

07.25.03.amjo.01

$${}_2F_2\left(4, 6; \frac{3}{2}, 6; -z\right) = \frac{1}{48}(4z^2 - 28z + 33) + \frac{e^{-z}\sqrt{\pi}(-8z^3 + 60z^2 - 90z + 15)\operatorname{erfi}(\sqrt{z})}{96\sqrt{z}}$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = 2$

07.25.03.amjp.01

$${}_2F_2(4, 6; 2, 2; z) = \frac{1}{720}e^z(z^6 + 34z^5 + 402z^4 + 2040z^3 + 4440z^2 + 3600z + 720)$$

07.25.03.amjq.01

$${}_2F_2\left(4, 6; 2, \frac{5}{2}; z\right) = \frac{64z^6 + 1920z^5 + 19280z^4 + 77760z^3 + 117756z^2 + 47160z + 315}{61440z} + \frac{1}{122880z^{3/2}}e^z\sqrt{\pi}(128z^7 + 3904z^6 + 40416z^5 + 173040z^4 + 298200z^3 + 167580z^2 + 14490z - 315)\operatorname{erf}(\sqrt{z})$$

07.25.03.amjr.01

$${}_2F_2\left(4, 6; 2, \frac{5}{2}; -z\right) = \frac{-64z^6 + 1920z^5 - 19280z^4 + 77760z^3 - 117756z^2 + 47160z - 315}{61440z} + \frac{1}{122880z^{3/2}}e^{-z}\sqrt{\pi}(128z^7 - 3904z^6 + 40416z^5 - 173040z^4 + 298200z^3 - 167580z^2 + 14490z + 315)\operatorname{erfi}(\sqrt{z})$$

07.25.03.amjs.01

$${}_2F_2(4, 6; 2, 3; z) = \frac{1}{360}e^z(z^5 + 27z^4 + 240z^3 + 840z^2 + 1080z + 360)$$

07.25.03.amjt.01

$${}_2F_2\left(4, 6; 2, \frac{7}{2}; z\right) = \frac{64 z^6 + 1472 z^5 + 10480 z^4 + 26016 z^3 + 17388 z^2 + 300 z + 45}{24576 z^2} + \frac{e^z \sqrt{\pi} (128 z^7 + 3008 z^6 + 22368 z^5 + 61200 z^4 + 53400 z^3 + 7380 z^2 - 270 z - 45) \operatorname{erf}(\sqrt{z})}{49152 z^{5/2}}$$

07.25.03.amju.01

$${}_2F_2\left(4, 6; 2, \frac{7}{2}; -z\right) = \frac{64 z^6 - 1472 z^5 + 10480 z^4 - 26016 z^3 + 17388 z^2 - 300 z + 45}{24576 z^2} + \frac{e^{-z} \sqrt{\pi} (-128 z^7 + 3008 z^6 - 22368 z^5 + 61200 z^4 - 53400 z^3 + 7380 z^2 + 270 z - 45) \operatorname{erfi}(\sqrt{z})}{49152 z^{5/2}}$$

07.25.03.amjv.01

$${}_2F_2(4, 6; 2, 4; z) = \frac{1}{120} e^z (z^4 + 20 z^3 + 120 z^2 + 240 z + 120)$$

07.25.03.amjw.01

$${}_2F_2\left(4, 6; 2, \frac{9}{2}; z\right) = \frac{7(64 z^6 + 1024 z^5 + 4368 z^4 + 4608 z^3 + 156 z^2 + 135)}{49152 z^3} + \frac{7 e^z \sqrt{\pi} (128 z^7 + 2112 z^6 + 9696 z^5 + 12720 z^4 + 2520 z^3 - 180 z^2 + 90 z - 135) \operatorname{erf}(\sqrt{z})}{98304 z^{7/2}}$$

07.25.03.amjx.01

$${}_2F_2\left(4, 6; 2, \frac{9}{2}; -z\right) = \frac{7 e^{-z} \sqrt{\pi} (128 z^7 - 2112 z^6 + 9696 z^5 - 12720 z^4 + 2520 z^3 + 180 z^2 + 90 z + 135) \operatorname{erfi}(\sqrt{z})}{98304 z^{7/2}} - \frac{7(64 z^6 - 1024 z^5 + 4368 z^4 - 4608 z^3 + 156 z^2 + 135)}{49152 z^3}$$

07.25.03.amjy.01

$${}_2F_2(4, 6; 2, 5; z) = \frac{1}{30} e^z (z^3 + 13 z^2 + 42 z + 30)$$

07.25.03.amjz.01

$${}_2F_2\left(4, 6; 2, \frac{11}{2}; z\right) = \frac{21(64 z^6 + 576 z^5 + 944 z^4 + 96 z^3 - 180 z^2 + 660 z - 1575)}{32768 z^4} + \frac{21 e^z \sqrt{\pi} (128 z^7 + 1216 z^6 + 2400 z^5 + 720 z^4 - 360 z^3 + 900 z^2 - 1710 z + 1575) \operatorname{erf}(\sqrt{z})}{65536 z^{9/2}}$$

07.25.03.amk0.01

$${}_2F_2\left(4, 6; 2, \frac{11}{2}; -z\right) = \frac{21(64 z^6 - 576 z^5 + 944 z^4 - 96 z^3 - 180 z^2 - 660 z - 1575)}{32768 z^4} - \frac{21 e^{-z} \sqrt{\pi} (128 z^7 - 1216 z^6 + 2400 z^5 - 720 z^4 - 360 z^3 - 900 z^2 - 1710 z - 1575) \operatorname{erfi}(\sqrt{z})}{65536 z^{9/2}}$$

07.25.03.amk1.01

$${}_2F_2(4, 6; 2, 6; z) = \frac{1}{6} e^z (z^2 + 6z + 6)$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = \frac{5}{2}$

07.25.03.amk2.01

$${}_2F_2\left(4, 6; \frac{5}{2}, 3; z\right) = \frac{32z^5 + 752z^4 + 5520z^3 + 14376z^2 + 10530z + 315}{15360z} + \frac{e^z \sqrt{\pi} (64z^6 + 1536z^5 + 11760z^4 + 33600z^3 + 31500z^2 + 5040z - 315) \operatorname{erf}(\sqrt{z})}{30720z^{3/2}}$$

07.25.03.amk3.01

$${}_2F_2\left(4, 6; \frac{5}{2}, 3; -z\right) = \frac{32z^5 - 752z^4 + 5520z^3 - 14376z^2 + 10530z - 315}{15360z} + \frac{e^{-z} \sqrt{\pi} (-64z^6 + 1536z^5 - 11760z^4 + 33600z^3 - 31500z^2 + 5040z + 315) \operatorname{erfi}(\sqrt{z})}{30720z^{3/2}}$$

07.25.03.amk4.01

$${}_2F_2\left(4, 6; \frac{5}{2}, 4; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z \sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.amk5.01

$${}_2F_2\left(4, 6; \frac{5}{2}, 4; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z} \sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.amk6.01

$${}_2F_2\left(4, 6; \frac{5}{2}, 5; z\right) = \frac{8z^3 + 84z^2 + 178z + 21}{320z} + \frac{e^z \sqrt{\pi} (16z^4 + 176z^3 + 432z^2 + 156z - 21) \operatorname{erf}(\sqrt{z})}{640z^{3/2}}$$

07.25.03.amk7.01

$${}_2F_2\left(4, 6; \frac{5}{2}, 5; -z\right) = \frac{8z^3 - 84z^2 + 178z - 21}{320z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 176z^3 - 432z^2 + 156z + 21) \operatorname{erfi}(\sqrt{z})}{640z^{3/2}}$$

07.25.03.amk8.01

$${}_2F_2\left(4, 6; \frac{5}{2}, 6; z\right) = \frac{4z^2 + 16z + 3}{32z} + \frac{e^z \sqrt{\pi} (8z^3 + 36z^2 + 18z - 3) \operatorname{erf}(\sqrt{z})}{64z^{3/2}}$$

07.25.03.amk9.01

$${}_2F_2\left(4, 6; \frac{5}{2}, 6; -z\right) = \frac{-4z^2 + 16z - 3}{32z} + \frac{e^{-z} \sqrt{\pi} (8z^3 - 36z^2 + 18z + 3) \operatorname{erfi}(\sqrt{z})}{64z^{3/2}}$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = 3$

07.25.03.amka.01

$${}_2F_2(4, 6; 3, 3; z) = \frac{1}{180} e^z (z^4 + 21 z^3 + 135 z^2 + 300 z + 180)$$

07.25.03.amkb.01

$${}_2F_2\left(4, 6; 3, \frac{7}{2}; z\right) = \frac{32 z^5 + 560 z^4 + 2736 z^3 + 3672 z^2 + 330 z - 45}{6144 z^2} + \frac{e^z \sqrt{\pi} (64 z^6 + 1152 z^5 + 6000 z^4 + 9600 z^3 + 2700 z^2 - 360 z + 45) \operatorname{erf}(\sqrt{z})}{12288 z^{5/2}}$$

07.25.03.amkc.01

$${}_2F_2\left(4, 6; 3, \frac{7}{2}; -z\right) = \frac{-32 z^5 + 560 z^4 - 2736 z^3 + 3672 z^2 - 330 z - 45}{6144 z^2} + \frac{e^{-z} \sqrt{\pi} (64 z^6 - 1152 z^5 + 6000 z^4 - 9600 z^3 + 2700 z^2 + 360 z + 45) \operatorname{erfi}(\sqrt{z})}{12288 z^{5/2}}$$

07.25.03.amkd.01

$${}_2F_2(4, 6; 3, 4; z) = \frac{1}{60} e^z (z^3 + 15 z^2 + 60 z + 60)$$

07.25.03.amke.01

$${}_2F_2\left(4, 6; 3, \frac{9}{2}; z\right) = \frac{7(32 z^5 + 368 z^4 + 912 z^3 + 168 z^2 - 30 z - 45)}{12288 z^3} + \frac{7 e^z \sqrt{\pi} (64 z^6 + 768 z^5 + 2160 z^4 + 960 z^3 - 180 z^2 + 45) \operatorname{erf}(\sqrt{z})}{24576 z^{7/2}}$$

07.25.03.amkf.01

$${}_2F_2\left(4, 6; 3, \frac{9}{2}; -z\right) = \frac{7(32 z^5 - 368 z^4 + 912 z^3 - 168 z^2 - 30 z + 45)}{12288 z^3} - \frac{7 e^{-z} \sqrt{\pi} (64 z^6 - 768 z^5 + 2160 z^4 - 960 z^3 - 180 z^2 + 45) \operatorname{erfi}(\sqrt{z})}{24576 z^{7/2}}$$

07.25.03.amkg.01

$${}_2F_2(4, 6; 3, 5; z) = \frac{1}{15} e^z (z^2 + 9 z + 15)$$

07.25.03.amkh.01

$${}_2F_2\left(4, 6; 3, \frac{11}{2}; z\right) = \frac{21(32 z^5 + 176 z^4 + 48 z^3 + 24 z^2 - 150 z + 315)}{8192 z^4} + \frac{21 e^z \sqrt{\pi} (64 z^6 + 384 z^5 + 240 z^4 - 180 z^2 + 360 z - 315) \operatorname{erf}(\sqrt{z})}{16384 z^{9/2}}$$

07.25.03.amki.01

$${}_2F_2\left(4, 6; 3, \frac{11}{2}; -z\right) = \frac{21 e^{-z} \sqrt{\pi} (64 z^6 - 384 z^5 + 240 z^4 - 180 z^3 - 360 z - 315) \operatorname{erfi}(\sqrt{z})}{16384 z^{9/2}} - \frac{21 (32 z^5 - 176 z^4 + 48 z^3 - 24 z^2 - 150 z - 315)}{8192 z^4}$$

07.25.03.amkj.01

$${}_2F_2(4, 6; 3, 6; z) = \frac{1}{3} e^z (z + 3)$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = \frac{7}{2}$

07.25.03.amkk.01

$${}_2F_2\left(4, 6; \frac{7}{2}, 4; z\right) = \frac{16 z^4 + 192 z^3 + 512 z^2 + 120 z - 45}{1024 z^2} + \frac{e^z \sqrt{\pi} (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45) \operatorname{erf}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.amkl.01

$${}_2F_2\left(4, 6; \frac{7}{2}, 4; -z\right) = \frac{16 z^4 - 192 z^3 + 512 z^2 - 120 z - 45}{1024 z^2} + \frac{e^{-z} \sqrt{\pi} (-32 z^5 + 400 z^4 - 1200 z^3 + 600 z^2 + 150 z + 45) \operatorname{erfi}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.amkm.01

$${}_2F_2\left(4, 6; \frac{7}{2}, 5; z\right) = \frac{8 z^3 + 52 z^2 + 26 z - 15}{128 z^2} + \frac{e^z \sqrt{\pi} (16 z^4 + 112 z^3 + 96 z^2 - 36 z + 15) \operatorname{erf}(\sqrt{z})}{256 z^{5/2}}$$

07.25.03.amkn.01

$${}_2F_2\left(4, 6; \frac{7}{2}, 5; -z\right) = \frac{-8 z^3 + 52 z^2 - 26 z - 15}{128 z^2} + \frac{e^{-z} \sqrt{\pi} (16 z^4 - 112 z^3 + 96 z^2 + 36 z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{5/2}}$$

07.25.03.amko.01

$${}_2F_2\left(4, 6; \frac{7}{2}, 6; z\right) = \frac{5(4 z^2 + 4 z - 3)}{64 z^2} + \frac{5 e^z \sqrt{\pi} (8 z^3 + 12 z^2 - 6 z + 3) \operatorname{erf}(\sqrt{z})}{128 z^{5/2}}$$

07.25.03.amkp.01

$${}_2F_2\left(4, 6; \frac{7}{2}, 6; -z\right) = \frac{5(4 z^2 - 4 z - 3)}{64 z^2} - \frac{5 e^{-z} \sqrt{\pi} (8 z^3 - 12 z^2 - 6 z - 3) \operatorname{erfi}(\sqrt{z})}{128 z^{5/2}}$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = 4$

07.25.03.amkq.01

$${}_2F_2(4, 6; 4, 4; z) = \frac{1}{20} e^z (z^2 + 10 z + 20)$$

07.25.03.amkr.01

$${}_2F_2\left(4, 6; 4, \frac{9}{2}; z\right) = \frac{7(16 z^4 + 112 z^3 + 72 z^2 - 60 z + 45)}{2048 z^3} + \frac{7 e^z \sqrt{\pi} (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45) \operatorname{erf}(\sqrt{z})}{4096 z^{7/2}}$$

07.25.03.amks.01

$${}_2F_2\left(4, 6; 4, \frac{9}{2}; -z\right) = \frac{7 e^{-z} \sqrt{\pi} (32 z^5 - 240 z^4 + 240 z^3 + 120 z^2 + 90 z + 45) \operatorname{erfi}(\sqrt{z})}{4096 z^{7/2}} - \frac{7 (16 z^4 - 112 z^3 + 72 z^2 + 60 z + 45)}{2048 z^3}$$

07.25.03.amkt.01

$${}_2F_2(4, 6; 4, 5; z) = \frac{1}{5} e^z (z + 5)$$

07.25.03.amku.01

$${}_2F_2\left(4, 6; 4, \frac{11}{2}; z\right) = \frac{63 (16 z^4 + 32 z^3 - 48 z^2 + 80 z - 105)}{4096 z^4} + \frac{63 e^z \sqrt{\pi} (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.amkv.01

$${}_2F_2\left(4, 6; 4, \frac{11}{2}; -z\right) = \frac{63 (16 z^4 - 32 z^3 - 48 z^2 - 80 z - 105)}{4096 z^4} - \frac{63 e^{-z} \sqrt{\pi} (32 z^5 - 80 z^4 - 80 z^3 - 120 z^2 - 150 z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.amkw.01

$${}_2F_2(4, 6; 4, 6; z) = e^z$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = \frac{9}{2}$

07.25.03.amkx.01

$${}_2F_2\left(4, 6; \frac{9}{2}, 5; z\right) = \frac{7 (8 z^3 + 20 z^2 - 30 z + 45)}{256 z^3} + \frac{7 e^z \sqrt{\pi} (16 z^4 + 48 z^3 - 48 z^2 + 60 z - 45) \operatorname{erf}(\sqrt{z})}{512 z^{7/2}}$$

07.25.03.amky.01

$${}_2F_2\left(4, 6; \frac{9}{2}, 5; -z\right) = \frac{7 (8 z^3 - 20 z^2 - 30 z - 45)}{256 z^3} - \frac{7 e^{-z} \sqrt{\pi} (16 z^4 - 48 z^3 - 48 z^2 - 60 z - 45) \operatorname{erfi}(\sqrt{z})}{512 z^{7/2}}$$

07.25.03.amkz.01

$${}_2F_2\left(4, 6; \frac{9}{2}, 6; z\right) = \frac{35 (4 z^2 - 8 z + 15)}{128 z^3} + \frac{35 e^z \sqrt{\pi} (8 z^3 - 12 z^2 + 18 z - 15) \operatorname{erf}(\sqrt{z})}{256 z^{7/2}}$$

07.25.03.aml0.01

$${}_2F_2\left(4, 6; \frac{9}{2}, 6; -z\right) = \frac{35 e^{-z} \sqrt{\pi} (8 z^3 + 12 z^2 + 18 z + 15) \operatorname{erfi}(\sqrt{z})}{256 z^{7/2}} - \frac{35 (4 z^2 + 8 z + 15)}{128 z^3}$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = 5$

07.25.03.aml1.01

$${}_2F_2(4, 6; 5, 5; z) = \frac{4 e^z (z^4 + z^3 - 3 z^2 + 6 z - 6)}{5 z^4} + \frac{24}{5 z^4}$$

07.25.03.aml2.01

$${}_2F_2\left(4, 6; 5, \frac{11}{2}; z\right) = \frac{63 (8 z^3 - 12 z^2 + 10 z + 105)}{512 z^4} + \frac{63 e^z \sqrt{\pi} (16 z^4 - 16 z^3 + 60 z - 105) \operatorname{erf}(\sqrt{z})}{1024 z^{9/2}}$$

07.25.03.aml3.01

$${}_2F_2\left(4, 6; 5, \frac{11}{2}; -z\right) = \frac{63 e^{-z} \sqrt{\pi} (16 z^4 + 16 z^3 - 60 z - 105) \operatorname{erfi}(\sqrt{z})}{1024 z^{9/2}} - \frac{63 (8 z^3 + 12 z^2 + 10 z - 105)}{512 z^4}$$

07.25.03.aml4.01

$${}_2F_2(4, 6; 5, 6; z) = \frac{4 e^z (z^3 - 3 z^2 + 6 z - 6)}{z^4} + \frac{24}{z^4}$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = \frac{11}{2}$

07.25.03.aml5.01

$${}_2F_2\left(4, 6; \frac{11}{2}, 6; z\right) = \frac{315 (4 z^2 - 20 z + 105)}{256 z^4} + \frac{315 e^z \sqrt{\pi} (8 z^3 - 36 z^2 + 90 z - 105) \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.aml6.01

$${}_2F_2\left(4, 6; \frac{11}{2}, 6; -z\right) = \frac{315 (4 z^2 + 20 z + 105)}{256 z^4} - \frac{315 e^{-z} \sqrt{\pi} (8 z^3 + 36 z^2 + 90 z + 105) \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

For fixed z and $a_1 = 4, a_2 = 6, b_1 = 6$

07.25.03.aml7.01

$${}_2F_2(4, 6; 6, 6; z) = \frac{120 (z + 4)}{z^5} + \frac{20 e^z (z^3 - 6 z^2 + 18 z - 24)}{z^5}$$

For fixed z and $a_1 = \frac{9}{2}, a_2 \geq \frac{9}{2}$

For fixed z and $a_1 = \frac{9}{2}, a_2 = \frac{9}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{9}{2}, a_2 = \frac{9}{2}, b_1 = -\frac{11}{2}$

07.25.03.aml8.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{1191317675625} (e^z (1048576 z^{20} + 178257920 z^{19} + 12963020800 z^{18} + 530723635200 z^{17} + 13552577740800 z^{16} + 226046910136320 z^{15} + 2508164009164800 z^{14} + 18514684919808000 z^{13} + 89522572833792000 z^{12} + 274472158722048000 z^{11} + 504947806646169600 z^{10} + 508583147659776000 z^9 + 238371765468480000 z^8 + 36917979275520000 z^7 + 586155890880000 z^6 + 8621049024000 z^5 + 1070558370000 z^4 + 289340100000 z^3 + 393824025000 z^2 - 393824025000 z + 1191317675625))$$

07.25.03.aml9.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{108301606875} (e^z (524288z^{19} + 82051072z^{18} + 5455872000z^{17} + 202619289600z^{16} + 4648786329600z^{15} + 68859984936960z^{14} + 668772132618240z^{13} + 4241551465267200z^{12} + 17191201892659200z^{11} + 42684468951398400z^{10} + 60393793041792000z^9 + 42913298183616000z^8 + 11902637275200000z^7 + 605033724960000z^6 - 9438917040000z^5 - 408934008000z^4 - 78121827000z^3 - 50634517500z^2 + 19691201250z - 108301606875))$$

07.25.03.amla.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{12033511875} (e^z (262144z^{18} + 37486592z^{17} + 2259353600z^{16} + 75327078400z^{15} + 1533458841600z^{14} + 19862133473280z^{13} + 165557931786240z^{12} + 879091244236800z^{11} + 2881507858790400z^{10} + 5493941252352000z^9 + 5474160885312000z^8 + 2297085993216000z^7 + 208603654560000z^6 - 10388619360000z^5 + 474851160000z^4 + 32958576000z^3 + 10376950500z^2 + 625117500z + 12033511875))$$

07.25.03.amb.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{1719073125} (e^z (131072z^{17} + 16973824z^{16} + 917504000z^{15} + 27112243200z^{14} + 482050867200z^{13} + 5351583498240z^{12} + 37290506158080z^{11} + 159866825932800z^{10} + 401619560832000z^9 + 538063041600000z^8 + 315796755456000z^7 + 43254352512000z^6 - 3834054000000z^5 + 556771320000z^4 - 40960080000z^3 - 4000752000z^2 - 812652750z - 1719073125))$$

07.25.03.amlc.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{343814625} (e^z (65536z^{16} + 7602176z^{15} + 363724800z^{14} + 9373286400z^{13} + 142605926400z^{12} + 1321035448320z^{11} + 7416451768320z^{10} + 24310024704000z^9 + 42794619840000z^8 + 33661111680000z^7 + 6423375168000z^6 - 854636832000z^5 + 219565080000z^4 - 50961960000z^3 + 500094000z^2 + 500094000z + 343814625))$$

07.25.03.amld.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{114604875} (e^z (32768z^{15} + 3358720z^{14} + 139878400z^{13} + 3078041600z^{12} + 38983526400z^{11} + 290174223360z^{10} + 1241744985600z^9 + 2841924960000z^8 + 2924797680000z^7 + 744168600000z^6 - 137071116000z^5 + 52430490000z^4 - 21293685000z^3 + 6459547500z^2 - 729303750z - 114604875))$$

07.25.03.amle.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{114604875} (e^z (16384z^{14} + 1458176z^{13} + 51712000z^{12} + 944332800z^{11} + 9576268800z^{10} + 54112558080z^9 + 160915749120z^8 + 214094361600z^7 + 70785489600z^6 - 17235892800z^5 + 9025959600z^4 - 5375613600z^3 + 2792191500z^2 - 958513500z + 114604875))$$

07.25.03.amlf.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{114604875} \left(e^{z/2} (8192 z^{14} + 679936 z^{13} + 22319104 z^{12} + 373882880 z^{11} + 3440478720 z^{10} + 17409262080 z^9 + 45600387840 z^8 + 52242140160 z^7 + 13980254400 z^6 - 3097886400 z^5 + 1700848800 z^4 - 1226685600 z^3 + 885020850 z^2 - 479256750 z + 114604875) I_0\left(\frac{z}{2}\right) + \frac{1}{114604875} \left(2 e^{z/2} (4096 z^{14} + 335872 z^{13} + 10825728 z^{12} + 176279552 z^{11} + 1549049600 z^{10} + 7233891840 z^9 + 16194286080 z^8 + 12425656320 z^7 - 1423487520 z^6 + 611352000 z^5 - 404409600 z^4 + 306406800 z^3 - 208339425 z^2 + 84473550 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.amlg.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{114604875} \left(e^z (8192 z^{13} + 618496 z^{12} + 18124800 z^{11} + 263731200 z^{10} + 2018956800 z^9 + 7876189440 z^8 + 13510264320 z^7 + 5720198400 z^6 - 1788544800 z^5 + 1219050000 z^4 - 972745200 z^3 + 716801400 z^2 - 395907750 z + 114604875) \right)$$

07.25.03.amlh.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{114604875} \left(e^{z/2} (8192 z^{13} + 569344 z^{12} + 15196160 z^{11} + 198712320 z^{10} + 1343424000 z^9 + 4518362880 z^8 + 6432168960 z^7 + 2018822400 z^6 - 530510400 z^5 + 354564000 z^4 - 324475200 z^3 + 317312100 z^2 - 260678250 z + 114604875) I_0\left(\frac{z}{2}\right) + \frac{1}{114604875} \left(e^{z/2} (8192 z^{13} + 561152 z^{12} + 14639104 z^{11} + 184345600 z^{10} + 1165862400 z^9 + 3431681280 z^8 + 3438074880 z^7 - 449245440 z^6 + 227505600 z^5 - 184212000 z^4 + 180532800 z^3 - 174881700 z^2 + 126847350 z - 30405375) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.amli.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{38201625} \left(e^z (4096 z^{12} + 253952 z^{11} + 5888000 z^{10} + 64153600 z^9 + 335865600 z^8 + 747371520 z^7 + 402474240 z^6 - 158457600 z^5 + 135702000 z^4 - 136836000 z^3 + 129389400 z^2 - 94462200 z + 38201625) \right)$$

07.25.03.amlj.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{114604875}$$

$$\left(4 e^{z/2} (4096 z^{12} + 229376 z^{11} + 4727808 z^{10} + 44820480 z^9 + 197879040 z^8 + 351959040 z^7 + 127491840 z^6 - 38868480 z^5 + 30693600 z^4 - 34171200 z^3 + 42543900 z^2 - 47968200 z + 33212025) I_0\left(\frac{z}{2}\right) + \frac{1}{114604875 z}\right.$$

$$\left.4 e^{z/2} (4096 z^{13} + 225280 z^{12} + 4504576 z^{11} + 40424448 z^{10} + 159494400 z^9 + 208823040 z^8 - 30585600 z^7 + 17821440 z^6 - 17045280 z^5 + 20412000 z^4 - 25307100 z^3 + 24929100 z^2 - 6081075 z - 18243225) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.amlk.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) =$$

$$\frac{1}{7640325} \left(e^z (2048 z^{11} + 99328 z^{10} + 1702400 z^9 + 12499200 z^8 + 36691200 z^7 + 25119360 z^6 - 12277440 z^5 + 12852000 z^4 - 15687000 z^3 + 17860500 z^2 - 15677550 z + 7640325)\right)$$

07.25.03.amll.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, 4; z\right) =$$

$$\frac{1}{38201625 z} \left(4 e^{z/2} (4096 z^{12} + 174080 z^{11} + 2548736 z^{10} + 15385600 z^9 + 34663680 z^8 + 14307840 z^7 - 4972800 z^6 + 4515840 z^5 - 5796000 z^4 + 8076600 z^3 - 8561700 z^2 - 3118500 z + 34459425) I_0\left(\frac{z}{2}\right) + \frac{1}{38201625 z^2} \left(4 e^{z/2} (4096 z^{13} + 169984 z^{12} + 2380800 z^{11} + 13085696 z^{10} + 22611200 z^9 - 3663360 z^8 + 2415360 z^7 - 2688000 z^6 + 3961440 z^5 - 6867000 z^4 + 12883500 z^3 - 24324300 z^2 + 50675625 z - 137837700) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.amlm.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) =$$

$$\frac{1}{1091475} \left(e^z (1024 z^{10} + 35840 z^9 + 403200 z^8 + 1612800 z^7 + 1411200 z^6 - 846720 z^5 + 1058400 z^4 - 1512000 z^3 + 1984500 z^2 - 1984500 z + 1091475)\right)$$

07.25.03.amln.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, 5; z\right) =$$

$$\frac{1}{38201625 z^2} \left(32 e^{z/2} (2048 z^{12} + 59392 z^{11} + 530432 z^{10} + 1551360 z^9 + 725760 z^8 - 314880 z^7 + 564480 z^6 - 2459520 z^5 + 13696200 z^4 - 70648200 z^3 + 300623400 z^2 - 964863900 z + 1964187225) I_0\left(\frac{z}{2}\right) + \frac{1}{38201625 z^3} \left(128 e^{z/2} (512 z^{13} + 14336 z^{12} + 118528 z^{11} + 275968 z^{10} - 48000 z^9 + 26880 z^8 + 32640 z^7 - 514080 z^6 + 3735270 z^5 - 21407400 z^4 + 99324225 z^3 - 360810450 z^2 + 964863900 z - 1964187225) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.amlo.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{121\,275\,z^4} \left(e^z (512\,z^{13} + 11\,008\,z^{12} + 64\,000\,z^{11} + 70\,400\,z^{10} - 33\,600\,z^9 - 104\,160\,z^8 + 1\,414\,560\,z^7 - 11\,365\,200\,z^6 + 74\,866\,050\,z^5 - 412\,755\,525\,z^4 + 1\,857\,945\,600\,z^3 - 6\,502\,809\,600\,z^2 + 16\,257\,024\,000\,z - 24\,385\,536\,000) \right) + \frac{1\,105\,920\sqrt{\pi}\operatorname{erfi}(\sqrt{z})}{11\,z^{9/2}}$$

07.25.03.amlp.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{121\,275\,z^4} \left(e^{-z} (-512\,z^{13} + 11\,008\,z^{12} - 64\,000\,z^{11} + 70\,400\,z^{10} + 33\,600\,z^9 - 104\,160\,z^8 - 1\,414\,560\,z^7 - 11\,365\,200\,z^6 - 74\,866\,050\,z^5 - 412\,755\,525\,z^4 - 1\,857\,945\,600\,z^3 - 6\,502\,809\,600\,z^2 - 16\,257\,024\,000\,z - 24\,385\,536\,000) \right) + \frac{1\,105\,920\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{11\,z^{9/2}}$$

07.25.03.amlq.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{7\,640\,325\,z^3} \left(32\,e^{z/2} (2048\,z^{12} + 31\,744\,z^{11} + 132\,096\,z^{10} + 11\,520\,z^9 + 545\,280\,z^8 - 5\,402\,880\,z^7 + 45\,884\,160\,z^6 - 341\,202\,960\,z^5 + 2\,185\,104\,600\,z^4 - 11\,727\,431\,100\,z^3 + 50\,586\,435\,900\,z^2 - 163\,027\,539\,675\,z + 329\,983\,453\,800) I_0\left(\frac{z}{2}\right) \right) + \frac{1}{7\,640\,325\,z^4} \left(32\,e^{z/2} (2048\,z^{13} + 29\,696\,z^{12} + 103\,424\,z^{11} - 79\,104\,z^{10} + 652\,800\,z^9 - 6\,132\,480\,z^8 + 52\,496\,640\,z^7 - 397\,862\,640\,z^6 + 2\,619\,129\,240\,z^5 - 14\,635\,120\,500\,z^4 + 67\,289\,121\,900\,z^3 - 243\,593\,675\,325\,z^2 + 652\,110\,158\,700\,z - 1\,319\,933\,815\,200) I_1\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.amlr.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{9\,845\,600\,625} \left(e^z (262\,144\,z^{18} + 37\,748\,736\,z^{17} + 2\,293\,825\,536\,z^{16} + 77\,224\,476\,672\,z^{15} + 1\,590\,760\,636\,416\,z^{14} + 20\,908\,527\,058\,944\,z^{13} + 177\,572\,113\,367\,040\,z^{12} + 966\,556\,995\,747\,840\,z^{11} + 3\,279\,537\,469\,716\,480\,z^{10} + 6\,584\,315\,861\,975\,040\,z^9 + 7\,151\,791\,003\,983\,360\,z^8 + 3\,577\,171\,581\,849\,600\,z^7 + 585\,561\,264\,825\,600\,z^6 + 9\,736\,230\,067\,200\,z^5 + 148\,656\,513\,600\,z^4 + 18\,517\,766\,400\,z^3 + 7\,233\,502\,500\,z^2 + 9\,845\,600\,625) \right)$$

07.25.03.amls.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$-\frac{1}{1093955625} \left(e^z (131072 z^{17} + 17235968 z^{16} + 948699136 z^{15} + 28650897408 z^{14} + 523196792832 z^{13} + 600709079400 z^{12} + 4373287575520 z^{11} + 199014805463040 z^{10} + 545187304811520 z^9 + 838815059335680 z^8 + 640042794316800 z^7 + 188478805132800 z^6 + 10062424713600 z^5 - 163097323200 z^4 - 7220404800 z^3 - 1571724000 z^2 - 312558750 z - 1093955625) \right)$$

07.25.03.amlt.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{156279375}$$

$$\left(e^z (65536 z^{16} + 7798784 z^{15} + 384663552 z^{14} + 10286481408 z^{13} + 163876823040 z^{12} + 1610592399360 z^{11} + 9786994882560 z^{10} + 35891935994880 z^9 + 75188004433920 z^8 + 81061509715200 z^7 + 36306113155200 z^6 + 3474119678400 z^5 - 179967160800 z^4 + 8434918800 z^3 + 607257000 z^2 + 125023500 z + 156279375) \right)$$

07.25.03.amlu.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) =$$

$$-\frac{1}{31255875} \left(e^z (32768 z^{15} + 3489792 z^{14} + 152199168 z^{13} + 3545149440 z^{12} + 48259491840 z^{11} + 395090519040 z^{10} + 1930318548480 z^9 + 5398897432320 z^8 + 790066339200 z^7 + 4980456331200 z^6 + 721459418400 z^5 - 66588706800 z^4 + 9899479800 z^3 - 732280500 z^2 - 62511750 z - 31255875) \right)$$

07.25.03.amlv.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{10418625} \left(e^z (16384 z^{14} + 154096 z^{13} + 58388480 z^{12} + 1159495680 z^{11} + 13114536960 z^{10} + 86071695360 z^9 + 319621559040 z^8 + 621908582400 z^7 + 529535966400 z^6 + 107316316800 z^5 - 14877399600 z^4 + 3899145600 z^3 - 898978500 z^2 + 83349000 z + 10418625) \right)$$

07.25.03.amlw.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) =$$

$$-\frac{1}{10418625} \left(e^z (8192 z^{13} + 667648 z^{12} + 21516288 z^{11} + 353826816 z^{10} + 3195913728 z^9 + 15870580992 z^8 + 40781422080 z^7 + 45875047680 z^6 + 12455220960 z^5 - 2390335920 z^4 + 927475920 z^3 - 369117000 z^2 + 104186250 z - 10418625) \right)$$

07.25.03.amlx.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{10418625} \left(e^{z/2} (-4096 z^{13} - 311296 z^{12} - 9288704 z^{11} - 140270592 z^{10} - 1152641280 z^9 - 5154266880 z^8 - 11804970240 z^7 - 11735297280 z^6 - 2763865440 z^5 + 522471600 z^4 - 231128100 z^3 + 121319100 z^2 - 52093125 z + 10418625) I_0\left(\frac{z}{2}\right) + \frac{1}{10418625} \left(e^{z/2} (-4096 z^{13} - 307200 z^{12} - 8983552 z^{11} - 131436544 z^{10} - 1025402112 z^9 - 4186506240 z^8 - 8024083200 z^7 - 5091932160 z^6 + 518908320 z^5 - 188450640 z^4 + 97694100 z^3 - 50274000 z^2 + 16305975 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.amly.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{10418625} \left(e^z (4096 z^{12} + 282624 z^{11} + 7507968 z^{10} + 98079744 z^9 + 666199296 z^8 + 2272596480 z^7 + 3346237440 z^6 + 1186980480 z^5 - 300782160 z^4 + 158351760 z^3 - 90493200 z^2 + 41674500 z - 10418625) \right)$$

07.25.03.amlz.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{10418625} \left(e^{z/2} (-4096 z^{12} - 260096 z^{11} - 6294528 z^{10} - 73989120 z^9 - 445397760 z^8 - 1321367040 z^7 - 1650136320 z^6 - 466018560 z^5 + 107654400 z^4 - 60517800 z^3 + 43073100 z^2 - 28066500 z + 10418625) I_0\left(\frac{z}{2}\right) + \frac{1}{10418625} \left(e^{z/2} (-4096 z^{12} - 256000 z^{11} - 6040576 z^{10} - 68072448 z^9 - 380102400 z^8 - 970007040 z^7 - 817931520 z^6 + 97332480 z^5 - 43162560 z^4 + 28917000 z^3 - 21186900 z^2 + 12266100 z - 2338875) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amm0.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{3472875} \left(e^z (2048 z^{11} + 115712 z^{10} + 2423296 z^9 + 23595264 z^8 + 108944640 z^7 + 210268800 z^6 + 96102720 z^5 - 31177440 z^4 + 21084840 z^3 - 15705900 z^2 + 9724050 z - 3472875) \right)$$

07.25.03.amm1.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, 3; z\right) = -\frac{1}{10418625} \left(8 e^{z/2} (1024 z^{11} + 52224 z^{10} + 972288 z^9 + 8250624 z^8 + 32313600 z^7 + 50754816 z^6 + 16829568 z^5 - 4611600 z^4 + 3156300 z^3 - 2853900 z^2 + 2534490 z - 1454355) I_0\left(\frac{z}{2}\right) - \frac{1}{10418625} \left(4 e^{z/2} (2048 z^{12} + 102400 z^{11} + 1843200 z^{10} + 14707200 z^9 + 50745600 z^8 + 56567808 z^7 - 7676928 z^6 + 4013856 z^5 - 3288600 z^4 + 3099600 z^3 - 2479680 z^2 + 561330 z + 1216215) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amm2.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{1}{694575} \left(e^z (1024 z^{10} + 45056 z^9 + 693504 z^8 + 4515840 z^7 + 11571840 z^6 + 6773760 z^5 - 2751840 z^4 + 2298240 z^3 - 2097900 z^2 + 1587600 z - 694575) \right)$$

07.25.03.amm3.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, 4; z\right) = -\frac{1}{3472875 z} \left(4 e^{z/2} (2048 z^{11} + 78848 z^{10} + 1036288 z^9 + 5564160 z^8 + 11100672 z^7 + 4252416 z^6 - 1350720 z^5 + 1083600 z^4 - 1146600 z^3 + 1099980 z^2 - 158760 z - 2027025) I_0\left(\frac{z}{2}\right) - \frac{1}{3472875 z^2} \left(4 e^{z/2} (2048 z^{12} + 76800 z^{11} + 960512 z^{10} + 4640000 z^9 + 6870528 z^8 - 1045248 z^7 + 630336 z^6 - 619920 z^5 + 768600 z^4 - 1049580 z^3 + 1496880 z^2 - 2837835 z + 8108100) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amm4.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{1}{99225} \left(e^z (512 z^9 + 16128 z^8 + 161280 z^7 + 564480 z^6 + 423360 z^5 - 211680 z^4 + 211680 z^3 - 226800 z^2 + 198450 z - 99225) \right)$$

07.25.03.amm5.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, 5; z\right) = -\frac{1}{3472875 z^2} \left(32 e^{z/2} (1024 z^{11} + 26624 z^{10} + 211200 z^9 + 546048 z^8 + 240384 z^7 - 100800 z^6 + 186480 z^5 - 781200 z^4 + 3776220 z^3 - 15830640 z^2 + 50675625 z - 103378275) I_0\left(\frac{z}{2}\right) - \frac{1}{3472875 z^3} \left(32 e^{z/2} (1024 z^{12} + 25600 z^{11} + 186112 z^{10} + 371712 z^9 - 60672 z^8 + 26304 z^7 + 75600 z^6 - 745920 z^5 + 4451580 z^4 - 20831580 z^3 + 75810735 z^2 - 202702500 z + 413513100) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amm6.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{11025 z^4} \left(e^z (-256 z^{12} - 4864 z^{11} - 24704 z^{10} - 22848 z^9 + 5376 z^8 + 60144 z^7 - 556920 z^6 + 3733380 z^5 - 20632815 z^4 + 92897280 z^3 - 325140480 z^2 + 812851200 z - 1219276800) \right) + \frac{55296 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.amm7.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{11025z^4} \left(e^{-z} (-256z^{12} + 4864z^{11} - 24704z^{10} + 22848z^9 + 5376z^8 - 60144z^7 - 556920z^6 - 3733380z^5 - 20632815z^4 - 92897280z^3 - 325140480z^2 - 812851200z - 1219276800) \right) + \frac{55296\sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.amm8.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{9}{2}, 6; z\right) = -\frac{1}{694575z^3} \left(32e^{z/2} (1024z^{11} + 13824z^{10} + 51456z^9 - 3072z^8 + 247680z^7 - 2167200z^6 + 16173360z^5 - 103692960z^4 + 556941420z^3 - 2404051650z^2 + 7753370625z - 15713497800) I_0\left(\frac{z}{2}\right) - \frac{1}{694575z^4} \left(32e^{z/2} (1024z^{12} + 12800z^{11} + 39168z^{10} - 36864z^9 + 294528z^8 - 2492640z^7 + 18874800z^6 - 124296480z^5 + 694926540z^4 - 3197023830z^3 + 11580393825z^2 - 31013482500z + 62853991200) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{9}{2}, a_2 = \frac{9}{2}, b_1 = -\frac{7}{2}$

07.25.03.amm9.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{121550625} \left(e^z (65536z^{16} + 7864320z^{15} + 391774208z^{14} + 10603593728z^{13} + 171467849728z^{12} + 1717536522240z^{11} + 10702450483200z^{10} + 40643925073920z^9 + 89695989573120z^8 + 105471566161920z^7 + 56342481753600z^6 + 9725679936000z^5 + 168372388800z^4 + 2637532800z^3 + 346096800z^2 + 79380000z + 121550625) \right)$$

07.25.03.amma.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) = -\frac{1}{17364375} \left(e^z (32768z^{15} + 3555328z^{14} + 158556160z^{13} + 3795513344z^{12} + 53472061440z^{11} + 457727800320z^{10} + 2375994539520z^9 + 7253992569600z^8 + 12205028223360z^7 + 10018184299200z^6 + 3125780128800z^5 + 174169774800z^4 - 2898693000z^3 - 130580100z^2 - 22821750z - 17364375) \right)$$

07.25.03.ammb.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{3472875} \left(e^z (16384z^{14} + 1589248z^{13} + 62590976z^{12} + 1303142400z^{11} + 15659320320z^{10} + 111418997760z^9 + 463773784320z^8 + 1076240471040z^7 + 1259431992000z^6 + 601080177600z^5 + 60189620400z^4 - 3199543200z^3 + 150425100z^2 + 9922500z + 3472875) \right)$$

07.25.03.ammc.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) = \frac{1}{1157625} \left(e^z (8192 z^{13} + 700416 z^{12} + 23941120 z^{11} + 424130560 z^{10} + 4224550400 z^9 + 24025370880 z^8 + 75721981440 z^7 + 121649337600 z^6 + 82293976800 z^5 + 12511170000 z^4 - 1183114800 z^3 + 174900600 z^2 - 12237750 z - 1157625) \right)$$

07.25.03.ammd.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{1157625} \left(e^z (4096 z^{12} + 303104 z^{11} + 8787968 z^{10} + 128579584 z^9 + 1019348736 z^8 + 4367569920 z^7 + 9471786240 z^6 + 8729844480 z^5 + 1862688240 z^4 - 263823840 z^3 + 68002200 z^2 - 14553000 z + 1157625) \right)$$

07.25.03.amme.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, 1; z\right) = \frac{1}{1157625} \left(e^{z/2} (2048 z^{12} + 141312 z^{11} + 3794944 z^{10} + 51057664 z^9 + 369447680 z^8 + 1435660800 z^7 + 2817507840 z^6 + 2370036480 z^5 + 473102280 z^4 - 71958600 z^3 + 23196600 z^2 - 7276500 z + 1157625) I_0\left(\frac{z}{2}\right) + \frac{1}{1157625} \left(4 e^{z/2} (512 z^{12} + 34816 z^{11} + 914176 z^{10} + 11867136 z^9 + 80918656 z^8 + 283118080 z^7 + 452289600 z^6 + 228184320 z^5 - 19818330 z^4 + 5647320 z^3 - 1986075 z^2 + 485100 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ammf.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{1157625} \left(e^z (2048 z^{11} + 128000 z^{10} + 3049984 z^9 + 35314944 z^8 + 209497344 z^7 + 612554880 z^6 + 754286400 z^5 + 216347040 z^4 - 42217560 z^3 + 15849540 z^2 - 5622750 z + 1157625) \right)$$

07.25.03.ammg.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{1157625} \left(e^{z/2} (2048 z^{11} + 117760 z^{10} + 2556928 z^9 + 26681600 z^8 + 140904960 z^7 + 362261760 z^6 + 388550400 z^5 + 95805360 z^4 - 18585000 z^3 + 8133300 z^2 - 3874500 z + 1157625) I_0\left(\frac{z}{2}\right) + \frac{1}{1157625} \left(e^{z/2} (2048 z^{11} + 115712 z^{10} + 2442240 z^9 + 24295168 z^8 + 117721600 z^7 + 254580480 z^6 + 174800640 z^5 - 18337200 z^4 + 6735960 z^3 - 3370500 z^2 + 1467900 z - 212625) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ammh.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{385875} \left(e^z (1024 z^{10} + 52224 z^9 + 976640 z^8 + 8379392 z^7 + 33523840 z^6 + 54848640 z^5 + 20627040 z^4 - 5275200 z^3 + 2629620 z^2 - 1278900 z + 385875) \right)$$

07.25.03.ammi.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{1157625} \left(4 e^{z/2} (1024 z^{10} + 47104 z^9 + 783104 z^8 + 5867520 z^7 + 20057856 z^6 + 27299328 z^5 + 8079120 z^4 - 1915200 z^3 + 1064700 z^2 - 687960 z + 312795) I_0\left(\frac{z}{2}\right) + \frac{1}{1157625 z} \left(4 e^{z/2} (1024 z^{11} + 46080 z^{10} + 737536 z^9 + 5152000 z^8 + 15231744 z^7 + 14036736 z^6 - 1719312 z^5 + 771120 z^4 - 497700 z^3 + 303660 z^2 - 59535 z - 93555) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ammj.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{77175} \left(e^z (512 z^9 + 20224 z^8 + 275968 z^7 + 1568000 z^6 + 3433920 z^5 + 1669920 z^4 - 540960 z^3 + 337680 z^2 - 204750 z + 77175) \right)$$

07.25.03.ammk.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{385875 z} \left(4 e^{z/2} (1024 z^{10} + 35328 z^9 + 411392 z^8 + 1934336 z^7 + 3356416 z^6 + 1167264 z^5 - 327600 z^4 + 218400 z^3 - 165060 z^2 + 52290 z + 135135) I_0\left(\frac{z}{2}\right) + \frac{1}{385875 z^2} \left(4 e^{z/2} (1024 z^{11} + 34304 z^{10} + 377600 z^9 + 1572864 z^8 + 1941248 z^7 - 271264 z^6 + 144144 z^5 - 117600 z^4 + 110460 z^3 - 107730 z^2 + 176715 z - 540540) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amml.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{11025} e^z (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025)$$

07.25.03.ammn.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{385875z^2} \left(32e^{z/2} (512z^{10} + 11776z^9 + 81664z^8 + 183296z^7 + 74592z^6 - 30240z^5 + 58800z^4 - 231840z^3 + 934290z^2 - 2972970z + 6081075) I_0\left(\frac{z}{2}\right) + \frac{1}{385875z^3} \left(64e^{z/2} (256z^{11} + 5632z^{10} + 35328z^9 + 58880z^8 - 8752z^7 + 2016z^6 + 18480z^5 - 127680z^4 + 609525z^3 - 2224530z^2 + 5945940z - 12162150) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ammn.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{1225z^4} \left(e^z (128z^{11} + 2112z^{10} + 9184z^9 + 6832z^8 + 728z^7 - 28980z^6 + 206010z^5 - 1145655z^4 + 5160960z^3 - 18063360z^2 + 45158400z - 67737600) + \frac{27648\sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}} \right)$$

07.25.03.ammn.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{1225z^4} \left(e^{-z} (-128z^{11} + 2112z^{10} - 9184z^9 + 6832z^8 - 728z^7 - 28980z^6 - 206010z^5 - 1145655z^4 - 5160960z^3 - 18063360z^2 - 45158400z - 67737600) + \frac{27648\sqrt{\pi} \operatorname{erf}(\sqrt{-z})}{z^{9/2}} \right)$$

07.25.03.ammn.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{77175z^3} \left(32e^{z/2} (512z^{10} + 5888z^9 + 19456z^8 - 5184z^7 + 110880z^6 - 845040z^5 + 5433120z^4 - 29214360z^3 + 126216090z^2 - 407432025z + 827026200) I_0\left(\frac{z}{2}\right) + \frac{1}{77175z^4} \left(32e^{z/2} (512z^{11} + 5376z^{10} + 14336z^9 - 17344z^8 + 131616z^7 - 989520z^6 + 6515040z^5 - 36446760z^4 + 167796090z^3 - 608242635z^2 + 1629728100z - 3308104800) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.ammq.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{2480625} \left(e^z (16384 z^{14} + 1605632 z^{13} + 64024576 z^{12} + 1353547776 z^{11} + 16584422400 z^{10} + 121065154560 z^9 + 522138919680 z^8 + 1277371146240 z^7 + 1631715099840 z^6 + 929804400000 z^5 + 168183464400 z^4 + 2993155200 z^3 + 47231100 z^2 + 5556600 z + 2480625) \right)$$

07.25.03.ammr.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{496125} \left(e^z (8192 z^{13} + 716800 z^{12} + 25202688 z^{11} + 462551040 z^{10} + 4823078400 z^9 + 29182567680 z^8 + 100565337600 z^7 + 186141553920 z^6 + 164362111200 z^5 + 53996922000 z^4 + 3096349200 z^3 - 51597000 z^2 - 2182950 z - 496125) \right)$$

07.25.03.amms.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{165375} \left(e^z (4096 z^{12} + 315392 z^{11} + 9605120 z^{10} + 149632000 z^9 + 1289299200 z^8 + 6210839040 z^7 + 16123054080 z^6 + 20517033600 z^5 + 10371438000 z^4 + 1069866000 z^3 - 56624400 z^2 + 2513700 z + 165375) \right)$$

07.25.03.ammt.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{165375} \left(e^z (2048 z^{11} + 136192 z^{10} + 3508736 z^9 + 44991744 z^8 + 307211520 z^7 + 1108544640 z^6 + 1964531520 z^5 + 1418124960 z^4 + 222281640 z^3 - 20771100 z^2 + 2844450 z - 165375) \right)$$

07.25.03.ammu.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{165375} \left(e^{z/2} (-1024 z^{11} - 63488 z^{10} - 1515776 z^9 - 17903872 z^8 - 112062720 z^7 - 370251840 z^6 - 605886960 z^5 - 416067120 z^4 - 66413340 z^3 + 7358400 z^2 - 1422225 z + 165375) I_0\left(\frac{z}{2}\right) + \frac{1}{165375} \left(e^{z/2} (-1024 z^{11} - 62464 z^{10} - 1453824 z^9 - 16480256 z^8 - 96250112 z^7 - 280969920 z^6 - 360361680 z^5 - 136308480 z^4 + 9378180 z^3 - 1813140 z^2 + 300825 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.ammv.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{165375} \left(e^z (1024 z^{10} + 57344 z^9 + 1209600 z^8 + 12214272 z^7 + 61998720 z^6 + 151280640 z^5 + 150222240 z^4 + 33062400 z^3 - 4577580 z^2 + 1058400 z - 165375) \right)$$

07.25.03.ammw.01

$$\begin{aligned}
 {}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, 2; z\right) = & \\
 & \frac{1}{165375} \left(e^{z/2} (-1024 z^{10} - 52736 z^9 - 1014016 z^8 - 9246720 z^7 - 42026880 z^6 - 91469280 z^5 - 81814320 z^4 - \right. \\
 & \left. 16823520 z^3 + 2538900 z^2 - 746550 z + 165375) I_0\left(\frac{z}{2}\right) + \right. \\
 & \left. \frac{1}{165375} \left(e^{z/2} (-1024 z^{10} - 51712 z^9 - 962816 z^8 - 8308736 z^7 - 34151040 z^6 - 60658080 z^5 - \right. \right. \\
 & \left. \left. 32328240 z^4 + 2832480 z^3 - 777420 z^2 + 229950 z - 23625) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

07.25.03.ammx.01

$$\begin{aligned}
 {}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = & \\
 & -\frac{1}{55125} \left(e^z (512 z^9 + 23296 z^8 + 383488 z^7 + 2847488 z^6 + 9643200 z^5 + 12959520 z^4 + 3833760 z^3 - \right. \\
 & \left. 720720 z^2 + 233730 z - 55125) \right)
 \end{aligned}$$

07.25.03.ammy.01

$$\begin{aligned}
 {}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, 3; z\right) = & \\
 & -\frac{1}{165375} \left(8 e^{z/2} (256 z^9 + 10496 z^8 + 153600 z^7 + 998592 z^6 + 2916816 z^5 + 3351600 z^4 + 851760 z^3 - \right. \\
 & \left. 163800 z^2 + 65205 z - 21735) I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{165375 z} \left(4 e^{z/2} (512 z^{10} + 20480 z^9 + 286976 z^8 + 1719936 z^7 + 4238304 z^6 + 3095232 z^5 - \right. \right. \\
 & \left. \left. 327600 z^4 + 115920 z^3 - 48510 z^2 + 7560 z + 8505) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

07.25.03.ammz.01

$$\begin{aligned}
 {}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = & \\
 & -\frac{1}{11025} e^z (256 z^8 + 8960 z^7 + 106624 z^6 + 517440 z^5 + 940800 z^4 + 364560 z^3 - 88200 z^2 + 36540 z - 11025)
 \end{aligned}$$

07.25.03.amn0.01

$$\begin{aligned}
 {}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, 4; z\right) = & \\
 & -\frac{1}{55125 z} \left(4 e^{z/2} (512 z^9 + 15616 z^8 + 158464 z^7 + 639296 z^6 + 941472 z^5 + 287280 z^4 - 67200 z^3 + 32760 z^2 - \right. \\
 & \left. 10710 z - 10395) I_0\left(\frac{z}{2}\right) - \frac{1}{55125 z^2} \left(4 e^{z/2} (512 z^{10} + 15104 z^9 + 143616 z^8 + \right. \right. \\
 & \left. \left. 502720 z^7 + 497056 z^6 - 61488 z^5 + 26880 z^4 - 15960 z^3 + 9450 z^2 - 12285 z + 41580) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

07.25.03.amn1.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = -\frac{e^z (128 z^7 + 3136 z^6 + 23520 z^5 + 58800 z^4 + 29400 z^3 - 8820 z^2 + 4410 z - 1575)}{1575}$$

07.25.03.amn2.01

$$\begin{aligned} {}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, 5; z\right) = \\ -\frac{1}{55125 z^2} \left(32 e^{z/2} (256 z^9 + 5120 z^8 + 30400 z^7 + 57792 z^6 + 21168 z^5 - 8400 z^4 + 17640 z^3 - 63000 z^2 + \right. \\ \left. 197505 z - 405405) I_0\left(\frac{z}{2}\right) - \frac{1}{55125 z^3} \left(32 e^{z/2} (256 z^{10} + 4864 z^9 + 25664 z^8 + \right. \right. \\ \left. \left. 34304 z^7 - 4368 z^6 - 672 z^5 + 15960 z^4 - 80640 z^3 + 295785 z^2 - 790020 z + 1621620) I_1\left(\frac{z}{2}\right) \right) \end{aligned}$$

07.25.03.amn3.01

$$\begin{aligned} {}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \\ \frac{1}{175 z^4} \left(e^z (-64 z^{10} - 896 z^9 - 3248 z^8 - 1792 z^7 - 1260 z^6 + 12600 z^5 - 71505 z^4 + 322560 z^3 - 1128960 z^2 + \right. \\ \left. 2822400 z - 4233600) \right) + \frac{12096 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}} \end{aligned}$$

07.25.03.amn4.01

$$\begin{aligned} {}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \\ \frac{1}{175 z^4} \left(e^{-z} (-64 z^{10} + 896 z^9 - 3248 z^8 + 1792 z^7 - 1260 z^6 - 12600 z^5 - 71505 z^4 - 322560 z^3 - 1128960 z^2 - \right. \\ \left. 2822400 z - 4233600) \right) + \frac{12096 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}} \end{aligned}$$

07.25.03.amn5.01

$$\begin{aligned} {}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{5}{2}, 6; z\right) = \\ -\frac{1}{11025 z^3} \left(32 e^{z/2} (256 z^9 + 2432 z^8 + 7104 z^7 - 4032 z^6 + 48720 z^5 - 317520 z^4 + 1711080 z^3 - 7401240 z^2 + \right. \\ \left. 23918895 z - 48648600) I_0\left(\frac{z}{2}\right) - \right. \\ \left. \frac{1}{11025 z^4} \left(32 e^{z/2} (256 z^{10} + 2176 z^9 + 5056 z^8 - 8256 z^7 + 58128 z^6 - 381360 z^5 + 2134440 z^4 - \right. \right. \\ \left. \left. 9835560 z^3 + 35686035 z^2 - 95675580 z + 194594400) I_1\left(\frac{z}{2}\right) \right) \right) \end{aligned}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.amn6.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{99225} \left(e^z (4096 z^{12} + 319488 z^{11} + 9885696 z^{10} + 157132800 z^9 + 1390176000 z^8 + 6945315840 z^7 + 19028747520 z^6 + 26470160640 z^5 + 16005654000 z^4 + 2989980000 z^3 + 53184600 z^2 + 793800 z + 99225) \right)$$

07.25.03.amn7.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{33075} \left(e^z (2048 z^{11} + 140288 z^{10} + 3750400 z^9 + 50438400 z^8 + 367238400 z^7 + 1452846720 z^6 + 2976563520 z^5 + 2817108000 z^4 + 960057000 z^3 + 54904500 z^2 - 859950 z - 33075) \right)$$

07.25.03.amn8.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{33075} \left(e^z (1024 z^{10} + 60416 z^9 + 1361664 z^8 + 15006720 z^7 + 86075520 z^6 + 253008000 z^5 + 349745760 z^4 + 184443840 z^3 + 18918900 z^2 - 926100 z + 33075) \right)$$

07.25.03.amn9.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{33075} \left(e^{z/2} (512 z^{10} + 28160 z^9 + 588544 z^8 + 5988864 z^7 + 31674720 z^6 + 86388960 z^5 + 113425200 z^4 + 60187680 z^3 + 6962130 z^2 - 463050 z + 33075) I_0\left(\frac{z}{2}\right) + \frac{1}{33075} \left(2 e^{z/2} (256 z^{10} + 13824 z^9 + 280576 z^8 + 2720512 z^7 + 13244112 z^6 + 31069920 z^5 + 30258480 z^4 + 7801920 z^3 - 368235 z^2 + 33390 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amna.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{33075} \left(e^z (512 z^9 + 25344 z^8 + 465408 z^7 + 4012800 z^6 + 16954560 z^5 + 33253920 z^4 + 25230240 z^3 + 3916080 z^2 - 330750 z + 33075) \right)$$

07.25.03.amnb.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{33075} \left(e^{z/2} (512 z^9 + 23296 z^8 + 390144 z^7 + 3046080 z^6 + 11615520 z^5 + 20719440 z^4 + 14793120 z^3 + 2351880 z^2 - 238950 z + 33075) I_0\left(\frac{z}{2}\right) + \frac{1}{33075} \left(e^{z/2} (512 z^9 + 22784 z^8 + 367616 z^7 + 2689344 z^6 + 9088800 z^5 + 12672240 z^4 + 4862880 z^3 - 321480 z^2 + 51930 z - 3375) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amnc.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{11025} e^z (256 z^8 + 10240 z^7 + 145664 z^6 + 913920 z^5 + 2536800 z^4 + 2674560 z^3 + 579600 z^2 - 70560 z + 11025)$$

07.25.03.amnd.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, 3; z\right) = \frac{1}{33075} 4 e^{z/2} (256 z^8 + 9216 z^7 + 116544 z^6 + 642432 z^5 + 1557360 z^4 + 1454400 z^3 + 297720 z^2 - 41040 z + 8505) I_0\left(\frac{z}{2}\right) + \frac{1}{33075 z} \left(4 e^{z/2} (256 z^9 + 8960 z^8 + 107712 z^7 + 538944 z^6 + 1064112 z^5 + 576720 z^4 - 48600 z^3 + 11160 z^2 - 1215 z - 945) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.amne.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (128 z^7 + 3904 z^6 + 39648 z^5 + 159600 z^4 + 231000 z^3 + 66780 z^2 - 10710 z + 2205)}{2205}$$

07.25.03.amnf.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{11025 z} 4 e^{z/2} (256 z^8 + 6784 z^7 + 58688 z^6 + 197568 z^5 + 238320 z^4 + 60240 z^3 - 10440 z^2 + 2520 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{11025 z^2} 4 e^{z/2} (256 z^9 + 6528 z^8 + 52288 z^7 + 148288 z^6 + 110448 z^5 - 11280 z^4 + 3480 z^3 - 1080 z^2 + 945 z - 3780) I_1\left(\frac{z}{2}\right)$$

07.25.03.amng.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315)$$

07.25.03.amnh.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, 5; z\right) = \frac{1}{11025 z^2} 32 e^{z/2} (128 z^8 + 2176 z^7 + 10752 z^6 + 16704 z^5 + 5280 z^4 - 2160 z^3 + 5040 z^2 - 15120 z + 31185) I_0\left(\frac{z}{2}\right) + \frac{1}{11025 z^3} 128 e^{z/2} (32 z^9 + 512 z^8 + 2192 z^7 + 2208 z^6 - 204 z^5 - 240 z^4 + 1530 z^3 - 5670 z^2 + 15120 z - 31185) I_1\left(\frac{z}{2}\right)$$

07.25.03.amni.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{35 z^4} e^z (32 z^9 + 368 z^8 + 1072 z^7 + 360 z^6 + 810 z^5 - 5085 z^4 + 23040 z^3 - 80640 z^2 + 201600 z - 302400) + \frac{4320 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.amnj.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{35 z^4} e^{-z} (-32 z^9 + 368 z^8 - 1072 z^7 + 360 z^6 - 810 z^5 - 5085 z^4 - 23040 z^3 - 80640 z^2 - 201600 z - 302400) + \frac{4320 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}}$$

07.25.03.amnk.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{2205 z^3} 32 e^{z/2} (128 z^8 + 960 z^7 + 2496 z^6 - 2544 z^5 + 20880 z^4 - 113400 z^3 + 491400 z^2 - 1590435 z + 3243240) I_0\left(\frac{z}{2}\right) + \frac{1}{2205 z^4} (32 e^{z/2} (128 z^9 + 832 z^8 + 1728 z^7 - 3984 z^6 + 25296 z^5 - 141480 z^4 + 652680 z^3 - 2371005 z^2 + 6361740 z - 12972960) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.amnl.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{11025} (e^z (1024 z^{10} + 61440 z^9 + 1414400 z^8 + 16025600 z^7 + 95478400 z^6 + 296770560 z^5 + 449584800 z^4 + 284592000 z^3 + 53140500 z^2 + 882000 z + 11025))$$

07.25.03.amnm.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{11025} (e^z (512 z^9 + 26368 z^8 + 509440 z^7 + 4701440 z^6 + 21881280 z^5 + 49919520 z^4 + 50074080 z^3 + 17110800 z^2 + 904050 z - 11025))$$

07.25.03.amnn.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{11025} (e^{z/2} (-256 z^9 - 12288 z^8 - 220352 z^7 - 1883840 z^6 - 8154160 z^5 - 17604720 z^4 - 17496360 z^3 - 6536040 z^2 - 452025 z + 11025) I_0\left(\frac{z}{2}\right) + \frac{1}{11025} (e^{z/2} (-256 z^9 - 12032 z^8 - 208448 z^7 - 1681152 z^6 - 6566000 z^5 - 11705120 z^4 - 7905240 z^3 - 1162560 z^2 + 25935 z) I_1\left(\frac{z}{2}\right))$$

07.25.03.amno.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{11025} e^z (256 z^8 + 11008 z^7 + 172160 z^6 + 1231680 z^5 + 4166400 z^4 + 6210960 z^3 + 3298680 z^2 + 308700 z - 11025)$$

07.25.03.amnp.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{11025} (e^{z/2} (-256 z^8 - 10112 z^7 - 144320 z^6 - 938560 z^5 - 2898000 z^4 - 4039920 z^3 - 2144040 z^2 - 228600 z + 11025) I_0\left(\frac{z}{2}\right) + \frac{1}{11025} e^{z/2} (-256 z^8 - 9856 z^7 - 134592 z^6 - 808640 z^5 - 2147600 z^4 - 2189520 z^3 - 529320 z^2 + 20760 z - 675) I_1\left(\frac{z}{2}\right))$$

07.25.03.amnq.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{e^z (128 z^7 + 4416 z^6 + 52960 z^5 + 271600 z^4 + 589400 z^3 + 453180 z^2 + 63210 z - 3675)}{3675}$$

07.25.03.amnr.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, 3; z\right) = -\frac{8 e^{z/2} (64 z^7 + 1984 z^6 + 21152 z^5 + 95760 z^4 + 184680 z^3 + 131880 z^2 + 19260 z - 1395) I_0\left(\frac{z}{2}\right) - \frac{1}{11025 z} 4 e^{z/2} (128 z^8 + 3840 z^7 + 38528 z^6 + 154784 z^5 + 230400 z^4 + 82560 z^3 - 4560 z^2 + 270 z + 135) I_1\left(\frac{z}{2}\right)}{11025}$$

07.25.03.amns.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{1}{735} e^z (64 z^6 + 1664 z^5 + 14000 z^4 + 44800 z^3 + 48300 z^2 + 9240 z - 735)$$

07.25.03.amnt.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, 4; z\right) = -\frac{4 e^{z/2} (128 z^7 + 2880 z^6 + 20608 z^5 + 55600 z^4 + 51920 z^3 + 9720 z^2 - 900 z - 105) I_0\left(\frac{z}{2}\right)}{3675 z} - \frac{4 e^{z/2} (128 z^8 + 2752 z^7 + 17920 z^6 + 38928 z^5 + 19600 z^4 - 1400 z^3 + 180 z^2 - 75 z + 420) I_1\left(\frac{z}{2}\right)}{3675 z^2}$$

07.25.03.amnu.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{1}{105} e^z (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105)$$

07.25.03.amnv.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, 5; z\right) = -\frac{32 e^{z/2} (64 z^7 + 896 z^6 + 3536 z^5 + 4240 z^4 + 1080 z^3 - 540 z^2 + 1365 z - 2835) I_0\left(\frac{z}{2}\right)}{3675 z^2} - \frac{32 e^{z/2} (64 z^8 + 832 z^7 + 2736 z^6 + 1856 z^5 - 40 z^4 - 540 z^3 + 2055 z^2 - 5460 z + 11340) I_1\left(\frac{z}{2}\right)}{3675 z^3}$$

07.25.03.amnw.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{1080 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}} - \frac{3 e^z (16 z^8 + 144 z^7 + 320 z^6 + 20 z^5 + 415 z^4 - 1920 z^3 + 6720 z^2 - 16800 z + 25200)}{35 z^4}$$

07.25.03.amnx.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1080 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}} - \frac{3 e^{-z} (16 z^8 - 144 z^7 + 320 z^6 - 20 z^5 + 415 z^4 + 1920 z^3 + 6720 z^2 + 16800 z + 25200)}{35 z^4}$$

07.25.03.amny.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; -\frac{1}{2}, 6; z\right) = -\frac{32 e^{z/2} (64 z^7 + 352 z^6 + 848 z^5 - 1440 z^4 + 8640 z^3 - 37590 z^2 + 121905 z - 249480) I_0\left(\frac{z}{2}\right)}{735 z^3} - \frac{1}{735 z^4} 32 e^{z/2} (64 z^8 + 288 z^7 + 592 z^6 - 1952 z^5 + 10800 z^4 - 49890 z^3 + 181545 z^2 - 487620 z + 997920) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{1}{2}$

07.25.03.amnz.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{11025} e^z (256 z^8 + 11264 z^7 + 181504 z^6 + 1352448 z^5 + 4854624 z^4 + 7968576 z^3 + 5115600 z^2 + 882000 z + 11025)$$

07.25.03.amo0.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{11025}$$

$$\frac{e^{z/2} (128 z^8 + 5248 z^7 + 78592 z^6 + 545216 z^5 + 1844640 z^4 + 2958480 z^3 + 2019360 z^2 + 441000 z + 11025) I_0\left(\frac{z}{2}\right) + 8 e^{z/2} (16 z^8 + 640 z^7 + 9192 z^6 + 59264 z^5 + 175322 z^4 + 216720 z^3 + 85575 z^2 + 4620 z) I_1\left(\frac{z}{2}\right)}{11025}$$

07.25.03.amo1.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 4672 z^6 + 60384 z^5 + 344112 z^4 + 878808 z^3 + 908460 z^2 + 286650 z + 11025)}{11025}$$

07.25.03.amo2.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, 2; z\right) = \frac{e^{z/2} (128 z^7 + 4288 z^6 + 50624 z^5 + 263760 z^4 + 625680 z^3 + 631560 z^2 + 217800 z + 11025) I_0\left(\frac{z}{2}\right) + e^{z/2} (128 z^7 + 4160 z^6 + 46528 z^5 + 219184 z^4 + 426000 z^3 + 279960 z^2 + 31560 z - 225) I_1\left(\frac{z}{2}\right)}{11025}$$

07.25.03.amo3.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (64 z^6 + 1856 z^5 + 18128 z^4 + 72352 z^3 + 113820 z^2 + 55860 z + 3675)}{3675}$$

07.25.03.amo4.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 + 1664 z^5 + 14448 z^4 + 51264 z^3 + 73560 z^2 + 35856 z + 2763) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 + 1600 z^6 + 12880 z^5 + 39120 z^4 + 39480 z^3 + 7224 z^2 - 99 z - 27) I_1\left(\frac{z}{2}\right)}{11025 z}$$

07.25.03.amo5.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{735} e^z (32 z^5 + 688 z^4 + 4592 z^3 + 10920 z^2 + 7770 z + 735)$$

07.25.03.amo6.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^6 + 1184 z^5 + 6704 z^4 + 13600 z^3 + 8856 z^2 + 918 z + 15) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 + 1120 z^6 + 5616 z^5 + 8480 z^4 + 2264 z^3 - 54 z^2 + 3 z - 60) I_1\left(\frac{z}{2}\right)}{3675 z^2}$$

07.25.03.amo7.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{105} e^z (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105)$$

07.25.03.amo8.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 + 352 z^5 + 1040 z^4 + 864 z^3 + 162 z^2 - 150 z + 315) I_0\left(\frac{z}{2}\right) + 64 e^{z/2} (16 z^7 + 160 z^6 + 368 z^5 + 128 z^4 + 27 z^3 - 114 z^2 + 300 z - 630) I_1\left(\frac{z}{2}\right)}{3675 z^3}$$

07.25.03.amo9.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (8 z^7 + 52 z^6 + 82 z^5 - 31 z^4 + 192 z^3 - 672 z^2 + 1680 z - 2520)}{35 z^4} + \frac{108 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{z^{9/2}}$$

07.25.03.amoa.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{108 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{z^{9/2}} - \frac{3 e^{-z} (8 z^7 - 52 z^6 + 82 z^5 + 31 z^4 + 192 z^3 + 672 z^2 + 1680 z + 2520)}{35 z^4}$$

07.25.03.amob.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^6 + 112 z^5 + 288 z^4 - 756 z^3 + 3390 z^2 - 11025 z + 22680) I_0\left(\frac{z}{2}\right)}{735 z^3} + \frac{32 e^{z/2} (32 z^7 + 80 z^6 + 224 z^5 - 972 z^4 + 4494 z^3 - 16395 z^2 + 44100 z - 90720) I_1\left(\frac{z}{2}\right)}{735 z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 1$

07.25.03.amoc.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; 1, \frac{3}{2}; z\right) = \frac{e^{z/2} (64 z^7 + 2176 z^6 + 26192 z^5 + 140112 z^4 + 345240 z^3 + 370020 z^2 + 143325 z + 11025) I_0\left(\frac{z}{2}\right)}{11025} + \frac{e^{z/2} (64 z^7 + 2112 z^6 + 24112 z^5 + 116992 z^4 + 238392 z^3 + 171780 z^2 + 25935 z) I_1\left(\frac{z}{2}\right)}{11025}$$

07.25.03.amod.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; 1, \frac{5}{2}; z\right) = \frac{e^{z/2} (32 z^6 + 864 z^5 + 7888 z^4 + 30016 z^3 + 47810 z^2 + 27930 z + 3675) I_0\left(\frac{z}{2}\right)}{3675} + \frac{2 e^{z/2} (16 z^6 + 416 z^5 + 3536 z^4 + 11664 z^3 + 13643 z^2 + 3710 z) I_1\left(\frac{z}{2}\right)}{3675}$$

07.25.03.amoe.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; 1, \frac{7}{2}; z\right) = \frac{1}{735} e^{z/2} (16 z^5 + 320 z^4 + 2012 z^3 + 4732 z^2 + 3885 z + 735) I_0\left(\frac{z}{2}\right) + \frac{1}{735} e^{z/2} (16 z^5 + 304 z^4 + 1716 z^3 + 3152 z^2 + 1337 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.amof.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{105} e^{z/2} (8 z^4 + 104 z^3 + 376 z^2 + 420 z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} (2 z^4 + 24 z^3 + 71 z^2 + 44 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{3}{2}$

07.25.03.amog.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (64 z^6 + 1920 z^5 + 19632 z^4 + 83712 z^3 + 146412 z^2 + 88200 z + 11025)}{11025}$$

07.25.03.amoh.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, 2; z\right) = \frac{e^{z/2} (64 z^6 + 1760 z^5 + 16464 z^4 + 64800 z^3 + 108480 z^2 + 68850 z + 11025) I_0\left(\frac{z}{2}\right)}{11025} + \frac{e^{z/2} (64 z^6 + 1696 z^5 + 14800 z^4 + 50784 z^3 + 63600 z^2 + 20310 z + 225) I_1\left(\frac{z}{2}\right)}{11025}$$

07.25.03.amoi.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (32 z^5 + 752 z^4 + 5680 z^3 + 16296 z^2 + 16170 z + 3675)}{3675}$$

07.25.03.amoj.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, 3; z\right) = \frac{8 e^{z/2} (16 z^5 + 336 z^4 + 2256 z^3 + 5820 z^2 + 5499 z + 1377) I_0\left(\frac{z}{2}\right)}{11025} + \frac{4 e^{z/2} (32 z^6 + 640 z^5 + 3888 z^4 + 8040 z^3 + 4362 z^2 + 108 z + 9) I_1\left(\frac{z}{2}\right)}{11025 z}$$

07.25.03.amok.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{735} e^z (16 z^4 + 272 z^3 + 1344 z^2 + 2100 z + 735)$$

07.25.03.amol.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 + 464 z^4 + 1936 z^3 + 2628 z^2 + 918 z - 3) I_0\left(\frac{z}{2}\right)}{3675 z} + \frac{4 e^{z/2} (32 z^6 + 432 z^5 + 1520 z^4 + 1292 z^3 + 54 z^2 + 3 z + 12) I_1\left(\frac{z}{2}\right)}{3675 z^2}$$

07.25.03.amom.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{105} e^z (8 z^3 + 84 z^2 + 210 z + 105)$$

07.25.03.amon.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^5 + 128 z^4 + 252 z^3 + 108 z^2 + 21 z - 45) I_0\left(\frac{z}{2}\right)}{3675 z^2} + \frac{32 e^{z/2} (16 z^6 + 112 z^5 + 148 z^4 + 33 z^2 - 84 z + 180) I_1\left(\frac{z}{2}\right)}{3675 z^3}$$

07.25.03.amoo.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{3 e^z (4 z^6 + 16 z^5 + 17 z^4 - 24 z^3 + 84 z^2 - 210 z + 315)}{35 z^4} - \frac{27 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.amop.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (4 z^6 - 16 z^5 + 17 z^4 + 24 z^3 + 84 z^2 + 210 z + 315)}{35 z^4} - \frac{27 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2 z^{9/2}}$$

07.25.03.amoq.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 + 24 z^4 + 108 z^3 - 372 z^2 + 1215 z - 2520) I_0\left(\frac{z}{2}\right)}{735 z^3} + \frac{32 e^{z/2} (16 z^6 + 8 z^5 + 108 z^4 - 492 z^3 + 1803 z^2 - 4860 z + 10080) I_1\left(\frac{z}{2}\right)}{735 z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 2$

07.25.03.amor.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; 2, \frac{5}{2}; z\right) = \frac{e^{z/2} (32 z^5 + 688 z^4 + 4768 z^3 + 12860 z^2 + 12990 z + 3675) I_0\left(\frac{z}{2}\right)}{3675} + \frac{e^{z/2} (32 z^5 + 656 z^4 + 4128 z^3 + 9028 z^2 + 5470 z + 225) I_1\left(\frac{z}{2}\right)}{3675}$$

07.25.03.amos.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; 2, \frac{7}{2}; z\right) = \frac{1}{735} e^{z/2} (16 z^4 + 248 z^3 + 1132 z^2 + 1740 z + 735) I_0\left(\frac{z}{2}\right) + \frac{1}{735} e^{z/2} (16 z^4 + 232 z^3 + 908 z^2 + 932 z + 75) I_1\left(\frac{z}{2}\right)$$

07.25.03.amot.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{105} e^{z/2} (8 z^3 + 76 z^2 + 180 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8 z^3 + 68 z^2 + 116 z + 15) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{5}{2}$

07.25.03.amou.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (16 z^4 + 288 z^3 + 1544 z^2 + 2744 z + 1225)}{1225}$$

07.25.03.amov.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (16 z^4 + 256 z^3 + 1220 z^2 + 1992 z + 921) I_0\left(\frac{z}{2}\right)}{3675} + \frac{4 e^{z/2} (16 z^5 + 240 z^4 + 988 z^3 + 1108 z^2 + 117 z - 9) I_1\left(\frac{z}{2}\right)}{3675 z}$$

07.25.03.amow.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{245} e^z (8 z^3 + 100 z^2 + 322 z + 245)$$

07.25.03.amox.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 + 168 z^3 + 452 z^2 + 308 z + 1) I_0\left(\frac{z}{2}\right)}{1225 z} + \frac{4 e^{z/2} (16 z^5 + 152 z^4 + 308 z^3 + 60 z^2 - 7 z - 4) I_1\left(\frac{z}{2}\right)}{1225 z^2}$$

07.25.03.amoy.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{35} e^z (4 z^2 + 28 z + 35)$$

07.25.03.amoz.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 + 40 z^3 + 40 z^2 - 4 z + 9) I_0\left(\frac{z}{2}\right)}{1225 z^2} + \frac{128 e^{z/2} (2 z^5 + 8 z^4 + 3 z^3 - 2 z^2 + 4 z - 9) I_1\left(\frac{z}{2}\right)}{1225 z^3}$$

07.25.03.amp0.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (4 z^5 + 6 z^4 + 8 z^3 - 28 z^2 + 70 z - 105)}{70 z^4} + \frac{27 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4 z^{9/2}}$$

07.25.03.amp1.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{27 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4 z^{9/2}} - \frac{9 e^{-z} (4 z^5 - 6 z^4 + 8 z^3 + 28 z^2 + 70 z + 105)}{70 z^4}$$

07.25.03.amp2.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^4 - 4 z^3 + 52 z^2 - 171 z + 360) I_0\left(\frac{z}{2}\right)}{245 z^3} + \frac{32 e^{z/2} (8 z^5 - 12 z^4 + 68 z^3 - 253 z^2 + 684 z - 1440) I_1\left(\frac{z}{2}\right)}{245 z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 3$

07.25.03.amp3.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; 3, \frac{7}{2}; z\right) = \frac{8}{735} e^{z/2} (4 z^3 + 44 z^2 + 126 z + 93) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8 z^4 + 80 z^3 + 176 z^2 + 42 z - 9) I_1\left(\frac{z}{2}\right)}{735 z}$$

07.25.03.amp4.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; 3, \frac{9}{2}; z\right) = \frac{4}{105} e^{z/2} (4 z^2 + 24 z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4 z^3 + 20 z^2 + 9 z - 3) I_1\left(\frac{z}{2}\right)}{105 z}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{7}{2}$

07.25.03.amp5.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{49} e^z (4 z^2 + 32 z + 49)$$

07.25.03.amp6.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (8 z^3 + 52 z^2 + 64 z - 1) I_0\left(\frac{z}{2}\right)}{245 z} + \frac{4 e^{z/2} (8 z^4 + 44 z^3 + 24 z^2 - 11 z + 4) I_1\left(\frac{z}{2}\right)}{245 z^2}$$

07.25.03.amp7.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{7} e^z (2 z + 7)$$

07.25.03.amp8.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (4 z^3 + 8 z^2 + z - 3) I_0\left(\frac{z}{2}\right)}{245 z^2} + \frac{32 e^{z/2} (4 z^4 + 4 z^3 - z^2 - 4 z + 12) I_1\left(\frac{z}{2}\right)}{245 z^3}$$

07.25.03.amp9.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (8 z^4 - 8 z^3 + 28 z^2 - 70 z + 105)}{56 z^4} - \frac{135 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.ampa.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (8 z^4 + 8 z^3 + 28 z^2 + 70 z + 105)}{56 z^4} - \frac{135 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{9/2}}$$

07.25.03.ampb.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (4 z^3 - 10 z^2 + 33 z - 72) I_0\left(\frac{z}{2}\right)}{49 z^3} + \frac{32 e^{z/2} (4 z^4 - 14 z^3 + 49 z^2 - 132 z + 288) I_1\left(\frac{z}{2}\right)}{49 z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = 4$

07.25.03.ampc.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; 4, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (4 z^2 + 10 z - 1) I_0\left(\frac{z}{2}\right)}{35 z} + \frac{4 e^{z/2} (4 z^3 + 6 z^2 - 5 z + 4) I_1\left(\frac{z}{2}\right)}{35 z^2}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{9}{2}$, $b_1 = \frac{9}{2}$

07.25.03.ampd.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = e^z$$

07.25.03.ampe.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (2 z^2 - 2 z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} + \frac{64 e^{z/2} (z^3 - 2 z^2 + 4 z - 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.ampf.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (8 z^3 - 28 z^2 + 70 z - 105)}{16 z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.ampg.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9 e^{-z} (8 z^3 + 28 z^2 + 70 z + 105)}{16 z^4}$$

07.25.03.amph.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (2 z^2 - 9 z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{32 e^{z/2} (2 z^3 - 11 z^2 + 36 z - 96) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = -\frac{11}{2}$

07.25.03.ampi.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; z\right) =$$

$$\frac{1}{34037647875} (8192 z^{20} + 1486848 z^{19} + 115984384 z^{18} + 5121162240 z^{17} + 141905756160 z^{16} +$$

$$2586643347456 z^{15} + 31625330688000 z^{14} + 259734044344320 z^{13} + 1413257752166400 z^{12} +$$

$$4942306507622400 z^{11} + 10539431454827520 z^{10} + 12543698267251200 z^9 +$$

$$7106917487443200 z^8 + 1364239285920000 z^7 + 26398676304000 z^6 + 416821204800 z^5 +$$

$$61297236000 z^4 + 25540515000 z^3 + 20628877500 z^2 + 25317258750 z + 34037647875) +$$

$$\frac{1}{34037647875} (512 e^z \sqrt{\pi} (16 z^{41/2} + 2912 z^{39/2} + 227976 z^{37/2} + 10114104 z^{35/2} + 282051105 z^{33/2} +$$

$$5185886580 z^{31/2} + 64167180210 z^{29/2} + 535955978880 z^{27/2} + 2988258829920 z^{25/2} +$$

$$10838291184000 z^{23/2} + 24462991828800 z^{21/2} + 31971876249600 z^{19/2} +$$

$$21430961596800 z^{17/2} + 5858167795200 z^{15/2} + 369212256000 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ampi.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, -\frac{11}{2}; -z\right) =$$

$$\frac{1}{34037647875} (8192 z^{20} - 1486848 z^{19} + 115984384 z^{18} - 5121162240 z^{17} + 141905756160 z^{16} -$$

$$2586643347456 z^{15} + 31625330688000 z^{14} - 259734044344320 z^{13} + 1413257752166400 z^{12} -$$

$$4942306507622400 z^{11} + 10539431454827520 z^{10} - 12543698267251200 z^9 +$$

$$7106917487443200 z^8 - 1364239285920000 z^7 + 26398676304000 z^6 - 416821204800 z^5 +$$

$$61297236000 z^4 - 25540515000 z^3 + 20628877500 z^2 - 25317258750 z + 34037647875) -$$

$$\frac{1}{34037647875} (512 e^{-z} \sqrt{\pi} (16 z^{41/2} - 2912 z^{39/2} + 227976 z^{37/2} - 10114104 z^{35/2} + 282051105 z^{33/2} -$$

$$5185886580 z^{31/2} + 64167180210 z^{29/2} - 535955978880 z^{27/2} + 2988258829920 z^{25/2} -$$

$$10838291184000 z^{23/2} + 24462991828800 z^{21/2} - 31971876249600 z^{19/2} +$$

$$21430961596800 z^{17/2} - 5858167795200 z^{15/2} + 369212256000 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ampk.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{3094331625} (-4096 z^{19} - 686080 z^{18} - 49075200 z^{17} - 1972016640 z^{16} - 49284393984 z^{15} - 801405480960 z^{14} -$$

$$862240555080 z^{13} - 61234996838400 z^{12} - 281483471001600 z^{11} - 804924585722880 z^{10} -$$

$$1336362622963200 z^9 - 1140348973881600 z^8 - 391734203616000 z^7 - 26398676304000 z^6 +$$

$$416821204800 z^5 + 20432412000 z^4 + 5108103000 z^3 + 2946982500 z^2 + 2813028750 z + 3094331625) -$$

$$\frac{1}{3094331625} (256 e^z \sqrt{\pi} (16 z^{39/2} + 2688 z^{37/2} + 193032 z^{35/2} + 7797720 z^{33/2} + 196276185 z^{31/2} + 3223124730 z^{29/2} +$$

$$35159057640 z^{27/2} + 254683517760 z^{25/2} + 1205474205600 z^{23/2} + 3605445950400 z^{21/2} +$$

$$6435762076800 z^{19/2} + 6228827942400 z^{17/2} + 2744477769600 z^{15/2} + 369212256000 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ampl.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{3094331625} (4096 z^{19} - 686080 z^{18} + 49075200 z^{17} - 1972016640 z^{16} + 49284393984 z^{15} - 801405480960 z^{14} +$$

$$862240555080 z^{13} - 61234996838400 z^{12} + 281483471001600 z^{11} - 804924585722880 z^{10} +$$

$$1336362622963200 z^9 - 1140348973881600 z^8 + 391734203616000 z^7 - 26398676304000 z^6 -$$

$$416821204800 z^5 + 20432412000 z^4 - 5108103000 z^3 + 2946982500 z^2 - 2813028750 z + 3094331625) -$$

$$\frac{1}{3094331625} \left(256 e^{-z} \sqrt{\pi} (16 z^{39/2} - 2688 z^{37/2} + 193032 z^{35/2} - 7797720 z^{33/2} + 196276185 z^{31/2} - 3223124730 z^{29/2} +$$

$$35159057640 z^{27/2} - 254683517760 z^{25/2} + 1205474205600 z^{23/2} - 3605445950400 z^{21/2} +$$

$$6435762076800 z^{19/2} - 6228827942400 z^{17/2} + 2744477769600 z^{15/2} - 369212256000 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ampm.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{343814625} (2048 z^{18} + 314368 z^{17} + 20451840 z^{16} + 740740864 z^{15} + 16503889920 z^{14} + 236010055680 z^{13} +$$

$$2194526208000 z^{12} + 13161676953600 z^{11} + 49474586004480 z^{10} + 110258692185600 z^9 +$$

$$131700941971200 z^8 + 68895006969600 z^7 + 8799558768000 z^6 - 416821204800 z^5 +$$

$$20432412000 z^4 + 1702701000 z^3 + 589396500 z^2 + 401861250 z + 343814625) +$$

$$\frac{1}{343814625} \left(128 e^z \sqrt{\pi} (16 z^{37/2} + 2464 z^{35/2} + 161000 z^{33/2} + 5865720 z^{31/2} + 131753265 z^{29/2} +$$

$$1905592080 z^{27/2} + 18008728920 z^{25/2} + 110613686400 z^{23/2} + 431178400800 z^{21/2} +$$

$$1018375545600 z^{19/2} + 1343884348800 z^{17/2} + 853290547200 z^{15/2} + 184606128000 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ampm.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{343814625} (2048 z^{18} - 314368 z^{17} + 20451840 z^{16} - 740740864 z^{15} + 16503889920 z^{14} - 236010055680 z^{13} +$$

$$2194526208000 z^{12} - 13161676953600 z^{11} + 49474586004480 z^{10} - 110258692185600 z^9 +$$

$$131700941971200 z^8 - 68895006969600 z^7 + 8799558768000 z^6 + 416821204800 z^5 +$$

$$20432412000 z^4 - 1702701000 z^3 + 589396500 z^2 - 401861250 z + 343814625) -$$

$$\frac{1}{343814625} \left(128 e^{-z} \sqrt{\pi} (16 z^{37/2} - 2464 z^{35/2} + 161000 z^{33/2} - 5865720 z^{31/2} + 131753265 z^{29/2} -$$

$$1905592080 z^{27/2} + 18008728920 z^{25/2} - 110613686400 z^{23/2} + 431178400800 z^{21/2} -$$

$$1018375545600 z^{19/2} + 1343884348800 z^{17/2} - 853290547200 z^{15/2} + 184606128000 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ampo.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{49116375}$$

$$\begin{aligned}
 & (-1024 z^{17} - 142848 z^{16} - 8369408 z^{15} - 270007680 z^{14} - 5285871360 z^{13} - 65271494400 z^{12} - 512160768000 z^{11} - \\
 & 2510662210560 z^{10} - 7356589632000 z^9 - 11818308499200 z^8 - 8716925548800 z^7 - 1759911753600 z^6 + \\
 & 138940401600 z^5 - 20432412000 z^4 + 1702701000 z^3 + 196465500 z^2 + 80372250 z + 49116375) - \\
 & \frac{1}{49116375} \left(64 e^z \sqrt{\pi} (16 z^{35/2} + 2240 z^{33/2} + 131880 z^{31/2} + 4283160 z^{29/2} + 84638505 z^{27/2} + \right. \\
 & 1059207030 z^{25/2} + 8475865650 z^{23/2} + 42806761200 z^{21/2} + 131531072400 z^{19/2} + \\
 & \left. 229189111200 z^{17/2} + 197938792800 z^{15/2} + 61535376000 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.ampp.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{49116375}$$

$$\begin{aligned}
 & (1024 z^{17} - 142848 z^{16} + 8369408 z^{15} - 270007680 z^{14} + 5285871360 z^{13} - 65271494400 z^{12} + 512160768000 z^{11} - \\
 & 2510662210560 z^{10} + 7356589632000 z^9 - 11818308499200 z^8 + 8716925548800 z^7 - 1759911753600 z^6 - \\
 & 138940401600 z^5 - 20432412000 z^4 - 1702701000 z^3 + 196465500 z^2 - 80372250 z + 49116375) - \\
 & \frac{1}{49116375} \left(64 e^{-z} \sqrt{\pi} (16 z^{35/2} - 2240 z^{33/2} + 131880 z^{31/2} - 4283160 z^{29/2} + 84638505 z^{27/2} - \right. \\
 & 1059207030 z^{25/2} + 8475865650 z^{23/2} - 42806761200 z^{21/2} + 131531072400 z^{19/2} - \\
 & \left. 229189111200 z^{17/2} + 197938792800 z^{15/2} - 61535376000 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.ampq.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{9823275} (512 z^{16} + 64256 z^{15} + 3349632 z^{14} + 94839744 z^{13} + 1601295360 z^{12} + 16666312320 z^{11} +$$

$$106779810816 z^{10} + 407796641280 z^9 + 861964104960 z^8 + 859151059200 z^7 + 251415964800 z^6 -$$

$$27788080320 z^5 + 6810804000 z^4 - 1702701000 z^3 + 196465500 z^2 + 26790750 z + 9823275) + \frac{1}{9823275}$$

$$\left(32 e^z \sqrt{\pi} (16 z^{33/2} + 2016 z^{31/2} + 105672 z^{29/2} + 3015096 z^{27/2} + 51472449 z^{25/2} + 544482540 z^{23/2} + 3575522790 \right.$$

$$\left. z^{21/2} + 14202578880 z^{19/2} + 32113020240 z^{17/2} + 36510989760 z^{15/2} + 15383844000 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ampr.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{9823275} (512 z^{16} - 64256 z^{15} + 3349632 z^{14} - 94839744 z^{13} + 1601295360 z^{12} - 16666312320 z^{11} +$$

$$106779810816 z^{10} - 407796641280 z^9 + 861964104960 z^8 - 859151059200 z^7 + 251415964800 z^6 +$$

$$27788080320 z^5 + 6810804000 z^4 + 1702701000 z^3 + 196465500 z^2 - 26790750 z + 9823275) - \frac{1}{9823275}$$

$$\left(32 e^{-z} \sqrt{\pi} (16 z^{33/2} - 2016 z^{31/2} + 105672 z^{29/2} - 3015096 z^{27/2} + 51472449 z^{25/2} - 544482540 z^{23/2} + 3575522790 \right.$$

$$\left. z^{21/2} - 14202578880 z^{19/2} + 32113020240 z^{17/2} - 36510989760 z^{15/2} + 15383844000 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amps.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{3274425} \left(-256 z^{15} - 28544 z^{14} - 1303872 z^{13} - 31787360 z^{12} - 451604160 z^{11} - 3831504768 z^{10} - \right.$$

$$\left. 19097863680 z^9 - 52588327680 z^8 - 69154041600 z^7 - 27935107200 z^6 + 3969725760 z^5 - \right.$$

$$\left. 1362160800 z^4 + 567567000 z^3 - 196465500 z^2 + 26790750 z + 3274425 \right) -$$

$$\frac{1}{3274425} \left(16 e^z \sqrt{\pi} \left(16 z^{31/2} + 1792 z^{29/2} + 82376 z^{27/2} + 2026584 z^{25/2} + 29180025 z^{23/2} + 252682290 z^{21/2} + \right. \right.$$

$$\left. 1301382180 z^{19/2} + 3791521440 z^{17/2} + 5572370160 z^{15/2} + 3076768800 z^{13/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.ampt.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{3274425} \left(256 z^{15} - 28544 z^{14} + 1303872 z^{13} - 31787360 z^{12} + 451604160 z^{11} - 3831504768 z^{10} + \right.$$

$$\left. 19097863680 z^9 - 52588327680 z^8 + 69154041600 z^7 - 27935107200 z^6 - 3969725760 z^5 - \right.$$

$$\left. 1362160800 z^4 - 567567000 z^3 - 196465500 z^2 - 26790750 z + 3274425 \right) -$$

$$\frac{1}{3274425} \left(16 e^{-z} \sqrt{\pi} \left(16 z^{31/2} - 1792 z^{29/2} + 82376 z^{27/2} - 2026584 z^{25/2} + 29180025 z^{23/2} - 252682290 z^{21/2} + \right. \right.$$

$$\left. 1301382180 z^{19/2} - 3791521440 z^{17/2} + 5572370160 z^{15/2} - 3076768800 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ampu.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{3274425} \left(128 z^{14} + 12480 z^{13} + 489760 z^{12} + 10022640 z^{11} + 115782912 z^{10} + 762377280 z^9 + 2734905600 z^8 + \right.$$

$$\left. 4688409600 z^7 + 2539555200 z^6 - 441080640 z^5 + 194594400 z^4 - \right.$$

$$\left. 113513400 z^3 + 65488500 z^2 - 26790750 z + 3274425 \right) +$$

$$\frac{1}{3274425} \left(8 e^z \sqrt{\pi} \left(16 z^{29/2} + 1568 z^{27/2} + 61992 z^{25/2} + 1282680 z^{23/2} + 15070545 z^{21/2} + \right. \right.$$

$$\left. 101976840 z^{19/2} + 383590620 z^{17/2} + 722796480 z^{15/2} + 512794800 z^{13/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.ampv.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, \frac{1}{2}; -z\right) =$$

$$\frac{1}{3274425} \left(128 z^{14} - 12480 z^{13} + 489760 z^{12} - 10022640 z^{11} + 115782912 z^{10} - 762377280 z^9 + 2734905600 z^8 - \right.$$

$$\left. 4688409600 z^7 + 2539555200 z^6 + 441080640 z^5 + 194594400 z^4 + \right.$$

$$\left. 113513400 z^3 + 65488500 z^2 + 26790750 z + 3274425 \right) -$$

$$\frac{1}{3274425} \left(8 e^{-z} \sqrt{\pi} \left(16 z^{29/2} - 1568 z^{27/2} + 61992 z^{25/2} - 1282680 z^{23/2} + 15070545 z^{21/2} - \right. \right.$$

$$\left. 101976840 z^{19/2} + 383590620 z^{17/2} - 722796480 z^{15/2} + 512794800 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ampw.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, 1; z\right) = \frac{1}{26195400} \left(e^z (1024 z^{14} + 93184 z^{13} + 3385088 z^{12} + 63458304 z^{11} + 662315136 z^{10} + 3863959680 z^9 + 11909328480 z^8 + 16504205760 z^7 + 5720731380 z^6 - 1473372180 z^5 + 826643475 z^4 - 538196400 z^3 + 316726200 z^2 - 133358400 z + 26195400) \right)$$

07.25.03.ampx.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{3274425} \left(4 e^z \sqrt{\pi} (16 z^7 + 1344 z^6 + 44520 z^5 + 748440 z^4 + 6837705 z^3 + 33599790 z^2 + 81192510 z + 73256400) \operatorname{erf}(\sqrt{z}) z^{13/2} + \frac{1}{3274425} (64 z^{13} + 5344 z^{12} + 175440 z^{11} + 2908632 z^{10} + 25977840 z^9 + 122668560 z^8 + 273490560 z^7 + 195350400 z^6 - 40098240 z^5 + 21621600 z^4 - 16216200 z^3 + 13097700 z^2 - 8930250 z + 3274425) \right)$$

07.25.03.ampy.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{3274425} \left(4 e^{-z} \sqrt{\pi} (16 z^7 - 1344 z^6 + 44520 z^5 - 748440 z^4 + 6837705 z^3 - 33599790 z^2 + 81192510 z - 73256400) \operatorname{erfi}(\sqrt{z}) z^{13/2} + \frac{1}{3274425} (-64 z^{13} + 5344 z^{12} - 175440 z^{11} + 2908632 z^{10} - 25977840 z^9 + 122668560 z^8 - 273490560 z^7 + 195350400 z^6 + 40098240 z^5 + 21621600 z^4 + 16216200 z^3 + 13097700 z^2 + 8930250 z + 3274425) \right)$$

07.25.03.ampz.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, 2; z\right) = \frac{1}{26195400} \left(e^z (1024 z^{13} + 78848 z^{12} + 2360064 z^{11} + 35137536 z^{10} + 275802240 z^9 + 1105937280 z^8 + 1955892960 z^7 + 857062080 z^6 - 278703180 z^5 + 198846900 z^4 - 167591025 z^3 + 132167700 z^2 - 79776900 z + 26195400) \right)$$

07.25.03.amq0.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{1091475} \left(2 e^z \sqrt{\pi} (16 z^6 + 1120 z^5 + 29960 z^4 + 388920 z^3 + 2559585 z^2 + 8003940 z + 9157050) \operatorname{erf}(\sqrt{z}) z^{13/2} + \frac{1}{1091475} (32 z^{12} + 2224 z^{11} + 58824 z^{10} + 749500 z^9 + 4771200 z^8 + 13933080 z^7 + 13023360 z^6 - 3084480 z^5 + 1965600 z^4 - 1801800 z^3 + 1871100 z^2 - 1786050 z + 1091475) \right)$$

07.25.03.amq1.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{1091475} (32 z^{12} - 2224 z^{11} + 58824 z^{10} - 749500 z^9 + 4771200 z^8 - 13933080 z^7 + 13023360 z^6 + 3084480 z^5 + 1965600 z^4 + 1801800 z^3 + 1871100 z^2 + 1786050 z + 1091475) - \frac{1}{1091475} (2 e^{-z} \sqrt{\pi} z^{13/2} (16 z^6 - 1120 z^5 + 29960 z^4 - 388920 z^3 + 2559585 z^2 - 8003940 z + 9157050) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amq2.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, 3; z\right) = \frac{1}{13097700} (e^z (1024 z^{12} + 64512 z^{11} + 1521408 z^{10} + 16880640 z^9 + 90115200 z^8 + 204785280 z^7 + 112825440 z^6 - 45541440 z^5 + 40086900 z^4 - 41674500 z^3 + 40781475 z^2 - 30958200 z + 13097700))$$

07.25.03.amq3.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{e^z \sqrt{\pi} (16 z^5 + 896 z^4 + 18312 z^3 + 169176 z^2 + 698649 z + 1017450) \operatorname{erf}(\sqrt{z}) z^{13/2}}{218295} + \frac{1}{218295} (16 z^{11} + 888 z^{10} + 17876 z^9 + 160662 z^8 + 626220 z^7 + 766080 z^6 - 205632 z^5 + 151200 z^4 - 163800 z^3 + 207900 z^2 - 255150 z + 218295)$$

07.25.03.amq4.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16 z^5 - 896 z^4 + 18312 z^3 - 169176 z^2 + 698649 z - 1017450) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{218295} + \frac{1}{218295} (-16 z^{11} + 888 z^{10} - 17876 z^9 + 160662 z^8 - 626220 z^7 + 766080 z^6 + 205632 z^5 + 151200 z^4 + 163800 z^3 + 207900 z^2 + 255150 z + 218295)$$

07.25.03.amq5.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, 4; z\right) = \frac{1}{4365900} (e^z (1024 z^{11} + 50176 z^{10} + 869120 z^9 + 6451200 z^8 + 19152000 z^7 + 13265280 z^6 - 6562080 z^5 + 6955200 z^4 - 8599500 z^3 + 9922500 z^2 - 8831025 z + 4365900))$$

07.25.03.amq6.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z \sqrt{\pi} (16 z^4 + 672 z^3 + 9576 z^2 + 54264 z + 101745) \operatorname{erf}(\sqrt{z}) z^{13/2}}{62370} + \frac{1}{31185} (8 z^{10} + 332 z^9 + 4626 z^8 + 24975 z^7 + 40320 z^6 - 12096 z^5 + 10080 z^4 - 12600 z^3 + 18900 z^2 - 28350 z + 31185)$$

07.25.03.amq7.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{31185} (8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185) - \frac{e^{-z} \sqrt{\pi} z^{13/2} (16z^4 - 672z^3 + 9576z^2 - 54264z + 101745) \operatorname{erfi}(\sqrt{z})}{62370}$$

07.25.03.amq8.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, 5; z\right) = \frac{1}{1091475} (e^z (1024z^{10} + 35840z^9 + 403200z^8 + 1612800z^7 + 1411200z^6 - 846720z^5 + 1058400z^4 - 1512000z^3 + 1984500z^2 - 1984500z + 1091475))$$

07.25.03.amq9.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{6930z^4} (8z^{13} + 220z^{12} + 1770z^{11} + 3835z^{10} - 1218z^9 + 630z^8 + 3360z^7 - 37800z^6 + 283500z^5 - 1757070z^4 + 9072000z^3 - 38102400z^2 + 127008000z - 381024000) + \frac{1}{13860z^{9/2}} (e^z \sqrt{\pi} (16z^{14} + 448z^{13} + 3752z^{12} + 9240z^{11} + 105z^{10} - 1050z^9 + 9450z^8 - 75600z^7 + 529200z^6 - 3175200z^5 + 15876000z^4 - 63504000z^3 + 190512000z^2 - 381024000z + 381024000) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amqa.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{6930z^4} (-8z^{13} + 220z^{12} - 1770z^{11} + 3835z^{10} + 1218z^9 + 630z^8 - 3360z^7 - 37800z^6 - 283500z^5 - 1757070z^4 - 9072000z^3 - 38102400z^2 - 127008000z - 381024000) + \frac{1}{13860z^{9/2}} (e^{-z} \sqrt{\pi} (16z^{14} - 448z^{13} + 3752z^{12} - 9240z^{11} + 105z^{10} + 1050z^9 + 9450z^8 + 75600z^7 + 529200z^6 + 3175200z^5 + 15876000z^4 + 63504000z^3 + 190512000z^2 + 381024000z + 381024000) \operatorname{erfi}(\sqrt{-z}))$$

07.25.03.amqb.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{11}{2}, 6; z\right) = \frac{1}{218295z^5} (e^z (1024z^{14} + 21504z^{13} + 123648z^{12} + 129024z^{11} - 8064z^{10} - 766080z^9 + 7953120z^8 - 65136960z^7 + 457943220z^6 - 2749643820z^5 + 13749310575z^4 - 54997242300z^3 + 164991726900z^2 - 329983453800z + 329983453800)) - \frac{1511640}{z^5}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = -\frac{9}{2}$

07.25.03.amqc.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{281\,302\,875} (2048 z^{18} + 316416 z^{17} + 20741\,632 z^{16} + 758\,006\,016 z^{15} + 17\,072\,121\,600 z^{14} + 247\,408\,140\,288 z^{13} + 2\,339\,615\,416\,320 z^{12} + 14\,345\,641\,175\,040 z^{11} + 55\,593\,056\,977\,920 z^{10} + 129\,593\,688\,998\,400 z^9 + 166\,677\,884\,110\,080 z^8 + 101\,022\,333\,753\,600 z^7 + 20\,547\,541\,123\,200 z^6 + 416\,821\,204\,800 z^5 + 6\,810\,804\,000 z^4 + 1\,021\,620\,600 z^3 + 420\,997\,500 z^2 + 312\,558\,750 z + 281\,302\,875) + \frac{1}{281\,302\,875} (128 e^z \sqrt{\pi} (16 z^{37/2} + 2480 z^{35/2} + 163\,272 z^{33/2} + 6\,001\,728 z^{31/2} + 136\,258\,905 z^{29/2} + 1\,996\,794\,585 z^{27/2} + 19\,184\,700\,960 z^{25/2} + 120\,390\,611\,040 z^{23/2} + 483\,130\,539\,360 z^{21/2} + 1\,189\,793\,253\,600 z^{19/2} + 1\,676\,589\,062\,400 z^{17/2} + 1\,199\,060\,755\,200 z^{15/2} + 346\,356\,259\,200 z^{13/2} + 22\,855\,996\,800 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amqd.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, -\frac{9}{2}; -z\right) = \frac{1}{281\,302\,875} (2048 z^{18} - 316416 z^{17} + 20741\,632 z^{16} - 758\,006\,016 z^{15} + 17\,072\,121\,600 z^{14} - 247\,408\,140\,288 z^{13} + 2\,339\,615\,416\,320 z^{12} - 14\,345\,641\,175\,040 z^{11} + 55\,593\,056\,977\,920 z^{10} - 129\,593\,688\,998\,400 z^9 + 166\,677\,884\,110\,080 z^8 - 101\,022\,333\,753\,600 z^7 + 20\,547\,541\,123\,200 z^6 - 416\,821\,204\,800 z^5 + 6\,810\,804\,000 z^4 - 1\,021\,620\,600 z^3 + 420\,997\,500 z^2 - 312\,558\,750 z + 281\,302\,875) - \frac{1}{281\,302\,875} (128 e^{-z} \sqrt{\pi} (16 z^{37/2} - 2480 z^{35/2} + 163\,272 z^{33/2} - 6\,001\,728 z^{31/2} + 136\,258\,905 z^{29/2} - 1\,996\,794\,585 z^{27/2} + 19\,184\,700\,960 z^{25/2} - 120\,390\,611\,040 z^{23/2} + 483\,130\,539\,360 z^{21/2} - 1\,189\,793\,253\,600 z^{19/2} + 1\,676\,589\,062\,400 z^{17/2} - 1\,199\,060\,755\,200 z^{15/2} + 346\,356\,259\,200 z^{13/2} - 22\,855\,996\,800 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amqe.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; z\right) = \frac{1}{31\,255\,875} (-1024 z^{17} - 144\,896 z^{16} - 8\,632\,576 z^{15} - 284\,115\,840 z^{14} - 5\,699\,042\,304 z^{13} - 72\,544\,604\,160 z^{12} - 591\,982\,110\,720 z^{11} - 3\,059\,235\,486\,720 z^{10} - 9\,667\,498\,406\,400 z^9 - 17\,488\,471\,069\,440 z^8 - 16\,063\,663\,392\,000 z^7 - 5\,873\,991\,177\,600 z^6 - 416\,821\,204\,800 z^5 + 6\,810\,804\,000 z^4 + 340\,540\,200 z^3 + 84\,199\,500 z^2 + 44\,651\,250 z + 31\,255\,875) - \frac{1}{31\,255\,875} (64 e^z \sqrt{\pi} (16 z^{35/2} + 2272 z^{33/2} + 136\,008 z^{31/2} + 4\,505\,640 z^{29/2} + 91\,202\,505 z^{27/2} + 1\,175\,972\,040 z^{25/2} + 9\,776\,924\,640 z^{23/2} + 51\,952\,138\,560 z^{21/2} + 171\,417\,708\,000 z^{19/2} + 332\,704\,713\,600 z^{17/2} + 345\,770\,208\,000 z^{15/2} + 161\,750\,131\,200 z^{13/2} + 22\,855\,996\,800 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amqf.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{31\,255\,875}$$

$$(1024 z^{17} - 144\,896 z^{16} + 8\,632\,576 z^{15} - 284\,115\,840 z^{14} + 5\,699\,042\,304 z^{13} - 72\,544\,604\,160 z^{12} + 591\,982\,110\,720 z^{11} - 3\,059\,235\,486\,720 z^{10} + 9\,667\,498\,406\,400 z^9 - 17\,488\,471\,069\,440 z^8 + 16\,063\,663\,392\,000 z^7 - 5\,873\,991\,177\,600 z^6 + 416\,821\,204\,800 z^5 + 6\,810\,804\,000 z^4 - 340\,540\,200 z^3 + 84\,199\,500 z^2 - 44\,651\,250 z + 31\,255\,875) -$$

$$\frac{1}{31\,255\,875} \left(64 e^{-z} \sqrt{\pi} (16 z^{35/2} - 2272 z^{33/2} + 136\,008 z^{31/2} - 4\,505\,640 z^{29/2} + 91\,202\,505 z^{27/2} - 1\,175\,972\,040 z^{25/2} + 9\,776\,924\,640 z^{23/2} - 51\,952\,138\,560 z^{21/2} + 171\,417\,708\,000 z^{19/2} - 332\,704\,713\,600 z^{17/2} + 345\,770\,208\,000 z^{15/2} - 161\,750\,131\,200 z^{13/2} + 22\,855\,996\,800 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amqg.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{4\,465\,125} (512 z^{16} + 65\,792 z^{15} + 3\,527\,040 z^{14} + 103\,292\,736 z^{13} + 1\,818\,277\,440 z^{12} + 19\,955\,335\,680 z^{11} + 137\,143\,319\,040 z^{10} + 577\,727\,193\,600 z^9 + 1\,417\,540\,642\,560 z^8 + 1\,836\,684\,460\,800 z^7 + 1\,028\,519\,856\,000 z^6 + 138\,940\,401\,600 z^5 - 6\,810\,804\,000 z^4 + 340\,540\,200 z^3 + 28\,066\,500 z^2 + 8\,930\,250 z + 4\,465\,125) +$$

$$\frac{1}{4\,465\,125} \left(32 e^z \sqrt{\pi} (16 z^{33/2} + 2064 z^{31/2} + 111\,240 z^{29/2} + 3\,282\,000 z^{27/2} + 58\,382\,505 z^{25/2} + 650\,529\,495 z^{23/2} + 4\,572\,688\,680 z^{21/2} + 19\,943\,317\,800 z^{19/2} + 51\,757\,801\,200 z^{17/2} + 73\,915\,707\,600 z^{15/2} + 50\,107\,377\,600 z^{13/2} + 11\,427\,998\,400 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amqh.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{4\,465\,125} (512 z^{16} - 65\,792 z^{15} + 3\,527\,040 z^{14} - 103\,292\,736 z^{13} + 1\,818\,277\,440 z^{12} - 19\,955\,335\,680 z^{11} + 137\,143\,319\,040 z^{10} - 577\,727\,193\,600 z^9 + 1\,417\,540\,642\,560 z^8 - 1\,836\,684\,460\,800 z^7 + 1\,028\,519\,856\,000 z^6 - 138\,940\,401\,600 z^5 - 6\,810\,804\,000 z^4 - 340\,540\,200 z^3 + 28\,066\,500 z^2 - 8\,930\,250 z + 4\,465\,125) -$$

$$\frac{1}{4\,465\,125} \left(32 e^{-z} \sqrt{\pi} (16 z^{33/2} - 2064 z^{31/2} + 111\,240 z^{29/2} - 3\,282\,000 z^{27/2} + 58\,382\,505 z^{25/2} - 650\,529\,495 z^{23/2} + 4\,572\,688\,680 z^{21/2} - 19\,943\,317\,800 z^{19/2} + 51\,757\,801\,200 z^{17/2} - 73\,915\,707\,600 z^{15/2} + 50\,107\,377\,600 z^{13/2} - 11\,427\,998\,400 z^{11/2}) \operatorname{erfi}(\sqrt{-z}) \right)$$

07.25.03.amqi.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{893\,025} (-256 z^{15} - 29\,568 z^{14} - 1\,408\,832 z^{13} - 36\,163\,680 z^{12} - 548\,170\,560 z^{11} - 5\,060\,584\,704 z^{10} - 28\,321\,758\,720 z^9 - 92\,596\,089\,600 z^8 - 162\,922\,233\,600 z^7 - 129\,517\,315\,200 z^6 - 27\,788\,080\,320 z^5 + 2\,270\,268\,000 z^4 - 340\,540\,200 z^3 + 28\,066\,500 z^2 + 2\,976\,750 z + 893\,025) - \frac{1}{893\,025}$$

$$\left(16 e^z \sqrt{\pi} (16 z^{31/2} + 1856 z^{29/2} + 88\,968 z^{27/2} + 2\,303\,352 z^{25/2} + 35\,348\,985 z^{23/2} + 332\,388\,630 z^{21/2} + 1\,913\,579\,640 z^{19/2} + 6\,548\,260\,320 z^{17/2} + 12\,468\,239\,280 z^{15/2} + 11\,574\,511\,200 z^{13/2} + 3\,809\,332\,800 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amqj.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{893025} (256 z^{15} - 29568 z^{14} + 1408832 z^{13} - 36163680 z^{12} + 548170560 z^{11} - 5060584704 z^{10} + 28321758720 z^9 - 92596089600 z^8 + 162922233600 z^7 - 129517315200 z^6 + 27788080320 z^5 + 2270268000 z^4 + 340540200 z^3 + 28066500 z^2 - 2976750 z + 893025) - \frac{1}{893025} (16 e^{-z} \sqrt{\pi} (16 z^{31/2} - 1856 z^{29/2} + 88968 z^{27/2} - 2303352 z^{25/2} + 35348985 z^{23/2} - 332388630 z^{21/2} + 1913579640 z^{19/2} - 6548260320 z^{17/2} + 12468239280 z^{15/2} - 11574511200 z^{13/2} + 3809332800 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amqk.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{297675} (128 z^{14} + 13120 z^{13} + 547040 z^{12} + 12070800 z^{11} + 153634992 z^{10} + 1152986880 z^9 + 5000970240 z^8 + 11721024000 z^7 + 12697776000 z^6 + 3969725760 z^5 - 454053600 z^4 + 113513400 z^3 - 28066500 z^2 + 2976750 z + 297675) + \frac{1}{297675} (8 e^z \sqrt{\pi} (16 z^{29/2} + 1648 z^{27/2} + 69192 z^{25/2} + 1542240 z^{23/2} + 19926585 z^{21/2} + 153049365 z^{19/2} + 689184720 z^{17/2} + 1723967280 z^{15/2} + 2124435600 z^{13/2} + 952333200 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amql.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{297675} (128 z^{14} - 13120 z^{13} + 547040 z^{12} - 12070800 z^{11} + 153634992 z^{10} - 1152986880 z^9 + 5000970240 z^8 - 11721024000 z^7 + 12697776000 z^6 - 3969725760 z^5 - 454053600 z^4 - 113513400 z^3 - 28066500 z^2 - 2976750 z + 297675) - \frac{1}{297675} (8 e^{-z} \sqrt{\pi} (16 z^{29/2} - 1648 z^{27/2} + 69192 z^{25/2} - 1542240 z^{23/2} + 19926585 z^{21/2} - 153049365 z^{19/2} + 689184720 z^{17/2} - 1723967280 z^{15/2} + 2124435600 z^{13/2} - 952333200 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amqm.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{297675} (-64 z^{13} - 5728 z^{12} - 204816 z^{11} - 3785208 z^{10} - 39060960 z^9 - 226606464 z^8 - 703261440 z^7 - 1015822080 z^6 - 441080640 z^5 + 64864800 z^4 - 22702680 z^3 + 9355500 z^2 - 2976750 z + 297675) - \frac{1}{297675} (4 e^z \sqrt{\pi} (16 z^{27/2} + 1440 z^{25/2} + 51912 z^{23/2} + 971208 z^{21/2} + 10214505 z^{19/2} + 61118820 z^{17/2} + 200234160 z^{15/2} + 322328160 z^{13/2} + 190466640 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amqn.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{297675} (64 z^{13} - 5728 z^{12} + 204816 z^{11} - 3785208 z^{10} + 39060960 z^9 - 226606464 z^8 + 703261440 z^7 - 1015822080 z^6 + 441080640 z^5 + 64864800 z^4 + 22702680 z^3 + 9355500 z^2 + 2976750 z + 297675) - \frac{1}{297675} (4 e^{-z} \sqrt{\pi} (16 z^{27/2} - 1440 z^{25/2} + 51912 z^{23/2} - 971208 z^{21/2} + 10214505 z^{19/2} - 61118820 z^{17/2} + 200234160 z^{15/2} - 322328160 z^{13/2} + 190466640 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amqo.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, 1; z\right) = -\frac{1}{2381400} (e^z (512 z^{13} + 42752 z^{12} + 1414656 z^{11} + 23948544 z^{10} + 223389120 z^9 + 1150117920 z^8 + 3079369440 z^7 + 3633048720 z^6 + 1043841330 z^5 - 214765425 z^4 + 91173600 z^3 - 41164200 z^2 + 14288400 z - 2381400))$$

07.25.03.amqp.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{297675} (-32 z^{12} - 2448 z^{11} - 73048 z^{10} - 1090260 z^9 - 8661492 z^8 - 35814240 z^7 - 68372640 z^6 - 40098240 z^5 + 7207200 z^4 - 3243240 z^3 + 1871100 z^2 - 992250 z + 297675) - \frac{1}{297675} (2 e^z \sqrt{\pi} z^{11/2} (16 z^7 + 1232 z^6 + 37128 z^5 + 562800 z^4 + 4586505 z^3 + 19840275 z^2 + 41511960 z + 31744440) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amqq.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{297675} (2 e^{-z} \sqrt{\pi} (16 z^7 - 1232 z^6 + 37128 z^5 - 562800 z^4 + 4586505 z^3 - 19840275 z^2 + 41511960 z - 31744440) \operatorname{erfi}(\sqrt{z}) z^{11/2}) + \frac{1}{297675} (-32 z^{12} + 2448 z^{11} - 73048 z^{10} + 1090260 z^9 - 8661492 z^8 + 35814240 z^7 - 68372640 z^6 + 40098240 z^5 + 7207200 z^4 + 3243240 z^3 + 1871100 z^2 + 992250 z + 297675)$$

07.25.03.amqr.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, 2; z\right) = -\frac{1}{2381400} (e^z (512 z^{12} + 36096 z^{11} + 981504 z^{10} + 13152000 z^9 + 91869120 z^8 + 323295840 z^7 + 493002720 z^6 + 182029680 z^5 - 48336750 z^4 + 26918325 z^3 - 16499700 z^2 + 8334900 z - 2381400))$$

07.25.03.amqs.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{99225} (-16z^{11} - 1016z^{10} - 24340z^9 - 277878z^8 - 1562940z^7 - 3953520z^6 - 3084480z^5 + 655200z^4 - 360360z^3 + 267300z^2 - 198450z + 99225) - \frac{1}{99225} (e^z \sqrt{\pi} z^{11/2} (16z^6 + 1024z^5 + 24840z^4 + 289560z^3 + 1690905z^2 + 4622130z + 4534920) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amqt.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{1}{99225} (16z^{11} - 1016z^{10} + 24340z^9 - 277878z^8 + 1562940z^7 - 3953520z^6 + 3084480z^5 + 655200z^4 + 360360z^3 + 267300z^2 + 198450z + 99225) - \frac{1}{99225} (e^{-z} \sqrt{\pi} z^{11/2} (16z^6 - 1024z^5 + 24840z^4 - 289560z^3 + 1690905z^2 - 4622130z + 4534920) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amqu.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, 3; z\right) = -\frac{1}{1190700} (e^z (512z^{11} + 29440z^{10} + 628224z^9 + 6241536z^8 + 29453760z^7 + 58212000z^6 + 27306720z^5 - 9117360z^4 + 6367410z^3 - 4918725z^2 + 3175200z - 1190700))$$

07.25.03.amqv.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{19845} (-8z^{10} - 404z^9 - 7326z^8 - 58545z^7 - 199215z^6 - 205632z^5 + 50400z^4 - 32760z^3 + 29700z^2 - 28350z + 19845) - \frac{e^z \sqrt{\pi} z^{11/2} (16z^5 + 816z^4 + 15048z^3 + 124032z^2 + 450585z + 566865) \operatorname{erf}(\sqrt{z})}{39690}$$

07.25.03.amqw.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16z^5 - 816z^4 + 15048z^3 - 124032z^2 + 450585z - 566865) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{39690} + \frac{1}{19845} (-8z^{10} + 404z^9 - 7326z^8 + 58545z^7 - 199215z^6 + 205632z^5 + 50400z^4 + 32760z^3 + 29700z^2 + 28350z + 19845)$$

07.25.03.amqx.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, 4; z\right) = -\frac{1}{396900} (e^z (512z^{10} + 22784z^9 + 354816z^8 + 2338560z^7 + 6068160z^6 + 3598560z^5 - 1481760z^4 + 1254960z^3 - 1162350z^2 + 893025z - 396900))$$

07.25.03.amqy.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{-8z^9 - 300z^8 - 3730z^7 - 17655z^6 - 24192z^5 + 6720z^4 - 5040z^3 + 5400z^2 - 6300z + 5670}{5670} - \frac{e^z \sqrt{\pi} z^{11/2} (16z^4 + 608z^3 + 7752z^2 + 38760z + 62985) \operatorname{erf}(\sqrt{z})}{11340}$$

07.25.03.amqz.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670}{5670} - \frac{e^{-z} \sqrt{\pi} z^{11/2} (16z^4 - 608z^3 + 7752z^2 - 38760z + 62985) \operatorname{erfi}(\sqrt{z})}{11340}$$

07.25.03.amr0.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, 5; z\right) = -\frac{1}{99225} (e^z (512z^9 + 16128z^8 + 161280z^7 + 564480z^6 + 423360z^5 - 211680z^4 + 211680z^3 - 226800z^2 + 198450z - 99225))$$

07.25.03.amr1.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{1260z^4} (-8z^{12} - 196z^{11} - 1382z^{10} - 2541z^9 + 735z^8 - 168z^7 - 3240z^6 + 27720z^5 - 175140z^4 + 907200z^3 - 3810240z^2 + 12700800z - 38102400) + \frac{1}{2520z^{9/2}} (e^z \sqrt{\pi} (-16z^{13} - 400z^{12} - 2952z^{11} - 6288z^{10} - 105z^9 + 945z^8 - 7560z^7 + 52920z^6 - 317520z^5 + 1587600z^4 - 6350400z^3 + 19051200z^2 - 38102400z + 38102400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amr2.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{1260z^4} (-8z^{12} + 196z^{11} - 1382z^{10} + 2541z^9 + 735z^8 + 168z^7 - 3240z^6 - 27720z^5 - 175140z^4 - 907200z^3 - 3810240z^2 - 12700800z - 38102400) + \frac{1}{2520z^{9/2}} (e^{-z} \sqrt{\pi} (16z^{13} - 400z^{12} + 2952z^{11} - 6288z^{10} + 105z^9 + 945z^8 + 7560z^7 + 52920z^6 + 317520z^5 + 1587600z^4 + 6350400z^3 + 19051200z^2 + 38102400z + 38102400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amr3.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{9}{2}, 6; z\right) = \frac{1}{19845z^5} (e^z (-512z^{13} - 9472z^{12} - 47616z^{11} - 40704z^{10} - 16320z^9 + 358560z^8 - 3080160z^7 + 21787920z^6 - 130925970z^5 + 654729075z^4 - 2618916300z^3 + 7856748900z^2 - 15713497800z + 15713497800)) - \frac{5542680}{7z^5}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = -\frac{7}{2}$

07.25.03.amr4.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{3472875} (512 z^{16} + 66304 z^{15} + 3587200 z^{14} + 106218432 z^{13} + 1895268352 z^{12} + 21159075840 z^{11} + 148707578880 z^{10} + 646002854400 z^9 + 1658465752320 z^8 + 2314400497920 z^7 + 1501768195200 z^6 + 322724001600 z^5 + 6810804000 z^4 + 113513400 z^3 + 16839900 z^2 + 6378750 z + 3472875) + \frac{1}{3472875} (32 e^z \sqrt{\pi} (16 z^{33/2} + 2080 z^{31/2} + 113128 z^{29/2} + 3374360 z^{27/2} + 60833265 z^{25/2} + 689305920 z^{23/2} + 4951783200 z^{21/2} + 22241439360 z^{19/2} + 60210511200 z^{17/2} + 91862668800 z^{15/2} + 70182201600 z^{13/2} + 21385728000 z^{11/2} + 1470268800 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amr5.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{3472875} (512 z^{16} - 66304 z^{15} + 3587200 z^{14} - 106218432 z^{13} + 1895268352 z^{12} - 21159075840 z^{11} + 148707578880 z^{10} - 646002854400 z^9 + 1658465752320 z^8 - 2314400497920 z^7 + 1501768195200 z^6 - 322724001600 z^5 + 6810804000 z^4 - 113513400 z^3 + 16839900 z^2 - 6378750 z + 3472875) - \frac{1}{3472875} (32 e^{-z} \sqrt{\pi} (16 z^{33/2} - 2080 z^{31/2} + 113128 z^{29/2} - 3374360 z^{27/2} + 60833265 z^{25/2} - 689305920 z^{23/2} + 4951783200 z^{21/2} - 22241439360 z^{19/2} + 60210511200 z^{17/2} - 91862668800 z^{15/2} + 70182201600 z^{13/2} - 21385728000 z^{11/2} + 1470268800 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amr6.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{496125} (-256 z^{15} - 30080 z^{14} - 1462848 z^{13} - 38495456 z^{12} - 601870080 z^{11} - 5782129920 z^{10} - 34137830400 z^9 - 120462554880 z^8 - 238858018560 z^7 - 236624169600 z^6 - 91891800000 z^5 - 6810804000 z^4 + 113513400 z^3 + 5613300 z^2 + 1275750 z + 496125) - \frac{1}{496125} (16 e^z \sqrt{\pi} (16 z^{31/2} + 1888 z^{29/2} + 92360 z^{27/2} + 2450760 z^{25/2} + 38776425 z^{23/2} + 379094520 z^{21/2} + 2298121560 z^{19/2} + 8452710000 z^{17/2} + 17946961200 z^{15/2} + 20074824000 z^{13/2} + 9957729600 z^{11/2} + 1470268800 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amr7.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{496125} (256 z^{15} - 30080 z^{14} + 1462848 z^{13} - 38495456 z^{12} + 601870080 z^{11} - 5782129920 z^{10} + 34137830400 z^9 - 120462554880 z^8 + 238858018560 z^7 - 236624169600 z^6 + 91891800000 z^5 - 6810804000 z^4 - 113513400 z^3 + 5613300 z^2 - 1275750 z + 496125) - \frac{1}{496125} (16 e^{-z} \sqrt{\pi} (16 z^{31/2} - 1888 z^{29/2} + 92360 z^{27/2} - 2450760 z^{25/2} + 38776425 z^{23/2} - 379094520 z^{21/2} + 2298121560 z^{19/2} - 8452710000 z^{17/2} + 17946961200 z^{15/2} - 20074824000 z^{13/2} + 9957729600 z^{11/2} - 1470268800 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amr8.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{99225} (128 z^{14} + 13504 z^{13} + 582944 z^{12} + 13424880 z^{11} + 180386304 z^{10} + 1454017920 z^9 + 6966616320 z^8 +$$

$$18983946240 z^7 + 26776713600 z^6 + 16025929920 z^5 +$$

$$2270268000 z^4 - 113513400 z^3 + 5613300 z^2 + 425250 z + 99225) +$$

$$\frac{1}{99225} \left(8 e^z \sqrt{\pi} (16 z^{29/2} + 1696 z^{27/2} + 73704 z^{25/2} + 1713720 z^{23/2} + 23352945 z^{21/2} + 192270960 z^{19/2} +$$

$$952224840 z^{17/2} + 2739360960 z^{15/2} + 4250156400 z^{13/2} + 3074198400 z^{11/2} + 735134400 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amr9.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{99225} (128 z^{14} - 13504 z^{13} + 582944 z^{12} - 13424880 z^{11} + 180386304 z^{10} - 1454017920 z^9 + 6966616320 z^8 -$$

$$18983946240 z^7 + 26776713600 z^6 - 16025929920 z^5 +$$

$$2270268000 z^4 + 113513400 z^3 + 5613300 z^2 - 425250 z + 99225) -$$

$$\frac{1}{99225} \left(8 e^{-z} \sqrt{\pi} (16 z^{29/2} - 1696 z^{27/2} + 73704 z^{25/2} - 1713720 z^{23/2} + 23352945 z^{21/2} - 192270960 z^{19/2} +$$

$$952224840 z^{17/2} - 2739360960 z^{15/2} + 4250156400 z^{13/2} - 3074198400 z^{11/2} + 735134400 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amra.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{33075} (-64 z^{13} - 5984 z^{12} - 225680 z^{11} - 4458552 z^{10} - 50171840 z^9 - 327607680 z^8 - 1210487040 z^7 -$$

$$2346489600 z^6 - 2009367360 z^5 - 454053600 z^4 + 37837800 z^3 - 5613300 z^2 + 425250 z + 33075) -$$

$$\frac{1}{33075} \left(4 e^z \sqrt{\pi} (16 z^{27/2} + 1504 z^{25/2} + 57160 z^{23/2} + 1142120 z^{21/2} + 13073865 z^{19/2} + 87680040 z^{17/2} +$$

$$338464560 z^{15/2} + 708573600 z^{13/2} + 707288400 z^{11/2} + 245044800 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amrb.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{33075} (64 z^{13} - 5984 z^{12} + 225680 z^{11} - 4458552 z^{10} + 50171840 z^9 - 327607680 z^8 + 1210487040 z^7 -$$

$$2346489600 z^6 + 2009367360 z^5 - 454053600 z^4 - 37837800 z^3 - 5613300 z^2 - 425250 z + 33075) -$$

$$\frac{1}{33075} \left(4 e^{-z} \sqrt{\pi} (16 z^{27/2} - 1504 z^{25/2} + 57160 z^{23/2} - 1142120 z^{21/2} + 13073865 z^{19/2} - 87680040 z^{17/2} +$$

$$338464560 z^{15/2} - 708573600 z^{13/2} + 707288400 z^{11/2} - 245044800 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amrc.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{33075} (32 z^{12} + 2608 z^{11} + 84168 z^{10} + 1388860 z^9 + 12625152 z^8 + 63403200 z^7 + 166333440 z^6 + 196035840 z^5 + 64864800 z^4 - 7567560 z^3 + 1871100 z^2 - 425250 z + 33075) + \frac{1}{33075} (2 e^z \sqrt{\pi} (16 z^{25/2} + 1312 z^{23/2} + 42728 z^{21/2} + 714840 z^{19/2} + 6640305 z^{17/2} + 34557600 z^{15/2} + 96561360 z^{13/2} + 129205440 z^{11/2} + 61261200 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amrd.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{33075} (32 z^{12} - 2608 z^{11} + 84168 z^{10} - 1388860 z^9 + 12625152 z^8 - 63403200 z^7 + 166333440 z^6 - 196035840 z^5 + 64864800 z^4 + 7567560 z^3 + 1871100 z^2 + 425250 z + 33075) - \frac{1}{33075} (2 e^{-z} \sqrt{\pi} (16 z^{25/2} - 1312 z^{23/2} + 42728 z^{21/2} - 714840 z^{19/2} + 6640305 z^{17/2} - 34557600 z^{15/2} + 96561360 z^{13/2} - 129205440 z^{11/2} + 61261200 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amre.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, 1; z\right) = \frac{1}{264600} (e^z (256 z^{12} + 19456 z^{11} + 580864 z^{10} + 8779520 z^9 + 72186720 z^8 + 322405440 z^7 + 733671120 z^6 + 716017680 z^5 + 163911825 z^4 - 25426800 z^3 + 7446600 z^2 - 1965600 z + 264600))$$

07.25.03.amrf.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{33075} (e^z \sqrt{\pi} (16 z^7 + 1120 z^6 + 30408 z^5 + 410760 z^4 + 2943465 z^3 + 11009880 z^2 + 19492200 z + 12252240) \operatorname{erf}(\sqrt{z}) z^{9/2}) + \frac{1}{33075} (16 z^{11} + 1112 z^{10} + 29860 z^9 + 396366 z^8 + 2758896 z^7 + 9796080 z^6 + 15593760 z^5 + 7207200 z^4 - 1081080 z^3 + 374220 z^2 - 141750 z + 33075)$$

07.25.03.amrg.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{33075} (e^{-z} \sqrt{\pi} (16 z^7 - 1120 z^6 + 30408 z^5 - 410760 z^4 + 2943465 z^3 - 11009880 z^2 + 19492200 z - 12252240) \operatorname{erfi}(\sqrt{z}) z^{9/2}) + \frac{1}{33075} (-16 z^{11} + 1112 z^{10} - 29860 z^9 + 396366 z^8 - 2758896 z^7 + 9796080 z^6 - 15593760 z^5 + 7207200 z^4 + 1081080 z^3 + 374220 z^2 + 141750 z + 33075)$$

07.25.03.amrh.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, 2; z\right) = \frac{1}{264600} (e^z (256 z^{11} + 16384 z^{10} + 400640 z^9 + 4773120 z^8 + 29228640 z^7 + 88576320 z^6 + 113636880 z^5 + 34196400 z^4 - 7070175 z^3 + 2853900 z^2 - 1115100 z + 264600))$$

07.25.03.amri.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{22050} e^z \sqrt{\pi} (16 z^6 + 928 z^5 + 20200 z^4 + 208760 z^3 + 1064625 z^2 + 2492880 z + 2042040) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{11025} (8 z^{10} + 460 z^9 + 9874 z^8 + 99663 z^7 + 486880 z^6 + 1042440 z^5 + 655200 z^4 - 120120 z^3 + 53460 z^2 - 28350 z + 11025)$$

07.25.03.amrj.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{1}{11025} (8 z^{10} - 460 z^9 + 9874 z^8 - 99663 z^7 + 486880 z^6 - 1042440 z^5 + 655200 z^4 + 120120 z^3 + 53460 z^2 + 28350 z + 11025) - \frac{1}{22050} (e^{-z} \sqrt{\pi} z^{9/2} (16 z^6 - 928 z^5 + 20200 z^4 - 208760 z^3 + 1064625 z^2 - 2492880 z + 2042040) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amrk.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, 3; z\right) = \frac{1}{132300} (e^z (256 z^{10} + 13312 z^9 + 254208 z^8 + 2231040 z^7 + 9149280 z^6 + 15382080 z^5 + 5962320 z^4 - 1577520 z^3 + 817425 z^2 - 415800 z + 132300))$$

07.25.03.amrl.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z \sqrt{\pi} (16 z^5 + 736 z^4 + 12104 z^3 + 87720 z^2 + 275145 z + 291720) \operatorname{erf}(\sqrt{z}) z^{9/2}}{8820} + \frac{1}{4410} (8 z^9 + 364 z^8 + 5874 z^7 + 41095 z^6 + 119544 z^5 + 100800 z^4 - 21840 z^3 + 11880 z^2 - 8100 z + 4410)$$

07.25.03.amrm.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16 z^5 - 736 z^4 + 12104 z^3 - 87720 z^2 + 275145 z - 291720) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{8820} + \frac{1}{4410} (-8 z^9 + 364 z^8 - 5874 z^7 + 41095 z^6 - 119544 z^5 + 100800 z^4 + 21840 z^3 + 11880 z^2 + 8100 z + 4410)$$

07.25.03.amrn.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, 4; z\right) = \frac{1}{44100} (e^z (256 z^9 + 10240 z^8 + 141568 z^7 + 815360 z^6 + 1811040 z^5 + 893760 z^4 - 294000 z^3 + 186480 z^2 - 114975 z + 44100))$$

07.25.03.amro.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z \sqrt{\pi} (16z^4 + 544z^3 + 6120z^2 + 26520z + 36465) \operatorname{erf}(\sqrt{z}) z^{9/2}}{2520} + \frac{8z^8 + 268z^7 + 2930z^6 + 11919z^5 + 13440z^4 - 3360z^3 + 2160z^2 - 1800z + 1260}{1260}$$

07.25.03.amrp.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260}{1260} - \frac{e^{-z} \sqrt{\pi} z^{9/2} (16z^4 - 544z^3 + 6120z^2 - 26520z + 36465) \operatorname{erfi}(\sqrt{z})}{2520}$$

07.25.03.amrq.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, 5; z\right) = \frac{1}{11025} e^z (256z^8 + 7168z^7 + 62720z^6 + 188160z^5 + 117600z^4 - 47040z^3 + 35280z^2 - 25200z + 11025)$$

07.25.03.amrr.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{280z^4} (8z^{11} + 172z^{10} + 1042z^9 + 1575z^8 - 392z^7 - 120z^6 + 2880z^5 - 19320z^4 + 100800z^3 - 423360z^2 + 1411200z - 4233600) + \frac{1}{560z^{9/2}} (e^z \sqrt{\pi} (16z^{12} + 352z^{11} + 2248z^{10} + 4040z^9 + 105z^8 - 840z^7 + 5880z^6 - 35280z^5 + 176400z^4 - 705600z^3 + 2116800z^2 - 4233600z + 4233600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amrs.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{280z^4} (-8z^{11} + 172z^{10} - 1042z^9 + 1575z^8 + 392z^7 - 120z^6 - 2880z^5 - 19320z^4 - 100800z^3 - 423360z^2 - 1411200z + 4233600) + \frac{1}{560z^{9/2}} (e^{-z} \sqrt{\pi} (16z^{12} - 352z^{11} + 2248z^{10} - 4040z^9 + 105z^8 + 840z^7 + 5880z^6 + 35280z^5 + 176400z^4 + 705600z^3 + 2116800z^2 + 4233600z + 4233600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amrt.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{7}{2}, 6; z\right) = \frac{1}{2205z^5} (e^z (256z^{12} + 4096z^{11} + 17664z^{10} + 11520z^9 + 13920z^8 - 158400z^7 + 1144080z^6 - 6889680z^5 + 34459425z^4 - 137837700z^3 + 413513100z^2 - 827026200z + 827026200)) - \frac{2625480}{7z^5}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = -\frac{5}{2}$

07.25.03.amru.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{70875} (128 z^{14} + 13632 z^{13} + 595168 z^{12} + 13897872 z^{11} + 190033200 z^{10} + 1567097760 z^9 + 7746441120 z^8 + 22097854080 z^7 + 33589221120 z^6 + 23308084800 z^5 + 5254048800 z^4 + 113513400 z^3 + 1871100 z^2 + 255150 z + 70875) + \frac{1}{70875} (8 e^z \sqrt{\pi} (16 z^{29/2} + 1712 z^{27/2} + 75240 z^{25/2} + 1773600 z^{23/2} + 24587625 z^{21/2} + 206981145 z^{19/2} + 1056234690 z^{17/2} + 3171536550 z^{15/2} + 5260815000 z^{13/2} + 4292379000 z^{11/2} + 1372971600 z^{9/2} + 97297200 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amrv.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{70875} (128 z^{14} - 13632 z^{13} + 595168 z^{12} - 13897872 z^{11} + 190033200 z^{10} - 1567097760 z^9 + 7746441120 z^8 - 22097854080 z^7 + 33589221120 z^6 - 23308084800 z^5 + 5254048800 z^4 - 113513400 z^3 + 1871100 z^2 - 255150 z + 70875) - \frac{1}{70875} (8 e^{-z} \sqrt{\pi} (16 z^{29/2} - 1712 z^{27/2} + 75240 z^{25/2} - 1773600 z^{23/2} + 24587625 z^{21/2} - 206981145 z^{19/2} + 1056234690 z^{17/2} - 3171536550 z^{15/2} + 5260815000 z^{13/2} - 4292379000 z^{11/2} + 1372971600 z^{9/2} - 97297200 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amrw.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{14175} (-64 z^{13} - 6112 z^{12} - 236496 z^{11} - 4823448 z^{10} - 56539920 z^9 - 389912400 z^8 - 1556953920 z^7 - 3406253760 z^6 - 3641077440 z^5 - 1491890400 z^4 - 113513400 z^3 + 1871100 z^2 + 85050 z + 14175) - \frac{1}{14175} (4 e^z \sqrt{\pi} (16 z^{27/2} + 1536 z^{25/2} + 59880 z^{23/2} + 1234680 z^{21/2} + 14710185 z^{19/2} + 104009850 z^{17/2} + 432175590 z^{15/2} + 1010658600 z^{13/2} + 1218180600 z^{11/2} + 637837200 z^{9/2} + 97297200 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amrx.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{14175} (64 z^{13} - 6112 z^{12} + 236496 z^{11} - 4823448 z^{10} + 56539920 z^9 - 389912400 z^8 + 1556953920 z^7 - 3406253760 z^6 + 3641077440 z^5 - 1491890400 z^4 + 113513400 z^3 + 1871100 z^2 - 85050 z + 14175) - \frac{1}{14175} (4 e^{-z} \sqrt{\pi} (16 z^{27/2} - 1536 z^{25/2} + 59880 z^{23/2} - 1234680 z^{21/2} + 14710185 z^{19/2} - 104009850 z^{17/2} + 432175590 z^{15/2} - 1010658600 z^{13/2} + 1218180600 z^{11/2} - 637837200 z^{9/2} + 97297200 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amry.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{4725} (32 z^{12} + 2704 z^{11} + 91\,224 z^{10} + 1\,592\,020 z^9 + 15\,576\,180 z^8 + 86\,616\,720 z^7 + 264\,941\,040 z^6 + 407\,927\,520 z^5 + 259\,459\,200 z^4 + 37\,837\,800 z^3 - 1\,871\,100 z^2 + 85\,050 z + 4725) + \frac{1}{4725} (2 e^z \sqrt{\pi} (16 z^{25/2} + 1360 z^{23/2} + 46\,280 z^{21/2} + 818\,160 z^{19/2} + 8\,164\,905 z^{17/2} + 46\,855\,515 z^{15/2} + 151\,042\,500 z^{13/2} + 255\,446\,100 z^{11/2} + 196\,396\,200 z^{9/2} + 48\,648\,600 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amrz.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{4725} (32 z^{12} - 2704 z^{11} + 91\,224 z^{10} - 1\,592\,020 z^9 + 15\,576\,180 z^8 - 86\,616\,720 z^7 + 264\,941\,040 z^6 - 407\,927\,520 z^5 + 259\,459\,200 z^4 - 37\,837\,800 z^3 - 1\,871\,100 z^2 - 85\,050 z + 4725) - \frac{1}{4725} (2 e^{-z} \sqrt{\pi} (16 z^{25/2} - 1360 z^{23/2} + 46\,280 z^{21/2} - 818\,160 z^{19/2} + 8\,164\,905 z^{17/2} - 46\,855\,515 z^{15/2} + 151\,042\,500 z^{13/2} - 255\,446\,100 z^{11/2} + 196\,396\,200 z^{9/2} - 48\,648\,600 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ams0.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{4725} (-16 z^{11} - 1176 z^{10} - 33\,860 z^9 - 491\,838 z^8 - 3\,868\,920 z^7 - 16\,434\,600 z^6 - 35\,315\,280 z^5 - 32\,432\,400 z^4 - 7\,567\,560 z^3 + 623\,700 z^2 - 85\,050 z + 4725) + \frac{1}{4725} (e^z \sqrt{\pi} (-16 z^{23/2} - 1184 z^{21/2} - 34\,440 z^{19/2} - 508\,200 z^{17/2} - 4\,099\,305 z^{15/2} - 18\,160\,380 z^{13/2} - 42\,080\,220 z^{11/2} - 45\,045\,000 z^{9/2} - 16\,216\,200 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ams1.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{4725} (16 z^{11} - 1176 z^{10} + 33\,860 z^9 - 491\,838 z^8 + 3\,868\,920 z^7 - 16\,434\,600 z^6 + 35\,315\,280 z^5 - 32\,432\,400 z^4 + 7\,567\,560 z^3 + 623\,700 z^2 + 85\,050 z + 4725) + \frac{1}{4725} (e^{-z} \sqrt{\pi} (-16 z^{23/2} + 1184 z^{21/2} - 34\,440 z^{19/2} + 508\,200 z^{17/2} - 4\,099\,305 z^{15/2} + 18\,160\,380 z^{13/2} - 42\,080\,220 z^{11/2} + 45\,045\,000 z^{9/2} - 16\,216\,200 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ams2.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, 1; z\right) = -\frac{1}{37\,800} (e^z (128 z^{11} + 8768 z^{10} + 233\,440 z^9 + 3\,105\,840 z^8 + 22\,117\,080 z^7 + 83\,792\,940 z^6 + 157\,353\,210 z^5 + 121\,979\,025 z^4 + 20\,966\,400 z^3 - 2\,230\,200 z^2 + 378\,000 z - 37\,800))$$

07.25.03.ams3.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{4725} (-8z^{10} - 500z^9 - 11934z^8 - 138753z^7 - 829815z^6 - 2465190z^5 - 3153150z^4 - 1081080z^3 + 124740z^2 - 28350z + 4725) - \frac{1}{9450} (e^z \sqrt{\pi} z^{7/2} (16z^7 + 1008z^6 + 24360z^5 + 288960z^4 + 1787625z^3 + 5647005z^2 + 8198190z + 4054050) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ams4.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{9450} (e^{-z} \sqrt{\pi} (16z^7 - 1008z^6 + 24360z^5 - 288960z^4 + 1787625z^3 - 5647005z^2 + 8198190z - 4054050) \operatorname{erfi}(\sqrt{z}) z^{7/2}) + \frac{1}{4725} (-8z^{10} + 500z^9 - 11934z^8 + 138753z^7 - 829815z^6 + 2465190z^5 - 3153150z^4 + 1081080z^3 + 124740z^2 + 28350z + 4725)$$

07.25.03.ams5.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, 2; z\right) = -\frac{1}{37800} (e^z (128z^{10} + 7360z^9 + 159840z^8 + 1667280z^7 + 8778840z^6 + 22341060z^5 + 23306850z^4 + 5444775z^3 - 812700z^2 + 207900z - 37800))$$

07.25.03.ams6.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{3150} (-8z^9 - 412z^8 - 7818z^7 - 68587z^6 - 284550z^5 - 499590z^4 - 240240z^3 + 35640z^2 - 11340z + 3150) - \frac{e^z \sqrt{\pi} z^{7/2} (16z^6 + 832z^5 + 16040z^4 + 144600z^3 + 630825z^2 + 1231230z + 810810) \operatorname{erf}(\sqrt{z})}{6300}$$

07.25.03.ams7.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{3150} (8z^9 - 412z^8 + 7818z^7 - 68587z^6 + 284550z^5 - 499590z^4 + 240240z^3 + 35640z^2 + 11340z + 3150) - \frac{1}{6300} e^{-z} \sqrt{\pi} z^{7/2} (16z^6 - 832z^5 + 16040z^4 - 144600z^3 + 630825z^2 - 1231230z + 810810) \operatorname{erfi}(\sqrt{z})$$

07.25.03.ams8.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, 3; z\right) = -\frac{1}{18900} (e^z (128z^9 + 5952z^8 + 100320z^7 + 764400z^6 + 2663640z^5 + 3695580z^4 + 1133370z^3 - 222075z^2 + 75600z - 18900))$$

07.25.03.ams9.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{-8z^8 - 324z^7 - 4582z^6 - 27501z^5 - 66465z^4 - 43680z^3 + 7920z^2 - 3240z + 1260}{1260} - \frac{e^z \sqrt{\pi} z^{7/2} (16z^5 + 656z^4 + 9480z^3 + 59280z^2 + 156585z + 135135) \operatorname{erf}(\sqrt{z})}{2520}$$

07.25.03.amsa.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16z^5 - 656z^4 + 9480z^3 - 59280z^2 + 156585z - 135135) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{2520} + \frac{-8z^8 + 324z^7 - 4582z^6 + 27501z^5 - 66465z^4 + 43680z^3 + 7920z^2 + 3240z + 1260}{1260}$$

07.25.03.amsb.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, 4; z\right) = -\frac{1}{6300} (e^z (128z^8 + 4544z^7 + 54880z^6 + 270480z^5 + 499800z^4 + 196980z^3 - 48510z^2 + 20475z - 6300))$$

07.25.03.amsc.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{360} (-8z^7 - 236z^6 - 2226z^5 - 7575z^4 - 6720z^3 + 1440z^2 - 720z + 360) - \frac{1}{720} e^z \sqrt{\pi} z^{7/2} (16z^4 + 480z^3 + 4680z^2 + 17160z + 19305) \operatorname{erf}(\sqrt{z})$$

07.25.03.amsd.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{360} (8z^7 - 236z^6 + 2226z^5 - 7575z^4 + 6720z^3 + 1440z^2 + 720z + 360) - \frac{1}{720} e^{-z} \sqrt{\pi} z^{7/2} (16z^4 - 480z^3 + 4680z^2 - 17160z + 19305) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amse.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, 5; z\right) = -\frac{e^z (128z^7 + 3136z^6 + 23520z^5 + 58800z^4 + 29400z^3 - 8820z^2 + 4410z - 1575)}{1575}$$

07.25.03.amsf.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{80z^4} (-8z^{10} - 148z^9 - 750z^8 - 889z^7 + 165z^6 + 270z^5 - 2370z^4 + 12600z^3 - 52920z^2 + 176400z - 529200) + \frac{1}{160z^{9/2}} (e^z \sqrt{\pi} (-16z^{11} - 304z^{10} - 1640z^9 - 2400z^8 - 105z^7 + 735z^6 - 4410z^5 + 22050z^4 - 88200z^3 + 264600z^2 - 529200z + 529200) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amsg.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{80z^4} (-8z^{10} + 148z^9 - 750z^8 + 889z^7 + 165z^6 - 270z^5 - 2370z^4 - 12600z^3 - 52920z^2 - 176400z - 529200) + \frac{1}{160z^{9/2}} \left(e^{-z} \sqrt{\pi} (16z^{11} - 304z^{10} + 1640z^9 - 2400z^8 + 105z^7 + 735z^6 + 4410z^5 + 22050z^4 + 88200z^3 + 264600z^2 + 529200z + 529200) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amsh.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{5}{2}, 6; z\right) = \frac{1}{315z^5} \left(e^z (-128z^{11} - 1728z^{10} - 6240z^9 - 2640z^8 - 8280z^7 + 66780z^6 - 405090z^5 + 2027025z^4 - 8108100z^3 + 24324300z^2 - 48648600z + 48648600) \right) - \frac{154440}{z^5}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = -\frac{3}{2}$

07.25.03.amsi.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{2835} (32z^{12} + 2736z^{11} + 93640z^{10} + 1663932z^9 + 16665984z^8 + 95687160z^7 + 306671040z^6 + 509404896z^5 + 376215840z^4 + 87567480z^3 + 1871100z^2 + 28350z + 2835) + \frac{1}{2835} \left(2e^z \sqrt{\pi} (16z^{25/2} + 1376z^{23/2} + 47496z^{21/2} + 854712z^{19/2} + 8727201z^{17/2} + 51646644z^{15/2} + 173942370z^{13/2} + 314889120z^{11/2} + 273513240z^{9/2} + 90810720z^{7/2} + 6486480z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amsj.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{2835} (32z^{12} - 2736z^{11} + 93640z^{10} - 1663932z^9 + 16665984z^8 - 95687160z^7 + 306671040z^6 - 509404896z^5 + 376215840z^4 - 87567480z^3 + 1871100z^2 - 28350z + 2835) - \frac{1}{2835} \left(2e^{-z} \sqrt{\pi} (16z^{25/2} - 1376z^{23/2} + 47496z^{21/2} - 854712z^{19/2} + 8727201z^{17/2} - 51646644z^{15/2} + 173942370z^{13/2} - 314889120z^{11/2} + 273513240z^{9/2} - 90810720z^{7/2} + 6486480z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amsk.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{945}(-16z^{11} - 1208z^{10} - 35956z^9 - 544902z^8 - 4535220z^7 - 20865000z^6 - 50738688z^5 - 58378320z^4 - 24864840z^3 - 1871100z^2 + 28350z + 945) + \frac{1}{945}e^z\sqrt{\pi}(-16z^{23/2} - 1216z^{21/2} - 36552z^{19/2} - 562296z^{17/2} - 4791129z^{15/2} - 22899870z^{13/2} - 59443020z^{11/2} - 77117040z^{9/2} - 42162120z^{7/2} - 6486480z^{5/2})\operatorname{erf}(\sqrt{z})$$

07.25.03.amsl.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{945}(16z^{11} - 1208z^{10} + 35956z^9 - 544902z^8 + 4535220z^7 - 20865000z^6 + 50738688z^5 - 58378320z^4 + 24864840z^3 - 1871100z^2 - 28350z + 945) + \frac{1}{945}e^{-z}\sqrt{\pi}(-16z^{23/2} + 1216z^{21/2} - 36552z^{19/2} + 562296z^{17/2} - 4791129z^{15/2} + 22899870z^{13/2} - 59443020z^{11/2} + 77117040z^{9/2} - 42162120z^{7/2} + 6486480z^{5/2})\operatorname{erfi}(\sqrt{z})$$

07.25.03.amsm.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{945}(8z^{10} + 524z^9 + 13266z^8 + 166575z^7 + 1107600z^6 + 3855852z^5 + 6486480z^4 + 4324320z^3 + 623700z^2 - 28350z + 945) + \frac{1}{1890}(e^z\sqrt{\pi}(16z^{21/2} + 1056z^{19/2} + 27048z^{17/2} + 345912z^{15/2} + 2369745z^{13/2} + 8681400z^{11/2} + 16036020z^{9/2} + 12972960z^{7/2} + 3243240z^{5/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.amsn.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{945}(8z^{10} - 524z^9 + 13266z^8 - 166575z^7 + 1107600z^6 - 3855852z^5 + 6486480z^4 - 4324320z^3 + 623700z^2 + 28350z + 945) + \frac{1}{1890}(e^{-z}\sqrt{\pi}(-16z^{21/2} + 1056z^{19/2} - 27048z^{17/2} + 345912z^{15/2} - 2369745z^{13/2} + 8681400z^{11/2} - 16036020z^{9/2} + 12972960z^{7/2} - 3243240z^{5/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.amso.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, 1; z\right) = \frac{1}{7560}(e^z(64z^{10} + 3904z^9 + 91344z^8 + 1050528z^7 + 6331164z^6 + 19737396z^5 + 29333115z^4 + 16989840z^3 + 1988280z^2 - 120960z + 7560))$$

07.25.03.amsp.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{3780} \left(e^z \sqrt{\pi} (16z^7 + 896z^6 + 18984z^5 + 194040z^4 + 1011465z^3 + 2612610z^2 + 2972970z + 1081080) \operatorname{erf}(\sqrt{z}) z^{5/2} \right) + \frac{1}{1890} (8z^9 + 444z^8 + 9274z^7 + 92595z^6 + 463554z^5 + 1111110z^4 + 1081080z^3 + 249480z^2 - 18900z + 1890)$$

07.25.03.amsq.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{3780} \left(e^{-z} \sqrt{\pi} (16z^7 - 896z^6 + 18984z^5 - 194040z^4 + 1011465z^3 - 2612610z^2 + 2972970z - 1081080) \operatorname{erfi}(\sqrt{z}) z^{5/2} \right) + \frac{1}{1890} (-8z^9 + 444z^8 - 9274z^7 + 92595z^6 - 463554z^5 + 1111110z^4 - 1081080z^3 + 249480z^2 + 18900z + 1890)$$

07.25.03.amsr.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, 2; z\right) = \frac{1}{7560} \left(e^z (64z^9 + 3264z^8 + 61968z^7 + 554784z^6 + 2447676z^5 + 5051340z^4 + 4076415z^3 + 684180z^2 - 64260z + 7560) \right)$$

07.25.03.amss.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z \sqrt{\pi} (16z^6 + 736z^5 + 12360z^4 + 95160z^3 + 345345z^2 + 540540z + 270270) \operatorname{erf}(\sqrt{z}) z^{5/2}}{2520} + \frac{8z^8 + 364z^7 + 6002z^6 + 44751z^5 + 152880z^4 + 210210z^3 + 71280z^2 - 7560z + 1260}{1260}$$

07.25.03.amst.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{8z^8 - 364z^7 + 6002z^6 - 44751z^5 + 152880z^4 - 210210z^3 + 71280z^2 + 7560z + 1260}{1260} - \frac{e^{-z} \sqrt{\pi} z^{5/2} (16z^6 - 736z^5 + 12360z^4 - 95160z^3 + 345345z^2 - 540540z + 270270) \operatorname{erfi}(\sqrt{z})}{2520}$$

07.25.03.amsu.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, 3; z\right) = \frac{1}{3780} e^z (64z^8 + 2624z^7 + 38352z^6 + 247968z^5 + 711900z^4 + 779940z^3 + 176715z^2 - 22680z + 3780)$$

07.25.03.amsv.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z \sqrt{\pi} (16z^5 + 576z^4 + 7176z^3 + 37752z^2 + 81081z + 54054) \operatorname{erf}(\sqrt{z}) z^{5/2}}{1008} + \frac{1}{504} (8z^7 + 284z^6 + 3450z^5 + 17283z^4 + 33306z^3 + 15840z^2 - 2160z + 504)$$

07.25.03.amsw.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16 z^5 - 576 z^4 + 7176 z^3 - 37752 z^2 + 81081 z - 54054) \operatorname{erfi}(\sqrt{z}) z^{5/2}}{1008} + \frac{1}{504} (-8 z^7 + 284 z^6 - 3450 z^5 + 17283 z^4 - 33306 z^3 + 15840 z^2 + 2160 z + 504)$$

07.25.03.amsx.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, 4; z\right) = \frac{e^z (64 z^7 + 1984 z^6 + 20496 z^5 + 84000 z^4 + 123900 z^3 + 36540 z^2 - 5985 z + 1260)}{1260}$$

07.25.03.amsy.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{288} e^z \sqrt{\pi} (16 z^4 + 416 z^3 + 3432 z^2 + 10296 z + 9009) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{144} (8 z^6 + 204 z^5 + 1618 z^4 + 4431 z^3 + 2880 z^2 - 480 z + 144)$$

07.25.03.amsz.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{144} (8 z^6 - 204 z^5 + 1618 z^4 - 4431 z^3 + 2880 z^2 + 480 z + 144) - \frac{1}{288} e^{-z} \sqrt{\pi} z^{5/2} (16 z^4 - 416 z^3 + 3432 z^2 - 10296 z + 9009) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amt0.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, 5; z\right) = \frac{1}{315} e^z (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315)$$

07.25.03.amt1.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{8 z^9 + 124 z^8 + 506 z^7 + 435 z^6 - 30 z^5 - 318 z^4 + 1800 z^3 - 7560 z^2 + 25200 z - 75600}{32 z^4} + \frac{1}{64 z^{9/2}} (e^z \sqrt{\pi} (16 z^{10} + 256 z^9 + 1128 z^8 + 1272 z^7 + 105 z^6 - 630 z^5 + 3150 z^4 - 12600 z^3 + 37800 z^2 - 75600 z + 75600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amt2.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{-8 z^9 + 124 z^8 - 506 z^7 + 435 z^6 + 30 z^5 - 318 z^4 - 1800 z^3 - 7560 z^2 - 25200 z - 75600}{32 z^4} + \frac{1}{64 z^{9/2}} (e^{-z} \sqrt{\pi} (16 z^{10} - 256 z^9 + 1128 z^8 - 1272 z^7 + 105 z^6 + 630 z^5 + 3150 z^4 + 12600 z^3 + 37800 z^2 + 75600 z + 75600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amt3.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{3}{2}, 6; z\right) = \frac{1}{63 z^5} (e^z (64 z^{10} + 704 z^9 + 2064 z^8 + 288 z^7 + 4284 z^6 - 26964 z^5 + 135135 z^4 - 540540 z^3 + 1621620 z^2 - 3243240 z + 3243240)) - \frac{51480}{z^5}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = -\frac{1}{2}$

07.25.03.amt4.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{315} (8z^{10} + 532z^9 + 13726z^8 + 176625z^7 + 1214095z^6 + 4435464z^5 + 8066520z^4 + 6264720z^3 + 1455300z^2 + 28350z + 315) + \frac{1}{630} e^z \sqrt{\pi} (16z^{21/2} + 1072z^{19/2} + 27976z^{17/2} + 366464z^{15/2} + 2592345z^{13/2} + 9938145z^{11/2} + 19690440z^{9/2} + 18045720z^{7/2} + 6070680z^{5/2} + 415800z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.amt5.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{315} (8z^{10} - 532z^9 + 13726z^8 - 176625z^7 + 1214095z^6 - 4435464z^5 + 8066520z^4 - 6264720z^3 + 1455300z^2 - 28350z + 315) + \frac{1}{630} e^{-z} \sqrt{\pi} (-16z^{21/2} + 1072z^{19/2} - 27976z^{17/2} + 366464z^{15/2} - 2592345z^{13/2} + 9938145z^{11/2} - 19690440z^{9/2} + 18045720z^{7/2} - 6070680z^{5/2} + 415800z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amt6.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{630} (-8z^9 - 460z^8 - 10050z^7 - 106495z^6 - 579612z^5 - 1580040z^4 - 1940400z^3 - 831600z^2 - 56700z + 630) + \frac{1}{1260} (e^z \sqrt{\pi} (-16z^{19/2} - 928z^{17/2} - 20552z^{15/2} - 222600z^{13/2} - 1256745z^{11/2} - 3654420z^{9/2} - 5072760z^{7/2} - 2827440z^{5/2} - 415800z^{3/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amt7.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{630} (8z^9 - 460z^8 + 10050z^7 - 106495z^6 + 579612z^5 - 1580040z^4 + 1940400z^3 - 831600z^2 + 56700z + 630) + \frac{1}{1260} (e^{-z} \sqrt{\pi} (-16z^{19/2} + 928z^{17/2} - 20552z^{15/2} + 222600z^{13/2} - 1256745z^{11/2} + 3654420z^{9/2} - 5072760z^{7/2} + 2827440z^{5/2} - 415800z^{3/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.amt8.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, 1; z\right) = -\frac{1}{2520} (e^z (32z^9 + 1712z^8 + 34544z^7 + 335272z^6 + 1656858z^5 + 4069695z^4 + 4492320z^3 + 1756440z^2 + 115920z - 2520))$$

07.25.03.amt9.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{-8z^8 - 388z^7 - 6950z^6 - 58029z^5 - 234465z^4 - 429660z^3 - 291060z^2 - 37800z + 1260}{1260} - \frac{1}{2520} \left(e^z \sqrt{\pi} z^{3/2} (16z^7 + 784z^6 + 14280z^5 + 122640z^4 + 520905z^3 + 1049895z^2 + 873180z + 207900) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amt10.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{2520} \left(e^{-z} \sqrt{\pi} (16z^7 - 784z^6 + 14280z^5 - 122640z^4 + 520905z^3 - 1049895z^2 + 873180z - 207900) \operatorname{erfi}(\sqrt{z}) z^{3/2} \right) + \frac{-8z^8 + 388z^7 - 6950z^6 + 58029z^5 - 234465z^4 + 429660z^3 - 291060z^2 + 37800z + 1260}{1260}$$

07.25.03.amt11.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, 2; z\right) = -\frac{1}{2520} \left(e^z (32z^8 + 1424z^7 + 23152z^6 + 173208z^5 + 617610z^4 + 981645z^3 + 565740z^2 + 59220z - 2520) \right)$$

07.25.03.amt12.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{840} (-8z^7 - 316z^6 - 4426z^5 - 27195z^4 - 73150z^3 - 73260z^2 - 15120z + 840) - \frac{e^z \sqrt{\pi} z^{3/2} (16z^6 + 640z^5 + 9160z^4 + 58520z^3 + 169785z^2 + 200970z + 69300) \operatorname{erf}(\sqrt{z})}{1680}$$

07.25.03.amt13.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{840} (8z^7 - 316z^6 + 4426z^5 - 27195z^4 + 73150z^3 - 73260z^2 + 15120z + 840) - \frac{e^{-z} \sqrt{\pi} z^{3/2} (16z^6 - 640z^5 + 9160z^4 - 58520z^3 + 169785z^2 - 200970z + 69300) \operatorname{erfi}(\sqrt{z})}{1680}$$

07.25.03.amt14.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, 3; z\right) = -\frac{e^z (32z^7 + 1136z^6 + 14064z^5 + 74760z^4 + 169050z^3 + 136395z^2 + 20160z - 1260)}{1260}$$

07.25.03.amt15.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{336} (-8z^6 - 244z^5 - 2478z^4 - 9961z^3 - 14355z^2 - 4320z + 336) - \frac{1}{672} e^z \sqrt{\pi} z^{3/2} (16z^5 + 496z^4 + 5192z^3 + 22176z^2 + 36729z + 17325) \operatorname{erf}(\sqrt{z})$$

07.25.03.amt16.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{672} e^{-z} \sqrt{\pi} (16z^5 - 496z^4 + 5192z^3 - 22176z^2 + 36729z - 17325) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{336} (-8z^6 + 244z^5 - 2478z^4 + 9961z^3 - 14355z^2 + 4320z + 336)$$

07.25.03.amth.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, 4; z\right) = -\frac{1}{420} e^z (32 z^6 + 848 z^5 + 7280 z^4 + 23\,800 z^3 + 26\,250 z^2 + 5145 z - 420)$$

07.25.03.amti.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{96} (-8 z^5 - 172 z^4 - 1106 z^3 - 2295 z^2 - 960 z + 96) - \frac{1}{192} e^z \sqrt{\pi} z^{3/2} (16 z^4 + 352 z^3 + 2376 z^2 + 5544 z + 3465) \operatorname{erf}(\sqrt{z})$$

07.25.03.amtj.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{96} (8 z^5 - 172 z^4 + 1106 z^3 - 2295 z^2 + 960 z + 96) - \frac{1}{192} e^{-z} \sqrt{\pi} z^{3/2} (16 z^4 - 352 z^3 + 2376 z^2 - 5544 z + 3465) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amtk.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, 5; z\right) = -\frac{1}{105} e^z (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105)$$

07.25.03.amtl.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{3(8 z^8 + 100 z^7 + 310 z^6 + 165 z^5 + 37 z^4 - 300 z^3 + 1260 z^2 - 4200 z + 12\,600)}{64 z^4} - \frac{1}{128 z^{9/2}} (3 e^z \sqrt{\pi} (16 z^9 + 208 z^8 + 712 z^7 + 560 z^6 + 105 z^5 - 525 z^4 + 2100 z^3 - 6300 z^2 + 12\,600 z - 12\,600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amtm.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{128 z^{9/2}} (3 e^{-z} \sqrt{\pi} (16 z^9 - 208 z^8 + 712 z^7 - 560 z^6 + 105 z^5 + 525 z^4 + 2100 z^3 + 6300 z^2 + 12\,600 z + 12\,600) \operatorname{erfi}(\sqrt{z})) - \frac{3(8 z^8 - 100 z^7 + 310 z^6 - 165 z^5 + 37 z^4 + 300 z^3 + 1260 z^2 + 4200 z + 12\,600)}{64 z^4}$$

07.25.03.amtn.01

$${}_2F_2\left(\frac{9}{2}, 5; -\frac{1}{2}, 6; z\right) = \frac{1}{21 z^5} (e^z (-32 z^9 - 272 z^8 - 624 z^7 + 168 z^6 - 2058 z^5 + 10\,395 z^4 - 41\,580 z^3 + 124\,740 z^2 - 249\,480 z + 249\,480)) - \frac{11\,880}{z^5}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = \frac{1}{2}$

07.25.03.amto.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{8 z^8 + 396 z^7 + 7282 z^6 + 62\,991 z^5 + 267\,840 z^4 + 532\,728 z^3 + 423\,360 z^2 + 90\,720 z + 1260}{1260} + \frac{1}{2520} (e^z \sqrt{\pi} (16 z^{17/2} + 800 z^{15/2} + 14\,952 z^{13/2} + 132\,888 z^{11/2} + 592\,305 z^{9/2} + 1\,285\,200 z^{7/2} + 1\,217\,160 z^{5/2} + 393\,120 z^{3/2} + 22\,680 \sqrt{z})) \operatorname{erf}(\sqrt{z}))$$

07.25.03.amtp.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{8z^8 - 396z^7 + 7282z^6 - 62991z^5 + 267840z^4 - 532728z^3 + 423360z^2 - 90720z + 1260}{1260} + \frac{1}{2520} \left(e^{-z} \sqrt{\pi} (-16z^{17/2} + 800z^{15/2} - 14952z^{13/2} + 132888z^{11/2} - 592305z^{9/2} + 1285200z^{7/2} - 1217160z^{5/2} + 393120z^{3/2} - 22680\sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amtq.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, 1; z\right) = \frac{e^z (16z^8 + 736z^7 + 12488z^6 + 98952z^5 + 383145z^4 + 693840z^3 + 511560z^2 + 110880z + 2520)}{2520}$$

07.25.03.amtr.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{8z^7 + 332z^6 + 4962z^5 + 33375z^4 + 103068z^3 + 132300z^2 + 52920z + 2520}{2520} + \frac{1}{5040} \left(e^z \sqrt{\pi} \sqrt{z} (16z^7 + 672z^6 + 10248z^5 + 71400z^4 + 235305z^3 + 343980z^2 + 185220z + 22680) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.amts.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{-8z^7 + 332z^6 - 4962z^5 + 33375z^4 - 103068z^3 + 132300z^2 - 52920z + 2520}{2520} + \frac{1}{5040} \left(e^{-z} \sqrt{\pi} \sqrt{z} (16z^7 - 672z^6 + 10248z^5 - 71400z^4 + 235305z^3 - 343980z^2 + 185220z - 22680) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.amtt.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, 2; z\right) = \frac{e^z (16z^7 + 608z^6 + 8232z^5 + 49560z^4 + 135345z^3 + 152460z^2 + 54180z + 2520)}{2520}$$

07.25.03.amtu.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{8z^6 + 268z^5 + 3090z^4 + 14959z^3 + 29520z^2 + 18900z + 1680}{1680} + \frac{e^z \sqrt{\pi} \sqrt{z} (16z^6 + 544z^5 + 6440z^4 + 32760z^3 + 71505z^2 + 57960z + 11340) \operatorname{erf}(\sqrt{z})}{3360}$$

07.25.03.amtv.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{8z^6 - 268z^5 + 3090z^4 - 14959z^3 + 29520z^2 - 18900z + 1680}{1680} - \frac{e^{-z} \sqrt{\pi} \sqrt{z} (16z^6 - 544z^5 + 6440z^4 - 32760z^3 + 71505z^2 - 57960z + 11340) \operatorname{erfi}(\sqrt{z})}{3360}$$

07.25.03.amtw.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, 3; z\right) = \frac{e^z (16z^6 + 480z^5 + 4872z^4 + 20328z^3 + 33705z^2 + 17640z + 1260)}{1260}$$

07.25.03.amtx.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{672} (8z^5 + 204z^4 + 1666z^3 + 5055z^2 + 4860z + 672) + \frac{e^z \sqrt{\pi} \sqrt{z} (16z^5 + 416z^4 + 3528z^3 + 11592z^2 + 13545z + 3780) \operatorname{erf}(\sqrt{z})}{1344}$$

07.25.03.amty.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{672} (-8z^5 + 204z^4 - 1666z^3 + 5055z^2 - 4860z + 672) + \frac{e^{-z} \sqrt{\pi} \sqrt{z} (16z^5 - 416z^4 + 3528z^3 - 11592z^2 + 13545z - 3780) \operatorname{erfi}(\sqrt{z})}{1344}$$

07.25.03.amtz.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, 4; z\right) = \frac{1}{420} e^z (16z^5 + 352z^4 + 2408z^3 + 5880z^2 + 4305z + 420)$$

07.25.03.amu0.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{192} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} e^z \sqrt{\pi} \sqrt{z} (16z^4 + 288z^3 + 1512z^2 + 2520z + 945) \operatorname{erf}(\sqrt{z})$$

07.25.03.amu1.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{192} (8z^4 - 140z^3 + 690z^2 - 975z + 192) - \frac{1}{384} e^{-z} \sqrt{\pi} \sqrt{z} (16z^4 - 288z^3 + 1512z^2 - 2520z + 945) \operatorname{erfi}(\sqrt{z})$$

07.25.03.amu2.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, 5; z\right) = \frac{1}{105} e^z (16z^4 + 224z^3 + 840z^2 + 840z + 105)$$

07.25.03.amu3.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{3(8z^7 + 76z^6 + 162z^5 + 31z^4 + 60z^3 - 252z^2 + 840z - 2520)}{128z^4} + \frac{3e^z \sqrt{\pi} (16z^8 + 160z^7 + 392z^6 + 168z^5 + 105z^4 - 420z^3 + 1260z^2 - 2520z + 2520) \operatorname{erf}(\sqrt{z})}{256z^{9/2}}$$

07.25.03.amu4.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z} \sqrt{\pi} (16z^8 - 160z^7 + 392z^6 - 168z^5 + 105z^4 + 420z^3 + 1260z^2 + 2520z + 2520) \operatorname{erfi}(\sqrt{z})}{256z^{9/2}} - \frac{3(8z^7 - 76z^6 + 162z^5 - 31z^4 + 60z^3 + 252z^2 + 840z + 2520)}{128z^4}$$

07.25.03.amu5.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{1}{2}, 6; z\right) = \frac{e^z (16z^8 + 96z^7 + 168z^6 - 168z^5 + 945z^4 - 3780z^3 + 11340z^2 - 22680z + 22680)}{21z^5} - \frac{1080}{z^5}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = 1$

07.25.03.amu6.01

$${}_2F_2\left(\frac{9}{2}, 5; 1, 1; z\right) = \frac{1}{10080} \left(e^{z/2} (32 z^8 + 1376 z^7 + 21\,776 z^6 + 161\,248 z^5 + 590\,370 z^4 + 1\,045\,482 z^3 + 815\,931 z^2 + 221\,760 z + 10\,080) I_0\left(\frac{z}{2}\right) + e^{z/2} (16 z^8 + 672 z^7 + 10\,224 z^6 + 70\,720 z^5 + 228\,955 z^4 + 320\,814 z^3 + 155\,196 z^2 + 13\,698 z) I_1\left(\frac{z}{2}\right) \right) / 5040$$

07.25.03.amu7.01

$${}_2F_2\left(\frac{9}{2}, 5; 1, \frac{3}{2}; z\right) = \frac{e^z (8 z^7 + 308 z^6 + 4242 z^5 + 26\,145 z^4 + 73\,920 z^3 + 88\,200 z^2 + 35\,280 z + 2520)}{2520}$$

07.25.03.amu8.01

$${}_2F_2\left(\frac{9}{2}, 5; 1, 2; z\right) = \frac{e^{z/2} (32 z^7 + 1136 z^6 + 14\,368 z^5 + 81\,420 z^4 + 214\,782 z^3 + 250\,191 z^2 + 108\,360 z + 10\,080) I_0\left(\frac{z}{2}\right) + e^{z/2} (32 z^7 + 1104 z^6 + 13\,280 z^5 + 68\,660 z^4 + 151\,758 z^3 + 122\,517 z^2 + 22\,356 z) I_1\left(\frac{z}{2}\right)}{10080}$$

07.25.03.amu9.01

$${}_2F_2\left(\frac{9}{2}, 5; 1, \frac{5}{2}; z\right) = \frac{1}{840} e^z (4 z^6 + 124 z^5 + 1315 z^4 + 5840 z^3 + 10\,680 z^2 + 6720 z + 840)$$

07.25.03.amua.01

$${}_2F_2\left(\frac{9}{2}, 5; 1, 3; z\right) = \frac{e^{z/2} (16 z^6 + 448 z^5 + 4260 z^4 + 16\,968 z^3 + 28\,449 z^2 + 17\,640 z + 2520) I_0\left(\frac{z}{2}\right) + e^{z/2} z (16 z^5 + 432 z^4 + 3836 z^3 + 13\,332 z^2 + 16\,653 z + 4959) I_1\left(\frac{z}{2}\right)}{2520}$$

07.25.03.amub.01

$${}_2F_2\left(\frac{9}{2}, 5; 1, \frac{7}{2}; z\right) = \frac{1}{168} e^z (2 z^5 + 47 z^4 + 352 z^3 + 984 z^2 + 912 z + 168)$$

07.25.03.amuc.01

$${}_2F_2\left(\frac{9}{2}, 5; 1, 4; z\right) = \frac{1}{840} e^{z/2} (16 z^5 + 328 z^4 + 2116 z^3 + 5108 z^2 + 4305 z + 840) I_0\left(\frac{z}{2}\right) + \frac{1}{840} e^{z/2} z (16 z^4 + 312 z^3 + 1812 z^2 + 3436 z + 1513) I_1\left(\frac{z}{2}\right)$$

07.25.03.amud.01

$${}_2F_2\left(\frac{9}{2}, 5; 1, \frac{9}{2}; z\right) = \frac{1}{24} e^z (z^4 + 16 z^3 + 72 z^2 + 96 z + 24)$$

07.25.03.amue.01

$${}_2F_2\left(\frac{9}{2}, 5; 1, 5; z\right) = \frac{1}{105} e^{z/2} (8 z^4 + 104 z^3 + 376 z^2 + 420 z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} z (2 z^3 + 24 z^2 + 71 z + 44) I_1\left(\frac{z}{2}\right)$$

07.25.03.amuf.01

$${}_2F_2\left(\frac{9}{2}, 5; 1, \frac{11}{2}; z\right) = \frac{3 e^z (128 z^7 + 1088 z^6 + 2144 z^5 + 496 z^4 + 840 z^3 - 2940 z^2 + 7350 z - 11\,025)}{2048 z^4} + \frac{33\,075 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.amug.01

$${}_2F_2\left(\frac{9}{2}, 5; 1, \frac{11}{2}; -z\right) = \frac{33\,075\sqrt{\pi}\operatorname{erf}(\sqrt{z})}{4096z^{9/2}} - \frac{3e^{-z}(128z^7 - 1088z^6 + 2144z^5 - 496z^4 + 840z^3 + 2940z^2 + 7350z + 11\,025)}{2048z^4}$$

07.25.03.amuh.01

$${}_2F_2\left(\frac{9}{2}, 5; 1, 6; z\right) = \frac{e^{z/2}(8z^6 + 44z^5 + 84z^4 - 63z^3 + 360z^2 - 1152z + 2304)I_0\left(\frac{z}{2}\right)}{21z^3} + \frac{e^{z/2}(8z^7 + 36z^6 + 52z^5 - 105z^4 + 480z^3 - 1728z^2 + 4608z - 9216)I_1\left(\frac{z}{2}\right)}{21z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = \frac{3}{2}$

07.25.03.amui.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{8z^6 + 276z^5 + 3310z^4 + 16\,953z^3 + 36\,603z^2 + 27\,930z + 4410}{5040} + \frac{e^z\sqrt{\pi}(16z^7 + 560z^6 + 6888z^5 + 36\,960z^4 + 87\,465z^3 + 81\,585z^2 + 22\,050z + 630)\operatorname{erf}(\sqrt{z})}{10\,080\sqrt{z}}$$

07.25.03.amuj.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{8z^6 - 276z^5 + 3310z^4 - 16\,953z^3 + 36\,603z^2 - 27\,930z + 4410}{5040} + \frac{e^{-z}\sqrt{\pi}(-16z^7 + 560z^6 - 6888z^5 + 36\,960z^4 - 87\,465z^3 + 81\,585z^2 - 22\,050z + 630)\operatorname{erfi}(\sqrt{z})}{10\,080\sqrt{z}}$$

07.25.03.amuk.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, 2; z\right) = \frac{e^z(8z^6 + 252z^5 + 2730z^4 + 12\,495z^3 + 23\,940z^2 + 16\,380z + 2520)}{2520}$$

07.25.03.amul.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{8z^5 + 220z^4 + 1994z^3 + 7083z^2 + 9030z + 2730}{3360} + \frac{e^z\sqrt{\pi}(16z^6 + 448z^5 + 4200z^4 + 15\,960z^3 + 23\,625z^2 + 10\,710z + 630)\operatorname{erf}(\sqrt{z})}{6720\sqrt{z}}$$

07.25.03.amum.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-8z^5 + 220z^4 - 1994z^3 + 7083z^2 - 9030z + 2730}{3360} + \frac{e^{-z}\sqrt{\pi}(16z^6 - 448z^5 + 4200z^4 - 15\,960z^3 + 23\,625z^2 - 10\,710z + 630)\operatorname{erfi}(\sqrt{z})}{6720\sqrt{z}}$$

07.25.03.amun.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, 3; z\right) = \frac{e^z(8z^5 + 196z^4 + 1554z^3 + 4725z^2 + 5040z + 1260)}{1260}$$

07.25.03.amuo.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{8z^4 + 164z^3 + 1014z^2 + 2085z + 1029}{1344} + \frac{e^z \sqrt{\pi} (16z^5 + 336z^4 + 2184z^3 + 5040z^2 + 3465z + 315) \operatorname{erf}(\sqrt{z})}{2688 \sqrt{z}}$$

07.25.03.amup.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{8z^4 - 164z^3 + 1014z^2 - 2085z + 1029}{1344} + \frac{e^{-z} \sqrt{\pi} (-16z^5 + 336z^4 - 2184z^3 + 5040z^2 - 3465z + 315) \operatorname{erfi}(\sqrt{z})}{2688 \sqrt{z}}$$

07.25.03.amuq.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, 4; z\right) = \frac{1}{420} e^z (8z^4 + 140z^3 + 714z^2 + 1155z + 420)$$

07.25.03.amur.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{384} (8z^3 + 108z^2 + 370z + 279) + \frac{e^z \sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.amus.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{1}{384} (-8z^3 + 108z^2 - 370z + 279) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.amut.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, 5; z\right) = \frac{1}{105} e^z (8z^3 + 84z^2 + 210z + 105)$$

07.25.03.amuu.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{3(8z^6 + 52z^5 + 62z^4 - 15z^3 + 63z^2 - 210z + 630)}{256z^4} + \frac{3e^z \sqrt{\pi} (16z^7 + 112z^6 + 168z^5 + 105z^3 - 315z^2 + 630z - 630) \operatorname{erf}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.amuv.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3(8z^6 - 52z^5 + 62z^4 + 15z^3 + 63z^2 + 210z + 630)}{256z^4} - \frac{3e^{-z} \sqrt{\pi} (16z^7 - 112z^6 + 168z^5 + 105z^3 + 315z^2 + 630z + 630) \operatorname{erfi}(\sqrt{z})}{512z^{9/2}}$$

07.25.03.amuw.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{3}{2}, 6; z\right) = \frac{e^z (8z^7 + 28z^6 + 42z^5 - 105z^4 + 420z^3 - 1260z^2 + 2520z - 2520)}{21z^5} + \frac{120}{z^5}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = 2$

07.25.03.amux.01

$${}_2F_2\left(\frac{9}{2}, 5; 2, 2; z\right) = \frac{e^{z/2} (16 z^6 + 464 z^5 + 4620 z^4 + 19596 z^3 + 35973 z^2 + 25785 z + 5040) I_0\left(\frac{z}{2}\right)}{5040} + \frac{e^{z/2} (16 z^6 + 448 z^5 + 4180 z^4 + 15624 z^3 + 22041 z^2 + 8568 z + 180) I_1\left(\frac{z}{2}\right)}{5040}$$

07.25.03.amuy.01

$${}_2F_2\left(\frac{9}{2}, 5; 2, \frac{5}{2}; z\right) = \frac{1}{840} e^z (4 z^5 + 100 z^4 + 815 z^3 + 2580 z^2 + 2940 z + 840)$$

07.25.03.amuz.01

$${}_2F_2\left(\frac{9}{2}, 5; 2, 3; z\right) = \frac{e^{z/2} (16 z^5 + 360 z^4 + 2628 z^3 + 7524 z^2 + 8145 z + 2520) I_0\left(\frac{z}{2}\right)}{2520} + \frac{e^{z/2} (16 z^5 + 344 z^4 + 2292 z^3 + 5388 z^2 + 3609 z + 180) I_1\left(\frac{z}{2}\right)}{2520}$$

07.25.03.amv0.01

$${}_2F_2\left(\frac{9}{2}, 5; 2, \frac{7}{2}; z\right) = \frac{1}{168} e^z (2 z^4 + 37 z^3 + 204 z^2 + 372 z + 168)$$

07.25.03.amv1.01

$${}_2F_2\left(\frac{9}{2}, 5; 2, 4; z\right) = \frac{1}{105} e^{z/2} (2 z^4 + 32 z^3 + 151 z^2 + 240 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{420} e^{z/2} (8 z^4 + 120 z^3 + 488 z^2 + 524 z + 45) I_1\left(\frac{z}{2}\right)$$

07.25.03.amv2.01

$${}_2F_2\left(\frac{9}{2}, 5; 2, \frac{9}{2}; z\right) = \frac{1}{24} e^z (z^3 + 12 z^2 + 36 z + 24)$$

07.25.03.amv3.01

$${}_2F_2\left(\frac{9}{2}, 5; 2, 5; z\right) = \frac{1}{105} e^{z/2} (8 z^3 + 76 z^2 + 180 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8 z^3 + 68 z^2 + 116 z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.amv4.01

$${}_2F_2\left(\frac{9}{2}, 5; 2, \frac{11}{2}; z\right) = \frac{3 e^z (64 z^6 + 352 z^5 + 368 z^4 - 120 z^3 + 420 z^2 - 1050 z + 1575)}{1024 z^4} - \frac{4725 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.amv5.01

$${}_2F_2\left(\frac{9}{2}, 5; 2, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64 z^6 - 352 z^5 + 368 z^4 + 120 z^3 + 420 z^2 + 1050 z + 1575)}{1024 z^4} - \frac{4725 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{2048 z^{9/2}}$$

07.25.03.amv6.01

$${}_2F_2\left(\frac{9}{2}, 5; 2, 6; z\right) = \frac{2 e^{z/2} (4 z^5 + 12 z^4 + 21 z^3 - 45 z^2 + 144 z - 288) I_0\left(\frac{z}{2}\right)}{21 z^3} + \frac{2 e^{z/2} (4 z^6 + 8 z^5 + 15 z^4 - 60 z^3 + 216 z^2 - 576 z + 1152) I_1\left(\frac{z}{2}\right)}{21 z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = \frac{5}{2}$

07.25.03.amv7.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{8z^5 + 172z^4 + 1138z^3 + 2607z^2 + 1600z + 30}{2240z} + \frac{e^z \sqrt{\pi} (16z^6 + 352z^5 + 2440z^4 + 6200z^3 + 5025z^2 + 660z - 30) \operatorname{erf}(\sqrt{z})}{4480z^{3/2}}$$

07.25.03.amv8.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{8z^5 - 172z^4 + 1138z^3 - 2607z^2 + 1600z - 30}{2240z} + \frac{e^{-z} \sqrt{\pi} (-16z^6 + 352z^5 - 2440z^4 + 6200z^3 - 5025z^2 + 660z + 30) \operatorname{erfi}(\sqrt{z})}{4480z^{3/2}}$$

07.25.03.amv9.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{5}{2}, 3; z\right) = \frac{1}{420} e^z (4z^4 + 76z^3 + 435z^2 + 840z + 420)$$

07.25.03.amva.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{8z^4 + 124z^3 + 522z^2 + 571z + 30}{896z} + \frac{e^z \sqrt{\pi} (16z^5 + 256z^4 + 1160z^3 + 1560z^2 + 345z - 30) \operatorname{erf}(\sqrt{z})}{1792z^{3/2}}$$

07.25.03.amvb.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-8z^4 + 124z^3 - 522z^2 + 571z - 30}{896z} + \frac{e^{-z} \sqrt{\pi} (16z^5 - 256z^4 + 1160z^3 - 1560z^2 + 345z + 30) \operatorname{erfi}(\sqrt{z})}{1792z^{3/2}}$$

07.25.03.amvc.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{5}{2}, 4; z\right) = \frac{1}{140} e^z (4z^3 + 52z^2 + 175z + 140)$$

07.25.03.amvd.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.amve.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.amvf.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{5}{2}, 5; z\right) = \frac{1}{35} e^z (4z^2 + 28z + 35)$$

07.25.03.amvg.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{9(8z^5 + 28z^4 + 10z^3 - 21z^2 + 70z - 210)}{512z^4} + \frac{9e^z \sqrt{\pi} (16z^6 + 64z^5 + 40z^4 - 40z^3 + 105z^2 - 210z + 210) \operatorname{erf}(\sqrt{z})}{1024z^{9/2}}$$

07.25.03.amvh.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{9 e^{-z} \sqrt{\pi} (16 z^6 - 64 z^5 + 40 z^4 + 40 z^3 + 105 z^2 + 210 z + 210) \operatorname{erfi}(\sqrt{z})}{1024 z^{9/2}} - \frac{9 (8 z^5 - 28 z^4 + 10 z^3 + 21 z^2 + 70 z + 210)}{512 z^4}$$

07.25.03.amvi.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{5}{2}, 6; z\right) = \frac{e^z (4 z^6 + 4 z^5 + 15 z^4 - 60 z^3 + 180 z^2 - 360 z + 360)}{7 z^5} - \frac{360}{7 z^5}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = 3$

07.25.03.amvj.01

$${}_2F_2\left(\frac{9}{2}, 5; 3, 3; z\right) = \frac{1}{630} e^{z/2} (8 z^4 + 136 z^3 + 696 z^2 + 1236 z + 633) I_0\left(\frac{z}{2}\right) + \frac{2 e^{z/2} (2 z^5 + 32 z^4 + 143 z^3 + 180 z^2 + 24 z - 3) I_1\left(\frac{z}{2}\right)}{315 z}$$

07.25.03.amvk.01

$${}_2F_2\left(\frac{9}{2}, 5; 3, \frac{7}{2}; z\right) = \frac{1}{84} e^z (2 z^3 + 27 z^2 + 96 z + 84)$$

07.25.03.amvl.01

$${}_2F_2\left(\frac{9}{2}, 5; 3, 4; z\right) = \frac{1}{210} e^{z/2} (8 z^3 + 92 z^2 + 276 z + 213) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (8 z^4 + 84 z^3 + 196 z^2 + 51 z - 12) I_1\left(\frac{z}{2}\right)}{210 z}$$

07.25.03.amvm.01

$${}_2F_2\left(\frac{9}{2}, 5; 3, \frac{9}{2}; z\right) = \frac{1}{12} e^z (z^2 + 8 z + 12)$$

07.25.03.amvn.01

$${}_2F_2\left(\frac{9}{2}, 5; 3, 5; z\right) = \frac{4}{105} e^{z/2} (4 z^2 + 24 z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4 z^3 + 20 z^2 + 9 z - 3) I_1\left(\frac{z}{2}\right)}{105 z}$$

07.25.03.amvo.01

$${}_2F_2\left(\frac{9}{2}, 5; 3, \frac{11}{2}; z\right) = \frac{3 e^z (32 z^5 + 80 z^4 + 24 z^3 - 84 z^2 + 210 z - 315)}{256 z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.amvp.01

$${}_2F_2\left(\frac{9}{2}, 5; 3, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{512 z^{9/2}} - \frac{3 e^{-z} (32 z^5 - 80 z^4 + 24 z^3 + 84 z^2 + 210 z + 315)}{256 z^4}$$

07.25.03.amvq.01

$${}_2F_2\left(\frac{9}{2}, 5; 3, 6; z\right) = \frac{4 e^{z/2} (4 z^4 + 2 z^3 + 15 z^2 - 48 z + 96) I_0\left(\frac{z}{2}\right)}{21 z^3} + \frac{4 e^{z/2} (4 z^5 - 2 z^4 + 19 z^3 - 72 z^2 + 192 z - 384) I_1\left(\frac{z}{2}\right)}{21 z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = \frac{7}{2}$

07.25.03.amvr.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5(8z^4 + 84z^3 + 190z^2 + 33z - 9)}{1792z^2} + \frac{5e^{z^2}\sqrt{\pi}(16z^5 + 176z^4 + 456z^3 + 192z^2 - 39z + 9)\operatorname{erf}(\sqrt{z})}{3584z^{5/2}}$$

07.25.03.amvs.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5(8z^4 - 84z^3 + 190z^2 - 33z - 9)}{1792z^2} - \frac{5e^{-z^2}\sqrt{\pi}(16z^5 - 176z^4 + 456z^3 - 192z^2 - 39z - 9)\operatorname{erfi}(\sqrt{z})}{3584z^{5/2}}$$

07.25.03.amvt.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{7}{2}, 4; z\right) = \frac{1}{28}e^z(2z^2 + 17z + 28)$$

07.25.03.amvu.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5e^{z^2}\sqrt{\pi}(16z^4 + 96z^3 + 72z^2 - 24z + 9)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.amvv.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5e^{-z^2}\sqrt{\pi}(16z^4 - 96z^3 + 72z^2 + 24z + 9)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

07.25.03.amvw.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{7}{2}, 5; z\right) = \frac{1}{7}e^z(2z + 7)$$

07.25.03.amvx.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{45(8z^4 + 4z^3 + 6z^2 - 35z + 105)}{1024z^4} + \frac{45e^{z^2}\sqrt{\pi}(16z^5 + 16z^4 + 8z^3 - 48z^2 + 105z - 105)\operatorname{erf}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.amvy.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{45(8z^4 - 4z^3 + 6z^2 + 35z + 105)}{1024z^4} - \frac{45e^{-z^2}\sqrt{\pi}(16z^5 - 16z^4 + 8z^3 + 48z^2 + 105z + 105)\operatorname{erfi}(\sqrt{z})}{2048z^{9/2}}$$

07.25.03.amvz.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{7}{2}, 6; z\right) = \frac{5e^z(2z^5 - 3z^4 + 12z^3 - 36z^2 + 72z - 72)}{7z^5} + \frac{360}{7z^5}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = 4$

07.25.03.amw0.01

$${}_2F_2\left(\frac{9}{2}, 5; 4, 4; z\right) = \frac{e^{z/2}(4z^3 + 28z^2 + 37z - 1)I_0\left(\frac{z}{2}\right)}{35z} + \frac{e^{z/2}(4z^4 + 24z^3 + 15z^2 - 8z + 4)I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.amw1.01

$${}_2F_2\left(\frac{9}{2}, 5; 4, \frac{9}{2}; z\right) = \frac{1}{4}e^z(z + 4)$$

07.25.03.amw2.01

$${}_2F_2\left(\frac{9}{2}, 5; 4, 5; z\right) = \frac{4e^{z/2}(4z^2 + 10z - 1)I_0\left(\frac{z}{2}\right)}{35z} + \frac{4e^{z/2}(4z^3 + 6z^2 - 5z + 4)I_1\left(\frac{z}{2}\right)}{35z^2}$$

07.25.03.amw3.01

$${}_2F_2\left(\frac{9}{2}, 5; 4, \frac{11}{2}; z\right) = \frac{9 e^z (16 z^4 - 8 z^3 + 28 z^2 - 70 z + 105)}{128 z^4} - \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.amw4.01

$${}_2F_2\left(\frac{9}{2}, 5; 4, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (16 z^4 + 8 z^3 + 28 z^2 + 70 z + 105)}{128 z^4} - \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{256 z^{9/2}}$$

07.25.03.amw5.01

$${}_2F_2\left(\frac{9}{2}, 5; 4, 6; z\right) = \frac{16 e^{z/2} (z^3 - 2 z^2 + 6 z - 12) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{8 e^{z/2} (2 z^4 - 6 z^3 + 19 z^2 - 48 z + 96) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = \frac{9}{2}$

07.25.03.amw6.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 (8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 e^z \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.amw7.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 (8 z^3 - 12 z^2 - 14 z - 15)}{1024 z^3} - \frac{35 e^{-z} \sqrt{\pi} (16 z^4 - 32 z^3 - 24 z^2 - 24 z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.amw8.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{9}{2}, 5; z\right) = e^z$$

07.25.03.amw9.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{315 (8 z^3 - 20 z^2 + 50 z - 105)}{2048 z^4} + \frac{315 e^z \sqrt{\pi} (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.amwa.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{315 e^{-z} \sqrt{\pi} (16 z^4 + 32 z^3 + 72 z^2 + 120 z + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315 (8 z^3 + 20 z^2 + 50 z + 105)}{2048 z^4}$$

07.25.03.amwb.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{9}{2}, 6; z\right) = \frac{5 e^z (z^4 - 4 z^3 + 12 z^2 - 24 z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = 5$

07.25.03.amwc.01

$${}_2F_2\left(\frac{9}{2}, 5; 5, 5; z\right) = \frac{32 e^{z/2} (2 z^2 - 2 z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} + \frac{64 e^{z/2} (z^3 - 2 z^2 + 4 z - 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

07.25.03.amwd.01

$${}_2F_2\left(\frac{9}{2}, 5; 5, \frac{11}{2}; z\right) = \frac{9 e^z (8 z^3 - 28 z^2 + 70 z - 105)}{16 z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.amwe.01

$${}_2F_2\left(\frac{9}{2}, 5; 5, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9 e^{-z} (8 z^3 + 28 z^2 + 70 z + 105)}{16 z^4}$$

07.25.03.amwf.01

$${}_2F_2\left(\frac{9}{2}, 5; 5, 6; z\right) = \frac{32 e^{z/2} (2 z^2 - 9 z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{32 e^{z/2} (2 z^3 - 11 z^2 + 36 z - 96) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = \frac{11}{2}$

07.25.03.amwg.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{11}{2}, 6; z\right) = \frac{45 e^z (4 z^3 - 26 z^2 + 87 z - 192)}{8 z^5} + \frac{4725 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{16 z^{9/2}} + \frac{1080}{z^5}$$

07.25.03.amwh.01

$${}_2F_2\left(\frac{9}{2}, 5; \frac{11}{2}, 6; -z\right) = \frac{45 e^{-z} (4 z^3 + 26 z^2 + 87 z + 192)}{8 z^5} + \frac{4725 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{16 z^{9/2}} - \frac{1080}{z^5}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 5$, $b_1 = 6$

07.25.03.amwi.01

$${}_2F_2\left(\frac{9}{2}, 5; 6, 6; z\right) = \frac{320 e^{z/2} (z^3 - 7 z^2 + 48 z - 96) I_0\left(\frac{z}{2}\right)}{7 z^5} + \frac{320 e^{z/2} (z^2 - 8 z + 4) I_1\left(\frac{z}{2}\right)}{7 z^4} + \frac{30720}{7 z^5}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{11}{2}$

07.25.03.amwj.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{10721859080625} (2097152 e^z z^{21} + 407896064 e^z z^{20} + 34304163840 e^z z^{19} + 1644783206400 e^z z^{18} + 49926271795200 e^z z^{17} + 1007749507645440 e^z z^{16} + 13832157513646080 e^z z^{15} + 129831438178713600 e^z z^{14} + 827059117860864000 e^z z^{13} + 3503189220959232000 e^z z^{12} + 9518532533675827200 e^z z^{11} + 15660652688058470400 e^z z^{10} + 14208488517750912000 e^z z^9 + 6033130095263040000 e^z z^8 + 850285835118720000 e^z z^7 + 12326515806528000 e^z z^6 + 165941048196000 e^z z^5 + 18778172490000 e^z z^4 + 5127749550000 e^z z^3 + 4332064275000 e^z z^2 - 1949428923750 e^z z + 10721859080625 e^z)$$

07.25.03.amwk.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{974714461875} (e^z (1048576z^{20} + 188743680z^{19} + 14604042240z^{18} + 639841075200z^{17} + 17604963532800z^{16} + 319022636728320z^{15} + 3885363707904000z^{14} + 31890127572172800z^{13} + 174353602139136000z^{12} + 618296196575232000z^{11} + 1358637185674137600z^{10} + 1716459008495616000z^9 + 1096637729140800000z^8 + 274970724779520000z^7 + 12686830390080000z^6 - 180157291776000z^5 - 7108121790000z^4 - 1273096440000z^3 - 618866325000z^2 - 974714461875))$$

07.25.03.amwl.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{108301606875} (e^z (524288z^{19} + 86769664z^{18} + 6130630656z^{17} + 243287654400z^{16} + 6004673740800z^{15} + 96462244085760z^{14} + 1026290535137280z^{13} + 7221594237419520z^{12} + 33014844288921600z^{11} + 94551610409625600z^{10} + 159284735584128000z^9 + 141448194119232000z^8 + 53250185153088000z^7 + 4359899507040000z^6 - 196434065520000z^5 + 8138386872000z^4 + 515132541000z^3 + 136150591500z^2 + 30943316250z + 108301606875))$$

07.25.03.amwm.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{15471658125} (e^z (262144z^{18} + 39583744z^{17} + 2530934784z^{16} + 90007142400z^{15} + 1967254732800z^{14} + 27574947348480z^{13} + 251183267758080z^{12} + 1475739342766080z^{11} + 5439377073715200z^{10} + 11919854225664000z^9 + 14083169550912000z^8 + 7349834080512000z^7 + 900673294752000z^6 - 71733483360000z^5 + 9383192280000z^4 - 622402704000z^3 - 53635081500z^2 - 12377326500z - 15471658125))$$

07.25.03.amwn.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{3094331625} (e^z (131072z^{17} + 17891328z^{16} + 1023934464z^{15} + 32204390400z^{14} + 613276876800z^{13} + 7348066467840z^{12} + 55785002434560z^{11} + 263697150689280z^{10} + 74195990688000z^9 + 113718771936000z^8 + 787052318976000z^7 + 133181604864000z^6 - 15798969648000z^5 + 3630682440000z^4 - 754427520000z^3 + 66012408000z^2 + 6188663250z + 3094331625))$$

07.25.03.amwo.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{1031443875} (e^z (65536z^{16} + 7995392z^{15} + 404029440z^{14} + 11051827200z^{13} + 179542425600z^{12} + 1788837765120z^{11} + 10898542448640z^{10} + 39210964531200z^9 + 76897719360000z^8 + 68758683840000z^7 + 15353398368000z^6 - 2499490224000z^5 + 848730960000z^4 - 306486180000z^3 + 8251510000z^2 - 825151000z - 1031443875))$$

07.25.03.amwp.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{1031443875} \left(e^z (32768 z^{15} + 3522560 z^{14} + 154460160 z^{13} + 3595161600 z^{12} + 48426854400 z^{11} + 385936911360 z^{10} + 1782870566400 z^9 + 4451082451200 z^8 + 5065741296000 z^7 + 1452023496000 z^6 - 309430044000 z^5 + 142690086000 z^4 - 75049821000 z^3 + 34381462500 z^2 - 10314438750 z + 1031443875) \right)$$

07.25.03.amwq.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{1031443875} \left(e^{z/2} (16384 z^{15} + 1654784 z^{14} + 67768320 z^{13} + 1462972416 z^{12} + 18128947200 z^{11} + 131650928640 z^{10} + 548039036160 z^9 + 1217103148800 z^8 + 1212702503040 z^7 + 291710160000 z^6 - 57967812000 z^5 + 28300557600 z^4 - 17931942000 z^3 + 11194961400 z^2 - 5157219375 z + 1031443875) I_0\left(\frac{z}{2}\right) + \frac{1}{1031443875} \left(e^{z/2} (16384 z^{15} + 1638400 z^{14} + 66138112 z^{13} + 1397637120 z^{12} + 16762791936 z^{11} + 115525724160 z^{10} + 439683552000 z^9 + 822030612480 z^8 + 533010844800 z^7 - 55967708160 z^6 + 21677997600 z^5 - 12746160000 z^4 + 8434918800 z^3 - 4893777000 z^2 + 1635128775 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.amwr.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{1031443875} \left(e^z (16384 z^{14} + 1523712 z^{13} + 56659968 z^{12} + 1089331200 z^{11} + 11686118400 z^{10} + 70264212480 z^9 + 223925264640 z^8 + 322176476160 z^7 + 116547076800 z^6 - 31544251200 z^5 + 18778359600 z^4 - 13157575200 z^3 + 8526602700 z^2 - 4125775500 z + 1031443875) \right)$$

07.25.03.amws.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{1031443875} \left(e^{z/2} (16384 z^{14} + 1417216 z^{13} + 48623616 z^{12} + 854138880 z^{11} + 8271943680 z^{10} + 44222492160 z^9 + 122829315840 z^8 + 149509463040 z^7 + 42092265600 z^6 - 9909345600 z^5 + 5883645600 z^4 - 4724697600 z^3 + 3991226400 z^2 - 2783261250 z + 1031443875) I_0\left(\frac{z}{2}\right) + \frac{1}{1031443875} \left(e^{z/2} (16384 z^{14} + 1400832 z^{13} + 47230976 z^{12} + 807591936 z^{11} + 7486617600 z^{10} + 37096604160 z^9 + 88798913280 z^8 + 73769149440 z^7 - 8838668160 z^6 + 4037947200 z^5 - 2907122400 z^4 + 2489356800 z^3 - 2057529600 z^2 + 1225825650 z - 212837625) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.amwt.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{343814625} \left(e^z (8192 z^{13} + 643072 z^{12} + 19648512 z^{11} + 299059200 z^{10} + 2403878400 z^9 + 9891383040 z^8 + 17994493440 z^7 + 8135043840 z^6 - 2739290400 z^5 + 2033262000 z^4 - 1793761200 z^3 + 1493137800 z^2 - 962680950 z + 343814625) \right)$$

07.25.03.amwu.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{1031443875} \left(8 e^{z/2} (4096 z^{13} + 294912 z^{12} + 8171520 z^{11} + 111175680 z^{10} + 783763200 z^9 + 2753879040 z^8 + 4095982080 z^7 + 1328140800 z^6 - 362426400 z^5 + 254016000 z^4 - 247665600 z^3 + 265015800 z^2 - 250259625 z + 140332500) I_0\left(\frac{z}{2}\right) + \frac{1}{1031443875 z} \left(4 e^{z/2} (8192 z^{14} + 581632 z^{13} + 15765504 z^{12} + 206868480 z^{11} + 1367984640 z^{10} + 4229153280 z^9 + 4482190080 z^8 - 602173440 z^7 + 316612800 z^6 - 269438400 z^5 + 282592800 z^4 - 301417200 z^3 + 251492850 z^2 - 60810750 z - 91216125) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amvw.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{68762925} \left(e^z (4096 z^{12} + 262144 z^{11} + 6285312 z^{10} + 70963200 z^9 + 385862400 z^8 + 894136320 z^7 + 502951680 z^6 - 207567360 z^5 + 187110000 z^4 - 199584000 z^3 + 200831400 z^2 - 157172400 z + 68762925) \right)$$

07.25.03.amww.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{343814625 z} \left(4 e^{z/2} (8192 z^{13} + 471040 z^{12} + 9977856 z^{11} + 97287168 z^{10} + 441914880 z^9 + 807909120 z^8 + 297907200 z^7 - 92655360 z^6 + 74934720 z^5 - 85730400 z^4 + 109317600 z^3 - 121621500 z^2 + 57068550 z + 103378275) I_0\left(\frac{z}{2}\right) + \frac{1}{343814625 z^2} \left(4 e^{z/2} (8192 z^{14} + 462848 z^{13} + 9519104 z^{12} + 87991296 z^{11} + 358245888 z^{10} + 485479680 z^9 - 72161280 z^8 + 42888960 z^7 - 42154560 z^6 + 52708320 z^5 - 71215200 z^4 + 88508700 z^3 - 85135050 z^2 + 115540425 z - 413513100) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amwx.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{9823275} \left(e^z (2048 z^{11} + 101376 z^{10} + 1774080 z^9 + 13305600 z^8 + 39916800 z^7 + 27941760 z^6 - 13970880 z^5 + 14968800 z^4 - 18711000 z^3 + 21829500 z^2 - 19646550 z + 9823275) \right)$$

07.25.03.amwy.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{343814625z^2} \left(32e^{z/2}(4096z^{13} + 176128z^{12} + 2608128z^{11} + 15916032z^{10} + 36215040z^9 + 15033600z^8 - 5287680z^7 + 5080320z^6 - 8255520z^5 + 21772800z^4 - 79209900z^3 + 297504900z^2 - 930404475z + 1964187225)I_0\left(\frac{z}{2}\right) + \frac{1}{343814625z^3} \left(32e^{z/2}(4096z^{14} + 172032z^{13} + 2438144z^{12} + 13559808z^{11} + 23715072z^{10} - 3855360z^9 + 2522880z^8 - 2557440z^7 + 1905120z^6 + 8074080z^5 - 72746100z^4 + 372972600z^3 - 1392566175z^2 + 3721617900z - 7856748900)I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.amwz.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{1091475} \left(e^z(1024z^{10} + 35840z^9 + 403200z^8 + 1612800z^7 + 1411200z^6 - 846720z^5 + 1058400z^4 - 1512000z^3 + 1984500z^2 - 1984500z + 1091475) \right)$$

07.25.03.amx0.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{68762925z^3} \left(32e^{z/2}(4096z^{13} + 116736z^{12} + 1029120z^{11} + 2970624z^{10} + 1440000z^9 - 1175040z^8 + 6531840z^7 - 50803200z^6 + 368595360z^5 - 2326401000z^4 + 12328677900z^3 - 52516163700z^2 + 166955914125z - 329983453800)I_0\left(\frac{z}{2}\right) + \frac{1}{68762925z^4} \left(32e^{z/2}(4096z^{14} + 112640z^{13} + 918528z^{12} + 2104320z^{11} - 304896z^{10} - 437760z^9 + 6393600z^8 - 56609280z^7 + 427744800z^6 - 2790388440z^5 + 15429714300z^4 - 70175605500z^3 + 251312586525z^2 - 667823656500z + 1319933815200)I_1\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.amx1.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{88610405625} \left(e^z(524288z^{19} + 87293952z^{18} + 6210846720z^{17} + 248495800320z^{16} + 6193275863040z^{15} + 100675197665280z^{14} + 1086942673797120z^{13} + 7792993732608000z^{12} + 36522341807616000z^{11} + 108275218345728000z^{10} + 192080110281292800z^9 + 185949118263283200z^8 + 83446068912192000z^7 + 12316259021472000z^6 + 185285684304000z^5 + 2564196264000z^4 + 292233501000z^3 + 94035532500z^2 + 19691201250z + 88610405625) \right)$$

07.25.03.amx2.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{9845600625}$$

$$\left(e^z (262144 z^{18} + 40108032 z^{17} + 2604072960 z^{16} + 94301061120 z^{15} + 2106476789760 z^{14} + 30326069329920 z^{13} + 285699747594240 z^{12} + 1753748759347200 z^{11} + 6861803968051200 z^{10} + 16397687348582400 z^9 + 22250462072025600 z^8 + 15097941879552000 z^7 + 3978179757216000 z^6 + 190859874912000 z^5 - 2787095304000 z^4 - 111449520000 z^3 - 21057529500 z^2 - 5626057500 z - 9845600625)\right)$$

07.25.03.amx3.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{1406514375} \left(e^z (131072 z^{17} + 18284544 z^{16} + 1073479680 z^{15} + 34805514240 z^{14} + 687780495360 z^{13} + 8629119959040 z^{12} + 69502354145280 z^{11} + 355606723584000 z^{10} + 1119458280729600 z^9 + 2041823130278400 z^8 + 1937026949760000 z^7 + 769376615616000 z^6 + 65648339568000 z^5 - 3042571896000 z^4 + 127738296000 z^3 + 8144388000 z^2 + 1687817250 z + 1406514375)\right)$$

07.25.03.amx4.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) =$$

$$-\frac{1}{281302875} \left(e^z (65536 z^{16} + 8257536 z^{15} + 433520640 z^{14} + 12417269760 z^{13} + 213508915200 z^{12} + 2286225285120 z^{11} + 15318262149120 z^{10} + 62916395673600 z^9 + 150772568486400 z^8 + 191662438464000 z^7 + 106032501792000 z^6 + 13574551536000 z^5 - 1112209056000 z^4 + 147027636000 z^3 - 9644670000 z^2 - 750141000 z - 281302875)\right)$$

07.25.03.amx5.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{93767625} \left(e^z (32768 z^{15} + 3686400 z^{14} + 170680320 z^{13} + 4245811200 z^{12} + 62173440000 z^{11} + 552464962560 z^{10} + 2963178892800 z^9 + 9234356140800 z^8 + 15362969328000 z^7 + 11334887928000 z^6 + 2009255220000 z^5 - 245117502000 z^4 + 56689227000 z^3 - 1152022500 z^2 + 937676250 z + 93767625)\right)$$

07.25.03.amx6.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) =$$

$$-\frac{1}{93767625} \left(e^z (16384 z^{14} + 1622016 z^{13} + 65064960 z^{12} + 1374658560 z^{11} + 16652805120 z^{10} + 118030832640 z^9 + 478327368960 z^8 + 1029722803200 z^7 + 988286443200 z^6 + 231868526400 z^5 - 38780758800 z^4 + 13173904800 z^3 - 4590148500 z^2 + 1125211500 z - 93767625)\right)$$

07.25.03.amx7.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{93767625} \left(e^{z/2} (-8192 z^{14} - 761856 z^{13} - 28545024 z^{12} - 559656960 z^{11} - 6245890560 z^{10} - 40462087680 z^9 - 148685725440 z^8 - 288341544960 z^7 - 248686200000 z^6 - 52179422400 z^5 + 8748583200 z^4 - 3395876400 z^3 + 1541361150 z^2 - 562605750 z + 93767625) I_0\left(\frac{z}{2}\right) - \frac{1}{93767625} \left(2 e^{z/2} (4096 z^{14} + 376832 z^{13} + 13897728 z^{12} + 266115072 z^{11} + 2863415040 z^{10} + 17487912960 z^9 + 58059348480 z^8 + 92666488320 z^7 + 49495834080 z^6 - 4577731200 z^5 + 148096800 z^4 - 670534200 z^3 + 294400575 z^2 - 78586200 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.amx8.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{93767625} \left(e^z (8192 z^{13} + 700416 z^{12} + 23777280 z^{11} + 413890560 z^{10} + 3980551680 z^9 + 21200175360 z^8 + 58962193920 z^7 + 72644947200 z^6 + 21951064800 z^5 - 4796593200 z^4 + 2194290000 z^3 - 1093062600 z^2 + 437582250 z - 93767625) \right)$$

07.25.03.amx9.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{93767625} \left(e^{z/2} (-8192 z^{13} - 651264 z^{12} - 20398080 z^{11} - 324602880 z^{10} - 2823206400 z^9 - 13426318080 z^8 - 32859509760 z^7 - 35021548800 z^6 - 8789860800 z^5 + 1798524000 z^4 - 885880800 z^3 + 544149900 z^2 - 300651750 z + 93767625) I_0\left(\frac{z}{2}\right) + \frac{1}{93767625} \left(e^{z/2} (-8192 z^{13} - 643072 z^{12} - 19759104 z^{11} - 305157120 z^{10} - 2527311360 z^9 - 11033729280 z^8 - 22838215680 z^7 - 15909384960 z^6 + 1719144000 z^5 - 679039200 z^4 + 397807200 z^3 - 248856300 z^2 + 118474650 z - 16372125) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.amxa.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{31255875} \left(e^z (4096 z^{12} + 294912 z^{11} + 8202240 z^{10} + 112619520 z^9 + 807770880 z^8 + 2926264320 z^7 + 4607850240 z^6 + 1763596800 z^5 - 487846800 z^4 + 284860800 z^3 - 184728600 z^2 + 100018800 z - 31255875) \right)$$

07.25.03.amxb.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, 3; z\right) = -\frac{1}{93767625} \left(4 e^{z/2} (4096 z^{12} + 270336 z^{11} + 6816768 z^{10} + 83712000 z^9 + 527904000 z^8 + 1644503040 z^7 + 2157684480 z^6 + 634314240 z^5 - 153770400 z^4 + 92080800 z^3 - 71612100 z^2 + 53411400 z - 24962175) I_0\left(\frac{z}{2}\right) - \frac{1}{93767625 z} \left(4 e^{z/2} (4096 z^{13} + 266240 z^{12} + 6552576 z^{11} + 77288448 z^{10} + 453638400 z^9 + 1223735040 z^8 + 1100770560 z^7 - 135717120 z^6 + 63231840 z^5 - 45360000 z^4 + 36684900 z^3 - 24664500 z^2 + 5145525 z + 6081075) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.amxc.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{1}{6251175} \left(e^z (2048 z^{11} + 119808 z^{10} + 2603520 z^9 + 26369280 z^8 + 127008000 z^7 + 256556160 z^6 + 123197760 z^5 - 42184800 z^4 + 30277800 z^3 - 24097500 z^2 + 16074450 z - 6251175) \right)$$

07.25.03.amxd.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = -\frac{1}{31255875 z} \left(4 e^{z/2} (4096 z^{12} + 215040 z^{11} + 4125696 z^{10} + 36111360 z^9 + 145946880 z^8 + 236321280 z^7 + 80075520 z^6 - 22498560 z^5 + 15876000 z^4 - 14855400 z^3 + 13437900 z^2 - 6293700 z - 6081075) I_0\left(\frac{z}{2}\right) - \frac{1}{31255875 z^2} \left(4 e^{z/2} (4096 z^{13} + 210944 z^{12} + 3916800 z^{11} + 32295936 z^{10} + 115411200 z^9 + 133747200 z^8 - 18489600 z^7 + 9918720 z^6 - 8436960 z^5 + 8505000 z^4 - 8108100 z^3 + 5613300 z^2 - 6081075 z + 24324300) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amxe.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{1}{893025} \left(e^z (1024 z^{10} + 46080 z^9 + 725760 z^8 + 4838400 z^7 + 12700800 z^6 + 7620480 z^5 - 3175200 z^4 + 2721600 z^3 - 2551500 z^2 + 1984500 z - 893025) \right)$$

07.25.03.amxf.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, 5; z\right) = -\frac{1}{31255875z^2} \left(32e^{z/2} (2048z^{12} + 79872z^{11} + 1062912z^{10} + 5775360z^9 + 11646720z^8 + 4492800z^7 - 1451520z^6 + 1270080z^5 - 1927800z^4 + 4876200z^3 - 15989400z^2 + 48648600z - 103378275) I_0\left(\frac{z}{2}\right) - \frac{1}{31255875z^3} \left(128e^{z/2} (512z^{13} + 19456z^{12} + 246528z^{11} + 1206528z^{10} + 1810560z^9 - 276480z^8 + 164160z^7 - 136080z^6 + 5670z^5 + 850500z^4 - 4833675z^3 + 18243225z^2 - 48648600z + 103378275) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amxg.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = -\frac{1}{99225} \left(e^z (512z^9 + 16128z^8 + 161280z^7 + 564480z^6 + 423360z^5 - 211680z^4 + 211680z^3 - 226800z^2 + 198450z - 99225) \right)$$

07.25.03.amxh.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = -\frac{1}{6251175z^3} \left(32e^{z/2} (2048z^{12} + 52224z^{11} + 408576z^{10} + 1040640z^9 + 483840z^8 - 449280z^7 + 2540160z^6 - 17735760z^5 + 111245400z^4 - 588602700z^3 + 2505402900z^2 - 7960127175z + 15713497800) I_0\left(\frac{z}{2}\right) - \frac{1}{6251175z^4} \left(32e^{z/2} (2048z^{13} + 50176z^{12} + 359424z^{11} + 704256z^{10} - 84480z^9 - 241920z^8 + 2643840z^7 - 20366640z^6 + 133199640z^5 - 736589700z^4 + 3348645300z^3 - 11985798825z^2 + 31840508700z - 62853991200) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.amxi.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{1093955625} \left(e^z (131072z^{17} + 18415616z^{16} + 1090256896z^{15} + 35702833152z^{14} + 714061479936z^{13} + 9093512085504z^{12} + 74648533155840z^{11} + 391658914160640z^{10} + 1276777956142080z^9 + 2453342871651840z^8 + 2538530985231360z^7 + 1202643476697600z^6 + 185124663561600z^5 + 2867605675200z^4 + 40255185600z^3 + 4658018400z^2 + 1116281250z + 1093955625) \right)$$

07.25.03.amxj.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) =$$

$$-\frac{1}{156279375} \left(e^z (65536z^{16} + 8388608z^{15} + 448659456z^{14} + 13140492288z^{13} + 232196063232z^{12} + 2573089505280z^{11} + 18026095288320z^{10} + 78659837706240z^9 + 205759870686720z^8 + 300752017735680z^7 + 216633430540800z^6 + 59738161996800z^5 + 2955088785600z^4 - 43741555200z^3 - 1743184800z^2 - 285768000z - 156279375) \right)$$

07.25.03.amxk.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{31255875} \left(e^z (32768z^{15} + 3784704z^{14} + 180805632z^{13} + 4671787008z^{12} + 71716055040z^{11} + 676958284800z^{10} + 3935860508160z^9 + 13746825550080z^8 + 27272394817920z^7 + 27650232187200z^6 + 11540902615200z^5 + 1016824460400z^4 - 47692297800z^3 + 1975371300z^2 + 116093250z + 31255875) \right)$$

07.25.03.amxl.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) =$$

$$-\frac{1}{10418625} \left(e^z (16384z^{14} + 1687552z^{13} + 70995968z^{12} + 1590435840z^{11} + 20748887040z^{10} + 162113602560z^9 + 752078234880z^8 + 1984904248320z^7 + 2719224043200z^6 + 1588607899200z^5 + 210323660400z^4 - 17396920800z^3 + 2249232300z^2 - 136930500z - 10418625) \right)$$

07.25.03.amxm.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{10418625} \left(e^z (8192z^{13} + 741376z^{12} + 26972160z^{11} + 512010240z^{10} + 5510346240z^9 + 34218858240z^8 + 119397680640z^7 + 216367200000z^6 + 169592421600z^5 + 31138052400z^4 - 3821353200z^3 + 854922600z^2 - 157767750z + 10418625) \right)$$

07.25.03.amxn.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, 1; z\right) =$$

$$\frac{1}{10418625} \left(e^{z/2} (4096z^{13} + 348160z^{12} + 11832320z^{11} + 208579584z^{10} + 2071679232z^9 + 11804325120z^8 + 37646864640z^7 + 62450438400z^6 + 45424522080z^5 + 7993369440z^4 - 1064126700z^3 + 296219700z^2 - 78883875z + 10418625) I_0\left(\frac{z}{2}\right) + \frac{1}{10418625} \left(e^{z/2} (4096z^{13} + 344064z^{12} + 11490304z^{11} + 197257216z^{10} + 1879835904z^9 + 10012649472z^8 + 28408584960z^7 + 37656783360z^6 + 15910362720z^5 - 1238469120z^4 + 308912940z^3 - 92723400z^2 + 18621225z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amxo.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{10418625} (e^z (4096 z^{12} + 319488 z^{11} + 9811968 z^{10} + 152979456 z^9 + 1301868288 z^8 + 6043548672 z^7 + 14372225280 z^6 + 14764135680 z^5 + 3593464560 z^4 - 601564320 z^3 + 194798520 z^2 - 59535000 z + 10418625))$$

07.25.03.amxp.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{10418625} (e^{z/2} (4096 z^{12} + 296960 z^{11} + 8414208 z^{10} + 120013824 z^9 + 925666560 z^8 + 3857656320 z^7 + 8170848000 z^6 + 7459925760 z^5 + 1616842080 z^4 - 274012200 z^3 + 103326300 z^2 - 41674500 z + 10418625) I_0\left(\frac{z}{2}\right) + \frac{1}{10418625} (e^{z/2} (4096 z^{12} + 292864 z^{11} + 8123392 z^{10} + 112032768 z^9 + 817415424 z^8 + 3088995840 z^7 + 5400380160 z^6 + 3049079040 z^5 - 286907040 z^4 + 92330280 z^3 - 39482100 z^2 + 14156100 z - 1488375) I_1\left(\frac{z}{2}\right))$$

07.25.03.amxq.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{3472875} (e^z (2048 z^{11} + 134144 z^{10} + 3363328 z^9 + 41174784 z^8 + 259773696 z^7 + 813697920 z^6 + 1083378240 z^5 + 340109280 z^4 - 73868760 z^3 + 31627260 z^2 - 13296150 z + 3472875))$$

07.25.03.amxr.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{10418625} (16 e^{z/2} (512 z^{11} + 30720 z^{10} + 698112 z^9 + 7649280 z^8 + 42560640 z^7 + 115637760 z^6 + 131261760 z^5 + 34050240 z^4 - 7040250 z^3 + 3364200 z^2 - 1828575 z + 680400) I_0\left(\frac{z}{2}\right) + \frac{1}{10418625} (4 e^{z/2} (2048 z^{12} + 120832 z^{11} + 2672640 z^{10} + 27982848 z^9 + 143481600 z^8 + 330739200 z^7 + 244984320 z^6 - 26933760 z^5 + 10591560 z^4 - 5859000 z^3 + 2986200 z^2 - 510300 z - 467775) I_1\left(\frac{z}{2}\right))$$

07.25.03.amxs.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{694575} (e^z (1024 z^{10} + 54272 z^9 + 1057536 z^8 + 9483264 z^7 + 39795840 z^6 + 68584320 z^5 + 27306720 z^4 - 7439040 z^3 + 3980340 z^2 - 2097900 z + 694575))$$

07.25.03.amxt.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{3472875 z} \left(4 e^{z/2} (2048 z^{11} + 97280 z^{10} + 1672192 z^9 + 12969216 z^8 + 45918720 z^7 + 64667904 z^6 + 19660032 z^5 - 4813200 z^4 + 2784600 z^3 - 1871100 z^2 + 782460 z + 405405) I_0\left(\frac{z}{2}\right) + \frac{1}{3472875 z^2} \left(4 e^{z/2} (2048 z^{12} + 95232 z^{11} + 1577984 z^{10} + 11436800 z^9 + 35182080 z^8 + 33897216 z^7 - 4252416 z^6 + 1974672 z^5 - 1348200 z^4 + 938700 z^3 - 442260 z^2 + 343035 z - 1621620) I_1\left(\frac{z}{2}\right)\right)$$

07.25.03.amxu.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{99225} \left(e^z (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + 408240 z^2 - 255150 z + 99225)\right)$$

07.25.03.amxv.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{3472875 z^2} \left(32 e^{z/2} (1024 z^{11} + 35840 z^{10} + 423168 z^9 + 2016000 z^8 + 3539712 z^7 + 1241856 z^6 - 357840 z^5 + 277200 z^4 - 396900 z^3 + 986580 z^2 - 2837835 z + 6081075) I_0\left(\frac{z}{2}\right) + \frac{1}{3472875 z^3} \left(32 e^{z/2} (1024 z^{12} + 34816 z^{11} + 388864 z^{10} + 1643520 z^9 + 2059008 z^8 - 288768 z^7 + 148176 z^6 - 80640 z^5 - 144900 z^4 + 1111320 z^3 - 4272345 z^2 + 11351340 z - 24324300) I_1\left(\frac{z}{2}\right)\right)\right)$$

07.25.03.amxw.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{11025} e^z (256 z^8 + 7168 z^7 + 62720 z^6 + 188160 z^5 + 117600 z^4 - 47040 z^3 + 35280 z^2 - 25200 z + 11025)$$

07.25.03.amxx.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{694575 z^3} \left(32 e^{z/2} (1024 z^{11} + 23040 z^{10} + 157440 z^9 + 347136 z^8 + 154368 z^7 - 171360 z^6 + 962640 z^5 - 5896800 z^4 + 31082940 z^3 - 132162030 z^2 + 419594175 z - 827026200) I_0\left(\frac{z}{2}\right) + \frac{1}{694575 z^4} \left(32 e^{z/2} (1024 z^{12} + 22016 z^{11} + 135936 z^{10} + 221184 z^9 - 17664 z^8 - 123552 z^7 + 1063440 z^6 - 7025760 z^5 + 38884860 z^4 - 176694210 z^3 + 632026395 z^2 - 1678376700 z + 3308104800) I_1\left(\frac{z}{2}\right)\right)\right)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.amxy.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{22325625} (e^z (32768 z^{15} + 3817472 z^{14} + 184246272 z^{13} + 4819906560 z^{12} + 75128825856 z^{11} + 723078558720 z^{10} + 4313037012480 z^9 + 15608215284480 z^8 + 32642966563200 z^7 + 36125625896640 z^6 + 18002650528800 z^5 + 2865105205200 z^4 + 44991790200 z^3 + 625117500 z^2 + 66083850 z + 22325625))$$

07.25.03.amxz.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{4465125} (e^z (16384 z^{14} + 1720320 z^{13} + 74059776 z^{12} + 1706385408 z^{11} + 23060136960 z^{10} + 188588252160 z^9 + 930694867200 z^8 + 2685285872640 z^7 + 4237696854720 z^6 + 3230873956800 z^5 + 924140372400 z^4 + 46342044000 z^3 - 675126900 z^2 - 25004700 z - 4465125))$$

07.25.03.amy0.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{1488375} (e^z (8192 z^{13} + 765952 z^{12} + 28987392 z^{11} + 577812480 z^{10} + 6618662400 z^9 + 44654158080 z^8 + 175095406080 z^7 + 379618202880 z^6 + 410566514400 z^5 + 178454178000 z^4 + 15934741200 z^3 - 731089800 z^2 + 27981450 z + 1488375))$$

07.25.03.amy1.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{1488375} (e^z (4096 z^{12} + 335872 z^{11} + 10967040 z^{10} + 184719360 z^9 + 1739216640 z^8 + 9282954240 z^7 + 27208500480 z^6 + 40162348800 z^5 + 24552687600 z^4 + 3292682400 z^3 - 264335400 z^2 + 30958200 z - 1488375))$$

07.25.03.amy2.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{1488375} (e^{z/2} (-2048 z^{12} - 157696 z^{11} - 4810752 z^{10} - 75310080 z^9 - 655909632 z^8 - 3228664320 z^7 - 8741537280 z^6 - 12064227840 z^5 - 7130176200 z^4 - 990654840 z^3 + 94537800 z^2 - 15479100 z + 1488375) I_0\left(\frac{z}{2}\right)) - \frac{1}{1488375} (4 e^{z/2} (512 z^{12} + 38912 z^{11} + 1164032 z^{10} + 17682432 z^9 + 146839680 z^8 + 668118528 z^7 + 1576169280 z^6 + 1669631040 z^5 + 525415590 z^4 - 31865400 z^3 + 5266485 z^2 - 718200 z) I_1\left(\frac{z}{2}\right))$$

07.25.03.amy3.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{1488375} (e^z (2048 z^{11} + 144384 z^{10} + 3967488 z^9 + 54668544 z^8 + 404925696 z^7 + 1604534400 z^6 + 3174776640 z^5 + 2619902880 z^4 + 486780840 z^3 - 57391740 z^2 + 11311650 z - 1488375))$$

07.25.03.amy4.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, 2; z\right) = \frac{1}{1488375} \left(e^{z/2} (-2048 z^{11} - 134144 z^{10} - 3400704 z^9 - 42905856 z^8 - 288852480 z^7 - 1034691840 z^6 - 1852058880 z^5 - 1404834480 z^4 - 250591320 z^3 + 32489100 z^2 - 8070300 z + 1488375) I_0\left(\frac{z}{2}\right) + \frac{1}{1488375} \left(e^{z/2} (-2048 z^{11} - 132096 z^{10} - 3269632 z^9 - 39700224 z^8 - 250661376 z^7 - 800997120 z^6 - 1145329920 z^5 - 498914640 z^4 + 38583720 z^3 - 9068220 z^2 + 2211300 z - 165375) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amy5.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = -\frac{1}{496125} \left(e^z (1024 z^{10} + 60416 z^9 + 1349376 z^8 + 14515200 z^7 + 79083648 z^6 + 209139840 z^5 + 227979360 z^4 + 56064960 z^3 - 8901900 z^2 + 2460780 z - 496125) \right)$$

07.25.03.amy6.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, 3; z\right) = -\frac{1}{1488375} \left(4 e^{z/2} (1024 z^{10} + 55296 z^9 + 1118976 z^8 + 10782720 z^7 + 52012800 z^6 + 120637440 z^5 + 115330320 z^4 + 25341120 z^3 - 4176900 z^2 + 1398600 z - 382725) I_0\left(\frac{z}{2}\right) - \frac{1}{1488375 z} \left(4 e^{z/2} (1024 z^{11} + 54272 z^{10} + 1065216 z^9 + 9743616 z^8 + 42750720 z^7 + 81849600 z^6 + 47804400 z^5 - 4470480 z^4 + 1357020 z^3 - 472500 z^2 + 61425 z + 42525) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amy7.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) = -\frac{1}{99225} \left(e^z (512 z^9 + 24320 z^8 + 419328 z^7 + 3273984 z^6 + 11712960 z^5 + 16722720 z^4 + 5292000 z^3 - 1073520 z^2 + 379890 z - 99225) \right)$$

07.25.03.amy8.01

$$\begin{aligned}
 {}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = & \\
 -\frac{1}{496125z} & \left(4e^{z/2}(1024z^{10} + 43520z^9 + 661248z^8 + 4469760z^7 + 13585152z^6 + 16230816z^5 + 4268880z^4 - \right. \\
 & \left. 856800z^3 + 359100z^2 - 119070z - 31185)I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{496125z^2} \left(4e^{z/2}(1024z^{11} + 42496z^{10} + 619264z^9 + 3870720z^8 + 9984768z^7 + 7681632z^6 - \right. \right. \\
 & \left. \left. 839664z^5 + 312480z^4 - 144900z^3 + 43470z^2 - 19845z + 124740)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

07.25.03.amy9.01

$$\begin{aligned}
 {}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = & \\
 -\frac{1}{14175} & \left(e^z(256z^8 + 9216z^7 + 112896z^6 + 564480z^5 + 1058400z^4 + 423360z^3 - 105840z^2 + 45360z - 14175)\right)
 \end{aligned}$$

07.25.03.amya.01

$$\begin{aligned}
 {}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, 5; z\right) = & \\
 -\frac{1}{496125z^2} & \left(32e^{z/2}(512z^{10} + 15872z^9 + 163584z^8 + 669696z^7 + 999264z^6 + 308448z^5 - 75600z^4 + \right. \\
 & \left. 50400z^3 - 73710z^2 + 187110z - 405405)I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{496125z^3} \left(64e^{z/2}(256z^{11} + 7680z^{10} + 74240z^9 + 264192z^8 + 265680z^7 - 32928z^6 + \right. \right. \\
 & \left. \left. 13104z^5 - 35595z^3 + 141750z^2 - 374220z + 810810)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

07.25.03.amyb.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = -\frac{e^z(128z^7 + 3136z^6 + 23520z^5 + 58800z^4 + 29400z^3 - 8820z^2 + 4410z - 1575)}{1575}$$

07.25.03.amyc.01

$$\begin{aligned}
 {}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{5}{2}, 6; z\right) = & \\
 -\frac{1}{99225z^3} & \left(32e^{z/2}(512z^{10} + 9984z^9 + 58368z^8 + 108480z^7 + 46368z^6 - 65520z^5 + 352800z^4 - 1837080z^3 + \right. \\
 & \left. 7796250z^2 - 24729705z + 48648600)I_0\left(\frac{z}{2}\right) - \right. \\
 & \left. \frac{1}{99225z^4} \left(32e^{z/2}(512z^{11} + 9472z^{10} + 49152z^9 + 63552z^8 - 480z^7 - 59472z^6 + 413280z^5 - \right. \right. \\
 & \left. \left. 2295720z^4 + 10427130z^3 - 37266075z^2 + 98918820z - 194594400)I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{3}{2}$

07.25.03.amyd.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{893025} (e^z (8192 z^{13} + 774144 z^{12} + 29675520 z^{11} + 600950784 z^{10} + 7022937600 z^9 + 48645031680 z^8 + 197799759360 z^7 + 452544019200 z^6 + 534944360160 z^5 + 278076078000 z^4 + 44956069200 z^3 + 692987400 z^2 + 893025 z + 893025))$$

07.25.03.amye.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = -\frac{1}{297675} (e^z (4096 z^{12} + 344064 z^{11} + 11569152 z^{10} + 202137600 z^9 + 1995436800 z^8 + 11352176640 z^7 + 36462908160 z^6 + 62188922880 z^5 + 49810950000 z^4 + 14510664000 z^3 + 712038600 z^2 - 9525600 z - 297675))$$

07.25.03.amyf.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{297675} (e^z (2048 z^{11} + 150528 z^{10} + 4354560 z^9 + 64055040 z^8 + 517305600 z^7 + 2313601920 z^6 + 5506643520 z^5 + 6314565600 z^4 + 2804495400 z^3 + 244093500 z^2 - 10120950 z + 297675))$$

07.25.03.amyg.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{297675} (e^{z/2} (1024 z^{11} + 70656 z^{10} + 1910016 z^9 + 26143488 z^8 + 195906816 z^7 + 813697920 z^6 + 1815332400 z^5 + 2004019920 z^4 + 909040860 z^3 + 90111420 z^2 - 5060475 z + 297675) I_0\left(\frac{z}{2}\right) + \frac{1}{297675} (e^{z/2} (1024 z^{11} + 69632 z^{10} + 1840896 z^9 + 24336384 z^8 + 172424448 z^7 + 651805056 z^6 + 1230319440 z^5 + 983545920 z^4 + 209075580 z^3 - 8497440 z^2 + 634095 z) I_1\left(\frac{z}{2}\right)))$$

07.25.03.amyh.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{297675} (e^z (1024 z^{10} + 64512 z^9 + 1564416 z^8 + 18729984 z^7 + 118177920 z^6 + 388644480 z^5 + 615777120 z^4 + 386285760 z^3 + 50247540 z^2 - 3572100 z + 297675))$$

07.25.03.amyi.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{297675} \left(e^{z/2} (1024 z^{10} + 59904 z^9 + 1340160 z^8 + 14708736 z^7 + 84672000 z^6 + 254086560 z^5 + 371886480 z^4 + 223927200 z^3 + 30387420 z^2 - 2598750 z + 297675) I_0\left(\frac{z}{2}\right) + \frac{1}{297675} \left(e^{z/2} (1024 z^{10} + 58880 z^9 + 1281792 z^8 + 13455360 z^7 + 71801856 z^6 + 187901280 z^5 + 209739600 z^4 + 65247840 z^3 - 3723300 z^2 + 497070 z - 23625) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.amyj.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{99225} \left(e^z (512 z^9 + 26880 z^8 + 526848 z^7 + 4886784 z^6 + 22438080 z^5 + 48474720 z^4 + 41277600 z^3 + 7393680 z^2 - 754110 z + 99225) \right)$$

07.25.03.amyk.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{1}{297675} \left(8 e^{z/2} (256 z^9 + 12288 z^8 + 218112 z^7 + 1814400 z^6 + 7413840 z^5 + 14253120 z^4 + 11032560 z^3 + 1920240 z^2 - 222075 z + 37800) I_0\left(\frac{z}{2}\right) + \frac{1}{297675 z} \left(4 e^{z/2} (512 z^{10} + 24064 z^9 + 412416 z^8 + 3227904 z^7 + 11783520 z^6 + 17992800 z^5 + 7746480 z^4 - 564480 z^3 + 107730 z^2 - 9450 z - 4725) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amyl.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{19845} \left(e^z (256 z^8 + 10752 z^7 + 161280 z^6 + 1072512 z^5 + 3175200 z^4 + 3598560 z^3 + 846720 z^2 - 113400 z + 19845) \right)$$

07.25.03.amym.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{99225 z} \left(4 e^{z/2} (512 z^9 + 19200 z^8 + 253440 z^7 + 1460928 z^6 + 3707424 z^5 + 3623760 z^4 + 776160 z^3 - 113400 z^2 + 24570 z + 2835) I_0\left(\frac{z}{2}\right) + \frac{1}{99225 z^2} \left(4 e^{z/2} (512 z^{10} + 18688 z^9 + 235008 z^8 + 1234752 z^7 + 2573088 z^6 + 1484784 z^5 - 131040 z^4 + 32760 z^3 - 5670 z^2 + 945 z - 11340) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amyn.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835)}{2835}$$

07.25.03.amyo.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = \frac{1}{99225 z^2} \left(32 e^{z/2} (256 z^9 + 6912 z^8 + 60864 z^7 + 208320 z^6 + 255024 z^5 + 65520 z^4 - 12600 z^3 + 7560 z^2 - 14175 z + 31185) I_0\left(\frac{z}{2}\right) + \frac{1}{99225 z^3} (32 e^{z/2} (256 z^{10} + 6656 z^9 + 54336 z^8 + 157056 z^7 + 119280 z^6 - 12096 z^5 + 2520 z^4 + 5040 z^3 - 21735 z^2 + 56700 z - 124740) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.amyp.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{315} e^z (64 z^6 + 1344 z^5 + 8400 z^4 + 16800 z^3 + 6300 z^2 - 1260 z + 315)$$

07.25.03.amyq.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{19845 z^3} \left(32 e^{z/2} (256 z^9 + 4224 z^8 + 20544 z^7 + 30912 z^6 + 13104 z^5 - 25200 z^4 + 123480 z^3 - 521640 z^2 + 1652805 z - 3243240) I_0\left(\frac{z}{2}\right) + \frac{1}{19845 z^4} (32 e^{z/2} (256 z^{10} + 3968 z^9 + 16704 z^8 + 15936 z^7 + 2352 z^6 - 27216 z^5 + 153720 z^4 - 698040 z^3 + 2491965 z^2 - 6611220 z + 12972960) I_1\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.amyr.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{99225} (e^z (2048 z^{11} + 152576 z^{10} + 4487680 z^9 + 67411200 z^8 + 559545600 z^7 + 2598587520 z^6 + 6537810240 z^5 + 8212125600 z^4 + 4375161000 z^3 + 692590500 z^2 + 9724050 z + 99225))$$

07.25.03.amys.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{99225} (e^z (1024 z^{10} + 66560 z^9 + 1678080 z^8 + 21120000 z^7 + 142492800 z^6 + 515583360 z^5 + 948780000 z^4 + 785332800 z^3 + 224248500 z^2 + 9922500 z - 99225))$$

07.25.03.amyt.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{99225} \left(e^{z/2} (-512 z^{10} - 31232 z^9 - 736000 z^8 - 8633088 z^7 - 54280800 z^6 - 184238880 z^5 - 324681840 z^4 - 270144000 z^3 - 85394610 z^2 - 4961250 z + 99225) I_0\left(\frac{z}{2}\right) - \frac{1}{99225} \left(2 e^{z/2} (256 z^{10} + 15360 z^9 + 352768 z^8 + 3971200 z^7 + 23331024 z^6 + 70465920 z^5 + 100489200 z^4 + 55233360 z^3 + 6607125 z^2 - 122220 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amyu.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{99225} \left(e^z (512 z^9 + 28416 z^8 + 597504 z^7 + 6078720 z^6 + 31734720 z^5 + 83250720 z^4 + 99761760 z^3 + 43500240 z^2 + 3373650 z - 99225) \right)$$

07.25.03.amyv.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{99225} \left(e^{z/2} (-512 z^9 - 26368 z^8 - 511488 z^7 - 4777920 z^6 - 22878240 z^5 - 55495440 z^4 - 63272160 z^3 - 28080360 z^2 - 2504250 z + 99225) I_0\left(\frac{z}{2}\right) + \frac{1}{99225} \left(e^{z/2} (-512 z^9 - 25856 z^8 - 485888 z^7 - 4304448 z^6 - 18792480 z^5 - 38443440 z^4 - 31137120 z^3 - 6030360 z^2 + 197190 z - 4725) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amyw.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{1}{33075} \left(e^z (256 z^8 + 11776 z^7 + 198656 z^6 + 1549440 z^5 + 5796000 z^4 + 9747360 z^3 + 6017760 z^2 + 687960 z - 33075) \right)$$

07.25.03.amyx.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = -\frac{1}{99225} \left(4 e^{z/2} (256 z^8 + 10752 z^7 + 164160 z^6 + 1150080 z^5 + 3855600 z^4 + 5886720 z^3 + 3462840 z^2 + 421200 z - 24975) I_0\left(\frac{z}{2}\right) - \frac{1}{99225 z} \left(4 e^{z/2} (256 z^9 + 10496 z^8 + 153792 z^7 + 1001280 z^6 + 2921520 z^5 + 3341520 z^4 + 942120 z^3 - 43560 z^2 + 2025 z + 675) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.amyz.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{e^z (128 z^7 + 4672 z^6 + 59616 z^5 + 327600 z^4 + 768600 z^3 + 646380 z^2 + 100170 z - 6615)}{6615}$$

07.25.03.amyz.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = -\frac{1}{33075z} \left(4e^{z/2} (256z^8 + 8320z^7 + 93248z^6 + 444864z^5 + 905520z^4 + 683280z^3 + 106200z^2 - 8280z - 315) I_0\left(\frac{z}{2}\right) - \frac{1}{33075z^2} \left(4e^{z/2} (256z^9 + 8064z^8 + 85312z^7 + 363328z^6 + 577584z^5 + 223920z^4 - 13320z^3 + 1080z^2 + 45z + 1260) I_1\left(\frac{z}{2}\right)\right) \right)$$

07.25.03.amz0.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{1}{945} e^z (64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945)$$

07.25.03.amz1.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = -\frac{1}{33075z^2} \left(32e^{z/2} (128z^8 + 2944z^7 + 21504z^6 + 59136z^5 + 56160z^4 + 10800z^3 - 1440z^2 + 1260z - 2835) I_0\left(\frac{z}{2}\right) - \frac{1}{33075z^3} \left(128e^{z/2} (32z^9 + 704z^8 + 4688z^7 + 10416z^6 + 5364z^5 - 360z^4 - 90z^3 + 495z^2 - 1260z + 2835) I_1\left(\frac{z}{2}\right)\right) \right)$$

07.25.03.amz2.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{1}{105} e^z (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105)$$

07.25.03.amz3.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = -\frac{1}{6615z^3} \left(32e^{z/2} (128z^8 + 1728z^7 + 6720z^6 + 7632z^5 + 3600z^4 - 9720z^3 + 40320z^2 - 127575z + 249480) I_0\left(\frac{z}{2}\right) - \frac{1}{6615z^4} \left(32e^{z/2} (128z^9 + 1600z^8 + 5184z^7 + 3120z^6 + 1872z^5 - 11880z^4 + 54000z^3 - 192465z^2 + 510300z - 997920) I_1\left(\frac{z}{2}\right)\right) \right)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{1}{2}$

07.25.03.amz4.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{99225} \left(e^z (512z^9 + 28928z^8 + 622080z^7 + 6516480z^6 + 35405760z^5 + 98465760z^4 + 129759840z^3 + 68266800z^2 + 9724050z + 99225)\right)$$

07.25.03.amz5.01

$$\begin{aligned}
 {}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, 1; z\right) = & \frac{1}{99225} \left(e^{z/2} (256 z^9 + 13568 z^8 + 272832 z^7 + 2669760 z^6 + 13606320 z^5 + 36051120 z^4 + 47081160 z^3 + \right. \\
 & \left. 26729640 z^2 + 4862025 z + 99225) I_0\left(\frac{z}{2}\right) + \right. \\
 & \left. \frac{1}{99225} \left(e^{z/2} (256 z^9 + 13312 z^8 + 259648 z^7 + 2416512 z^6 + 11307120 z^5 + 25730880 z^4 + \right. \right. \\
 & \left. \left. 25242840 z^3 + 8008560 z^2 + 343665 z) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

07.25.03.amz6.01

$$\begin{aligned}
 {}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = & \frac{1}{99225} \\
 & (e^z (256 z^8 + 12288 z^7 + 218880 z^6 + 1835520 z^5 + 7607520 z^4 + 14999040 z^3 + 12383280 z^2 + 3175200 z + 99225))
 \end{aligned}$$

07.25.03.amz7.01

$$\begin{aligned}
 {}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, 2; z\right) = & \frac{1}{99225} \left(e^{z/2} (256 z^8 + 11392 z^7 + 187200 z^6 + 1444800 z^5 + 5535600 z^4 + 10296720 z^3 + 8459640 z^2 + \right. \\
 & \left. 2406600 z + 99225) I_0\left(\frac{z}{2}\right) + \frac{1}{99225} \right. \\
 & \left. \left(e^{z/2} (256 z^8 + 11136 z^7 + 176192 z^6 + 1273920 z^5 + 4339440 z^4 + 6449520 z^3 + 3328920 z^2 + 294840 z - 1575) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

07.25.03.amz8.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 5056 z^6 + 71520 z^5 + 452880 z^4 + 1312920 z^3 + 1591380 z^2 + 621810 z + 33075)}{33075}$$

07.25.03.amz9.01

$$\begin{aligned}
 {}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, 3; z\right) = & \frac{32 e^{z/2} (16 z^7 + 576 z^6 + 7368 z^5 + 42000 z^4 + 110250 z^3 + 124920 z^2 + 49635 z + 3105) I_0\left(\frac{z}{2}\right) +}{99225} \\
 & \frac{1}{99225 z} \left(4 e^{z/2} (128 z^8 + 4480 z^7 + 54528 z^6 + 283584 z^5 + 621600 z^4 + 477360 z^3 + 67680 z^2 - 720 z - 135) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

07.25.03.amza.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (64 z^6 + 1984 z^5 + 20880 z^4 + 90720 z^3 + 157500 z^2 + 86940 z + 6615)}{6615}$$

07.25.03.amzb.01

$$\begin{aligned}
 {}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, 4; z\right) = & \frac{4 e^{z/2} (128 z^7 + 3520 z^6 + 32448 z^5 + 122640 z^4 + 187920 z^3 + 98280 z^2 + 8280 z + 45) I_0\left(\frac{z}{2}\right) +}{33075 z} \\
 & \frac{1}{33075 z^2} \left(4 e^{z/2} (128 z^8 + 3392 z^7 + 29120 z^6 + 95088 z^5 + 104400 z^4 + 21240 z^3 - 360 z^2 - 45 z - 180) I_1\left(\frac{z}{2}\right) \right)
 \end{aligned}$$

07.25.03.amzc.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945)$$

07.25.03.amzd.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{32 e^{z/2} (64 z^7 + 1216 z^6 + 7056 z^5 + 14640 z^4 + 9720 z^3 + 1080 z^2 - 135 z + 315) I_0\left(\frac{z}{2}\right) + 32 e^{z/2} (64 z^8 + 1152 z^7 + 5936 z^6 + 9216 z^5 + 2520 z^4 - 225 z^2 + 540 z - 1260) I_1\left(\frac{z}{2}\right)}{33075 z^2}$$

07.25.03.amze.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{105} e^z (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105)$$

07.25.03.amzf.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 + 672 z^6 + 1968 z^5 + 1440 z^4 + 1080 z^3 - 3690 z^2 + 11655 z - 22680) I_0\left(\frac{z}{2}\right) + \frac{1}{6615 z^4} 32 e^{z/2} (64 z^8 + 608 z^7 + 1392 z^6 + 288 z^5 + 1080 z^4 - 4950 z^3 + 17595 z^2 - 46620 z + 90720) I_1\left(\frac{z}{2}\right)}{6615 z^3}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 1$

07.25.03.amzg.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{99225} \left(e^{z/2} (128 z^8 + 5760 z^7 + 96000 z^6 + 754752 z^5 + 2965536 z^4 + 5720400 z^3 + 4979520 z^2 + 1587600 z + 99225) I_0\left(\frac{z}{2}\right) + \frac{1}{99225} 8 e^{z/2} (16 z^8 + 704 z^7 + 11304 z^6 + 83376 z^5 + 292314 z^4 + 455112 z^3 + 257355 z^2 + 30555 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.amzh.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \frac{e^{z/2} (64 z^7 + 2368 z^6 + 31376 z^5 + 187440 z^4 + 525336 z^3 + 656880 z^2 + 310905 z + 33075) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^7 + 2304 z^6 + 29104 z^5 + 159424 z^4 + 378360 z^3 + 335496 z^2 + 70455 z) I_1\left(\frac{z}{2}\right)}{33075}$$

07.25.03.amzi.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{e^{z/2} (32 z^6 + 928 z^5 + 9168 z^4 + 38064 z^3 + 66738 z^2 + 43470 z + 6615) I_0\left(\frac{z}{2}\right) + 2 e^{z/2} (16 z^6 + 448 z^5 + 4144 z^4 + 15096 z^3 + 19947 z^2 + 6384 z) I_1\left(\frac{z}{2}\right)}{6615}$$

07.25.03.amzj.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{945} e^{z/2} (16 z^5 + 336 z^4 + 2220 z^3 + 5484 z^2 + 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^5 + 320 z^4 + 1908 z^3 + 3720 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)$$

07.25.03.amzk.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; 1, \frac{11}{2}; z\right) = \frac{1}{105} e^{z/2} (8 z^4 + 104 z^3 + 376 z^2 + 420 z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} (2 z^4 + 24 z^3 + 71 z^2 + 44 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{3}{2}$

07.25.03.amzl.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{e^z (128 z^7 + 5184 z^6 + 75 744 z^5 + 501 168 z^4 + 1 548 504 z^3 + 2 079 756 z^2 + 992 250 z + 99 225)}{99 225}$$

07.25.03.amzm.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{99 225} e^{z/2} (128 z^7 + 4800 z^6 + 64 704 z^5 + 395 472 z^4 + 1 144 080 z^3 + 1 499 400 z^2 + 768 600 z + 99 225) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (128 z^7 + 4672 z^6 + 60 096 z^5 + 337 584 z^4 + 832 272 z^3 + 788 760 z^2 + 194 040 z + 1575) I_1\left(\frac{z}{2}\right)}{99 225}$$

07.25.03.amzn.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (64 z^6 + 2112 z^5 + 24 144 z^4 + 117 792 z^3 + 244 188 z^2 + 185 220 z + 33 075)}{33 075}$$

07.25.03.amzo.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 + 1920 z^5 + 19 824 z^4 + 87 360 z^3 + 166 680 z^2 + 123 840 z + 24 795) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 + 1856 z^6 + 18 000 z^5 + 70 224 z^4 + 103 800 z^3 + 42 120 z^2 + 765 z + 45) I_1\left(\frac{z}{2}\right)}{99 225 z}$$

07.25.03.amzp.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (32 z^5 + 816 z^4 + 6768 z^3 + 21 672 z^2 + 24 570 z + 6615)}{6615}$$

07.25.03.amzq.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^6 + 1440 z^5 + 10 416 z^4 + 29 088 z^3 + 29 880 z^2 + 8262 z - 9) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 + 1376 z^6 + 9072 z^5 + 20 640 z^4 + 12 600 z^3 + 378 z^2 + 27 z + 36) I_1\left(\frac{z}{2}\right)}{33 075 z^2}$$

07.25.03.amzr.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{945} e^z (16 z^4 + 288 z^3 + 1512 z^2 + 2520 z + 945)$$

07.25.03.amzs.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 + 480 z^5 + 2064 z^4 + 2880 z^3 + 1026 z^2 + 18 z - 45) I_0\left(\frac{z}{2}\right) + 64 e^{z/2} (16 z^7 + 224 z^6 + 816 z^5 + 720 z^4 + 27 z^3 + 18 z^2 - 36 z + 90) I_1\left(\frac{z}{2}\right)}{33 075 z^3}$$

07.25.03.amzt.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{105} e^z (8 z^3 + 84 z^2 + 210 z + 105)$$

07.25.03.amzu.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^6 + 240 z^5 + 480 z^4 + 108 z^3 + 414 z^2 - 1305 z + 2520) I_0\left(\frac{z}{2}\right)}{6615 z^3} + \frac{32 e^{z/2} (32 z^7 + 208 z^6 + 288 z^5 - 108 z^4 + 558 z^3 - 1971 z^2 + 5220 z - 10080) I_1\left(\frac{z}{2}\right)}{6615 z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 2$

07.25.03.amzv.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \frac{e^{z/2} (64 z^6 + 1952 z^5 + 20592 z^4 + 93408 z^3 + 185640 z^2 + 146790 z + 33075) I_0\left(\frac{z}{2}\right)}{33075} + \frac{e^{z/2} (64 z^6 + 1888 z^5 + 18736 z^4 + 75552 z^3 + 117768 z^2 + 53130 z + 1575) I_1\left(\frac{z}{2}\right)}{33075}$$

07.25.03.amzw.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{e^{z/2} (32 z^5 + 752 z^4 + 5760 z^3 + 17388 z^2 + 19950 z + 6615) I_0\left(\frac{z}{2}\right)}{6615} + \frac{e^{z/2} (32 z^5 + 720 z^4 + 5056 z^3 + 12660 z^2 + 9198 z + 525) I_1\left(\frac{z}{2}\right)}{6615}$$

07.25.03.amzx.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{945} e^{z/2} (16 z^4 + 264 z^3 + 1284 z^2 + 2100 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^4 + 248 z^3 + 1044 z^2 + 1164 z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.amzy.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; 2, \frac{11}{2}; z\right) = \frac{1}{105} e^{z/2} (8 z^3 + 76 z^2 + 180 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8 z^3 + 68 z^2 + 116 z + 15) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{5}{2}$

07.25.03.amzz.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (32 z^5 + 848 z^4 + 7408 z^3 + 25560 z^2 + 32634 z + 11025)}{11025}$$

07.25.03.an00.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{8 e^{z/2} (16 z^5 + 384 z^4 + 3024 z^3 + 9480 z^2 + 11475 z + 4140) I_0\left(\frac{z}{2}\right)}{33075} + \frac{4 e^{z/2} (32 z^6 + 736 z^5 + 5328 z^4 + 13968 z^3 + 11010 z^2 + 810 z - 45) I_1\left(\frac{z}{2}\right)}{33075 z}$$

07.25.03.an01.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (16 z^4 + 320 z^3 + 1944 z^2 + 4032 z + 2205)}{2205}$$

07.25.03.an02.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (32 z^5 + 560 z^4 + 2944 z^3 + 5340 z^2 + 2766 z + 3) I_0\left(\frac{z}{2}\right)}{11025 z} + \frac{4 e^{z/2} (32 z^6 + 528 z^5 + 2432 z^4 + 3140 z^3 + 414 z^2 - 39 z - 12) I_1\left(\frac{z}{2}\right)}{11025 z^2}$$

07.25.03.an03.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{315} e^z (8 z^3 + 108 z^2 + 378 z + 315)$$

07.25.03.an04.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (16 z^5 + 176 z^4 + 492 z^3 + 348 z^2 - 3 z + 9) I_0\left(\frac{z}{2}\right)}{11025 z^2} + \frac{32 e^{z/2} (16 z^6 + 160 z^5 + 340 z^4 + 72 z^3 - 15 z^2 + 12 z - 36) I_1\left(\frac{z}{2}\right)}{11025 z^3}$$

07.25.03.an05.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{35} e^z (4 z^2 + 28 z + 35)$$

07.25.03.an06.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (16 z^5 + 72 z^4 + 84 z^3 - 60 z^2 + 189 z - 360) I_0\left(\frac{z}{2}\right)}{2205 z^3} + \frac{32 e^{z/2} (16 z^6 + 56 z^5 + 36 z^4 - 84 z^3 + 285 z^2 - 756 z + 1440) I_1\left(\frac{z}{2}\right)}{2205 z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 3$

07.25.03.an07.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{4 e^{z/2} (16 z^4 + 288 z^3 + 1572 z^2 + 3000 z + 1665) I_0\left(\frac{z}{2}\right)}{6615} + \frac{4 e^{z/2} (16 z^5 + 272 z^4 + 1308 z^3 + 1812 z^2 + 285 z - 45) I_1\left(\frac{z}{2}\right)}{6615 z}$$

07.25.03.an08.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{16}{945} e^{z/2} (2 z^3 + 24 z^2 + 75 z + 60) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8 z^4 + 88 z^3 + 216 z^2 + 60 z - 15) I_1\left(\frac{z}{2}\right)}{945 z}$$

07.25.03.an09.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; 3, \frac{11}{2}; z\right) = \frac{4}{105} e^{z/2} (4 z^2 + 24 z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4 z^3 + 20 z^2 + 9 z - 3) I_1\left(\frac{z}{2}\right)}{105 z}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{7}{2}$

07.25.03.an0a.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{441} e^z (8 z^3 + 116 z^2 + 450 z + 441)$$

07.25.03.an0b.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{4 e^{z/2} (16 z^4 + 200 z^3 + 660 z^2 + 564 z - 3) I_0\left(\frac{z}{2}\right)}{2205 z} + \frac{4 e^{z/2} (16 z^5 + 184 z^4 + 484 z^3 + 156 z^2 - 51 z + 12) I_1\left(\frac{z}{2}\right)}{2205 z^2}$$

07.25.03.an0c.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{63} e^z (4 z^2 + 36 z + 63)$$

07.25.03.an0d.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 + 56 z^3 + 72 z^2 - 3) I_0\left(\frac{z}{2}\right)}{2205 z^2} + \frac{128 e^{z/2} (2 z^5 + 12 z^4 + 7 z^3 - 3 z^2 + 3) I_1\left(\frac{z}{2}\right)}{2205 z^3}$$

07.25.03.an0e.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{7} e^z (2 z + 7)$$

07.25.03.an0f.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^4 + 12 z^3 + 12 z^2 - 39 z + 72) I_0\left(\frac{z}{2}\right)}{441 z^3} + \frac{32 e^{z/2} (8 z^5 + 4 z^4 + 12 z^3 - 57 z^2 + 156 z - 288) I_1\left(\frac{z}{2}\right)}{441 z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 4$

07.25.03.an0g.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; 4, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (8 z^3 + 60 z^2 + 84 z - 3) I_0\left(\frac{z}{2}\right)}{315 z} + \frac{4 e^{z/2} (8 z^4 + 52 z^3 + 36 z^2 - 21 z + 12) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.an0h.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; 4, \frac{11}{2}; z\right) = \frac{4 e^{z/2} (4 z^2 + 10 z - 1) I_0\left(\frac{z}{2}\right)}{35 z} + \frac{4 e^{z/2} (4 z^3 + 6 z^2 - 5 z + 4) I_1\left(\frac{z}{2}\right)}{35 z^2}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{9}{2}$

07.25.03.an0i.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{9} e^z (2 z + 9)$$

07.25.03.an0j.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (4 z^3 + 12 z^2 - 3 z + 3) I_0\left(\frac{z}{2}\right)}{315 z^2} + \frac{32 e^{z/2} (4 z^4 + 8 z^3 - 9 z^2 + 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3}$$

07.25.03.an0k.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = e^z$$

07.25.03.an0l.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (4 z^3 - 6 z^2 + 15 z - 24) I_0\left(\frac{z}{2}\right)}{63 z^3} + \frac{32 e^{z/2} (4 z^4 - 10 z^3 + 27 z^2 - 60 z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 5$

07.25.03.an0m.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; 5, \frac{11}{2}; z\right) = \frac{32 e^{z/2} (2z^2 - 2z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} + \frac{64 e^{z/2} (z^3 - 2z^2 + 4z - 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{11}{2}$

07.25.03.an0n.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{9 e^z (8z^3 - 28z^2 + 70z - 105)}{16 z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.an0o.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9 e^{-z} (8z^3 + 28z^2 + 70z + 105)}{16 z^4}$$

07.25.03.an0p.01

$${}_2F_2\left(\frac{9}{2}, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (2z^2 - 9z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{32 e^{z/2} (2z^3 - 11z^2 + 36z - 96) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = -\frac{11}{2}$

07.25.03.an0q.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{170188239375} (8192 z^{21} + 1695744 z^{20} + 152408064 z^{19} + 7846062080 z^{18} + 257075735040 z^{17} + 5635194808320 z^{16} + 84586463216640 z^{15} + 875290744258560 z^{14} + 6205201319116800 z^{13} + 29574586873036800 z^{12} + 91601955938304000 z^{11} + 174461072462208000 z^{10} + 186584428079078400 z^9 + 95389309247904000 z^8 + 16559908106112000 z^7 + 290385439344000 z^6 + 4168212048000 z^5 + 551675124000 z^4 + 204324120000 z^3 + 144402142500 z^2 + 151903552500 z + 170188239375) + \frac{1}{170188239375} (256 e^z \sqrt{\pi} (32 z^{43/2} + 6640 z^{41/2} + 598640 z^{39/2} + 30943080 z^{37/2} + 1019236890 z^{35/2} + 22499970675 z^{33/2} + 340955710200 z^{31/2} + 3574431985950 z^{29/2} + 25806888878400 z^{27/2} + 126265641415200 z^{25/2} + 406589592729600 z^{23/2} + 822296499192000 z^{21/2} + 970046334432000 z^{19/2} + 590352298704000 z^{17/2} + 147192619392000 z^{15/2} + 8491881888000 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an0r.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{170\,188\,239\,375} \left(-8192 z^{21} + 1\,695\,744 z^{20} - 152\,408\,064 z^{19} + 7\,846\,062\,080 z^{18} - 257\,075\,735\,040 z^{17} + 5\,635\,194\,808\,320 z^{16} - 84\,586\,463\,216\,640 z^{15} + 875\,290\,744\,258\,560 z^{14} - 6\,205\,201\,319\,116\,800 z^{13} + 29\,574\,586\,873\,036\,800 z^{12} - 91\,601\,955\,938\,304\,000 z^{11} + 174\,461\,072\,462\,208\,000 z^{10} - 186\,584\,428\,079\,078\,400 z^9 + 95\,389\,309\,247\,904\,000 z^8 - 16\,559\,908\,106\,112\,000 z^7 + 290\,385\,439\,344\,000 z^6 - 4\,168\,212\,048\,000 z^5 + 551\,675\,124\,000 z^4 - 204\,324\,120\,000 z^3 + 144\,402\,142\,500 z^2 - 151\,903\,552\,500 z + 170\,188\,239\,375 \right) + \frac{1}{170\,188\,239\,375} \left(256 e^{-z} \sqrt{\pi} \left(32 z^{43/2} - 6640 z^{41/2} + 598\,640 z^{39/2} - 30\,943\,080 z^{37/2} + 1\,019\,236\,890 z^{35/2} - 22\,499\,970\,675 z^{33/2} + 340\,955\,710\,200 z^{31/2} - 3\,574\,431\,985\,950 z^{29/2} + 25\,806\,888\,878\,400 z^{27/2} - 126\,265\,641\,415\,200 z^{25/2} + 406\,589\,592\,729\,600 z^{23/2} - 822\,296\,499\,192\,000 z^{21/2} + 970\,046\,334\,432\,000 z^{19/2} - 590\,352\,298\,704\,000 z^{17/2} + 147\,192\,619\,392\,000 z^{15/2} - 8\,491\,881\,888\,000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an0s.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{15\,471\,658\,125} \left(-4096 z^{20} - 786\,432 z^{19} - 65\,196\,032 z^{18} - 3\,075\,870\,720 z^{17} - 91\,659\,052\,800 z^{16} - 1\,810\,807\,810\,560 z^{15} - 24\,227\,422\,894\,080 z^{14} - 220\,402\,280\,448\,000 z^{13} - 1\,349\,596\,342\,886\,400 z^{12} - 5\,426\,729\,699\,328\,000 z^{11} - 13\,721\,423\,877\,504\,000 z^{10} - 20\,303\,656\,674\,739\,200 z^9 - 15\,527\,122\,969\,478\,400 z^8 - 4\,795\,328\,780\,928\,000 z^7 - 290\,385\,439\,344\,000 z^6 + 4\,168\,212\,048\,000 z^5 + 183\,891\,708\,000 z^4 + 40\,864\,824\,000 z^3 + 20\,628\,877\,500 z^2 + 16\,878\,172\,500 z + 15\,471\,658\,125 \right) - \frac{1}{15\,471\,658\,125} \left(128 e^z \sqrt{\pi} \left(32 z^{41/2} + 6160 z^{39/2} + 512\,400 z^{37/2} + 24\,281\,880 z^{35/2} + 727\,854\,330 z^{33/2} + 14\,493\,573\,045 z^{31/2} + 196\,019\,979\,750 z^{29/2} + 1\,810\,252\,168\,200 z^{27/2} + 11\,324\,871\,532\,800 z^{25/2} + 46\,991\,540\,685\,600 z^{23/2} + 124\,640\,348\,616\,000 z^{21/2} + 199\,094\,756\,112\,000 z^{19/2} + 173\,667\,309\,984\,000 z^{17/2} + 69\,350\,368\,752\,000 z^{15/2} + 8\,491\,881\,888\,000 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an0t.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; -z\right) = \frac{1}{15\,471\,658\,125} \left(-4096 z^{20} + 786\,432 z^{19} - 65\,196\,032 z^{18} + 3\,075\,870\,720 z^{17} - 91\,659\,052\,800 z^{16} + 1\,810\,807\,810\,560 z^{15} - 24\,227\,422\,894\,080 z^{14} + 220\,402\,280\,448\,000 z^{13} - 1\,349\,596\,342\,886\,400 z^{12} + 5\,426\,729\,699\,328\,000 z^{11} - 13\,721\,423\,877\,504\,000 z^{10} + 20\,303\,656\,674\,739\,200 z^9 - 15\,527\,122\,969\,478\,400 z^8 + 4\,795\,328\,780\,928\,000 z^7 - 290\,385\,439\,344\,000 z^6 - 4\,168\,212\,048\,000 z^5 + 183\,891\,708\,000 z^4 - 40\,864\,824\,000 z^3 + 20\,628\,877\,500 z^2 - 16\,878\,172\,500 z + 15\,471\,658\,125 \right) + \frac{1}{15\,471\,658\,125} \left(128 e^{-z} \sqrt{\pi} \left(32 z^{41/2} - 6160 z^{39/2} + 512\,400 z^{37/2} - 24\,281\,880 z^{35/2} + 727\,854\,330 z^{33/2} - 14\,493\,573\,045 z^{31/2} + 196\,019\,979\,750 z^{29/2} - 1\,810\,252\,168\,200 z^{27/2} + 11\,324\,871\,532\,800 z^{25/2} - 46\,991\,540\,685\,600 z^{23/2} + 124\,640\,348\,616\,000 z^{21/2} - 199\,094\,756\,112\,000 z^{19/2} + 173\,667\,309\,984\,000 z^{17/2} - 69\,350\,368\,752\,000 z^{15/2} + 8\,491\,881\,888\,000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an0u.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{1719073125} (2048 z^{19} + 362496 z^{18} + 27524096 z^{17} + 1180300800 z^{16} + 31679235200 z^{15} + 557489694720 z^{14} +$$

$$6553298304000 z^{13} + 51465497395200 z^{12} + 265777666560000 z^{11} + 872470859904000 z^{10} +$$

$$1715638887244800 z^9 + 1821333435667200 z^8 + 850369668019200 z^7 + 96795146448000 z^6 -$$

$$4168212048000 z^5 + 183891708000 z^4 + 13621608000 z^3 + 4125775500 z^2 + 2411167500 z + 1719073125) +$$

$$\frac{1}{1719073125} \left(64 e^z \sqrt{\pi} (32 z^{39/2} + 5680 z^{37/2} + 432880 z^{35/2} + 18654440 z^{33/2} + 504001050 z^{31/2} + 8949561495 z^{29/2} +$$

$$106524364800 z^{27/2} + 851532885000 z^{25/2} + 4512608452800 z^{23/2} + 15403281516000 z^{21/2} +$$

$$32220659520000 z^{19/2} + 37991458512000 z^{17/2} + 21701475936000 z^{15/2} + 4245940944000 z^{13/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.an0v.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{1719073125} (-2048 z^{19} + 362496 z^{18} - 27524096 z^{17} + 1180300800 z^{16} - 31679235200 z^{15} + 557489694720 z^{14} -$$

$$6553298304000 z^{13} + 51465497395200 z^{12} - 265777666560000 z^{11} + 872470859904000 z^{10} -$$

$$1715638887244800 z^9 + 1821333435667200 z^8 - 850369668019200 z^7 + 96795146448000 z^6 +$$

$$4168212048000 z^5 + 183891708000 z^4 - 13621608000 z^3 + 4125775500 z^2 - 2411167500 z + 1719073125) +$$

$$\frac{1}{1719073125} \left(64 e^{-z} \sqrt{\pi} (32 z^{39/2} - 5680 z^{37/2} + 432880 z^{35/2} - 18654440 z^{33/2} + 504001050 z^{31/2} - 8949561495 z^{29/2} +$$

$$106524364800 z^{27/2} - 851532885000 z^{25/2} + 4512608452800 z^{23/2} - 15403281516000 z^{21/2} +$$

$$32220659520000 z^{19/2} - 37991458512000 z^{17/2} + 21701475936000 z^{15/2} - 4245940944000 z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.an0w.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{245581875} (-1024 z^{18} - 165888 z^{17} - 11440128 z^{16} - 441510400 z^{15} - 10547010240 z^{14} - 162934934400 z^{13} -$$

$$1652070806400 z^{12} - 10934205004800 z^{11} - 46077921792000 z^{10} - 117660357964800 z^9 -$$

$$166306093228800 z^8 - 108541370649600 z^7 - 19359029289600 z^6 + 1389404016000 z^5 -$$

$$183891708000 z^4 + 13621608000 z^3 + 1375258500 z^2 + 482233500 z + 245581875) -$$

$$\frac{1}{245581875} \left(32 e^z \sqrt{\pi} (32 z^{37/2} + 5200 z^{35/2} + 360080 z^{33/2} + 13973400 z^{31/2} + 336320250 z^{29/2} +$$

$$5250038745 z^{27/2} + 54023977350 z^{25/2} + 365317088850 z^{23/2} + 1590071742000 z^{21/2} +$$

$$4272779322000 z^{19/2} + 6583983588000 z^{17/2} + 5071540572000 z^{15/2} + 1415313648000 z^{13/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.an0x.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{245\,581\,875} \left(-1024 z^{18} + 165\,888 z^{17} - 11\,440\,128 z^{16} + 441\,510\,400 z^{15} - 10\,547\,010\,240 z^{14} + 162\,934\,934\,400 z^{13} - 1\,652\,070\,806\,400 z^{12} + 10\,934\,205\,004\,800 z^{11} - 46\,077\,921\,792\,000 z^{10} + 117\,660\,357\,964\,800 z^9 - 166\,306\,093\,228\,800 z^8 + 108\,541\,370\,649\,600 z^7 - 19\,359\,029\,289\,600 z^6 - 1\,389\,404\,016\,000 z^5 - 183\,891\,708\,000 z^4 - 13\,621\,608\,000 z^3 + 1\,375\,258\,500 z^2 - 482\,233\,500 z + 245\,581\,875 \right) + \frac{1}{245\,581\,875} \left(32 e^{-z} \sqrt{\pi} \left(32 z^{37/2} - 5200 z^{35/2} + 360\,080 z^{33/2} - 13\,973\,400 z^{31/2} + 336\,320\,250 z^{29/2} - 5\,250\,038\,745 z^{27/2} + 54\,023\,977\,350 z^{25/2} - 365\,317\,088\,850 z^{23/2} + 1\,590\,071\,742\,000 z^{21/2} - 4\,272\,779\,322\,000 z^{19/2} + 6\,583\,983\,588\,000 z^{17/2} - 5\,071\,540\,572\,000 z^{15/2} + 1\,415\,313\,648\,000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an0y.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{49\,116\,375} \left(512 z^{17} + 75\,264 z^{16} + 4\,666\,624 z^{15} + 160\,126\,080 z^{14} + 3\,354\,233\,760 z^{13} + 44\,645\,462\,400 z^{12} + 381\,077\,726\,400 z^{11} + 2\,056\,179\,686\,400 z^{10} + 6\,736\,769\,625\,600 z^9 + 12\,373\,885\,036\,800 z^8 + 10\,802\,095\,718\,400 z^7 + 2\,765\,575\,612\,800 z^6 - 277\,880\,803\,200 z^5 + 61\,297\,236\,000 z^4 - 13\,621\,608\,000 z^3 + 1\,375\,258\,500 z^2 + 160\,744\,500 z + 49\,116\,375 \right) + \frac{1}{49\,116\,375} \left(16 e^z \sqrt{\pi} \left(32 z^{35/2} + 4\,720 z^{33/2} + 294\,000 z^{31/2} + 10\,151\,400 z^{29/2} + 214\,503\,450 z^{27/2} + 2\,890\,500\,795 z^{25/2} + 25\,118\,969\,400 z^{23/2} + 139\,246\,364\,250 z^{21/2} + 476\,100\,828\,000 z^{19/2} + 940\,073\,526\,000 z^{17/2} + 943\,542\,432\,000 z^{15/2} + 353\,828\,412\,000 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an0z.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{49\,116\,375} \left(-512 z^{17} + 75\,264 z^{16} - 4\,666\,624 z^{15} + 160\,126\,080 z^{14} - 3\,354\,233\,760 z^{13} + 44\,645\,462\,400 z^{12} - 381\,077\,726\,400 z^{11} + 2\,056\,179\,686\,400 z^{10} - 6\,736\,769\,625\,600 z^9 + 12\,373\,885\,036\,800 z^8 - 10\,802\,095\,718\,400 z^7 + 2\,765\,575\,612\,800 z^6 + 277\,880\,803\,200 z^5 + 61\,297\,236\,000 z^4 + 13\,621\,608\,000 z^3 + 1\,375\,258\,500 z^2 - 160\,744\,500 z + 49\,116\,375 \right) + \frac{1}{49\,116\,375} \left(16 e^{-z} \sqrt{\pi} \left(32 z^{35/2} - 4\,720 z^{33/2} + 294\,000 z^{31/2} - 10\,151\,400 z^{29/2} + 214\,503\,450 z^{27/2} - 2\,890\,500\,795 z^{25/2} + 25\,118\,969\,400 z^{23/2} - 139\,246\,364\,250 z^{21/2} + 476\,100\,828\,000 z^{19/2} - 940\,073\,526\,000 z^{17/2} + 943\,542\,432\,000 z^{15/2} - 353\,828\,412\,000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an10.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{16\,372\,125} \left(-256 z^{16} - 33\,792 z^{15} - 1\,860\,352 z^{14} - 55\,895\,040 z^{13} - 1\,007\,265\,520 z^{12} - 11\,268\,583\,200 z^{11} - 78\,294\,686\,400 z^{10} - 328\,034\,434\,560 z^9 - 772\,806\,182\,400 z^8 - 879\,076\,800\,000 z^7 - 307\,286\,179\,200 z^6 + 39\,697\,257\,600 z^5 - 12\,259\,447\,200 z^4 + 4\,540\,536\,000 z^3 - 1\,375\,258\,500 z^2 + 160\,744\,500 z + 16\,372\,125 \right) - \frac{1}{16\,372\,125} \left(8 e^z \sqrt{\pi} \left(32 z^{33/2} + 4\,240 z^{31/2} + 234\,640 z^{29/2} + 7\,101\,080 z^{27/2} + 129\,290\,490 z^{25/2} + 1\,468\,305\,405 z^{23/2} + 10\,435\,915\,350 z^{21/2} + 45\,323\,126\,100 z^{19/2} + 113\,515\,819\,200 z^{17/2} + 145\,462\,791\,600 z^{15/2} + 70\,765\,682\,400 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an11.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{16372125} \left(-256 z^{16} + 33792 z^{15} - 1860352 z^{14} + 55895040 z^{13} - 1007265520 z^{12} + 11268583200 z^{11} - \right.$$

$$\left. 78294686400 z^{10} + 328034434560 z^9 - 772806182400 z^8 + 879076800000 z^7 - 307286179200 z^6 - \right.$$

$$\left. 39697257600 z^5 - 12259447200 z^4 - 4540536000 z^3 - 1375258500 z^2 - 160744500 z + 16372125 \right) + \frac{1}{16372125}$$

$$\left(8 e^{-z} \sqrt{\pi} \left(32 z^{33/2} - 4240 z^{31/2} + 234640 z^{29/2} - 7101080 z^{27/2} + 129290490 z^{25/2} - 1468305405 z^{23/2} + 10435915350 \right. \right.$$

$$\left. z^{21/2} - 45323126100 z^{19/2} + 113515819200 z^{17/2} - 145462791600 z^{15/2} + 70765682400 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.an12.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{16372125} \left(128 z^{15} + 14976 z^{14} + 720576 z^{13} + 18587360 z^{12} + 280926600 z^{11} + 2552558400 z^{10} + 13742006880 z^9 + \right.$$

$$\left. 41336144640 z^8 + 60363273600 z^7 + 27935107200 z^6 - 4410806400 z^5 + \right.$$

$$\left. 1751349600 z^4 - 908107200 z^3 + 458419500 z^2 - 160744500 z + 16372125 \right) +$$

$$\frac{1}{16372125} \left(4 e^z \sqrt{\pi} \left(32 z^{31/2} + 3760 z^{29/2} + 182000 z^{27/2} + 4735080 z^{25/2} + 72469530 z^{23/2} + 671140575 z^{21/2} + \right. \right.$$

$$\left. 3724509600 z^{19/2} + 11802539700 z^{17/2} + 19095501600 z^{15/2} + 11794280400 z^{13/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.an13.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, \frac{1}{2}; -z\right) =$$

$$\frac{1}{16372125} \left(-128 z^{15} + 14976 z^{14} - 720576 z^{13} + 18587360 z^{12} - 280926600 z^{11} + 2552558400 z^{10} - \right.$$

$$\left. 13742006880 z^9 + 41336144640 z^8 - 60363273600 z^7 + 27935107200 z^6 + 4410806400 z^5 + \right.$$

$$\left. 1751349600 z^4 + 908107200 z^3 + 458419500 z^2 + 160744500 z + 16372125 \right) +$$

$$\frac{1}{16372125} \left(4 e^{-z} \sqrt{\pi} \left(32 z^{31/2} - 3760 z^{29/2} + 182000 z^{27/2} - 4735080 z^{25/2} + 72469530 z^{23/2} - 671140575 z^{21/2} + \right. \right.$$

$$\left. 3724509600 z^{19/2} - 11802539700 z^{17/2} + 19095501600 z^{15/2} - 11794280400 z^{13/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.an14.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, 1; z\right) =$$

$$\frac{1}{130977000} \left(e^z \left(1024 z^{15} + 112640 z^{14} + 5062400 z^{13} + 121004800 z^{12} + 1677648000 z^{11} + 13798686720 z^{10} + \right. \right.$$

$$\left. 66004764000 z^9 + 171325476000 z^8 + 203771200500 z^7 + 61454673000 z^6 - 13907078325 z^5 + \right.$$

$$\left. 6901594875 z^4 - 3988845000 z^3 + 2083725000 z^2 - 773955000 z + 130977000 \right)$$

07.25.03.an15.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{16372125} \left(2 e^z \sqrt{\pi} (32 z^8 + 3280 z^7 + 136080 z^6 + 2966040 z^5 + 36877050 z^4 + 265493025 z^3 + 1069579350 z^2 + 2176325550 z + 1684897200) \operatorname{erf}(\sqrt{z}) z^{13/2} \right) + \frac{1}{16372125} (64 z^{14} + 6528 z^{13} + 268928 z^{12} + 5800800 z^{11} + 70980300 z^{10} + 498088920 z^9 + 1919461320 z^8 + 3574912320 z^7 + 2148854400 z^6 - 400982400 z^5 + 194594400 z^4 - 129729600 z^3 + 91683900 z^2 - 53581500 z + 16372125)$$

07.25.03.an16.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{16372125} (64 z^{14} - 6528 z^{13} + 268928 z^{12} - 5800800 z^{11} + 70980300 z^{10} - 498088920 z^9 + 1919461320 z^8 - 3574912320 z^7 + 2148854400 z^6 + 400982400 z^5 + 194594400 z^4 + 129729600 z^3 + 91683900 z^2 + 53581500 z + 16372125) - \frac{1}{16372125} \left(2 e^{-z} \sqrt{\pi} z^{13/2} (32 z^8 - 3280 z^7 + 136080 z^6 - 2966040 z^5 + 36877050 z^4 - 265493025 z^3 + 1069579350 z^2 - 2176325550 z + 1684897200) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an17.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, 2; z\right) = \frac{1}{130977000} \left(e^z (1024 z^{14} + 97280 z^{13} + 3700480 z^{12} + 72898560 z^{11} + 802865280 z^{10} + 4967168640 z^9 + 16333077600 z^8 + 24327777600 z^7 + 9148979700 z^6 - 2588184900 z^5 + 1622031075 z^4 - 1208560500 z^3 + 845397000 z^2 - 452466000 z + 130977000) \right)$$

07.25.03.an18.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{5457375} \left(e^z \sqrt{\pi} (32 z^7 + 2800 z^6 + 96880 z^5 + 1706600 z^4 + 16397850 z^3 + 85116675 z^2 + 218412600 z + 210612150) \operatorname{erf}(\sqrt{z}) z^{13/2} \right) + \frac{1}{5457375} (32 z^{13} + 2784 z^{12} + 95504 z^{11} + 1660200 z^{10} + 15612170 z^9 + 78033480 z^8 + 185511060 z^7 + 143256960 z^6 - 30844800 z^5 + 17690400 z^4 - 14414400 z^3 + 13097700 z^2 - 10716300 z + 5457375)$$

07.25.03.an19.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{5457375} \left(e^{-z} \sqrt{\pi} (32 z^7 - 2800 z^6 + 96880 z^5 - 1706600 z^4 + 16397850 z^3 - 85116675 z^2 + 218412600 z - 210612150) \operatorname{erfi}(\sqrt{z}) z^{13/2} \right) + \frac{1}{5457375} (-32 z^{13} + 2784 z^{12} - 95504 z^{11} + 1660200 z^{10} - 15612170 z^9 + 78033480 z^8 - 185511060 z^7 + 143256960 z^6 + 30844800 z^5 + 17690400 z^4 + 14414400 z^3 + 13097700 z^2 + 10716300 z + 5457375)$$

07.25.03.an1a.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, 3; z\right) = \frac{1}{65488500} \left(e^z (1024 z^{13} + 81920 z^{12} + 2553600 z^{11} + 39701760 z^{10} + 326444160 z^9 + 1376282880 z^8 + 2570248800 z^7 + 1195538400 z^6 - 415327500 z^5 + 319107600 z^4 - 292614525 z^3 + 254512125 z^2 - 172651500 z + 65488500) \right)$$

07.25.03.an1b.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{2182950} \left(e^z \sqrt{\pi} (32 z^6 + 2320 z^5 + 64400 z^4 + 869400 z^3 + 5965050 z^2 + 19501125 z + 23401350) \operatorname{erf}(\sqrt{z}) z^{13/2} \right) + \frac{1}{1091475} (16 z^{12} + 1152 z^{11} + 31632 z^{10} + 419440 z^9 + 2787255 z^8 + 8532090 z^7 + 8426880 z^6 - 2056320 z^5 + 1360800 z^4 - 1310400 z^3 + 1455300 z^2 - 1530900 z + 1091475)$$

07.25.03.an1c.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{1091475} (16 z^{12} - 1152 z^{11} + 31632 z^{10} - 419440 z^9 + 2787255 z^8 - 8532090 z^7 + 8426880 z^6 + 2056320 z^5 + 1360800 z^4 + 1310400 z^3 + 1455300 z^2 + 1530900 z + 1091475) - \frac{1}{2182950} \left(e^{-z} \sqrt{\pi} z^{13/2} (32 z^6 - 2320 z^5 + 64400 z^4 - 869400 z^3 + 5965050 z^2 - 19501125 z + 23401350) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an1d.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, 4; z\right) = \frac{1}{21829500} \left(e^z (1024 z^{12} + 66560 z^{11} + 1621760 z^{10} + 18618880 z^9 + 103017600 z^8 + 243089280 z^7 + 139356000 z^6 - 58665600 z^5 + 53997300 z^4 - 58873500 z^3 + 60626475 z^2 - 48620250 z + 21829500) \right)$$

07.25.03.an1e.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z \sqrt{\pi} (32 z^5 + 1840 z^4 + 38640 z^3 + 367080 z^2 + 1560090 z + 2340135) \operatorname{erf}(\sqrt{z}) z^{13/2}}{623700} + \frac{1}{311850} (16 z^{11} + 912 z^{10} + 18872 z^9 + 174540 z^8 + 701145 z^7 + 887040 z^6 - 241920 z^5 + 181440 z^4 - 201600 z^3 + 264600 z^2 - 340200 z + 311850)$$

07.25.03.an1f.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32 z^5 - 1840 z^4 + 38640 z^3 - 367080 z^2 + 1560090 z - 2340135) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{623700} + \frac{1}{311850} (-16 z^{11} + 912 z^{10} - 18872 z^9 + 174540 z^8 - 701145 z^7 + 887040 z^6 + 241920 z^5 + 181440 z^4 + 201600 z^3 + 264600 z^2 + 340200 z + 311850)$$

$$\begin{aligned}
 & \text{07.25.03.an1g.01} \\
 {}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, 5; z\right) = & \\
 & \frac{1}{5457375} \left(e^z (1024 z^{11} + 51200 z^{10} + 904960 z^9 + 6854400 z^8 + 20764800 z^7 + 14676480 z^6 - 7408800 z^5 + \right. \\
 & \left. 8013600 z^4 - 10111500 z^3 + 11907000 z^2 - 10815525 z + 5457375) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.an1h.01} \\
 {}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, \frac{11}{2}; z\right) = & \\
 & \frac{1}{69300z^4} (16z^{14} + 672z^{13} + 9472z^{12} + 51720z^{11} + 84475z^{10} - 25410z^9 + 20790z^8 - 21840z^7 + 226800z^5 - \\
 & 1694700z^4 + 9072000z^3 - 38102400z^2 + 127008000z - 381024000) + \\
 & \frac{1}{138600z^{9/2}} \left(e^z \sqrt{\pi} (32z^{15} + 1360z^{14} + 19600z^{13} + 112280z^{12} + 212730z^{11} + 105z^{10} - 1050z^9 + 9450z^8 - 75600z^7 + \right. \\
 & \left. 529200z^6 - 3175200z^5 + 15876000z^4 - 63504000z^3 + 190512000z^2 - 381024000z + 381024000) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.an1i.01} \\
 {}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, \frac{11}{2}; -z\right) = & \\
 & \frac{1}{69300z^4} (16z^{14} - 672z^{13} + 9472z^{12} - 51720z^{11} + 84475z^{10} + 25410z^9 + 20790z^8 + 21840z^7 - 226800z^5 - \\
 & 1694700z^4 - 9072000z^3 - 38102400z^2 - 127008000z - 381024000) + \frac{1}{138600z^{9/2}} \\
 & \left(e^{-z} \sqrt{\pi} (-32z^{15} + 1360z^{14} - 19600z^{13} + 112280z^{12} - 212730z^{11} + 105z^{10} + 1050z^9 + 9450z^8 + 75600z^7 + 529200 \right. \\
 & \left. z^6 + 3175200z^5 + 15876000z^4 + 63504000z^3 + 190512000z^2 + 381024000z + 381024000) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.an1j.01} \\
 {}_2F_2\left(\frac{9}{2}, 6; -\frac{11}{2}, 6; z\right) = & \\
 & \frac{1}{1091475} \left(e^z (1024 z^{10} + 35840 z^9 + 403200 z^8 + 1612800 z^7 + 1411200 z^6 - 846720 z^5 + 1058400 z^4 - \right. \\
 & \left. 1512000 z^3 + 1984500 z^2 - 1984500 z + 1091475) \right)
 \end{aligned}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = -\frac{9}{2}$

07.25.03.an1k.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{1406514375} (2048 z^{19} + 364544 z^{18} + 27859968 z^{17} + 1203795456 z^{16} + 32601260160 z^{15} + 579960017280 z^{14} +$$

$$6908988248064 z^{13} + 55183460290560 z^{12} + 291370967838720 z^{11} + 986189391129600 z^{10} +$$

$$2028915045964800 z^9 + 2320292270096640 z^8 + 1256601606220800 z^7 + 228948519945600 z^6 +$$

$$4168212048000 z^5 + 61297236000 z^4 + 8172964800 z^3 + 2946982500 z^2 + 1875352500 z + 1406514375) +$$

$$\frac{1}{1406514375} (64 e^z \sqrt{\pi} (32 z^{39/2} + 5712 z^{37/2} + 438144 z^{35/2} + 19024152 z^{33/2} + 518588658 z^{31/2} +$$

$$9307686465 z^{29/2} + 112250801565 z^{27/2} + 912245755680 z^{25/2} + 4939151243040 z^{23/2} +$$

$$17356633227360 z^{21/2} + 37857182479200 z^{19/2} + 47666026195200 z^{17/2} +$$

$$30669231398400 z^{15/2} + 8011905955200 z^{13/2} + 479975932800 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an1l.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{1406514375} (-2048 z^{19} + 364544 z^{18} - 27859968 z^{17} + 1203795456 z^{16} - 32601260160 z^{15} + 579960017280 z^{14} -$$

$$6908988248064 z^{13} + 55183460290560 z^{12} - 291370967838720 z^{11} + 986189391129600 z^{10} -$$

$$2028915045964800 z^9 + 2320292270096640 z^8 - 1256601606220800 z^7 + 228948519945600 z^6 -$$

$$4168212048000 z^5 + 61297236000 z^4 - 8172964800 z^3 + 2946982500 z^2 - 1875352500 z + 1406514375) +$$

$$\frac{1}{1406514375} (64 e^{-z} \sqrt{\pi} (32 z^{39/2} - 5712 z^{37/2} + 438144 z^{35/2} - 19024152 z^{33/2} + 518588658 z^{31/2} -$$

$$9307686465 z^{29/2} + 112250801565 z^{27/2} - 912245755680 z^{25/2} + 4939151243040 z^{23/2} -$$

$$17356633227360 z^{21/2} + 37857182479200 z^{19/2} - 47666026195200 z^{17/2} +$$

$$30669231398400 z^{15/2} - 8011905955200 z^{13/2} + 479975932800 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an1m.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{156279375} (-1024 z^{18} - 167936 z^{17} - 11747328 z^{16} - 461012480 z^{15} - 11235161280 z^{14} - 177844972032 z^{13} -$$

$$1858981447680 z^{12} - 12796650639360 z^{11} - 56859265612800 z^{10} - 156638079360000 z^9 -$$

$$249479417214720 z^8 - 203115969100800 z^7 - 66076686748800 z^6 - 4168212048000 z^5 +$$

$$61297236000 z^4 + 2724321600 z^3 + 589396500 z^2 + 267907500 z + 156279375) -$$

$$\frac{1}{156279375} (32 e^z \sqrt{\pi} (32 z^{37/2} + 5264 z^{35/2} + 369712 z^{33/2} + 14587608 z^{31/2} + 358124970 z^{29/2} + 5726436765 z^{27/2} +$$

$$60712870680 z^{25/2} + 426542790240 z^{23/2} + 1953351711360 z^{21/2} + 5636522959200 z^{19/2} +$$

$$9674567683200 z^{17/2} + 8967755462400 z^{15/2} + 3765965011200 z^{13/2} + 479975932800 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an1n.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; -z\right) = \frac{1}{156279375} (-1024 z^{18} + 167936 z^{17} - 11747328 z^{16} + 461012480 z^{15} - 11235161280 z^{14} + 177844972032 z^{13} - 1858981447680 z^{12} + 12796650639360 z^{11} - 56859265612800 z^{10} + 156638079360000 z^9 - 249479417214720 z^8 + 203115969100800 z^7 - 66076686748800 z^6 + 4168212048000 z^5 + 61297236000 z^4 - 2724321600 z^3 + 589396500 z^2 - 267907500 z + 156279375) + \frac{1}{156279375} (32 e^{-z} \sqrt{\pi} (32 z^{37/2} - 5264 z^{35/2} + 369712 z^{33/2} - 14587608 z^{31/2} + 358124970 z^{29/2} - 5726436765 z^{27/2} + 60712870680 z^{25/2} - 426542790240 z^{23/2} + 1953351711360 z^{21/2} - 5636522959200 z^{19/2} + 9674567683200 z^{17/2} - 8967755462400 z^{15/2} + 3765965011200 z^{13/2} - 479975932800 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an1o.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{22325625} (512 z^{17} + 76800 z^{16} + 4875520 z^{15} + 172037760 z^{14} + 3727509408 z^{13} + 51727660320 z^{12} + 465611408640 z^{11} + 2695335955200 z^{10} + 9744430348800 z^9 + 20793330996480 z^8 + 23643649612800 z^7 + 11679414364800 z^6 + 1389404016000 z^5 - 61297236000 z^4 + 2724321600 z^3 + 196465500 z^2 + 53581500 z + 22325625) + \frac{1}{22325625} (16 e^z \sqrt{\pi} (32 z^{35/2} + 4816 z^{33/2} + 307104 z^{31/2} + 10902360 z^{29/2} + 238199010 z^{27/2} + 3344446665 z^{25/2} + 30612850695 z^{23/2} + 181639984680 z^{21/2} + 681871818600 z^{19/2} + 1545292047600 z^{17/2} + 1948107445200 z^{15/2} + 1175325681600 z^{13/2} + 239987966400 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an1p.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{22325625} (-512 z^{17} + 76800 z^{16} - 4875520 z^{15} + 172037760 z^{14} - 3727509408 z^{13} + 51727660320 z^{12} - 465611408640 z^{11} + 2695335955200 z^{10} - 9744430348800 z^9 + 20793330996480 z^8 - 23643649612800 z^7 + 11679414364800 z^6 - 1389404016000 z^5 - 61297236000 z^4 - 2724321600 z^3 + 196465500 z^2 - 53581500 z + 22325625) + \frac{1}{22325625} (16 e^{-z} \sqrt{\pi} (32 z^{35/2} - 4816 z^{33/2} + 307104 z^{31/2} - 10902360 z^{29/2} + 238199010 z^{27/2} - 3344446665 z^{25/2} + 30612850695 z^{23/2} - 181639984680 z^{21/2} + 681871818600 z^{19/2} - 1545292047600 z^{17/2} + 1948107445200 z^{15/2} - 1175325681600 z^{13/2} + 239987966400 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an1q.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{4465125} (-256 z^{16} - 34816 z^{15} - 1985280 z^{14} - 62212608 z^{13} - 1180366320 z^{12} - 14088947040 z^{11} - 106526044800 z^{10} - 501276787200 z^9 - 1403240993280 z^8 - 2140258982400 z^7 - 1485639792000 z^6 - 277880803200 z^5 + 20432412000 z^4 - 2724321600 z^3 + 196465500 z^2 + 17860500 z + 4465125) - \frac{1}{4465125} (8 e^z \sqrt{\pi} (32 z^{33/2} + 4368 z^{31/2} + 250320 z^{29/2} + 7898520 z^{27/2} + 151315290 z^{25/2} + 1831293765 z^{23/2} + 14131206810 z^{21/2} + 68590330200 z^{19/2} + 201739507200 z^{17/2} + 334855004400 z^{15/2} + 273832423200 z^{13/2} + 79995988800 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an1r.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{4465125} (-256z^{16} + 34816z^{15} - 1985280z^{14} + 62212608z^{13} - 1180366320z^{12} + 14088947040z^{11} - 106526044800z^{10} + 501276787200z^9 - 1403240993280z^8 + 2140258982400z^7 - 1485639792000z^6 + 277880803200z^5 + 20432412000z^4 + 2724321600z^3 + 196465500z^2 - 17860500z + 4465125) + \frac{1}{4465125} (8e^{-z}\sqrt{\pi} (32z^{33/2} - 4368z^{31/2} + 250320z^{29/2} - 7898520z^{27/2} + 151315290z^{25/2} - 1831293765z^{23/2} + 14131206810z^{21/2} - 68590330200z^{19/2} + 201739507200z^{17/2} - 334855004400z^{15/2} + 273832423200z^{13/2} - 79995988800z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an1s.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{1488375} (128z^{15} + 15616z^{14} + 789696z^{13} + 21637600z^{12} + 352545480z^{11} + 3528919800z^{10} + 21655294080z^9 + 78804351360z^8 + 157647772800z^7 + 147294201600z^6 + 39697257600z^5 - 4086482400z^4 + 908107200z^3 - 196465500z^2 + 17860500z + 1488375) + \frac{1}{1488375} (4e^z\sqrt{\pi} (32z^{31/2} + 3920z^{29/2} + 199360z^{27/2} + 5506200z^{25/2} + 90747090z^{23/2} + 923822865z^{21/2} + 5816801025z^{19/2} + 22055922000z^{17/2} + 47348053200z^{15/2} + 50766685200z^{13/2} + 19998997200z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an1t.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{1488375} (-128z^{15} + 15616z^{14} - 789696z^{13} + 21637600z^{12} - 352545480z^{11} + 3528919800z^{10} - 21655294080z^9 + 78804351360z^8 - 157647772800z^7 + 147294201600z^6 - 39697257600z^5 - 4086482400z^4 - 908107200z^3 - 196465500z^2 - 17860500z + 1488375) + \frac{1}{1488375} (4e^{-z}\sqrt{\pi} (32z^{31/2} - 3920z^{29/2} + 199360z^{27/2} - 5506200z^{25/2} + 90747090z^{23/2} - 923822865z^{21/2} + 5816801025z^{19/2} - 22055922000z^{17/2} + 47348053200z^{15/2} - 50766685200z^{13/2} + 19998997200z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an1u.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{1488375} (-64z^{14} - 6912z^{13} - 305024z^{12} - 7161888z^{11} - 97636140z^{10} - 791328720z^9 - 3746820672z^8 - 9728449920z^7 - 11935909440z^6 - 4410806400z^5 + 583783200z^4 - 181621440z^3 + 65488500z^2 - 17860500z + 1488375) - \frac{1}{1488375} (2e^z\sqrt{\pi} (32z^{29/2} + 3472z^{27/2} + 154224z^{25/2} + 3655512z^{23/2} + 50536458z^{21/2} + 418458285z^{19/2} + 2050676460z^{17/2} + 5650510320z^{15/2} + 7794480960z^{13/2} + 3999799440z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an1v.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{1488375} (-64 z^{14} + 6912 z^{13} - 305024 z^{12} + 7161888 z^{11} - 97636140 z^{10} + 791328720 z^9 - 3746820672 z^8 + 9728449920 z^7 - 11935909440 z^6 + 4410806400 z^5 + 583783200 z^4 + 181621440 z^3 + 65488500 z^2 + 17860500 z + 1488375) + \frac{1}{1488375} (2 e^{-z} \sqrt{\pi} (32 z^{29/2} - 3472 z^{27/2} + 154224 z^{25/2} - 3655512 z^{23/2} + 50536458 z^{21/2} - 418458285 z^{19/2} + 2050676460 z^{17/2} - 5650510320 z^{15/2} + 7794480960 z^{13/2} - 3999799440 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an1w.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, 1; z\right) = -\frac{1}{11907000} (e^z (512 z^{14} + 51968 z^{13} + 2141440 z^{12} + 46583040 z^{11} + 582617280 z^{10} + 4277565600 z^9 + 18030902400 z^8 + 40585482000 z^7 + 41007377250 z^6 + 10223647875 z^5 - 1841715225 z^4 + 688224600 z^3 - 273861000 z^2 + 83349000 z - 11907000))$$

07.25.03.an1x.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{1488375} (-32 z^{13} - 3008 z^{12} - 113424 z^{11} - 2221320 z^{10} - 24436650 z^9 - 152279946 z^8 - 512794800 z^7 - 815587920 z^6 - 400982400 z^5 + 64864800 z^4 - 25945920 z^3 + 13097700 z^2 - 5953500 z + 1488375) - \frac{1}{1488375} (e^z \sqrt{\pi} z^{11/2} (32 z^8 + 3024 z^7 + 114912 z^6 + 2276568 z^5 + 25494210 z^4 + 163516185 z^3 + 579030795 z^2 + 1018263960 z + 666633240) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an1y.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, \frac{3}{2}; -z\right) = \frac{1}{1488375} (32 z^{13} - 3008 z^{12} + 113424 z^{11} - 2221320 z^{10} + 24436650 z^9 - 152279946 z^8 + 512794800 z^7 - 815587920 z^6 + 400982400 z^5 + 64864800 z^4 + 25945920 z^3 + 13097700 z^2 + 5953500 z + 1488375) - \frac{1}{1488375} (e^{-z} \sqrt{\pi} z^{11/2} (32 z^8 - 3024 z^7 + 114912 z^6 - 2276568 z^5 + 25494210 z^4 - 163516185 z^3 + 579030795 z^2 - 1018263960 z + 666633240) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an1z.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, 2; z\right) = -\frac{1}{11907000} (e^z (512 z^{13} + 44800 z^{12} + 1559040 z^{11} + 27874560 z^{10} + 275997120 z^9 + 1517594400 z^8 + 4372552800 z^7 + 56059600 z^6 + 1771960050 z^5 - 408112425 z^4 + 198846900 z^3 - 107163000 z^2 + 47628000 z - 11907000))$$

07.25.03.an20.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{496125} \left(-16z^{12} - 1280z^{11} - 40080z^{10} - 630320z^9 - 5303319z^8 - 23377410z^7 - 48023640z^6 - 30844800z^5 + 5896800z^4 - 2882880z^3 + 1871100z^2 - 1190700z + 496125\right) - \frac{1}{992250} \left(e^z \sqrt{\pi} z^{11/2} (32z^7 + 2576z^6 + 81424z^5 + 1299480z^4 + 1199930z^3 + 51516885z^2 + 115378830z + 95233320) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.an21.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{1}{992250} \left(e^{-z} \sqrt{\pi} (32z^7 - 2576z^6 + 81424z^5 - 1299480z^4 + 1199930z^3 - 51516885z^2 + 115378830z - 95233320) \operatorname{erfi}(\sqrt{z}) z^{11/2}\right) + \frac{1}{496125} \left(-16z^{12} + 1280z^{11} - 40080z^{10} + 630320z^9 - 5303319z^8 + 23377410z^7 - 48023640z^6 + 30844800z^5 + 5896800z^4 + 2882880z^3 + 1871100z^2 + 1190700z + 496125\right)$$

07.25.03.an22.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, 3; z\right) = -\frac{1}{5953500} \left(e^z (512z^{12} + 37632z^{11} + 1069824z^{10} + 15036672z^9 + 110593728z^8 + 411657120z^7 + 667638720z^6 + 263949840z^5 - 75688830z^4 + 46020555z^3 - 31255875z^2 + 17860500z - 5953500)\right)$$

07.25.03.an23.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{198450} \left(-16z^{11} - 1056z^{10} - 26360z^9 - 314508z^8 - 1855665z^7 - 4949595z^6 - 4112640z^5 + 907200z^4 - 524160z^3 + 415800z^2 - 340200z + 198450\right) - \frac{1}{396900} \left(e^z \sqrt{\pi} z^{11/2} (32z^6 + 2128z^5 + 53760z^4 + 654360z^3 + 4001970z^2 + 11497185z + 11904165) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.an24.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{1}{198450} \left(16z^{11} - 1056z^{10} + 26360z^9 - 314508z^8 + 1855665z^7 - 4949595z^6 + 4112640z^5 + 907200z^4 + 524160z^3 + 415800z^2 + 340200z + 198450\right) - \frac{1}{396900} \left(e^{-z} \sqrt{\pi} z^{11/2} (32z^6 - 2128z^5 + 53760z^4 - 654360z^3 + 4001970z^2 - 11497185z + 11904165) \operatorname{erfi}(\sqrt{z})\right)$$

$$\begin{aligned}
 & \text{07.25.03.an25.01} \\
 & {}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, 4; z\right) = \\
 & -\frac{1}{1984500} \left(e^z (512 z^{11} + 30464 z^{10} + 673792 z^9 + 6951168 z^8 + 34130880 z^7 + 70348320 z^6 + 34503840 z^5 - \right. \\
 & \left. 12080880 z^4 + 8877330 z^3 - 7243425 z^2 + 4961250 z - 1984500) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.an26.01} \\
 & {}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, \frac{9}{2}; z\right) = \\
 & \frac{1}{56700} \left(-16 z^{10} - 832 z^9 - 15552 z^8 - 128280 z^7 - 451395 z^6 - 483840 z^5 + 120960 z^4 - 80640 z^3 + 75600 z^2 - \right. \\
 & \left. 75600 z + 56700 \right) - \frac{e^z \sqrt{\pi} z^{11/2} (32 z^5 + 1680 z^4 + 31920 z^3 + 271320 z^2 + 1017450 z + 1322685) \operatorname{erf}(\sqrt{z})}{113400}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.an27.01} \\
 & {}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, \frac{9}{2}; -z\right) = \\
 & \frac{e^{-z} \sqrt{\pi} (32 z^5 - 1680 z^4 + 31920 z^3 - 271320 z^2 + 1017450 z - 1322685) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{113400} + \frac{1}{56700} \left(-16 z^{10} + 832 z^9 - \right. \\
 & \left. 15552 z^8 + 128280 z^7 - 451395 z^6 + 483840 z^5 + 120960 z^4 + 80640 z^3 + 75600 z^2 + 75600 z + 56700 \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.an28.01} \\
 & {}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, 5; z\right) = \\
 & -\frac{1}{496125} \left(e^z (512 z^{10} + 23296 z^9 + 370944 z^8 + 2499840 z^7 + 6632640 z^6 + 4021920 z^5 - 1693440 z^4 + \right. \\
 & \left. 1466640 z^3 - 1389150 z^2 + 1091475 z - 496125) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.an29.01} \\
 & {}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, \frac{11}{2}; z\right) = \\
 & \frac{1}{12600 z^4} \left(-16 z^{13} - 608 z^{12} - 7656 z^{11} - 36692 z^{10} - 50925 z^9 + 14175 z^8 - 10248 z^7 + 7560 z^6 + 15120 z^5 - \right. \\
 & \left. 163800 z^4 + 907200 z^3 - 3810240 z^2 + 12700800 z - 38102400 \right) + \\
 & \frac{1}{25200 z^{9/2}} \left(e^z \sqrt{\pi} (-32 z^{14} - 1232 z^{13} - 15904 z^{12} - 80472 z^{11} - 132258 z^{10} - 105 z^9 + 945 z^8 - 7560 z^7 + \right. \\
 & \left. 52920 z^6 - 317520 z^5 + 1587600 z^4 - 6350400 z^3 + 19051200 z^2 - 38102400 z + 38102400) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.an2a.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{1}{12\,600 z^4} (16 z^{13} - 608 z^{12} + 7656 z^{11} - 36\,692 z^{10} + 50\,925 z^9 + 14\,175 z^8 + 10\,248 z^7 + 7560 z^6 - 15\,120 z^5 - 163\,800 z^4 - 907\,200 z^3 - 3\,810\,240 z^2 - 12\,700\,800 z - 38\,102\,400) + \frac{1}{25\,200 z^{9/2}} \left(e^{-z} \sqrt{\pi} (-32 z^{14} + 1232 z^{13} - 15\,904 z^{12} + 80\,472 z^{11} - 132\,258 z^{10} + 105 z^9 + 945 z^8 + 7560 z^7 + 52\,920 z^6 + 317\,520 z^5 + 1\,587\,600 z^4 + 6\,350\,400 z^3 + 19\,051\,200 z^2 + 38\,102\,400 z + 38\,102\,400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an2b.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{9}{2}, 6; z\right) = -\frac{1}{99\,225} (e^z (512 z^9 + 16\,128 z^8 + 161\,280 z^7 + 564\,480 z^6 + 423\,360 z^5 - 211\,680 z^4 + 211\,680 z^3 - 226\,800 z^2 + 198\,450 z - 99\,225))$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = -\frac{7}{2}$

07.25.03.an2c.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{17\,364\,375} (512 z^{17} + 77\,312 z^{16} + 4\,946\,176 z^{15} + 176\,136\,320 z^{14} + 3\,858\,596\,256 z^{13} + 54\,277\,351\,424 z^{12} + 497\,002\,275\,840 z^{11} + 2\,942\,339\,742\,720 z^{10} + 10\,970\,776\,320\,000 z^9 + 24\,499\,660\,181\,760 z^8 + 30\,018\,636\,426\,240 z^7 + 17\,203\,793\,443\,200 z^6 + 3\,274\,288\,617\,600 z^5 + 61\,297\,236\,000 z^4 + 908\,107\,200 z^3 + 117\,879\,300 z^2 + 38\,272\,500 z + 17\,364\,375) + \frac{1}{17\,364\,375} \left(16 e^z \sqrt{\pi} (32 z^{35/2} + 4848 z^{33/2} + 311\,536 z^{31/2} + 11\,160\,712 z^{29/2} + 246\,517\,850 z^{27/2} + 3\,507\,776\,115 z^{25/2} + 32\,650\,661\,760 z^{23/2} + 197\,988\,157\,920 z^{21/2} + 765\,422\,763\,840 z^{19/2} + 1\,809\,409\,140\,000 z^{17/2} + 2\,436\,931\,123\,200 z^{15/2} + 1\,656\,962\,092\,800 z^{13/2} + 452\,040\,825\,600 z^{11/2} + 27\,935\,107\,200 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an2d.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; -z\right) = \frac{1}{17\,364\,375} (-512 z^{17} + 77\,312 z^{16} - 4\,946\,176 z^{15} + 176\,136\,320 z^{14} - 3\,858\,596\,256 z^{13} + 54\,277\,351\,424 z^{12} - 497\,002\,275\,840 z^{11} + 2\,942\,339\,742\,720 z^{10} - 10\,970\,776\,320\,000 z^9 + 24\,499\,660\,181\,760 z^8 - 30\,018\,636\,426\,240 z^7 + 17\,203\,793\,443\,200 z^6 - 3\,274\,288\,617\,600 z^5 + 61\,297\,236\,000 z^4 - 908\,107\,200 z^3 + 117\,879\,300 z^2 - 38\,272\,500 z + 17\,364\,375) + \frac{1}{17\,364\,375} \left(16 e^{-z} \sqrt{\pi} (32 z^{35/2} - 4848 z^{33/2} + 311\,536 z^{31/2} - 11\,160\,712 z^{29/2} + 246\,517\,850 z^{27/2} - 3\,507\,776\,115 z^{25/2} + 32\,650\,661\,760 z^{23/2} - 197\,988\,157\,920 z^{21/2} + 765\,422\,763\,840 z^{19/2} - 1\,809\,409\,140\,000 z^{17/2} + 2\,436\,931\,123\,200 z^{15/2} - 1\,656\,962\,092\,800 z^{13/2} + 452\,040\,825\,600 z^{11/2} - 27\,935\,107\,200 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an2e.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; z\right) = \frac{1}{2480625} \left(-256 z^{16} - 35328 z^{15} - 2049280 z^{14} - 65543424 z^{13} - 1274845552 z^{12} - 15695433600 z^{11} - 123501893760 z^{10} - 613172985600 z^9 - 1853164592640 z^8 - 3187493406720 z^7 - 2762189539200 z^6 - 942442300800 z^5 - 61297236000 z^4 + 908107200 z^3 + 39293100 z^2 + 7654500 z + 2480625 \right) - \frac{1}{2480625} \left(8 e^z \sqrt{\pi} \left(32 z^{33/2} + 4432 z^{31/2} + 258352 z^{29/2} + 8318840 z^{27/2} + 163329450 z^{25/2} + 2037811065 z^{23/2} + 16348173240 z^{21/2} + 83550945240 z^{19/2} + 264117092400 z^{17/2} + 488823678000 z^{15/2} + 481636411200 z^{13/2} + 212052859200 z^{11/2} + 27935107200 z^{9/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an2f.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; -z\right) = \frac{1}{2480625} \left(-256 z^{16} + 35328 z^{15} - 2049280 z^{14} + 65543424 z^{13} - 1274845552 z^{12} + 15695433600 z^{11} - 123501893760 z^{10} + 613172985600 z^9 - 1853164592640 z^8 + 3187493406720 z^7 - 2762189539200 z^6 + 942442300800 z^5 - 61297236000 z^4 - 908107200 z^3 + 39293100 z^2 - 7654500 z + 2480625 \right) + \frac{1}{2480625} \left(8 e^{-z} \sqrt{\pi} \left(32 z^{33/2} - 4432 z^{31/2} + 258352 z^{29/2} - 8318840 z^{27/2} + 163329450 z^{25/2} - 2037811065 z^{23/2} + 16348173240 z^{21/2} - 83550945240 z^{19/2} + 264117092400 z^{17/2} - 488823678000 z^{15/2} + 481636411200 z^{13/2} - 212052859200 z^{11/2} + 27935107200 z^{9/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an2g.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; z\right) = \frac{1}{496125} \left(128 z^{15} + 16000 z^{14} + 832704 z^{13} + 23619808 z^{12} + 401621640 z^{11} + 4243962240 z^{10} + 27974049600 z^9 + 112480899840 z^8 + 261808606080 z^7 + 319137436800 z^6 + 166140374400 z^5 + 20432412000 z^4 - 908107200 z^3 + 39293100 z^2 + 2551500 z + 496125 \right) + \frac{1}{496125} \left(4 e^z \sqrt{\pi} \left(32 z^{31/2} + 4016 z^{29/2} + 210160 z^{27/2} + 6007080 z^{25/2} + 103258650 z^{23/2} + 1108483215 z^{21/2} + 7480307520 z^{19/2} + 31188792600 z^{17/2} + 76984336800 z^{15/2} + 103901994000 z^{13/2} + 66028435200 z^{11/2} + 13967553600 z^{9/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an2h.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{496125} \left(-128 z^{15} + 16000 z^{14} - 832704 z^{13} + 23619808 z^{12} - 401621640 z^{11} + 4243962240 z^{10} - 27974049600 z^9 + \right.$$

$$\left. 112480899840 z^8 - 261808606080 z^7 + 319137436800 z^6 - 166140374400 z^5 + \right.$$

$$\left. 20432412000 z^4 + 908107200 z^3 + 39293100 z^2 - 2551500 z + 496125 \right) +$$

$$\frac{1}{496125} \left(4 e^{-z} \sqrt{\pi} \left(32 z^{3/2} - 4016 z^{29/2} + 210160 z^{27/2} - 6007080 z^{25/2} + 103258650 z^{23/2} - \right. \right.$$

$$\left. 1108483215 z^{21/2} + 7480307520 z^{19/2} - 31188792600 z^{17/2} + 76984336800 z^{15/2} - \right.$$

$$\left. 103901994000 z^{13/2} + 66028435200 z^{11/2} - 13967553600 z^{9/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.an2i.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{165375} \left(-64 z^{14} - 7168 z^{13} - 330368 z^{12} - 8179360 z^{11} - 119173740 z^{10} - 1053125920 z^9 - 5612758080 z^8 - \right.$$

$$\left. 17360138880 z^7 - 28640539200 z^6 - 21073852800 z^5 - \right.$$

$$\left. 4086482400 z^4 + 302702400 z^3 - 39293100 z^2 + 2551500 z + 165375 \right) -$$

$$\frac{1}{165375} \left(2 e^z \sqrt{\pi} \left(32 z^{29/2} + 3600 z^{27/2} + 166960 z^{25/2} + 4170520 z^{23/2} + 61553450 z^{21/2} + 554502165 z^{19/2} + \right. \right.$$

$$\left. 3044290200 z^{17/2} + 9878761200 z^{15/2} + 17711769600 z^{13/2} + 15343146000 z^{11/2} + 4655851200 z^{9/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.an2j.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{165375} \left(-64 z^{14} + 7168 z^{13} - 330368 z^{12} + 8179360 z^{11} - 119173740 z^{10} + 1053125920 z^9 - 5612758080 z^8 + \right.$$

$$\left. 17360138880 z^7 - 28640539200 z^6 + 21073852800 z^5 - \right.$$

$$\left. 4086482400 z^4 - 302702400 z^3 - 39293100 z^2 - 2551500 z + 165375 \right) +$$

$$\frac{1}{165375} \left(2 e^{-z} \sqrt{\pi} \left(32 z^{29/2} - 3600 z^{27/2} + 166960 z^{25/2} - 4170520 z^{23/2} + 61553450 z^{21/2} - 554502165 z^{19/2} + \right. \right.$$

$$\left. 3044290200 z^{17/2} - 9878761200 z^{15/2} + 17711769600 z^{13/2} - 15343146000 z^{11/2} + 4655851200 z^{9/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.an2k.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{165375} \left(32 z^{13} + 3168 z^{12} + 127184 z^{11} + 2692200 z^{10} + 32724650 z^9 + 233242176 z^8 + 953961120 z^7 + \right.$$

$$\left. 2088078720 z^6 + 2082880800 z^5 + 583783200 z^4 - 60540480 z^3 + 13097700 z^2 - 2551500 z + 165375 \right) +$$

$$\frac{1}{165375} \left(e^z \sqrt{\pi} \left(32 z^{27/2} + 3184 z^{25/2} + 128752 z^{23/2} + 2754248 z^{21/2} + 34010970 z^{19/2} + 248403435 z^{17/2} + \right. \right.$$

$$\left. 1057062720 z^{15/2} + 2479322160 z^{13/2} + 2835836640 z^{11/2} + 1163962800 z^{9/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.an2l.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{165375} \left(-32z^{13} + 3168z^{12} - 127184z^{11} + 2692200z^{10} - 32724650z^9 + 233242176z^8 - 953961120z^7 + 2088078720z^6 - 2082880800z^5 + 583783200z^4 + 60540480z^3 + 13097700z^2 + 2551500z + 165375 \right) + \frac{1}{165375} \left(e^{-z} \sqrt{\pi} \left(32z^{27/2} - 3184z^{25/2} + 128752z^{23/2} - 2754248z^{21/2} + 34010970z^{19/2} - 248403435z^{17/2} + 1057062720z^{15/2} - 2479322160z^{13/2} + 2835836640z^{11/2} - 1163962800z^{9/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an2m.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, 1; z\right) = \frac{1}{1323000} \left(e^z \left(256z^{13} + 23808z^{12} + 892160z^{11} + 17492480z^{10} + 195100000z^9 + 1260832800z^8 + 4602536400z^7 + 8786400000z^6 + 7324088625z^5 + 1449779625z^4 - 195967800z^3 + 50160600z^2 - 11529000z + 1323000 \right) \right)$$

07.25.03.an2n.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{330750} \left(e^z \sqrt{\pi} \left(32z^8 + 2768z^7 + 95536z^6 + 1703352z^5 + 16977450z^4 + 95606385z^3 + 292211640z^2 + 433840680z + 232792560 \right) \operatorname{erf}(\sqrt{z}) z^{9/2} \right) + \frac{1}{165375} \left(16z^{12} + 1376z^{11} + 47088z^{10} + 828800z^9 + 8096223z^8 + 44116632z^7 + 127249080z^6 + 168189840z^5 + 64864800z^4 - 8648640z^3 + 2619540z^2 - 850500z + 165375 \right)$$

07.25.03.an2o.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{165375} \left(16z^{12} - 1376z^{11} + 47088z^{10} - 828800z^9 + 8096223z^8 - 44116632z^7 + 127249080z^6 - 168189840z^5 + 64864800z^4 + 8648640z^3 + 2619540z^2 + 850500z + 165375 \right) - \frac{1}{330750} \left(e^{-z} \sqrt{\pi} z^{9/2} \left(32z^8 - 2768z^7 + 95536z^6 - 1703352z^5 + 16977450z^4 - 95606385z^3 + 292211640z^2 - 433840680z + 232792560 \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an2p.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, 2; z\right) = \frac{1}{1323000} \left(e^z \left(256z^{12} + 20480z^{11} + 646400z^{10} + 10382080z^9 + 91279200z^8 + 439320000z^7 + 1087976400z^6 + 1170565200z^5 + 300697425z^4 - 53707500z^3 + 18862200z^2 - 6426000z + 1323000 \right) \right)$$

07.25.03.an2q.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{220500} \left(e^z \sqrt{\pi} (32 z^7 + 2352 z^6 + 67312 z^5 + 962920 z^4 + 7348250 z^3 + 29472135 z^2 + 56434560 z + 38798760) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{110250} (16 z^{11} + 1168 z^{10} + 33080 z^9 + 465484 z^8 + 3456537 z^7 + 13204240 z^6 + 22890840 z^5 + 11793600 z^4 - 1921920 z^3 + 748440 z^2 - 340200 z + 110250) \right)$$

07.25.03.an2r.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{1}{220500} \left(e^{-z} \sqrt{\pi} (32 z^7 - 2352 z^6 + 67312 z^5 - 962920 z^4 + 7348250 z^3 - 29472135 z^2 + 56434560 z - 38798760) \operatorname{erfi}(\sqrt{z}) z^{9/2} + \frac{1}{110250} (-16 z^{11} + 1168 z^{10} - 33080 z^9 + 465484 z^8 - 3456537 z^7 + 13204240 z^6 - 22890840 z^5 + 11793600 z^4 + 1921920 z^3 + 748440 z^2 + 340200 z + 110250) \right)$$

07.25.03.an2s.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, 3; z\right) = \frac{1}{661500} \left(e^z (256 z^{11} + 17152 z^{10} + 440576 z^9 + 5535744 z^8 + 35921760 z^7 + 116024160 z^6 + 159783120 z^5 + 52083360 z^4 - 11802735 z^3 + 5306175 z^2 - 2362500 z + 661500) \right)$$

07.25.03.an2t.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{88200} e^z \sqrt{\pi} (32 z^6 + 1936 z^5 + 44080 z^4 + 478040 z^3 + 2567850 z^2 + 6361485 z + 5542680) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{44100} (16 z^{10} + 960 z^9 + 21568 z^8 + 228696 z^7 + 1179235 z^6 + 2682600 z^5 + 1814400 z^4 - 349440 z^3 + 166320 z^2 - 97200 z + 44100)$$

07.25.03.an2u.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{1}{44100} (16 z^{10} - 960 z^9 + 21568 z^8 - 228696 z^7 + 1179235 z^6 - 2682600 z^5 + 1814400 z^4 + 349440 z^3 + 166320 z^2 + 97200 z + 44100) - \frac{1}{88200} \left(e^{-z} \sqrt{\pi} z^{9/2} (32 z^6 - 1936 z^5 + 44080 z^4 - 478040 z^3 + 2567850 z^2 - 6361485 z + 5542680) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an2v.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, 4; z\right) = \frac{1}{220500} \left(e^z (256 z^{10} + 13824 z^9 + 274688 z^8 + 2514176 z^7 + 10780000 z^6 + 19004160 z^5 + 7749840 z^4 - 2165520 z^3 + 1190385 z^2 - 645750 z + 220500) \right)$$

07.25.03.an2w.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z \sqrt{\pi} (32 z^5 + 1520 z^4 + 25\,840 z^3 + 193\,800 z^2 + 629\,850 z + 692\,835) \operatorname{erf}(\sqrt{z}) z^{9/2}}{25\,200} + \frac{1}{12\,600} (16 z^9 + 752 z^8 + 12\,552 z^7 + 90\,980 z^6 + 274\,845 z^5 + 241\,920 z^4 - 53\,760 z^3 + 30\,240 z^2 - 21\,600 z + 12\,600)$$

07.25.03.an2x.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32 z^5 - 1520 z^4 + 25\,840 z^3 - 193\,800 z^2 + 629\,850 z - 692\,835) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{25\,200} + \frac{1}{12\,600} (-16 z^9 + 752 z^8 - 12\,552 z^7 + 90\,980 z^6 - 274\,845 z^5 + 241\,920 z^4 + 53\,760 z^3 + 30\,240 z^2 + 21\,600 z + 12\,600)$$

07.25.03.an2y.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, 5; z\right) = \frac{1}{55\,125} (e^z (256 z^9 + 10\,496 z^8 + 148\,736 z^7 + 878\,080 z^6 + 1\,999\,200 z^5 + 1\,011\,360 z^4 - 341\,040 z^3 + 221\,760 z^2 - 140\,175 z + 55\,125))$$

07.25.03.an2z.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{2800 z^4} (16 z^{12} + 544 z^{11} + 6032 z^{10} + 24\,880 z^9 + 28\,455 z^8 - 7112 z^7 + 4200 z^6 - 720 z^5 - 16\,800 z^4 + 100\,800 z^3 - 423\,360 z^2 + 1\,411\,200 z - 4\,233\,600) + \frac{1}{5600 z^{9/2}} (e^z \sqrt{\pi} (32 z^{13} + 1104 z^{12} + 12\,592 z^{11} + 55\,288 z^{10} + 76\,970 z^9 + 105 z^8 - 840 z^7 + 5880 z^6 - 35\,280 z^5 + 176\,400 z^4 - 705\,600 z^3 + 2\,116\,800 z^2 - 4\,233\,600 z + 4\,233\,600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an30.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{1}{2800 z^4} (16 z^{12} - 544 z^{11} + 6032 z^{10} - 24\,880 z^9 + 28\,455 z^8 + 7112 z^7 + 4200 z^6 + 720 z^5 - 16\,800 z^4 - 100\,800 z^3 - 423\,360 z^2 - 1\,411\,200 z - 4\,233\,600) + \frac{1}{5600 z^{9/2}} (e^{-z} \sqrt{\pi} (-32 z^{13} + 1104 z^{12} - 12\,592 z^{11} + 55\,288 z^{10} - 76\,970 z^9 + 105 z^8 + 840 z^7 + 5880 z^6 + 35\,280 z^5 + 176\,400 z^4 + 705\,600 z^3 + 2\,116\,800 z^2 + 4\,233\,600 z + 4\,233\,600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an31.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{7}{2}, 6; z\right) = \frac{1}{11\,025} e^z (256 z^8 + 7168 z^7 + 62\,720 z^6 + 188\,160 z^5 + 117\,600 z^4 - 47\,040 z^3 + 35\,280 z^2 - 25\,200 z + 11\,025)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = -\frac{5}{2}$

07.25.03.an32.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{354375} (128 z^{15} + 16128 z^{14} + 847296 z^{13} + 24306656 z^{12} + 419066952 z^{11} + 4506347160 z^{10} + 30389246160 z^9 + 126076026960 z^8 + 307260768960 z^7 + 403820464320 z^6 + 244064620800 z^5 + 48064816800 z^4 + 908107200 z^3 + 13097700 z^2 + 1530900 z + 354375) + \frac{1}{354375} (4 e^z \sqrt{\pi} (32 z^{31/2} + 4048 z^{29/2} + 213824 z^{27/2} + 6180600 z^{25/2} + 107704050 z^{23/2} + 1176178665 z^{21/2} + 8114922585 z^{19/2} + 34861409730 z^{17/2} + 89810043750 z^{15/2} + 129583503000 z^{13/2} + 92885902200 z^{11/2} + 26281054800 z^{9/2} + 1654052400 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an33.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{354375} (-128 z^{15} + 16128 z^{14} - 847296 z^{13} + 24306656 z^{12} - 419066952 z^{11} + 4506347160 z^{10} - 30389246160 z^9 + 126076026960 z^8 - 307260768960 z^7 + 403820464320 z^6 - 244064620800 z^5 + 48064816800 z^4 - 908107200 z^3 + 13097700 z^2 - 1530900 z + 354375) + \frac{1}{354375} (4 e^{-z} \sqrt{\pi} (32 z^{31/2} - 4048 z^{29/2} + 213824 z^{27/2} - 6180600 z^{25/2} + 107704050 z^{23/2} - 1176178665 z^{21/2} + 8114922585 z^{19/2} - 34861409730 z^{17/2} + 89810043750 z^{15/2} - 129583503000 z^{13/2} + 92885902200 z^{11/2} - 26281054800 z^{9/2} + 1654052400 z^{7/2}) \operatorname{erfi}(\sqrt{-z}))$$

07.25.03.an34.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{70875} (-64 z^{14} - 7296 z^{13} - 343424 z^{12} - 8722656 z^{11} - 131192460 z^{10} - 1207598280 z^9 - 6797563560 z^8 - 22726081440 z^7 - 42341513760 z^6 - 38962123200 z^5 - 13816202400 z^4 - 908107200 z^3 + 13097700 z^2 + 510300 z + 70875) - \frac{1}{70875} (2 e^z \sqrt{\pi} (32 z^{29/2} + 3664 z^{27/2} + 173520 z^{25/2} + 4445400 z^{23/2} + 67695450 z^{21/2} + 634615065 z^{19/2} + 3672617130 z^{17/2} + 12825706950 z^{15/2} + 25681509000 z^{13/2} + 26857467000 z^{11/2} + 12313501200 z^{9/2} + 1654052400 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an35.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{70875} \left(-64 z^{14} + 7296 z^{13} - 343424 z^{12} + 8722656 z^{11} - 131192460 z^{10} + 1207598280 z^9 - 6797563560 z^8 + \right.$$

$$\left. 22726081440 z^7 - 42341513760 z^6 + 38962123200 z^5 - \right.$$

$$\left. 13816202400 z^4 + 908107200 z^3 + 13097700 z^2 - 510300 z + 70875 \right) +$$

$$\frac{1}{70875} \left(2 e^{-z} \sqrt{\pi} \left(32 z^{29/2} - 3664 z^{27/2} + 173520 z^{25/2} - 4445400 z^{23/2} + 67695450 z^{21/2} - \right. \right.$$

$$\left. 634615065 z^{19/2} + 3672617130 z^{17/2} - 12825706950 z^{15/2} + 25681509000 z^{13/2} - \right.$$

$$\left. 26857467000 z^{11/2} + 12313501200 z^{9/2} - 1654052400 z^{7/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.an36.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{23625} \left(32 z^{13} + 3264 z^{12} + 135824 z^{11} + 3004680 z^{10} + 38618090 z^9 + 296201370 z^8 + 1341485640 z^7 + \right.$$

$$\left. 3425243640 z^6 + 4472067600 z^5 + 2432430000 z^4 + 302702400 z^3 - 13097700 z^2 + 510300 z + 23625 \right) +$$

$$\frac{1}{23625} \left(e^z \sqrt{\pi} \left(32 z^{27/2} + 3280 z^{25/2} + 137440 z^{23/2} + 3071000 z^{21/2} + 40056450 z^{19/2} + 314163465 z^{17/2} + \right. \right.$$

$$\left. 1473472875 z^{15/2} + 3984869700 z^{13/2} + 5757160500 z^{11/2} + 3828825000 z^{9/2} + 827026200 z^{7/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.an37.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{23625} \left(-32 z^{13} + 3264 z^{12} - 135824 z^{11} + 3004680 z^{10} - 38618090 z^9 + 296201370 z^8 - 1341485640 z^7 + \right.$$

$$\left. 3425243640 z^6 - 4472067600 z^5 + 2432430000 z^4 - 302702400 z^3 - 13097700 z^2 - 510300 z + 23625 \right) +$$

$$\frac{1}{23625} \left(e^{-z} \sqrt{\pi} \left(32 z^{27/2} - 3280 z^{25/2} + 137440 z^{23/2} - 3071000 z^{21/2} + 40056450 z^{19/2} - 314163465 z^{17/2} + \right. \right.$$

$$\left. 1473472875 z^{15/2} - 3984869700 z^{13/2} + 5757160500 z^{11/2} - 3828825000 z^{9/2} + 827026200 z^{7/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.an38.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{23625} \left(-16 z^{12} - 1440 z^{11} - 52080 z^{10} - 982240 z^9 - 10493199 z^8 - 64587420 z^7 - 222860820 z^6 - 398197800 z^5 - \right.$$

$$\left. 308107800 z^4 - 60540480 z^3 + 4365900 z^2 - 510300 z + 23625 \right) +$$

$$\frac{1}{47250} \left(e^z \sqrt{\pi} \left(-32 z^{25/2} - 2896 z^{23/2} - 105584 z^{21/2} - 2015160 z^{19/2} - 21920010 z^{17/2} - 138803385 z^{15/2} - \right. \right.$$

$$\left. 501849180 z^{13/2} - 973774620 z^{11/2} - 888287400 z^{9/2} - 275675400 z^{7/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.an39.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, \frac{1}{2}; -z\right) =$$

$$\frac{1}{23625} \left(-16z^{12} + 1440z^{11} - 52080z^{10} + 982240z^9 - 10493199z^8 + 64587420z^7 - 222860820z^6 + \right.$$

$$\left. 398197800z^5 - 308107800z^4 + 60540480z^3 + 4365900z^2 + 510300z + 23625 \right) +$$

$$\frac{1}{47250} \left(e^{-z} \sqrt{\pi} \left(32z^{25/2} - 2896z^{23/2} + 105584z^{21/2} - 2015160z^{19/2} + 21920010z^{17/2} - 138803385z^{15/2} + \right. \right.$$

$$\left. \left. 501849180z^{13/2} - 973774620z^{11/2} + 888287400z^{9/2} - 275675400z^{7/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an3a.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, 1; z\right) =$$

$$-\frac{1}{189000} \left(e^z \left(128z^{12} + 10816z^{11} + 364960z^{10} + 6374000z^9 + 62493000z^8 + 349197900z^7 + 1079075550z^6 + \right. \right.$$

$$\left. \left. 1695511125z^5 + 1118777625z^4 + 165501000z^3 - 15233400z^2 + 2230200z - 189000 \right) \right)$$

07.25.03.an3b.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, \frac{3}{2}; z\right) =$$

$$\frac{1}{47250} \left(-16z^{11} - 1248z^{10} - 38360z^9 - 599244z^8 - 5117697z^7 - 23902935z^6 - 57501990z^5 - 60810750z^4 - \right.$$

$$\left. 17297280z^3 + 1746360z^2 - 340200z + 47250 \right) -$$

$$\frac{1}{94500} \left(e^z \sqrt{\pi} z^{7/2} \left(32z^8 + 2512z^7 + 77952z^6 + 1235640z^5 + 10799250z^4 + 52409385z^3 + \right. \right.$$

$$\left. \left. 134983485z^2 + 163873710z + 68918850 \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an3c.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, \frac{3}{2}; -z\right) =$$

$$\frac{1}{47250} \left(16z^{11} - 1248z^{10} + 38360z^9 - 599244z^8 + 5117697z^7 - 23902935z^6 + 57501990z^5 - 60810750z^4 + \right.$$

$$\left. 17297280z^3 + 1746360z^2 + 340200z + 47250 \right) -$$

$$\frac{1}{94500} \left(e^{-z} \sqrt{\pi} z^{7/2} \left(32z^8 - 2512z^7 + 77952z^6 - 1235640z^5 + 10799250z^4 - \right. \right.$$

$$\left. \left. 52409385z^3 + 134983485z^2 - 163873710z + 68918850 \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an3d.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, 2; z\right) =$$

$$-\frac{1}{189000} \left(e^z \left(128z^{11} + 9280z^{10} + 262880z^9 + 3745200z^8 + 28786200z^7 + 118908300z^6 + 246717450z^5 + \right. \right.$$

$$\left. \left. 215206425z^4 + 42745500z^3 - 5481000z^2 + 1209600z - 189000 \right) \right)$$

07.25.03.an3e.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{31500} (-16z^{10} - 1056z^9 - 26752z^8 - 332232z^7 - 2139739z^6 - 6922230z^5 - 9803430z^4 - 3843840z^3 + 498960z^2 - 136080z + 31500) - \frac{1}{63000} (e^z \sqrt{\pi} z^{7/2} (32z^7 + 2128z^6 + 54544z^5 + 690200z^4 + 4587450z^3 + 15709785z^2 + 25014990z + 13783770) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an3f.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{63000} (e^{-z} \sqrt{\pi} (32z^7 - 2128z^6 + 54544z^5 - 690200z^4 + 4587450z^3 - 15709785z^2 + 25014990z - 13783770) \operatorname{erfi}(\sqrt{z}) z^{7/2}) + \frac{1}{31500} (-16z^{10} + 1056z^9 - 26752z^8 + 332232z^7 - 2139739z^6 + 6922230z^5 - 9803430z^4 + 3843840z^3 + 498960z^2 + 136080z + 31500)$$

07.25.03.an3g.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, 3; z\right) = -\frac{1}{94500} (e^z (128z^{10} + 7744z^9 + 177696z^8 + 1968240z^7 + 11072040z^6 + 30331980z^5 + 34393590z^4 + 8844885z^3 - 1478925z^2 + 434700z - 94500))$$

07.25.03.an3h.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{12600} (-16z^9 - 864z^8 - 17256z^7 - 160084z^6 - 706605z^5 - 1331505z^4 - 698880z^3 + 110880z^2 - 38880z + 12600) - \frac{1}{25200} e^z \sqrt{\pi} z^{7/2} (32z^6 + 1744z^5 + 35360z^4 + 336600z^3 + 1558050z^2 + 3245385z + 2297295) \operatorname{erf}(\sqrt{z})$$

07.25.03.an3i.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{12600} (16z^9 - 864z^8 + 17256z^7 - 160084z^6 + 706605z^5 - 1331505z^4 + 698880z^3 + 110880z^2 + 38880z + 12600) - \frac{1}{25200} (e^{-z} \sqrt{\pi} z^{7/2} (32z^6 - 1744z^5 + 35360z^4 - 336600z^3 + 1558050z^2 - 3245385z + 2297295) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an3j.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, 4; z\right) = -\frac{1}{31500} (e^z (128z^9 + 6208z^8 + 109408z^7 + 874160z^6 + 3204600z^5 + 4695180z^4 + 1527330z^3 - 319095z^2 + 116550z - 31500))$$

07.25.03.an3k.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{-16z^8 - 672z^7 - 9872z^6 - 61680z^5 - 155655z^4 - 107520z^3 + 20160z^2 - 8640z + 3600}{3600} - \frac{e^z \sqrt{\pi} z^{7/2} (32z^5 + 1360z^4 + 20400z^3 + 132600z^2 + 364650z + 328185) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.an3l.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32z^5 - 1360z^4 + 20400z^3 - 132600z^2 + 364650z - 328185) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{7200} + \frac{-16z^8 + 672z^7 - 9872z^6 + 61680z^5 - 155655z^4 + 107520z^3 + 20160z^2 + 8640z + 3600}{3600}$$

07.25.03.an3m.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, 5; z\right) = -\frac{1}{7875} (e^z (128z^8 + 4672z^7 + 58016z^6 + 294000z^5 + 558600z^4 + 226380z^3 - 57330z^2 + 24885z - 7875))$$

07.25.03.an3n.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{800z^4} (-16z^{11} - 480z^{10} - 4600z^9 - 15900z^8 - 14329z^7 + 3045z^6 - 1170z^5 - 1650z^4 + 12600z^3 - 52920z^2 + 176400z - 529200) + \frac{1}{1600z^{9/2}} (e^z \sqrt{\pi} (-32z^{12} - 976z^{11} - 9664z^{10} - 35960z^9 - 41010z^8 - 105z^7 + 735z^6 - 4410z^5 + 22050z^4 - 88200z^3 + 264600z^2 - 529200z + 529200) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an3o.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{800z^4} (16z^{11} - 480z^{10} + 4600z^9 - 15900z^8 + 14329z^7 + 3045z^6 + 1170z^5 - 1650z^4 - 12600z^3 - 52920z^2 - 176400z - 529200) + \frac{1}{1600z^{9/2}} (e^{-z} \sqrt{\pi} (-32z^{12} + 976z^{11} - 9664z^{10} + 35960z^9 - 41010z^8 + 105z^7 + 735z^6 + 4410z^5 + 22050z^4 + 88200z^3 + 264600z^2 + 529200z + 529200) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an3p.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{5}{2}, 6; z\right) = -\frac{e^z (128z^7 + 3136z^6 + 23520z^5 + 58800z^4 + 29400z^3 - 8820z^2 + 4410z - 1575)}{1575}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = -\frac{3}{2}$

07.25.03.an3q.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{14175} (32 z^{13} + 3296 z^{12} + 138768 z^{11} + 3114024 z^{10} + 40749450 z^9 + 319951080 z^8 + 1496130660 z^7 + 4003159680 z^6 + 5641075440 z^5 + 3567564000 z^4 + 713512800 z^3 + 13097700 z^2 + 170100 z + 14175) + \frac{1}{14175} (e^z \sqrt{\pi} (32 z^{27/2} + 3312 z^{25/2} + 140400 z^{23/2} + 3181800 z^{21/2} + 42241050 z^{19/2} + 338927715 z^{17/2} + 1639050840 z^{15/2} + 4630452750 z^{13/2} + 7159698000 z^{11/2} + 5378373000 z^{9/2} + 1556755200 z^{7/2} + 97297200 z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an3r.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{14175} (-32 z^{13} + 3296 z^{12} - 138768 z^{11} + 3114024 z^{10} - 40749450 z^9 + 319951080 z^8 - 1496130660 z^7 + 4003159680 z^6 - 5641075440 z^5 + 3567564000 z^4 - 713512800 z^3 + 13097700 z^2 - 170100 z + 14175) + \frac{1}{14175} (e^{-z} \sqrt{\pi} (32 z^{27/2} - 3312 z^{25/2} + 140400 z^{23/2} - 3181800 z^{21/2} + 42241050 z^{19/2} - 338927715 z^{17/2} + 1639050840 z^{15/2} - 4630452750 z^{13/2} + 7159698000 z^{11/2} - 5378373000 z^{9/2} + 1556755200 z^{7/2} - 97297200 z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an3s.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{4725} (-16 z^{12} - 1472 z^{11} - 54672 z^{10} - 1065680 z^9 - 11874855 z^8 - 77322510 z^7 - 288958020 z^6 - 584503920 z^5 - 567567000 z^4 - 205405200 z^3 - 13097700 z^2 + 170100 z + 4725) + \frac{1}{9450} (e^z \sqrt{\pi} (-32 z^{25/2} - 2960 z^{23/2} - 110800 z^{21/2} - 2184600 z^{19/2} - 24764250 z^{17/2} - 165577965 z^{15/2} - 645583050 z^{13/2} - 1402537500 z^{11/2} - 1549548000 z^{9/2} - 729729000 z^{7/2} - 97297200 z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an3t.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{4725} (-16 z^{12} + 1472 z^{11} - 54672 z^{10} + 1065680 z^9 - 11874855 z^8 + 77322510 z^7 - 288958020 z^6 + 584503920 z^5 - 567567000 z^4 + 205405200 z^3 - 13097700 z^2 - 170100 z + 4725) + \frac{1}{9450} (e^{-z} \sqrt{\pi} (32 z^{25/2} - 2960 z^{23/2} + 110800 z^{21/2} - 2184600 z^{19/2} + 24764250 z^{17/2} - 165577965 z^{15/2} + 645583050 z^{13/2} - 1402537500 z^{11/2} + 1549548000 z^{9/2} - 729729000 z^{7/2} + 97297200 z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an3u.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{9450} (16z^{11} + 1296z^{10} + 41720z^9 + 690828z^8 + 6367545z^7 + 33048600z^6 + 93153060z^5 + 129729600z^4 + 72432360z^3 + 8731800z^2 - 340200z + 9450) + \frac{1}{18900} (e^z \sqrt{\pi} (32z^{23/2} + 2608z^{21/2} + 84720z^{19/2} + 1422120z^{17/2} + 13387290z^{15/2} + 71866935z^{13/2} + 214381440z^{11/2} + 330630300z^{9/2} + 227026800z^{7/2} + 48648600z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an3v.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{9450} (-16z^{11} + 1296z^{10} - 41720z^9 + 690828z^8 - 6367545z^7 + 33048600z^6 - 93153060z^5 + 129729600z^4 - 72432360z^3 + 8731800z^2 + 340200z + 9450) + \frac{1}{18900} (e^{-z} \sqrt{\pi} (32z^{23/2} - 2608z^{21/2} + 84720z^{19/2} - 1422120z^{17/2} + 13387290z^{15/2} - 71866935z^{13/2} + 214381440z^{11/2} - 330630300z^{9/2} + 227026800z^{7/2} - 48648600z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an3w.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, 1; z\right) = \frac{1}{37800} (e^z (64z^{11} + 4864z^{10} + 146000z^9 + 2238000z^8 + 18937500z^7 + 89380200z^6 + 226707075z^5 + 280987875z^4 + 137907000z^3 + 13797000z^2 - 718200z + 37800))$$

07.25.03.an3x.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{37800} (e^z \sqrt{\pi} (32z^8 + 2256z^7 + 62160z^6 + 862680z^5 + 6485850z^4 + 26465985z^3 + 55585530z^2 + 52702650z + 16216200) \operatorname{erf}(\sqrt{z}) z^{5/2}) + \frac{1}{18900} (16z^{10} + 1120z^9 + 30528z^8 + 416616z^7 + 3048555z^6 + 11883690z^5 + 22972950z^4 + 18378360z^3 + 3492720z^2 - 226800z + 18900)$$

07.25.03.an3y.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{18900} (16z^{10} - 1120z^9 + 30528z^8 - 416616z^7 + 3048555z^6 - 11883690z^5 + 22972950z^4 - 18378360z^3 + 3492720z^2 + 226800z + 18900) - \frac{1}{37800} (e^{-z} \sqrt{\pi} z^{5/2} (32z^8 - 2256z^7 + 62160z^6 - 862680z^5 + 6485850z^4 - 26465985z^3 + 55585530z^2 - 52702650z + 16216200) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an3z.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, 2; z\right) = \frac{1}{37800} (e^z (64 z^{10} + 4160 z^9 + 104400 z^8 + 1298400 z^7 + 8550300 z^6 + 29528100 z^5 + 49538475 z^4 + 33295500 z^3 + 4725000 z^2 - 378000 z + 37800))$$

07.25.03.an40.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{25200} (e^z \sqrt{\pi} (32 z^7 + 1904 z^6 + 43120 z^5 + 474600 z^4 + 2689050 z^3 + 7642635 z^2 + 9729720 z + 4054050) \operatorname{erf}(\sqrt{z}) z^{5/2}) + \frac{1}{12600} (16 z^9 + 944 z^8 + 21096 z^7 + 227204 z^6 + 1240365 z^5 + 3292380 z^4 + 3633630 z^3 + 997920 z^2 - 90720 z + 12600)$$

07.25.03.an41.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{25200} (e^{-z} \sqrt{\pi} (32 z^7 - 1904 z^6 + 43120 z^5 - 474600 z^4 + 2689050 z^3 - 7642635 z^2 + 9729720 z - 4054050) \operatorname{erfi}(\sqrt{z}) z^{5/2}) + \frac{1}{12600} (-16 z^9 + 944 z^8 - 21096 z^7 + 227204 z^6 - 1240365 z^5 + 3292380 z^4 - 3633630 z^3 + 997920 z^2 + 90720 z + 12600)$$

07.25.03.an42.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, 3; z\right) = \frac{1}{18900} (e^z (64 z^9 + 3456 z^8 + 69840 z^7 + 669840 z^6 + 3191580 z^5 + 7187040 z^4 + 6416235 z^3 + 1214325 z^2 - 132300 z + 18900))$$

07.25.03.an43.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z \sqrt{\pi} (32 z^6 + 1552 z^5 + 27600 z^4 + 226200 z^3 + 879450 z^2 + 1486485 z + 810810) \operatorname{erf}(\sqrt{z}) z^{5/2}}{10080} + \frac{16 z^8 + 768 z^7 + 13424 z^6 + 106752 z^5 + 392175 z^4 + 586950 z^3 + 221760 z^2 - 25920 z + 5040}{5040}$$

07.25.03.an44.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{16 z^8 - 768 z^7 + 13424 z^6 - 106752 z^5 + 392175 z^4 - 586950 z^3 + 221760 z^2 + 25920 z + 5040}{5040} - \frac{1}{10080} e^{-z} \sqrt{\pi} z^{5/2} (32 z^6 - 1552 z^5 + 27600 z^4 - 226200 z^3 + 879450 z^2 - 1486485 z + 810810) \operatorname{erfi}(\sqrt{z})$$

07.25.03.an45.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, 4; z\right) = \frac{1}{6300} e^z (64 z^8 + 2752 z^7 + 42320 z^6 + 288960 z^5 + 879900 z^4 + 1027740 z^3 + 249795 z^2 - 34650 z + 6300)$$

07.25.03.an46.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z \sqrt{\pi} (32 z^5 + 1200 z^4 + 15\,600 z^3 + 85\,800 z^2 + 193\,050 z + 135\,135) \operatorname{erf}(\sqrt{z}) z^{5/2}}{2880} + \frac{16 z^7 + 592 z^6 + 7512 z^5 + 39\,420 z^4 + 79\,905 z^3 + 40\,320 z^2 - 5760 z + 1440}{1440}$$

07.25.03.an47.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32 z^5 - 1200 z^4 + 15\,600 z^3 - 85\,800 z^2 + 193\,050 z - 135\,135) \operatorname{erfi}(\sqrt{z}) z^{5/2}}{2880} + \frac{-16 z^7 + 592 z^6 - 7512 z^5 + 39\,420 z^4 - 79\,905 z^3 + 40\,320 z^2 + 5760 z + 1440}{1440}$$

07.25.03.an48.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, 5; z\right) = \frac{e^z (64 z^7 + 2048 z^6 + 21\,840 z^5 + 92\,400 z^4 + 140\,700 z^3 + 42\,840 z^2 - 7245 z + 1575)}{1575}$$

07.25.03.an49.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{320 z^4} (16 z^{10} + 416 z^9 + 3360 z^8 + 9368 z^7 + 6195 z^6 - 990 z^5 - 30 z^4 + 1800 z^3 - 7560 z^2 + 25\,200 z - 75\,600) + \frac{1}{640 z^{9/2}} (e^z \sqrt{\pi} (32 z^{11} + 848 z^{10} + 7120 z^9 + 21\,720 z^8 + 19\,290 z^7 + 105 z^6 - 630 z^5 + 3150 z^4 - 12\,600 z^3 + 37\,800 z^2 - 75\,600 z + 75\,600) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an4a.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{320 z^4} (16 z^{10} - 416 z^9 + 3360 z^8 - 9368 z^7 + 6195 z^6 + 990 z^5 - 30 z^4 - 1800 z^3 - 7560 z^2 - 25\,200 z - 75\,600) + \frac{1}{640 z^{9/2}} (e^{-z} \sqrt{\pi} (-32 z^{11} + 848 z^{10} - 7120 z^9 + 21\,720 z^8 - 19\,290 z^7 + 105 z^6 + 630 z^5 + 3150 z^4 + 12\,600 z^3 + 37\,800 z^2 + 75\,600 z + 75\,600) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an4b.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{3}{2}, 6; z\right) = \frac{1}{315} e^z (64 z^6 + 1344 z^5 + 8400 z^4 + 16\,800 z^3 + 6300 z^2 - 1260 z + 315)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = -\frac{1}{2}$

07.25.03.an4c.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{3150} (16z^{11} + 1312z^{10} + 42872z^9 + 723340z^8 + 6831345z^7 + 36648235z^6 + 108399720z^5 + 163243080z^4 + 106306200z^3 + 20790000z^2 + 340200z + 3150) + \frac{1}{6300} (e^z \sqrt{\pi} (32z^{23/2} + 2640z^{21/2} + 87040z^{19/2} + 1488280z^{17/2} + 14346290z^{15/2} + 79500225z^{13/2} + 248081925z^{11/2} + 410209800z^{9/2} + 318918600z^{7/2} + 91891800z^{5/2} + 5405400z^{3/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an4d.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{3150} (-16z^{11} + 1312z^{10} - 42872z^9 + 723340z^8 - 6831345z^7 + 36648235z^6 - 108399720z^5 + 163243080z^4 - 106306200z^3 + 20790000z^2 - 340200z + 3150) + \frac{1}{6300} (e^{-z} \sqrt{\pi} (32z^{23/2} - 2640z^{21/2} + 87040z^{19/2} - 1488280z^{17/2} + 14346290z^{15/2} - 79500225z^{13/2} + 248081925z^{11/2} - 410209800z^{9/2} + 318918600z^{7/2} - 91891800z^{5/2} + 5405400z^{3/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an4e.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{6300} (-16z^{10} - 1152z^9 - 32512z^8 - 463800z^7 - 3599635z^6 - 15246660z^5 - 33513480z^4 - 33873840z^3 - 12058200z^2 - 680400z + 6300) + \frac{1}{12600} (e^z \sqrt{\pi} (-32z^{21/2} - 2320z^{19/2} - 66160z^{17/2} - 959000z^{15/2} - 7633290z^{13/2} - 33700485z^{11/2} - 79579500z^{9/2} - 91891800z^{7/2} - 43243200z^{5/2} - 5405400z^{3/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an4f.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{6300} (-16z^{10} + 1152z^9 - 32512z^8 + 463800z^7 - 3599635z^6 + 15246660z^5 - 33513480z^4 + 33873840z^3 - 12058200z^2 + 680400z + 6300) + \frac{1}{12600} (e^{-z} \sqrt{\pi} (32z^{21/2} - 2320z^{19/2} + 66160z^{17/2} - 959000z^{15/2} + 7633290z^{13/2} - 33700485z^{11/2} + 79579500z^{9/2} - 91891800z^{7/2} + 43243200z^{5/2} - 5405400z^{3/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an4g.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, 1; z\right) = -\frac{1}{12600} (e^z (32z^{10} + 2160z^9 + 56800z^8 + 749800z^7 + 5344850z^6 + 20638275z^5 + 41119575z^4 + 37695000z^3 + 12411000z^2 + 693000z - 12600))$$

07.25.03.an4h.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{12600} \left(-16z^9 - 992z^8 - 23592z^7 - 275540z^6 - 1681485z^5 - 5270265z^4 - 7747740z^3 - 4282740z^2 - 453600z + 12600 \right) - \frac{1}{25200} \left(e^z \sqrt{\pi} z^{3/2} (32z^8 + 2000z^7 + 48160z^6 + 573720z^5 + 3617250z^4 + 11996985z^3 + 19594575z^2 + 13513500z + 2702700) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an4i.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{12600} \left(16z^9 - 992z^8 + 23592z^7 - 275540z^6 + 1681485z^5 - 5270265z^4 + 7747740z^3 - 4282740z^2 + 453600z + 12600 \right) - \frac{1}{25200} \left(e^{-z} \sqrt{\pi} z^{3/2} (32z^8 - 2000z^7 + 48160z^6 - 573720z^5 + 3617250z^4 - 11996985z^3 + 19594575z^2 - 13513500z + 2702700) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an4j.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, 2; z\right) = -\frac{1}{12600} \left(e^z (32z^9 + 1840z^8 + 40240z^7 + 427880z^6 + 2349690z^5 + 6540135z^4 + 8418900z^3 + 4019400z^2 + 352800z - 12600) \right)$$

07.25.03.an4k.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{8400} \left(-16z^8 - 832z^7 - 16112z^6 - 147040z^5 - 659295z^4 - 1371370z^3 - 1094940z^2 - 181440z + 8400 \right) - \frac{1}{16800} \left(e^z \sqrt{\pi} z^{3/2} (32z^7 + 1680z^6 + 33040z^5 + 309400z^4 + 1451450z^3 + 3288285z^2 + 3153150z + 900900) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an4l.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{16800} \left(e^{-z} \sqrt{\pi} (32z^7 - 1680z^6 + 33040z^5 - 309400z^4 + 1451450z^3 - 3288285z^2 + 3153150z - 900900) \operatorname{erfi}(\sqrt{z}) z^{3/2} \right) + \frac{1}{8400} \left(-16z^8 + 832z^7 - 16112z^6 + 147040z^5 - 659295z^4 + 1371370z^3 - 1094940z^2 + 181440z + 8400 \right)$$

07.25.03.an4m.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, 3; z\right) = -\frac{1}{6300} \left(e^z (32z^8 + 1520z^7 + 26560z^6 + 215400z^5 + 841890z^4 + 1488795z^3 + 974925z^2 + 119700z - 6300) \right)$$

07.25.03.an4n.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{-16z^7 - 672z^6 - 10072z^5 - 66780z^4 - 196105z^3 - 218295z^2 - 51840z + 3360}{3360} - \frac{e^z \sqrt{\pi} z^{3/2} (32z^6 + 1360z^5 + 20800z^4 + 143000z^3 + 450450z^2 + 585585z + 225225) \operatorname{erf}(\sqrt{z})}{6720}$$

07.25.03.an4o.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{16z^7 - 672z^6 + 10072z^5 - 66780z^4 + 196105z^3 - 218295z^2 + 51840z + 3360}{3360} - \frac{1}{6720} e^{-z} \sqrt{\pi} z^{3/2} (32z^6 - 1360z^5 + 20800z^4 - 143000z^3 + 450450z^2 - 585585z + 225225) \operatorname{erfi}(\sqrt{z})$$

07.25.03.an4p.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, 4; z\right) = -\frac{e^z (32z^7 + 1200z^6 + 15760z^5 + 89320z^4 + 216650z^3 + 188895z^2 + 30450z - 2100)}{2100}$$

07.25.03.an4q.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{960} (-16z^6 - 512z^5 - 5472z^4 - 23240z^3 - 35595z^2 - 11520z + 960) - \frac{e^z \sqrt{\pi} z^{3/2} (32z^5 + 1040z^4 + 11440z^3 + 51480z^2 + 90090z + 45045) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.an4r.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32z^5 - 1040z^4 + 11440z^3 - 51480z^2 + 90090z - 45045) \operatorname{erfi}(\sqrt{z}) z^{3/2}}{1920} + \frac{1}{960} (-16z^6 + 512z^5 - 5472z^4 + 23240z^3 - 35595z^2 + 11520z + 960)$$

07.25.03.an4s.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, 5; z\right) = -\frac{1}{525} e^z (32z^6 + 880z^5 + 7840z^4 + 26600z^3 + 30450z^2 + 6195z - 525)$$

07.25.03.an4t.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{3(16z^9 + 352z^8 + 2312z^7 + 4900z^6 + 2085z^5 - 155z^4 - 300z^3 + 1260z^2 - 4200z + 12600)}{640z^4} - \frac{1}{1280z^{9/2}} \left(3e^z \sqrt{\pi} (32z^{10} + 720z^9 + 4960z^8 + 11800z^7 + 7490z^6 + 105z^5 - 525z^4 + 2100z^3 - 6300z^2 + 12600z - 12600) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.an4u.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3(16z^9 - 352z^8 + 2312z^7 - 4900z^6 + 2085z^5 + 155z^4 - 300z^3 - 1260z^2 - 4200z - 12600)}{640z^4} - \frac{1}{1280z^{9/2}} \left(3e^{-z} \sqrt{\pi} (32z^{10} - 720z^9 + 4960z^8 - 11800z^7 + 7490z^6 - 105z^5 - 525z^4 - 2100z^3 - 6300z^2 - 12600z - 12600) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.an4v.01

$${}_2F_2\left(\frac{9}{2}, 6; -\frac{1}{2}, 6; z\right) = -\frac{1}{105} e^z (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = \frac{1}{2}$

07.25.03.an4w.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{12600} (16z^9 + 1008z^8 + 24456z^7 + 293092z^6 + 1852125z^5 + 6106320z^4 + 9740808z^3 + 6320160z^2 + 1111320z + 12600) + \frac{1}{25200} \left(e^z \sqrt{\pi} (32z^{19/2} + 2032z^{17/2} + 49904z^{15/2} + 609672z^{13/2} + 3975258z^{11/2} + 13824195z^{9/2} + 24282720z^{7/2} + 19043640z^{5/2} + 5155920z^{3/2} + 249480\sqrt{z}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an4x.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{12600} (-16z^9 + 1008z^8 - 24456z^7 + 293092z^6 - 1852125z^5 + 6106320z^4 - 9740808z^3 + 6320160z^2 - 1111320z + 12600) + \frac{1}{25200} \left(e^{-z} \sqrt{\pi} (32z^{19/2} - 2032z^{17/2} + 49904z^{15/2} - 609672z^{13/2} + 3975258z^{11/2} - 13824195z^{9/2} + 24282720z^{7/2} - 19043640z^{5/2} + 5155920z^{3/2} - 249480\sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an4y.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, 1; z\right) = \frac{1}{12600} (e^z (16z^9 + 944z^8 + 21320z^7 + 236320z^6 + 1372665z^5 + 4142145z^4 + 6062280z^3 + 3691800z^2 + 667800z + 12600))$$

07.25.03.an4z.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{25200} (16z^8 + 864z^7 + 17552z^6 + 170640z^5 + 836055z^4 + 1993068z^3 + 2037420z^2 + 657720z + 25200) + \frac{1}{50400} \left(e^z \sqrt{\pi} \sqrt{z} (32z^8 + 1744z^7 + 35952z^6 + 358008z^5 + 1827210z^4 + 4688145z^3 + 5530140z^2 + 2453220z + 249480) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an50.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{25200} (16z^8 - 864z^7 + 17552z^6 - 170640z^5 + 836055z^4 - 1993068z^3 + 2037420z^2 - 657720z + 25200) - \frac{1}{50400} \left(e^{-z} \sqrt{\pi} \sqrt{z} (32z^8 - 1744z^7 + 35952z^6 - 358008z^5 + 1827210z^4 - 4688145z^3 + 5530140z^2 - 2453220z + 249480) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an51.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, 2; z\right) = \frac{1}{12600} (e^z (16z^8 + 800z^7 + 14920z^6 + 131880z^5 + 581385z^4 + 1235220z^3 + 1121400z^2 + 327600z + 12600))$$

07.25.03.an52.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{16z^7 + 720z^6 + 11800z^5 + 88380z^4 + 310849z^3 + 471240z^2 + 238140z + 16800}{16800} + \frac{1}{33600} \left(e^z \sqrt{\pi} \sqrt{z} (32z^7 + 1456z^6 + 24304z^5 + 187880z^4 + 699930z^3 + 1188495z^2 + 776160z + 124740) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an53.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{-16z^7 + 720z^6 - 11800z^5 + 88380z^4 - 310849z^3 + 471240z^2 - 238140z + 16800}{16800} + \frac{1}{33600} \left(e^{-z} \sqrt{\pi} \sqrt{z} (32z^7 - 1456z^6 + 24304z^5 - 187880z^4 + 699930z^3 - 1188495z^2 + 776160z - 124740) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an54.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, 3; z\right) = \frac{e^z (16z^7 + 656z^6 + 9672z^5 + 64176z^4 + 196329z^3 + 253575z^2 + 107100z + 6300)}{6300}$$

07.25.03.an55.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{16z^6 + 576z^5 + 7200z^4 + 38248z^3 + 84315z^2 + 62100z + 6720}{6720} + \frac{e^z \sqrt{\pi} \sqrt{z} (32z^6 + 1168z^5 + 14960z^4 + 83160z^3 + 200970z^2 + 183645z + 41580) \operatorname{erf}(\sqrt{z})}{13440}$$

07.25.03.an56.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{16z^6 - 576z^5 + 7200z^4 - 38248z^3 + 84315z^2 - 62100z + 6720}{6720} - \frac{e^{-z} \sqrt{\pi} \sqrt{z} (32z^6 - 1168z^5 + 14960z^4 - 83160z^3 + 200970z^2 - 183645z + 41580) \operatorname{erfi}(\sqrt{z})}{13440}$$

07.25.03.an57.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, 4; z\right) = \frac{e^z (16z^6 + 512z^5 + 5576z^4 + 25144z^3 + 45465z^2 + 26250z + 2100)}{2100}$$

07.25.03.an58.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920}{1920} + \frac{e^z \sqrt{\pi} \sqrt{z} (32z^5 + 880z^4 + 7920z^3 + 27720z^2 + 34650z + 10395) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.an59.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920}{1920} + \frac{e^{-z} \sqrt{\pi} \sqrt{z} (32z^5 - 880z^4 + 7920z^3 - 27720z^2 + 34650z - 10395) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.an5a.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, 5; z\right) = \frac{1}{525} e^z (16z^5 + 368z^4 + 2632z^3 + 6720z^2 + 5145z + 525)$$

07.25.03.an5b.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{3(16z^8 + 288z^7 + 1456z^6 + 2112z^5 + 415z^4 + 60z^3 - 252z^2 + 840z - 2520)}{1280z^4} + \frac{1}{2560z^{9/2}} \left(3e^z \sqrt{\pi} (32z^9 + 592z^8 + 3184z^7 + 5432z^6 + 2058z^5 + 105z^4 - 420z^3 + 1260z^2 - 2520z + 2520) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.an5c.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{3(16z^8 - 288z^7 + 1456z^6 - 2112z^5 + 415z^4 - 60z^3 - 252z^2 - 840z - 2520)}{1280z^4} - \frac{1}{2560z^{9/2}} \left(3e^{-z} \sqrt{\pi} (32z^9 - 592z^8 + 3184z^7 - 5432z^6 + 2058z^5 - 105z^4 - 420z^3 - 1260z^2 - 2520z - 2520) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.an5d.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{1}{2}, 6; z\right) = \frac{1}{105} e^z (16z^4 + 224z^3 + 840z^2 + 840z + 105)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = 1$

07.25.03.an5e.01

$${}_2F_2\left(\frac{9}{2}, 6; 1, 1; z\right) = \frac{1}{100800} \left(e^{z/2} (64z^9 + 3552z^8 + 75248z^7 + 781760z^6 + 4273240z^5 + 12313770z^4 + 17854035z^3 + 11672190z^2 + 2671200z + 100800) I_0\left(\frac{z}{2}\right) + \frac{1}{100800} \left(e^{z/2} (64z^9 + 3488z^8 + 71792z^7 + 711648z^6 + 3594200z^5 + 9013670z^4 + 10109115z^3 + 3973860z^2 + 284040z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.an5f.01

$${}_2F_2\left(\frac{9}{2}, 6; 1, \frac{3}{2}; z\right) = \frac{e^z (8z^8 + 404z^7 + 7630z^6 + 68565z^5 + 309225z^4 + 679560z^3 + 652680z^2 + 214200z + 12600)}{12600}$$

07.25.03.an5g.01

$${}_2F_2\left(\frac{9}{2}, 6; 1, 2; z\right) = \frac{1}{50400} \left(e^{z/2} (32z^8 + 1504z^7 + 26320z^6 + 218720z^5 + 916050z^4 + 1904610z^3 + 1816695z^2 + 655200z + 50400) I_0\left(\frac{z}{2}\right) + \frac{e^{z/2} (16z^8 + 736z^7 + 12432z^6 + 97280z^5 + 366275z^4 + 624330z^3 + 400230z^2 + 58410z) I_1\left(\frac{z}{2}\right)}{25200} \right)$$

07.25.03.an5h.01

$${}_2F_2\left(\frac{9}{2}, 6; 1, \frac{5}{2}; z\right) = \frac{e^z (4z^7 + 168z^6 + 2555z^5 + 17675z^4 + 57400z^3 + 81480z^2 + 41160z + 4200)}{4200}$$

07.25.03.an5i.01

$${}_2F_2\left(\frac{9}{2}, 6; 1, 3; z\right) = \frac{e^{z/2} (32 z^7 + 1232 z^6 + 17056 z^5 + 106980 z^4 + 316590 z^3 + 420885 z^2 + 214200 z + 25200) I_0\left(\frac{z}{2}\right) + e^{z/2} z (32 z^6 + 1200 z^5 + 15872 z^4 + 91676 z^3 + 231750 z^2 + 222435 z + 52110) I_1\left(\frac{z}{2}\right)}{25200}$$

07.25.03.an5j.01

$${}_2F_2\left(\frac{9}{2}, 6; 1, \frac{7}{2}; z\right) = \frac{1}{840} e^z (2 z^6 + 67 z^5 + 775 z^4 + 3800 z^3 + 7800 z^2 + 5640 z + 840)$$

07.25.03.an5k.01

$${}_2F_2\left(\frac{9}{2}, 6; 1, 4; z\right) = \frac{e^{z/2} (16 z^6 + 480 z^5 + 4916 z^4 + 21200 z^3 + 38665 z^2 + 26250 z + 4200) I_0\left(\frac{z}{2}\right) + e^{z/2} z (16 z^5 + 464 z^4 + 4460 z^3 + 16956 z^2 + 23525 z + 7985) I_1\left(\frac{z}{2}\right)}{4200}$$

07.25.03.an5l.01

$${}_2F_2\left(\frac{9}{2}, 6; 1, \frac{9}{2}; z\right) = \frac{1}{120} e^z (z^5 + 25 z^4 + 200 z^3 + 600 z^2 + 600 z + 120)$$

07.25.03.an5m.01

$${}_2F_2\left(\frac{9}{2}, 6; 1, 5; z\right) = \frac{e^{z/2} (16 z^5 + 344 z^4 + 2324 z^3 + 5860 z^2 + 5145 z + 1050) I_0\left(\frac{z}{2}\right) + e^{z/2} z (16 z^4 + 328 z^3 + 2004 z^2 + 4004 z + 1865) I_1\left(\frac{z}{2}\right)}{1050}$$

07.25.03.an5n.01

$${}_2F_2\left(\frac{9}{2}, 6; 1, \frac{11}{2}; z\right) = \frac{3 e^z (256 z^8 + 4224 z^7 + 19520 z^6 + 26720 z^5 + 6640 z^4 + 840 z^3 - 2940 z^2 + 7350 z - 11025)}{20480 z^4} + \frac{6615 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.an5o.01

$${}_2F_2\left(\frac{9}{2}, 6; 1, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (256 z^8 - 4224 z^7 + 19520 z^6 - 26720 z^5 + 6640 z^4 - 840 z^3 - 2940 z^2 - 7350 z - 11025)}{20480 z^4} + \frac{6615 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.an5p.01

$${}_2F_2\left(\frac{9}{2}, 6; 1, 6; z\right) = \frac{1}{105} e^{z/2} (8 z^4 + 104 z^3 + 376 z^2 + 420 z + 105) I_0\left(\frac{z}{2}\right) + \frac{4}{105} e^{z/2} z (2 z^3 + 24 z^2 + 71 z + 44) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = \frac{3}{2}$

07.25.03.an5q.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{16 z^7 + 736 z^6 + 12408 z^5 + 96540 z^4 + 358713 z^3 + 594027 z^2 + 357210 z + 44730}{50400} + \frac{1}{100800 \sqrt{z}} (e^z \sqrt{\pi} (32 z^8 + 1488 z^7 + 25536 z^6 + 204792 z^5 + 803250 z^4 + 1475145 z^3 + 1104705 z^2 + 243810 z + 5670) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an5r.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{-16z^7 + 736z^6 - 12408z^5 + 96540z^4 - 358713z^3 + 594027z^2 - 357210z + 44730}{50400} + \frac{1}{100800\sqrt{z}}$$

$$\left(e^{-z}\sqrt{\pi}(32z^8 - 1488z^7 + 25536z^6 - 204792z^5 + 803250z^4 - 1475145z^3 + 1104705z^2 - 243810z + 5670)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.an5s.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{3}{2}, 2; z\right) = \frac{e^z(8z^7 + 340z^6 + 5250z^5 + 37065z^4 + 123900z^3 + 183960z^2 + 100800z + 12600)}{12600}$$

07.25.03.an5t.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{16z^6 + 608z^5 + 8160z^4 + 47864z^3 + 122787z^2 + 119070z + 27930}{33600} +$$

$$\frac{1}{67200\sqrt{z}}\left(e^z\sqrt{\pi}(32z^7 + 1232z^6 + 16912z^5 + 103320z^4 + 286650z^3 + 328545z^2 + 119070z + 5670)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.an5u.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{16z^6 - 608z^5 + 8160z^4 - 47864z^3 + 122787z^2 - 119070z + 27930}{33600} +$$

$$\frac{1}{67200\sqrt{z}}\left(e^{-z}\sqrt{\pi}(-32z^7 + 1232z^6 - 16912z^5 + 103320z^4 - 286650z^3 + 328545z^2 - 119070z + 5670)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.an5v.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{3}{2}, 3; z\right) = \frac{e^z(8z^6 + 276z^5 + 3318z^4 + 17157z^3 + 38115z^2 + 31500z + 6300)}{6300}$$

07.25.03.an5w.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{16z^5 + 480z^4 + 4808z^3 + 19236z^2 + 28485z + 10605}{13440} +$$

$$\frac{e^z\sqrt{\pi}(32z^6 + 976z^5 + 10080z^4 + 42840z^3 + 72450z^2 + 38745z + 2835)\operatorname{erf}(\sqrt{z})}{26880\sqrt{z}}$$

07.25.03.an5x.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{-16z^5 + 480z^4 - 4808z^3 + 19236z^2 - 28485z + 10605}{13440} +$$

$$\frac{e^{-z}\sqrt{\pi}(32z^6 - 976z^5 + 10080z^4 - 42840z^3 + 72450z^2 - 38745z + 2835)\operatorname{erfi}(\sqrt{z})}{26880\sqrt{z}}$$

07.25.03.an5y.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{3}{2}, 4; z\right) = \frac{e^z(8z^5 + 212z^4 + 1834z^3 + 6153z^2 + 7350z + 2100)}{2100}$$

07.25.03.an5z.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{3}{2}, \frac{9}{2}; z\right) =$$

$$\frac{16z^4 + 352z^3 + 2352z^2 + 5280z + 2895}{3840} + \frac{e^z\sqrt{\pi}(32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945)\operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.an60.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{16z^4 - 352z^3 + 2352z^2 - 5280z + 2895}{3840} + \frac{e^{-z}\sqrt{\pi}(-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945)\operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.an61.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{3}{2}, 5; z\right) = \frac{1}{525} e^z (8z^4 + 148z^3 + 798z^2 + 1365z + 525)$$

07.25.03.an62.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{3(16z^7 + 224z^6 + 792z^5 + 620z^4 - 15z^3 + 63z^2 - 210z + 630)}{2560z^4} + \frac{3e^z\sqrt{\pi}(32z^8 + 464z^7 + 1792z^6 + 1848z^5 + 210z^4 + 105z^3 - 315z^2 + 630z - 630)\operatorname{erf}(\sqrt{z})}{5120z^{9/2}}$$

07.25.03.an63.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{3e^{-z}\sqrt{\pi}(32z^8 - 464z^7 + 1792z^6 - 1848z^5 + 210z^4 - 105z^3 - 315z^2 - 630z - 630)\operatorname{erfi}(\sqrt{z})}{5120z^{9/2}} - \frac{3(16z^7 - 224z^6 + 792z^5 - 620z^4 - 15z^3 - 63z^2 - 210z - 630)}{2560z^4}$$

07.25.03.an64.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{3}{2}, 6; z\right) = \frac{1}{105} e^z (8z^3 + 84z^2 + 210z + 105)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = 2$

07.25.03.an65.01

$${}_2F_2\left(\frac{9}{2}, 6; 2, 2; z\right) = \frac{e^{z/2}(32z^7 + 1264z^6 + 18080z^5 + 118380z^4 + 371550z^3 + 537975z^2 + 314640z + 50400)I_0\left(\frac{z}{2}\right)}{50400} + \frac{e^{z/2}(32z^7 + 1232z^6 + 16864z^5 + 102100z^4 + 276750z^3 + 298845z^2 + 90900z + 1440)I_1\left(\frac{z}{2}\right)}{50400}$$

07.25.03.an66.01

$${}_2F_2\left(\frac{9}{2}, 6; 2, \frac{5}{2}; z\right) = \frac{e^z(4z^6 + 140z^5 + 1715z^4 + 9100z^3 + 21000z^2 + 18480z + 4200)}{4200}$$

07.25.03.an67.01

$${}_2F_2\left(\frac{9}{2}, 6; 2, 3; z\right) = \frac{e^{z/2}(16z^6 + 512z^5 + 5700z^4 + 27480z^3 + 58545z^2 + 50220z + 12600)I_0\left(\frac{z}{2}\right)}{12600} + \frac{e^{z/2}(16z^6 + 496z^5 + 5212z^4 + 22500z^3 + 38205z^2 + 19395z + 720)I_1\left(\frac{z}{2}\right)}{12600}$$

07.25.03.an68.01

$${}_2F_2\left(\frac{9}{2}, 6; 2, \frac{7}{2}; z\right) = \frac{1}{840} e^z (2z^5 + 55z^4 + 500z^3 + 1800z^2 + 2400z + 840)$$

07.25.03.an69.01

$${}_2F_2\left(\frac{9}{2}, 6; 2, 4; z\right) = \frac{e^{z/2} (16 z^5 + 392 z^4 + 3140 z^3 + 9940 z^2 + 11985 z + 4200) I_0\left(\frac{z}{2}\right)}{4200} + \frac{e^{z/2} (16 z^5 + 376 z^4 + 2772 z^3 + 7340 z^2 + 5705 z + 360) I_1\left(\frac{z}{2}\right)}{4200}$$

07.25.03.an6a.01

$${}_2F_2\left(\frac{9}{2}, 6; 2, \frac{9}{2}; z\right) = \frac{1}{120} e^z (z^4 + 20 z^3 + 120 z^2 + 240 z + 120)$$

07.25.03.an6b.01

$${}_2F_2\left(\frac{9}{2}, 6; 2, 5; z\right) = \frac{1}{525} e^{z/2} (8 z^4 + 136 z^3 + 680 z^2 + 1140 z + 525) I_0\left(\frac{z}{2}\right) + \frac{4}{525} e^{z/2} (2 z^4 + 32 z^3 + 139 z^2 + 160 z + 15) I_1\left(\frac{z}{2}\right)$$

07.25.03.an6c.01

$${}_2F_2\left(\frac{9}{2}, 6; 2, \frac{11}{2}; z\right) = \frac{3 e^z (128 z^7 + 1600 z^6 + 4960 z^5 + 3440 z^4 - 120 z^3 + 420 z^2 - 1050 z + 1575)}{10240 z^4} - \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.an6d.01

$${}_2F_2\left(\frac{9}{2}, 6; 2, \frac{11}{2}; -z\right) = -\frac{3 e^{-z} (128 z^7 - 1600 z^6 + 4960 z^5 - 3440 z^4 - 120 z^3 - 420 z^2 - 1050 z - 1575)}{10240 z^4} - \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.an6e.01

$${}_2F_2\left(\frac{9}{2}, 6; 2, 6; z\right) = \frac{1}{105} e^{z/2} (8 z^3 + 76 z^2 + 180 z + 105) I_0\left(\frac{z}{2}\right) + \frac{1}{105} e^{z/2} (8 z^3 + 68 z^2 + 116 z + 15) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = \frac{5}{2}$

07.25.03.an6f.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{16 z^6 + 496 z^5 + 5192 z^4 + 22132 z^3 + 36309 z^2 + 16660 z + 210}{22400 z} + \frac{e^z \sqrt{\pi} (32 z^7 + 1008 z^6 + 10864 z^5 + 49000 z^4 + 90650 z^3 + 56595 z^2 + 5880 z - 210) \operatorname{erf}(\sqrt{z})}{44800 z^{3/2}}$$

07.25.03.an6g.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-16 z^6 + 496 z^5 - 5192 z^4 + 22132 z^3 - 36309 z^2 + 16660 z - 210}{22400 z} + \frac{e^{-z} \sqrt{\pi} (32 z^7 - 1008 z^6 + 10864 z^5 - 49000 z^4 + 90650 z^3 - 56595 z^2 + 5880 z + 210) \operatorname{erfi}(\sqrt{z})}{44800 z^{3/2}}$$

07.25.03.an6h.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{5}{2}, 3; z\right) = \frac{e^z (4 z^5 + 112 z^4 + 1043 z^3 + 3885 z^2 + 5460 z + 2100)}{2100}$$

07.25.03.an6i.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{16z^5 + 384z^4 + 2896z^3 + 7824z^2 + 6055z + 210}{8960z} + \frac{e^z \sqrt{\pi} (32z^6 + 784z^5 + 6160z^4 + 18200z^3 + 17850z^2 + 3045z - 210) \operatorname{erf}(\sqrt{z})}{17920z^{3/2}}$$

07.25.03.an6j.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{16z^5 - 384z^4 + 2896z^3 - 7824z^2 + 6055z - 210}{8960z} + \frac{e^{-z} \sqrt{\pi} (-32z^6 + 784z^5 - 6160z^4 + 18200z^3 - 17850z^2 + 3045z + 210) \operatorname{erfi}(\sqrt{z})}{17920z^{3/2}}$$

07.25.03.an6k.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{5}{2}, 4; z\right) = \frac{1}{700} e^z (4z^4 + 84z^3 + 539z^2 + 1190z + 700)$$

07.25.03.an6l.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z \sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.an6m.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z} \sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.an6n.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{5}{2}, 5; z\right) = \frac{1}{175} e^z (4z^3 + 56z^2 + 203z + 175)$$

07.25.03.an6o.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{9(16z^6 + 160z^5 + 320z^4 + 40z^3 - 21z^2 + 70z - 210)}{5120z^4} + \frac{9e^z \sqrt{\pi} (32z^7 + 336z^6 + 784z^5 + 280z^4 - 70z^3 + 105z^2 - 210z + 210) \operatorname{erf}(\sqrt{z})}{10240z^{9/2}}$$

07.25.03.an6p.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{9(16z^6 - 160z^5 + 320z^4 - 40z^3 - 21z^2 - 70z - 210)}{5120z^4} - \frac{9e^{-z} \sqrt{\pi} (32z^7 - 336z^6 + 784z^5 - 280z^4 - 70z^3 - 105z^2 - 210z - 210) \operatorname{erfi}(\sqrt{z})}{10240z^{9/2}}$$

07.25.03.an6q.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{5}{2}, 6; z\right) = \frac{1}{35} e^z (4z^2 + 28z + 35)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = 3$

07.25.03.an6r.01

$${}_2F_2\left(\frac{9}{2}, 6; 3, 3; z\right) = \frac{e^{z/2} (16z^5 + 408z^4 + 3444z^3 + 11700z^2 + 15561z + 6318) I_0\left(\frac{z}{2}\right) + e^{z/2} (16z^6 + 392z^5 + 3060z^4 + 8820z^3 + 7929z^2 + 756z - 72) I_1\left(\frac{z}{2}\right)}{6300z}$$

07.25.03.an6s.01

$${}_2F_2\left(\frac{9}{2}, 6; 3, \frac{7}{2}; z\right) = \frac{1}{420} e^z (2z^4 + 43z^3 + 285z^2 + 660z + 420)$$

07.25.03.an6t.01

$${}_2F_2\left(\frac{9}{2}, 6; 3, 4; z\right) = \frac{e^{z/2} (8z^4 + 152z^3 + 880z^2 + 1788z + 1059) I_0\left(\frac{z}{2}\right) + e^{z/2} (4z^5 + 72z^4 + 370z^3 + 556z^2 + 99z - 18) I_1\left(\frac{z}{2}\right)}{1050 + 525z}$$

07.25.03.an6u.01

$${}_2F_2\left(\frac{9}{2}, 6; 3, \frac{9}{2}; z\right) = \frac{1}{60} e^z (z^3 + 15z^2 + 60z + 60)$$

07.25.03.an6v.01

$${}_2F_2\left(\frac{9}{2}, 6; 3, 5; z\right) = \frac{2}{525} e^{z/2} (8z^3 + 100z^2 + 324z + 267) I_0\left(\frac{z}{2}\right) + \frac{2 e^{z/2} (8z^4 + 92z^3 + 236z^2 + 69z - 18) I_1\left(\frac{z}{2}\right)}{525z}$$

07.25.03.an6w.01

$${}_2F_2\left(\frac{9}{2}, 6; 3, \frac{11}{2}; z\right) = \frac{3 e^z (64z^6 + 544z^5 + 848z^4 + 24z^3 - 84z^2 + 210z - 315)}{2560z^4} + \frac{189 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{1024 z^{9/2}}$$

07.25.03.an6x.01

$${}_2F_2\left(\frac{9}{2}, 6; 3, \frac{11}{2}; -z\right) = \frac{3 e^{-z} (64z^6 - 544z^5 + 848z^4 - 24z^3 - 84z^2 - 210z - 315)}{2560z^4} + \frac{189 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{1024 z^{9/2}}$$

07.25.03.an6y.01

$${}_2F_2\left(\frac{9}{2}, 6; 3, 6; z\right) = \frac{4}{105} e^{z/2} (4z^2 + 24z + 27) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (4z^3 + 20z^2 + 9z - 3) I_1\left(\frac{z}{2}\right)}{105z}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = \frac{7}{2}$

07.25.03.an6z.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{16z^5 + 288z^4 + 1464z^3 + 2092z^2 + 225z - 45}{3584z^2} + \frac{e^z \sqrt{\pi} (32z^6 + 592z^5 + 3200z^4 + 5400z^3 + 1650z^2 - 255z + 45) \operatorname{erf}(\sqrt{z})}{7168 z^{5/2}}$$

07.25.03.an70.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{-16z^5 + 288z^4 - 1464z^3 + 2092z^2 - 225z - 45}{3584z^2} + \frac{e^{-z}\sqrt{\pi}(32z^6 - 592z^5 + 3200z^4 - 5400z^3 + 1650z^2 + 255z + 45)\operatorname{erfi}(\sqrt{z})}{7168z^{5/2}}$$

07.25.03.an71.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{7}{2}, 4; z\right) = \frac{1}{140} e^z (2z^3 + 31z^2 + 130z + 140)$$

07.25.03.an72.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{16z^4 + 192z^3 + 512z^2 + 120z - 45}{1024z^2} + \frac{e^z\sqrt{\pi}(32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45)\operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.an73.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z}\sqrt{\pi}(-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45)\operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.an74.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{7}{2}, 5; z\right) = \frac{1}{35} e^z (2z^2 + 19z + 35)$$

07.25.03.an75.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{9(16z^5 + 96z^4 + 40z^3 - 12z^2 - 35z + 105)}{2048z^4} + \frac{9e^z\sqrt{\pi}(32z^6 + 208z^5 + 160z^4 - 40z^3 - 30z^2 + 105z - 105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.an76.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{9e^{-z}\sqrt{\pi}(32z^6 - 208z^5 + 160z^4 + 40z^3 - 30z^2 - 105z - 105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{9(16z^5 - 96z^4 + 40z^3 + 12z^2 - 35z - 105)}{2048z^4}$$

07.25.03.an77.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{7}{2}, 6; z\right) = \frac{1}{7} e^z (2z + 7)$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = 4$

07.25.03.an78.01

$${}_2F_2\left(\frac{9}{2}, 6; 4, 4; z\right) = \frac{e^{z/2}(8z^4 + 108z^3 + 388z^2 + 361z - 4)I_0\left(\frac{z}{2}\right)}{350z} + \frac{e^{z/2}(8z^5 + 100z^4 + 292z^3 + 111z^2 - 44z + 16)I_1\left(\frac{z}{2}\right)}{350z^2}$$

07.25.03.an79.01

$${}_2F_2\left(\frac{9}{2}, 6; 4, \frac{9}{2}; z\right) = \frac{1}{20} e^z (z^2 + 10z + 20)$$

07.25.03.an7a.01

$${}_2F_2\left(\frac{9}{2}, 6; 4, 5; z\right) = \frac{4 e^{z/2} (4 z^3 + 32 z^2 + 47 z - 2) I_0\left(\frac{z}{2}\right)}{175 z} + \frac{4 e^{z/2} (4 z^4 + 28 z^3 + 21 z^2 - 13 z + 8) I_1\left(\frac{z}{2}\right)}{175 z^2}$$

07.25.03.an7b.01

$${}_2F_2\left(\frac{9}{2}, 6; 4, \frac{11}{2}; z\right) = \frac{9 e^z (32 z^5 + 144 z^4 - 8 z^3 + 28 z^2 - 70 z + 105)}{1280 z^4} - \frac{189 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.an7c.01

$${}_2F_2\left(\frac{9}{2}, 6; 4, \frac{11}{2}; -z\right) = -\frac{9 e^{-z} (32 z^5 - 144 z^4 - 8 z^3 - 28 z^2 - 70 z - 105)}{1280 z^4} - \frac{189 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{512 z^{9/2}}$$

07.25.03.an7d.01

$${}_2F_2\left(\frac{9}{2}, 6; 4, 6; z\right) = \frac{4 e^{z/2} (4 z^2 + 10 z - 1) I_0\left(\frac{z}{2}\right)}{35 z} + \frac{4 e^{z/2} (4 z^3 + 6 z^2 - 5 z + 4) I_1\left(\frac{z}{2}\right)}{35 z^2}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = \frac{9}{2}$

07.25.03.an7e.01

$${}_2F_2\left(\frac{9}{2}, \frac{9}{2}, \frac{9}{2}; z\right) = \frac{7 (16 z^4 + 112 z^3 + 72 z^2 - 60 z + 45)}{2048 z^3} + \frac{7 e^z \sqrt{\pi} (32 z^5 + 240 z^4 + 240 z^3 - 120 z^2 + 90 z - 45) \operatorname{erf}(\sqrt{z})}{4096 z^{7/2}}$$

07.25.03.an7f.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7 e^{-z} \sqrt{\pi} (32 z^5 - 240 z^4 + 240 z^3 + 120 z^2 + 90 z + 45) \operatorname{erfi}(\sqrt{z})}{4096 z^{7/2}} - \frac{7 (16 z^4 - 112 z^3 + 72 z^2 + 60 z + 45)}{2048 z^3}$$

07.25.03.an7g.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{9}{2}, 5; z\right) = \frac{1}{5} e^z (z + 5)$$

07.25.03.an7h.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{63 (16 z^4 + 32 z^3 - 48 z^2 + 80 z - 105)}{4096 z^4} + \frac{63 e^z \sqrt{\pi} (32 z^5 + 80 z^4 - 80 z^3 + 120 z^2 - 150 z + 105) \operatorname{erf}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.an7i.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{63 (16 z^4 - 32 z^3 - 48 z^2 - 80 z - 105)}{4096 z^4} - \frac{63 e^{-z} \sqrt{\pi} (32 z^5 - 80 z^4 - 80 z^3 - 120 z^2 - 150 z - 105) \operatorname{erfi}(\sqrt{z})}{8192 z^{9/2}}$$

07.25.03.an7j.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{9}{2}, 6; z\right) = e^z$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = 5$

07.25.03.an7k.01

$${}_2F_2\left(\frac{9}{2}, 6; 5, 5; z\right) = \frac{16 e^{z/2} (4 z^3 + 14 z^2 - 5 z + 6) I_0\left(\frac{z}{2}\right)}{175 z^2} + \frac{16 e^{z/2} (4 z^4 + 10 z^3 - 13 z^2 + 20 z - 24) I_1\left(\frac{z}{2}\right)}{175 z^3}$$

07.25.03.an7l.01

$${}_2F_2\left(\frac{9}{2}, 6; 5, \frac{11}{2}; z\right) = \frac{9 e^z (16 z^4 + 8 z^3 - 28 z^2 + 70 z - 105)}{160 z^4} + \frac{189 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.an7m.01

$${}_2F_2\left(\frac{9}{2}, 6; 5, \frac{11}{2}; -z\right) = \frac{9 e^{-z} (16 z^4 - 8 z^3 - 28 z^2 - 70 z - 105)}{160 z^4} + \frac{189 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{64 z^{9/2}}$$

07.25.03.an7n.01

$${}_2F_2\left(\frac{9}{2}, 6; 5, 6; z\right) = \frac{32 e^{z/2} (2 z^2 - 2 z + 3) I_0\left(\frac{z}{2}\right)}{35 z^2} + \frac{64 e^{z/2} (z^3 - 2 z^2 + 4 z - 6) I_1\left(\frac{z}{2}\right)}{35 z^3}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = \frac{11}{2}$

07.25.03.an7o.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{11}{2}, 6; z\right) = \frac{9 e^z (8 z^3 - 28 z^2 + 70 z - 105)}{16 z^4} + \frac{945 \sqrt{\pi} \operatorname{erfi}(\sqrt{z})}{32 z^{9/2}}$$

07.25.03.an7p.01

$${}_2F_2\left(\frac{9}{2}, 6; \frac{11}{2}, 6; -z\right) = \frac{945 \sqrt{\pi} \operatorname{erf}(\sqrt{z})}{32 z^{9/2}} - \frac{9 e^{-z} (8 z^3 + 28 z^2 + 70 z + 105)}{16 z^4}$$

For fixed z and $a_1 = \frac{9}{2}$, $a_2 = 6$, $b_1 = 6$

07.25.03.an7q.01

$${}_2F_2\left(\frac{9}{2}, 6; 6, 6; z\right) = \frac{32 e^{z/2} (2 z^2 - 9 z + 24) I_0\left(\frac{z}{2}\right)}{7 z^3} + \frac{32 e^{z/2} (2 z^3 - 11 z^2 + 36 z - 96) I_1\left(\frac{z}{2}\right)}{7 z^4}$$

For fixed z and $a_1 = 5$, $a_2 \geq 5$

For fixed z and $a_1 = 5$, $a_2 = 5$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 5$, $a_2 = 5$, $b_1 = -\frac{11}{2}$

07.25.03.an7r.01

$${}_2F_2\left(5, 5; -\frac{11}{2}, 1; z\right) = \frac{1}{11975040} (128 z^{14} + 12736 z^{13} + 510944 z^{12} + 10711248 z^{11} + 127075032 z^{10} + 862001172 z^9 + 3198811194 z^8 + 5705913375 z^7 + 3251404800 z^6 - 585252864 z^5 + 270950400 z^4 - 169344000 z^3 + 108864000 z^2 - 54432000 z + 11975040) + \frac{1}{23950080} (e^z \sqrt{\pi} (256 z^{29/2} + 25600 z^{27/2} + 1034496 z^{25/2} + 21921024 z^{23/2} + 264381024 z^{21/2} + 1841531328 z^{19/2} + 7155129744 z^{17/2} + 13986763056 z^{15/2} + 10352045025 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an7s.01

$${}_2F_2\left(5, 5; -\frac{11}{2}, 1; -z\right) = \frac{1}{11975040} (128 z^{14} - 12736 z^{13} + 510944 z^{12} - 10711248 z^{11} + 127075032 z^{10} - 862001172 z^9 + 3198811194 z^8 - 5705913375 z^7 + 3251404800 z^6 + 585252864 z^5 + 270950400 z^4 + 169344000 z^3 + 108864000 z^2 + 54432000 z + 11975040) + \frac{1}{23950080} (e^{-z} \sqrt{\pi} (-256 z^{29/2} + 25600 z^{27/2} - 1034496 z^{25/2} + 21921024 z^{23/2} - 264381024 z^{21/2} + 1841531328 z^{19/2} - 7155129744 z^{17/2} + 13986763056 z^{15/2} - 10352045025 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an7t.01

$${}_2F_2\left(5, 5; -\frac{11}{2}, 2; z\right) = \frac{1}{5987520} (64 z^{13} + 5440 z^{12} + 182064 z^{11} + 3082464 z^{10} + 28173708 z^9 + 136514052 z^8 + 313486065 z^7 + 232243200 z^6 - 48771072 z^5 + 27095040 z^4 - 21168000 z^3 + 18144000 z^2 - 13608000 z + 5987520) + \frac{1}{11975040} (e^z \sqrt{\pi} (128 z^{27/2} + 10944 z^{25/2} + 369504 z^{23/2} + 6341712 z^{21/2} + 59260824 z^{19/2} + 298527012 z^{17/2} + 741558258 z^{15/2} + 690136335 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an7u.01

$${}_2F_2\left(5, 5; -\frac{11}{2}, 2; -z\right) = \frac{1}{5987520} (-64 z^{13} + 5440 z^{12} - 182064 z^{11} + 3082464 z^{10} - 28173708 z^9 + 136514052 z^8 - 313486065 z^7 + 232243200 z^6 + 48771072 z^5 + 27095040 z^4 + 21168000 z^3 + 18144000 z^2 + 13608000 z + 5987520) + \frac{1}{11975040} (e^{-z} \sqrt{\pi} (128 z^{27/2} - 10944 z^{25/2} + 369504 z^{23/2} - 6341712 z^{21/2} + 59260824 z^{19/2} - 298527012 z^{17/2} + 741558258 z^{15/2} - 690136335 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an7v.01

$${}_2F_2\left(5, 5; -\frac{11}{2}, 3; z\right) = \frac{1}{1496880} (32 z^{12} + 2256 z^{11} + 60592 z^{10} + 784920 z^9 + 5087898 z^8 + 15160545 z^7 + 14515200 z^6 - 3483648 z^5 + 2257920 z^4 - 2116800 z^3 + 2268000 z^2 - 2268000 z + 1496880) + \frac{1}{2993760} (e^z \sqrt{\pi} (64 z^{25/2} + 4544 z^{23/2} + 123408 z^{21/2} + 1628256 z^{19/2} + 10905468 z^{17/2} + 34756092 z^{15/2} + 40596255 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an7w.01

$${}_2F_2\left(5, 5; -\frac{11}{2}, 3; -z\right) = \frac{1}{1496880} (32 z^{12} - 2256 z^{11} + 60592 z^{10} - 784920 z^9 + 5087898 z^8 - 15160545 z^7 + 14515200 z^6 + 3483648 z^5 + 2257920 z^4 + 2116800 z^3 + 2268000 z^2 + 2268000 z + 1496880) + \frac{1}{2993760} (e^{-z} \sqrt{\pi} (-64 z^{25/2} + 4544 z^{23/2} - 123408 z^{21/2} + 1628256 z^{19/2} - 10905468 z^{17/2} + 34756092 z^{15/2} - 40596255 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an7x.01

$${}_2F_2\left(5, 5; -\frac{11}{2}, 4; z\right) = \frac{1}{249480} (16 z^{11} + 896 z^{10} + 18208 z^9 + 165288 z^8 + 651195 z^7 + 806400 z^6 - 217728 z^5 + 161280 z^4 - 176400 z^3 + 226800 z^2 - 283500 z + 249480) + \frac{1}{498960} (e^z \sqrt{\pi} (32 z^{23/2} + 1808 z^{21/2} + 37296 z^{19/2} + 347928 z^{17/2} + 1451562 z^{15/2} + 2136645 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an7y.01

$${}_2F_2\left(5, 5; -\frac{11}{2}, 4; -z\right) = \frac{1}{249480} (-16 z^{11} + 896 z^{10} - 18208 z^9 + 165288 z^8 - 651195 z^7 + 806400 z^6 + 217728 z^5 + 161280 z^4 + 176400 z^3 + 226800 z^2 + 283500 z + 249480) + \frac{1}{498960} (e^{-z} \sqrt{\pi} (32 z^{23/2} - 1808 z^{21/2} + 37296 z^{19/2} - 347928 z^{17/2} + 1451562 z^{15/2} - 2136645 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an7z.01

$${}_2F_2\left(5, 5; -\frac{11}{2}, 5; z\right) = \frac{1}{31185} (8 z^{10} + 332 z^9 + 4626 z^8 + 24975 z^7 + 40320 z^6 - 12096 z^5 + 10080 z^4 - 12600 z^3 + 18900 z^2 - 28350 z + 31185) + \frac{e^z \sqrt{\pi} (16 z^{21/2} + 672 z^{19/2} + 9576 z^{17/2} + 54264 z^{15/2} + 101745 z^{13/2}) \operatorname{erf}(\sqrt{z})}{62370}$$

07.25.03.an80.01

$${}_2F_2\left(5, 5; -\frac{11}{2}, 5; -z\right) = \frac{1}{31185} (8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185) + \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 672z^{19/2} - 9576z^{17/2} + 54264z^{15/2} - 101745z^{13/2}) \operatorname{erfi}(\sqrt{z})}{62370}$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = -\frac{9}{2}$

07.25.03.an81.01

$${}_2F_2\left(5, 5; -\frac{9}{2}, 1; z\right) = \frac{1}{2177280} (-128z^{13} - 11712z^{12} - 429024z^{11} - 8142800z^{10} - 86561496z^9 - 519341652z^8 - 1675630650z^7 - 2535699375z^6 - 1170505728z^5 + 180633600z^4 - 67737600z^3 + 31104000z^2 - 12096000z + 2177280) + \frac{1}{4354560} (e^z \sqrt{\pi} (-256z^{27/2} - 23552z^{25/2} - 869632z^{23/2} - 16703232z^{21/2} - 180864864z^{19/2} - 1118071872z^{17/2} - 3800914128z^{15/2} - 6384934800z^{13/2} - 3967110225z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an82.01

$${}_2F_2\left(5, 5; -\frac{9}{2}, 1; -z\right) = \frac{1}{2177280} (128z^{13} - 11712z^{12} + 429024z^{11} - 8142800z^{10} + 86561496z^9 - 519341652z^8 + 1675630650z^7 - 2535699375z^6 + 1170505728z^5 + 180633600z^4 + 67737600z^3 + 31104000z^2 + 12096000z + 2177280) + \frac{1}{4354560} (e^{-z} \sqrt{\pi} (-256z^{27/2} + 23552z^{25/2} - 869632z^{23/2} + 16703232z^{21/2} - 180864864z^{19/2} + 1118071872z^{17/2} - 3800914128z^{15/2} + 6384934800z^{13/2} - 3967110225z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an83.01

$${}_2F_2\left(5, 5; -\frac{9}{2}, 2; z\right) = \frac{1}{1088640} (-64z^{12} - 4992z^{11} - 152144z^{10} - 2324160z^9 - 18947196z^8 - 80666040z^7 - 159324075z^6 - 97542144z^5 + 18063360z^4 - 8467200z^3 + 5184000z^2 - 3024000z + 1088640) + \frac{1}{2177280} (e^z \sqrt{\pi} (-128z^{25/2} - 10048z^{23/2} - 309216z^{21/2} - 4795632z^{19/2} - 40078296z^{17/2} - 178292124z^{15/2} - 384974010z^{13/2} - 305162325z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an84.01

$${}_2F_2\left(5, 5; -\frac{9}{2}, 2; -z\right) = \frac{1}{1088640} \left(-64 z^{12} + 4992 z^{11} - 152144 z^{10} + 2324160 z^9 - 18947196 z^8 + 80666040 z^7 - 159324075 z^6 + 97542144 z^5 + 18063360 z^4 + 8467200 z^3 + 5184000 z^2 + 3024000 z + 1088640\right) + \frac{1}{2177280} \left(e^{-z} \sqrt{\pi} \left(128 z^{25/2} - 10048 z^{23/2} + 309216 z^{21/2} - 4795632 z^{19/2} + 40078296 z^{17/2} - 178292124 z^{15/2} + 384974010 z^{13/2} - 305162325 z^{11/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.an85.01

$${}_2F_2\left(5, 5; -\frac{9}{2}, 3; z\right) = \frac{1}{272160} \left(-32 z^{11} - 2064 z^{10} - 50288 z^9 - 584760 z^8 - 3356330 z^7 - 8686245 z^6 - 6967296 z^5 + 1505280 z^4 - 846720 z^3 + 648000 z^2 - 504000 z + 272160\right) + \frac{1}{544320} \left(e^z \sqrt{\pi} \left(-64 z^{23/2} - 4160 z^{21/2} - 102608 z^{19/2} - 1217824 z^{17/2} - 7251996 z^{15/2} - 20252100 z^{13/2} - 20344155 z^{11/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.an86.01

$${}_2F_2\left(5, 5; -\frac{9}{2}, 3; -z\right) = \frac{1}{272160} \left(32 z^{11} - 2064 z^{10} + 50288 z^9 - 584760 z^8 + 3356330 z^7 - 8686245 z^6 + 6967296 z^5 + 1505280 z^4 + 846720 z^3 + 648000 z^2 + 504000 z + 272160\right) + \frac{1}{544320} \left(e^{-z} \sqrt{\pi} \left(-64 z^{23/2} + 4160 z^{21/2} - 102608 z^{19/2} + 1217824 z^{17/2} - 7251996 z^{15/2} + 20252100 z^{13/2} - 20344155 z^{11/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.an87.01

$${}_2F_2\left(5, 5; -\frac{9}{2}, 4; z\right) = \frac{1}{45360} \left(-16 z^{10} - 816 z^9 - 14952 z^8 - 120820 z^7 - 416085 z^6 - 435456 z^5 + 107520 z^4 - 70560 z^3 + 64800 z^2 - 63000 z + 45360\right) + \frac{1}{90720} \left(e^z \sqrt{\pi} \left(-32 z^{21/2} - 1648 z^{19/2} - 30704 z^{17/2} - 255816 z^{15/2} - 939930 z^{13/2} - 1196715 z^{11/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.an88.01

$${}_2F_2\left(5, 5; -\frac{9}{2}, 4; -z\right) = \frac{1}{45360} \left(-16 z^{10} + 816 z^9 - 14952 z^8 + 120820 z^7 - 416085 z^6 + 435456 z^5 + 107520 z^4 + 70560 z^3 + 64800 z^2 + 63000 z + 45360\right) + \frac{1}{90720} \left(e^{-z} \sqrt{\pi} \left(32 z^{21/2} - 1648 z^{19/2} + 30704 z^{17/2} - 255816 z^{15/2} + 939930 z^{13/2} - 1196715 z^{11/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.an89.01

$${}_2F_2\left(5, 5; -\frac{9}{2}, 5; z\right) = \frac{-8 z^9 - 300 z^8 - 3730 z^7 - 17655 z^6 - 24192 z^5 + 6720 z^4 - 5040 z^3 + 5400 z^2 - 6300 z + 5670}{5670} + \frac{e^z \sqrt{\pi} \left(-16 z^{19/2} - 608 z^{17/2} - 7752 z^{15/2} - 38760 z^{13/2} - 62985 z^{11/2}\right) \operatorname{erf}(\sqrt{z})}{5670}$$

07.25.03.an8a.01

$${}_2F_2\left(5, 5; -\frac{9}{2}, 5; -z\right) = \frac{8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670}{5670} + \frac{e^{-z} \sqrt{\pi} (-16z^{19/2} + 608z^{17/2} - 7752z^{15/2} + 38760z^{13/2} - 62985z^{11/2}) \operatorname{erfi}(\sqrt{z})}{11340}$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = -\frac{7}{2}$

07.25.03.an8b.01

$${}_2F_2\left(5, 5; -\frac{7}{2}, 1; z\right) = \frac{1}{483840} (128z^{12} + 10688z^{11} + 354272z^{10} + 6022352z^9 + 56614104z^8 + 295500180z^7 + 811328250z^6 + 1011315231z^5 + 361267200z^4 - 45158400z^3 + 12441600z^2 - 3456000z + 483840) + \frac{1}{967680} (e^z \sqrt{\pi} (256z^{25/2} + 21504z^{23/2} + 719104z^{21/2} + 12388608z^{19/2} + 118921824z^{17/2} + 642384576z^{15/2} + 1873760400z^{13/2} + 2637414000z^{11/2} + 1329696225z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an8c.01

$${}_2F_2\left(5, 5; -\frac{7}{2}, 1; -z\right) = \frac{1}{483840} (128z^{12} - 10688z^{11} + 354272z^{10} - 6022352z^9 + 56614104z^8 - 295500180z^7 + 811328250z^6 - 1011315231z^5 + 361267200z^4 + 45158400z^3 + 12441600z^2 + 3456000z + 483840) + \frac{1}{967680} (e^{-z} \sqrt{\pi} (-256z^{25/2} + 21504z^{23/2} - 719104z^{21/2} + 12388608z^{19/2} - 118921824z^{17/2} + 642384576z^{15/2} - 1873760400z^{13/2} + 2637414000z^{11/2} - 1329696225z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.an8d.01

$${}_2F_2\left(5, 5; -\frac{7}{2}, 2; z\right) = \frac{1}{241920} (64z^{11} + 4544z^{10} + 124912z^9 + 1701792z^8 + 12197100z^7 + 44789100z^6 + 74202813z^5 + 36126720z^4 - 5644800z^3 + 2073600z^2 - 864000z + 241920) + \frac{1}{483840} (e^z \sqrt{\pi} (128z^{23/2} + 9152z^{21/2} + 254304z^{19/2} + 3524112z^{17/2} + 25981848z^{15/2} + 100346580z^{13/2} + 184280850z^{11/2} + 120881475z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.an8e.01

$${}_2F_2\left(5, 5; -\frac{7}{2}, 2; -z\right) = \frac{1}{241920} (-64 z^{11} + 4544 z^{10} - 124912 z^9 + 1701792 z^8 - 12197100 z^7 + 44789100 z^6 - 74202813 z^5 + 36126720 z^4 + 5644800 z^3 + 2073600 z^2 + 864000 z + 241920) + \frac{1}{483840} \left(e^{-z} \sqrt{\pi} (128 z^{23/2} - 9152 z^{21/2} + 254304 z^{19/2} - 3524112 z^{17/2} + 25981848 z^{15/2} - 100346580 z^{13/2} + 184280850 z^{11/2} - 120881475 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an8f.01

$${}_2F_2\left(5, 5; -\frac{7}{2}, 3; z\right) = \frac{1}{60480} (32 z^{10} + 1872 z^9 + 40944 z^8 + 421880 z^7 + 2108970 z^6 + 4636017 z^5 + 3010560 z^4 - 564480 z^3 + 259200 z^2 - 144000 z + 60480) + \frac{1}{120960} \left(e^z \sqrt{\pi} (64 z^{21/2} + 3776 z^{19/2} + 83728 z^{17/2} + 882912 z^{15/2} + 4603260 z^{13/2} + 11045580 z^{11/2} + 9298575 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an8g.01

$${}_2F_2\left(5, 5; -\frac{7}{2}, 3; -z\right) = \frac{1}{60480} (32 z^{10} - 1872 z^9 + 40944 z^8 - 421880 z^7 + 2108970 z^6 - 4636017 z^5 + 3010560 z^4 + 564480 z^3 + 259200 z^2 + 144000 z + 60480) + \frac{1}{120960} \left(e^{-z} \sqrt{\pi} (-64 z^{21/2} + 3776 z^{19/2} - 83728 z^{17/2} + 882912 z^{15/2} - 4603260 z^{13/2} + 11045580 z^{11/2} - 9298575 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an8h.01

$${}_2F_2\left(5, 5; -\frac{7}{2}, 4; z\right) = \frac{1}{10080} (16 z^9 + 736 z^8 + 12016 z^7 + 85120 z^6 + 251007 z^5 + 215040 z^4 - 47040 z^3 + 25920 z^2 - 18000 z + 10080) + \frac{e^z \sqrt{\pi} (32 z^{19/2} + 1488 z^{17/2} + 24752 z^{15/2} + 181560 z^{13/2} + 576810 z^{11/2} + 619905 z^{9/2}) \operatorname{erf}(\sqrt{z})}{20160}$$

07.25.03.an8i.01

$${}_2F_2\left(5, 5; -\frac{7}{2}, 4; -z\right) = \frac{1}{10080} (-16 z^9 + 736 z^8 - 12016 z^7 + 85120 z^6 - 251007 z^5 + 215040 z^4 + 47040 z^3 + 25920 z^2 + 18000 z + 10080) + \frac{1}{20160} \left(e^{-z} \sqrt{\pi} (32 z^{19/2} - 1488 z^{17/2} + 24752 z^{15/2} - 181560 z^{13/2} + 576810 z^{11/2} - 619905 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an8j.01

$${}_2F_2\left(5, 5; -\frac{7}{2}, 5; z\right) = \frac{8 z^8 + 268 z^7 + 2930 z^6 + 11919 z^5 + 13440 z^4 - 3360 z^3 + 2160 z^2 - 1800 z + 1260}{1260} + \frac{e^z \sqrt{\pi} (16 z^{17/2} + 544 z^{15/2} + 6120 z^{13/2} + 26520 z^{11/2} + 36465 z^{9/2}) \operatorname{erf}(\sqrt{z})}{2520}$$

07.25.03.an8k.01

$${}_2F_2\left(5, 5; -\frac{7}{2}, 5; -z\right) = \frac{8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260}{1260} + \frac{e^{-z}\sqrt{\pi}\left(-16z^{17/2} + 544z^{15/2} - 6120z^{13/2} + 26520z^{11/2} - 36465z^{9/2}\right)\operatorname{erfi}(\sqrt{z})}{2520}$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = -\frac{5}{2}$

07.25.03.an8l.01

$${}_2F_2\left(5, 5; -\frac{5}{2}, 1; z\right) = \frac{1}{138240}\left(-128z^{11} - 9664z^{10} - 286688z^9 - 4306896z^8 - 35211480z^7 - 156491220z^6 - 355205754z^5 - 349851375z^4 - 90316800z^3 + 8294400z^2 - 1382400z + 138240\right) + \frac{1}{276480}\left(e^z\sqrt{\pi}\left(-256z^{23/2} - 19456z^{21/2} - 582912z^{19/2} - 8891136z^{17/2} - 74466144z^{15/2} - 344520000z^{13/2} - 840200400z^{11/2} - 957013200z^{9/2} - 372683025z^{7/2}\right)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.an8m.01

$${}_2F_2\left(5, 5; -\frac{5}{2}, 1; -z\right) = \frac{1}{138240}\left(128z^{11} - 9664z^{10} + 286688z^9 - 4306896z^8 + 35211480z^7 - 156491220z^6 + 355205754z^5 - 349851375z^4 + 90316800z^3 + 8294400z^2 + 1382400z + 138240\right) + \frac{1}{276480}\left(e^{-z}\sqrt{\pi}\left(-256z^{23/2} + 19456z^{21/2} - 582912z^{19/2} + 8891136z^{17/2} - 74466144z^{15/2} + 344520000z^{13/2} - 840200400z^{11/2} + 957013200z^{9/2} - 372683025z^{7/2}\right)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.an8n.01

$${}_2F_2\left(5, 5; -\frac{5}{2}, 2; z\right) = \frac{1}{69120}\left(-64z^{10} - 4096z^9 - 100368z^8 - 1201920z^7 - 7434780z^6 - 22977792z^5 - 30844215z^4 - 11289600z^3 + 1382400z^2 - 345600z + 69120\right) + \frac{1}{138240}\left(e^z\sqrt{\pi}\left(-128z^{21/2} - 8256z^{19/2} - 204768z^{17/2} - 2500272z^{15/2} - 15980760z^{13/2} - 52404300z^{11/2} - 79472250z^{9/2} - 41409225z^{7/2}\right)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.an8o.01

$${}_2F_2\left(5, 5; -\frac{5}{2}, 2; -z\right) = \frac{1}{69120} \left(-64 z^{10} + 4096 z^9 - 100368 z^8 + 1201920 z^7 - 7434780 z^6 + 22977792 z^5 - 30844215 z^4 + 11289600 z^3 + 1382400 z^2 + 345600 z + 69120\right) + \frac{1}{138240} \left(e^{-z} \sqrt{\pi} \left(128 z^{21/2} - 8256 z^{19/2} + 204768 z^{17/2} - 2500272 z^{15/2} + 15980760 z^{13/2} - 52404300 z^{11/2} + 79472250 z^{9/2} - 41409225 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.an8p.01

$${}_2F_2\left(5, 5; -\frac{5}{2}, 3; z\right) = \frac{1}{17280} \left(-32 z^9 - 1680 z^8 - 32560 z^7 - 292440 z^6 - 1245978 z^5 - 2256645 z^4 - 1128960 z^3 + 172800 z^2 - 57600 z + 17280\right) + \frac{1}{34560} \left(e^z \sqrt{\pi} \left(-64 z^{19/2} - 3392 z^{17/2} - 66768 z^{15/2} - 615840 z^{13/2} - 2755740 z^{11/2} - 5534100 z^{9/2} - 3764475 z^{7/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.an8q.01

$${}_2F_2\left(5, 5; -\frac{5}{2}, 3; -z\right) = \frac{1}{17280} \left(32 z^9 - 1680 z^8 + 32560 z^7 - 292440 z^6 + 1245978 z^5 - 2256645 z^4 + 1128960 z^3 + 172800 z^2 + 57600 z + 17280\right) + \frac{1}{34560} \left(e^{-z} \sqrt{\pi} \left(-64 z^{19/2} + 3392 z^{17/2} - 66768 z^{15/2} + 615840 z^{13/2} - 2755740 z^{11/2} + 5534100 z^{9/2} - 3764475 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.an8r.01

$${}_2F_2\left(5, 5; -\frac{5}{2}, 4; z\right) = \frac{-16 z^8 - 656 z^7 - 9400 z^6 - 57228 z^5 - 140505 z^4 - 94080 z^3 + 17280 z^2 - 7200 z + 2880}{2880} + \frac{e^z \sqrt{\pi} \left(-32 z^{17/2} - 1328 z^{15/2} - 19440 z^{13/2} - 123240 z^{11/2} - 330330 z^{9/2} - 289575 z^{7/2}\right) \operatorname{erf}(\sqrt{z})}{5760}$$

07.25.03.an8s.01

$${}_2F_2\left(5, 5; -\frac{5}{2}, 4; -z\right) = \frac{-16 z^8 + 656 z^7 - 9400 z^6 + 57228 z^5 - 140505 z^4 + 94080 z^3 + 17280 z^2 + 7200 z + 2880}{2880} + \frac{e^{-z} \sqrt{\pi} \left(32 z^{17/2} - 1328 z^{15/2} + 19440 z^{13/2} - 123240 z^{11/2} + 330330 z^{9/2} - 289575 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})}{5760}$$

07.25.03.an8t.01

$${}_2F_2\left(5, 5; -\frac{5}{2}, 5; z\right) = \frac{1}{360} \left(-8 z^7 - 236 z^6 - 2226 z^5 - 7575 z^4 - 6720 z^3 + 1440 z^2 - 720 z + 360\right) + \frac{1}{720} e^z \sqrt{\pi} \left(-16 z^{15/2} - 480 z^{13/2} - 4680 z^{11/2} - 17160 z^{9/2} - 19305 z^{7/2}\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.an8u.01

$${}_2F_2\left(5, 5; -\frac{5}{2}, 5; -z\right) = \frac{1}{360} \left(8 z^7 - 236 z^6 + 2226 z^5 - 7575 z^4 + 6720 z^3 + 1440 z^2 + 720 z + 360\right) + \frac{1}{720} e^{-z} \sqrt{\pi} \left(-16 z^{15/2} + 480 z^{13/2} - 4680 z^{11/2} + 17160 z^{9/2} - 19305 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = -\frac{3}{2}$

07.25.03.an8v.01

$${}_2F_2\left(5, 5; -\frac{3}{2}, 1; z\right) = \frac{1}{55296} (128 z^{10} + 8640 z^9 + 226272 z^8 + 2953424 z^7 + 20547288 z^6 + 75533076 z^5 + 136060602 z^4 + 99471519 z^3 + 16588800 z^2 - 921600 z + 55296) + \frac{1}{110592} \left(e^z \sqrt{\pi} (256 z^{21/2} + 17408 z^{19/2} + 461056 z^{17/2} + 6124800 z^{15/2} + 43842144 z^{13/2} + 169151424 z^{11/2} + 332746128 z^{9/2} + 291520944 z^{7/2} + 81162081 z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an8w.01

$${}_2F_2\left(5, 5; -\frac{3}{2}, 1; -z\right) = \frac{1}{55296} (128 z^{10} - 8640 z^9 + 226272 z^8 - 2953424 z^7 + 20547288 z^6 - 75533076 z^5 + 136060602 z^4 - 99471519 z^3 + 16588800 z^2 + 921600 z + 55296) + \frac{1}{110592} \left(e^{-z} \sqrt{\pi} (-256 z^{21/2} + 17408 z^{19/2} - 461056 z^{17/2} + 6124800 z^{15/2} - 43842144 z^{13/2} + 169151424 z^{11/2} - 332746128 z^{9/2} + 291520944 z^{7/2} - 81162081 z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an8x.01

$${}_2F_2\left(5, 5; -\frac{3}{2}, 2; z\right) = \frac{1}{27648} (64 z^9 + 3648 z^8 + 78512 z^7 + 811104 z^6 + 4225356 z^5 + 10624596 z^4 + 10984617 z^3 + 2764800 z^2 - 230400 z + 27648) + \frac{1}{55296} \left(e^z \sqrt{\pi} (128 z^{19/2} + 7360 z^{17/2} + 160608 z^{15/2} + 1697232 z^{13/2} + 9191832 z^{11/2} + 24828804 z^{9/2} + 29814642 z^{7/2} + 11594583 z^{5/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an8y.01

$${}_2F_2\left(5, 5; -\frac{3}{2}, 2; -z\right) = \frac{1}{27648} (-64 z^9 + 3648 z^8 - 78512 z^7 + 811104 z^6 - 4225356 z^5 + 10624596 z^4 - 10984617 z^3 + 2764800 z^2 + 230400 z + 27648) + \frac{1}{55296} \left(e^{-z} \sqrt{\pi} (128 z^{19/2} - 7360 z^{17/2} + 160608 z^{15/2} - 1697232 z^{13/2} + 9191832 z^{11/2} - 24828804 z^{9/2} + 29814642 z^{7/2} - 11594583 z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an8z.01

$${}_2F_2\left(5, 5; -\frac{3}{2}, 3; z\right) = \frac{32 z^8 + 1488 z^7 + 25136 z^6 + 192600 z^5 + 679034 z^4 + 969633 z^3 + 345600 z^2 - 38400 z + 6912}{6912} + \frac{1}{13824} \left(e^z \sqrt{\pi} (64 z^{17/2} + 3008 z^{15/2} + 51728 z^{13/2} + 408928 z^{11/2} + 1528956 z^{9/2} + 2476188 z^{7/2} + 1288287 z^{5/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an90.01

$${}_2F_2\left(5, 5; -\frac{3}{2}, 3; -z\right) = \frac{32 z^8 - 1488 z^7 + 25\,136 z^6 - 192\,600 z^5 + 679\,034 z^4 - 969\,633 z^3 + 345\,600 z^2 + 38\,400 z + 6912}{6912} + \frac{1}{13\,824} \left(e^{-z} \sqrt{\pi} \left(-64 z^{17/2} + 3008 z^{15/2} - 51\,728 z^{13/2} + 408\,928 z^{11/2} - 1\,528\,956 z^{9/2} + 2\,476\,188 z^{7/2} - 1\,288\,287 z^{5/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an91.01

$${}_2F_2\left(5, 5; -\frac{3}{2}, 4; z\right) = \frac{16 z^7 + 576 z^6 + 7104 z^5 + 36\,184 z^4 + 71\,043 z^3 + 34\,560 z^2 - 4800 z + 1152}{1152} + \frac{e^z \sqrt{\pi} \left(32 z^{15/2} + 1168 z^{13/2} + 14\,768 z^{11/2} + 78\,936 z^{9/2} + 172\,458 z^{7/2} + 117\,117 z^{5/2} \right) \operatorname{erf}(\sqrt{z})}{2304}$$

07.25.03.an92.01

$${}_2F_2\left(5, 5; -\frac{3}{2}, 4; -z\right) = \frac{-16 z^7 + 576 z^6 - 7104 z^5 + 36\,184 z^4 - 71\,043 z^3 + 34\,560 z^2 + 4800 z + 1152}{1152} + \frac{e^{-z} \sqrt{\pi} \left(32 z^{15/2} - 1168 z^{13/2} + 14\,768 z^{11/2} - 78\,936 z^{9/2} + 172\,458 z^{7/2} - 117\,117 z^{5/2} \right) \operatorname{erfi}(\sqrt{z})}{2304}$$

07.25.03.an93.01

$${}_2F_2\left(5, 5; -\frac{3}{2}, 5; z\right) = \frac{1}{144} \left(8 z^6 + 204 z^5 + 1618 z^4 + 4431 z^3 + 2880 z^2 - 480 z + 144 \right) + \frac{1}{288} e^z \sqrt{\pi} \left(16 z^{13/2} + 416 z^{11/2} + 3432 z^{9/2} + 10\,296 z^{7/2} + 9009 z^{5/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.an94.01

$${}_2F_2\left(5, 5; -\frac{3}{2}, 5; -z\right) = \frac{1}{144} \left(8 z^6 - 204 z^5 + 1618 z^4 - 4431 z^3 + 2880 z^2 + 480 z + 144 \right) + \frac{1}{288} e^{-z} \sqrt{\pi} \left(-16 z^{13/2} + 416 z^{11/2} - 3432 z^{9/2} + 10\,296 z^{7/2} - 9009 z^{5/2} \right) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = -\frac{1}{2}$

07.25.03.an95.01

$${}_2F_2\left(5, 5; -\frac{1}{2}, 1; z\right) = \frac{1}{36\,864} \left(-128 z^9 - 7616 z^8 - 173\,024 z^7 - 1\,918\,928 z^6 - 11\,030\,232 z^5 - 32\,187\,732 z^4 - 43\,262\,394 z^3 - 21\,171\,375 z^2 - 1843\,200 z + 36\,864 \right) + \frac{1}{73\,728} \left(e^z \sqrt{\pi} \left(-256 z^{19/2} - 15\,360 z^{17/2} - 353\,536 z^{15/2} - 4\,003\,584 z^{13/2} - 23\,824\,224 z^{11/2} - 73\,854\,528 z^{9/2} - 111\,182\,544 z^{7/2} - 69\,155\,856 z^{5/2} - 12\,006\,225 z^{3/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an96.01

$${}_2F_2\left(5, 5; -\frac{1}{2}, 1; -z\right) = \frac{1}{36864} (128 z^9 - 7616 z^8 + 173024 z^7 - 1918928 z^6 + 11030232 z^5 - 32187732 z^4 + 43262394 z^3 - 21171375 z^2 + 1843200 z + 36864) + \frac{1}{73728} \left(e^{-z} \sqrt{\pi} (-256 z^{19/2} + 15360 z^{17/2} - 353536 z^{15/2} + 4003584 z^{13/2} - 23824224 z^{11/2} + 73854528 z^{9/2} - 111182544 z^{7/2} + 69155856 z^{5/2} - 12006225 z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an97.01

$${}_2F_2\left(5, 5; -\frac{1}{2}, 2; z\right) = \frac{1}{18432} (-64 z^8 - 3200 z^7 - 59344 z^6 - 515904 z^5 - 2187708 z^4 - 4258632 z^3 - 3128355 z^2 - 460800 z + 18432) + \frac{1}{36864} \left(e^z \sqrt{\pi} (-128 z^{17/2} - 6464 z^{15/2} - 121824 z^{13/2} - 1088112 z^{11/2} - 4839384 z^{9/2} - 10310652 z^{7/2} - 9193338 z^{5/2} - 2401245 z^{3/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an98.01

$${}_2F_2\left(5, 5; -\frac{1}{2}, 2; -z\right) = \frac{1}{18432} (-64 z^8 + 3200 z^7 - 59344 z^6 + 515904 z^5 - 2187708 z^4 + 4258632 z^3 - 3128355 z^2 + 460800 z + 18432) + \frac{1}{36864} \left(e^{-z} \sqrt{\pi} (128 z^{17/2} - 6464 z^{15/2} + 121824 z^{13/2} - 1088112 z^{11/2} + 4839384 z^{9/2} - 10310652 z^{7/2} + 9193338 z^{5/2} - 2401245 z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an99.01

$${}_2F_2\left(5, 5; -\frac{1}{2}, 3; z\right) = \frac{-32 z^7 - 1296 z^6 - 18672 z^5 - 118520 z^4 - 331338 z^3 - 348165 z^2 - 76800 z + 4608}{4608} + \frac{1}{9216} \left(e^z \sqrt{\pi} (-64 z^{15/2} - 2624 z^{13/2} - 38608 z^{11/2} - 254496 z^{9/2} - 765468 z^{7/2} - 945252 z^{5/2} - 343035 z^{3/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an9a.01

$${}_2F_2\left(5, 5; -\frac{1}{2}, 3; -z\right) = \frac{32 z^7 - 1296 z^6 + 18672 z^5 - 118520 z^4 + 331338 z^3 - 348165 z^2 + 76800 z + 4608}{4608} + \frac{1}{9216} \left(e^{-z} \sqrt{\pi} (-64 z^{15/2} + 2624 z^{13/2} - 38608 z^{11/2} + 254496 z^{9/2} - 765468 z^{7/2} + 945252 z^{5/2} - 343035 z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an9b.01

$${}_2F_2\left(5, 5; -\frac{1}{2}, 4; z\right) = \frac{1}{768} (-16 z^6 - 496 z^5 - 5128 z^4 - 21028 z^3 - 31005 z^2 - 9600 z + 768) + \frac{e^z \sqrt{\pi} (-32 z^{13/2} - 1008 z^{11/2} - 10736 z^{9/2} - 46728 z^{7/2} - 79002 z^{5/2} - 38115 z^{3/2}) \operatorname{erf}(\sqrt{z})}{1536}$$

07.25.03.an9c.01

$${}_2F_2\left(5, 5; -\frac{1}{2}, 4; -z\right) = \frac{1}{768} (-16z^6 + 496z^5 - 5128z^4 + 21028z^3 - 31005z^2 + 9600z + 768) + \frac{e^{-z} \sqrt{\pi} (32z^{13/2} - 1008z^{11/2} + 10736z^{9/2} - 46728z^{7/2} + 79002z^{5/2} - 38115z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1536}$$

07.25.03.an9d.01

$${}_2F_2\left(5, 5; -\frac{1}{2}, 5; z\right) = \frac{1}{96} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) + \frac{1}{192} e^z \sqrt{\pi} (-16z^{11/2} - 352z^{9/2} - 2376z^{7/2} - 5544z^{5/2} - 3465z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.an9e.01

$${}_2F_2\left(5, 5; -\frac{1}{2}, 5; -z\right) = \frac{1}{96} (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) + \frac{1}{192} e^{-z} \sqrt{\pi} (-16z^{11/2} + 352z^{9/2} - 2376z^{7/2} + 5544z^{5/2} - 3465z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = \frac{1}{2}$

07.25.03.an9f.01

$${}_2F_2\left(5, 5; \frac{1}{2}, 1; z\right) = \frac{1}{73728} (128z^8 + 6592z^7 + 126944z^6 + 1160400z^5 + 5284056z^4 + 11500692z^3 + 10409850z^2 + 2793375z + 73728) + \frac{1}{147456} \left(e^z \sqrt{\pi} (256z^{17/2} + 13312z^{15/2} + 260352z^{13/2} + 2441472z^{11/2} + 11616864z^{9/2} + 27387072z^{7/2} + 29021328z^{5/2} + 11113200z^{3/2} + 893025\sqrt{z}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an9g.01

$${}_2F_2\left(5, 5; \frac{1}{2}, 1; -z\right) = \frac{1}{73728} (128z^8 - 6592z^7 + 126944z^6 - 1160400z^5 + 5284056z^4 - 11500692z^3 + 10409850z^2 - 2793375z + 73728) + \frac{1}{147456} \left(e^{-z} \sqrt{\pi} (-256z^{17/2} + 13312z^{15/2} - 260352z^{13/2} + 2441472z^{11/2} - 11616864z^{9/2} + 27387072z^{7/2} - 29021328z^{5/2} + 11113200z^{3/2} - 893025\sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an9h.01

$${}_2F_2\left(5, 5; \frac{1}{2}, 2; z\right) = \frac{64z^7 + 2752z^6 + 42864z^5 + 302880z^4 + 994476z^3 + 1384380z^2 + 623925z + 36864}{36864} + \frac{1}{73728} \left(e^z \sqrt{\pi} (128z^{15/2} + 5568z^{13/2} + 88416z^{11/2} + 646032z^{9/2} + 2255256z^{7/2} + 3544884z^{5/2} + 2103570z^{3/2} + 297675\sqrt{z}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an9i.01

$${}_2F_2\left(5, 5; \frac{1}{2}, 2; -z\right) = \frac{-64 z^7 + 2752 z^6 - 42864 z^5 + 302880 z^4 - 994476 z^3 + 1384380 z^2 - 623925 z + 36864}{36864} + \frac{1}{73728} \left(e^{-z} \sqrt{\pi} (128 z^{15/2} - 5568 z^{13/2} + 88416 z^{11/2} - 646032 z^{9/2} + 2255256 z^{7/2} - 3544884 z^{5/2} + 2103570 z^{3/2} - 297675 \sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an9j.01

$${}_2F_2\left(5, 5; \frac{1}{2}, 3; z\right) = \frac{32 z^6 + 1104 z^5 + 13168 z^4 + 66360 z^3 + 137610 z^2 + 94065 z + 9216}{9216} + \frac{1}{18432} \left(e^z \sqrt{\pi} (64 z^{13/2} + 2240 z^{11/2} + 27408 z^{9/2} + 144864 z^{7/2} + 330876 z^{5/2} + 283500 z^{3/2} + 59535 \sqrt{z}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an9k.01

$${}_2F_2\left(5, 5; \frac{1}{2}, 3; -z\right) = \frac{32 z^6 - 1104 z^5 + 13168 z^4 - 66360 z^3 + 137610 z^2 - 94065 z + 9216}{9216} + \frac{1}{18432} \left(e^{-z} \sqrt{\pi} (-64 z^{13/2} + 2240 z^{11/2} - 27408 z^{9/2} + 144864 z^{7/2} - 330876 z^{5/2} + 283500 z^{3/2} - 59535 \sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an9l.01

$${}_2F_2\left(5, 5; \frac{1}{2}, 4; z\right) = \frac{16 z^5 + 416 z^4 + 3472 z^3 + 10800 z^2 + 10695 z + 1536}{1536} + \frac{e^z \sqrt{\pi} (32 z^{11/2} + 848 z^{9/2} + 7344 z^{7/2} + 24696 z^{5/2} + 29610 z^{3/2} + 8505 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{3072}$$

07.25.03.an9m.01

$${}_2F_2\left(5, 5; \frac{1}{2}, 4; -z\right) = \frac{-16 z^5 + 416 z^4 - 3472 z^3 + 10800 z^2 - 10695 z + 1536}{1536} + \frac{e^{-z} \sqrt{\pi} (32 z^{11/2} - 848 z^{9/2} + 7344 z^{7/2} - 24696 z^{5/2} + 29610 z^{3/2} - 8505 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3072}$$

07.25.03.an9n.01

$${}_2F_2\left(5, 5; \frac{1}{2}, 5; z\right) = \frac{1}{192} (8 z^4 + 140 z^3 + 690 z^2 + 975 z + 192) + \frac{1}{384} e^z \sqrt{\pi} (16 z^{9/2} + 288 z^{7/2} + 1512 z^{5/2} + 2520 z^{3/2} + 945 \sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.an9o.01

$${}_2F_2\left(5, 5; \frac{1}{2}, 5; -z\right) = \frac{1}{192} (8 z^4 - 140 z^3 + 690 z^2 - 975 z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (-16 z^{9/2} + 288 z^{7/2} - 1512 z^{5/2} + 2520 z^{3/2} - 945 \sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = 1$

07.25.03.an9p.01

$${}_2F_2(5, 5; 1, 1; z) = \frac{1}{576} e^z (z^8 + 48 z^7 + 856 z^6 + 7200 z^5 + 30024 z^4 + 59904 z^3 + 50688 z^2 + 13824 z + 576)$$

07.25.03.an9q.01

$${}_2F_2\left(5, 5; 1, \frac{3}{2}; z\right) = \frac{128 z^7 + 5568 z^6 + 88032 z^5 + 634832 z^4 + 2147544 z^3 + 3140820 z^2 + 1568250 z + 136431}{147456} + \frac{1}{294912 \sqrt{z}} \left(e^z \sqrt{\pi} (256 z^8 + 11264 z^7 + 181504 z^6 + 1352448 z^5 + 4854624 z^4 + 7968576 z^3 + 5115600 z^2 + 882000 z + 11025) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an9r.01

$${}_2F_2\left(5, 5; 1, \frac{3}{2}; -z\right) = \frac{-128 z^7 + 5568 z^6 - 88032 z^5 + 634832 z^4 - 2147544 z^3 + 3140820 z^2 - 1568250 z + 136431}{147456} + \frac{1}{294912 \sqrt{z}} \left(e^{-z} \sqrt{\pi} (256 z^8 - 11264 z^7 + 181504 z^6 - 1352448 z^5 + 4854624 z^4 - 7968576 z^3 + 5115600 z^2 - 882000 z + 11025) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an9s.01

$${}_2F_2(5, 5; 1, 2; z) = \frac{1}{576} e^z (z^7 + 40 z^6 + 576 z^5 + 3744 z^4 + 11304 z^3 + 14688 z^2 + 6624 z + 576)$$

07.25.03.an9t.01

$${}_2F_2\left(5, 5; 1, \frac{5}{2}; z\right) = \frac{128 z^7 + 4544 z^6 + 56288 z^5 + 299216 z^4 + 674520 z^3 + 540180 z^2 + 87354 z - 225}{98304 z} + \frac{1}{196608 z^{3/2}} \left(e^z \sqrt{\pi} (256 z^8 + 9216 z^7 + 116992 z^6 + 650496 z^5 + 1602144 z^4 + 1560000 z^3 + 435600 z^2 + 10800 z + 225) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an9u.01

$${}_2F_2\left(5, 5; 1, \frac{5}{2}; -z\right) = \frac{128 z^7 - 4544 z^6 + 56288 z^5 - 299216 z^4 + 674520 z^3 - 540180 z^2 + 87354 z + 225}{98304 z} + \frac{1}{196608 z^{3/2}} \left(e^{-z} \sqrt{\pi} (-256 z^8 + 9216 z^7 - 116992 z^6 + 650496 z^5 - 1602144 z^4 + 1560000 z^3 - 435600 z^2 + 10800 z - 225) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an9v.01

$${}_2F_2(5, 5; 1, 3; z) = \frac{1}{288} e^z (z^6 + 32 z^5 + 352 z^4 + 1632 z^3 + 3144 z^2 + 2112 z + 288)$$

07.25.03.an9w.01

$${}_2F_2\left(5, 5; 1, \frac{7}{2}; z\right) = \frac{5(128 z^7 + 3520 z^6 + 31712 z^5 + 110544 z^4 + 133848 z^3 + 33876 z^2 - 198 z - 81)}{196608 z^2} + \frac{1}{393216 z^{5/2}} \left(5 e^z \sqrt{\pi} (256 z^8 + 7168 z^7 + 66816 z^6 + 249600 z^5 + 354144 z^4 + 143424 z^3 + 5328 z^2 + 144 z + 81) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an9x.01

$${}_2F_2\left(5, 5; 1, \frac{7}{2}; -z\right) = \frac{1}{393\,216\,z^{5/2}} \left(5 e^{-z} \sqrt{\pi} (256 z^8 - 7168 z^7 + 66\,816 z^6 - 249\,600 z^5 + 354\,144 z^4 - 143\,424 z^3 + 5328 z^2 - 144 z + 81) \operatorname{erfi}(\sqrt{z})\right) - \frac{5(128 z^7 - 3520 z^6 + 31\,712 z^5 - 110\,544 z^4 + 133\,848 z^3 - 33\,876 z^2 - 198 z + 81)}{196\,608 z^2}$$

07.25.03.an9y.01

$${}_2F_2(5, 5; 1, 4; z) = \frac{1}{96} e^z (z^5 + 24 z^4 + 184 z^3 + 528 z^2 + 504 z + 96)$$

07.25.03.an9z.01

$${}_2F_2\left(5, 5; 1, \frac{9}{2}; z\right) = \frac{35(128 z^7 + 2496 z^6 + 14\,304 z^5 + 25\,808 z^4 + 9432 z^3 - 108 z^2 - 6 z - 225)}{393\,216 z^3} + \frac{1}{786\,432 z^{7/2}} (35 e^z \sqrt{\pi} (256 z^8 + 5120 z^7 + 30\,976 z^6 + 63\,744 z^5 + 35\,424 z^4 + 1728 z^3 + 144 z^2 - 144 z + 225) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ana0.01

$${}_2F_2\left(5, 5; 1, \frac{9}{2}; -z\right) = \frac{35(128 z^7 - 2496 z^6 + 14\,304 z^5 - 25\,808 z^4 + 9432 z^3 + 108 z^2 - 6 z + 225)}{393\,216 z^3} - \frac{1}{786\,432 z^{7/2}} (35 e^{-z} \sqrt{\pi} (256 z^8 - 5120 z^7 + 30\,976 z^6 - 63\,744 z^5 + 35\,424 z^4 - 1728 z^3 + 144 z^2 + 144 z + 225) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ana1.01

$${}_2F_2(5, 5; 1, 5; z) = \frac{1}{24} e^z (z^4 + 16 z^3 + 72 z^2 + 96 z + 24)$$

07.25.03.ana2.01

$${}_2F_2\left(5, 5; 1, \frac{11}{2}; z\right) = \frac{105(128 z^7 + 1472 z^6 + 4064 z^5 + 2000 z^4 + 216 z^3 - 1068 z^2 + 3450 z - 11\,025)}{262\,144 z^4} + \frac{1}{524\,288 z^{9/2}} (105 e^z \sqrt{\pi} (256 z^8 + 3072 z^7 + 9472 z^6 + 6912 z^5 + 864 z^4 - 1728 z^3 + 5328 z^2 - 10\,800 z + 11\,025) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ana3.01

$${}_2F_2\left(5, 5; 1, \frac{11}{2}; -z\right) = \frac{1}{524\,288 z^{9/2}} (105 e^{-z} \sqrt{\pi} (256 z^8 - 3072 z^7 + 9472 z^6 - 6912 z^5 + 864 z^4 + 1728 z^3 + 5328 z^2 + 10\,800 z + 11\,025) \operatorname{erfi}(\sqrt{z})) - \frac{105(128 z^7 - 1472 z^6 + 4064 z^5 - 2000 z^4 + 216 z^3 + 1068 z^2 + 3450 z + 11\,025)}{262\,144 z^4}$$

07.25.03.ana4.01

$${}_2F_2(5, 5; 1, 6; z) = \frac{5 e^z (z^8 + 8 z^7 + 16 z^6 + 24 z^4 - 96 z^3 + 288 z^2 - 576 z + 576)}{24 z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = \frac{3}{2}$

07.25.03.ana5.01

$${}_2F_2\left(5, 5; \frac{3}{2}, 2; z\right) = \frac{64 z^6 + 2304 z^5 + 29072 z^4 + 158592 z^3 + 372060 z^2 + 320400 z + 62703}{73728} + \frac{1}{147456 \sqrt{z}} \left(e^z \sqrt{\pi} (128 z^7 + 4672 z^6 + 60384 z^5 + 344112 z^4 + 878808 z^3 + 908460 z^2 + 286650 z + 11025) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ana6.01

$${}_2F_2\left(5, 5; \frac{3}{2}, 2; -z\right) = \frac{64 z^6 - 2304 z^5 + 29072 z^4 - 158592 z^3 + 372060 z^2 - 320400 z + 62703}{73728} + \frac{1}{147456 \sqrt{z}} \left(e^{-z} \sqrt{\pi} (-128 z^7 + 4672 z^6 - 60384 z^5 + 344112 z^4 - 878808 z^3 + 908460 z^2 - 286650 z + 11025) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ana7.01

$${}_2F_2\left(5, 5; \frac{3}{2}, 3; z\right) = \frac{32 z^5 + 912 z^4 + 8624 z^3 + 32280 z^2 + 44090 z + 14757}{18432} + \frac{e^z \sqrt{\pi} (64 z^6 + 1856 z^5 + 18128 z^4 + 72352 z^3 + 113820 z^2 + 55860 z + 3675) \operatorname{erf}(\sqrt{z})}{36864 \sqrt{z}}$$

07.25.03.ana8.01

$${}_2F_2\left(5, 5; \frac{3}{2}, 3; -z\right) = \frac{-32 z^5 + 912 z^4 - 8624 z^3 + 32280 z^2 - 44090 z + 14757}{18432} + \frac{e^{-z} \sqrt{\pi} (64 z^6 - 1856 z^5 + 18128 z^4 - 72352 z^3 + 113820 z^2 - 55860 z + 3675) \operatorname{erfi}(\sqrt{z})}{36864 \sqrt{z}}$$

07.25.03.ana9.01

$${}_2F_2\left(5, 5; \frac{3}{2}, 4; z\right) = \frac{16 z^4 + 336 z^3 + 2136 z^2 + 4540 z + 2337}{3072} + \frac{e^z \sqrt{\pi} (32 z^5 + 688 z^4 + 4592 z^3 + 10920 z^2 + 7770 z + 735) \operatorname{erf}(\sqrt{z})}{6144 \sqrt{z}}$$

07.25.03.anaa.01

$${}_2F_2\left(5, 5; \frac{3}{2}, 4; -z\right) = \frac{16 z^4 - 336 z^3 + 2136 z^2 - 4540 z + 2337}{3072} + \frac{e^{-z} \sqrt{\pi} (-32 z^5 + 688 z^4 - 4592 z^3 + 10920 z^2 - 7770 z + 735) \operatorname{erfi}(\sqrt{z})}{6144 \sqrt{z}}$$

07.25.03.anab.01

$${}_2F_2\left(5, 5; \frac{3}{2}, 5; z\right) = \frac{1}{384} (8 z^3 + 108 z^2 + 370 z + 279) + \frac{e^z \sqrt{\pi} (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.anac.01

$${}_2F_2\left(5, 5; \frac{3}{2}, 5; -z\right) = \frac{1}{384} (-8 z^3 + 108 z^2 - 370 z + 279) + \frac{e^{-z} \sqrt{\pi} (16 z^4 - 224 z^3 + 840 z^2 - 840 z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = 2$

07.25.03.anad.01

$${}_2F_2(5, 5; 2, 2; z) = \frac{1}{576} e^z (z^6 + 33 z^5 + 378 z^4 + 1854 z^3 + 3888 z^2 + 3024 z + 576)$$

07.25.03.anae.01

$${}_2F_2\left(5, 5; 2, \frac{5}{2}; z\right) = \frac{64 z^6 + 1856 z^5 + 17968 z^4 + 69600 z^3 + 100620 z^2 + 38052 z + 225}{49152 z} + \frac{1}{98304 z^{3/2}} \left(e^z \sqrt{\pi} (128 z^7 + 3776 z^6 + 37728 z^5 + 155472 z^4 + 256920 z^3 + 137700 z^2 + 11250 z - 225) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anaf.01

$${}_2F_2\left(5, 5; 2, \frac{5}{2}; -z\right) = \frac{-64 z^6 + 1856 z^5 - 17968 z^4 + 69600 z^3 - 100620 z^2 + 38052 z - 225}{49152 z} + \frac{1}{98304 z^{3/2}} \left(e^{-z} \sqrt{\pi} (128 z^7 - 3776 z^6 + 37728 z^5 - 155472 z^4 + 256920 z^3 - 137700 z^2 + 11250 z + 225) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anag.01

$${}_2F_2(5, 5; 2, 3; z) = \frac{1}{288} e^z (z^5 + 26 z^4 + 222 z^3 + 744 z^2 + 912 z + 288)$$

07.25.03.anah.01

$${}_2F_2\left(5, 5; 2, \frac{7}{2}; z\right) = \frac{5(64 z^6 + 1408 z^5 + 9552 z^4 + 22464 z^3 + 14076 z^2 + 216 z + 27)}{98304 z^2} + \frac{5 e^z \sqrt{\pi} (128 z^7 + 2880 z^6 + 20448 z^5 + 53232 z^4 + 43992 z^3 + 5724 z^2 - 198 z - 27) \operatorname{erfi}(\sqrt{z})}{196608 z^{5/2}}$$

07.25.03.anai.01

$${}_2F_2\left(5, 5; 2, \frac{7}{2}; -z\right) = \frac{5(64 z^6 - 1408 z^5 + 9552 z^4 - 22464 z^3 + 14076 z^2 - 216 z + 27)}{98304 z^2} - \frac{5 e^{-z} \sqrt{\pi} (128 z^7 - 2880 z^6 + 20448 z^5 - 53232 z^4 + 43992 z^3 - 5724 z^2 - 198 z + 27) \operatorname{erfi}(\sqrt{z})}{196608 z^{5/2}}$$

07.25.03.anaj.01

$${}_2F_2(5, 5; 2, 4; z) = \frac{1}{96} e^z (z^4 + 19 z^3 + 108 z^2 + 204 z + 96)$$

07.25.03.anak.01

$${}_2F_2\left(5, 5; 2, \frac{9}{2}; z\right) = \frac{35(64 z^6 + 960 z^5 + 3824 z^4 + 3744 z^3 + 108 z^2 + 12 z + 45)}{196608 z^3} + \frac{35 e^z \sqrt{\pi} (128 z^7 + 1984 z^6 + 8544 z^5 + 10512 z^4 + 1944 z^3 - 108 z^2 + 18 z - 45) \operatorname{erfi}(\sqrt{z})}{393216 z^{7/2}}$$

07.25.03.anal.01

$${}_2F_2\left(5, 5; 2, \frac{9}{2}; -z\right) = \frac{35 e^{-z} \sqrt{\pi} (128 z^7 - 1984 z^6 + 8544 z^5 - 10512 z^4 + 1944 z^3 + 108 z^2 + 18 z + 45) \operatorname{erfi}(\sqrt{z})}{393216 z^{7/2}} - \frac{35(64 z^6 - 960 z^5 + 3824 z^4 - 3744 z^3 + 108 z^2 - 12 z + 45)}{196608 z^3}$$

07.25.03.anam.01

$${}_2F_2(5, 5; 2, 5; z) = \frac{1}{24} e^z (z^3 + 12z^2 + 36z + 24)$$

07.25.03.anan.01

$${}_2F_2\left(5, 5; 2, \frac{11}{2}; z\right) = \frac{105(64z^6 + 512z^5 + 784z^4 + 156z^2 - 480z + 1575)}{131072z^4} + \frac{105e^z\sqrt{\pi}(128z^7 + 1088z^6 + 2016z^5 + 432z^4 + 216z^3 - 756z^2 + 1530z - 1575)\operatorname{erf}(\sqrt{z})}{262144z^{9/2}}$$

07.25.03.anao.01

$${}_2F_2\left(5, 5; 2, \frac{11}{2}; -z\right) = \frac{105(64z^6 - 512z^5 + 784z^4 + 156z^2 + 480z + 1575)}{131072z^4} - \frac{105e^{-z}\sqrt{\pi}(128z^7 - 1088z^6 + 2016z^5 - 432z^4 + 216z^3 + 756z^2 + 1530z + 1575)\operatorname{erfi}(\sqrt{z})}{262144z^{9/2}}$$

07.25.03.anap.01

$${}_2F_2(5, 5; 2, 6; z) = \frac{5e^z(z^7 + 5z^6 + 6z^5 - 6z^4 + 24z^3 - 72z^2 + 144z - 144)}{24z^5} + \frac{30}{z^5}$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = \frac{5}{2}$

07.25.03.anaq.01

$${}_2F_2\left(5, 5; \frac{5}{2}, 3; z\right) = \frac{32z^5 + 720z^4 + 5040z^3 + 12440z^2 + 8538z + 225}{12288z} + \frac{e^z\sqrt{\pi}(64z^6 + 1472z^5 + 10768z^4 + 29280z^3 + 25980z^2 + 3900z - 225)\operatorname{erf}(\sqrt{z})}{24576z^{3/2}}$$

07.25.03.anar.01

$${}_2F_2\left(5, 5; \frac{5}{2}, 3; -z\right) = \frac{32z^5 - 720z^4 + 5040z^3 - 12440z^2 + 8538z - 225}{12288z} + \frac{e^{-z}\sqrt{\pi}(-64z^6 + 1472z^5 - 10768z^4 + 29280z^3 - 25980z^2 + 3900z + 225)\operatorname{erfi}(\sqrt{z})}{24576z^{3/2}}$$

07.25.03.anas.01

$${}_2F_2\left(5, 5; \frac{5}{2}, 4; z\right) = \frac{16z^4 + 256z^3 + 1120z^2 + 1288z + 75}{2048z} + \frac{e^z\sqrt{\pi}(32z^5 + 528z^4 + 2480z^3 + 3480z^2 + 810z - 75)\operatorname{erf}(\sqrt{z})}{4096z^{3/2}}$$

07.25.03.anat.01

$${}_2F_2\left(5, 5; \frac{5}{2}, 4; -z\right) = \frac{-16z^4 + 256z^3 - 1120z^2 + 1288z - 75}{2048z} + \frac{e^{-z}\sqrt{\pi}(32z^5 - 528z^4 + 2480z^3 - 3480z^2 + 810z + 75)\operatorname{erfi}(\sqrt{z})}{4096z^{3/2}}$$

07.25.03.anau.01

$${}_2F_2\left(5, 5; \frac{5}{2}, 5; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.anav.01

$${}_2F_2\left(5, 5; \frac{5}{2}, 5; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = 3$

07.25.03.anaw.01

$${}_2F_2(5, 5; 3, 3; z) = \frac{1}{144} e^z (z^4 + 20z^3 + 122z^2 + 256z + 144)$$

07.25.03.anax.01

$${}_2F_2\left(5, 5; 3, \frac{7}{2}; z\right) = \frac{5(32z^5 + 528z^4 + 2416z^3 + 3000z^2 + 234z - 27)}{24576z^2} + \frac{5e^z \sqrt{\pi} (64z^6 + 1088z^5 + 5328z^4 + 7968z^3 + 2076z^2 - 252z + 27) \operatorname{erf}(\sqrt{z})}{49152z^{5/2}}$$

07.25.03.anay.01

$${}_2F_2\left(5, 5; 3, \frac{7}{2}; -z\right) = \frac{5e^{-z} \sqrt{\pi} (64z^6 - 1088z^5 + 5328z^4 - 7968z^3 + 2076z^2 + 252z + 27) \operatorname{erfi}(\sqrt{z})}{49152z^{5/2}} - \frac{5(32z^5 - 528z^4 + 2416z^3 - 3000z^2 + 234z + 27)}{24576z^2}$$

07.25.03.anaz.01

$${}_2F_2(5, 5; 3, 4; z) = \frac{1}{48} e^z (z^3 + 14z^2 + 52z + 48)$$

07.25.03.anb0.01

$${}_2F_2\left(5, 5; 3, \frac{9}{2}; z\right) = \frac{35(32z^5 + 336z^4 + 752z^3 + 120z^2 - 22z - 15)}{49152z^3} + \frac{35e^z \sqrt{\pi} (64z^6 + 704z^5 + 1808z^4 + 736z^3 - 132z^2 + 12z + 15) \operatorname{erf}(\sqrt{z})}{98304z^{7/2}}$$

07.25.03.anb1.01

$${}_2F_2\left(5, 5; 3, \frac{9}{2}; -z\right) = \frac{35(32z^5 - 336z^4 + 752z^3 - 120z^2 - 22z + 15)}{49152z^3} - \frac{35e^{-z} \sqrt{\pi} (64z^6 - 704z^5 + 1808z^4 - 736z^3 - 132z^2 - 12z + 15) \operatorname{erfi}(\sqrt{z})}{98304z^{7/2}}$$

07.25.03.anb2.01

$${}_2F_2(5, 5; 3, 5; z) = \frac{1}{12} e^z (z^2 + 8z + 12)$$

07.25.03.anb3.01

$${}_2F_2\left(5, 5; 3, \frac{11}{2}; z\right) = \frac{105(32z^5 + 144z^4 + 48z^3 - 40z^2 + 90z - 315)}{32768z^4} + \frac{105e^z\sqrt{\pi}(64z^6 + 320z^5 + 208z^4 - 96z^3 + 156z^2 - 300z + 315)\operatorname{erf}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.anb4.01

$${}_2F_2\left(5, 5; 3, \frac{11}{2}; -z\right) = \frac{105e^{-z}\sqrt{\pi}(64z^6 - 320z^5 + 208z^4 + 96z^3 + 156z^2 + 300z + 315)\operatorname{erfi}(\sqrt{z})}{65536z^{9/2}} - \frac{105(32z^5 - 144z^4 + 48z^3 + 40z^2 + 90z + 315)}{32768z^4}$$

07.25.03.anb5.01

$${}_2F_2(5, 5; 3, 6; z) = \frac{5e^z(z^6 + 2z^5 + 2z^4 - 8z^3 + 24z^2 - 48z + 48)}{12z^5} - \frac{20}{z^5}$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = \frac{7}{2}$

07.25.03.anb6.01

$${}_2F_2\left(5, 5; \frac{7}{2}, 4; z\right) = \frac{5(16z^4 + 176z^3 + 424z^2 + 84z - 27)}{4096z^2} + \frac{5e^z\sqrt{\pi}(32z^5 + 368z^4 + 1008z^3 + 456z^2 - 102z + 27)\operatorname{erf}(\sqrt{z})}{8192z^{5/2}}$$

07.25.03.anb7.01

$${}_2F_2\left(5, 5; \frac{7}{2}, 4; -z\right) = \frac{5(16z^4 - 176z^3 + 424z^2 - 84z - 27)}{4096z^2} - \frac{5e^{-z}\sqrt{\pi}(32z^5 - 368z^4 + 1008z^3 - 456z^2 - 102z - 27)\operatorname{erfi}(\sqrt{z})}{8192z^{5/2}}$$

07.25.03.anb8.01

$${}_2F_2\left(5, 5; \frac{7}{2}, 5; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5e^z\sqrt{\pi}(16z^4 + 96z^3 + 72z^2 - 24z + 9)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.anb9.01

$${}_2F_2\left(5, 5; \frac{7}{2}, 5; -z\right) = \frac{5e^{-z}\sqrt{\pi}(16z^4 - 96z^3 + 72z^2 + 24z + 9)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = 4$

07.25.03.anba.01

$${}_2F_2(5, 5; 4, 4; z) = \frac{1}{16}e^z(z^2 + 9z + 16)$$

07.25.03.anbb.01

$${}_2F_2\left(5, 5; 4, \frac{9}{2}; z\right) = \frac{35(16z^4 + 96z^3 + 48z^2 - 32z + 15)}{8192z^3} + \frac{35e^z\sqrt{\pi}(32z^5 + 208z^4 + 176z^3 - 72z^2 + 42z - 15)\operatorname{erf}(\sqrt{z})}{16384z^{7/2}}$$

07.25.03.anbc.01

$${}_2F_2\left(5, 5; 4, \frac{9}{2}; -z\right) = \frac{35 e^{-z} \sqrt{\pi} (32 z^5 - 208 z^4 + 176 z^3 + 72 z^2 + 42 z + 15) \operatorname{erfi}(\sqrt{z})}{16384 z^{7/2}} - \frac{35 (16 z^4 - 96 z^3 + 48 z^2 + 32 z + 15)}{8192 z^3}$$

07.25.03.anbd.01

$${}_2F_2(5, 5; 4, 5; z) = \frac{1}{4} e^z (z + 4)$$

07.25.03.anbe.01

$${}_2F_2\left(5, 5; 4, \frac{11}{2}; z\right) = \frac{315 (16 z^4 + 16 z^3 - 8 z^2 - 20 z + 105)}{16384 z^4} + \frac{315 e^z \sqrt{\pi} (32 z^5 + 48 z^4 - 16 z^3 - 24 z^2 + 90 z - 105) \operatorname{erf}(\sqrt{z})}{32768 z^{9/2}}$$

07.25.03.anbf.01

$${}_2F_2\left(5, 5; 4, \frac{11}{2}; -z\right) = \frac{315 (16 z^4 - 16 z^3 - 8 z^2 + 20 z + 105)}{16384 z^4} - \frac{315 e^{-z} \sqrt{\pi} (32 z^5 - 48 z^4 - 16 z^3 + 24 z^2 + 90 z + 105) \operatorname{erfi}(\sqrt{z})}{32768 z^{9/2}}$$

07.25.03.anbg.01

$${}_2F_2(5, 5; 4, 6; z) = \frac{5 e^z (z^5 - z^4 + 4 z^3 - 12 z^2 + 24 z - 24)}{4 z^5} + \frac{30}{z^5}$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = \frac{9}{2}$

07.25.03.anbh.01

$${}_2F_2\left(5, 5; \frac{9}{2}, 5; z\right) = \frac{35 (8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 e^z \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.anbi.01

$${}_2F_2\left(5, 5; \frac{9}{2}, 5; -z\right) = \frac{35 (8 z^3 - 12 z^2 - 14 z - 15)}{1024 z^3} - \frac{35 e^{-z} \sqrt{\pi} (16 z^4 - 32 z^3 - 24 z^2 - 24 z - 15) \operatorname{erfi}(\sqrt{z})}{2048 z^{7/2}}$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = 5$

07.25.03.anbj.01

$${}_2F_2(5, 5; 5, 5; z) = e^z$$

07.25.03.anbk.01

$${}_2F_2\left(5, 5; 5, \frac{11}{2}; z\right) = \frac{315 (8 z^3 - 20 z^2 + 50 z - 105)}{2048 z^4} + \frac{315 e^z \sqrt{\pi} (16 z^4 - 32 z^3 + 72 z^2 - 120 z + 105) \operatorname{erf}(\sqrt{z})}{4096 z^{9/2}}$$

07.25.03.anbl.01

$${}_2F_2\left(5, 5; 5, \frac{11}{2}; -z\right) = \frac{315 e^{-z} \sqrt{\pi} (16 z^4 + 32 z^3 + 72 z^2 + 120 z + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315 (8 z^3 + 20 z^2 + 50 z + 105)}{2048 z^4}$$

07.25.03.anbm.01

$${}_2F_2(5, 5; 5, 6; z) = \frac{5 e^z (z^4 - 4 z^3 + 12 z^2 - 24 z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = 5, a_2 = 5, b_1 = 6$

07.25.03.anbn.01

$${}_2F_2(5, 5; 6, 6; z) = \frac{25 e^z (z^3 - 7z^2 + 26z - 50)}{z^5} + \frac{600 \operatorname{Ei}(z)}{z^5} + \frac{300 \log\left(\frac{1}{z}\right)}{z^5} - \frac{300 \log(z)}{z^5} - \frac{50(-25 + 12\gamma)}{z^5}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = -\frac{11}{2}$

07.25.03.anbo.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{306338830875} (16384 z^{21} + 3383296 z^{20} + 303329280 z^{19} + 15576139776 z^{18} + 509030307840 z^{17} + 11128483860480 z^{16} + 166586283085824 z^{15} + 1718956157829120 z^{14} + 12150668593889280 z^{13} + 57735915993907200 z^{12} + 178261605368985600 z^{11} + 338382713469588480 z^{10} + 360625157890905600 z^9 + 183671701008364800 z^8 + 31755576926304000 z^7 + 554372202384000 z^6 + 7919602891200 z^5 + 1042053012000 z^4 + 383107725000 z^3 + 268175407500 z^2 + 278489846250 z + 306338830875) + \frac{1}{306338830875} (1024 e^z \sqrt{\pi} (16 z^{43/2} + 3312 z^{41/2} + 297864 z^{39/2} + 15357552 z^{37/2} + 504561393 z^{35/2} + 11108959785 z^{33/2} + 167884911810 z^{31/2} + 1755132402870 z^{29/2} + 12635466449760 z^{27/2} + 61638691292640 z^{25/2} + 197875650772800 z^{23/2} + 398916753681600 z^{21/2} + 469037229091200 z^{19/2} + 284460668553600 z^{17/2} + 70667225798400 z^{15/2} + 4061334816000 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anbp.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{306338830875} (-16384 z^{21} + 3383296 z^{20} - 303329280 z^{19} + 15576139776 z^{18} - 509030307840 z^{17} + 11128483860480 z^{16} - 166586283085824 z^{15} + 1718956157829120 z^{14} - 12150668593889280 z^{13} + 57735915993907200 z^{12} - 178261605368985600 z^{11} + 338382713469588480 z^{10} - 360625157890905600 z^9 + 183671701008364800 z^8 - 31755576926304000 z^7 + 554372202384000 z^6 - 7919602891200 z^5 + 1042053012000 z^4 - 383107725000 z^3 + 268175407500 z^2 - 278489846250 z + 306338830875) + \frac{1}{306338830875} (1024 e^{-z} \sqrt{\pi} (16 z^{43/2} - 3312 z^{41/2} + 297864 z^{39/2} - 15357552 z^{37/2} + 504561393 z^{35/2} - 11108959785 z^{33/2} + 167884911810 z^{31/2} - 1755132402870 z^{29/2} + 12635466449760 z^{27/2} - 61638691292640 z^{25/2} + 197875650772800 z^{23/2} - 398916753681600 z^{21/2} + 469037229091200 z^{19/2} - 284460668553600 z^{17/2} + 70667225798400 z^{15/2} - 4061334816000 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anbq.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{27848984625} \left(-8192 z^{20} - 1568768 z^{19} - 129705984 z^{18} - 6102666240 z^{17} - 181346088960 z^{16} - \right.$$

$$3572331227136 z^{15} - 47653440307200 z^{14} - 432182155345920 z^{13} - 2637957688934400 z^{12} -$$

$$10571975927654400 z^{11} - 26637923169285120 z^{10} - 39270950726515200 z^9 -$$

$$29913896965075200 z^8 - 9198923358240000 z^7 - 554372202384000 z^6 + 7919602891200 z^5 +$$

$$347351004000 z^4 + 76621545000 z^3 + 38310772500 z^2 + 30943316250 z + 27848984625 \left. \right) -$$

$$\frac{1}{27848984625} \left(512 e^z \sqrt{\pi} \left(16 z^{41/2} + 3072 z^{39/2} + 254856 z^{37/2} + 12044424 z^{35/2} + 360028305 z^{33/2} + \right. \right.$$

$$7148648430 z^{31/2} + 96398427510 z^{29/2} + 887546555280 z^{27/2} + 5535094007520 z^{25/2} +$$

$$22893033240000 z^{23/2} + 60517451332800 z^{21/2} + 96329497017600 z^{19/2} +$$

$$\left. \left. 83719241020800 z^{17/2} + 33302945491200 z^{15/2} + 4061334816000 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anbr.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{27848984625} \left(-8192 z^{20} + 1568768 z^{19} - 129705984 z^{18} + 6102666240 z^{17} - 181346088960 z^{16} + \right.$$

$$3572331227136 z^{15} - 47653440307200 z^{14} + 432182155345920 z^{13} - 2637957688934400 z^{12} +$$

$$10571975927654400 z^{11} - 26637923169285120 z^{10} + 39270950726515200 z^9 -$$

$$29913896965075200 z^8 + 9198923358240000 z^7 - 554372202384000 z^6 - 7919602891200 z^5 +$$

$$347351004000 z^4 - 76621545000 z^3 + 38310772500 z^2 - 30943316250 z + 27848984625 \left. \right) +$$

$$\frac{1}{27848984625} \left(512 e^{-z} \sqrt{\pi} \left(16 z^{41/2} - 3072 z^{39/2} + 254856 z^{37/2} - 12044424 z^{35/2} + 360028305 z^{33/2} - \right. \right.$$

$$7148648430 z^{31/2} + 96398427510 z^{29/2} - 887546555280 z^{27/2} + 5535094007520 z^{25/2} -$$

$$22893033240000 z^{23/2} + 60517451332800 z^{21/2} - 96329497017600 z^{19/2} +$$

$$\left. \left. 83719241020800 z^{17/2} - 33302945491200 z^{15/2} + 4061334816000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anbs.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{3094331625} \left(4096 z^{19} + 722944 z^{18} + 54733824 z^{17} + 2340149760 z^{16} + 62617729536 z^{15} + 1098475499520 z^{14} + \right.$$

$$12870586552320 z^{13} + 100736468582400 z^{12} + 518393656166400 z^{11} + 1695467133803520 z^{10} +$$

$$3321019082304000 z^9 + 3510965929363200 z^8 + 1631844329068800 z^7 + 184790734128000 z^6 -$$

$$7919602891200 z^5 + 347351004000 z^4 + 25540515000 z^3 + 7662154500 z^2 + 4420473750 z + 3094331625 \left. \right) +$$

$$\frac{1}{3094331625} \left(256 e^z \sqrt{\pi} \left(16 z^{39/2} + 2832 z^{37/2} + 215208 z^{35/2} + 9246720 z^{33/2} + 249067665 z^{31/2} + 4408904115 z^{29/2} + \right. \right.$$

$$52309386360 z^{27/2} + 416762078040 z^{25/2} + 2200997383200 z^{23/2} + 7486051557600 z^{21/2} +$$

$$\left. \left. 15601141987200 z^{19/2} + 18323787081600 z^{17/2} + 10424092694400 z^{15/2} + 2030667408000 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anbt.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{3094331625} \left(-4096 z^{19} + 722944 z^{18} - 54733824 z^{17} + 2340149760 z^{16} - 62617729536 z^{15} + 1098475499520 z^{14} - \right.$$

$$12870586552320 z^{13} + 100736468582400 z^{12} - 518393656166400 z^{11} + 1695467133803520 z^{10} -$$

$$3321019082304000 z^9 + 3510965929363200 z^8 - 1631844329068800 z^7 + 184790734128000 z^6 +$$

$$7919602891200 z^5 + 347351004000 z^4 - 25540515000 z^3 + 7662154500 z^2 - 4420473750 z + 3094331625 \Big) +$$

$$\frac{1}{3094331625} \left(256 e^{-z} \sqrt{\pi} \left(16 z^{39/2} - 2832 z^{37/2} + 215208 z^{35/2} - 9246720 z^{33/2} + 249067665 z^{31/2} - 4408904115 z^{29/2} + \right. \right.$$

$$52309386360 z^{27/2} - 416762078040 z^{25/2} + 2200997383200 z^{23/2} - 7486051557600 z^{21/2} +$$

$$\left. \left. 15601141987200 z^{19/2} - 18323787081600 z^{17/2} + 10424092694400 z^{15/2} - 2030667408000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anbu.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{442047375} \left(-2048 z^{18} - 330752 z^{17} - 22737408 z^{16} - 874651392 z^{15} - 20824012800 z^{14} - 320583997440 z^{13} - \right.$$

$$3238870118400 z^{12} - 21356249241600 z^{11} - 89645181373440 z^{10} - 227964126297600 z^9 -$$

$$320793877958400 z^8 - 208365815750400 z^7 - 36958146825600 z^6 + 2639867630400 z^5 -$$

$$347351004000 z^4 + 25540515000 z^3 + 2554051500 z^2 + 884094750 z + 442047375 \Big) -$$

$$\frac{1}{442047375} \left(128 e^z \sqrt{\pi} \left(16 z^{37/2} + 2592 z^{35/2} + 178920 z^{33/2} + 6920760 z^{31/2} + 166018545 z^{29/2} + \right. \right.$$

$$2582700120 z^{27/2} + 26482385160 z^{25/2} + 178420611600 z^{23/2} + 773632490400 z^{21/2} +$$

$$\left. \left. 2070624124800 z^{19/2} + 3177397238400 z^{17/2} + 2436800889600 z^{15/2} + 676889136000 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anbv.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{442047375} \left(-2048 z^{18} + 330752 z^{17} - 22737408 z^{16} + 874651392 z^{15} - 20824012800 z^{14} + 320583997440 z^{13} - \right.$$

$$3238870118400 z^{12} + 21356249241600 z^{11} - 89645181373440 z^{10} + 227964126297600 z^9 -$$

$$320793877958400 z^8 + 208365815750400 z^7 - 36958146825600 z^6 - 2639867630400 z^5 -$$

$$347351004000 z^4 - 25540515000 z^3 + 2554051500 z^2 - 884094750 z + 442047375 \Big) +$$

$$\frac{1}{442047375} \left(128 e^{-z} \sqrt{\pi} \left(16 z^{37/2} - 2592 z^{35/2} + 178920 z^{33/2} - 6920760 z^{31/2} + 166018545 z^{29/2} - \right. \right.$$

$$2582700120 z^{27/2} + 26482385160 z^{25/2} - 178420611600 z^{23/2} + 773632490400 z^{21/2} -$$

$$\left. \left. 2070624124800 z^{19/2} + 3177397238400 z^{17/2} - 2436800889600 z^{15/2} + 676889136000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anbw.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{88409475}$$

$$\begin{aligned} & (1024 z^{17} + 150016 z^{16} + 9268992 z^{15} + 316902528 z^{14} + 6613627776 z^{13} + 87689629440 z^{12} + 745489140480 z^{11} + \\ & 4005579561984 z^{10} + 13065742609920 z^9 + 23885805968640 z^8 + 20745040377600 z^7 + 5279735260800 z^6 - \\ & 527973526080 z^5 + 115783668000 z^4 - 25540515000 z^3 + 2554051500 z^2 + 294698250 z + 88409475) + \\ & \frac{1}{88409475} \left(64 e^z \sqrt{\pi} \left(16 z^{35/2} + 2352 z^{33/2} + 145992 z^{31/2} + 5022864 z^{29/2} + 105744177 z^{27/2} + \right. \right. \\ & 1419514173 z^{25/2} + 12287243430 z^{23/2} + 67835420730 z^{21/2} + 230949124560 z^{19/2} + \\ & \left. \left. 453980252880 z^{17/2} + 453515721120 z^{15/2} + 169222284000 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right) \end{aligned}$$

07.25.03.anbx.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{88409475}$$

$$\begin{aligned} & (-1024 z^{17} + 150016 z^{16} - 9268992 z^{15} + 316902528 z^{14} - 6613627776 z^{13} + 87689629440 z^{12} - 745489140480 z^{11} + \\ & 4005579561984 z^{10} - 13065742609920 z^9 + 23885805968640 z^8 - 20745040377600 z^7 + 5279735260800 z^6 + \\ & 527973526080 z^5 + 115783668000 z^4 + 25540515000 z^3 + 2554051500 z^2 - 294698250 z + 88409475) + \\ & \frac{1}{88409475} \left(64 e^{-z} \sqrt{\pi} \left(16 z^{35/2} - 2352 z^{33/2} + 145992 z^{31/2} - 5022864 z^{29/2} + 105744177 z^{27/2} - \right. \right. \\ & 1419514173 z^{25/2} + 12287243430 z^{23/2} - 67835420730 z^{21/2} + 230949124560 z^{19/2} - \\ & \left. \left. 453980252880 z^{17/2} + 453515721120 z^{15/2} - 169222284000 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right) \end{aligned}$$

07.25.03.anby.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{29469825} (-512 z^{16} - 67328 z^{15} - 3692160 z^{14} - 110486208 z^{13} - 1982743680 z^{12} - 22085562240 z^{11} -$$

$$152757868032 z^{10} - 636971005440 z^9 - 1493024037120 z^8 - 1688999558400 z^7 - 586637251200 z^6 +$$

$$75424789440 z^5 - 23156733600 z^4 + 8513505000 z^3 - 2554051500 z^2 + 294698250 z + 29469825) - \frac{1}{29469825}$$

$$\left(32 e^z \sqrt{\pi} \left(16 z^{33/2} + 2112 z^{31/2} + 116424 z^{29/2} + 3509352 z^{27/2} + 63631953 z^{25/2} + 719562690 z^{23/2} + 5091616530 \right. \right.$$

$$\left. \left. z^{21/2} + 22010871960 z^{19/2} + 54862148880 z^{17/2} + 69945210720 z^{15/2} + 33844456800 z^{13/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anbz.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{29469825} (-512 z^{16} + 67328 z^{15} - 3692160 z^{14} + 110486208 z^{13} - 1982743680 z^{12} + 22085562240 z^{11} -$$

$$152757868032 z^{10} + 636971005440 z^9 - 1493024037120 z^8 + 1688999558400 z^7 - 586637251200 z^6 -$$

$$75424789440 z^5 - 23156733600 z^4 - 8513505000 z^3 - 2554051500 z^2 - 294698250 z + 29469825) + \frac{1}{29469825}$$

$$\left(32 e^{-z} \sqrt{\pi} \left(16 z^{33/2} - 2112 z^{31/2} + 116424 z^{29/2} - 3509352 z^{27/2} + 63631953 z^{25/2} - 719562690 z^{23/2} + 5091616530 \right. \right.$$

$$\left. \left. z^{21/2} - 22010871960 z^{19/2} + 54862148880 z^{17/2} - 69945210720 z^{15/2} + 33844456800 z^{13/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anc0.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{29469825} (256 z^{15} + 29824 z^{14} + 1428672 z^{13} + 36684960 z^{12} + 551830560 z^{11} + 4989333888 z^{10} +$$

$$26721636480 z^9 + 79937383680 z^8 + 116038137600 z^7 + 53330659200 z^6 - 8380532160 z^5 +$$

$$3308104800 z^4 - 1702701000 z^3 + 851350500 z^2 - 294698250 z + 29469825) +$$

$$\frac{1}{29469825} \left(16 e^z \sqrt{\pi} (16 z^{31/2} + 1872 z^{29/2} + 90216 z^{27/2} + 2336544 z^{25/2} + 35593425 z^{23/2} + 328035015 z^{21/2} +$$

$$1811266380 z^{19/2} + 5709474540 z^{17/2} + 9186352560 z^{15/2} + 5640742800 z^{13/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anc1.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; -z\right) =$$

$$\frac{1}{29469825} (-256 z^{15} + 29824 z^{14} - 1428672 z^{13} + 36684960 z^{12} - 551830560 z^{11} + 4989333888 z^{10} -$$

$$26721636480 z^9 + 79937383680 z^8 - 116038137600 z^7 + 53330659200 z^6 + 8380532160 z^5 +$$

$$3308104800 z^4 + 1702701000 z^3 + 851350500 z^2 + 294698250 z + 29469825) +$$

$$\frac{1}{29469825} \left(16 e^{-z} \sqrt{\pi} (16 z^{31/2} - 1872 z^{29/2} + 90216 z^{27/2} - 2336544 z^{25/2} + 35593425 z^{23/2} - 328035015 z^{21/2} +$$

$$1811266380 z^{19/2} - 5709474540 z^{17/2} + 9186352560 z^{15/2} - 5640742800 z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anc2.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, 1; z\right) =$$

$$\frac{1}{235758600} (e^z (2048 z^{15} + 224256 z^{14} + 10031616 z^{13} + 238624512 z^{12} + 3291837696 z^{11} + 26935058304 z^{10} +$$

$$128145568320 z^9 + 330741623520 z^8 + 391038195240 z^7 + 117188614620 z^6 - 26340784470 z^5 +$$

$$12976546275 z^4 - 7439493600 z^3 + 3850723800 z^2 - 1414551600 z + 235758600))$$

07.25.03.anc3.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) =$$

$$\frac{1}{29469825} \left(8 e^z \sqrt{\pi} (16 z^8 + 1632 z^7 + 67368 z^6 + 1460760 z^5 + 18064305 z^4 + 129327660 z^3 + 517989780 z^2 +$$

$$1047566520 z + 805820400) \operatorname{erf}(\sqrt{z}) z^{13/2}\right) +$$

$$\frac{1}{29469825} (128 z^{14} + 12992 z^{13} + 532512 z^{12} + 11426160 z^{11} + 139051968 z^{10} + 970200000 z^9 +$$

$$3716254080 z^8 + 6876334080 z^7 + 4102358400 z^6 - 761866560 z^5 +$$

$$367567200 z^4 - 243243000 z^3 + 170270100 z^2 - 98232750 z + 29469825)$$

07.25.03.anc4.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{29469825} (128 z^{14} - 12992 z^{13} + 532512 z^{12} - 11426160 z^{11} + 139051968 z^{10} - 970200000 z^9 + 3716254080 z^8 - 6876334080 z^7 + 4102358400 z^6 + 761866560 z^5 + 367567200 z^4 + 243243000 z^3 + 170270100 z^2 + 98232750 z + 29469825) - \frac{1}{29469825} (8 e^{-z} \sqrt{\pi} z^{13/2} (16 z^8 - 1632 z^7 + 67368 z^6 - 1460760 z^5 + 18064305 z^4 - 129327660 z^3 + 517989780 z^2 - 1047566520 z + 805820400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anc5.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{235758600} (e^z (2048 z^{14} + 193536 z^{13} + 7322112 z^{12} + 143437056 z^{11} + 1570593024 z^{10} + 9658535040 z^9 + 31560217920 z^8 + 46699662240 z^7 + 17440897320 z^6 - 4897666620 z^5 + 3045215250 z^4 - 2249529975 z^3 + 1558626300 z^2 - 825155100 z + 235758600))$$

07.25.03.anc6.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{9823275} (4 e^z \sqrt{\pi} (16 z^7 + 1392 z^6 + 47880 z^5 + 838320 z^4 + 8004465 z^3 + 41278545 z^2 + 105204330 z + 100727550) \operatorname{erf}(\sqrt{z}) z^{13/2}) + \frac{1}{9823275} (64 z^{13} + 5536 z^{12} + 188784 z^{11} + 3261576 z^{10} + 30474840 z^9 + 151295760 z^8 + 357089040 z^7 + 273490560 z^6 - 58605120 z^5 + 33415200 z^4 - 27027000 z^3 + 24324300 z^2 - 19646550 z + 9823275)$$

07.25.03.anc7.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{9823275} (4 e^{-z} \sqrt{\pi} (16 z^7 - 1392 z^6 + 47880 z^5 - 838320 z^4 + 8004465 z^3 - 41278545 z^2 + 105204330 z - 100727550) \operatorname{erfi}(\sqrt{z}) z^{13/2}) + \frac{1}{9823275} (-64 z^{13} + 5536 z^{12} - 188784 z^{11} + 3261576 z^{10} - 30474840 z^9 + 151295760 z^8 - 357089040 z^7 + 273490560 z^6 + 58605120 z^5 + 33415200 z^4 + 27027000 z^3 + 24324300 z^2 + 19646550 z + 9823275)$$

07.25.03.anc8.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, 3; z\right) = \frac{1}{117879300} (e^z (2048 z^{13} + 162816 z^{12} + 5042688 z^{11} + 77882112 z^{10} + 636007680 z^9 + 2662450560 z^8 + 4935712320 z^7 + 2278251360 z^6 - 785113560 z^5 + 598128300 z^4 - 543554550 z^3 + 468242775 z^2 - 314344800 z + 117879300))$$

07.25.03.anc9.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{1964655} \left(2e^z \sqrt{\pi} (16z^6 + 1152z^5 + 31752z^4 + 425544z^3 + 2897937z^2 + 9401238z + 11191950) \operatorname{erf}(\sqrt{z}) z^{13/2} + \frac{1}{1964655} (32z^{12} + 2288z^{11} + 62376z^{10} + 821004z^9 + 5413848z^8 + 16437960z^7 + 16087680z^6 - 3907008z^5 + 2570400z^4 - 2457000z^3 + 2702700z^2 - 2806650z + 1964655) \right)$$

07.25.03.anca.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{1964655} (32z^{12} - 2288z^{11} + 62376z^{10} - 821004z^9 + 5413848z^8 - 16437960z^7 + 16087680z^6 - 3907008z^5 + 2570400z^4 + 2457000z^3 + 2702700z^2 + 2806650z + 1964655) - \frac{1}{1964655} (2e^{-z} \sqrt{\pi} z^{13/2} (16z^6 - 1152z^5 + 31752z^4 - 425544z^3 + 2897937z^2 - 9401238z + 11191950) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ancb.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, 4; z\right) = \frac{1}{39293100} (e^z (2048z^{12} + 132096z^{11} + 3193344z^{10} + 36368640z^9 + 199584000z^8 + 467026560z^7 + 265446720z^6 - 110769120z^5 + 101039400z^4 - 109147500z^3 + 111330450z^2 - 88409475z + 39293100))$$

07.25.03.ancc.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{e^z \sqrt{\pi} (16z^5 + 912z^4 + 18984z^3 + 178752z^2 + 752913z + 1119195) \operatorname{erf}(\sqrt{z}) z^{13/2}}{280665} + \frac{1}{280665} (16z^{11} + 904z^{10} + 18540z^9 + 169914z^8 + 676170z^7 + 846720z^6 - 229824z^5 + 171360z^4 - 189000z^3 + 245700z^2 - 311850z + 280665)$$

07.25.03.ancd.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16z^5 - 912z^4 + 18984z^3 - 178752z^2 + 752913z - 1119195) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{280665} + \frac{1}{280665} (-16z^{11} + 904z^{10} - 18540z^9 + 169914z^8 - 676170z^7 + 846720z^6 + 229824z^5 + 171360z^4 + 189000z^3 + 245700z^2 + 311850z + 280665)$$

07.25.03.ance.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{9823275} (e^z (2048z^{11} + 101376z^{10} + 1774080z^9 + 13305600z^8 + 39916800z^7 + 27941760z^6 - 13970880z^5 + 14968800z^4 - 18711000z^3 + 21829500z^2 - 19646550z + 9823275))$$

07.25.03.ancf.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z \sqrt{\pi} (16z^4 + 672z^3 + 9576z^2 + 54264z + 101745) \operatorname{erf}(\sqrt{z}) z^{13/2}}{62370} + \frac{1}{31185} (8z^{10} + 332z^9 + 4626z^8 + 24975z^7 + 40320z^6 - 12096z^5 + 10080z^4 - 12600z^3 + 18900z^2 - 28350z + 31185)$$

07.25.03.ancg.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{1}{31185} (8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185) - \frac{e^{-z} \sqrt{\pi} z^{13/2} (16z^4 - 672z^3 + 9576z^2 - 54264z + 101745) \operatorname{erfi}(\sqrt{z})}{62370}$$

07.25.03.anch.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{1964655z^5} (e^z (2048z^{15} + 70656z^{14} + 784896z^{13} + 3101952z^{12} + 2693376z^{11} - 1685376z^{10} + 2882880z^9 - 10977120z^8 + 69105960z^7 - 461912220z^6 + 2751826770z^5 - 13749310575z^4 + 54997242300z^3 - 164991726900z^2 + 329983453800z - 329983453800)) + \frac{167960}{z^5}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = -\frac{9}{2}$

07.25.03.anci.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{2531725875} (4096z^{19} + 727040z^{18} + 55403520z^{17} + 2386849280z^{16} + 64444514304z^{15} + 1142847912960z^{14} + 13570568355840z^{13} + 108027305164800z^{12} + 568396294502400z^{11} + 1916785725281280z^{10} + 3928236402931200z^9 + 4473906656083200z^8 + 2412180878688000z^7 + 437349498768000z^6 + 7919602891200z^5 + 115783668000z^4 + 15324309000z^3 + 5472967500z^2 + 3438146250z + 2531725875) + \frac{1}{2531725875} (256e^z \sqrt{\pi} (16z^{39/2} + 2848z^{37/2} + 217832z^{35/2} + 9430440z^{33/2} + 256293465z^{31/2} + 4585713780z^{29/2} + 55127003490z^{27/2} + 446530527360z^{25/2} + 2409380316000z^{23/2} + 8436751344000z^{21/2} + 18333694612800z^{19/2} + 22994718566400z^{17/2} + 14735085321600z^{15/2} + 3832774848000z^{13/2} + 228559968000z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ancj.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{2531725875} \left(-4096 z^{19} + 727040 z^{18} - 55403520 z^{17} + 2386849280 z^{16} - 64444514304 z^{15} + 1142847912960 z^{14} - \right.$$

$$13570568355840 z^{13} + 108027305164800 z^{12} - 568396294502400 z^{11} + 1916785725281280 z^{10} -$$

$$3928236402931200 z^9 + 4473906656083200 z^8 - 2412180878688000 z^7 + 437349498768000 z^6 -$$

$$7919602891200 z^5 + 115783668000 z^4 - 15324309000 z^3 + 5472967500 z^2 - 3438146250 z + 2531725875 \left. \right) +$$

$$\frac{1}{2531725875} \left(256 e^{-z} \sqrt{\pi} \left(16 z^{39/2} - 2848 z^{37/2} + 217832 z^{35/2} - 9430440 z^{33/2} + 256293465 z^{31/2} - \right. \right.$$

$$4585713780 z^{29/2} + 55127003490 z^{27/2} - 446530527360 z^{25/2} + 2409380316000 z^{23/2} -$$

$$8436751344000 z^{21/2} + 18333694612800 z^{19/2} - 22994718566400 z^{17/2} +$$

$$\left. \left. 14735085321600 z^{15/2} - 3832774848000 z^{13/2} + 228559968000 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anck.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{281302875} \left(-2048 z^{18} - 334848 z^{17} - 23349760 z^{16} - 913392384 z^{15} - 22186206720 z^{14} - 349990901760 z^{13} - \right.$$

$$3645418291200 z^{12} - 25001319168000 z^{11} - 110659295738880 z^{10} - 303608660313600 z^9 -$$

$$481470363360000 z^8 - 390168274809600 z^7 - 126279382320000 z^6 - 7919602891200 z^5 +$$

$$115783668000 z^4 + 5108103000 z^3 + 1094593500 z^2 + 491163750 z + 281302875 \left. \right) -$$

$$\frac{1}{281302875} \left(128 e^z \sqrt{\pi} \left(16 z^{37/2} + 2624 z^{35/2} + 183720 z^{33/2} + 7225800 z^{31/2} + 176809665 z^{29/2} + \right. \right.$$

$$2817617130 z^{27/2} + 29768449320 z^{25/2} + 208382932800 z^{23/2} + 950699786400 z^{21/2} + 2732552625600 z^{19/2} +$$

$$\left. \left. 4670931484800 z^{17/2} + 4310992627200 z^{15/2} + 1802107440000 z^{13/2} + 228559968000 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ancl.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{281302875} \left(-2048 z^{18} + 334848 z^{17} - 23349760 z^{16} + 913392384 z^{15} - 22186206720 z^{14} + 349990901760 z^{13} - \right.$$

$$3645418291200 z^{12} + 25001319168000 z^{11} - 110659295738880 z^{10} + 303608660313600 z^9 -$$

$$481470363360000 z^8 + 390168274809600 z^7 - 126279382320000 z^6 + 7919602891200 z^5 +$$

$$115783668000 z^4 - 5108103000 z^3 + 1094593500 z^2 - 491163750 z + 281302875 \left. \right) +$$

$$\frac{1}{281302875} \left(128 e^{-z} \sqrt{\pi} \left(16 z^{37/2} - 2624 z^{35/2} + 183720 z^{33/2} - 7225800 z^{31/2} + 176809665 z^{29/2} - \right. \right.$$

$$2817617130 z^{27/2} + 29768449320 z^{25/2} - 208382932800 z^{23/2} + 950699786400 z^{21/2} - 2732552625600 z^{19/2} +$$

$$\left. \left. 4670931484800 z^{17/2} - 4310992627200 z^{15/2} + 1802107440000 z^{13/2} - 228559968000 z^{11/2} \right) \operatorname{erfi}(\sqrt{-z}) \right)$$

07.25.03.ancm.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{40186125} (1024 z^{17} + 153088 z^{16} + 9685248 z^{15} + 340548480 z^{14} + 7351726080 z^{13} + 101637043200 z^{12} +$$

$$911267481600 z^{11} + 5253528591360 z^{10} + 18911133504000 z^9 + 40169121350400 z^8 +$$

$$45450614764800 z^7 + 22330308873600 z^6 + 2639867630400 z^5 -$$

$$115783668000 z^4 + 5108103000 z^3 + 364864500 z^2 + 98232750 z + 40186125) +$$

$$\frac{1}{40186125} (64 e^z \sqrt{\pi} (16 z^{35/2} + 2400 z^{33/2} + 152520 z^{31/2} + 5395560 z^{29/2} + 117458505 z^{27/2} +$$

$$1643032080 z^{25/2} + 14981160600 z^{23/2} + 88533648000 z^{21/2} + 330964250400 z^{19/2} +$$

$$746767123200 z^{17/2} + 937095868800 z^{15/2} + 562609152000 z^{13/2} + 114279984000 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ancn.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{40186125} (-1024 z^{17} + 153088 z^{16} - 9685248 z^{15} + 340548480 z^{14} - 7351726080 z^{13} + 101637043200 z^{12} -$$

$$911267481600 z^{11} + 5253528591360 z^{10} - 18911133504000 z^9 + 40169121350400 z^8 -$$

$$45450614764800 z^7 + 22330308873600 z^6 - 2639867630400 z^5 -$$

$$115783668000 z^4 - 5108103000 z^3 + 364864500 z^2 - 98232750 z + 40186125) +$$

$$\frac{1}{40186125} (64 e^{-z} \sqrt{\pi} (16 z^{35/2} - 2400 z^{33/2} + 152520 z^{31/2} - 5395560 z^{29/2} + 117458505 z^{27/2} -$$

$$1643032080 z^{25/2} + 14981160600 z^{23/2} - 88533648000 z^{21/2} + 330964250400 z^{19/2} -$$

$$746767123200 z^{17/2} + 937095868800 z^{15/2} - 562609152000 z^{13/2} + 114279984000 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anco.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{8037225} (-512 z^{16} - 69376 z^{15} - 3940992 z^{14} - 123016384 z^{13} - 2324568960 z^{12} - 27629723520 z^{11} -$$

$$207991504896 z^{10} - 974231815680 z^9 - 2713885896960 z^8 - 4117595731200 z^7 - 2841762268800 z^6 -$$

$$527973526080 z^5 + 38594556000 z^4 - 5108103000 z^3 + 364864500 z^2 + 32744250 z + 8037225) -$$

$$\frac{1}{8037225} (32 e^z \sqrt{\pi} (16 z^{33/2} + 2176 z^{31/2} + 124232 z^{29/2} + 3904776 z^{27/2} + 74505969 z^{25/2} +$$

$$897972390 z^{23/2} + 6899409090 z^{21/2} + 33338375280 z^{19/2} + 97595623440 z^{17/2} +$$

$$161193382560 z^{15/2} + 131128956000 z^{13/2} + 38093328000 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ancp.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{8037225} \left(-512 z^{16} + 69376 z^{15} - 3940992 z^{14} + 123016384 z^{13} - 2324568960 z^{12} + 27629723520 z^{11} - \right.$$

$$207991504896 z^{10} + 974231815680 z^9 - 2713885896960 z^8 + 4117595731200 z^7 - 2841762268800 z^6 +$$

$$527973526080 z^5 + 38594556000 z^4 + 5108103000 z^3 + 364864500 z^2 - 32744250 z + 8037225 \Big) +$$

$$\frac{1}{8037225} \left(32 e^{-z} \sqrt{\pi} \left(16 z^{33/2} - 2176 z^{31/2} + 124232 z^{29/2} - 3904776 z^{27/2} + 74505969 z^{25/2} - \right. \right.$$

$$897972390 z^{23/2} + 6899409090 z^{21/2} - 33338375280 z^{19/2} + 97595623440 z^{17/2} -$$

$$\left. \left. 161193382560 z^{15/2} + 131128956000 z^{13/2} - 38093328000 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ancq.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{2679075} \left(256 z^{15} + 31104 z^{14} + 1566272 z^{13} + 42728160 z^{12} + 693020160 z^{11} + 6904204608 z^{10} + \right.$$

$$42157601280 z^9 + 152607732480 z^8 + 303574521600 z^7 + 281890627200 z^6 + 75424789440 z^5 -$$

$$\left. \left. 7718911200 z^4 + 1702701000 z^3 - 364864500 z^2 + 32744250 z + 2679075 \right) + \frac{1}{2679075} \right.$$

$$\left(16 e^z \sqrt{\pi} \left(16 z^{31/2} + 1952 z^{29/2} + 98856 z^{27/2} + 2718504 z^{25/2} + 44602425 z^{23/2} + 451948140 z^{21/2} + 2831875830 \right. \right.$$

$$\left. \left. z^{19/2} + 10683368640 z^{17/2} + 22812042960 z^{15/2} + 24321124800 z^{13/2} + 9523332000 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ancr.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{2679075} \left(-256 z^{15} + 31104 z^{14} - 1566272 z^{13} + 42728160 z^{12} - 693020160 z^{11} + 6904204608 z^{10} - \right.$$

$$42157601280 z^9 + 152607732480 z^8 - 303574521600 z^7 + 281890627200 z^6 - 75424789440 z^5 -$$

$$\left. \left. 7718911200 z^4 - 1702701000 z^3 - 364864500 z^2 - 32744250 z + 2679075 \right) + \frac{1}{2679075} \right.$$

$$\left(16 e^{-z} \sqrt{\pi} \left(16 z^{31/2} - 1952 z^{29/2} + 98856 z^{27/2} - 2718504 z^{25/2} + 44602425 z^{23/2} - 451948140 z^{21/2} + 2831875830 \right. \right.$$

$$\left. \left. z^{19/2} - 10683368640 z^{17/2} + 22812042960 z^{15/2} - 24321124800 z^{13/2} + 9523332000 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ancs.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{2679075} \left(-128 z^{14} - 13760 z^{13} - 604320 z^{12} - 14118960 z^{11} - 191487072 z^{10} - 1543596480 z^9 - 7267034880 z^8 - \right.$$

$$18753638400 z^7 - 22855996800 z^6 - 8380532160 z^5 + 1102701600 z^4 -$$

$$\left. \left. 340540200 z^3 + 121621500 z^2 - 32744250 z + 2679075 \right) - \right.$$

$$\frac{1}{2679075} \left(8 e^z \sqrt{\pi} \left(16 z^{29/2} + 1728 z^{27/2} + 76392 z^{25/2} + 1801800 z^{23/2} + 24782625 z^{21/2} + 204121890 z^{19/2} + \right. \right.$$

$$\left. \left. 994778820 z^{17/2} + 2725138080 z^{15/2} + 3736076400 z^{13/2} + 1904666400 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anc1.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; -z\right) =$$

$$\frac{1}{2679075} (-128 z^{14} + 13760 z^{13} - 604320 z^{12} + 14118960 z^{11} - 191487072 z^{10} + 1543596480 z^9 -$$

$$7267034880 z^8 + 18753638400 z^7 - 22855996800 z^6 + 8380532160 z^5 +$$

$$1102701600 z^4 + 340540200 z^3 + 121621500 z^2 + 32744250 z + 2679075) +$$

$$\frac{1}{2679075} \left(8 e^{-z} \sqrt{\pi} (16 z^{29/2} - 1728 z^{27/2} + 76392 z^{25/2} - 1801800 z^{23/2} + 24782625 z^{21/2} - 204121890 z^{19/2} +$$

$$994778820 z^{17/2} - 2725138080 z^{15/2} + 3736076400 z^{13/2} - 1904666400 z^{11/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ancu.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, 1; z\right) =$$

$$-\frac{1}{21432600} (e^z (1024 z^{14} + 103424 z^{13} + 4240128 z^{12} + 91751424 z^{11} + 1141286016 z^{10} + 8331742080 z^9 +$$

$$34911686880 z^8 + 78091594560 z^7 + 78381705780 z^6 + 19403454420 z^5 -$$

$$3468665025 z^4 + 1285275600 z^3 - 506557800 z^2 + 152409600 z - 21432600))$$

07.25.03.ancv.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) =$$

$$\frac{1}{2679075} (-64 z^{13} - 5984 z^{12} - 224400 z^{11} - 4369592 z^{10} - 47783040 z^9 - 295898400 z^8 - 989775360 z^7 -$$

$$1562803200 z^6 - 761866560 z^5 + 122522400 z^4 - 48648600 z^3 + 24324300 z^2 - 10914750 z + 2679075) -$$

$$\frac{1}{2679075} \left(4 e^z \sqrt{\pi} z^{11/2} (16 z^8 + 1504 z^7 + 56840 z^6 + 1119720 z^5 + 12465705 z^4 +$$

$$79464840 z^3 + 279595260 z^2 + 488376000 z + 317444400) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ancw.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; -z\right) =$$

$$\frac{1}{2679075} (64 z^{13} - 5984 z^{12} + 224400 z^{11} - 4369592 z^{10} + 47783040 z^9 - 295898400 z^8 + 989775360 z^7 -$$

$$1562803200 z^6 + 761866560 z^5 + 122522400 z^4 + 48648600 z^3 + 24324300 z^2 + 10914750 z + 2679075) -$$

$$\frac{1}{2679075} \left(4 e^{-z} \sqrt{\pi} z^{11/2} (16 z^8 - 1504 z^7 + 56840 z^6 - 1119720 z^5 + 12465705 z^4 -$$

$$79464840 z^3 + 279595260 z^2 - 488376000 z + 317444400) \operatorname{erfi}(\sqrt{-z})\right)$$

07.25.03.ancx.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, 2; z\right) =$$

$$-\frac{1}{21432600} (e^z (1024 z^{13} + 89088 z^{12} + 3081984 z^{11} + 54767616 z^{10} + 538842240 z^9 + 2943319680 z^8 +$$

$$8421809760 z^7 + 10717116480 z^6 + 3361890420 z^5 - 767888100 z^4 +$$

$$370775475 z^3 - 197826300 z^2 + 86921100 z - 21432600))$$

07.25.03.ancy.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = \frac{1}{893025} \left(-32 z^{12} - 2544 z^{11} - 79144 z^{10} - 1236300 z^9 - 10328760 z^8 - 45191880 z^7 - 92093760 z^6 - 58605120 z^5 + 11138400 z^4 - 5405400 z^3 + 3474900 z^2 - 2182950 z + 893025 \right) - \frac{1}{893025} \left(2 e^z \sqrt{\pi} z^{11/2} (16 z^7 + 1280 z^6 + 40200 z^5 + 637320 z^4 + 5455185 z^3 + 24912990 z^2 + 55378350 z + 45349200) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ancz.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; -z\right) = \frac{1}{893025} \left(2 e^{-z} \sqrt{\pi} (16 z^7 - 1280 z^6 + 40200 z^5 - 637320 z^4 + 5455185 z^3 - 24912990 z^2 + 55378350 z - 45349200) \operatorname{erfi}(\sqrt{z}) z^{11/2} \right) + \frac{1}{893025} \left(-32 z^{12} + 2544 z^{11} - 79144 z^{10} + 1236300 z^9 - 10328760 z^8 + 45191880 z^7 - 92093760 z^6 + 58605120 z^5 + 11138400 z^4 + 5405400 z^3 + 3474900 z^2 + 2182950 z + 893025 \right)$$

07.25.03.and0.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, 3; z\right) = -\frac{1}{10716300} \left(e^z (1024 z^{12} + 74752 z^{11} + 2110208 z^{10} + 29445120 z^9 + 214945920 z^8 + 793860480 z^7 + 1277065440 z^6 + 500592960 z^5 - 142260300 z^4 + 85673700 z^3 - 57593025 z^2 + 32545800 z - 10716300) \right)$$

07.25.03.and1.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{178605} \left(-16 z^{11} - 1048 z^{10} - 25956 z^9 - 307182 z^8 - 1797120 z^7 - 4750380 z^6 - 3907008 z^5 + 856800 z^4 - 491400 z^3 + 386100 z^2 - 311850 z + 178605 \right) - \frac{1}{178605} \left(e^z \sqrt{\pi} z^{11/2} (16 z^6 + 1056 z^5 + 26472 z^4 + 319656 z^3 + 1938969 z^2 + 5523300 z + 5668650) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.and2.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{1}{178605} \left(16 z^{11} - 1048 z^{10} + 25956 z^9 - 307182 z^8 + 1797120 z^7 - 4750380 z^6 + 3907008 z^5 + 856800 z^4 + 491400 z^3 + 386100 z^2 + 311850 z + 178605 \right) - \frac{1}{178605} \left(e^{-z} \sqrt{\pi} z^{11/2} (16 z^6 - 1056 z^5 + 26472 z^4 - 319656 z^3 + 1938969 z^2 - 5523300 z + 5668650) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.and3.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = \frac{1}{3572100} (e^z (1024 z^{11} + 60416 z^{10} + 1324800 z^9 + 13547520 z^8 + 65923200 z^7 + 134628480 z^6 + 65409120 z^5 - 22680000 z^4 + 16499700 z^3 - 13324500 z^2 + 9029475 z - 3572100))$$

07.25.03.and4.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{25515} (-8 z^{10} - 412 z^9 - 7626 z^8 - 62275 z^7 - 216870 z^6 - 229824 z^5 + 57120 z^4 - 37800 z^3 + 35100 z^2 - 34650 z + 25515) - \frac{e^z \sqrt{\pi} z^{11/2} (16 z^5 + 832 z^4 + 15656 z^3 + 131784 z^2 + 489345 z + 629850) \operatorname{erf}(\sqrt{z})}{51030}$$

07.25.03.and5.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16 z^5 - 832 z^4 + 15656 z^3 - 131784 z^2 + 489345 z - 629850) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{51030} + \frac{1}{25515} (-8 z^{10} + 412 z^9 - 7626 z^8 + 62275 z^7 - 216870 z^6 + 229824 z^5 + 57120 z^4 + 37800 z^3 + 35100 z^2 + 34650 z + 25515)$$

07.25.03.and6.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, 5; z\right) = \frac{1}{893025} (e^z (1024 z^{10} + 46080 z^9 + 725760 z^8 + 4838400 z^7 + 12700800 z^6 + 7620480 z^5 - 3175200 z^4 + 2721600 z^3 - 2551500 z^2 + 1984500 z - 893025))$$

07.25.03.and7.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{-8 z^9 - 300 z^8 - 3730 z^7 - 17655 z^6 - 24192 z^5 + 6720 z^4 - 5040 z^3 + 5400 z^2 - 6300 z + 5670}{5670} - \frac{e^z \sqrt{\pi} z^{11/2} (16 z^4 + 608 z^3 + 7752 z^2 + 38760 z + 62985) \operatorname{erf}(\sqrt{z})}{11340}$$

07.25.03.and8.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{8 z^9 - 300 z^8 + 3730 z^7 - 17655 z^6 + 24192 z^5 + 6720 z^4 + 5040 z^3 + 5400 z^2 + 6300 z + 5670}{5670} - \frac{e^{-z} \sqrt{\pi} z^{11/2} (16 z^4 - 608 z^3 + 7752 z^2 - 38760 z + 62985) \operatorname{erfi}(\sqrt{z})}{11340}$$

07.25.03.and9.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{9}{2}, 6; z\right) = \frac{1}{178605 z^5} (e^z (-1024 z^{14} - 31744 z^{13} - 313088 z^{12} - 1081344 z^{11} - 806016 z^{10} + 439680 z^9 - 781920 z^8 + 3533760 z^7 - 22184820 z^6 + 131124420 z^5 - 654729075 z^4 + 2618916300 z^3 - 7856748900 z^2 + 15713497800 z - 15713497800)) + \frac{1847560}{21 z^5}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = -\frac{7}{2}$

07.25.03.anda.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{31\,255\,875} (1024 z^{17} + 154\,112 z^{16} + 9\,826\,048 z^{15} + 348\,685\,440 z^{14} + 7\,610\,974\,080 z^{13} + 106\,659\,434\,496 z^{12} +$$

$$972\,845\,475\,840 z^{11} + 5\,735\,971\,906\,560 z^{10} + 21\,295\,549\,785\,600 z^9 + 47\,340\,854\,611\,200 z^8 +$$

$$57\,722\,872\,354\,560 z^7 + 32\,905\,818\,691\,200 z^6 + 6\,225\,853\,233\,600 z^5 +$$

$$115\,783\,668\,000 z^4 + 1\,702\,701\,000 z^3 + 218\,918\,700 z^2 + 70\,166\,250 z + 31\,255\,875) +$$

$$\frac{1}{31\,255\,875} (64 e^z \sqrt{\pi} (16 z^{35/2} + 2416 z^{33/2} + 154\,728 z^{31/2} + 5\,523\,792 z^{29/2} + 121\,571\,745 z^{27/2} + 1\,723\,471\,425 z^{25/2} +$$

$$15\,980\,677\,920 z^{23/2} + 96\,518\,187\,360 z^{21/2} + 371\,590\,662\,240 z^{19/2} + 874\,599\,314\,400 z^{17/2} +$$

$$1\,172\,534\,227\,200 z^{15/2} + 793\,389\,945\,600 z^{13/2} + 215\,327\,548\,800 z^{11/2} + 13\,232\,419\,200 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.andb.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{31\,255\,875} (-1024 z^{17} + 154\,112 z^{16} - 9\,826\,048 z^{15} + 348\,685\,440 z^{14} - 7\,610\,974\,080 z^{13} + 106\,659\,434\,496 z^{12} -$$

$$972\,845\,475\,840 z^{11} + 5\,735\,971\,906\,560 z^{10} - 21\,295\,549\,785\,600 z^9 + 47\,340\,854\,611\,200 z^8 -$$

$$57\,722\,872\,354\,560 z^7 + 32\,905\,818\,691\,200 z^6 - 6\,225\,853\,233\,600 z^5 +$$

$$115\,783\,668\,000 z^4 - 1\,702\,701\,000 z^3 + 218\,918\,700 z^2 - 70\,166\,250 z + 31\,255\,875) +$$

$$\frac{1}{31\,255\,875} (64 e^{-z} \sqrt{\pi} (16 z^{35/2} - 2416 z^{33/2} + 154\,728 z^{31/2} - 5\,523\,792 z^{29/2} + 121\,571\,745 z^{27/2} -$$

$$1\,723\,471\,425 z^{25/2} + 15\,980\,677\,920 z^{23/2} - 96\,518\,187\,360 z^{21/2} + 371\,590\,662\,240 z^{19/2} - 874\,599\,314\,400 z^{17/2} +$$

$$1\,172\,534\,227\,200 z^{15/2} - 793\,389\,945\,600 z^{13/2} + 215\,327\,548\,800 z^{11/2} - 13\,232\,419\,200 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.andc.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{4\,465\,125} (-512 z^{16} - 70\,400 z^{15} - 4\,068\,480 z^{14} - 129\,624\,000 z^{13} - 2\,511\,195\,648 z^{12} - 30\,788\,997\,120 z^{11} -$$

$$241\,221\,657\,600 z^{10} - 1\,192\,208\,140\,800 z^9 - 3\,585\,866\,630\,400 z^8 - 6\,136\,128\,794\,880 z^7 - 5\,287\,754\,908\,800 z^6 -$$

$$1\,792\,992\,801\,600 z^5 - 115\,783\,668\,000 z^4 + 1\,702\,701\,000 z^3 + 72\,972\,900 z^2 + 14\,033\,250 z + 4\,465\,125) -$$

$$\frac{1}{4\,465\,125} (32 e^z \sqrt{\pi} (16 z^{33/2} + 2208 z^{31/2} + 128\,232 z^{29/2} + 4\,113\,240 z^{27/2} + 80\,439\,345 z^{25/2} +$$

$$999\,517\,320 z^{23/2} + 7\,984\,539\,360 z^{21/2} + 40\,626\,411\,840 z^{19/2} + 127\,832\,191\,200 z^{17/2} +$$

$$235\,438\,358\,400 z^{15/2} + 230\,780\,793\,600 z^{13/2} + 101\,047\,564\,800 z^{11/2} + 13\,232\,419\,200 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.andd.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{4465125} \left(-512 z^{16} + 70400 z^{15} - 4068480 z^{14} + 129624000 z^{13} - 2511195648 z^{12} + 30788997120 z^{11} - \right.$$

$$241221657600 z^{10} + 1192208140800 z^9 - 3585866630400 z^8 + 6136128794880 z^7 - 5287754908800 z^6 +$$

$$1792992801600 z^5 - 115783668000 z^4 - 1702701000 z^3 + 72972900 z^2 - 14033250 z + 4465125 \left. \right) +$$

$$\frac{1}{4465125} \left(32 e^{-z} \sqrt{\pi} \left(16 z^{33/2} - 2208 z^{31/2} + 128232 z^{29/2} - 4113240 z^{27/2} + 80439345 z^{25/2} - \right. \right.$$

$$999517320 z^{23/2} + 7984539360 z^{21/2} - 40626411840 z^{19/2} + 127832191200 z^{17/2} -$$

$$\left. \left. 235438358400 z^{15/2} + 230780793600 z^{13/2} - 101047564800 z^{11/2} + 13232419200 z^{9/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ande.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{893025} \left(256 z^{15} + 31872 z^{14} + 1651904 z^{13} + 46656672 z^{12} + 789818400 z^{11} + 8307538176 z^{10} + 54494081280 z^9 + \right.$$

$$217995183360 z^8 + 504633265920 z^7 + 611498160000 z^6 + 316254818880 z^5 +$$

$$38594556000 z^4 - 1702701000 z^3 + 72972900 z^2 + 4677750 z + 893025 \left. \right) +$$

$$\frac{1}{893025} \left(16 e^z \sqrt{\pi} \left(16 z^{31/2} + 2000 z^{29/2} + 104232 z^{27/2} + 2966688 z^{25/2} + 50772465 z^{23/2} + \right. \right.$$

$$542565135 z^{21/2} + 3644018280 z^{19/2} + 15118283880 z^{17/2} + 37122487920 z^{15/2} +$$

$$\left. \left. 49825918800 z^{13/2} + 31477118400 z^{11/2} + 6616209600 z^{9/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.andf.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{893025} \left(-256 z^{15} + 31872 z^{14} - 1651904 z^{13} + 46656672 z^{12} - 789818400 z^{11} + 8307538176 z^{10} - \right.$$

$$54494081280 z^9 + 217995183360 z^8 - 504633265920 z^7 + 611498160000 z^6 -$$

$$316254818880 z^5 + 38594556000 z^4 + 1702701000 z^3 + 72972900 z^2 - 4677750 z + 893025 \left. \right) +$$

$$\frac{1}{893025} \left(16 e^{-z} \sqrt{\pi} \left(16 z^{31/2} - 2000 z^{29/2} + 104232 z^{27/2} - 2966688 z^{25/2} + 50772465 z^{23/2} - \right. \right.$$

$$542565135 z^{21/2} + 3644018280 z^{19/2} - 15118283880 z^{17/2} + 37122487920 z^{15/2} -$$

$$\left. \left. 49825918800 z^{13/2} + 31477118400 z^{11/2} - 6616209600 z^{9/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.andg.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{297675} \left(-128 z^{14} - 14272 z^{13} - 654752 z^{12} - 16133040 z^{11} - 233888928 z^{10} - 2056080000 z^9 - 10897908480 z^8 - \right.$$

$$33509790720 z^7 - 54934588800 z^6 - 40138338240 z^5 -$$

$$7718911200 z^4 + 567567000 z^3 - 72972900 z^2 + 4677750 z + 297675 \left. \right) -$$

$$\frac{1}{297675} \left(8 e^z \sqrt{\pi} \left(16 z^{29/2} + 1792 z^{27/2} + 82728 z^{25/2} + 2056680 z^{23/2} + 30205665 z^{21/2} + 270714150 z^{19/2} + \right. \right.$$

$$\left. \left. 1478305080 z^{17/2} + 4770148320 z^{15/2} + 8501598000 z^{13/2} + 7317928800 z^{11/2} + 2205403200 z^{9/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.andh.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{297675} \left(-128 z^{14} + 14272 z^{13} - 654752 z^{12} + 16133040 z^{11} - 233888928 z^{10} + 2056080000 z^9 - \right.$$

$$\left. 10897908480 z^8 + 33509790720 z^7 - 54934588800 z^6 + 40138338240 z^5 - \right.$$

$$\left. 7718911200 z^4 - 567567000 z^3 - 72972900 z^2 - 4677750 z + 297675 \right) +$$

$$\frac{1}{297675} \left(8 e^{-z} \sqrt{\pi} \left(16 z^{29/2} - 1792 z^{27/2} + 82728 z^{25/2} - 2056680 z^{23/2} + 30205665 z^{21/2} - 270714150 z^{19/2} + \right. \right.$$

$$\left. 1478305080 z^{17/2} - 4770148320 z^{15/2} + 8501598000 z^{13/2} - 7317928800 z^{11/2} + 2205403200 z^{9/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.andi.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{297675} \left(64 z^{13} + 6304 z^{12} + 251760 z^{11} + 5300232 z^{10} + 64060440 z^9 + 453859200 z^8 + 1844519040 z^7 + \right.$$

$$\left. 4009824000 z^6 + 3969725760 z^5 + 1102701600 z^4 - 113513400 z^3 + 24324300 z^2 - 4677750 z + 297675 \right) +$$

$$\frac{1}{297675} \left(4 e^z \sqrt{\pi} \left(16 z^{27/2} + 1584 z^{25/2} + 63720 z^{23/2} + 1355760 z^{21/2} + 16648065 z^{19/2} + 120881565 z^{17/2} + \right. \right.$$

$$\left. 511252560 z^{15/2} + 1191380400 z^{13/2} + 1353315600 z^{11/2} + 551350800 z^{9/2} \right) \operatorname{erf}(\sqrt{z})$$

07.25.03.andj.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; -z\right) =$$

$$\frac{1}{297675} \left(-64 z^{13} + 6304 z^{12} - 251760 z^{11} + 5300232 z^{10} - 64060440 z^9 + 453859200 z^8 - 1844519040 z^7 + \right.$$

$$\left. 4009824000 z^6 - 3969725760 z^5 + 1102701600 z^4 + 113513400 z^3 + 24324300 z^2 + 4677750 z + 297675 \right) +$$

$$\frac{1}{297675} \left(4 e^{-z} \sqrt{\pi} \left(16 z^{27/2} - 1584 z^{25/2} + 63720 z^{23/2} - 1355760 z^{21/2} + 16648065 z^{19/2} - 120881565 z^{17/2} + \right. \right.$$

$$\left. 511252560 z^{15/2} - 1191380400 z^{13/2} + 1353315600 z^{11/2} - 551350800 z^{9/2} \right) \operatorname{erfi}(\sqrt{z})$$

07.25.03.andk.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, 1; z\right) =$$

$$\frac{1}{2381400} \left(e^z \left(512 z^{13} + 47360 z^{12} + 1764864 z^{11} + 34404096 z^{10} + 381420480 z^9 + 2449478880 z^8 + 8882667360 z^7 + \right. \right.$$

$$\left. 16839128880 z^6 + 13932159570 z^5 + 2735647425 z^4 - 366508800 z^3 + 92874600 z^2 - 21092400 z + 2381400 \right)$$

07.25.03.andl.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) =$$

$$\frac{1}{297675} \left(2 e^z \sqrt{\pi} \left(16 z^8 + 1376 z^7 + 47208 z^6 + 836472 z^5 + 8283345 z^4 + 46331460 z^3 + 140600880 z^2 + \right. \right.$$

$$\left. 207174240 z + 110270160 \right) \operatorname{erf}(\sqrt{z}) z^{9/2} +$$

$$\frac{1}{297675} \left(32 z^{12} + 2736 z^{11} + 93064 z^{10} + 1627740 z^9 + 15796080 z^8 + 85474368 z^7 + 244702080 z^6 + \right.$$

$$\left. 320785920 z^5 + 122522400 z^4 - 16216200 z^3 + 4864860 z^2 - 1559250 z + 297675 \right)$$

07.25.03.andm.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{297675} (32z^{12} - 2736z^{11} + 93064z^{10} - 1627740z^9 + 15796080z^8 - 85474368z^7 + 244702080z^6 - 320785920z^5 + 122522400z^4 + 16216200z^3 + 4864860z^2 + 1559250z + 297675) - \frac{1}{297675} (2e^{-z}\sqrt{\pi}z^{9/2}(16z^8 - 1376z^7 + 47208z^6 - 836472z^5 + 8283345z^4 - 46331460z^3 + 140600880z^2 - 207174240z + 110270160)\operatorname{erfi}(\sqrt{z}))$$

07.25.03.andn.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{2381400} (e^z(512z^{12} + 40704z^{11} + 1276416z^{10} + 20363520z^9 + 177785280z^8 + 849411360z^7 + 2087376480z^6 + 2227493520z^5 + 567198450z^4 - 100344825z^3 + 34870500z^2 - 11736900z + 2381400))$$

07.25.03.ando.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{99225} (e^z\sqrt{\pi}(16z^7 + 1168z^6 + 33192z^5 + 471360z^4 + 3569745z^3 + 14203755z^2 + 26970840z + 18378360)\operatorname{erf}(\sqrt{z})z^{9/2} + \frac{1}{99225} (16z^{11} + 1160z^{10} + 32620z^9 + 455610z^8 + 3356874z^7 + 12717360z^6 + 21848400z^5 + 11138400z^4 - 1801800z^3 + 694980z^2 - 311850z + 99225))$$

07.25.03.andp.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{1}{99225} (e^{-z}\sqrt{\pi}(16z^7 - 1168z^6 + 33192z^5 - 471360z^4 + 3569745z^3 - 14203755z^2 + 26970840z - 18378360)\operatorname{erfi}(\sqrt{z})z^{9/2} + \frac{1}{99225} (-16z^{11} + 1160z^{10} - 32620z^9 + 455610z^8 - 3356874z^7 + 12717360z^6 - 21848400z^5 + 11138400z^4 + 1801800z^3 + 694980z^2 + 311850z + 99225))$$

07.25.03.andq.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{1190700} (e^z(512z^{11} + 34048z^{10} + 867840z^9 + 10817280z^8 + 69612480z^7 + 222899040z^6 + 304184160z^5 + 98204400z^4 - 22027950z^3 + 9794925z^2 - 4309200z + 1190700))$$

07.25.03.andr.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{39690} e^z \sqrt{\pi} (16 z^6 + 960 z^5 + 21672 z^4 + 232968 z^3 + 1240065 z^2 + 3043170 z + 2625480) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{19845} (8 z^{10} + 476 z^9 + 10602 z^8 + 111411 z^7 + 569070 z^6 + 1281528 z^5 + 856800 z^4 - 163800 z^3 + 77220 z^2 - 44550 z + 19845)$$

07.25.03.andr.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{1}{19845} (8 z^{10} - 476 z^9 + 10602 z^8 - 111411 z^7 + 569070 z^6 - 1281528 z^5 + 856800 z^4 + 163800 z^3 + 77220 z^2 + 44550 z + 19845) - \frac{1}{39690} (e^{-z} \sqrt{\pi} z^{9/2} (16 z^6 - 960 z^5 + 21672 z^4 - 232968 z^3 + 1240065 z^2 - 3043170 z + 2625480) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.andt.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{396900} (e^z (512 z^{10} + 27392 z^9 + 539136 z^8 + 4886784 z^7 + 20744640 z^6 + 36197280 z^5 + 14605920 z^4 - 4037040 z^3 + 2194290 z^2 - 1176525 z + 396900))$$

07.25.03.andu.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{e^z \sqrt{\pi} (16 z^5 + 752 z^4 + 12648 z^3 + 93840 z^2 + 301665 z + 328185) \operatorname{erf}(\sqrt{z}) z^{9/2}}{11340} + \frac{1}{5670} (8 z^9 + 372 z^8 + 6142 z^7 + 44025 z^6 + 131463 z^5 + 114240 z^4 - 25200 z^3 + 14040 z^2 - 9900 z + 5670)$$

07.25.03.andv.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16 z^5 - 752 z^4 + 12648 z^3 - 93840 z^2 + 301665 z - 328185) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{11340} + \frac{1}{5670} (-8 z^9 + 372 z^8 - 6142 z^7 + 44025 z^6 - 131463 z^5 + 114240 z^4 + 25200 z^3 + 14040 z^2 + 9900 z + 5670)$$

07.25.03.andw.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{99225} (e^z (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + 408240 z^2 - 255150 z + 99225))$$

07.25.03.andx.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{e^z \sqrt{\pi} (16 z^4 + 544 z^3 + 6120 z^2 + 26520 z + 36465) \operatorname{erf}(\sqrt{z}) z^{9/2}}{2520} + \frac{8 z^8 + 268 z^7 + 2930 z^6 + 11919 z^5 + 13440 z^4 - 3360 z^3 + 2160 z^2 - 1800 z + 1260}{1260}$$

07.25.03.andy.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260}{1260} - \frac{e^{-z} \sqrt{\pi} z^{9/2} (16z^4 - 544z^3 + 6120z^2 - 26520z + 36465) \operatorname{erfi}(\sqrt{z})}{2520}$$

07.25.03.andz.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{19845z^5} \left(e^z (512z^{13} + 14080z^{12} + 121344z^{11} + 358656z^{10} + 223680z^9 - 108000z^8 + 228960z^7 - 1194480z^6 + 6911730z^5 - 34459425z^4 + 137837700z^3 - 413513100z^2 + 827026200z - 827026200) \right) + \frac{291720}{7z^5}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = -\frac{5}{2}$

07.25.03.ane0.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{637875} (256z^{15} + 32128z^{14} + 1680960z^{13} + 48018144z^{12} + 824236032z^{11} + 8822661120z^{10} + 59211394560z^9 + 244405612800z^8 + 592423683840z^7 + 774051707520z^6 + 464821156800z^5 + 90875584800z^4 + 1702701000z^3 + 24324300z^2 + 2806650z + 637875) + \frac{1}{637875} (16e^z \sqrt{\pi} (16z^{31/2} + 2016z^{29/2} + 106056z^{27/2} + 3052680z^{25/2} + 52965225z^{23/2} + 575795520z^{21/2} + 3953970720z^{19/2} + 16902587520z^{17/2} + 43319253600z^{15/2} + 62161344000z^{13/2} + 44296761600z^{11/2} + 12454041600z^{9/2} + 778377600z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ane1.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{637875} (-256z^{15} + 32128z^{14} - 1680960z^{13} + 48018144z^{12} - 824236032z^{11} + 8822661120z^{10} - 59211394560z^9 + 244405612800z^8 - 592423683840z^7 + 774051707520z^6 - 464821156800z^5 + 90875584800z^4 - 1702701000z^3 + 24324300z^2 - 2806650z + 637875) + \frac{1}{637875} (16e^{-z} \sqrt{\pi} (16z^{31/2} - 2016z^{29/2} + 106056z^{27/2} - 3052680z^{25/2} + 52965225z^{23/2} - 575795520z^{21/2} + 3953970720z^{19/2} - 16902587520z^{17/2} + 43319253600z^{15/2} - 62161344000z^{13/2} + 44296761600z^{11/2} - 12454041600z^{9/2} + 778377600z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ane2.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{127575} \left(-128 z^{14} - 14528 z^{13} - 680736 z^{12} - 17208816 z^{11} - 257561472 z^{10} - 2358656640 z^9 - 13205214720 z^8 - 43895208960 z^7 - 81276773760 z^6 - 74283168960 z^5 - 26140514400 z^4 - 1702701000 z^3 + 24324300 z^2 + 935550 z + 127575\right) - \frac{1}{127575} \left(8 e^z \sqrt{\pi} \left(16 z^{29/2} + 1824 z^{27/2} + 85992 z^{25/2} + 2192760 z^{23/2} + 33230385 z^{21/2} + 309952440 z^{19/2} + 1784303640 z^{17/2} + 6196765680 z^{15/2} + 12335425200 z^{13/2} + 12819643200 z^{11/2} + 5837832000 z^{9/2} + 778377600 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ane3.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{127575} \left(-128 z^{14} + 14528 z^{13} - 680736 z^{12} + 17208816 z^{11} - 257561472 z^{10} + 2358656640 z^9 - 13205214720 z^8 + 43895208960 z^7 - 81276773760 z^6 + 74283168960 z^5 - 26140514400 z^4 + 1702701000 z^3 + 24324300 z^2 - 935550 z + 127575\right) + \frac{1}{127575} \left(8 e^{-z} \sqrt{\pi} \left(16 z^{29/2} - 1824 z^{27/2} + 85992 z^{25/2} - 2192760 z^{23/2} + 33230385 z^{21/2} - 309952440 z^{19/2} + 1784303640 z^{17/2} - 6196765680 z^{15/2} + 12335425200 z^{13/2} - 12819643200 z^{11/2} + 5837832000 z^{9/2} - 778377600 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ane4.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{42525} \left(64 z^{13} + 6496 z^{12} + 268944 z^{11} + 5918136 z^{10} + 75644160 z^9 + 576826560 z^8 + 2596354560 z^7 + 6585546240 z^6 + 8536207680 z^5 + 4605400800 z^4 + 567567000 z^3 - 24324300 z^2 + 935550 z + 42525\right) + \frac{1}{42525} \left(4 e^z \sqrt{\pi} \left(16 z^{27/2} + 1632 z^{25/2} + 68040 z^{23/2} + 1512360 z^{21/2} + 19619145 z^{19/2} + 152999280 z^{17/2} + 713308680 z^{15/2} + 1916913600 z^{13/2} + 2750857200 z^{11/2} + 1816214400 z^{9/2} + 389188800 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ane5.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{42525} \left(-64 z^{13} + 6496 z^{12} - 268944 z^{11} + 5918136 z^{10} - 75644160 z^9 + 576826560 z^8 - 2596354560 z^7 + 6585546240 z^6 - 8536207680 z^5 + 4605400800 z^4 - 567567000 z^3 - 24324300 z^2 - 935550 z + 42525\right) + \frac{1}{42525} \left(4 e^{-z} \sqrt{\pi} \left(16 z^{27/2} - 1632 z^{25/2} + 68040 z^{23/2} - 1512360 z^{21/2} + 19619145 z^{19/2} - 152999280 z^{17/2} + 713308680 z^{15/2} - 1916913600 z^{13/2} + 2750857200 z^{11/2} - 1816214400 z^{9/2} + 389188800 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ane6.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{42525} \left(-32 z^{12} - 2864 z^{11} - 102984 z^{10} - 1930620 z^9 - 20494560 z^8 - 125305920 z^7 - 429287040 z^6 - 761080320 z^5 - 583783200 z^4 - 113513400 z^3 + 8108100 z^2 - 935550 z + 42525 \right) - \frac{1}{42525} \left(2 e^z \sqrt{\pi} \left(16 z^{25/2} + 1440 z^{23/2} + 52200 z^{21/2} + 990360 z^{19/2} + 10705905 z^{17/2} + 67352040 z^{15/2} + 241844400 z^{13/2} + 465847200 z^{11/2} + 421621200 z^{9/2} + 129729600 z^{7/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ane7.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{42525} \left(-32 z^{12} + 2864 z^{11} - 102984 z^{10} + 1930620 z^9 - 20494560 z^8 + 125305920 z^7 - 429287040 z^6 + 761080320 z^5 - 583783200 z^4 + 113513400 z^3 + 8108100 z^2 + 935550 z + 42525 \right) + \frac{1}{42525} \left(2 e^{-z} \sqrt{\pi} \left(16 z^{25/2} - 1440 z^{23/2} + 52200 z^{21/2} - 990360 z^{19/2} + 10705905 z^{17/2} - 67352040 z^{15/2} + 241844400 z^{13/2} - 465847200 z^{11/2} + 421621200 z^{9/2} - 129729600 z^{7/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ane8.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, 1; z\right) = -\frac{1}{340200} \left(e^z \left(256 z^{12} + 21504 z^{11} + 721152 z^{10} + 12514560 z^9 + 121880160 z^8 + 676278720 z^7 + 2074358160 z^6 + 3233669040 z^5 + 2115576225 z^4 + 310035600 z^3 - 28236600 z^2 + 4082400 z - 340200 \right) \right)$$

07.25.03.ane9.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{42525} \left(-16 z^{11} - 1240 z^{10} - 37860 z^9 - 587310 z^8 - 4978944 z^7 - 23073120 z^6 - 55036800 z^5 - 57657600 z^4 - 16216200 z^3 + 1621620 z^2 - 311850 z + 42525 \right) - \frac{1}{42525} \left(e^z \sqrt{\pi} z^{7/2} \left(16 z^8 + 1248 z^7 + 38472 z^6 + 605640 z^5 + 5255145 z^4 + 25310880 z^3 + 64668240 z^2 + 77837760 z + 32432400 \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anea.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; -z\right) =$$

$$\frac{1}{42525} (16z^{11} - 1240z^{10} + 37860z^9 - 587310z^8 + 4978944z^7 - 23073120z^6 + 55036800z^5 - 57657600z^4 +$$

$$16216200z^3 + 1621620z^2 + 311850z + 42525) -$$

$$\frac{1}{42525} (e^{-z} \sqrt{\pi} z^{7/2} (16z^8 - 1248z^7 + 38472z^6 - 605640z^5 + 5255145z^4 - 25310880z^3 +$$

$$64668240z^2 - 77837760z + 32432400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.aneb.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, 2; z\right) =$$

$$-\frac{1}{340200} (e^z (256z^{11} + 18432z^{10} + 518400z^9 + 7330560z^8 + 55905120z^7 + 229037760z^6 + 471093840z^5 +$$

$$407106000z^4 + 80046225z^3 - 10149300z^2 + 2211300z - 340200))$$

07.25.03.anec.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{14175} (-8z^{10} - 524z^9 - 13170z^8 - 162207z^7 -$$

$$1035576z^6 - 3318840z^5 - 4651920z^4 - 1801800z^3 + 231660z^2 - 62370z + 14175) - \frac{1}{28350}$$

$$(e^z \sqrt{\pi} z^{7/2} (16z^7 + 1056z^6 + 26856z^5 + 337080z^4 + 2221425z^3 + 7539480z^2 + 11891880z + 6486480) \operatorname{erf}(\sqrt{z}))$$

07.25.03.aned.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; -z\right) =$$

$$\frac{1}{28350} (e^{-z} \sqrt{\pi} (16z^7 - 1056z^6 + 26856z^5 - 337080z^4 + 2221425z^3 - 7539480z^2 + 11891880z - 6486480)$$

$$\operatorname{erfi}(\sqrt{z}) z^{7/2}) + \frac{1}{14175} (-8z^{10} + 524z^9 - 13170z^8 + 162207z^7 - 1035576z^6 +$$

$$3318840z^5 - 4651920z^4 + 1801800z^3 + 231660z^2 + 62370z + 14175)$$

07.25.03.anee.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, 3; z\right) =$$

$$-\frac{1}{170100} (e^z (256z^{10} + 15360z^9 + 349440z^8 + 3836160z^7 + 21379680z^6 + 58000320z^5 + 65091600z^4 +$$

$$16556400z^3 - 2735775z^2 + 793800z - 170100))$$

07.25.03.anef.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) =$$

$$\frac{1}{5670} (-8z^9 - 428z^8 - 8466z^7 - 77751z^6 - 339552z^5 - 632520z^4 - 327600z^3 + 51480z^2 - 17820z + 5670) -$$

$$\frac{1}{11340} e^z \sqrt{\pi} z^{7/2} (16z^6 + 864z^5 + 17352z^4 + 163560z^3 + 749385z^2 + 1544400z + 1081080) \operatorname{erf}(\sqrt{z})$$

07.25.03.aneg.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{5670} (8z^9 - 428z^8 + 8466z^7 - 77751z^6 + 339552z^5 - 632520z^4 + 327600z^3 + 51480z^2 + 17820z + 5670) - \frac{1}{11340} e^{-z} \sqrt{\pi} z^{7/2} (16z^6 - 864z^5 + 17352z^4 - 163560z^3 + 749385z^2 - 1544400z + 1081080) \operatorname{erfi}(\sqrt{z})$$

07.25.03.aneh.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = -\frac{1}{56700} (e^z (256z^9 + 12288z^8 + 214272z^7 + 1693440z^6 + 6138720z^5 + 8890560z^4 + 2857680z^3 - 589680z^2 + 212625z - 56700))$$

07.25.03.anei.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{-8z^8 - 332z^7 - 4818z^6 - 29727z^5 - 74040z^4 - 50400z^3 + 9360z^2 - 3960z + 1620}{1620} - \frac{e^z \sqrt{\pi} z^{7/2} (16z^5 + 672z^4 + 9960z^3 + 63960z^2 + 173745z + 154440) \operatorname{erf}(\sqrt{z})}{3240}$$

07.25.03.anej.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (16z^5 - 672z^4 + 9960z^3 - 63960z^2 + 173745z - 154440) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{3240} + \frac{-8z^8 + 332z^7 - 4818z^6 + 29727z^5 - 74040z^4 + 50400z^3 + 9360z^2 + 3960z + 1620}{1620}$$

07.25.03.anek.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, 5; z\right) = -\frac{1}{14175} (e^z (256z^8 + 9216z^7 + 112896z^6 + 564480z^5 + 1058400z^4 + 423360z^3 - 105840z^2 + 45360z - 14175))$$

07.25.03.anel.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{360} (-8z^7 - 236z^6 - 2226z^5 - 7575z^4 - 6720z^3 + 1440z^2 - 720z + 360) - \frac{1}{720} e^z \sqrt{\pi} z^{7/2} (16z^4 + 480z^3 + 4680z^2 + 17160z + 19305) \operatorname{erf}(\sqrt{z})$$

07.25.03.anem.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{1}{360} (8z^7 - 236z^6 + 2226z^5 - 7575z^4 + 6720z^3 + 1440z^2 + 720z + 360) - \frac{1}{720} e^{-z} \sqrt{\pi} z^{7/2} (16z^4 - 480z^3 + 4680z^2 - 17160z + 19305) \operatorname{erfi}(\sqrt{z})$$

07.25.03.anen.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{5}{2}, 6; z\right) = \frac{1}{2835 z^5} \left(e^z (-256 z^{12} - 6144 z^{11} - 45312 z^{10} - 111360 z^9 - 56160 z^8 + 25920 z^7 - 75600 z^6 + 408240 z^5 - 2027025 z^4 + 8108100 z^3 - 24324300 z^2 + 48648600 z - 48648600) \right) + \frac{17160}{z^5}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = -\frac{3}{2}$

07.25.03.aneo.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{25515} \left(64 z^{13} + 6560 z^{12} + 274800 z^{11} + 6134408 z^{10} + 79834968 z^9 + 623236176 z^8 + 2896574160 z^7 + 7699648320 z^6 + 10772745984 z^5 + 6758912160 z^4 + 1339458120 z^3 + 24324300 z^2 + 311850 z + 25515 \right) + \frac{1}{25515} \left(4 e^z \sqrt{\pi} \left(16 z^{27/2} + 1648 z^{25/2} + 69512 z^{23/2} + 1567152 z^{21/2} + 20693169 z^{19/2} + 165100257 z^{17/2} + 793702098 z^{15/2} + 2228255190 z^{13/2} + 3422404440 z^{11/2} + 2552429880 z^{9/2} + 732972240 z^{7/2} + 45405360 z^{5/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anep.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{25515} \left(-64 z^{13} + 6560 z^{12} - 274800 z^{11} + 6134408 z^{10} - 79834968 z^9 + 623236176 z^8 - 2896574160 z^7 + 7699648320 z^6 - 10772745984 z^5 + 6758912160 z^4 - 1339458120 z^3 + 24324300 z^2 - 311850 z + 25515 \right) + \frac{1}{25515} \left(4 e^{-z} \sqrt{\pi} \left(16 z^{27/2} - 1648 z^{25/2} + 69512 z^{23/2} - 1567152 z^{21/2} + 20693169 z^{19/2} - 165100257 z^{17/2} + 793702098 z^{15/2} - 2228255190 z^{13/2} + 3422404440 z^{11/2} - 2552429880 z^{9/2} + 732972240 z^{7/2} - 45405360 z^{5/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aneq.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{8505} \left(-32 z^{12} - 2928 z^{11} - 108136 z^{10} - 2095404 z^9 - 23204808 z^8 - 150109800 z^7 - 557051040 z^6 - 1118269152 z^5 - 1076755680 z^4 - 385945560 z^3 - 24324300 z^2 + 311850 z + 8505 \right) - \frac{1}{8505} \left(2 e^z \sqrt{\pi} \left(16 z^{25/2} + 1472 z^{23/2} + 54792 z^{21/2} + 1074024 z^{19/2} + 12100977 z^{17/2} + 80393418 z^{15/2} + 311341590 z^{13/2} + 671547240 z^{11/2} + 736215480 z^{9/2} + 343783440 z^{7/2} + 45405360 z^{5/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aner.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{8505} \left(-32 z^{12} + 2928 z^{11} - 108\,136 z^{10} + 2\,095\,404 z^9 - 23\,204\,808 z^8 + 150\,109\,800 z^7 - 557\,051\,040 z^6 + 1\,118\,269\,152 z^5 - 1\,076\,755\,680 z^4 + 385\,945\,560 z^3 - 24\,324\,300 z^2 - 311\,850 z + 8505 \right) + \frac{1}{8505} \left(2 e^{-z} \sqrt{\pi} \left(16 z^{25/2} - 1472 z^{23/2} + 54\,792 z^{21/2} - 1\,074\,024 z^{19/2} + 12\,100\,977 z^{17/2} - 80\,393\,418 z^{15/2} + 311\,341\,590 z^{13/2} - 671\,547\,240 z^{11/2} + 736\,215\,480 z^{9/2} - 343\,783\,440 z^{7/2} + 45\,405\,360 z^{5/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anes.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{8505} \left(16 z^{11} + 1288 z^{10} + 41\,196 z^9 + 677\,562 z^8 + 6\,200\,970 z^7 + 31\,941\,000 z^6 + 89\,297\,208 z^5 + 123\,243\,120 z^4 + 68\,108\,040 z^3 + 8\,108\,100 z^2 - 311\,850 z + 8505 \right) + \frac{1}{8505} \left(e^z \sqrt{\pi} \left(16 z^{23/2} + 1296 z^{21/2} + 41\,832 z^{19/2} + 697\,536 z^{17/2} + 6\,520\,689 z^{15/2} + 34\,748\,595 z^{13/2} + 102\,850\,020 z^{11/2} + 157\,297\,140 z^{9/2} + 107\,026\,920 z^{7/2} + 22\,702\,680 z^{5/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anet.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{8505} \left(-16 z^{11} + 1288 z^{10} - 41\,196 z^9 + 677\,562 z^8 - 6\,200\,970 z^7 + 31\,941\,000 z^6 - 89\,297\,208 z^5 + 123\,243\,120 z^4 - 68\,108\,040 z^3 + 8\,108\,100 z^2 + 311\,850 z + 8505 \right) + \frac{1}{8505} \left(e^{-z} \sqrt{\pi} \left(16 z^{23/2} - 1296 z^{21/2} + 41\,832 z^{19/2} - 697\,536 z^{17/2} + 6\,520\,689 z^{15/2} - 34\,748\,595 z^{13/2} + 102\,850\,020 z^{11/2} - 157\,297\,140 z^{9/2} + 107\,026\,920 z^{7/2} - 22\,702\,680 z^{5/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aneu.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{68\,040} \left(e^z \left(128 z^{11} + 9664 z^{10} + 288\,096 z^9 + 4\,384\,656 z^8 + 36\,824\,472 z^7 + 172\,429\,236 z^6 + 433\,676\,754 z^5 + 532\,642\,635 z^4 + 258\,824\,160 z^3 + 25\,605\,720 z^2 - 1\,315\,440 z + 68\,040 \right) \right)$$

07.25.03.anev.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{17\,010} \left(e^z \sqrt{\pi} \left(16 z^8 + 1120 z^7 + 30\,632 z^6 + 421\,848 z^5 + 3\,145\,905 z^4 + 12\,727\,260 z^3 + 26\,486\,460 z^2 + 24\,864\,840 z + 7\,567\,560 \right) \operatorname{erf}(\sqrt{z}) z^{5/2} + \frac{1}{8505} \left(8 z^{10} + 556 z^9 + 15\,042 z^8 + 203\,671 z^7 + 1\,477\,980 z^6 + 5\,710\,068 z^5 + 10\,930\,920 z^4 + 8\,648\,640 z^3 + 1\,621\,620 z^2 - 103\,950 z + 8505 \right) \right)$$

07.25.03.anew.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{8505} (8z^{10} - 556z^9 + 15042z^8 - 203671z^7 + 1477980z^6 - 5710068z^5 + 10930920z^4 - 8648640z^3 + 1621620z^2 + 103950z + 8505) - \frac{1}{17010} (e^{-z} \sqrt{\pi} z^{5/2} (16z^8 - 1120z^7 + 30632z^6 - 421848z^5 + 3145905z^4 - 12727260z^3 + 26486460z^2 - 24864840z + 7567560) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anex.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{68040} (e^z (128z^{10} + 8256z^9 + 205536z^8 + 2534832z^7 + 16545816z^6 + 56608524z^5 + 94025610z^4 + 62514585z^3 + 8765820z^2 - 691740z + 68040))$$

07.25.03.aney.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{11340} (e^z \sqrt{\pi} (16z^7 + 944z^6 + 21192z^5 + 231120z^4 + 1296945z^3 + 3648645z^2 + 4594590z + 1891890) \operatorname{erf}(\sqrt{z}) z^{5/2}) + \frac{1}{5670} (8z^9 + 468z^8 + 10366z^7 + 110601z^6 + 597807z^5 + 1569750z^4 + 1711710z^3 + 463320z^2 - 41580z + 5670)$$

07.25.03.anez.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{11340} (e^{-z} \sqrt{\pi} (16z^7 - 944z^6 + 21192z^5 - 231120z^4 + 1296945z^3 - 3648645z^2 + 4594590z - 1891890) \operatorname{erfi}(\sqrt{z}) z^{5/2}) + \frac{1}{5670} (-8z^9 + 468z^8 - 10366z^7 + 110601z^6 - 597807z^5 + 1569750z^4 - 1711710z^3 + 463320z^2 + 41580z + 5670)$$

07.25.03.anf0.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{1}{34020} (e^z (128z^9 + 6848z^8 + 137056z^7 + 1301328z^6 + 6135192z^5 + 13662180z^4 + 12052530z^3 + 2251935z^2 - 241920z + 34020))$$

07.25.03.anf1.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z \sqrt{\pi} (16z^6 + 768z^5 + 13512z^4 + 109512z^3 + 420849z^2 + 702702z + 378378) \operatorname{erf}(\sqrt{z}) z^{5/2}}{4536} + \frac{8z^8 + 380z^7 + 6570z^6 + 51651z^5 + 187446z^4 + 276822z^3 + 102960z^2 - 11880z + 2268}{2268}$$

07.25.03.anf2.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{8z^8 - 380z^7 + 6570z^6 - 51651z^5 + 187446z^4 - 276822z^3 + 102960z^2 + 11880z + 2268}{2268} - \frac{e^{-z} \sqrt{\pi} z^{5/2} (16z^6 - 768z^5 + 13512z^4 - 109512z^3 + 420849z^2 - 702702z + 378378) \operatorname{erfi}(\sqrt{z})}{4536}$$

$$\begin{aligned}
 & \text{07.25.03.anf3.01} \\
 {}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, 4; z\right) &= \\
 & \frac{1}{11\,340} \left(e^z (128 z^8 + 5440 z^7 + 82\,656 z^6 + 557\,424 z^5 + 1\,675\,800 z^4 + 1\,931\,580 z^3 + 463\,050 z^2 - 63\,315 z + 11\,340) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.anf4.01} \\
 {}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) &= \frac{e^z \sqrt{\pi} (16 z^5 + 592 z^4 + 7592 z^3 + 41\,184 z^2 + 91\,377 z + 63\,063) \operatorname{erf}(\sqrt{z}) z^{5/2}}{1296} + \\
 & \frac{1}{648} (8 z^7 + 292 z^6 + 3654 z^5 + 18\,901 z^4 + 37\,737 z^3 + 18\,720 z^2 - 2640 z + 648)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.anf5.01} \\
 {}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; -z\right) &= \frac{e^{-z} \sqrt{\pi} (16 z^5 - 592 z^4 + 7592 z^3 - 41\,184 z^2 + 91\,377 z - 63\,063) \operatorname{erfi}(\sqrt{z}) z^{5/2}}{1296} + \\
 & \frac{1}{648} (-8 z^7 + 292 z^6 - 3654 z^5 + 18\,901 z^4 - 37\,737 z^3 + 18\,720 z^2 + 2640 z + 648)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.anf6.01} \\
 {}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, 5; z\right) &= \frac{e^z (128 z^7 + 4032 z^6 + 42\,336 z^5 + 176\,400 z^4 + 264\,600 z^3 + 79\,380 z^2 - 13\,230 z + 2835)}{2835}
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.anf7.01} \\
 {}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) &= \frac{1}{288} e^z \sqrt{\pi} (16 z^4 + 416 z^3 + 3432 z^2 + 10\,296 z + 9009) \operatorname{erf}(\sqrt{z}) z^{5/2} + \\
 & \frac{1}{144} (8 z^6 + 204 z^5 + 1618 z^4 + 4431 z^3 + 2880 z^2 - 480 z + 144)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.anf8.01} \\
 {}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; -z\right) &= \frac{1}{144} (8 z^6 - 204 z^5 + 1618 z^4 - 4431 z^3 + 2880 z^2 + 480 z + 144) - \\
 & \frac{1}{288} e^{-z} \sqrt{\pi} z^{5/2} (16 z^4 - 416 z^3 + 3432 z^2 - 10\,296 z + 9009) \operatorname{erfi}(\sqrt{z})
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.anf9.01} \\
 {}_2F_2\left(5, \frac{11}{2}; -\frac{3}{2}, 6; z\right) &= \\
 & \frac{1}{567 z^5} \left(e^z (128 z^{11} + 2624 z^{10} + 16\,096 z^9 + 31\,536 z^8 + 12\,312 z^7 - 6804 z^6 + 27\,594 z^5 - 135\,135 z^4 + 540\,540 z^3 - \right. \\
 & \left. 1\,621\,620 z^2 + 3\,243\,240 z - 3\,243\,240) \right) + \frac{5720}{z^5}
 \end{aligned}$$

For fixed z and $a_1 = 5$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.anfa.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{2835} (16z^{11} + 1304z^{10} + 42340z^9 + 709614z^8 + 6654720z^7 + 35434140z^6 + 103964256z^5 + 155176560z^4 +$$

$$100041480z^3 + 19334700z^2 + 311850z + 2835) +$$

$$\frac{1}{2835} \left(e^z \sqrt{\pi} (16z^{23/2} + 1312z^{21/2} + 42984z^{19/2} + 730152z^{17/2} + 6989913z^{15/2} + 38453940z^{13/2} +$$

$$119071890z^{11/2} + 195259680z^{9/2} + 150436440z^{7/2} + 42910560z^{5/2} + 2494800z^{3/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anfb.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; -z\right) =$$

$$\frac{1}{2835} (-16z^{11} + 1304z^{10} - 42340z^9 + 709614z^8 - 6654720z^7 + 35434140z^6 - 103964256z^5 + 155176560z^4 -$$

$$100041480z^3 + 19334700z^2 - 311850z + 2835) +$$

$$\frac{1}{2835} \left(e^{-z} \sqrt{\pi} (16z^{23/2} - 1312z^{21/2} + 42984z^{19/2} - 730152z^{17/2} + 6989913z^{15/2} - 38453940z^{13/2} +$$

$$119071890z^{11/2} - 195259680z^{9/2} + 150436440z^{7/2} - 42910560z^{5/2} + 2494800z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anfc.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{2835} (-8z^{10} - 572z^9 - 16026z^8 - 226875z^7 - 1746570z^6 - 7333524z^5 - 15966720z^4 - 15966720z^3 - 5613300z^2 -$$

$$311850z + 2835) + \frac{1}{5670} \left(e^z \sqrt{\pi} (-16z^{21/2} - 1152z^{19/2} - 32616z^{17/2} - 469224z^{15/2} - 3705345z^{13/2} -$$

$$16221870z^{11/2} - 37962540z^{9/2} - 43409520z^{7/2} - 20207880z^{5/2} - 2494800z^{3/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anfd.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; -z\right) =$$

$$\frac{1}{2835} (-8z^{10} + 572z^9 - 16026z^8 + 226875z^7 - 1746570z^6 + 7333524z^5 - 15966720z^4 + 15966720z^3 - 5613300z^2 +$$

$$311850z + 2835) + \frac{1}{5670} \left(e^{-z} \sqrt{\pi} (16z^{21/2} - 1152z^{19/2} + 32616z^{17/2} - 469224z^{15/2} + 3705345z^{13/2} -$$

$$16221870z^{11/2} + 37962540z^{9/2} - 43409520z^{7/2} + 20207880z^{5/2} - 2494800z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anfe.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, 1; z\right) =$$

$$-\frac{1}{22680} \left(e^z (64z^{10} + 4288z^9 + 111888z^8 + 1465056z^7 + 10354428z^6 + 39619692z^5 + 78169455z^4 +$$

$$70897680z^3 + 23065560z^2 + 1270080z - 22680) \right)$$

07.25.03.anff.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{5670}(-8z^9 - 492z^8 - 11602z^7 - 134295z^6 - 811728z^5 - 2517900z^4 - 3659040z^3 - 1995840z^2 - 207900z + 5670) - \frac{1}{11340}\left(e^z \sqrt{\pi} z^{3/2} (16z^8 + 992z^7 + 23688z^6 + 279720z^5 + 1747305z^4 + 5738040z^3 + 9272340z^2 + 6320160z + 1247400) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anfg.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{5670}(8z^9 - 492z^8 + 11602z^7 - 134295z^6 + 811728z^5 - 2517900z^4 + 3659040z^3 - 1995840z^2 + 207900z + 5670) - \frac{1}{11340}\left(e^{-z} \sqrt{\pi} z^{3/2} (16z^8 - 992z^7 + 23688z^6 - 279720z^5 + 1747305z^4 - 5738040z^3 + 9272340z^2 - 6320160z + 1247400) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anfh.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = -\frac{1}{22680}\left(e^z (64z^9 + 3648z^8 + 79056z^7 + 832608z^6 + 4526172z^5 + 12462660z^4 + 15856155z^3 + 7473060z^2 + 646380z - 22680)\right)$$

07.25.03.anfi.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{-8z^8 - 412z^7 - 7898z^6 - 71307z^5 - 316050z^4 - 649110z^3 - 510840z^2 - 83160z + 3780}{3780} - \frac{1}{7560}\left(e^z \sqrt{\pi} z^{3/2} (16z^7 + 832z^6 + 16200z^5 + 150120z^4 + 696465z^3 + 1559250z^2 + 1476090z + 415800) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anfj.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{7560}\left(e^{-z} \sqrt{\pi} (16z^7 - 832z^6 + 16200z^5 - 150120z^4 + 696465z^3 - 1559250z^2 + 1476090z - 415800) \operatorname{erfi}(\sqrt{z}) z^{3/2}\right) + \frac{-8z^8 + 412z^7 - 7898z^6 + 71307z^5 - 316050z^4 + 649110z^3 - 510840z^2 + 83160z + 3780}{3780}$$

07.25.03.anfk.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = -\frac{1}{11340}\left(e^z (64z^8 + 3008z^7 + 51984z^6 + 416736z^5 + 1609020z^4 + 2808540z^3 + 1813455z^2 + 219240z - 11340)\right)$$

07.25.03.anfl.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{-8z^7 - 332z^6 - 4914z^5 - 32151z^4 - 93072z^3 - 101970z^2 - 23760z + 1512}{1512} - \frac{e^z \sqrt{\pi} z^{3/2} (16z^6 + 672z^5 + 10152z^4 + 68904z^3 + 214137z^2 + 274428z + 103950) \operatorname{erf}(\sqrt{z})}{3024}$$

07.25.03.anfm.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{8z^7 - 332z^6 + 4914z^5 - 32151z^4 + 93072z^3 - 101970z^2 + 23760z + 1512}{1512} - \frac{e^{-z} \sqrt{\pi} z^{3/2} (16z^6 - 672z^5 + 10152z^4 - 68904z^3 + 214137z^2 - 274428z + 103950) \operatorname{erfi}(\sqrt{z})}{3024}$$

07.25.03.anfn.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = -\frac{e^z (64z^7 + 2368z^6 + 30672z^5 + 171360z^4 + 409500z^3 + 351540z^2 + 55755z - 3780)}{3780}$$

07.25.03.anfo.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{432} (-8z^6 - 252z^5 - 2650z^4 - 11067z^3 - 16650z^2 - 5280z + 432) - \frac{1}{864} e^z \sqrt{\pi} z^{3/2} (16z^5 + 512z^4 + 5544z^3 + 24552z^2 + 42273z + 20790) \operatorname{erf}(\sqrt{z})$$

07.25.03.anfp.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{864} e^{-z} \sqrt{\pi} (16z^5 - 512z^4 + 5544z^3 - 24552z^2 + 42273z - 20790) \operatorname{erfi}(\sqrt{z}) z^{3/2} + \frac{1}{432} (-8z^6 + 252z^5 - 2650z^4 + 11067z^3 - 16650z^2 + 5280z + 432)$$

07.25.03.anfq.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = -\frac{1}{945} e^z (64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945)$$

07.25.03.anfr.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{96} (-8z^5 - 172z^4 - 1106z^3 - 2295z^2 - 960z + 96) - \frac{1}{192} e^z \sqrt{\pi} z^{3/2} (16z^4 + 352z^3 + 2376z^2 + 5544z + 3465) \operatorname{erf}(\sqrt{z})$$

07.25.03.anfs.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{96} (8z^5 - 172z^4 + 1106z^3 - 2295z^2 + 960z + 96) - \frac{1}{192} e^{-z} \sqrt{\pi} z^{3/2} (16z^4 - 352z^3 + 2376z^2 - 5544z + 3465) \operatorname{erfi}(\sqrt{z})$$

07.25.03.anft.01

$${}_2F_2\left(5, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = \frac{1}{189z^5} (e^z (-64z^{10} - 1088z^9 - 5328z^8 - 7776z^7 - 2268z^6 + 2268z^5 - 10395z^4 + 41580z^3 - 124740z^2 + 249480z - 249480)) + \frac{1320}{z^5}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = \frac{1}{2}$

07.25.03.anfu.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{5670} (8z^9 + 500z^8 + 12030z^7 + 142905z^6 + 894567z^5 + 2919240z^4 + 4604040z^3 + 2948400z^2 + 510300z + 5670) + \frac{1}{11340} \left(e^z \sqrt{\pi} (16z^{19/2} + 1008z^{17/2} + 24552z^{15/2} + 297360z^{13/2} + 1921185z^{11/2} + 6615945z^{9/2} + 11498760z^{7/2} + 8913240z^{5/2} + 2381400z^{3/2} + 113400\sqrt{z}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anfv.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{5670} (-8z^9 + 500z^8 - 12030z^7 + 142905z^6 - 894567z^5 + 2919240z^4 - 4604040z^3 + 2948400z^2 - 510300z + 5670) + \frac{1}{11340} \left(e^{-z} \sqrt{\pi} (16z^{19/2} - 1008z^{17/2} + 24552z^{15/2} - 297360z^{13/2} + 1921185z^{11/2} - 6615945z^{9/2} + 11498760z^{7/2} - 8913240z^{5/2} + 2381400z^{3/2} - 113400\sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anfw.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{22680} (e^z (32z^9 + 1872z^8 + 41904z^7 + 460152z^6 + 2646378z^5 + 7901145z^4 + 11430720z^3 + 6872040z^2 + 1224720z + 22680))$$

07.25.03.anfx.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{8z^8 + 428z^7 + 8610z^6 + 82839z^5 + 401340z^4 + 945000z^3 + 952560z^2 + 302400z + 11340}{11340} + \frac{1}{22680} \left(e^z \sqrt{\pi} \sqrt{z} (16z^8 + 864z^7 + 17640z^6 + 173880z^5 + 877905z^4 + 2226420z^3 + 2593080z^2 + 1134000z + 113400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anfy.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{8z^8 - 428z^7 + 8610z^6 - 82839z^5 + 401340z^4 - 945000z^3 + 952560z^2 - 302400z + 11340}{11340} - \frac{1}{22680} \left(e^{-z} \sqrt{\pi} \sqrt{z} (16z^8 - 864z^7 + 17640z^6 - 173880z^5 + 877905z^4 - 2226420z^3 + 2593080z^2 - 1134000z + 113400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anfz.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{22680} (e^z (32z^8 + 1584z^7 + 29232z^6 + 255528z^5 + 1113210z^4 + 2335095z^3 + 2090340z^2 + 601020z + 22680))$$

07.25.03.ang0.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{8z^7 + 356z^6 + 5766z^5 + 42645z^4 + 147945z^3 + 220860z^2 + 109620z + 7560}{7560} + \frac{1}{15120} \left(e^z \sqrt{\pi} \sqrt{z} (16z^7 + 720z^6 + 11880z^5 + 90720z^4 + 333585z^3 + 558495z^2 + 359100z + 56700) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ang1.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{-8z^7 + 356z^6 - 5766z^5 + 42645z^4 - 147945z^3 + 220860z^2 - 109620z + 7560}{7560} + \frac{1}{15120} \left(e^{-z} \sqrt{\pi} \sqrt{z} (16z^7 - 720z^6 + 11880z^5 - 90720z^4 + 333585z^3 - 558495z^2 + 359100z - 56700) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ang2.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, 3; z\right) = \frac{e^z (32z^7 + 1296z^6 + 18864z^5 + 123480z^4 + 372330z^3 + 473445z^2 + 196560z + 11340)}{11340}$$

07.25.03.ang3.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{8z^6 + 284z^5 + 3498z^4 + 18291z^3 + 39630z^2 + 28620z + 3024}{3024} + \frac{e^z \sqrt{\pi} \sqrt{z} (16z^6 + 576z^5 + 7272z^4 + 39816z^3 + 94689z^2 + 85050z + 18900) \operatorname{erf}(\sqrt{z})}{6048}$$

07.25.03.ang4.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{8z^6 - 284z^5 + 3498z^4 - 18291z^3 + 39630z^2 - 28620z + 3024}{3024} - \frac{e^{-z} \sqrt{\pi} \sqrt{z} (16z^6 - 576z^5 + 7272z^4 - 39816z^3 + 94689z^2 - 85050z + 18900) \operatorname{erfi}(\sqrt{z})}{6048}$$

07.25.03.ang5.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, 4; z\right) = \frac{e^z (32z^6 + 1008z^5 + 10800z^4 + 47880z^3 + 85050z^2 + 48195z + 3780)}{3780}$$

07.25.03.ang6.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{1}{864} (8z^5 + 212z^4 + 1806z^3 + 5745z^2 + 5835z + 864) + \frac{e^z \sqrt{\pi} \sqrt{z} (16z^5 + 432z^4 + 3816z^3 + 13104z^2 + 16065z + 4725) \operatorname{erf}(\sqrt{z})}{1728}$$

07.25.03.ang7.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{1}{864} (-8z^5 + 212z^4 - 1806z^3 + 5745z^2 - 5835z + 864) + \frac{e^{-z} \sqrt{\pi} \sqrt{z} (16z^5 - 432z^4 + 3816z^3 - 13104z^2 + 16065z - 4725) \operatorname{erfi}(\sqrt{z})}{1728}$$

07.25.03.ang8.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{1}{945} e^z (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945)$$

07.25.03.ang9.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{192} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} e^z \sqrt{\pi} \sqrt{z} (16z^4 + 288z^3 + 1512z^2 + 2520z + 945) \operatorname{erf}(\sqrt{z})$$

07.25.03.anga.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{1}{192} (8z^4 - 140z^3 + 690z^2 - 975z + 192) - \frac{1}{384} e^{-z} \sqrt{\pi} \sqrt{z} (16z^4 - 288z^3 + 1512z^2 - 2520z + 945) \operatorname{erfi}(\sqrt{z})$$

07.25.03.angb.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \frac{e^z (32z^9 + 432z^8 + 1584z^7 + 1512z^6 + 378z^5 - 945z^4 + 3780z^3 - 11340z^2 + 22680z - 22680)}{189z^5} + \frac{120}{z^5}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = 1$

07.25.03.angc.01

$${}_2F_2\left(5, \frac{11}{2}; 1, 1; z\right) = \frac{1}{90720} \left(e^{z/2} (64z^9 + 3520z^8 + 73872z^7 + 759984z^6 + 4111992z^5 + 11723400z^4 + 16808553z^3 + 10856259z^2 + 2449440z + 90720) I_0\left(\frac{z}{2}\right) + \frac{1}{90720} \left(e^{z/2} (64z^9 + 3456z^8 + 70448z^7 + 691200z^6 + 3452760z^5 + 8555760z^4 + 9467487z^3 + 3663468z^2 + 256644z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.angd.01

$${}_2F_2\left(5, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{22680} \left(e^z (16z^8 + 800z^7 + 14952z^6 + 132888z^5 + 592305z^4 + 1285200z^3 + 1217160z^2 + 393120z + 22680) \right)$$

07.25.03.ange.01

$${}_2F_2\left(5, \frac{11}{2}; 1, 2; z\right) = \frac{1}{90720} \left(e^{z/2} (64z^8 + 2976z^7 + 51504z^6 + 423072z^5 + 1750680z^4 + 3594438z^3 + 3383199z^2 + 1202040z + 90720) I_0\left(\frac{z}{2}\right) + \frac{1}{90720} \left(e^{z/2} (64z^8 + 2912z^7 + 48624z^6 + 375840z^5 + 1396440z^4 + 2345562z^3 + 1478403z^2 + 211284z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.angf.01

$${}_2F_2\left(5, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \frac{e^z (8z^7 + 332z^6 + 4986z^5 + 34035z^4 + 108960z^3 + 152280z^2 + 75600z + 7560)}{7560}$$

07.25.03.angg.01

$${}_2F_2\left(5, \frac{11}{2}; 1, 3; z\right) = \frac{e^{z/2} (16z^7 + 608z^6 + 8304z^5 + 51360z^4 + 149811z^3 + 196218z^2 + 98280z + 11340) I_0\left(\frac{z}{2}\right) + e^{z/2} z (32z^6 + 1184z^5 + 15440z^4 + 87840z^3 + 218418z^2 + 205782z + 47151) I_1\left(\frac{z}{2}\right)}{22680}$$

07.25.03.angh.01

$${}_2F_2\left(5, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{e^z (4z^6 + 132z^5 + 1503z^4 + 7248z^3 + 14616z^2 + 10368z + 1512)}{1512}$$

07.25.03.angi.01

$${}_2F_2\left(5, \frac{11}{2}; 1, 4; z\right) = \frac{e^{z/2} (32 z^6 + 944 z^5 + 9504 z^4 + 40284 z^3 + 72222 z^2 + 48195 z + 7560) I_0\left(\frac{z}{2}\right) + e^{z/2} z (32 z^5 + 912 z^4 + 8608 z^3 + 32100 z^2 + 43614 z + 14457) I_1\left(\frac{z}{2}\right)}{7560}$$

07.25.03.angi.01

$${}_2F_2\left(5, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{1}{216} e^z (2 z^5 + 49 z^4 + 384 z^3 + 1128 z^2 + 1104 z + 216)$$

07.25.03.angk.01

$${}_2F_2\left(5, \frac{11}{2}; 1, 5; z\right) = \frac{1}{945} e^{z/2} (16 z^5 + 336 z^4 + 2220 z^3 + 5484 z^2 + 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} z (16 z^4 + 320 z^3 + 1908 z^2 + 3720 z + 1689) I_1\left(\frac{z}{2}\right)$$

07.25.03.angi.01

$${}_2F_2\left(5, \frac{11}{2}; 1, \frac{11}{2}; z\right) = \frac{1}{24} e^z (z^4 + 16 z^3 + 72 z^2 + 96 z + 24)$$

07.25.03.angm.01

$${}_2F_2\left(5, \frac{11}{2}; 1, 6; z\right) = \frac{e^{z/2} (16 z^7 + 200 z^6 + 708 z^5 + 756 z^4 + 273 z^3 - 360 z^2 + 1152 z - 2304) I_0\left(\frac{z}{2}\right) + e^{z/2} (16 z^8 + 184 z^7 + 532 z^6 + 300 z^5 + 105 z^4 - 480 z^3 + 1728 z^2 - 4608 z + 9216) I_1\left(\frac{z}{2}\right)}{189 z^3}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = \frac{3}{2}$

07.25.03.angn.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{8 z^7 + 364 z^6 + 6066 z^5 + 46615 z^4 + 170880 z^3 + 278712 z^2 + 164640 z + 20160}{22680} + \frac{1}{45360 \sqrt{z}} (e^z \sqrt{\pi} (16 z^8 + 736 z^7 + 12488 z^6 + 98952 z^5 + 383145 z^4 + 693840 z^3 + 511560 z^2 + 110880 z + 2520) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ango.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{-8 z^7 + 364 z^6 - 6066 z^5 + 46615 z^4 - 170880 z^3 + 278712 z^2 - 164640 z + 20160}{22680} + \frac{1}{45360 \sqrt{z}} (e^{-z} \sqrt{\pi} (16 z^8 - 736 z^7 + 12488 z^6 - 98952 z^5 + 383145 z^4 - 693840 z^3 + 511560 z^2 - 110880 z + 2520) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.angp.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{e^z (16 z^7 + 672 z^6 + 10248 z^5 + 71400 z^4 + 235305 z^3 + 343980 z^2 + 185220 z + 22680)}{22680}$$

07.25.03.angq.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{8 z^6 + 300 z^5 + 3970 z^4 + 22935 z^3 + 57852 z^2 + 55020 z + 12600}{15120} + \frac{e^z \sqrt{\pi} (16 z^7 + 608 z^6 + 8232 z^5 + 49560 z^4 + 135345 z^3 + 152460 z^2 + 54180 z + 2520) \operatorname{erf}(\sqrt{z})}{30240 \sqrt{z}}$$

07.25.03.angr.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{8z^6 - 300z^5 + 3970z^4 - 22935z^3 + 57852z^2 - 55020z + 12600}{15120} + \frac{1}{30240\sqrt{z}} \left(e^{-z} \sqrt{\pi} (-16z^7 + 608z^6 - 8232z^5 + 49560z^4 - 135345z^3 + 152460z^2 - 54180z + 2520) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.angs.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{e^z (16z^6 + 544z^5 + 6440z^4 + 32760z^3 + 71505z^2 + 57960z + 11340)}{11340}$$

07.25.03.angt.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{8z^5 + 236z^4 + 2322z^3 + 9111z^2 + 13200z + 4788}{6048} + \frac{e^z \sqrt{\pi} (16z^6 + 480z^5 + 4872z^4 + 20328z^3 + 33705z^2 + 17640z + 1260) \operatorname{erf}(\sqrt{z})}{12096\sqrt{z}}$$

07.25.03.angu.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{-8z^5 + 236z^4 - 2322z^3 + 9111z^2 - 13200z + 4788}{6048} + \frac{e^{-z} \sqrt{\pi} (16z^6 - 480z^5 + 4872z^4 - 20328z^3 + 33705z^2 - 17640z + 1260) \operatorname{erfi}(\sqrt{z})}{12096\sqrt{z}}$$

07.25.03.angv.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{e^z (16z^5 + 416z^4 + 3528z^3 + 11592z^2 + 13545z + 3780)}{3780}$$

07.25.03.angw.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{8z^4 + 172z^3 + 1122z^2 + 2455z + 1308}{1728} + \frac{e^z \sqrt{\pi} (16z^5 + 352z^4 + 2408z^3 + 5880z^2 + 4305z + 420) \operatorname{erf}(\sqrt{z})}{3456\sqrt{z}}$$

07.25.03.angx.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{8z^4 - 172z^3 + 1122z^2 - 2455z + 1308}{1728} + \frac{e^{-z} \sqrt{\pi} (-16z^5 + 352z^4 - 2408z^3 + 5880z^2 - 4305z + 420) \operatorname{erfi}(\sqrt{z})}{3456\sqrt{z}}$$

07.25.03.angy.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \frac{1}{945} e^z (16z^4 + 288z^3 + 1512z^2 + 2520z + 945)$$

07.25.03.angz.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{384} (8z^3 + 108z^2 + 370z + 279) + \frac{e^z \sqrt{\pi} (16z^4 + 224z^3 + 840z^2 + 840z + 105) \operatorname{erf}(\sqrt{z})}{768\sqrt{z}}$$

07.25.03.anh0.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{1}{384} (-8z^3 + 108z^2 - 370z + 279) + \frac{e^{-z} \sqrt{\pi} (16z^4 - 224z^3 + 840z^2 - 840z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.anh1.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \frac{e^z (16z^8 + 160z^7 + 392z^6 + 168z^5 + 105z^4 - 420z^3 + 1260z^2 - 2520z + 2520)}{189z^5} - \frac{40}{3z^5}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = 2$

07.25.03.anh2.01

$${}_2F_2\left(5, \frac{11}{2}; 2, 2; z\right) = \frac{e^{z/2} (32z^7 + 1248z^6 + 17616z^5 + 113760z^4 + 351954z^3 + 502002z^2 + 288855z + 45360) I_0\left(\frac{z}{2}\right)}{45360} + \frac{e^{z/2} (16z^7 + 608z^6 + 8208z^5 + 48960z^4 + 130563z^3 + 138402z^2 + 41166z + 630) I_1\left(\frac{z}{2}\right)}{22680}$$

07.25.03.anh3.01

$${}_2F_2\left(5, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \frac{e^z (8z^6 + 276z^5 + 3330z^4 + 17385z^3 + 39420z^2 + 34020z + 7560)}{7560}$$

07.25.03.anh4.01

$${}_2F_2\left(5, \frac{11}{2}; 2, 3; z\right) = \frac{e^{z/2} (32z^6 + 1008z^5 + 11040z^4 + 52332z^3 + 109566z^2 + 92295z + 22680) I_0\left(\frac{z}{2}\right)}{22680} + \frac{e^{z/2} (32z^6 + 976z^5 + 10080z^4 + 42708z^3 + 71022z^2 + 35181z + 1260) I_1\left(\frac{z}{2}\right)}{22680}$$

07.25.03.anh5.01

$${}_2F_2\left(5, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{e^z (4z^5 + 108z^4 + 963z^3 + 3396z^2 + 4428z + 1512)}{1512}$$

07.25.03.anh6.01

$${}_2F_2\left(5, \frac{11}{2}; 2, 4; z\right) = \frac{e^{z/2} (16z^5 + 384z^4 + 3012z^3 + 9336z^2 + 11025z + 3780) I_0\left(\frac{z}{2}\right)}{3780} + \frac{e^{z/2} (16z^5 + 368z^4 + 2652z^3 + 6852z^2 + 5181z + 315) I_1\left(\frac{z}{2}\right)}{3780}$$

07.25.03.anh7.01

$${}_2F_2\left(5, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{1}{216} e^z (2z^4 + 39z^3 + 228z^2 + 444z + 216)$$

07.25.03.anh8.01

$${}_2F_2\left(5, \frac{11}{2}; 2, 5; z\right) = \frac{1}{945} e^{z/2} (16z^4 + 264z^3 + 1284z^2 + 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^4 + 248z^3 + 1044z^2 + 1164z + 105) I_1\left(\frac{z}{2}\right)$$

07.25.03.anh9.01

$${}_2F_2\left(5, \frac{11}{2}; 2, \frac{11}{2}; z\right) = \frac{1}{24} e^z (z^3 + 12z^2 + 36z + 24)$$

07.25.03.anha.01

$${}_2F_2\left(5, \frac{11}{2}; 2, 6; z\right) = \frac{2 e^{z/2} (8 z^6 + 72 z^5 + 168 z^4 + 84 z^3 + 45 z^2 - 144 z + 288) I_0\left(\frac{z}{2}\right)}{189 z^3} + \frac{8 e^{z/2} (2 z^7 + 16 z^6 + 27 z^5 + 15 z^3 - 54 z^2 + 144 z - 288) I_1\left(\frac{z}{2}\right)}{189 z^4}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = \frac{5}{2}$

07.25.03.anhb.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{8 z^6 + 244 z^5 + 2510 z^4 + 10497 z^3 + 16851 z^2 + 7530 z + 90}{10080 z} + \frac{e^z \sqrt{\pi} (16 z^7 + 496 z^6 + 5256 z^5 + 23280 z^4 + 42225 z^3 + 25785 z^2 + 2610 z - 90) \operatorname{erf}(\sqrt{z})}{20160 z^{3/2}}$$

07.25.03.anhc.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{-8 z^6 + 244 z^5 - 2510 z^4 + 10497 z^3 - 16851 z^2 + 7530 z - 90}{10080 z} + \frac{e^{-z} \sqrt{\pi} (16 z^7 - 496 z^6 + 5256 z^5 - 23280 z^4 + 42225 z^3 - 25785 z^2 + 2610 z + 90) \operatorname{erfi}(\sqrt{z})}{20160 z^{3/2}}$$

07.25.03.anhd.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{e^z (8 z^5 + 220 z^4 + 2010 z^3 + 7335 z^2 + 10080 z + 3780)}{3780}$$

07.25.03.anhe.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{8 z^5 + 188 z^4 + 1386 z^3 + 3651 z^2 + 2742 z + 90}{4032 z} + \frac{e^z \sqrt{\pi} (16 z^6 + 384 z^5 + 2952 z^4 + 8520 z^3 + 8145 z^2 + 1350 z - 90) \operatorname{erf}(\sqrt{z})}{8064 z^{3/2}}$$

07.25.03.anhf.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{8 z^5 - 188 z^4 + 1386 z^3 - 3651 z^2 + 2742 z - 90}{4032 z} + \frac{e^{-z} \sqrt{\pi} (-16 z^6 + 384 z^5 - 2952 z^4 + 8520 z^3 - 8145 z^2 + 1350 z + 90) \operatorname{erfi}(\sqrt{z})}{8064 z^{3/2}}$$

07.25.03.anhg.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{e^z (8 z^4 + 164 z^3 + 1026 z^2 + 2205 z + 1260)}{1260}$$

07.25.03.anhh.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{8 z^4 + 132 z^3 + 598 z^2 + 717 z + 45}{1152 z} + \frac{e^z \sqrt{\pi} (16 z^5 + 272 z^4 + 1320 z^3 + 1920 z^2 + 465 z - 45) \operatorname{erf}(\sqrt{z})}{2304 z^{3/2}}$$

07.25.03.anhi.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{-8z^4 + 132z^3 - 598z^2 + 717z - 45}{1152z} + \frac{e^{-z}\sqrt{\pi}(16z^5 - 272z^4 + 1320z^3 - 1920z^2 + 465z + 45)\operatorname{erfi}(\sqrt{z})}{2304z^{3/2}}$$

07.25.03.anhj.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{1}{315} e^z (8z^3 + 108z^2 + 378z + 315)$$

07.25.03.anhk.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z\sqrt{\pi}(16z^4 + 160z^3 + 360z^2 + 120z - 15)\operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.anhl.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z}\sqrt{\pi}(-16z^4 + 160z^3 - 360z^2 + 120z + 15)\operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.anhm.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{e^z(8z^7 + 52z^6 + 66z^5 - 15z^4 + 60z^3 - 180z^2 + 360z - 360)}{63z^5} + \frac{40}{7z^5}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = 3$

07.25.03.anhn.01

$${}_2F_2\left(5, \frac{11}{2}; 3, 3; z\right) = \frac{e^{z/2}(16z^5 + 400z^4 + 3308z^3 + 11004z^2 + 14325z + 5685)I_0\left(\frac{z}{2}\right)}{5670} + \frac{e^{z/2}(16z^6 + 384z^5 + 2932z^4 + 8248z^3 + 7209z^2 + 660z - 60)I_1\left(\frac{z}{2}\right)}{5670z}$$

07.25.03.anho.01

$${}_2F_2\left(5, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{1}{756} e^z (4z^4 + 84z^3 + 543z^2 + 1224z + 756)$$

07.25.03.anhp.01

$${}_2F_2\left(5, \frac{11}{2}; 3, 4; z\right) = \frac{e^{z/2}(16z^4 + 296z^3 + 1668z^2 + 3300z + 1905)I_0\left(\frac{z}{2}\right)}{1890} + \frac{e^{z/2}(16z^5 + 280z^4 + 1396z^3 + 2028z^2 + 345z - 60)I_1\left(\frac{z}{2}\right)}{1890z}$$

07.25.03.anhq.01

$${}_2F_2\left(5, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{1}{108} e^z (2z^3 + 29z^2 + 112z + 108)$$

07.25.03.anhr.01

$${}_2F_2\left(5, \frac{11}{2}; 3, 5; z\right) = \frac{16}{945} e^{z/2} (2z^3 + 24z^2 + 75z + 60)I_0\left(\frac{z}{2}\right) + \frac{4e^{z/2}(8z^4 + 88z^3 + 216z^2 + 60z - 15)I_1\left(\frac{z}{2}\right)}{945z}$$

07.25.03.anhs.01

$${}_2F_2\left(5, \frac{11}{2}; 3, \frac{11}{2}; z\right) = \frac{1}{12} e^z (z^2 + 8z + 12)$$

07.25.03.anht.01

$${}_2F_2\left(5, \frac{11}{2}; 3, 6; z\right) = \frac{4 e^{z/2} (8z^5 + 44z^4 + 52z^3 - 15z^2 + 48z - 96) I_0\left(\frac{z}{2}\right)}{189 z^3} + \frac{4 e^{z/2} (8z^6 + 36z^5 + 20z^4 - 25z^3 + 72z^2 - 192z + 384) I_1\left(\frac{z}{2}\right)}{189 z^4}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = \frac{7}{2}$

07.25.03.anhu.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{5(8z^5 + 140z^4 + 690z^3 + 951z^2 + 96z - 18)}{8064 z^2} + \frac{5 e^z \sqrt{\pi} (16z^6 + 288z^5 + 1512z^4 + 2472z^3 + 729z^2 - 108z + 18) \operatorname{erf}(\sqrt{z})}{16128 z^{5/2}}$$

07.25.03.anhv.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{5 e^{-z} \sqrt{\pi} (16z^6 - 288z^5 + 1512z^4 - 2472z^3 + 729z^2 + 108z + 18) \operatorname{erfi}(\sqrt{z})}{16128 z^{5/2}} - \frac{5(8z^5 - 140z^4 + 690z^3 - 951z^2 + 96z + 18)}{8064 z^2}$$

07.25.03.anhw.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{1}{252} e^z (4z^3 + 60z^2 + 243z + 252)$$

07.25.03.anhx.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{5(8z^4 + 92z^3 + 234z^2 + 51z - 18)}{2304 z^2} + \frac{5 e^z \sqrt{\pi} (16z^5 + 192z^4 + 552z^3 + 264z^2 - 63z + 18) \operatorname{erf}(\sqrt{z})}{4608 z^{5/2}}$$

07.25.03.anhy.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{5(8z^4 - 92z^3 + 234z^2 - 51z - 18)}{2304 z^2} - \frac{5 e^{-z} \sqrt{\pi} (16z^5 - 192z^4 + 552z^3 - 264z^2 - 63z - 18) \operatorname{erfi}(\sqrt{z})}{4608 z^{5/2}}$$

07.25.03.anhz.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{1}{63} e^z (4z^2 + 36z + 63)$$

07.25.03.ani0.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512 z^2} + \frac{5 e^z \sqrt{\pi} (16z^4 + 96z^3 + 72z^2 - 24z + 9) \operatorname{erf}(\sqrt{z})}{1024 z^{5/2}}$$

07.25.03.ani1.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{5 e^{-z} \sqrt{\pi} (16 z^4 - 96 z^3 + 72 z^2 + 24 z + 9) \operatorname{erfi}(\sqrt{z})}{1024 z^{5/2}} - \frac{5 (8 z^3 - 44 z^2 + 18 z + 9)}{512 z^2}$$

07.25.03.ani2.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \frac{5 e^z (4 z^6 + 12 z^5 + 3 z^4 - 12 z^3 + 36 z^2 - 72 z + 72)}{63 z^5} - \frac{40}{7 z^5}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = 4$

07.25.03.ani3.01

$${}_2F_2\left(5, \frac{11}{2}; 4, 4; z\right) = \frac{e^{z/2} (8 z^4 + 104 z^3 + 360 z^2 + 324 z - 3) I_0\left(\frac{z}{2}\right)}{315 z} + \frac{4 e^{z/2} (2 z^5 + 24 z^4 + 67 z^3 + 24 z^2 - 9 z + 3) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.ani4.01

$${}_2F_2\left(5, \frac{11}{2}; 4, \frac{9}{2}; z\right) = \frac{1}{36} e^z (2 z^2 + 19 z + 36)$$

07.25.03.ani5.01

$${}_2F_2\left(5, \frac{11}{2}; 4, 5; z\right) = \frac{4 e^{z/2} (8 z^3 + 60 z^2 + 84 z - 3) I_0\left(\frac{z}{2}\right)}{315 z} + \frac{4 e^{z/2} (8 z^4 + 52 z^3 + 36 z^2 - 21 z + 12) I_1\left(\frac{z}{2}\right)}{315 z^2}$$

07.25.03.ani6.01

$${}_2F_2\left(5, \frac{11}{2}; 4, \frac{11}{2}; z\right) = \frac{1}{4} e^z (z + 4)$$

07.25.03.ani7.01

$${}_2F_2\left(5, \frac{11}{2}; 4, 6; z\right) = \frac{8 e^{z/2} (4 z^4 + 8 z^3 + 3 z^2 - 12 z + 24) I_0\left(\frac{z}{2}\right)}{63 z^3} + \frac{8 e^{z/2} (4 z^5 + 4 z^4 + z^3 - 15 z^2 + 48 z - 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = \frac{9}{2}$

07.25.03.ani8.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{35 (8 z^4 + 52 z^3 + 30 z^2 - 23 z + 15)}{4608 z^3} + \frac{35 e^z \sqrt{\pi} (16 z^5 + 112 z^4 + 104 z^3 - 48 z^2 + 33 z - 15) \operatorname{erf}(\sqrt{z})}{9216 z^{7/2}}$$

07.25.03.ani9.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{35 e^{-z} \sqrt{\pi} (16 z^5 - 112 z^4 + 104 z^3 + 48 z^2 + 33 z + 15) \operatorname{erfi}(\sqrt{z})}{9216 z^{7/2}} - \frac{35 (8 z^4 - 52 z^3 + 30 z^2 + 23 z + 15)}{4608 z^3}$$

07.25.03.ania.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{1}{9} e^z (2 z + 9)$$

07.25.03.anib.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{35 (8 z^3 + 12 z^2 - 14 z + 15)}{1024 z^3} + \frac{35 e^z \sqrt{\pi} (16 z^4 + 32 z^3 - 24 z^2 + 24 z - 15) \operatorname{erf}(\sqrt{z})}{2048 z^{7/2}}$$

07.25.03.anic.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{35(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35e^{-z}\sqrt{\pi}(16z^4 - 32z^3 - 24z^2 - 24z - 15)\operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.anid.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{5e^z(2z^5 - z^4 + 4z^3 - 12z^2 + 24z - 24)}{9z^5} + \frac{40}{3z^5}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = 5$

07.25.03.anie.01

$${}_2F_2\left(5, \frac{11}{2}; 5, 5; z\right) = \frac{32e^{z/2}(4z^3 + 12z^2 - 3z + 3)I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{32e^{z/2}(4z^4 + 8z^3 - 9z^2 + 12z - 12)I_1\left(\frac{z}{2}\right)}{315z^3}$$

07.25.03.anif.01

$${}_2F_2\left(5, \frac{11}{2}; 5, \frac{11}{2}; z\right) = e^z$$

07.25.03.anig.01

$${}_2F_2\left(5, \frac{11}{2}; 5, 6; z\right) = \frac{32e^{z/2}(4z^3 - 6z^2 + 15z - 24)I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{32e^{z/2}(4z^4 - 10z^3 + 27z^2 - 60z + 96)I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = \frac{11}{2}$

07.25.03.anih.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{315(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315e^z\sqrt{\pi}(16z^4 - 32z^3 + 72z^2 - 120z + 105)\operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.anii.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{315e^{-z}\sqrt{\pi}(16z^4 + 32z^3 + 72z^2 + 120z + 105)\operatorname{erfi}(\sqrt{z})}{4096z^{9/2}} - \frac{315(8z^3 + 20z^2 + 50z + 105)}{2048z^4}$$

07.25.03.anij.01

$${}_2F_2\left(5, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{5e^z(z^4 - 4z^3 + 12z^2 - 24z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = 5, a_2 = \frac{11}{2}, b_1 = 6$

07.25.03.anik.01

$${}_2F_2\left(5, \frac{11}{2}; 6, 6; z\right) = \frac{320e^{z/2}(2z^4 - 10z^3 + 31z^2 - 48z + 96)I_0\left(\frac{z}{2}\right)}{63z^5} + \frac{640e^{z/2}(z^3 - 6z^2 + 22z - 50)I_1\left(\frac{z}{2}\right)}{63z^4} - \frac{10240}{21z^5}$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = -\frac{11}{2}$

07.25.03.anil.01

$${}_2F_2\left(5, 6; -\frac{11}{2}, 1; z\right) = \frac{1}{119750400} (256 z^{15} + 30464 z^{14} + 1492992 z^{13} + 39293120 z^{12} + 607140960 z^{11} + 5653782288 z^{10} + 31291162560 z^9 + 97155854100 z^8 + 147293966025 z^7 + 71530905600 z^6 - 11705057280 z^5 + 4877107200 z^4 - 2709504000 z^3 + 1524096000 z^2 - 653184000 z + 119750400) + \frac{1}{239500800} (e^z \sqrt{\pi} (512 z^{31/2} + 61184 z^{29/2} + 3016192 z^{27/2} + 80049408 z^{25/2} + 1252155840 z^{23/2} + 11878874400 z^{21/2} + 67714668000 z^{19/2} + 221162029200 z^{17/2} + 370373166450 z^{15/2} + 238097035575 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anim.01

$${}_2F_2\left(5, 6; -\frac{11}{2}, 1; -z\right) = \frac{1}{119750400} (-256 z^{15} + 30464 z^{14} - 1492992 z^{13} + 39293120 z^{12} - 607140960 z^{11} + 5653782288 z^{10} - 31291162560 z^9 + 97155854100 z^8 - 147293966025 z^7 + 71530905600 z^6 + 11705057280 z^5 + 4877107200 z^4 + 2709504000 z^3 + 1524096000 z^2 + 653184000 z + 119750400) + \frac{1}{239500800} (e^{-z} \sqrt{\pi} (512 z^{31/2} - 61184 z^{29/2} + 3016192 z^{27/2} - 80049408 z^{25/2} + 1252155840 z^{23/2} - 11878874400 z^{21/2} + 67714668000 z^{19/2} - 221162029200 z^{17/2} + 370373166450 z^{15/2} - 238097035575 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anin.01

$${}_2F_2\left(5, 6; -\frac{11}{2}, 2; z\right) = \frac{1}{59875200} (128 z^{14} + 13248 z^{13} + 554464 z^{12} + 12167760 z^{11} + 151734744 z^{10} + 1087390836 z^9 + 4290923610 z^8 + 8213801895 z^7 + 5109350400 z^6 - 975421440 z^5 + 487710720 z^4 - 338688000 z^3 + 254016000 z^2 - 163296000 z + 59875200) + \frac{1}{119750400} (e^z \sqrt{\pi} (256 z^{29/2} + 26624 z^{27/2} + 1122048 z^{25/2} + 24877056 z^{23/2} + 315114720 z^{21/2} + 2315617920 z^{19/2} + 9543345840 z^{17/2} + 19919229120 z^{15/2} + 15873135705 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anio.01

$${}_2F_2\left(5, 6; -\frac{11}{2}, 2; -z\right) = \frac{1}{59875200} (128 z^{14} - 13248 z^{13} + 554464 z^{12} - 12167760 z^{11} + 151734744 z^{10} - 1087390836 z^9 + 4290923610 z^8 - 8213801895 z^7 + 5109350400 z^6 + 975421440 z^5 + 487710720 z^4 + 338688000 z^3 + 254016000 z^2 + 163296000 z + 59875200) + \frac{1}{119750400} (e^{-z} \sqrt{\pi} (-256 z^{29/2} + 26624 z^{27/2} - 1122048 z^{25/2} + 24877056 z^{23/2} - 315114720 z^{21/2} + 2315617920 z^{19/2} - 9543345840 z^{17/2} + 19919229120 z^{15/2} - 15873135705 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anip.01

$${}_2F_2\left(5, 6; -\frac{11}{2}, 3; z\right) = \frac{1}{14968800} (64 z^{13} + 5632 z^{12} + 195600 z^{11} + 3446016 z^{10} + 32883228 z^9 + 167041440 z^8 + 404449335 z^7 + 319334400 z^6 - 69672960 z^5 + 40642560 z^4 - 33868800 z^3 + 31752000 z^2 - 27216000 z + 14968800) + \frac{1}{29937600} \left(e^z \sqrt{\pi} (128 z^{27/2} + 11328 z^{25/2} + 396768 z^{23/2} + 7082160 z^{21/2} + 69030360 z^{19/2} + 363959820 z^{17/2} + 950094810 z^{15/2} + 933713865 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aniq.01

$${}_2F_2\left(5, 6; -\frac{11}{2}, 3; -z\right) = \frac{1}{14968800} (-64 z^{13} + 5632 z^{12} - 195600 z^{11} + 3446016 z^{10} - 32883228 z^9 + 167041440 z^8 - 404449335 z^7 + 319334400 z^6 + 69672960 z^5 + 40642560 z^4 + 33868800 z^3 + 31752000 z^2 + 27216000 z + 14968800) + \frac{1}{29937600} \left(e^{-z} \sqrt{\pi} (128 z^{27/2} - 11328 z^{25/2} + 396768 z^{23/2} - 7082160 z^{21/2} + 69030360 z^{19/2} - 363959820 z^{17/2} + 950094810 z^{15/2} - 933713865 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anir.01

$${}_2F_2\left(5, 6; -\frac{11}{2}, 4; z\right) = \frac{1}{2494800} (32 z^{12} + 2320 z^{11} + 64176 z^{10} + 857752 z^9 + 5749050 z^8 + 17765325 z^7 + 17740800 z^6 - 4354560 z^5 + 2903040 z^4 - 2822400 z^3 + 3175200 z^2 - 3402000 z + 2494800) + \frac{1}{4989600} \left(e^z \sqrt{\pi} (64 z^{25/2} + 4672 z^{23/2} + 130640 z^{21/2} + 1777440 z^{19/2} + 12297180 z^{17/2} + 40562340 z^{15/2} + 49142835 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anis.01

$${}_2F_2\left(5, 6; -\frac{11}{2}, 4; -z\right) = \frac{1}{2494800} (32 z^{12} - 2320 z^{11} + 64176 z^{10} - 857752 z^9 + 5749050 z^8 - 17765325 z^7 + 17740800 z^6 + 4354560 z^5 + 2903040 z^4 + 2822400 z^3 + 3175200 z^2 + 3402000 z + 2494800) + \frac{1}{4989600} \left(e^{-z} \sqrt{\pi} (-64 z^{25/2} + 4672 z^{23/2} - 130640 z^{21/2} + 1777440 z^{19/2} - 12297180 z^{17/2} + 40562340 z^{15/2} - 49142835 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anit.01

$${}_2F_2\left(5, 6; -\frac{11}{2}, 5; z\right) = \frac{1}{311850} (16 z^{11} + 912 z^{10} + 18872 z^9 + 174540 z^8 + 701145 z^7 + 887040 z^6 - 241920 z^5 + 181440 z^4 - 201600 z^3 + 264600 z^2 - 340200 z + 311850) + \frac{1}{623700} \left(e^z \sqrt{\pi} (32 z^{23/2} + 1840 z^{21/2} + 38640 z^{19/2} + 367080 z^{17/2} + 1560090 z^{15/2} + 2340135 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.aniu.01

$${}_2F_2\left(5, 6; -\frac{11}{2}, 5; -z\right) = \frac{1}{311850} \left(-16z^{11} + 912z^{10} - 18872z^9 + 174540z^8 - 701145z^7 + 887040z^6 + 241920z^5 + 181440z^4 + 201600z^3 + 264600z^2 + 340200z + 311850\right) + \frac{1}{623700} \left(e^{-z} \sqrt{\pi} (32z^{23/2} - 1840z^{21/2} + 38640z^{19/2} - 367080z^{17/2} + 1560090z^{15/2} - 2340135z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.aniv.01

$${}_2F_2\left(5, 6; -\frac{11}{2}, 6; z\right) = \frac{1}{31185} \left(8z^{10} + 332z^9 + 4626z^8 + 24975z^7 + 40320z^6 - 12096z^5 + 10080z^4 - 12600z^3 + 18900z^2 - 28350z + 31185\right) + \frac{e^z \sqrt{\pi} (16z^{21/2} + 672z^{19/2} + 9576z^{17/2} + 54264z^{15/2} + 101745z^{13/2}) \operatorname{erf}(\sqrt{z})}{62370}$$

07.25.03.aniw.01

$${}_2F_2\left(5, 6; -\frac{11}{2}, 6; -z\right) = \frac{1}{31185} \left(8z^{10} - 332z^9 + 4626z^8 - 24975z^7 + 40320z^6 + 12096z^5 + 10080z^4 + 12600z^3 + 18900z^2 + 28350z + 31185\right) + \frac{e^{-z} \sqrt{\pi} (-16z^{21/2} + 672z^{19/2} - 9576z^{17/2} + 54264z^{15/2} - 101745z^{13/2}) \operatorname{erfi}(\sqrt{z})}{62370}$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = -\frac{9}{2}$

07.25.03.anix.01

$${}_2F_2\left(5, 6; -\frac{9}{2}, 1; z\right) = \frac{1}{21772800} \left(-256z^{14} - 28160z^{13} - 1267840z^{12} - 30432000z^{11} - 425148864z^{10} - 3541793760z^9 - 17303797080z^8 - 4660070400z^7 - 59752496475z^6 - 23410114560z^5 + 3251404800z^4 - 1083801600z^3 + 435456000z^2 - 145152000z + 21772800\right) + \frac{1}{43545600} \left(e^z \sqrt{\pi} (-512z^{29/2} - 56576z^{27/2} - 2563584z^{25/2} - 62104320z^{23/2} - 879529920z^{21/2} - 7481224800z^{19/2} - 37789768800z^{17/2} - 107792722800z^{15/2} - 154787720850z^{13/2} - 83309314725z^{11/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.aniy.01

$${}_2F_2\left(5, 6; -\frac{9}{2}, 1; -z\right) = \frac{1}{21\,772\,800} \left(-256 z^{14} + 28\,160 z^{13} - 1\,267\,840 z^{12} + 30\,432\,000 z^{11} - 425\,148\,864 z^{10} + 3\,541\,793\,760 z^9 - 17\,303\,797\,080 z^8 + 46\,600\,070\,400 z^7 - 59\,752\,496\,475 z^6 + 23\,410\,114\,560 z^5 + 3\,251\,404\,800 z^4 + 1\,083\,801\,600 z^3 + 435\,456\,000 z^2 + 145\,152\,000 z + 21\,772\,800 \right) + \frac{1}{43\,545\,600} \left(e^{-z} \sqrt{\pi} \left(512 z^{29/2} - 56\,576 z^{27/2} + 2\,563\,584 z^{25/2} - 62\,104\,320 z^{23/2} + 879\,529\,920 z^{21/2} - 7\,481\,224\,800 z^{19/2} + 37\,789\,768\,800 z^{17/2} - 107\,792\,722\,800 z^{15/2} + 154\,787\,720\,850 z^{13/2} - 83\,309\,314\,725 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.aniz.01

$${}_2F_2\left(5, 6; -\frac{9}{2}, 2; z\right) = \frac{1}{10\,886\,400} \left(-128 z^{13} - 12\,224 z^{12} - 468\,960 z^{11} - 9\,359\,952 z^{10} - 105\,154\,776 z^9 - 670\,919\,220 z^8 - 2\,320\,958\,970 z^7 - 3\,810\,291\,975 z^6 - 1\,950\,842\,880 z^5 + 325\,140\,480 z^4 - 135\,475\,200 z^3 + 72\,576\,000 z^2 - 36\,288\,000 z + 10\,886\,400 \right) + \frac{1}{21\,772\,800} \left(e^z \sqrt{\pi} \left(-256 z^{27/2} - 24\,576 z^{25/2} - 950\,016 z^{23/2} - 19\,176\,960 z^{21/2} - 219\,229\,920 z^{19/2} - 1\,438\,698\,240 z^{17/2} - 5\,227\,251\,120 z^{15/2} - 9\,464\,726\,880 z^{13/2} - 6\,408\,408\,825 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anj0.01

$${}_2F_2\left(5, 6; -\frac{9}{2}, 2; -z\right) = \frac{1}{10\,886\,400} \left(128 z^{13} - 12\,224 z^{12} + 468\,960 z^{11} - 9\,359\,952 z^{10} + 105\,154\,776 z^9 - 670\,919\,220 z^8 + 2\,320\,958\,970 z^7 - 3\,810\,291\,975 z^6 + 1\,950\,842\,880 z^5 + 325\,140\,480 z^4 + 135\,475\,200 z^3 + 72\,576\,000 z^2 + 36\,288\,000 z + 10\,886\,400 \right) + \frac{1}{21\,772\,800} \left(e^{-z} \sqrt{\pi} \left(-256 z^{27/2} + 24\,576 z^{25/2} - 950\,016 z^{23/2} + 19\,176\,960 z^{21/2} - 219\,229\,920 z^{19/2} + 1\,438\,698\,240 z^{17/2} - 5\,227\,251\,120 z^{15/2} + 9\,464\,726\,880 z^{13/2} - 6\,408\,408\,825 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anj1.01

$${}_2F_2\left(5, 6; -\frac{9}{2}, 3; z\right) = \frac{1}{2\,721\,600} \left(-64 z^{12} - 5184 z^{11} - 164\,528 z^{10} - 2\,625\,888 z^9 - 22\,455\,756 z^8 - 100\,804\,020 z^7 - 211\,441\,545 z^6 - 139\,345\,920 z^5 + 27\,095\,040 z^4 - 13\,547\,520 z^3 + 9\,072\,000 z^2 - 6\,048\,000 z + 2\,721\,600 \right) + \frac{1}{5\,443\,200} \left(e^z \sqrt{\pi} \left(-128 z^{25/2} - 10\,432 z^{23/2} - 334\,176 z^{21/2} - 5\,411\,280 z^{19/2} - 47\,385\,240 z^{17/2} - 221\,804\,100 z^{15/2} - 506\,486\,610 z^{13/2} - 427\,227\,255 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anj2.01

$${}_2F_2\left(5, 6; -\frac{9}{2}, 3; -z\right) = \frac{1}{2721600} (-64z^{12} + 5184z^{11} - 164528z^{10} + 2625888z^9 - 22455756z^8 + 100804020z^7 - 211441545z^6 + 139345920z^5 + 27095040z^4 + 13547520z^3 + 9072000z^2 + 6048000z + 2721600) + \frac{1}{5443200} (e^{-z} \sqrt{\pi} (128z^{25/2} - 10432z^{23/2} + 334176z^{21/2} - 5411280z^{19/2} + 47385240z^{17/2} - 221804100z^{15/2} + 506486610z^{13/2} - 427227255z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anj3.01

$${}_2F_2\left(5, 6; -\frac{9}{2}, 4; z\right) = \frac{1}{453600} (-32z^{11} - 2128z^{10} - 53552z^9 - 644568z^8 - 3839610z^7 - 10350585z^6 - 8709120z^5 + 1935360z^4 - 1128960z^3 + 907200z^2 - 756000z + 453600) + \frac{1}{907200} (e^z \sqrt{\pi} (-64z^{23/2} - 4288z^{21/2} - 109200z^{19/2} - 1340640z^{17/2} - 8275260z^{15/2} - 24011820z^{13/2} - 25131015z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anj4.01

$${}_2F_2\left(5, 6; -\frac{9}{2}, 4; -z\right) = \frac{1}{453600} (32z^{11} - 2128z^{10} + 53552z^9 - 644568z^8 + 3839610z^7 - 10350585z^6 + 8709120z^5 + 1935360z^4 + 1128960z^3 + 907200z^2 + 756000z + 453600) + \frac{1}{907200} (e^{-z} \sqrt{\pi} (-64z^{23/2} + 4288z^{21/2} - 109200z^{19/2} + 1340640z^{17/2} - 8275260z^{15/2} + 24011820z^{13/2} - 25131015z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anj5.01

$${}_2F_2\left(5, 6; -\frac{9}{2}, 5; z\right) = \frac{1}{56700} (-16z^{10} - 832z^9 - 15552z^8 - 128280z^7 - 451395z^6 - 483840z^5 + 120960z^4 - 80640z^3 + 75600z^2 - 75600z + 56700) + \frac{1}{113400} (e^z \sqrt{\pi} (-32z^{21/2} - 1680z^{19/2} - 31920z^{17/2} - 271320z^{15/2} - 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anj6.01

$${}_2F_2\left(5, 6; -\frac{9}{2}, 5; -z\right) = \frac{1}{56700} (-16z^{10} + 832z^9 - 15552z^8 + 128280z^7 - 451395z^6 + 483840z^5 + 120960z^4 + 80640z^3 + 75600z^2 + 75600z + 56700) + \frac{1}{113400} (e^{-z} \sqrt{\pi} (32z^{21/2} - 1680z^{19/2} + 31920z^{17/2} - 271320z^{15/2} + 1017450z^{13/2} - 1322685z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anj7.01

$${}_2F_2\left(5, 6; -\frac{9}{2}, 6; z\right) = \frac{-8z^9 - 300z^8 - 3730z^7 - 17655z^6 - 24192z^5 + 6720z^4 - 5040z^3 + 5400z^2 - 6300z + 5670}{5670} + \frac{e^z \sqrt{\pi} (-16z^{19/2} - 608z^{17/2} - 7752z^{15/2} - 38760z^{13/2} - 62985z^{11/2}) \operatorname{erf}(\sqrt{z})}{113400}$$

07.25.03.anj8.01

$${}_2F_2\left(5, 6; -\frac{9}{2}, 6; -z\right) = \frac{8z^9 - 300z^8 + 3730z^7 - 17655z^6 + 24192z^5 + 6720z^4 + 5040z^3 + 5400z^2 + 6300z + 5670}{5670} + \frac{e^{-z}\sqrt{\pi}\left(-16z^{19/2} + 608z^{17/2} - 7752z^{15/2} + 38760z^{13/2} - 62985z^{11/2}\right)\operatorname{erfi}(\sqrt{z})}{11340}$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = -\frac{7}{2}$

07.25.03.anj9.01

$${}_2F_2\left(5, 6; -\frac{7}{2}, 1; z\right) = \frac{1}{4838400}\left(256z^{13} + 25856z^{12} + 1061120z^{11} + 23016768z^{10} + 287547680z^9 + 2114351280z^8 + 8965764720z^7 + 20486635500z^6 + 21556000845z^5 + 6502809600z^4 - 722534400z^3 + 174182400z^2 - 41472000z + 4838400\right) + \frac{1}{9676800}\left(e^z\sqrt{\pi}\left(512z^{27/2} + 51968z^{25/2} + 2147840z^{23/2} + 47069440z^{21/2} + 597113280z^{19/2} + 4495658400z^{17/2} + 19807135200z^{15/2} + 48371317200z^{13/2} + 58045086450z^{11/2} + 25264228275z^{9/2}\right)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anja.01

$${}_2F_2\left(5, 6; -\frac{7}{2}, 1; -z\right) = \frac{1}{4838400}\left(-256z^{13} + 25856z^{12} - 1061120z^{11} + 23016768z^{10} - 287547680z^9 + 2114351280z^8 - 8965764720z^7 + 20486635500z^6 - 21556000845z^5 + 6502809600z^4 + 722534400z^3 + 174182400z^2 + 41472000z + 4838400\right) + \frac{1}{9676800}\left(e^{-z}\sqrt{\pi}\left(512z^{27/2} - 51968z^{25/2} + 2147840z^{23/2} - 47069440z^{21/2} + 597113280z^{19/2} - 4495658400z^{17/2} + 19807135200z^{15/2} - 48371317200z^{13/2} + 58045086450z^{11/2} - 25264228275z^{9/2}\right)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anjb.01

$${}_2F_2\left(5, 6; -\frac{7}{2}, 2; z\right) = \frac{1}{2419200}\left(128z^{12} + 11200z^{11} + 390624z^{10} + 7021648z^9 + 70228440z^8 + 393076980z^7 + 1169641050z^6 + 1604937735z^5 + 650280960z^4 - 90316800z^3 + 29030400z^2 - 10368000z + 2419200\right) + \frac{1}{4838400}\left(e^z\sqrt{\pi}\left(256z^{25/2} + 22528z^{23/2} + 792320z^{21/2} + 14423040z^{19/2} + 147114720z^{17/2} + 850239360z^{15/2} + 2676533040z^{13/2} + 4111660800z^{11/2} + 2296748025z^{9/2}\right)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anjc.01

$${}_2F_2\left(5, 6; -\frac{7}{2}, 2; -z\right) = \frac{1}{2419200} (128 z^{12} - 11200 z^{11} + 390624 z^{10} - 7021648 z^9 + 70228440 z^8 - 393076980 z^7 + 1169641050 z^6 - 1604937735 z^5 + 650280960 z^4 + 90316800 z^3 + 29030400 z^2 + 10368000 z + 2419200) + \frac{1}{4838400} \left(e^{-z} \sqrt{\pi} (-256 z^{25/2} + 22528 z^{23/2} - 792320 z^{21/2} + 14423040 z^{19/2} - 147114720 z^{17/2} + 850239360 z^{15/2} - 2676533040 z^{13/2} + 4111660800 z^{11/2} - 2296748025 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anjd.01

$${}_2F_2\left(5, 6; -\frac{7}{2}, 3; z\right) = \frac{1}{604800} (64 z^{11} + 4736 z^{10} + 136144 z^9 + 1947456 z^8 + 14728380 z^7 + 57442920 z^6 + 102018915 z^5 + 54190080 z^4 - 9031680 z^3 + 3628800 z^2 - 1728000 z + 604800) + \frac{1}{1209600} \left(e^z \sqrt{\pi} (128 z^{23/2} + 9536 z^{21/2} + 276960 z^{19/2} + 4026480 z^{17/2} + 31279320 z^{15/2} + 127966140 z^{13/2} + 250554330 z^{11/2} + 176672925 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anje.01

$${}_2F_2\left(5, 6; -\frac{7}{2}, 3; -z\right) = \frac{1}{604800} (-64 z^{11} + 4736 z^{10} - 136144 z^9 + 1947456 z^8 - 14728380 z^7 + 57442920 z^6 - 102018915 z^5 + 54190080 z^4 + 9031680 z^3 + 3628800 z^2 + 1728000 z + 604800) + \frac{1}{1209600} \left(e^{-z} \sqrt{\pi} (128 z^{23/2} - 9536 z^{21/2} + 276960 z^{19/2} - 4026480 z^{17/2} + 31279320 z^{15/2} - 127966140 z^{13/2} + 250554330 z^{11/2} - 176672925 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anjf.01

$${}_2F_2\left(5, 6; -\frac{7}{2}, 4; z\right) = \frac{1}{100800} (32 z^{10} + 1936 z^9 + 43888 z^8 + 469944 z^7 + 2449450 z^6 + 5640045 z^5 + 3870720 z^4 - 752640 z^3 + 362880 z^2 - 216000 z + 100800) + \frac{1}{201600} \left(e^z \sqrt{\pi} (64 z^{21/2} + 3904 z^{19/2} + 89680 z^{17/2} + 981920 z^{15/2} + 5329500 z^{13/2} + 13352820 z^{11/2} + 11778195 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anjg.01

$${}_2F_2\left(5, 6; -\frac{7}{2}, 4; -z\right) = \frac{1}{100800} (32 z^{10} - 1936 z^9 + 43888 z^8 - 469944 z^7 + 2449450 z^6 - 5640045 z^5 + 3870720 z^4 + 752640 z^3 + 362880 z^2 + 216000 z + 100800) + \frac{1}{201600} \left(e^{-z} \sqrt{\pi} (-64 z^{21/2} + 3904 z^{19/2} - 89680 z^{17/2} + 981920 z^{15/2} - 5329500 z^{13/2} + 13352820 z^{11/2} - 11778195 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anjh.01

$${}_2F_2\left(5, 6; -\frac{7}{2}, 5; z\right) = \frac{1}{12600} (16z^9 + 752z^8 + 12552z^7 + 90980z^6 + 274845z^5 + 241920z^4 - 53760z^3 + 30240z^2 - 21600z + 12600) + \frac{e^z \sqrt{\pi} (32z^{19/2} + 1520z^{17/2} + 25840z^{15/2} + 193800z^{13/2} + 629850z^{11/2} + 692835z^{9/2}) \operatorname{erf}(\sqrt{z})}{25200}$$

07.25.03.anji.01

$${}_2F_2\left(5, 6; -\frac{7}{2}, 5; -z\right) = \frac{1}{12600} (-16z^9 + 752z^8 - 12552z^7 + 90980z^6 - 274845z^5 + 241920z^4 + 53760z^3 + 30240z^2 + 21600z + 12600) + \frac{1}{25200} (e^{-z} \sqrt{\pi} (32z^{19/2} - 1520z^{17/2} + 25840z^{15/2} - 193800z^{13/2} + 629850z^{11/2} - 692835z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anjj.01

$${}_2F_2\left(5, 6; -\frac{7}{2}, 6; z\right) = \frac{8z^8 + 268z^7 + 2930z^6 + 11919z^5 + 13440z^4 - 3360z^3 + 2160z^2 - 1800z + 1260}{1260} + \frac{e^z \sqrt{\pi} (16z^{17/2} + 544z^{15/2} + 6120z^{13/2} + 26520z^{11/2} + 36465z^{9/2}) \operatorname{erf}(\sqrt{z})}{2520}$$

07.25.03.anjk.01

$${}_2F_2\left(5, 6; -\frac{7}{2}, 6; -z\right) = \frac{8z^8 - 268z^7 + 2930z^6 - 11919z^5 + 13440z^4 + 3360z^3 + 2160z^2 + 1800z + 1260}{1260} + \frac{e^{-z} \sqrt{\pi} (-16z^{17/2} + 544z^{15/2} - 6120z^{13/2} + 26520z^{11/2} - 36465z^{9/2}) \operatorname{erfi}(\sqrt{z})}{2520}$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = -\frac{5}{2}$

07.25.03.anjl.01

$${}_2F_2\left(5, 6; -\frac{5}{2}, 1; z\right) = \frac{1}{1382400} (-256z^{12} - 23552z^{11} - 872832z^{10} - 16918400z^9 - 186445440z^8 - 1189595520z^7 - 4283007240z^6 - 8061128280z^5 - 6670007775z^4 - 1445068800z^3 + 116121600z^2 - 16588800z + 1382400) + \frac{1}{2764800} (e^z \sqrt{\pi} (-512z^{25/2} - 47360z^{23/2} - 1768960z^{21/2} - 34686720z^{19/2} - 388992960z^{17/2} - 2550693600z^{15/2} - 9604360800z^{13/2} - 19558234800z^{11/2} - 18928616850z^{9/2} - 6335611425z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anjm.01

$${}_2F_2\left(5, 6; -\frac{5}{2}, 1; -z\right) = \frac{1}{1382400} \left(-256 z^{12} + 23552 z^{11} - 872832 z^{10} + 16918400 z^9 - 186445440 z^8 + 1189595520 z^7 - 4283007240 z^6 + 8061128280 z^5 - 6670007775 z^4 + 1445068800 z^3 + 116121600 z^2 + 16588800 z + 1382400\right) + \frac{1}{2764800} \left(e^{-z} \sqrt{\pi} \left(512 z^{25/2} - 47360 z^{23/2} + 1768960 z^{21/2} - 34686720 z^{19/2} + 388992960 z^{17/2} - 2550693600 z^{15/2} + 960436800 z^{13/2} - 19558234800 z^{11/2} + 18928616850 z^{9/2} - 6335611425 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anjn.01

$${}_2F_2\left(5, 6; -\frac{5}{2}, 2; z\right) = \frac{1}{691200} \left(-128 z^{11} - 10176 z^{10} - 319456 z^9 - 5109840 z^8 - 44826840 z^7 - 215969460 z^6 - 539028090 z^5 - 596605095 z^4 - 180633600 z^3 + 19353600 z^2 - 4147200 z + 691200\right) + \frac{1}{1382400} \left(e^z \sqrt{\pi} \left(-256 z^{23/2} - 20480 z^{21/2} - 648960 z^{19/2} - 10529280 z^{17/2} - 94468320 z^{15/2} - 472366080 z^{13/2} - 1259434800 z^{11/2} - 1592791200 z^{9/2} - 703956825 z^{7/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anjo.01

$${}_2F_2\left(5, 6; -\frac{5}{2}, 2; -z\right) = \frac{1}{691200} \left(128 z^{11} - 10176 z^{10} + 319456 z^9 - 5109840 z^8 + 44826840 z^7 - 215969460 z^6 + 539028090 z^5 - 596605095 z^4 + 180633600 z^3 + 19353600 z^2 + 4147200 z + 691200\right) + \frac{1}{1382400} \left(e^{-z} \sqrt{\pi} \left(-256 z^{23/2} + 20480 z^{21/2} - 648960 z^{19/2} + 10529280 z^{17/2} - 94468320 z^{15/2} + 472366080 z^{13/2} - 1259434800 z^{11/2} + 1592791200 z^{9/2} - 703956825 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anjp.01

$${}_2F_2\left(5, 6; -\frac{5}{2}, 3; z\right) = \frac{1}{172800} \left(-64 z^{10} - 4288 z^9 - 110448 z^8 - 1397280 z^7 - 9189420 z^6 - 30453660 z^5 - 44384085 z^4 - 18063360 z^3 + 2419200 z^2 - 691200 z + 172800\right) + \frac{1}{345600} \left(e^z \sqrt{\pi} \left(-128 z^{21/2} - 8640 z^{19/2} - 225120 z^{17/2} - 2900880 z^{15/2} - 19675800 z^{13/2} - 68938740 z^{11/2} - 112676850 z^{9/2} - 63996075 z^{7/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anjq.01

$${}_2F_2\left(5, 6; -\frac{5}{2}, 3; -z\right) = \frac{1}{172\,800} \left(-64 z^{10} + 4288 z^9 - 110\,448 z^8 + 1\,397\,280 z^7 - 9\,189\,420 z^6 + 30\,453\,660 z^5 - 44\,384\,085 z^4 + 18\,063\,360 z^3 + 241\,920 z^2 + 691\,200 z + 172\,800\right) + \frac{1}{345\,600} \left(e^{-z} \sqrt{\pi} (128 z^{21/2} - 8640 z^{19/2} + 225\,120 z^{17/2} - 2\,900\,880 z^{15/2} + 19\,675\,800 z^{13/2} - 68\,938\,740 z^{11/2} + 112\,676\,850 z^{9/2} - 63\,996\,075 z^{7/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anjr.01

$${}_2F_2\left(5, 6; -\frac{5}{2}, 4; z\right) = \frac{1}{28\,800} \left(-32 z^9 - 1744 z^8 - 35\,184 z^7 - 330\,040 z^6 - 1\,474\,890 z^5 - 2\,818\,665 z^4 - 1\,505\,280 z^3 + 241\,920 z^2 - 86\,400 z + 28\,800\right) + \frac{1}{57\,600} \left(e^z \sqrt{\pi} (-64 z^{19/2} - 3520 z^{17/2} - 72\,080 z^{15/2} - 693\,600 z^{13/2} - 3\,248\,700 z^{11/2} - 6\,855\,420 z^{9/2} - 4\,922\,775 z^{7/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anjs.01

$${}_2F_2\left(5, 6; -\frac{5}{2}, 4; -z\right) = \frac{1}{28\,800} \left(32 z^9 - 1744 z^8 + 35\,184 z^7 - 330\,040 z^6 + 1\,474\,890 z^5 - 2\,818\,665 z^4 + 1\,505\,280 z^3 + 241\,920 z^2 + 86\,400 z + 28\,800\right) + \frac{1}{57\,600} \left(e^{-z} \sqrt{\pi} (-64 z^{19/2} + 3520 z^{17/2} - 72\,080 z^{15/2} + 693\,600 z^{13/2} - 3\,248\,700 z^{11/2} + 6\,855\,420 z^{9/2} - 4\,922\,775 z^{7/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anjt.01

$${}_2F_2\left(5, 6; -\frac{5}{2}, 5; z\right) = \frac{-16 z^8 - 672 z^7 - 9872 z^6 - 61\,680 z^5 - 155\,655 z^4 - 107\,520 z^3 + 20\,160 z^2 - 8640 z + 3600}{3600} + \frac{e^z \sqrt{\pi} (-32 z^{17/2} - 1360 z^{15/2} - 20\,400 z^{13/2} - 132\,600 z^{11/2} - 364\,650 z^{9/2} - 328\,185 z^{7/2}) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.anju.01

$${}_2F_2\left(5, 6; -\frac{5}{2}, 5; -z\right) = \frac{-16 z^8 + 672 z^7 - 9872 z^6 + 61\,680 z^5 - 155\,655 z^4 + 107\,520 z^3 + 20\,160 z^2 + 8640 z + 3600}{3600} + \frac{e^{-z} \sqrt{\pi} (32 z^{17/2} - 1360 z^{15/2} + 20\,400 z^{13/2} - 132\,600 z^{11/2} + 364\,650 z^{9/2} - 328\,185 z^{7/2}) \operatorname{erfi}(\sqrt{z})}{7200}$$

07.25.03.anjv.01

$${}_2F_2\left(5, 6; -\frac{5}{2}, 6; z\right) = \frac{1}{360} \left(-8 z^7 - 236 z^6 - 2226 z^5 - 7575 z^4 - 6720 z^3 + 1440 z^2 - 720 z + 360\right) + \frac{1}{720} e^z \sqrt{\pi} \left(-16 z^{15/2} - 480 z^{13/2} - 4680 z^{11/2} - 17\,160 z^{9/2} - 19\,305 z^{7/2}\right) \operatorname{erf}(\sqrt{z})$$

07.25.03.anjw.01

$${}_2F_2\left(5, 6; -\frac{5}{2}, 6; -z\right) = \frac{1}{360} \left(8 z^7 - 236 z^6 + 2226 z^5 - 7575 z^4 + 6720 z^3 + 1440 z^2 + 720 z + 360\right) + \frac{1}{720} e^{-z} \sqrt{\pi} \left(-16 z^{15/2} + 480 z^{13/2} - 4680 z^{11/2} + 17\,160 z^{9/2} - 19\,305 z^{7/2}\right) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = -\frac{3}{2}$

07.25.03.anjx.01

$${}_2F_2\left(5, 6; -\frac{3}{2}, 1; z\right) = \frac{1}{552960} (256 z^{11} + 21248 z^{10} + 702976 z^9 + 12007872 z^8 + 114724320 z^7 + 621191760 z^6 + 1843407648 z^5 + 2740611780 z^4 + 1672706385 z^3 + 232243200 z^2 - 11059200 z + 552960) + \frac{1}{1105920} \left(e^z \sqrt{\pi} (512 z^{23/2} + 42752 z^{21/2} + 1426944 z^{19/2} + 24698112 z^{17/2} + 240804288 z^{15/2} + 1346672160 z^{13/2} + 4217672160 z^{11/2} + 6905218320 z^{9/2} + 5118180210 z^{7/2} + 1217431215 z^{5/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anjy.01

$${}_2F_2\left(5, 6; -\frac{3}{2}, 1; -z\right) = \frac{1}{552960} (-256 z^{11} + 21248 z^{10} - 702976 z^9 + 12007872 z^8 - 114724320 z^7 + 621191760 z^6 - 1843407648 z^5 + 2740611780 z^4 - 1672706385 z^3 + 232243200 z^2 + 11059200 z + 552960) + \frac{1}{1105920} \left(e^{-z} \sqrt{\pi} (512 z^{23/2} - 42752 z^{21/2} + 1426944 z^{19/2} - 24698112 z^{17/2} + 240804288 z^{15/2} - 1346672160 z^{13/2} + 4217672160 z^{11/2} - 6905218320 z^{9/2} + 5118180210 z^{7/2} - 1217431215 z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anjz.01

$${}_2F_2\left(5, 6; -\frac{3}{2}, 2; z\right) = \frac{1}{276480} (128 z^{10} + 9152 z^9 + 255456 z^8 + 3581520 z^7 + 27036120 z^6 + 109335924 z^5 + 221057370 z^4 + 187348455 z^3 + 38707200 z^2 - 2764800 z + 276480) + \frac{1}{552960} \left(e^z \sqrt{\pi} (256 z^{21/2} + 18432 z^{19/2} + 519936 z^{17/2} + 7409664 z^{15/2} + 57420000 z^{13/2} + 242686080 z^{11/2} + 531376560 z^{9/2} + 530038080 z^{7/2} + 173918745 z^{5/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ank0.01

$${}_2F_2\left(5, 6; -\frac{3}{2}, 2; -z\right) = \frac{1}{276480} (128 z^{10} - 9152 z^9 + 255456 z^8 - 3581520 z^7 + 27036120 z^6 - 109335924 z^5 + 221057370 z^4 - 187348455 z^3 + 38707200 z^2 + 2764800 z + 276480) + \frac{1}{552960} \left(e^{-z} \sqrt{\pi} (-256 z^{21/2} + 18432 z^{19/2} - 519936 z^{17/2} + 7409664 z^{15/2} - 57420000 z^{13/2} + 242686080 z^{11/2} - 531376560 z^{9/2} + 530038080 z^{7/2} - 173918745 z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ank1.01

$${}_2F_2\left(5, 6; -\frac{3}{2}, 3; z\right) = \frac{1}{69120} (64 z^9 + 3840 z^8 + 87440 z^7 + 961920 z^6 + 5380956 z^5 + 14698800 z^4 + 16802415 z^3 + 4838400 z^2 - 460800 z + 69120) + \frac{1}{138240} \left(e^z \sqrt{\pi} (128 z^{19/2} + 7744 z^{17/2} + 178656 z^{15/2} + 2007600 z^{13/2} + 11645400 z^{11/2} + 34002540 z^{9/2} + 44671770 z^{7/2} + 19324305 z^{5/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ank2.01

$${}_2F_2\left(5, 6; -\frac{3}{2}, 3; -z\right) = \frac{1}{69120} (-64 z^9 + 3840 z^8 - 87440 z^7 + 961920 z^6 - 5380956 z^5 + 14698800 z^4 - 16802415 z^3 + 4838400 z^2 + 460800 z + 69120) + \frac{1}{138240} \left(e^{-z} \sqrt{\pi} (128 z^{19/2} - 7744 z^{17/2} + 178656 z^{15/2} - 2007600 z^{13/2} + 11645400 z^{11/2} - 34002540 z^{9/2} + 44671770 z^{7/2} - 19324305 z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ank3.01

$${}_2F_2\left(5, 6; -\frac{3}{2}, 4; z\right) = \frac{32 z^8 + 1552 z^7 + 27440 z^6 + 221016 z^5 + 823770 z^4 + 1253805 z^3 + 483840 z^2 - 57600 z + 11520}{11520} + \frac{1}{23040} \left(e^z \sqrt{\pi} (64 z^{17/2} + 3136 z^{15/2} + 56400 z^{13/2} + 468000 z^{11/2} + 1844700 z^{9/2} + 3166020 z^{7/2} + 1756755 z^{5/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ank4.01

$${}_2F_2\left(5, 6; -\frac{3}{2}, 4; -z\right) = \frac{32 z^8 - 1552 z^7 + 27440 z^6 - 221016 z^5 + 823770 z^4 - 1253805 z^3 + 483840 z^2 + 57600 z + 11520}{11520} + \frac{1}{23040} \left(e^{-z} \sqrt{\pi} (-64 z^{17/2} + 3136 z^{15/2} - 56400 z^{13/2} + 468000 z^{11/2} - 1844700 z^{9/2} + 3166020 z^{7/2} - 1756755 z^{5/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ank5.01

$${}_2F_2\left(5, 6; -\frac{3}{2}, 5; z\right) = \frac{16 z^7 + 592 z^6 + 7512 z^5 + 39420 z^4 + 79905 z^3 + 40320 z^2 - 5760 z + 1440}{1440} + \frac{e^z \sqrt{\pi} (32 z^{15/2} + 1200 z^{13/2} + 15600 z^{11/2} + 85800 z^{9/2} + 193050 z^{7/2} + 135135 z^{5/2}) \operatorname{erf}(\sqrt{z})}{2880}$$

07.25.03.ank6.01

$${}_2F_2\left(5, 6; -\frac{3}{2}, 5; -z\right) = \frac{-16 z^7 + 592 z^6 - 7512 z^5 + 39420 z^4 - 79905 z^3 + 40320 z^2 + 5760 z + 1440}{1440} + \frac{e^{-z} \sqrt{\pi} (32 z^{15/2} - 1200 z^{13/2} + 15600 z^{11/2} - 85800 z^{9/2} + 193050 z^{7/2} - 135135 z^{5/2}) \operatorname{erfi}(\sqrt{z})}{2880}$$

07.25.03.ank7.01

$${}_2F_2\left(5, 6; -\frac{3}{2}, 6; z\right) = \frac{1}{144} (8z^6 + 204z^5 + 1618z^4 + 4431z^3 + 2880z^2 - 480z + 144) + \frac{1}{288} e^z \sqrt{\pi} (16z^{13/2} + 416z^{11/2} + 3432z^{9/2} + 10296z^{7/2} + 9009z^{5/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ank8.01

$${}_2F_2\left(5, 6; -\frac{3}{2}, 6; -z\right) = \frac{1}{144} (8z^6 - 204z^5 + 1618z^4 - 4431z^3 + 2880z^2 + 480z + 144) + \frac{1}{288} e^{-z} \sqrt{\pi} (-16z^{13/2} + 416z^{11/2} - 3432z^{9/2} + 10296z^{7/2} - 9009z^{5/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = -\frac{1}{2}$

07.25.03.ank9.01

$${}_2F_2\left(5, 6; -\frac{1}{2}, 1; z\right) = \frac{1}{368640} (-256z^{10} - 18944z^9 - 551552z^8 - 8156160z^7 - 66040640z^6 - 294459168z^5 - 690561720z^4 - 761354160z^3 - 308405475z^2 - 22118400z + 368640) + \frac{1}{737280} (e^z \sqrt{\pi} (-512z^{21/2} - 38144z^{19/2} - 1121792z^{17/2} - 16845568z^{15/2} - 139730880z^{13/2} - 648017760z^{11/2} - 1625601120z^{9/2} - 2028414960z^{7/2} - 1061350290z^{5/2} - 156080925z^{3/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anka.01

$${}_2F_2\left(5, 6; -\frac{1}{2}, 1; -z\right) = \frac{1}{368640} (-256z^{10} + 18944z^9 - 551552z^8 + 8156160z^7 - 66040640z^6 + 294459168z^5 - 690561720z^4 + 761354160z^3 - 308405475z^2 + 22118400z + 368640) + \frac{1}{737280} (e^{-z} \sqrt{\pi} (512z^{21/2} - 38144z^{19/2} + 1121792z^{17/2} - 16845568z^{15/2} + 139730880z^{13/2} - 648017760z^{11/2} + 1625601120z^{9/2} - 2028414960z^{7/2} + 1061350290z^{5/2} - 156080925z^{3/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ankb.01

$${}_2F_2\left(5, 6; -\frac{1}{2}, 2; z\right) = \frac{1}{184320} (-128z^9 - 8128z^8 - 198624z^7 - 2393680z^6 - 15157464z^5 - 49689396z^4 - 77331450z^3 - 46198215z^2 - 5529600z + 184320) + \frac{1}{368640} (e^z \sqrt{\pi} (-256z^{19/2} - 16384z^{17/2} - 405248z^{15/2} - 4978176z^{13/2} - 32529120z^{11/2} - 112569600z^{9/2} - 193667760z^{7/2} - 142702560z^{5/2} - 31216185z^{3/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ankc.01

$${}_2F_2\left(5, 6; -\frac{1}{2}, 2; -z\right) = \frac{1}{184320} (128 z^9 - 8128 z^8 + 198624 z^7 - 2393680 z^6 + 15157464 z^5 - 49689396 z^4 + 77331450 z^3 - 46198215 z^2 + 5529600 z + 184320) + \frac{1}{368640} \left(e^{-z} \sqrt{\pi} (-256 z^{19/2} + 16384 z^{17/2} - 405248 z^{15/2} + 4978176 z^{13/2} - 32529120 z^{11/2} + 112569600 z^{9/2} - 193667760 z^{7/2} + 142702560 z^{5/2} - 31216185 z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ankd.01

$${}_2F_2\left(5, 6; -\frac{1}{2}, 3; z\right) = \frac{1}{46080} (-64 z^8 - 3392 z^7 - 67120 z^6 - 627936 z^5 - 2898828 z^4 - 6246660 z^3 - 5217345 z^2 - 921600 z + 46080) + \frac{1}{92160} \left(e^z \sqrt{\pi} (-128 z^{17/2} - 6848 z^{15/2} - 137568 z^{13/2} - 1319760 z^{11/2} - 6366360 z^{9/2} - 14903460 z^{7/2} - 14864850 z^{5/2} - 4459455 z^{3/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anke.01

$${}_2F_2\left(5, 6; -\frac{1}{2}, 3; -z\right) = \frac{1}{46080} (-64 z^8 + 3392 z^7 - 67120 z^6 + 627936 z^5 - 2898828 z^4 + 6246660 z^3 - 5217345 z^2 + 921600 z + 46080) + \frac{1}{92160} \left(e^{-z} \sqrt{\pi} (128 z^{17/2} - 6848 z^{15/2} + 137568 z^{13/2} - 1319760 z^{11/2} + 6366360 z^{9/2} - 14903460 z^{7/2} + 14864850 z^{5/2} - 4459455 z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ankf.01

$${}_2F_2\left(5, 6; -\frac{1}{2}, 4; z\right) = \frac{-32 z^7 - 1360 z^6 - 20656 z^5 - 139032 z^4 - 415450 z^3 - 472185 z^2 - 115200 z + 7680}{7680} + \frac{1}{15360} \left(e^z \sqrt{\pi} (-64 z^{15/2} - 2752 z^{13/2} - 42640 z^{11/2} - 297440 z^{9/2} - 952380 z^{7/2} - 1261260 z^{5/2} - 495495 z^{3/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ankg.01

$${}_2F_2\left(5, 6; -\frac{1}{2}, 4; -z\right) = \frac{32 z^7 - 1360 z^6 + 20656 z^5 - 139032 z^4 + 415450 z^3 - 472185 z^2 + 115200 z + 7680}{7680} + \frac{1}{15360} \left(e^{-z} \sqrt{\pi} (-64 z^{15/2} + 2752 z^{13/2} - 42640 z^{11/2} + 297440 z^{9/2} - 952380 z^{7/2} + 1261260 z^{5/2} - 495495 z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ankh.01

$${}_2F_2\left(5, 6; -\frac{1}{2}, 5; z\right) = \frac{1}{960} (-16 z^6 - 512 z^5 - 5472 z^4 - 23240 z^3 - 35595 z^2 - 11520 z + 960) + \frac{e^z \sqrt{\pi} (-32 z^{13/2} - 1040 z^{11/2} - 11440 z^{9/2} - 51480 z^{7/2} - 90090 z^{5/2} - 45045 z^{3/2}) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.anki.01

$${}_2F_2\left(5, 6; -\frac{1}{2}, 5; -z\right) = \frac{1}{960} (-16 z^6 + 512 z^5 - 5472 z^4 + 23\,240 z^3 - 35\,595 z^2 + 11\,520 z + 960) + \frac{e^{-z} \sqrt{\pi} (32 z^{13/2} - 1040 z^{11/2} + 11\,440 z^{9/2} - 51\,480 z^{7/2} + 90\,090 z^{5/2} - 45\,045 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1920}$$

07.25.03.ankj.01

$${}_2F_2\left(5, 6; -\frac{1}{2}, 6; z\right) = \frac{1}{96} (-8 z^5 - 172 z^4 - 1106 z^3 - 2295 z^2 - 960 z + 96) + \frac{1}{192} e^z \sqrt{\pi} (-16 z^{11/2} - 352 z^{9/2} - 2376 z^{7/2} - 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ankk.01

$${}_2F_2\left(5, 6; -\frac{1}{2}, 6; -z\right) = \frac{1}{96} (8 z^5 - 172 z^4 + 1106 z^3 - 2295 z^2 + 960 z + 96) + \frac{1}{192} e^{-z} \sqrt{\pi} (-16 z^{11/2} + 352 z^{9/2} - 2376 z^{7/2} + 5544 z^{5/2} - 3465 z^{3/2}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = \frac{1}{2}$

07.25.03.ankl.01

$${}_2F_2\left(5, 6; \frac{1}{2}, 1; z\right) = \frac{1}{737\,280} (256 z^9 + 16\,640 z^8 + 418\,560 z^7 + 5\,234\,240 z^6 + 34\,824\,864 z^5 + 122\,500\,080 z^4 + 213\,032\,400 z^3 + 156\,851\,100 z^2 + 34\,413\,525 z + 737\,280) + \frac{1}{1\,474\,560} (e^z \sqrt{\pi} (512 z^{19/2} + 33\,536 z^{17/2} + 853\,504 z^{15/2} + 10\,871\,040 z^{13/2} + 74\,504\,640 z^{11/2} + 275\,494\,560 z^{9/2} + 523\,622\,880 z^{7/2} + 457\,546\,320 z^{5/2} + 146\,257\,650 z^{3/2} + 9\,823\,275 \sqrt{z}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ankm.01

$${}_2F_2\left(5, 6; \frac{1}{2}, 1; -z\right) = \frac{1}{737\,280} (-256 z^9 + 16\,640 z^8 - 418\,560 z^7 + 5\,234\,240 z^6 - 34\,824\,864 z^5 + 122\,500\,080 z^4 - 213\,032\,400 z^3 + 156\,851\,100 z^2 - 34\,413\,525 z + 737\,280) + \frac{1}{1\,474\,560} (e^{-z} \sqrt{\pi} (512 z^{19/2} - 33\,536 z^{17/2} + 853\,504 z^{15/2} - 10\,871\,040 z^{13/2} + 74\,504\,640 z^{11/2} - 275\,494\,560 z^{9/2} + 523\,622\,880 z^{7/2} - 457\,546\,320 z^{5/2} + 146\,257\,650 z^{3/2} - 9\,823\,275 \sqrt{z}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ankn.01

$${}_2F_2\left(5, 6; \frac{1}{2}, 2; z\right) = \frac{1}{368\,640} (128 z^8 + 7104 z^7 + 148\,960 z^6 + 1\,503\,312 z^5 + 7\,707\,096 z^4 + 19\,456\,500 z^3 + 21\,484\,890 z^2 + 7\,784\,775 z + 368\,640) + \frac{1}{737\,280} (e^z \sqrt{\pi} (256 z^{17/2} + 14\,336 z^{15/2} + 304\,896 z^{13/2} + 3\,148\,800 z^{11/2} + 16\,785\,120 z^{9/2} + 45\,429\,120 z^{7/2} + 57\,380\,400 z^{5/2} + 27\,941\,760 z^{3/2} + 3\,274\,425 \sqrt{z}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anko.01

$${}_2F_2\left(5, 6; \frac{1}{2}, 2; -z\right) = \frac{1}{368\,640} (128 z^8 - 7104 z^7 + 148\,960 z^6 - 1\,503\,312 z^5 + 7\,707\,096 z^4 - 19\,456\,500 z^3 + 21\,484\,890 z^2 - 7\,784\,775 z + 368\,640) + \frac{1}{737\,280} \left(e^{-z} \sqrt{\pi} (-256 z^{17/2} + 14\,336 z^{15/2} - 304\,896 z^{13/2} + 3\,148\,800 z^{11/2} - 16\,785\,120 z^{9/2} + 45\,429\,120 z^{7/2} - 57\,380\,400 z^{5/2} + 27\,941\,760 z^{3/2} - 3\,274\,425 \sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ankp.01

$${}_2F_2\left(5, 6; \frac{1}{2}, 3; z\right) = \frac{64 z^7 + 2944 z^6 + 49\,488 z^5 + 381\,888 z^4 + 1\,392\,636 z^3 + 2\,210\,040 z^2 + 1\,188\,315 z + 92\,160}{92\,160} + \frac{1}{184\,320} \left(e^z \sqrt{\pi} (128 z^{15/2} + 5952 z^{13/2} + 101\,856 z^{11/2} + 810\,480 z^{9/2} + 3\,124\,440 z^{7/2} + 5\,530\,140 z^{5/2} + 3\,804\,570 z^{3/2} + 654\,885 \sqrt{z}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ankq.01

$${}_2F_2\left(5, 6; \frac{1}{2}, 3; -z\right) = \frac{-64 z^7 + 2944 z^6 - 49\,488 z^5 + 381\,888 z^4 - 1\,392\,636 z^3 + 2\,210\,040 z^2 - 1\,188\,315 z + 92\,160}{92\,160} + \frac{1}{184\,320} \left(e^{-z} \sqrt{\pi} (128 z^{15/2} - 5952 z^{13/2} + 101\,856 z^{11/2} - 810\,480 z^{9/2} + 3\,124\,440 z^{7/2} - 5\,530\,140 z^{5/2} + 3\,804\,570 z^{3/2} - 654\,885 \sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ankr.01

$${}_2F_2\left(5, 6; \frac{1}{2}, 4; z\right) = \frac{32 z^6 + 1168 z^5 + 14\,832 z^4 + 80\,248 z^3 + 180\,810 z^2 + 136\,845 z + 15\,360}{15\,360} + \frac{1}{30\,720} \left(e^z \sqrt{\pi} (64 z^{13/2} + 2368 z^{11/2} + 30\,800 z^{9/2} + 174\,240 z^{7/2} + 429\,660 z^{5/2} + 401\,940 z^{3/2} + 93\,555 \sqrt{z}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anks.01

$${}_2F_2\left(5, 6; \frac{1}{2}, 4; -z\right) = \frac{32 z^6 - 1168 z^5 + 14\,832 z^4 - 80\,248 z^3 + 180\,810 z^2 - 136\,845 z + 15\,360}{15\,360} + \frac{1}{30\,720} \left(e^{-z} \sqrt{\pi} (-64 z^{13/2} + 2368 z^{11/2} - 30\,800 z^{9/2} + 174\,240 z^{7/2} - 429\,660 z^{5/2} + 401\,940 z^{3/2} - 93\,555 \sqrt{z}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ankt.01

$${}_2F_2\left(5, 6; \frac{1}{2}, 5; z\right) = \frac{16 z^5 + 432 z^4 + 3752 z^3 + 12\,180 z^2 + 12\,645 z + 1920}{1920} + \frac{e^z \sqrt{\pi} (32 z^{11/2} + 880 z^{9/2} + 7920 z^{7/2} + 27\,720 z^{5/2} + 34\,650 z^{3/2} + 10\,395 \sqrt{z}) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.anku.01

$${}_2F_2\left(5, 6; \frac{1}{2}, 5; -z\right) = \frac{-16 z^5 + 432 z^4 - 3752 z^3 + 12\,180 z^2 - 12\,645 z + 1920}{1920} + \frac{e^{-z} \sqrt{\pi} (32 z^{11/2} - 880 z^{9/2} + 7920 z^{7/2} - 27\,720 z^{5/2} + 34\,650 z^{3/2} - 10\,395 \sqrt{z}) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.ankv.01

$${}_2F_2\left(5, 6; \frac{1}{2}, 6; z\right) = \frac{1}{192} (8z^4 + 140z^3 + 690z^2 + 975z + 192) + \frac{1}{384} e^z \sqrt{\pi} (16z^{9/2} + 288z^{7/2} + 1512z^{5/2} + 2520z^{3/2} + 945\sqrt{z}) \operatorname{erf}(\sqrt{z})$$

07.25.03.ankw.01

$${}_2F_2\left(5, 6; \frac{1}{2}, 6; -z\right) = \frac{1}{192} (8z^4 - 140z^3 + 690z^2 - 975z + 192) + \frac{1}{384} e^{-z} \sqrt{\pi} (-16z^{9/2} + 288z^{7/2} - 1512z^{5/2} + 2520z^{3/2} - 945\sqrt{z}) \operatorname{erfi}(\sqrt{z})$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = 1$

07.25.03.ankx.01

$${}_2F_2(5, 6; 1, 1; z) = \frac{1}{2880} (e^z (z^9 + 61z^8 + 1432z^7 + 16616z^6 + 102024z^5 + 330120z^4 + 529920z^3 + 368640z^2 + 83520z + 2880))$$

07.25.03.anky.01

$${}_2F_2\left(5, 6; 1, \frac{3}{2}; z\right) = \frac{1}{1474560} (256z^8 + 14336z^7 + 304000z^6 + 3113088z^5 + 16281600z^4 + 42329280z^3 + 49087080z^2 + 19701000z + 1375335) + \frac{1}{2949120\sqrt{z}} (e^z \sqrt{\pi} (512z^9 + 28928z^8 + 622080z^7 + 6516480z^6 + 35405760z^5 + 98465760z^4 + 129759840z^3 + 68266800z^2 + 9724050z + 99225) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ankz.01

$${}_2F_2\left(5, 6; 1, \frac{3}{2}; -z\right) = \frac{1}{1474560} (256z^8 - 14336z^7 + 304000z^6 - 3113088z^5 + 16281600z^4 - 42329280z^3 + 49087080z^2 - 19701000z + 1375335) + \frac{1}{2949120\sqrt{z}} (e^{-z} \sqrt{\pi} (-512z^9 + 28928z^8 - 622080z^7 + 6516480z^6 - 35405760z^5 + 98465760z^4 - 129759840z^3 + 68266800z^2 - 9724050z + 99225) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anl0.01

$${}_2F_2(5, 6; 1, 2; z) = \frac{e^z (z^8 + 52z^7 + 1016z^6 + 9504z^5 + 45000z^4 + 105120z^3 + 109440z^2 + 40320z + 2880)}{2880}$$

07.25.03.an1.01

$${}_2F_2\left(5, 6; 1, \frac{5}{2}; z\right) = \frac{1}{983040z} (256z^8 + 12032z^7 + 207872z^6 + 1663680z^5 + 6389600z^4 + 11003280z^3 + 6917760z^2 + 884340z - 1575) + \frac{1}{1966080z^{3/2}} \left(e^z \sqrt{\pi} (512z^9 + 24320z^8 + 427520z^7 + 3523840z^6 + 14262720z^5 + 27152160z^4 + 21151200z^3 + 4813200z^2 + 97650z + 1575) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an2.01

$${}_2F_2\left(5, 6; 1, \frac{5}{2}; -z\right) = \frac{1}{983040z} (-256z^8 + 12032z^7 - 207872z^6 + 1663680z^5 - 6389600z^4 + 11003280z^3 - 6917760z^2 + 884340z + 1575) + \frac{1}{1966080z^{3/2}} \left(e^{-z} \sqrt{\pi} (512z^9 - 24320z^8 + 427520z^7 - 3523840z^6 + 14262720z^5 - 27152160z^4 + 21151200z^3 - 4813200z^2 + 97650z - 1575) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an3.01

$${}_2F_2(5, 6; 1, 3; z) = \frac{e^z (z^7 + 43z^6 + 672z^5 + 4800z^4 + 16200z^3 + 24120z^2 + 12960z + 1440)}{1440}$$

07.25.03.an4.01

$${}_2F_2\left(5, 6; 1, \frac{7}{2}; z\right) = \frac{256z^8 + 9728z^7 + 130176z^6 + 756992z^5 + 1901760z^4 + 1749600z^3 + 344088z^2 - 1440z - 405}{393216z^2} + \frac{1}{786432z^{5/2}} \left(e^z \sqrt{\pi} (512z^9 + 19712z^8 + 269824z^7 + 1635072z^6 + 4452288z^5 + 4890720z^4 + 1588320z^3 + 48240z^2 + 1170z + 405) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.an5.01

$${}_2F_2\left(5, 6; 1, \frac{7}{2}; -z\right) = \frac{256z^8 - 9728z^7 + 130176z^6 - 756992z^5 + 1901760z^4 - 1749600z^3 + 344088z^2 + 1440z - 405}{393216z^2} + \frac{1}{786432z^{5/2}} \left(e^{-z} \sqrt{\pi} (-512z^9 + 19712z^8 - 269824z^7 + 1635072z^6 - 4452288z^5 + 4890720z^4 - 1588320z^3 + 48240z^2 - 1170z + 405) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.an6.01

$${}_2F_2(5, 6; 1, 4; z) = \frac{1}{480} e^z (z^6 + 34z^5 + 400z^4 + 2000z^3 + 4200z^2 + 3120z + 480)$$

07.25.03.an7.01

$${}_2F_2\left(5, 6; 1, \frac{9}{2}; z\right) = \frac{7(256z^8 + 7424z^7 + 70912z^6 + 264000z^5 + 345120z^4 + 96048z^3 - 720z^2 - 180z - 675)}{786432z^3} + \frac{1}{1572864z^{7/2}} \left(7 e^z \sqrt{\pi} (512z^9 + 15104z^8 + 148992z^7 + 592128z^6 + 899520z^5 + 393120z^4 + 15840z^3 + 720z^2 - 270z + 675) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anl8.01

$${}_2F_2\left(5, 6; 1, \frac{9}{2}; -z\right) = \frac{1}{1572864 z^{7/2}} \left(7 e^{-z} \sqrt{\pi} (512 z^9 - 15104 z^8 + 148992 z^7 - 592128 z^6 + 899520 z^5 - 393120 z^4 + 15840 z^3 - 720 z^2 - 270 z - 675) \operatorname{erfi}(\sqrt{z})\right) - \frac{7(256 z^8 - 7424 z^7 + 70912 z^6 - 264000 z^5 + 345120 z^4 - 96048 z^3 - 720 z^2 + 180 z - 675)}{786432 z^3}$$

07.25.03.anl9.01

$${}_2F_2(5, 6; 1, 5; z) = \frac{1}{120} e^z (z^5 + 25 z^4 + 200 z^3 + 600 z^2 + 600 z + 120)$$

07.25.03.anla.01

$${}_2F_2\left(5, 6; 1, \frac{11}{2}; z\right) = \frac{21(256 z^8 + 5120 z^7 + 30080 z^6 + 55680 z^5 + 20864 z^4 - 1080 z^2 + 3000 z - 11025)}{524288 z^4} + \frac{1}{1048576 z^{9/2}} \left(21 e^z \sqrt{\pi} (512 z^9 + 10496 z^8 + 65024 z^7 + 136960 z^6 + 77760 z^5 + 4320 z^4 - 1440 z^3 + 5040 z^2 - 10350 z + 11025) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anlb.01

$${}_2F_2\left(5, 6; 1, \frac{11}{2}; -z\right) = \frac{21(256 z^8 - 5120 z^7 + 30080 z^6 - 55680 z^5 + 20864 z^4 - 1080 z^2 - 3000 z - 11025)}{524288 z^4} - \frac{1}{1048576 z^{9/2}} \left(21 e^{-z} \sqrt{\pi} (512 z^9 - 10496 z^8 + 65024 z^7 - 136960 z^6 + 77760 z^5 - 4320 z^4 - 1440 z^3 - 5040 z^2 - 10350 z - 11025) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anlc.01

$${}_2F_2(5, 6; 1, 6; z) = \frac{1}{24} e^z (z^4 + 16 z^3 + 72 z^2 + 96 z + 24)$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = \frac{3}{2}$

07.25.03.anld.01

$${}_2F_2\left(5, 6; \frac{3}{2}, 2; z\right) = \frac{128 z^7 + 6080 z^6 + 106464 z^5 + 867408 z^4 + 3416280 z^3 + 6117300 z^2 + 4131450 z + 638055}{737280} + \frac{1}{1474560 \sqrt{z}} \left(e^z \sqrt{\pi} (256 z^8 + 12288 z^7 + 218880 z^6 + 1835520 z^5 + 7607520 z^4 + 14999040 z^3 + 12383280 z^2 + 3175200 z + 99225) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anle.01

$${}_2F_2\left(5, 6; \frac{3}{2}, 2; -z\right) = \frac{-128 z^7 + 6080 z^6 - 106464 z^5 + 867408 z^4 - 3416280 z^3 + 6117300 z^2 - 4131450 z + 638055}{737280} + \frac{1}{1474560 \sqrt{z}} \left(e^{-z} \sqrt{\pi} (256 z^8 - 12288 z^7 + 218880 z^6 - 1835520 z^5 + 7607520 z^4 - 14999040 z^3 + 12383280 z^2 - 3175200 z + 99225) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anlf.01

$${}_2F_2\left(5, 6; \frac{3}{2}, 3; z\right) = \frac{64 z^6 + 2496 z^5 + 34 544 z^4 + 210 336 z^3 + 565 740 z^2 + 584 940 z + 151 245}{184 320} + \frac{1}{368 640 \sqrt{z}} \left(e^z \sqrt{\pi} (128 z^7 + 5056 z^6 + 71 520 z^5 + 452 880 z^4 + 1 312 920 z^3 + 1 591 380 z^2 + 621 810 z + 33 075) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anlg.01

$${}_2F_2\left(5, 6; \frac{3}{2}, 3; -z\right) = \frac{64 z^6 - 2496 z^5 + 34 544 z^4 - 210 336 z^3 + 565 740 z^2 - 584 940 z + 151 245}{184 320} + \frac{1}{368 640 \sqrt{z}} \left(e^{-z} \sqrt{\pi} (-128 z^7 + 5056 z^6 - 71 520 z^5 + 452 880 z^4 - 1 312 920 z^3 + 1 591 380 z^2 - 621 810 z + 33 075) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anlh.01

$${}_2F_2\left(5, 6; \frac{3}{2}, 4; z\right) = \frac{32 z^5 + 976 z^4 + 9968 z^3 + 40 824 z^2 + 62 250 z + 24 105}{30 720} + \frac{e^z \sqrt{\pi} (64 z^6 + 1984 z^5 + 20 880 z^4 + 90 720 z^3 + 157 500 z^2 + 86 940 z + 6615) \operatorname{erf}(\sqrt{z})}{61 440 \sqrt{z}}$$

07.25.03.anli.01

$${}_2F_2\left(5, 6; \frac{3}{2}, 4; -z\right) = \frac{-32 z^5 + 976 z^4 - 9968 z^3 + 40 824 z^2 - 62 250 z + 24 105}{30 720} + \frac{e^{-z} \sqrt{\pi} (64 z^6 - 1984 z^5 + 20 880 z^4 - 90 720 z^3 + 157 500 z^2 - 86 940 z + 6615) \operatorname{erfi}(\sqrt{z})}{61 440 \sqrt{z}}$$

07.25.03.anlj.01

$${}_2F_2\left(5, 6; \frac{3}{2}, 5; z\right) = \frac{16 z^4 + 352 z^3 + 2352 z^2 + 5280 z + 2895}{3840} + \frac{e^z \sqrt{\pi} (32 z^5 + 720 z^4 + 5040 z^3 + 12 600 z^2 + 9450 z + 945) \operatorname{erf}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.anlk.01

$${}_2F_2\left(5, 6; \frac{3}{2}, 5; -z\right) = \frac{16 z^4 - 352 z^3 + 2352 z^2 - 5280 z + 2895}{3840} + \frac{e^{-z} \sqrt{\pi} (-32 z^5 + 720 z^4 - 5040 z^3 + 12 600 z^2 - 9450 z + 945) \operatorname{erfi}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.anll.01

$${}_2F_2\left(5, 6; \frac{3}{2}, 6; z\right) = \frac{1}{384} (8 z^3 + 108 z^2 + 370 z + 279) + \frac{e^z \sqrt{\pi} (16 z^4 + 224 z^3 + 840 z^2 + 840 z + 105) \operatorname{erf}(\sqrt{z})}{768 \sqrt{z}}$$

07.25.03.anlm.01

$${}_2F_2\left(5, 6; \frac{3}{2}, 6; -z\right) = \frac{1}{384} (-8 z^3 + 108 z^2 - 370 z + 279) + \frac{e^{-z} \sqrt{\pi} (16 z^4 - 224 z^3 + 840 z^2 - 840 z + 105) \operatorname{erfi}(\sqrt{z})}{768 \sqrt{z}}$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = 2$

07.25.03.anln.01

$${}_2F_2(5, 6; 2, 2; z) = \frac{e^z (z^7 + 44 z^6 + 708 z^5 + 5256 z^4 + 18\,720 z^3 + 30\,240 z^2 + 18\,720 z + 2880)}{2880}$$

07.25.03.anlo.01

$${}_2F_2\left(5, 6; 2, \frac{5}{2}; z\right) = \frac{128 z^7 + 5056 z^6 + 71\,136 z^5 + 442\,960 z^4 + 1\,231\,320 z^3 + 1\,345\,140 z^2 + 391\,770 z + 1575}{491\,520 z} + \frac{1}{983\,040 z^{3/2}} \left(e^z \sqrt{\pi} (256 z^8 + 10\,240 z^7 + 147\,200 z^6 + 952\,320 z^5 + 2\,845\,920 z^4 + 3\,615\,360 z^3 + 1\,537\,200 z^2 + 100\,800 z - 1575) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anlp.01

$${}_2F_2\left(5, 6; 2, \frac{5}{2}; -z\right) = \frac{128 z^7 - 5056 z^6 + 71\,136 z^5 - 442\,960 z^4 + 1\,231\,320 z^3 - 1\,345\,140 z^2 + 391\,770 z - 1575}{491\,520 z} + \frac{1}{983\,040 z^{3/2}} \left(e^{-z} \sqrt{\pi} (-256 z^8 + 10\,240 z^7 - 147\,200 z^6 + 952\,320 z^5 - 2\,845\,920 z^4 + 3\,615\,360 z^3 - 1\,537\,200 z^2 + 100\,800 z + 1575) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anlq.01

$${}_2F_2(5, 6; 2, 3; z) = \frac{e^z (z^6 + 36 z^5 + 456 z^4 + 2520 z^3 + 6120 z^2 + 5760 z + 1440)}{1440}$$

07.25.03.anlr.01

$${}_2F_2\left(5, 6; 2, \frac{7}{2}; z\right) = \frac{128 z^7 + 4032 z^6 + 42\,976 z^5 + 186\,960 z^4 + 313\,560 z^3 + 146\,484 z^2 + 1530 z + 135}{196\,608 z^2} + \frac{1}{393\,216 z^{5/2}} \left(e^z \sqrt{\pi} (256 z^8 + 8192 z^7 + 89\,856 z^6 + 413\,184 z^5 + 780\,000 z^4 + 495\,360 z^3 + 51\,120 z^2 - 1440 z - 135) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anls.01

$${}_2F_2\left(5, 6; 2, \frac{7}{2}; -z\right) = \frac{-128 z^7 + 4032 z^6 - 42\,976 z^5 + 186\,960 z^4 - 313\,560 z^3 + 146\,484 z^2 - 1530 z + 135}{196\,608 z^2} + \frac{1}{393\,216 z^{5/2}} \left(e^{-z} \sqrt{\pi} (256 z^8 - 8192 z^7 + 89\,856 z^6 - 413\,184 z^5 + 780\,000 z^4 - 495\,360 z^3 + 51\,120 z^2 + 1440 z - 135) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anlt.01

$${}_2F_2(5, 6; 2, 4; z) = \frac{1}{480} e^z (z^5 + 28 z^4 + 260 z^3 + 960 z^2 + 1320 z + 480)$$

07.25.03.anlu.01

$${}_2F_2\left(5, 6; 2, \frac{9}{2}; z\right) = \frac{7 (128 z^7 + 3008 z^6 + 21\,984 z^5 + 56\,400 z^4 + 39\,384 z^3 + 756 z^2 + 90 z + 135)}{393\,216 z^3} + \frac{1}{786\,432 z^{7/2}} \left(7 e^z \sqrt{\pi} (256 z^8 + 6144 z^7 + 46\,848 z^6 + 132\,096 z^5 + 119\,520 z^4 + 17\,280 z^3 - 720 z^2 - 135) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anlv.01

$${}_2F_2\left(5, 6; 2, \frac{9}{2}; -z\right) = \frac{7 (128 z^7 - 3008 z^6 + 21\,984 z^5 - 56\,400 z^4 + 39\,384 z^3 - 756 z^2 + 90 z - 135)}{393\,216 z^3} - \frac{1}{786\,432 z^{7/2}} \left(7 e^{-z} \sqrt{\pi} (256 z^8 - 6144 z^7 + 46\,848 z^6 - 132\,096 z^5 + 119\,520 z^4 - 17\,280 z^3 - 720 z^2 - 135) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anlw.01

$${}_2F_2(5, 6; 2, 5; z) = \frac{1}{120} e^z (z^4 + 20 z^3 + 120 z^2 + 240 z + 120)$$

07.25.03.anlx.01

$${}_2F_2\left(5, 6; 2, \frac{11}{2}; z\right) = \frac{21(128 z^7 + 1984 z^6 + 8160 z^5 + 8272 z^4 + 216 z^3 + 180 z^2 - 390 z + 1575)}{262144 z^4} + \frac{21 e^z \sqrt{\pi} (256 z^8 + 4096 z^7 + 18176 z^6 + 23040 z^5 + 4320 z^4 - 720 z^2 + 1440 z - 1575) \operatorname{erf}(\sqrt{z})}{524288 z^{9/2}}$$

07.25.03.anly.01

$${}_2F_2\left(5, 6; 2, \frac{11}{2}; -z\right) = \frac{21 e^{-z} \sqrt{\pi} (256 z^8 - 4096 z^7 + 18176 z^6 - 23040 z^5 + 4320 z^4 - 720 z^2 - 1440 z - 1575) \operatorname{erfi}(\sqrt{z})}{524288 z^{9/2}} - \frac{21(128 z^7 - 1984 z^6 + 8160 z^5 - 8272 z^4 + 216 z^3 - 180 z^2 - 390 z - 1575)}{262144 z^4}$$

07.25.03.anlz.01

$${}_2F_2(5, 6; 2, 6; z) = \frac{1}{24} e^z (z^3 + 12 z^2 + 36 z + 24)$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = \frac{5}{2}$

07.25.03.anm0.01

$${}_2F_2\left(5, 6; \frac{5}{2}, 3; z\right) = \frac{64 z^6 + 2048 z^5 + 22288 z^4 + 99840 z^3 + 175260 z^2 + 89280 z + 1575}{122880 z} + \frac{1}{245760 z^{3/2}} \left(e^z \sqrt{\pi} (128 z^7 + 4160 z^6 + 46560 z^5 + 220080 z^4 + 432600 z^3 + 293580 z^2 + 34650 z - 1575) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anm1.01

$${}_2F_2\left(5, 6; \frac{5}{2}, 3; -z\right) = \frac{-64 z^6 + 2048 z^5 - 22288 z^4 + 99840 z^3 - 175260 z^2 + 89280 z - 1575}{122880 z} + \frac{1}{245760 z^{3/2}} \left(e^{-z} \sqrt{\pi} (128 z^7 - 4160 z^6 + 46560 z^5 - 220080 z^4 + 432600 z^3 - 293580 z^2 + 34650 z + 1575) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anm2.01

$${}_2F_2\left(5, 6; \frac{5}{2}, 4; z\right) = \frac{32 z^5 + 784 z^4 + 6064 z^3 + 16920 z^2 + 13690 z + 525}{20480 z} + \frac{e^z \sqrt{\pi} (64 z^6 + 1600 z^5 + 12880 z^4 + 39200 z^3 + 39900 z^2 + 7140 z - 525) \operatorname{erf}(\sqrt{z})}{40960 z^{3/2}}$$

07.25.03.anm3.01

$${}_2F_2\left(5, 6; \frac{5}{2}, 4; -z\right) = \frac{32 z^5 - 784 z^4 + 6064 z^3 - 16920 z^2 + 13690 z - 525}{20480 z} + \frac{e^{-z} \sqrt{\pi} (-64 z^6 + 1600 z^5 - 12880 z^4 + 39200 z^3 - 39900 z^2 + 7140 z + 525) \operatorname{erfi}(\sqrt{z})}{40960 z^{3/2}}$$

07.25.03.anm4.01

$${}_2F_2\left(5, 6; \frac{5}{2}, 5; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z \sqrt{\pi} (32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105) \operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.anm5.01

$${}_2F_2\left(5, 6; \frac{5}{2}, 5; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z} \sqrt{\pi} (32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105) \operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.anm6.01

$${}_2F_2\left(5, 6; \frac{5}{2}, 6; z\right) = \frac{8z^3 + 76z^2 + 146z + 15}{256z} + \frac{e^z \sqrt{\pi} (16z^4 + 160z^3 + 360z^2 + 120z - 15) \operatorname{erf}(\sqrt{z})}{512z^{3/2}}$$

07.25.03.anm7.01

$${}_2F_2\left(5, 6; \frac{5}{2}, 6; -z\right) = \frac{8z^3 - 76z^2 + 146z - 15}{256z} + \frac{e^{-z} \sqrt{\pi} (-16z^4 + 160z^3 - 360z^2 + 120z + 15) \operatorname{erfi}(\sqrt{z})}{512z^{3/2}}$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = 3$

07.25.03.anm8.01

$${}_2F_2(5, 6; 3, 3; z) = \frac{1}{720} e^z (z^5 + 29z^4 + 282z^3 + 1110z^2 + 1680z + 720)$$

07.25.03.anm9.01

$${}_2F_2\left(5, 6; 3, \frac{7}{2}; z\right) = \frac{64z^6 + 1600z^5 + 12720z^4 + 36960z^3 + 32076z^2 + 1620z - 135}{49152z^2} + \frac{e^z \sqrt{\pi} (128z^7 + 3264z^6 + 26976z^5 + 85200z^4 + 91800z^3 + 18180z^2 - 1710z + 135) \operatorname{erf}(\sqrt{z})}{98304z^{5/2}}$$

07.25.03.anma.01

$${}_2F_2\left(5, 6; 3, \frac{7}{2}; -z\right) = \frac{64z^6 - 1600z^5 + 12720z^4 - 36960z^3 + 32076z^2 - 1620z - 135}{49152z^2} + \frac{1}{98304z^{5/2}} \left(e^{-z} \sqrt{\pi} (-128z^7 + 3264z^6 - 26976z^5 + 85200z^4 - 91800z^3 + 18180z^2 + 1710z + 135) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anmb.01

$${}_2F_2(5, 6; 3, 4; z) = \frac{1}{240} e^z (z^4 + 22z^3 + 150z^2 + 360z + 240)$$

07.25.03.anmc.01

$${}_2F_2\left(5, 6; 3, \frac{9}{2}; z\right) = \frac{7(64z^6 + 1152z^5 + 5840z^4 + 8256z^3 + 828z^2 - 120z - 45)}{98304z^3} + \frac{7e^z \sqrt{\pi} (128z^7 + 2368z^6 + 12768z^5 + 21360z^4 + 6360z^3 - 900z^2 + 90z + 45) \operatorname{erf}(\sqrt{z})}{196608z^{7/2}}$$

07.25.03.anmd.01

$${}_2F_2\left(5, 6; 3, \frac{9}{2}; -z\right) = \frac{7 e^{-z} \sqrt{\pi} (128 z^7 - 2368 z^6 + 12768 z^5 - 21360 z^4 + 6360 z^3 + 900 z^2 + 90 z - 45) \operatorname{erfi}(\sqrt{z})}{196608 z^{7/2}} - \frac{7(64 z^6 - 1152 z^5 + 5840 z^4 - 8256 z^3 + 828 z^2 + 120 z - 45)}{98304 z^3}$$

07.25.03.anme.01

$${}_2F_2(5, 6; 3, 5; z) = \frac{1}{60} e^z (z^3 + 15 z^2 + 60 z + 60)$$

07.25.03.anmf.01

$${}_2F_2\left(5, 6; 3, \frac{11}{2}; z\right) = \frac{21(64 z^6 + 704 z^5 + 1648 z^4 + 288 z^3 - 84 z^2 + 60 z - 315)}{65536 z^4} + \frac{21 e^z \sqrt{\pi} (128 z^7 + 1472 z^6 + 3936 z^5 + 1680 z^4 - 360 z^3 + 180 z^2 - 270 z + 315) \operatorname{erf}(\sqrt{z})}{131072 z^{9/2}}$$

07.25.03.anmg.01

$${}_2F_2\left(5, 6; 3, \frac{11}{2}; -z\right) = \frac{21(64 z^6 - 704 z^5 + 1648 z^4 - 288 z^3 - 84 z^2 - 60 z - 315)}{65536 z^4} - \frac{21 e^{-z} \sqrt{\pi} (128 z^7 - 1472 z^6 + 3936 z^5 - 1680 z^4 - 360 z^3 - 180 z^2 - 270 z - 315) \operatorname{erfi}(\sqrt{z})}{131072 z^{9/2}}$$

07.25.03.anmh.01

$${}_2F_2(5, 6; 3, 6; z) = \frac{1}{12} e^z (z^2 + 8 z + 12)$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = \frac{7}{2}$

07.25.03.anmi.01

$${}_2F_2\left(5, 6; \frac{7}{2}, 4; z\right) = \frac{32 z^5 + 592 z^4 + 3120 z^3 + 4696 z^2 + 570 z - 135}{8192 z^2} + \frac{e^z \sqrt{\pi} (64 z^6 + 1216 z^5 + 6800 z^4 + 12000 z^3 + 3900 z^2 - 660 z + 135) \operatorname{erf}(\sqrt{z})}{16384 z^{5/2}}$$

07.25.03.anmj.01

$${}_2F_2\left(5, 6; \frac{7}{2}, 4; -z\right) = \frac{-32 z^5 + 592 z^4 - 3120 z^3 + 4696 z^2 - 570 z - 135}{8192 z^2} + \frac{e^{-z} \sqrt{\pi} (64 z^6 - 1216 z^5 + 6800 z^4 - 12000 z^3 + 3900 z^2 + 660 z + 135) \operatorname{erfi}(\sqrt{z})}{16384 z^{5/2}}$$

07.25.03.anmk.01

$${}_2F_2\left(5, 6; \frac{7}{2}, 5; z\right) = \frac{16 z^4 + 192 z^3 + 512 z^2 + 120 z - 45}{1024 z^2} + \frac{e^z \sqrt{\pi} (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45) \operatorname{erf}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.anml.01

$${}_2F_2\left(5, 6; \frac{7}{2}, 5; -z\right) = \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z}\sqrt{\pi}(-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45)\operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.anmm.01

$${}_2F_2\left(5, 6; \frac{7}{2}, 6; z\right) = \frac{5(8z^3 + 44z^2 + 18z - 9)}{512z^2} + \frac{5e^z\sqrt{\pi}(16z^4 + 96z^3 + 72z^2 - 24z + 9)\operatorname{erf}(\sqrt{z})}{1024z^{5/2}}$$

07.25.03.anmn.01

$${}_2F_2\left(5, 6; \frac{7}{2}, 6; -z\right) = \frac{5e^{-z}\sqrt{\pi}(16z^4 - 96z^3 + 72z^2 + 24z + 9)\operatorname{erfi}(\sqrt{z})}{1024z^{5/2}} - \frac{5(8z^3 - 44z^2 + 18z + 9)}{512z^2}$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = 4$

07.25.03.anmo.01

$${}_2F_2(5, 6; 4, 4; z) = \frac{1}{80}e^z(z^3 + 16z^2 + 70z + 80)$$

07.25.03.anmp.01

$${}_2F_2\left(5, 6; 4, \frac{9}{2}; z\right) = \frac{7(32z^5 + 400z^4 + 1136z^3 + 312z^2 - 150z + 45)}{16384z^3} + \frac{7e^z\sqrt{\pi}(64z^6 + 832z^5 + 2640z^4 + 1440z^3 - 420z^2 + 180z - 45)\operatorname{erf}(\sqrt{z})}{32768z^{7/2}}$$

07.25.03.anmq.01

$${}_2F_2\left(5, 6; 4, \frac{9}{2}; -z\right) = \frac{7(32z^5 - 400z^4 + 1136z^3 - 312z^2 - 150z - 45)}{16384z^3} - \frac{7e^{-z}\sqrt{\pi}(64z^6 - 832z^5 + 2640z^4 - 1440z^3 - 420z^2 - 180z - 45)\operatorname{erfi}(\sqrt{z})}{32768z^{7/2}}$$

07.25.03.anmr.01

$${}_2F_2(5, 6; 4, 5; z) = \frac{1}{20}e^z(z^2 + 10z + 20)$$

07.25.03.anms.01

$${}_2F_2\left(5, 6; 4, \frac{11}{2}; z\right) = \frac{63(32z^5 + 208z^4 + 112z^3 - 72z^2 + 10z + 105)}{32768z^4} + \frac{63e^z\sqrt{\pi}(64z^6 + 448z^5 + 400z^4 - 160z^3 + 60z^2 + 60z - 105)\operatorname{erf}(\sqrt{z})}{65536z^{9/2}}$$

07.25.03.anmt.01

$${}_2F_2\left(5, 6; 4, \frac{11}{2}; -z\right) = \frac{63e^{-z}\sqrt{\pi}(64z^6 - 448z^5 + 400z^4 + 160z^3 + 60z^2 - 60z - 105)\operatorname{erfi}(\sqrt{z})}{65536z^{9/2}} - \frac{63(32z^5 - 208z^4 + 112z^3 + 72z^2 + 10z - 105)}{32768z^4}$$

07.25.03.anmu.01

$${}_2F_2(5, 6; 4, 6; z) = \frac{1}{4} e^z (z + 4)$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = \frac{9}{2}$

07.25.03.anmv.01

$${}_2F_2\left(5, 6; \frac{9}{2}, 5; z\right) = \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z \sqrt{\pi} (32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45) \operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.anmw.01

$${}_2F_2\left(5, 6; \frac{9}{2}, 5; -z\right) = \frac{7e^{-z} \sqrt{\pi} (32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45) \operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.anmx.01

$${}_2F_2\left(5, 6; \frac{9}{2}, 6; z\right) = \frac{35(8z^3 + 12z^2 - 14z + 15)}{1024z^3} + \frac{35e^z \sqrt{\pi} (16z^4 + 32z^3 - 24z^2 + 24z - 15) \operatorname{erf}(\sqrt{z})}{2048z^{7/2}}$$

07.25.03.anmy.01

$${}_2F_2\left(5, 6; \frac{9}{2}, 6; -z\right) = \frac{35(8z^3 - 12z^2 - 14z - 15)}{1024z^3} - \frac{35e^{-z} \sqrt{\pi} (16z^4 - 32z^3 - 24z^2 - 24z - 15) \operatorname{erfi}(\sqrt{z})}{2048z^{7/2}}$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = 5$

07.25.03.anmz.01

$${}_2F_2(5, 6; 5, 5; z) = \frac{1}{5} e^z (z + 5)$$

07.25.03.ann0.01

$${}_2F_2\left(5, 6; 5, \frac{11}{2}; z\right) = \frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z \sqrt{\pi} (32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105) \operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ann1.01

$${}_2F_2\left(5, 6; 5, \frac{11}{2}; -z\right) = \frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z} \sqrt{\pi} (32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105) \operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ann2.01

$${}_2F_2(5, 6; 5, 6; z) = e^z$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = \frac{11}{2}$

07.25.03.ann3.01

$${}_2F_2\left(5, 6; \frac{11}{2}, 6; z\right) = \frac{315(8z^3 - 20z^2 + 50z - 105)}{2048z^4} + \frac{315e^z \sqrt{\pi} (16z^4 - 32z^3 + 72z^2 - 120z + 105) \operatorname{erf}(\sqrt{z})}{4096z^{9/2}}$$

07.25.03.ann4.01

$${}_2F_2\left(5, 6; \frac{11}{2}, 6; -z\right) = \frac{315 e^{-z} \sqrt{\pi} (16 z^4 + 32 z^3 + 72 z^2 + 120 z + 105) \operatorname{erfi}(\sqrt{z})}{4096 z^{9/2}} - \frac{315 (8 z^3 + 20 z^2 + 50 z + 105)}{2048 z^4}$$

For fixed z and $a_1 = 5, a_2 = 6, b_1 = 6$

07.25.03.ann5.01

$${}_2F_2(5, 6; 6, 6; z) = \frac{5 e^z (z^4 - 4 z^3 + 12 z^2 - 24 z + 24)}{z^5} - \frac{120}{z^5}$$

For fixed z and $a_1 = \frac{11}{2}, a_2 \geq \frac{11}{2}$

For fixed z and $a_1 = \frac{11}{2}, a_2 = \frac{11}{2}, b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{11}{2}, a_2 = \frac{11}{2}, b_1 = -\frac{11}{2}$

07.25.03.ann6.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{96496731725625} (4194304 e^z z^{22} + 922746880 e^z z^{21} + 88595234816 e^z z^{20} + 4901862113280 e^z z^{19} + 173867787878400 e^z z^{18} + 4162328702484480 e^z z^{17} + 68982044840755200 e^z z^{16} + 799117019389624320 e^z z^{15} + 6457881448334131200 e^z z^{14} + 35953447567048704000 e^z z^{13} + 134642309359006310400 e^z z^{12} + 326395813920067584000 e^z z^{11} + 482575904989197465600 e^z z^{10} + 395695450169800704000 e^z z^9 + 152528824051813440000 e^z z^8 + 19581227239343616000 e^z z^7 + 259188714033480000 e^z z^6 + 3190436260704000 e^z z^5 + 329484431430000 e^z z^4 + 85580371800000 e^z z^3 + 52417977727500 e^z z^2 + 96496731725625 e^z)$$

07.25.03.ann7.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{8772430156875} (-2097152 e^z z^{21} - 428867584 e^z z^{20} - 38079037440 e^z z^{19} - 1936864051200 e^z z^{18} - 62723093299200 e^z z^{17} - 1359848778301440 e^z z^{16} - 20212610248212480 e^z z^{15} - 207538712336793600 e^z z^{14} - 1464861669304320000 e^z z^{13} - 6990261263741952000 e^z z^{12} - 21884456465180467200 e^z z^{11} - 42833396401541222400 e^z z^{10} - 48537668687663232000 e^z z^9 - 27965884678079040000 e^z z^8 - 6349700330709120000 e^z z^7 - 266063123608128000 e^z z^6 + 3437204787324000 e^z z^5 + 123384263310000 e^z z^4 + 20334179250000 e^z z^3 + 8045262225000 e^z z^2 + 1949428923750 e^z z + 8772430156875 e^z)$$

07.25.03.ann8.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{7}{2}; z\right) = \frac{1}{974714461875} (e^z (1048576 z^{20} + 198180864 z^{19} + 16165896192 z^{18} + 750192427008 z^{17} + 21984141312000 z^{16} + 427106764062720 z^{15} + 5621684101447680 z^{14} + 50363357204643840 z^{13} + 304342298412687360 z^{12} + 1212563393775820800 z^{11} + 3060566173047398400 z^{10} + 4583584249009920000 z^9 + 3642705223286976000 z^8 + 1233474057535104000 z^7 + 91165021516800000 z^6 - 3715970471136000 z^5 + 139382841906000 z^4 + 7999289298000 z^3 + 1831844322000 z^2 + 556979692500 z + 974714461875))$$

07.25.03.ann9.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{5}{2}; z\right) = -\frac{1}{139244923125} (e^z (524288 z^{19} + 90963968 z^{18} + 6763970560 z^{17} + 283782610944 z^{16} + 7444788019200 z^{15} + 127938319810560 z^{14} + 1467489692712960 z^{13} + 11240526521548800 z^{12} + 56626673773178880 z^{11} + 181581643589068800 z^{10} + 35002403194752000 z^9 + 366778906933824000 z^8 + 170847530441280000 z^7 + 18770672223072000 z^6 - 1344169799280000 z^5 + 158269463352000 z^4 - 9443310723000 z^3 - 722010712500 z^2 - 167093907750 z - 139244923125))$$

07.25.03.anna.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{27848984625} (e^z (262144 z^{18} + 41418752 z^{17} + 2781413376 z^{16} + 104342224896 z^{15} + 2418116198400 z^{14} + 36160823623680 z^{13} + 354056198307840 z^{12} + 2256729376849200 z^{11} + 9131137183365120 z^{10} + 22307292919296000 z^9 + 30003797621952000 z^8 + 18368566546176000 z^7 + 2765215762848000 z^6 - 292919058432000 z^5 + 60212746440000 z^4 - 11184387984000 z^3 + 870538630500 z^2 + 74263959000 z + 27848984625))$$

07.25.03.annb.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, -\frac{1}{2}; z\right) = -\frac{1}{9282994875} (e^z (131072 z^{17} + 18677760 z^{16} + 1119879168 z^{15} + 37052743680 z^{14} + 745898803200 z^{13} + 9502575575040 z^{12} + 77251055616000 z^{11} + 394479660072960 z^{10} + 1212491481062400 z^9 + 2059960351680000 z^8 + 1612156525056000 z^7 + 317422385280000 z^6 - 45792852336000 z^5 + 13815453960000 z^4 - 4432261680000 z^3 + 1056198528000 z^2 - 92829948750 z - 9282994875))$$

07.25.03.annc.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{9282994875} (e^z (65536 z^{16} + 8323072 z^{15} + 439255040 z^{14} + 12596428800 z^{13} + 215494041600 z^{12} + 2273106309120 z^{11} + 14757911562240 z^{10} + 57039670195200 z^9 + 121408543872000 z^8 + 119416096800000 z^7 + 29873633328000 z^6 - 5593790664000 z^5 + 2275631820000 z^4 - 1056984390000 z^3 + 426330135000 z^2 - 111395938500 z + 9282994875))$$

07.25.03.annd.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, 1; z\right) = \frac{1}{9282994875} \left(e^{z/2} (32768 z^{16} + 3932160 z^{15} + 195133440 z^{14} + 5232500736 z^{13} + 83169828864 z^{12} + 809174016000 z^{11} + 4805599518720 z^{10} + 16836187737600 z^9 + 32173292067840 z^8 + 2812790021760 z^7 + 6089623545600 z^6 - 1085834030400 z^5 + 471612456000 z^4 - 262677945600 z^3 + 142012407600 z^2 - 55697969250 z + 9282994875) I_0\left(\frac{z}{2}\right) + \frac{1}{9282994875} \right. \\
 \left. \left(2 e^{z/2} (16384 z^{16} + 1949696 z^{15} + 95625216 z^{14} + 2521583616 z^{13} + 39109244928 z^{12} + 366648809472 z^{11} + 2053458570240 z^{10} + 6515611280640 z^9 + 10326208717440 z^8 + 5714485096320 z^7 - 549838134720 z^6 + 192040178400 z^5 - 100344711600 z^4 + 57977564400 z^3 - 28676818800 z^2 + 7873801425 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anne.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{9282994875} \left(e^z (32768 z^{15} + 3653632 z^{14} + 166649856 z^{13} + 4048441344 z^{12} + 57141504000 z^{11} + 479425858560 z^{10} + 2344984266240 z^9 + 6242484568320 z^8 + 7643153105280 z^7 + 2384400110400 z^6 - 561784053600 z^5 + 292916962800 z^4 - 180310422600 z^3 + 102594284100 z^2 - 43320642750 z + 9282994875) \right)$$

07.25.03.annf.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, 2; z\right) = \frac{1}{9282994875} \left(e^{z/2} (32768 z^{15} + 3424256 z^{14} + 145457152 z^{13} + 3266310144 z^{12} + 42236866560 z^{11} + 321205463040 z^{10} + 140563517440 z^9 + 3294011508480 z^8 + 3471971247360 z^7 + 878066179200 z^6 - 185301043200 z^5 + 97786634400 z^4 - 68936767200 z^3 + 50328507600 z^2 - 29797267500 z + 9282994875) I_0\left(\frac{z}{2}\right) + \frac{1}{9282994875} \right. \\
 \left. \left(e^{z/2} (32768 z^{15} + 3391488 z^{14} + 142082048 z^{13} + 3125891072 z^{12} + 39178727424 z^{11} + 283457771520 z^{10} + 113904333320 z^9 + 2265653617920 z^8 + 1582405735680 z^7 - 173806093440 z^6 + 71621625600 z^5 - 45842176800 z^4 + 34295335200 z^3 - 24190261200 z^2 + 11851037100 z - 1489863375) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anng.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{3094331625} \left(e^z (16384 z^{14} + 1572864 z^{13} + 60518400 z^{12} + 1207222272 z^{11} + 13480473600 z^{10} + 84687482880 z^9 + 283273562880 z^8 + 430143436800 z^7 + 165357339840 z^6 - 47979993600 z^5 + 30977931600 z^4 - 23920142400 z^3 + 17485429500 z^2 - 9901861200 z + 3094331625) \right)$$

07.25.03.annh.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, 3; z\right) =$$

$$\frac{1}{9282994875} \left(4 e^{z/2} (16384 z^{14} + 1458176 z^{13} + 51572736 z^{12} + 935854080 z^{11} + 9383700480 z^{10} + 52060124160 z^9 + 150368106240 z^8 + 190469283840 z^7 + 55373673600 z^6 - 13533609600 z^5 + 8423805600 z^4 - 7201353600 z^3 + 6641384400 z^2 - 5285857500 z + 2434768875) I_0\left(\frac{z}{2}\right) + \frac{1}{9282994875 z} \left(4 e^{z/2} (16384 z^{15} + 1441792 z^{14} + 50139136 z^{13} + 886419456 z^{12} + 8520960000 z^{11} + 43936527360 z^{10} + 109944679680 z^9 + 96180099840 z^8 - 11849535360 z^7 + 5621011200 z^6 - 4254314400 z^5 + 3902320800 z^4 - 3564615600 z^3 + 2483289900 z^2 - 516891375 z - 456080625) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.anni.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{7}{2}; z\right) =$$

$$\frac{1}{618866325} \left(e^z (8192 z^{13} + 659456 z^{12} + 20697088 z^{11} + 324200448 z^{10} + 2687731200 z^9 + 11434832640 z^8 + 21571038720 z^7 + 10146850560 z^6 - 3569559840 z^5 + 2781702000 z^4 - 2592097200 z^3 + 2296463400 z^2 - 1591370550 z + 618866325) \right)$$

07.25.03.annj.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, 4; z\right) =$$

$$\frac{1}{3094331625 z} \left(4 e^{z/2} (16384 z^{14} + 1204224 z^{13} + 34099200 z^{12} + 474636288 z^{11} + 3426914304 z^{10} + 12341260800 z^9 + 18807655680 z^8 + 6206284800 z^7 - 1727671680 z^6 + 1240868160 z^5 - 1247853600 z^4 + 1388016000 z^3 - 1365903000 z^2 + 732535650 z + 310134825) I_0\left(\frac{z}{2}\right) + \frac{1}{3094331625 z^2} \left(4 e^{z/2} (16384 z^{15} + 1187840 z^{14} + 32919552 z^{13} + 442294272 z^{12} + 2999943168 z^{11} + 9533044224 z^{10} + 10420819200 z^9 - 1420830720 z^8 + 761892480 z^7 - 665340480 z^6 + 723310560 z^5 - 816480000 z^4 + 768511800 z^3 - 377026650 z^2 + 164189025 z - 1240539300) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.annk.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{9}{2}; z\right) =$$

$$\frac{1}{88409475} \left(e^z (4096 z^{12} + 266240 z^{11} + 6488064 z^{10} + 74511360 z^9 + 412473600 z^8 + 973969920 z^7 + 558835200 z^6 - 235509120 z^5 + 217047600 z^4 - 237006000 z^3 + 244490400 z^2 - 196465500 z + 88409475) \right)$$

07.25.03.annl.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, 5; z\right) = \frac{1}{3094331625z^2} \left(32 e^{z/2} (8192 z^{14} + 475136 z^{13} + 10153984 z^{12} + 99895296 z^{11} + 457830912 z^{10} + 844124160 z^9 + 312940800 z^8 - 97943040 z^7 + 80015040 z^6 - 93985920 z^5 + 131090400 z^4 - 200831400 z^3 + 354573450 z^2 - 827026200 z + 1964187225) I_0\left(\frac{z}{2}\right) + \frac{1}{3094331625z^3} \left(64 e^{z/2} (4096 z^{15} + 233472 z^{14} + 4845568 z^{13} + 45214720 z^{12} + 185902848 z^{11} + 254597376 z^{10} - 38008320 z^9 + 22705920 z^8 - 22356000 z^7 + 27306720 z^6 - 31570560 z^5 + 7881300 z^4 + 143918775 z^3 - 638512875 z^2 + 1654052400 z - 3928374450) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.annm.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{1}{9823275} \left(e^z (2048 z^{11} + 101376 z^{10} + 1774080 z^9 + 13305600 z^8 + 39916800 z^7 + 27941760 z^6 - 13970880 z^5 + 14968800 z^4 - 18711000 z^3 + 21829500 z^2 - 19646550 z + 9823275) \right)$$

07.25.03.annn.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{11}{2}, 6; z\right) = \frac{1}{618866325z^3} \left(32 e^{z/2} (8192 z^{14} + 348160 z^{13} + 5099520 z^{12} + 30802944 z^{11} + 69459456 z^{10} + 28627200 z^9 - 9400320 z^8 + 3628800 z^7 + 34292160 z^6 - 325049760 z^5 + 2167981200 z^4 - 11733668100 z^3 + 50655354750 z^2 - 163027539675 z + 329983453800) I_0\left(\frac{z}{2}\right) + \frac{1}{618866325z^4} \left(32 e^{z/2} (8192 z^{15} + 339968 z^{14} + 4763648 z^{13} + 26201088 z^{12} + 45325824 z^{11} - 7405824 z^{10} + 5483520 z^9 - 11508480 z^8 + 60419520 z^7 - 411596640 z^6 + 2644896240 z^5 - 14683769100 z^4 + 67390473150 z^3 - 243869350725 z^2 + 652110158700 z - 1319933815200) I_1\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{9}{2}$

07.25.03.anno.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{9}{2}; z\right) = \frac{1}{797493650625} \left(e^z (1048576 z^{20} + 199229440 z^{19} + 16349921280 z^{18} + 764058009600 z^{17} + 22574879539200 z^{16} + 442888153989120 z^{15} + 5898867661209600 z^{14} + 53628981048115200 z^{13} + 330213476791296000 z^{12} + 1348743032727552000 z^{11} + 3524141552588697600 z^{10} + 5558061214121472000 z^9 + 481562094406464000 z^8 + 1943892103023360000 z^7 + 259012010819520000 z^6 + 3525556394304000 z^5 + 44175803490000 z^4 + 4571573580000 z^3 + 1261844325000 z^2 + 393824025000 z + 797493650625) \right)$$

07.25.03.annp.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{7}{2}; z\right) = -\frac{1}{88\,610\,405\,625} \left(e^z (524\,288 z^{19} + 92\,012\,544 z^{18} + 6\,932\,791\,296 z^{17} + 295\,369\,113\,600 z^{16} + 7\,890\,694\,963\,200 z^{15} + 138\,591\,779\,880\,960 z^{14} + 1\,632\,811\,921\,735\,680 z^{13} + 12\,935\,589\,189\,304\,320 z^{12} + 68\,089\,819\,475\,865\,600 z^{11} + 231\,787\,689\,770\,649\,600 z^{10} + 487\,238\,482\,555\,776\,000 z^9 + 586\,457\,435\,559\,744\,000 z^8 + 355\,209\,022\,744\,128\,000 z^7 + 83\,923\,494\,651\,360\,000 z^6 + 3\,620\,763\,432\,720\,000 z^5 - 47\,603\,519\,208\,000 z^4 - 1\,713\,857\,859\,000 z^3 - 284\,999\,998\,500 z^2 - 81\,577\,833\,750 z - 88\,610\,405\,625) \right)$$

07.25.03.annq.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{12\,658\,629\,375} \left(e^z (262\,144 z^{18} + 42\,205\,184 z^{17} + 2\,896\,625\,664 z^{16} + 111\,476\,736\,000 z^{15} + 2\,663\,365\,017\,600 z^{14} + 41\,330\,557\,255\,680 z^{13} + 423\,765\,666\,938\,880 z^{12} + 2\,865\,786\,425\,671\,680 z^{11} + 12\,551\,511\,545\,395\,200 z^{10} + 34\,309\,019\,840\,256\,000 z^9 + 54\,919\,632\,156\,480\,000 z^8 + 46\,090\,373\,075\,712\,000 z^7 + 16\,288\,205\,607\,072\,000 z^6 + 1\,241\,233\,308\,000\,000 z^5 - 51\,468\,245\,640\,000 z^4 + 1\,932\,363\,216\,000 z^3 + 109\,252\,678\,500 z^2 + 21\,379\,018\,500 z + 12\,658\,629\,375) \right)$$

07.25.03.annr.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{3}{2}; z\right) = -\frac{1}{2\,531\,725\,875} \left(e^z (131\,072 z^{17} + 19\,202\,048 z^{16} + 1\,189\,085\,184 z^{15} + 40\,874\,803\,200 z^{14} + 861\,622\,272\,000 z^{13} + 11\,618\,244\,771\,840 z^{12} + 101\,509\,508\,136\,960 z^{11} + 570\,062\,393\,671\,680 z^{10} + 2\,000\,287\,820\,160\,000 z^9 + 4\,152\,639\,089\,088\,000 z^8 + 4\,620\,301\,088\,256\,000 z^7 + 2\,253\,831\,640\,704\,000 z^6 + 255\,692\,061\,072\,000 z^5 - 18\,613\,498\,680\,000 z^4 + 2\,186\,125\,200\,000 z^3 - 126\,880\,992\,000 z^2 - 8\,814\,156\,750 z - 2\,531\,725\,875) \right)$$

07.25.03.anns.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{843\,908\,625} \left(e^z (65\,536 z^{16} + 8\,650\,752 z^{15} + 477\,757\,440 z^{14} + 14\,465\,433\,600 z^{13} + 264\,458\,649\,600 z^{12} + 3\,032\,306\,565\,120 z^{11} + 21\,947\,841\,699\,840 z^{10} + 98\,474\,542\,387\,200 z^9 + 261\,584\,842\,176\,000 z^8 + 376\,018\,070\,400\,000 z^7 + 242\,051\,156\,928\,000 z^6 + 37\,685\,614\,176\,000 z^5 - 4\,053\,619\,080\,000 z^4 + 827\,298\,360\,000 z^3 - 147\,884\,940\,000 z^2 + 10\,501\,974\,000 z + 843\,908\,625) \right)$$

07.25.03.annt.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{1}{2}; z\right) = -\frac{1}{843\,908\,625} \left(e^z (32\,768 z^{15} + 3\,850\,240 z^{14} + 186\,900\,480 z^{13} + 4\,896\,460\,800 z^{12} + 75\,920\,025\,600 z^{11} + 718\,993\,013\,760 z^{10} + 4\,143\,487\,219\,200 z^9 + 14\,017\,629\,830\,400 z^8 + 25\,660\,197\,360\,000 z^7 + 21\,217\,752\,360\,000 z^6 + 4\,327\,940\,484\,000 z^5 - 632\,925\,090\,000 z^4 + 188\,428\,275\,000 z^3 - 57\,421\,507\,500 z^2 + 12\,189\,791\,250 z - 843\,908\,625) \right)$$

07.25.03.annu.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, 1; z\right) = \frac{1}{843\,908\,625} \left(e^{z/2} (-16\,384 z^{15} - 1\,818\,624 z^{14} - 83\,005\,440 z^{13} - 2\,033\,872\,896 z^{12} - 29\,322\,086\,400 z^{11} - 256\,568\,739\,840 z^{10} - 1\,357\,280\,789\,760 z^9 - 4\,190\,817\,657\,600 z^8 - 6\,979\,533\,402\,240 z^7 - 5\,265\,434\,160\,000 z^6 - 985\,620\,636\,000 z^5 + 146\,671\,106\,400 z^4 - 49\,985\,586\,000 z^3 + 19\,632\,261\,600 z^2 - 6\,094\,895\,625 z + 843\,908\,625) I_0\left(\frac{z}{2}\right) + \frac{1}{843\,908\,625} \left(e^{z/2} (-16\,384 z^{15} - 1\,802\,240 z^{14} - 81\,211\,392 z^{13} - 1\,953\,546\,240 z^{12} - 27\,407\,394\,816 z^{11} - 230\,062\,325\,760 z^{10} - 1\,139\,200\,070\,400 z^9 - 3\,144\,404\,551\,680 z^8 - 4\,239\,670\,377\,600 z^7 - 1\,923\,865\,655\,040 z^6 + 161\,431\,250\,400 z^5 - 46\,457\,712\,000 z^4 + 18\,386\,449\,200 z^3 - 6\,882\,246\,000 z^2 + 1\,508\,319\,225 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.annv.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{3}{2}; z\right) = -\frac{1}{843\,908\,625} \left(e^z (16\,384 z^{14} + 1\,687\,552 z^{13} + 70\,668\,288 z^{12} + 1\,564\,876\,800 z^{11} + 19\,963\,929\,600 z^{10} + 149\,875\,246\,080 z^9 + 647\,928\,771\,840 z^8 + 1\,501\,420\,354\,560 z^7 + 1\,569\,446\,020\,800 z^6 + 407\,477\,044\,800 z^5 - 77\,153\,504\,400 z^4 + 30\,728\,224\,800 z^3 - 13\,334\,649\,300 z^2 + 4\,625\,869\,500 z - 843\,908\,625) \right)$$

07.25.03.annw.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, 2; z\right) = \frac{1}{843\,908\,625} \left(e^{z/2} (-16\,384 z^{14} - 1\,581\,056 z^{13} - 61\,648\,896 z^{12} - 1\,262\,100\,480 z^{11} - 14\,764\,001\,280 z^{10} - 100\,686\,620\,160 z^9 - 391\,355\,677\,440 z^8 - 806\,699\,658\,240 z^7 - 742\,523\,241\,600 z^6 - 165\,887\,870\,400 z^5 + 30\,086\,834\,400 z^4 - 12\,992\,918\,400 z^3 + 6\,891\,771\,600 z^2 - 3\,229\,773\,750 z + 843\,908\,625) I_0\left(\frac{z}{2}\right) + \frac{1}{843\,908\,625} \left(e^{z/2} (-16\,384 z^{14} - 1\,564\,672 z^{13} - 60\,092\,416 z^{12} - 1\,202\,774\,016 z^{11} - 13\,589\,760\,000 z^{10} - 87\,642\,831\,360 z^9 - 309\,473\,498\,880 z^8 - 530\,533\,463\,040 z^7 - 309\,349\,031\,040 z^6 + 30\,344\,932\,800 z^5 - 10\,673\,661\,600 z^4 + 5\,466\,787\,200 z^3 - 2\,919\,596\,400 z^2 + 1\,143\,667\,350 z - 114\,604\,875) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.annx.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{5}{2}; z\right) = -\frac{1}{281\,302\,875} \left(e^z (8192 z^{13} + 724\,992 z^{12} + 25\,546\,752 z^{11} + 463\,104\,000 z^{10} + 4\,656\,268\,800 z^9 + 26\,046\,800\,640 z^8 + 76\,519\,779\,840 z^7 + 100\,292\,048\,640 z^6 + 32\,532\,645\,600 z^5 - 7\,723\,674\,000 z^4 + 3\,903\,454\,800 z^3 - 2\,201\,434\,200 z^2 + 1\,037\,695\,050 z - 281\,302\,875) \right)$$

07.25.03.anny.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, 3; z\right) = -\frac{1}{843908625} \left(8 e^{z/2} (4096 z^{13} + 335872 z^{12} + 10874880 z^{11} + 179343360 z^{10} + 1620883200 z^9 + 8032919040 z^8 + 20541012480 z^7 + 22904985600 z^6 + 5980716000 z^5 - 1283688000 z^4 + 673142400 z^3 - 451105200 z^2 + 283854375 z - 109289250) I_0\left(\frac{z}{2}\right) - \frac{1}{843908625 z} \left(4 e^{z/2} (8192 z^{14} + 663552 z^{13} + 21090304 z^{12} + 337920000 z^{11} + 2913753600 z^{10} + 13301921280 z^9 + 28956890880 z^8 + 21413237760 z^7 - 2397729600 z^6 + 995198400 z^5 - 624607200 z^4 + 432280800 z^3 - 241797150 z^2 + 42099750 z + 30405375) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.annz.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{7}{2}; z\right) = -\frac{1}{56260575} \left(e^z (4096 z^{12} + 303104 z^{11} + 8681472 z^{10} + 123033600 z^9 + 913248000 z^8 + 3434296320 z^7 + 5634074880 z^6 + 2256387840 z^5 - 656586000 z^4 + 405972000 z^3 - 281118600 z^2 + 164316600 z - 56260575) \right)$$

07.25.03.ano0.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, 4; z\right) = -\frac{1}{281302875 z} \left(4 e^{z/2} (8192 z^{13} + 552960 z^{12} + 14278656 z^{11} + 179801088 z^{10} + 1164142080 z^9 + 3726846720 z^8 + 5024332800 z^7 + 1508855040 z^6 - 375036480 z^5 + 231789600 z^4 - 187790400 z^3 + 147136500 z^2 - 68805450 z - 18243225) I_0\left(\frac{z}{2}\right) - \frac{1}{281302875 z^2} \left(4 e^{z/2} (8192 z^{14} + 544768 z^{13} + 13737984 z^{12} + 166327296 z^{11} + 1004164608 z^{10} + 2793703680 z^9 + 2602782720 z^8 - 326903040 z^7 + 156219840 z^6 - 116030880 z^5 + 98884800 z^4 - 73653300 z^3 + 27130950 z^2 - 6081075 z + 72972900) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ano1.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{9}{2}; z\right) = -\frac{1}{8037225} \left(e^z (2048 z^{11} + 121856 z^{10} + 2695680 z^9 + 27820800 z^8 + 136684800 z^7 + 281957760 z^6 + 138438720 z^5 - 48535200 z^4 + 35721000 z^3 - 29200500 z^2 + 20043450 z - 8037225) \right)$$

07.25.03.ano2.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, 5; z\right) =$$

$$-\frac{1}{281\,302\,875 z^2} \left(32 e^{z/2} (4096 z^{13} + 217\,088 z^{12} + 4\,205\,568 z^{11} + 37\,174\,272 z^{10} + 151\,722\,240 z^9 + 247\,968\,000 z^8 + 84\,568\,320 z^7 - 23\,950\,080 z^6 + 17\,146\,080 z^5 - 16\,783\,200 z^4 + 18\,314\,100 z^3 - 22\,283\,100 z^2 + 42\,567\,525 z - 103\,378\,275) I_0\left(\frac{z}{2}\right) - \frac{1}{281\,302\,875 z^3} \left(32 e^{z/2} (4096 z^{14} + 212\,992 z^{13} + 3\,994\,624 z^{12} + 33\,282\,048 z^{11} + 120\,237\,312 z^{10} + 140\,989\,440 z^9 - 19\,595\,520 z^8 + 10\,575\,360 z^7 - 8\,981\,280 z^6 + 8\,527\,680 z^5 - 4\,706\,100 z^4 - 13\,721\,400 z^3 + 66\,891\,825 z^2 - 170\,270\,100 z + 413\,513\,100) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.ano3.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, \frac{11}{2}; z\right) =$$

$$-\frac{1}{893\,025} \left(e^z (1024 z^{10} + 46\,080 z^9 + 725\,760 z^8 + 4\,838\,400 z^7 + 12\,700\,800 z^6 + 7\,620\,480 z^5 - 3\,175\,200 z^4 + 2\,721\,600 z^3 - 2\,551\,500 z^2 + 1\,984\,500 z - 893\,025) \right)$$

07.25.03.ano4.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{9}{2}, 6; z\right) =$$

$$-\frac{1}{56\,260\,575 z^3} \left(32 e^{z/2} (4096 z^{13} + 157\,696 z^{12} + 2\,073\,600 z^{11} + 11\,142\,144 z^{10} + 22\,252\,800 z^9 + 8\,501\,760 z^8 - 2\,453\,760 z^7 + 13\,880\,160 z^5 - 101\,493\,000 z^4 + 556\,623\,900 z^3 - 2\,408\,105\,700 z^2 + 7\,753\,370\,625 z - 15\,713\,497\,800) I_0\left(\frac{z}{2}\right) - \frac{1}{56\,260\,575 z^4} \left(32 e^{z/2} (4096 z^{14} + 153\,600 z^{13} + 1\,922\,048 z^{12} + 9\,292\,800 z^{11} + 13\,780\,224 z^{10} - 2\,127\,360 z^9 + 1\,555\,200 z^8 - 3\,732\,480 z^7 + 20\,412\,000 z^6 - 126\,395\,640 z^5 + 697\,920\,300 z^4 - 3\,202\,699\,500 z^3 + 11\,596\,610\,025 z^2 - 31\,013\,482\,500 z + 62\,853\,991\,200) I_1\left(\frac{z}{2}\right) \right)$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{7}{2}$

07.25.03.ano5.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{9\,845\,600\,625}$$

$$\left(e^z (262\,144 z^{18} + 42\,467\,328 z^{17} + 2\,935\,554\,048 z^{16} + 113\,925\,685\,248 z^{15} + 2\,749\,127\,786\,496 z^{14} + 43\,179\,175\,968\,768 z^{13} + 449\,382\,965\,133\,312 z^{12} + 3\,097\,422\,356\,152\,320 z^{11} + 13\,911\,664\,422\,942\,720 z^{10} + 39\,379\,690\,559\,139\,840 z^9 + 66\,410\,633\,761\,758\,720 z^8 + 60\,791\,499\,613\,716\,480 z^7 + 25\,625\,762\,337\,772\,800 z^6 + 3\,523\,103\,819\,020\,800 z^5 + 48\,829\,806\,849\,600 z^4 + 613\,143\,820\,800 z^3 + 62\,786\,801\,700 z^2 + 14\,467\,005\,000 z + 9\,845\,600\,625) \right)$$

07.25.03.ano6.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{5}{2}; z\right) =$$

$$-\frac{1}{1406514375} \left(e^z (131072 z^{17} + 19464192 z^{16} + 1224474624 z^{15} + 42881384448 z^{14} + 924309356544 z^{13} + 12808649097216 z^{12} + 115817965240320 z^{11} + 680076438773760 z^{10} + 2535335359441920 z^9 + 5745500802639360 z^8 + 7350563269002240 z^7 + 4668778365350400 z^6 + 1140935255510400 z^5 + 50149026244800 z^4 - 659609697600 z^3 - 23232938400 z^2 - 3456006750 z - 1406514375) \right)$$

07.25.03.ano7.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{281302875} \left(e^z (65536 z^{16} + 8847360 z^{15} + 501645312 z^{14} + 15671771136 z^{13} + 297601081344 z^{12} + 3577114275840 z^{11} + 27503511275520 z^{10} + 133761884820480 z^9 + 398215428387840 z^8 + 682565545186560 z^7 + 603736681161600 z^6 + 221310798609600 z^5 + 17190631231200 z^4 - 711433724400 z^3 + 25912013400 z^2 + 1339537500 z + 281302875) \right)$$

07.25.03.ano8.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, -\frac{1}{2}; z\right) =$$

$$-\frac{1}{93767625} \left(e^z (32768 z^{15} + 3981312 z^{14} + 201056256 z^{13} + 5523738624 z^{12} + 90801285120 z^{11} + 925944929280 z^{10} + 5881223738880 z^9 + 22771764368640 z^8 + 51091245797760 z^7 + 60280920705600 z^6 + 30604197405600 z^5 + 3540708385200 z^4 - 256455347400 z^3 + 28966158900 z^2 - 1527072750 z - 93767625) \right)$$

07.25.03.ano9.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{1}{2}; z\right) =$$

$$\frac{1}{93767625} \left(e^z (16384 z^{14} + 1769472 z^{13} + 78409728 z^{12} + 1860157440 z^{11} + 25868989440 z^{10} + 217217064960 z^9 + 1094266817280 z^8 + 3178881054720 z^7 + 4882896043200 z^6 + 3284532115200 z^5 + 521704184400 z^4 - 55610452800 z^3 + 10798458300 z^2 - 1714608000 z + 93767625) \right)$$

07.25.03.anoa.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, 1; z\right) =$$

$$\frac{1}{93767625} \left(e^{z/2} (8192 z^{14} + 835584 z^{13} + 34811904 z^{12} + 772638720 z^{11} + 10000323072 z^{10} + 77752313856 z^9 + 361163577600 z^8 + 965985108480 z^7 + 1372794091200 z^6 + 869820819840 z^5 + 135132066720 z^4 - 15758404200 z^3 + 3790593450 z^2 - 857304000 z + 93767625) I_0\left(\frac{z}{2}\right) + \frac{1}{93767625} \left(2 e^{z/2} (4096 z^{14} + 413696 z^{13} + 16994304 z^{12} + 369527808 z^{11} + 4638729984 z^{10} + 34406436096 z^9 + 148173193728 z^8 + 348343752960 z^7 + 388406884320 z^6 + 138615533280 z^5 - 9666125280 z^4 + 2109682260 z^3 - 540110025 z^2 + 89004825 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anob.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{93\,767\,625} (e^z (8192 z^{13} + 774\,144 z^{12} + 29\,528\,064 z^{11} + 590\,505\,984 z^{10} + 6\,734\,181\,888 z^9 + 44\,633\,804\,544 z^8 + 167\,746\,070\,016 z^7 + 331\,345\,002\,240 z^6 + 287\,705\,507\,040 z^5 + 59\,885\,768\,880 z^4 - 8\,633\,867\,760 z^3 + 2\,413\,310\,760 z^2 - 634\,047\,750 z + 93\,767\,625))$$

07.25.03.anoc.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, 2; z\right) = \frac{1}{93\,767\,625} (e^{z/2} (8192 z^{13} + 724\,992 z^{12} + 25\,743\,360 z^{11} + 476\,058\,624 z^{10} + 4\,983\,455\,232 z^9 + 30\,088\,316\,160 z^8 + 102\,297\,323\,520 z^7 + 182\,096\,812\,800 z^6 + 143\,068\,524\,480 z^5 + 27\,304\,633\,440 z^4 - 4046\,338\,800 z^3 + 1\,315\,723\,500 z^2 - 449\,489\,250 z + 93\,767\,625) I_0\left(\frac{z}{2}\right) + \frac{1}{93\,767\,625} (e^{z/2} (8192 z^{13} + 716\,800 z^{12} + 25\,030\,656 z^{11} + 451\,378\,176 z^{10} + 4\,543\,901\,184 z^9 + 25\,747\,206\,912 z^8 + 78\,440\,140\,800 z^7 + 113\,116\,227\,840 z^6 + 53\,164\,278\,720 z^5 - 4485\,287\,520 z^4 + 1\,264\,137\,840 z^3 - 461\,821\,500 z^2 + 136\,335\,150 z - 10\,418\,625) I_1\left(\frac{z}{2}\right))$$

07.25.03.anod.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{31\,255\,875} (e^z (4096 z^{12} + 331\,776 z^{11} + 10\,616\,832 z^{10} + 173\,159\,424 z^9 + 1\,548\,916\,992 z^8 + 7\,602\,190\,848 z^7 + 19\,254\,412\,800 z^6 + 21\,264\,405\,120 z^5 + 5\,634\,120\,240 z^4 - 1\,044\,776\,880 z^3 + 384\,562\,080 z^2 - 139\,311\,900 z + 31\,255\,875))$$

07.25.03.anoe.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, 3; z\right) = \frac{1}{93\,767\,625} (4 e^{z/2} (4096 z^{12} + 307\,200 z^{11} + 9\,028\,608 z^{10} + 133\,976\,064 z^9 + 1\,078\,652\,160 z^8 + 4\,708\,869\,120 z^7 + 10\,483\,603\,200 z^6 + 10\,085\,160\,960 z^5 + 2\,297\,846\,880 z^4 - 414\,817\,200 z^3 + 170\,610\,300 z^2 - 78\,246\,000 z + 24\,026\,625) I_0\left(\frac{z}{2}\right) + \frac{1}{93\,767\,625 z} (4 e^{z/2} (4096 z^{13} + 303\,104 z^{12} + 8\,727\,552 z^{11} + 125\,395\,968 z^{10} + 957\,329\,664 z^9 + 3\,806\,403\,840 z^8 + 7\,054\,076\,160 z^7 + 4\,274\,000\,640 z^6 - 421\,575\,840 z^5 + 145\,288\,080 z^4 - 68\,777\,100 z^3 + 29\,087\,100 z^2 - 4\,039\,875 z - 2\,338\,875) I_1\left(\frac{z}{2}\right))$$

07.25.03.anof.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{6\,251\,175} (e^z (2048 z^{11} + 138\,240 z^{10} + 3\,580\,416 z^9 + 45\,404\,928 z^8 + 297\,706\,752 z^7 + 972\,881\,280 z^6 + 1\,357\,715\,520 z^5 + 449\,336\,160 z^4 - 103\,624\,920 z^3 + 47\,548\,620 z^2 - 21\,687\,750 z + 6\,251\,175))$$

07.25.03.anog.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, 4; z\right) = \frac{1}{31\,255\,875\,z} \left(4 e^{z/2} (4096 z^{12} + 251\,904 z^{11} + 5\,876\,736 z^{10} + 66\,210\,816 z^9 + 379\,392\,768 z^8 + 1\,062\,858\,240 z^7 + 1\,244\,097\,792 z^6 + 331\,382\,016 z^5 - 70\,761\,600 z^4 + 35\,267\,400 z^3 - 20\,241\,900 z^2 + 7\,790\,580 z + 1\,216\,215) I_0\left(\frac{z}{2}\right) + \frac{1}{31\,255\,875\,z^2} \left(4 e^{z/2} (4096 z^{13} + 247\,808 z^{12} + 5\,630\,976 z^{11} + 60\,699\,648 z^{10} + 321\,273\,600 z^9 + 767\,024\,640 z^8 + 591\,660\,288 z^7 - 66\,624\,768 z^6 + 27\,107\,136 z^5 - 15\,762\,600 z^4 + 8\,788\,500 z^3 - 2\,347\,380 z^2 + 93\,555 z - 4\,864\,860) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.anoh.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{893\,025} \left(e^z (1024 z^{10} + 55\,296 z^9 + 1\,099\,008 z^8 + 10\,063\,872 z^7 + 43\,182\,720 z^6 + 76\,204\,800 z^5 + 31\,116\,960 z^4 - 8\,709\,120 z^3 + 4\,796\,820 z^2 - 2\,608\,200 z + 893\,025) \right)$$

07.25.03.anoi.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, 5; z\right) = \frac{1}{31\,255\,875\,z^2} \left(32 e^{z/2} (2048 z^{12} + 98\,304 z^{11} + 1\,708\,032 z^{10} + 13\,392\,384 z^9 + 47\,934\,720 z^8 + 68\,207\,616 z^7 + 20\,901\,888 z^6 - 5\,171\,040 z^5 + 3\,061\,800 z^4 - 2\,268\,000 z^3 + 1\,769\,040 z^2 - 2\,432\,430 z + 608\,1075) I_0\left(\frac{z}{2}\right) + \frac{1}{31\,255\,875\,z^3} \left(64 e^{z/2} (1024 z^{13} + 48\,128 z^{12} + 806\,400 z^{11} + 5\,912\,832 z^{10} + 18\,412\,800 z^9 + 17\,978\,112 z^8 - 2\,270\,592 z^7 + 1\,061\,424 z^6 - 714\,420 z^5 + 396\,900 z^4 + 334\,530 z^3 - 1\,964\,655 z^2 + 4\,864\,860 z - 12\,162\,150) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anoj.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{99\,225} \left(e^z (512 z^9 + 20\,736 z^8 + 290\,304 z^7 + 1\,693\,440 z^6 + 3\,810\,240 z^5 + 1\,905\,120 z^4 - 635\,040 z^3 + 408\,240 z^2 - 255\,150 z + 99\,225) \right)$$

07.25.03.anok.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{7}{2}, 6; z\right) = \frac{1}{6\,251\,175\,z^3} \left(32 e^{z/2} (2048 z^{12} + 70\,656 z^{11} + 823\,296 z^{10} + 3\,874\,560 z^9 + 6\,732\,288 z^8 + 2\,329\,344 z^7 - 544\,320 z^6 - 408\,240 z^5 + 5\,103\,000 z^4 - 29\,109\,780 z^3 + 126\,486\,360 z^2 - 407\,432\,025 z + 827\,026\,200) I_0\left(\frac{z}{2}\right) + \frac{1}{6\,251\,175\,z^4} \left(32 e^{z/2} (2048 z^{13} + 68\,608 z^{12} + 755\,712 z^{11} + 3\,151\,104 z^{10} + 3\,896\,832 z^9 - 559\,872 z^8 + 419\,904 z^7 - 1\,224\,720 z^6 + 6\,735\,960 z^5 - 36\,662\,220 z^4 + 168\,149\,520 z^3 - 609\,323\,715 z^2 + 1\,629\,728\,100 z - 3\,308\,104\,800) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{5}{2}$

07.25.03.anol.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{200930625} \left(e^z (65\,536 z^{16} + 8\,912\,896 z^{15} + 509\,739\,008 z^{14} + 16\,088\,432\,640 z^{13} + 309\,314\,568\,192 z^{12} + 3\,775\,150\,718\,976 z^{11} + 29\,595\,352\,227\,840 z^{10} + 147\,668\,429\,905\,920 z^9 + 455\,491\,315\,238\,400 z^8 + 823\,039\,482\,746\,880 z^7 + 794\,643\,444\,887\,040 z^6 + 347\,780\,570\,457\,600 z^5 + 48\,796\,772\,068\,800 z^4 + 676\,127\,088\,000 z^3 + 8\,258\,695\,200 z^2 + 771\,573\,600 z + 200\,930\,625) \right)$$

07.25.03.anom.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{3}{2}; z\right) = -\frac{1}{40186125} \left(e^z (32\,768 z^{15} + 4\,046\,848 z^{14} + 208\,330\,752 z^{13} + 5\,856\,743\,424 z^{12} + 99\,018\,221\,568 z^{11} + 1\,045\,920\,476\,160 z^{10} + 6\,953\,272\,542\,720 z^9 + 28\,637\,943\,425\,280 z^8 + 70\,236\,968\,780\,160 z^7 + 95\,453\,381\,862\,720 z^6 + 63\,234\,885\,924\,000 z^5 + 15\,803\,070\,418\,800 z^4 + 693\,780\,406\,200 z^3 - 8\,826\,659\,100 z^2 - 283\,981\,950 z - 40\,186\,125) \right)$$

07.25.03.anon.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{13395375} \left(e^z (16\,384 z^{14} + 1\,818\,624 z^{13} + 83\,251\,200 z^{12} + 2\,054\,234\,112 z^{11} + 29\,993\,886\,720 z^{10} + 268\,012\,200\,960 z^9 + 1\,466\,544\,764\,160 z^8 + 4\,786\,430\,745\,600 z^7 + 8\,793\,115\,289\,280 z^6 + 8\,157\,672\,129\,600 z^5 + 3\,065\,590\,508\,400 z^4 + 237\,558\,938\,400 z^3 - 9\,448\,204\,500 z^2 + 310\,772\,700 z + 13\,395\,375) \right)$$

07.25.03.anoo.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{1}{2}; z\right) = -\frac{1}{13395375} \left(e^z (8\,192 z^{13} + 806\,912 z^{12} + 32\,346\,112 z^{11} + 687\,482\,880 z^{10} + 8\,465\,856\,000 z^9 + 62\,046\,324\,480 z^8 + 267\,924\,948\,480 z^7 + 651\,703\,207\,680 z^6 + 812\,190\,002\,400 z^5 + 423\,981\,054\,000 z^4 + 48\,861\,565\,200 z^3 - 3\,374\,443\,800 z^2 + 337\,563\,450 z - 13\,395\,375) \right)$$

07.25.03.anop.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, 1; z\right) = \frac{1}{13395375} \left(e^{z/2} (-4096 z^{13} - 380\,928 z^{12} - 14\,355\,456 z^{11} - 285\,551\,616 z^{10} - 3\,276\,640\,512 z^9 - 22\,298\,879\,232 z^8 - 89\,305\,493\,760 z^7 - 202\,315\,034\,880 z^6 - 238\,452\,167\,520 z^5 - 122\,076\,188\,640 z^4 - 14\,786\,350\,740 z^3 + 1\,216\,385\,100 z^2 - 168\,781\,725 z + 13\,395\,375) I_0\left(\frac{z}{2}\right) + \frac{1}{13395375} \left(e^{z/2} (-4096 z^{13} - 376\,832 z^{12} - 13\,980\,672 z^{11} - 271\,755\,264 z^{10} - 3\,011\,511\,552 z^9 - 19\,410\,388\,992 z^8 - 71\,168\,170\,752 z^7 - 138\,531\,617\,280 z^6 - 122\,766\,749\,280 z^5 - 32\,388\,128\,640 z^4 + 1\,730\,472\,660 z^3 - 244\,331\,640 z^2 + 27\,343\,575 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.anoq.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{3}{2}; z\right) = -\frac{1}{13\,395\,375}$$

$$\left(e^z (4096 z^{12} + 352\,256 z^{11} + 12\,122\,112 z^{10} + 216\,459\,264 z^9 + 2\,176\,564\,992 z^8 + 12\,522\,359\,808 z^7 + 40\,044\,775\,680 z^6 + 65\,560\,561\,920 z^5 + 45\,511\,910\,640 z^4 + 7\,186\,929\,120 z^3 - 723\,469\,320 z^2 + 121\,451\,400 z - 13\,395\,375)\right)$$

07.25.03.anor.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, 2; z\right) =$$

$$\frac{1}{13\,395\,375} \left(e^{z/2} (-4096 z^{12} - 329\,728 z^{11} - 10\,560\,512 z^{10} - 174\,425\,088 z^9 - 1\,612\,160\,256 z^8 - 8\,479\,296\,000 z^7 - 24\,725\,917\,440 z^6 - 37\,092\,867\,840 z^5 - 24\,094\,193\,760 z^4 - 3\,735\,448\,920 z^3 + 416\,499\,300 z^2 - 87\,450\,300 z + 13\,395\,375) I_0\left(\frac{z}{2}\right) + \frac{1}{13\,395\,375} \right.$$

$$\left. \left(e^{z/2} (-4096 z^{12} - 325\,632 z^{11} - 10\,236\,928 z^{10} - 164\,346\,880 z^9 - 1\,452\,619\,008 z^8 - 7\,099\,577\,856 z^7 - 18\,216\,334\,080 z^6 - 21\,374\,357\,760 z^5 - 7\,695\,727\,200 z^4 + 525\,009\,240 z^3 - 105\,609\,420 z^2 + 21\,224\,700 z - 1\,157\,625) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.anos.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{5}{2}; z\right) =$$

$$-\frac{1}{4\,465\,125} \left(e^z (2048 z^{11} + 150\,528 z^{10} + 4\,329\,984 z^9 + 62\,764\,800 z^8 + 492\,016\,896 z^7 + 2\,079\,036\,288 z^6 + 4\,429\,615\,680 z^5 + 3\,987\,779\,040 z^4 + 823\,170\,600 z^3 - 110\,803\,140 z^2 + 26\,076\,330 z - 4\,465\,125) \right)$$

07.25.03.anot.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, 3; z\right) =$$

$$-\frac{1}{13\,395\,375} \left(16 e^{z/2} (512 z^{11} + 34\,816 z^{10} + 919\,296 z^9 + 12\,125\,184 z^8 + 85\,691\,520 z^7 + 323\,688\,960 z^6 + 613\,811\,520 z^5 + 495\,371\,520 z^4 + 94\,324\,230 z^3 - 13\,343\,400 z^2 + 3\,765\,825 z - 850\,500) I_0\left(\frac{z}{2}\right) - \right.$$

$$\left. \frac{1}{13\,395\,375} \left(4 e^{z/2} (2048 z^{12} + 137\,216 z^{11} + 3\,540\,992 z^{10} + 45\,026\,304 z^9 + 299\,379\,456 z^8 + 1\,014\,750\,720 z^7 + 1\,554\,577\,920 z^6 + 737\,936\,640 z^5 - 60\,936\,120 z^4 + 15\,853\,320 z^3 - 4\,573\,800 z^2 + 472\,500 z + 212\,625) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anou.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{7}{2}; z\right) =$$

$$-\frac{1}{893\,025} \left(e^z (1024 z^{10} + 62\,464 z^9 + 1\,446\,656 z^8 + 16\,192\,512 z^7 + 92\,179\,584 z^6 + 255\,991\,680 z^5 + 294\,870\,240 z^4 + 77\,232\,960 z^3 - 13\,195\,980 z^2 + 3\,980\,340 z - 893\,025) \right)$$

07.25.03.anov.01

$$\begin{aligned}
 {}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, 4; z\right) = & \\
 & -\frac{1}{4465125z} \left(4e^{z/2} (2048z^{11} + 113664z^{10} + 2368512z^9 + 23549184z^8 + 117434880z^7 + 282030336z^6 + \right. \\
 & \quad \left. 279353088z^5 + 63488880z^4 - 10924200z^3 + 3874500z^2 - 1122660z - 93555) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{4465125z^2} \left(4e^{z/2} (2048z^{12} + 111616z^{11} + 2257920z^{10} + 21345024z^9 + 97113600z^8 + 193653504z^7 + \right. \right. \\
 & \quad \left. \left. 118653696z^6 - 11459952z^5 + 3651480z^4 - 1379700z^3 + 253260z^2 + 25515z + 374220) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

07.25.03.anow.01

$$\begin{aligned}
 {}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{9}{2}; z\right) = & \\
 & -\frac{1}{127575} \left(e^z (512z^9 + 24832z^8 + 437760z^7 + 3499776z^6 + 12841920z^5 + 18839520z^4 + 6138720z^3 - \right. \\
 & \quad \left. 1285200z^2 + 470610z - 127575)\right)
 \end{aligned}$$

07.25.03.anox.01

$$\begin{aligned}
 {}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, 5; z\right) = & \\
 & -\frac{1}{4465125z^2} \left(32e^{z/2} (1024z^{11} + 44032z^{10} + 677120z^9 + 4633344z^8 + 14254848z^7 + 17230080z^6 + \right. \\
 & \quad \left. 4577328z^5 - 932400z^4 + 409500z^3 - 192780z^2 + 155925z - 405405) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{4465125z^3} \left(32e^{z/2} (1024z^{12} + 43008z^{11} + 634624z^{10} + 4019200z^9 + 10513152z^8 + 8212992z^7 - \right. \right. \\
 & \quad \left. \left. 905520z^6 + 338688z^5 - 144900z^4 - 27720z^3 + 263655z^2 - 623700z + 1621620) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

07.25.03.anoy.01

$$\begin{aligned}
 {}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, \frac{11}{2}; z\right) = & \\
 & -\frac{1}{14175} \left(e^z (256z^8 + 9216z^7 + 112896z^6 + 564480z^5 + 1058400z^4 + 423360z^3 - 105840z^2 + 45360z - 14175)\right)
 \end{aligned}$$

07.25.03.anoz.01

$$\begin{aligned}
 {}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{5}{2}, 6; z\right) = & \\
 & -\frac{1}{893025z^3} \left(32e^{z/2} (1024z^{11} + 31232z^{10} + 317184z^9 + 1281024z^8 + 1890048z^7 + 570528z^6 - 85680z^5 - \right. \\
 & \quad \left. 252000z^4 + 1689660z^3 - 7422030z^2 + 23918895z - 48648600) I_0\left(\frac{z}{2}\right) - \right. \\
 & \quad \left. \frac{1}{893025z^4} \left(32e^{z/2} (1024z^{12} + 30208z^{11} + 287488z^{10} + 1007616z^9 + 999168z^8 - 131232z^7 + 111888z^6 - \right. \right. \\
 & \quad \left. \left. 413280z^5 + 2153340z^4 - 9860130z^3 + 35769195z^2 - 95675580z + 194594400) I_1\left(\frac{z}{2}\right)\right)
 \end{aligned}$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{3}{2}$

$$\begin{aligned}
 & \text{07.25.03.anp0.01} \\
 & {}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{3}{2}; z\right) = \\
 & \frac{1}{8037225} \left(e^z (16384 z^{14} + 1835008 z^{13} + 84897792 z^{12} + 2121842688 z^{11} + 31473447936 z^{10} + 286909378560 z^9 + \right. \\
 & \quad 1611725310720 z^8 + 5454482503680 z^7 + 10573313123520 z^6 + 10720094999040 z^5 + \\
 & \quad \left. 4817205464400 z^4 + 675727012800 z^3 + 9026696700 z^2 + 100018800 z + 8037225) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.anp1.01} \\
 & {}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, -\frac{1}{2}; z\right) = \\
 & -\frac{1}{2679075} \left(e^z (8192 z^{13} + 823296 z^{12} + 33804288 z^{11} + 739780608 z^{10} + 9448588800 z^9 + 72590273280 z^8 + \right. \\
 & \quad 334025879040 z^7 + 890098917120 z^6 + 1281211434720 z^5 + 875807478000 z^4 + \\
 & \quad \left. 219084037200 z^3 + 9237450600 z^2 - 105376950 z - 2679075) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.anp2.01} \\
 & {}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{2679075} \\
 & \left(e^z (4096 z^{12} + 364544 z^{11} + 13074432 z^{10} + 245683200 z^9 + 2635987200 z^8 + 16525232640 z^7 + 59598927360 z^6 + \right. \\
 & \quad \left. 117255358080 z^5 + 112956606000 z^4 + 42555618000 z^3 + 3152973600 z^2 - 110735100 z + 2679075) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.anp3.01} \\
 & {}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, 1; z\right) = \frac{1}{2679075} \\
 & \left(e^{z/2} (2048 z^{12} + 172032 z^{11} + 5799936 z^{10} + 102050304 z^9 + 1021918464 z^8 + 5971359744 z^7 + 20133308160 z^6 + \right. \\
 & \quad 37478881440 z^5 + 35186455080 z^4 + 13717226880 z^3 + 1167022080 z^2 - 55367550 z + 2679075) I_0\left(\frac{z}{2}\right) + \\
 & \quad \left. \frac{1}{2679075} \left(2 e^{z/2} (1024 z^{12} + 84992 z^{11} + 2815488 z^{10} + 48251136 z^9 + 464034048 z^8 + 2543208192 z^7 + \right. \right. \\
 & \quad \left. \left. 7714973952 z^6 + 11951498160 z^5 + 7935652620 z^4 + 1399798260 z^3 - 48949110 z^2 + 3002265 z) I_1\left(\frac{z}{2}\right) \right) \right)
 \end{aligned}$$

$$\begin{aligned}
 & \text{07.25.03.anp4.01} \\
 & {}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{3}{2}; z\right) = \\
 & \frac{1}{2679075} \left(e^z (2048 z^{11} + 158720 z^{10} + 4870656 z^9 + 76570368 z^8 + 667145472 z^7 + 3259025280 z^6 + \right. \\
 & \quad \left. 8615799360 z^5 + 11240782560 z^4 + 5894781480 z^3 + 646073820 z^2 - 38697750 z + 2679075) \right)
 \end{aligned}$$

07.25.03.anp5.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, 2; z\right) = \frac{1}{2679075} \left(e^{z/2} (2048 z^{11} + 148480 z^{10} + 4239360 z^9 + 61668096 z^8 + 494774784 z^7 + 2220099840 z^6 + 5409270720 z^5 + 6611245200 z^4 + 3385572120 z^3 + 392934780 z^2 - 28312200 z + 2679075) I_0\left(\frac{z}{2}\right) + \frac{1}{2679075} \left(e^{z/2} (2048 z^{11} + 146432 z^{10} + 4093952 z^9 + 57645312 z^8 + 439036416 z^7 + 1806223104 z^6 + 3775947840 z^5 + 3435269040 z^4 + 874886040 z^3 - 43057980 z^2 + 4747680 z - 165375) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.anp6.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{893025} \left(e^z (1024 z^{10} + 67584 z^9 + 1725696 z^8 + 21891072 z^7 + 147498624 z^6 + 523272960 z^5 + 906625440 z^4 + 633951360 z^3 + 94609620 z^2 - 8096760 z + 893025) \right)$$

07.25.03.anp7.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, 3; z\right) = \frac{1}{2679075} \left(4 e^{z/2} (1024 z^{10} + 62464 z^9 + 1463040 z^8 + 16889856 z^7 + 102816000 z^6 + 328224960 z^5 + 514417680 z^4 + 334252800 z^3 + 49589820 z^2 - 4819500 z + 675675) I_0\left(\frac{z}{2}\right) + \frac{1}{2679075 z} \left(4 e^{z/2} (1024 z^{11} + 61440 z^{10} + 1402112 z^9 + 15517440 z^8 + 87941376 z^7 + 246818880 z^6 + 299703600 z^5 + 103980240 z^4 - 6545700 z^3 + 1035720 z^2 - 70875 z - 23625) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anp8.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{178605} \left(e^z (512 z^9 + 27904 z^8 + 569856 z^7 + 5531904 z^6 + 26728128 z^5 + 61175520 z^4 + 55671840 z^3 + 10780560 z^2 - 1207710 z + 178605) \right)$$

07.25.03.anp9.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, 4; z\right) = \frac{1}{893025 z} \left(4 e^{z/2} (1024 z^{10} + 50688 z^9 + 930048 z^8 + 8017920 z^7 + 34038144 z^6 + 68134752 z^5 + 55001520 z^4 + 10009440 z^3 - 1228500 z^2 + 224910 z + 8505) I_0\left(\frac{z}{2}\right) + \frac{1}{893025 z^2} \left(4 e^{z/2} (1024 z^{11} + 49664 z^{10} + 880896 z^9 + 7160832 z^8 + 27271296 z^7 + 43704864 z^6 + 19947312 z^5 - 1522080 z^4 + 313740 z^3 - 35910 z^2 - 6615 z - 34020) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anpa.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{1}{25515} (e^z (256 z^8 + 11008 z^7 + 169344 z^6 + 1157184 z^5 + 3528000 z^4 + 4127760 z^3 + 1005480 z^2 - 139860 z + 25515))$$

07.25.03.anpb.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, 5; z\right) = \frac{1}{893025 z^2} (32 e^{z/2} (512 z^{10} + 19456 z^9 + 260352 z^8 + 1521792 z^7 + 3915744 z^6 + 3878784 z^5 + 841680 z^4 - 126000 z^3 + 32130 z^2 - 11340 z + 31185) I_0\left(\frac{z}{2}\right) + \frac{1}{893025 z^3} (64 e^{z/2} (256 z^{11} + 9472 z^{10} + 120832 z^9 + 644544 z^8 + 1365072 z^7 + 802032 z^6 - 71568 z^5 + 17640 z^4 - 315 z^3 - 10395 z^2 + 22680 z - 62370) I_1\left(\frac{z}{2}\right))$$

07.25.03.anpc.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z (128 z^7 + 4032 z^6 + 42336 z^5 + 176400 z^4 + 264600 z^3 + 79380 z^2 - 13230 z + 2835)}{2835}$$

07.25.03.anpd.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{3}{2}, 6; z\right) = \frac{1}{178605 z^3} (32 e^{z/2} (512 z^{10} + 13568 z^9 + 117504 z^8 + 396096 z^7 + 479136 z^6 + 117936 z^5 - 108360 z^3 + 493290 z^2 - 1590435 z + 3243240) I_0\left(\frac{z}{2}\right) + \frac{1}{178605 z^4} (32 e^{z/2} (512 z^{11} + 13056 z^{10} + 104704 z^9 + 297408 z^8 + 222624 z^7 - 26544 z^6 + 32256 z^5 - 143640 z^4 + 654570 z^3 - 2378565 z^2 + 6361740 z - 12972960) I_1\left(\frac{z}{2}\right))$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = -\frac{1}{2}$

07.25.03.anpe.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{893025} (e^z (4096 z^{12} + 368640 z^{11} + 1340064 z^{10} + 255989760 z^9 + 2804371200 z^8 + 18066723840 z^7 + 67645958400 z^6 + 140642645760 z^5 + 148356457200 z^4 + 67012596000 z^3 + 9023124600 z^2 + 107163000 z + 893025))$$

07.25.03.anpf.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{1}{2}; z\right) = -\frac{1}{893025} (e^z (2048 z^{11} + 162816 z^{10} + 5153280 z^9 + 84192000 z^8 + 770745600 z^7 + 4023515520 z^6 + 11693643840 z^5 + 17699925600 z^4 + 12228489000 z^3 + 2935075500 z^2 + 108949050 z - 893025))$$

07.25.03.anpg.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, 1; z\right) = \frac{1}{893025} \left(e^{z/2} (-1024 z^{11} - 76800 z^{10} - 2284800 z^9 - 34975488 z^8 - 299503872 z^7 - 1465067520 z^6 - 4026198960 z^5 - 5900202000 z^4 - 4150768860 z^3 - 1114846740 z^2 - 54474525 z + 893025) I_0\left(\frac{z}{2}\right) + \frac{1}{893025} \left(e^{z/2} (-1024 z^{11} - 75776 z^{10} - 2209536 z^9 - 32802816 z^8 - 267733248 z^7 - 1211749632 z^6 - 2921501520 z^5 - 3395286720 z^4 - 1534676220 z^3 - 150073560 z^2 + 2299185 z) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.anph.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{3}{2}; z\right) = -\frac{1}{893025} \left(e^z (1024 z^{10} + 70656 z^9 + 1905408 z^8 + 25900032 z^7 + 191122560 z^6 + 769461120 z^5 + 1614785760 z^4 + 1583426880 z^3 + 572250420 z^2 + 36911700 z - 893025) \right)$$

07.25.03.anpi.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, 2; z\right) = \frac{1}{893025} \left(e^{z/2} (-1024 z^{10} - 66048 z^9 - 1656576 z^8 - 20846592 z^7 - 142007040 z^6 - 528625440 z^5 - 1037831760 z^4 - 983193120 z^3 - 367351740 z^2 - 27452250 z + 893025) I_0\left(\frac{z}{2}\right) + \frac{1}{893025} \left(e^{z/2} (-1024 z^{10} - 65024 z^9 - 1592064 z^8 - 19286016 z^7 - 123455232 z^6 - 413411040 z^5 - 671060880 z^4 - 438893280 z^3 - 68641020 z^2 + 1869210 z - 33075) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anpj.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{5}{2}; z\right) = -\frac{1}{297675} \left(e^z (512 z^9 + 29952 z^8 + 668160 z^7 + 7270656 z^6 + 41031360 z^5 + 118026720 z^4 + 158245920 z^3 + 79606800 z^2 + 7501410 z - 297675) \right)$$

07.25.03.anpk.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, 3; z\right) = -\frac{1}{893025} \left(8 e^{z/2} (256 z^9 + 13824 z^8 + 282624 z^7 + 2799360 z^6 + 14314320 z^5 + 37386720 z^4 + 46352880 z^3 + 22697280 z^2 + 2305125 z - 112050) I_0\left(\frac{z}{2}\right) - \frac{1}{893025 z} \left(4 e^{z/2} (512 z^{10} + 27136 z^9 + 538368 z^8 + 5073408 z^7 + 23798880 z^6 + 53051040 z^5 + 47844720 z^4 + 10740960 z^3 - 414990 z^2 + 14850 z + 3375) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anpl.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{7}{2}; z\right) = -\frac{1}{59535} \left(e^z (256 z^8 + 12288 z^7 + 217344 z^6 + 1787904 z^5 + 7106400 z^4 + 12821760 z^3 + 8603280 z^2 + 1088640 z - 59535) \right)$$

07.25.03.anpm.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, 4; z\right) = -\frac{1}{297675 z} \left(4 e^{z/2} (512 z^9 + 22272 z^8 + 353280 z^7 + 2579904 z^6 + 9045792 z^5 + 14490000 z^4 + 8975520 z^3 + 1161000 z^2 - 74790 z - 945) I_0\left(\frac{z}{2}\right) - \frac{1}{297675 z^2} \left(4 e^{z/2} (512 z^{10} + 21760 z^9 + 331776 z^8 + 2258496 z^7 + 6933024 z^6 + 8415792 z^5 + 2556000 z^4 - 127080 z^3 + 7290 z^2 + 1485 z + 3780) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anpn.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{9}{2}; z\right) = -\frac{e^z (128 z^7 + 4800 z^6 + 63072 z^5 + 357840 z^4 + 869400 z^3 + 759780 z^2 + 122850 z - 8505)}{8505}$$

07.25.03.anpo.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, 5; z\right) = -\frac{1}{297675 z^2} \left(32 e^{z/2} (256 z^9 + 8448 z^8 + 96192 z^7 + 466368 z^6 + 964656 z^5 + 739440 z^4 + 117000 z^3 - 9720 z^2 + 945 z - 2835) I_0\left(\frac{z}{2}\right) - \frac{1}{297675 z^3} \left(32 e^{z/2} (256 z^{10} + 8192 z^9 + 88128 z^8 + 382080 z^7 + 619248 z^6 + 245376 z^5 - 14760 z^4 + 720 z^3 + 2025 z^2 - 3780 z + 11340) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anpp.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, \frac{11}{2}; z\right) = -\frac{1}{945} e^z (64 z^6 + 1728 z^5 + 15120 z^4 + 50400 z^3 + 56700 z^2 + 11340 z - 945)$$

07.25.03.anpq.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; -\frac{1}{2}, 6; z\right) = -\frac{1}{59535 z^3} \left(32 e^{z/2} (256 z^9 + 5760 z^8 + 41280 z^7 + 111552 z^6 + 104688 z^5 + 18000 z^4 + 6840 z^3 - 37800 z^2 + 121905 z - 249480) I_0\left(\frac{z}{2}\right) - \frac{1}{59535 z^4} \left(32 e^{z/2} (256 z^{10} + 5504 z^9 + 35904 z^8 + 78144 z^7 + 39792 z^6 - 4752 z^5 + 11160 z^4 - 50040 z^3 + 182385 z^2 - 487620 z + 997920) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{11}{2}, a_2 = \frac{11}{2}, b_1 = \frac{1}{2}$

07.25.03.anpr.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{893025} (e^z (1024 z^{10} + 71680 z^9 + 1967360 z^8 + 27340800 z^7 + 207657600 z^6 + 869640960 z^5 + 1933437600 z^4 + 2082931200 z^3 + 906916500 z^2 + 107163000 z + 893025))$$

07.25.03.anps.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, 1; z\right) = \frac{1}{893025} \left(e^{z/2} (512 z^{10} + 33792 z^9 + 871680 z^8 + 11361408 z^7 + 80978400 z^6 + 320302080 z^5 + 685193040 z^4 + 740955600 z^3 + 352691010 z^2 + 53581500 z + 893025) I_0\left(\frac{z}{2}\right) + \frac{1}{893025} \left(2 e^{z/2} (256 z^{10} + 16640 z^9 + 419328 z^8 + 5269440 z^7 + 35413584 z^6 + 127001520 z^5 + 229143600 z^4 + 181447560 z^3 + 46649925 z^2 + 1596105 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anpt.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{893025} (e^z (512 z^9 + 30976 z^8 + 720384 z^7 + 8267520 z^6 + 50089920 z^5 + 159325920 z^4 + 249752160 z^3 + 167333040 z^2 + 35125650 z + 893025))$$

07.25.03.anpu.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, 2; z\right) = \frac{1}{893025} \left(e^{z/2} (512 z^9 + 28928 z^8 + 625408 z^7 + 6649920 z^6 + 37326240 z^5 + 110851440 z^4 + 166239360 z^3 + 112676760 z^2 + 26570250 z + 893025) I_0\left(\frac{z}{2}\right) + \frac{1}{893025} \left(e^{z/2} (512 z^9 + 28416 z^8 + 597248 z^7 + 6066368 z^6 + 31531680 z^5 + 81837840 z^4 + 95632320 z^3 + 39319560 z^2 + 2751210 z - 11025) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anpv.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{297675} (e^z (256 z^8 + 13056 z^7 + 249216 z^6 + 2264640 z^5 + 10324800 z^4 + 22876560 z^3 + 21931560 z^2 + 6906060 z + 297675))$$

07.25.03.anpw.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, 3; z\right) = \frac{1}{893025} \left(4 e^{z/2} (256 z^8 + 12032 z^7 + 210240 z^6 + 1739520 z^5 + 7215600 z^4 + 14706720 z^3 + 13456440 z^2 + 4392000 z + 223425) I_0\left(\frac{z}{2}\right) + \frac{1}{893025 z} \left(4 e^{z/2} (256 z^9 + 11776 z^8 + 198592 z^7 + 1546560 z^6 + 5757360 z^5 + 9557520 z^4 + 5715720 z^3 + 633240 z^2 - 5175 z - 675) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anpx.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{e^z (128 z^7 + 5312 z^6 + 79456 z^5 + 536400 z^4 + 1675800 z^3 + 2221380 z^2 + 969570 z + 59535)}{59535}$$

07.25.03.anpy.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, 4; z\right) = \frac{1}{297675 z} \left(4 e^{z/2} (256 z^8 + 9600 z^7 + 128448 z^6 + 769344 z^5 + 2131920 z^4 + 2562480 z^3 + 1089000 z^2 + 74520 z + 135) I_0\left(\frac{z}{2}\right) + \frac{1}{297675 z^2} \left(4 e^{z/2} (256 z^9 + 9344 z^8 + 119232 z^7 + 654528 z^6 + 1528464 z^5 + 1267920 z^4 + 199080 z^3 - 2520 z^2 - 405 z - 540) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anpz.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{e^z (64 z^6 + 2048 z^5 + 22320 z^4 + 100800 z^3 + 182700 z^2 + 105840 z + 8505)}{8505}$$

07.25.03.anq0.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, 5; z\right) = \frac{1}{297675 z^2} \left(32 e^{z/2} (128 z^8 + 3584 z^7 + 33664 z^6 + 129696 z^5 + 202560 z^4 + 108000 z^3 + 9360 z^2 - 90 z + 315) I_0\left(\frac{z}{2}\right) + \frac{1}{297675 z^3} \left(64 e^{z/2} (64 z^9 + 1728 z^8 + 15136 z^7 + 50512 z^6 + 56808 z^5 + 11880 z^4 - 180 z^3 - 135 z^2 + 180 z - 630) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anq1.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{945} e^z (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945)$$

07.25.03.anq2.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{1}{2}, 6; z\right) = \frac{1}{59535 z^3} \left(32 e^{z/2} (128 z^8 + 2368 z^7 + 13440 z^6 + 27312 z^5 + 18000 z^4 + 1080 z^3 + 3420 z^2 - 11025 z + 22680) I_0\left(\frac{z}{2}\right) + \frac{1}{59535 z^4} \left(32 e^{z/2} (128 z^9 + 2240 z^8 + 11264 z^7 + 17040 z^6 + 4752 z^5 - 1080 z^4 + 4500 z^3 - 16515 z^2 + 44100 z - 90720) I_1\left(\frac{z}{2}\right) \right) \right)$$

For fixed z and $a_1 = \frac{11}{2}, a_2 = \frac{11}{2}, b_1 = 1$

07.25.03.anq3.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; 1, \frac{3}{2}; z\right) = \frac{1}{893025} \left(e^{z/2} (256 z^9 + 14592 z^8 + 318912 z^7 + 3437760 z^6 + 19644336 z^5 + 59775408 z^4 + 92844360 z^3 + 66565800 z^2 + 17562825 z + 893025) I_0\left(\frac{z}{2}\right) + \frac{1}{893025} \left(e^{z/2} (256 z^9 + 14336 z^8 + 304704 z^7 + 3139968 z^6 + 16643184 z^5 + 44438976 z^4 + 54370008 z^3 + 24479280 z^2 + 2299185 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anq4.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; 1, \frac{5}{2}; z\right) = \frac{1}{297675} \left(e^{z/2} (128 z^8 + 6144 z^7 + 110208 z^6 + 943008 z^5 + 4090176 z^4 + 8872416 z^3 + 8920800 z^2 + 3453030 z + 297675) I_0\left(\frac{z}{2}\right) + \frac{1}{297675} \left(2 e^{z/2} (64 z^8 + 3008 z^7 + 52128 z^6 + 420816 z^5 + 1647528 z^4 + 2955528 z^3 + 2035908 z^2 + 333585 z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anq5.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; 1, \frac{7}{2}; z\right) = \frac{e^{z/2} (64 z^7 + 2496 z^6 + 35088 z^5 + 224112 z^4 + 677592 z^3 + 923832 z^2 + 484785 z + 59535) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^7 + 2432 z^6 + 32688 z^5 + 192576 z^4 + 499128 z^3 + 495072 z^2 + 121527 z) I_1\left(\frac{z}{2}\right)}{59535}$$

07.25.03.anq6.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; 1, \frac{9}{2}; z\right) = \frac{e^{z/2} (32 z^6 + 960 z^5 + 9840 z^4 + 42504 z^3 + 77706 z^2 + 52920 z + 8505) I_0\left(\frac{z}{2}\right) + 2 e^{z/2} (16 z^6 + 464 z^5 + 4464 z^4 + 17004 z^3 + 23667 z^2 + 8073 z) I_1\left(\frac{z}{2}\right)}{8505}$$

07.25.03.anq7.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; 1, \frac{11}{2}; z\right) = \frac{1}{945} e^{z/2} (16 z^5 + 336 z^4 + 2220 z^3 + 5484 z^2 + 4725 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^5 + 320 z^4 + 1908 z^3 + 3720 z^2 + 1689 z) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{11}{2}, a_2 = \frac{11}{2}, b_1 = \frac{3}{2}$

07.25.03.anq8.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{893025} \left(e^z (256 z^8 + 13312 z^7 + 260352 z^6 + 2441472 z^5 + 11616864 z^4 + 27387072 z^3 + 29021328 z^2 + 11113200 z + 893025) \right)$$

07.25.03.anq9.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, 2; z\right) = \frac{1}{893025} \left(e^{z/2} (256 z^8 + 12416 z^7 + 225600 z^6 + 1962432 z^5 + 8699376 z^4 + 19449360 z^3 + 20454840 z^2 + 8555400 z + 893025) \right. \\ \left. I_0\left(\frac{z}{2}\right) + \frac{1}{893025} \left(e^{z/2} (256 z^8 + 12160 z^7 + 213568 z^6 + 1754688 z^5 + 7040112 z^4 + 13107696 z^3 + 9639000 z^2 + 1847160 z + 11025) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anqa.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{e^z (128 z^7 + 5568 z^6 + 88416 z^5 + 646032 z^4 + 2255256 z^3 + 3544884 z^2 + 2103570 z + 297675)}{297675}$$

07.25.03.anqb.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, 3; z\right) = \frac{32 e^{z/2} (16 z^7 + 640 z^6 + 9288 z^5 + 61824 z^4 + 197610 z^3 + 291600 z^2 + 173475 z + 27900) I_0\left(\frac{z}{2}\right)}{893025} + \\ \frac{1}{893025 z} \left(4 e^{z/2} (128 z^8 + 4992 z^7 + 69376 z^6 + 427584 z^5 + 1183392 z^4 + 1307760 z^3 + 404640 z^2 + 5400 z + 225) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.anqc.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{e^z (64 z^6 + 2240 z^5 + 27408 z^4 + 144864 z^3 + 330876 z^2 + 283500 z + 59535)}{59535}$$

07.25.03.anqd.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, 4; z\right) = \frac{4 e^{z/2} (128 z^7 + 4032 z^6 + 43968 z^5 + 205968 z^4 + 420624 z^3 + 337320 z^2 + 74376 z - 27) I_0\left(\frac{z}{2}\right)}{297675 z} + \\ \frac{1}{297675 z^2} \left(4 e^{z/2} (128 z^8 + 3904 z^7 + 40128 z^6 + 167664 z^5 + 269520 z^4 + 122040 z^3 + 2664 z^2 + 171 z + 108) I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.anqe.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z (32 z^5 + 848 z^4 + 7344 z^3 + 24696 z^2 + 29610 z + 8505)}{8505}$$

07.25.03.anqf.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, 5; z\right) = \frac{32 e^{z/2} (64 z^7 + 1472 z^6 + 10896 z^5 + 31152 z^4 + 32760 z^3 + 9288 z^2 + 9 z - 45) I_0\left(\frac{z}{2}\right)}{297675 z^2} + \\ \frac{32 e^{z/2} (64 z^8 + 1408 z^7 + 9520 z^6 + 22272 z^5 + 14040 z^4 + 432 z^3 + 63 z^2 - 36 z + 180) I_1\left(\frac{z}{2}\right)}{297675 z^3}$$

07.25.03.anqg.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{1}{945} e^z (16 z^4 + 288 z^3 + 1512 z^2 + 2520 z + 945)$$

07.25.03.anqh.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{3}{2}, 6; z\right) = \frac{32 e^{z/2} (64 z^7 + 928 z^6 + 3888 z^5 + 5280 z^4 + 1944 z^3 - 378 z^2 + 1215 z - 2520) I_0\left(\frac{z}{2}\right)}{59535 z^3} + \\ \frac{32 e^{z/2} (64 z^8 + 864 z^7 + 3056 z^6 + 2592 z^5 + 216 z^4 - 486 z^3 + 1827 z^2 - 4860 z + 10080) I_1\left(\frac{z}{2}\right)}{59535 z^4}$$

For fixed z and $a_1 = \frac{11}{2}, a_2 = \frac{11}{2}, b_1 = 2$

07.25.03.anqi.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; 2, \frac{5}{2}; z\right) = \frac{1}{297\,675} \left(e^{z/2} (128 z^7 + 5184 z^6 + 76\,416 z^5 + 519\,024 z^4 + 1\,704\,528 z^3 + 2\,613\,240 z^2 + 1\,649\,340 z + 297\,675) I_0\left(\frac{z}{2}\right) + \frac{1}{297\,675} \left(e^{z/2} (128 z^7 + 5056 z^6 + 71\,424 z^5 + 450\,000 z^4 + 1\,285\,584 z^3 + 1\,495\,368 z^2 + 512\,820 z + 11\,025) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anqi.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; 2, \frac{7}{2}; z\right) = \frac{e^{z/2} (64 z^6 + 2080 z^5 + 23\,600 z^4 + 116\,448 z^3 + 255\,192 z^2 + 226\,590 z + 59\,535) I_0\left(\frac{z}{2}\right) + e^{z/2} (64 z^6 + 2016 z^5 + 21\,616 z^4 + 95\,776 z^3 + 168\,408 z^2 + 89\,922 z + 3675) I_1\left(\frac{z}{2}\right)}{59\,535}$$

07.25.03.anqk.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; 2, \frac{9}{2}; z\right) = \frac{e^{z/2} (32 z^5 + 784 z^4 + 6288 z^3 + 19\,956 z^2 + 24\,150 z + 8505) I_0\left(\frac{z}{2}\right) + e^{z/2} (32 z^5 + 752 z^4 + 5552 z^3 + 14\,748 z^2 + 11\,526 z + 735) I_1\left(\frac{z}{2}\right)}{8505}$$

07.25.03.anql.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; 2, \frac{11}{2}; z\right) = \frac{1}{945} e^{z/2} (16 z^4 + 264 z^3 + 1284 z^2 + 2100 z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16 z^4 + 248 z^3 + 1044 z^2 + 1164 z + 105) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{11}{2}, a_2 = \frac{11}{2}, b_1 = \frac{5}{2}$

07.25.03.anqm.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{e^z (64 z^6 + 2304 z^5 + 29\,232 z^4 + 162\,240 z^3 + 397\,548 z^2 + 381\,024 z + 99\,225)}{99\,225}$$

07.25.03.anqn.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, 3; z\right) = \frac{4 e^{z/2} (64 z^6 + 2112 z^5 + 24\,432 z^4 + 123\,648 z^3 + 280\,440 z^2 + 261\,540 z + 74\,475) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 + 2048 z^6 + 22\,416 z^5 + 102\,192 z^4 + 187\,608 z^3 + 108\,180 z^2 + 5625 z - 225) I_1\left(\frac{z}{2}\right)}{297\,675 z}$$

07.25.03.anqo.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{e^z (32 z^5 + 912 z^4 + 8688 z^3 + 33\,336 z^2 + 48\,762 z + 19\,845)}{19\,845}$$

07.25.03.anqp.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, 4; z\right) = \frac{4 e^{z/2} (64 z^6 + 1632 z^5 + 13776 z^4 + 46752 z^3 + 61920 z^2 + 24858 z + 9) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (64 z^7 + 1568 z^6 + 12240 z^5 + 35232 z^4 + 31440 z^3 + 2862 z^2 - 207 z - 36) I_1\left(\frac{z}{2}\right)}{99225 z^2}$$

07.25.03.anqq.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{e^z (16 z^4 + 336 z^3 + 2160 z^2 + 4788 z + 2835)}{2835}$$

07.25.03.anqr.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, 5; z\right) = \frac{32 e^{z/2} (32 z^6 + 576 z^5 + 3120 z^4 + 5832 z^3 + 3114 z^2 + 9) I_0\left(\frac{z}{2}\right) + 64 e^{z/2} (16 z^7 + 272 z^6 + 1296 z^5 + 1740 z^4 + 243 z^3 - 27 z^2 - 18) I_1\left(\frac{z}{2}\right)}{99225 z^3}$$

07.25.03.anqs.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{1}{315} e^z (8 z^3 + 108 z^2 + 378 z + 315)$$

07.25.03.anqt.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{5}{2}, 6; z\right) = \frac{32 e^{z/2} (32 z^6 + 336 z^5 + 912 z^4 + 612 z^3 + 54 z^2 - 171 z + 360) I_0\left(\frac{z}{2}\right) + 32 e^{z/2} (32 z^7 + 304 z^6 + 624 z^5 + 108 z^4 + 54 z^3 - 261 z^2 + 684 z - 1440) I_1\left(\frac{z}{2}\right)}{19845 z^4}$$

For fixed z and $a_1 = \frac{11}{2}, a_2 = \frac{11}{2}, b_1 = 3$

07.25.03.anqu.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; 3, \frac{7}{2}; z\right) = \frac{8 e^{z/2} (16 z^5 + 416 z^4 + 3600 z^3 + 12624 z^2 + 17475 z + 7470) I_0\left(\frac{z}{2}\right) + 4 e^{z/2} (32 z^6 + 800 z^5 + 6416 z^4 + 19200 z^3 + 18258 z^2 + 1950 z - 225) I_1\left(\frac{z}{2}\right)}{59535 z}$$

07.25.03.anqv.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; 3, \frac{9}{2}; z\right) = \frac{4 e^{z/2} (16 z^4 + 304 z^3 + 1764 z^2 + 3600 z + 2145) I_0\left(\frac{z}{2}\right)}{8505} + \frac{4 e^{z/2} (16 z^5 + 288 z^4 + 1484 z^3 + 2244 z^2 + 405 z - 75) I_1\left(\frac{z}{2}\right)}{8505 z}$$

07.25.03.anqw.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; 3, \frac{11}{2}; z\right) = \frac{16}{945} e^{z/2} (2 z^3 + 24 z^2 + 75 z + 60) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8 z^4 + 88 z^3 + 216 z^2 + 60 z - 15) I_1\left(\frac{z}{2}\right)}{945 z}$$

For fixed z and $a_1 = \frac{11}{2}, a_2 = \frac{11}{2}, b_1 = \frac{7}{2}$

07.25.03.anqx.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{e^z (16z^4 + 352z^3 + 2408z^2 + 5832z + 3969)}{3969}$$

07.25.03.anqy.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{7}{2}, 4; z\right) = \frac{4e^{z/2} (32z^5 + 624z^4 + 3744z^3 + 7980z^2 + 5022z - 9) I_0\left(\frac{z}{2}\right)}{19845z} + \frac{4e^{z/2} (32z^6 + 592z^5 + 3168z^4 + 5076z^3 + 1038z^2 - 243z + 36) I_1\left(\frac{z}{2}\right)}{19845z^2}$$

07.25.03.anqz.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{567} e^z (8z^3 + 124z^2 + 522z + 567)$$

07.25.03.anr0.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{7}{2}, 5; z\right) = \frac{32e^{z/2} (16z^5 + 208z^4 + 716z^3 + 636z^2 - 3z - 3) I_0\left(\frac{z}{2}\right)}{19845z^2} + \frac{32e^{z/2} (16z^6 + 192z^5 + 532z^4 + 184z^3 - 63z^2 + 12z + 12) I_1\left(\frac{z}{2}\right)}{19845z^3}$$

07.25.03.anr1.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{1}{63} e^z (4z^2 + 36z + 63)$$

07.25.03.anr2.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{7}{2}, 6; z\right) = \frac{32e^{z/2} (16z^5 + 104z^4 + 132z^3 - 12z^2 + 33z - 72) I_0\left(\frac{z}{2}\right)}{3969z^3} + \frac{32e^{z/2} (16z^6 + 88z^5 + 52z^4 - 36z^3 + 57z^2 - 132z + 288) I_1\left(\frac{z}{2}\right)}{3969z^4}$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 4$

07.25.03.anr3.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; 4, \frac{9}{2}; z\right) = \frac{4e^{z/2} (16z^4 + 216z^3 + 780z^2 + 732z - 9) I_0\left(\frac{z}{2}\right)}{2835z} + \frac{4e^{z/2} (16z^5 + 200z^4 + 588z^3 + 228z^2 - 93z + 36) I_1\left(\frac{z}{2}\right)}{2835z^2}$$

07.25.03.anr4.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; 4, \frac{11}{2}; z\right) = \frac{4e^{z/2} (8z^3 + 60z^2 + 84z - 3) I_0\left(\frac{z}{2}\right)}{315z} + \frac{4e^{z/2} (8z^4 + 52z^3 + 36z^2 - 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{9}{2}$

07.25.03.anr5.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{81} e^z (4z^2 + 40z + 81)$$

07.25.03.anr6.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{9}{2}, 5; z\right) = \frac{32 e^{z/2} (8 z^4 + 64 z^3 + 96 z^2 - 6 z + 3) I_0\left(\frac{z}{2}\right)}{2835 z^2} + \frac{64 e^{z/2} (4 z^5 + 28 z^4 + 22 z^3 - 15 z^2 + 12 z - 6) I_1\left(\frac{z}{2}\right)}{2835 z^3}$$

07.25.03.anr7.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{9} e^z (2 z + 9)$$

07.25.03.anr8.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{9}{2}, 6; z\right) = \frac{32 e^{z/2} (8 z^4 + 20 z^3 - 9 z + 24) I_0\left(\frac{z}{2}\right)}{567 z^3} + \frac{32 e^{z/2} (8 z^5 + 12 z^4 - 8 z^3 - 3 z^2 + 36 z - 96) I_1\left(\frac{z}{2}\right)}{567 z^4}$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = 5$

07.25.03.anr9.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; 5, \frac{11}{2}; z\right) = \frac{32 e^{z/2} (4 z^3 + 12 z^2 - 3 z + 3) I_0\left(\frac{z}{2}\right)}{315 z^2} + \frac{32 e^{z/2} (4 z^4 + 8 z^3 - 9 z^2 + 12 z - 12) I_1\left(\frac{z}{2}\right)}{315 z^3}$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = \frac{11}{2}$, $b_1 = \frac{11}{2}$

07.25.03.anra.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{11}{2}, \frac{11}{2}; z\right) = e^z$$

07.25.03.anrb.01

$${}_2F_2\left(\frac{11}{2}, \frac{11}{2}; \frac{11}{2}, 6; z\right) = \frac{32 e^{z/2} (4 z^3 - 6 z^2 + 15 z - 24) I_0\left(\frac{z}{2}\right)}{63 z^3} + \frac{32 e^{z/2} (4 z^4 - 10 z^3 + 27 z^2 - 60 z + 96) I_1\left(\frac{z}{2}\right)}{63 z^4}$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = -\frac{11}{2}$

07.25.03.anrc.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; z\right) = \frac{1}{1531694154375} (16384 z^{22} + 3817472 z^{21} + 389595136 z^{20} + 23006035968 z^{19} + 874922081280 z^{18} + 22574241592320 z^{17} + 405612310763520 z^{16} + 5128981242255360 z^{15} + 45598884643307520 z^{14} + 281830054573670400 z^{13} + 1184135238287769600 z^{12} + 3260676441673728000 z^{11} + 5556034824633216000 z^{10} + 5340039935071564800 z^9 + 2460095352326304000 z^8 + 385225729967232000 z^7 + 6098094226224000 z^6 + 79196028912000 z^5 + 9378477108000 z^4 + 3064861800000 z^3 + 1877227852500 z^2 + 1670939077500 z + 1531694154375) + \frac{1}{1531694154375} (512 e^z \sqrt{\pi} (32 z^{45/2} + 7472 z^{43/2} + 764640 z^{41/2} + 45310440 z^{39/2} + 1730927730 z^{37/2} + 44923182255 z^{35/2} + 813455094375 z^{33/2} + 10393546189950 z^{31/2} + 93721096611450 z^{29/2} + 590789641226400 z^{27/2} + 2553105496788000 z^{25/2} + 7327729982865600 z^{23/2} + 13304493822312000 z^{21/2} + 14171000980752000 z^{19/2} + 7821772502544000 z^{17/2} + 1774803314592000 z^{15/2} + 93410700768000 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anrd.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, -\frac{11}{2}; -z\right) = \frac{1}{1531694154375} (16384 z^{22} - 3817472 z^{21} + 389595136 z^{20} - 23006035968 z^{19} + 874922081280 z^{18} - 22574241592320 z^{17} + 405612310763520 z^{16} - 5128981242255360 z^{15} + 45598884643307520 z^{14} - 281830054573670400 z^{13} + 1184135238287769600 z^{12} - 3260676441673728000 z^{11} + 5556034824633216000 z^{10} - 5340039935071564800 z^9 + 2460095352326304000 z^8 - 385225729967232000 z^7 + 6098094226224000 z^6 - 79196028912000 z^5 + 9378477108000 z^4 - 3064861800000 z^3 + 1877227852500 z^2 - 1670939077500 z + 1531694154375) - \frac{1}{1531694154375} (512 e^{-z} \sqrt{\pi} (32 z^{45/2} - 7472 z^{43/2} + 764640 z^{41/2} - 45310440 z^{39/2} + 1730927730 z^{37/2} - 44923182255 z^{35/2} + 813455094375 z^{33/2} - 10393546189950 z^{31/2} + 93721096611450 z^{29/2} - 590789641226400 z^{27/2} + 2553105496788000 z^{25/2} - 7327729982865600 z^{23/2} + 13304493822312000 z^{21/2} - 14171000980752000 z^{19/2} + 7821772502544000 z^{17/2} - 1774803314592000 z^{15/2} + 93410700768000 z^{13/2}) \operatorname{erfi}(\sqrt{-z}))$$

07.25.03.anre.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; z\right) = \frac{1}{139244923125} (-8192 z^{21} - 1777664 z^{20} - 168136704 z^{19} - 9149982720 z^{18} - 318593149440 z^{17} - 7468375864320 z^{16} - 120802619427840 z^{15} - 1359839202140160 z^{14} - 10613246928076800 z^{13} - 56566513730764800 z^{12} - 200136549924864000 z^{11} - 448889550012288000 z^{10} - 592657561573862400 z^9 - 405931768637472000 z^8 - 112466483724672000 z^7 - 6098094226224000 z^6 + 79196028912000 z^5 + 3126159036000 z^4 + 612972360000 z^3 + 268175407500 z^2 + 185659897500 z + 139244923125) - \frac{1}{139244923125} (256 e^z \sqrt{\pi} (32 z^{43/2} + 6960 z^{41/2} + 660240 z^{39/2} + 36067080 z^{37/2} + 1262055690 z^{35/2} + 29778513975 z^{33/2} + 485891440650 z^{31/2} + 5534631783450 z^{29/2} + 43909410560400 z^{27/2} + 239514356743200 z^{25/2} + 876504999585600 z^{23/2} + 2068699985352000 z^{21/2} + 2960993895552000 z^{19/2} + 2327025398544000 z^{17/2} + 840696306912000 z^{15/2} + 93410700768000 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anrf.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{139244923125} (8192 z^{21} - 1777664 z^{20} + 168136704 z^{19} - 9149982720 z^{18} + 318593149440 z^{17} -$$

$$7468375864320 z^{16} + 120802619427840 z^{15} - 1359839202140160 z^{14} + 10613246928076800 z^{13} -$$

$$56566513730764800 z^{12} + 200136549924864000 z^{11} - 448889550012288000 z^{10} + 592657561573862400 z^9 -$$

$$405931768637472000 z^8 + 112466483724672000 z^7 - 6098094226224000 z^6 - 79196028912000 z^5 +$$

$$3126159036000 z^4 - 612972360000 z^3 + 268175407500 z^2 - 185659897500 z + 139244923125) -$$

$$\frac{1}{139244923125} \left(256 e^{-z} \sqrt{\pi} (32 z^{43/2} - 6960 z^{41/2} + 660240 z^{39/2} - 36067080 z^{37/2} + 1262055690 z^{35/2} -$$

$$29778513975 z^{33/2} + 485891440650 z^{31/2} - 5534631783450 z^{29/2} + 43909410560400 z^{27/2} -$$

$$239514356743200 z^{25/2} + 876504999585600 z^{23/2} - 2068699985352000 z^{21/2} + 2960993895552000 z^{19/2} -$$

$$2327025398544000 z^{17/2} + 840696306912000 z^{15/2} - 93410700768000 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anrg.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{15471658125} (4096 z^{20} + 823296 z^{19} + 71720960 z^{18} + 3571304448 z^{17} + 112904467200 z^{16} + 2381034044160 z^{15} +$$

$$34262237399040 z^{14} + 338361649920000 z^{13} + 2275975296000000 z^{12} +$$

$$10210727697408000 z^{11} + 29425899355776000 z^{10} + 51185156645145600 z^9 +$$

$$48311124811488000 z^8 + 20101982805273600 z^7 + 2032698075408000 z^6 - 79196028912000 z^5 +$$

$$3126159036000 z^4 + 204324120000 z^3 + 53635081500 z^2 + 26522842500 z + 15471658125) +$$

$$\frac{1}{15471658125} \left(128 e^z \sqrt{\pi} (32 z^{41/2} + 6448 z^{39/2} + 563520 z^{37/2} + 28177800 z^{35/2} + 895744290 z^{33/2} +$$

$$19029582495 z^{31/2} + 276566033205 z^{29/2} + 2768971451400 z^{27/2} + 18988667497800 z^{25/2} +$$

$$87605016760800 z^{23/2} + 263269882260000 z^{21/2} + 489080691792000 z^{19/2} +$$

$$515590436592000 z^{17/2} + 264663652176000 z^{15/2} + 46705350384000 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anrh.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{15471658125} (4096 z^{20} - 823296 z^{19} + 71720960 z^{18} - 3571304448 z^{17} + 112904467200 z^{16} -$$

$$2381034044160 z^{15} + 34262237399040 z^{14} - 338361649920000 z^{13} + 2275975296000000 z^{12} -$$

$$10210727697408000 z^{11} + 29425899355776000 z^{10} - 51185156645145600 z^9 +$$

$$48311124811488000 z^8 - 20101982805273600 z^7 + 2032698075408000 z^6 + 79196028912000 z^5 +$$

$$3126159036000 z^4 - 204324120000 z^3 + 53635081500 z^2 - 26522842500 z + 15471658125) -$$

$$\frac{1}{15471658125} \left(128 e^{-z} \sqrt{\pi} (32 z^{41/2} - 6448 z^{39/2} + 563520 z^{37/2} - 28177800 z^{35/2} + 895744290 z^{33/2} -$$

$$19029582495 z^{31/2} + 276566033205 z^{29/2} - 2768971451400 z^{27/2} + 18988667497800 z^{25/2} -$$

$$87605016760800 z^{23/2} + 263269882260000 z^{21/2} - 489080691792000 z^{19/2} +$$

$$515590436592000 z^{17/2} - 264663652176000 z^{15/2} + 46705350384000 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anri.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; z\right) = \frac{1}{2210236875} (-2048 z^{19} - 378880 z^{18} - 30178304 z^{17} - 1363342848 z^{16} - 38743401600 z^{15} - 726241858560 z^{14} - 9160257254400 z^{13} - 77898630297600 z^{12} - 440724946636800 z^{11} - 1609717608576000 z^{10} - 3598204614681600 z^9 - 4482230927328000 z^8 - 2587031598412800 z^7 - 406539615081600 z^6 + 26398676304000 z^5 - 3126159036000 z^4 + 204324120000 z^3 + 17878360500 z^2 + 5304568500 z + 2210236875) - \frac{1}{2210236875} (64 e^z \sqrt{\pi} (32 z^{39/2} + 5936 z^{37/2} + 474480 z^{35/2} + 21535080 z^{33/2} + 615788250 z^{31/2} + 11640123495 z^{29/2} + 148524674760 z^{27/2} + 1283724703800 z^{25/2} + 7435145163600 z^{23/2} + 28123855452000 z^{21/2} + 66402894096000 z^{19/2} + 90663327216000 z^{17/2} + 62273800512000 z^{15/2} + 15568450128000 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anrj.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, -\frac{5}{2}; -z\right) = \frac{1}{2210236875} (2048 z^{19} - 378880 z^{18} + 30178304 z^{17} - 1363342848 z^{16} + 38743401600 z^{15} - 726241858560 z^{14} + 9160257254400 z^{13} - 77898630297600 z^{12} + 440724946636800 z^{11} - 1609717608576000 z^{10} + 3598204614681600 z^9 - 4482230927328000 z^8 + 2587031598412800 z^7 - 406539615081600 z^6 - 26398676304000 z^5 - 3126159036000 z^4 - 204324120000 z^3 + 17878360500 z^2 - 5304568500 z + 2210236875) - \frac{1}{2210236875} (64 e^{-z} \sqrt{\pi} (32 z^{39/2} - 5936 z^{37/2} + 474480 z^{35/2} - 21535080 z^{33/2} + 615788250 z^{31/2} - 11640123495 z^{29/2} + 148524674760 z^{27/2} - 1283724703800 z^{25/2} + 7435145163600 z^{23/2} - 28123855452000 z^{21/2} + 66402894096000 z^{19/2} - 90663327216000 z^{17/2} + 62273800512000 z^{15/2} - 15568450128000 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anrk.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; z\right) = \frac{1}{442047375} (1024 z^{18} + 173056 z^{17} + 12493824 z^{16} + 506843136 z^{15} + 12788775360 z^{14} + 209894207040 z^{13} + 2277107280000 z^{12} + 16269293174400 z^{11} + 74864437401600 z^{10} + 211975132723200 z^9 + 339540483744000 z^8 + 259770710707200 z^7 + 58077087868800 z^6 - 5279735260800 z^5 + 1042053012000 z^4 - 204324120000 z^3 + 17878360500 z^2 + 1768189500 z + 442047375) + \frac{1}{442047375} (32 e^z \sqrt{\pi} (32 z^{37/2} + 5424 z^{35/2} + 393120 z^{33/2} + 16031400 z^{31/2} + 407380050 z^{29/2} + 6751562895 z^{27/2} + 74257482915 z^{25/2} + 541149874650 z^{23/2} + 2564796291750 z^{21/2} + 7605485118000 z^{19/2} + 13164498270000 z^{17/2} + 11676337596000 z^{15/2} + 3892112532000 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anrl.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, -\frac{3}{2}; -z\right) = \frac{1}{442047375} (1024 z^{18} - 173056 z^{17} + 12493824 z^{16} - 506843136 z^{15} + 12788775360 z^{14} - 209894207040 z^{13} + 2277107280000 z^{12} - 16269293174400 z^{11} + 74864437401600 z^{10} - 211975132723200 z^9 + 339540483744000 z^8 - 259770710707200 z^7 + 58077087868800 z^6 + 5279735260800 z^5 + 1042053012000 z^4 + 204324120000 z^3 + 17878360500 z^2 - 1768189500 z + 442047375) - \frac{1}{442047375} (32 e^{-z} \sqrt{\pi} (32 z^{37/2} - 5424 z^{35/2} + 393120 z^{33/2} - 16031400 z^{31/2} + 407380050 z^{29/2} - 6751562895 z^{27/2} + 74257482915 z^{25/2} - 541149874650 z^{23/2} + 2564796291750 z^{21/2} - 7605485118000 z^{19/2} + 13164498270000 z^{17/2} - 11676337596000 z^{15/2} + 3892112532000 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anrm.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; z\right) = \frac{1}{147349125} (-512 z^{17} - 78336 z^{16} - 5072128 z^{15} - 182450304 z^{14} - 4024974240 z^{13} - 56732648640 z^{12} - 516300724800 z^{11} - 2995715923200 z^{10} - 10673182840320 z^9 - 21647559225600 z^8 - 21351017318400 z^7 - 6453009763200 z^6 + 754247894400 z^5 - 208410602400 z^4 + 68108040000 z^3 - 17878360500 z^2 + 1768189500 z + 147349125) - \frac{1}{147349125} (16 e^z \sqrt{\pi} (32 z^{35/2} + 4912 z^{33/2} + 319440 z^{31/2} + 11559240 z^{29/2} + 257109930 z^{27/2} + 3666243735 z^{25/2} + 33928801830 z^{23/2} + 201861856350 z^{21/2} + 748039584600 z^{19/2} + 1621168441200 z^{17/2} + 1816319181600 z^{15/2} + 778422506400 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anrm.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, -\frac{1}{2}; -z\right) = \frac{1}{147349125} (512 z^{17} - 78336 z^{16} + 5072128 z^{15} - 182450304 z^{14} + 4024974240 z^{13} - 56732648640 z^{12} + 516300724800 z^{11} - 2995715923200 z^{10} + 10673182840320 z^9 - 21647559225600 z^8 + 21351017318400 z^7 - 6453009763200 z^6 - 754247894400 z^5 - 208410602400 z^4 - 68108040000 z^3 - 17878360500 z^2 - 1768189500 z + 147349125) - \frac{1}{147349125} (16 e^{-z} \sqrt{\pi} (32 z^{35/2} - 4912 z^{33/2} + 319440 z^{31/2} - 11559240 z^{29/2} + 257109930 z^{27/2} - 3666243735 z^{25/2} + 33928801830 z^{23/2} - 201861856350 z^{21/2} + 748039584600 z^{19/2} - 1621168441200 z^{17/2} + 1816319181600 z^{15/2} - 778422506400 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anro.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, \frac{1}{2}; z\right) = \frac{1}{147349125} (256 z^{16} + 35072 z^{15} + 2010112 z^{14} + 63100800 z^{13} + 1193139120 z^{12} + 14077849200 z^{11} + 103820270400 z^{10} + 465454503360 z^9 + 1186167628800 z^8 + 1482709536000 z^7 + 586637251200 z^6 - 83805321600 z^5 + 29772943200 z^4 - 13621608000 z^3 + 5959453500 z^2 - 1768189500 z + 147349125) + \frac{1}{147349125} (8 e^z \sqrt{\pi} (32 z^{33/2} + 4400 z^{31/2} + 253440 z^{29/2} + 8011080 z^{27/2} + 152965890 z^{25/2} + 1830653055 z^{23/2} + 13791618225 z^{21/2} + 63945674100 z^{19/2} + 172528517700 z^{17/2} + 240940299600 z^{15/2} + 129737084400 z^{13/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anrp.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, \frac{1}{2}; -z\right) = \frac{1}{147\,349\,125} (256 z^{16} - 35\,072 z^{15} + 2\,010\,112 z^{14} - 63\,100\,800 z^{13} + 1\,193\,139\,120 z^{12} - 14\,077\,849\,200 z^{11} + 103\,820\,270\,400 z^{10} - 465\,454\,503\,360 z^9 + 1\,186\,167\,628\,800 z^8 - 1\,482\,709\,536\,000 z^7 + 586\,637\,251\,200 z^6 + 83\,805\,321\,600 z^5 + 29\,772\,943\,200 z^4 + 13\,621\,608\,000 z^3 + 5\,959\,453\,500 z^2 + 1\,768\,189\,500 z + 147\,349\,125) - \frac{1}{147\,349\,125} (8 e^{-z} \sqrt{\pi} (32 z^{33/2} - 4400 z^{31/2} + 253\,440 z^{29/2} - 8\,011\,080 z^{27/2} + 152\,965\,890 z^{25/2} - 1\,830\,653\,055 z^{23/2} + 13\,791\,618\,225 z^{21/2} - 63\,945\,674\,100 z^{19/2} + 172\,528\,517\,700 z^{17/2} - 240\,940\,299\,600 z^{15/2} + 129\,737\,084\,400 z^{13/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anrq.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, 1; z\right) = \frac{1}{1\,178\,793\,000} (e^z (2048 z^{16} + 265\,216 z^{15} + 14\,292\,480 z^{14} + 419\,193\,600 z^{13} + 7\,348\,454\,400 z^{12} + 79\,604\,461\,440 z^{11} + 532\,171\,442\,880 z^{10} + 2\,124\,779\,580\,000 z^9 + 4\,690\,679\,301\,000 z^8 + 4\,809\,646\,957\,500 z^7 + 1\,262\,733\,976\,350 z^6 - 250\,431\,298\,425 z^5 + 109\,349\,422\,875 z^4 - 55\,665\,225\,000 z^3 + 25\,540\,515\,000 z^2 - 8\,251\,551\,000 z + 1\,178\,793\,000))$$

07.25.03.anrr.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, \frac{3}{2}; z\right) = \frac{1}{147\,349\,125} (4 e^z \sqrt{\pi} (32 z^9 + 3888 z^8 + 195\,120 z^7 + 5\,279\,400 z^6 + 84\,333\,690 z^5 + 818\,648\,775 z^4 + 4\,786\,481\,700 z^3 + 16\,080\,857\,100 z^2 + 27\,800\,803\,800 z + 18\,533\,869\,200) \operatorname{erf}(\sqrt{z}) z^{13/2}) + \frac{1}{147\,349\,125} (128 z^{15} + 15\,488 z^{14} + 772\,800 z^{13} + 20\,738\,784 z^{12} + 327\,333\,000 z^{11} + 3\,120\,400\,800 z^{10} + 17\,726\,718\,240 z^9 + 56\,691\,835\,200 z^8 + 88\,962\,572\,160 z^7 + 45\,125\,942\,400 z^6 - 7\,618\,665\,600 z^5 + 3\,308\,104\,800 z^4 - 1\,945\,944\,000 z^3 + 1\,191\,890\,700 z^2 - 589\,396\,500 z + 147\,349\,125)$$

07.25.03.anrs.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, \frac{3}{2}; -z\right) = \frac{1}{147\,349\,125} (4 e^{-z} \sqrt{\pi} (32 z^9 - 3888 z^8 + 195\,120 z^7 - 5\,279\,400 z^6 + 84\,333\,690 z^5 - 818\,648\,775 z^4 + 4\,786\,481\,700 z^3 - 16\,080\,857\,100 z^2 + 27\,800\,803\,800 z - 18\,533\,869\,200) \operatorname{erfi}(\sqrt{z}) z^{13/2}) + \frac{1}{147\,349\,125} (-128 z^{15} + 15\,488 z^{14} - 772\,800 z^{13} + 20\,738\,784 z^{12} - 327\,333\,000 z^{11} + 3\,120\,400\,800 z^{10} - 17\,726\,718\,240 z^9 + 56\,691\,835\,200 z^8 - 88\,962\,572\,160 z^7 + 45\,125\,942\,400 z^6 + 7\,618\,665\,600 z^5 + 3\,308\,104\,800 z^4 + 1\,945\,944\,000 z^3 + 1\,191\,890\,700 z^2 + 589\,396\,500 z + 147\,349\,125)$$

07.25.03.anrt.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, 2; z\right) = \frac{1}{1178793000} \left(e^z (2048 z^{15} + 232448 z^{14} + 10805760 z^{13} + 267912960 z^{12} + 3865585920 z^{11} + 33217430400 z^{10} + 166779708480 z^9 + 456982495200 z^8 + 577836844200 z^7 + 186952203900 z^6 - 45931450950 z^5 + 25157407275 z^4 - 16437613500 z^3 + 10085229000 z^2 - 4715172000 z + 1178793000) \right)$$

07.25.03.anru.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, \frac{5}{2}; z\right) = \frac{1}{49116375} \left(2 e^z \sqrt{\pi} (32 z^8 + 3376 z^7 + 144480 z^6 + 3256680 z^5 + 41996850 z^4 + 314686575 z^3 + 1324929375 z^2 + 2831563350 z + 2316733650) \operatorname{erf}(\sqrt{z}) z^{13/2} \right) + \frac{1}{49116375} \left(64 z^{14} + 6720 z^{13} + 285632 z^{12} + 6373824 z^{11} + 80941500 z^{10} + 591761940 z^9 + 2387662200 z^8 + 4687978680 z^7 + 3008396160 z^6 - 586051200 z^5 + 300736800 z^4 - 216216000 z^3 + 170270100 z^2 - 117879300 z + 49116375 \right)$$

07.25.03.anrv.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, \frac{5}{2}; -z\right) = \frac{1}{49116375} \left(64 z^{14} - 6720 z^{13} + 285632 z^{12} - 6373824 z^{11} + 80941500 z^{10} - 591761940 z^9 + 2387662200 z^8 - 4687978680 z^7 + 3008396160 z^6 + 586051200 z^5 + 300736800 z^4 + 216216000 z^3 + 170270100 z^2 + 117879300 z + 49116375 \right) - \frac{1}{49116375} \left(2 e^{-z} \sqrt{\pi} z^{13/2} (32 z^8 - 3376 z^7 + 144480 z^6 - 3256680 z^5 + 41996850 z^4 - 314686575 z^3 + 1324929375 z^2 - 2831563350 z + 2316733650) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anrw.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, 3; z\right) = \frac{1}{589396500} \left(e^z (2048 z^{14} + 199680 z^{13} + 7810560 z^{12} + 158565120 z^{11} + 1804239360 z^{10} + 11566558080 z^9 + 39547569600 z^8 + 61506799200 z^7 + 24275651400 z^6 - 7253007300 z^5 + 4839600150 z^4 - 3880193625 z^3 + 2963354625 z^2 - 1768189500 z + 589396500) \right)$$

07.25.03.anrx.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, \frac{7}{2}; z\right) = \frac{1}{9823275} \left(e^z \sqrt{\pi} (32 z^7 + 2864 z^6 + 101520 z^5 + 1835400 z^4 + 18136650 z^3 + 97046775 z^2 + 257414850 z + 257414850) \operatorname{erf}(\sqrt{z}) z^{13/2} \right) + \frac{1}{9823275} \left(32 z^{13} + 2848 z^{12} + 100112 z^{11} + 1786728 z^{10} + 17289930 z^9 + 89182500 z^8 + 219639420 z^7 + 176964480 z^6 - 39070080 z^5 + 23133600 z^4 - 19656000 z^3 + 18918900 z^2 - 16839900 z + 9823275 \right)$$

07.25.03.anry.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, \frac{7}{2}; -z\right) = \frac{1}{9823275} \left(e^{-z} \sqrt{\pi} (32z^7 - 2864z^6 + 101520z^5 - 1835400z^4 + 18136650z^3 - 97046775z^2 + 257414850z - 257414850) \operatorname{erfi}(\sqrt{z}) z^{13/2} + \frac{1}{9823275} (-32z^{13} + 2848z^{12} - 100112z^{11} + 1786728z^{10} - 17289930z^9 + 89182500z^8 - 219639420z^7 + 176964480z^6 + 39070080z^5 + 23133600z^4 + 19656000z^3 + 18918900z^2 + 16839900z + 9823275) \right)$$

07.25.03.anrz.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, 4; z\right) = \frac{1}{196465500} \left(e^z (2048z^{13} + 166912z^{12} + 5306880z^{11} + 84268800z^{10} + 708744960z^9 + 3061618560z^8 + 5869765440z^7 + 2809144800z^6 - 1006651800z^5 + 800207100z^4 - 761849550z^3 + 690903675z^2 - 491163750z + 196465500) \right)$$

07.25.03.ans0.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, \frac{9}{2}; z\right) = \frac{1}{2806650} \left(e^z \sqrt{\pi} (32z^6 + 2352z^5 + 66240z^4 + 908040z^3 + 6332130z^2 + 21061215z + 25741485) \operatorname{erf}(\sqrt{z}) z^{13/2} + \frac{1}{1403325} (16z^{12} + 1168z^{11} + 32544z^{10} + 438312z^9 + 2961795z^8 + 9233235z^7 + 9313920z^6 - 2298240z^5 + 1542240z^4 - 1512000z^3 + 1719900z^2 - 1871100z + 1403325) \right)$$

07.25.03.ans1.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, \frac{9}{2}; -z\right) = \frac{1}{1403325} (16z^{12} - 1168z^{11} + 32544z^{10} - 438312z^9 + 2961795z^8 - 9233235z^7 + 9313920z^6 + 2298240z^5 + 1542240z^4 + 1512000z^3 + 1719900z^2 + 1871100z + 1403325) - \frac{1}{2806650} \left(e^{-z} \sqrt{\pi} z^{13/2} (32z^6 - 2352z^5 + 66240z^4 - 908040z^3 + 6332130z^2 - 21061215z + 25741485) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ans2.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, 5; z\right) = \frac{1}{49116375} \left(e^z (2048z^{12} + 134144z^{11} + 3294720z^{10} + 38142720z^9 + 212889600z^8 + 506943360z^7 + 293388480z^6 - 124740000z^5 + 116008200z^4 - 127858500z^3 + 133159950z^2 - 108056025z + 49116375) \right)$$

07.25.03.ans3.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, \frac{11}{2}; z\right) = \frac{e^z \sqrt{\pi} (32 z^5 + 1840 z^4 + 38\,640 z^3 + 367\,080 z^2 + 1\,560\,090 z + 2\,340\,135) \operatorname{erf}(\sqrt{z}) z^{13/2}}{623\,700} +$$

$$\frac{1}{311\,850} (16 z^{11} + 912 z^{10} + 18\,872 z^9 + 174\,540 z^8 + 701\,145 z^7 +$$

$$887\,040 z^6 - 241\,920 z^5 + 181\,440 z^4 - 201\,600 z^3 + 264\,600 z^2 - 340\,200 z + 311\,850)$$

07.25.03.ans4.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32 z^5 - 1840 z^4 + 38\,640 z^3 - 367\,080 z^2 + 1\,560\,090 z - 2\,340\,135) \operatorname{erfi}(\sqrt{z}) z^{13/2}}{623\,700} +$$

$$\frac{1}{311\,850} (-16 z^{11} + 912 z^{10} - 18\,872 z^9 + 174\,540 z^8 - 701\,145 z^7 +$$

$$887\,040 z^6 + 241\,920 z^5 + 181\,440 z^4 + 201\,600 z^3 + 264\,600 z^2 + 340\,200 z + 311\,850)$$

07.25.03.ans5.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{11}{2}, 6; z\right) =$$

$$\frac{1}{9\,823\,275} (e^z (2048 z^{11} + 101\,376 z^{10} + 1\,774\,080 z^9 + 13\,305\,600 z^8 + 39\,916\,800 z^7 + 27\,941\,760 z^6 - 13\,970\,880 z^5 +$$

$$14\,968\,800 z^4 - 18\,711\,000 z^3 + 21\,829\,500 z^2 - 19\,646\,550 z + 9\,823\,275))$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = -\frac{9}{2}$

07.25.03.ans6.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; z\right) =$$

$$\frac{1}{12\,658\,629\,375} (4096 z^{20} + 827\,392 z^{19} + 72\,486\,912 z^{18} + 3\,633\,070\,080 z^{17} + 115\,734\,961\,920 z^{16} + 2\,462\,833\,013\,760 z^{15} +$$

$$35\,826\,623\,239\,680 z^{14} + 358\,582\,045\,409\,280 z^{13} + 2\,453\,265\,548\,697\,600 z^{12} +$$

$$11\,254\,149\,056\,102\,400 z^{11} + 33\,445\,211\,700\,096\,000 z^{10} + 60\,881\,957\,594\,035\,200 z^9 +$$

$$61\,932\,968\,371\,411\,200 z^8 + 29\,927\,360\,905\,344\,000 z^7 + 4\,869\,355\,838\,256\,000 z^6 + 79\,196\,028\,912\,000 z^5 +$$

$$1\,042\,053\,012\,000 z^4 + 122\,594\,472\,000 z^3 + 38\,310\,772\,500 z^2 + 20\,628\,877\,500 z + 12\,658\,629\,375) +$$

$$\frac{1}{12\,658\,629\,375} (128 e^z \sqrt{\pi} (32 z^{41/2} + 6480 z^{39/2} + 569\,520 z^{37/2} + 28\,663\,320 z^{35/2} + 918\,095\,850 z^{33/2} +$$

$$19\,679\,459\,625 z^{31/2} + 289\,096\,844\,400 z^{29/2} + 2\,932\,760\,183\,850 z^{27/2} + 20\,447\,329\,089\,600 z^{25/2} +$$

$$96\,383\,053\,116\,000 z^{23/2} + 298\,206\,680\,889\,600 z^{21/2} + 577\,666\,580\,904\,000 z^{19/2} + 650\,327\,571\,936\,000 z^{17/2} +$$

$$376\,042\,682\,736\,000 z^{15/2} + 88\,610\,941\,440\,000 z^{13/2} + 4\,799\,759\,328\,000 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ans7.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, -\frac{9}{2}; -z\right) =$$

$$\frac{1}{12\,658\,629\,375} (4096 z^{20} - 827\,392 z^{19} + 72\,486\,912 z^{18} - 3\,633\,070\,080 z^{17} + 115\,734\,961\,920 z^{16} - 2\,462\,833\,013\,760 z^{15} +$$

$$35\,826\,623\,239\,680 z^{14} - 358\,582\,045\,409\,280 z^{13} + 2\,453\,265\,548\,697\,600 z^{12} -$$

$$11\,254\,149\,056\,102\,400 z^{11} + 33\,445\,211\,700\,096\,000 z^{10} - 60\,881\,957\,594\,035\,200 z^9 +$$

$$61\,932\,968\,371\,411\,200 z^8 - 29\,927\,360\,905\,344\,000 z^7 + 4\,869\,355\,838\,256\,000 z^6 - 79\,196\,028\,912\,000 z^5 +$$

$$1\,042\,053\,012\,000 z^4 - 122\,594\,472\,000 z^3 + 38\,310\,772\,500 z^2 - 20\,628\,877\,500 z + 12\,658\,629\,375) -$$

$$\frac{1}{12\,658\,629\,375} \left(128 e^{-z} \sqrt{\pi} (32 z^{41/2} - 6480 z^{39/2} + 569\,520 z^{37/2} - 28\,663\,320 z^{35/2} + 918\,095\,850 z^{33/2} -$$

$$19\,679\,459\,625 z^{31/2} + 289\,096\,844\,400 z^{29/2} - 2\,932\,760\,183\,850 z^{27/2} + 20\,447\,329\,089\,600 z^{25/2} -$$

$$96\,383\,053\,116\,000 z^{23/2} + 298\,206\,680\,889\,600 z^{21/2} - 577\,666\,580\,904\,000 z^{19/2} + 650\,327\,571\,936\,000 z^{17/2} -$$

$$376\,042\,682\,736\,000 z^{15/2} + 88\,610\,941\,440\,000 z^{13/2} - 4\,799\,759\,328\,000 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ans8.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; z\right) =$$

$$\frac{1}{1\,406\,514\,375} (-2048 z^{19} - 382\,976 z^{18} - 30\,882\,816 z^{17} - 1\,415\,247\,360 z^{16} - 40\,899\,484\,800 z^{15} - 782\,192\,920\,320 z^{14} -$$

$$10\,110\,197\,744\,640 z^{13} - 88\,645\,126\,348\,800 z^{12} - 521\,710\,679\,347\,200 z^{11} -$$

$$2\,009\,656\,172\,160\,000 z^{10} - 4\,848\,400\,474\,444\,800 z^9 - 6\,810\,921\,779\,961\,600 z^8 -$$

$$4\,912\,689\,050\,035\,200 z^7 - 1\,418\,328\,881\,424\,000 z^6 - 79\,196\,028\,912\,000 z^5 +$$

$$1\,042\,053\,012\,000 z^4 + 40\,864\,824\,000 z^3 + 7\,662\,154\,500 z^2 + 2\,946\,982\,500 z + 1\,406\,514\,375) -$$

$$\frac{1}{1\,406\,514\,375} \left(64 e^z \sqrt{\pi} (32 z^{39/2} + 6000 z^{37/2} + 485\,520 z^{35/2} + 22\,351\,560 z^{33/2} + 649\,877\,130 z^{31/2} +$$

$$12\,530\,811\,195 z^{29/2} + 163\,788\,732\,450 z^{27/2} + 1\,458\,661\,591\,800 z^{25/2} + 8\,778\,036\,355\,200 z^{23/2} +$$

$$34\,936\,798\,629\,600 z^{21/2} + 88\,585\,889\,112\,000 z^{19/2} + 134\,737\,135\,344\,000 z^{17/2} +$$

$$111\,379\,030\,560\,000 z^{15/2} + 41\,905\,591\,056\,000 z^{13/2} + 4\,799\,759\,328\,000 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ans9.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{1\,406\,514\,375} (2048 z^{19} - 382\,976 z^{18} + 30\,882\,816 z^{17} - 1\,415\,247\,360 z^{16} + 40\,899\,484\,800 z^{15} - 782\,192\,920\,320 z^{14} +$$

$$10\,110\,197\,744\,640 z^{13} - 88\,645\,126\,348\,800 z^{12} + 521\,710\,679\,347\,200 z^{11} -$$

$$2\,009\,656\,172\,160\,000 z^{10} + 4\,848\,400\,474\,444\,800 z^9 - 6\,810\,921\,779\,961\,600 z^8 +$$

$$4\,912\,689\,050\,035\,200 z^7 - 1\,418\,328\,881\,424\,000 z^6 + 79\,196\,028\,912\,000 z^5 +$$

$$1\,042\,053\,012\,000 z^4 - 40\,864\,824\,000 z^3 + 7\,662\,154\,500 z^2 - 2\,946\,982\,500 z + 1\,406\,514\,375) -$$

$$\frac{1}{1\,406\,514\,375} \left(64 e^{-z} \sqrt{\pi} (32 z^{39/2} - 6000 z^{37/2} + 485\,520 z^{35/2} - 22\,351\,560 z^{33/2} + 649\,877\,130 z^{31/2} -$$

$$12\,530\,811\,195 z^{29/2} + 163\,788\,732\,450 z^{27/2} - 1\,458\,661\,591\,800 z^{25/2} + 8\,778\,036\,355\,200 z^{23/2} -$$

$$34\,936\,798\,629\,600 z^{21/2} + 88\,585\,889\,112\,000 z^{19/2} - 134\,737\,135\,344\,000 z^{17/2} +$$

$$111\,379\,030\,560\,000 z^{15/2} - 41\,905\,591\,056\,000 z^{13/2} + 4\,799\,759\,328\,000 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ansa.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; z\right) = \frac{1}{200930625} (1024 z^{18} + 176128 z^{17} + 12976128 z^{16} + 539020800 z^{15} + 13987765440 z^{14} + 237485122560 z^{13} + 2686624012800 z^{12} + 20246433177600 z^{11} + 99984640896000 z^{10} + 31254896494800 z^9 + 582172713158400 z^8 + 581414362905600 z^7 + 252947316585600 z^6 + 26398676304000 z^5 - 1042053012000 z^4 + 40864824000 z^3 + 2554051500 z^2 + 589396500 z + 200930625) + \frac{1}{200930625} (32 e^z \sqrt{\pi} (32 z^{37/2} + 5520 z^{35/2} + 408240 z^{33/2} + 17044440 z^{31/2} + 445343850 z^{29/2} + 7632028845 z^{27/2} + 87468444000 z^{25/2} + 671445595800 z^{23/2} + 3406471588800 z^{21/2} + 11091497508000 z^{19/2} + 22036904064000 z^{17/2} + 24552615024000 z^{15/2} + 13168570464000 z^{13/2} + 2399879664000 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ansb.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, -\frac{5}{2}; -z\right) = \frac{1}{200930625} (1024 z^{18} - 176128 z^{17} + 12976128 z^{16} - 539020800 z^{15} + 13987765440 z^{14} - 237485122560 z^{13} + 2686624012800 z^{12} - 20246433177600 z^{11} + 99984640896000 z^{10} - 31254896494800 z^9 + 582172713158400 z^8 - 581414362905600 z^7 + 252947316585600 z^6 - 26398676304000 z^5 - 1042053012000 z^4 - 40864824000 z^3 + 2554051500 z^2 - 589396500 z + 200930625) - \frac{1}{200930625} (32 e^{-z} \sqrt{\pi} (32 z^{37/2} - 5520 z^{35/2} + 408240 z^{33/2} - 17044440 z^{31/2} + 445343850 z^{29/2} - 7632028845 z^{27/2} + 87468444000 z^{25/2} - 671445595800 z^{23/2} + 3406471588800 z^{21/2} - 11091497508000 z^{19/2} + 22036904064000 z^{17/2} - 24552615024000 z^{15/2} + 13168570464000 z^{13/2} - 2399879664000 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ansc.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; z\right) = \frac{1}{40186125} (-512 z^{17} - 80384 z^{16} - 5362944 z^{15} - 199831680 z^{14} - 4598485920 z^{13} - 68252788800 z^{12} - 662856667200 z^{11} - 4186700582400 z^{10} - 16762305369600 z^9 - 40438704902400 z^8 - 53607275366400 z^7 - 32478371452800 z^6 - 5279735260800 z^5 + 347351004000 z^4 - 40864824000 z^3 + 2554051500 z^2 + 196465500 z + 40186125) - \frac{1}{40186125} (16 e^z \sqrt{\pi} (32 z^{35/2} + 5040 z^{33/2} + 337680 z^{31/2} + 12654600 z^{29/2} + 293488650 z^{27/2} + 4403653695 z^{25/2} + 43431907050 z^{23/2} + 280558432350 z^{21/2} + 1162004130000 z^{19/2} + 2957468598000 z^{17/2} + 4292092476000 z^{15/2} + 3092152644000 z^{13/2} + 799959888000 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ansd.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, -\frac{3}{2}; -z\right) = \frac{1}{40186125} (512 z^{17} - 80384 z^{16} + 5362944 z^{15} - 199831680 z^{14} + 4598485920 z^{13} - 68252788800 z^{12} + 662856667200 z^{11} - 4186700582400 z^{10} + 16762305369600 z^9 - 40438704902400 z^8 + 53607275366400 z^7 - 32478371452800 z^6 + 5279735260800 z^5 + 347351004000 z^4 + 40864824000 z^3 + 2554051500 z^2 - 196465500 z + 40186125) - \frac{1}{40186125} (16 e^{-z} \sqrt{\pi} (32 z^{35/2} - 5040 z^{33/2} + 337680 z^{31/2} - 12654600 z^{29/2} + 293488650 z^{27/2} - 4403653695 z^{25/2} + 43431907050 z^{23/2} - 280558432350 z^{21/2} + 1162004130000 z^{19/2} - 2957468598000 z^{17/2} + 4292092476000 z^{15/2} - 3092152644000 z^{13/2} + 799959888000 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anse.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; z\right) = \frac{1}{13395375} (256 z^{16} + 36352 z^{15} + 2172672 z^{14} + 71688960 z^{13} + 1440017520 z^{12} + 18319492800 z^{11} + 148873082400 z^{10} + 761140316160 z^9 + 2348893209600 z^8 + 4032032256000 z^7 + 3253170211200 z^6 + 754247894400 z^5 - 69470200800 z^4 + 13621608000 z^3 - 2554051500 z^2 + 196465500 z + 13395375) + \frac{1}{13395375} (8 e^z \sqrt{\pi} (32 z^{33/2} + 4560 z^{31/2} + 273840 z^{29/2} + 9094680 z^{27/2} + 184352490 z^{25/2} + 2375776305 z^{23/2} + 19674144000 z^{21/2} + 103491136350 z^{19/2} + 334075039200 z^{17/2} + 618943323600 z^{15/2} + 578432534400 z^{13/2} + 199989972000 z^{11/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ansf.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, -\frac{1}{2}; -z\right) = \frac{1}{13395375} (256 z^{16} - 36352 z^{15} + 2172672 z^{14} - 71688960 z^{13} + 1440017520 z^{12} - 18319492800 z^{11} + 148873082400 z^{10} - 761140316160 z^9 + 2348893209600 z^8 - 4032032256000 z^7 + 3253170211200 z^6 - 754247894400 z^5 - 69470200800 z^4 - 13621608000 z^3 - 2554051500 z^2 - 196465500 z + 13395375) - \frac{1}{13395375} (8 e^{-z} \sqrt{\pi} (32 z^{33/2} - 4560 z^{31/2} + 273840 z^{29/2} - 9094680 z^{27/2} + 184352490 z^{25/2} - 2375776305 z^{23/2} + 19674144000 z^{21/2} - 103491136350 z^{19/2} + 334075039200 z^{17/2} - 618943323600 z^{15/2} + 578432534400 z^{13/2} - 199989972000 z^{11/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ansg.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, \frac{1}{2}; z\right) = \frac{1}{13\,395\,375} \left(-128 z^{15} - 16\,256 z^{14} - 858\,816 z^{13} - 24\,687\,840 z^{12} - 424\,164\,360 z^{11} - 4\,505\,281\,200 z^{10} - 29\,568\,581\,280 z^9 - 116\,272\,558\,080 z^8 - 254\,932\,272\,000 z^7 - 266\,653\,296\,000 z^6 - 83\,805\,321\,600 z^5 + 9\,924\,314\,400 z^4 - 2\,724\,321\,600 z^3 + 851\,350\,500 z^2 - 196\,465\,500 z + 13\,395\,375 \right) - \frac{1}{13\,395\,375} \left(4 e^z \sqrt{\pi} \left(32 z^{31/2} + 4080 z^{29/2} + 216\,720 z^{27/2} + 6\,277\,320 z^{25/2} + 109\,024\,650 z^{23/2} + 1\,176\,505\,155 z^{21/2} + 7\,909\,092\,450 z^{19/2} + 32\,309\,304\,300 z^{17/2} + 75\,600\,604\,800 z^{15/2} + 89\,739\,090\,000 z^{13/2} + 39\,997\,994\,400 z^{11/2} \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ansh.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, \frac{1}{2}; -z\right) = \frac{1}{13\,395\,375} \left(128 z^{15} - 16\,256 z^{14} + 858\,816 z^{13} - 24\,687\,840 z^{12} + 424\,164\,360 z^{11} - 4\,505\,281\,200 z^{10} + 29\,568\,581\,280 z^9 - 116\,272\,558\,080 z^8 + 254\,932\,272\,000 z^7 - 266\,653\,296\,000 z^6 + 83\,805\,321\,600 z^5 + 9\,924\,314\,400 z^4 + 2\,724\,321\,600 z^3 + 851\,350\,500 z^2 + 196\,465\,500 z + 13\,395\,375 \right) - \frac{1}{13\,395\,375} \left(4 e^{-z} \sqrt{\pi} \left(32 z^{31/2} - 4080 z^{29/2} + 216\,720 z^{27/2} - 6\,277\,320 z^{25/2} + 109\,024\,650 z^{23/2} - 1\,176\,505\,155 z^{21/2} + 7\,909\,092\,450 z^{19/2} - 32\,309\,304\,300 z^{17/2} + 75\,600\,604\,800 z^{15/2} - 89\,739\,090\,000 z^{13/2} + 39\,997\,994\,400 z^{11/2} \right) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ansi.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, 1; z\right) = -\frac{1}{107\,163\,000} \left(e^z \left(1024 z^{15} + 122\,880 z^{14} + 6\,101\,760 z^{13} + 163\,833\,600 z^{12} + 2\,609\,308\,800 z^{11} + 25\,451\,032\,320 z^{10} + 151\,556\,076\,000 z^9 + 531\,943\,524\,000 z^8 + 1\,015\,480\,840\,500 z^7 + 881\,602\,218\,000 z^6 + 190\,565\,879\,175 z^5 - 29\,932\,709\,625 z^4 + 9\,775\,647\,000 z^3 - 3\,393\,495\,000 z^2 + 893\,025\,000 z - 107\,163\,000 \right) \right)$$

07.25.03.ansj.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, \frac{3}{2}; z\right) = \frac{1}{13\,395\,375} \left(-64 z^{14} - 7168 z^{13} - 329\,088 z^{12} - 8\,069\,280 z^{11} - 115\,406\,700 z^{10} - 986\,821\,920 z^9 - 4\,965\,060\,240 z^8 - 13\,830\,808\,320 z^7 - 18\,460\,612\,800 z^6 - 7\,618\,665\,600 z^5 + 1\,102\,701\,600 z^4 - 389\,188\,800 z^3 + 170\,270\,100 z^2 - 65\,488\,500 z + 13\,395\,375 \right) - \frac{1}{13\,395\,375} \left(2 e^z \sqrt{\pi} z^{11/2} \left(32 z^9 + 3600 z^8 + 166\,320 z^7 + 4\,115\,160 z^6 + 59\,642\,730 z^5 + 520\,435\,125 z^4 + 2\,704\,741\,200 z^3 + 7\,966\,633\,500 z^2 + 11\,867\,536\,800 z + 6\,666\,332\,400 \right) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ansk.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, \frac{3}{2}; -z\right) =$$

$$\frac{1}{13\,395\,375} \left(2 e^{-z} \sqrt{\pi} (32 z^9 - 3600 z^8 + 166\,320 z^7 - 4\,115\,160 z^6 + 59\,642\,730 z^5 - 520\,435\,125 z^4 + 2\,704\,741\,200 z^3 - 796\,633\,500 z^2 + 11\,867\,536\,800 z - 6\,666\,332\,400) \operatorname{erfi}(\sqrt{z}) z^{11/2} \right) +$$

$$\frac{1}{13\,395\,375} (-64 z^{14} + 7168 z^{13} - 329\,088 z^{12} + 8\,069\,280 z^{11} - 115\,406\,700 z^{10} + 986\,821\,920 z^9 - 496\,506\,240 z^8 + 13\,830\,808\,320 z^7 - 18\,460\,612\,800 z^6 + 7\,618\,665\,600 z^5 + 1\,102\,701\,600 z^4 + 389\,188\,800 z^3 + 170\,270\,100 z^2 + 65\,488\,500 z + 13\,395\,375)$$

07.25.03.ansl.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, 2; z\right) =$$

$$-\frac{1}{107\,163\,000} \left(e^z (1024 z^{14} + 107\,520 z^{13} + 4\,596\,480 z^{12} + 104\,079\,360 z^{11} + 1\,360\,356\,480 z^{10} + 10\,487\,111\,040 z^9 + 46\,684\,965\,600 z^8 + 111\,778\,833\,600 z^7 + 121\,250\,171\,700 z^6 + 32\,851\,016\,100 z^5 - 654\,021\,742\,5 z^4 + 2\,768\,377\,500 z^3 - 1\,297\,863\,000 z^2 + 500\,094\,000 z - 107\,163\,000) \right)$$

07.25.03.ansm.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, \frac{5}{2}; z\right) =$$

$$\frac{1}{4465\,125} (-32 z^{13} - 3104 z^{12} - 121\,104 z^{11} - 2\,461\,800 z^{10} - 28\,218\,570 z^9 - 184\,099\,860 z^8 - 653\,059\,260 z^7 - 1\,103\,729\,760 z^6 - 586\,051\,200 z^5 + 100\,245\,600 z^4 - 43\,243\,200 z^3 + 24\,324\,300 z^2 - 13\,097\,700 z + 4465\,125) -$$

$$\frac{1}{4465\,125} \left(e^z \sqrt{\pi} z^{11/2} (32 z^8 + 3120 z^7 + 122\,640 z^6 + 2\,520\,840 z^5 + 29\,392\,650 z^4 + 197\,115\,975 z^3 + 733\,581\,450 z^2 + 1\,364\,400\,450 z + 952\,333\,200) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ansn.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, \frac{5}{2}; -z\right) =$$

$$\frac{1}{4465\,125} (32 z^{13} - 3104 z^{12} + 121\,104 z^{11} - 2\,461\,800 z^{10} + 28\,218\,570 z^9 - 184\,099\,860 z^8 + 653\,059\,260 z^7 - 1\,103\,729\,760 z^6 + 586\,051\,200 z^5 + 100\,245\,600 z^4 + 43\,243\,200 z^3 + 24\,324\,300 z^2 + 13\,097\,700 z + 4465\,125) -$$

$$\frac{1}{4465\,125} \left(e^{-z} \sqrt{\pi} z^{11/2} (32 z^8 - 3120 z^7 + 122\,640 z^6 - 2\,520\,840 z^5 + 29\,392\,650 z^4 - 197\,115\,975 z^3 + 733\,581\,450 z^2 - 1\,364\,400\,450 z + 952\,333\,200) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anso.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, 3; z\right) =$$

$$-\frac{1}{53\,581\,500} \left(e^z (1024 z^{13} + 92\,160 z^{12} + 3\,306\,240 z^{11} + 61\,098\,240 z^{10} + 627\,177\,600 z^9 + 3\,588\,157\,440 z^8 + 10\,803\,391\,200 z^7 + 14\,548\,312\,800 z^6 + 4\,863\,669\,300 z^5 - 1\,194\,669\,000 z^4 + 627\,796\,575 z^3 - 370\,605\,375 z^2 + 184\,558\,500 z - 53\,581\,500) \right)$$

07.25.03.ansp.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, \frac{7}{2}; z\right) = \frac{1}{893025} (-16z^{12} - 1312z^{11} - 42192z^{10} - 683040z^9 - 5932335z^8 - 27088740z^7 - 57922830z^6 - 39070080z^5 + 7711200z^4 - 3931200z^3 + 2702700z^2 - 1871100z + 893025) - \frac{1}{1786050} (e^z \sqrt{\pi} z^{11/2} (32z^7 + 2640z^6 + 85680z^5 + 1407000z^4 + 12508650z^3 + 59520825z^2 + 138373200z + 119041650) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ansq.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, \frac{7}{2}; -z\right) = \frac{1}{1786050} (e^{-z} \sqrt{\pi} (32z^7 - 2640z^6 + 85680z^5 - 1407000z^4 + 12508650z^3 - 59520825z^2 + 138373200z - 119041650) \operatorname{erfi}(\sqrt{z}) z^{11/2}) + \frac{1}{893025} (-16z^{12} + 1312z^{11} - 42192z^{10} + 683040z^9 - 5932335z^8 + 27088740z^7 - 57922830z^6 + 39070080z^5 + 7711200z^4 + 3931200z^3 + 2702700z^2 + 1871100z + 893025)$$

07.25.03.ansr.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, 4; z\right) = -\frac{1}{17860500} (e^z (1024z^{12} + 76800z^{11} + 2231040z^{10} + 32094720z^9 + 242040960z^8 + 925706880z^7 + 1546322400z^6 + 631411200z^5 - 187620300z^4 + 118673100z^3 - 84242025z^2 + 50604750z - 17860500))$$

07.25.03.anss.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, \frac{9}{2}; z\right) = \frac{1}{255150} (-16z^{11} - 1072z^{10} - 27192z^9 - 330060z^8 - 1983945z^7 - 5400990z^6 - 4596480z^5 + 1028160z^4 - 604800z^3 + 491400z^2 - 415800z + 255150) - \frac{1}{510300} (e^z \sqrt{\pi} z^{11/2} (32z^6 + 2160z^5 + 55440z^4 + 686280z^3 + 4273290z^2 + 12514635z + 13226850) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anst.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, \frac{9}{2}; -z\right) = \frac{1}{255150} (16z^{11} - 1072z^{10} + 27192z^9 - 330060z^8 + 1983945z^7 - 5400990z^6 + 4596480z^5 + 1028160z^4 - 604800z^3 + 491400z^2 + 415800z + 255150) - \frac{1}{510300} (e^{-z} \sqrt{\pi} z^{11/2} (32z^6 - 2160z^5 + 55440z^4 - 686280z^3 + 4273290z^2 - 12514635z + 13226850) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ansu.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, 5; z\right) = -\frac{1}{4465125} (e^z (1024 z^{11} + 61440 z^{10} + 1370880 z^9 + 14273280 z^8 + 70761600 z^7 + 147329280 z^6 + 73029600 z^5 - 25855200 z^4 + 19221300 z^3 - 15876000 z^2 + 11013975 z - 4465125))$$

07.25.03.ansv.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, \frac{11}{2}; z\right) = \frac{1}{56700} (-16 z^{10} - 832 z^9 - 15552 z^8 - 128280 z^7 - 451395 z^6 - 483840 z^5 + 120960 z^4 - 80640 z^3 + 75600 z^2 - 75600 z + 56700) - \frac{e^z \sqrt{\pi} z^{11/2} (32 z^5 + 1680 z^4 + 31920 z^3 + 271320 z^2 + 1017450 z + 1322685) \operatorname{erf}(\sqrt{z})}{113400}$$

07.25.03.answ.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32 z^5 - 1680 z^4 + 31920 z^3 - 271320 z^2 + 1017450 z - 1322685) \operatorname{erfi}(\sqrt{z}) z^{11/2}}{113400} + \frac{1}{56700} (-16 z^{10} + 832 z^9 - 15552 z^8 + 128280 z^7 - 451395 z^6 + 483840 z^5 + 120960 z^4 + 80640 z^3 + 75600 z^2 + 75600 z + 56700)$$

07.25.03.ansx.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{9}{2}, 6; z\right) = -\frac{1}{893025} (e^z (1024 z^{10} + 46080 z^9 + 725760 z^8 + 4838400 z^7 + 12700800 z^6 + 7620480 z^5 - 3175200 z^4 + 2721600 z^3 - 2551500 z^2 + 1984500 z - 893025))$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = -\frac{7}{2}$

07.25.03.ansy.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; z\right) = \frac{1}{156279375} (1024 z^{18} + 177152 z^{17} + 13138944 z^{16} + 550043648 z^{15} + 14405615040 z^{14} + 247299704640 z^{13} + 2835973773312 z^{12} + 2174269160480 z^{11} + 109821380981760 z^{10} + 354112053120000 z^9 + 690473300486400 z^8 + 743451424773120 z^7 + 375744968726400 z^6 + 63105407164800 z^5 + 1042053012000 z^4 + 13621608000 z^3 + 1532430900 z^2 + 420997500 z + 156279375) + \frac{1}{156279375} (32 e^z \sqrt{\pi} (32 z^{37/2} + 5552 z^{35/2} + 413344 z^{33/2} + 17391432 z^{31/2} + 458571378 z^{29/2} + 7945097415 z^{27/2} + 92282855715 z^{25/2} + 720398746080 z^{23/2} + 3735245132640 z^{21/2} + 12525327833760 z^{19/2} + 25959249943200 z^{17/2} + 30900135571200 z^{15/2} + 18678623846400 z^{13/2} + 4548343363200 z^{11/2} + 251415964800 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ansz.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, -\frac{7}{2}; -z\right) =$$

$$\frac{1}{156279375} (1024 z^{18} - 177152 z^{17} + 13138944 z^{16} - 550043648 z^{15} + 14405615040 z^{14} - 247299704640 z^{13} +$$

$$2835973773312 z^{12} - 2174269160480 z^{11} + 109821380981760 z^{10} - 354112053120000 z^9 +$$

$$690473300486400 z^8 - 743451424773120 z^7 + 375744968726400 z^6 - 63105407164800 z^5 +$$

$$1042053012000 z^4 - 13621608000 z^3 + 1532430900 z^2 - 420997500 z + 156279375) -$$

$$\frac{1}{156279375} \left(32 e^{-z} \sqrt{\pi} (32 z^{37/2} - 5552 z^{35/2} + 413344 z^{33/2} - 17391432 z^{31/2} + 458571378 z^{29/2} -$$

$$7945097415 z^{27/2} + 92282855715 z^{25/2} - 720398746080 z^{23/2} + 3735245132640 z^{21/2} -$$

$$12525327833760 z^{19/2} + 25959249943200 z^{17/2} - 30900135571200 z^{15/2} +$$

$$18678623846400 z^{13/2} - 4548343363200 z^{11/2} + 251415964800 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ant0.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; z\right) =$$

$$\frac{1}{22325625} (-512 z^{17} - 81408 z^{16} - 5511424 z^{15} - 208924800 z^{14} - 4907291040 z^{13} - 74674880256 z^{12} -$$

$$748129213440 z^{11} - 4918370042880 z^{10} - 20781544089600 z^9 - 54150293664000 z^8 -$$

$$81018530933760 z^7 - 61398826070400 z^6 - 18353365430400 z^5 -$$

$$1042053012000 z^4 + 13621608000 z^3 + 510810300 z^2 + 84199500 z + 22325625) -$$

$$\frac{1}{22325625} \left(16 e^z \sqrt{\pi} (32 z^{35/2} + 5104 z^{33/2} + 346992 z^{31/2} + 13227528 z^{29/2} + 313068570 z^{27/2} + 4814411715 z^{25/2} +$$

$$48953150280 z^{23/2} + 328773543840 z^{21/2} + 1433830325760 z^{19/2} + 3922345879200 z^{17/2} +$$

$$6347520547200 z^{15/2} + 5510053382400 z^{13/2} + 2148463699200 z^{11/2} + 251415964800 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ant1.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, -\frac{5}{2}; -z\right) =$$

$$\frac{1}{22325625} (512 z^{17} - 81408 z^{16} + 5511424 z^{15} - 208924800 z^{14} + 4907291040 z^{13} - 74674880256 z^{12} +$$

$$748129213440 z^{11} - 4918370042880 z^{10} + 20781544089600 z^9 - 54150293664000 z^8 +$$

$$81018530933760 z^7 - 61398826070400 z^6 + 18353365430400 z^5 -$$

$$1042053012000 z^4 - 13621608000 z^3 + 510810300 z^2 - 84199500 z + 22325625) -$$

$$\frac{1}{22325625} \left(16 e^{-z} \sqrt{\pi} (32 z^{35/2} - 5104 z^{33/2} + 346992 z^{31/2} - 13227528 z^{29/2} + 313068570 z^{27/2} - 4814411715 z^{25/2} +$$

$$48953150280 z^{23/2} - 328773543840 z^{21/2} + 1433830325760 z^{19/2} - 3922345879200 z^{17/2} +$$

$$6347520547200 z^{15/2} - 5510053382400 z^{13/2} + 2148463699200 z^{11/2} - 251415964800 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ant2.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; z\right) =$$

$$\frac{1}{4465125} (256 z^{16} + 37120 z^{15} + 2273280 z^{14} + 77201280 z^{13} + 1605522864 z^{12} + 21318136560 z^{11} +$$

$$182917365120 z^{10} + 1004809680000 z^9 + 3427897190400 z^8 + 6852813891840 z^7 + 7230113654400 z^6 +$$

$$3268407542400 z^5 + 347351004000 z^4 - 13621608000 z^3 + 510810300 z^2 + 28066500 z + 4465125) +$$

$$\frac{1}{4465125} \left(8 e^z \sqrt{\pi} (32 z^{33/2} + 4656 z^{31/2} + 286464 z^{29/2} + 9789960 z^{27/2} + 205379010 z^{25/2} +$$

$$2760621615 z^{23/2} + 24107555745 z^{21/2} + 135913097880 z^{19/2} + 482438640600 z^{17/2} +$$

$$1027714035600 z^{15/2} + 1208950369200 z^{13/2} + 674251905600 z^{11/2} + 125707982400 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ant3.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, -\frac{3}{2}; -z\right) =$$

$$\frac{1}{4465125} (256 z^{16} - 37120 z^{15} + 2273280 z^{14} - 77201280 z^{13} + 1605522864 z^{12} - 21318136560 z^{11} +$$

$$182917365120 z^{10} - 1004809680000 z^9 + 3427897190400 z^8 - 6852813891840 z^7 + 7230113654400 z^6 -$$

$$3268407542400 z^5 + 347351004000 z^4 + 13621608000 z^3 + 510810300 z^2 - 28066500 z + 4465125) -$$

$$\frac{1}{4465125} \left(8 e^{-z} \sqrt{\pi} (32 z^{33/2} - 4656 z^{31/2} + 286464 z^{29/2} - 9789960 z^{27/2} + 205379010 z^{25/2} -$$

$$2760621615 z^{23/2} + 24107555745 z^{21/2} - 135913097880 z^{19/2} + 482438640600 z^{17/2} -$$

$$1027714035600 z^{15/2} + 1208950369200 z^{13/2} - 674251905600 z^{11/2} + 125707982400 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ant4.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; z\right) =$$

$$\frac{1}{1488375} (-128 z^{15} - 16768 z^{14} - 918720 z^{13} - 27584224 z^{12} - 499773960 z^{11} - 5674047120 z^{10} -$$

$$40611560640 z^9 - 179833996800 z^8 - 470130272640 z^7 - 662823907200 z^6 -$$

$$419026608000 z^5 - 69470200800 z^4 + 4540536000 z^3 - 510810300 z^2 + 28066500 z + 1488375) -$$

$$\frac{1}{1488375} \left(4 e^z \sqrt{\pi} (32 z^{31/2} + 4208 z^{29/2} + 231760 z^{27/2} + 7008840 z^{25/2} + 128281770 z^{23/2} +$$

$$1477803915 z^{21/2} + 10807320510 z^{19/2} + 49454533800 z^{17/2} + 136256904000 z^{15/2} +$$

$$210172611600 z^{13/2} + 158087311200 z^{11/2} + 41902660800 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ant5.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, -\frac{1}{2}; -z\right) = \frac{1}{1488375} (128 z^{15} - 16768 z^{14} + 918720 z^{13} - 27584224 z^{12} + 499773960 z^{11} - 5674047120 z^{10} + 40611560640 z^9 - 179833996800 z^8 + 470130272640 z^7 - 662823907200 z^6 + 419026608000 z^5 - 69470200800 z^4 - 4540536000 z^3 - 510810300 z^2 - 28066500 z + 1488375) - \frac{1}{1488375} (4 e^{-z} \sqrt{\pi} (32 z^{3/2} - 4208 z^{29/2} + 231760 z^{27/2} - 7008840 z^{25/2} + 128281770 z^{23/2} - 1477803915 z^{21/2} + 10807320510 z^{19/2} - 49454533800 z^{17/2} + 136256904000 z^{15/2} - 210172611600 z^{13/2} + 158087311200 z^{11/2} - 41902660800 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ant6.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, \frac{1}{2}; z\right) = \frac{1}{1488375} (64 z^{14} + 7488 z^{13} + 362048 z^{12} + 9451200 z^{11} + 146095740 z^{10} + 1380372420 z^9 + 7945179840 z^8 + 26899750080 z^7 + 49521326400 z^6 + 41902660800 z^5 + 9924314400 z^4 - 908107200 z^3 + 170270100 z^2 - 28066500 z + 1488375) + \frac{1}{1488375} (2 e^z \sqrt{\pi} (32 z^{29/2} + 3760 z^{27/2} + 182880 z^{25/2} + 4814280 z^{23/2} + 75324690 z^{21/2} + 724557015 z^{19/2} + 4286307375 z^{17/2} + 15164074800 z^{15/2} + 30108380400 z^{13/2} + 29522329200 z^{11/2} + 10475665200 z^{9/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ant7.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, \frac{1}{2}; -z\right) = \frac{1}{1488375} (64 z^{14} - 7488 z^{13} + 362048 z^{12} - 9451200 z^{11} + 146095740 z^{10} - 1380372420 z^9 + 7945179840 z^8 - 26899750080 z^7 + 49521326400 z^6 - 41902660800 z^5 + 9924314400 z^4 + 908107200 z^3 + 170270100 z^2 + 28066500 z + 1488375) - \frac{1}{1488375} (2 e^{-z} \sqrt{\pi} (32 z^{29/2} - 3760 z^{27/2} + 182880 z^{25/2} - 4814280 z^{23/2} + 75324690 z^{21/2} - 724557015 z^{19/2} + 4286307375 z^{17/2} - 15164074800 z^{15/2} + 30108380400 z^{13/2} - 29522329200 z^{11/2} + 10475665200 z^{9/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ant8.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, 1; z\right) = \frac{1}{11907000} (e^z (512 z^{14} + 56576 z^{13} + 2569984 z^{12} + 62641920 z^{11} + 897481920 z^{10} + 7789365600 z^9 + 40725892800 z^8 + 123431137200 z^7 + 199162577250 z^6 + 142057243125 z^5 + 24254318025 z^4 - 2839195800 z^3 + 629029800 z^2 - 124173000 z + 11907000))$$

07.25.03.ant9.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, \frac{3}{2}; z\right) = \frac{1}{1488375} \left(e^z \sqrt{\pi} (32 z^9 + 3312 z^8 + 139824 z^7 + 3136392 z^6 + 40824378 z^5 + 316313235 z^4 + 1439488260 z^3 + 3648168720 z^2 + 4571199360 z + 2095133040) \operatorname{erf}(\sqrt{z}) z^{9/2} \right) + \frac{1}{1488375} (32 z^{13} + 3296 z^{12} + 138192 z^{11} + 3068904 z^{10} + 39355050 z^9 + 298011960 z^8 + 1306894176 z^7 + 3106071360 z^6 + 3428399520 z^5 + 1102701600 z^4 - 129729600 z^3 + 34054020 z^2 - 9355500 z + 1488375)$$

07.25.03.anta.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, \frac{3}{2}; -z\right) = \frac{1}{1488375} \left(e^{-z} \sqrt{\pi} (32 z^9 - 3312 z^8 + 139824 z^7 - 3136392 z^6 + 40824378 z^5 - 316313235 z^4 + 1439488260 z^3 - 3648168720 z^2 + 4571199360 z - 2095133040) \operatorname{erfi}(\sqrt{z}) z^{9/2} \right) + \frac{1}{1488375} (-32 z^{13} + 3296 z^{12} - 138192 z^{11} + 3068904 z^{10} - 39355050 z^9 + 298011960 z^8 - 1306894176 z^7 + 3106071360 z^6 - 3428399520 z^5 + 1102701600 z^4 + 129729600 z^3 + 34054020 z^2 + 9355500 z + 1488375)$$

07.25.03.antb.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, 2; z\right) = \frac{1}{11907000} \left(e^z (512 z^{13} + 49408 z^{12} + 1927680 z^{11} + 39509760 z^{10} + 462874560 z^9 + 316062000 z^8 + 12280312800 z^7 + 25188634800 z^6 + 22842133650 z^5 + 5004441225 z^4 - 767888100 z^3 + 232356600 z^2 - 68040000 z + 11907000) \right)$$

07.25.03.antic.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, \frac{5}{2}; z\right) = \frac{1}{992250} \left(e^z \sqrt{\pi} (32 z^8 + 2864 z^7 + 102592 z^6 + 1905288 z^5 + 19866210 z^4 + 117651135 z^3 + 380628045 z^2 + 603144360 z + 349188840) \operatorname{erf}(\sqrt{z}) z^{9/2} \right) + \frac{1}{496125} (16 z^{12} + 1424 z^{11} + 50592 z^{10} + 928040 z^9 + 9492675 z^8 + 54486243 z^7 + 166861800 z^6 + 236862360 z^5 + 100245600 z^4 - 14414400 z^3 + 4864860 z^2 - 1871100 z + 496125)$$

07.25.03.antd.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, \frac{5}{2}; -z\right) = \frac{1}{496125} (16z^{12} - 1424z^{11} + 50592z^{10} - 928040z^9 + 9492675z^8 - 54486243z^7 + 166861800z^6 - 236862360z^5 + 100245600z^4 + 14414400z^3 + 4864860z^2 + 1871100z + 496125) - \frac{1}{992250} (e^{-z} \sqrt{\pi} z^{9/2} (32z^8 - 2864z^7 + 102592z^6 - 1905288z^5 + 19866210z^4 - 117651135z^3 + 380628045z^2 - 603144360z + 349188840) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ante.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, 3; z\right) = \frac{1}{5953500} (e^z (512z^{12} + 42240z^{11} + 1378560z^{10} + 22967040z^9 + 210237120z^8 + 1058248800z^7 + 2756073600z^6 + 3140046000z^5 + 861811650z^4 - 166428675z^3 + 64255275z^2 - 24664500z + 5953500))$$

07.25.03.antf.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, \frac{7}{2}; z\right) = \frac{1}{396900} (e^z \sqrt{\pi} (32z^7 + 2416z^6 + 71184z^5 + 1051080z^4 + 8304330z^3 + 34607835z^2 + 69157530z + 49884120) \operatorname{erf}(\sqrt{z}) z^{9/2}) + \frac{1}{198450} (16z^{11} + 1200z^{10} + 35000z^9 + 508620z^8 + 3913929z^7 + 15562710z^6 + 28256040z^5 + 15422400z^4 - 2620800z^3 + 1081080z^2 - 534600z + 198450)$$

07.25.03.antg.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, \frac{7}{2}; -z\right) = \frac{1}{396900} (e^{-z} \sqrt{\pi} (32z^7 - 2416z^6 + 71184z^5 - 1051080z^4 + 8304330z^3 - 34607835z^2 + 69157530z - 49884120) \operatorname{erfi}(\sqrt{z}) z^{9/2}) + \frac{1}{198450} (-16z^{11} + 1200z^{10} - 35000z^9 + 508620z^8 - 3913929z^7 + 15562710z^6 - 28256040z^5 + 15422400z^4 + 2620800z^3 + 1081080z^2 + 534600z + 198450)$$

07.25.03.anth.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, 4; z\right) = \frac{1}{1984500} (e^z (512z^{11} + 35072z^{10} + 922624z^9 + 11895552z^8 + 79386048z^7 + 264388320z^6 + 376578720z^5 + 127416240z^4 - 30102030z^3 + 14183505z^2 - 6662250z + 1984500))$$

07.25.03.anti.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, \frac{9}{2}; z\right) = \frac{1}{113400} e^z \sqrt{\pi} (32 z^6 + 1968 z^5 + 45600 z^4 + 503880 z^3 + 2761650 z^2 + 6991335 z + 6235515) \operatorname{erf}(\sqrt{z}) z^{9/2} + \frac{1}{56700} (16 z^{10} + 976 z^9 + 22320 z^8 + 241248 z^7 + 1270215 z^6 + 2957445 z^5 + 2056320 z^4 - 403200 z^3 + 196560 z^2 - 118800 z + 56700)$$

07.25.03.antij.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, \frac{9}{2}; -z\right) = \frac{1}{56700} (16 z^{10} - 976 z^9 + 22320 z^8 - 241248 z^7 + 1270215 z^6 - 2957445 z^5 + 2056320 z^4 + 403200 z^3 + 196560 z^2 + 118800 z + 56700) - \frac{1}{113400} (e^{-z} \sqrt{\pi} z^{9/2} (32 z^6 - 1968 z^5 + 45600 z^4 - 503880 z^3 + 2761650 z^2 - 6991335 z + 6235515) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.antk.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, 5; z\right) = \frac{1}{496125} (e^z (512 z^{10} + 27904 z^9 + 559872 z^8 + 5177088 z^7 + 22438080 z^6 + 40007520 z^5 + 16511040 z^4 - 4672080 z^3 + 2602530 z^2 - 1431675 z + 496125))$$

07.25.03.antl.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, \frac{11}{2}; z\right) = \frac{e^z \sqrt{\pi} (32 z^5 + 1520 z^4 + 25840 z^3 + 193800 z^2 + 629850 z + 692835) \operatorname{erf}(\sqrt{z}) z^{9/2}}{25200} + \frac{1}{12600} (16 z^9 + 752 z^8 + 12552 z^7 + 90980 z^6 + 274845 z^5 + 241920 z^4 - 53760 z^3 + 30240 z^2 - 21600 z + 12600)$$

07.25.03.antm.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32 z^5 - 1520 z^4 + 25840 z^3 - 193800 z^2 + 629850 z - 692835) \operatorname{erfi}(\sqrt{z}) z^{9/2}}{25200} + \frac{1}{12600} (-16 z^9 + 752 z^8 - 12552 z^7 + 90980 z^6 - 274845 z^5 + 241920 z^4 + 53760 z^3 + 30240 z^2 + 21600 z + 12600)$$

07.25.03.antrn.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{7}{2}, 6; z\right) = \frac{1}{99225} (e^z (512 z^9 + 20736 z^8 + 290304 z^7 + 1693440 z^6 + 3810240 z^5 + 1905120 z^4 - 635040 z^3 + 408240 z^2 - 255150 z + 99225))$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = -\frac{5}{2}$

07.25.03.anto.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; z\right) = \frac{1}{3189375} (256 z^{16} + 37376 z^{15} + 2307328 z^{14} + 79100160 z^{13} + 1663752048 z^{12} + 22400504832 z^{11} + 195603448320 z^{10} + 1099400924160 z^9 + 3870381024000 z^8 + 8103665710080 z^7 + 9223316968320 z^6 + 4847476233600 z^5 + 830334304800 z^4 + 13621608000 z^3 + 170270100 z^2 + 16839900 z + 3189375) + \frac{1}{3189375} (8 e^z \sqrt{\pi} (32 z^{33/2} + 4688 z^{31/2} + 290736 z^{29/2} + 10029432 z^{27/2} + 212774250 z^{25/2} + 2899443465 z^{23/2} + 25757602560 z^{21/2} + 148470325920 z^{19/2} + 543008370240 z^{17/2} + 1207304028000 z^{15/2} + 1518304435200 z^{13/2} + 955140076800 z^{11/2} + 238183545600 z^{9/2} + 13232419200 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.antp.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, -\frac{5}{2}; -z\right) = \frac{1}{3189375} (256 z^{16} - 37376 z^{15} + 2307328 z^{14} - 79100160 z^{13} + 1663752048 z^{12} - 22400504832 z^{11} + 195603448320 z^{10} - 1099400924160 z^9 + 3870381024000 z^8 - 8103665710080 z^7 + 9223316968320 z^6 - 4847476233600 z^5 + 830334304800 z^4 - 13621608000 z^3 + 170270100 z^2 - 16839900 z + 3189375) - \frac{1}{3189375} (8 e^{-z} \sqrt{\pi} (32 z^{33/2} - 4688 z^{31/2} + 290736 z^{29/2} - 10029432 z^{27/2} + 212774250 z^{25/2} - 2899443465 z^{23/2} + 25757602560 z^{21/2} - 148470325920 z^{19/2} + 543008370240 z^{17/2} - 1207304028000 z^{15/2} + 1518304435200 z^{13/2} - 955140076800 z^{11/2} + 238183545600 z^{9/2} - 13232419200 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.antq.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; z\right) = \frac{1}{637875} (-128 z^{15} - 17024 z^{14} - 949440 z^{13} - 29114592 z^{12} - 541184136 z^{11} - 6343041600 z^{10} - 47295622080 z^9 - 221241916800 z^8 - 625425909120 z^7 - 996601656960 z^6 - 789534345600 z^5 - 241491650400 z^4 - 13621608000 z^3 + 170270100 z^2 + 5613300 z + 637875) - \frac{1}{637875} (4 e^z \sqrt{\pi} (32 z^{31/2} + 4272 z^{29/2} + 239472 z^{27/2} + 7395240 z^{25/2} + 138821850 z^{23/2} + 1650046815 z^{21/2} + 12557228040 z^{19/2} + 60569729640 z^{17/2} + 179589992400 z^{15/2} + 309354066000 z^{13/2} + 280888171200 z^{11/2} + 112475563200 z^{9/2} + 13232419200 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.antr.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, -\frac{3}{2}; -z\right) = \frac{1}{637875} (128 z^{15} - 17024 z^{14} + 949440 z^{13} - 29114592 z^{12} + 541184136 z^{11} - 6343041600 z^{10} + 47295622080 z^9 - 221241916800 z^8 + 625425909120 z^7 - 996601656960 z^6 + 789534345600 z^5 - 241491650400 z^4 + 13621608000 z^3 + 170270100 z^2 - 5613300 z + 637875) - \frac{1}{637875} (4 e^{-z} \sqrt{\pi} (32 z^{31/2} - 4272 z^{29/2} + 239472 z^{27/2} - 7395240 z^{25/2} + 138821850 z^{23/2} - 1650046815 z^{21/2} + 12557228040 z^{19/2} - 60569729640 z^{17/2} + 179589992400 z^{15/2} - 309354066000 z^{13/2} + 280888171200 z^{11/2} - 112475563200 z^{9/2} + 13232419200 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ants.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; z\right) = \frac{1}{212625} (64 z^{14} + 7680 z^{13} + 382592 z^{12} + 10352544 z^{11} + 167248620 z^{10} + 1671015360 z^9 + 10351980000 z^8 + 38823909120 z^7 + 83444437440 z^6 + 92626934400 z^5 + 43005362400 z^4 + 4540536000 z^3 - 170270100 z^2 + 5613300 z + 212625) + \frac{1}{212625} (2 e^z \sqrt{\pi} (32 z^{29/2} + 3856 z^{27/2} + 193200 z^{25/2} + 5270040 z^{23/2} + 86121450 z^{21/2} + 874953765 z^{19/2} + 5557597920 z^{17/2} + 21666544200 z^{15/2} + 49590727200 z^{13/2} + 61400430000 z^{11/2} + 35286451200 z^{9/2} + 6616209600 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.antt.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, -\frac{1}{2}; -z\right) = \frac{1}{212625} (64 z^{14} - 7680 z^{13} + 382592 z^{12} - 10352544 z^{11} + 167248620 z^{10} - 1671015360 z^9 + 10351980000 z^8 - 38823909120 z^7 + 83444437440 z^6 - 92626934400 z^5 + 43005362400 z^4 - 4540536000 z^3 - 170270100 z^2 - 5613300 z + 212625) - \frac{1}{212625} (2 e^{-z} \sqrt{\pi} (32 z^{29/2} - 3856 z^{27/2} + 193200 z^{25/2} - 5270040 z^{23/2} + 86121450 z^{21/2} - 874953765 z^{19/2} + 5557597920 z^{17/2} - 21666544200 z^{15/2} + 49590727200 z^{13/2} - 61400430000 z^{11/2} + 35286451200 z^{9/2} - 6616209600 z^{7/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.antu.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, \frac{1}{2}; z\right) = \frac{1}{212625} (-32 z^{13} - 3424 z^{12} - 150224 z^{11} - 3525480 z^{10} - 48440490 z^9 - 401133360 z^8 - 1987359840 z^7 - 5653851840 z^6 - 8454045600 z^5 - 5513508000 z^4 - 908107200 z^3 + 56756700 z^2 - 5613300 z + 212625) + \frac{1}{212625} (e^z \sqrt{\pi} (-32 z^{27/2} - 3440 z^{25/2} - 151920 z^{23/2} - 3598920 z^{21/2} - 50132250 z^{19/2} - 423763515 z^{17/2} - 2167489800 z^{15/2} - 6494115600 z^{13/2} - 10626033600 z^{11/2} - 8270262000 z^{9/2} - 2205403200 z^{7/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.antv.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, \frac{1}{2}; -z\right) = \frac{1}{212\,625} (32 z^{13} - 3424 z^{12} + 150\,224 z^{11} - 3\,525\,480 z^{10} + 48\,440\,490 z^9 - 401\,133\,360 z^8 + 1\,987\,359\,840 z^7 - 5\,653\,851\,840 z^6 + 8\,454\,045\,600 z^5 - 5\,513\,508\,000 z^4 + 908\,107\,200 z^3 + 56\,756\,700 z^2 + 5\,613\,300 z + 212\,625) + \frac{1}{212\,625} \left(e^{-z} \sqrt{\pi} (-32 z^{27/2} + 3440 z^{25/2} - 151\,920 z^{23/2} + 3\,598\,920 z^{21/2} - 50\,132\,250 z^{19/2} + 423\,763\,515 z^{17/2} - 2\,167\,489\,800 z^{15/2} + 6\,494\,115\,600 z^{13/2} - 10\,626\,033\,600 z^{11/2} + 8\,270\,262\,000 z^{9/2} - 2\,205\,403\,200 z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.antw.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, 1; z\right) = -\frac{1}{1\,701\,000} \left(e^z (256 z^{13} + 25\,856 z^{12} + 1\,065\,216 z^{11} + 23\,331\,840 z^{10} + 297\,084\,000 z^9 + 2\,260\,720\,800 z^8 + 10\,189\,702\,800 z^7 + 26\,051\,608\,800 z^6 + 34\,452\,266\,625 z^5 + 19\,350\,221\,625 z^4 + 2\,452\,048\,200 z^3 - 193\,573\,800 z^2 + 24\,154\,200 z - 1\,701\,000) \right)$$

07.25.03.antx.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, \frac{3}{2}; z\right) = \frac{1}{212\,625} (-16 z^{12} - 1504 z^{11} - 57\,072 z^{10} - 1\,135\,680 z^9 - 12\,890\,175 z^8 - 85\,058\,208 z^7 - 318\,472\,560 z^6 - 628\,205\,760 z^5 - 551\,350\,800 z^4 - 129\,729\,600 z^3 + 11\,351\,340 z^2 - 1\,871\,100 z + 212\,625) - \frac{1}{425\,250} \left(e^z \sqrt{\pi} z^{7/2} (32 z^9 + 3024 z^8 + 115\,632 z^7 + 2\,326\,968 z^6 + 26\,862\,570 z^5 + 182\,000\,385 z^4 + 711\,486\,720 z^3 + 1\,513\,708\,560 z^2 + 1\,543\,782\,240 z + 551\,350\,800) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anty.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, \frac{3}{2}; -z\right) = \frac{1}{425\,250} \left(e^{-z} \sqrt{\pi} (32 z^9 - 3024 z^8 + 115\,632 z^7 - 2\,326\,968 z^6 + 26\,862\,570 z^5 - 182\,000\,385 z^4 + 711\,486\,720 z^3 - 1\,513\,708\,560 z^2 + 1\,543\,782\,240 z - 551\,350\,800) \operatorname{erfi}(\sqrt{z}) z^{7/2} \right) + \frac{1}{212\,625} (-16 z^{12} + 1504 z^{11} - 57\,072 z^{10} + 1\,135\,680 z^9 - 12\,890\,175 z^8 + 85\,058\,208 z^7 - 318\,472\,560 z^6 + 628\,205\,760 z^5 - 551\,350\,800 z^4 + 129\,729\,600 z^3 + 11\,351\,340 z^2 + 1\,871\,100 z + 212\,625)$$

07.25.03.antz.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, 2; z\right) = -\frac{1}{1\,701\,000} \left(e^z (256 z^{12} + 22\,528 z^{11} + 794\,880 z^{10} + 14\,588\,160 z^9 + 151\,202\,400 z^8 + 899\,899\,200 z^7 + 2\,990\,509\,200 z^6 + 5\,118\,044\,400 z^5 + 3\,744\,000\,225 z^4 + 630\,220\,500 z^3 - 68\,833\,800 z^2 + 12\,927\,600 z - 1\,701\,000) \right)$$

07.25.03.anu0.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, \frac{5}{2}; z\right) = \frac{1}{141750} \left(-16z^{11} - 1296z^{10} - 41528z^9 - 679500z^8 - 6114393z^7 - 30322152z^6 - 78268680z^5 - 90221040z^4 - 28828800z^3 + 3243240z^2 - 748440z + 141750\right) - \frac{1}{283500} \left(e^z \sqrt{\pi} z^{7/2} (32z^8 + 2608z^7 + 84336z^6 + 1399272z^5 + 12869850z^4 + 66171735z^3 + 182112840z^2 + 238918680z + 110270160) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anu1.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, \frac{5}{2}; -z\right) = \frac{1}{141750} \left(16z^{11} - 1296z^{10} + 41528z^9 - 679500z^8 + 6114393z^7 - 30322152z^6 + 78268680z^5 - 90221040z^4 + 28828800z^3 + 3243240z^2 + 748440z + 141750\right) - \frac{1}{283500} \left(e^{-z} \sqrt{\pi} z^{7/2} (32z^8 - 2608z^7 + 84336z^6 - 1399272z^5 + 12869850z^4 - 66171735z^3 + 182112840z^2 - 238918680z + 110270160) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anu2.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, 3; z\right) = -\frac{1}{850500} \left(e^z (256z^{11} + 19200z^{10} + 564480z^9 + 8378880z^8 + 67413600z^7 + 293176800z^6 + 645094800z^5 + 602380800z^4 + 129715425z^3 - 18356625z^2 + 4592700z - 850500)\right)$$

07.25.03.anu3.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, \frac{7}{2}; z\right) = \frac{1}{56700} \left(-16z^{10} - 1088z^9 - 28480z^8 - 366744z^7 - 2459907z^6 - 8335440z^5 - 12466440z^4 - 5241600z^3 + 720720z^2 - 213840z + 56700\right) - \frac{1}{113400} \left(e^z \sqrt{\pi} z^{7/2} (32z^7 + 2192z^6 + 58032z^5 + 760920z^4 + 5260650z^3 + 18825885z^2 + 31505760z + 18378360) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anu4.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, \frac{7}{2}; -z\right) = \frac{1}{113400} \left(e^{-z} \sqrt{\pi} (32z^7 - 2192z^6 + 58032z^5 - 760920z^4 + 5260650z^3 - 18825885z^2 + 31505760z - 18378360) \operatorname{erfi}(\sqrt{z}) z^{7/2}\right) + \frac{1}{56700} \left(-16z^{10} + 1088z^9 - 28480z^8 + 366744z^7 - 2459907z^6 + 8335440z^5 - 12466440z^4 + 5241600z^3 + 720720z^2 + 213840z + 56700\right)$$

07.25.03.anu5.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, 4; z\right) = \frac{1}{283500} \left(e^z (256 z^{10} + 15872 z^9 + 374016 z^8 + 4264704 z^7 + 24766560 z^6 + 70277760 z^5 + 82872720 z^4 + 22271760 z^3 - 3915135 z^2 + 1219050 z - 283500) \right)$$

07.25.03.anu6.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, \frac{9}{2}; z\right) = \frac{1}{16200} (-16 z^9 - 880 z^8 - 17928 z^7 - 169956 z^6 - 768285 z^5 - 1487160 z^4 - 806400 z^3 + 131040 z^2 - 47520 z + 16200) - \frac{1}{32400} \left(e^z \sqrt{\pi} z^{7/2} (32 z^6 + 1776 z^5 + 36720 z^4 + 357000 z^3 + 1690650 z^2 + 3610035 z + 2625480) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anu7.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, \frac{9}{2}; -z\right) = \frac{1}{16200} (16 z^9 - 880 z^8 + 17928 z^7 - 169956 z^6 + 768285 z^5 - 1487160 z^4 + 806400 z^3 + 131040 z^2 + 47520 z + 16200) - \frac{1}{32400} \left(e^{-z} \sqrt{\pi} z^{7/2} (32 z^6 - 1776 z^5 + 36720 z^4 - 357000 z^3 + 1690650 z^2 - 3610035 z + 2625480) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anu8.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, 5; z\right) = \frac{1}{70875} \left(e^z (256 z^9 + 12544 z^8 + 223488 z^7 + 1806336 z^6 + 6703200 z^5 + 9948960 z^4 + 3281040 z^3 - 695520 z^2 + 257985 z - 70875) \right)$$

07.25.03.anu9.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, \frac{11}{2}; z\right) = \frac{-16 z^8 - 672 z^7 - 9872 z^6 - 61680 z^5 - 155655 z^4 - 107520 z^3 + 20160 z^2 - 8640 z + 3600}{3600} - \frac{e^z \sqrt{\pi} z^{7/2} (32 z^5 + 1360 z^4 + 20400 z^3 + 132600 z^2 + 364650 z + 328185) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.anua.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32 z^5 - 1360 z^4 + 20400 z^3 - 132600 z^2 + 364650 z - 328185) \operatorname{erfi}(\sqrt{z}) z^{7/2}}{7200} + \frac{-16 z^8 + 672 z^7 - 9872 z^6 + 61680 z^5 - 155655 z^4 + 107520 z^3 + 20160 z^2 + 8640 z + 3600}{3600}$$

07.25.03.anub.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{5}{2}, 6; z\right) = \frac{1}{14175} \left(e^z (256 z^8 + 9216 z^7 + 112896 z^6 + 564480 z^5 + 1058400 z^4 + 423360 z^3 - 105840 z^2 + 45360 z - 14175) \right)$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = -\frac{3}{2}$

07.25.03.anuc.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; z\right) = \frac{1}{127575} (64 z^{14} + 7744 z^{13} + 389568 z^{12} + 10665408 z^{11} + 174788796 z^{10} + 1778090580 z^9 + 11276878680 z^8 + 43671910680 z^7 + 98385749280 z^6 + 117937179360 z^5 + 63762098400 z^4 + 10897286400 z^3 + 170270100 z^2 + 1871100 z + 127575) + \frac{1}{127575} (2 e^z \sqrt{\pi} (32 z^{29/2} + 3888 z^{27/2} + 196704 z^{25/2} + 5428200 z^{23/2} + 89968050 z^{21/2} + 930302415 z^{19/2} + 604511135 z^{17/2} + 24299062830 z^{15/2} + 58094678250 z^{13/2} + 76975353000 z^{11/2} + 49962112200 z^{9/2} + 12551338800 z^{7/2} + 681080400 z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anud.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, -\frac{3}{2}; -z\right) = \frac{1}{127575} (64 z^{14} - 7744 z^{13} + 389568 z^{12} - 10665408 z^{11} + 174788796 z^{10} - 1778090580 z^9 + 11276878680 z^8 - 43671910680 z^7 + 98385749280 z^6 - 117937179360 z^5 + 63762098400 z^4 - 10897286400 z^3 + 170270100 z^2 - 1871100 z + 127575) - \frac{1}{127575} (2 e^{-z} \sqrt{\pi} (32 z^{29/2} - 3888 z^{27/2} + 196704 z^{25/2} - 5428200 z^{23/2} + 89968050 z^{21/2} - 930302415 z^{19/2} + 604511135 z^{17/2} - 24299062830 z^{15/2} + 58094678250 z^{13/2} - 76975353000 z^{11/2} + 49962112200 z^{9/2} - 12551338800 z^{7/2} + 681080400 z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anue.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; z\right) = \frac{1}{42525} (-32 z^{13} - 3488 z^{12} - 156432 z^{11} - 3770088 z^{10} - 53537610 z^9 - 462449340 z^8 - 2424000780 z^7 - 7470655920 z^6 - 12655122480 z^5 - 10378368000 z^4 - 3178375200 z^3 - 170270100 z^2 + 1871100 z + 42525) + \frac{1}{42525} (e^z \sqrt{\pi} (-32 z^{27/2} - 3504 z^{25/2} - 158160 z^{23/2} - 3846600 z^{21/2} - 55348650 z^{19/2} - 487513215 z^{17/2} - 2632518630 z^{15/2} - 8503951050 z^{13/2} - 15574923000 z^{11/2} - 14675661000 z^{9/2} - 5935129200 z^{7/2} - 681080400 z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anuf.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, -\frac{1}{2}; -z\right) = \frac{1}{42525} (32 z^{13} - 3488 z^{12} + 156432 z^{11} - 3770088 z^{10} + 53537610 z^9 - 462449340 z^8 + 2424000780 z^7 - 7470655920 z^6 + 12655122480 z^5 - 10378368000 z^4 + 3178375200 z^3 - 170270100 z^2 - 1871100 z + 42525) + \frac{1}{42525} (e^{-z} \sqrt{\pi} (-32 z^{27/2} + 3504 z^{25/2} - 158160 z^{23/2} + 3846600 z^{21/2} - 55348650 z^{19/2} + 487513215 z^{17/2} - 2632518630 z^{15/2} + 8503951050 z^{13/2} - 15574923000 z^{11/2} + 14675661000 z^{9/2} - 5935129200 z^{7/2} + 681080400 z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anug.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, \frac{1}{2}; z\right) = \frac{1}{42525} (16 z^{12} + 1552 z^{11} + 61152 z^{10} + 1274280 z^9 + 15328995 z^8 + 109160235 z^7 + 454201020 z^6 + 1050269220 z^5 + 1216215000 z^4 + 567567000 z^3 + 56756700 z^2 - 1871100 z + 42525) + \frac{1}{85050} (e^z \sqrt{\pi} (32 z^{25/2} + 3120 z^{23/2} + 123840 z^{21/2} + 2608200 z^{19/2} + 31874850 z^{17/2} + 232514415 z^{15/2} + 1004917725 z^{13/2} + 2474444700 z^{11/2} + 3202699500 z^{9/2} + 1864863000 z^{7/2} + 340540200 z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anuh.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, \frac{1}{2}; -z\right) = \frac{1}{42525} (16 z^{12} - 1552 z^{11} + 61152 z^{10} - 1274280 z^9 + 15328995 z^8 - 109160235 z^7 + 454201020 z^6 - 1050269220 z^5 + 1216215000 z^4 - 567567000 z^3 + 56756700 z^2 + 1871100 z + 42525) + \frac{1}{85050} (e^{-z} \sqrt{\pi} (-32 z^{25/2} + 3120 z^{23/2} - 123840 z^{21/2} + 2608200 z^{19/2} - 31874850 z^{17/2} + 232514415 z^{15/2} - 1004917725 z^{13/2} + 2474444700 z^{11/2} - 3202699500 z^{9/2} + 1864863000 z^{7/2} - 340540200 z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anui.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, 1; z\right) = \frac{1}{340200} (e^z (128 z^{12} + 11712 z^{11} + 433056 z^{10} + 8418000 z^9 + 93825000 z^8 + 614322900 z^7 + 2330398350 z^6 + 4869410175 z^5 + 5052607875 z^4 + 2096199000 z^3 + 177924600 z^2 - 7824600 z + 340200))$$

07.25.03.anuj.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{170100} (e^z \sqrt{\pi} (32 z^9 + 2736 z^8 + 93744 z^7 + 1670760 z^6 + 16838010 z^5 + 97810335 z^4 + 320245380 z^3 + 552972420 z^2 + 437837400 z + 113513400) \operatorname{erf}(\sqrt{z}) z^{5/2}) + \frac{1}{85050} (16 z^{11} + 1360 z^{10} + 46200 z^9 + 812940 z^8 + 8034009 z^7 + 45242820 z^6 + 140687820 z^5 + 221621400 z^4 + 145945800 z^3 + 22702680 z^2 - 1247400 z + 85050)$$

07.25.03.anuk.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{170100} \left(e^{-z} \sqrt{\pi} (32z^9 - 2736z^8 + 93744z^7 - 1670760z^6 + 16838010z^5 - 97810335z^4 + 320245380z^3 - 552972420z^2 + 437837400z - 113513400) \operatorname{erfi}(\sqrt{z}) z^{5/2} \right) + \frac{1}{85050} (-16z^{11} + 1360z^{10} - 46200z^9 + 812940z^8 - 8034009z^7 + 45242820z^6 - 140687820z^5 + 221621400z^4 - 145945800z^3 + 22702680z^2 + 1247400z + 85050)$$

07.25.03.anul.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, 2; z\right) = \frac{1}{340200} \left(e^z (128z^{11} + 10176z^{10} + 321120z^9 + 5206800z^8 + 46963800z^7 + 238612500z^6 + 660110850z^5 + 908745075z^4 + 508882500z^3 + 60669000z^2 - 4082400z + 340200) \right)$$

07.25.03.anum.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, \frac{5}{2}; z\right) = \frac{1}{113400} \left(e^z \sqrt{\pi} (32z^8 + 2352z^7 + 67872z^6 + 992040z^5 + 7909650z^4 + 34533135z^3 + 78513435z^2 + 81891810z + 28378350) \operatorname{erf}(\sqrt{z}) z^{5/2} \right) + \frac{1}{56700} (16z^{10} + 1168z^9 + 33360z^8 + 479904z^7 + 3730167z^6 + 15604785z^5 + 32850090z^4 + 29279250z^3 + 6486480z^2 - 498960z + 56700)$$

07.25.03.anun.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, \frac{5}{2}; -z\right) = \frac{1}{56700} (16z^{10} - 1168z^9 + 33360z^8 - 479904z^7 + 3730167z^6 - 15604785z^5 + 32850090z^4 - 29279250z^3 + 6486480z^2 + 498960z + 56700) - \frac{1}{113400} \left(e^{-z} \sqrt{\pi} z^{5/2} (32z^8 - 2352z^7 + 67872z^6 - 992040z^5 + 7909650z^4 - 34533135z^3 + 78513435z^2 - 81891810z + 28378350) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anuo.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, 3; z\right) = \frac{1}{170100} \left(e^z (128z^{10} + 8640z^9 + 226080z^8 + 2946000z^7 + 20449800z^6 + 75014100z^5 + 135012150z^4 + 98672175z^3 + 15521625z^2 - 1417500z + 170100) \right)$$

07.25.03.anup.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, \frac{7}{2}; z\right) = \frac{1}{45360} \left(e^z \sqrt{\pi} (32 z^7 + 1968 z^6 + 46224 z^5 + 529800 z^4 + 3141450 z^3 + 9401535 z^2 + 12702690 z + 5675670) \operatorname{erf}(\sqrt{z}) z^{5/2} \right) + \frac{1}{22680} (16 z^9 + 976 z^8 + 22632 z^7 + 254052 z^6 + 1453869 z^5 + 4076730 z^4 + 4807530 z^3 + 1441440 z^2 - 142560 z + 22680)$$

07.25.03.anuq.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, \frac{7}{2}; -z\right) = \frac{1}{45360} \left(e^{-z} \sqrt{\pi} (32 z^7 - 1968 z^6 + 46224 z^5 - 529800 z^4 + 3141450 z^3 - 9401535 z^2 + 12702690 z - 5675670) \operatorname{erfi}(\sqrt{z}) z^{5/2} \right) + \frac{1}{22680} (-16 z^9 + 976 z^8 - 22632 z^7 + 254052 z^6 - 1453869 z^5 + 4076730 z^4 - 4807530 z^3 + 1441440 z^2 + 142560 z + 22680)$$

07.25.03.anur.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, 4; z\right) = \frac{1}{56700} \left(e^z (128 z^9 + 7104 z^8 + 147936 z^7 + 1466640 z^6 + 7250040 z^5 + 17013780 z^4 + 15915690 z^3 + 3178035 z^2 - 368550 z + 56700) \right)$$

07.25.03.anus.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, \frac{9}{2}; z\right) = \frac{e^z \sqrt{\pi} (32 z^6 + 1584 z^5 + 28800 z^4 + 241800 z^3 + 965250 z^2 + 1679535 z + 945945) \operatorname{erf}(\sqrt{z}) z^{5/2}}{12960} + \frac{16 z^8 + 784 z^7 + 14016 z^6 + 114264 z^5 + 431595 z^4 + 666855 z^3 + 262080 z^2 - 31680 z + 6480}{6480}$$

07.25.03.anut.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, \frac{9}{2}; -z\right) = \frac{16 z^8 - 784 z^7 + 14016 z^6 - 114264 z^5 + 431595 z^4 - 666855 z^3 + 262080 z^2 + 31680 z + 6480}{6480} - \frac{1}{12960} e^{-z} \sqrt{\pi} z^{5/2} (32 z^6 - 1584 z^5 + 28800 z^4 - 241800 z^3 + 965250 z^2 - 1679535 z + 945945) \operatorname{erfi}(\sqrt{z})$$

07.25.03.anuu.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, 5; z\right) = \frac{1}{14175} \left(e^z (128 z^8 + 5568 z^7 + 86688 z^6 + 599760 z^5 + 1852200 z^4 + 2196180 z^3 + 542430 z^2 - 76545 z + 14175) \right)$$

07.25.03.anuv.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, \frac{11}{2}; z\right) = \frac{e^z \sqrt{\pi} (32 z^5 + 1200 z^4 + 15600 z^3 + 85800 z^2 + 193050 z + 135135) \operatorname{erf}(\sqrt{z}) z^{5/2}}{2880} + \frac{16 z^7 + 592 z^6 + 7512 z^5 + 39420 z^4 + 79905 z^3 + 40320 z^2 - 5760 z + 1440}{1440}$$

07.25.03.anuw.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32 z^5 - 1200 z^4 + 15\,600 z^3 - 85\,800 z^2 + 193\,050 z - 135\,135) \operatorname{erfi}(\sqrt{z}) z^{5/2}}{2880} + \frac{-16 z^7 + 592 z^6 - 7512 z^5 + 39\,420 z^4 - 79\,905 z^3 + 40\,320 z^2 + 5760 z + 1440}{1440}$$

07.25.03.anux.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{3}{2}, 6; z\right) = \frac{e^z (128 z^7 + 4032 z^6 + 42\,336 z^5 + 176\,400 z^4 + 264\,600 z^3 + 79\,380 z^2 - 13\,230 z + 2835)}{2835}$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = -\frac{1}{2}$

07.25.03.anuy.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, -\frac{1}{2}; z\right) = \frac{1}{14\,175} (16 z^{12} + 1568 z^{11} + 62\,544 z^{10} + 1\,322\,912 z^9 + 16\,214\,895 z^8 + 118\,310\,580 z^7 + 508\,847\,430 z^6 + 1\,234\,902\,240 z^5 + 1\,547\,025\,480 z^4 + 843\,242\,400 z^3 + 137\,837\,700 z^2 + 1\,871\,100 z + 14\,175) + \frac{1}{28\,350} (e^z \sqrt{\pi} (32 z^{25/2} + 3152 z^{23/2} + 126\,640 z^{21/2} + 2\,706\,840 z^{19/2} + 33\,693\,930 z^{17/2} + 251\,655\,705 z^{15/2} + 1\,122\,584\,400 z^{13/2} + 2\,891\,029\,050 z^{11/2} + 4\,010\,806\,800 z^{9/2} + 2\,643\,240\,600 z^{7/2} + 648\,648\,000 z^{5/2} + 32\,432\,400 z^{3/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anuz.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, -\frac{1}{2}; -z\right) = \frac{1}{14\,175} (16 z^{12} - 1568 z^{11} + 62\,544 z^{10} - 1\,322\,912 z^9 + 16\,214\,895 z^8 - 118\,310\,580 z^7 + 508\,847\,430 z^6 - 1\,234\,902\,240 z^5 + 1\,547\,025\,480 z^4 - 843\,242\,400 z^3 + 137\,837\,700 z^2 - 1\,871\,100 z + 14\,175) + \frac{1}{28\,350} (e^{-z} \sqrt{\pi} (-32 z^{25/2} + 3152 z^{23/2} - 126\,640 z^{21/2} + 2\,706\,840 z^{19/2} - 33\,693\,930 z^{17/2} + 251\,655\,705 z^{15/2} - 1\,122\,584\,400 z^{13/2} + 2\,891\,029\,050 z^{11/2} - 4\,010\,806\,800 z^{9/2} + 2\,643\,240\,600 z^{7/2} - 648\,648\,000 z^{5/2} + 32\,432\,400 z^{3/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anv0.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{28\,350} (-16 z^{11} - 1392 z^{10} - 48\,632 z^9 - 885\,900 z^8 - 9\,150\,345 z^7 - 54\,646\,410 z^6 - 184\,633\,020 z^5 - 330\,810\,480 z^4 - 275\,675\,400 z^3 - 81\,081\,000 z^2 - 3\,742\,200 z + 28\,350) + \frac{1}{56\,700} (e^z \sqrt{\pi} (-32 z^{23/2} - 2800 z^{21/2} - 98\,640 z^{19/2} - 1\,819\,080 z^{17/2} - 19\,141\,290 z^{15/2} - 117\,666\,675 z^{13/2} - 416\,584\,350 z^{11/2} - 808\,107\,300 z^{9/2} - 778\,377\,600 z^{7/2} - 308\,107\,800 z^{5/2} - 32\,432\,400 z^{3/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anv1.01

$$\begin{aligned}
 {}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, \frac{1}{2}; -z\right) = & \\
 & \frac{1}{28350} (16z^{11} - 1392z^{10} + 48632z^9 - 885900z^8 + 9150345z^7 - 54646410z^6 + 184633020z^5 - 330810480z^4 + \\
 & 275675400z^3 - 81081000z^2 + 3742200z + 28350) + \\
 & \frac{1}{56700} \left(e^{-z} \sqrt{\pi} (-32z^{23/2} + 2800z^{21/2} - 98640z^{19/2} + 1819080z^{17/2} - 19141290z^{15/2} + 117666675z^{13/2} - \right. \\
 & \left. 416584350z^{11/2} + 808107300z^{9/2} - 778377600z^{7/2} + 308107800z^{5/2} - 32432400z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.anv2.01

$$\begin{aligned}
 {}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, 1; z\right) = & \\
 & -\frac{1}{113400} \left(e^z (64z^{11} + 5248z^{10} + 171920z^9 + 2919600z^8 + 27935100z^7 + 153518400z^6 + 474366375z^5 + \right. \\
 & \left. 774422775z^4 + 590247000z^3 + 162729000z^2 + 7597800z - 113400) \right)
 \end{aligned}$$

07.25.03.anv3.01

$$\begin{aligned}
 {}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, \frac{3}{2}; z\right) = & \\
 & \frac{1}{56700} (-16z^{10} - 1216z^9 - 36480z^8 - 558168z^7 - 4701795z^6 - 21972600z^5 - 54594540z^4 - 64864800z^3 - \\
 & 29189160z^2 - 2494800z + 56700) - \frac{1}{113400} \left(e^z \sqrt{\pi} z^{3/2} (32z^9 + 2448z^8 + 74160z^7 + 1151640z^6 + \right. \\
 & \left. 9928170z^5 + 48169485z^4 + 127567440z^3 + 170270100z^2 + 97297200z + 16216200) \operatorname{erf}(\sqrt{z}) \right)
 \end{aligned}$$

07.25.03.anv4.01

$$\begin{aligned}
 {}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, \frac{3}{2}; -z\right) = & \\
 & \frac{1}{113400} \left(e^{-z} \sqrt{\pi} (32z^9 - 2448z^8 + 74160z^7 - 1151640z^6 + 9928170z^5 - 48169485z^4 + 127567440z^3 - \right. \\
 & \left. 170270100z^2 + 97297200z - 16216200) \operatorname{erfi}(\sqrt{z}) z^{3/2} \right) + \\
 & \frac{1}{56700} (-16z^{10} + 1216z^9 - 36480z^8 + 558168z^7 - 4701795z^6 + 21972600z^5 - 54594540z^4 + \\
 & 64864800z^3 - 29189160z^2 + 2494800z + 56700)
 \end{aligned}$$

07.25.03.anv5.01

$$\begin{aligned}
 {}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, 2; z\right) = & \\
 & -\frac{1}{113400} \left(e^z (64z^{10} + 4544z^9 + 126480z^8 + 1781280z^7 + 13684860z^6 + 57724380z^5 + 128020095z^4 + \right. \\
 & \left. 134322300z^3 + 52957800z^2 + 3855600z - 113400) \right)
 \end{aligned}$$

07.25.03.anv6.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{37800} (-16z^9 - 1040z^8 - 26088z^7 - 323876z^6 - 2122605z^5 - 7248150z^4 - 11861850z^3 - 7567560z^2 - 997920z + 37800) - \frac{1}{75600} \left(e^z \sqrt{\pi} z^{3/2} (32z^8 + 2096z^7 + 53200z^6 + 672840z^5 + 4545450z^4 + 16351335z^3 + 29459430z^2 + 22972950z + 5405400) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anv7.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{37800} (16z^9 - 1040z^8 + 26088z^7 - 323876z^6 + 2122605z^5 - 7248150z^4 + 11861850z^3 - 7567560z^2 + 997920z + 37800) - \frac{1}{75600} \left(e^{-z} \sqrt{\pi} z^{3/2} (32z^8 - 2096z^7 + 53200z^6 - 672840z^5 + 4545450z^4 - 16351335z^3 + 29459430z^2 - 22972950z + 5405400) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anv8.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, 3; z\right) = -\frac{1}{56700} \left(e^z (64z^9 + 3840z^8 + 88080z^7 + 988560z^6 + 5776380z^5 + 17289720z^4 + 24281775z^3 + 12913425z^2 + 1304100z - 56700) \right)$$

07.25.03.anv9.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, \frac{7}{2}; z\right) = \frac{1}{15120} (-16z^8 - 864z^7 - 17456z^6 - 167184z^5 - 792855z^4 - 1763580z^3 - 1531530z^2 - 285120z + 15120) - \frac{1}{30240} \left(e^z \sqrt{\pi} z^{3/2} (32z^7 + 1744z^6 + 35760z^5 + 351000z^4 + 1737450z^3 + 4189185z^2 + 4324320z + 1351350) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anva.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, \frac{7}{2}; -z\right) = \frac{1}{30240} \left(e^{-z} \sqrt{\pi} (32z^7 - 1744z^6 + 35760z^5 - 351000z^4 + 1737450z^3 - 4189185z^2 + 4324320z - 1351350) \operatorname{erfi}(\sqrt{z}) z^{3/2} \right) + \frac{1}{15120} (-16z^8 + 864z^7 - 17456z^6 + 167184z^5 - 792855z^4 + 1763580z^3 - 1531530z^2 + 285120z + 15120)$$

07.25.03.anvb.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, 4; z\right) = -\frac{1}{18900} \left(e^z (64z^8 + 3136z^7 + 56720z^6 + 478080z^5 + 1951740z^4 + 3627540z^3 + 2516535z^2 + 330750z - 18900) \right)$$

07.25.03.anvc.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, \frac{9}{2}; z\right) = \frac{-16z^7 - 688z^6 - 10584z^5 - 72252z^4 - 219345z^3 - 253890z^2 - 63360z + 4320}{4320} - \frac{e^z \sqrt{\pi} z^{3/2} (32z^6 + 1392z^5 + 21840z^4 + 154440z^3 + 501930z^2 + 675675z + 270270) \operatorname{erf}(\sqrt{z})}{8640}$$

07.25.03.anvd.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, \frac{9}{2}; -z\right) = \frac{16z^7 - 688z^6 + 10584z^5 - 72252z^4 + 219345z^3 - 253890z^2 + 63360z + 4320}{4320} - \frac{1}{8640} e^{-z} \sqrt{\pi} z^{3/2} (32z^6 - 1392z^5 + 21840z^4 - 154440z^3 + 501930z^2 - 675675z + 270270) \operatorname{erfi}(\sqrt{z})$$

07.25.03.anve.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, 5; z\right) = -\frac{e^z (64z^7 + 2432z^6 + 32400z^5 + 186480z^4 + 459900z^3 + 408240z^2 + 67095z - 4725)}{4725}$$

07.25.03.anvf.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, \frac{11}{2}; z\right) = \frac{1}{960} (-16z^6 - 512z^5 - 5472z^4 - 23240z^3 - 35595z^2 - 11520z + 960) - \frac{e^z \sqrt{\pi} z^{3/2} (32z^5 + 1040z^4 + 11440z^3 + 51480z^2 + 90090z + 45045) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.anvg.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, \frac{11}{2}; -z\right) = \frac{e^{-z} \sqrt{\pi} (32z^5 - 1040z^4 + 11440z^3 - 51480z^2 + 90090z - 45045) \operatorname{erfi}(\sqrt{z}) z^{3/2}}{1920} + \frac{1}{960} (-16z^6 + 512z^5 - 5472z^4 + 23240z^3 - 35595z^2 + 11520z + 960)$$

07.25.03.anvh.01

$${}_2F_2\left(\frac{11}{2}, 6; -\frac{1}{2}, 6; z\right) = -\frac{1}{945} e^z (64z^6 + 1728z^5 + 15120z^4 + 50400z^3 + 56700z^2 + 11340z - 945)$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = \frac{1}{2}$

07.25.03.anvi.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, \frac{1}{2}; z\right) = \frac{1}{56700} (16z^{10} + 1232z^9 + 37552z^8 + 586080z^7 + 5065095z^6 + 24507285z^5 + 64045080z^4 + 82577880z^3 + 43659000z^2 + 6237000z + 56700) + \frac{1}{113400} \left(e^z \sqrt{\pi} (32z^{21/2} + 2480z^{19/2} + 76320z^{17/2} + 1208520z^{15/2} + 10681650z^{13/2} + 53576775z^{11/2} + 148700475z^{9/2} + 213305400z^{7/2} + 138461400z^{5/2} + 31185000z^{3/2} + 1247400\sqrt{z}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anvj.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, \frac{1}{2}; -z\right) = \frac{1}{56700} (16z^{10} - 1232z^9 + 37552z^8 - 586080z^7 + 5065095z^6 - 24507285z^5 + 64045080z^4 - 82577880z^3 + 43659000z^2 - 6237000z + 56700) + \frac{1}{113400} (e^{-z} \sqrt{\pi} (-32z^{21/2} + 2480z^{19/2} - 76320z^{17/2} + 1208520z^{15/2} - 10681650z^{13/2} + 53576775z^{11/2} - 148700475z^{9/2} + 213305400z^{7/2} - 138461400z^{5/2} + 31185000z^{3/2} - 1247400\sqrt{z})) \operatorname{erfi}(\sqrt{z})$$

07.25.03.anvk.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, 1; z\right) = \frac{1}{113400} (e^z (32z^{10} + 2320z^9 + 66240z^8 + 963000z^7 + 7708050z^6 + 34364925z^5 + 82541025z^4 + 98317800z^3 + 49329000z^2 + 7371000z + 113400))$$

07.25.03.anvl.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, \frac{3}{2}; z\right) = \frac{1}{113400} (16z^9 + 1072z^8 + 27912z^7 + 363300z^6 + 2534685z^5 + 9450540z^4 + 17713080z^3 + 14469840z^2 + 3742200z + 113400) + \frac{1}{226800} (e^z \sqrt{\pi} \sqrt{z} (32z^9 + 2160z^8 + 56880z^7 + 753480z^6 + 5407290z^5 + 21133035z^4 + 43035300z^3 + 41164200z^2 + 14968800z + 1247400) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anvm.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, \frac{3}{2}; -z\right) = \frac{1}{113400} (-16z^9 + 1072z^8 - 27912z^7 + 363300z^6 - 2534685z^5 + 9450540z^4 - 17713080z^3 + 14469840z^2 - 3742200z + 113400) + \frac{1}{226800} (e^{-z} \sqrt{\pi} \sqrt{z} (32z^9 - 2160z^8 + 56880z^7 - 753480z^6 + 5407290z^5 - 21133035z^4 + 43035300z^3 - 41164200z^2 + 14968800z - 1247400) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anvn.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, 2; z\right) = \frac{1}{113400} (e^z (32z^9 + 2000z^8 + 48240z^7 + 577080z^6 + 3668490z^5 + 12353985z^4 + 20771100z^3 + 15233400z^2 + 3628800z + 113400))$$

07.25.03.anvo.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, \frac{5}{2}; z\right) = \frac{1}{75600} (16z^8 + 912z^7 + 19712z^6 + 206040z^5 + 1101195z^4 + 2925615z^3 + 3451140z^2 + 1372140z + 75600) + \frac{1}{151200} (e^z \sqrt{\pi} \sqrt{z} (32z^8 + 1840z^7 + 40320z^6 + 430920z^5 + 2390850z^4 + 6787935z^3 + 9095625z^2 + 4781700z + 623700) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anvp.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, \frac{5}{2}; -z\right) = \frac{1}{75\,600} (16z^8 - 912z^7 + 19\,712z^6 - 206\,040z^5 + 1\,101\,195z^4 - 2\,925\,615z^3 + 3\,451\,140z^2 - 1\,372\,140z + 75\,600) - \frac{1}{151\,200} \left(e^{-z} \sqrt{\pi} \sqrt{z} (32z^8 - 1840z^7 + 40\,320z^6 - 430\,920z^5 + 2\,390\,850z^4 - 6\,787\,935z^3 + 9\,095\,625z^2 - 4\,781\,700z + 623\,700) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anvq.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, 3; z\right) = \frac{1}{56\,700} \left(e^z (32z^8 + 1680z^7 + 33\,120z^6 + 312\,120z^5 + 1\,483\,650z^4 + 3\,452\,085z^3 + 3\,510\,675z^2 + 1\,190\,700z + 56\,700) \right)$$

07.25.03.anvr.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, \frac{7}{2}; z\right) = \frac{16z^7 + 752z^6 + 12\,952z^5 + 102\,780z^4 + 387\,345z^3 + 639\,870z^2 + 362\,340z + 30\,240}{30\,240} + \frac{1}{60\,480} \left(e^z \sqrt{\pi} \sqrt{z} (32z^7 + 1520z^6 + 26\,640z^5 + 217\,800z^4 + 866\,250z^3 + 1\,590\,435z^2 + 1\,143\,450z + 207\,900) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anvs.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, \frac{7}{2}; -z\right) = \frac{-16z^7 + 752z^6 - 12\,952z^5 + 102\,780z^4 - 387\,345z^3 + 639\,870z^2 - 362\,340z + 30\,240}{30\,240} + \frac{1}{60\,480} \left(e^{-z} \sqrt{\pi} \sqrt{z} (32z^7 - 1520z^6 + 26\,640z^5 - 217\,800z^4 + 866\,250z^3 - 1\,590\,435z^2 + 1\,143\,450z - 207\,900) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anvt.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, 4; z\right) = \frac{e^z (32z^7 + 1360z^6 + 20\,880z^5 + 145\,080z^4 + 468\,090z^3 + 643\,545z^2 + 292\,950z + 18\,900)}{18\,900}$$

07.25.03.anvu.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, \frac{9}{2}; z\right) = \frac{16z^6 + 592z^5 + 7632z^4 + 42\,000z^3 + 96\,495z^2 + 74\,745z + 8640}{8640} + \frac{e^z \sqrt{\pi} \sqrt{z} (32z^6 + 1200z^5 + 15\,840z^4 + 91\,080z^3 + 228\,690z^2 + 218\,295z + 51\,975) \operatorname{erf}(\sqrt{z})}{17\,280}$$

07.25.03.anvv.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, \frac{9}{2}; -z\right) = \frac{16z^6 - 592z^5 + 7632z^4 - 42\,000z^3 + 96\,495z^2 - 74\,745z + 8640}{8640} - \frac{e^{-z} \sqrt{\pi} \sqrt{z} (32z^6 - 1200z^5 + 15\,840z^4 - 91\,080z^3 + 228\,690z^2 - 218\,295z + 51\,975) \operatorname{erfi}(\sqrt{z})}{17\,280}$$

07.25.03.anvw.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, 5; z\right) = \frac{e^z (32z^6 + 1040z^5 + 11\,520z^4 + 52\,920z^3 + 97\,650z^2 + 57\,645z + 4725)}{4725}$$

07.25.03.anvx.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, \frac{11}{2}; z\right) = \frac{16z^5 + 432z^4 + 3752z^3 + 12180z^2 + 12645z + 1920}{1920} + \frac{e^z \sqrt{\pi} \sqrt{z} (32z^5 + 880z^4 + 7920z^3 + 27720z^2 + 34650z + 10395) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.anvy.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, \frac{11}{2}; -z\right) = \frac{-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920}{1920} + \frac{e^{-z} \sqrt{\pi} \sqrt{z} (32z^5 - 880z^4 + 7920z^3 - 27720z^2 + 34650z - 10395) \operatorname{erfi}(\sqrt{z})}{3840}$$

07.25.03.anvz.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{1}{2}, 6; z\right) = \frac{1}{945} e^z (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945)$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = 1$

07.25.03.anw0.01

$${}_2F_2\left(\frac{11}{2}, 6; 1, 1; z\right) = \frac{1}{907200} \left(e^{z/2} (128z^{10} + 8768z^9 + 235840z^8 + 3224112z^7 + 24284400z^6 + 102519000z^5 + 237297240z^4 + 283456575z^3 + 154693710z^2 + 29484000z + 907200) I_0\left(\frac{z}{2}\right) + \frac{1}{907200} \left(e^{z/2} (128z^{10} + 8640z^9 + 227264z^8 + 3001040z^7 + 21388752z^6 + 82428840z^5 + 163168200z^4 + 147064545z^3 + 46667700z^2 + 2657160z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anw1.01

$${}_2F_2\left(\frac{11}{2}, 6; 1, \frac{3}{2}; z\right) = \frac{1}{113400} \left(e^z (16z^9 + 1008z^8 + 24552z^7 + 297360z^6 + 1921185z^5 + 6615945z^4 + 11498760z^3 + 8913240z^2 + 2381400z + 113400) \right)$$

07.25.03.anw2.01

$${}_2F_2\left(\frac{11}{2}, 6; 1, 2; z\right) = \frac{1}{453600} \left(e^{z/2} (64z^9 + 3776z^8 + 85776z^7 + 966000z^6 + 5804280z^5 + 18726120z^4 + 31186305z^3 + 24389055z^2 + 7257600z + 453600) I_0\left(\frac{z}{2}\right) + \frac{1}{453600} \left(e^{z/2} (64z^9 + 3712z^8 + 82096z^7 + 885696z^6 + 4956120z^5 + 14141520z^4 + 18849735z^3 + 9577080z^2 + 1101780z) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anw3.01

$${}_2F_2\left(\frac{11}{2}, 6; 1, \frac{5}{2}; z\right) = \frac{1}{37800} e^z (8z^8 + 428z^7 + 8638z^6 + 83895z^5 + 415275z^4 + 1023960z^3 + 1141560z^2 + 461160z + 37800)$$

07.25.03.anw4.01

$${}_2F_2\left(\frac{11}{2}, 6; 1, 3; z\right) = \frac{1}{226800} \left(e^{z/2} (64z^8 + 3168z^7 + 58800z^6 + 522720z^5 + 2367000z^4 + 5392170z^3 + 5737815z^2 + 2381400z + 226800) I_0\left(\frac{z}{2}\right) + \frac{1}{226800} \left(e^{z/2} z (64z^7 + 3104z^6 + 55728z^5 + 468480z^4 + 1923480z^3 + 3656070z^2 + 2713095z + 494190) I_1\left(\frac{z}{2}\right) \right) \right)$$

07.25.03.anw5.01

$${}_2F_2\left(\frac{11}{2}, 6; 1, \frac{7}{2}; z\right) = \frac{e^z (4z^7 + 176z^6 + 2823z^5 + 20775z^4 + 72600z^3 + 112680z^2 + 63720z + 7560)}{7560}$$

07.25.03.anw6.01

$${}_2F_2\left(\frac{11}{2}, 6; 1, 4; z\right) = \frac{e^{z/2} (16z^7 + 640z^6 + 9248z^5 + 60864z^4 + 190095z^3 + 268440z^2 + 146475z + 18900) I_0\left(\frac{z}{2}\right) + e^{z/2} z (32z^6 + 1248z^5 + 17264z^4 + 105056z^3 + 282618z^2 + 293010z + 76065) I_1\left(\frac{z}{2}\right)}{37800}$$

07.25.03.anw7.01

$${}_2F_2\left(\frac{11}{2}, 6; 1, \frac{9}{2}; z\right) = \frac{e^z (2z^6 + 69z^5 + 825z^4 + 4200z^3 + 9000z^2 + 6840z + 1080)}{1080}$$

07.25.03.anw8.01

$${}_2F_2\left(\frac{11}{2}, 6; 1, 5; z\right) = \frac{e^{z/2} (32z^6 + 976z^5 + 10176z^4 + 44724z^3 + 83190z^2 + 57645z + 9450) I_0\left(\frac{z}{2}\right) + e^{z/2} z (32z^5 + 944z^4 + 9248z^3 + 35916z^2 + 51054z + 17835) I_1\left(\frac{z}{2}\right)}{9450}$$

07.25.03.anw9.01

$${}_2F_2\left(\frac{11}{2}, 6; 1, \frac{11}{2}; z\right) = \frac{1}{120} e^z (z^5 + 25z^4 + 200z^3 + 600z^2 + 600z + 120)$$

07.25.03.anwa.01

$${}_2F_2\left(\frac{11}{2}, 6; 1, 6; z\right) = \frac{1}{945} e^{z/2} (16z^5 + 336z^4 + 2220z^3 + 5484z^2 + 4725z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} z (16z^4 + 320z^3 + 1908z^2 + 3720z + 1689) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = \frac{3}{2}$

07.25.03.anwb.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{3}{2}, \frac{3}{2}; z\right) = \frac{1}{226800} (16z^8 + 928z^7 + 20496z^6 + 220272z^5 + 1222215z^4 + 3427920z^3 + 4413528z^2 + 2086560z + 204120) + \frac{1}{453600\sqrt{z}} \left(e^z \sqrt{\pi} (32z^9 + 1872z^8 + 41904z^7 + 460152z^6 + 2646378z^5 + 7901145z^4 + 11430720z^3 + 6872040z^2 + 1224720z + 22680) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anwc.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{3}{2}, \frac{3}{2}; -z\right) = \frac{1}{226800} (16z^8 - 928z^7 + 20496z^6 - 220272z^5 + 1222215z^4 - 3427920z^3 + 4413528z^2 - 2086560z + 204120) + \frac{1}{453600\sqrt{z}} \left(e^{-z} \sqrt{\pi} (-32z^9 + 1872z^8 - 41904z^7 + 460152z^6 - 2646378z^5 + 7901145z^4 - 11430720z^3 + 6872040z^2 - 1224720z + 22680) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anwd.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{3}{2}, 2; z\right) = \frac{1}{113400} \left(e^z (16z^8 + 864z^7 + 17640z^6 + 173880z^5 + 877905z^4 + 2226420z^3 + 2593080z^2 + 1134000z + 113400) \right)$$

07.25.03.anwe.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{3}{2}, \frac{5}{2}; z\right) = \frac{16z^7 + 784z^6 + 14232z^5 + 121020z^4 + 502305z^3 + 962388z^2 + 714420z + 128520}{151200} + \frac{1}{302400\sqrt{z}} \left(e^z \sqrt{\pi} (32z^8 + 1584z^7 + 29232z^6 + 255528z^5 + 1113210z^4 + 2335095z^3 + 2090340z^2 + 601020z + 22680) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anwf.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{3}{2}, \frac{5}{2}; -z\right) = \frac{-16z^7 + 784z^6 - 14232z^5 + 121020z^4 - 502305z^3 + 962388z^2 - 714420z + 128520}{151200} + \frac{1}{302400\sqrt{z}} \left(e^{-z} \sqrt{\pi} (32z^8 - 1584z^7 + 29232z^6 - 255528z^5 + 1113210z^4 - 2335095z^3 + 2090340z^2 - 601020z + 22680) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anwg.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{3}{2}, 3; z\right) = \frac{e^z (16z^7 + 720z^6 + 11880z^5 + 90720z^4 + 333585z^3 + 558495z^2 + 359100z + 56700)}{56700}$$

07.25.03.anwh.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{3}{2}, \frac{7}{2}; z\right) = \frac{16z^6 + 640z^5 + 9120z^4 + 57480z^3 + 161259z^2 + 176040z + 49140}{60480} + \frac{1}{120960\sqrt{z}} \left(e^z \sqrt{\pi} (32z^7 + 1296z^6 + 18864z^5 + 123480z^4 + 372330z^3 + 473445z^2 + 196560z + 11340) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anwi.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{3}{2}, \frac{7}{2}; -z\right) = \frac{16z^6 - 640z^5 + 9120z^4 - 57480z^3 + 161259z^2 - 176040z + 49140}{60480} + \frac{1}{120960\sqrt{z}} \left(e^{-z} \sqrt{\pi} (-32z^7 + 1296z^6 - 18864z^5 + 123480z^4 - 372330z^3 + 473445z^2 - 196560z + 11340) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anwj.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{3}{2}, 4; z\right) = \frac{e^z (16z^6 + 576z^5 + 7272z^4 + 39816z^3 + 94689z^2 + 85050z + 18900)}{18900}$$

07.25.03.anwk.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{3}{2}, \frac{9}{2}; z\right) = \frac{16z^5 + 496z^4 + 5160z^3 + 21588z^2 + 33765z + 13500}{17280} + \frac{e^z \sqrt{\pi} (32z^6 + 1008z^5 + 10800z^4 + 47880z^3 + 85050z^2 + 48195z + 3780) \operatorname{erf}(\sqrt{z})}{34560\sqrt{z}}$$

07.25.03.anwl.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{3}{2}, \frac{9}{2}; -z\right) = \frac{-16z^5 + 496z^4 - 5160z^3 + 21588z^2 - 33765z + 13500}{17280} + \frac{e^{-z} \sqrt{\pi} (32z^6 - 1008z^5 + 10800z^4 - 47880z^3 + 85050z^2 - 48195z + 3780) \operatorname{erfi}(\sqrt{z})}{34560\sqrt{z}}$$

07.25.03.anwm.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{3}{2}, 5; z\right) = \frac{e^z (16z^5 + 432z^4 + 3816z^3 + 13104z^2 + 16065z + 4725)}{4725}$$

07.25.03.anwn.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{3}{2}, \frac{11}{2}; z\right) = \frac{16z^4 + 352z^3 + 2352z^2 + 5280z + 2895}{3840} + \frac{e^z \sqrt{\pi} (32z^5 + 720z^4 + 5040z^3 + 12600z^2 + 9450z + 945) \operatorname{erf}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.anwo.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{3}{2}, \frac{11}{2}; -z\right) = \frac{16z^4 - 352z^3 + 2352z^2 - 5280z + 2895}{3840} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 720z^4 - 5040z^3 + 12600z^2 - 9450z + 945) \operatorname{erfi}(\sqrt{z})}{7680\sqrt{z}}$$

07.25.03.anwp.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{3}{2}, 6; z\right) = \frac{1}{945} e^z (16z^4 + 288z^3 + 1512z^2 + 2520z + 945)$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = 2$

07.25.03.anwq.01

$${}_2F_2\left(\frac{11}{2}, 6; 2, 2; z\right) = \frac{1}{453\,600} \left(e^{z/2} (64 z^8 + 3232 z^7 + 61\,488 z^6 + 564\,000 z^5 + 2\,660\,760 z^4 + 6\,410\,070 z^3 + 7\,399\,215 z^2 + 3\,512\,880 z + 453\,600) I_0\left(\frac{z}{2}\right) + I_1\left(\frac{z}{2}\right) \right)$$

07.25.03.anwr.01

$${}_2F_2\left(\frac{11}{2}, 6; 2, \frac{5}{2}; z\right) = \frac{e^z (8 z^7 + 364 z^6 + 6090 z^5 + 47\,355 z^4 + 178\,500 z^3 + 309\,960 z^2 + 211\,680 z + 37\,800)}{37\,800}$$

07.25.03.anws.01

$${}_2F_2\left(\frac{11}{2}, 6; 2, 3; z\right) = \frac{e^{z/2} (16 z^7 + 672 z^6 + 10\,320 z^5 + 73\,440 z^4 + 254\,475 z^3 + 415\,350 z^2 + 282\,870 z + 56\,700) I_0\left(\frac{z}{2}\right) + e^{z/2} (32 z^7 + 1312 z^6 + 19\,344 z^5 + 128\,160 z^4 + 389\,250 z^3 + 489\,870 z^2 + 187\,875 z + 5040) I_1\left(\frac{z}{2}\right)}{113\,400}$$

07.25.03.anwt.01

$${}_2F_2\left(\frac{11}{2}, 6; 2, \frac{7}{2}; z\right) = \frac{e^z (4 z^6 + 148 z^5 + 1935 z^4 + 11\,100 z^3 + 28\,200 z^2 + 28\,080 z + 7560)}{7560}$$

07.25.03.anwu.01

$${}_2F_2\left(\frac{11}{2}, 6; 2, 4; z\right) = \frac{e^{z/2} (32 z^6 + 1072 z^5 + 12\,576 z^4 + 64\,380 z^3 + 146\,910 z^2 + 136\,395 z + 37\,800) I_0\left(\frac{z}{2}\right) + e^{z/2} (32 z^6 + 1040 z^5 + 11\,552 z^4 + 53\,316 z^3 + 98\,430 z^2 + 55\,905 z + 2520) I_1\left(\frac{z}{2}\right)}{37\,800}$$

07.25.03.anww.01

$${}_2F_2\left(\frac{11}{2}, 6; 2, \frac{9}{2}; z\right) = \frac{e^z (2 z^5 + 57 z^4 + 540 z^3 + 2040 z^2 + 2880 z + 1080)}{1080}$$

07.25.03.anww.01

$${}_2F_2\left(\frac{11}{2}, 6; 2, 5; z\right) = \frac{e^{z/2} (16 z^5 + 400 z^4 + 3276 z^3 + 10\,620 z^2 + 13\,125 z + 4725) I_0\left(\frac{z}{2}\right) + e^{z/2} (16 z^5 + 384 z^4 + 2900 z^3 + 7896 z^2 + 6345 z + 420) I_1\left(\frac{z}{2}\right)}{4725}$$

07.25.03.anwx.01

$${}_2F_2\left(\frac{11}{2}, 6; 2, \frac{11}{2}; z\right) = \frac{1}{120} e^z (z^4 + 20 z^3 + 120 z^2 + 240 z + 120)$$

07.25.03.anwy.01

$${}_2F_2\left(\frac{11}{2}, 6; 2, 6; z\right) = \frac{1}{945} e^{z/2} (16z^4 + 264z^3 + 1284z^2 + 2100z + 945) I_0\left(\frac{z}{2}\right) + \frac{1}{945} e^{z/2} (16z^4 + 248z^3 + 1044z^2 + 1164z + 105) I_1\left(\frac{z}{2}\right)$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = \frac{5}{2}$

07.25.03.anwz.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{5}{2}, \frac{5}{2}; z\right) = \frac{16z^7 + 656z^6 + 9648z^5 + 63440z^4 + 189183z^3 + 227997z^2 + 77910z + 630}{100800z} + \frac{1}{201600z^{3/2}} (e^z \sqrt{\pi} (32z^8 + 1328z^7 + 19936z^6 + 135912z^5 + 433650z^4 + 600495z^3 + 288855z^2 + 23310z - 630) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anx0.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{5}{2}, \frac{5}{2}; -z\right) = \frac{16z^7 - 656z^6 + 9648z^5 - 63440z^4 + 189183z^3 - 227997z^2 + 77910z - 630}{100800z} + \frac{1}{201600z^{3/2}} (e^{-z} \sqrt{\pi} (-32z^8 + 1328z^7 - 19936z^6 + 135912z^5 - 433650z^4 + 600495z^3 - 288855z^2 + 23310z + 630) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anx1.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{5}{2}, 3; z\right) = \frac{e^z (8z^6 + 300z^5 + 3990z^4 + 23415z^3 + 61425z^2 + 64260z + 18900)}{18900}$$

07.25.03.anx2.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{5}{2}, \frac{7}{2}; z\right) = \frac{16z^6 + 528z^5 + 5960z^4 + 27924z^3 + 51957z^2 + 28770z + 630}{40320z} + \frac{e^z \sqrt{\pi} (32z^7 + 1072z^6 + 12432z^5 + 61320z^4 + 127050z^3 + 92295z^2 + 11970z - 630) \operatorname{erf}(\sqrt{z})}{80640z^{3/2}}$$

07.25.03.anx3.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{5}{2}, \frac{7}{2}; -z\right) = \frac{-16z^6 + 528z^5 - 5960z^4 + 27924z^3 - 51957z^2 + 28770z - 630}{40320z} + \frac{1}{80640z^{3/2}} e^{-z} \sqrt{\pi} (32z^7 - 1072z^6 + 12432z^5 - 61320z^4 + 127050z^3 - 92295z^2 + 11970z + 630) \operatorname{erfi}(\sqrt{z})$$

07.25.03.anx4.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{5}{2}, 4; z\right) = \frac{e^z (8z^5 + 236z^4 + 2338z^3 + 9387z^2 + 14490z + 6300)}{6300}$$

07.25.03.anx5.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{5}{2}, \frac{9}{2}; z\right) = \frac{16z^5 + 400z^4 + 3168z^3 + 9096z^2 + 7635z + 315}{11520z} + \frac{e^z \sqrt{\pi} (32z^6 + 816z^5 + 6720z^4 + 21000z^3 + 22050z^2 + 4095z - 315) \operatorname{erf}(\sqrt{z})}{23040z^{3/2}}$$

07.25.03.anx6.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{5}{2}, \frac{9}{2}; -z\right) = \frac{16z^5 - 400z^4 + 3168z^3 - 9096z^2 + 7635z - 315}{11520z} + \frac{e^{-z}\sqrt{\pi}(-32z^6 + 816z^5 - 6720z^4 + 21000z^3 - 22050z^2 + 4095z + 315)\operatorname{erfi}(\sqrt{z})}{23040z^{3/2}}$$

07.25.03.anx7.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{5}{2}, 5; z\right) = \frac{e^z(8z^4 + 172z^3 + 1134z^2 + 2583z + 1575)}{1575}$$

07.25.03.anx8.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{5}{2}, \frac{11}{2}; z\right) = \frac{16z^4 + 272z^3 + 1272z^2 + 1580z + 105}{2560z} + \frac{e^z\sqrt{\pi}(32z^5 + 560z^4 + 2800z^3 + 4200z^2 + 1050z - 105)\operatorname{erf}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.anx9.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{5}{2}, \frac{11}{2}; -z\right) = \frac{-16z^4 + 272z^3 - 1272z^2 + 1580z - 105}{2560z} + \frac{e^{-z}\sqrt{\pi}(32z^5 - 560z^4 + 2800z^3 - 4200z^2 + 1050z + 105)\operatorname{erfi}(\sqrt{z})}{5120z^{3/2}}$$

07.25.03.anxa.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{5}{2}, 6; z\right) = \frac{1}{315}e^z(8z^3 + 108z^2 + 378z + 315)$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = 3$

07.25.03.anxb.01

$${}_2F_2\left(\frac{11}{2}, 6; 3, 3; z\right) = \frac{e^{z/2}(32z^6 + 1104z^5 + 13440z^4 + 72180z^3 + 175590z^2 + 178245z + 56790)I_0\left(\frac{z}{2}\right)}{56700} + \frac{e^{z/2}(32z^7 + 1072z^6 + 12384z^5 + 60300z^4 + 120510z^3 + 78435z^2 + 5220z - 360)I_1\left(\frac{z}{2}\right)}{56700z}$$

07.25.03.anxc.01

$${}_2F_2\left(\frac{11}{2}, 6; 3, \frac{7}{2}; z\right) = \frac{e^z(4z^5 + 120z^4 + 1215z^3 + 5025z^2 + 8100z + 3780)}{3780}$$

07.25.03.anxd.01

$${}_2F_2\left(\frac{11}{2}, 6; 3, 4; z\right) = \frac{e^{z/2}(16z^5 + 432z^4 + 3900z^3 + 14340z^2 + 20925z + 9495)I_0\left(\frac{z}{2}\right)}{9450} + \frac{e^{z/2}(16z^6 + 416z^5 + 3492z^4 + 11040z^3 + 11265z^2 + 1350z - 180)I_1\left(\frac{z}{2}\right)}{9450z}$$

07.25.03.anxe.01

$${}_2F_2\left(\frac{11}{2}, 6; 3, \frac{9}{2}; z\right) = \frac{1}{540}e^z(2z^4 + 45z^3 + 315z^2 + 780z + 540)$$

07.25.03.anxf.01

$${}_2F_2\left(\frac{11}{2}, 6; 3, 5; z\right) = \frac{2 e^{z/2} (16 z^4 + 312 z^3 + 1860 z^2 + 3900 z + 2385) I_0\left(\frac{z}{2}\right)}{4725} + \frac{2 e^{z/2} (16 z^5 + 296 z^4 + 1572 z^3 + 2460 z^2 + 465 z - 90) I_1\left(\frac{z}{2}\right)}{4725 z}$$

07.25.03.anxg.01

$${}_2F_2\left(\frac{11}{2}, 6; 3, \frac{11}{2}; z\right) = \frac{1}{60} e^z (z^3 + 15 z^2 + 60 z + 60)$$

07.25.03.anxh.01

$${}_2F_2\left(\frac{11}{2}, 6; 3, 6; z\right) = \frac{16}{945} e^{z/2} (2 z^3 + 24 z^2 + 75 z + 60) I_0\left(\frac{z}{2}\right) + \frac{4 e^{z/2} (8 z^4 + 88 z^3 + 216 z^2 + 60 z - 15) I_1\left(\frac{z}{2}\right)}{945 z}$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = \frac{7}{2}$

07.25.03.anxi.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{7}{2}, \frac{7}{2}; z\right) = \frac{16 z^6 + 416 z^5 + 3472 z^4 + 10752 z^3 + 10239 z^2 + 660 z - 90}{16128 z^2} + \frac{e^z \sqrt{\pi} (32 z^7 + 848 z^6 + 7344 z^5 + 24600 z^4 + 28650 z^3 + 6345 z^2 - 720 z + 90) \operatorname{erf}(\sqrt{z})}{32256 z^{5/2}}$$

07.25.03.anxj.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{7}{2}, \frac{7}{2}; -z\right) = \frac{16 z^6 - 416 z^5 + 3472 z^4 - 10752 z^3 + 10239 z^2 - 660 z - 90}{16128 z^2} + \frac{e^{-z} \sqrt{\pi} (-32 z^7 + 848 z^6 - 7344 z^5 + 24600 z^4 - 28650 z^3 + 6345 z^2 + 720 z + 90) \operatorname{erfi}(\sqrt{z})}{32256 z^{5/2}}$$

07.25.03.anxk.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{7}{2}, 4; z\right) = \frac{e^z (4 z^4 + 92 z^3 + 663 z^2 + 1710 z + 1260)}{1260}$$

07.25.03.anxl.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{7}{2}, \frac{9}{2}; z\right) = \frac{16 z^5 + 304 z^4 + 1656 z^3 + 2604 z^2 + 345 z - 90}{4608 z^2} + \frac{e^z \sqrt{\pi} (32 z^6 + 624 z^5 + 3600 z^4 + 6600 z^3 + 2250 z^2 - 405 z + 90) \operatorname{erf}(\sqrt{z})}{9216 z^{5/2}}$$

07.25.03.anxm.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{7}{2}, \frac{9}{2}; -z\right) = \frac{-16 z^5 + 304 z^4 - 1656 z^3 + 2604 z^2 - 345 z - 90}{4608 z^2} + \frac{e^{-z} \sqrt{\pi} (32 z^6 - 624 z^5 + 3600 z^4 - 6600 z^3 + 2250 z^2 + 405 z + 90) \operatorname{erfi}(\sqrt{z})}{9216 z^{5/2}}$$

07.25.03.anxn.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{7}{2}, 5; z\right) = \frac{1}{315} e^z (4 z^3 + 64 z^2 + 279 z + 315)$$

07.25.03.anxo.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{7}{2}, \frac{11}{2}; z\right) = \frac{16z^4 + 192z^3 + 512z^2 + 120z - 45}{1024z^2} + \frac{e^z \sqrt{\pi} (32z^5 + 400z^4 + 1200z^3 + 600z^2 - 150z + 45) \operatorname{erf}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.anxp.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{7}{2}, \frac{11}{2}; -z\right) = \frac{16z^4 - 192z^3 + 512z^2 - 120z - 45}{1024z^2} + \frac{e^{-z} \sqrt{\pi} (-32z^5 + 400z^4 - 1200z^3 + 600z^2 + 150z + 45) \operatorname{erfi}(\sqrt{z})}{2048z^{5/2}}$$

07.25.03.anxq.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{7}{2}, 6; z\right) = \frac{1}{63} e^z (4z^2 + 36z + 63)$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = 4$

07.25.03.anxr.01

$${}_2F_2\left(\frac{11}{2}, 6; 4, 4; z\right) = \frac{e^{z/2} (16z^5 + 328z^4 + 2084z^3 + 4740z^2 + 3201z - 12) I_0\left(\frac{z}{2}\right)}{3150z} + \frac{e^{z/2} (16z^6 + 312z^5 + 1780z^4 + 3100z^3 + 729z^2 - 204z + 48) I_1\left(\frac{z}{2}\right)}{3150z^2}$$

07.25.03.anxs.01

$${}_2F_2\left(\frac{11}{2}, 6; 4, \frac{9}{2}; z\right) = \frac{1}{180} e^z (2z^3 + 33z^2 + 150z + 180)$$

07.25.03.anxt.01

$${}_2F_2\left(\frac{11}{2}, 6; 4, 5; z\right) = \frac{8e^{z/2} (4z^4 + 56z^3 + 210z^2 + 204z - 3) I_0\left(\frac{z}{2}\right)}{1575z} + \frac{4e^{z/2} (8z^5 + 104z^4 + 320z^3 + 132z^2 - 57z + 24) I_1\left(\frac{z}{2}\right)}{1575z^2}$$

07.25.03.anxu.01

$${}_2F_2\left(\frac{11}{2}, 6; 4, \frac{11}{2}; z\right) = \frac{1}{20} e^z (z^2 + 10z + 20)$$

07.25.03.anxv.01

$${}_2F_2\left(\frac{11}{2}, 6; 4, 6; z\right) = \frac{4e^{z/2} (8z^3 + 60z^2 + 84z - 3) I_0\left(\frac{z}{2}\right)}{315z} + \frac{4e^{z/2} (8z^4 + 52z^3 + 36z^2 - 21z + 12) I_1\left(\frac{z}{2}\right)}{315z^2}$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = \frac{9}{2}$

07.25.03.anxw.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{9}{2}, \frac{9}{2}; z\right) = \frac{7(16z^5 + 208z^4 + 624z^3 + 192z^2 - 105z + 45)}{9216z^3} + \frac{7e^z \sqrt{\pi} (32z^6 + 432z^5 + 1440z^4 + 840z^3 - 270z^2 + 135z - 45) \operatorname{erf}(\sqrt{z})}{18432z^{7/2}}$$

07.25.03.anxx.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{9}{2}, \frac{9}{2}; -z\right) = \frac{7(16z^5 - 208z^4 + 624z^3 - 192z^2 - 105z - 45)}{9216z^3} - \frac{7e^{-z}\sqrt{\pi}(32z^6 - 432z^5 + 1440z^4 - 840z^3 - 270z^2 - 135z - 45)\operatorname{erfi}(\sqrt{z})}{18432z^{7/2}}$$

07.25.03.anxy.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{9}{2}, 5; z\right) = \frac{1}{45}e^z(2z^2 + 21z + 45)$$

07.25.03.anxz.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{9}{2}, \frac{11}{2}; z\right) = \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z\sqrt{\pi}(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)\operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.any0.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{9}{2}, \frac{11}{2}; -z\right) = \frac{7e^{-z}\sqrt{\pi}(32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45)\operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

07.25.03.any1.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{9}{2}, 6; z\right) = \frac{1}{9}e^z(2z + 9)$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = 5$

07.25.03.any2.01

$${}_2F_2\left(\frac{11}{2}, 6; 5, 5; z\right) = \frac{16e^{z/2}(8z^4 + 68z^3 + 108z^2 - 9z + 6)I_0\left(\frac{z}{2}\right)}{1575z^2} + \frac{16e^{z/2}(8z^5 + 60z^4 + 52z^3 - 39z^2 + 36z - 24)I_1\left(\frac{z}{2}\right)}{1575z^3}$$

07.25.03.any3.01

$${}_2F_2\left(\frac{11}{2}, 6; 5, \frac{11}{2}; z\right) = \frac{1}{5}e^z(z + 5)$$

07.25.03.any4.01

$${}_2F_2\left(\frac{11}{2}, 6; 5, 6; z\right) = \frac{32e^{z/2}(4z^3 + 12z^2 - 3z + 3)I_0\left(\frac{z}{2}\right)}{315z^2} + \frac{32e^{z/2}(4z^4 + 8z^3 - 9z^2 + 12z - 12)I_1\left(\frac{z}{2}\right)}{315z^3}$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = \frac{11}{2}$

07.25.03.any5.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{11}{2}, \frac{11}{2}; z\right) = \frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z\sqrt{\pi}(32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.any6.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{11}{2}, \frac{11}{2}; -z\right) = \frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z}\sqrt{\pi}(32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.any7.01

$${}_2F_2\left(\frac{11}{2}, 6; \frac{11}{2}, 6; z\right) = e^z$$

For fixed z and $a_1 = \frac{11}{2}$, $a_2 = 6$, $b_1 = 6$

07.25.03.any8.01

$${}_2F_2\left(\frac{11}{2}, 6; 6, 6; z\right) = \frac{32e^{z/2}(4z^3 - 6z^2 + 15z - 24)I_0\left(\frac{z}{2}\right)}{63z^3} + \frac{32e^{z/2}(4z^4 - 10z^3 + 27z^2 - 60z + 96)I_1\left(\frac{z}{2}\right)}{63z^4}$$

For fixed z and $a_1 = 6$, $a_2 \geq 6$

For fixed z and $a_1 = 6$, $a_2 = 6$, $b_1 \geq -\frac{11}{2}$

For fixed z and $a_1 = 6$, $a_2 = 6$, $b_1 = -\frac{11}{2}$

07.25.03.any9.01

$${}_2F_2\left(6, 6; -\frac{11}{2}, 1; z\right) = \frac{1}{1197504000} (512z^{16} + 71424z^{15} + 4173824z^{14} + 133797120z^{13} + 2588121920z^{12} + 31307385120z^{11} + 237328136640z^{10} + 1097314580880z^9 + 2896425373050z^8 + 3773152220175z^7 + 1573679923200z^6 - 234101145600z^5 + 87787929600z^4 - 43352064000z^3 + 21337344000z^2 - 7838208000z + 1197504000) + \frac{1}{2395008000} (e^z\sqrt{\pi}(1024z^{33/2} + 143360z^{31/2} + 8418560z^{29/2} + 271697920z^{27/2} + 5306040960z^{25/2} + 65078891520z^{23/2} + 503674442400z^{21/2} + 2406049430400z^{19/2} + 6712121121300z^{17/2} + 9735523232400z^{15/2} + 5476231818225z^{13/2})\operatorname{erf}(\sqrt{z}))$$

07.25.03.anya.01

$${}_2F_2\left(6, 6; -\frac{11}{2}, 1; -z\right) = \frac{1}{1197504000} (512z^{16} - 71424z^{15} + 4173824z^{14} - 133797120z^{13} + 2588121920z^{12} - 31307385120z^{11} + 237328136640z^{10} - 1097314580880z^9 + 2896425373050z^8 - 3773152220175z^7 + 1573679923200z^6 + 234101145600z^5 + 87787929600z^4 + 43352064000z^3 + 21337344000z^2 + 7838208000z + 1197504000) + \frac{1}{2395008000} (e^{-z}\sqrt{\pi}(-1024z^{33/2} + 143360z^{31/2} - 8418560z^{29/2} + 271697920z^{27/2} - 5306040960z^{25/2} + 65078891520z^{23/2} - 503674442400z^{21/2} + 2406049430400z^{19/2} - 6712121121300z^{17/2} + 9735523232400z^{15/2} - 5476231818225z^{13/2})\operatorname{erfi}(\sqrt{z}))$$

07.25.03.anyb.01

$${}_2F_2\left(6, 6; -\frac{11}{2}, 2; z\right) = \frac{1}{598\,752\,000} (256 z^{15} + 31\,488 z^{14} + 1\,598\,976 z^{13} + 43\,728\,832 z^{12} + 704\,483\,040 z^{11} + 6\,867\,660\,240 z^{10} + 39\,990\,289\,248 z^9 + 131\,483\,242\,980 z^8 + 213\,004\,381\,185 z^7 + 112\,405\,708\,800 z^6 - 19\,508\,428\,800 z^5 + 8\,778\,792\,960 z^4 - 5\,419\,008\,000 z^3 + 3\,556\,224\,000 z^2 - 1\,959\,552\,000 z + 598\,752\,000) + \frac{1}{1\,197\,504\,000} \left(e^z \sqrt{\pi} (512 z^{31/2} + 63\,232 z^{29/2} + 3\,229\,184 z^{27/2} + 89\,025\,792 z^{25/2} + 1\,451\,172\,288 z^{23/2} + 14\,399\,792\,160 z^{21/2} + 86\,239\,611\,360 z^{19/2} + 297\,508\,795\,920 z^{17/2} + 529\,726\,999\,410 z^{15/2} + 365\,082\,121\,215 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anyc.01

$${}_2F_2\left(6, 6; -\frac{11}{2}, 2; -z\right) = \frac{1}{598\,752\,000} (-256 z^{15} + 31\,488 z^{14} - 1\,598\,976 z^{13} + 43\,728\,832 z^{12} - 704\,483\,040 z^{11} + 6\,867\,660\,240 z^{10} - 39\,990\,289\,248 z^9 + 131\,483\,242\,980 z^8 - 213\,004\,381\,185 z^7 + 112\,405\,708\,800 z^6 + 19\,508\,428\,800 z^5 + 8\,778\,792\,960 z^4 + 5\,419\,008\,000 z^3 + 3\,556\,224\,000 z^2 + 1\,959\,552\,000 z + 598\,752\,000) + \frac{1}{1\,197\,504\,000} \left(e^{-z} \sqrt{\pi} (512 z^{31/2} - 63\,232 z^{29/2} + 3\,229\,184 z^{27/2} - 89\,025\,792 z^{25/2} + 1\,451\,172\,288 z^{23/2} - 14\,399\,792\,160 z^{21/2} + 86\,239\,611\,360 z^{19/2} - 297\,508\,795\,920 z^{17/2} + 529\,726\,999\,410 z^{15/2} - 365\,082\,121\,215 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anyd.01

$${}_2F_2\left(6, 6; -\frac{11}{2}, 3; z\right) = \frac{1}{149\,688\,000} (128 z^{14} + 13\,632 z^{13} + 588\,256 z^{12} + 13\,341\,360 z^{11} + 172\,410\,840 z^{10} + 1\,284\,690\,204 z^9 + 5\,293\,172\,250 z^8 + 10\,640\,497\,905 z^7 + 7\,025\,356\,800 z^6 - 1\,393\,459\,200 z^5 + 731\,566\,080 z^4 - 541\,900\,800 z^3 + 444\,528\,000 z^2 - 326\,592\,000 z + 149\,688\,000) + \frac{1}{299\,376\,000} \left(e^z \sqrt{\pi} (256 z^{29/2} + 27\,392 z^{27/2} + 1\,190\,016 z^{25/2} + 27\,257\,664 z^{23/2} + 357\,607\,680 z^{21/2} + 2\,729\,800\,080 z^{19/2} + 11\,727\,104\,760 z^{17/2} + 25\,619\,797\,980 z^{15/2} + 21\,475\,418\,895 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anye.01

$${}_2F_2\left(6, 6; -\frac{11}{2}, 3; -z\right) = \frac{1}{149\,688\,000} (128 z^{14} - 13\,632 z^{13} + 588\,256 z^{12} - 13\,341\,360 z^{11} + 172\,410\,840 z^{10} - 1\,284\,690\,204 z^9 + 5\,293\,172\,250 z^8 - 10\,640\,497\,905 z^7 + 7\,025\,356\,800 z^6 + 1\,393\,459\,200 z^5 + 731\,566\,080 z^4 + 541\,900\,800 z^3 + 444\,528\,000 z^2 + 326\,592\,000 z + 149\,688\,000) + \frac{1}{299\,376\,000} \left(e^{-z} \sqrt{\pi} (-256 z^{29/2} + 27\,392 z^{27/2} - 1\,190\,016 z^{25/2} + 27\,257\,664 z^{23/2} - 357\,607\,680 z^{21/2} + 2\,729\,800\,080 z^{19/2} - 11\,727\,104\,760 z^{17/2} + 25\,619\,797\,980 z^{15/2} - 21\,475\,418\,895 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anyf.01

$${}_2F_2\left(6, 6; -\frac{11}{2}, 4; z\right) = \frac{1}{24\,948\,000} (64 z^{13} + 5760 z^{12} + 204\,880 z^{11} + 3\,702\,720 z^{10} + 36\,314\,236 z^9 + 190\,037\,640 z^8 + 475\,510\,635 z^7 + 390\,297\,600 z^6 - 87\,091\,200 z^5 + 52\,254\,720 z^4 - 45\,158\,400 z^3 + 44\,452\,800 z^2 - 40\,824\,000 z + 24\,948\,000) + \frac{1}{49\,896\,000} \left(e^z \sqrt{\pi} (128 z^{27/2} + 11\,584 z^{25/2} + 415\,456 z^{23/2} + 7\,604\,720 z^{21/2} + 76\,140\,120 z^{19/2} + 413\,148\,540 z^{17/2} + 1\,112\,344\,170 z^{15/2} + 1\,130\,285\,205 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anyg.01

$${}_2F_2\left(6, 6; -\frac{11}{2}, 4; -z\right) = \frac{1}{24\,948\,000} (-64 z^{13} + 5760 z^{12} - 204\,880 z^{11} + 3\,702\,720 z^{10} - 36\,314\,236 z^9 + 190\,037\,640 z^8 - 475\,510\,635 z^7 + 390\,297\,600 z^6 + 87\,091\,200 z^5 + 52\,254\,720 z^4 + 45\,158\,400 z^3 + 44\,452\,800 z^2 + 40\,824\,000 z + 24\,948\,000) + \frac{1}{49\,896\,000} \left(e^{-z} \sqrt{\pi} (128 z^{27/2} - 11\,584 z^{25/2} + 415\,456 z^{23/2} - 7\,604\,720 z^{21/2} + 76\,140\,120 z^{19/2} - 413\,148\,540 z^{17/2} + 1\,112\,344\,170 z^{15/2} - 1\,130\,285\,205 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anyh.01

$${}_2F_2\left(6, 6; -\frac{11}{2}, 5; z\right) = \frac{1}{3\,118\,500} (32 z^{12} + 2352 z^{11} + 66\,000 z^{10} + 895\,496 z^9 + 6\,098\,130 z^8 + 19\,167\,615 z^7 + 19\,514\,880 z^6 - 4\,838\,400 z^5 + 3\,265\,920 z^4 - 3\,225\,600 z^3 + 3\,704\,400 z^2 - 4\,082\,400 z + 3\,118\,500) + \frac{1}{6\,237\,000} \left(e^z \sqrt{\pi} (64 z^{25/2} + 4736 z^{23/2} + 134\,320 z^{21/2} + 1\,854\,720 z^{19/2} + 13\,031\,340 z^{17/2} + 43\,682\,520 z^{15/2} + 53\,823\,105 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anyi.01

$${}_2F_2\left(6, 6; -\frac{11}{2}, 5; -z\right) = \frac{1}{3\,118\,500} (32 z^{12} - 2352 z^{11} + 66\,000 z^{10} - 895\,496 z^9 + 6\,098\,130 z^8 - 19\,167\,615 z^7 + 19\,514\,880 z^6 + 4\,838\,400 z^5 + 3\,265\,920 z^4 + 3\,225\,600 z^3 + 3\,704\,400 z^2 + 4\,082\,400 z + 3\,118\,500) + \frac{1}{6\,237\,000} \left(e^{-z} \sqrt{\pi} (-64 z^{25/2} + 4736 z^{23/2} - 134\,320 z^{21/2} + 1\,854\,720 z^{19/2} - 13\,031\,340 z^{17/2} + 43\,682\,520 z^{15/2} - 53\,823\,105 z^{13/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anyj.01

$${}_2F_2\left(6, 6; -\frac{11}{2}, 6; z\right) = \frac{1}{311\,850} (16 z^{11} + 912 z^{10} + 18\,872 z^9 + 174\,540 z^8 + 701\,145 z^7 + 887\,040 z^6 - 241\,920 z^5 + 181\,440 z^4 - 201\,600 z^3 + 264\,600 z^2 - 340\,200 z + 311\,850) + \frac{1}{623\,700} \left(e^z \sqrt{\pi} (32 z^{23/2} + 1840 z^{21/2} + 38\,640 z^{19/2} + 367\,080 z^{17/2} + 1\,560\,090 z^{15/2} + 2\,340\,135 z^{13/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anyk.01

$${}_2F_2\left(6, 6; -\frac{11}{2}, 6; -z\right) = \frac{1}{311850} \left(-16z^{11} + 912z^{10} - 18872z^9 + 174540z^8 - 701145z^7 + 887040z^6 + 241920z^5 + 181440z^4 + 201600z^3 + 264600z^2 + 340200z + 311850\right) + \frac{1}{623700} \left(e^{-z} \sqrt{\pi} (32z^{23/2} - 1840z^{21/2} + 38640z^{19/2} - 367080z^{17/2} + 1560090z^{15/2} - 2340135z^{13/2}) \operatorname{erfi}(\sqrt{z})\right)$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = -\frac{9}{2}$

07.25.03.anyl.01

$${}_2F_2\left(6, 6; -\frac{9}{2}, 1; z\right) = \frac{1}{217728000} \left(-512z^{15} - 66304z^{14} - 3577344z^{13} - 105210880z^{12} - 1853353920z^{11} - 20235690720z^{10} - 136959994080z^9 - 557691446880z^8 - 1273189410450z^7 - 1397864237175z^6 - 468202291200z^5 + 58525286400z^4 - 17340825600z^3 + 6096384000z^2 - 1741824000z + 217728000\right) + \frac{1}{435456000} \left(e^z \sqrt{\pi} (-1024z^{31/2} - 133120z^{29/2} - 7220480z^{27/2} - 213934080z^{25/2} - 3808502400z^{23/2} - 42227877120z^{21/2} - 292535056800z^{19/2} - 1235909203200z^{17/2} - 3004393511700z^{15/2} - 3726736209000z^{13/2} - 1749495609225z^{11/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anym.01

$${}_2F_2\left(6, 6; -\frac{9}{2}, 1; -z\right) = \frac{1}{217728000} \left(512z^{15} - 66304z^{14} + 3577344z^{13} - 105210880z^{12} + 1853353920z^{11} - 20235690720z^{10} + 136959994080z^9 - 557691446880z^8 + 1273189410450z^7 - 1397864237175z^6 + 468202291200z^5 + 58525286400z^4 + 17340825600z^3 + 6096384000z^2 + 1741824000z + 217728000\right) + \frac{1}{435456000} \left(e^{-z} \sqrt{\pi} (-1024z^{31/2} + 133120z^{29/2} - 7220480z^{27/2} + 213934080z^{25/2} - 3808502400z^{23/2} + 42227877120z^{21/2} - 292535056800z^{19/2} + 1235909203200z^{17/2} - 3004393511700z^{15/2} + 3726736209000z^{13/2} - 1749495609225z^{11/2}) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anyn.01

$${}_2F_2\left(6, 6; -\frac{9}{2}, 2; z\right) = \frac{1}{108864000} \left(-256z^{14} - 29184z^{13} - 1365632z^{12} - 34183680z^{11} - 500028480z^{10} - 4383031968z^9 - 22671150840z^8 - 65167742160z^7 - 90234832275z^6 - 39016857600z^5 + 5852528640z^4 - 2167603200z^3 + 1016064000z^2 - 435456000z + 108864000\right) + \frac{1}{217728000} \left(e^z \sqrt{\pi} (-512z^{29/2} - 58624z^{27/2} - 2760192z^{25/2} - 69704448z^{23/2} - 1032945600z^{21/2} - 9235064160z^{19/2} - 49299354720z^{17/2} - 149610731760z^{15/2} - 230505535890z^{13/2} - 134576585325z^{11/2}) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anyo.01

$${}_2F_2\left(6, 6; -\frac{9}{2}, 2; -z\right) = \frac{1}{108\,864\,000} \left(-256 z^{14} + 29\,184 z^{13} - 1\,365\,632 z^{12} + 34\,183\,680 z^{11} - 500\,028\,480 z^{10} + 4\,383\,031\,968 z^9 - 22\,671\,150\,840 z^8 + 65\,167\,742\,160 z^7 - 90\,234\,832\,275 z^6 + 39\,016\,857\,600 z^5 + 5\,852\,528\,640 z^4 + 2\,167\,603\,200 z^3 + 1\,016\,064\,000 z^2 + 435\,456\,000 z + 108\,864\,000\right) + \frac{1}{217\,728\,000} \left(e^{-z} \sqrt{\pi} \left(512 z^{29/2} - 58\,624 z^{27/2} + 2\,760\,192 z^{25/2} - 69\,704\,448 z^{23/2} + 1\,032\,945\,600 z^{21/2} - 9\,235\,064\,160 z^{19/2} + 49\,299\,354\,720 z^{17/2} - 149\,610\,731\,760 z^{15/2} + 230\,505\,535\,890 z^{13/2} - 134\,576\,585\,325 z^{11/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anyp.01

$${}_2F_2\left(6, 6; -\frac{9}{2}, 3; z\right) = \frac{1}{27\,216\,000} \left(-128 z^{13} - 12\,608 z^{12} - 500\,064 z^{11} - 10\,347\,120 z^{10} - 120\,910\,104 z^9 - 805\,653\,756 z^8 - 2\,925\,783\,090 z^7 - 5\,078\,941\,245 z^6 - 2\,786\,918\,400 z^5 + 487\,710\,720 z^4 - 216\,760\,320 z^3 + 127\,008\,000 z^2 - 72\,576\,000 z + 27\,216\,000\right) + \frac{1}{54\,432\,000} \left(e^z \sqrt{\pi} \left(-256 z^{27/2} - 25\,344 z^{25/2} - 1\,012\,608 z^{23/2} - 21\,182\,016 z^{21/2} - 251\,697\,600 z^{19/2} - 1\,723\,009\,680 z^{17/2} - 6\,558\,075\,720 z^{15/2} - 12\,503\,646\,540 z^{13/2} - 8\,971\,772\,355 z^{11/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anyq.01

$${}_2F_2\left(6, 6; -\frac{9}{2}, 3; -z\right) = \frac{1}{27\,216\,000} \left(128 z^{13} - 12\,608 z^{12} + 500\,064 z^{11} - 10\,347\,120 z^{10} + 120\,910\,104 z^9 - 805\,653\,756 z^8 + 2\,925\,783\,090 z^7 - 5\,078\,941\,245 z^6 + 2\,786\,918\,400 z^5 + 487\,710\,720 z^4 + 216\,760\,320 z^3 + 127\,008\,000 z^2 + 72\,576\,000 z + 27\,216\,000\right) + \frac{1}{54\,432\,000} \left(e^{-z} \sqrt{\pi} \left(-256 z^{27/2} + 25\,344 z^{25/2} - 1\,012\,608 z^{23/2} + 21\,182\,016 z^{21/2} - 251\,697\,600 z^{19/2} + 1\,723\,009\,680 z^{17/2} - 6\,558\,075\,720 z^{15/2} + 12\,503\,646\,540 z^{13/2} - 8\,971\,772\,355 z^{11/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anyr.01

$${}_2F_2\left(6, 6; -\frac{9}{2}, 4; z\right) = \frac{1}{4\,536\,000} \left(-64 z^{12} - 5312 z^{11} - 173\,040 z^{10} - 2\,840\,096 z^9 - 25\,034\,028 z^8 - 116\,162\,460 z^7 - 252\,843\,885 z^6 - 174\,182\,400 z^5 + 34\,836\,480 z^4 - 18\,063\,360 z^3 + 12\,700\,800 z^2 - 9\,072\,000 z + 4\,536\,000\right) + \frac{1}{9\,072\,000} \left(e^z \sqrt{\pi} \left(-128 z^{25/2} - 10\,688 z^{23/2} - 351\,328 z^{21/2} - 5\,848\,080 z^{19/2} - 52\,747\,800 z^{17/2} - 254\,905\,140 z^{15/2} - 602\,533\,890 z^{13/2} - 527\,751\,315 z^{11/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anys.01

$${}_2F_2\left(6, 6; -\frac{9}{2}, 4; -z\right) = \frac{1}{4536000} (-64 z^{12} + 5312 z^{11} - 173040 z^{10} + 2840096 z^9 - 25034028 z^8 + 116162460 z^7 - 252843885 z^6 + 174182400 z^5 + 34836480 z^4 + 18063360 z^3 + 12700800 z^2 + 9072000 z + 4536000) + \frac{1}{9072000} \left(e^{-z} \sqrt{\pi} (128 z^{25/2} - 10688 z^{23/2} + 351328 z^{21/2} - 5848080 z^{19/2} + 52747800 z^{17/2} - 254905140 z^{15/2} + 602533890 z^{13/2} - 527751315 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anyt.01

$${}_2F_2\left(6, 6; -\frac{9}{2}, 5; z\right) = \frac{1}{567000} (-32 z^{11} - 2160 z^{10} - 55216 z^9 - 675672 z^8 - 4096170 z^7 - 11253375 z^6 - 9676800 z^5 + 2177280 z^4 - 1290240 z^3 + 1058400 z^2 - 907200 z + 567000) + \frac{1}{1134000} \left(e^z \sqrt{\pi} (-64 z^{23/2} - 4352 z^{21/2} - 112560 z^{19/2} - 1404480 z^{17/2} - 8817900 z^{15/2} - 26046720 z^{13/2} - 27776385 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anyu.01

$${}_2F_2\left(6, 6; -\frac{9}{2}, 5; -z\right) = \frac{1}{567000} (32 z^{11} - 2160 z^{10} + 55216 z^9 - 675672 z^8 + 4096170 z^7 - 11253375 z^6 + 9676800 z^5 + 2177280 z^4 + 1290240 z^3 + 1058400 z^2 + 907200 z + 567000) + \frac{1}{1134000} \left(e^{-z} \sqrt{\pi} (-64 z^{23/2} + 4352 z^{21/2} - 112560 z^{19/2} + 1404480 z^{17/2} - 8817900 z^{15/2} + 26046720 z^{13/2} - 27776385 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anyv.01

$${}_2F_2\left(6, 6; -\frac{9}{2}, 6; z\right) = \frac{1}{56700} (-16 z^{10} - 832 z^9 - 15552 z^8 - 128280 z^7 - 451395 z^6 - 483840 z^5 + 120960 z^4 - 80640 z^3 + 75600 z^2 - 75600 z + 56700) + \frac{1}{113400} \left(e^z \sqrt{\pi} (-32 z^{21/2} - 1680 z^{19/2} - 31920 z^{17/2} - 271320 z^{15/2} - 1017450 z^{13/2} - 1322685 z^{11/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anyw.01

$${}_2F_2\left(6, 6; -\frac{9}{2}, 6; -z\right) = \frac{1}{56700} (-16 z^{10} + 832 z^9 - 15552 z^8 + 128280 z^7 - 451395 z^6 + 483840 z^5 + 120960 z^4 + 80640 z^3 + 75600 z^2 + 75600 z + 56700) + \frac{1}{113400} \left(e^{-z} \sqrt{\pi} (32 z^{21/2} - 1680 z^{19/2} + 31920 z^{17/2} - 271320 z^{15/2} + 1017450 z^{13/2} - 1322685 z^{11/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = -\frac{7}{2}$

07.25.03.anyx.01

$${}_2F_2\left(6, 6; -\frac{7}{2}, 1; z\right) = \frac{1}{48384000} (512 z^{14} + 61184 z^{13} + 3026944 z^{12} + 81025280 z^{11} + 1287616320 z^{10} + 12546993440 z^9 + 74780268480 z^8 + 263549670480 z^7 + 508751067450 z^6 + 456384245175 z^5 + 117050572800 z^4 - 11560550400 z^3 + 2438553600 z^2 - 497664000 z + 48384000) + \frac{1}{96768000} \left(e^z \sqrt{\pi} (1024 z^{29/2} + 122880 z^{27/2} + 6114560 z^{25/2} + 165017600 z^{23/2} + 2653379200 z^{21/2} + 26307601920 z^{19/2} + 160997047200 z^{17/2} + 591921014400 z^{15/2} + 1228630468500 z^{13/2} + 1269475272000 z^{11/2} + 480020337225 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anyy.01

$${}_2F_2\left(6, 6; -\frac{7}{2}, 1; -z\right) = \frac{1}{48384000} (512 z^{14} - 61184 z^{13} + 3026944 z^{12} - 81025280 z^{11} + 1287616320 z^{10} - 12546993440 z^9 + 74780268480 z^8 - 263549670480 z^7 + 508751067450 z^6 - 456384245175 z^5 + 117050572800 z^4 + 11560550400 z^3 + 2438553600 z^2 + 497664000 z + 48384000) + \frac{1}{96768000} \left(e^{-z} \sqrt{\pi} (-1024 z^{29/2} + 122880 z^{27/2} - 6114560 z^{25/2} + 165017600 z^{23/2} - 2653379200 z^{21/2} + 26307601920 z^{19/2} - 160997047200 z^{17/2} + 591921014400 z^{15/2} - 1228630468500 z^{13/2} + 1269475272000 z^{11/2} - 480020337225 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anyz.01

$${}_2F_2\left(6, 6; -\frac{7}{2}, 2; z\right) = \frac{1}{24192000} (256 z^{13} + 26880 z^{12} + 1150720 z^{11} + 26141760 z^{10} + 343720864 z^9 + 2676178800 z^8 + 12110380560 z^7 + 29843763900 z^6 + 34395502725 z^5 + 11705057280 z^4 - 1445068800 z^3 + 406425600 z^2 - 124416000 z + 24192000) + \frac{1}{48384000} \left(e^z \sqrt{\pi} (512 z^{27/2} + 54016 z^{25/2} + 2328064 z^{23/2} + 53408000 z^{21/2} + 712497600 z^{19/2} + 5672576160 z^{17/2} + 26609050080 z^{15/2} + 69783581520 z^{13/2} + 90938372850 z^{11/2} + 43638212475 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anz0.01

$${}_2F_2\left(6, 6; -\frac{7}{2}, 2; -z\right) = \frac{1}{24192000} (-256 z^{13} + 26880 z^{12} - 1150720 z^{11} + 26141760 z^{10} - 343720864 z^9 + 2676178800 z^8 - 12110380560 z^7 + 29843763900 z^6 - 34395502725 z^5 + 11705057280 z^4 + 1445068800 z^3 + 406425600 z^2 + 124416000 z + 24192000) + \frac{1}{48384000} \left(e^{-z} \sqrt{\pi} (512 z^{27/2} - 54016 z^{25/2} + 2328064 z^{23/2} - 53408000 z^{21/2} + 712497600 z^{19/2} - 5672576160 z^{17/2} + 26609050080 z^{15/2} - 69783581520 z^{13/2} + 90938372850 z^{11/2} - 43638212475 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anz1.01

$${}_2F_2\left(6, 6; -\frac{7}{2}, 3; z\right) = \frac{1}{6048000} (128 z^{12} + 11584 z^{11} + 419040 z^{10} + 7838512 z^9 + 81913176 z^8 + 481447260 z^7 + 1514298570 z^6 + 2217051225 z^5 + 975421440 z^4 - 144506880 z^3 + 50803200 z^2 - 20736000 z + 6048000) + \frac{1}{12096000} \left(e^z \sqrt{\pi} (256 z^{25/2} + 23296 z^{23/2} + 849536 z^{21/2} + 16084800 z^{19/2} + 171273600 z^{17/2} + 1037915280 z^{15/2} + 3444329880 z^{13/2} + 5614986780 z^{11/2} + 3356785575 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anz2.01

$${}_2F_2\left(6, 6; -\frac{7}{2}, 3; -z\right) = \frac{1}{6048000} (128 z^{12} - 11584 z^{11} + 419040 z^{10} - 7838512 z^9 + 81913176 z^8 - 481447260 z^7 + 1514298570 z^6 - 2217051225 z^5 + 975421440 z^4 + 144506880 z^3 + 50803200 z^2 + 20736000 z + 6048000) + \frac{1}{12096000} \left(e^{-z} \sqrt{\pi} (-256 z^{25/2} + 23296 z^{23/2} - 849536 z^{21/2} + 16084800 z^{19/2} - 171273600 z^{17/2} + 1037915280 z^{15/2} - 3444329880 z^{13/2} + 5614986780 z^{11/2} - 3356785575 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anz3.01

$${}_2F_2\left(6, 6; -\frac{7}{2}, 4; z\right) = \frac{1}{1008000} (64 z^{11} + 4864 z^{10} + 143888 z^9 + 2123008 z^8 + 16608156 z^7 + 67240720 z^6 + 124579095 z^5 + 69672960 z^4 - 12042240 z^3 + 5080320 z^2 - 2592000 z + 1008000) + \frac{1}{2016000} \left(e^z \sqrt{\pi} (128 z^{23/2} + 9792 z^{21/2} + 292576 z^{19/2} + 4385200 z^{17/2} + 35207000 z^{15/2} + 149284140 z^{13/2} + 303965610 z^{11/2} + 223785705 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anz4.01

$${}_2F_2\left(6, 6; -\frac{7}{2}, 4; -z\right) = \frac{1}{1008000} (-64 z^{11} + 4864 z^{10} - 143888 z^9 + 2123008 z^8 - 16608156 z^7 + 67240720 z^6 - 124579095 z^5 + 69672960 z^4 + 12042240 z^3 + 5080320 z^2 + 2592000 z + 1008000) + \frac{1}{2016000} \left(e^{-z} \sqrt{\pi} (128 z^{23/2} - 9792 z^{21/2} + 292576 z^{19/2} - 4385200 z^{17/2} + 35207000 z^{15/2} - 149284140 z^{13/2} + 303965610 z^{11/2} - 223785705 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anz5.01

$${}_2F_2\left(6, 6; -\frac{7}{2}, 5; z\right) = \frac{1}{126000} (32 z^{10} + 1968 z^9 + 45392 z^8 + 495048 z^7 + 2631410 z^6 + 6189735 z^5 + 4354560 z^4 - 860160 z^3 + 423360 z^2 - 259200 z + 126000) + \frac{1}{252000} \left(e^z \sqrt{\pi} (64 z^{21/2} + 3968 z^{19/2} + 92720 z^{17/2} + 1033600 z^{15/2} + 5717100 z^{13/2} + 14612520 z^{11/2} + 13163865 z^{9/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anz6.01

$${}_2F_2\left(6, 6; -\frac{7}{2}, 5; -z\right) = \frac{1}{126000} (32 z^{10} - 1968 z^9 + 45392 z^8 - 495048 z^7 + 2631410 z^6 - 6189735 z^5 + 4354560 z^4 + 860160 z^3 + 423360 z^2 + 259200 z + 126000) + \frac{1}{252000} \left(e^{-z} \sqrt{\pi} (-64 z^{21/2} + 3968 z^{19/2} - 92720 z^{17/2} + 1033600 z^{15/2} - 5717100 z^{13/2} + 14612520 z^{11/2} - 13163865 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anz7.01

$${}_2F_2\left(6, 6; -\frac{7}{2}, 6; z\right) = \frac{1}{12600} (16 z^9 + 752 z^8 + 12552 z^7 + 90980 z^6 + 274845 z^5 + 241920 z^4 - 53760 z^3 + 30240 z^2 - 21600 z + 12600) + \frac{e^z \sqrt{\pi} (32 z^{19/2} + 1520 z^{17/2} + 25840 z^{15/2} + 193800 z^{13/2} + 629850 z^{11/2} + 692835 z^{9/2}) \operatorname{erf}(\sqrt{z})}{25200}$$

07.25.03.anz8.01

$${}_2F_2\left(6, 6; -\frac{7}{2}, 6; -z\right) = \frac{1}{12600} (-16 z^9 + 752 z^8 - 12552 z^7 + 90980 z^6 - 274845 z^5 + 241920 z^4 + 53760 z^3 + 30240 z^2 + 21600 z + 12600) + \frac{1}{25200} \left(e^{-z} \sqrt{\pi} (32 z^{19/2} - 1520 z^{17/2} + 25840 z^{15/2} - 193800 z^{13/2} + 629850 z^{11/2} - 692835 z^{9/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = -\frac{5}{2}$

07.25.03.anz9.01

$${}_2F_2\left(6, 6; -\frac{5}{2}, 1; z\right) = \frac{1}{13824000} (-512 z^{13} - 56064 z^{12} - 2522624 z^{11} - 60871680 z^{10} - 862708160 z^9 - 7398275040 z^8 - 38154653280 z^7 - 113784394080 z^6 - 180151182450 z^5 - 126395751375 z^4 - 23121100800 z^3 + 1625702400 z^2 - 199065600 z + 13824000) + \frac{1}{27648000} \left(e^z \sqrt{\pi} (-1024 z^{27/2} - 112640 z^{25/2} - 5100800 z^{23/2} - 124211200 z^{21/2} - 1783900800 z^{19/2} - 15604197120 z^{17/2} - 82976061600 z^{15/2} - 260016768000 z^{13/2} - 448580164500 z^{11/2} - 372314943000 z^{9/2} - 107705394225 z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anza.01

$${}_2F_2\left(6, 6; -\frac{5}{2}, 1; -z\right) = \frac{1}{13\,824\,000} (512 z^{13} - 56\,064 z^{12} + 2\,522\,624 z^{11} - 60\,871\,680 z^{10} + 862\,708\,160 z^9 - 7\,398\,275\,040 z^8 + 38\,154\,653\,280 z^7 - 113\,784\,394\,080 z^6 + 180\,151\,182\,450 z^5 - 126\,395\,751\,375 z^4 + 23\,121\,100\,800 z^3 + 1\,625\,702\,400 z^2 + 199\,065\,600 z + 13\,824\,000) + \frac{1}{27\,648\,000} \left(e^{-z} \sqrt{\pi} (-1024 z^{27/2} + 112\,640 z^{25/2} - 5\,100\,800 z^{23/2} + 124\,211\,200 z^{21/2} - 1\,783\,900\,800 z^{19/2} + 15\,604\,197\,120 z^{17/2} - 82\,976\,061\,600 z^{15/2} + 260\,016\,768\,000 z^{13/2} - 448\,580\,164\,500 z^{11/2} + 372\,314\,943\,000 z^{9/2} - 107\,705\,394\,225 z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anzb.01

$${}_2F_2\left(6, 6; -\frac{5}{2}, 2; z\right) = \frac{1}{6\,912\,000} (-256 z^{12} - 24\,576 z^{11} - 954\,240 z^{10} - 19\,474\,048 z^9 - 227\,324\,160 z^8 - 1\,548\,210\,240 z^7 - 6\,010\,762\,920 z^6 - 12\,373\,353\,000 z^5 - 11\,442\,848\,535 z^4 - 2\,890\,137\,600 z^3 + 270\,950\,400 z^2 - 49\,766\,400 z + 6\,912\,000) + \frac{1}{13\,824\,000} \left(e^z \sqrt{\pi} (-512 z^{25/2} - 49\,408 z^{23/2} - 1\,932\,800 z^{21/2} - 39\,878\,400 z^{19/2} - 473\,227\,200 z^{17/2} - 3\,306\,440\,160 z^{15/2} - 13\,383\,289\,440 z^{13/2} - 29\,633\,713\,200 z^{11/2} - 31\,670\,946\,450 z^{9/2} - 11\,967\,266\,025 z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anzc.01

$${}_2F_2\left(6, 6; -\frac{5}{2}, 2; -z\right) = \frac{1}{6\,912\,000} (-256 z^{12} + 24\,576 z^{11} - 954\,240 z^{10} + 19\,474\,048 z^9 - 227\,324\,160 z^8 + 1\,548\,210\,240 z^7 - 6\,010\,762\,920 z^6 + 12\,373\,353\,000 z^5 - 11\,442\,848\,535 z^4 + 2\,890\,137\,600 z^3 + 270\,950\,400 z^2 + 49\,766\,400 z + 6\,912\,000) + \frac{1}{13\,824\,000} \left(e^{-z} \sqrt{\pi} (512 z^{25/2} - 49\,408 z^{23/2} + 1\,932\,800 z^{21/2} - 39\,878\,400 z^{19/2} + 473\,227\,200 z^{17/2} - 3\,306\,440\,160 z^{15/2} + 13\,383\,289\,440 z^{13/2} - 29\,633\,713\,200 z^{11/2} + 31\,670\,946\,450 z^{9/2} - 11\,967\,266\,025 z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anzd.01

$${}_2F_2\left(6, 6; -\frac{5}{2}, 3; z\right) = \frac{1}{1\,728\,000} (-128 z^{11} - 10\,560 z^{10} - 345\,184 z^9 - 5\,772\,528 z^8 - 53\,210\,520 z^7 - 271\,105\,980 z^6 - 721\,750\,050 z^5 - 862\,909\,605 z^4 - 289\,013\,760 z^3 + 33\,868\,800 z^2 - 8\,294\,400 z + 1\,728\,000) + \frac{1}{3\,456\,000} \left(e^z \sqrt{\pi} (-256 z^{23/2} - 21\,248 z^{21/2} - 700\,800 z^{19/2} - 11\,880\,000 z^{17/2} - 111\,873\,600 z^{15/2} - 590\,420\,880 z^{13/2} - 1\,673\,067\,240 z^{11/2} - 2\,268\,852\,300 z^{9/2} - 1\,087\,933\,275 z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anze.01

$${}_2F_2\left(6, 6; -\frac{5}{2}, 3; -z\right) = \frac{1}{1728000} (128 z^{11} - 10560 z^{10} + 345184 z^9 - 5772528 z^8 + 53210520 z^7 - 271105980 z^6 + 721750050 z^5 - 862909605 z^4 + 289013760 z^3 + 33868800 z^2 + 8294400 z + 1728000) + \frac{1}{3456000} \left(e^{-z} \sqrt{\pi} (-256 z^{23/2} + 21248 z^{21/2} - 700800 z^{19/2} + 11880000 z^{17/2} - 111873600 z^{15/2} + 590420880 z^{13/2} - 1673067240 z^{11/2} + 2268852300 z^{9/2} - 1087933275 z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anzf.01

$${}_2F_2\left(6, 6; -\frac{5}{2}, 4; z\right) = \frac{1}{288000} (-64 z^{10} - 4416 z^9 - 117424 z^8 - 1538016 z^7 - 10509580 z^6 - 36353220 z^5 - 55658745 z^4 - 24084480 z^3 + 3386880 z^2 - 1036800 z + 288000) + \frac{1}{576000} \left(e^z \sqrt{\pi} (-128 z^{21/2} - 8896 z^{19/2} - 239200 z^{17/2} - 3189200 z^{15/2} - 22450200 z^{13/2} - 81933540 z^{11/2} - 140098530 z^{9/2} - 83687175 z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anzg.01

$${}_2F_2\left(6, 6; -\frac{5}{2}, 4; -z\right) = \frac{1}{288000} (-64 z^{10} + 4416 z^9 - 117424 z^8 + 1538016 z^7 - 10509580 z^6 + 36353220 z^5 - 55658745 z^4 + 24084480 z^3 + 3386880 z^2 + 1036800 z + 288000) + \frac{1}{576000} \left(e^{-z} \sqrt{\pi} (128 z^{21/2} - 8896 z^{19/2} + 239200 z^{17/2} - 3189200 z^{15/2} + 22450200 z^{13/2} - 81933540 z^{11/2} + 140098530 z^{9/2} - 83687175 z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anzh.01

$${}_2F_2\left(6, 6; -\frac{5}{2}, 5; z\right) = \frac{1}{36000} (-32 z^9 - 1776 z^8 - 36528 z^7 - 349784 z^6 - 1598250 z^5 - 3129975 z^4 - 1720320 z^3 + 282240 z^2 - 103680 z + 36000) + \frac{1}{72000} \left(e^z \sqrt{\pi} (-64 z^{19/2} - 3584 z^{17/2} - 74800 z^{15/2} - 734400 z^{13/2} - 3513900 z^{11/2} - 7584720 z^{9/2} - 5579145 z^{7/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.anzi.01

$${}_2F_2\left(6, 6; -\frac{5}{2}, 5; -z\right) = \frac{1}{36000} (32 z^9 - 1776 z^8 + 36528 z^7 - 349784 z^6 + 1598250 z^5 - 3129975 z^4 + 1720320 z^3 + 282240 z^2 + 103680 z + 36000) + \frac{1}{72000} \left(e^{-z} \sqrt{\pi} (-64 z^{19/2} + 3584 z^{17/2} - 74800 z^{15/2} + 734400 z^{13/2} - 3513900 z^{11/2} + 7584720 z^{9/2} - 5579145 z^{7/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anzj.01

$${}_2F_2\left(6, 6; -\frac{5}{2}, 6; z\right) = \frac{-16z^8 - 672z^7 - 9872z^6 - 61680z^5 - 155655z^4 - 107520z^3 + 20160z^2 - 8640z + 3600}{3600} + \frac{e^z \sqrt{\pi} (-32z^{17/2} - 1360z^{15/2} - 20400z^{13/2} - 132600z^{11/2} - 364650z^{9/2} - 328185z^{7/2}) \operatorname{erf}(\sqrt{z})}{7200}$$

07.25.03.anzk.01

$${}_2F_2\left(6, 6; -\frac{5}{2}, 6; -z\right) = \frac{-16z^8 + 672z^7 - 9872z^6 + 61680z^5 - 155655z^4 + 107520z^3 + 20160z^2 + 8640z + 3600}{3600} + \frac{e^{-z} \sqrt{\pi} (32z^{17/2} - 1360z^{15/2} + 20400z^{13/2} - 132600z^{11/2} + 364650z^{9/2} - 328185z^{7/2}) \operatorname{erfi}(\sqrt{z})}{7200}$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = -\frac{3}{2}$

07.25.03.anzl.01

$${}_2F_2\left(6, 6; -\frac{3}{2}, 1; z\right) = \frac{1}{5529600} (512z^{12} + 50944z^{11} + 2064384z^{10} + 44381440z^9 + 553008960z^8 + 410055840z^7 + 17883890880z^6 + 43773371280z^5 + 54449192250z^4 + 27980733375z^3 + 3251404800z^2 - 132710400z + 5529600) + \frac{1}{11059200} (e^z \sqrt{\pi} (1024z^{25/2} + 102400z^{23/2} + 4179200z^{21/2} + 90777600z^{19/2} + 1148457600z^{17/2} + 8713451520z^{15/2} + 39408804000z^{13/2} + 102381552000z^{11/2} + 141435508500z^{9/2} + 89443926000z^{7/2} + 18261468225z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anzm.01

$${}_2F_2\left(6, 6; -\frac{3}{2}, 1; -z\right) = \frac{1}{5529600} (512z^{12} - 50944z^{11} + 2064384z^{10} - 44381440z^9 + 553008960z^8 - 410055840z^7 + 17883890880z^6 - 43773371280z^5 + 54449192250z^4 - 27980733375z^3 + 3251404800z^2 + 132710400z + 5529600) + \frac{1}{11059200} (e^{-z} \sqrt{\pi} (-1024z^{25/2} + 102400z^{23/2} - 4179200z^{21/2} + 90777600z^{19/2} - 1148457600z^{17/2} + 8713451520z^{15/2} - 39408804000z^{13/2} + 102381552000z^{11/2} - 141435508500z^{9/2} + 89443926000z^{7/2} - 18261468225z^{5/2}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.anzn.01

$${}_2F_2\left(6, 6; -\frac{3}{2}, 2; z\right) = \frac{1}{2764800} (256z^{11} + 22272z^{10} + 776192z^9 + 14051520z^8 + 143376480z^7 + 837480720z^6 + 2718095040z^5 + 4509070740z^4 + 3171494025z^3 + 541900800z^2 - 33177600z + 2764800) + \frac{1}{5529600} (e^z \sqrt{\pi} (512z^{23/2} + 44800z^{21/2} + 1574400z^{19/2} + 28857600z^{17/2} + 300081600z^{15/2} + 1806032160z^{13/2} + 6159160800z^{11/2} + 11156230800z^{9/2} + 9358484850z^{7/2} + 2608781175z^{5/2}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.anzo.01

$${}_2F_2\left(6, 6; -\frac{3}{2}, 2; -z\right) = \frac{1}{2764800} \left(-256 z^{11} + 22272 z^{10} - 776192 z^9 + 14051520 z^8 - 143376480 z^7 + 837480720 z^6 - 2718095040 z^5 + 4509070740 z^4 - 3171494025 z^3 + 541900800 z^2 + 33177600 z + 2764800\right) + \frac{1}{5529600} \left(e^{-z} \sqrt{\pi} \left(512 z^{23/2} - 44800 z^{21/2} + 1574400 z^{19/2} - 28857600 z^{17/2} + 300081600 z^{15/2} - 1806032160 z^{13/2} + 6159160800 z^{11/2} - 11156230800 z^{9/2} + 9358484850 z^{7/2} - 2608781175 z^{5/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anzp.01

$${}_2F_2\left(6, 6; -\frac{3}{2}, 3; z\right) = \frac{1}{691200} \left(128 z^{10} + 9536 z^9 + 278496 z^8 + 4106160 z^7 + 32807640 z^6 + 141621660 z^5 + 309250170 z^4 + 288162945 z^3 + 67737600 z^2 - 5529600 z + 691200\right) + \frac{1}{1382400} \left(e^z \sqrt{\pi} \left(256 z^{21/2} + 19200 z^{19/2} + 566400 z^{17/2} + 8481600 z^{15/2} + 69465600 z^{13/2} + 312558480 z^{11/2} + 735391800 z^{9/2} + 798068700 z^{7/2} + 289864575 z^{5/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anzq.01

$${}_2F_2\left(6, 6; -\frac{3}{2}, 3; -z\right) = \frac{1}{691200} \left(128 z^{10} - 9536 z^9 + 278496 z^8 - 4106160 z^7 + 32807640 z^6 - 141621660 z^5 + 309250170 z^4 - 288162945 z^3 + 67737600 z^2 + 5529600 z + 691200\right) + \frac{1}{1382400} \left(e^{-z} \sqrt{\pi} \left(-256 z^{21/2} + 19200 z^{19/2} - 566400 z^{17/2} + 8481600 z^{15/2} - 69465600 z^{13/2} + 312558480 z^{11/2} - 735391800 z^{9/2} + 798068700 z^{7/2} - 289864575 z^{5/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anzr.01

$${}_2F_2\left(6, 6; -\frac{3}{2}, 4; z\right) = \frac{1}{115200} \left(64 z^9 + 3968 z^8 + 93648 z^7 + 1071680 z^6 + 6265020 z^5 + 17993880 z^4 + 21817635 z^3 + 6773760 z^2 - 691200 z + 115200\right) + \frac{1}{230400} \left(e^z \sqrt{\pi} \left(128 z^{19/2} + 8000 z^{17/2} + 191200 z^{15/2} + 2233200 z^{13/2} + 13517400 z^{11/2} + 41381340 z^{9/2} + 57335850 z^{7/2} + 26351325 z^{5/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anzs.01

$${}_2F_2\left(6, 6; -\frac{3}{2}, 4; -z\right) = \frac{1}{115\,200} \left(-64 z^9 + 3968 z^8 - 93\,648 z^7 + 1\,071\,680 z^6 - 6\,265\,020 z^5 + 17\,993\,880 z^4 - 21\,817\,635 z^3 + 6\,773\,760 z^2 + 691\,200 z + 115\,200\right) + \frac{1}{230\,400} \left(e^{-z} \sqrt{\pi} \left(128 z^{19/2} - 8000 z^{17/2} + 191\,200 z^{15/2} - 2\,233\,200 z^{13/2} + 13\,517\,400 z^{11/2} - 41\,381\,340 z^{9/2} + 57\,335\,850 z^{7/2} - 26\,351\,325 z^{5/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anzt.01

$${}_2F_2\left(6, 6; -\frac{3}{2}, 5; z\right) = \frac{32 z^8 + 1584 z^7 + 28\,624 z^6 + 236\,040 z^5 + 902\,610 z^4 + 1\,413\,615 z^3 + 564\,480 z^2 - 69\,120 z + 14\,400}{14\,400} + \frac{1}{28\,800} \left(e^z \sqrt{\pi} \left(64 z^{17/2} + 3200 z^{15/2} + 58\,800 z^{13/2} + 499\,200 z^{11/2} + 2\,016\,300 z^{9/2} + 3\,552\,120 z^{7/2} + 2\,027\,025 z^{5/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anzu.01

$${}_2F_2\left(6, 6; -\frac{3}{2}, 5; -z\right) = \frac{32 z^8 - 1584 z^7 + 28\,624 z^6 - 236\,040 z^5 + 902\,610 z^4 - 1\,413\,615 z^3 + 564\,480 z^2 + 69\,120 z + 14\,400}{14\,400} + \frac{1}{28\,800} \left(e^{-z} \sqrt{\pi} \left(-64 z^{17/2} + 3200 z^{15/2} - 58\,800 z^{13/2} + 499\,200 z^{11/2} - 2\,016\,300 z^{9/2} + 3\,552\,120 z^{7/2} - 2\,027\,025 z^{5/2}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.anzv.01

$${}_2F_2\left(6, 6; -\frac{3}{2}, 6; z\right) = \frac{16 z^7 + 592 z^6 + 7512 z^5 + 39\,420 z^4 + 79\,905 z^3 + 40\,320 z^2 - 5760 z + 1440}{1440} + \frac{e^z \sqrt{\pi} \left(32 z^{15/2} + 1200 z^{13/2} + 15\,600 z^{11/2} + 85\,800 z^{9/2} + 193\,050 z^{7/2} + 135\,135 z^{5/2}\right) \operatorname{erf}(\sqrt{z})}{2880}$$

07.25.03.anzw.01

$${}_2F_2\left(6, 6; -\frac{3}{2}, 6; -z\right) = \frac{-16 z^7 + 592 z^6 - 7512 z^5 + 39\,420 z^4 - 79\,905 z^3 + 40\,320 z^2 + 5760 z + 1440}{1440} + \frac{e^{-z} \sqrt{\pi} \left(32 z^{15/2} - 1200 z^{13/2} + 15\,600 z^{11/2} - 85\,800 z^{9/2} + 193\,050 z^{7/2} - 135\,135 z^{5/2}\right) \operatorname{erfi}(\sqrt{z})}{2880}$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = -\frac{1}{2}$

07.25.03.anzx.01

$${}_2F_2\left(6, 6; -\frac{1}{2}, 1; z\right) = \frac{1}{3\,686\,400} \left(-512 z^{11} - 45\,824 z^{10} - 1\,652\,224 z^9 - 31\,185\,920 z^8 - 335\,478\,720 z^7 - 2\,100\,911\,840 z^6 - 7\,514\,784\,480 z^5 - 14\,458\,525\,920 z^4 - 13\,243\,016\,850 z^3 - 4\,473\,757\,575 z^2 - 265\,420\,800 z + 3\,686\,400\right) + \frac{1}{7\,372\,800} \left(e^z \sqrt{\pi} \left(-1024 z^{23/2} - 92\,160 z^{21/2} - 3\,349\,760 z^{19/2} - 63\,979\,520 z^{17/2} - 700\,600\,960 z^{15/2} - 4\,509\,845\,760 z^{13/2} - 16\,859\,575\,200 z^{11/2} - 34\,943\,251\,200 z^{9/2} - 36\,605\,754\,900 z^{7/2} - 16\,232\,416\,200 z^{5/2} - 2\,029\,052\,025 z^{3/2}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.anzy.01

$${}_2F_2\left(6, 6; -\frac{1}{2}, 1; -z\right) = \frac{1}{3\,686\,400} (512 z^{11} - 45\,824 z^{10} + 1\,652\,224 z^9 - 31\,185\,920 z^8 + 335\,478\,720 z^7 - 2\,100\,911\,840 z^6 + 7\,514\,784\,480 z^5 - 14\,458\,525\,920 z^4 + 13\,243\,016\,850 z^3 - 4\,473\,757\,575 z^2 + 265\,420\,800 z + 3\,686\,400) + \frac{1}{7\,372\,800} \left(e^{-z} \sqrt{\pi} (-1024 z^{23/2} + 92\,160 z^{21/2} - 3\,349\,760 z^{19/2} + 63\,979\,520 z^{17/2} - 700\,600\,960 z^{15/2} + 4\,509\,845\,760 z^{13/2} - 16\,859\,575\,200 z^{11/2} + 34\,943\,251\,200 z^{9/2} - 36\,605\,754\,900 z^{7/2} + 16\,232\,416\,200 z^{5/2} - 2\,029\,052\,025 z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.anzz.01

$${}_2F_2\left(6, 6; -\frac{1}{2}, 2; z\right) = \frac{1}{1\,843\,200} (-256 z^{10} - 19\,968 z^9 - 616\,576 z^8 - 9\,745\,152 z^7 - 85\,190\,080 z^6 - 415\,718\,880 z^5 - 1\,088\,076\,888 z^4 - 1\,380\,005\,760 z^3 - 677\,991\,195 z^2 - 66\,355\,200 z + 1\,843\,200) + \frac{1}{3\,686\,400} \left(e^z \sqrt{\pi} (-512 z^{21/2} - 40\,192 z^{19/2} - 1\,252\,864 z^{17/2} - 20\,087\,552 z^{15/2} - 179\,556\,288 z^{13/2} - 908\,250\,720 z^{11/2} - 2\,526\,157\,920 z^{9/2} - 3\,577\,757\,040 z^{7/2} - 2\,202\,970\,770 z^{5/2} - 405\,810\,405 z^{3/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ao00.01

$${}_2F_2\left(6, 6; -\frac{1}{2}, 2; -z\right) = \frac{1}{1\,843\,200} (-256 z^{10} + 19\,968 z^9 - 616\,576 z^8 + 9\,745\,152 z^7 - 85\,190\,080 z^6 + 415\,718\,880 z^5 - 1\,088\,076\,888 z^4 + 1\,380\,005\,760 z^3 - 677\,991\,195 z^2 + 66\,355\,200 z + 1\,843\,200) + \frac{1}{3\,686\,400} \left(e^{-z} \sqrt{\pi} (512 z^{21/2} - 40\,192 z^{19/2} + 1\,252\,864 z^{17/2} - 20\,087\,552 z^{15/2} + 179\,556\,288 z^{13/2} - 908\,250\,720 z^{11/2} + 2\,526\,157\,920 z^{9/2} - 3\,577\,757\,040 z^{7/2} + 2\,202\,970\,770 z^{5/2} - 405\,810\,405 z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ao01.01

$${}_2F_2\left(6, 6; -\frac{1}{2}, 3; z\right) = \frac{1}{460\,800} (-128 z^9 - 8512 z^8 - 218\,976 z^7 - 2\,796\,400 z^6 - 18\,925\,080 z^5 - 67\,082\,364 z^4 - 114\,811\,410 z^3 - 77\,502\,285 z^2 - 11\,059\,200 z + 460\,800) + \frac{1}{921\,600} \left(e^z \sqrt{\pi} (-256 z^{19/2} - 17\,152 z^{17/2} - 446\,336 z^{15/2} - 5\,803\,584 z^{13/2} - 40\,447\,680 z^{11/2} - 150\,767\,760 z^{9/2} - 283\,088\,520 z^{7/2} - 231\,891\,660 z^{5/2} - 57\,972\,915 z^{3/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ao02.01

$${}_2F_2\left(6, 6; -\frac{1}{2}, 3; -z\right) = \frac{1}{460800} (128 z^9 - 8512 z^8 + 218976 z^7 - 2796400 z^6 + 18925080 z^5 - 67082364 z^4 + 114811410 z^3 - 77502285 z^2 + 11059200 z + 460800) + \frac{1}{921600} \left(e^{-z} \sqrt{\pi} (-256 z^{19/2} + 17152 z^{17/2} - 446336 z^{15/2} + 5803584 z^{13/2} - 40447680 z^{11/2} + 150767760 z^{9/2} - 283088520 z^{7/2} + 231891660 z^{5/2} - 57972915 z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ao03.01

$${}_2F_2\left(6, 6; -\frac{1}{2}, 4; z\right) = \frac{1}{76800} (-64 z^8 - 3520 z^7 - 72560 z^6 - 710560 z^5 - 3454956 z^4 - 7908460 z^3 - 7106085 z^2 - 1382400 z + 76800) + \frac{1}{153600} \left(e^z \sqrt{\pi} (-128 z^{17/2} - 7104 z^{15/2} - 148576 z^{13/2} - 1490320 z^{11/2} - 7556120 z^{9/2} - 18712980 z^{7/2} - 19909890 z^{5/2} - 6441435 z^{3/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ao04.01

$${}_2F_2\left(6, 6; -\frac{1}{2}, 4; -z\right) = \frac{1}{76800} (-64 z^8 + 3520 z^7 - 72560 z^6 + 710560 z^5 - 3454956 z^4 + 7908460 z^3 - 7106085 z^2 + 1382400 z + 76800) + \frac{1}{153600} \left(e^{-z} \sqrt{\pi} (128 z^{17/2} - 7104 z^{15/2} + 148576 z^{13/2} - 1490320 z^{11/2} + 7556120 z^{9/2} - 18712980 z^{7/2} + 19909890 z^{5/2} - 6441435 z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ao05.01

$${}_2F_2\left(6, 6; -\frac{1}{2}, 5; z\right) = \frac{-32 z^7 - 1392 z^6 - 21680 z^5 - 149976 z^4 - 461930 z^3 - 543375 z^2 - 138240 z + 9600}{9600} + \frac{1}{19200} \left(e^z \sqrt{\pi} (-64 z^{15/2} - 2816 z^{13/2} - 44720 z^{11/2} - 320320 z^{9/2} - 1055340 z^{7/2} - 1441440 z^{5/2} - 585585 z^{3/2}) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ao06.01

$${}_2F_2\left(6, 6; -\frac{1}{2}, 5; -z\right) = \frac{32 z^7 - 1392 z^6 + 21680 z^5 - 149976 z^4 + 461930 z^3 - 543375 z^2 + 138240 z + 9600}{9600} + \frac{1}{19200} \left(e^{-z} \sqrt{\pi} (-64 z^{15/2} + 2816 z^{13/2} - 44720 z^{11/2} + 320320 z^{9/2} - 1055340 z^{7/2} + 1441440 z^{5/2} - 585585 z^{3/2}) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ao07.01

$${}_2F_2\left(6, 6; -\frac{1}{2}, 6; z\right) = \frac{1}{960} (-16 z^6 - 512 z^5 - 5472 z^4 - 23240 z^3 - 35595 z^2 - 11520 z + 960) + \frac{e^z \sqrt{\pi} (-32 z^{13/2} - 1040 z^{11/2} - 11440 z^{9/2} - 51480 z^{7/2} - 90090 z^{5/2} - 45045 z^{3/2}) \operatorname{erf}(\sqrt{z})}{1920}$$

07.25.03.ao08.01

$${}_2F_2\left(6, 6; -\frac{1}{2}, 6; -z\right) = \frac{1}{960} (-16 z^6 + 512 z^5 - 5472 z^4 + 23\,240 z^3 - 35\,595 z^2 + 11\,520 z + 960) + \frac{e^{-z} \sqrt{\pi} (32 z^{13/2} - 1040 z^{11/2} + 11\,440 z^{9/2} - 51\,480 z^{7/2} + 90\,090 z^{5/2} - 45\,045 z^{3/2}) \operatorname{erfi}(\sqrt{z})}{1920}$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = \frac{1}{2}$

07.25.03.ao09.01

$${}_2F_2\left(6, 6; \frac{1}{2}, 1; z\right) = \frac{1}{7\,372\,800} (512 z^{10} + 40\,704 z^9 + 1\,286\,144 z^8 + 20\,916\,480 z^7 + 189\,657\,920 z^6 + 971\,991\,840 z^5 + 2\,728\,624\,320 z^4 + 3\,866\,064\,720 z^3 + 2\,342\,173\,050 z^2 + 422\,785\,575 z + 7\,372\,800) + \frac{1}{14\,745\,600} (e^z \sqrt{\pi} (1024 z^{21/2} + 81\,920 z^{19/2} + 2\,612\,480 z^{17/2} + 43\,079\,680 z^{15/2} + 399\,043\,200 z^{13/2} + 2\,115\,586\,560 z^{11/2} + 6281\,642\,400 z^{9/2} + 9\,816\,681\,600 z^{7/2} + 7\,155\,710\,100 z^{5/2} + 1\,920\,996\,000 z^{3/2} + 108\,056\,025 \sqrt{z}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ao0a.01

$${}_2F_2\left(6, 6; \frac{1}{2}, 1; -z\right) = \frac{1}{7\,372\,800} (512 z^{10} - 40\,704 z^9 + 1\,286\,144 z^8 - 20\,916\,480 z^7 + 189\,657\,920 z^6 - 971\,991\,840 z^5 + 2\,728\,624\,320 z^4 - 3\,866\,064\,720 z^3 + 2\,342\,173\,050 z^2 - 422\,785\,575 z + 7\,372\,800) + \frac{1}{14\,745\,600} (e^{-z} \sqrt{\pi} (-1024 z^{21/2} + 81\,920 z^{19/2} - 2\,612\,480 z^{17/2} + 43\,079\,680 z^{15/2} - 399\,043\,200 z^{13/2} + 2\,115\,586\,560 z^{11/2} - 6281\,642\,400 z^{9/2} + 9\,816\,681\,600 z^{7/2} - 7\,155\,710\,100 z^{5/2} + 1\,920\,996\,000 z^{3/2} - 108\,056\,025 \sqrt{z}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ao0b.01

$${}_2F_2\left(6, 6; \frac{1}{2}, 2; z\right) = \frac{1}{3\,686\,400} (256 z^9 + 17\,664 z^8 + 475\,392 z^7 + 6\,425\,920 z^6 + 46\,851\,360 z^5 + 184\,156\,848 z^4 + 368\,684\,400 z^3 + 328\,730\,220 z^2 + 96\,691\,725 z + 3\,686\,400) + \frac{1}{7\,372\,800} (e^z \sqrt{\pi} (512 z^{19/2} + 35\,584 z^{17/2} + 968\,192 z^{15/2} + 13\,310\,208 z^{13/2} + 99\,695\,040 z^{11/2} + 409\,775\,520 z^{9/2} + 887\,055\,840 z^{7/2} + 916\,589\,520 z^{5/2} + 369\,791\,730 z^{3/2} + 36\,018\,675 \sqrt{z}) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ao0c.01

$${}_2F_2\left(6, 6; \frac{1}{2}, 2; -z\right) = \frac{1}{3\,686\,400} (-256 z^9 + 17\,664 z^8 - 475\,392 z^7 + 6\,425\,920 z^6 - 46\,851\,360 z^5 + 184\,156\,848 z^4 - 368\,684\,400 z^3 + 328\,730\,220 z^2 - 96\,691\,725 z + 3\,686\,400) + \frac{1}{7\,372\,800} (e^{-z} \sqrt{\pi} (512 z^{19/2} - 35\,584 z^{17/2} + 968\,192 z^{15/2} - 13\,310\,208 z^{13/2} + 99\,695\,040 z^{11/2} - 409\,775\,520 z^{9/2} + 887\,055\,840 z^{7/2} - 916\,589\,520 z^{5/2} + 369\,791\,730 z^{3/2} - 36\,018\,675 \sqrt{z}) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ao0d.01

$${}_2F_2\left(6, 6; \frac{1}{2}, 3; z\right) = \frac{1}{921\,600} \left(128 z^8 + 7488 z^7 + 166\,624 z^6 + 1\,800\,240 z^5 + 9\,998\,424 z^4 + 27\,812\,316 z^3 + 34\,745\,130 z^2 + 14\,914\,665 z + 921\,600\right) + \frac{1}{1\,843\,200} \left(e^z \sqrt{\pi} \left(256 z^{17/2} + 15\,104 z^{15/2} + 340\,608 z^{13/2} + 3\,759\,936 z^{11/2} + 21\,648\,000 z^{9/2} + 64\,175\,760 z^{7/2} + 90\,561\,240 z^{5/2} + 50\,769\,180 z^{3/2} + 7\,203\,735 \sqrt{z}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ao0e.01

$${}_2F_2\left(6, 6; \frac{1}{2}, 3; -z\right) = \frac{1}{921\,600} \left(128 z^8 - 7488 z^7 + 166\,624 z^6 - 1\,800\,240 z^5 + 9\,998\,424 z^4 - 27\,812\,316 z^3 + 34\,745\,130 z^2 - 14\,914\,665 z + 921\,600\right) + \frac{1}{1\,843\,200} \left(e^{-z} \sqrt{\pi} \left(-256 z^{17/2} + 15\,104 z^{15/2} - 340\,608 z^{13/2} + 3\,759\,936 z^{11/2} - 21\,648\,000 z^{9/2} + 64\,175\,760 z^{7/2} - 90\,561\,240 z^{5/2} + 50\,769\,180 z^{3/2} - 7\,203\,735 \sqrt{z}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ao0f.01

$${}_2F_2\left(6, 6; \frac{1}{2}, 4; z\right) = \frac{64 z^7 + 3072 z^6 + 54\,160 z^5 + 441\,216 z^4 + 1\,713\,628 z^3 + 2\,933\,280 z^2 + 1\,735\,695 z + 153\,600}{153\,600} + \frac{1}{307\,200} \left(e^z \sqrt{\pi} \left(128 z^{15/2} + 6208 z^{13/2} + 111\,328 z^{11/2} + 933\,680 z^{9/2} + 3\,821\,400 z^{7/2} + 7\,248\,780 z^{5/2} + 5\,412\,330 z^{3/2} + 1\,029\,105 \sqrt{z}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ao0g.01

$${}_2F_2\left(6, 6; \frac{1}{2}, 4; -z\right) = \frac{-64 z^7 + 3072 z^6 - 54\,160 z^5 + 441\,216 z^4 - 1\,713\,628 z^3 + 2\,933\,280 z^2 - 1\,735\,695 z + 153\,600}{153\,600} + \frac{1}{307\,200} \left(e^{-z} \sqrt{\pi} \left(128 z^{15/2} - 6208 z^{13/2} + 111\,328 z^{11/2} - 933\,680 z^{9/2} + 3\,821\,400 z^{7/2} - 7\,248\,780 z^{5/2} + 5\,412\,330 z^{3/2} - 1\,029\,105 \sqrt{z}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ao0h.01

$${}_2F_2\left(6, 6; \frac{1}{2}, 5; z\right) = \frac{32 z^6 + 1200 z^5 + 15\,696 z^4 + 87\,752 z^3 + 205\,170 z^2 + 162\,135 z + 19\,200}{19\,200} + \frac{1}{38\,400} \left(e^z \sqrt{\pi} \left(64 z^{13/2} + 2432 z^{11/2} + 32\,560 z^{9/2} + 190\,080 z^{7/2} + 485\,100 z^{5/2} + 471\,240 z^{3/2} + 114\,345 \sqrt{z}\right) \operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ao0i.01

$${}_2F_2\left(6, 6; \frac{1}{2}, 5; -z\right) = \frac{32 z^6 - 1200 z^5 + 15\,696 z^4 - 87\,752 z^3 + 205\,170 z^2 - 162\,135 z + 19\,200}{19\,200} + \frac{1}{38\,400} \left(e^{-z} \sqrt{\pi} \left(-64 z^{13/2} + 2432 z^{11/2} - 32\,560 z^{9/2} + 190\,080 z^{7/2} - 485\,100 z^{5/2} + 471\,240 z^{3/2} - 114\,345 \sqrt{z}\right) \operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ao0j.01

$${}_2F_2\left(6, 6; \frac{1}{2}, 6; z\right) = \frac{16 z^5 + 432 z^4 + 3752 z^3 + 12\,180 z^2 + 12\,645 z + 1920}{1920} + \frac{e^z \sqrt{\pi} \left(32 z^{11/2} + 880 z^{9/2} + 7920 z^{7/2} + 27\,720 z^{5/2} + 34\,650 z^{3/2} + 10\,395 \sqrt{z}\right) \operatorname{erf}(\sqrt{z})}{3840}$$

07.25.03.ao0k.01

$${}_2F_2\left(6, 6; \frac{1}{2}, 6; -z\right) = \frac{-16z^5 + 432z^4 - 3752z^3 + 12180z^2 - 12645z + 1920}{1920} + \frac{e^{-z}\sqrt{\pi}\left(32z^{11/2} - 880z^{9/2} + 7920z^{7/2} - 27720z^{5/2} + 34650z^{3/2} - 10395\sqrt{z}\right)\operatorname{erfi}(\sqrt{z})}{3840}$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = 1$

07.25.03.ao0l.01

$${}_2F_2(6, 6; 1, 1; z) = \frac{1}{14400}\left(e^z(z^{10} + 75z^9 + 2225z^8 + 33800z^7 + 284800z^6 + 1350360z^5 + 3501000z^4 + 4608000z^3 + 2664000z^2 + 504000z + 14400)\right)$$

07.25.03.ao0m.01

$${}_2F_2\left(6, 6; 1, \frac{3}{2}; z\right) = \frac{1}{14745600}\left(512z^9 + 35584z^8 + 966144z^7 + 13204480z^6 + 97667520z^5 + 391534560z^4 + 807028320z^3 + 755485920z^2 + 246136050z + 13852575\right) + \frac{1}{29491200\sqrt{z}}\left(e^z\sqrt{\pi}\left(1024z^{10} + 71680z^9 + 1967360z^8 + 27340800z^7 + 207657600z^6 + 869640960z^5 + 1933437600z^4 + 2082931200z^3 + 906916500z^2 + 107163000z + 893025\right)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ao0n.01

$${}_2F_2\left(6, 6; 1, \frac{3}{2}; -z\right) = \frac{1}{14745600}\left(-512z^9 + 35584z^8 - 966144z^7 + 13204480z^6 - 97667520z^5 + 391534560z^4 - 807028320z^3 + 755485920z^2 - 246136050z + 13852575\right) + \frac{1}{29491200\sqrt{z}}\left(e^{-z}\sqrt{\pi}\left(1024z^{10} - 71680z^9 + 1967360z^8 - 27340800z^7 + 207657600z^6 - 869640960z^5 + 1933437600z^4 - 2082931200z^3 + 906916500z^2 - 107163000z + 893025\right)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ao0o.01

$${}_2F_2(6, 6; 1, 2; z) = \frac{1}{14400}\left(e^z(z^9 + 65z^8 + 1640z^7 + 20680z^6 + 140040z^5 + 510120z^4 + 950400z^3 + 806400z^2 + 244800z + 14400)\right)$$

07.25.03.ao0p.01

$${}_2F_2\left(6, 6; 1, \frac{5}{2}; z\right) = \frac{1}{9830400z}\left(512z^9 + 30464z^8 + 692224z^7 + 7681280z^6 + 44208960z^5 + 129385760z^4 + 175197120z^3 + 87826320z^2 + 8941050z - 11025\right) + \frac{1}{19660800z^{3/2}}\left(e^z\sqrt{\pi}\left(1024z^{10} + 61440z^9 + 1414400z^8 + 16025600z^7 + 95478400z^6 + 296770560z^5 + 449584800z^4 + 284592000z^3 + 53140500z^2 + 882000z + 11025\right)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ao0q.01

$${}_2F_2\left(6, 6; 1, \frac{5}{2}; -z\right) = \frac{1}{9830400z} (512z^9 - 30464z^8 + 692224z^7 - 7681280z^6 + 44208960z^5 - 129385760z^4 + 175197120z^3 - 87826320z^2 + 8941050z + 11025) + \frac{1}{19660800z^{3/2}} \left(e^{-z} \sqrt{\pi} (-1024z^{10} + 61440z^9 - 1414400z^8 + 16025600z^7 - 95478400z^6 + 296770560z^5 - 449584800z^4 + 284592000z^3 - 53140500z^2 + 882000z - 11025) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ao0r.01

$${}_2F_2(6, 6; 1, 3; z) = \frac{e^z (z^8 + 55z^7 + 1145z^6 + 11520z^5 + 59400z^4 + 153720z^3 + 181800z^2 + 79200z + 7200)}{7200}$$

07.25.03.ao0s.01

$${}_2F_2\left(6, 6; 1, \frac{7}{2}; z\right) = \frac{1}{3932160z^2} (512z^9 + 25344z^8 + 464384z^7 + 3978240z^6 + 16564160z^5 + 31515360z^4 + 22583520z^3 + 3489120z^2 - 10350z - 2025) + \frac{1}{7864320z^{5/2}} \left(e^z \sqrt{\pi} (1024z^{10} + 51200z^9 + 953600z^8 + 8396800z^7 + 36700800z^6 + 76565760z^5 + 66756000z^4 + 17568000z^3 + 436500z^2 + 9000z + 2025) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ao0t.01

$${}_2F_2\left(6, 6; 1, \frac{7}{2}; -z\right) = \frac{1}{3932160z^2} (-512z^9 + 25344z^8 - 464384z^7 + 3978240z^6 - 16564160z^5 + 31515360z^4 - 22583520z^3 + 3489120z^2 + 10350z - 2025) + \frac{1}{7864320z^{5/2}} \left(e^{-z} \sqrt{\pi} (1024z^{10} - 51200z^9 + 953600z^8 - 8396800z^7 + 36700800z^6 - 76565760z^5 + 66756000z^4 - 17568000z^3 + 436500z^2 - 9000z + 2025) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ao0u.01

$${}_2F_2(6, 6; 1, 4; z) = \frac{e^z (z^7 + 45z^6 + 740z^5 + 5600z^4 + 20200z^3 + 32520z^2 + 19200z + 2400)}{2400}$$

07.25.03.ao0v.01

$${}_2F_2\left(6, 6; 1, \frac{9}{2}; z\right) = \frac{1}{7864320z^3} (7(512z^9 + 20224z^8 + 282624z^7 + 1726720z^6 + 4595520z^5 + 4534560z^4 + 976320z^3 - 5040z^2 - 1350z - 2025)) + \frac{1}{15728640z^{7/2}} \left(7e^z \sqrt{\pi} (1024z^{10} + 40960z^9 + 584960z^8 + 3717120z^7 + 10680960z^6 + 12480000z^5 + 4356000z^4 + 144000z^3 + 4500z^2 + 2025) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ao0w.01

$${}_2F_2\left(6, 6; 1, \frac{9}{2}; -z\right) = \frac{1}{7864320z^3} \\ (7(512z^9 - 20224z^8 + 282624z^7 - 1726720z^6 + 4595520z^5 - 4534560z^4 + 976320z^3 + 5040z^2 - 1350z + 2025)) - \\ \frac{1}{15728640z^{7/2}} \left(7e^{-z}\sqrt{\pi}(1024z^{10} - 40960z^9 + 584960z^8 - 3717120z^7 + 10680960z^6 - \right. \\ \left. 12480000z^5 + 4356000z^4 - 144000z^3 + 4500z^2 + 2025)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ao0x.01

$${}_2F_2(6, 6; 1, 5; z) = \frac{1}{600} e^z (z^6 + 35z^5 + 425z^4 + 2200z^3 + 4800z^2 + 3720z + 600)$$

07.25.03.ao0y.01

$${}_2F_2\left(6, 6; 1, \frac{11}{2}; z\right) = \frac{1}{5242880z^4} \\ (21(512z^9 + 15104z^8 + 146944z^7 + 558080z^6 + 745920z^5 + 212960z^4 - 1440z^3 - 1440z^2 + 1650z - 11025)) + \\ \frac{1}{10485760z^{9/2}} \left(21e^z\sqrt{\pi}(1024z^{10} + 30720z^9 + 308480z^8 + 1249280z^7 + \right. \\ \left. 1936000z^6 + 864000z^5 + 36000z^4 + 4500z^2 - 9000z + 11025)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ao0z.01

$${}_2F_2\left(6, 6; 1, \frac{11}{2}; -z\right) = \\ \frac{1}{10485760z^{9/2}} \left(21e^{-z}\sqrt{\pi}(1024z^{10} - 30720z^9 + 308480z^8 - 1249280z^7 + 1936000z^6 - 864000z^5 + \right. \\ \left. 36000z^4 + 4500z^2 + 9000z + 11025)\operatorname{erfi}(\sqrt{z})\right) - \frac{1}{5242880z^4} \\ (21(512z^9 - 15104z^8 + 146944z^7 - 558080z^6 + 745920z^5 - 212960z^4 - 1440z^3 + 1440z^2 + 1650z + 11025))$$

07.25.03.ao10.01

$${}_2F_2(6, 6; 1, 6; z) = \frac{1}{120} e^z (z^5 + 25z^4 + 200z^3 + 600z^2 + 600z + 120)$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = \frac{3}{2}$

07.25.03.ao11.01

$${}_2F_2\left(6, 6; \frac{3}{2}, 2; z\right) = \\ \frac{1}{7372800} (256z^8 + 15360z^7 + 352640z^6 + 3964800z^5 + 23220864z^4 + 69659520z^3 + 98025480z^2 + 52752600z + \\ 6479775) + \frac{1}{14745600\sqrt{z}} \left(e^z\sqrt{\pi}(512z^9 + 30976z^8 + 720384z^7 + 8267520z^6 + 50089920z^5 + \right. \\ \left. 159325920z^4 + 249752160z^3 + 167333040z^2 + 35125650z + 893025)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ao12.01

$${}_2F_2\left(6, 6; \frac{3}{2}, 2; -z\right) = \frac{1}{7372800} (256 z^8 - 15360 z^7 + 352640 z^6 - 3964800 z^5 + 23220864 z^4 - 69659520 z^3 + 98025480 z^2 - 52752600 z + 6479775) + \frac{1}{14745600 \sqrt{z}} \left(e^{-z} \sqrt{\pi} (-512 z^9 + 30976 z^8 - 720384 z^7 + 8267520 z^6 - 50089920 z^5 + 159325920 z^4 - 249752160 z^3 + 167333040 z^2 - 35125650 z + 893025) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ao13.01

$${}_2F_2\left(6, 6; \frac{3}{2}, 3; z\right) = \frac{128 z^7 + 6464 z^6 + 121440 z^5 + 1074672 z^4 + 4678296 z^3 + 9511740 z^2 + 7641090 z + 1545525}{1843200} + \frac{1}{3686400 \sqrt{z}} \left(e^z \sqrt{\pi} (256 z^8 + 13056 z^7 + 249216 z^6 + 2264640 z^5 + 10324800 z^4 + 22876560 z^3 + 21931560 z^2 + 6906060 z + 297675) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ao14.01

$${}_2F_2\left(6, 6; \frac{3}{2}, 3; -z\right) = \frac{1}{1843200} (-128 z^7 + 6464 z^6 - 121440 z^5 + 1074672 z^4 - 4678296 z^3 + 9511740 z^2 - 7641090 z + 1545525) + \frac{1}{3686400 \sqrt{z}} \left(e^{-z} \sqrt{\pi} (256 z^8 - 13056 z^7 + 249216 z^6 - 2264640 z^5 + 10324800 z^4 - 22876560 z^3 + 21931560 z^2 - 6906060 z + 297675) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ao15.01

$${}_2F_2\left(6, 6; \frac{3}{2}, 4; z\right) = \frac{64 z^6 + 2624 z^5 + 38448 z^4 + 250208 z^3 + 729036 z^2 + 833940 z + 247665}{307200} + \frac{1}{614400 \sqrt{z}} \left(e^z \sqrt{\pi} (128 z^7 + 5312 z^6 + 79456 z^5 + 536400 z^4 + 1675800 z^3 + 2221380 z^2 + 969570 z + 59535) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ao16.01

$${}_2F_2\left(6, 6; \frac{3}{2}, 4; -z\right) = \frac{64 z^6 - 2624 z^5 + 38448 z^4 - 250208 z^3 + 729036 z^2 - 833940 z + 247665}{307200} + \frac{1}{614400 \sqrt{z}} \left(e^{-z} \sqrt{\pi} (-128 z^7 + 5312 z^6 - 79456 z^5 + 536400 z^4 - 1675800 z^3 + 2221380 z^2 - 969570 z + 59535) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ao17.01

$${}_2F_2\left(6, 6; \frac{3}{2}, 5; z\right) = \frac{32 z^5 + 1008 z^4 + 10672 z^3 + 45528 z^2 + 72810 z + 29895}{38400} + \frac{e^z \sqrt{\pi} (64 z^6 + 2048 z^5 + 22320 z^4 + 100800 z^3 + 182700 z^2 + 105840 z + 8505) \operatorname{erf}(\sqrt{z})}{76800 \sqrt{z}}$$

07.25.03.ao18.01

$${}_2F_2\left(6, 6; \frac{3}{2}, 5; -z\right) = \frac{-32 z^5 + 1008 z^4 - 10672 z^3 + 45528 z^2 - 72810 z + 29895}{38400} + \frac{e^{-z} \sqrt{\pi} (64 z^6 - 2048 z^5 + 22320 z^4 - 100800 z^3 + 182700 z^2 - 105840 z + 8505) \operatorname{erfi}(\sqrt{z})}{76800 \sqrt{z}}$$

07.25.03.ao19.01

$${}_2F_2\left(6, 6; \frac{3}{2}, 6; z\right) = \frac{16 z^4 + 352 z^3 + 2352 z^2 + 5280 z + 2895}{3840} + \frac{e^z \sqrt{\pi} (32 z^5 + 720 z^4 + 5040 z^3 + 12600 z^2 + 9450 z + 945) \operatorname{erf}(\sqrt{z})}{7680 \sqrt{z}}$$

07.25.03.ao1a.01

$${}_2F_2\left(6, 6; \frac{3}{2}, 6; -z\right) = \frac{16 z^4 - 352 z^3 + 2352 z^2 - 5280 z + 2895}{3840} + \frac{e^{-z} \sqrt{\pi} (-32 z^5 + 720 z^4 - 5040 z^3 + 12600 z^2 - 9450 z + 945) \operatorname{erfi}(\sqrt{z})}{7680 \sqrt{z}}$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = 2$

07.25.03.ao1b.01

$${}_2F_2(6, 6; 2, 2; z) = \frac{e^z (z^8 + 56 z^7 + 1192 z^6 + 12336 z^5 + 66024 z^4 + 180000 z^3 + 230400 z^2 + 115200 z + 14400)}{14400}$$

07.25.03.ao1c.01

$${}_2F_2\left(6, 6; 2, \frac{5}{2}; z\right) = \frac{1}{4915200 z} (256 z^8 + 13056 z^7 + 248320 z^6 + 2232768 z^5 + 9933280 z^4 + 20853840 z^3 + 17678880 z^2 + 4018500 z + 11025) + \frac{1}{9830400 z^{3/2}} (e^z \sqrt{\pi} (512 z^9 + 26368 z^8 + 509440 z^7 + 4701440 z^6 + 21881280 z^5 + 49919520 z^4 + 50074080 z^3 + 17110800 z^2 + 904050 z - 11025) \operatorname{erf}(\sqrt{z}))$$

07.25.03.ao1d.01

$${}_2F_2\left(6, 6; 2, \frac{5}{2}; -z\right) = \frac{1}{4915200 z} (-256 z^8 + 13056 z^7 - 248320 z^6 + 2232768 z^5 - 9933280 z^4 + 20853840 z^3 - 17678880 z^2 + 4018500 z - 11025) + \frac{1}{9830400 z^{3/2}} (e^{-z} \sqrt{\pi} (512 z^9 - 26368 z^8 + 509440 z^7 - 4701440 z^6 + 21881280 z^5 - 49919520 z^4 + 50074080 z^3 - 17110800 z^2 + 904050 z + 11025) \operatorname{erfi}(\sqrt{z}))$$

07.25.03.ao1e.01

$${}_2F_2(6, 6; 2, 3; z) = \frac{e^z (z^7 + 47 z^6 + 816 z^5 + 6624 z^4 + 26280 z^3 + 48600 z^2 + 36000 z + 7200)}{7200}$$

07.25.03.ao1f.01

$${}_2F_2\left(6, 6; 2, \frac{7}{2}; z\right) = \frac{1}{1966080 z^2} (256 z^8 + 10752 z^7 + 162432 z^6 + 1100800 z^5 + 3397440 z^4 + 4258080 z^3 + 1515960 z^2 + 10800 z + 675) + \frac{1}{3932160 z^{5/2}} \left(e^z \sqrt{\pi} (512 z^9 + 21760 z^8 + 335360 z^7 + 2353920 z^6 + 7757760 z^5 + 11130720 z^4 + 5551200 z^3 + 457200 z^2 - 10350 z - 675) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ao1g.01

$${}_2F_2\left(6, 6; 2, \frac{7}{2}; -z\right) = \frac{1}{1966080 z^2} (256 z^8 - 10752 z^7 + 162432 z^6 - 1100800 z^5 + 3397440 z^4 - 4258080 z^3 + 1515960 z^2 - 10800 z + 675) + \frac{1}{3932160 z^{5/2}} \left(e^{-z} \sqrt{\pi} (-512 z^9 + 21760 z^8 - 335360 z^7 + 2353920 z^6 - 7757760 z^5 + 11130720 z^4 - 5551200 z^3 + 457200 z^2 + 10350 z - 675) \operatorname{erfi}(\sqrt{z}) \right)$$

07.25.03.ao1h.01

$${}_2F_2(6, 6; 2, 4; z) = \frac{e^z (z^6 + 38 z^5 + 512 z^4 + 3040 z^3 + 8040 z^2 + 8400 z + 2400)}{2400}$$

07.25.03.ao1i.01

$${}_2F_2\left(6, 6; 2, \frac{9}{2}; z\right) = \frac{7(256 z^8 + 8448 z^7 + 94976 z^6 + 439872 z^5 + 796320 z^4 + 411120 z^3 + 5328 z^2 + 540 z + 405)}{3932160 z^3} + \frac{1}{7864320 z^{7/2}} \left(7 e^z \sqrt{\pi} (512 z^9 + 17152 z^8 + 198144 z^7 + 966912 z^6 + 1956288 z^5 + 1349280 z^4 + 154080 z^3 - 5040 z^2 - 270 z - 405) \operatorname{erf}(\sqrt{z}) \right)$$

07.25.03.ao1j.01

$${}_2F_2\left(6, 6; 2, \frac{9}{2}; -z\right) = \frac{1}{7864320 z^{7/2}} \left(7 e^{-z} \sqrt{\pi} (512 z^9 - 17152 z^8 + 198144 z^7 - 966912 z^6 + 1956288 z^5 - 1349280 z^4 + 154080 z^3 + 5040 z^2 - 270 z + 405) \operatorname{erfi}(\sqrt{z}) \right) - \frac{7(256 z^8 - 8448 z^7 + 94976 z^6 - 439872 z^5 + 796320 z^4 - 411120 z^3 + 5328 z^2 - 540 z + 405)}{3932160 z^3}$$

07.25.03.ao1k.01

$${}_2F_2(6, 6; 2, 5; z) = \frac{1}{600} e^z (z^5 + 29 z^4 + 280 z^3 + 1080 z^2 + 1560 z + 600)$$

07.25.03.ao11.01

$${}_2F_2\left(6, 6; 2, \frac{11}{2}; z\right) = \frac{21(256z^8 + 6144z^7 + 45952z^6 + 120960z^5 + 87040z^4 + 1728z^3 + 360z^2 - 120z + 1575)}{2621440z^4} + \frac{1}{5242880z^{9/2}} \left(21e^z\sqrt{\pi} (512z^9 + 12544z^8 + 97792z^7 + 282368z^6 + 262080z^5 + 38880z^4 - 1440z^3 - 720z^2 + 1170z - 1575)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ao1m.01

$${}_2F_2\left(6, 6; 2, \frac{11}{2}; -z\right) = \frac{21(256z^8 - 6144z^7 + 45952z^6 - 120960z^5 + 87040z^4 - 1728z^3 + 360z^2 + 120z + 1575)}{2621440z^4} - \frac{1}{5242880z^{9/2}} \left(21e^{-z}\sqrt{\pi} (512z^9 - 12544z^8 + 97792z^7 - 282368z^6 + 262080z^5 - 38880z^4 - 1440z^3 + 720z^2 + 1170z + 1575)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ao1n.01

$${}_2F_2(6, 6; 2, 6; z) = \frac{1}{120} e^z (z^4 + 20z^3 + 120z^2 + 240z + 120)$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = \frac{5}{2}$

07.25.03.ao1o.01

$${}_2F_2\left(6, 6; \frac{5}{2}, 3; z\right) = \frac{128z^7 + 5440z^6 + 83424z^5 + 576688z^4 + 1830360z^3 + 2396700z^2 + 927450z + 11025}{1228800z} + \frac{1}{2457600z^{3/2}} \left(e^z\sqrt{\pi} (256z^8 + 11008z^7 + 172160z^6 + 1231680z^5 + 4166400z^4 + 6210960z^3 + 3298680z^2 + 308700z - 11025)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ao1p.01

$${}_2F_2\left(6, 6; \frac{5}{2}, 3; -z\right) = \frac{128z^7 - 5440z^6 + 83424z^5 - 576688z^4 + 1830360z^3 - 2396700z^2 + 927450z - 11025}{1228800z} + \frac{1}{2457600z^{3/2}} \left(e^{-z}\sqrt{\pi} (-256z^8 + 11008z^7 - 172160z^6 + 1231680z^5 - 4166400z^4 + 6210960z^3 - 3298680z^2 + 308700z + 11025)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ao1q.01

$${}_2F_2\left(6, 6; \frac{5}{2}, 4; z\right) = \frac{64z^6 + 2176z^5 + 25424z^4 + 124096z^3 + 242940z^2 + 144040z + 3675}{204800z} + \frac{1}{409600z^{3/2}} \left(e^z\sqrt{\pi} (128z^7 + 4416z^6 + 52960z^5 + 271600z^4 + 589400z^3 + 453180z^2 + 63210z - 3675)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ao1r.01

$${}_2F_2\left(6, 6; \frac{5}{2}, 4; -z\right) = \frac{-64z^6 + 2176z^5 - 25424z^4 + 124096z^3 - 242940z^2 + 144040z - 3675}{204800z} + \frac{1}{409600z^{3/2}} \left(e^{-z}\sqrt{\pi} (128z^7 - 4416z^6 + 52960z^5 - 271600z^4 + 589400z^3 - 453180z^2 + 63210z + 3675)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ao1s.01

$${}_2F_2\left(6, 6; \frac{5}{2}, 5; z\right) = \frac{32 z^5 + 816 z^4 + 6608 z^3 + 19464 z^2 + 16850 z + 735}{25600 z} + \frac{e^z \sqrt{\pi} (64 z^6 + 1664 z^5 + 14000 z^4 + 44800 z^3 + 48300 z^2 + 9240 z - 735) \operatorname{erf}(\sqrt{z})}{51200 z^{3/2}}$$

07.25.03.ao1t.01

$${}_2F_2\left(6, 6; \frac{5}{2}, 5; -z\right) = \frac{32 z^5 - 816 z^4 + 6608 z^3 - 19464 z^2 + 16850 z - 735}{25600 z} + \frac{e^{-z} \sqrt{\pi} (-64 z^6 + 1664 z^5 - 14000 z^4 + 44800 z^3 - 48300 z^2 + 9240 z + 735) \operatorname{erfi}(\sqrt{z})}{51200 z^{3/2}}$$

07.25.03.ao1u.01

$${}_2F_2\left(6, 6; \frac{5}{2}, 6; z\right) = \frac{16 z^4 + 272 z^3 + 1272 z^2 + 1580 z + 105}{2560 z} + \frac{e^z \sqrt{\pi} (32 z^5 + 560 z^4 + 2800 z^3 + 4200 z^2 + 1050 z - 105) \operatorname{erf}(\sqrt{z})}{5120 z^{3/2}}$$

07.25.03.ao1v.01

$${}_2F_2\left(6, 6; \frac{5}{2}, 6; -z\right) = \frac{-16 z^4 + 272 z^3 - 1272 z^2 + 1580 z - 105}{2560 z} + \frac{e^{-z} \sqrt{\pi} (32 z^5 - 560 z^4 + 2800 z^3 - 4200 z^2 + 1050 z + 105) \operatorname{erfi}(\sqrt{z})}{5120 z^{3/2}}$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = 3$

07.25.03.ao1w.01

$${}_2F_2(6, 6; 3, 3; z) = \frac{e^z (z^6 + 39 z^5 + 543 z^4 + 3366 z^3 + 9450 z^2 + 10800 z + 3600)}{3600}$$

07.25.03.ao1x.01

$${}_2F_2\left(6, 6; 3, \frac{7}{2}; z\right) = \frac{128 z^7 + 4416 z^6 + 52576 z^5 + 263280 z^4 + 535320 z^3 + 338940 z^2 + 11250 z - 675}{491520 z^2} + \frac{1}{983040 z^{5/2}} + \frac{e^z \sqrt{\pi} (256 z^8 + 8960 z^7 + 109440 z^6 + 575040 z^5 + 1291200 z^4 + 1046160 z^3 + 160200 z^2 - 11700 z + 675) \operatorname{erf}(\sqrt{z})}{983040 z^{5/2}}$$

07.25.03.ao1y.01

$${}_2F_2\left(6, 6; 3, \frac{7}{2}; -z\right) = \frac{-128 z^7 + 4416 z^6 - 52576 z^5 + 263280 z^4 - 535320 z^3 + 338940 z^2 - 11250 z - 675}{491520 z^2} + \frac{1}{983040 z^{5/2}} + \frac{e^{-z} \sqrt{\pi} (256 z^8 - 8960 z^7 + 109440 z^6 - 575040 z^5 + 1291200 z^4 - 1046160 z^3 + 160200 z^2 + 11700 z + 675) \operatorname{erfi}(\sqrt{z})}{983040 z^{5/2}}$$

07.25.03.ao1z.01

$${}_2F_2(6, 6; 3, 4; z) = \frac{e^z (z^5 + 31 z^4 + 326 z^3 + 1410 z^2 + 2400 z + 1200)}{1200}$$

07.25.03.ao20.01

$${}_2F_2\left(6, 6; 3, \frac{9}{2}; z\right) = \frac{7(128z^7 + 3392z^6 + 28896z^5 + 91440z^4 + 88920z^3 + 5724z^2 - 630z - 135)}{983040z^3} + \frac{1}{1966080z^{7/2}} \\ \left(7e^z\sqrt{\pi}(256z^8 + 6912z^7 + 61056z^6 + 208704z^5 + 247680z^4 + 55440z^3 - 6120z^2 + 540z + 135)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ao21.01

$${}_2F_2\left(6, 6; 3, \frac{9}{2}; -z\right) = \frac{7(128z^7 - 3392z^6 + 28896z^5 - 91440z^4 + 88920z^3 - 5724z^2 - 630z + 135)}{983040z^3} - \frac{1}{1966080z^{7/2}} \\ \left(7e^{-z}\sqrt{\pi}(256z^8 - 6912z^7 + 61056z^6 - 208704z^5 + 247680z^4 - 55440z^3 - 6120z^2 - 540z + 135)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ao22.01

$${}_2F_2(6, 6; 3, 5; z) = \frac{1}{300} e^z (z^4 + 23z^3 + 165z^2 + 420z + 300)$$

07.25.03.ao23.01

$${}_2F_2\left(6, 6; 3, \frac{11}{2}; z\right) = \frac{21(128z^7 + 2368z^6 + 12384z^5 + 18160z^4 + 1944z^3 - 324z^2 - 30z - 315)}{655360z^4} + \\ \frac{1}{1310720z^{9/2}} \left(21e^z\sqrt{\pi}(256z^8 + 4864z^7 + 27008z^6 + 46656z^5 + 14400z^4 - 2160z^3 + 360z^2 - 180z + 315)\operatorname{erf}(\sqrt{z})\right)$$

07.25.03.ao24.01

$${}_2F_2\left(6, 6; 3, \frac{11}{2}; -z\right) = \\ \frac{1}{1310720z^{9/2}} \left(21e^{-z}\sqrt{\pi}(256z^8 - 4864z^7 + 27008z^6 - 46656z^5 + 14400z^4 + 2160z^3 + 360z^2 + 180z + 315)\operatorname{erfi}(\sqrt{z})\right) - \\ \frac{21(128z^7 - 2368z^6 + 12384z^5 - 18160z^4 + 1944z^3 + 324z^2 - 30z + 315)}{655360z^4}$$

07.25.03.ao25.01

$${}_2F_2(6, 6; 3, 6; z) = \frac{1}{60} e^z (z^3 + 15z^2 + 60z + 60)$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = \frac{7}{2}$

07.25.03.ao26.01

$${}_2F_2\left(6, 6; \frac{7}{2}, 4; z\right) = \frac{64z^6 + 1728z^5 + 15088z^4 + 49440z^3 + 50860z^2 + 3900z - 675}{81920z^2} + \\ \frac{1}{163840z^{5/2}} e^z\sqrt{\pi} (128z^7 + 3520z^6 + 31840z^5 + 112400z^4 + 139800z^3 + 33780z^2 - 4350z + 675)\operatorname{erf}(\sqrt{z})$$

07.25.03.ao27.01

$${}_2F_2\left(6, 6; \frac{7}{2}, 4; -z\right) = \frac{64z^6 - 1728z^5 + 15088z^4 - 49440z^3 + 50860z^2 - 3900z - 675}{81920z^2} + \\ \frac{1}{163840z^{5/2}} \left(e^{-z}\sqrt{\pi}(-128z^7 + 3520z^6 - 31840z^5 + 112400z^4 - 139800z^3 + 33780z^2 + 4350z + 675)\operatorname{erfi}(\sqrt{z})\right)$$

07.25.03.ao28.01

$${}_2F_2\left(6, 6; \frac{7}{2}, 5; z\right) = \frac{32 z^5 + 624 z^4 + 3504 z^3 + 5720 z^2 + 810 z - 225}{10240 z^2} + \frac{e^z \sqrt{\pi} (64 z^6 + 1280 z^5 + 7600 z^4 + 14400 z^3 + 5100 z^2 - 960 z + 225) \operatorname{erf}(\sqrt{z})}{20480 z^{5/2}}$$

07.25.03.ao29.01

$${}_2F_2\left(6, 6; \frac{7}{2}, 5; -z\right) = \frac{-32 z^5 + 624 z^4 - 3504 z^3 + 5720 z^2 - 810 z - 225}{10240 z^2} + \frac{e^{-z} \sqrt{\pi} (64 z^6 - 1280 z^5 + 7600 z^4 - 14400 z^3 + 5100 z^2 + 960 z + 225) \operatorname{erfi}(\sqrt{z})}{20480 z^{5/2}}$$

07.25.03.ao2a.01

$${}_2F_2\left(6, 6; \frac{7}{2}, 6; z\right) = \frac{16 z^4 + 192 z^3 + 512 z^2 + 120 z - 45}{1024 z^2} + \frac{e^z \sqrt{\pi} (32 z^5 + 400 z^4 + 1200 z^3 + 600 z^2 - 150 z + 45) \operatorname{erf}(\sqrt{z})}{2048 z^{5/2}}$$

07.25.03.ao2b.01

$${}_2F_2\left(6, 6; \frac{7}{2}, 6; -z\right) = \frac{16 z^4 - 192 z^3 + 512 z^2 - 120 z - 45}{1024 z^2} + \frac{e^{-z} \sqrt{\pi} (-32 z^5 + 400 z^4 - 1200 z^3 + 600 z^2 + 150 z + 45) \operatorname{erfi}(\sqrt{z})}{2048 z^{5/2}}$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = 4$

07.25.03.ao2c.01

$${}_2F_2(6, 6; 4, 4; z) = \frac{1}{400} e^z (z^4 + 24 z^3 + 182 z^2 + 500 z + 400)$$

07.25.03.ao2d.01

$${}_2F_2\left(6, 6; 4, \frac{9}{2}; z\right) = \frac{7(64 z^6 + 1280 z^5 + 7440 z^4 + 12800 z^3 + 2076 z^2 - 720 z + 135)}{163840 z^3} + \frac{7 e^z \sqrt{\pi} (128 z^7 + 2624 z^6 + 16096 z^5 + 31920 z^4 + 12120 z^3 - 2580 z^2 + 810 z - 135) \operatorname{erf}(\sqrt{z})}{327680 z^{7/2}}$$

07.25.03.ao2e.01

$${}_2F_2\left(6, 6; 4, \frac{9}{2}; -z\right) = \frac{7 e^{-z} \sqrt{\pi} (128 z^7 - 2624 z^6 + 16096 z^5 - 31920 z^4 + 12120 z^3 + 2580 z^2 + 810 z + 135) \operatorname{erfi}(\sqrt{z})}{327680 z^{7/2}} - \frac{7(64 z^6 - 1280 z^5 + 7440 z^4 - 12800 z^3 + 2076 z^2 + 720 z + 135)}{163840 z^3}$$

07.25.03.ao2f.01

$${}_2F_2(6, 6; 4, 5; z) = \frac{1}{100} e^z (z^3 + 17 z^2 + 80 z + 100)$$

07.25.03.ao2g.01

$${}_2F_2\left(6, 6; 4, \frac{11}{2}; z\right) = \frac{63(64z^6 + 832z^5 + 2480z^4 + 736z^3 - 372z^2 + 100z + 105)}{327680z^4} + \frac{63e^z\sqrt{\pi}(128z^7 + 1728z^6 + 5728z^5 + 3280z^4 - 1000z^3 + 420z^2 - 30z - 105)\operatorname{erf}(\sqrt{z})}{655360z^{9/2}}$$

07.25.03.ao2h.01

$${}_2F_2\left(6, 6; 4, \frac{11}{2}; -z\right) = \frac{63(64z^6 - 832z^5 + 2480z^4 - 736z^3 - 372z^2 - 100z + 105)}{327680z^4} - \frac{63e^{-z}\sqrt{\pi}(128z^7 - 1728z^6 + 5728z^5 - 3280z^4 - 1000z^3 - 420z^2 - 30z + 105)\operatorname{erfi}(\sqrt{z})}{655360z^{9/2}}$$

07.25.03.ao2i.01

$${}_2F_2(6, 6; 4, 6; z) = \frac{1}{20}e^z(z^2 + 10z + 20)$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = \frac{9}{2}$

07.25.03.ao2j.01

$${}_2F_2\left(6, 6; \frac{9}{2}, 5; z\right) = \frac{7(32z^5 + 432z^4 + 1360z^3 + 456z^2 - 270z + 135)}{20480z^3} + \frac{7e^z\sqrt{\pi}(64z^6 + 896z^5 + 3120z^4 + 1920z^3 - 660z^2 + 360z - 135)\operatorname{erf}(\sqrt{z})}{40960z^{7/2}}$$

07.25.03.ao2k.01

$${}_2F_2\left(6, 6; \frac{9}{2}, 5; -z\right) = \frac{7(32z^5 - 432z^4 + 1360z^3 - 456z^2 - 270z - 135)}{20480z^3} - \frac{7e^{-z}\sqrt{\pi}(64z^6 - 896z^5 + 3120z^4 - 1920z^3 - 660z^2 - 360z - 135)\operatorname{erfi}(\sqrt{z})}{40960z^{7/2}}$$

07.25.03.ao2l.01

$${}_2F_2\left(6, 6; \frac{9}{2}, 6; z\right) = \frac{7(16z^4 + 112z^3 + 72z^2 - 60z + 45)}{2048z^3} + \frac{7e^z\sqrt{\pi}(32z^5 + 240z^4 + 240z^3 - 120z^2 + 90z - 45)\operatorname{erf}(\sqrt{z})}{4096z^{7/2}}$$

07.25.03.ao2m.01

$${}_2F_2\left(6, 6; \frac{9}{2}, 6; -z\right) = \frac{7e^{-z}\sqrt{\pi}(32z^5 - 240z^4 + 240z^3 + 120z^2 + 90z + 45)\operatorname{erfi}(\sqrt{z})}{4096z^{7/2}} - \frac{7(16z^4 - 112z^3 + 72z^2 + 60z + 45)}{2048z^3}$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = 5$

07.25.03.ao2n.01

$${}_2F_2(6, 6; 5, 5; z) = \frac{1}{25}e^z(z^2 + 11z + 25)$$

07.25.03.ao2o.01

$${}_2F_2\left(6, 6; 5, \frac{11}{2}; z\right) = \frac{63(32z^5 + 240z^4 + 176z^3 - 168z^2 + 170z - 105)}{40960z^4} + \frac{63e^z\sqrt{\pi}(64z^6 + 512z^5 + 560z^4 - 320z^3 + 300z^2 - 240z + 105)\operatorname{erf}(\sqrt{z})}{81920z^{9/2}}$$

07.25.03.ao2p.01

$${}_2F_2\left(6, 6; 5, \frac{11}{2}; -z\right) = \frac{63e^{-z}\sqrt{\pi}(64z^6 - 512z^5 + 560z^4 + 320z^3 + 300z^2 + 240z + 105)\operatorname{erfi}(\sqrt{z})}{81920z^{9/2}} - \frac{63(32z^5 - 240z^4 + 176z^3 + 168z^2 + 170z + 105)}{40960z^4}$$

07.25.03.ao2q.01

$${}_2F_2(6, 6; 5, 6; z) = \frac{1}{5}e^z(z + 5)$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = \frac{11}{2}$

07.25.03.ao2r.01

$${}_2F_2\left(6, 6; \frac{11}{2}, 6; z\right) = \frac{63(16z^4 + 32z^3 - 48z^2 + 80z - 105)}{4096z^4} + \frac{63e^z\sqrt{\pi}(32z^5 + 80z^4 - 80z^3 + 120z^2 - 150z + 105)\operatorname{erf}(\sqrt{z})}{8192z^{9/2}}$$

07.25.03.ao2s.01

$${}_2F_2\left(6, 6; \frac{11}{2}, 6; -z\right) = \frac{63(16z^4 - 32z^3 - 48z^2 - 80z - 105)}{4096z^4} - \frac{63e^{-z}\sqrt{\pi}(32z^5 - 80z^4 - 80z^3 - 120z^2 - 150z - 105)\operatorname{erfi}(\sqrt{z})}{8192z^{9/2}}$$

For fixed z and $a_1 = 6, a_2 = 6, b_1 = 6$

07.25.03.ao2t.01

$${}_2F_2(6, 6; 6, 6; z) = e^z$$

General characteristics

Domain and analyticity

${}_2F_2(a_1, a_2; b_1, b_2; z)$ is an analytical function of a_1, a_2, b_1, b_2 and z which is defined in \mathbb{C}^5 . For fixed a_1, a_2, b_1, b_2 , it is an entire function of z . For fixed a_2, b_1, b_2, z , it is an entire function of a_1 . For fixed a_1, b_1, b_2, z , it is an entire function of a_2 . For negative integer a_1 or a_2 , ${}_2F_2(a_1, a_2; b_1, b_2; z)$ degenerates to a polynomial in z of order $-a_1$ or $-a_2$.

07.25.04.0001.01

$$(\{a_1 * a_2\} * \{b_1 * b_2\} * z) \rightarrow {}_2F_2(a_1, a_2; b_1, b_2; z) :: (\{\mathbb{C} \otimes \mathbb{C}\} \otimes \{\mathbb{C} \otimes \mathbb{C}\} \otimes \mathbb{C}) \rightarrow \mathbb{C}$$

Symmetries and periodicities

Mirror symmetry

07.25.04.0002.01

$${}_2F_2(\overline{a_1}, \overline{a_2}; \overline{b_1}, \overline{b_2}; \overline{z}) = \overline{{}_2F_2(a_1, a_2; b_1, b_2; z)}$$

Permutation symmetry

07.25.04.0003.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = {}_2F_2(a_2, a_1; b_1, b_2; z)$$

07.25.04.0004.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = {}_2F_2(a_1, a_2; b_2, b_1; z)$$

Periodicity

No periodicity

Poles and essential singularities

With respect to z

For fixed a_1, a_2, b_1, b_2 in nonpolynomial cases (when $\neg(-a_1 \in \mathbb{N} \vee -a_2 \in \mathbb{N})$), the function ${}_2F_2(a_1, a_2; b_1, b_2; z)$ has only one singular point at $z = \infty$. It is an essential singular point.

07.25.04.0005.01

$$Sing_z({}_2F_2(a_1, a_2; b_1, b_2; z)) = \{\{\infty, \infty\}\} /; \neg(-a_1 \in \mathbb{N} \vee -a_2 \in \mathbb{N})$$

For negative integer a_1 or a_2 and fixed b_1, b_2 , the function ${}_2F_2(a_1, a_2; b_1, b_2; z)$ is a polynomial and has pole of order $-a_1$ or $-a_2$ at $z = \infty$.

07.25.04.0006.01

$$Sing_z({}_2F_2(a_1, a_2; b_1, b_2; z)) = \{\{\infty, -\alpha\}\} /; (-a_1 \in \mathbb{N}^+ \wedge \alpha = a_1) \vee (-a_2 \in \mathbb{N}^+ \wedge \alpha = a_2) \vee (-a_1 \in \mathbb{N}^+ \wedge -a_2 \in \mathbb{N}^+ \wedge \alpha = \min(-a_1, -a_2))$$

With respect to a_j

For fixed a_1, b_1, b_2, z , the function ${}_2F_2(a_1, a_2; b_1, b_2; z)$ has only one singular point at $a_2 = \infty$. It is an essential singular point.

For fixed a_2, b_1, b_2, z , the function ${}_2F_2(a_1, a_2; b_1, b_2; z)$ has only one singular point at $a_1 = \infty$. It is an essential singular point.

07.25.04.0007.01

$$Sing_{a_j}({}_2F_2(a_1, a_2; b_1, b_2; z)) = \{\{\infty, \infty\}\} /; j \in \{1, 2\}$$

With respect to b_j

The function ${}_2F_2(a_1, a_2; b_1, b_2; z)$ as a function of b_2 has an infinite set of singular points:

- a) $b_2 = -k /; k \in \mathbb{N}$, are the simple poles with residues $\frac{(-1)^k}{k!} {}_2\tilde{F}_2(a_1, a_2; b_1, -k; z)$;
- b) $b_2 = \infty$ is the point of convergence of poles, which is an essential singular point.

The function ${}_2F_2(a_1, a_2; b_1, b_2; z)$ as a function of b_1 has an infinite set of singular points:

a) $b_1 = -k$ /; $k \in \mathbb{N}$, are the simple poles with residues $\frac{(-1)^k}{k!} {}_2\tilde{F}_2(a_1, a_2; -k, b_2; z)$;

b) $b_1 = \infty$ is the point of convergence of poles, which is an essential singular point.

07.25.04.0008.01

$$\text{Sing}_{b_j}({}_2F_2(a_1, a_2; b_1, b_2; z)) = \{ \{-k, 1\} /; k \in \mathbb{N}, \{\infty, \infty\} /; j \in \{1, 2\} \}$$

07.25.04.0009.01

$$\text{res}_{b_2}({}_2F_2(a_1, a_2; b_1, b_2; z))(-k) = \frac{(-1)^k}{k!} {}_2\tilde{F}_2(a_1, a_2; b_1, -k; z) /; k \in \mathbb{N}$$

07.25.04.0010.01

$$\text{res}_{b_1}({}_2F_2(a_1, a_2; b_1, b_2; z))(-k) = \frac{(-1)^k}{k!} {}_2\tilde{F}_2(a_1, a_2; -k, b_2; z) /; k \in \mathbb{N}$$

Branch points

With respect to z

The function ${}_2F_2(a_1, a_2; b_1, b_2; z)$ does not have branch points with respect to z .

07.25.04.0011.01

$$\mathcal{BP}_z({}_2F_2(a_1, a_2; b_1, b_2; z)) = \{ \}$$

With respect to a_k

The function ${}_2F_2(a_1, a_2; b_1, b_2; z)$ does not have branch points with respect to a_k .

07.25.04.0012.01

$$\mathcal{BP}_{a_k}({}_2F_2(a_1, a_2; b_1, b_2; z)) = \{ \} /; k \in \{1, 2\}$$

With respect to b_k

The function ${}_2F_2(a_1, a_2; b_1, b_2; z)$ does not have branch points with respect to b_k .

07.25.04.0013.01

$$\mathcal{BP}_{b_k}({}_2F_2(a_1, a_2; b_1, b_2; z)) = \{ \} /; k \in \{1, 2\}$$

Branch cuts

With respect to z

The function ${}_2F_2(a_1, a_2; b_1, b_2; z)$ does not have branch cuts with respect to z .

07.25.04.0014.01

$$\mathcal{BC}_z({}_2F_2(a_1, a_2; b_1, b_2; z)) = \{ \}$$

With respect to a_k

The function ${}_2F_2(a_1, a_2; b_1, b_2; z)$ does not have branch cuts with respect to a_k .

07.25.04.0015.01

$$\mathcal{BC}_{a_k}({}_2F_2(a_1, a_2; b_1, b_2; z)) = \{ \} /; k \in \{1, 2\}$$

With respect to b_k

The function ${}_2F_2(a_1, a_2; b_1, b_2; z)$ does not have branch cuts with respect to b_k .

07.25.04.0016.01

$$\mathcal{BC}_{b_k}({}_2F_2(a_1, a_2; b_1, b_2; z)) = \{ \} /; k \in \{1, 2\}$$

Series representations**Generalized power series**

Expansions at generic point $z = z_0$

For the function itself

07.25.06.0013.01

$$\begin{aligned} {}_2F_2(a_1, a_2; b_1, b_2; z) \propto {}_2F_2(a_1, a_2; b_1, b_2; z_0) + \frac{a_1 a_2}{b_1 b_2} {}_2F_2(a_1 + 1, a_2 + 1; b_1 + 1, b_2 + 1; z_0) (z - z_0) + \\ \frac{a_1 (a_1 + 1) a_2 (a_2 + 1)}{2 b_1 (b_1 + 1) b_2 (b_2 + 1)} {}_2F_2(a_1 + 2, a_2 + 2; b_1 + 2, b_2 + 2; z_0) (z - z_0)^2 + \dots /; (z \rightarrow z_0) \end{aligned}$$

07.25.06.0014.01

$$\begin{aligned} {}_2F_2(a_1, a_2; b_1, b_2; z) \propto {}_2F_2(a_1, a_2; b_1, b_2; z_0) + \frac{a_1 a_2}{b_1 b_2} {}_2F_2(a_1 + 1, a_2 + 1; b_1 + 1, b_2 + 1; z_0) (z - z_0) + \\ \frac{a_1 (a_1 + 1) a_2 (a_2 + 1)}{2 b_1 (b_1 + 1) b_2 (b_2 + 1)} {}_2F_2(a_1 + 2, a_2 + 2; b_1 + 2, b_2 + 2; z_0) (z - z_0)^2 + O((z - z_0)^3) \end{aligned}$$

07.25.06.0015.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = \sum_{k=0}^{\infty} \frac{(a_1)_k (a_2)_k}{k! (b_1)_k (b_2)_k} {}_2F_2(k + a_1, k + a_2; k + b_1, k + b_2; z_0) (z - z_0)^k$$

07.25.06.0016.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = F_{2 \times 0 \times 0 \times 0}^{2 \times 0 \times 0 \times 0} \left(\begin{matrix} a_1, a_2 \\ b_1, b_2 \end{matrix}; z_0, z - z_0 \right)$$

07.25.06.0017.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) \propto {}_2F_2(a_1, a_2; b_1, b_2; z_0) (1 + O(z - z_0))$$

Expansions at $z = 0$ **For the function itself****General case**

07.25.06.0001.02

$${}_2F_2(a_1, a_2; b_1, b_2; z) \propto 1 + \frac{a_1 a_2}{b_1 b_2} z + \frac{a_1 (1 + a_1) a_2 (1 + a_2)}{2 b_1 (1 + b_1) b_2 (1 + b_2)} z^2 + \dots /; (z \rightarrow 0)$$

07.25.06.0018.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) \propto 1 + \frac{a_1 a_2}{b_1 b_2} z + \frac{a_1 (1 + a_1) a_2 (1 + a_2)}{2 b_1 (1 + b_1) b_2 (1 + b_2)} z^2 + O(z^3)$$

07.25.06.0002.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = \sum_{k=0}^{\infty} \frac{(a_1)_k (a_2)_k}{(b_1)_k (b_2)_k k!} z^k$$

07.25.06.0003.02

$${}_2F_2(a_1, a_2; b_1, b_2; z) \propto 1 + O(z)$$

07.25.06.0019.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = F_{\infty}(z, a_1, a_2, b_1, b_2) /;$$

$$\left(F_n(z, a_1, a_2, b_1, b_2) = \sum_{k=0}^n \frac{(a_1)_k (a_2)_k z^k}{(b_1)_k (b_2)_k k!} = {}_2F_2(a_1, a_2; b_1, b_2; z) - \frac{\Gamma(n+a_1+1) \Gamma(n+a_2+1) \Gamma(b_1) \Gamma(b_2) z^{n+1}}{\Gamma(n+2) \Gamma(a_1) \Gamma(a_2) \Gamma(n+b_1+1) \Gamma(n+b_2+1)} \right. \\ \left. {}_3F_3(1, n+a_1+1, n+a_2+1; n+2, n+b_1+1, n+b_2+1; z) \right) \bigwedge n \in \mathbb{N}$$

Summed form of the truncated series expansion.

Expansions at $z = \infty$ for polynomial cases

07.25.06.0004.01

$${}_2F_2(-n, a_2; b_1, b_2; z) = \frac{(a_2)_n (-z)^n}{(b_1)_n (b_2)_n} {}_3F_1\left(-n, -n-b_1+1, 1-n-b_2; 1-n-a_2; -\frac{1}{z}\right); n \in \mathbb{N}^+$$

Asymptotic series expansions

The general formulas

07.25.06.0005.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) \propto \Gamma(b_1) \Gamma(b_2) \mathcal{A}_F\left(\begin{matrix} a_1, a_2 \\ b_1, b_2 \end{matrix}; \{z, \tilde{\infty}, \infty\}\right); (|z| \rightarrow \infty)$$

07.25.06.0006.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) \propto \Gamma(b_1) \Gamma(b_2) \left(\mathcal{A}_F^{(\text{power})}\left(\begin{matrix} a_1, a_2 \\ b_1, b_2 \end{matrix}; \{z, \tilde{\infty}, \infty\}\right) + \mathcal{A}_F^{(\text{exp})}\left(\begin{matrix} a_1, a_2 \\ b_1, b_2 \end{matrix}; \{z, \tilde{\infty}, \infty\}\right) \right); (|z| \rightarrow \infty)$$

Case of simple poles

07.25.06.0007.01

$$\begin{aligned}
 {}_2F_2(a_1, a_2; b_1, b_2; z) \propto & \frac{\Gamma(a_2 - a_1) \Gamma(b_1) \Gamma(b_2)}{\Gamma(a_2) \Gamma(b_1 - a_1) \Gamma(b_2 - a_1)} (-z)^{-a_1} \left(1 - \frac{a_1 (a_1 - b_1 + 1) (a_1 - b_2 + 1)}{(a_1 - a_2 + 1) z} + \right. \\
 & \left. (a_1 (a_1 + 1) (a_1 - b_1 + 1) (a_1 - b_1 + 2) (a_1 - b_2 + 1) (a_1 - b_2 + 2)) / (2 (a_1 - a_2 + 1) (a_1 - a_2 + 2) z^2) + \dots \right) + \\
 & \frac{\Gamma(a_1 - a_2) \Gamma(b_1) \Gamma(b_2)}{\Gamma(a_1) \Gamma(b_1 - a_2) \Gamma(b_2 - a_2)} (-z)^{-a_2} \left(1 - \frac{a_2 (a_2 - b_1 + 1) (a_2 - b_2 + 1)}{(-a_1 + a_2 + 1) z} + \right. \\
 & \left. (a_2 (a_2 + 1) (a_2 - b_1 + 1) (a_2 - b_1 + 2) (a_2 - b_2 + 1) (a_2 - b_2 + 2)) / (2 (-a_1 + a_2 + 1) (-a_1 + a_2 + 2) z^2) + \dots \right) + \\
 & \frac{\Gamma(b_1) \Gamma(b_2)}{\Gamma(a_1) \Gamma(a_2)} z^{a_1 + a_2 - b_1 - b_2} e^z \left(1 + \frac{1}{z} (a_1^2 + (a_2 - b_1 - b_2 - 1) a_1 + a_2^2 + b_1 + b_1 b_2 + b_2 - a_2 (b_1 + b_2 + 1)) + \right. \\
 & \frac{1}{2 z^2} ((a_1 + a_2 - b_1 - 1) (a_1 + a_2 - b_2 - 1) (a_1 + a_2 - b_1 - b_2) - (2 a_1 + a_2 - b_1 - b_2 - 1) \\
 & (a_1 + 2 a_2 - b_1 - b_2 - 1) (a_1^2 + (a_2 - b_1 - b_2 - 1) a_1 + a_2^2 + b_1 + b_1 b_2 + b_2 - a_2 (b_1 + b_2 + 1)) + \\
 & (a_1^2 + (a_2 - b_1 - b_2 - 1) a_1 + a_2^2 + b_1 + b_1 b_2 + b_2 - a_2 (b_1 + b_2 + 1)) (3 a_1^2 + (6 a_2 - 4 b_1 - 4 b_2 - 7) a_1 + \\
 & \left. 3 a_2^2 + b_1^2 + b_2^2 + 5 b_1 + 3 b_1 b_2 + 5 b_2 - a_2 (4 b_1 + 4 b_2 + 7) + 4) + \dots \right); (|z| \rightarrow \infty) \wedge a_1 - a_2 \notin \mathbb{Z}
 \end{aligned}$$

07.25.06.0008.01

$$\begin{aligned}
 {}_2F_2(a_1, a_2; b_1, b_2; z) \propto & \frac{\Gamma(b_1) \Gamma(b_2)}{\Gamma(a_1) \Gamma(a_2)} e^z z^\chi \sum_{k=0}^{\infty} c_k z^{-k} + \frac{\Gamma(b_1) \Gamma(b_2) \Gamma(a_2 - a_1)}{\Gamma(a_2) \Gamma(b_1 - a_1) \Gamma(b_2 - a_1)} (-z)^{-a_1} {}_3F_1\left(a_1, a_1 - b_1 + 1, a_1 - b_2 + 1; a_1 - a_2 + 1; -\frac{1}{z}\right) + \\
 & \frac{\Gamma(b_1) \Gamma(b_2) \Gamma(a_1 - a_2)}{\Gamma(a_1) \Gamma(b_1 - a_2) \Gamma(b_2 - a_2)} (-z)^{-a_2} {}_3F_1\left(a_2, a_2 - b_1 + 1, a_2 - b_2 + 1; -a_1 + a_2 + 1; -\frac{1}{z}\right); \\
 (|z| \rightarrow \infty) \wedge \chi = a_1 + a_2 - b_1 - b_2 \wedge c_0 = 1 \wedge c_1 = (A_2 - 1) \chi + b_1 b_2 - a_1 a_2 \wedge \\
 c_k = \frac{1}{k} ((1 - B_2 + 2 a_1 + a_1^2 + 2 a_2 + a_2^2 - A_2 B_2 + a_1 a_2 + b_1 b_2 + (2 B_2 - 3 (A_2 + 1)) k + 2 k^2) c_{k-1} - \\
 (k - A_2 + b_1 - 1) (k - A_2 + b_2 - 1) (k - \chi - 2) c_{k-2}) \wedge A_2 = a_1 + a_2 \wedge B_2 = b_1 + b_2 \wedge a_1 - a_2 \notin \mathbb{Z}
 \end{aligned}$$

07.25.06.0009.01

$$\begin{aligned}
 {}_2F_2(a_1, a_2; b_1, b_2; z) \propto & \frac{\Gamma(b_1) \Gamma(b_2) \Gamma(a_2 - a_1)}{\Gamma(a_2) \Gamma(b_1 - a_1) \Gamma(b_2 - a_1)} (-z)^{-a_1} \left(1 + O\left(\frac{1}{z}\right) \right) + \\
 & \frac{\Gamma(b_1) \Gamma(b_2) \Gamma(a_1 - a_2)}{\Gamma(a_1) \Gamma(b_1 - a_2) \Gamma(b_2 - a_2)} (-z)^{-a_2} \left(1 + O\left(\frac{1}{z}\right) \right) + \frac{\Gamma(b_1) \Gamma(b_2)}{\Gamma(a_1) \Gamma(a_2)} e^z z^{a_1 + a_2 - b_1 - b_2} \left(1 + O\left(\frac{1}{z}\right) \right); (|z| \rightarrow \infty) \wedge a_1 \neq a_2
 \end{aligned}$$

Case of double poles

07.25.06.0010.01

$$\begin{aligned}
 {}_2F_2(a_1, n + a_1; b_1, b_2; z) &\propto \frac{\Gamma(b_1) \Gamma(b_2)}{n! \Gamma(a_1) \Gamma(b_1 - a_1 - n) \Gamma(b_2 - a_1 - n)} \log(-z) z^{-n} (-z)^{-a_1} {}_3F_1\left(n + a_1, n + a_1 - b_1 + 1, n + a_1 - b_2 + 1; n + 1; -\frac{1}{z}\right) + \\
 &\frac{\Gamma(b_1) \Gamma(b_2)}{\Gamma(n + a_1) \Gamma(b_1 - a_1) \Gamma(b_2 - a_1)} (-z)^{-a_1} z^{-n} \sum_{k=0}^{\infty} \frac{(a_1)_{k+n} (a_1 - b_1 + 1)_{k+n} (a_1 - b_2 + 1)_{k+n}}{k! (k+n)!} \\
 &(\psi(k + 1) + \psi(k + n + 1) - \psi(k + n + a_1) - \psi(b_1 - a_1 - n - k) - \psi(b_2 - a_1 - n - k)) (-z)^{-k} + \\
 &\frac{\Gamma(b_1) \Gamma(b_2)}{\Gamma(a_1) \Gamma(n + a_1)} e^z z^\chi \sum_{k=0}^{\infty} c_k z^{-k} + \frac{\Gamma(b_1) \Gamma(b_2)}{\Gamma(n + a_1)} (-z)^{-a_1} \sum_{k=0}^{n-1} \frac{(a_1)_k \Gamma(n - k) z^{-k}}{\Gamma(b_1 - a_1 - k) \Gamma(b_2 - a_1 - k) k!}; \\
 (|z| \rightarrow \infty) \bigwedge n \in \mathbb{N} \bigwedge \chi = n + 2a_1 - b_1 - b_2 \bigwedge c_0 = 1 \bigwedge c_1 = \mathfrak{B} - \mathfrak{A} + (A_2 - 1) \chi \bigwedge \\
 c_k = \frac{1}{k} ((2k^2 + (2B_2 - 3(A_2 + 1))k + n^2 + 2a_1^2 + \mathfrak{A} + \mathfrak{B} + 2n + 2na_1 + 4a_1 - A_2B_2 - B_2 + 1)c_{k-1} - (k - A_2 + b_1 - 1) \\
 (k - A_2 + b_2 - 1)(k - \chi - 2)c_{k-2}) \bigwedge A_2 = n + 2a_1 \bigwedge B_2 = b_1 + b_2 \bigwedge \mathfrak{A} = a_1(n + a_1) \bigwedge \mathfrak{B} = b_1 b_2
 \end{aligned}$$

07.25.06.0011.01

$$\begin{aligned}
 {}_2F_2(a_1, a_1; b_1, b_2; z) &\propto \frac{\Gamma(b_1) \Gamma(b_2)}{\Gamma(a_1)^2} e^z \left(1 + O\left(\frac{1}{z}\right)\right) z^\chi + \frac{\Gamma(b_1) \Gamma(b_2)}{\Gamma(a_1) \Gamma(b_1 - a_1) \Gamma(b_2 - a_1)} (-z)^{-a_1} \\
 &\left(\log(-z) \left(1 + O\left(\frac{1}{z}\right)\right) - (\psi(b_1 - a_1) + \psi(b_2 - a_1) + \psi(a_1) + 2\gamma) \left(1 + O\left(\frac{1}{z}\right)\right)\right); (|z| \rightarrow \infty) \bigwedge \chi = 2a_1 - b_1 - b_2
 \end{aligned}$$

Residue representations

07.25.06.0012.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = \frac{\Gamma(b_1) \Gamma(b_2)}{\Gamma(a_1) \Gamma(a_2)} \sum_{j=0}^{\infty} \operatorname{res}_s \left(\frac{\Gamma(a_1 - s) \Gamma(a_2 - s) (-z)^{-s}}{\Gamma(b_1 - s) \Gamma(b_2 - s)} \Gamma(s) \right) (-j)$$

Limit representations

07.25.09.0001.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = \lim_{p \rightarrow \infty} {}_3F_2\left(a_1, a_2, p; b_1, b_2; \frac{z}{p}\right)$$

07.25.09.0002.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = \lim_{p \rightarrow \infty} {}_2F_3(a_1, a_2; b_1, b_2, p; pz)$$

Continued fraction representations

07.25.10.0001.01

$$\begin{aligned}
 {}_2F_2(a_1, a_2; b_1, b_2; z) &= 1 + \frac{a_1 a_2 z / (b_1 b_2)}{1 + \frac{-\frac{z(1+a_1)(1+a_2)}{2(1+b_1)(1+b_2)}}{1 + \frac{z(1+a_1)(1+a_2)}{2(1+b_1)(1+b_2)} + \frac{-\frac{z(2+a_1)(2+a_2)}{3(2+b_1)(2+b_2)}}{1 + \frac{z(2+a_1)(2+a_2)}{3(2+b_1)(2+b_2)} + \dots}}
 \end{aligned}$$

07.25.10.0002.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = 1 + \frac{a_1 a_2 z}{b_1 b_2 \left(1 + K_k \left(-\frac{(k+a_1)(k+a_2)z}{(k+1)(k+b_1)(k+b_2)}, 1 + \frac{(k+a_1)(k+a_2)z}{(k+1)(k+b_1)(k+b_2)} \right)_1 \right)^\infty}$$

Differential equations

Ordinary linear differential equations and wronskians

For the direct function itself

07.25.13.0002.01

$$z^2 w^{(3)}(z) + z(1-z+b_1+b_2)w''(z) + (b_1 b_2 - z(a_1+a_2+1))w'(z) - a_1 a_2 w(z) = 0 /;$$

$$w(z) = c_1 {}_2\tilde{F}_2(a_1, a_2; b_1, b_2; z) + c_2 \left(G_{2,3}^{2,2} \left(z \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right) + G_{2,3}^{2,2} \left(z \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_2, 1-b_1 \end{matrix} \right. \right) \right) + c_3 G_{2,3}^{3,2} \left(-z \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right)$$

07.25.13.0003.01

$$W_z \left({}_2\tilde{F}_2(a_1, a_2; b_1, b_2; z), G_{2,3}^{2,2} \left(z \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right) + G_{2,3}^{2,2} \left(z \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_2, 1-b_1 \end{matrix} \right. \right), G_{2,3}^{3,2} \left(-z \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right) \right) =$$

$$\Gamma(a_1 - b_1 + 1) \Gamma(a_2 - b_1 + 1) \Gamma(a_1 - b_2 + 1) \Gamma(a_2 - b_2 + 1) e^z (-z)^{-b_1-b_2} z^{-b_1-b_2-1} (z^{b_2} (-z)^{b_1} + z^{b_1} (-z)^{b_2})$$

07.25.13.0004.01

$$z^2 w^{(3)}(z) + z(1-z+b_1+b_2)w''(z) + (b_1 b_2 - z(a_1+a_2+1))w'(z) - a_1 a_2 w(z) = 0 /;$$

$$w(z) = c_1 {}_2\tilde{F}_2(a_1, a_2; b_1, b_2; z) + c_2 z^{1-b_1} {}_2\tilde{F}_2(a_1 - b_1 + 1, a_2 - b_1 + 1; 2 - b_1, -b_1 + b_2 + 1; z) +$$

$$c_3 z^{1-b_2} {}_2\tilde{F}_2(a_1 - b_2 + 1, a_2 - b_2 + 1; 2 - b_2, b_1 - b_2 + 1; z) \bigwedge b_1 \notin \mathbb{Z} \bigwedge b_2 \notin \mathbb{Z} \bigwedge b_1 - b_2 \notin \mathbb{Z}$$

07.25.13.0005.01

$$W_z \left({}_2\tilde{F}_2(a_1, a_2; b_1, b_2; z), z^{1-b_1} {}_2\tilde{F}_2(a_1 - b_1 + 1, a_2 - b_1 + 1; 2 - b_1, -b_1 + b_2 + 1; z), \right.$$

$$\left. z^{1-b_2} {}_2\tilde{F}_2(a_1 - b_2 + 1, a_2 - b_2 + 1; 2 - b_2, b_1 - b_2 + 1; z) \right) = \frac{\sin(\pi b_1) \sin(\pi(b_1 - b_2)) \sin(\pi b_2)}{\pi^3} e^z z^{-b_1-b_2-1}$$

07.25.13.0001.01

$$z^2 w^{(3)}(z) + z(1-z+b_1+b_2)w''(z) + (b_1 b_2 - z(a_1+a_2+1))w'(z) - a_1 a_2 w(z) = 0 /;$$

$$w(z) = c_1 {}_2F_2(a_1, a_2; b_1, b_2; z) + c_2 z^{1-b_1} {}_2F_2(a_1 - b_1 + 1, a_2 - b_1 + 1; 2 - b_1, -b_1 + b_2 + 1; z) +$$

$$c_3 z^{1-b_2} {}_2F_2(a_1 - b_2 + 1, a_2 - b_2 + 1; 2 - b_2, b_1 - b_2 + 1; z) \bigwedge b_1 \notin \mathbb{Z} \bigwedge b_2 \notin \mathbb{Z} \bigwedge b_1 - b_2 \notin \mathbb{Z}$$

07.25.13.0006.01

$$W_z \left({}_2F_2(a_1, a_2; b_1, b_2; z), z^{1-b_1} {}_2F_2(a_1 - b_1 + 1, a_2 - b_1 + 1; 2 - b_1, -b_1 + b_2 + 1; z), \right.$$

$$\left. z^{1-b_2} {}_2F_2(a_1 - b_2 + 1, a_2 - b_2 + 1; 2 - b_2, b_1 - b_2 + 1; z) \right) = (b_1 - 1)(b_2 - 1)(b_1 - b_2) e^z z^{-b_1-b_2-1}$$

07.25.13.0007.01

$$w^{(3)}(z) + \left(\frac{(b_1 + b_2 + 1)g'(z)}{g(z)} - g'(z) - \frac{3g''(z)}{g'(z)} \right) w''(z) +$$

$$\left(\frac{b_1 b_2 g'(z)^2}{g(z)^2} + \frac{3g''(z)^2}{g'(z)^2} + g''(z) - \frac{(a_1 + a_2 + 1)g'(z)^2 + (b_1 + b_2 + 1)g''(z)}{g(z)} - \frac{g^{(3)}(z)}{g'(z)} \right) w'(z) - \frac{a_1 a_2 g'(z)^3}{g(z)^2} w(z) = 0 /;$$

$$w(z) = c_1 {}_2\tilde{F}_2(a_1, a_2; b_1, b_2; g(z)) + c_2 \left(G_{2,3}^{2,2} \left(g(z) \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right) + G_{2,3}^{2,2} \left(g(z) \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_2, 1-b_1 \end{matrix} \right. \right) \right) +$$

$$c_3 G_{2,3}^{3,2} \left(-g(z) \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right)$$

07.25.13.0008.01

$$W_z \left({}_2\tilde{F}_2(a_1, a_2; b_1, b_2; g(z)), G_{2,3}^{2,2} \left(g(z) \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right) + G_{2,3}^{2,2} \left(g(z) \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_2, 1-b_1 \end{matrix} \right. \right), G_{2,3}^{3,2} \left(-g(z) \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right) \right) = e^{g(z)} (-g(z))^{-b_1-b_2} g(z)^{-b_1-b_2-1} (g(z)^{b_2} (-g(z))^{b_1} + g(z)^{b_1} (-g(z))^{b_2}) \Gamma(a_1 - b_1 + 1) \Gamma(a_2 - b_1 + 1) \Gamma(a_1 - b_2 + 1) \Gamma(a_2 - b_2 + 1) g'(z)^3$$

07.25.13.0009.01

$$w^{(3)}(z) + \left(\frac{(b_1 + b_2 + 1) g'(z)}{g(z)} - g'(z) - \frac{3 h'(z)}{h(z)} - \frac{3 g''(z)}{g'(z)} \right) w''(z) + \left(\frac{b_1 b_2 g'(z)^2}{g(z)^2} - \frac{2(b_1 + b_2 + 1) h'(z) g'(z)}{g(z) h(z)} + \frac{6 h'(z)^2}{h(z)^2} + \frac{3 g''(z)^2}{g'(z)^2} + \frac{6 h'(z) g''(z)}{h(z) g'(z)} + g''(z) + \frac{2 g'(z) h'(z) - 3 h''(z)}{h(z)} - \frac{(a_1 + a_2 + 1) g'(z)^2 + (b_1 + b_2 + 1) g''(z)}{g(z)} - \frac{g^{(3)}(z)}{g'(z)} \right) w'(z) + \left(-\frac{a_1 a_2 g'(z)^3}{g(z)^2} - \frac{b_1 b_2 h'(z) g'(z)^2}{g(z)^2 h(z)} + \frac{2(b_1 + b_2 + 1) h'(z)^2 g'(z)}{g(z) h(z)^2} + \frac{(a_1 + a_2 + 1) h'(z) g'(z)^2 - (b_1 + b_2 + 1) h''(z) g'(z) + (b_1 + b_2 + 1) h'(z) g''(z)}{g(z) h(z)} + \frac{3 g''(z) h'(z) + h'(z) g^{(3)}(z)}{h(z) g'(z)} - \frac{h'(z) g''(z) - g'(z) h''(z) + h^{(3)}(z)}{h(z)} - \frac{2 h'(z) (g'(z) h'(z) - 3 h''(z))}{h(z)^2} - \frac{6 h'(z)^3}{h(z)^3} - \frac{6 h'(z)^2 g''(z)}{h(z)^2 g'(z)} - \frac{3 h'(z) g''(z)^2}{h(z) g'(z)^2} \right) w(z) = 0; w(z) = c_1 h(z) {}_2\tilde{F}_2(a_1, a_2; b_1, b_2; g(z)) + c_2 h(z) \left(G_{2,3}^{2,2} \left(g(z) \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right) + G_{2,3}^{2,2} \left(g(z) \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_2, 1-b_1 \end{matrix} \right. \right) \right) + c_3 h(z) G_{2,3}^{3,2} \left(-g(z) \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right)$$

07.25.13.0010.01

$$W_z \left(h(z) {}_2\tilde{F}_2(a_1, a_2; b_1, b_2; g(z)), h(z) \left(G_{2,3}^{2,2} \left(g(z) \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right) + G_{2,3}^{2,2} \left(g(z) \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_2, 1-b_1 \end{matrix} \right. \right) \right), h(z) G_{2,3}^{3,2} \left(-g(z) \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right) \right) = e^{g(z)} (-g(z))^{-b_1-b_2} g(z)^{-b_1-b_2-1} (g(z)^{b_2} (-g(z))^{b_1} + g(z)^{b_1} (-g(z))^{b_2}) \Gamma(a_1 - b_1 + 1) \Gamma(a_2 - b_1 + 1) \Gamma(a_1 - b_2 + 1) \Gamma(a_2 - b_2 + 1) h(z)^3 g'(z)^3$$

07.25.13.0011.01

$$z^3 w^{(3)}(z) + (-3s - r(a z^r + 2) + r(b_1 + b_2) + 3) z^2 w''(z) + (-a r^2 a_1 z^r + r^2 + 3(s - 1)s + r(2s - 1)(a z^r + 2) - r(a r a_2 z^r + (r + 2s - 1)b_2 + b_1(-b_2 r + r + 2s - 1)) + 1) z w'(z) + (-a r(r a_1 - s)(r a_2 - s) z^r - s(-b_1 r + r + s)(-b_2 r + r + s)) w(z) = 0; w(z) = c_1 z^s {}_2\tilde{F}_2(a_1, a_2; b_1, b_2; a z^r) + c_2 z^s \left(G_{2,3}^{2,2} \left(a z^r \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right) + G_{2,3}^{2,2} \left(a z^r \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_2, 1-b_1 \end{matrix} \right. \right) \right) + c_3 z^s G_{2,3}^{3,2} \left(-a z^r \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right)$$

07.25.13.0012.01

$$W_z \left(z^s {}_2\tilde{F}_2(a_1, a_2; b_1, b_2; a z^r), z^s \left(G_{2,3}^{2,2} \left(a z^r \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right) + G_{2,3}^{2,2} \left(a z^r \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_2, 1-b_1 \end{matrix} \right. \right) \right), z^s G_{2,3}^{3,2} \left(-a z^r \left| \begin{matrix} 1-a_1, 1-a_2 \\ 0, 1-b_1, 1-b_2 \end{matrix} \right. \right) \right) = a^3 e^{a z^r} r^3 z^{3r+3s-3} (-a z^r)^{-b_1-b_2} (a z^r)^{-b_1-b_2-1} ((a z^r)^{b_2} (-a z^r)^{b_1} + (a z^r)^{b_1} (-a z^r)^{b_2}) \Gamma(a_1 - b_1 + 1) \Gamma(a_2 - b_1 + 1) \Gamma(a_1 - b_2 + 1) \Gamma(a_2 - b_2 + 1)$$

07.25.13.0013.01

$$w^{(3)}(z) + (-(a r^z + 2) \log(r) + (b_1 + b_2) \log(r) - 3 \log(s)) w''(z) + (\log^2(r) + 2(a r^z + 2) \log(s) \log(r) - (a \log(r) a_1 r^z + a \log(r) a_2 r^z + (\log(r) + 2 \log(s)) b_2 + b_1 (-b_2 \log(r) + \log(r) + 2 \log(s))) \log(r) + 3 \log^2(s)) w'(z) + (-a \log(r) (\log(r) a_1 - \log(s)) (\log(r) a_2 - \log(s)) r^z - \log(s) (-b_1 \log(r) + \log(r) + \log(s)) (-b_2 \log(r) + \log(r) + \log(s))) w(z) = 0 /; w(z) = c_1 s^z {}_2\tilde{F}_2(a_1, a_2; b_1, b_2; a r^z) + c_2 s^z \left(G_{2,3}^{2,2} \left(a r^z \left| \begin{matrix} 1 - a_1, 1 - a_2 \\ 0, 1 - b_1, 1 - b_2 \end{matrix} \right. \right) + G_{2,3}^{2,2} \left(a r^z \left| \begin{matrix} 1 - a_1, 1 - a_2 \\ 0, 1 - b_2, 1 - b_1 \end{matrix} \right. \right) \right) + c_3 s^z G_{2,3}^{3,2} \left(-a r^z \left| \begin{matrix} 1 - a_1, 1 - a_2 \\ 0, 1 - b_1, 1 - b_2 \end{matrix} \right. \right)$$

07.25.13.0014.01

$$W_z \left(s^z {}_2\tilde{F}_2(a_1, a_2; b_1, b_2; a r^z), s^z \left(G_{2,3}^{2,2} \left(a r^z \left| \begin{matrix} 1 - a_1, 1 - a_2 \\ 0, 1 - b_1, 1 - b_2 \end{matrix} \right. \right) + G_{2,3}^{2,2} \left(a r^z \left| \begin{matrix} 1 - a_1, 1 - a_2 \\ 0, 1 - b_2, 1 - b_1 \end{matrix} \right. \right) \right), s^z G_{2,3}^{3,2} \left(-a r^z \left| \begin{matrix} 1 - a_1, 1 - a_2 \\ 0, 1 - b_1, 1 - b_2 \end{matrix} \right. \right) \right) = a^3 e^{a r^z} r^{3z} (-a r^z)^{-b_1 - b_2} (a r^z)^{-b_1 - b_2 - 1} ((a r^z)^{b_2} (-a r^z)^{b_1} + (a r^z)^{b_1} (-a r^z)^{b_2}) s^{3z} \Gamma(a_1 - b_1 + 1) \Gamma(a_2 - b_1 + 1) \Gamma(a_1 - b_2 + 1) \Gamma(a_2 - b_2 + 1) \log^3(r)$$

Transformations

Products, sums, and powers of the direct function

Products of the direct function

07.25.16.0001.01

$${}_2F_2(a_1, a_2; b_1, b_2; c z) {}_2F_2(\alpha_1, \alpha_2; \beta_1, \beta_2; d z) = \sum_{k=0}^{\infty} c_k z^k /;$$

$$c_k = \frac{d^k (\alpha_1)_k (\alpha_2)_k}{k! (\beta_1)_k (\beta_2)_k} {}_5F_4 \left(-k, 1 - k - \beta_1, 1 - k - \beta_2, a_1, a_2; 1 - k - \alpha_1, 1 - k - \alpha_2, b_1, b_2; -\frac{c}{d} \right) \sqrt{\frac{c^k (a_1)_k (a_2)_k}{k! (b_1)_k (b_2)_k} {}_5F_4 \left(-k, 1 - k - b_1, 1 - k - b_2, \alpha_1, \alpha_2; 1 - k - a_1, 1 - k - a_2, \beta_1, \beta_2; -\frac{d}{c} \right)}$$

07.25.16.0002.01

$${}_2F_2(a_1, a_2; b_1, b_2; c z) {}_2F_2(\alpha_1, \alpha_2; \beta_1, \beta_2; d z) = \sum_{k=0}^{\infty} \sum_{m=0}^k \frac{(a_1)_m (a_2)_m (\alpha_1)_{k-m} (\alpha_2)_{k-m} c^m d^{k-m} z^k}{(b_1)_m (b_2)_m m! (\beta_1)_{k-m} (\beta_2)_{k-m} (k-m)!}$$

07.25.16.0003.01

$${}_2F_2(a_1, a_2; b_1, b_2; c z) {}_2F_2(\alpha_1, \alpha_2; \beta_1, \beta_2; d z) = F_{0;2:2}^{0;2:2} \left(\begin{matrix} : a_1, a_2; \alpha_1, \alpha_2; \\ : b_1, b_2; \beta_1, \beta_2; \end{matrix} \middle| c z, d z \right)$$

Identities

Recurrence identities

Consecutive neighbors

07.25.17.0001.01

$${}_2F_2(a, a_2; b_1, b_2; z) = (B_1 + C_1 z) {}_2F_2(a + 1, a_2; b_1, b_2; z) + (B_2 + C_2 z) {}_2F_2(a + 2, a_2; b_1, b_2; z) + B_3 {}_2F_2(a + 3, a_2; b_1, b_2; z) /;$$

$$B_1 = \frac{3a^2 + (7 - 2b_1 - 2b_2)a + (b_1 - 2)(b_2 - 2)}{(a - b_1 + 1)(a - b_2 + 1)} \bigwedge C_1 = \frac{a - a_2 + 1}{(a - b_1 + 1)(a - b_2 + 1)} \bigwedge$$

$$B_2 = \frac{(a + 1)(b_1 + b_2 - 3a - 5)}{(a - b_1 + 1)(a - b_2 + 1)} \bigwedge C_2 = -\frac{a + 1}{(a - b_1 + 1)(a - b_2 + 1)} \bigwedge B_3 = \frac{(a + 1)(a + 2)}{(a - b_1 + 1)(a - b_2 + 1)}$$

07.25.17.0002.01

$${}_2F_2(a, a_2; b_1, b_2; z) = (B_1 + C_1 z) {}_2F_2(a - 1, a_2; b_1, b_2; z) + (B_2 + C_2 z) {}_2F_2(a - 2, a_2; b_1, b_2; z) + B_3 {}_2F_2(a - 3, a_2; b_1, b_2; z) /;$$

$$B_1 = \frac{b_1 + b_2 - 3a + 4}{1 - a} \bigwedge C_1 = \frac{1}{a - 1} \bigwedge B_2 = \frac{(a - 2)(5 - 3a + 2b_1 + 2b_2) - b_1 b_2}{(a - 1)(a - 2)} \bigwedge$$

$$C_2 = \frac{a_2 - a + 2}{(a - 1)(a - 2)} \bigwedge B_3 = \frac{(a - b_1 - 2)(a - b_2 - 2)}{(a - 1)(a - 2)}$$

07.25.17.0003.01

$${}_2F_2(a_1, a_2; b, b_2; z) = (B_1 + C_1 z) {}_2F_2(a_1, a_2; b + 1, b_2; z) + (B_2 + C_2 z) {}_2F_2(a_1, a_2; b + 2, b_2; z) + C_3 z {}_2F_2(a_1, a_2; b + 3, b_2; z) /;$$

$$B_1 = \frac{2b - b_2 + 2}{b} \bigwedge C_1 = \frac{1}{b} \bigwedge B_2 = \frac{b_2 - b - 2}{b} \bigwedge C_2 = \frac{a_1 + a_2 - 2b - 3}{b(b + 1)} \bigwedge C_3 = \frac{(b - a_1 + 2)(b - a_2 + 2)}{b(b + 1)(b + 2)}$$

07.25.17.0004.01

$${}_2F_2(a_1, a_2; b, b_2; z) = \frac{B_1 + C_1 z}{z} {}_2F_2(a_1, a_2; b - 1, b_2; z) + \frac{B_2 + C_2 z}{z} {}_2F_2(a_1, a_2; b - 2, b_2; z) + \frac{B_3}{z} {}_2F_2(a_1, a_2; b - 3, b_2; z) /;$$

$$B_1 = \frac{(b - 1)(b - 2)(b - b_2 - 1)}{(b - a_1 - 1)(b - a_2 - 1)} \bigwedge C_1 = \frac{(b - 1)(2b - a_1 - a_2 - 3)}{(b - a_1 - 1)(b - a_2 - 1)} \bigwedge$$

$$B_2 = \frac{(b - 1)(b - 2)(b_2 - 2b + 4)}{(b - a_1 - 1)(b - a_2 - 1)} \bigwedge C_2 = -\frac{(b - 1)(b - 2)}{(b - a_1 - 1)(b - a_2 - 1)} \bigwedge B_3 = \frac{(b - 1)(b - 2)(b - 3)}{(b - a_1 - 1)(b - a_2 - 1)}$$

Functional identities

Relations between contiguous functions

07.25.17.0005.01

$$b {}_2F_2(a, b + 1; b_1, b_2; z) - a {}_2F_2(a + 1, b; b_1, b_2; z) + (a - b) {}_2F_2(a, b; b_1, b_2; z) = 0$$

07.25.17.0006.01

$$-a {}_2F_2(a + 1, a_2; b + 1, b_2; z) + (a - b) {}_2F_2(a, a_2; b + 1, b_2; z) + b {}_2F_2(a, a_2; b, b_2; z) = 0$$

07.25.17.0007.01

$$(c - d) {}_2F_2(a_1, a_2; c + 1, d + 1; z) + d {}_2F_2(a_1, a_2; c + 1, d; z) - c {}_2F_2(a_1, a_2; c, d + 1; z) = 0$$

07.25.17.0008.01

$$(a - b) c {}_2F_2(a, b; c, b_2; z) - a(c - b) {}_2F_2(a + 1, b; c + 1, b_2; z) + (c - a) b {}_2F_2(a, b + 1; c + 1, b_2; z) = 0$$

07.25.17.0009.01

$$a(c - d) {}_2F_2(a + 1, a_2; c + 1, d + 1; z) - d(c - a) {}_2F_2(a, a_2; c + 1, d; z) + (d - a) c {}_2F_2(a, a_2; c, d + 1; z) = 0$$

07.25.17.0010.01

$$b z {}_2F_2(a + 1, b + 1; c + 1, d + 1; z) + c d ({}_2F_2(a, b; c, d; z) - {}_2F_2(a + 1, b; c, d; z)) = 0$$

07.25.17.0011.01

$$d c(c + 1) ({}_2F_2(a, b; c, d; z) - {}_2F_2(a, b; c + 1, d; z)) - a b z {}_2F_2(a + 1, b + 1; c + 2, d + 1; z) = 0$$

07.25.17.0012.01

$$(b - a) z {}_2F_2(a + 1, b + 1; c + 1, d + 1; z) + c d ({}_2F_2(a, b + 1; c, d; z) - {}_2F_2(a + 1, b; c, d; z)) = 0$$

07.25.17.0013.01

$$(c - a) b z {}_2F_2(a + 1, b + 1; c + 2, d + 1; z) + (c + 1) c d ({}_2F_2(a, b; c, d; z) - {}_2F_2(a + 1, b; c + 1, d; z)) = 0$$

07.25.17.0014.01

$$a z {}_2F_2(a + 1, b + 1; c + 1, d + 1; z) + d (-a {}_2F_2(a + 1, b + 1; c + 1, d; z) - (c - a) {}_2F_2(a, b + 1; c + 1, d; z) + c {}_2F_2(a, b; c, d; z)) = 0$$

Relations of special kind

07.25.17.0015.01

$${}_2F_2(a_1, a_2; -c, c + 1; z) + {}_2F_2(a_1, a_2; c, 1 - c; z) = 2 {}_2F_2(a_1, a_2; c + 1, 1 - c; z)$$

07.25.17.0016.01

$${}_2F_2(a, a_2; -a, a + 1; z) - 2 {}_2F_2(a, a_2; 1 - a, a + 1; z) = -{}_1F_1(a_2; 1 - a; z)$$

07.25.17.0017.01

$${}_2F_2(-a, a_2; 1 - a, b_2; z) + {}_2F_2(a, a_2; a + 1, b_2; z) = 2 {}_3F_3(a, -a, a_2; a + 1, 1 - a, b_2; z)$$

07.25.17.0018.01

$${}_2F_2(-a, a + 1; b_1, b_2; z) + {}_2F_2(a, 1 - a; b_1, b_2; z) = 2 {}_2F_2(a, -a; b_1, b_2; z)$$

Division on even and odd parts and generalization

07.25.17.0019.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = A^+(z) + A^-(z) /;$$

$$A^+(z) = \frac{1}{2} ({}_2F_2(a_1, a_2; b_1, b_2; z) + {}_2F_2(a_1, a_2; b_1, b_2; -z)) \quad \bigwedge \quad A^-(z) = \frac{1}{2} ({}_2F_2(a_1, a_2; b_1, b_2; z) - {}_2F_2(a_1, a_2; b_1, b_2; -z))$$

07.25.17.0020.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = A^+(z) + A^-(z) /; \quad A^+(z) = {}_4F_5\left(\frac{a_1}{2}, \frac{a_2}{2}, \frac{a_1 + 1}{2}, \frac{a_2 + 1}{2}; \frac{1}{2}, \frac{b_1}{2}, \frac{b_2}{2}, \frac{b_1 + 1}{2}, \frac{b_2 + 1}{2}; \frac{z^2}{4}\right) \bigwedge$$

$$A^-(z) = \frac{z a_1 a_2}{b_1 b_2} {}_4F_5\left(\frac{a_1 + 1}{2}, \frac{a_2 + 1}{2}, \frac{a_1 + 2}{2}, \frac{a_2 + 2}{2}; \frac{3}{2}, \frac{b_1 + 1}{2}, \frac{b_2 + 1}{2}, \frac{b_1 + 2}{2}, \frac{b_2 + 2}{2}; \frac{z^2}{4}\right)$$

07.25.17.0021.01

$${}_pF_q(a_1, \dots, a_p; b_1, \dots, b_q; z) =$$

$$\sum_{k=0}^{n-1} \frac{z^k \prod_{j=1}^p (a_j)_k}{k! \prod_{j=1}^q (b_j)_k} {}_nF_{n+1}\left(1, \frac{k + a_1}{n}, \dots, \frac{k + a_1 + n - 1}{n}, \frac{k + a_2}{n}, \dots, \frac{k + a_2 + n - 1}{n}; \frac{k + 1}{n}, \dots, \frac{k + n}{n}, \frac{k + b_1}{n}, \dots, \frac{k + b_1 + n - 1}{n}, \frac{k + b_2}{n}, \dots, \frac{k + b_2 + n - 1}{n}; \frac{z^n}{n^n}\right)$$

Differentiation

Low-order differentiation

With respect to a_1

07.25.20.0001.01

$${}_2F_2^{((1,0),(0,0))}(a_1, a_2; b_1, b_2; z) = \sum_{k=0}^{\infty} \frac{(a_1)_k (a_2)_k \psi(k + a_1) z^k}{(b_1)_k (b_2)_k k!} - \psi(a_1) {}_2F_2(a_1, a_2; b_1, b_2; z)$$

07.25.20.0002.01

$${}_2F_2^{((1,0),(0,0,0))}(a_1, a_2; b_1, b_2; z) = \frac{z a_2}{b_1 b_2} F_{3 \times 0 \times 1}^{2 \times 1 \times 2} \left(\begin{matrix} a_1 + 1, a_2 + 1; 1, a_1; \\ 2, b_1 + 1, b_2 + 1; a_1 + 1; \end{matrix} z, z \right)$$

07.25.20.0003.01

$${}_2F_2^{((1,0),(0,0,0))}(a_1, a_2; b_1, b_2; z) = \sum_{k=0}^{\infty} \frac{(a_2)_k}{(b_1)_k (b_2)_k k!} \frac{\partial^n (a_1)_k}{\partial a_1^n} z^k /; n \in \mathbb{N}^+$$

With respect to a_2

07.25.20.0004.01

$${}_2F_2^{((0,1),(0,0,0))}(a_1, a_2; b_1, b_2; z) = \sum_{k=0}^{\infty} \frac{(a_1)_k (a_2)_k \psi(k + a_2) z^k}{(b_1)_k (b_2)_k k!} - \psi(a_2) {}_2F_2(a_1, a_2; b_1, b_2; z)$$

07.25.20.0005.01

$${}_2F_2^{((0,1),(0,0,0))}(a_1, a_2; b_1, b_2; z) = \frac{z a_1}{b_1 b_2} F_{3 \times 0 \times 1}^{2 \times 1 \times 2} \left(\begin{matrix} a_1 + 1, a_2 + 1; 1, a_2; \\ 2, b_1 + 1, b_2 + 1; a_2 + 1; \end{matrix} z, z \right)$$

07.25.20.0006.01

$${}_2F_2^{((0,1),(0,0,0))}(a_1, a_2; b_1, b_2; z) = \sum_{k=0}^{\infty} \frac{(a_1)_k}{(b_1)_k (b_2)_k k!} \frac{\partial^n (a_2)_k}{\partial a_2^n} z^k /; n \in \mathbb{N}^+$$

With respect to b_1

07.25.20.0007.01

$${}_2F_2^{((0,0),(1,0,0))}(a_1, a_2; b_1, b_2; z) = \psi(b_1) {}_2F_2(a_1, a_2; b_1, b_2; z) - \sum_{k=0}^{\infty} \frac{(a_1)_k (a_2)_k \psi(k + b_1) z^k}{(b_1)_k (b_2)_k k!}$$

07.25.20.0008.01

$${}_2F_2^{((0,0),(1,0,0))}(a_1, a_2; b_1, b_2; z) = -\frac{z a_1 a_2}{b_1^2 b_2} F_{3 \times 0 \times 1}^{2 \times 1 \times 2} \left(\begin{matrix} a_1 + 1, a_2 + 1; 1, b_1; \\ 2, b_1 + 1, b_2 + 1; b_1 + 1; \end{matrix} z, z \right)$$

07.25.20.0009.01

$${}_2F_2^{((0,0),(1,0,0))}(a_1, a_2; b_1, b_2; z) = \sum_{k=0}^{\infty} \frac{(a_1)_k (a_2)_k}{(b_2)_k k!} \frac{\partial^n \frac{1}{(b_1)_k}}{\partial b_1^n} z^k /; n \in \mathbb{N}^+$$

With respect to b_2

07.25.20.0010.01

$${}_2F_2^{((0,0),(0,1,0))}(a_1, a_2; b_1, b_2; z) = \psi(b_2) {}_2F_2(a_1, a_2; b_1, b_2; z) - \sum_{k=0}^{\infty} \frac{(a_1)_k (a_2)_k \psi(k + b_2) z^k}{(b_1)_k (b_2)_k k!}$$

07.25.20.0011.01

$${}_2F_2^{((0,0),(0,1,0))}(a_1, a_2; b_1, b_2; z) = -\frac{z a_1 a_2}{b_2^2 b_1} F_{3 \times 0 \times 1}^{2 \times 1 \times 2} \left(\begin{matrix} a_1 + 1, a_2 + 1; 1, b_2; \\ 2, b_1 + 1, b_2 + 1; b_2 + 1; \end{matrix} z, z \right)$$

07.25.20.0012.01

$${}_2F_2^{((0,0),(0,1,0))}(a_1, a_2; b_1, b_2; z) = \sum_{k=0}^{\infty} \frac{(a_1)_k (a_2)_k}{(b_1)_k k!} \frac{\partial^n \frac{1}{(b_2)_k}}{\partial b_2^n} z^k /; n \in \mathbb{N}^+$$

With respect to element of parameters ||| With respect to element of parameters

07.25.20.0013.01

$$\frac{\partial_2 F_2(a, a_2; a+1, b_2; z)}{\partial a} = \frac{a_2 z}{b_2 (a+1)^2} {}_3F_3(a+1, a+1, a_2+1; a+2, a+2, b_2+1; z)$$

07.25.20.0014.01

$$\frac{\partial_2 F_2(a+1, a_2; a, b_2; z)}{\partial a} = -\frac{a_2 z}{b_2 a^2} {}_1F_1(a_2+1; b_2+1; z)$$

With respect to z

07.25.20.0015.01

$$\frac{\partial_2 F_2(a_1, a_2; b_1, b_2; z)}{\partial z} = \frac{a_1 a_2}{b_1 b_2} {}_2F_2(a_1+1, a_2+1; b_1+1, b_2+1; z)$$

07.25.20.0016.01

$$\frac{\partial^2 {}_2F_2(a_1, a_2; b_1, b_2; z)}{\partial z^2} = \frac{a_1 (a_1+1) a_2 (a_2+1)}{b_1 (b_1+1) b_2 (b_2+1)} {}_2F_2(a_1+2, a_2+2; b_1+2, b_2+2; z)$$

Symbolic differentiation

With respect to a_1

07.25.20.0027.02

$${}_2F_2^{((n,0),(0,0,0))}(a_1, a_2; b_1, b_2; z) = \sum_{k=0}^{\infty} \frac{(a_2)_k}{(b_1)_k (b_2)_k k!} \frac{\partial^n (a_1)_k}{\partial a_1^n} z^k ; n \in \mathbb{N}$$

With respect to a_2

07.25.20.0028.02

$${}_2F_2^{((0,n),(0,0,0))}(a_1, a_2; b_1, b_2; z) = \sum_{k=0}^{\infty} \frac{(a_1)_k}{(b_1)_k (b_2)_k k!} \frac{\partial^n (a_2)_k}{\partial a_2^n} z^k ; n \in \mathbb{N}$$

With respect to b_1

07.25.20.0029.02

$${}_2F_2^{((0,0),(n,0,0))}(a_1, a_2; b_1, b_2; z) = \sum_{k=0}^{\infty} \frac{(a_1)_k (a_2)_k}{(b_2)_k k!} \frac{\partial^n \frac{1}{(b_1)_k}}{\partial b_1^n} z^k ; n \in \mathbb{N}$$

With respect to b_2

07.25.20.0030.02

$${}_2F_2^{((0,0),(0,n,0))}(a_1, a_2; b_1, b_2; z) = \sum_{k=0}^{\infty} \frac{(a_1)_k (a_2)_k}{(b_1)_k k!} \frac{\partial^n \frac{1}{(b_2)_k}}{\partial b_2^n} z^k ; n \in \mathbb{N}$$

With respect to element of parameters ||| With respect to element of parameters

07.25.20.0031.02

$$\frac{\partial^n {}_2F_2(a, a_2; a+1, b_2; z)}{\partial a^n} = \frac{(-1)^{n-1} n! z a_2}{(a+1)^{n+1} b_2} {}_{n+2}F_{n+2}(a+1, \dots, a+1, a_2+1; a+2, \dots, a+2, b_2+1; z) ; n \in \mathbb{N}$$

07.25.20.0032.02

$$\frac{\partial^n {}_2F_2(a+1, a_2; a, b_2; z)}{\partial a^n} = \frac{(-1)^n n!}{a^{n+1}} \left(a {}_1F_1(a_2; b_2; z) + \frac{z a_2}{b_2} {}_1F_1(a_2+1; b_2+1; z) \right) + \frac{(-1)^{n-1} n!}{a^n} {}_1F_1(a_2; b_2; z); n \in \mathbb{N}$$

With respect to z

07.25.20.0017.02

$$\frac{\partial^n {}_2F_2(a_1, a_2; b_1, b_2; z)}{\partial z^n} = \frac{\prod_{j=1}^2 (a_j)_n}{\prod_{j=1}^2 (b_j)_n} {}_2F_2(n+a_1, n+a_2; n+b_1, n+b_2; z); n \in \mathbb{N}$$

07.25.20.0018.02

$$\frac{\partial^n {}_2F_2(a_1, a_2; b_1, b_2; z)}{\partial z^n} = z^{-n} \prod_{j=1}^2 \Gamma(b_j) {}_3\tilde{F}_3(1, a_1, a_2; 1-n, b_1, b_2; z); n \in \mathbb{N}$$

07.25.20.0019.02

$$\frac{\partial^n (z^\alpha {}_2F_2(a_1, a_2; b_1, b_2; z))}{\partial z^n} = (-1)^n (-\alpha)_n z^{\alpha-n} {}_3F_3(\alpha+1, a_1, a_2; 1-n+\alpha, b_1, b_2; z); n \in \mathbb{N}$$

07.25.20.0020.02

$$\frac{\partial^n (z^{a+n-1} {}_2F_2(a, a_2; b_1, b_2; z))}{\partial z^n} = (a)_n z^{a-1} {}_2F_2(a+n, a_2; b_1, b_2; z); n \in \mathbb{N}$$

07.25.20.0021.02

$$\frac{\partial^n (z^{c-1} {}_2F_2(a_1, a_2; c, b_2; z))}{\partial z^n} = (c-n)_n z^{c-n-1} {}_2F_2(a_1, a_2; c-n, b_2; z); n \in \mathbb{N}$$

07.25.20.0022.02

$$\frac{\partial^n (z^n {}_2F_2(-n, a_2; \frac{1}{2}, b_2; z))}{\partial z^n} = n! {}_3F_3(-n, n+1, a_2; \frac{1}{2}, 1, b_2; z); n \in \mathbb{N}$$

07.25.20.0023.02

$$\frac{\partial^n (z^\alpha {}_2F_2(-n, a_2; b_1, b_2; z))}{\partial z^n} = (-1)^n (-\alpha)_n z^{\alpha-n} {}_3F_3(-n, \alpha+1, a_2; 1-n+\alpha, b_1, b_2; z); n \in \mathbb{N}$$

07.25.20.0024.02

$$\frac{\partial^n (z^\alpha {}_2F_2(-\frac{n}{2}, \frac{1-n}{2}; b_1, b_2; z^m))}{\partial z^n} = (-1)^n (-\alpha)_n z^{\alpha-n} {}_{m+2}F_{m+2} \left(-\frac{n}{2}, \frac{1-n}{2}, \frac{\alpha+1}{m}, \frac{\alpha+2}{m}, \dots, \frac{\alpha+m}{m}; \frac{\alpha-n+1}{m}, \frac{\alpha-n+2}{m}, \dots, \frac{\alpha-n+m}{m}, b_1, b_2; z^m \right); m \in \mathbb{N}^+ \wedge n \in \mathbb{N}$$

07.25.20.0025.02

$$\frac{\partial^n (e^{-z} {}_2F_2(-n, a_2; b_1, b_2; z))}{\partial z^n} = (-1)^n e^{-z} \sum_{k=0}^n \frac{(-n)_k z^k}{k! (b_1)_k (b_2)_k} {}_3F_2(-n, k-n, k+a_2; k+b_1, k+b_2; z); n \in \mathbb{N}$$

Fractional integro-differentiation

With respect to z

07.25.20.0026.01

$$\frac{\partial^\alpha {}_2F_2(a_1, a_2; b_1, b_2; z)}{\partial z^\alpha} = z^{-\alpha} \prod_{j=1}^2 \Gamma(b_j) {}_3\tilde{F}_3(1, a_1, a_2; 1-\alpha, b_1, b_2; z)$$

Integration

Indefinite integration

Involving only one direct function

07.25.21.0001.01

$$\int {}_2F_2(a_1, a_2; b_1, b_2; c z) dz = \frac{(b_1 - 1)(b_2 - 1)}{c(a_1 - 1)(a_2 - 1)} {}_2F_2(a_1 - 1, a_2 - 1; b_1 - 1, b_2 - 1; c z)$$

07.25.21.0002.01

$$\int {}_2F_2(a_1, a_2; b_1, b_2; z) dz = \frac{(b_1 - 1)(b_2 - 1)}{(a_1 - 1)(a_2 - 1)} {}_2F_2(a_1 - 1, a_2 - 1; b_1 - 1, b_2 - 1; z)$$

Involving one direct function and elementary functions

Involving power function

Involving power

Linear arguments

07.25.21.0003.01

$$\int z^{\alpha-1} {}_2F_2(a_1, a_2; b_1, b_2; z) dz = \frac{z^\alpha}{\alpha} {}_3F_3(\alpha, a_1, a_2; \alpha + 1, b_1, b_2; z)$$

Power arguments

07.25.21.0004.01

$$\int z^{\alpha-1} {}_2F_2(a_1, a_2; b_1, b_2; c z^r) dz = \frac{z^\alpha}{\alpha} {}_3F_3\left(\frac{\alpha}{r}, a_1, a_2; \frac{\alpha}{r} + 1, b_1, b_2; c z^r\right)$$

Definite integration

For the direct function itself

07.25.21.0005.01

$$\int_0^\infty t^{\alpha-1} {}_2F_2(a_1, a_2; b_1, b_2; -t) dt = \frac{\Gamma(b_1) \Gamma(b_2) \Gamma(\alpha) \Gamma(a_1 - \alpha) \Gamma(a_2 - \alpha)}{\Gamma(a_1) \Gamma(a_2) \Gamma(b_1 - \alpha) \Gamma(b_2 - \alpha)} /; 0 < \operatorname{Re}(\alpha) < \min(\operatorname{Re}(a_1), \operatorname{Re}(a_2))$$

Involving the direct function

07.25.21.0006.01

$$\int_0^\infty t^{\alpha-1} e^{-ct} {}_2F_2(a_1, a_2; b_1, b_2; -t) dt = c^{-\alpha} \Gamma(\alpha) {}_3F_2\left(\alpha, a_1, a_2; b_1, b_2; -\frac{1}{c}\right) /; \operatorname{Re}(\alpha) > 0 \wedge \operatorname{Re}(c) > 0$$

Integral transforms

Laplace transforms

07.25.22.0001.01

$$\mathcal{L}_t[{}_2F_2(a_1, a_2; b_1, b_2; -t)](z) = \frac{1}{z} {}_3F_2\left(1, a_1, a_2; b_1, b_2; -\frac{1}{z}\right); \operatorname{Re}(z) > 0$$

Operations

Limit operation

07.25.25.0001.01

$$\lim_{b_1 \rightarrow -n} \frac{{}_2F_2(a_1, a_2; b_1, b_2; z)}{\Gamma(b_1)} = z^{n+1} (a_1)_{n+1} (a_2)_{n+1} {}_2\tilde{F}_2(n + a_1 + 1, n + a_2 + 1; n + 2, n + b_2 + 1; z); n \in \mathbb{N}$$

07.25.25.0002.01

$$\lim_{a \rightarrow \infty} {}_2F_2\left(a_1, a; b_1, b_2; \frac{z}{a}\right) = {}_1F_2(a_1; b_1, b_2; z)$$

07.25.25.0003.01

$$\lim_{a \rightarrow \infty} {}_2F_2\left(a, a_2; b_1, b_2; \frac{z}{a}\right) = {}_1F_2(a_2; b_1, b_2; z)$$

Representations through more general functions

Through hypergeometric functions

Involving ${}_pF_q$

07.25.26.0001.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = {}_pF_q(a_1, \dots, a_p; b_1, \dots, b_q; z); p = 2 \wedge q = 2$$

07.25.26.0002.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = {}_3F_3(a_1, a_2, a_3; b_1, b_2, a_3; z)$$

07.25.26.0005.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = \lim_{a \rightarrow \infty} {}_3F_2\left(a_1, a_2, a; b_1, b_2; \frac{z}{a}\right)$$

Involving ${}_p\tilde{F}_q$

07.25.26.0003.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = \Gamma(b_1) \Gamma(b_2) {}_2\tilde{F}_2(a_1, a_2; b_1, b_2; z)$$

Through Meijer G

Classical cases for the direct function itself

07.25.26.0004.01

$${}_2F_2(a_1, a_2; b_1, b_2; z) = \frac{\Gamma(b_1) \Gamma(b_2)}{\Gamma(a_1) \Gamma(a_2)} G_{2,3}^{1,2}\left(-z \left| \begin{matrix} 1 - a_1, 1 - a_2 \\ 0, 1 - b_1, 1 - b_2 \end{matrix} \right.\right)$$

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